ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) AND SUPPLEMENTAL STUDIES TO THE EAS

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

Prepared for:
Shabsi Parnes

Prepared by:
Equity Environmental Engineering
500 International Drive, Suite 150
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November 24, 2021

840 Lorimer Street Rezoning

Brooklyn, NY
Block 2679 Lots 32, 34, 42, and 43

CEQR Reference No: 21DCP078K

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* 840 Lorimer Street Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP078K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
210299ZMK, N210300ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY Department of City Planning (DCP)			NAME OF APPLICANT Shabsi Parnes		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, Deputy Director Environmental Assessment and Review Division			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Kevin Williams		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 500 International Drive		
CITY New York	STATE NY	ZIP 10271	CITY Mount Olive	STATE NJ	ZIP 07828
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 973-527-7451	EMAIL kevin.williams@equityenvironmental.com	

5. *Project Description*

The Applicant, Shabsi Parnes, is seeking the approval of a zoning map amendment and a zoning text amendment (Proposed Actions) to facilitate the development of 840 Lorimer Street (Block 2679, Lot 43) with a new 10-story commercial and residential mixed-use building on the boundary of the Greenpoint and Williamsburg neighborhoods in Brooklyn, Community District 1.

The zoning map amendment would rezone Block 2679, Lots 42 and p/o 43 from a M1-2/R6 (MX-8) zoning district to a C4-5D zoning district and Block 2679, Lots 32, 34, and p/o 43 from a R6A/C2-4 zoning district to a C4-5D zoning district. Block 2679, Lots 32, 34, 42, and 43 comprise the Project Area. The zoning text amendment would modify Appendix F of the Zoning Resolution to designate a Mandatory Inclusionary Housing (MIH) Area coterminous with the Project Area.

The Proposed Actions would facilitate the development of Block 2679, Lot 43 (the Development Site). The Proposed Development is the demolition of the existing massing and the construction of a new mixed-use commercial and residential development of an approximate 111,683 GSF (83,050 ZSF; 5.49 FAR), 10-story, 115-foot-tall building. The proposed development would include 31,377 GSF (25,029 ZSF; 1.65 FAR) of commercial uses and 80,306 GSF (58,021 ZSF; 3.83 FAR) of residential uses. The building would contain 74 dwelling units, approximately 15 of which would be designated as affordable housing units permanently set aside at or below 80% AMI pursuant to MIH Option 1. The project also includes 7,514 GSF of parking spaces at cellar and ground levels, totaling 30 parking spaces.

The Proposed Actions are discretionary actions subject to environmental review. The NYC Department of City Planning shall be the lead agency on behalf of the City Planning Commission for environmental review under CEQR.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 1	STREET ADDRESS 563 and 561 Manhattan Avenue, 334 Driggs Avenue, 840 Lorimer Street
TAX BLOCK(S) AND LOT(S) Block 2679, Lots 32, 34, 42, 43		ZIP CODE 11222
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Affected Area is generally bounded by Nassau Avenue to the		

north, Manhattan Avenue to the east, Driggs Avenue to the south, and Lorimer Street to the west

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-2/R6(MX-8), R6A/C2-4 | ZONING SECTIONAL MAP NUMBER 13a

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO 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
- ☒ ZONING MAP
- ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
- ☒ SANBORN OR OTHER LAND USE MAP
- ☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 21,319 | Waterbody area (sq. ft) and type:

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

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): 111,683

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

HEIGHT OF EACH BUILDING (ft.): 115' | NUMBER OF STORIES OF EACH BUILDING: 10

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: 15,130

The total square feet not owned or controlled by the applicant: 6,189

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: 15,130 sq. ft. (width x length) | VOLUME OF DISTURBANCE: 151,300 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 15,130 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.)	80,306	31,377		
Type (*e.g.,* retail, office, school)	74 units	Local Retail: 10,459 gsf; Commercial Office: 20,918 gsf		

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 186 NUMBER OF ADDITIONAL WORKERS: 76

Provide a brief explanation of how these numbers were determined: 2.52 person per dewelling unit; 3 employees per 1,000 gsf retail; 1 employee per 250 SF for commercial office; 1 employee per 1,000 SF manufacturing 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): 2023

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

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

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☒	☐
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☒	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒

	YES	NO
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☒	☐
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. A LPC designated architectural resource is recognized on Lorimer Street between Driggs Avenue and Bayard Street adjacent to the project site. See attached EAS for description and analysis.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☐	☒
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☐	☒
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: No RECs were identified.	☐	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒

	YES	NO
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 7,395 = (41 x 94 residential households) + (13 x 84 office employees) + (79 x 31 retail employees)		
○ 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): 16,961,615.3 = (216.3 x 31,377 commercial gsf) + (126.7 x 80,306 large residential gsf)		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☒
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒

	YES	NO
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
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.		
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.		

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
Kira Xiang	11/24/2021

SIGNATURE Kira Xiang

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	Potentially Significant Adverse Impact – 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	Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe	November 24, 2021

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 (Brooklyn Block 2679, Lots 32, 34, 42, and 43) from M1-2/R6 (MX-8) and R6A/C2-4 to C4-5D, and a Zoning Text Amendment to establish a Mandatory Inclusionary Housing area coterminous with the rezoning area in the Greenpoint neighborhood of Brooklyn Community District 1. The predominant land uses in the surrounding area are residential, mixed-use, and open space, with McCarren Park immediately adjacent. Residential buildings are characterized by three to four-story townhouses and apartment buildings within M1-2/R6 (MX-8) and R6B districts, as well as mid-rise elevator condominium buildings generally ranging from six to nine stories. The proposed actions would facilitate the development of a mixed-use residential and commercial building on Block 2679, Lot 43, containing 94 dwelling units, 38 residential accessory parking spaces, and 31,377 gsf of commercial space. The proposed actions are anticipated to result in a change in land use within the project area, however, given the existing mixed-use character of the surrounding area and varying building heights, the change in land use and zoning would not constitute a significant adverse impact. The proposed rezoning area is located within the coastal zone, and the proposed actions would be consistent with all applicable policies of the Waterfront Revitalization Program (WRP #20-029). The proposed actions would not result in significant adverse land use, zoning, or public policy impacts.

Shadows

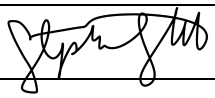
A detailed analysis related to shadows is included in this EAS. The detailed analysis showed that incremental shadows introduced by the proposed actions would affect one sunlight-sensitive resource: McCarren Park. The portions of McCarren Park that would be affected by the shadows induced by the Proposed Development mainly consist of vegetation, outdoor walking lanes, benches, and a one-story building occupied with a public restroom to the west and south of the project area. Activities within the affected park area are mostly passive. Therefore, the concerns regarding shadows from the Proposed Development within the affected park area are passive activities and the growth of vegetation. Though the shadows induced by the Proposed Development would be cast upon the northeastern corner of McCarren Park on all analysis days, including growing seasons, the shadows would move constantly throughout the days and be cast upon different portions within the affected area of the park. All the benches, walking lanes, and vegetation within the affected area would have exposure to the direct sunlight for a minimum of 6 hours all year round, the minimum specified in the CEQR Technical Manual to support vegetative growth. As such, the Proposed Actions would not affect the vitality or usage of any sunlight sensitive resources in McCarren Park, and significant adverse shadows impacts would not result from the Proposed Actions.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-650) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Rachel Antelmi at rantelmi@planning.nyc.gov.

Project Name: 840 Lorimer Street Rezoning
CEQR # 21DCP078K
SEQRA Classification: Unlisted

TITLE Deputy Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME Stephanie Shellooe	DATE November 24, 2021
SIGNATURE 	
TITLE Chair, City Planning Commission	
NAME Anita Laremont	DATE November 29, 2021
SIGNATURE	

Project Name: 840 Lorimer Street Rezoning
CEQR # 21DCP078K
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	BK	Block 2679, Lot 43

(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-650**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

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: 840 Lorimer Street Rezoning
CEQR # 21DCP078K
SEQRA Classification: Unlisted

Air Quality

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

> ***Projected Development Site 1:*** *Any new residential and/or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for the heating, ventilating, and air conditioning (HVAC) system and hot water equipment, and ensure the HVAC system and hot water equipment stack is located at the building's highest tier and 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:*** *In order to ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on all facades in order to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.*

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Figure 1: Project Location Map

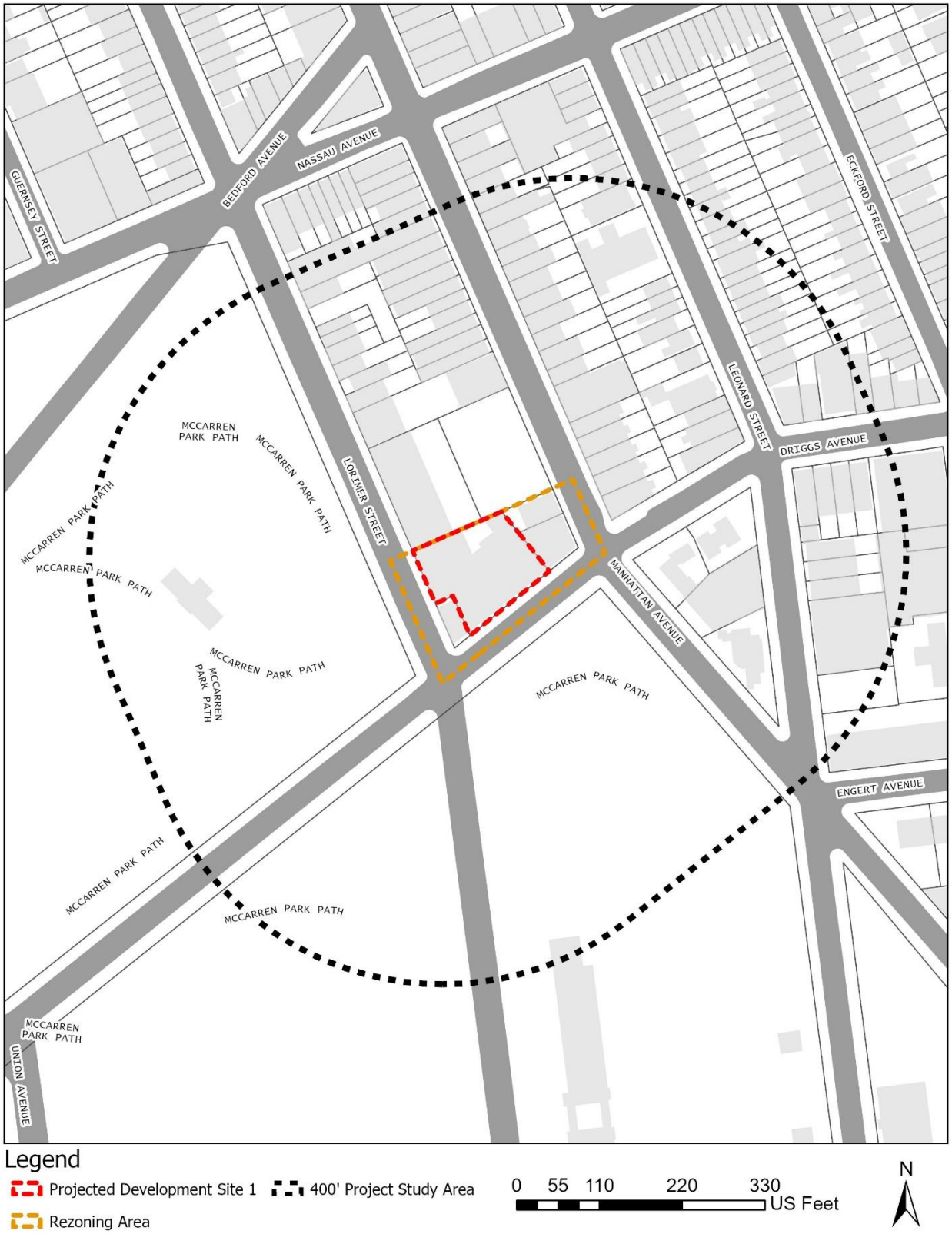


Figure 2: Land Use Map



Figure 3: Tax Map

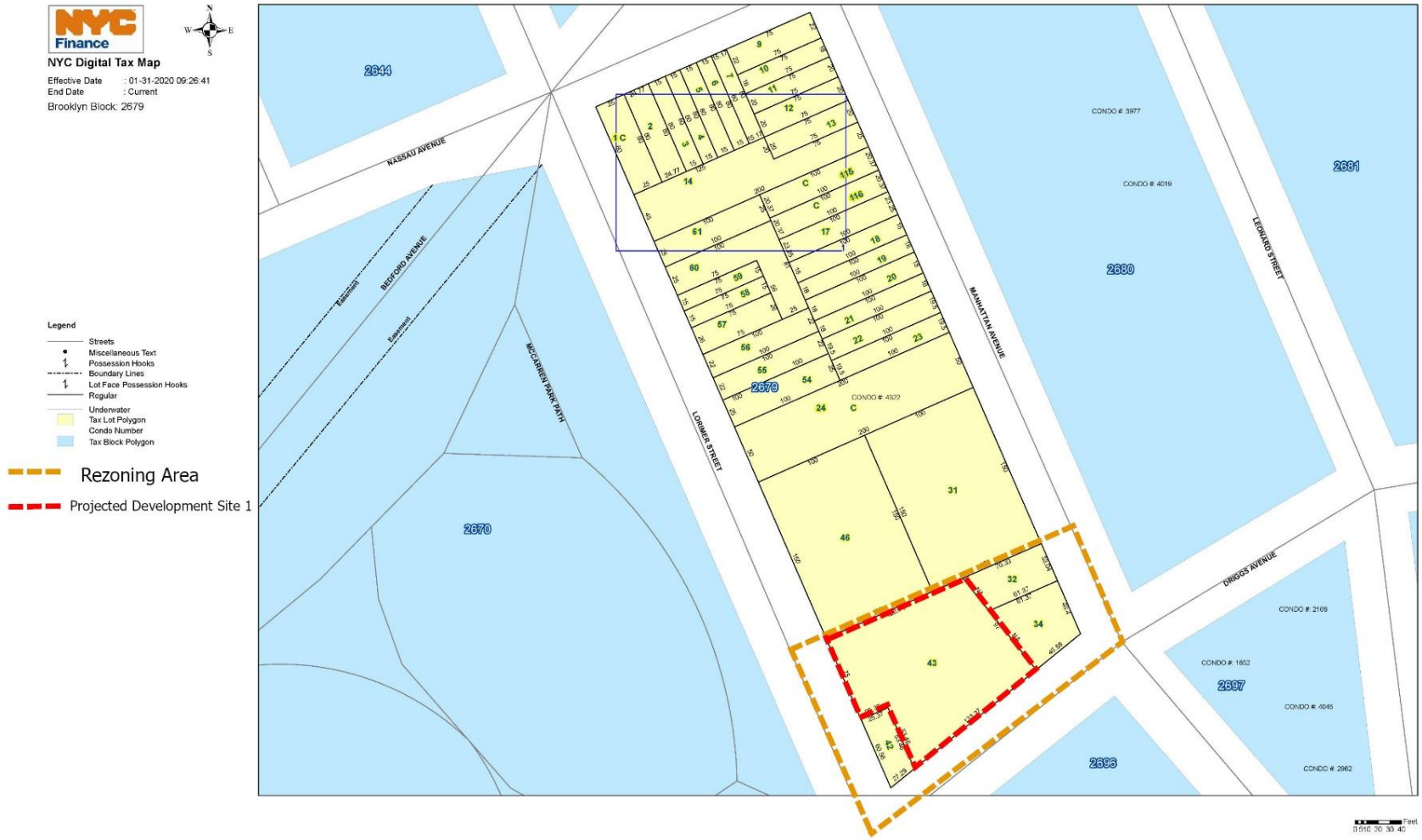
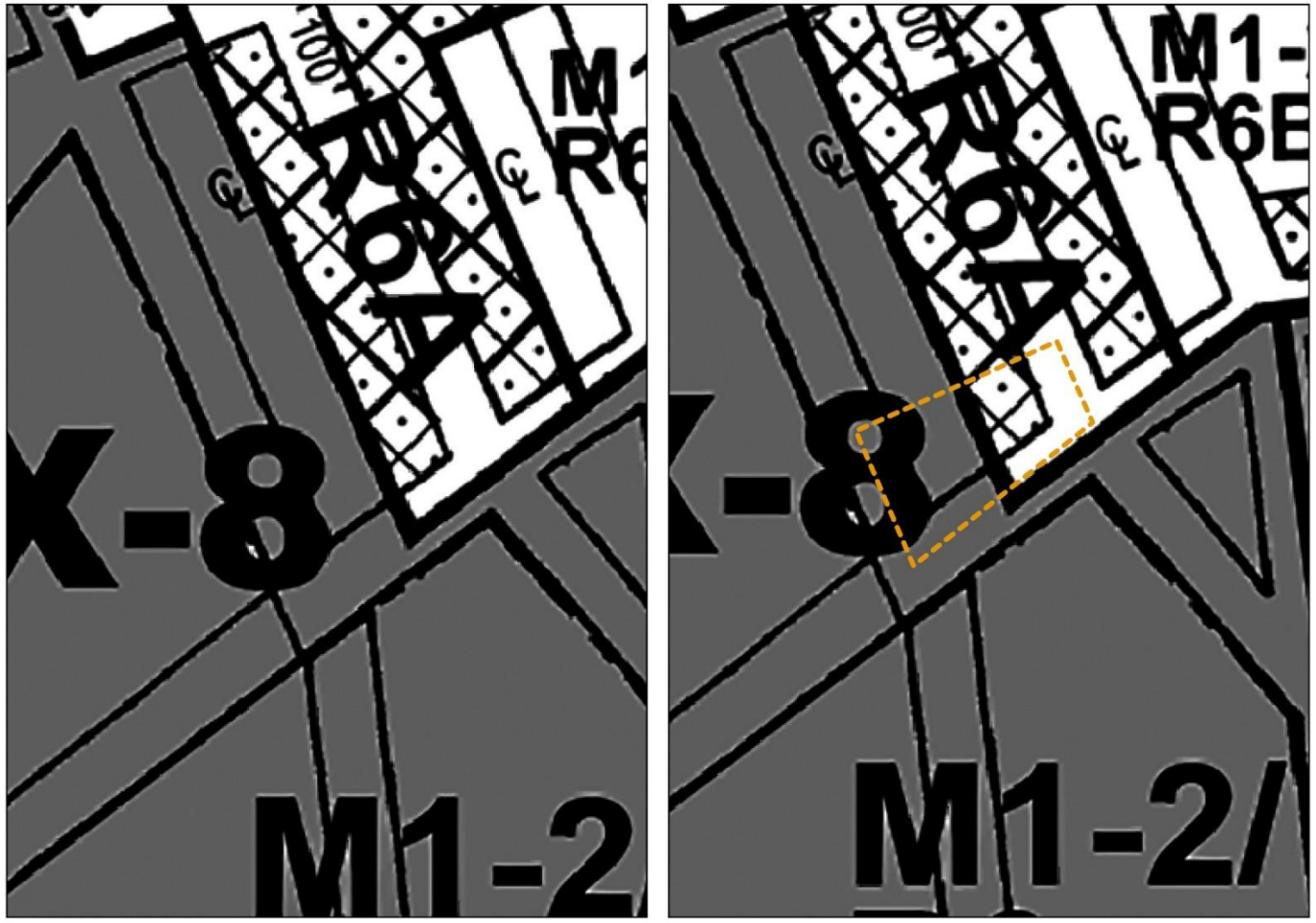


Figure 4: Zoning Change Map



Existing M1-2/R6 (MX-8) and R6A/C2-4 Zoning Districts

Proposed C4-5D Zoning District

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

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

Figure 5: Zoning Map

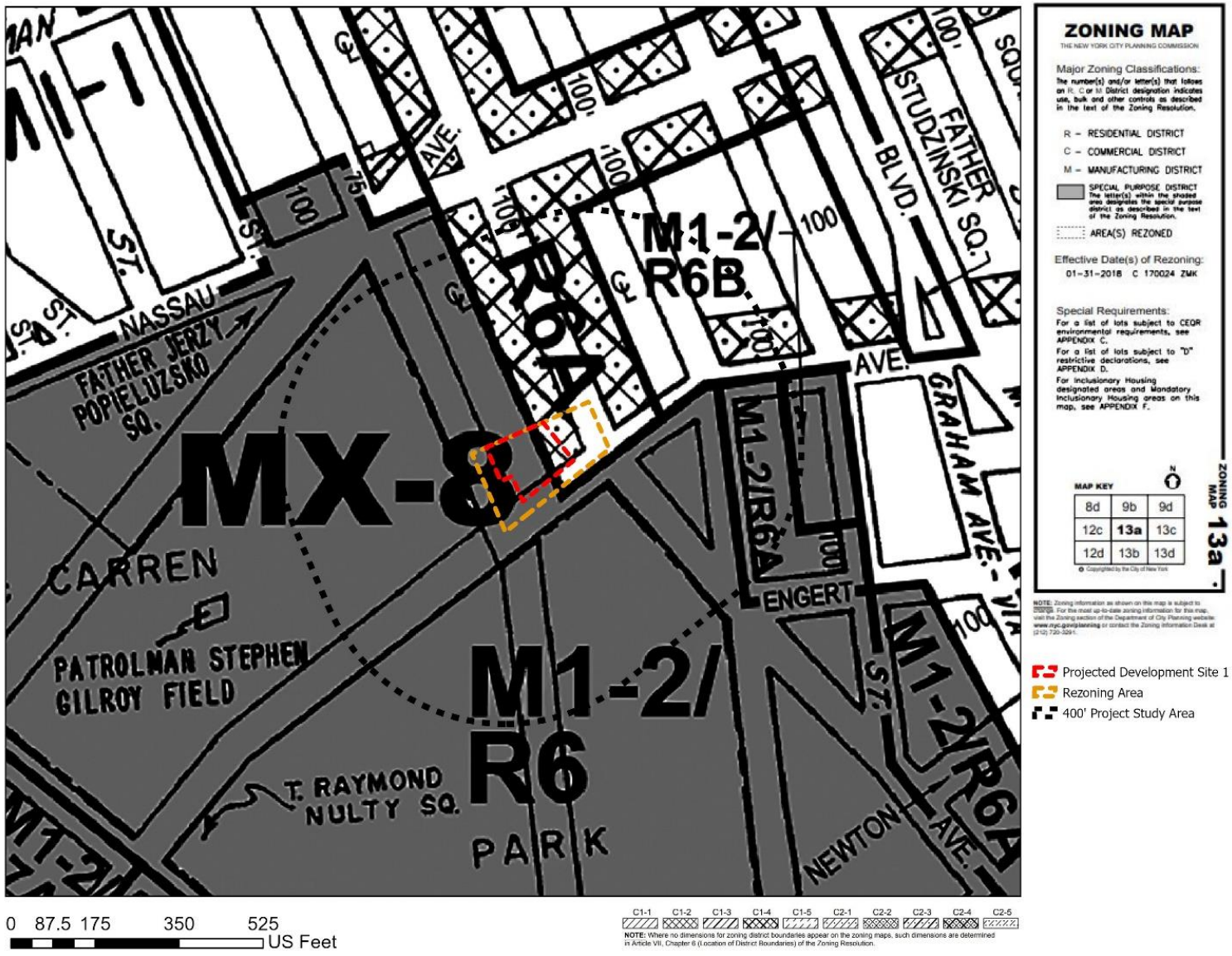


Figure 6-1: Photo Key 1-3 (Site Photos taken on 4/27/2020)



01 View of Lorimer Street and the Subject Property facing south east



02 View of Lorimer Street facing south. Subject Property seen on the left



03 View of Lorimer Street and McCarren Park facing south west



Figure 6-2: Photo Key 4-6



04 View of Lorimer Street facing north. Subject Property seen on the right



05 View of Lorimer Street and the Subject Property facing north



06 View of Lorimer Street and Driggs Avenue intersection facing north. Subject Property centered in frame



Figure 6-3: Photo Key 7-9



07 View of Driggs Avenue and the Subject Property facing north



08 View of Driggs Avenue facing north east



09 View of Driggs Avenue and McCarren Park facing south east from the Subject Property



Figure 6-4: Photo Key 10-12



10 View of Driggs Avenue facing south west. Subject Property seen on the right



11 View of Manhattan Avenue facing south east



12 View of Manhattan Avenue facing south east



Figure 6-5: Photo Key 13-15



13 View of Driggs Avenue and Manhattan Avenue intersection facing west



14 View of Driggs Avenue and Manhattan Avenue intersection facing west



15 View of Manhattan Avenue facing south



1. Project Description

1.1 Introduction

The Applicant, Shabsi Parnes, proposes a zoning map amendment and zoning text amendment (the Proposed Actions) of approximately 21,319 square feet (sf) comprising Block 2679, Lots 32, 34, 42, and 43 (the Affected Area) located along the north block front of Driggs Avenue between Lorimer Street and Manhattan Avenue at the boundary of Greenpoint and Williamsburg neighborhood of Brooklyn, Community District 1.

The zoning map amendment would rezone Block 2679, Lots 42 and p/o 43 from a M1-2/R6 (MX-8) zoning district to a C4-5D zoning district and Block 2679, Lots 32, 34, and p/o 43 from a R6A/C2-4 zoning district to a C4-5D zoning district. The zoning text amendment would affect Zoning Resolution Appendix F by modifying Brooklyn CD 1 Map with MIH area.

The Proposed Actions would facilitate the development of Block 2679, Lot 43 (the Development Site). The Proposed Development is the demolition of the existing massing and the construction of a new mixed-use commercial and residential development of a 119,197 GSF (83,050 ZSF; 5.49 FAR), 10-story, 115-foot-tall building. The proposed development would include 31,377 GSF (25,029 ZSF; 1.65 FAR) of commercial uses, comprised of 10,459 GSF ground floor local retail and 20,918 GSF commercial office on the second floor, and 80,306 GSF (58,021 ZSF; 3.83 FAR) of residential uses from second to tenth floor. The building would contain 74 dwelling units (1,085 GSF average size), approximately 15 of which would be designated as affordable housing units permanently set aside at or below 80% AMI pursuant to MIH Option 1. The project also includes 7,514 GSF of 30 parking spaces at cellar and ground levels.

The building would include 16 enclosed residential accessory parking spaces, residential storage and mechanical space, and commercial space at cellar level. On the ground floor, another 14 enclosed residential accessory parking spaces are provided along with a residential lobby and two separate retail spaces with entrances on Lorimer Street and Driggs Avenue respectively. Two more commercial office spaces would be located on second and third floor with 8,374 GSF on each floor. Residential amenities occupy the rest of the second floor and dwelling units would be distributed through third floor to tenth floor

The Proposed Actions are discretionary actions subject to environmental review. The New York City (NYC) Department of City Planning (DCP) shall be the lead agency on behalf of the NYC City Planning Commission (CPC) for environmental review under CEQR.

1.2 Background

The Affected Area is located at the southern boundary of the Greenpoint neighborhood. It was originally zoned M1-1 and R4/C2-3 in the 1961 zoning ordinance. A 1940 Certificate of Occupancy (CO) exists for Lot 42 to be used as a store and four families multiple use dwellings. A 1923 CO for Lot 34 permits the building's use as a private garage and a 1965 CO permits the use of the site for Use Group 6B automobile supply store on the ground floor and two family residential dwellings on second and third floor. A 2014 CO for Lot 32 permits a mixed-use building on the site with seven dwelling units on first through fourth floor and retail establishment on first floor.

The Department of City Planning ("DCP") has initiated two large-scale rezoning in the Greenpoint-Williamsburg neighborhood, which have exerted great impact on the existing zoning in the Affected Area and are indicative of the area's trend toward mixed residential and commercial uses in context with the scale of the existing buildings.

In 2005, waterfront and upland portions of Greenpoint and Williamsburg neighborhoods were rezoned as part of the Greenpoint-Williamsburg Rezoning (N 050110 (A) ZRK, C 050111 (A) ZMK, effective May 11, 2005). The Greenpoint-Williamsburg Rezoning changed R6, C8-1, C8-2, M1-1, M1-2, M3-1, R6(M-1), R6(M1-2), M1-1(R6), and M1-2(R6) Districts to R6, R6A, R6B, R8, M1-2, M1-2/R6, M1-2/R6A, M1-2/R6B and M1-2/R7A in nearly 200 blocks in the western Community District 1 in the borough of Brooklyn. With the Greenpoint-Williamsburg Waterfront Rezoning, DCP proposed to allow for housing and open spaces, in tandem with light industry and commercial uses in the area. The rezoning established M1-2/R6 Districts and Special Mixed-Use Districts (MX-8) in the western portion of Block 2679, including Lot 42 and a portion of Lot 43, which is within the Affected Area.

In 2009, an approximately 175-block area to the east of the 2005 Greenpoint-Williamsburg Rezoning boundary was rezoned in the Greenpoint-Williamsburg Contextual Rezoning (N 090333 (A) ZRK, C 090334 (A) ZMK, effective July 29, 2009). The contextual rezoning eliminated C1-3, C2-2 and C2-3 districts from within an existing R6 district, changed R6, C4-3 and C8-2 Districts to R6A, R6B, R7A, C4-3A and C4-4A Districts, and established a C2-4 District within adopted R6A, R6B and R7A Districts. Separate from the 2005 Greenpoint-Williamsburg Waterfront Rezoning, this rezoning aims to preserve neighborhood character and scale by limiting the height of new development, to create opportunities and incentives for affordable housing through inclusionary zoning, and to support local retail corridors while protecting the residential character of nearby side streets. The eastern portion of Block 2679, including Lots 32, 34, and the remaining portion of Lot 43, was rezoned R6A/C2-4 as part of the Greenpoint-Williamsburg Contextual Rezoning.

1.3 Description of the Surrounding Area

The Affected Area is located in Community District 1 in the Greenpoint neighborhood of Brooklyn, bordering on the neighborhood of Williamsburg. The Affected Area is bounded by Nassau Avenue to the north, Manhattan Avenue to the east, Driggs Avenue to the south, and Lorimer Street to the west. Nassau Avenue (southwest to northeast) and Driggs Avenue (northeast to southwest) are both narrow one-way roads with a single moving lane in each direction and curbside parking. Manhattan Avenue and Lorimer Street are both northwest-southeast two-way narrow roads with one moving lane of traffic in each direction and curbside parking.

The predominant land uses in the 400-foot Surrounding Area are residential, mixed-use, and open space. Residential is characterized by 3- and 4-story townhouses and apartment buildings within M1-2/R6 (MX-8) and R6B districts. Meanwhile, there are also mid-rise elevator condominium buildings in the vicinity. Located at the northwest boundary of the Affected Area, within an M1-2/R6 (MX-8) district, is a 6-story multi-family elevator residential building with 52 dwelling units located on 848 Lorimer Street (Block 2679, Lot 46). Located to the southeast of the Affected Area are four 6- to 9-story elevator condominium buildings within a triangle-shaped block bounded by Driggs Avenue to the north, Manhattan Avenue to the west, and Leonard Street to the east in the same M1-2/R6 (MX-8) district. Among the four condominium buildings, a 9-story building with mixed residential condo building classification codes is located on 297 Driggs Avenue (Block 2697, Lot 7501)

and provides 14 dwelling units. To its east boundary, there is an 8-story elevator residential building with 12 dwelling units located on 285 Driggs Avenue (Block 2697, Lot 7502). On Block 2697, Lot 7504 (501 Leonard Street), a 6-story mixed commercial and residential building with 18 dwelling units is located to the north of the 8-story elevator building with 14 dwelling units on Block 2697, Lot 7503 (524 Manhattan Avenue).

The mixed-use residential and commercial buildings are located along Manhattan Avenue and Nassau Avenue within a C2-4 overlay in an R6A district to the northeast of the Affected Area. These buildings are mainly 3- to 4-story tall with commercial uses on the ground floor and residential units on the upper floors. The small-scale ground-floor retail commercial uses within the 400-foot study area consist of restaurants, cafe, wine bars, clothing stores, and sports goods stores. McCarren Park is located immediately to the southeast of the Affected Area.

Other land use types also intersperse among the predominant mixed-use and residential uses. A surface-level parking lot is immediately adjacent to the Affected Area on the north side. The two 2-story buildings on 519 Leonard Street (Block 2680, Lot 24) to the northeast of the Affected Area are occupied by St. Stanislaus Memorial American Legion Post 1771, a non-profit organization for veterans. A USPS post office is located on Lot 4 at the northeast corner of Block 2680.

Zoning districts in the Surrounding Area are M1-2/R6 (MX-8) and R6A, R6B, and Park. C2-4 commercial overlays are mapped north-south along both sides of Manhattan Avenue between Driggs Avenue and Norman Avenue within the R6A zoning district. Along both sides of Nassau Avenue, between Lorimer Street to the west and Monitor Street to the east, C2-4 commercial overlays are also mapped within R6A, R7A, and R6B zoning districts from west to east. The Affected Area is split by an M1-2/R6 (MX-8) zoning district and an R6A/C2-4 zoning district in the middle along a north-south direction. The western M1-2/R6 (MX-8) portion is mapped surrounding the McCarren Park while the eastern R6A/C2-4 portion is within a T-shape zoning district, which extends north from Driggs Avenue to Norman Avenue and east from the mid line of the blocks between Lorimer Street and Manhattan Avenue to the mid line of the blocks between Eckford Street and McGuinness Boulevard. The neighboring area to the east of the Affected Area falls into R6B. There exists a large public park to the southwest of the Affected Area. A further discussion of area zoning is provided in the following Land Use, Zoning, and Public Policy section of this document.

The Affected Area is located within a Transit Zone, where households are accessible to transit, retail and services and have low car ownership rates. Within these areas, parking would be optional for affordable housing units. The existing public transportation system around the Affected Area is sufficient to meet the residents' needs. Bus B43, connecting Greenpoint and Lefferts Garden, passes by the Affected Area on the east side along the Manhattan Avenue, with four stops of both directions (two stops on each direction) within 5-minute walk distance. The B48 bus, also running between Greenpoint and Lefferts Garden, serves the Affected Area at four stops located on the Lorimer Street (two stations toward Greenpoint direction) and Manhattan Avenue (two stations toward Lefferts Garden direction) respectively, which would take up to 5 minutes to walk. The area also falls within the 5-minute-walk service area of B62 bus, which runs between Downtown Brooklyn and Long Island City. There is also a subway station (Nassau Avenue) of G train near the area within 5-minute walk distance. G train starts from Court Square in Queens and extends all the way south to Windsor Terrace near Prospect Park in Brooklyn.

1.4 Description of the Affected Area

The Affected Area consists of Block 2679, Lots 32, 34, 42, and 43, totaling approximately 21,319 square feet. The western portion (Lots 42 and p/o 43) is within an M1-2/R6 (MX-8) zoning district and the eastern portion (Lots 32, 34, and p/o 43) is within a R6A/C2-4 zoning district. M1-2/R6 (MX-8) zoning districts allow residential and community facility development up to 3.00 FAR while commercial and industrial development up to 2.00 FAR. Meanwhile, R6A/C2-4 zoning districts share the same FAR requirements with M1-2/R6 (MX-8) zoning districts except that industrial developments are not permitted.

The Applicant Owned Development Site
The Applicant Owned Development Site is located at 840 Lorimer Street (Block 2679, Lot 43). The lot is a 15,130 SF irregularly shaped interior lot with frontage on both Driggs Avenue and Lorimer Street, which is improved with 3 separate buildings totaling 39,125 GSF. Each building is 3 stories in height, and are manufacturing buildings that were constructed in 1931. The buildings are currently used for feather processing facility.

Non-Applicant Controlled Sites
The others lots in the Affected Area are Lots 32, 34, and 42, and are all independently owned:

- Lot 32 is a 2,310 SF interior lot with 33 feet of frontage along Manhattan Avenue. The lot was improved with a 6,600 GSF, 4-story, 7-unit residential dwelling building in 1928, which then received interior renovations in 2013 to convert the ground floor to retail use.
- Lot 34 is a 2,259 SF corner lot with frontage along Manhattan Avenue and Driggs Avenue. The building on site was constructed in 1931, and is a 3-story, 4,500 GSF mixed-use commercial and residential building. The existing building on the lot is under demolition now after a new building permit (321383276-01-NB) of a proposed 6-story 8-dwelling-unit mixed commercial and residential building was approved by Department of Building (DOB) on 09/12/2019.
- Lot 42 is a 1,620 SF corner lot with frontage along Lorimer Street and Driggs Avenue. Originally constructed in 1931, the lot is improved with a 3-story, 4,510 GSF mixed-use residential and commercial building. The building is now owned by Dabm Realty Corp with a ground-floor restaurant, Bernie's, and four residential units.

1.5 Description of the Proposed Development

The Proposed Development is the demolition of the existing massing and the construction of a new mixed-use commercial and residential development of a 119,197 GSF (83,050 ZSF; 5.49 FAR), 10-story, 115-foot-tall building. The proposed development would include 31,377 GSF (25,029 ZSF; 1.65 FAR) of commercial uses and 80,306 GSF (58,021 ZSF; 3.83 FAR) of residential uses. The building would contain 74 dwelling units (1,085 GSF average size), approximately 15 of which would be designated as affordable housing units permanently set aside at or below 80% AMI pursuant to MIH Option 1. The project also includes 7,514 GSF of parking spaces at cellar and ground levels.

The building would include 16 enclosed residential accessory parking spaces, residential storage and mechanical space, and commercial space at cellar level. On the ground floor, another 14 enclosed residential accessory parking spaces are provided along with a residential lobby and two separate retail spaces with entrances on Lorimer Street and Driggs Avenue respectively. Two more commercial office spaces are located

on second and third floor with 8,374 GSF on each floor. Residential amenities occupy the rest of the second floor and dwelling units are distributed through third floor to tenth floor.

1.6 Action(s) Necessary to Facilitate the Project

There are two actions necessary to facilitate the Proposed Development:

1) A Zoning Map Amendment to rezone Block 2679, Lots 32, 34, and p/o 43 from a R6A/C2-4 zoning district to a C4-5D zoning district; and Block 2679, Lots 42 and p/o 43 from an M1-2/R6 (MX-8) zoning district to a C4-5D zoning district.
2) A Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 1, Brooklyn, to establish the Affected Area as an MIH Area.

1.7 Purpose and Need

The Affected Area is currently mapped within an M1-2/R6 (MX-8) and R6A/C2-4 zoning district, which makes it less attractive to investments due to the limited bulk (3.00 FAR residential and community facility, 2.00 commercial and industrial) and high parking requirements (1 space per 300 SF) for all commercial and industrial uses. As a result, the existing zoning cannot provide an incentive for new conforming mixed-use development in the Affected Area.

The Applicant believes that the increased bulk (3.00 maximum FAR within M1-2/R6(MX-8) and R6A/C2-4 to 5.60 FAR within new proposed C4-5D zoning districts) and the reduction of parking requirements (1 space per 300 sf of uses within existing M1-2) would help induce the development of an underutilized lot (used for feather processing currently) within a mixed residential and commercial district in a growing neighborhood of Brooklyn. In addition, there will not be any manufacturing use within the proposed C4-5D zoning district, which is not in context with the surrounding commercial and residential uses. The Proposed Actions would also set aside a substantial amount of permanently affordable housing units, furthering city goals for affordable housing.

The Affected Area within the M1-2/R6 (MX-8) and R6A/C2-4 district is underutilized and present an opportunity for new mixed-use growth. It is in close proximity to existing mixed-use residential and commercial districts and to mass transit. There are numerous public transportation options for bus and subway service near the Affected Area, including the three bus lines (B43, B48, and B62) and the Nassau Avenue subway station with G line service located at the intersection of Nassau Avenue and Manhattan Avenue.

The Applicant feels the proposed C4-5D envelope, equivalent to R7D envelope, is consistent with the M1-2/R6(MX) and R6A/C2-4 districts mapped in the area. It would permit medium-density residential development at a maximum FAR of 5.6 for developments with a permanent affordable housing set aside pursuant to the MIH program. The maximum building height is 115 feet after a setback from the base height of up to 95 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 11 floors. Off-street parking is required for 50 percent of the residential dwelling units but is not required for income-restricted housing units within the Transit Zone. Within the proposed C4-5D district, the bulk regulations of Article III, Chapter 3 would apply to commercial and community facility uses. At this density, the Applicant would be able to construct a mixed-

use residential and commercial building with 80 units, of which 16 would be permanently affordable at low-income levels under MIH program according to CEQR analysis standards.

The proposed rezoning would provide new opportunities for affordable and market-rate housing development to revitalize an area experiencing young population decline for the past decade. While the total population in the local census tract encompassing the Affected Area, Brooklyn census tract 569, almost remains the same between 2000 and 2010, the population age structure in this census tract changed dramatically with the young population, who are in their 20s, dropped by more than 75%. Additionally, new affordable housing is a critical need in Brooklyn Community District 1, where almost 40 percent of the households are rent burdened. According to the U.S. Census Bureau, American Community Survey (ACS) 2013-17 Five Year Estimates for Public Use Microdata Area (PUMA) 4001 (which approximates Brooklyn Community District 1), 40.3 percent of households spend 35 percent or more of their income on rent. The number of rent burdened households has grown significantly by 11.7% from ACS 2006-2010 data to ACS 2013-17 data. Meanwhile, the median gross rent in Brooklyn Community District 1 has risen sharply by 39.1% from 1,193 dollar per month to 1,659 dollar per month between the two American Community Surveys. It is much higher than the median gross rent in Brooklyn of 1,314 dollar per month and New York City of 1,340 dollar per month.

Besides, 24 percent of Brooklyn Community District 1 residents have incomes below the NYC.gov Poverty Threshold, above the estimated 21.9 percent in Brooklyn and 19.6 percent Citywide. According to the Furman Center's "State of New York City's Housing and Neighborhoods in 2018", median monthly rent in Community District 1 has risen from $900 in the year 2000 to $2,000 in 2017 as the demand for housing has placed upward pressure on the supply of housing. It reports median asking rents were substantially higher at $2,980 in 2017 having risen rapidly from $2,500 in 2010.[1] The proposed development would add an estimated 80 dwelling units including 16 affordable units to meet this demand on a site now used for manufacturing and would provide opportunities for additional housing supply, including affordable housing on other non-residential sites.

In addition to opportunities for medium-density housing development under the MIH program, mapping a C4-5D within the Affected Area provides opportunities for active, non-residential ground floor use. Establishing a C4-5D district would promote a transition to a mix of uses as envisioned by Community Board 1, helping to foster both residential growth with affordable housing and revitalization of an underutilized property. The C4-5D district would encourage job creation and provide increased walk-to-work opportunities for a diverse mix of business uses, while forbidding the existing industrial uses in a mixed-use residential and commercial area for a more resident and pedestrian friendly environment.

It is the Applicant's opinion that the proposed zoning map amendment would thus allow the productive and more intensive reuse of the underutilized property. In addition, it would help reknit the urban fabric in the area and better integrate it within the predominately mixed-use portion of the Greenpoint neighborhood surrounding the McCarren Park. The proposed C4-5D would allow residential and local retail/ service uses with larger bulk and encourage neighborhood investment and job creation. The proposed development would include opportunities for such employment growth.

The proposed text amendment of ZR Appendix F is necessary for establishing an MIH Area, which would require new developments to set aside 25-30 percent of the residential floor area for affordable housing. MIH

[1] See New York University Furman Center, State of New York City's Housing and Neighborhoods in 2018, 52; available at: http://furmancenter.org/files/sotc/SOC_2018_Full.pdf.

Option 1 requires to set aside 25 percent of the residential floor area as affordable housing for low-income families, whose household income are at an average of 60 percent of AMI, including 10 percent of the total residential floor area for households with an income at 40 percent of AMI. MIH Option 2 requires to set aside 30 percent of the residential floor area for households with an income at an average of 80 percent AMI. The Applicant proposes mapping both MIH Option 1 and Option 2 within the Affected Area to provide maximum flexibility for both Applicant controlled and non-Applicant controlled sites. The MIH program for the Development Site would result in approximately 16 permanently affordable units. The proposed affordable housing set-asides would ensure that development within the Affected Area would address the critical need for new affordable housing in Brooklyn Community District 1. The proposed MIH Area would address the City's Housing New York: A Five-Borough, Ten-Year Plan goals by increasing affordable housing to help ensure the community remains economically diverse in the face of increasing pressure for market-rate development.

The Proposed Actions are consistent with many of the City's Stated Policy goals such as the concession of more affordable housing, supportive transit-oriented housing, job creation, and the provision of first floor commercial uses that serve the needs of the local community. The proposed C4-5D zoning district will encourage neighborhood investment in both residential and commercial uses, which is critical to the City's economic viability from encroachment. The proposed rezoning will respond to the evolving needs of the local community economy as well as enhance the vitality of the existing neighborhood by ensuring a balanced variety of uses. Due to the proximity among mixed-use, community facility, commercial, and residential uses as well as open space, the Affected Area is well suited for the Proposed Development and would serve as both a paradigm and a platform for new mixed-use communities throughout the City's Boroughs.

1.8 Analysis Framework

Build Year

The analysis year for the Proposed Actions is 2023 based on an 18-month period for pre-certification and ULURP processes followed by an 18-month timeline for the development of the Applicant site.

The analysis which follows compares the difference between the future without the Proposed Actions (No-Action condition) and the future with the Proposed Actions (With-Action condition) for the 2023 analysis year. This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions.

Existing Condition

Projected Development Site (Block 2679, Lot 43)

The Applicant Owned Development Site is located at 840 Lorimer Street (Block 2679, Lot 43). The lot is a 15,130 SF irregularly shaped interior lot with frontage on both Driggs Avenue and Lorimer Street, which is improved with 3 separate buildings totaling 39,125 GSF. Each building is 3 stories in height, and are manufacturing buildings that were constructed in 1931. The buildings are currently used for feather processing facility.

Other Affected Sites (Block 2679, Lots 32, 34, and 42)

The others lots in the Affected Area are Lots 32, 34, and 42, and are all independently owned.

Lot 32 is a 2,310 SF interior lot with 33 feet of frontage along Manhattan Avenue. The lot was improved with a 6,600 GSF, 4-story, 7-unit residential dwelling building in 1928, which then received interior renovations in 2013 to convert the ground floor to retail use.

Lot 34 is a 2,259 SF corner lot with frontage along Manhattan Avenue and Driggs Avenue. The building on site was constructed in 1931, and is a 3-story, 4,500 GSF mixed-use commercial and residential building. The existing building on the lot is under demolition now after a new building permit (321383276-01-NB) of a proposed 6-story 8-dwelling-unit mixed commercial and residential building was approved by Department of Building (DOB) on 09/12/2019.

Lot 42 is a 1,620 SF corner lot with frontage along Lorimer Street and Driggs Avenue. Originally constructed in 1931, the lot is improved with a 3-story, 4,510 GSF mixed-use residential and commercial building. The building is now owned by Dabm Realty Corp with a ground-floor restaurant, Bernie's, and four residential units.

No-Action Condition

Projected Development Site (Block 2679, Lot 43)

Under the Projected Site's existing M1-2/R6 (MX-8) and R6A/C2-4 zoning, development of residential or community facility uses at up to 3.0 FAR and commercial or light industrial uses at up to 2.0 FAR would be permitted in the future without the Proposed Actions. For most uses, one (1) parking space is required for every 300 sf of development under an M1-2 zone per ZT § 44-21. Parking is waived per ZT § 44-23 if the requirement thereby calculated is less than 15 spaces.

Redevelopment of Block 2679, Lot 43 is not economically feasible in the absence of the Proposed Actions due to the limited bulk and high parking requirements for all commercial and industrial uses within the existing M1-2/R6 (MX-8) and R6A/C2-4 zoning district. Therefore, it is expected that without the Proposed Actions, the Affected Area would remain the same as the existing conditions, which is three manufacturing buildings of 2.59 FAR.

Other Affected Sites (Block 2679, Lots 32, 34, and 42)

Lot 32 was improved with a 6,600 GSF multi-family walk-up building in 1928, which contains 1 commercial unit and 7 dwelling units. Because of the building's age and exceedance of six dwelling units, the building is likely under rent control regulations. Therefore, it is expected to remain in its existing condition.

Lot 34 was improved with a 3-story mixed-use building of 4,500 GSF, including 2,821 GSF commercial use and 1,679 GSF residential use. Built in 1931 and altered in 2002, the building has a local retail store on the ground floor and 2 residential units on the upper floor. The existing building on the lot is under demolition now after a new building permit (321383276-01-NB) of a proposed 6-story 8-dwelling-unit mixed commercial and residential building was approved by DOB on 09/12/2019. Under the No-Action scenario, the new as-of-right construction would complete and the DOB approved mixed-use building would replace the existing one.

Lot 42 has a width of 27.25 feet and a depth of 60.5 feet. The 1,620-SF lot doesn't have sufficient lot area for any new development and it is occupied by an actively operated restaurant.

With-Action Condition

Projected Development Site (Block 2679, Lot 43)

The 15,130-square-foot Applicant-Owned lot would be developed with a 119,197 GSF (83,050 ZSF; 5.49 FAR) mixed-use commercial and residential building. There would be 31,377 GSF of commercial uses (10,459 GSF of ground floor local retail and 20,918 GSF of commercial office on second and third floor) and 80,306 GSF of residential uses on the upper floors. The 10-story building would have a building height of 115 feet. There would be 94 total dwelling units (1 unit per 850 GSF), with 75 being market rate and 19 being permanently affordable per MIH Option 1. 38 residential accessory spaces would be required, and 38 spaces (7,514 GSF) would be provided at both cellar and ground levels. No commercial accessory parking spaces are required within the C4-5D zoning district.

Other Affected Sites (Block 2679, Lots 32, 34 and 42)

The other lots within the rezoning area are not expected to develop:

- Lot 32 was improved with a 6,600 GSF multi-family walk-up building in 1928, which contains 1 commercial unit and 7 dwelling units. Because of the building's age and exceedance of six dwelling units, the building is likely under rent control regulations and redevelopment of the building is not likely. It is expected that it would continue in its current use under the With-Action scenario.
- Lot 34 was improved with a 3-story, 4,500 GSF mixed-use commercial and residential building, which was constructed in 1931. The existing building on the lot is under demolition now after a new building permit (321383276-01-NB) of a proposed 6-story 8-dwelling-unit mixed commercial and residential building was approved by DOB on 09/12/2019. Given the current reinvestment on the site, additional redevelopment is unlikely on the site under the With-Action scenario.
- Lot 42 was improved with a 4,510 GSF multi-family walk-up building in 1931 and contains 1 commercial unit and 4 dwelling units. The lot has a width of 27.25 feet and a depth of 60.5 feet, which is too small and narrow to accommodate efficient new development. Therefore, redevelopment is unlikely on the site under the With-Action scenario.

For purposes of a conservative analysis the RWCDS will assess the maximum permitted envelope for the urban design and shadows assessment. The shadows assessment will also take into account a reasonable bulkhead height for mechanical equipment (20-foot-tall bulkheads for the projected site).

The RWCDS Analysis Framework described above is shown below in **Table 1.8-1.**

Table 1.8-1: RWCDS Analysis Framework Table

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Land Use				
Residential	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
Describe type of residential structures	N/A	N/A	One mixed-use multi-family building	
No. of dwelling units	N/A	N/A	94	94
No. of low- to moderate-income units	N/A	N/A	19	19
Gross floor area (sq. ft.)	N/A	N/A	80,306	80,306
Commercial	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
Describe type (retail, office, other)	N/A	N/A	Local Retail, Commercial Office	
Gross floor area (sq. ft.)	N/A	N/A	Local Retail: 10,459 gsf; Commercial Office: 20,918 gsf	31,377
Manufacturing/Industrial	Yes	Yes	No	
If "yes," specify the following:				
Type of Use	Light Industrial	Light Industrial	N/A	
Gross floor area (sq. ft.)	39,125	39,125	N/A	-39,125
Open storage area (sq. ft.)	N/A	N/A	N/A	
If any enclosed activities, specify:	N/A	N/A	N/A	
Community Facility	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify the following:				
Type of Use	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Vacant Land	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes", describe:	N/A	N/A	N/A	
Publicly Accessible Open Space	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify type (mapped City, State, or Federal Parkland, wetland-mapped or otherwise known, other):	N/A	N/A	N/A	
Other Land Uses	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Parking				
Garages	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	N/A	
No. of accessory spaces	N/A	N/A	38	38
Operating hours	N/A	N/A	24/7	
Attended or non-attended	N/A	N/A	attended	
Lots	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify the following:	TRUE	TRUE	TRUE	

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
No. of public spaces	N/A	N/A	N/A	
No. of accessory spaces	N/A	N/A	N/A	
Operating hours	N/A	N/A	N/A	
Other (includes street parking)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Population				
Residents	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify number:	N/A	N/A	237	237
Briefly explain how the number of residents was calculated:	2.52 person dwelling unit average per Brooklyn CD 1 (2018 ACS)			
Businesses	☑ Yes ☐ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. and type	Feather processing	Feather processing	2 local retail, 2 commerical office	
No. and type of workers by business	39	39	**115 total:** 31 local retail, 84 commercial office	76
No. and type of non-residents who are not workers	587	587	4,299	3,712
Briefly explain how the number of businesses was calculated:	Employees: 3 employees per 1,000 SF for local retail; 1 employee per 250 SF for commercial office; 1 employee per 1,000 SF manufacturing space. Patrons: 205 per 1,000 SF local retail; 15 per 1,000 SF light industrial, 103 per 1,000 SF commercial office. (Per transportation factors.)			
Other (students, visitors, concert-goers, *etc* .)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If any, specify type and number:	N/A	N/A	N/A	
Briefly explain how the number was calculated:				
Zoning				
Zoning classification	M1-2/R6, R6A/C2-4	M1-2/R6, R6A/C2-4	C4-5D	
Maximum amount of floor area that can be developed	3.00 Res. and CF; 2.00 Mf and Com.	3.00 Res. and CF; 2.00 Mf and Com.	5.60 Res.; 4.20 Com. and CF	
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Residential, Commercial, Mixed-Use, Open Space, Transportation; M1-2/R6(MX-8), R6A, R6B, C2-4	Residential, Commercial, Mixed-Use, Open Space, Transportation; M1-2/R6(MX-8), R6A, R6B, C2-4	Residential, Commercial, Mixed-Use, Open Space, Transportation; M1-2/R6(MX-8), R6A, R6B, C2-5	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

2. Environmental Review

Chapter 4: Land Use, Zoning, and Public Policy

The *CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the Surrounding Area. Land use, zoning and public policy are described in detail below. This section considers existing conditions, development trends, zoning, and other public policies in relation to the Projected Development Site and the area in which the Proposed Actions may have an effect. Because the Proposed Actions would permit a larger bulk that are not permitted as of right under the existing M1-2/R6(MX-8) and R6A/C2-4 zoning regulations, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTOTM 20v2 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within the 400-foot Study Area were performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No-Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of New York City Department of City Planning (NYCDCP) and other city agencies programs and documentation.

2.4.1 Land Use

The *CEQR Technical Manual* suggests that a land use, zoning and public policy study area should generally extend 400 feet from the Affected Area. Existing land uses within approximately 400 feet of the Affected Area are presented in **Figure 2.4-1**.

Figure 2.4-1: Area to be Rezoned Overlaid Existing Land Use Map



Existing Conditions

Land Use Study Area

As shown in **Figure 2.4-1** and stated in **Section 1.3**, the Surrounding Area is predominantly residential, mixed-use, and open space. Residential is characterized by 3- and 4-story townhouses and apartment buildings. Meanwhile, there are also mid-rise elevator condominium buildings in the vicinity. The mixed-use residential and commercial buildings are located along Manhattan Avenue and Nassau Avenue to the northeast of the Affected Area. These buildings are mainly 3- to 4-story tall with commercial uses on the ground floor and residential units on the upper floors. The small-scale ground-floor retail commercial uses within the 400-foot study area consist of restaurants, cafe, wine bars, clothing stores, and sports goods stores. McCarren Park is located immediately to the southeast of the Affected Area.

Other land use types also intersperse among the predominant mixed-use and residential uses. A surface-level parking lot is immediately adjacent to the Affected Area on the north side. The two 2-story buildings on 519 Leonard Street (Block 2680, Lot 24) to the northeast of the Affected Area are occupied by St. Stanislaus Memorial American Legion Post 1771, a non-profit organization for veterans. A USPS post office is located on Lot 4 at the northeast corner of Block 2680.

Affected Area

A full breakdown of each lot within the Affected Area can be found in **Section 1.4**.

The Development Site (Block 2679, Lot 43) consists of an irregularly shaped interior lot with frontages on both Lorimer Street and Driggs Avenue. It is improved with 3 separate buildings totaling 39,125 GSF. Each building is 3 stories in height, and are manufacturing buildings that were constructed in 1931. The buildings are currently used for feather processing facility.

Other lots within the Affected Area include a four-story seven-unit residential building on lot 32 (2.65 FAR); a three-story mixed-use commercial and residential building on lot 34 (1.88 FAR), which is under demolition now for the new construction of a six-story eight-unit mixed-use building; and Lot 42, which is improved with a three-story, 4,510 GSF mixed-use residential and commercial building (2.59 FAR), with a ground-floor restaurant, Bernie's, and four residential units.

Analysis

Future No-Action Condition

Land Use Study Area

There are five active construction permits in the Surrounding Area, accounting for 44,620 GSF of development and 96 proposed dwelling units. As shown in **Table 2.4-1** below, the largest active development, which accounts for roughly half of the proposed floor area and three quarters of dwelling units, is located at 65 Eckford Street. It is a 27,361 GSF new building, which will include 70 dwelling units and rise to a height of 5 stories.

Table 2.4-1: Active Major Construction Projects					
Address	Type	Land Use	Additional Floor Area (GSF)	Dwelling Units	Stories
888 Lorimer Street	New Building	Residential	12,532	5	6
574 Manhattan Avenue	Alt 1 Enlargement	Residential	2,700	9	4
602 Manhattan Avenue	Alt 1 Enlargement	Residential	471	8	5
65 Eckford Street	New Building	Residential	27,361	70	5
67 Engert Avenue	Alt 1 Enlargement	Residential	1,556	4	3
Total			**44,620**	**96**	
561 Manhattan Avenue*	New Building	Residential	13,076	8	6

* Construction Permit Within Affected Area Expected to be Issued.
GSF = Gross Square Feet

Affected Area

As shown in **Table 2.4-1** above, there is one New Building Permit (321383276-01-NB) within the Affected Area expected to be issued soon on Block 2679 Lot 34 (561 Manhattan Avenue). The latest action from DOB was approval of the plan exam on 09/12/2019. Currently, the existing building on the site is being demolished and the proposed development would be a 6-story 8-unit mixed commercial and residential building with 13,076 GSF (8,803 ZSF, 2.99 FAR). Under the No-Action Condition in the future, only the development on Lot 34 would be anticipated and other sites would remain the same as the Existing Conditions.

Future With-Action Condition

Land Use Study Area

Land use and development patterns in the land use study area are anticipated to remain unchanged in the future with the Proposed Actions. Any new development in the Affected Area or Surrounding Area would be consistent with the medium-density R6 and R6A residential zoning, M1-2 manufacturing zoning, C2-4 commercial overlay zoning, or the proposed rezoning of C4-5D as discussed previously.

Affected Area

Projected Development Site (Block 2679, Lot 43)

Under the With-Action Condition, the Applicant-Owned lot (Projected Development Site) would have a projected lot size of 15,130 SF, and would be developed with a 119,197 GSF (83,050 ZSF; 5.49 FAR) mixed-use commercial and residential building. There would be 31,377 GSF of ground floor commercial (local retail) uses and 80,306 GSF of residential uses on the upper floors. There would be 94 total dwelling units (1 unit per 850 GSF), with 75 being market rate and 19 being permanently affordable per MIH Option 1. 38 residential accessory spaces would be required, and 38 spaces (7,514 GSF) would be provided at both cellar and ground levels. No commercial accessory parking spaces are required within the C4-5D zoning district.

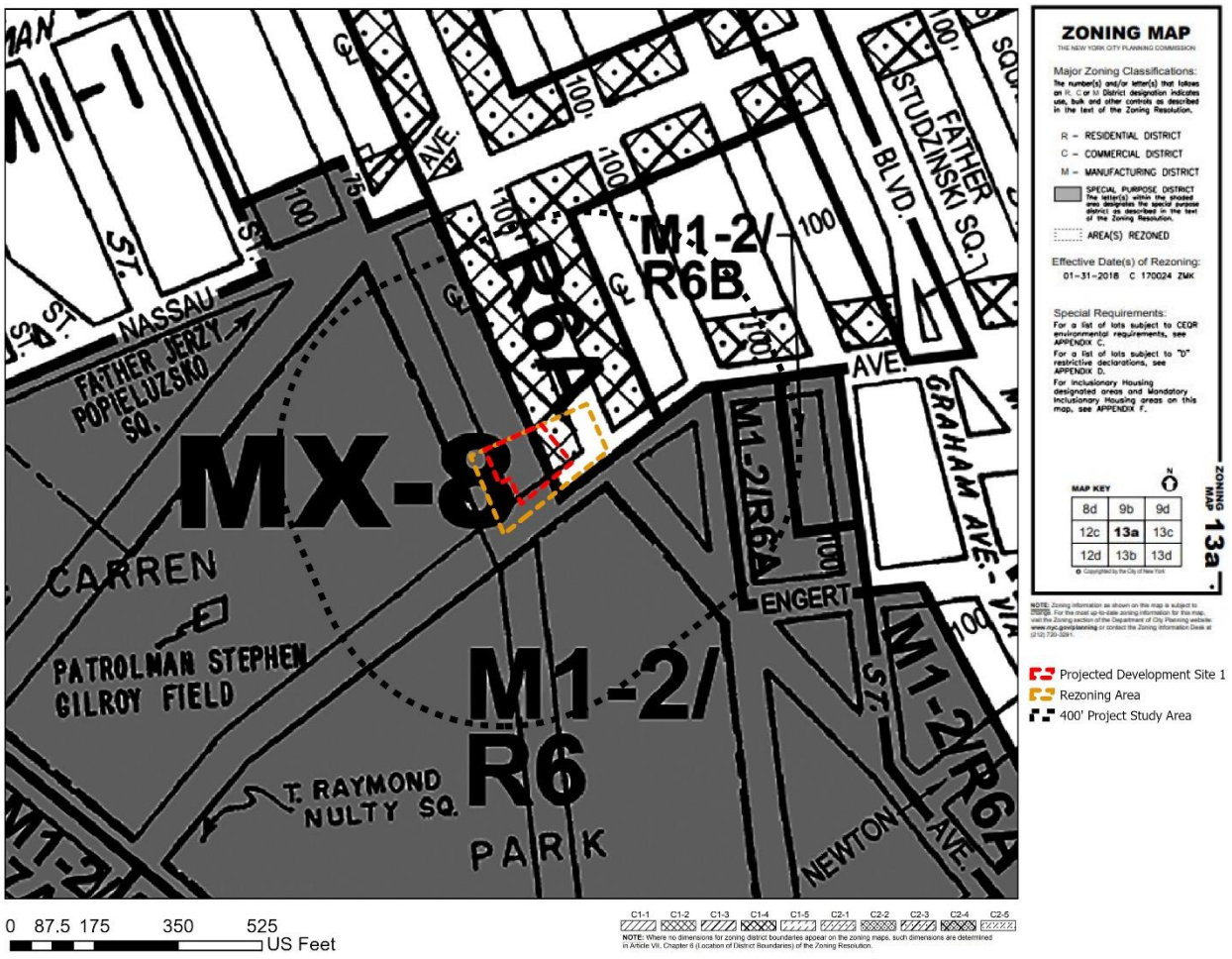
The density and uses permitted by the Proposed Actions would be consistent with nearby mid-rise multi-family buildings mostly along Manhattan Avenue and Nassu Avenue. The development would also continue

the recent development trend in the area: DOB records indicate that there are 5 active construction permits with 44,620 GSF of construction proposed, including 96 dwelling units in the area.

2.4.2 Zoning

The *CEQR Technical Manual* suggests that a zoning study area should extend 400 feet from the Affected Area. Existing zoning districts within approximately 400 feet of the Project Site are presented in **Figure 2.4-2**. The proposed zoning map amendment would affect the following lots: Block 2679, Lots 42 and p/o 43 from a M1-2/R6 (MX-8) zoning district to a C4-5D zoning district and Block 2679, Lots 32, 34, and p/o 43 from a R6A/C2-4 zoning district to a C4-5D zoning district.

Figure 2.4-2: Area to be Rezoned Overlaid Existing Zoning Map



Existing Conditions

<u>Zoning Study Area</u>

The zoning districts within 400 feet of the Affected Area are M1-2/R6 (MX-8), R6A, R6B, C2-4 commercial overlays, and Park.

Table 2.4-2: Zoning Districts in the Surrounding Area			
Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
M1-2/R6 (MX-8)	Light Manufacturing & Residential UGs 1-14, 16-17	3.00 FAR - Residential 2.00 FAR - Manufacturing 2.00 FAR - Commercial 3.00 FAR - Community Facility	1 per 300 sf
R6A	Contextual Residential UGs 1-4	3.60 FAR - Residential 3.00 FAR - Community Facility	50% of DU; 0 for IRHU
R6B	Contextual Residential UGs 1-4	2.20 FAR - Residential 2.00 FAR - Community Facility	50% of DU; 0 for IRHU
C2-4 Commercial Overlay	Local Retail UGs 1-9, 14	1.00 FAR - Commercial (R1-R5B) 2.00 FAR - Commercial (R5B - R10X)	1 per 1,000 sf
Park	-	-	-
C4-5D*	Contextual General Commercial UGs 1-6, 8-10, 12	4.20 FAR - Commercial 5.60 FAR – Residential 4.20 FAR - Community Facility	1 per 1,000 sf

* Proposed Zoning District Within Affected Area
Source: Zoning Handbook, New York City Department of City Planning, 2019

Existing zoning districts in the surrounding area include:

M1-2/R6 (MX-8)

The Special Mixed-Use District (MX) was first established in 1997 to recognize the varied character of mixed residential and industrial neighborhoods by permitting the expansion and new development of a wide variety of uses, as well as to create new opportunities for mixed use areas. The Special Mixed-Use Districts are currently found in all boroughs except Staten Island. These include Port Morris (MX-1), in the Bronx; Greenpoint-Williamsburg (MX-8) in Brooklyn; the Northern Hunters Point Waterfront (MX-9) in Queens; and West Harlem (MX-15) in Manhattan.

The M1-2/R6 (MX-8) zoning districts integrate the zoning regulations of both M1-2 and R6 districts. Combining the two zoning districts together, the FAR in M1-2/R6 (MX-8) zoning districts for residential and community facility are both 3.0 and the FAR for manufacturing and commercial are both 2.0. The maximum building height would be 75 feet and the maximum stories would be 7. One parking space per 300 square feet is required in M1-2/R6 (MX-8) districts.

R6A

R6A is a contextual district where the Quality Housing bulk regulations are mandatory. These regulations produce high lot coverage, six- to eight-story apartment buildings set at or near the street line. Designed to be compatible with older buildings found in medium-density neighborhoods, R6A districts are mapped in the Bronx, Brooklyn and Queens.

The basic residential FAR in R6A districts is 3.0. Above a minimum base height of 40 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 70 feet, or 75 feet if providing a qualifying ground floor. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

Off-street parking is generally required for 50 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots less than 10,000 square feet. Parking can be waived if five or fewer spaces are required.

R6B

R6B districts are often traditional row house districts, which preserve the scale and harmonious streetscape of neighborhoods of four-story attached buildings developed during the 19th century. Many of these houses are set back from the street with stoops and small front yards that are typical of Brooklyn's "brownstone" neighborhoods, such as Park Slope, Boerum Hill and Bedford Stuyvesant.

The FAR of 2.0 and the mandatory Quality Housing regulations also accommodate apartment buildings at a similar four- to five-story scale. The base height of a new building before setback must be between 30 and 40 feet and the maximum height is 50 feet. For buildings providing a qualifying ground floor, the maximum base height and overall height increase by 5 feet. Higher maximum FAR are available for buildings participating in the Inclusionary Housing program or that provide certain senior facilities.

Off-street parking spaces are required for 50% of the dwelling units. However, requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone. Parking can be waived if five or fewer spaces are required.

C2-4 Commercial Overlay

C2-4 districts are commercial overlays mapped within residence districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts.

Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use.

When commercial overlays are mapped in R1 through R5 districts, the maximum commercial floor area ratio (FAR) is 1.0; when mapped in R6 through R10 districts, the maximum commercial FAR is 2.0. Commercial buildings are subject to commercial bulk rules.

Overlay districts differ from other commercial districts in that residential bulk is governed by the residence district within which the overlay is mapped. All other commercial districts that permit residential use are assigned a specific residential district equivalent. Unless otherwise indicated on the zoning maps, the depth of overlay districts ranges from 100 to 200 feet.

Park

A public park is any publicly owned park, playground, beach, parkway, or roadway within the jurisdiction and control of the New York City Commissioner of Parks & Recreation. Typically, public parks are not subject to zoning regulations.

On the south and west of the Surrounding Area, nearly half of the whole area within 400 feet is occupied by a large public park called McCarren Park. It is owned by NYC Department of Parks and Recreation and is operating as open space and outdoor recreation facilities.

Affected Area

The Affected Area is zoned M1-2/R6 (MX-8) and R6A/C2-4, which permits mid-density residential developments along with manufacturing, commercial, or community facility uses.

Analysis

Future No-Action Condition

Zoning Study Area and Affected Area

No changes to zoning would occur in the future without the Proposed Actions. Existing zoning patterns would remain. The Affected Area would continue to be subject to M1-2/R6 (MX-8) and R6A/C2-4 zoning regulations.

Future With-Action Condition

Zoning Study Area

No changes to zoning would occur in the Surrounding Area in the future with the Proposed Actions.

Affected Area – C4-5D

Block 2679, Lots 42 and p/o 43 would be rezoned from an existing M1-2/R6 (MX-8) zoning district to a C4-5D zoning district. Meanwhile, Block 2679, Lots 32, 34, and p/o 43 would also be rezoned from a R6A/C2-4 zoning district to a C4-5D zoning district.

C4 districts are mapped in regional commercial centers that are located outside of the central business districts. In these areas, specialty and department stores, theaters and other commercial and office uses serve a larger region and generate more traffic than neighborhood shopping areas. Use Groups 5, 6, 8, 9, 10 and 12, which include most retail establishments, are permitted in C4 districts. Uses that would interrupt the desired continuous retail frontage, such as home maintenance and repair service stores listed in Use Group 7, are not allowed.

The commercial and residential bulk and density regulations in C4-5D districts can differ from corresponding non-contextual districts as the buildings in C4-5D districts are required to comply with the Quality Housing Program for residential use in terms of building height and setback. Off-street parking is required for C4-5D, which is one parking space per 1,000 square feet.

Conclusion

The proposed zoning would induce development consistent with nearby mixed-use residential and commercial buildings to the north along Manhattan Avenue and to the east along Nassau Avenue. The proposed zoning district is mapped at the confluence of Lorimer Street, Driggs Avenue, and Manhattan Avenue, which is appropriate for a higher density of residential and commercial uses while maintaining the mixed-use character of nearby side streets. The rezoning would not adversely affect surrounding land uses, nor would it be incompatible with those land uses. Therefore, no significant adverse impacts are anticipated to land use and zoning.

2.4.3 Public Policy

The project site is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Fresh Zone, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The Proposed Actions are also not a large publicly sponsored project, and as such, consistency with the City's PlaNYC 2030 for sustainability is not warranted. The Affected Area is located in a transit zone – where parking is optional for new affordable units.

New York City Coastal Zone

Actions that are located within the designated boundaries of New York City's Coastal Management Zone are subject to an assessment for consistency with the City's Local Waterfront Revitalization Program (WRP). The WRP includes policy objectives that prioritize the development of water-dependent and water-enhancing uses on Coastal Management Zone properties, mandate public access to the waterfront within certain zoning districts, offer construction guidelines for flood zones, and address the maintenance of water quality.

Since the rezoning area is located in the Coastal Management Zone, a consistency review is warranted for the Proposed Actions (See Appendix C). The Proposed Actions would support and facilitate commercial and residential redevelopment in appropriate Coastal Zone areas, integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change. The WRP Consistency Assessment Form (CAF) was completed and is provided in Appendix C. The CAF assists the Applicant in identifying the relevant WRP policies and certifying that the project is consistent with the WRP.

The Proposed Actions would place a new mid-rise structure in a designated "AE Zone" within the 1% annual chance floodplain (100-year flood zone) as per the 2007 effective Flood Insurance Rate Maps (FIRMS). Zone AE are areas that have a 1% probability of flooding every year (also known as the "100-year floodplain"), and where predicted flood water elevations above mean sea level have been established. Properties in Zone AE are considered to be at high risk of flooding under the National Flood Insurance Program (NFIP) and are required to comply with Appendix G of the Building Code.

The CAF was completed to determine the consistency of the proposed project with the WRP's ten policies. Additionally, as the site is located within the boundaries of a flood zone, the Flood Evaluation Worksheet was also completed. The Flood Evaluation Worksheet allows the Applicant to calculate future flood elevations and assess site-specific risks to vulnerable or critical project features.

Based on the information provided in the CAF, a Detailed Methodology and Policy Response is provided in Appendix C, which incorporates the findings of the Flood Evaluation Worksheet, and the Proposed Actions' consistency with the applicable WRP Policies.

Waterfront Revitalization Program (WRP #20-029)

The Project Site is located within the boundaries of the New York City Coastal Zone and is subject to CEQR discretionary review procedures; therefore, the Proposed Actions must be reviewed and assessed for consistency with the policies set forth in the New York City Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term.

The Project Site is in a designated "AE Zone" within the 1% annual chance floodplain (100-year flood zone) as per the 2007 effective Flood Insurance Rate Maps (FIRMS). The WRP Form was completed, and is attached as Appendix C. A write-up of how the project would conform with WRP is also provided in Appendix C.

Conclusion

The Proposed Actions would allow for the neighborhoods around the two major commercial corridors, Manhattan Avenue and Nassau Avenue, to transition more fully to a mixed residential and commercial neighborhood. The current industrial style uses present in the Affected Area do not complement the overall character of the adjacent neighborhood. The Proposed Actions would therefore not have a significant impact on the extent of conformity with the current zoning in the Surrounding Area, and it would not adversely affect the viability of conforming uses on nearby properties.

In addition to opportunities for medium-density housing development under the MIH program, mapping a C4-5D zoning district within the Affected Area provides opportunities for active, non-residential ground floor use. Establishing a C4-5D district would promote a transition to a mix of uses as envisioned by Community Board 1, helping to foster both residential growth with affordable housing and revitalization of an underutilized manufacturing property. The C4-5D district would encourage job creation and provide increased walk-to-work opportunities for a diverse mix of business uses.

The proposed zoning map amendment would thus allow a more productive and more intensive reuse of the underutilized industrial property. In addition, it would help reknit the urban fabric in the area and better integrate it within the predominately residential portions of the Greenpoint neighborhood to the north and east of the site. The C4-5D proposed will allow higher density residential uses along with local retail and service uses, encouraging neighborhood investments and job creation. The proposed development would also include opportunities for employment growth in commercial.

Therefore, significant adverse impacts to land use, zoning, or public policy are not anticipated. Further analysis is not warranted.

Chapter 7: Open Space

Open space is defined as publicly or privately-owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment.

Pursuant to Chapter 7, Section 100 of the *2020 CEQR Technical Manual*, Open Space Resources are defined as active and/or passive, and may include, but is not limited to, the following:

- Parks operated or managed by the City, State, or Federal governments and include neighborhood and regional parks, beaches, pools, golf courses, boardwalks, playgrounds, ballfields, and recreation centers that are available to the public at no cost or through a nominal fee, as in the case of recreation centers and golf courses;
- Open space designated through regulatory approvals (such as zoning), including large-scale permits that prescribe publicly accessible open space, such as public plazas;
- Outdoor schoolyards if available to the public during non-school hours;
- Publicly-accessible institutional campuses;
- Esplanades;
- Designated greenways, as shown on the City's Bike Map, and defined as multi-use pathways for non-motorized recreation and transportation along natural and manmade linear spaces such as rail and highway rights-of-way, river corridors, and waterfront spaces;
- Landscaped medians with seating;
- Housing complex grounds, if publicly accessible;
- Nature preserves, if publicly accessible;
- Gardens, if publicly accessible.

The *CEQR Technical Manual* defines the need for an open space assessment if the proposed action would have a direct or indirect effect on open space resources. Direct effects would occur if the proposed action would result in the physical loss of a public open space; change of use of an open space so that it no longer serves the same user population; limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether temporary or permanent. Indirect effects would occur if the proposed action would result in an increase of population sufficiently large enough to noticeably diminish the ability of an area's open space to serve future population.

Direct effects to open space are addressed in the sections for those specific technical areas where warranted. Construction impacts to open space are not anticipated as there would be no physical loss of public open space, no change in existing open space so that it no longer serves the same user population, would not limit public access and would not increase noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness. An assessment of the effects of the Proposed Actions related to shadows on open space resources is provided in **Section 2.8**.

Methodology

According to the guidelines of the City's *CEQR Technical Manual* for analysis of residential development, census tracts with at least half of their geographic area within a one-half mile radius of the Affected Area

comprise the open space study area. Using current population figures, an open space ratio is calculated for both the future no-action and future with-action conditions, expressed as the amount of open space acreage per 1,000 user population. Typically, a comparison is made to the median open space ratio, which is 1.50 acres per 1,000 residents, and the city's planning goal of 2.50 acres per 1,000 residents. A reduction in the open space ratio increment of more than 5 percent over future no-action conditions generally warrants a more detailed analysis, unless the open space ratio is below the citywide average, in which case even a small reduction could be considered significant.

In addition to field surveys, information from the NYC Department of City Planning's Community District Needs Statements, NYC Parks Department website, and U.S. Census data were utilized in preparing the open space analysis.

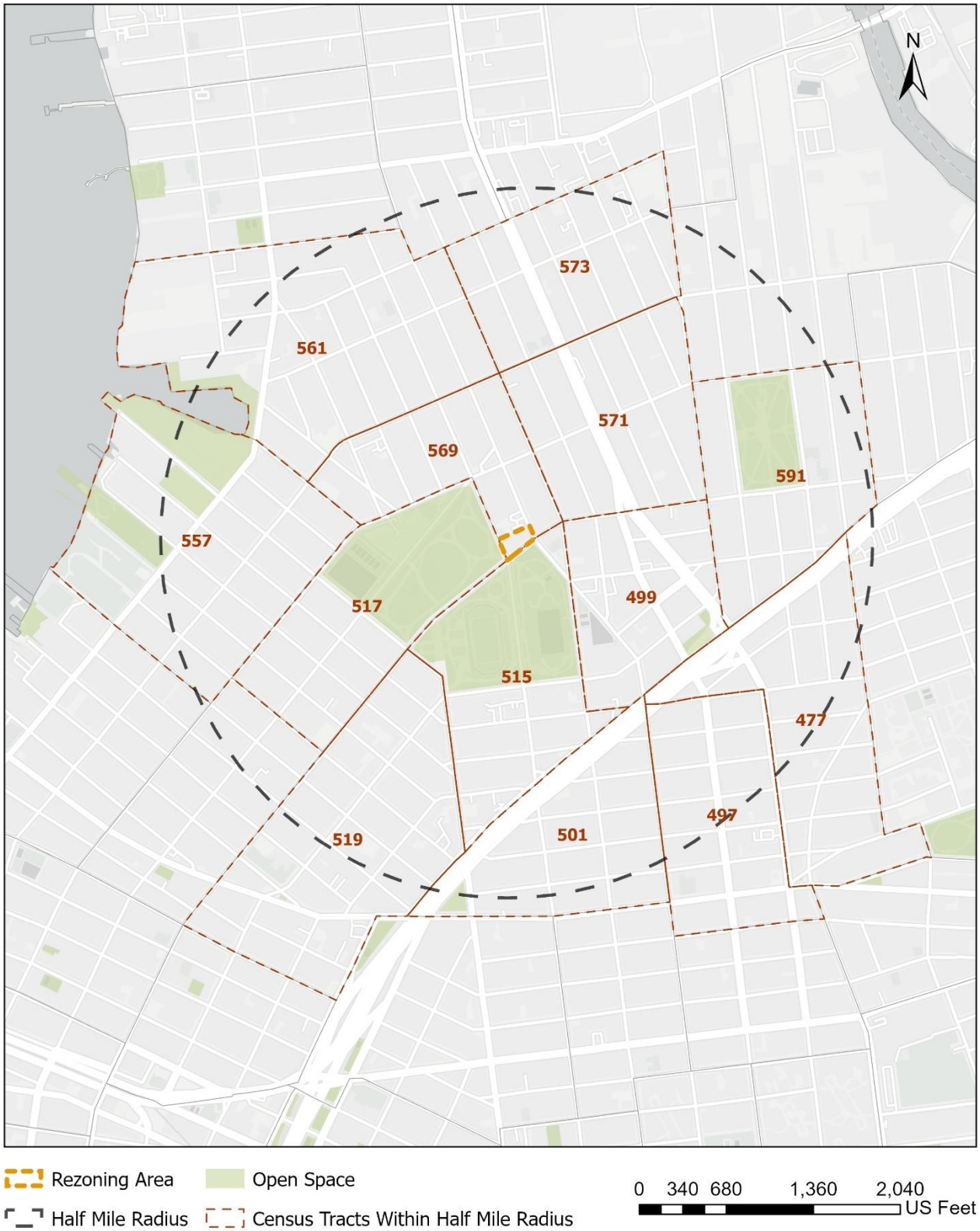
Preliminary Open Space Assessment

The Proposed Actions would result in a net increment of GSF of development, including 80,306 GSF of residential floor area and 31,377 GSF of commercial floor area. Meanwhile, a reduction of 39,125 GSF of manufacturing floor area would occur as a result of the replacement of the existing buildings. The Proposed Actions are projected to result in the development of 94 dwelling units within the Affected Area. Assuming an average occupancy of 2.52 persons based on the average household size within Brooklyn Community District 1 (2014-2018 ACS 5-Year Survey), population introduced as a result of the Proposed Actions would be approximately 237 residents. Adding together the increase in commercial floor area and the decrease in industrial floor area, there would be approximately 76 more employees as a result of the Proposed Actions. The Affected Area is within an area that is identified as underserved by open space, and therefore the threshold for assessment of the potential indirect impacts is 50 new residents or 125 additional employees. Therefore, an assessment of indirect effects on public open space resources is warranted. The Proposed Actions would introduce fewer than 125 additional employees, as such the preliminary assessment addresses the residential population introduced by the Proposed Actions.

Study Area Definition

In accordance with the guidelines established in the City's *2020 CEQR Technical Manual*, the open space study area is defined to analyze both the nearby open spaces and the population using those open space resources. It is generally defined by a reasonable walking distance that users would travel to reach local open spaces and recreational areas. Pursuant to the *2020 CEQR Technical Manual*, the open space study area includes all U.S. Census Tracts that have 50 percent or more of their area within a half-mile radius of the Affected Area for residential users. As shown in **Figure 2.7-1**, the following Census Tracts that have 50% or more of their area within the ½ mile study area are 477, 497, 499, 501, 515, 517, 519, 557, 561, 569, 571, 573, and 591.

Figure 2.7-1: Open Space Study Area Census Tracts



Existing Condition

Based on the 2014-2018 ACS, the study area defined above, as of 2018, had a population of 38,848 residents, as shown in **Table 2.7-1** below.

Table 2.7-1: Study Area Population 2018

Census Tract	2018 Population
477	3,761
497	2,882
499	1,827
501	3,174
515	2,289
517	2,529
519	5,217
557	1,933
561	3,394
569*	1,580
571	3,873
573	2,410
591	3,979
Total	**38,848**

* Census Tract with the Affected Area

No-Action Condition

There would be one residential development in the future without the Proposed Actions within the Affected Area. A New Building Permit (321383276-01-NB) is expected to be issued soon on Block 2679 Lot 34 (561 Manhattan Avenue), a 2,259 SF corner lot with frontage along Manhattan Avenue and Driggs Avenue. The latest action from DOB was approval of the plan exam on 09/12/2019. Currently, the existing building on the site is being demolished and the proposed development would be a 6-story 8-unit mixed commercial and residential building with 13,076 GSF (8,803 ZSF, 2.99 FAR). Besides, there are approximately 90 active construction permits within the half-mile study area, totaling up to 1,486 proposed new dwelling units. Therefore, there would be 1,494 dwelling units within the study area under the No-Action Condition.

Using the same 2.52 residents per household figure as above, the No-Action Condition would have 3,765 new residents introduced to the study area by the 2023 build year. The No-Action population would therefore be the existing population of 38,848 residents plus the 3,765 new residents introduced by the active construction projects, for a total no-action population of 42,613 residents.

With-Action Condition

The With-Action population would be the No-Action population of 42,613 residents described above plus the 237 residents anticipated as a result of the Proposed Actions. The With-Action population would be 42,850 residents.

Table 2.7-2: Existing, No-Action, and With-Action Populations		
Existing	**No-Action**	**With-Action**
38,848	42,613	42,850

Existing = 2014-2018 American Community Survey; No-Action = Existing plus 1,494 proposed dwelling units from active DOB permits; With-Action = No-Action plus 237 additional residents from the Projected Development Site

Open Space Resources

There are fourteen open space resources within the study area identified in **Table 2.7-3**. Acres of open spaces resources located in the half-mile study area are considered active or passive based on field visits and a review of open space site plans. The location of these resources, as well as community gardens present in the study area, are shown in **Figure 2.7-2.**

There are six open space resources listed as "Triangles" in the Features column in **Table 2.7-3** below. All these resources are equipped with benches for seating and some have sculptures and little lanes on the grass for walking and strolling. Therefore, these resources could be considered as passive open spaces that the public would use instead of just landscaped areas. One community garden, Lentol Garden, is also listed as passive open space resource since it is publicly accessible on a constant and regular basis. The open hour of Lentol Garden is from 9 AM to 6 PM all year round.

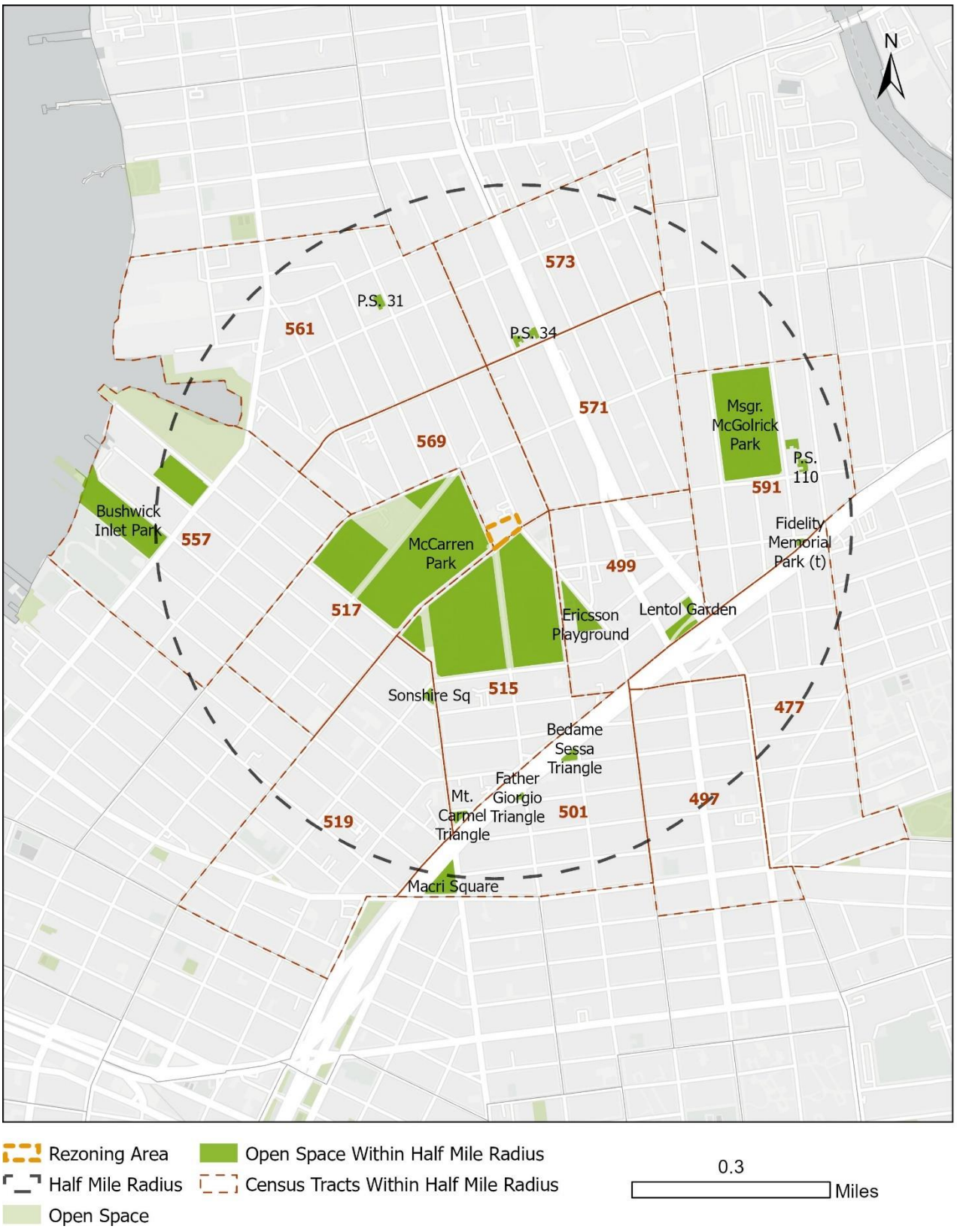
It should be noted that Bushwick Inlet Park consists of three parts: the area improved as parkland to the south between North 9 Street and North 10 Street, the area not yet improved from North 10 Street all the way north to Franklin Street, and the area proposed for the Greenpoint Monitor Museum along Quay Street. Since the majority area of the park is not improved as parkland yet, the analysis below only considers the portion that is already served as public open space.

Table 2.7-3: Open Space Resources								
Name	**Address**	**Ownership**	**Acreage**	**% Active**	**% Passive**	**Total Active**	**Total Passive**	**Features**
McCarren Park	N 12 St., Lorimer St., Manhattan Ave. btwn Bayard St. & Berry St. - Nassau Ave.	NYC DPR	36.49	75	25	27.37	9.12	BA, BC, BF, BR, BoC, FE, FF, HC, OP, PG, RC, RT, SP, SF, SS, TC, ML
Macri Square	Metropolitan, Union, Meeker Ave.	NYC DPR	0.57	0	100	0	0.57	DF, TR
Mt. Carmel Triangle	Union Ave., Meeker Ave., Jackson St.	NYC DPR	0.10	0	100	0	0.10	TR
Father Giorgio Triangle	Jackson St., Lorimer St., Meeker Ave.	NYC DPR	0.07	0	100	0	0.07	TR
Bedame Sessa Triangle	Leonard St., Withers St., Meeker Ave.	NYC DPR	0.07	0	100	0	0.07	TR
Sonshire Square	Union Ave., N. 11 St. and Roebling St.	NYC DPR	0.04	0	100	0	0.04	TR
Lentol Garden	Graham Ave., Meeker Ave., Humbolt St., BQE	NYC DPR	0.76	0	100	0	0.76	CG
Ericsson Playground	Manhattan Ave. and Leonard St.	NYC DPR	1.06	75	25	0.80	0.27	BC, HC, PG
Fidelity Memorial Park	Monitor St. bet. Engert Ave. and Meeker Ave.	NYC DPR	0.01	0	100	0	0.01	TR
Msgr. McGolrick Park	Russell St., Monitor St. bet. Nassau Ave. and Driggs Ave.	NYC DPR	9.13	75	25	6.85	2.28	BR, PG, SS, DF

Bushwick Inlet Park	Kent Ave. btwn Quay St. & N 9 St.	NYC DPR	35.53	75	25	26.65	8.88	BR, SF, PG, FF, SS
P.S. 31 Playground	75 Meserole Ave.	NYC DOE	0.27	75	25	0.20	0.07	PG
P.S. 34 Playground	131 Norman Ave.	NYC DOE	0.28	75	25	0.21	0.07	PG
P.S. 110 Playground	124 Monitor St.	NYC DOE	0.30	75	25	0.23	0.08	PG
Total			**84.68**			**62.30**	**22.39**	

BA=Barbecue Areas; BC=Basketball Courts; BoC=Bocce Courts; HC= Handball Courts; PG=Playground; BR=Bathrooms; BF=Baseball Fields; FE=Fitness Equipment; RT=Running Track; TC=Tennis Courts; SF=Soccer Fields; SS= Spray Showers; CG=Community Garden; FF=Football Fields; OP=Outdoor Pools; RC=Recreation Center; SP=Skate Parks; ML=Media Labs; DF = Dog-Friendly Area; TR = Triangle

Figure 2.7-2: Open Space Location in Study Area



Analysis

Existing Condition

The study area has 84.68 acres of open space and an existing residential population of 38,848. The open space ratio (OSR) under existing conditions is 2.18 acres per thousand residents.

No-Action Condition

In the future without the Proposed Actions, the population for the Study Area in the 2023 build year is forecasted to be 42,613 and is projected to be served by the same 84.68 acres of open space as in the existing condition. With this population, the OSR would be 1.99. The OSR is above the citywide average of 1.50 acres per thousand people, indicating the open space within the study area is sufficient for an enjoyable living environment.

With-Action Condition

The Proposed Actions would result in an increase in the No-Action population by 237 residents by the 2023 build year. The total 2023 build year With-Action population would be 42,850. With this increase in population, the OSR would be 1.98 acres per 1,000 residents, or a 0.55 percent reduction from the No-Action OSR.

Conclusion

Under the existing, No-Action, and With-Action conditions, the OSR in the area would all be well above the citywide median ratio of 1.5 acres per thousand residents. By *CEQR Technical Manual* methodology, a decrease in open space ratio in an underserved area that approaches or exceeds 5 percent is generally considered to be a substantial change warranting more detailed analysis. The *CEQR Technical Manual* further states that detailed analysis of open space effects on residents is generally unnecessary if the open space ratio decreases by less than 1 percent.

The Proposed Actions would not result in a significant reduction to the OSR compared to the No-Action condition in the 2023 build year (1.99 OSR for No-Action and 1.98 OSR for With-Action). Therefore, further assessment is not warranted, and no significant impacts to open space utilization or availability would occur as a result of the Proposed Actions.

Chapter 8: Shadows

The *CEQR Technical Manual* defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space or feature. An incremental shadow is the additional or new shadow that a building or other built structure resulting from a proposed action would cast on a sunlight-sensitive resource during the year. The 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, including public open space, architectural resources and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use and important landscaping and vegetation. In general, increases in shadow coverage make parks feel darker and colder, affecting the experience of park patrons. Shadows can also have impacts on historic resources whose features are sunlight-sensitive, such as stained-glass windows, by obscuring the features or details, which make the resources significant.

The duration and dimensions of shadows are determined by the geographic location of the area from which the shadow is cast and the time of day and season. Shadows cast during the morning and evening, when the sun is low in the sky, are longer, while midday shadows are shorter in length. Shadows in winter, when the sun arcs low across the southern sky, are also longer throughout the day than at corresponding times in spring and fall seasons. In summer, the high arc of the sun casts shorter shadows than at any other time of year, and early and late shadows during the summer are cast farther towards the south than shadows cast in early and late winter months.

The *CEQR Technical Manual* states that a shadow assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. Therefore, a shadow assessment is warranted only if the project would either result in: (a) new structures (or additions to existing structures including the addition of rooftop mechanical equipment) of 50 feet or more; or, (b) be located adjacent to, or across the street from, a sunlight-sensitive resource.

The 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, including public open space, architectural resources and natural resources. In general, shadows on city streets and sidewalks or on other buildings are not considered significant. Some open spaces also contain facilities that are not sensitive to sunlight. These are usually paved such as handball or basketball courts, places containing no seating areas and no vegetation, no unusual or historic plantings, or containing only unusual or historic plantings that are shade tolerant. These types of facilities do not need to be analyzed for shadow impacts. Additionally, it is generally not necessary to assess resources located to the south of projected development sites, as shadows cast by the action-generated development would not be cast in the direction of these resources. Furthermore, shadows occurring within one and one-half hours after the beginning and before the end of the CEQR analysis period generally are not considered significant in accordance with the *CEQR Technical Manual*.

Methodology

This preliminary analysis of shadows follows the guidelines set forth in the *2020 CEQR Technical Manual* for a preliminary assessment (Section 310). According to the *2020 CEQR Technical Manual*, a preliminary shadow assessment includes the development of a base map showing the site location in relationship to any

sunlight-sensitive resources as per guidelines provided in the *2020 CEQR Technical Manual*. Following these guidelines, the longest shadow study area is determined, and a Tier 1 screening assessment is conducted to determine if any sunlight-sensitive resources fall within the study area. If no resources are identified, no further analysis would be required. If sunlight-sensitive resources lay within the longest shadow study area, the next tier of screening assessment should be conducted. This preliminary assessment includes a basic description of the proposed project that would be facilitated by the Proposed Actions in order to determine whether a more detailed assessment would be appropriate.

Analysis

Projected Development Site would be developed with a building 135 feet in height (115-foot building plus an additional 20 feet for mechanical bulkheads) in the proximity of sunlight sensitive resources. Accordingly, a preliminary assessment of shadows is warranted.

Tier 1 Shadow Screening Assessment

The shadow assessment begins with a preliminary screening assessment to ascertain whether a project's shadow may reach any sunlight-sensitive resources at any time of the year. If the screening assessment does not eliminate this possibility, a detailed shadow analysis may be warranted to determine the extent and duration of the net incremental shadow resulting from the project. The effects of shadows on a sunlight-sensitive resource are site-specific; therefore, as directed in the *CEQR Technical Manual*, the screening assessment was performed for the relevant Projected Development Site to determine whether it falls within the range of maximum possible shadow cast on potential sunlight sensitive resources as described above. To determine this, a Tier 1 Screening Assessment was performed in accordance with the *CEQR Technical Manual*. A base map is developed that illustrates the proposed site location in relationship to any sunlight-sensitive resources. The longest shadow study area is then determined, which encompasses the site of the proposed project and a perimeter around the site's boundary with a radius equal to the longest shadow that could be cast by the proposed structure, which is 4.3 times the height of the structure that occurs on December 21st, the winter solstice. A map as shown in **Figure 2.8-1** was prepared placing NYC Department of Parks Resources and Selected Facilities and Program Sites provided on NYC.gov Department of City Planning GIS portal, as well as a list of park and public spaces provided from NYC.gov DOITT- GIS and Mapping Portal, as well as a screen of SHPO and NYC Landmark Listed Properties. After this a buffer map was prepared to display the maximum possible shadow of 580.5 feet, which could be cast from the Projected Development Site in the proposed rezoning area. This shadow cast was derived by multiplying the height of 135 feet (the maximum possible height under the proposed rezoning with MIH bonus plus a 20-foot bulkhead) by 4.3 (the *CEQR Technical Manual* multiplier representing the maximum shadow cast from any object as being 4.3 times its height). The potentially impacted area of shadow from the projected site was then compared to those resources identified above to see if any fell within the shadow cast area.

Based on the Tier 1 analysis in **Figure 2.8-1**, it was determined that one sunlight sensitive resource, McCarren Park, is located within the reach of the longest possible shadow that could be cast from the Projected Development associated with the requested rezoning within the Affected Area. Therefore, a Tier 2 Screening Assessment is needed for the shadow analysis.

Figure 2.8-1: Tier 1 Shadow Assessment



Tier 2 Screening Assessment

Since there is one sunlight sensitive resource falling within the longest action-induced shadow area, a Tier 2 screening assessment was conducted to further study the potential impact of the Proposed Development on the resource. Given the path that the sun travels 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. As shown in **Figure 2.8-2**, the grey shaded triangle area to the south of the development is the area that will never be interrupted by the new building. In other words, only the complementing portion to the north within the longest shadow study area is the area that can be shaded by the proposed project.

Based on the Tier 2 shadow analysis, a small portion on the northeastern corner of McCarren Park will be affected by the Proposed Development. Consequently, a Tier 3 shadow screening assessment is necessary.

Figure 2.8-2: Tier 2 Shadow Study Screening



Tier 3 Screening Assessment

The *CEQR Technical Manual* states that if any portion of a sunlight-sensitive resource is within the area that could be shaded by the Proposed Project, a Tier 3 screening assessment should be performed. Because the sun rises in the east and travels across the southern part of the sky to set in the west, a project's earliest shadows would be cast almost directly westward. Throughout the day, they would shift clockwise (moving northwest, then north, then northeast) until sunset, when they would fall east. Therefore, a project's earliest shadow on a sunlight-sensitive resource would occur in a similar pattern, depending in the location of the resource in relation to the project site. For a Tier 3 screening assessment, if the assessment determines that no shadows from the development would reach any of the sunlight-sensitive resources on any of the representative analysis days then no further assessment for those days is needed. If, however, in the absence of intervening buildings shadows from the proposed buildings would reach sunlight-sensitive resources on any of the representative analysis days, then a detailed shadow analysis would be warranted for those days.

As shown in **Figures 2.8-3** to **2.8-6** below, shadows from the projected building would reach the sunlight-sensitive resources in the longest action-induced shadow area. Therefore, a detailed shadow analysis was conducted to further determine the potential impact of the shadow of the proposed building.

Figure 2.8-3: Tier 3 Screening - December

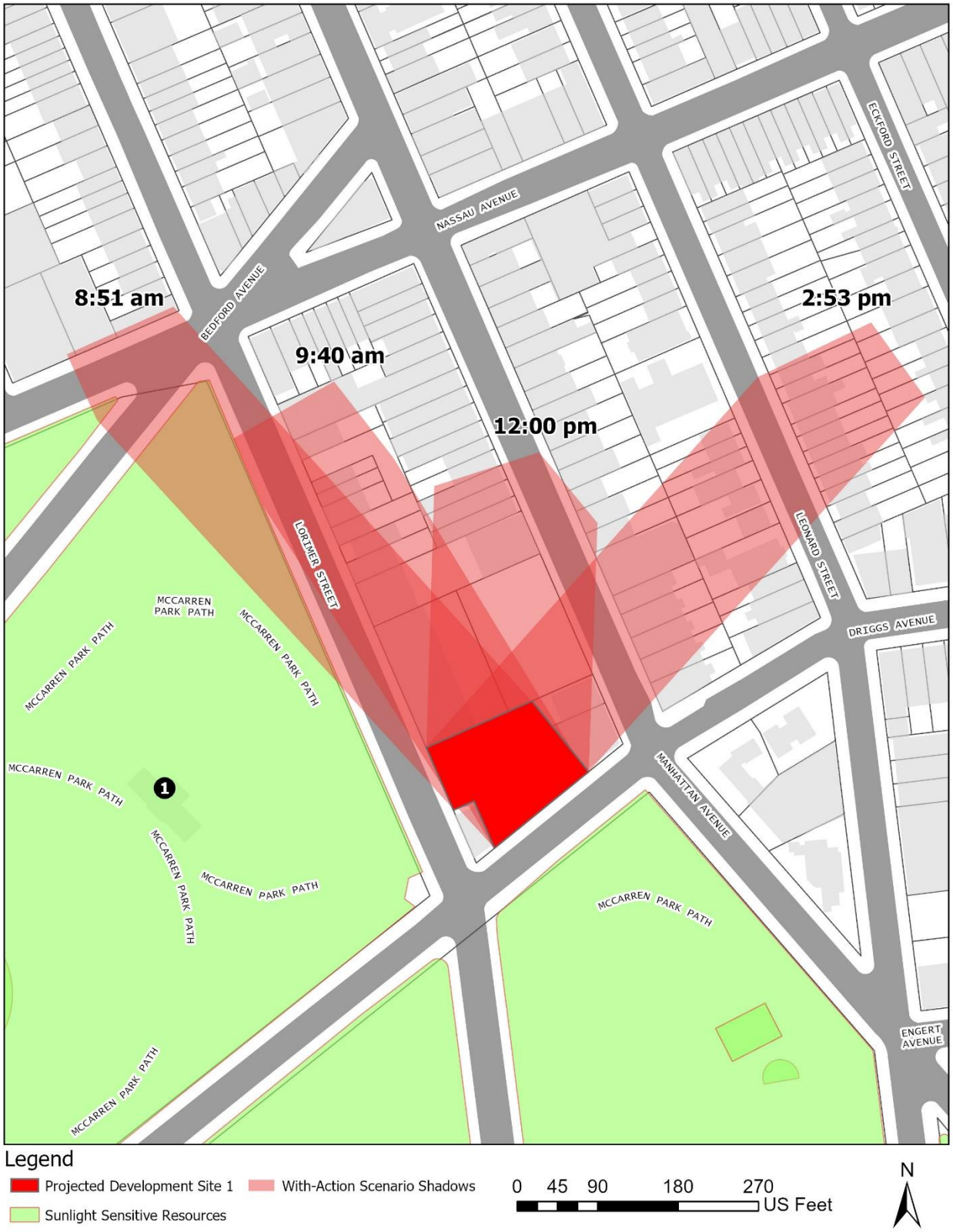


Figure 2.8-4: Tier 3 Screening – March/ September

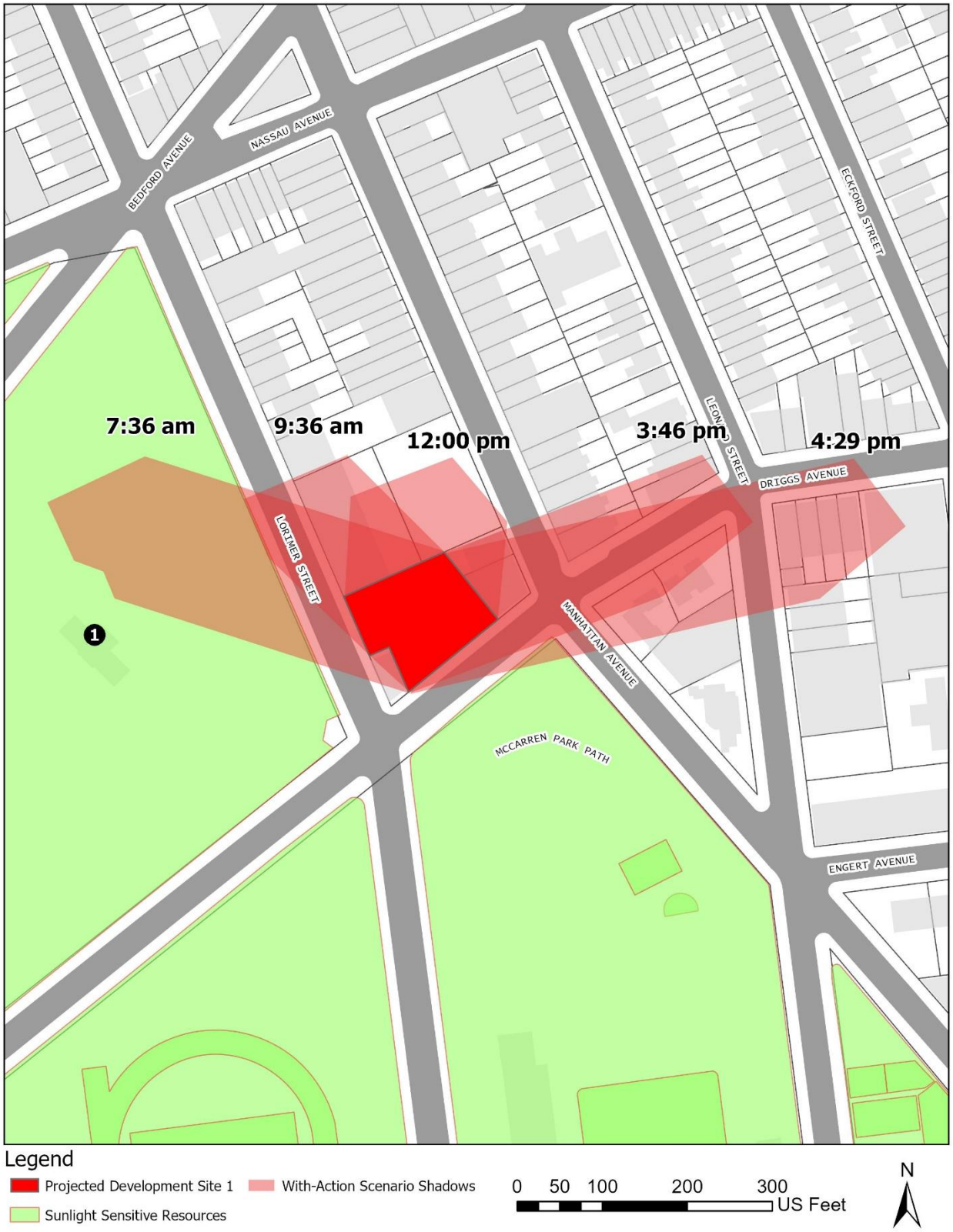
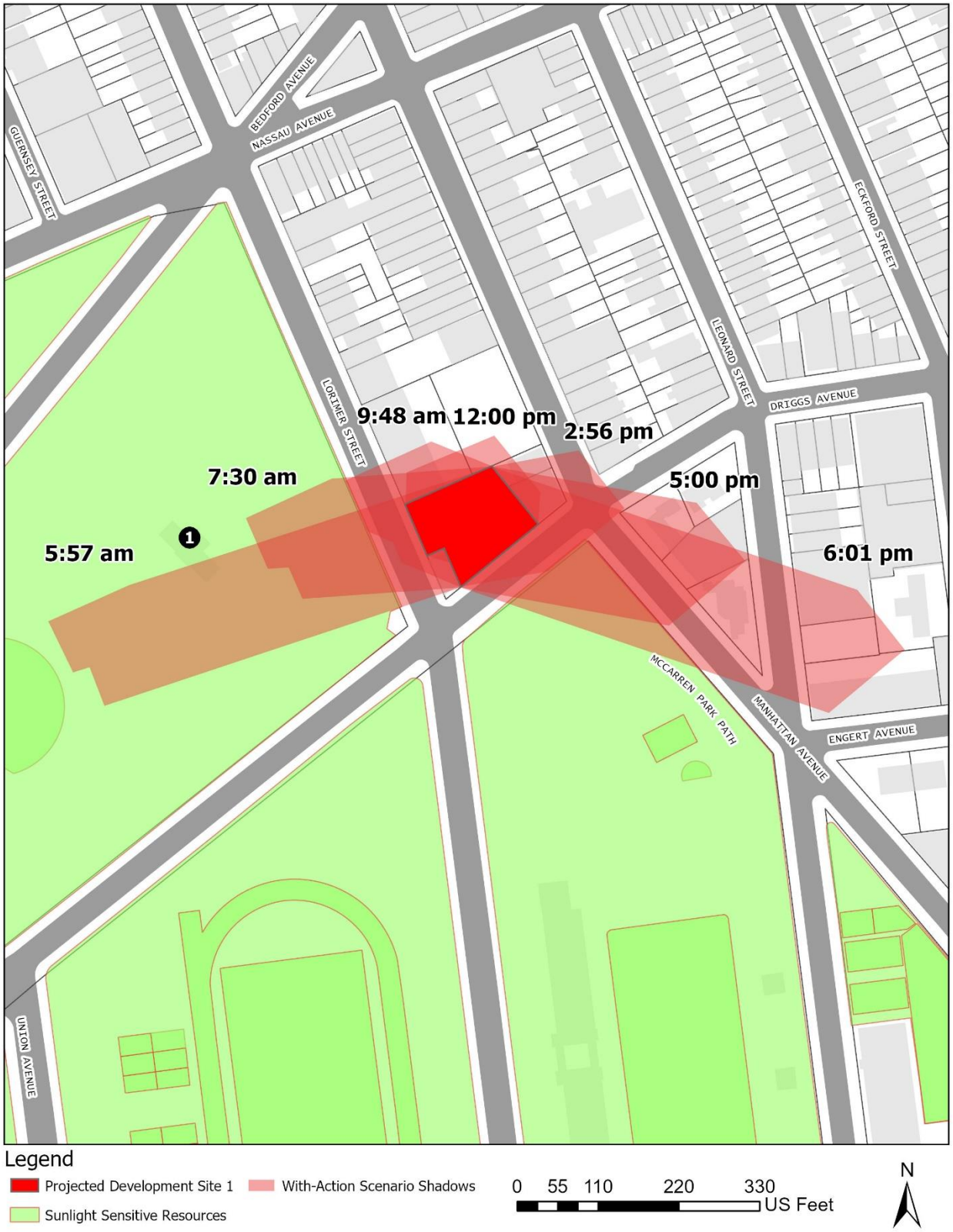


Figure 2.8-5: Tier 3 Screening – May/August



Figure 2.8-6: Tier 3 Screening – June



Detailed Shadow Analysis

The *CEQR Technical Manual* states that a detailed shadow analysis is warranted when the screening analyses do not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resources. The purpose of the detailed analysis is to determine the extent and duration of shadows that fall on a sunlight-sensitive resource as a result of the proposed project. The results of the detailed shadow analyses on the identified resources of concern are summarized in **Table 2.8-1**, and the incremental shadows cast by the Projected Development Site are shown in the figures above. The shadows of intervening buildings were including in the detailed shadow analysis in order to identify the incremental shadows cast by the Projected Building.

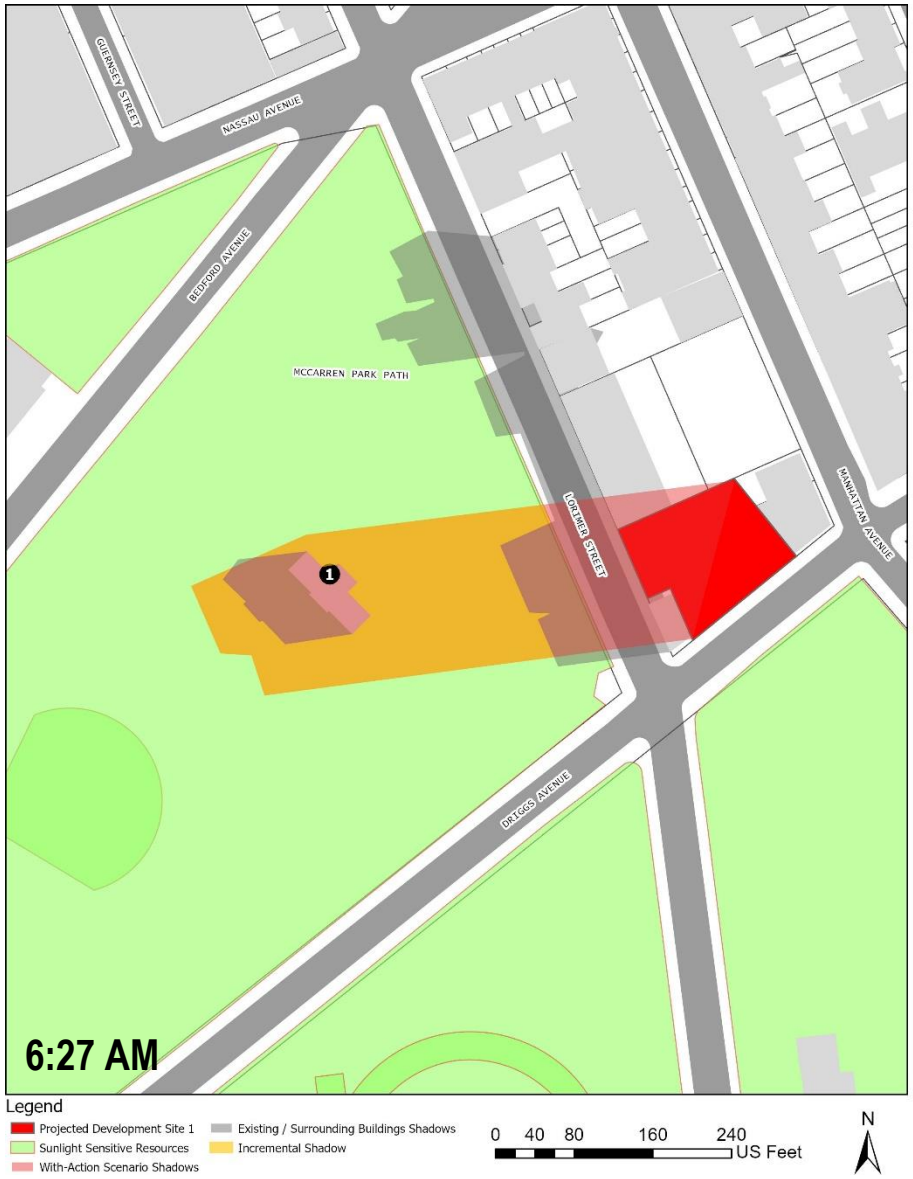
Based on the Findings of the Detailed Shadow Analysis, the Proposed Actions would cast shadows on the McCarren Park (Sunlight Sensitive Resource 1).

Table 2.8-1: Tier 3 Shadows Table

Analysis Day	21-Dec	March 21 / September 21	May 6 / August 6	21-Jun
Timeframe Window	8:51 a.m. - 2:53 p.m.	7:36 a.m. - 4:29 p.m.	6:27 a.m. - 5:18 p.m.	5:57 a.m. - 6:01 p.m.
Sunlight Sensitive Resource 1	McCarren Park			
Shadow enter - exit times	8:51 am - 9:40 am	7:36 am - 9:36 am 3:46 pm - 4:29 pm	6:27 am - 9:40 am 3:00 pm - 5:18 pm	5:57 am - 9:48 am 2:56 pm - 6:01 pm
Incremental Shadow Duration	49 Minutes	2 Hours 43 Minutes	3 Hours 13 Minutes 2 Hours 18 Minutes	3 Hours 51 Minutes 3 Hours 5 Minutes
Note: Daylight savings time not used				

As shown in **Table 2.8-1** above, the shadow induced by the proposed project would be cast on the McCarren Park (Sunlight Sensitive Resource 1) for a total of 49 minutes, 2 hours and 43 minutes, 5 hours and 31 minutes, and 6 hours and 56 minutes on the analysis days in December, March/September, May/August, and June respectively. Given the relatively long hours of the project induced shadow on the sunlight sensitive resource in May/August and June, detailed shadow diagrams for the two analysis days were provided to show the existing background shadow and the net-incremental shadow of the proposed project and to help determine the potential for the shadow impact. **Figures 2.8-7** to **2.8-8** below show the detailed shadow diagrams for May 6th/August 6th and June 21st.

Figure 2.8-7 Detailed Shadow Diagrams – May/August (1)



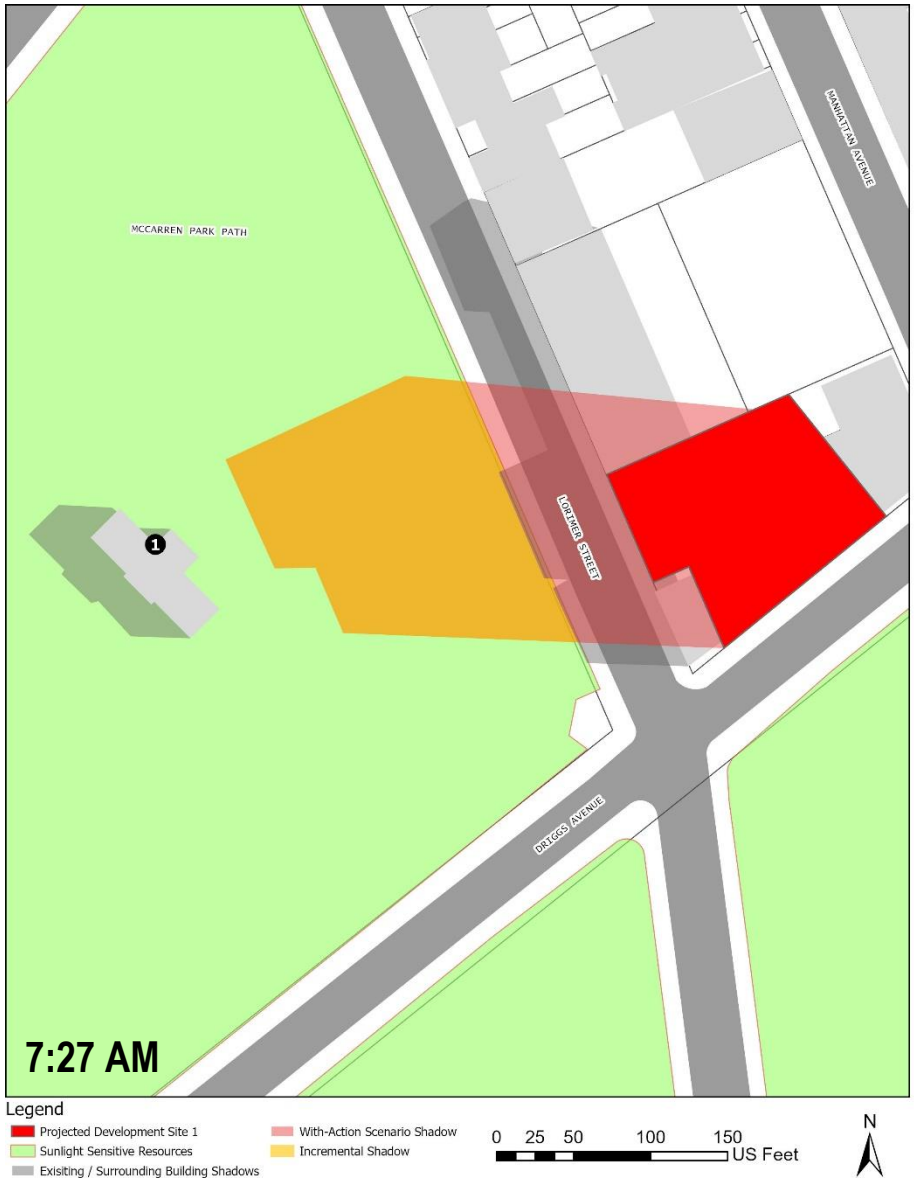
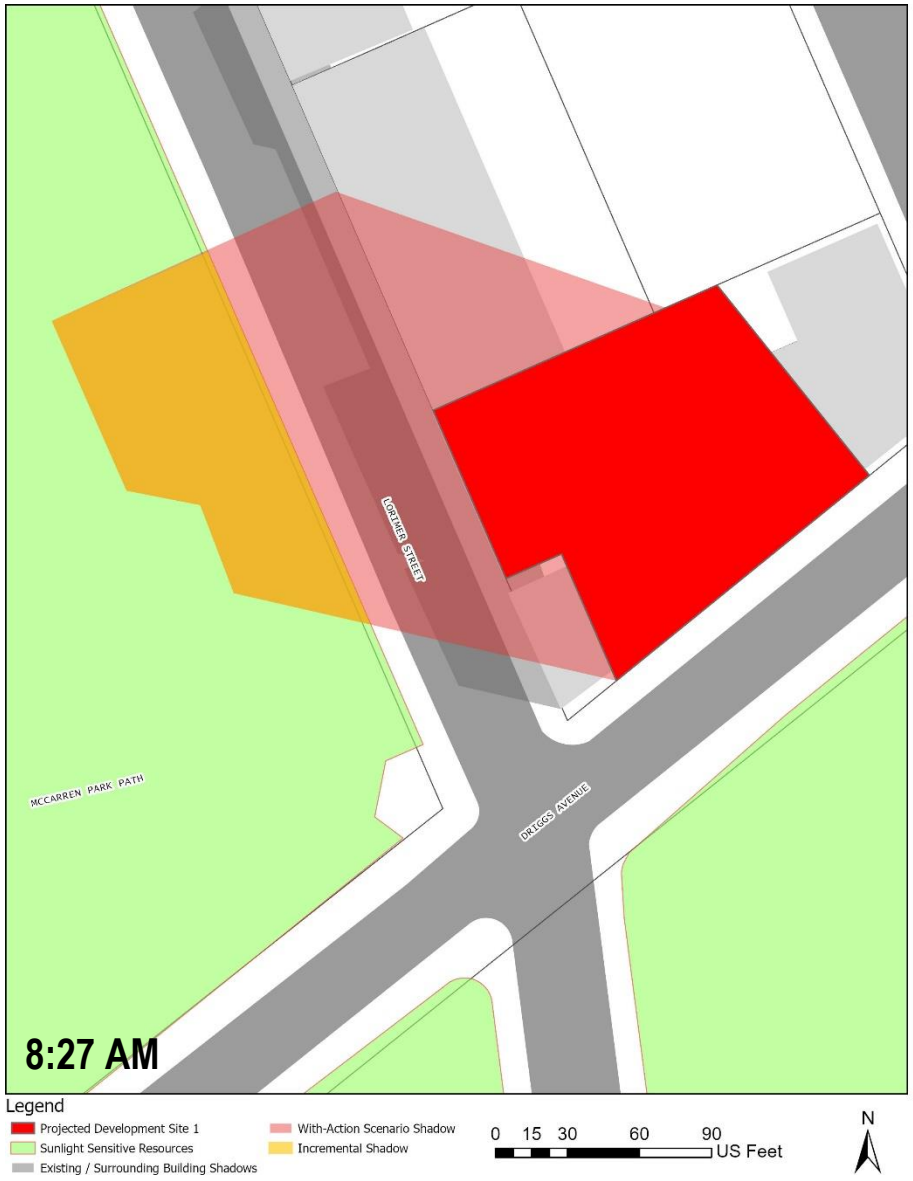


Figure 2.8-7 Detailed Shadow Diagrams – May/August (2)



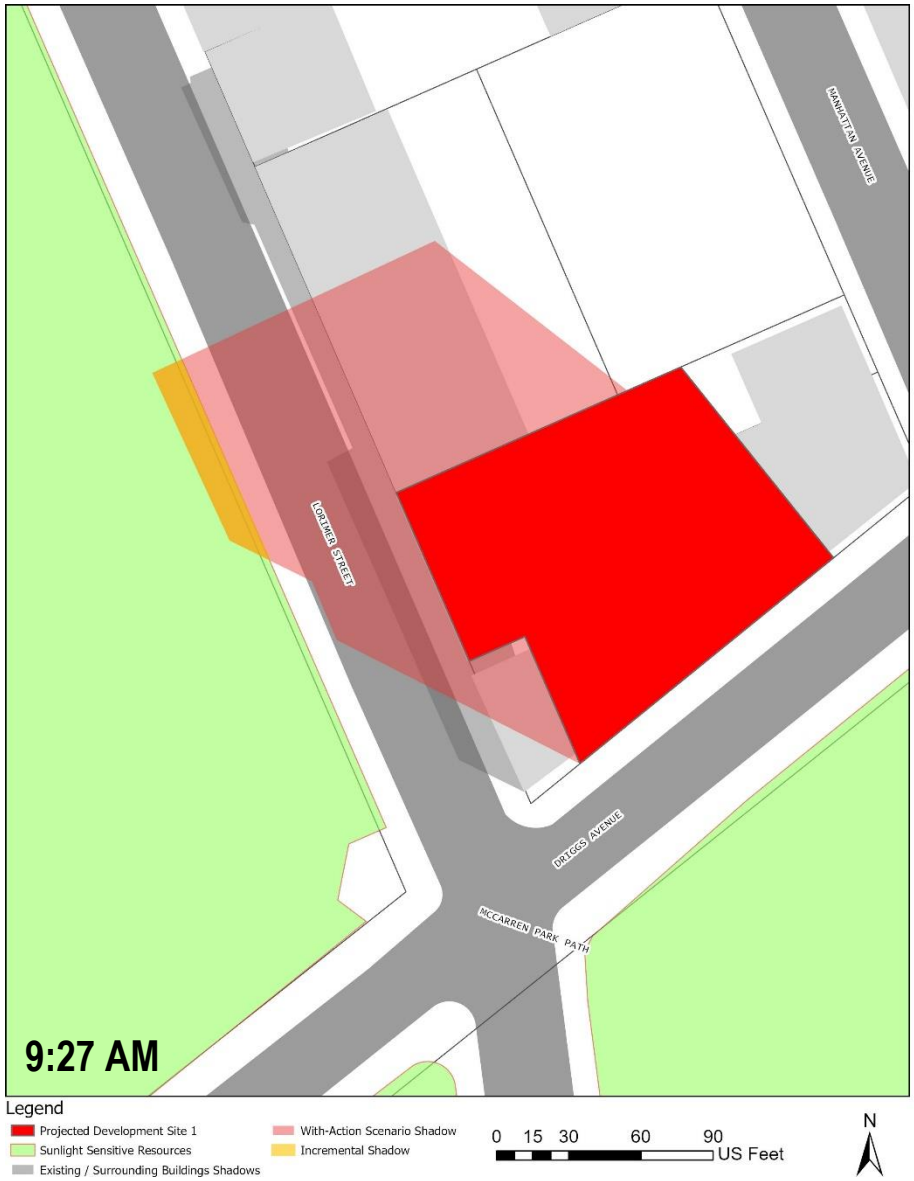
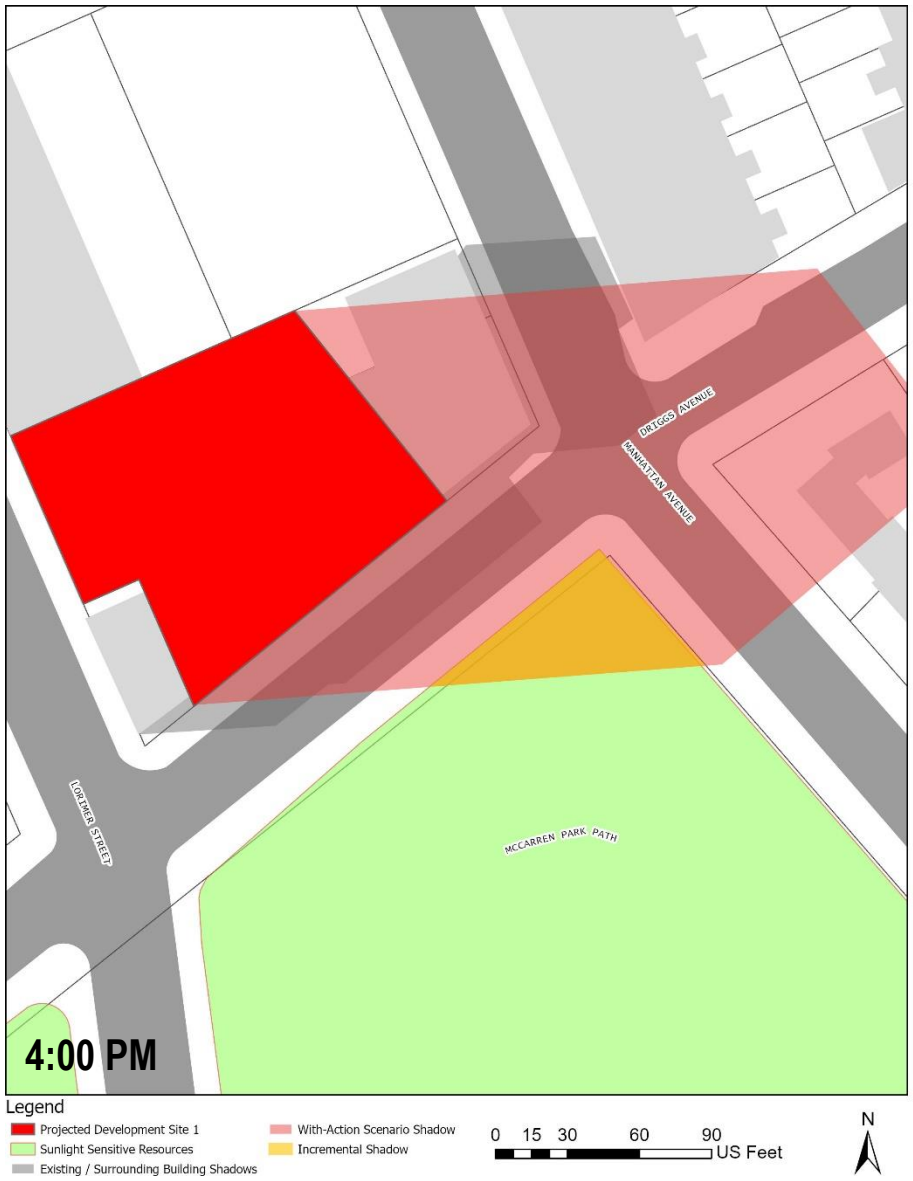


Figure 2.8-7 Detailed Shadow Diagrams – May/August (3)



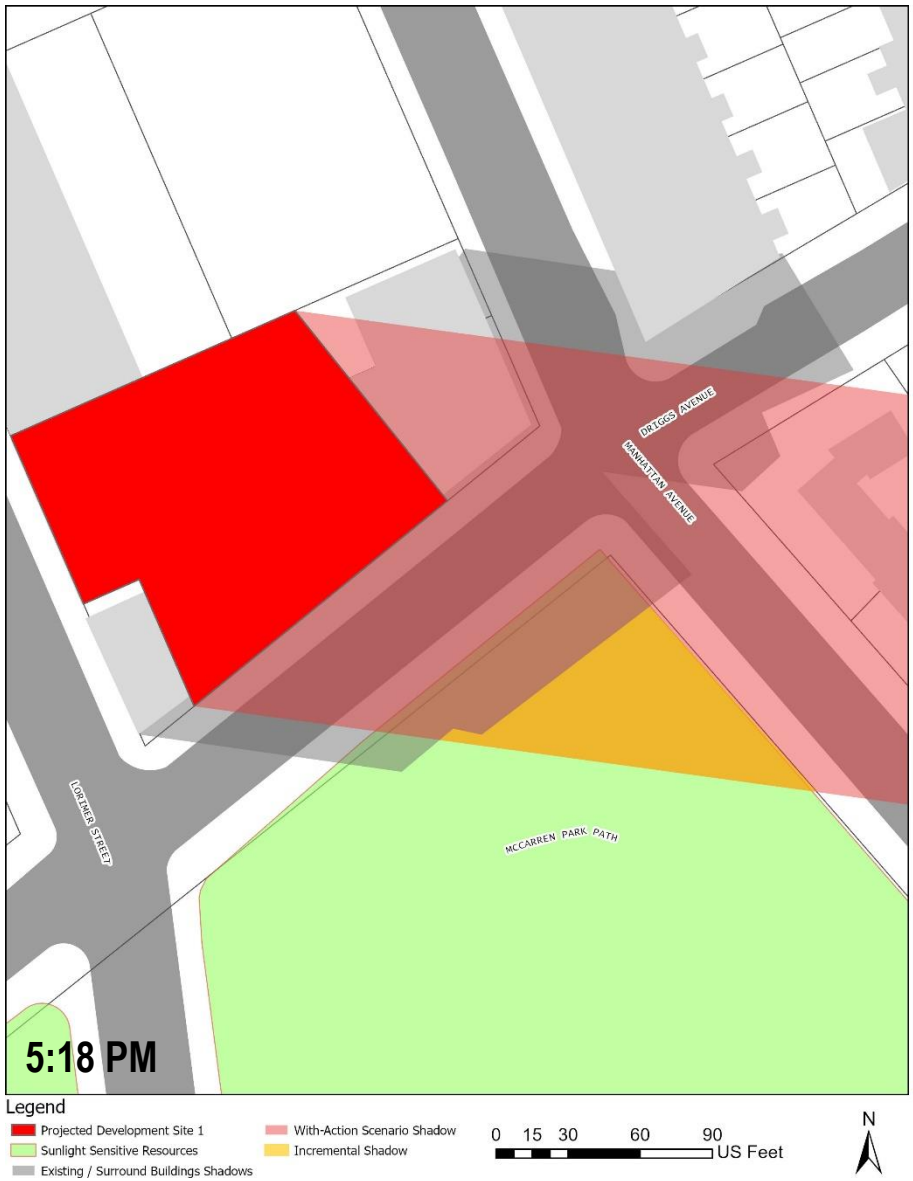
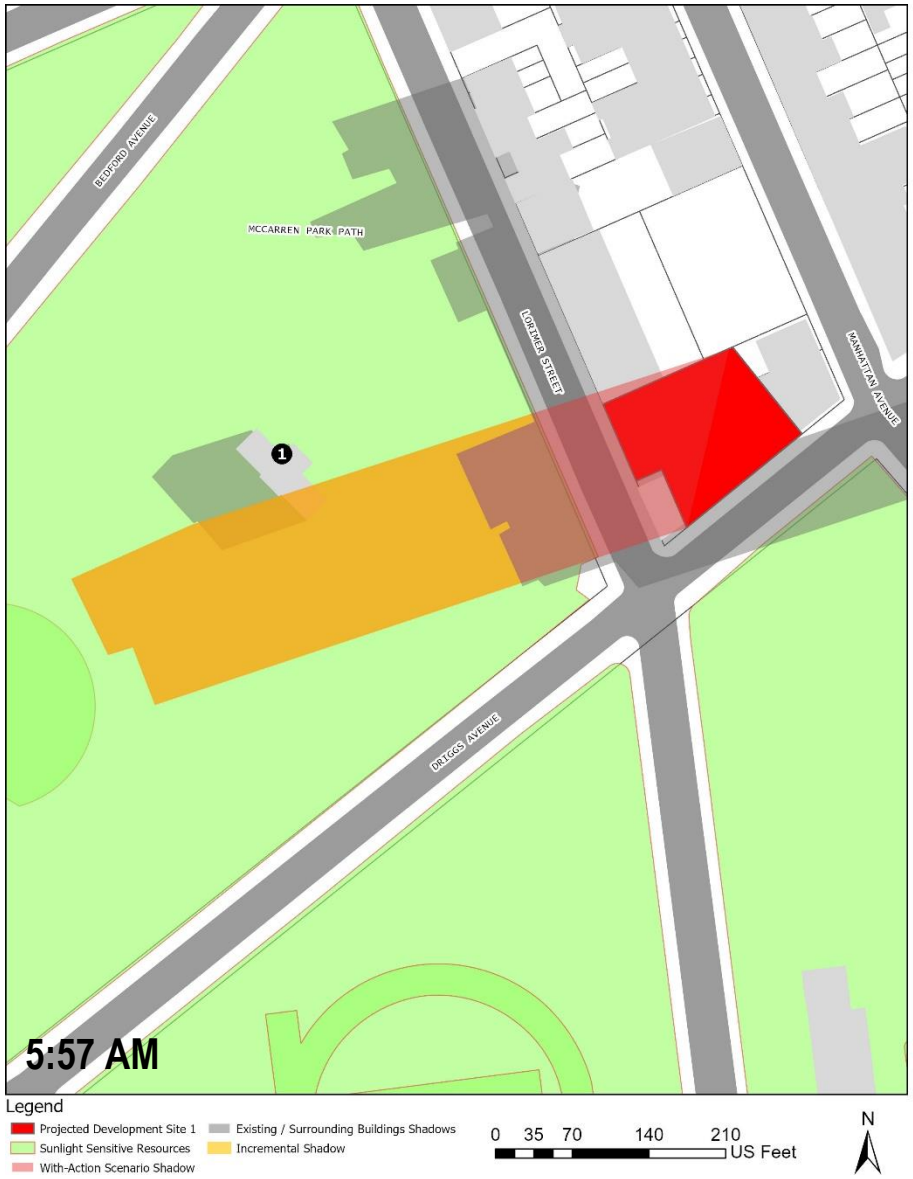


Figure 2.8-8 Detailed Shadow Diagrams – June (1)



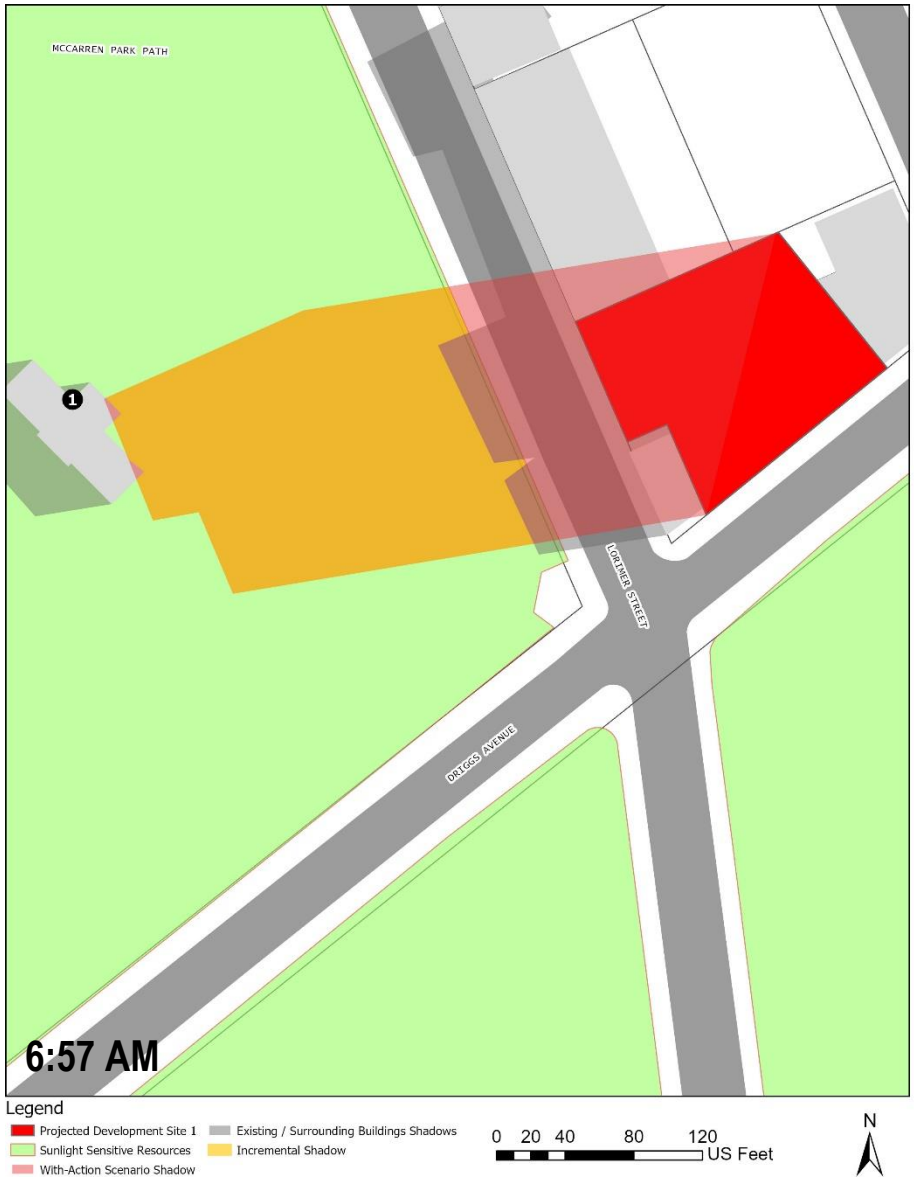
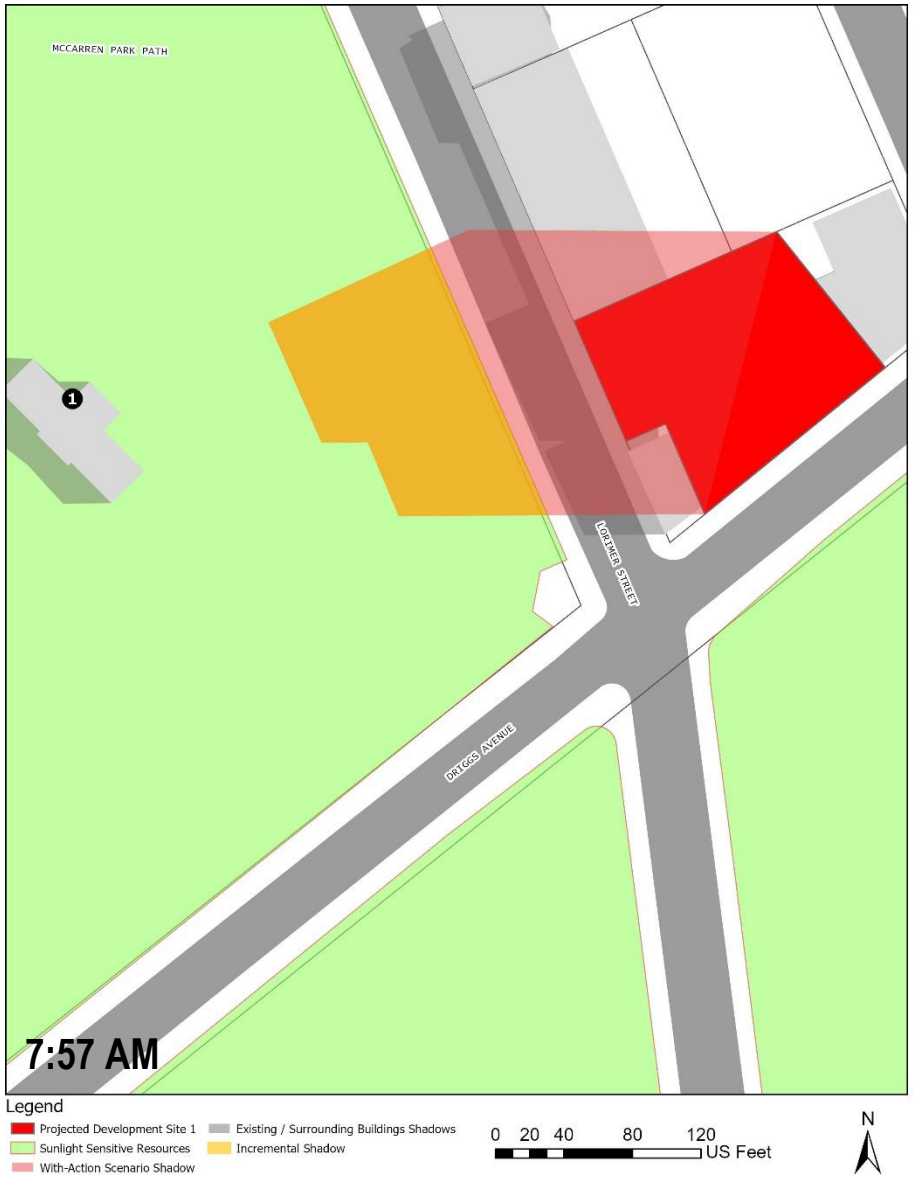


Figure 2.8-8 Detailed Shadow Diagrams – June (2)



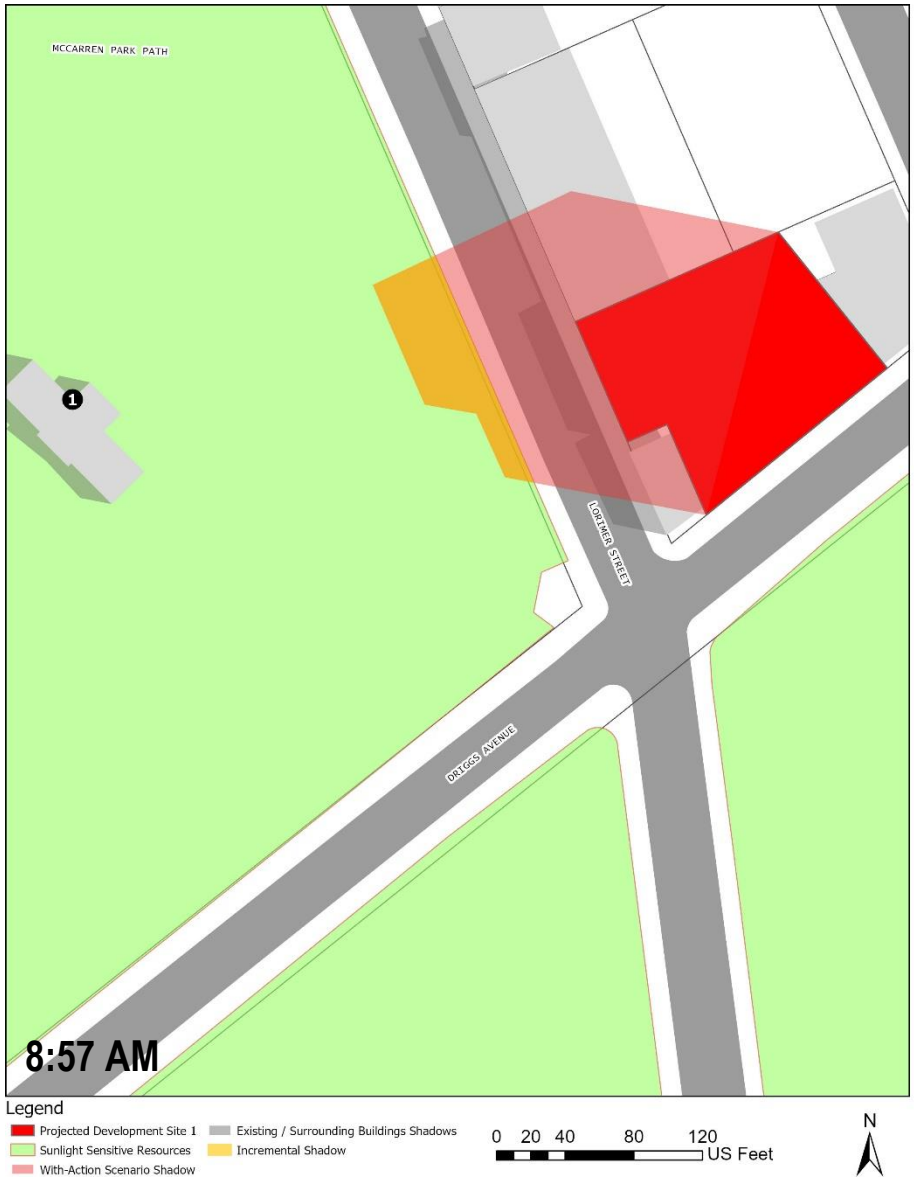
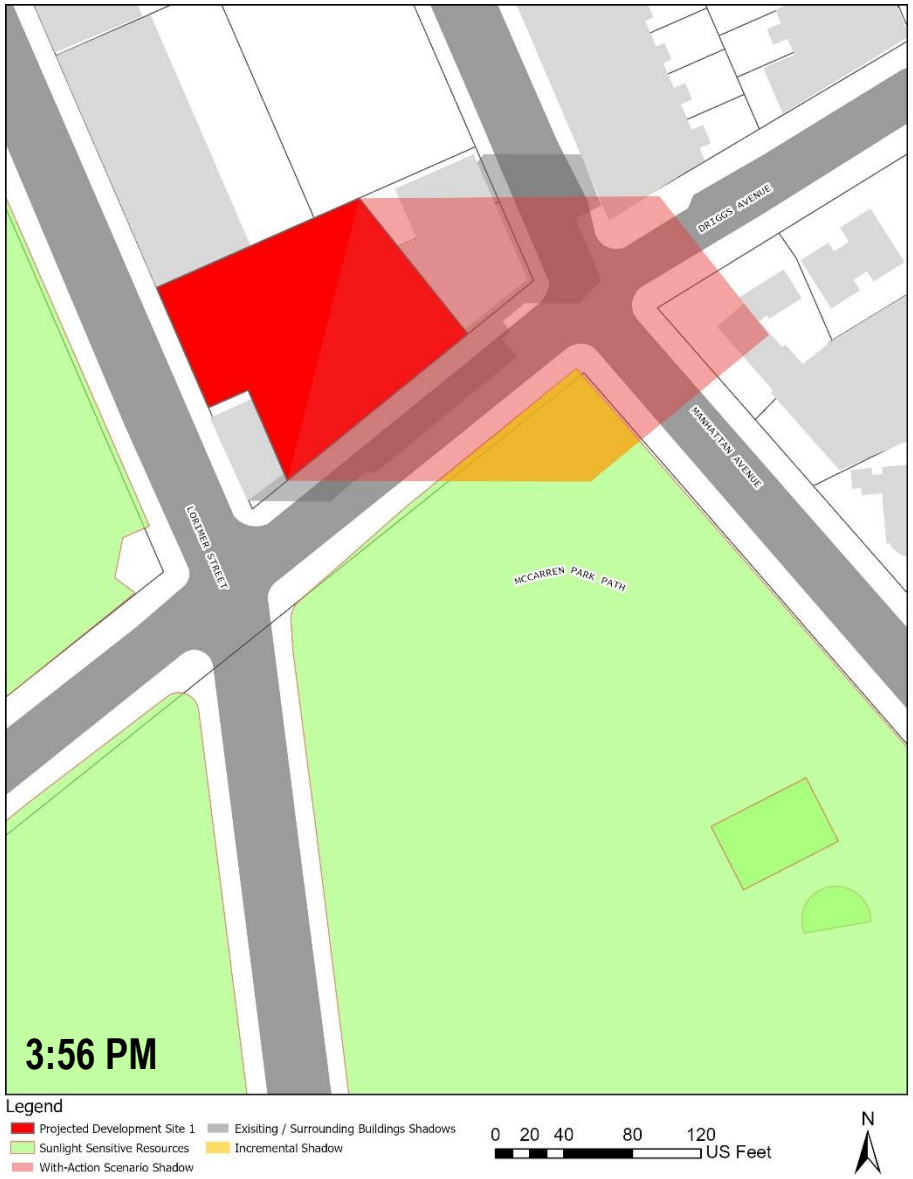


Figure 2.8-8 Detailed Shadow Diagrams – June (3)



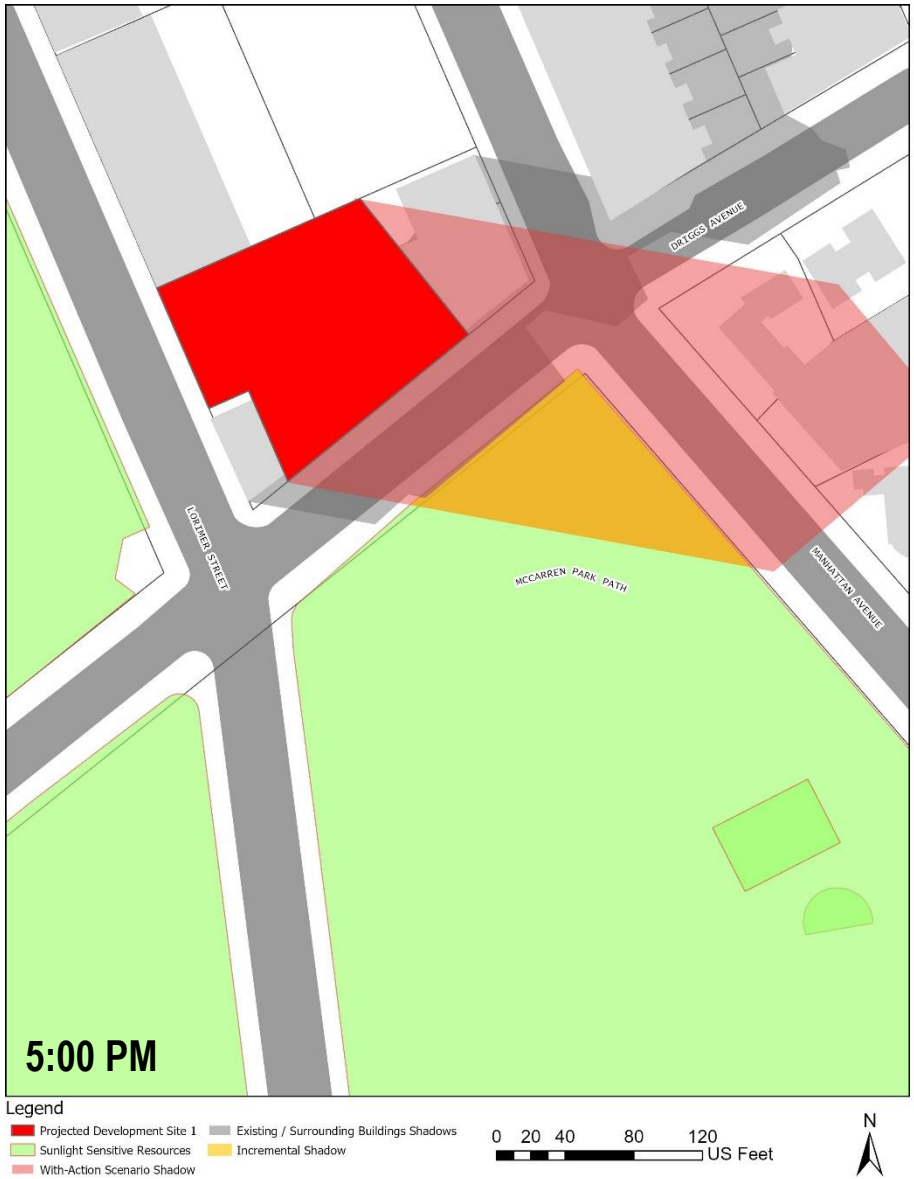
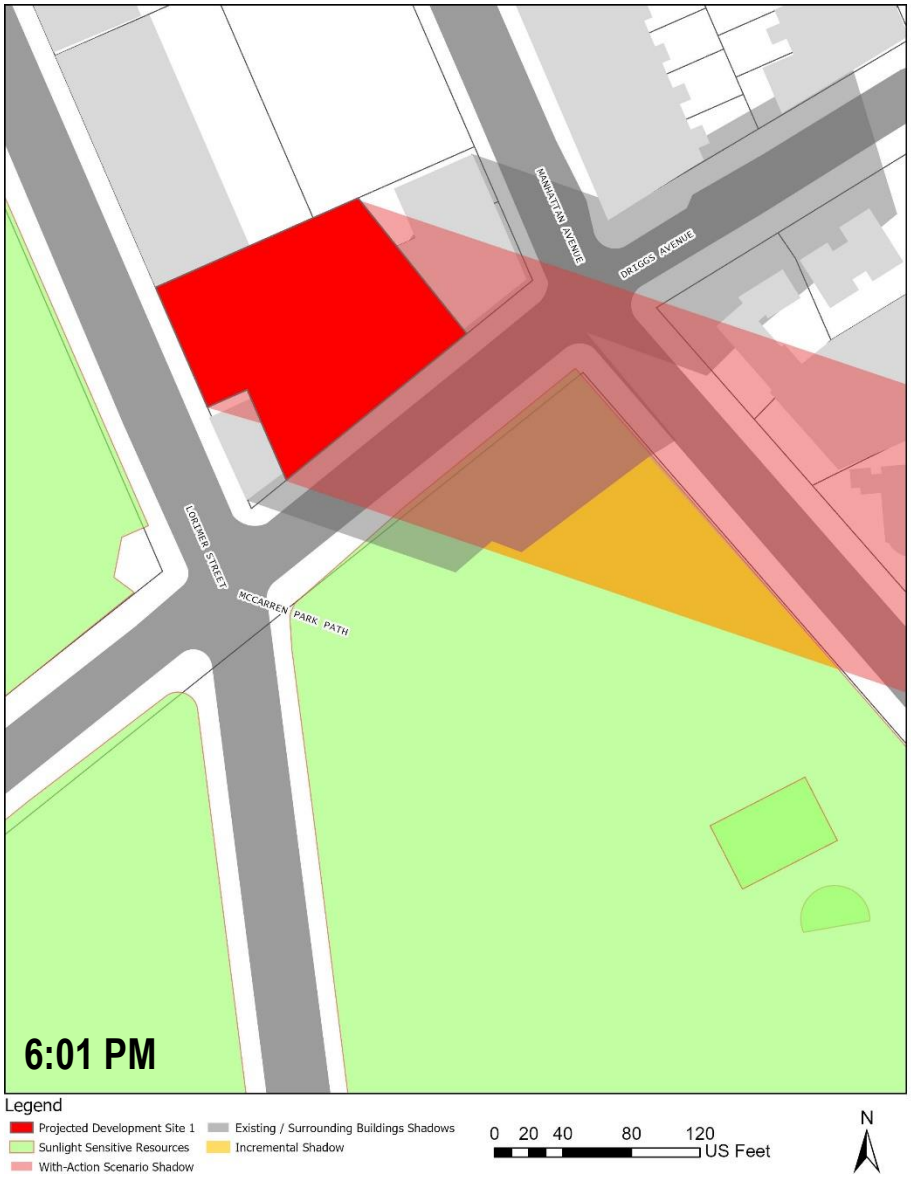


Figure 2.8-8 Detailed Shadow Diagrams – June (4)



McCarren Park (Sunlight Sensitive Resource 1)



McCarren Park is a public park located on the boundary of Williamsburg and Greenpoint neighborhoods, which is bordered by Nassau Avenue, Bayard Street, Lorimer Street and North 12th Street. It is operated by the New York City Department of Parks and Recreation.

McCarren Park is the site of endless games of kickball, soccer, baseball, bocce, handball, basketball, football, and tennis, not to mention running meets and playground antics. It is 35 acres of bustling activity, shared by families born into the neighborhood, recent immigrants, and young renters. McCarren Park is home to the McCarren Park Pool and Play Center, completed in 2012 to be respite on hot days and a year-round center of community life.

Determination of Shadow Impact Significance

The *CEQR Technical Manual* states that the determination of significance of shadow on a sunlight-sensitive resource is based on (1) the information resulting from the detailed shadow analysis describing the extent and duration of incremental shadows; and (2) an analysis of the resource's sensitivity to reduced sunlight. The goal of the assessment is to determine whether the effects of incremental shadows on a sunlight-sensitive resource are significant under CEQR. A shadow impact can occur when the incremental shadow from a proposed project falls on a sunlight-sensitive resource or feature and reduces its direct sunlight exposure. Determining whether this impact is significant or not, under CEQR, depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs.

For open space and natural resources, the uses and features of a resource is an indicator of its sensitivity to shadows. Shadows occurring during the cold-weather months generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. This sensitivity is assessed for warm-weather-dependent features (such as wading pools and sandboxes) or vegetation that could be affected by a loss of sunlight during the growing season, and for features (such as benches) that could be affected by a loss of winter 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. Where the incremental shadows from the project fall on sunlight-sensitive features or uses, the analysis assesses the loss of sunlight relative to sunlight that would be available without the project.

As stated in the *CEQR Technical Manual*, to determine impact significance, an incremental shadow is generally not considered significant when its duration is no longer than 10 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 10 minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- *Vegetation* - A substantial reduction in sunlight available to a sunlight-sensitive feature of the resource to less than the minimum time necessary for its survival (when there was sufficient sunlight in the future without the project). Or, a reduction in direct sunlight exposure where the sunlight-sensitive feature of the resource is already subject to substandard sunlight (i.e., less than minimum time necessary for its survival).
- *Open Space Utilization* - A substantial reduction in the usability of open space as a result of increased shadow.
- *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.

McCarren Park (Sunlight Sensitive Resource 1)

Based on the findings of the Detailed Shadow Analysis, the Proposed Development would cast shadows on portions of McCarren Park on December 21st for a total of 49 minutes between 8:51 am and 9:40 am, on March 21st/September 21st for 2 hours from 7:36 am to 9:36 am and 43 minutes from 3:46 pm to 4:29 pm, on May 6th/August 6th for 3 hours and 13 minutes from 6:27 am to 9:40 am and 2 hours and 18 minutes from

3:00 pm to 5:18 pm, and on June 21st for 3 hours and 51 minutes from 5:57 am to 9:48 am and 3 hours and 5 minutes from 2:56 pm to 6:01 pm.

On May 6th/August 6th, the shadow induced by the proposed development would be cast on an area of McCarren Park near the intersection of Lorimer Street and Driggs Avenue to the west of the site in the morning for a period of 3 hours and 13 minutes from 6:27 am to 9:40 am (**Figure 2.8-7(1) and (2)**). Later in the afternoon on the same analysis day, the project induced shadow would move eastward to shed on an area of the park near the intersection of Manhattan Avenue and Driggs Avenue to the east of the site for a period of 2 hours and 18 minutes from 3:00 pm to 5:18 pm. Given that the sun rises at 6:27 am in the morning and falls at 5:18 pm in the afternoon on May 6th/August 6th, providing direct sunlight for a total of 10 hours and 51 minutes, the area of McCarren Park to the west of the site will be exposed to direct sunlight for a total of 7 hours and 38 minutes and the area to the east of the site will be exposed to direct sunlight for a total of 8 hours 33 minutes.

On June 21st, the shadow induced by the proposed development would be cast on an area of McCarren Park near the intersection of Lorimer Street and Driggs Avenue to the west of the site in the morning for a period of 3 hours and 51 minutes from 5:57 am to 9:48 am (**Figure 2.8-8(1), (2) and (3)**). Later in the afternoon on the same analysis day, the project induced shadow would move eastward to shed on an area of the park near the intersection of Manhattan Avenue and Driggs Avenue to the east of the site for a period of 3 hours and 5 minutes from 2:56 pm to 6:01 pm. Given that the sun rises at 5:57 am in the morning and falls at 6:01 pm in the afternoon on June 21st, providing direct sunlight for a total of 12 hours and 4 minutes, the area of McCarren Park to the west of the site will be exposed to direct sunlight for a total of 8 hours and 13 minutes and the area to the east of the site will be exposed to direct sunlight for a total of 8 hours 59 minutes.

As shown in **Figure 2.8-9** below, the portions of McCarren Park that would be impacted by the shadows induced by the Proposed Development mainly consist of vegetation, outdoor walking lanes, benches, and a one-story building used as public restroom to the west and south of the Affected Area. People's activities within the affected park area are mostly passive, including sitting, strolling, and relaxation. Therefore, the concerns regarding shadows from the Proposed Development within the affected park area are people's passive activities and the growth of vegetation.

Though the shadows induced by the Proposed Development would be cast upon the northeastern corner of McCarren Park on all analysis days, including growing seasons, the shadows would move constantly throughout the days and cast on different portions within the affected area of the park. All the benches, walking lanes, and vegetation within the affected area have exposure to the direct sunlight for a minimum of 6 hours all year round. As such, the Proposed Actions would not affect the vitality or usage of any sunlight sensitive resources in McCarren Park, and significant adverse impacts from shadows would not result from the Proposed Actions on resource 1 and no further analysis is required for this resource.

Figure 2.8-9 McCarren Park Satellite Map



Conclusion

As indicated above, the Tier 1 analysis showed that one sunlight sensitive resource within the area, McCarren Park, would be potentially affected by the shadows from the Proposed Development. In Tier 2 analysis, given the characteristics of the travel path of the sun in the northern hemisphere, a portion of McCarren Park is located in the area that could be potentially shaded by the Proposed Development. Tier 3 analysis determined that the shadows from the Proposed Development would reach McCarren Park on all four analysis days. As a result, a detailed shadow analysis was performed to assess the extent and duration of the shadows on the sunlight sensitive resources. The sunlight sensitive resource within the Proposed Development's longest action-induced shadow area will experience a limited reduction in sunlight. Therefore, no further analysis is necessary.

Chapter 9 Historic and Cultural Resources

An assessment of historic and cultural resources is usually necessary for projects that are in close proximity to historic or landmark structures or districts, or for projects that require in-ground disturbance, unless such disturbance occurs in an area that has been formerly excavated, according to the *CEQR Technical Manual*.

The term "historic resources" defines districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, architectural and archaeological importance. In assessing both historic and cultural resources, the findings of the appropriate city, state, and federal agencies are consulted. Historic resources include: the New York City Landmarks Preservation Commission (LPC) designated landmarks, interior landmarks, scenic landmarks, and historic districts; locations being considered for landmark status by the LPC; properties/districts listed on, or formally determined eligible for, inclusion on the State and/or National Register (S/NR) of Historic Places; locations recommended by the New York State Board for Listings on the State and/or National Register of Historic Places and National Historic Landmarks.

Architectural Resources

Per *CEQR Technical Manual* guidelines, impacts on historic resources are considered on those sites affected by the Proposed Actions and in the area surrounding identified development sites. The historic resources study area is therefore defined as the project site plus an approximately 400-foot radius around the proposed action area.

To determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No architectural resources were found in the project area that were considered historic or significant.

The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and by letter dated June 1, 2020 indicated that one building of known architectural significance designated by LPC is located adjacent to the radius outside of the Study Area (see Appendix A). **Figure 2.9-1** shows the location of the identified site.

One LPC designated property was identified within the Study Area, which is McCarren Play Center located on 776 Lorimer Street (Block 2696, Lot 1). It opened in 1936, the recreation center contains various spaces and equipment for different activities, including an afterschool room, a cardio room, a fitness room, a game room, a gym, a media lab, three multipurpose rooms, an outdoor pool, and many other accessible fitness equipment and facilities. Since McCarren Play Center intersects with the radius of the Study Area, analysis was conducted to determine whether the Proposed Actions would have adverse impact on this LPC designated property.

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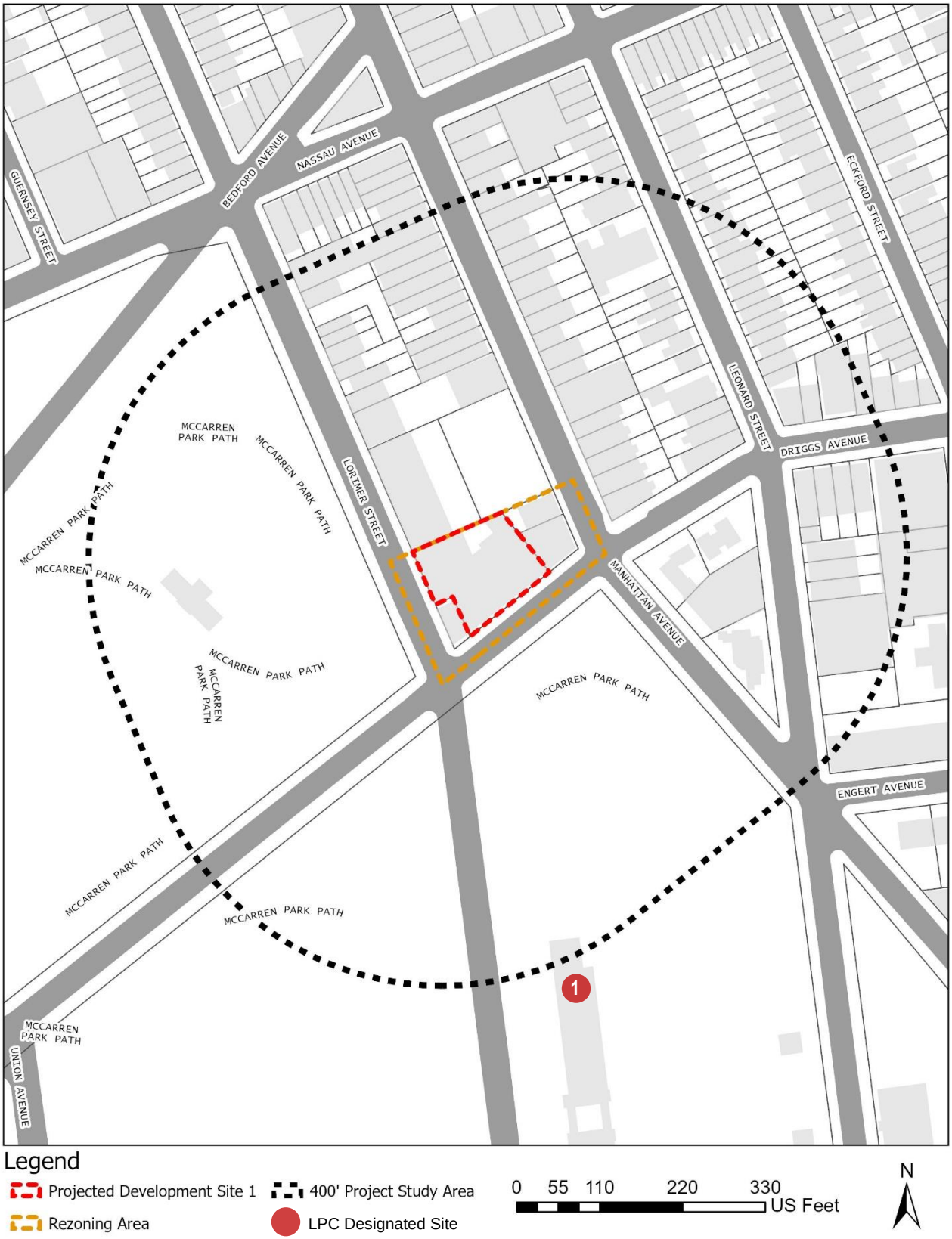
Figure 2.9-1: LPC Designated Site



Analysis

Future No-Action Condition

In the future without the Proposed Actions, existing conditions of the Projected Development Site (Block 2679 Lot 43) would remain. Though the occupants in the existing buildings may change, no non-conforming uses or new development would happen on the Projected Development Site. McCarren Play Center would not be affected under the No-Action condition.

Future With-Action Condition

In the future with the Proposed Actions, the Projected Development Site would be developed with a 119,197-GSF mixed-use commercial and residential building. There would be 31,377 GSF of commercial uses (10,459 GSF of ground floor local retail and 20,918 GSF of commercial office on second and third floor) and 80,306 GSF of residential uses on the upper floors. The 10-story building would have a building height of 115 feet. 38 residential accessory spaces would be provided at both cellar and ground levels.

Since the proposed bulk and use of the Proposed Development is compatible with the surrounding area, it is expected that the Proposed Development would not pose any changes to the resource's setting or context, though part of the McCarren Play Center is located within the Study Area radius. As the construction of the Proposed Development is considered short term (less than 2 years) and there is approximately 380-foot distance between the site and the resource, it is also expected that the construction on the Projected Development Site (Block 2679 Lot 43) would not cause any physical, visual, or historical changes to the resource during any period.

Conclusion

According to the *CEQR Technical Manual*, significant adverse impacts to historic and cultural resources could potentially result if a proposed action affects those characteristics that make a resource eligible for LPC designation or S/NR listing. The Future With-Action Scenario's potential for significant adverse impacts on historic resources were assessed in accordance with **Table 2.9-1** to determine (a) whether there would be a physical change to any designated resource or its setting, and (b) if so, is the change likely to diminish the qualities of the resource that make it important (including non-physical changes such as context or visual prominence). The assessment of the potential for impacts on significant resources are described below.

Table 2.9-1 Possible Impacts to Historic and Cultural Resources

Construction resulting in ground disturbance, including construction of temporary roads and access facilities, grading, and landscaping.
Below-ground construction, such as excavation or installation of utilities.
Physical destruction, demolition, damage, alteration or neglect of all or part of an historic property.
Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.
Isolation of the property from, or alteration of, its setting or visual relationship with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor.
Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting.

Replication of aspects of the resource so as to create a false historical appearance.
Elimination or screening of publicly accessible views of the resource.
Construction-related impacts such as falling objects, vibration, dewatering, flooding, subsidence, or collapse.
Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over an historic landscape or an historic structure to the extent that the architectural details that distinguish that resource as significant are obscured.

Source: Table 8-1 CEQR Technical Manual

The Proposed Actions would not result in any types of visual and contextual impacts to the known historic resources within the Study Area, as all the new buildings that could be developed under the Proposed Actions would be commercial, residential, or community facility structures of heights and bulk consistent with those urban design features of the area. The Proposed Actions would not introduce any incompatible visual, audible, or atmospheric elements to the settings of historic resources. As discussed in the Urban Design section below (See **Chapter 10**, *Urban Design and Visual Resources*), the proposed building would be designed to be visually compatible and consistent with existing developments, but would not be replicated so as to create a false historical appearance. Additionally, the significant views of the historic architectural resource identified above will not be adversely affected by the Proposed Actions.

The historic resources in the study area include one building operating as recreation center within McCarren Park and the Proposed Actions aim to encourage the design of new development that is in character with the area surrounding the park, which is predominately residential, commercial, and mixed-use. Publicly accessible views of the resource would not be blocked, because the new development would occur on existing block and lot, and maximum building height would be limited and capped according to the sky exposure plane. In addition, as more fully described in the Shadows section (See **Chapter 8**, *Shadows*), there would be no significant adverse impacts to historic resources with sunlight dependent features.

The Projected Development Site doesn't contain historic architectural resources and is not adjacent to or within 90 feet of any identified historic architectural resources. Therefore, no direct impacts or indirect construction-related effects via ground-borne construction activities are anticipated.

Therefore, significant adverse impacts to architectural resources are not expected because of the Proposed Actions, and further analysis is not warranted.

Cultural and Archaeological Resources

Unlike the architectural evaluation of a study area that extends beyond the footprint of a project's block and lot lines, the analysis of potential and/or projected impacts to archaeological resources is controlled by the actual footprint of the limits of soil disturbance. Archeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells and privies. The *CEQR Technical Manual* requires a detailed evaluation of a project's potential effect on the archeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated.

The Proposed Actions would result in new in-ground construction on the Projected Development Site. As noted, the LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on June 1, 2020 (see Appendix A). The LPC has indicated that no cultural resource of archaeological significance is associated with the study area. Therefore,

significant adverse impacts to archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

Chapter 10: Urban Design and Visual Resources

According to the *CEQR Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings. Pursuant to the *2020 CEQR Technical Manual*, an assessment of Urban Design may be warranted when a proposed action may affect one or more of the elements that contribute to the pedestrian experience of an area, specifically the arrangement, appearance, and functionality of the built environment.

The proposed rezoning of the Affected Area from M1-2/R6(MX-8) and R6A/C2-4 to C4-5D would alter permitted use, bulk, and height within the Affected Area. Therefore, further analysis is warranted. The differences between existing and proposed zoning, with regards to those aspects of zoning affecting urban design, are presented in the following **Table 2.10-1**.

Table 2.10-1: No-Action and With-Action Zoning

	No-Action		With-Action
Zoning	M1-2/R6(MX-8)	R6A/C2-4	C4-5D
Permitted Uses	Manu., Res., Com., CF	Com., Res., CF	Com., Res., CF
Maximum FAR	Manu. and Com.: 2.00 Res., CF: 3.00	Com.: 2.00 Res., CF: 3.00	Res.: 5.60 Com., CF: 4.20
Actual FAR	2.59		5.49
Maximum Height	Base Height: 40-65 feet		Base Height: 60-95 feet
	Building Height: 75 feet (w/QGF)		Building Height: 115 feet (w/QGF)
Actual Height	41.9 feet		115 feet
Lot Coverage (corner lot)	100%		100%

Com. = Commercial; CF = Community Facility; Manu. = Manufacturing; Res. = Residential; QGF = Qualifying Ground Floor

Existing Conditions

The Affected Area consists of Block 2679 Lots 32, 34, 42, and 43 at the confluence of Lorimer Street, Manhattan Avenue, and Driggs Avenue in Greenpoint neighborhood, Brooklyn, which is described in detail in **Sections 1.4 and 2.4.**

The Development Site (Block 2679, Lot 43) consists of an irregularly shaped interior lot with frontages on both Lorimer Street and Driggs Avenue. It is improved with 3 separate buildings totaling 39,125 GSF. Each building is 3 stories in height, and are manufacturing buildings that were constructed in 1931. The buildings are currently used for feather processing facility.

Other lots within the Affected Area include a four-story seven-unit residential building on lot 32 (2.65 FAR); a three-story mixed-use commercial and residential building on lot 34 (1.88 FAR), which is under demolition now for the new construction of a six-story eight-unit mixed-use building; and Lot 42, which is improved with a three-story, 4,510 GSF mixed-use residential and commercial building (2.59 FAR), with a ground-floor restaurant, Bernie's, and four residential units.

The traffic grid is irregular as a result of the confluence of Lorimer Street, Driggs Avenue, and Manhattan Avenue. Major commercial thoroughfares pass by the Surrounding Area, including Manhattan Avenue and Nassau Avenue in the vicinity. The area is well-served by transit, and is within a Transit Zone. The Nassau Avenue subway station is serviced by the MTA with stops for the G line and is at the northeast corner of the block where the Affected Area is located. Stops for the B43, B48, and B62 buses are in the immediate area.

Sidewalks are in good condition with regular street lights and trees throughout the study area. The Surrounding Area is predominantly residential, with 3- and 4-story townhouses and apartment buildings. The mixed-use residential and commercial buildings are located along Manhattan Avenue and Nassau Avenue to the northeast of the Affected Area. These buildings are mainly 3- to 4-story tall with commercial uses on the ground floor and residential units on the upper floors. The small-scale ground-floor retail commercial uses within the 400-foot study area consist of restaurants, cafe, wine bars, clothing stores, and sports goods stores. McCarren Park is located immediately to the southeast of the Affected Area.

Analysis

Future No-Action Condition

In the future without the Proposed Actions, it is expected that a new DOB approved 6-story 8-unit mixed residential and commercial building of 13,076 GSF (8,803 ZSF, 2.99 FAR) would be developed on Block 2679 Lot 34. While tenants within the residential, manufacturing, retail, and office buildings on other lots may change, the overall use of these buildings within the study area would remain the same. Any physical changes to buildings in the study area would comply with designated zoning regulations and other surrounding districts. No significant changes to the area's urban character are anticipated. No changes to the area's views to the adjacent parks and open spaces are also expected. All other lots within the Affect Area, including the Projected Development Site, Block 2679 Lot 43, would remain in their existing condition.

The renderings of the building massing on Block 2679 Lot 34 under the No-Action scenario are shown in **Figure 2.10-3** and **Figure 2.10-6**.

Future With-Action Condition

Block 2679 Lot 43 would have a projected lot size of 15,130 SF, and would be developed with a 119,197 GSF (83,050 ZSF; 5.49 FAR), 10-story, 115-foot-tall mixed-use commercial and residential building. There would be 31,377 GSF of ground floor commercial (local retail) uses and 80,306 GSF of residential uses on the upper floors. There would be 94 total dwelling units (1 unit per 850 GSF), with 75 being market rate and 19 being permanently affordable per MIH Option 1. 38 residential accessory spaces would be required, and 38 spaces (7,514 GSF) would be provided at both cellar and ground levels. No commercial accessory parking spaces are required within the C4-5D zoning district.

The Proposed Actions would introduce development that is larger in scale than adjacent buildings but with uses similar to the Surrounding Area. Though the building height of the Proposed Development would be increased dramatically compared to that under the existing and No-Action scenarios, there are residential buildings with comparable height nearby. Located to the southeast of the Affected Area are four 6- to 9-story elevator condominium buildings within a triangle-shaped block bounded by Driggs Avenue to the north, Manhattan Avenue to the west, and Leonard Street to the east. The Applicant believes that the Proposed

Development with ground floor commercial uses, currently improved with three manufacturing buildings used as feather processing facility, would activate the pedestrian experience and provide locally serving retail uses.

The DOB approved No-Action development on Lot 43 would be expected to be constructed in the With-Action condition, as described in the No-Action. The renderings of the building massing on Block 2679 Lots 34 and 43 under the With-Action scenario are shown in **Figure 2.10-4**, **Figure 2.10-7,** and **Figure 2.10-9**.

Conclusion

The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood. It would not significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or the visual character of the area. It is the Applicant's opinion that the Proposed Development with ground floor commercial uses would improve walkability and the visual character of the area, and would also provide locally serving retail uses. Therefore, the Proposed Actions would not result in any significant adverse impact to the constituent elements of Urban Design, and a detailed analysis is not warranted.

Figure 2.10-1: Urban Design Study Area – Photomontage Locations

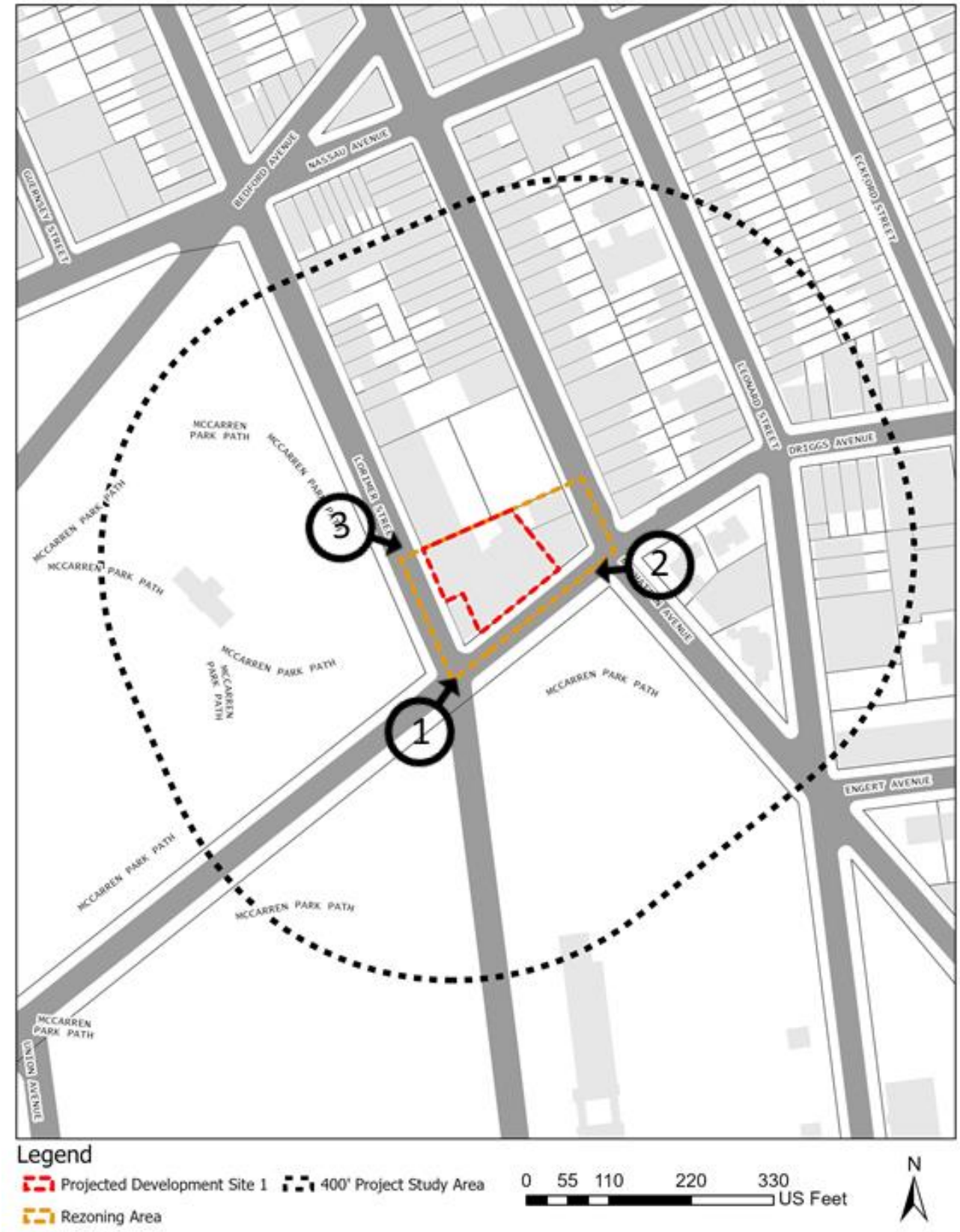


Figure 2.10-2: Existing Condition 1
Looking Northeast at Lorimer Street and Driggs Avenue



Figure 2.10-3: No-Action Condition 1
Looking Northeast at Lorimer Street and Driggs Avenue



Figure 2.10-4: With-Action Condition 1
Looking Northeast at Lorimer Street and Driggs Avenue



Figure 2.10-5: Existing Condition 2
Looking Northwest at Driggs Avenue and Manhattan Avenue



Figure 2.10-6: No-Action Condition 2
Looking Northwest at Driggs Avenue and Manhattan Avenue

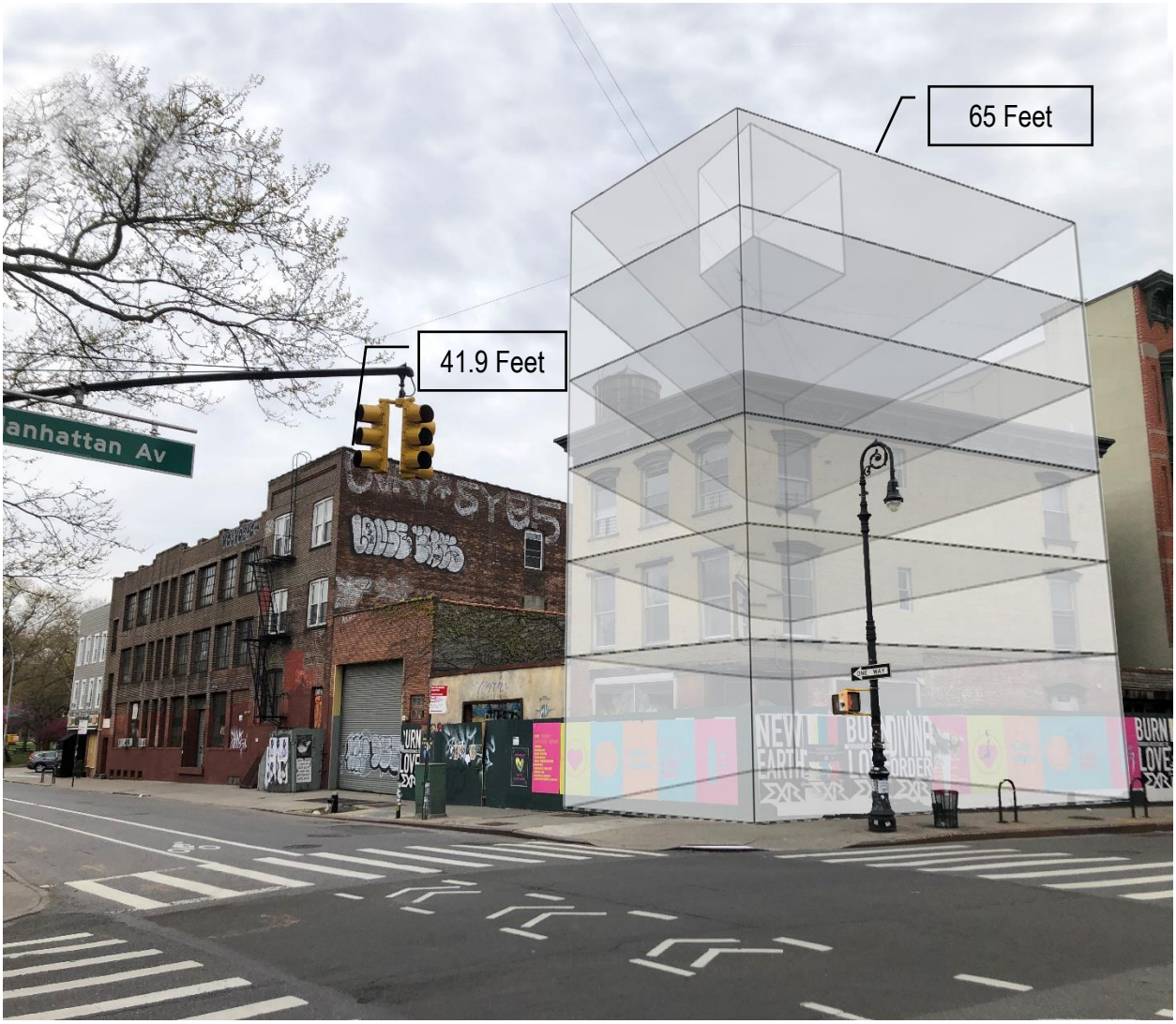


Figure 2.10-7: With-Action Condition 2
Looking Northwest at Driggs Avenue and Manhattan Avenue



Figure 2.10-8: Existing Condition and No-Action Condition 3
Looking Southeast at Lorimer Street



Figure 2.10-9: With-Action Condition 3
Looking Southeast at Lorimer Street



Chapter 12: Hazardous Materials

According to the *CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: (a) hazardous material exists 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.

Methodology

The hazardous materials assessment begins with a Phase 1 ESA, which is a qualitative evaluation of the environmental conditions present at a site, based on a review of available information, site observations, and interviews. Pursuant to the *2020 CEQR Technical Manual*, the Phase 1 ESA is conducted in accordance with the standards established by the current ASTM Phase 1 ESA Standard and includes research and field observations to determine whether the site may contain contamination from either past or present activities on the site or as a result of activities on adjacent or nearby properties. If a potential REC is identified during this assessment, then building any subsurface investigations are usually conducted as part of a Phase II ESA to confirm the presence and extent of the contamination.

Analysis

Projected Development Site (840 Lorimer Street), Block 2679 Lot 43, is owned by the Applicant. The lot is a 15,130 SF irregularly shaped interior lot with frontage on both Driggs Avenue and Lorimer Street, which is improved with 3 separate buildings totaling 39,125 GSF. Each building is 3 stories in height, and are manufacturing buildings that were constructed in 1931. The buildings are currently used for feather processing facility.

The proposed rezoning would allow for residential, commercial, and community facility uses to be built with a higher FAR in the proposed C4-5D zoning districts. Accordingly, a Phase I Environmental Site Assessment (ESA) was conducted for the Project Site by Equity Environmental Engineering (EEE) in April 2020. A copy of this report is included as an Attachment. This Phase I ESA will be reviewed by the Department of Environmental Protection.

The purpose of a Phase I ESA is to determine whether any type of environmental hazard exists within or adjacent to the project site. Environmental hazards may include, but are not limited to, hazardous/toxic wastes or raw chemicals stored, dumped, or spilled on the site, underground and above ground storage of petroleum or hazardous materials; asbestos within the building materials/structures; and identification of potential off-site sources of hazardous waste contamination, such as industrial facilities adjacent to the subject property.

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release, or a material threat of a release into structures on the property or into the ground, groundwater or surface waters of the property. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. All RECs, excluding de minimis RECs, were considered in the Phase I.

EEE has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13. The following conditions were observed:

- RECs: There are no RECs associated with the Subject Property.
- HRECs: There are no HRECs associated with the Subject Property.
- CRECs: There are no CRECs associated with the Subject Property.
- VECs: The EDR Vapor Encroachment database identified no VEC (Vapor Encroachment Conditions) of concern within 1/10 of a mile of the Subject Property. Based on these findings, a vapor encroachment condition can be ruled out.

Conclusion

Based on the findings of the Phase I ESA, no RECs, HRECs, CRECs, or VECs were identified related to the Subject Property. In the regulatory databases, however, 17 spills and 1 historical auto site were identified within 1/8-mile; 10 underground storage tank sites, 1 dry cleaner, and 15 aboveground storage tank sites were identified within 1/4 mile; 25 leaking storage tank sites were identified within a 1/2-mile; and 3 manufactured gas plants were identified within 1 mile of the Subject Property. Meanwhile, the Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses, including various manufacturers, a recycling station, a marble yard, auto repair, a mill, a paint store, furniture assembly, auto sales, plumbing, and tire service. Therefore, a Phase II ESA is required by DEP to adequately identify and characterize the surface and subsurface soils, groundwater, and soil vapor of the Subject Property, and to inform and disclose the measures necessary to avoid impacts from hazardous materials.

However, currently there is a building with operating business in place, making the performance of a Phase II impracticable at this time as a rig cannot be mobilized on site. An E-Designation is therefore mapped for the Subject Property to prevent the potential impact of the hazardous materials. The E-Designation language related to Hazardous Materials is as follows:

E-Designation (E-650)

<u>Projected Development Site (Block 2679 Lot 43)</u>
An E-Designation should be placed on the site to assure that testing and mitigation will be performed, as necessary, before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation (OER).

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

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

Chapter 13: Transportation

Pursuant to *CEQR Technical Manual* methodology, a transportation assessment may be necessary when a proposed action would alter the transportation network by closing, opening, or realigning an element of the transportation system such as a roadway, pedestrian way, or transit route, or if it would generate new trips on the transportation network. The objective of the transportation analyses is to determine whether a proposed project 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.

Methodology

The *CEQR Technical Manual* states that a preliminary trip generation assessment should be prepared to determine whether a quantified analysis of any technical areas of the transportation system is necessary. Except in unusual circumstances, a further quantified analysis would typically not be needed for a technical area if the proposed development would result in fewer than the following increments:

• 50 peak hour vehicle trips;
• 200 peak hour subway/rail or bus transit riders (or 50 bus trips in a single direction on a single route during a peak hour); or
• 200 peak hour pedestrian trips.

The *CEQR Technical Manual* also states that if the threshold for traffic is surpassed, a parking assessment may also be warranted. This chapter assesses the potential for project-generated vehicle, transit, and pedestrian trips to affect the local transportation network, as well as an assessment of transportation safety in the study area.

Analysis

Future No-Action Condition

Block 2679 Lot 43 (Projected Development Site), a 15,130 SF irregularly shaped interior lot with frontage on both Driggs Avenue and Lorimer Street, would remain unchanged under the No-Action Condition with 3 separate buildings totaling 39,125 GSF, all of which are manufacturing GSF used as feather processing facility. It doesn't provide parking spaces on site in the existing M1-2/R6 (MX-8) and R6A/C2-4 zoning district.

Future With-Action Condition

Pursuant to the Proposed Actions, Projected Development Site (Block 2679, Lot 43) would be developed under RWCDS with a 119,197 GSF (83,050 ZSF; 5.49 FAR) mixed-use commercial and residential building. There would be 31,377 GSF of commercial uses (10,459 GSF of ground floor local retail and 20,918 GSF of commercial office on second and third floor) and 80,306 GSF of residential uses on the upper floors. There would be 94 total dwelling units (1 unit per 850 GSF), with 75 being market rate and 19 being permanently affordable per MIH Option 1 (the number of the units are rounded). 38 residential accessory spaces would be required, and 38 spaces (7,514 GSF) would be provided at both cellar and ground levels. No commercial accessory parking spaces are required within the C4-5D zoning district.

In total, there would be 94 dwelling units, 10,459 GSF local retail space, and 20,918 GSF commercial office space as a result of the new building on the development site.

Preliminary Assessment

Based on the Affected Area's location, it is within Traffic Zone 2. According to Table 16-1 of the *2020 CEQR Technical Manual*, a residential development of fewer than 200 residential units, 15,000 square feet of local retail, or 25,000 square feet of community facility space, or a weighted average below 1.00 of any of the above, typically does not warrant further assessment of the potential for adverse effects on Transportation. Incremental development under the Proposed Actions, compared to No-Action conditions, would consist of 94 more residential dwelling units (0.47 weighted average) and an increase of 10,459 GSF of local retail space (0.7 weighted average) and 20,918 GSF of commercial office space (0.21 weighted average), which results in a weighted average of 1.38 for the Proposed Actions. Therefore, a Tier 1 trip generation is required.

Tier 1 Trip Generation

For Tier 1 trip generation, data from CEQR TM, East New York FEIS, 25 Kent Avenue EAS, ACS 2015-2019 Journey To Work, ACS 2012-2016 Reverse Journey To Work, and local retail and office data provided by NYCDOT was integrated for the traffic generation model. As **Table 2.13-1** shows, the assumption of the travel factors is determined based on the listed data sources. **Table 2.13-2** and **Table 2.13-3** show the person trips, vehicular trips, and pedestrian trips generated from the trip factors in **Table 2.13-1**.

Table 2.13-1 Travel Factors for 840 Lorimer Street Rezoning

	Local Retail		Office		Residential		Light Industry	
Trip Generation	(1)		(1)		(1)		(2)	
Weekday	205		18		8.075		14.7	
Saturday	240		3.9		9.6		2.2	
	per 1,000 sf		per 1,000 sf		per 1 DU		per 1,000 sf	
Linked-trip	25%							
Temporal Distribution	(1)		(1)		(1)		(2)	
AM	3.00%		12.00%		10.00%		13.20%	
MD	19.00%		15.00%		5.00%		11.00%	
PM	10.00%		14.00%		11.00%		14.20%	
Sat MD	10.00%		17.00%		8.00%		10.70%	
Modal Splits	(4)		AM/PM/Sat (5)	MD (7)	(3)		(6)	
Auto	11.00%		28.70%	2.00%	10.58%		36.27%	
Taxi	0.00%		4.90%	1.00%	2.19%		0.07%	
Bus	2.00%		12.70%	7.00%	0.95%		4.01%	
Subway	3.00%		32.10%	7.00%	69.52%		38.78%	
Walk/Other	84.00%		21.60%	83.00%	16.76%		20.87%	
In/Out Splits	In (2)	Out (2)	In (2)	Out (2)	In (2)	Out (2)	In (2)	Out (2)
AM	50%	50%	96%	4%	15%	85%	88.00%	12.00%
MD	50%	50%	39%	61%	50%	50%	50.00%	50.00%
PM	50%	50%	5%	95%	70%	30%	12.00%	88.00%
Sat MD	55%	45%	60%	40%	50%	50%	47.00%	53.00%
Vehicle Occupancy	(4)		(7)		Weekday (3)(2)	Sat (3)(2)	(2)	
Auto	1.20		1.26		1.14	1.14	1.20	
Taxi	1.20		1.26		1.30	1.30	1.20	
Truck Trip Generation	(1)		(2)		(1)		(2)	
Weekday	0.35		0.32		0.06		0.67	
Saturday	0.04		0.01		0.02		0.67	
Temporal Distribution	(1)		(1)		(1)		(2)	
AM	8.00%		10.00%		12.00%		14.00%	
MD	11.00%		11.00%		9.00%		9.00%	
PM	2.00%		2.00%		2.00%		1.00%	
Saturday	11.00%		11%		9%		0.00%	
In/Out Splits	In (2)	Out (2)	In (2)	Out (2)	In (2)	Out (2)	In (1)	Out (1)
AM/MD/PM/Sat	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%

1 = 2020 CEQR Technical Manual; 2 = East New York FEIS; 3 = 5-year ACS Journey To Work (2015-2019), Census Tracts 499, 515, 517, 557, 561, 569, 571, and 573; 4 = DOT provided data on Local Retail use; 5 = DOT provided data on Office use; 6 = 5-year ACS Reverse Journey To Work (2012-2016), Census Tracts 499, 515, 517, 557, 561, 569, 571, and 573; 7 = 25 Kent Avenue EAS, 2016

Table 2.13-2 Estimated Person/Vehicular Trips

	Local Retail		Office		Residential		Light Industry	
Size/Units	10,459	gsf	20,918	gsf	94	DU	-39,125	gsf
Peak Hour Trips								
AM	48		45		76		-76	
MD	306		56		38		-63	
PM	161		53		83		-82	
Sat MD	188		14		72		-9	
Person Trips								
AM	In	Out	In	Out	In	Out	In	Out
Auto	3	3	12	1	1	7	-24	-3
Taxi	0	0	2	0	0	1	0	0
Bus	0	0	6	0	0	1	-3	0
Subway	1	1	14	1	8	45	-26	-4
Walk/Other	20	20	9	0	2	11	-14	-2
Total	24	24	43	2	11	65	-67	-9
MD	In	Out	In	Out	In	Out	In	Out
Auto	17	17	0	1	2	2	-11	-11
Taxi	0	0	0	0	0	0	0	0
Bus	3	3	2	2	0	0	-1	-1
Subway	5	5	2	2	13	13	-12	-12
Walk/Other	128	128	18	29	3	3	-7	-7
Total	153	153	22	34	19	19	-32	-32
PM	In	Out	In	Out	In	Out	In	Out
Auto	9	9	1	14	6	3	-4	-26
Taxi	0	0	0	2	1	1	0	0
Bus	2	2	0	6	1	0	0	-3
Subway	2	2	1	16	41	17	-4	-28
Walk/Other	68	68	1	11	10	4	-2	-15
Total	80	80	3	50	58	25	-10	-72
Saturday	In	Out	In	Out	In	Out	In	Out
Auto	11	9	2	2	4	4	-2	-2
Taxi	0	0	0	0	1	1	0	0
Bus	2	2	1	1	0	0	0	0
Subway	3	3	3	2	25	25	-2	-2
Walk/Other	87	71	2	1	6	6	-1	-1
Total	104	85	8	6	36	36	-4	-5
Vehicle Trips								
AM	In	Out	In	Out	In	Out	In	Out
Auto	2	2	10	0	1	6	-20	-3
Taxi	0	0	2	0	0	1	0	0
Taxi Balanced	0	0	3	0	0	2	0	0

Truck	0	0	0	0	0	0	-2	-2
Total	2	2	14	1	2	8	-22	-5
MD	In	Out	In	Out	In	Out	In	Out
Auto	14	14	0	1	2	2	-10	-10
Taxi	0	0	0	0	0	0	0	0
Taxi Balanced	0	0	0	1	1	1	0	0
Truck	0	0	0	0	0	0	-1	-1
Total	14	14	1	1	3	3	-11	-11
PM	In	Out	In	Out	In	Out	In	Out
Auto	7	7	1	11	5	2	-3	-22
Taxi	0	0	0	2	1	0	0	0
Taxi Balanced	0	0	0	4	2	1	0	0
Truck	0	0	0	0	0	0	0	0
Total	7	7	1	15	7	3	-3	-22
Saturday	In	Out	In	Out	In	Out	In	Out
Auto	9	8	2	1	3	3	-1	-1
Taxi	0	0	0	0	1	1	0	0
Taxi Balanced	0	0	1	0	1	1	0	0
Truck	0	0	0	0	0	0	0	0
Total	10	8	3	2	5	5	-1	-1

Table 2.13-3 Estimated Pedestrian Trips

	Local Retail		Office		Residential		Light Industry		Total		
Pedestrian Trips											
AM	In	Out	In	Out	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	0	0	6	0	0	1	-3	0	3	1	4
Subway	1	1	14	1	8	45	-26	-4	-3	43	39
Walk/Other	20	20	9	0	2	11	-14	-2	18	30	47
Total	21	21	29	1	10	56	-43	-6	18	73	91
MD	In	Out	In	Out	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	3	3	2	2	0	0	-1	-1	4	4	8
Subway	5	5	2	2	13	13	-12	-12	7	8	15
Walk/Other	128	128	18	29	3	3	-7	-7	143	153	297
Total	136	136	21	33	17	17	-20	-20	154	166	320
PM	In	Out	In	Out	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	2	2	0	6	1	0	0	-3	2	5	7
Subway	2	2	1	16	41	17	-4	-28	40	8	48
Walk/Other	68	68	1	11	10	4	-2	-15	76	68	143
Total	72	72	2	33	51	22	-6	-46	118	81	199
Saturday	In	Out	In	Out	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	2	2	1	1	0	0	0	0	3	3	6
Subway	3	3	3	2	25	25	-2	-2	29	28	57
Walk/Other	87	71	2	1	6	6	-1	-1	94	77	171
Total	92	75	6	4	31	31	-3	-3	126	107	234

The increments induced by the Proposed Development are calculated through the traffic generation model. As **Table 2.13-4** shows, the number of trips increased wouldn't exceed the threshold for subway or MTA bus. However, the number of pedestrian trips, including not only "walk" trips, but also trips of other modes that usually have a pedestrian component, is expected to be 320 and 234 during weekday midday and Saturday peak hour respectively, exceeding the 200-pedestrian threshold per Chapter 16 Section 313 of the *2020 CEQR Technical Manual*. As for vehicular trips, peak hour of all four types would not anticipate an incremental amount of more than 50 vehicular trips. Therefore, a Tier 2 trip assignment is warranted for the Proposed Development given the exceedance of the pedestrian trips thresholds.

Table 2.13-4 Traffic Increments of Proposed Development Compared with CEQR Thresholds

Peak Hour	AM Peak Hour	Midday Peak Hour	PM Peak Hour	Saturday Peak Hour
Total Walk Only Trip-Ends	47	297	143	171
Total Subway Trip-Ends	39	15	48	57
Subway Threshold	**200**	**200**	**200**	**200**
Total MTA Bus Trip-Ends	4	8	7	6
MTA Bus Threshold	**200**	**200**	**200**	**200**
Total Pedestrian Trip-Ends	91	**320**	199	**234**
Pedestrian Threshold	**200**	**200**	**200**	**200**
Vehicular Trip-Ends	3	15	17	28
Vehicular Threshold	**50**	**50**	**50**	**50**

*Note: Areas highlighted **yellow** denote exceedances to the applicable pedestrian and vehicular **thresholds** per Chapter 16 Section 313 of the 2020 CEQR Technical Manual*

Tier 2 Trip Assignment

Pursuant to Section 320 of the *CEQR Technical Manual*, when a proposed project exceeds 200 peak hour pedestrian trips as determined by the Level 1 Trip Generation Screening Assessment, a Level 2 Project Generated Trip Assignment should be prepared to determine whether a detailed assessment of any technical areas is warranted. Accordingly, based on the Level 1 Trip Generation Screening Assessment, project generated pedestrian trips-ends were assigned to the traffic network for all peak hours in which exceedances to the above thresholds are projected.

Level 2: Project Generated Trip Assignment Assumptions

The Level 2 Assignment assumptions are based on the transit access points identified in **Figure 2.13-2** below and population distribution based on the 2015-2019 5-year American Community Survey Data for the subject census tracts and all bounding census tracts shown in **Figure 2.13-1** below.

Figure 2.13-1: Transportation Census Tract Study Area - Population Distribution

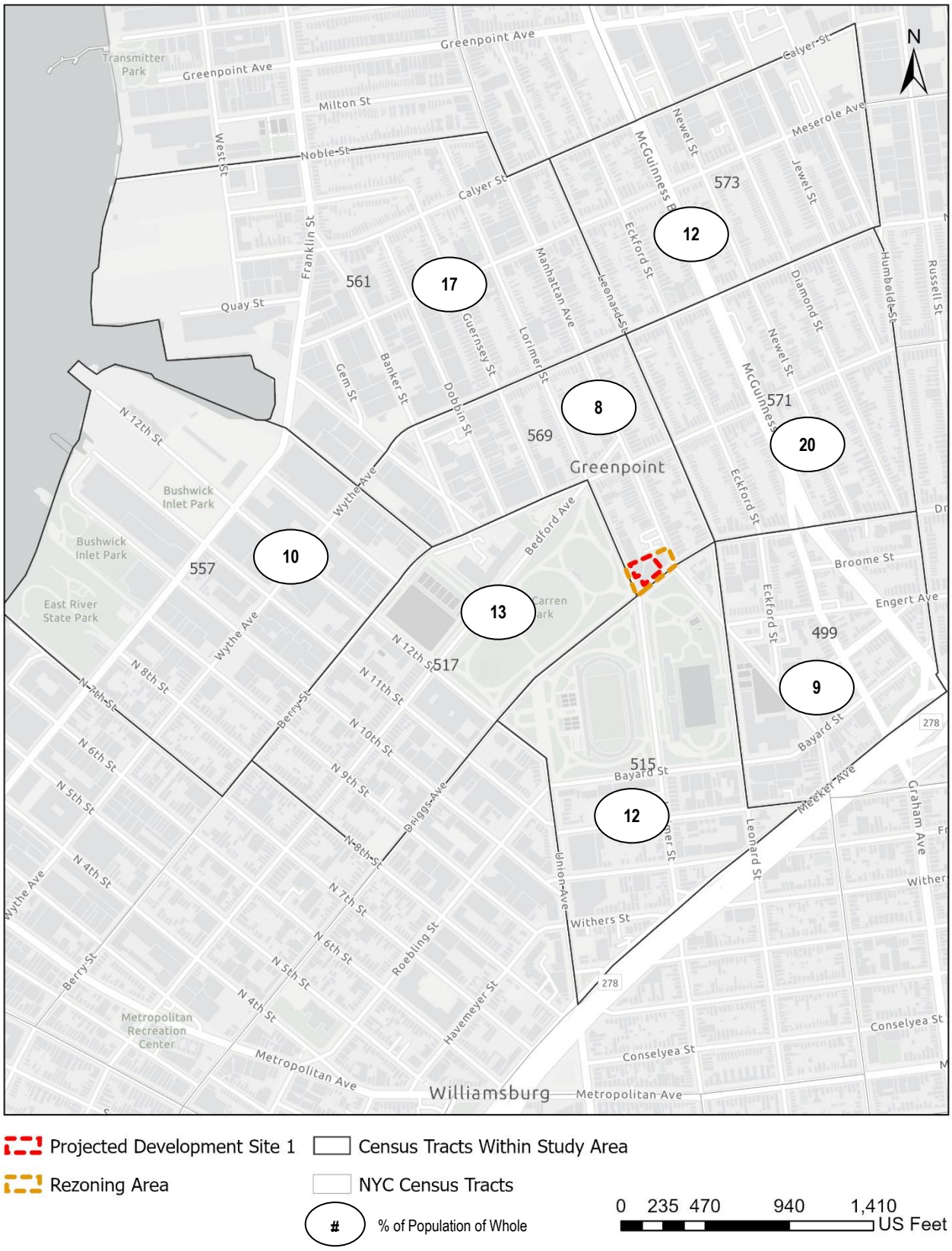


Figure 2.13-2: Transportation Study Area – Public Transit

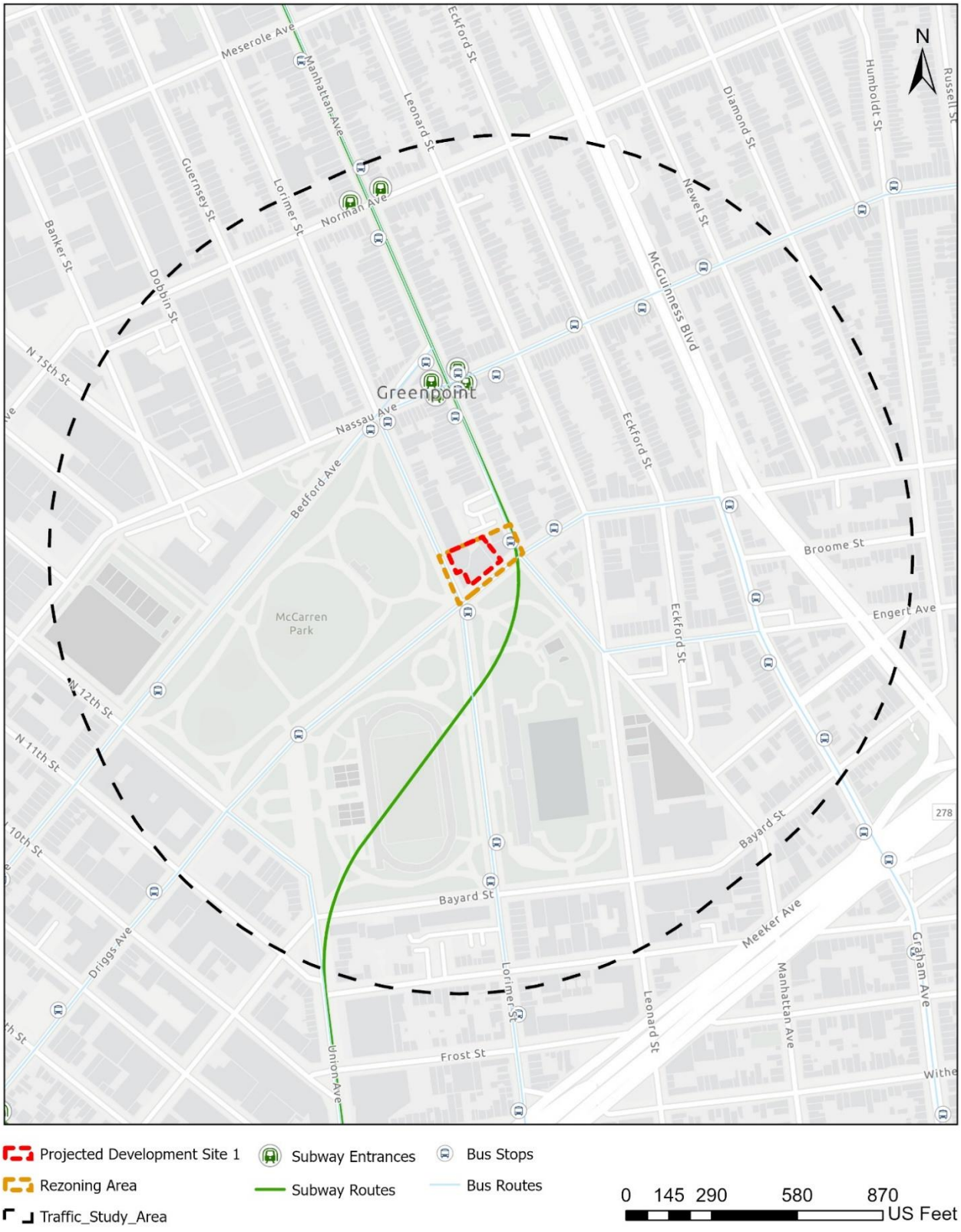


Figure 2.13-3: MD Pedestrian Assignment (1 of 2)

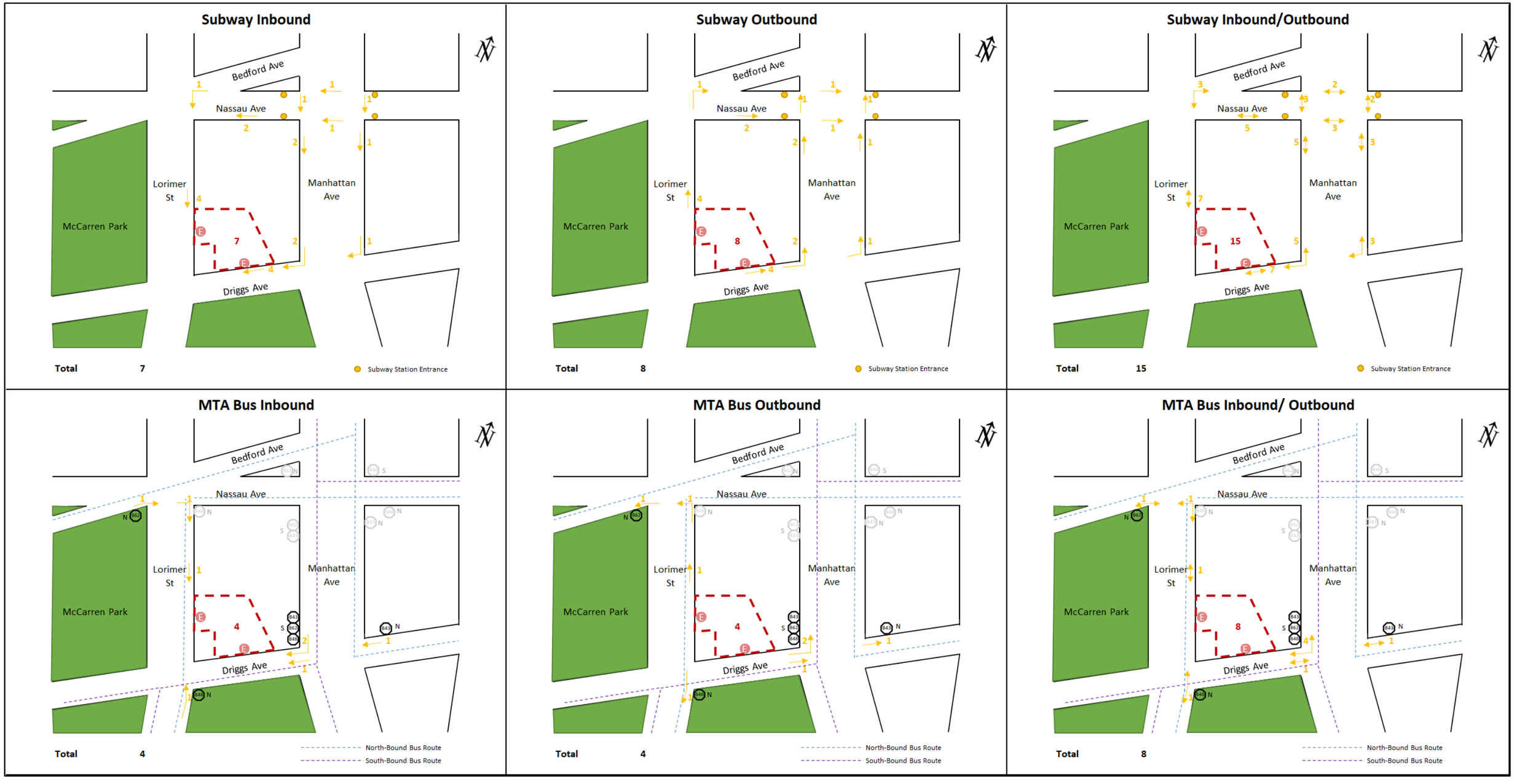
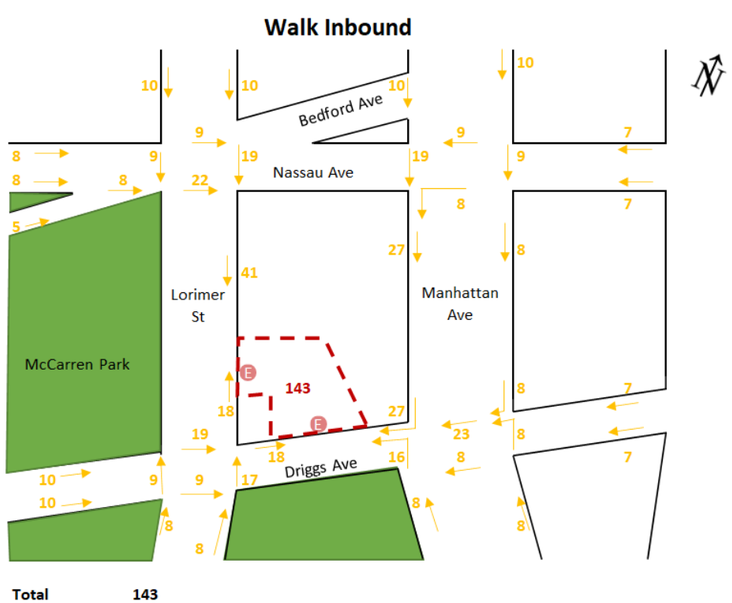
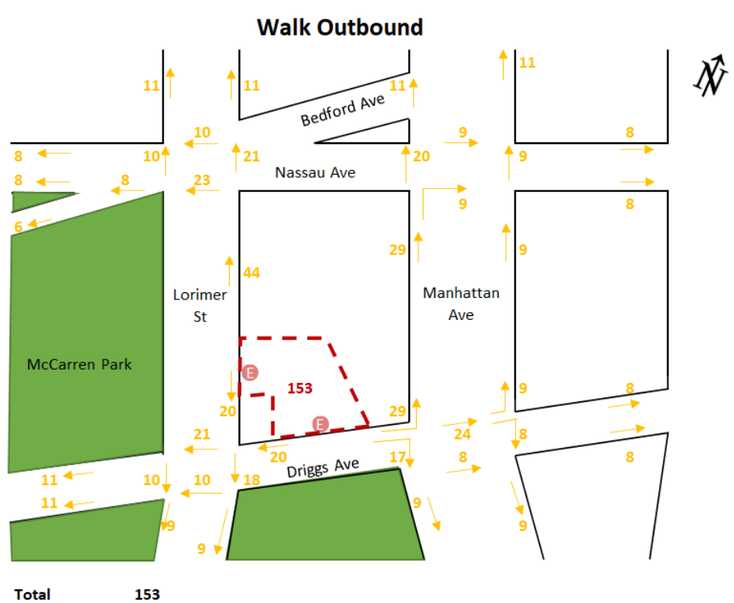
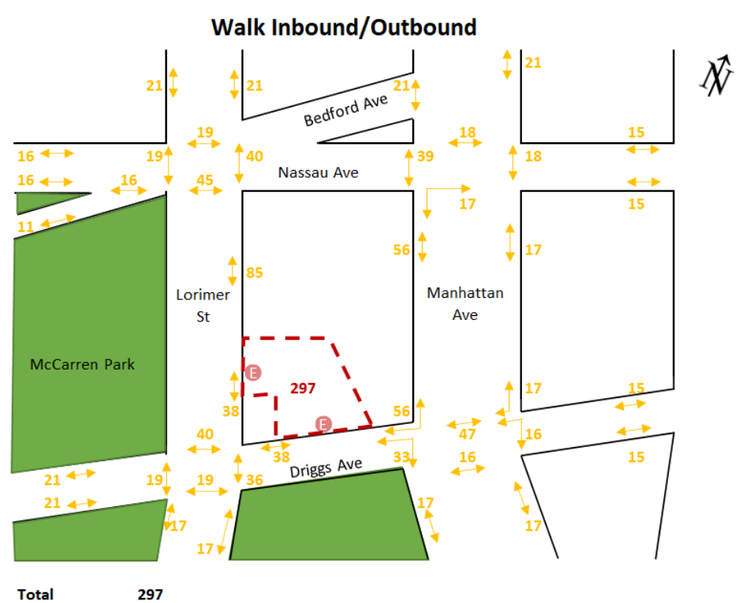


Figure 2.13-4: MD Pedestrian Assignment (2 of 2)







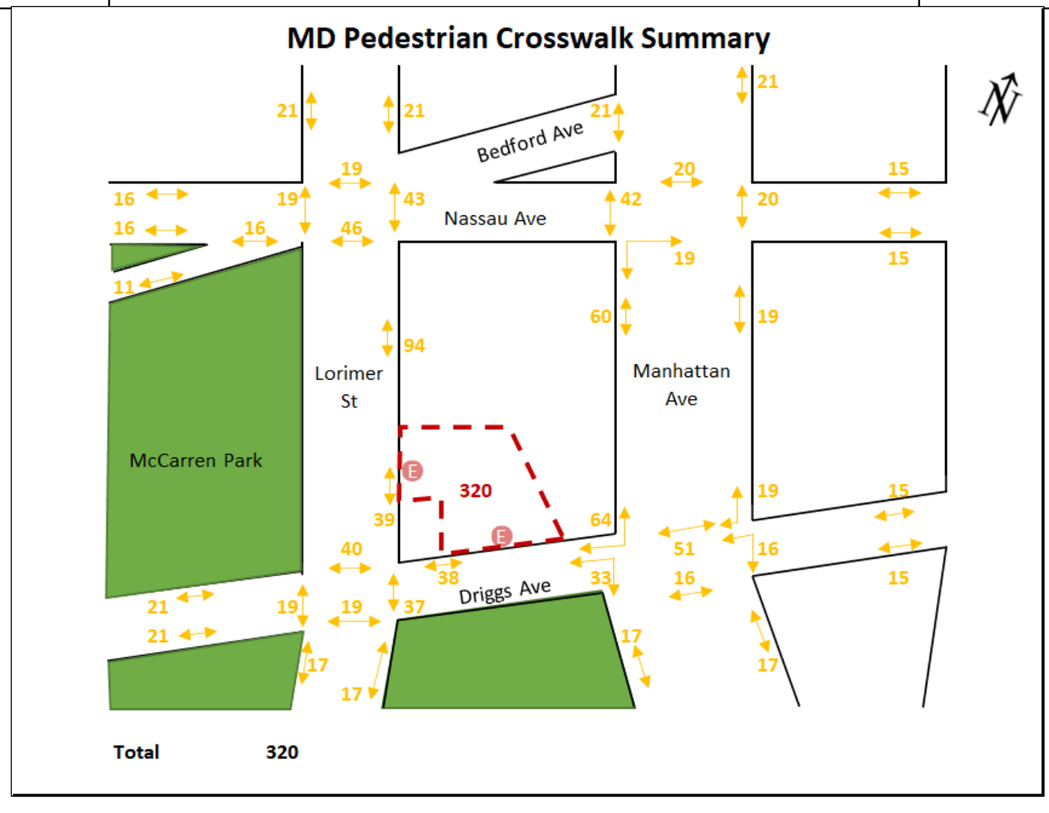
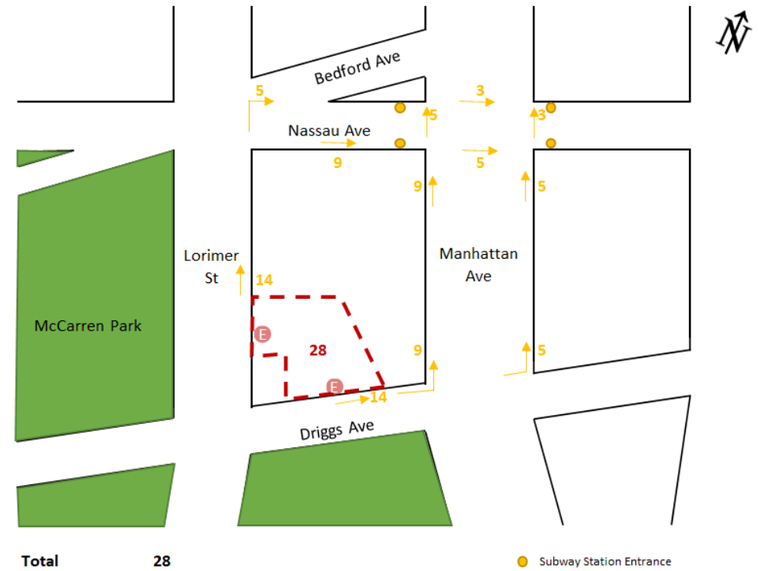
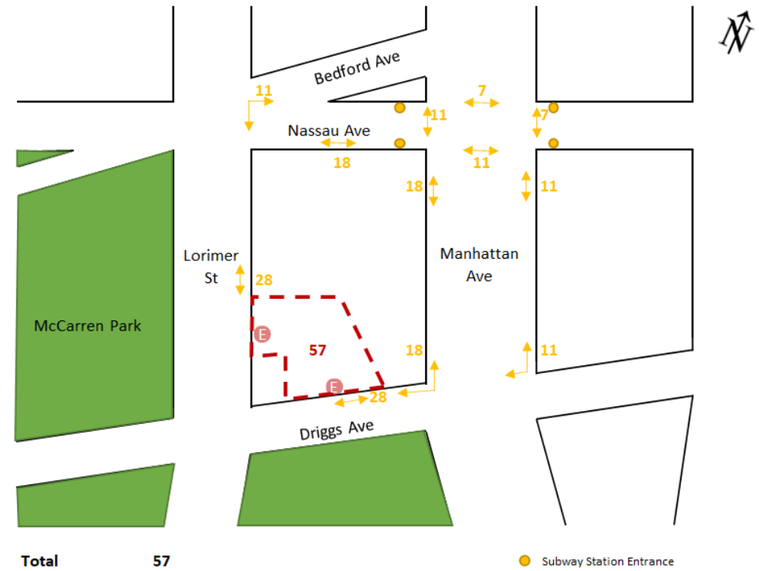
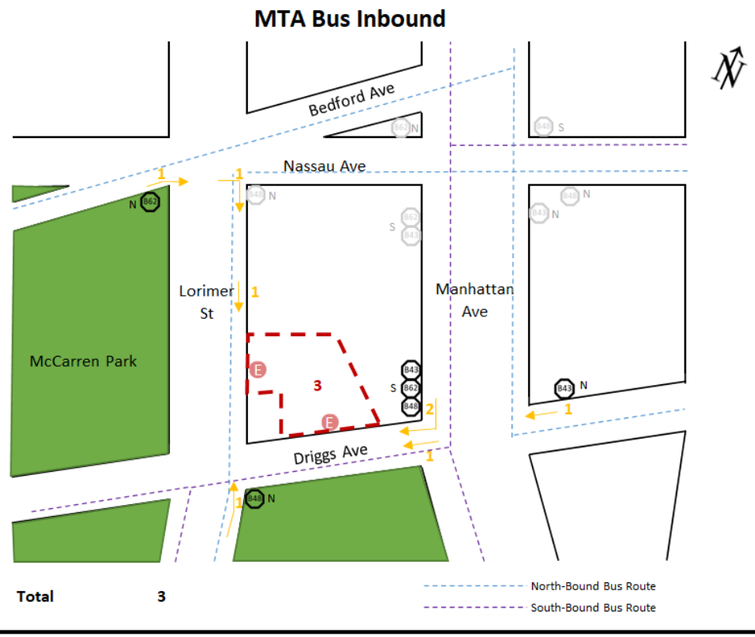


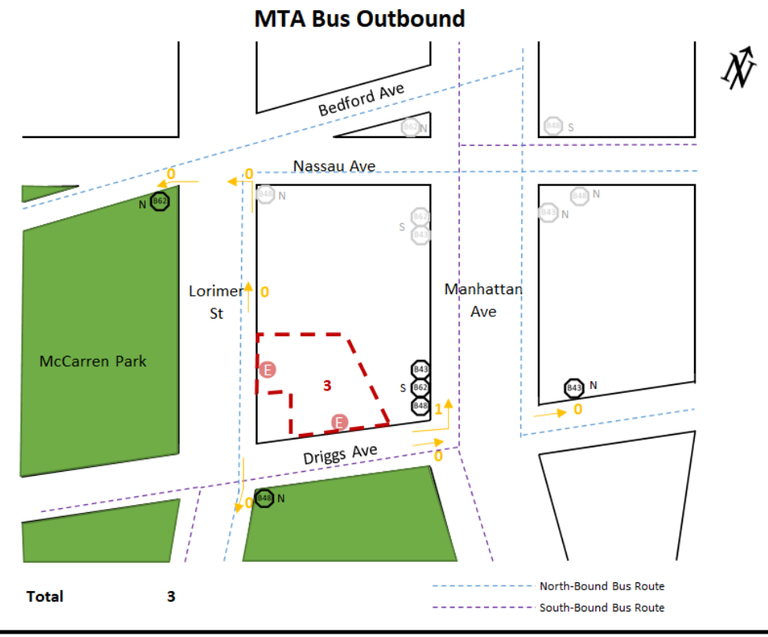
Figure 2.13-5: Saturday Pedestrian Assignment (1 of 2)











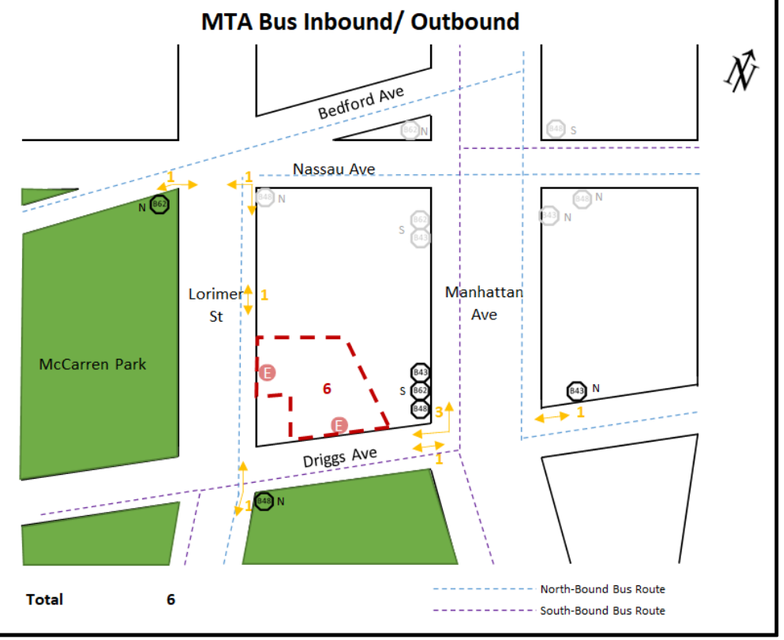
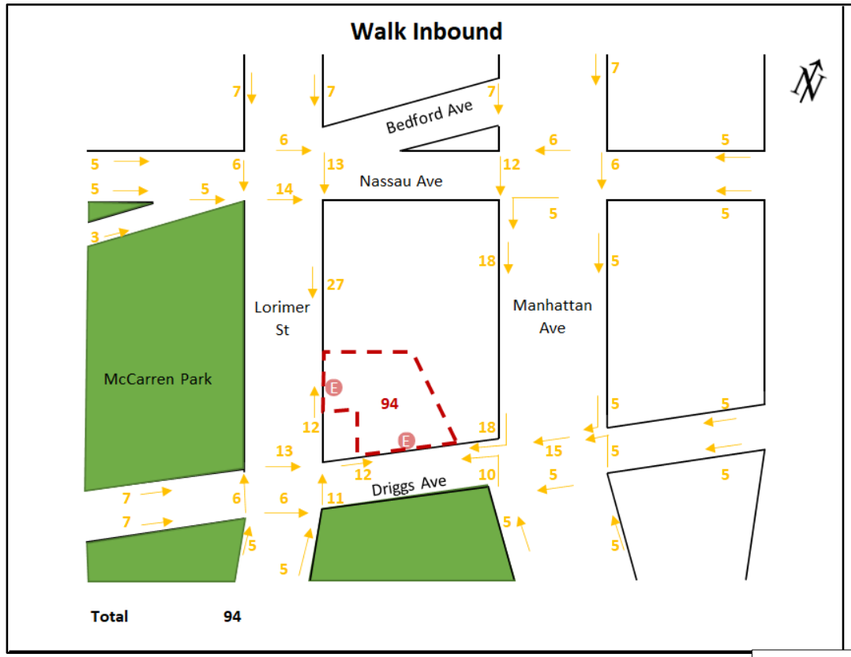
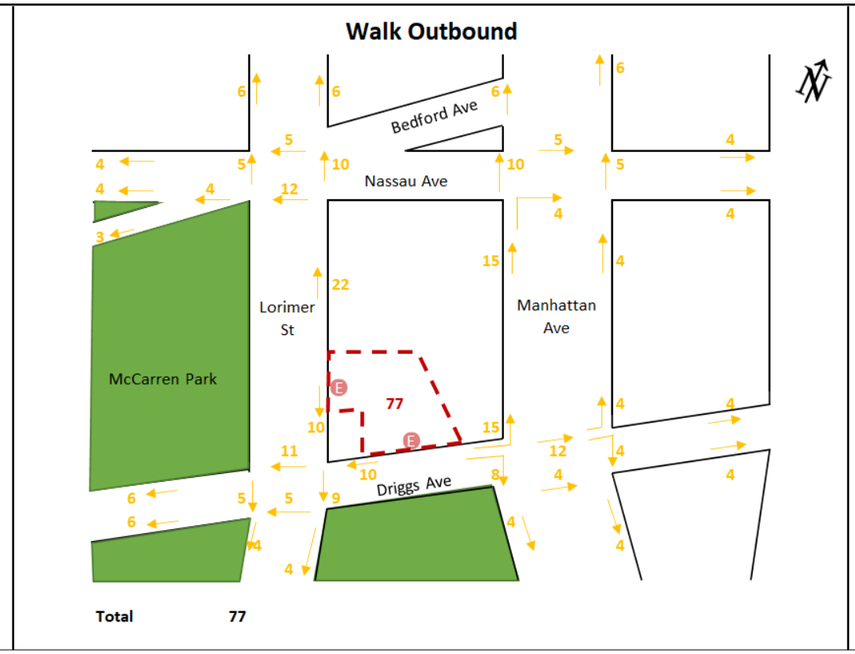
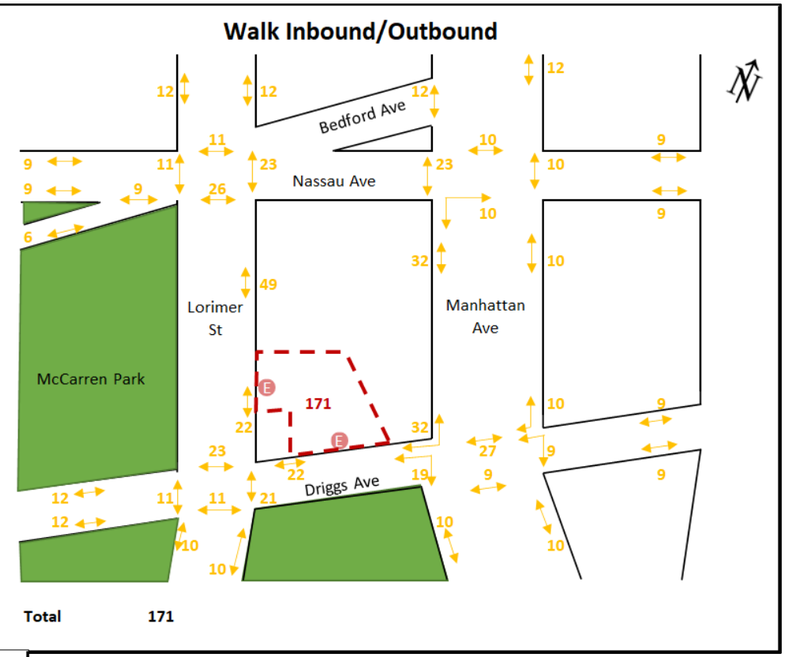
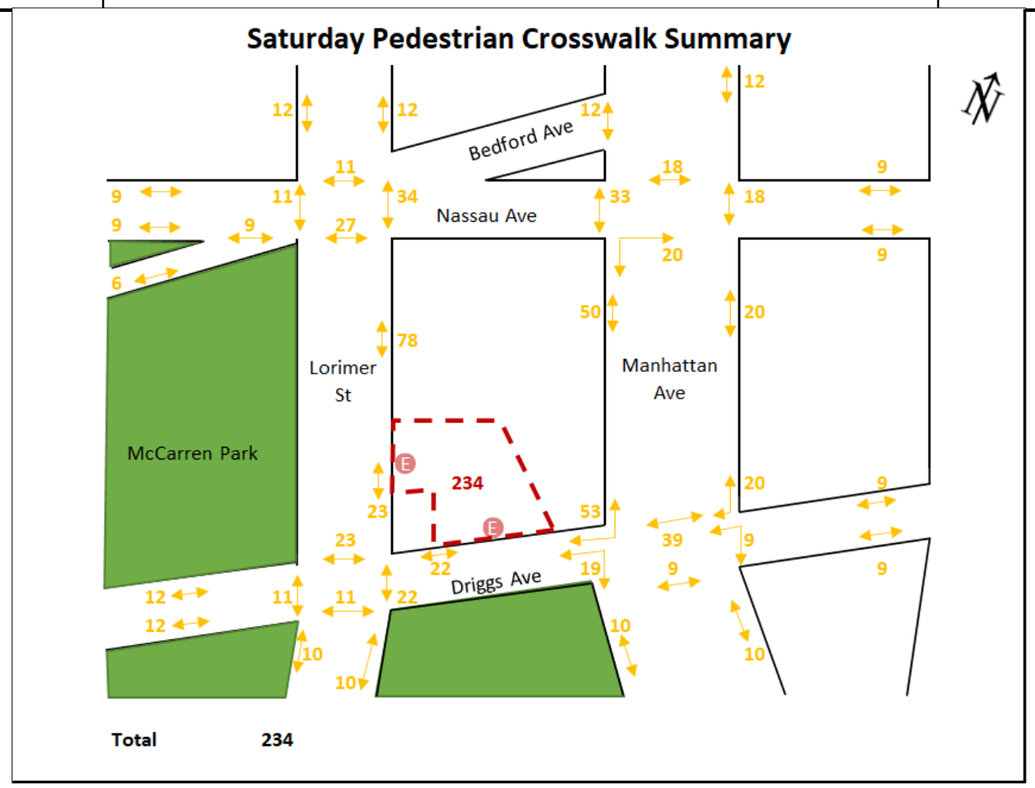


Figure 2.13-6: Saturday Pedestrian Assignment (2 of 2)









Based on the Level 2 Project Generated Trip Assignment, this section identifies where exceedances to the applicable Level 2 CEQR thresholds occur and concludes where further assessment or mitigation is warranted.

Level 2: Pedestrian Trip Assignment Findings

The *2020 CEQR Technical Manual* indicates that a detailed pedestrian analysis be performed for projects that are likely to generate 200 or more incremental pedestrian trips during any peak hour on any singular pedestrian element (i.e., a crosswalk, street corner, or sidewalk).

Based on the Pedestrian Trip Assignments shown in **Figures 2.13-3 to 2.13-6** above, no Pedestrian Level of Service Analysis is warranted for any single pedestrian element at any peak hours.

Chapter 17: Air Quality

When assessing the potential for air quality significant impacts, the *CEQR Technical Manual* seeks to determine a proposed action's effect on ambient air quality, or the quality of the surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during operation and/or construction of a project being proposed. The pollutants of most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates (PM_{10}), fine particulate matter ($PM_{2.5}$), and sulfur dioxide. The *CEQR Technical Manual* generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The *CEQR Technical Manual* generally recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

Mobile Sources

According to the *CEQR Technical Manual*, projects, whether site- specific or generic, may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic; create any other mobile sources of pollutants (such as diesel trains, helicopters etc.); or add new uses near mobile sources (roadways, garages, parking lots, etc.). Projects requiring further assessment include:

- Projects that would result in placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants.
- Projects that would result in the creation of a fully or partially covered roadway, would exacerbate traffic conditions on such a roadway, or would add new uses near such a roadway.
- Projects that would generate peak hour auto traffic or divert existing peak hour traffic of 170 or more auto trips in this area of the City.
- Projects that would generate peak hour heavy- duty diesel vehicle traffic or its equivalent in vehicular emissions resulting from 12 or more heavy-duty diesel vehicles (HDDVs) for paved roads with average daily traffic of fewer than 5,000 vehicles, 19 or more HDDVs for collector roads, 23 or more HDDVs for principal and minor arterials, or 23 or more HDDVs for expressways and limited-access roads.
- Projects that would result in new sensitive uses (e.g., schools or hospitals) adjacent to large existing parking facilities or parking garage exhaust vents.
- Projects that would result in parking facilities or applications requesting the grant of a special permit or authorization for parking facilities; or projects that would result in a sizable number of other mobile sources of pollution (e.g., a heliport or a new railroad terminal).
- Projects that would substantially increase the vehicle miles traveled in a large area.

The Proposed Actions would not result in operable windows or air intakes within 200 feet of an atypical roadway. It would not result in creation of a covered roadway or affect any covered roadway. Peak hour trip generation is far below the 170-car threshold, as per the transportation section, as potentially warranting further assessment (see EAS Short Form screen). Using the maximum incremental vehicular trip-ends of 46 during AM peak hour as presented in **Table 2.13-4** and the worksheet provided in the *2020 CEQR Technical Manual* Section 210, the highest HDDV equivalent traffic volume induced by the Proposed Development is

22 for paved roads, 9 for collector roads, 2 for principal and minor arterials, and 2 for expressways and limited-access roads. According to the NYSDOT Road Functional Class Maps, Lorimer Street is a major collector while Driggs Avenue, Manhattan Avenue, and Nassau Avenue are all minor arterials. Therefore, the HDDV equivalent traffic volume that the project would generate would not exceed the thresholds based on the road functional class. The project would not create a new sensitive receptor adjacent to large parking facilities. The project would not result in creation of a new parking facility. Per **Table 1.8-1**, the parking increment between No-action and With-action scenarios is 38 parking spaces, which does not exceed the threshold of 85 parking spaces. The project would not result in any other mobile sources of pollution, and would not significantly increase vehicle miles traveled in a large area. Therefore, no further assessment of the potential for mobile source air quality impacts is warranted.

Stationary Sources

According to the *2020 CEQR Technical Manual*, projects may result in stationary source air quality impacts when one or more of the following occurs:

- New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, and other large institutional uses).
- Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use.
- Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected.
- Fossil fuels (fuel oil or natural gas) for heating/hot water, ventilation, and air conditioning systems are used.
- Large emission sources are created (e.g., solid waste or medical-waste incinerators, cogeneration facilities, asphalt/concrete plants, or power-generating plants, etc.).
- New sensitive uses are located near a large emission source.
- Medical, chemical, or research labs are created or result in new uses being located near them.
- Operation of manufacturing or processing facilities is created.
- New sensitive uses created within 400 feet of manufacturing or processing facilities.
- New uses created within 400 feet of a stack associated with commercial, institutional, or residential developments (and the height of the new structures would be similar to or greater than the height of the emission stack).
- Potentially significant odors are created.
- New uses near an odor-producing facility are created.
- “Non-point” sources that could result in fugitive dust are created.
- New uses near nonpoint sources are created.
- A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a station

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis frame work, as mandated by the State Environmental Review Act, follows the New York City Environmental Quality Review 2020 Technical Manual (CEQR TM). The potential air quality impacts

of the following emissions are estimated following the procedures and methodologies prescribed in the CEQR TM:

- The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development to significantly impact nearby existing land uses.
- The potential for air toxic emissions released from existing industrial facilities to significantly impact the proposed development within 400 feet of the proposed development.
- The potential for significant air quality impacts from the emissions of existing HVAC systems with a 20 or more million Btu per hour (MMBtu/hr) design capacity to significantly impact the proposed development within 400 feet of the proposed development.
- The potential for significant air quality impacts from the emissions of facilities that require Prevention of Significant Deterioration permits (Title V), and facilities which require a state facility permit to significantly impact the proposed development within 1,000 feet of the proposed development.

Analysis Framework

The stationary source analysis will study the potential impacts of the Projected Development building on nearby receptors. Projected Development Site is projected to be developed with a 111,683 GSF 10-story, 115-foot-tall mixed-use building. The building will include 80,306 GSF of residential floor area and 31,377 GSF of commercial floor area.

Air Pollutants and Applicable Standards/Guidelines

National Air Quality Standards

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants which are being of concern nationwide, and established threshold concentration based upon adverse effect on human health. The six pollutants and their characteristics are:

- Carbon Monoxide (CO) is mainly produced by motor vehicles from the incomplete combustion of gasoline. The impact of CO on the ambient air is analyzed next to roadways, intersections, parking lots, and parking garages vents as these locations are the most affected.
- Nitrogen Dioxide (NO_2) is a main concern related to the burning of natural gas. Emitted NO_x from the burning of fossil fuel gradually convert to NO_2 in a chemical reaction that is affected by ozone concentration and the presence of sunlight. In a micro scale analysis, buildings HVAC systems are analyzed for NO_2 impact.
- Ozone (O_3) is formed by chemical reaction between hydrocarbons and nitrogen oxides and its impact is analyzed on a regional scale by monitoring stations.
- Lead (Pb) in the ambient air is monitored on a regional level. In a project scale analysis, impact due to Lead concentration levels are analyzed if a new source, such as lead smelters, is introduced into the environment or if a project is located next to a lead emitter.
- Particulate Matter emissions are associated with both stationary sources and mobile sources. Two sizes of particulate matters are analyzed: Inhalable Particles (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$), where the subscript number refers to the diameter of the particulate matter in micrometers.
- Sulfur Dioxide (SO_2) emission is principally associated with stationary sources that burn oil or coal. These fuels contain sulfur that bond to oxygen atoms in the burning process.

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The NO_2 and $PM_{2.5}$ standards together with their health-related averaging periods are presented in **Table 2.17-1**.

Table 2.17-1: National and New York State Ambient Air Quality

Pollutant	Averaging Period	National and State Standards
NO_2	Maximum 1-Hour Concentration	0.10 ppm (188 µg/m^3)
	Annual Arithmetic Average	0.053 ppm (100 µg/m^3)
$PM_{2.5}$	24-Hour Concentration	35 µg/m^3
	Average of 3 Consecutive Annual Means	12 µg/m^3
SO_2	Maximum 1-Hour Concentration	75 ppb (196 µg/m^3)
	Annual Arithmetic Mean	30 ppb (80 µg/m^3)

NO_2 NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions is then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile (8th Highest) of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NO_x/NO_2 ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's PVMRM module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model.

Per the *CEQR TM*, a Tier 1 approach is initially applied, followed by a Tier 2 application of NO_x/NO_2 ratio of 80% to the NOx modeled concentration to determine whether violation of the NAAQS is likely to occur. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO_2 NAAQS were estimated.

The annual NO_2 standard is 0.053 ppm (100 ug/m^3). In order to conservatively estimate annual NO_2 impacts, a NO_2 to NO_x ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

New York State Standards

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the New York State Department of Environmental Conservation (NYSDEC) has established guidelines for maximum allowable

concentration of "noncriteria pollutants," which are potentially toxic or carcinogenic pollutants. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations and are published in the DAR-1 AGC/SGC Table, where AGC/SGC refers to Annual and Short-term Guideline Concentrations. The most recent DAR-1 guidelines were created on July 14, 2016.

NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic or duration.

NYC Interim Guidelines

In addition to the NAAQS, the *CEQR TM* requires that projects subject to CEQR apply a $PM_{2.5}$ significant impact criteria (based on concentration increments). These criteria are called *de minimis* and they are more stringent than the NAAQS and the state standards as the criteria set a maximum increase of pollutant concentration that is below the national standard. If the estimated impacts of a proposed project are less than the *de minimis* criteria, the impacts are not considered to be significant. As outlined in the *CEQR TM,* $PM_{2.5}$ significant impacts are evaluated as follow:

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Background Concentrations

Determination of significant impact criteria is evaluated by adding the background concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the project area.

Background concentrations of NO_2, SO_2, and $PM_{2.5}$—the criteria pollutants relevant for HVAC system fueled by natural gas or fuel oil #2 analysis—were obtained from the NYSDEC's annual report for 2018 at the nearest monitoring stations. **Table 2.17-2** shows the background concentrations.

Table 2.17-2: Background Concentration at the Queens College Monitoring Station (NYSDEC 2018 Report)

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO2	98th Percentile of Daily Maximum 1-hour averaged over last 3 years	188 µg/m3	56.2 ppb (105.68 µg/m3)	Queens College 2
	Annual Arithmetic Mean	100 µg/m3	14.44 ppb (27.15 µg/m3)	
SO2	99th Percentile of Daily Maximum 1-hour averaged over last 3 years	196 µg/m3	5.67 ppb (14.83µg/m3)	Queens College 2
	Annual Arithmetic Mean	80 µg/m3	0.41 ppb (1.07 µg/m3)	
PM2.5	24-Hour average of 98th percentile for last 3 years	35 µg/m3	17.2 µg/m3	JHS 126
	Average of last 3 years annual means	12 µg/m3	7.7 µg/m3	

The *de minimis* criteria for $PM_{2.5}$ was evaluated as described in the NYC Interim Guidelines. The concentration increments are presented below:

- 24-hour $PM_{2.5}$ 8.90 µg/m^3
- Annual $PM_{2.5}$ 0.3 µg/m^3

Project HVAC Systems Analysis

Per the *CEQR Technical Manual*, the HVAC analysis considers the potential for emissions from the HVAC system of the proposed project to significantly impact existing land uses (project-on-existing), and the potential of the proposed project to significantly impact each other (project-on-project). Based on CEQR guidelines, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system boiler emissions can be significant. The screening analysis determines the threshold of development size below which the action would not have a significant impact. This CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

Screening Analysis

The HVAC analysis considers the potential for emissions from the HVAC systems of the proposed development to significantly impact existing land uses (project-on-existing) within 400 feet, and, if multiple buildings are proposed, the potential of each or all of the proposed developments to significantly impact each other (project-on-project).

As outlined in the *CEQR TM*, the analysis of buildings' HVAC systems follows stationary sources methodology; a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system boiler emissions can be significant. This CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

A new stationary source of emissions (HVAC System) would be introduced as a result of the Proposed Actions. The Proposed Development would consist of a 10-story mixed-use residential and commercial building with a natural gas-fueled heat and hot water system. The cellar would consist of parking for the facility, a residential storage area, and a commercial space. The first floor is used for the commercial space, residential lobby, and additional parking. The second floor will be used for another commercial space and amenities for the residential apartments. The third floor will be used for apartments and another commercial space. The fourth through the tenth floor will be only for residential apartment space. There is no need for a project-on-project analysis because the Proposed Actions consist of a single building.

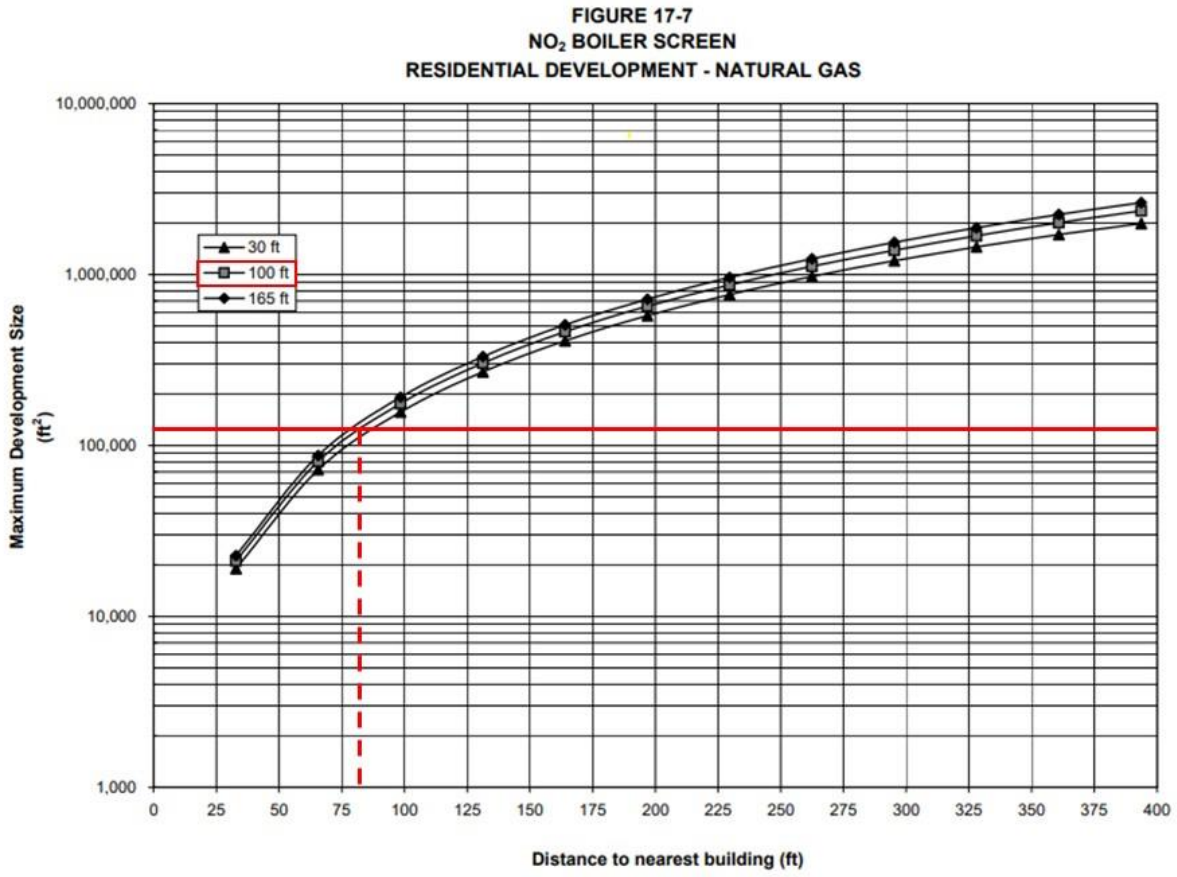
A screening (project-on-existing) analysis was performed for a residential use HVAC fueled by natural gas to determine if the proposed HVAC system has the potential for adverse stationary source impacts on adjacent receptors.

Impacts from boiler emissions at the Proposed Development site are a function of fuel oil type, stack height, the minimum distance from the source to the nearest building, and square footage of the development. The proposed 111,683 GSF development would be heated by a natural gas-fired HVAC system, venting on the roofs at a height of approximately 118-feet, consisting of the proposed building height of 115 feet and the estimated stack height of 3 feet. The Project Site development size was plotted on the nomograph for

residential developments utilizing natural-gas depicted in Figure 17-8 of the *CEQR Technical Manual* Appendix (**Figure 2.17-1** below). The strictly residential-use nomograph was used because it is the more conservative screening. This nomograph indicates the minimum distance between the projected development and buildings of a similar or greater height to avoid a potential air quality impact. Per the *CEQR Technical Manual*, the CEQR nomographs for a 100-foot stack height was applied as the 100-foot curve height is closest to, but not higher than, the proposed stack height of the proposed building.

The screening analysis **Figure 2.17-1** nomograph shows that a detailed analysis is required if a building of similar or greater height is within 80 feet of the Proposed Development. A review of existing land uses within 400 feet of the Development Site shows that the nearest building of similar or greater height is a 126-foot building, located at 50 Bayard Street (Block 2721, Lot 7504), which is approximately 1,090 feet south of the Proposed Development.

Figure 2.17-1: The Projected Development Site Minimum Distance - HVAC Screen Nomograph



E-Designation (E-650)

An (E) designation for the use of natural gas and the minimum stack height is required for Projected Development Site 1 to prevent the potential impact of the HVAC source air pollution. The E-Designation language related to HVAC source air quality is as follows:

Block 2679, Lot 43 (Projected Development Site 1): Any new residential and/or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for the heating, ventilating, and air conditioning (HVAC) system and hot water equipment, and ensure the HVAC system and hot water equipment stack is located at the building's highest tier and at least 118 feet above grade to avoid any potential significant adverse air quality impacts.

With this (E) designation in place, no significant adverse impacts on air quality related to HVAC systems are expected, and no further analysis is warranted.

Industrial Emissions

The Proposed Actions would introduce a sensitive land use into the area. Accordingly, a preliminary screening was conducted to determine if there are any potential sources of industrial process emissions that could affect project occupants. Industrial sources were identified through a site visit within a 400-foot study area and the DEP CATS search.

400-Foot Study Area

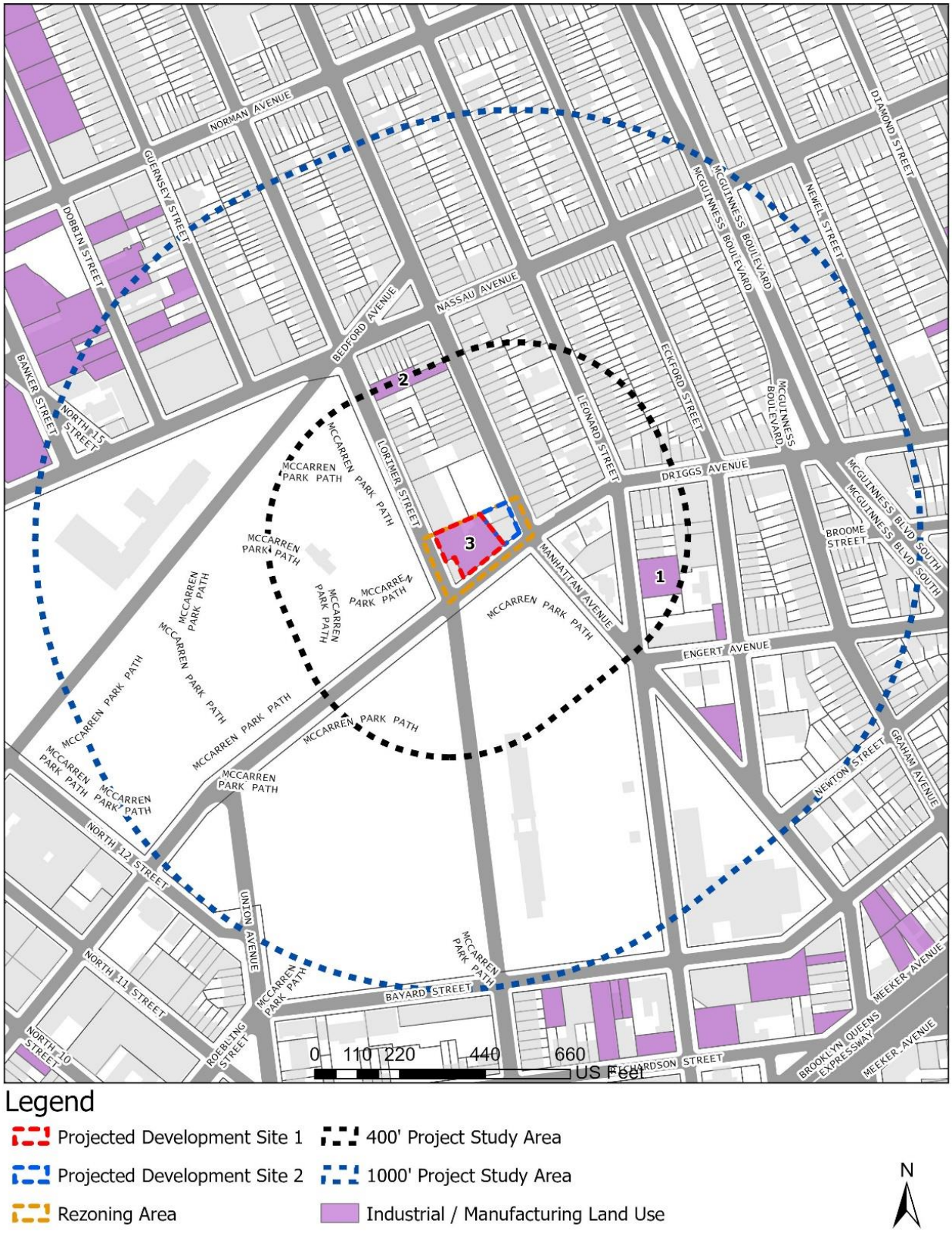
Table 2.17-3: Industrial Sites within 400 feet of Affected Area

Site Key #	Block	Lot	Address	Permit Number
1	2698	7	488 Leonard Street	Warehouse
2	2679	14	611 Manhattan Avenue	Warehouse
3	2679	43	840 Lorimer Street	Light Manufacturing

The Affected Area is located within a M1-1 zoning district, and the surrounding area is primarily low- to medium-density residential, commercial, and community facility uses. The 400-foot radius was screened for potential sources of industrial emissions and is shown below in **Figure 2.17-2.**

Based on field observations and reviews of DCP land use maps, nine (9) sources were identified as potentially manufacturing or industrial in nature. These uses were screened further using Google and in field assessment on multiple occasions. **Table 2.17-3** shows the three (3) properties within approximately 400 feet of the Affected Area that were screened as potentially industrial or manufacturing sites. These sites were further reviewed for permit activity.

Figure 2.17-2: Industrial Emissions Screening



Further investigation of the three sites through the DEP CATS search revealed that only active permits were related to feather processing equipment at site 3. DEP confirmed the search findings via their Air Permits email. Site 3 as identified is the location for the Proposed Development. Therefore, any current industrial uses will cease prior to the Proposed Developments construction. In summary, no further analysis is required because the only potential industrial emissions impact is on the Proposed Development site and will end prior to development.

1,000-Foot Study Area

The surrounding area within a radius of 1,000 feet of the Affected Area was screened for potential large and major emission sources. Based on field observations and reviews of DCP land use maps, no large and major emission sources were identified (**see Figure 2.17-2**).

Conclusion

As indicated above, there are no active industrial emissions permits, large or major emission sources within the 400- or 1,000-foot study areas. Additionally, there is no evidence present to conclude that there are illegal unpermitted air emissions present in the study area. Therefore, there does not appear to be any potentially significant impact in terms of air toxics to project occupants.

Chapter 19: Noise

Introduction

The Proposed Actions would create noise-sensitive residential and commercial office development. Therefore, an assessment of the potential for adverse effects on project occupants from ambient noise is warranted. The projected development would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. Therefore, this noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development. The predominant noise source at the Affected Area is vehicular traffic on surrounding streets.

Framework of Noise Analysis

Noise is defined as any unwanted sound, and sound is defined as any pressure variation that the human ear can detect. Humans can detect a large range of sound pressures, from 20 to 20 million micropascals, but only those air pressure variations occurring within a particular set of frequencies are experienced as sound. Air pressure changes that occur between 20 and 20,000 times a second, stated as units of Hertz (Hz), are registered as sound.

Because the human ear can detect such a wide range of sound pressures, sound pressure is converted to sound pressure level (SPL), which is measured in units called decibels (dB). The decibel is a relative measure of the sound pressure with respect to a standardized reference quantity. Because the dB scale is logarithmic, a relative increase of 10 dB represents a sound pressure that is 10 times higher. However, humans do not perceive a 10-dB increase as 10 times louder. Instead, they perceive it as twice as loud.

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and C-weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter “A” indicates that the sound has been filtered to reduce the strength of very low and very high frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high frequency bands are significantly affected by C-weighting.

Table 2.19-1: Noise Levels of Common Sources

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A)Is perceived as a doubling or halving in SPL.	
Source: 2020 CEQR Technical Manual	

The following is typical of human response to relative changes in noise level:

- 3-dBA change is the threshold of change detectable by the human ear;
- 5-dBA change is readily noticeable; and
- 10-dBA change is perceived as a doubling or halving of the noise level.

The SPL that humans experience typically varies from moment to moment. Therefore, various descriptors are used to evaluate noise levels over time. Some typical descriptors are defined below.

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity, level. High noise levels during a measurement period will have a greater effect on the L_{eq} than low noise levels. L_{eq} has an advantage over other descriptors because L_{eq} values from various noise sources can be added and subtracted to determine cumulative noise levels.
- L_{max} is the highest SPL measured during a given period of time. It is useful in evaluating L_{eq}s for time periods that have an especially wide range of noise levels.
- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (L_X). Examples include L_{10}, L_{50}, and L_{90}. L_{10} is the A-weighted sound level that is exceeded 10% of the measurement period.

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law (i.e., the SPL changes in inverse proportion to the square of the distance from the sound source). In a large open area with no obstructive or reflective surfaces, it is a general rule that at distances greater than 50 feet, the SPL from a point source of noise drops off at a rate of 6 dB with each doubling of distance away from the source. For "line" sources, such as vehicles on a street, the SPL drops off at a rate of 3 dBA with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate also will vary with both terrain conditions and the presence of obstructions in the sound propagation path.

Noise Standards and Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Quality Review (CEQR) noise exposure guidelines for exterior noise levels. As shown in **Table 2.19-2** below, noise standards classify noise exposure into four categories based on noise level limits and land use, for vehicular traffic, rail, and aircraft noise sources: Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable, Table 19-3 of the *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA (*L_{10} or Ldn, depending on the source*) or below.

Table 2.19-2: Noise Exposure Guidelines for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1.Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	Ldn < 60 dBA		Ldn < 60 dBA		Ldn < 60 dBA		Ldn < 75 dBA
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		55<L_{10}≤65 dBA		65<L_{10}≤80 dBA		L_{10}>80dBA	
3. Residence, residential hotel or motel	7 am to 10 pm	L_{10}≤65dBA		65<L_{10}≤70 dBA		70<L_{10}≤80 dBA		L_{10}>80dBA	
	10 pm to 7 am	L10≤55dBA		55<L_{10}≤70 dBA		70<L_{10}≤80 dBA		L_{10}>80dBA	
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 nursing 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 2.19-3 CEQR TM: Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise Level with Proposed Project	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[1]	(i) 28 dB(A)	(ii) 31 dB(A)	(iii) 33 dB(A)	(iv) 35 dB(A)	$36 + (L_{10} - 80)^2$ dB(A)

Source: New York City of Environmental Protection

Notes:

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

Stationary Noise Source

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

Traffic Noise Source

Existing Condition Noise Estimation

Noise Reading Reference

Although regular protocol would have been to take new noise measurements, and typically noise/traffic data older than 3 years would not be acceptable, any noise measurement would not be applicable due to the COVID-19 pandemic situation. Therefore, this noise analysis identifies noise readings of recently certified or adopted projects in the area surrounding the Projected Development Site with similar characteristics to use as a baseline for noise level estimation and projection under Existing, No-Action, and With-Action conditions.

As per the noise analysis guidance received from DCP in August 2020, the noise reading data at Noise Monitoring Location 32 from the Greenpoint-Williamsburg Rezoning FEIS (04DCP003K) would be an applicable reference to the noise readings for this EAS given that Noise Monitoring Location 32 is a residential receptor located adjacent to the Projected Development Site at Driggs Avenue between Eckford Street and Graham Avenue. As shown in **Figure 2.19-1** and **Figure 2.19-2**, one of the proposed noise monitoring locations (Location 2) of the Projected Development Site is located along Driggs Avenue, which is approximately 700 feet west of the Noise Monitoring Location 32 of Greenpoint-Williamsburg Rezoning FEIS

on the same street. In addition, the two noise monitoring locations have the same characteristics, predominantly residential uses with scattered commercial uses and mixed residential and commercial uses.

However, the most recent noise reading data at Noise Monitoring Location 32 from the Greenpoint-Williamsburg Rezoning FEIS was the noise level predictions conducted in June 2004 for the With-Action noise condition in 2013, which is more than 3 years from the current year of 2020. Therefore, whether the 2013 noise levels are appropriate representative of the current condition is the key to the adoption of the 2013 noise reading data as the baseline noise level, which would be validated by checking if there have been any nearby developmental changes between 2013 and 2020.

As shown in **Figure 2.19-2** and **Table 2.19-4** below, from 2013 to 2020, there are 21 developmental changes in the nearby area, which is generally bounded by Nassau Avenue to the north, Lorimer Street to the west, Engert Avenue to the south, and McGuinness Boulevard to the east. Among all of the 21 developmental changes, eleven are residential development (2 alteration projects and 9 new buildings), nine are mixed residential and commercial development (6 alteration projects and 3 new buildings), and the remaining development is a newly built commercial building used as hotel. Altogether, 315 units were added to the area, including 203 residential units and 112 commercial units.

Figure 2.19-1: Proposed Noise Monitoring Locations



Figure 2.19-2: Developmental Changes from 2013 to 2020 Within Developmental Change Research Area



Table 2.19-4: Developmental Changes from 2013 to 2020 Within Developmental Change Research Area

Map ID	Address	Block	Lot	Built Year	Alt. Year	Land Use	Residential Units	Commercial Units	Total Units
1	565 GRAHAM AVENUE	2699	20	2015	-	Multi-Family Walk-Up Buildings	3	0	3
2	247 DRIGGS AVENUE	2699	7501	2014	-	Multi-Family Elevator Buildings	19	10	29
3	561 GRAHAM AVENUE	2699	22	1910	2015	Multi-Family Walk-Up Buildings	3	0	3
4	502 LEONARD STREET	2698	11	2015	-	Multi-Family Walk-Up Buildings	8	0	8
5	65 ECKFORD STREET	2698	26	2018	-	Commercial Hotel	0	70	70
6	498 LEONARD STREET	2698	9	2015	-	Multi-Family Walk-Up Buildings	8	0	8
7	500 LEONARD STREET	2698	10	2015	-	Multi-Family Walk-Up Buildings	8	0	8
8	55 ECKFORD STREET	2698	32	2017	-	Multi-Family Elevator Buildings	26	0	26
9	75 ECKFORD STREET	2698	25	1930	2015	Mixed Residential & Commercial Buildings	2	1	3
10	273 DRIGGS AVENUE	2698	19	1928	2015	Multi-Family Walk-Up Buildings	8	0	8
11	548 LEONARD STREET	2681	60	2018	-	Multi-Family Walk-Up Buildings	7	0	7
12	106B NASSAU AVENUE	2681	4	1931	2017	Mixed Residential & Commercial Buildings	2	1	3
13	568 GRAHAM AVENUE	2700	6	2017	-	Multi-Family Walk-Up Buildings	4	0	4
14	288 DRIGGS AVENUE	2680	28	1931	2013	Mixed Residential & Commercial Buildings	5	1	6
15	501 LEONARD STREET	2697	7504	2015	-	Mixed Residential & Commercial Buildings	18	1	19
16	623 MANHATTAN AVENUE	2679	9	1931	2016	Mixed Residential & Commercial Buildings	2	2	4
17	563 MANHATTAN AVENUE	2679	32	1928	2013	Mixed Residential & Commercial Buildings	7	1	8
18	848 LORIMER STREET	2679	46	2019	-	Multi-Family Elevator Buildings	52	0	52
19	868 LORIMER STREET	2679	7503	2017	-	Mixed Residential & Commercial Buildings	14	23	37
20	888 LORIMER STREET	2679	60	2018	-	Mixed Residential & Commercial Buildings	5	1	6
21	621 MANHATTAN AVENUE	2679	10	1931	2017	Mixed Residential & Commercial Buildings	2	1	3
Total							**203**	**112**	**315**

Based on the analysis of the developmental changes within the area from 2013 to 2020, there were 203 residential units and 112 commercial units (70 hotel units and 42 retail units) introduced to the area. Therefore, it is reasonable to assume that the existing noise level in 2020 has increased from the 2013 baseline noise level because of the considerable amount of developmental changes in the nearby area. As traffic noise is the major noise source that would impact the Projected Development Site, the Federal Highway Administration (FHWA) Noise Passenger Car Equivalent Calculation (Noise PCE Proportional Modeling) was adopted to use the 2013 baseline noise level from the Greenpoint-Williamsburg Rezoning FEIS and the traffic volumes induced by the developmental changes to estimate the existing noise level in 2020.

Traffic Noise Model (Noise PCE Proportional Model)

As per the *CEQR Technical Manual*, the Noise PCE Proportional Model is appropriate for situations where traffic is one of the components of the total ambient noise. The Noise PCE Proportional Model was conducted in four steps. First, the 2020 traffic volumes with no developmental changes were determined by applying an annual growth factor (1% growth/year) to the 2013 traffic volumes. Second, additional traffic volumes generated from developmental changes were added to the 2020 traffic volumes with no developmental changes calculated from the first step. Third, the 2013 and 2020 (with developmental changes) vehicular traffic volumes were converted into PCE values cars based on the *CEQR Technical Manual*. In the Noise PCE Proportional Model, one automobile or light truck (having a gross weight less than 9,900 pounds) is assumed to generate the noise equivalent of one car, one medium truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of 13 cars, one heavy truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. After the Noise PCEs were calculated and tabulated at the receptor site, the 2020 noise levels were calculated using the following equation:

$$F\ NL = 10 * \log (F\ PCE / E\ PCE) + E\ NL$$

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

Based on the 2013 With-Action noise data from the Greenpoint-Williamsburg Rezoning FEIS, the highest 2013 noise level at Location 32, Driggs Avenue between Eckford Street and Graham Avenue, is 72.0 dBA during the AM peak hour. In addition, the traffic data retrieved from the NYS Traffic Data Viewer[2] (**Figure 2.19-3**) shows that the annual average daily traffic (AADT) volume on Driggs Avenue was 6,201 in 2016, including 336 trucks and 5,865 automobiles. It should be noted that the analyzed noise level is for AM peak hour, but the AADT volume is related to the total volume for an entire day. There are 24 hours in one day, and as a result, the annual average hourly traffic volume should be 258 vehicles. Using the same proportion of trucks and automobiles derived from the AADT volume, the annual average hourly traffic volume should be 14 and 244 vehicles respectively for trucks and automobiles.

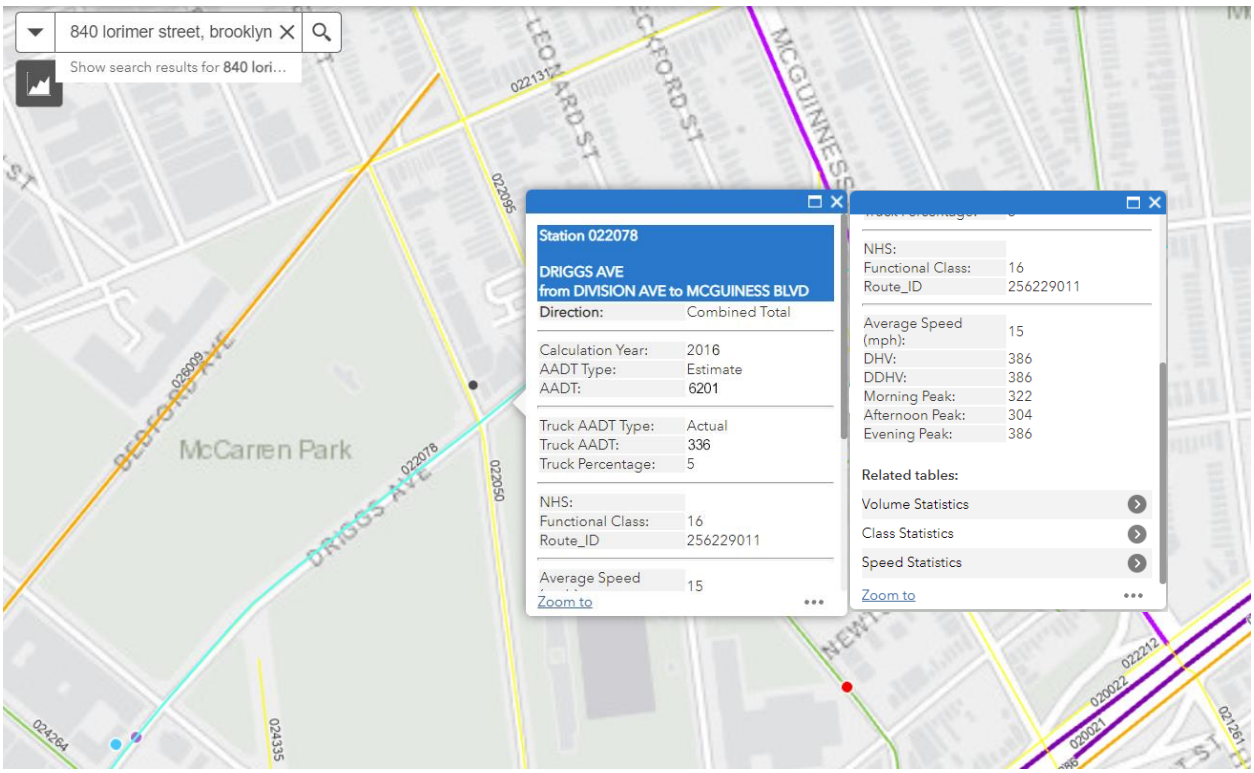
[2] NYS Traffic Data Viewer: https://gisportalny.dot.ny.gov/portalny/apps/webappviewer/index.html?id=28537cbc8b5941e19cf8e959b16797b4

As per the NYS Traffic Data Viewer, the design hourly volume (DHV) of Driggs Avenue is 386 vehicles with 322 vehicles for morning peak hours, 304 vehicles for afternoon peak hours, and 386 vehicles for evening peak hours. Since using higher baseline noise PCE would produce less conservative calculation compared to using lower baseline noise PCE, the annual average hourly traffic volume of 258 was adopted for a more conservative analysis instead of the DHV of 322 vehicles during the AM peak hour.

Since one automobile is assumed to generate the noise equivalent of one car and one medium truck is assumed to generate the noise equivalent of 13 cars, 2016 noise PCE was estimated to be 426 during the AM peak hour given that there are 182 PCE from the 14 trucks and 244 PCE from the 244 automobiles.

Applying the 1% annual traffic growth rate, the 2013 noise PCE for AM peak hour was approximately 414. Since the developmental changes from 2013 to 2020 are predominantly residential and mixed residential and commercial uses, the majority of the traffic volumes derived from such developmental changes were assumed to be automobile, which is assumed to generate the noise equivalent of one car. Therefore, after applying the 1% annual traffic growth rate and adding the 315 noise PCE generated by the developmental changes shown in **Table 2.19-4** above, the 2020 noise PCE is approximately 759. According to the Noise PCE Proportional Model equation, the 2020 noise level is estimated to be increased to 74.63 dBA at its AM peak throughout a typical weekday compared to the 72.0 dBA during the AM peak hour in 2013.

Figure 2.19-3: NYS Traffic Data Viewer – Driggs Avenue from Division Ave. to McGuiness Blvd.



Future No Action Condition Noise Projection

Under the Future No-Action condition, no development would happen on the Projected Development Site. There would be one residential development within the Affected Area. A New Building Permit (321383276-01-NB) is expected to be issued soon on Block 2679 Lot 34 (561 Manhattan Avenue), a 2,259 SF corner lot with frontage along Manhattan Avenue and Driggs Avenue. The latest action from DOB was approval of the plan exam on 09/12/2019. Currently, the existing building on the site is being demolished and the proposed development would be a 6-story 8-unit mixed commercial and residential building with 13,076 GSF (8,803 ZSF, 2.99 FAR).

In addition, there are six active major constructions expected to take place within the developmental change research area. Adding the new building on 561 Manhattan Avenue together, the seven developments would total 51,522 square feet and 110 proposed dwelling units.

Table 2.19-5: Active Constructions Within Developmental Change Research Area

Address	Permit Type	Proposed Stories	Proposed Dwelling Units
561 Manhattan Avenue	New Building	6	8
888 Lorimer Street	New Building	6	5
602 Manhattan Avenue	ALT 1 Enlargement	5	8
574 Manhattan Avenue	ALT 1 Enlargement	4	9
65 Eckford Street	New Building	5	70
67 Engert Avenue	ALT 1 Enlargement	3	4
124 Eckford Street	New Building	4	6
Total			**110**

Since all the seven active construction permits within the developmental change research area are for residential use, the majority of the traffic volumes derived from such constructions were assumed to be automobile, which is assumed to generate the noise equivalent of one car. Therefore, adding the 110 noise PCE generated by the No-Action active constructions and the 1% annual growth rate for traffic volumes to the 2020 noise PCE, the 2023 No-Action noise PCE would be 892. Inserting the 2023 No-Action noise PCE of 892, 2020 noise level of 74.63 dBA, and 2020 noise PCE of 759 to the noise PCE calculation, the 2023 No-Action noise level would be 75.33 dBA.

Future With Action Condition Noise Projection

Under the Future With-Action condition, Block 2679 Lot 43 would have a projected lot size of 15,130 SF, and would be developed with a 119,197 GSF (83,050 ZSF; 5.49 FAR) mixed-use commercial and residential building. There would be 31,377 GSF of ground floor commercial (local retail) uses and 80,306 GSF of residential uses on the upper floors. There would be 94 total dwelling units (1 unit per 850 GSF), with 75 being market rate and 19 being permanently affordable per MIH Option 1. 38 residential accessory spaces would be required, and 38 spaces (7,514 GSF) would be provided at both cellar and ground levels. No commercial accessory parking spaces are required within the C4-5D zoning district.

As per Transportation Trip Generation analysis, during the AM peak hour, there would be 46 trips generated by the Proposed Development, which is the maximum amount throughout a typical weekday. Since the

Proposed Development is a mixed-use commercial and residential building, the 46 trips would be assumed to be automobile, which is assumed to generate the noise equivalent of one car. Therefore, adding the 46 noise PCE generated by the Proposed Development to the 2023 No-Action noise PCE of 892, the 2023 With-Action noise PCE would be 938. Inserting the 2023 With-Action noise PCE of 938, 2020 noise level of 74.63 dBA, and 2020 noise PCE of 759 to the Noise PCE Proportional Model equation, the 2023 With-Action noise level would be 75.55 dBA.

Determination of Impacts/Building Attenuation Requirements

The *2020 CEQR Technical Manual* **Table 2.19-2** contains noise exposure guidelines. For a residential use such as would occur under the proposed action, an L_{10} of between 65 and 70 dBA is identified as marginally acceptable general external exposure. An L_{10} of between 70 and 80 dBA is identified as marginally unacceptable general external exposure. Since any noise measurement is limited due to current COVID-19 pandemic situation, Noise PCE Proportional Model was adopted to estimate the noise readings under Existing, No-Action, and With-Action conditions. The noise estimation and projection show that the highest L_{10} at noise monitor location at ground level along Driggs Avenue was estimated to be 74.63 dBA, 75.33 dBA, and 75.55 dBA during the AM peak hour under Existing, No-Action, and With-Action conditions respectively. Though only AM peak hour noise level was analyzed for attenuation purposes, the use of AM peak hour is still a sufficient and conservative method of determining the required attenuation as it is the highest L_{10} measured throughout the day as per the Greenpoint-Williamsburg Rezoning FEIS. The noise levels during the midday and PM peak hours would not exceed that during the AM period.

Based on the noise estimation and projection results, a window-wall attenuation of 31 dBA is required for the building façade facing Driggs Avenue. As for the façades facing Lorimer Street and Manhattan Avenue, since the average daily traffic along the two streets are similar to the traffic volume along Driggs Avenue based on the data retrieved from NYS Traffic Data Viewer, the rest of the building façades are also required to be equipped with a window-wall attenuation of 31 dBA. With this level of attenuation, there would be no potential for adverse impacts related to ambient noise.

Based on the results of the noise monitoring as summarized above, a composite window-wall noise attenuation of 31 dB(A) would be required for all building facades.

The text for E-650 Designation would be as follows:

Block 2679, Lot 43 (Projected Development Site): In order to ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on all facades in order to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Conclusion

With this E-650 designation in place, no significant adverse impacts related to noise are expected, and no further analysis is warranted.

Appendix A: Agency Correspondence

Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 840_LORIMER
Date Received: 5/29/2020

Properties with no Architectural or Archaeological significance:

1) 563 MANHATTAN AVENUE, BBL: 3026790032
2) 561 MANHATTAN AVENUE, BBL: 3026790034
3) 334 DRIGGS AVENUE, BBL: 3026790042
4) 840 LORIMER STREET, BBL: 3026790043

Properties with Architectural significance in the radius :

LPC DESIGNATED MCCARREN PLAY CENTER, LORIMER STREET BETWEEN DRIGGS AVENUE AND BAYARD STREET ADJACENT TO RADIUS

Gina Santucci 6/1/2020

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 34983_FSO_DNP_06012020.docx

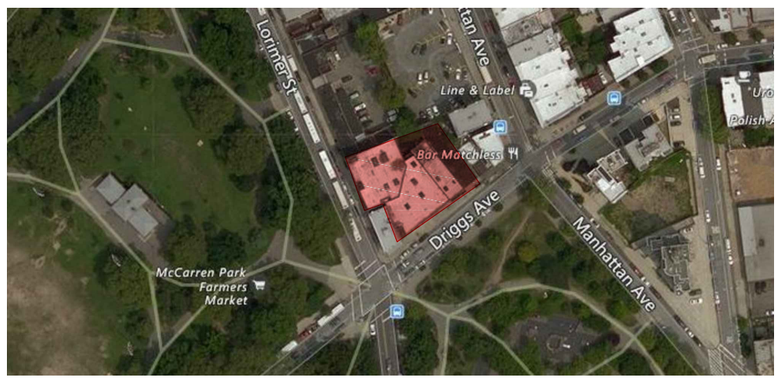
Appendix B: Illustrative Architectural Plans

840 LORIMER STREET



DRAWING LIST

A-1 TITLE SHEET
A-2 RENDERINGS - EXISTING & PROPOSED
A-3 RENDERED ELEVATIONS
A-4 CLOSE-UP VIEWS
A-5 AERIAL PHOTOGRAPH
A-6 LAND USE MAP
A-7 SITE & AREA PHOTOS
A-8 TAX MAP
A-9 SURVEY
A-10 ZONING MAP
A-11 ZONING ANALYSIS- SITE
A-12 ZONING ANALYSIS- CHART
A-13 SITE PLAN & BUILDING ENVELOPE
A-14 CELLAR PLAN
A-15 GROUND FLOOR PLAN
A-16 2ND FLOOR PLAN
A-17 3RD FLOOR PLAN
A-18 4TH & 5TH FLOOR PLAN
A-19 6TH-8TH FLOOR PLAN
A-20 9TH & 10TH PLAN
A-21 FAR CALCULATION & UNIT TYPE MATRIX
A-22 PROPOSED & POSSIBLE DEVELOPMENT SCENARIO
A-23 PROPOSED & POSSIBLE DEVELOPMENT SCENARIO



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TITLE SHEET
840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION
STATEMENT

DATE: 01/22/2020
SCALE: N.T.S.
SHEET 1 OF 23

A-1





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RENDERINGS
EXISTING & PROPOSED

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION
STATEMENT

DATE: 01/22/2020
SCALE: AS N.T.S.
SHEET 2 OF 23

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DRIGGS AVE VIEW



LORIMER STREET VIEW



DRIGGS AVE ELEVATION



LORIMER STREET ELEVATION

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RENDERED ELEVATIONS

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION
STATEMENT

DATE: 01/22/20
SCALE: N.T.S.
SHEET 3 OF 23

A-3





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CLOSE-UP VIEWS

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION
STATEMENT

DATE: 01/22/2020
SCALE: N.T.S.
SHEET 4 OF 23

A-4



BIENENFELD ARCHITECTURE RICHARD BIENENFELD ARCHITECT, P.C. 271 North Avenue, suite 613 · New Rochelle, NY 10801 T: 914.636.3800 · F: 914.636.4220 · www.bienenfeld.com	AERIAL PHOTOGRAPH 840 LORIMER STREET, BROOKLYN, NY 11222	PRE-APPLICATION STATEMENT	DATE: 01/22/2020 SCALE: N.T.S. SHEET 5 OF 23	A-5



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LAND USE MAP

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 6 OF 23

A-6



1 INTERSECTION OF LORIMER ST & DRIGGS AVE



2 DRIGGS AVE - VIEW SOUTHWEST



3 DRIGGS AVE - VIEW NORTHEAST



4 DRIGGS AVE - VIEW EAST



5 N12TH STREET AND BERRY- VIEW NORTHWEST



6 KEY PLAN

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SITE & AREA PHOTOS

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: N.T.S.
SHEET 7 OF 23

A-7

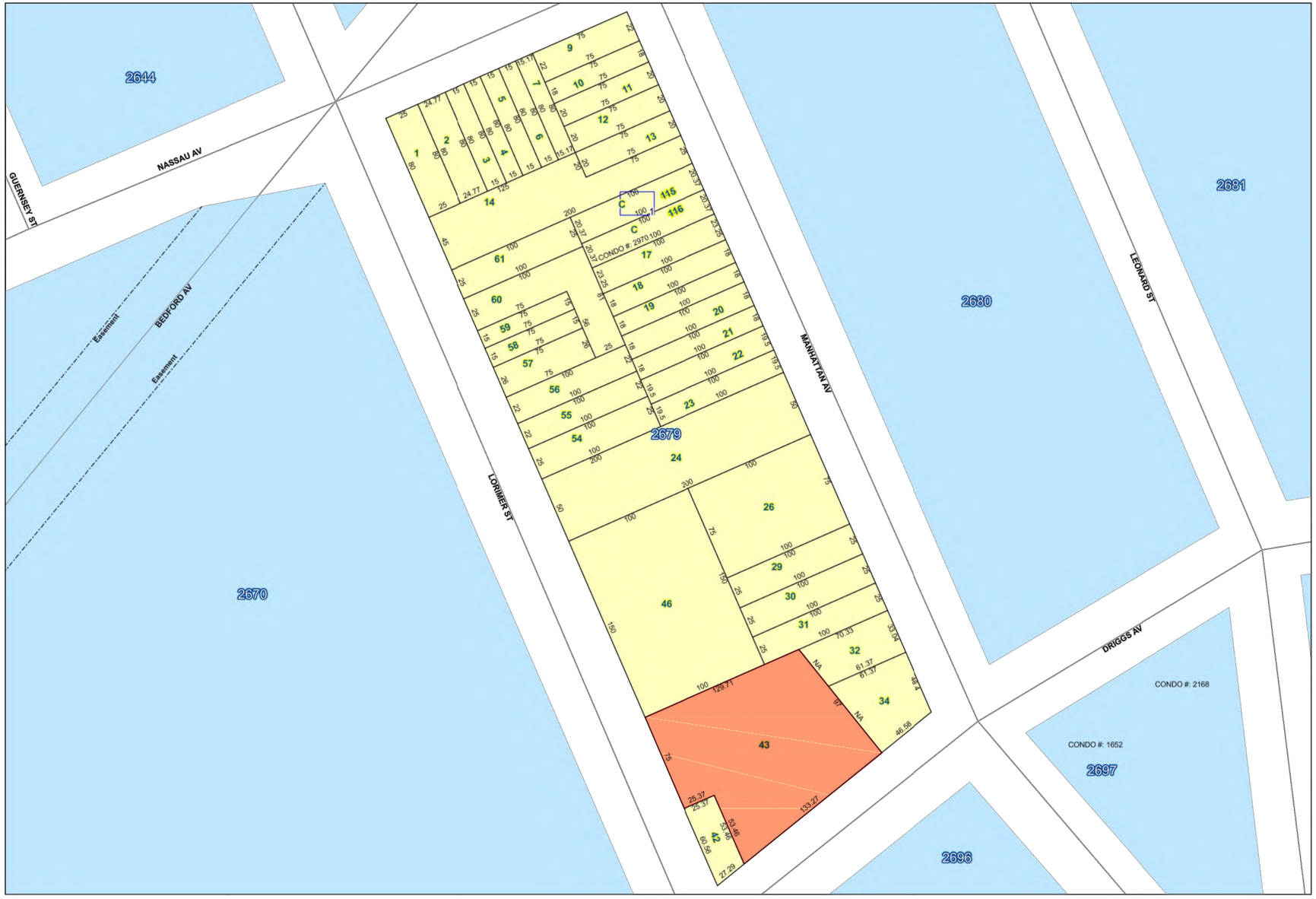
S:\RBA\RBA Projects\1704 - Lorimer Street\CAD\02.5 - Revised Design\1704 - A7_Site & Area Photos.dwg, Layout1, 1/24/2020 2:00:23 PM, 11×17

NYC Finance

NYC Digital Tax Map

Effective Date : 03-10-2011 09:53:49
End Date : Current

Brooklyn Block: 2679



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TAX MAP

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 8 OF 23

A-8

JOB NUMBER: B2679-43
PROPERTY ADDRESS: 320 DRIGGS AVENUE

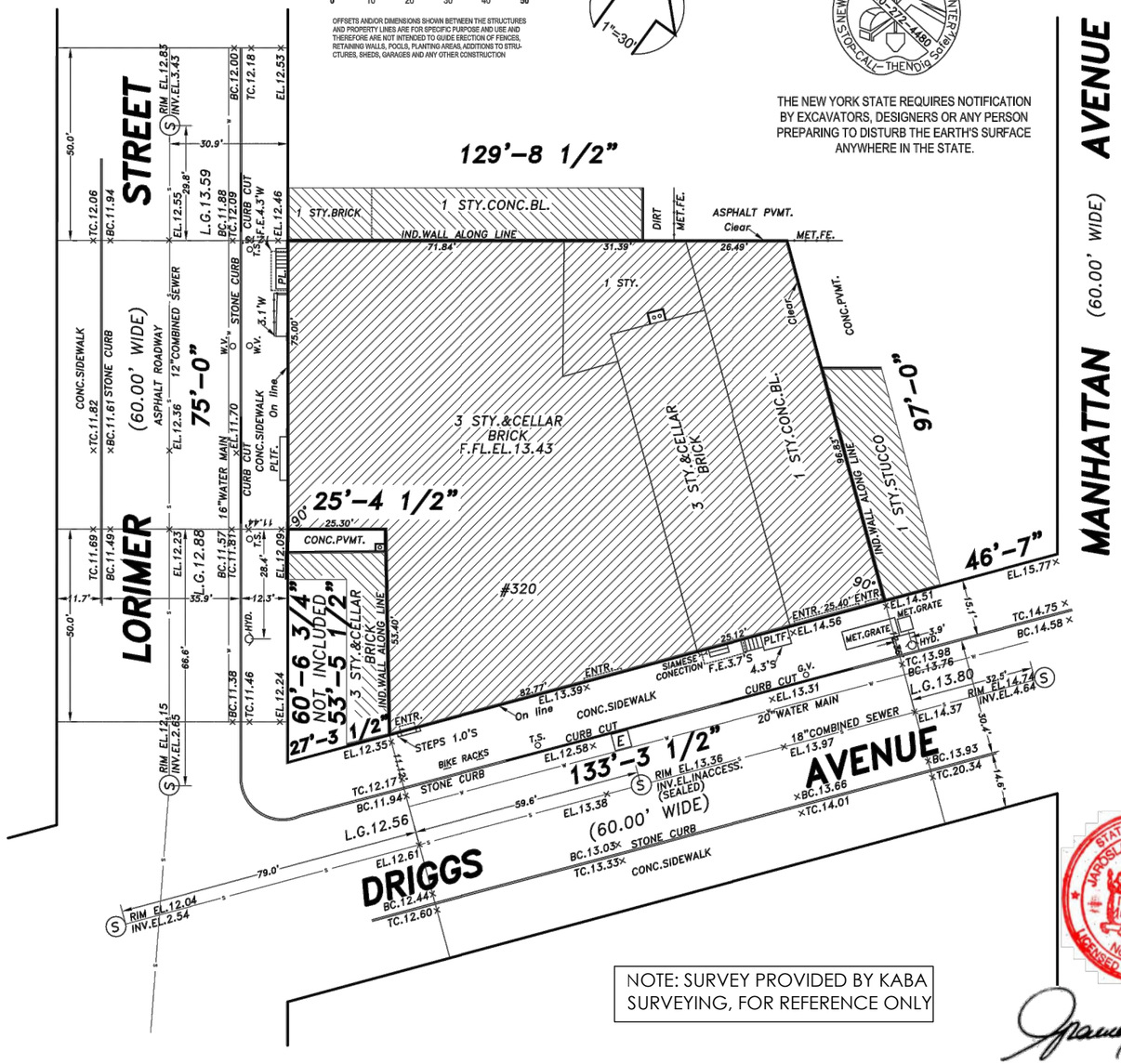
NOTE:
PROPERTY CORNER MONUMENTS WERE NOT PLACED AS PART OF THIS SURVEY.
LIABILITY IS LIMITED TO THE AMOUNT OF THIS AGREEMENT.

GRAPHIC SCALE
0 5 10 15 20 25 30 35 40 45 50

OFFSETS AND/OR DIMENSIONS SHOWN BETWEEN THE STRUCTURES AND PROPERTY LINES ARE FOR SPECIFIC PURPOSE AND USE AND THEREFORE ARE NOT INTENDED TO GUIDE ERECTION OF FENCES, RETAINING WALLS, POOLS, PLANTING AREAS, ADDITIONS TO STRUCTURES, SHEDS, GARAGES AND ANY OTHER CONSTRUCTION

1"=30'

THE NEW YORK STATE REQUIRES NOTIFICATION BY EXCAVATORS, DESIGNERS OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.



NOTE: SURVEY PROVIDED BY KABA SURVEYING, FOR REFERENCE ONLY

SUBSURFACE UTILITIES ARE NOT GUARANTEED BY SURVEYOR. HIGH CAUTION RECOMMENDED AND VERIFICATION WITH PROPER CITY AGENCIES, IS MANDATORY BEFORE COMMENCING ALL NEW WORK.
ALL SUBSURFACE AND OVERHEAD UTILITIES (AS TO SIZE , TYPE AND DEPTH) SHOWN ON THIS SURVEY ARE TAKEN
FROM RECORDS OF GOVERNMENTAL AGENCIES AND UTILITY COMPANIES, UNLESS OTHERWISE NOTED AND SHOWN.
COVER OR DEPTH OF UTILITIES WHICH DERIVED FROM FIELD MEASURMENTS SHOWN ON THIS SURVEY SHOULD BE VERIFIED WITH PROPER AGENCY PRIOR TO CONSTRUCTION OF PROJECT.
INVERT ELEVATIONS ARE DERIVED FROM CITY AGENCY RECORDS WHEN NOT AVAILABLE BY FIELD SURVEY AND NOTED AS "PER RECORD" ON THE SURVEY.
ALL SUBSURFACE UTILITY AS TO LOCATION AND DEPTH, SHOULD BE RECHECKED AND LEGAL GRADES SHOULD BE VERIFIED WITH THE TOPOGRAPHICAL BUREAU, PREFERABLY IN WRITING BEFORE COMMENCING CONSTRUCTION.
THIS IS TO CERTIFY THAT THERE ARE NO STREAMS OR NATURAL WATER COURSES ON THE SURVEYED PROPERTY EXCEPT AS SHOWN AND/OR DESCRIBED ON THIS SURVEY.
ALL OPERATIONS OF UNDERGROUND FACILITIES AND ALL EXCAVATORS ARE OBLIGATED TO COMPLY WITH ARTICLE
36 OF THE GENERAL BUSINESS LAW AND WITH PROVISIONS OF INDUSTRIAL CODE PART (RULE NO.35) BEFORE ANY EXCAVATION OR DEMOLITION IS COMMENCED. EVERY EXCAVATOR IS REQUIRED BY THESE LAWS TO GIVE ADVANCE
NOTICE TO EVERY OPERATOR OF UNDERGROUND FACILITIES OF HIS INTENT TO PERFORM EXCAVATION OR DEMO-
LITION WORK IN THE SPECIFIED AREA
ALL ELEVATIONS SHOWN REFER TO NAVD 88 DATUM.
LEGAL GRADES SHOWN ON THE SURVEY REFER TO NAVD 88 DATUM.

SYMBOLS AND ABBREVIATIONS

FENCES	C.L.FENCE, METAL FENCE, WOOD FENCE	CITY MONUMENT	
UTILITY POLE	U.P., GUY WIRE U.P.	CUT CROSS	
CATCH BASIN	C.B., C.B. WITH INLET	SET NAIL	
PARKING METER	P.M.	SET STAKE	
TRAFFIC LIGHT	T.L., WITH STREET LIGHT	SET MARK (PAINTED)	
LIGHT		SET BENCHMARK	
STREET LIGHT		F.E.	FIRE ESCAPE
FIRE HYDRANT	HYD., HYD.	PL. or PLTF.	PLATFORM
SIAMESE CONNECTION		C.E.	CELLAR ENTRANCE
SHUT OFF VALVE	G.V., G.V., W.V., W.V.	A.W.	AIR WAY
HANDICAPPED PARKING		CONC.	CONCRETE
EXISTING TREE	Ø12", TREE GROUP	PVMT.	PAVEMENT
DRAINS	DR., DR.	AC	AIR CONDITION
TRAFFIC SIGN	T.S.	MET.	METAL
CURB AND CURB CUT	CURB CUT	N	NORTH OF PROPERTY LINE
OVERHEAD SERVICE	O.H.S.W.	S	SOUTH OF PROPERTY LINE
CABLE TV MANHOLE	C.TV.	E	EAST OF PROPERTY LINE
MANHOLES	G, E, T, W, S, RIM EL., INV.EL.	W	WEST OF PROPERTY LINE

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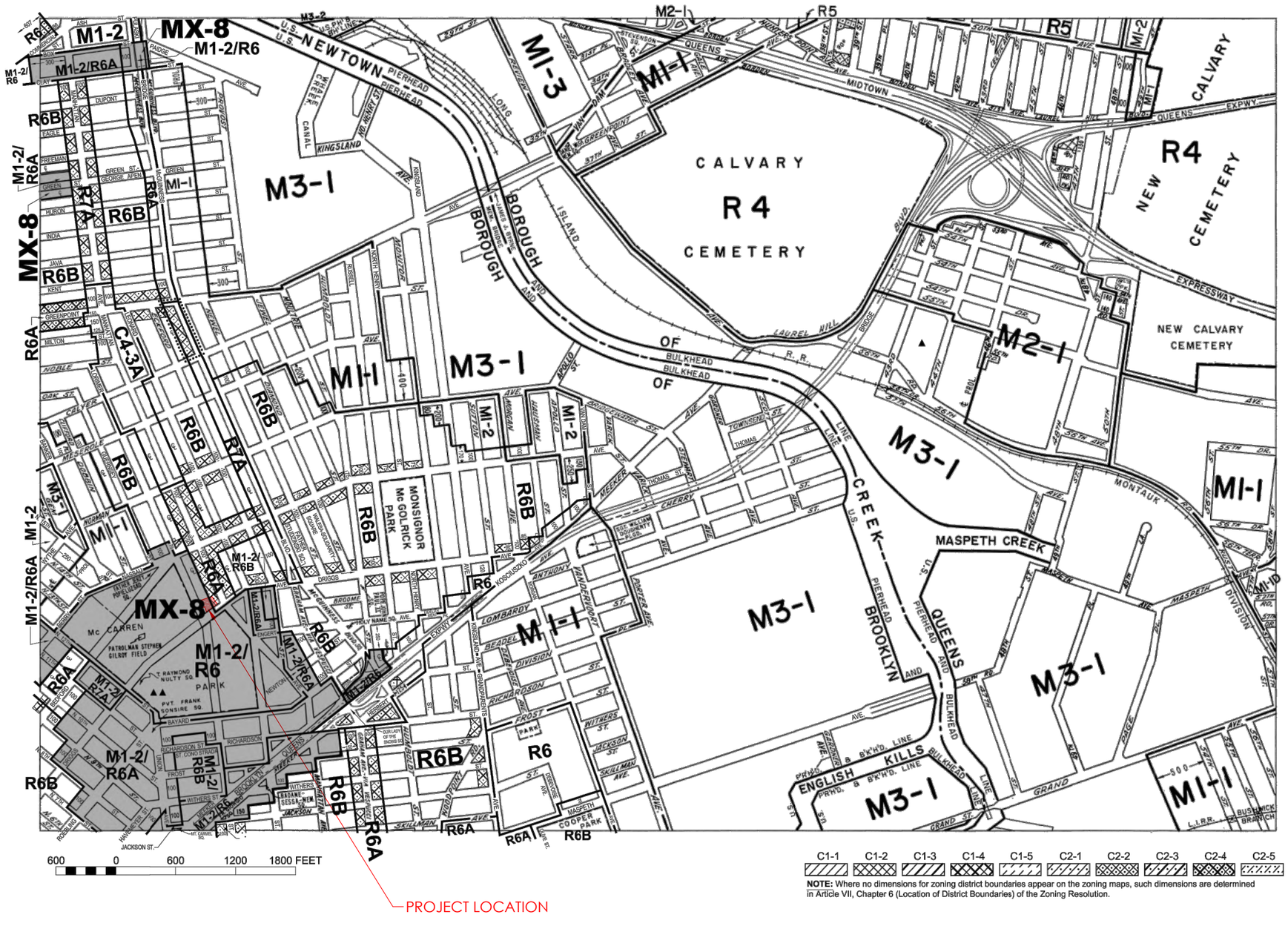
338 JERICHO TURNPIKE, FLORAL PARK, NY 11001
SURVEYS@KABAPLS.COM

SURVEYED & GUARANTEED FOR:
DEPARTMENT OF BUILDINGS

BOROUGH: KINGS
TOWN: BROOKLYN
BLOCK: 2679 SECTION:
LOT: 43
SURVEYED:
JULY 17, 2015-ARCHITECTURAL SURVEY

STATE OF NEW YORK
JARROSLAW W. KRAWCZYK
No. 050750
LICENSED LAND SURVEYOR

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF **THE NEW YORK STATE EDUCATION LAW.** COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID COPY. GUARANTEES OR CERTIFICATIONS INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES OR CERTIFICATIONS ARE NOT TRANSFERRABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.


MX-8
M1-2/R6
M1-2
M1-2/R6A
M1-2/R6
R6B
M1-2/R6A
MX-8
R6B
R6B
R6A
C4-3A
R6B
R7A
R6B
M1-2/R6A
M1-1
M3-1
M1-2/R6A
MX-8
M1-2/R6
PARK
M1-2/R6A
R6A
M1-2/R6A
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M1-2/R6A
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M3-2
M3-1
M1-3
M1-1
M1-1
R5
R5
M1-2
M1-1
M1-1D
R4
CALVARY
R4
CEMETERY
NEW CEMETERY
NEW CALVARY CEMETERY
M2-1
M3-1
M1-1
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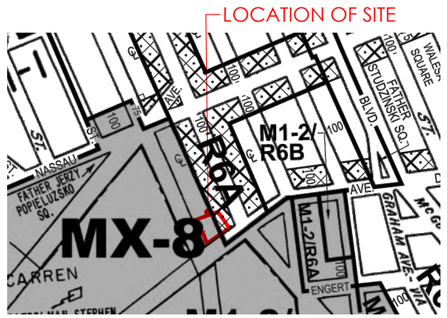
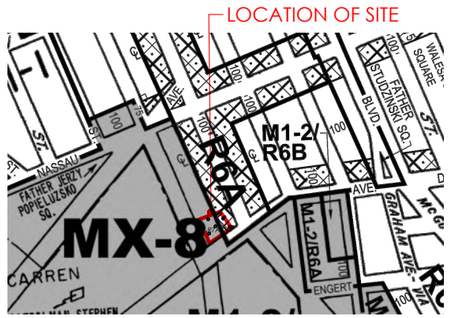
M1-2/R6A
M1-2/R6A
M1-2/R6B
M1-2/R6A
M1-2/R6A
M1-2/R6A

Location	840 Lorimer Street Brooklyn, NY 11222
Block	2679
Lot	43
Map Number	13a
Zoning District	C4-5D
Flood Zone	X
Base Flood Elevation (BFE)	N.A.
Community District	1
Transit Zone	Yes

	SF	%
Total Lot Area	15,105 SF	100.00%
Lot Area A - M1-2/R6/MX-8	10,725 SF	71%
Lot Area B - C2-4/R6A	4,380 SF	29%



CURRENT ZONING MAP (13a)



PROPOSED ZONING MAP (13a)
REZONING FROM M1-2/R6/MX-8 TO C4-5D
REZONING FROM C2-4/R6A TO C4-5D

QUALITY HOUSING NOTES

28-21 SIZE OF DWELLING UNIT
A DWELLING UNIT SHALL HAVE AN AREA OF AT LEAST 400 SQUARE FEET OF FLOOR AREA.

28-22 WINDOWS
ALL WINDOWS IN THE RESIDENTIAL PORTION OF THE BUILDING SHALL BE DOUBLE GLAZED.

28-12 REFUSE STORAGE AND DISPOSAL
REFUSE DISPOSAL ROOM NOT LESS THAN 12 SQUARE FEET WITH MINIMUM DIMENSION OF 3'-0" IS PROVIDED AT EACH FLOOR THAT HAS ENTRANCES TO DWELLING UNITS.

RESIDENTIAL STORAGE AND REMOVAL LOCATIONS SHALL BE PROVIDED AT THE RATE OF 2.9 CUBIC FEET PER DWELLING UNIT.

28-13 LAUNDRY FACILITY
WASHERS AND DRYERS PROVIDED; CAN BE DEDUCTED FROM FAR IF THEY FOLLOW REQUIREMENTS

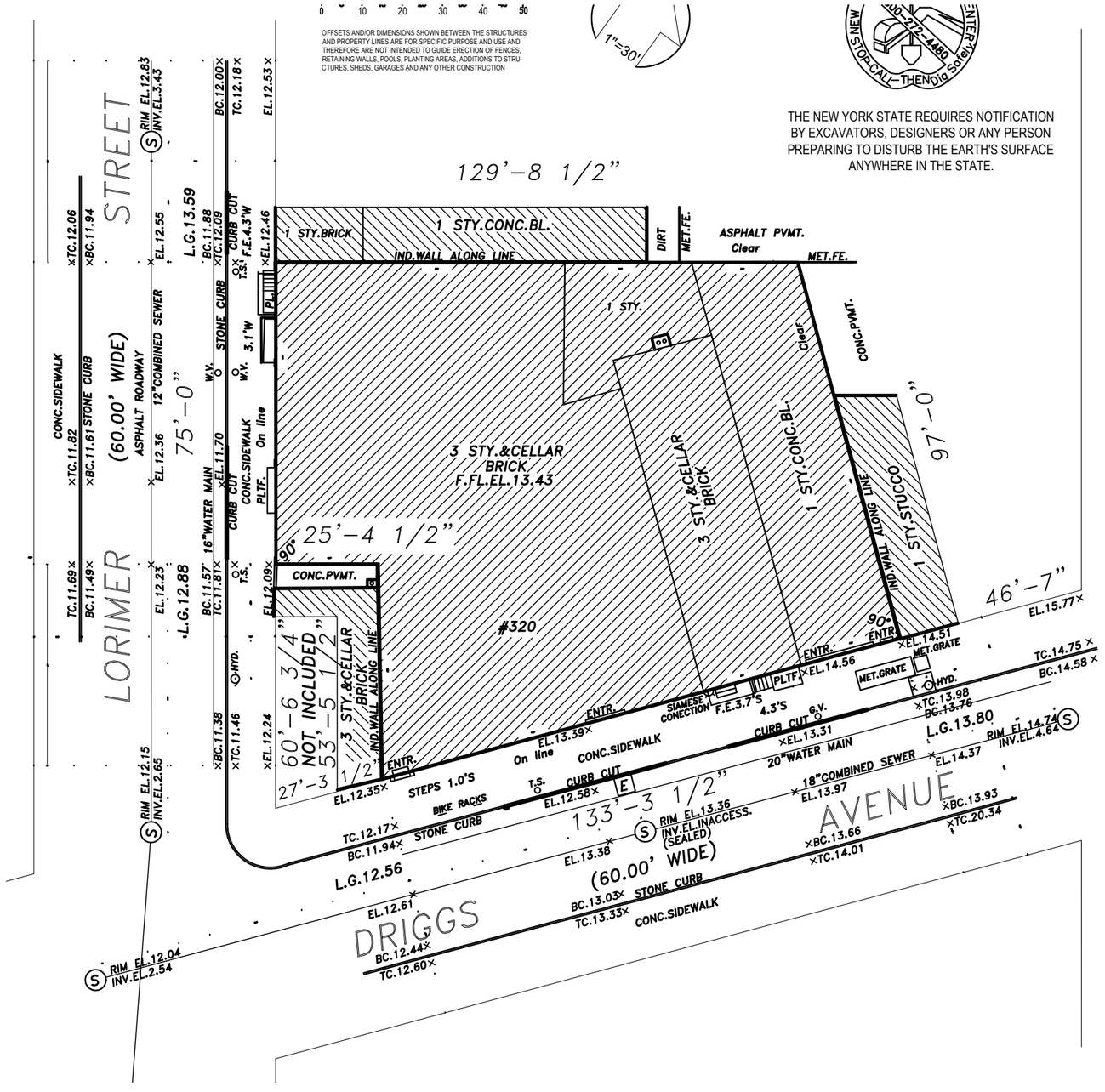
28-14 DAYLIGHT IN CORRIDORS
A WINDOW OF MINIMUM 20 SF DIRECTLY VISIBLE FROM THE VERTICAL CIRCULATION CORE IS PROVIDED AT EACH FLOOR. ALLOWING FIFTY PERCENT OF THE SQUARE FOOTAGE OF THE CORRIDOR TO BE EXCLUDED FROM THE DEFINITION OF FLOOR AREA.

28-21 REQUIRED RECREATION SPACE
MINIMUM REQUIRED RECREATION SPACE: IN R7D (RES. EQUIVALENT OF C4-5D), REQUIRE 3.3% OF TOTAL RESIDENTIAL FLOOR AREA.

28-22 STANDARDS FOR RECREATION SPACE
(A) ALL RECREATION SPACE IS ACCESSIBLE TO RESIDENTS OF THE BUILDING
(B) MINIMUM DIMENSION OF ANY RECREATION SPACE SHALL BE 15 FEET, AND MINIMUM SIZE OF INDOOR RECREATION SPACE SHALL BE 300 SF.
(C) RECREATION SPACE REQUIRES WINDOWS NO LESS THEN 9.5% OF FLOOR AREA.

28-23 PLANTING REQUIREMENTS
THE ENTIRE AREA OF THE ZONING LOT BETWEEN THE STREET LINE AND ALL STREET WALLS OF THE BUILDING AND THEIR PROLONGATIONS SHALL BE PLANTED AT GROUND LEVEL, OR IN RAISED PLANTING BEDS THAT ARE PERMANENTLY AFFIXED TO THE GROUND

28-31 DENSITY PER CORRIDOR
IF THE NUMBER OF DWELLING UNITS SERVED BY A VERTICAL CIRCULATION CORE AND CORRIDOR ON EACH STORY DOES NOT EXCEED 11 UNITS FOR R7D, 50 PERCENT OF THE SQUARE FEET OF THE CORRIDOR SERVING SUCH DWELLING UNITS ON SUCH STORY MAY BE EXCLUDED FROM THE DEFINITION OF FLOOR AREA.



1 SURVEY - EXISTING CONDITIONS
SCALE: 1/32" = 1'-0"

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ZONING ANALYSIS - SITE

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 11 OF 23

A-11

Location	840 Lorimer Street Brooklyn, NY 11222
Block	2679
Lot	43
Map Number	13a
Zoning District	C4-5D
Flood Zone	X
Base Flood Elevation (BFE)	N.A.
Community District	1
Transit Zone	Yes

	SF	%
Total Lot Area	15,105 SF	100.00%
Lot Area A - M1-2/R6/MX-8	10,770 SF	71%
Lot Area B - C2-4/R6A	4,335 SF	29%

	Existing Zoning						Proposed Zoning				
	M1-2/R6/MX-8 (Lot A)			C2-4/R6A (Lot B)			C4-5D / R7D (Lots A, B combined)				
	ZR SECTION	Maximum Permitted	Minimum Required	Maximum Permitted	Minimum Required	ZR SECTION	Maximum Permitted	Minimum Required	Existing	Proposed	ZR SECTION
Use Groups	22-00										
FLOOR AREA											
FAR		2.42		3.00			5.60		0.00	5.50	33-01, 35-01
Floor Area - Total		26,063 SF		13,005 SF			**84,588** SF		.0 SF	83,050 SF	
Residential - Inclusionary	23-154 (b)	2.42		N.A.	N.A.		5.60		0.00	3.84	23-154 (b), 23-154 (d)(2)
Floor Area		**26,063** SF		N.A.	N.A.		**84,588** SF		.0 SF	58,021 SF	
Residential		2.20		3.00		23-153	N.A. M.I.H.	N.A. M.I.H.	0.00 .0 SF	N.A. M.I.H.	
Floor Area		**23,694** SF		**13,005** SF							
Commercial	43-12	2.00		2.00		33-121	4.20		2.54	1.66	33-122, 35-31
Floor Area		**21,540.0** SF		**8,670** SF			**63,441.0** SF		38,405.0 SF	25,029 SF	
Community Facility	123-62, 24-10	2.00		3.00			4.20		0.00	0.00	
Floor Area		**21,540.0** SF		**13,005.0** SF			**63,441.0** SF		.0 SF	.0 SF	
LOT COVERAGE											
Within 100 FT of Corner (%) [2]	123-64(b)	None		N.A.			100%		100%	90%	23-156(b)(1)
Within 100 FT of Corner (SF)		None		N.A.			8,883 SF		**8,883.0** SF	**8,026.0** SF	
Interior-Lorimer St. (%)		None		N.A.			65%		100%	65%	23-153
Interior-Lorimer St. (Sf)		None		N.A.			1,227 SF		**1,887.0** SF	**1,224.0** SF	
Interior-Driggs Ave. (%)		N.A		100%		23-153	100%		100%	76%	23-156(b)(2)
Interior-Driggs Ave. (Sf)		N.A.		**4,335** SF			**4,335** SF		**4,335.0** SF	**3,276.0** SF	
Total lot Coverage - A and B[1] [3]		**15,105** SF		Combined with Lot A[1]			**14,445** SF		**15,105.0** SF	**12,526.0** SF	
Density											
Density Per Dwelling Unit (factor)	23-22		680 SF		680 SF	23-22	680		n/a	1143	23-22, 23-24
Allowable Dwelling Units		**38**		**19**			**124**		n/a	74	
YARDS											
Front Yard	123-651		None		None			None	0 FT	0 FT	35-51
Side Yard [4]	123-651, 23-462		None		None	23-462		0 FT / 8 FT	0 FT	0 FT / 8 FT	23-462(c), 35-52
Rear Yard	23-471(c)		None		None	23-471(c)		None	0 FT	0 FT	23-471(c), 33-261
Rear Yard-100' of corner & short dim.[5]	23-541, 23-542		None		None	23-541, 23-542		None	0 FT	0 FT	23-541, 23-542
BUILDING HEIGHT											
Street Wall [10] [11]	23-641		Street Line		0 FT[9]	23-661(a)		Entire width 70% within 8 FT	100%	100%	23-661(c)(1) 35-651(a)(1),(3)
Base Height		60 FT		60 FT	40 FT		95 FT	60 FT	40 FT	93 FT	35-652, 23-664(b)
Max Building height		110 FT		70 FT			110 FT				
Max Building height-Qualifying Ground Fl.				75 FT, 7 Stor.			115 FT, 11 Stor.			115 FT	
Setback	23-671, 23-662	10 FT			10 FT	23-671, 23-662	15 FT			15 FT	23-662(c)(1), (c)(2), 23-664
PARKING											
Commercial - Retail	44-21		Varies[6]		Varies	36-232		1 per 1,000 sf		0	36-232
Residential MIH[12]			None[12]					0		0	25-251
Residential	25-23		70%		50%	25-23		50% of units/ 30 Spaces		30 Spaces	36-33, 35-23, 25-23
Community Facility	25-31, 25-33		Varies[7]		Varies	25-31, 25-33		1 per 1,000 sf		n/a	25-31, 25-33
Parking Waiver - Retail								Less than 40 spaces		n/a	36-232, 25-33
Parking Waiver - Residential MIH								0 required		n/a	25-251
Parking Waiver - Residential								Less than 15 spaces		n/a	25-261
Parking Waiver - Comm. Facility								Less than 40 spaces		n/a	36-232, 25-33
ADDITIONAL REQUIREMENTS											
Recreation space (%)								3.3%	n/a	3.3%	28-21
Rec. Space Floor Area (SF)								2,650 SF	n/a	2,650 SF	
Bicycle Parking								1 per 2 dwelling units	n/a	1 per 2 dwelling units	25-811

1) Lot coverage for lots A and B in both districts. Lot A per ZR 123-64(b) does not require a lot coverage. 10,725 SF + 4,380 SF = 15,105 SF

2) As per 23-156(b)(1), within 100 feet of a corner, allowed maximum 100% lot coverage

3) As per 23-156(b)(2), along short dimension of a block, allowed maximum 100% lot coverage within 100 feet of such front lot line

4) if any open area extending along a #side lot line# is provided at any level, it shall have a minimum width of eight feet, measured perpendicular to the #side lot line#, and extend along the entire #side lot line#

5) As per ZR 23-541, no rear yard required within 100 FT of a corner. ZR 23-542; No rear yard required along short dimension of a block within 100 FT of front lot line.

6) As per ZR 44-23 waived if less then 15 spaces required (applies to existing zoning only)

7) As per 25-31 and 25-33 waived if less then 25 Spaces required (applies to existing zoning only)

8) As per 33-011, in C1 and C2 Districts mapped within R6 through R10 districts with a letter suffix, all buildings to comply with applicable height and setback regulations set forth in Article III, Chapter 5

9) As per ZR 35-651(a)(1), Along #wide streets# and along #narrow streets# within 50 feet of their intersection with a #wide street# the #street wall# shall extend along the entire #street# frontage of a #zoning lot#. At least 70 percent of the #aggregate width of street walls# shall be located within eight feet of the #street line# and extend to at least the minimum base height specified in Section 23-662 (Maximum height of buildings and setback regulations), or the height of the #building#, whichever is less. Up to 30 percent of the #aggregate width of street walls# may be recessed beyond eight feet of the #street line#, provided that any such recesses deeper than 10 feet along a #wide street# or 15 feet along a #narrow street# are located within an #outer court#.

10) As per ZR 35-651(a)(3), for #zoning lots# bounded by more than one #street line#, these #street wall# location provisions shall be mandatory along only one #street line#

11) Per ZR 23-661(a)(1), street wall shall be located no closer to the #street line# than the #street wall#, or portion thereof, of an existing adjacent #building# on an adjoining #zoning lot# located on the same #street# frontage

12) Per ZR 25-251, within the Transit Zone no accessory off-street parking spaces shall be required for income-restricted housing units.

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ZONING ANALYSIS - CHART

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/31/2020
SCALE: N.T.S.
SHEET 12 OF 23

A-12

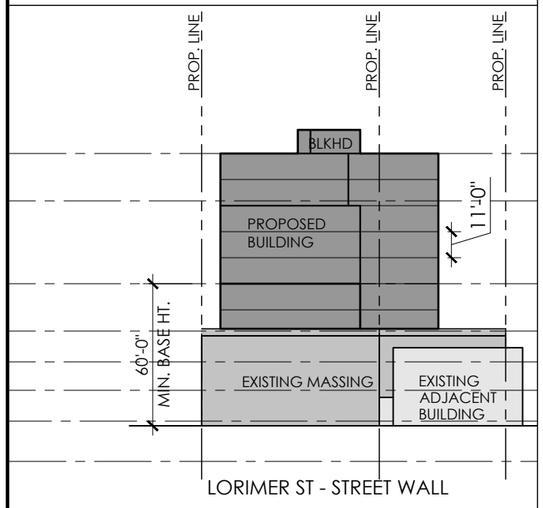
LEGEND

EXISTING ADJACENT BUILDING

EXISTING BUILDING

PROPOSED BUILDING

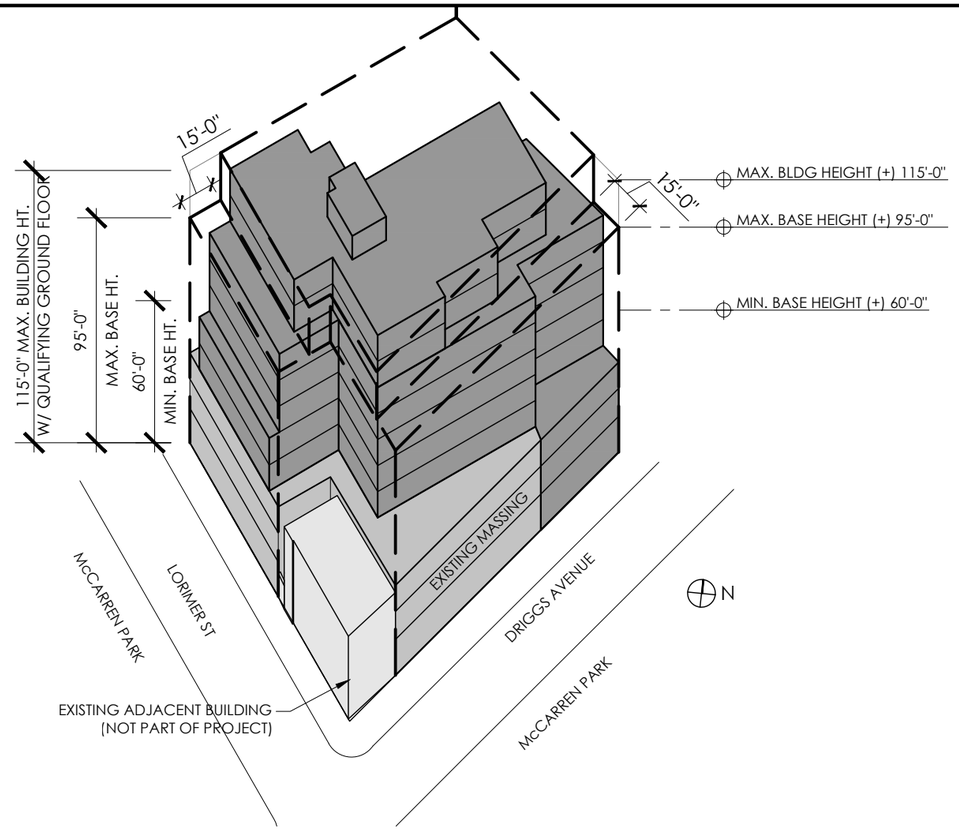
PORTIONS TO BE REMOVED



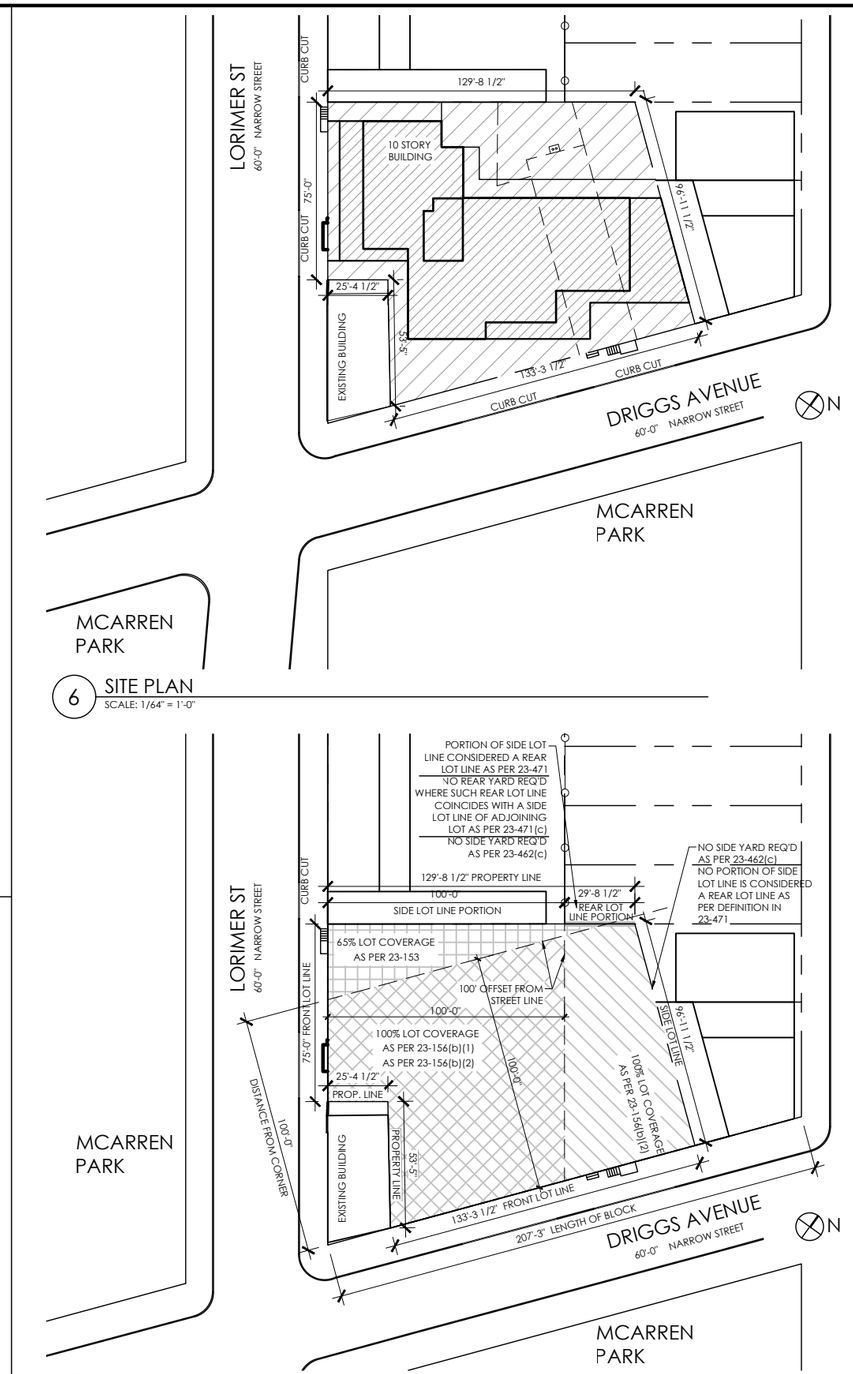
LORIMER ST - STREET WALL

1) AS PER ZR 35-651(A)(3) FOR ZONING LOTS BOUNDED MORE THAN ONE STREET LINE, STREET WALL PROVISIONS SHALL BE MANDATORY ALONG ONLY ONE STREET LINE.

2 LORIMER ST. - STREET WALL
SCALE: 1/64" = 1'-0"

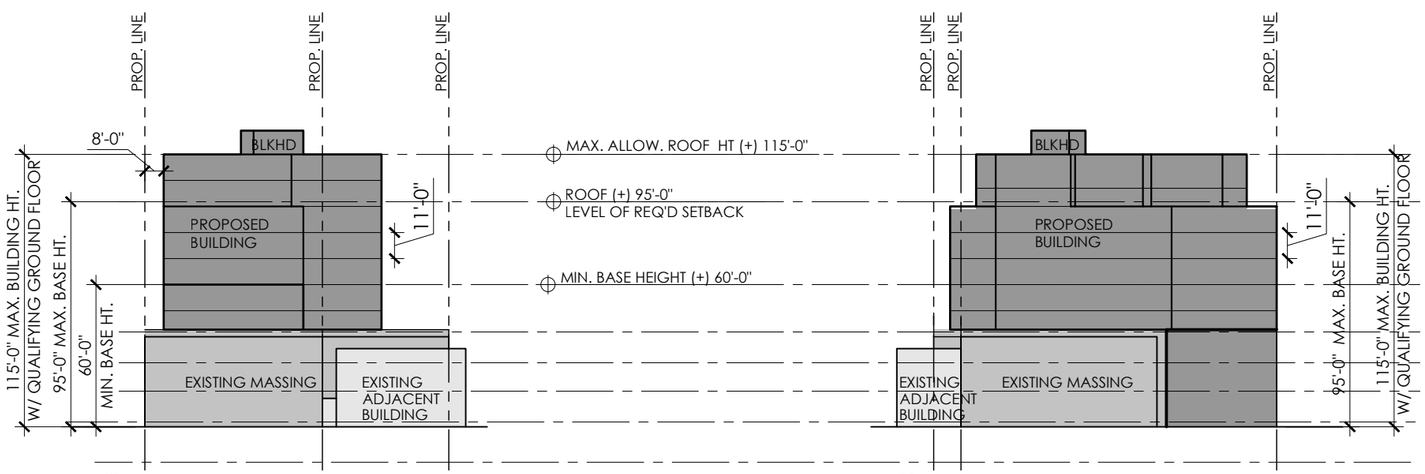


1 BUILDING ENVELOPE - AXONOMETRIC
SCALE: 1/64" = 1'-0"



6 SITE PLAN
SCALE: 1/64" = 1'-0"

5 LOT COVERAGE/YARD DIAGRAM
SCALE: 1/64" = 1'-0"



3 LORIMER ST. - ELEVATION DIAGRAM
SCALE: 1/64" = 1'-0"

4 DRIGGS AVE - ELEVATION DIAGRAM
SCALE: 1/64" = 1'-0"

BIENENFELD ARCHITECTURE

RICHARD BIENENFELD ARCHITECT, P.C.

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SITE PLAN & BUILDING ENVELOPE

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020

SCALE: AS NOTED

SHEET 13 OF 23

A-13



- COMMERCIAL
- CIRC./CORE
- PARKING
- RESIDENTIAL
- RETAIL
- MECHANICAL

1 **CELLAR FLOOR PLAN**
SCALE: 1/16" = 1'-0"

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CELLAR PLAN

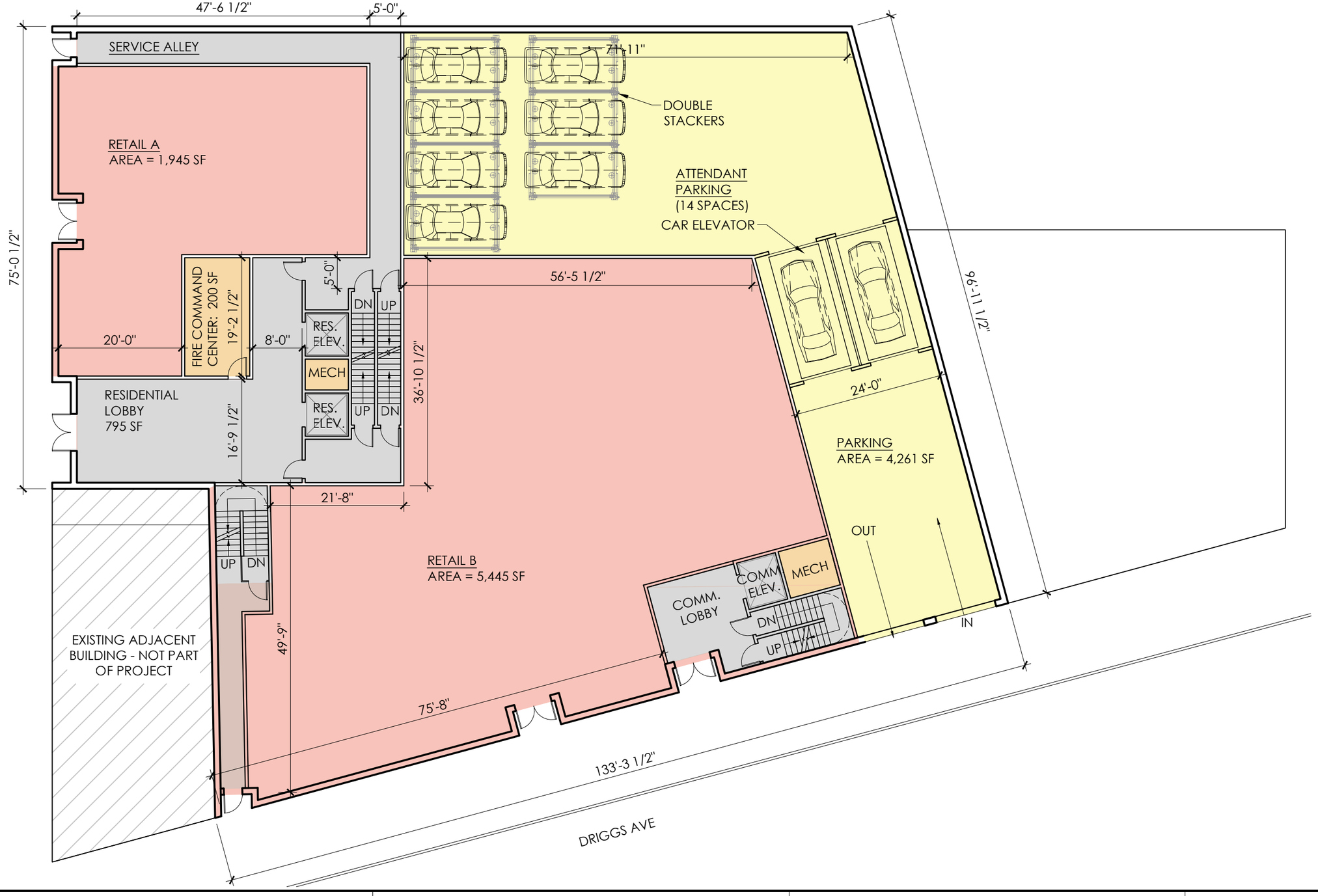
840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/31/2020
SCALE: AS NOTED
SHEET 14 OF 23

A-14

GROUND FLOOR
AREA = 14,989 sf



- COMMERCIAL
- CIRC./CORE
- PARKING
- RESIDENTIAL
- RETAIL
- MECHANICAL

LORMIER ST

2 GROUND FLOOR PLAN
SCALE: 1/16" = 1'-0"

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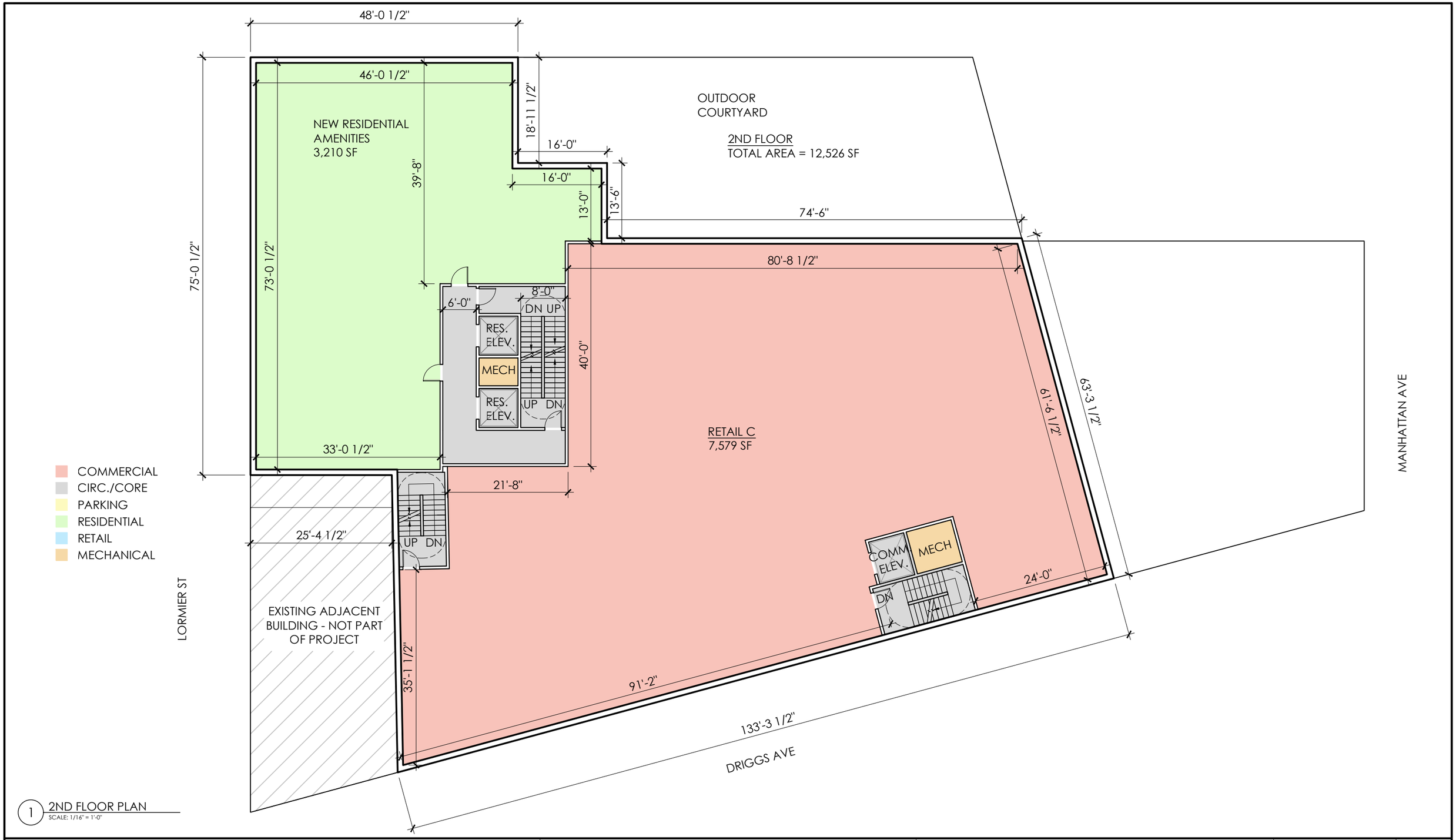
GROUND FLOOR PLAN
840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION
STATEMENT

DATE: 01/31/2020
SCALE: AS NOTED
SHEET 15 OF 23

A-15



1 2ND FLOOR PLAN
SCALE: 1/16" = 1'-0"

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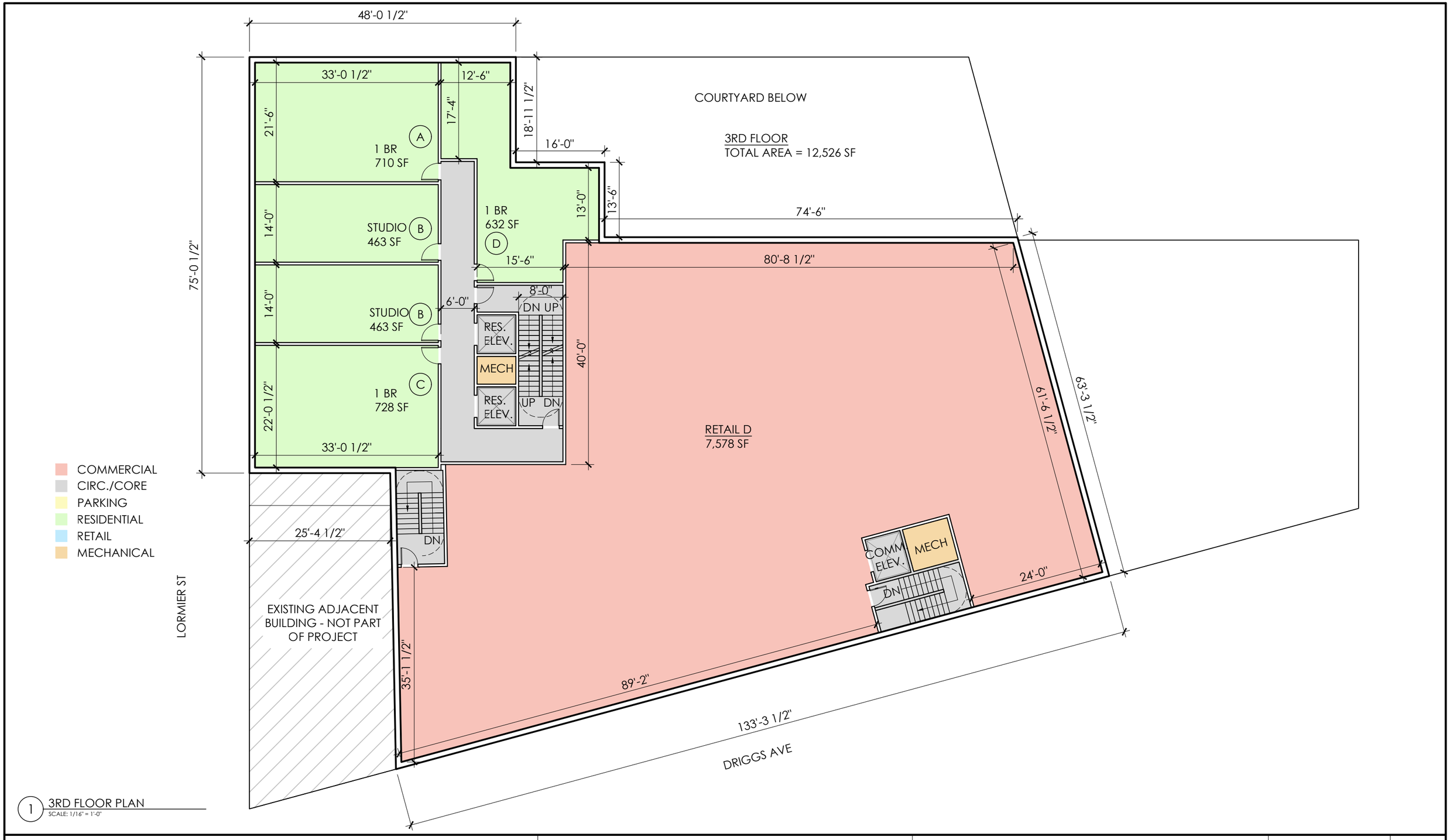
2ND FLOOR

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/31/2020
SCALE: AS NOTED
SHEET 16 OF 23

A-16



1 3RD FLOOR PLAN
SCALE: 1/16" = 1'-0"

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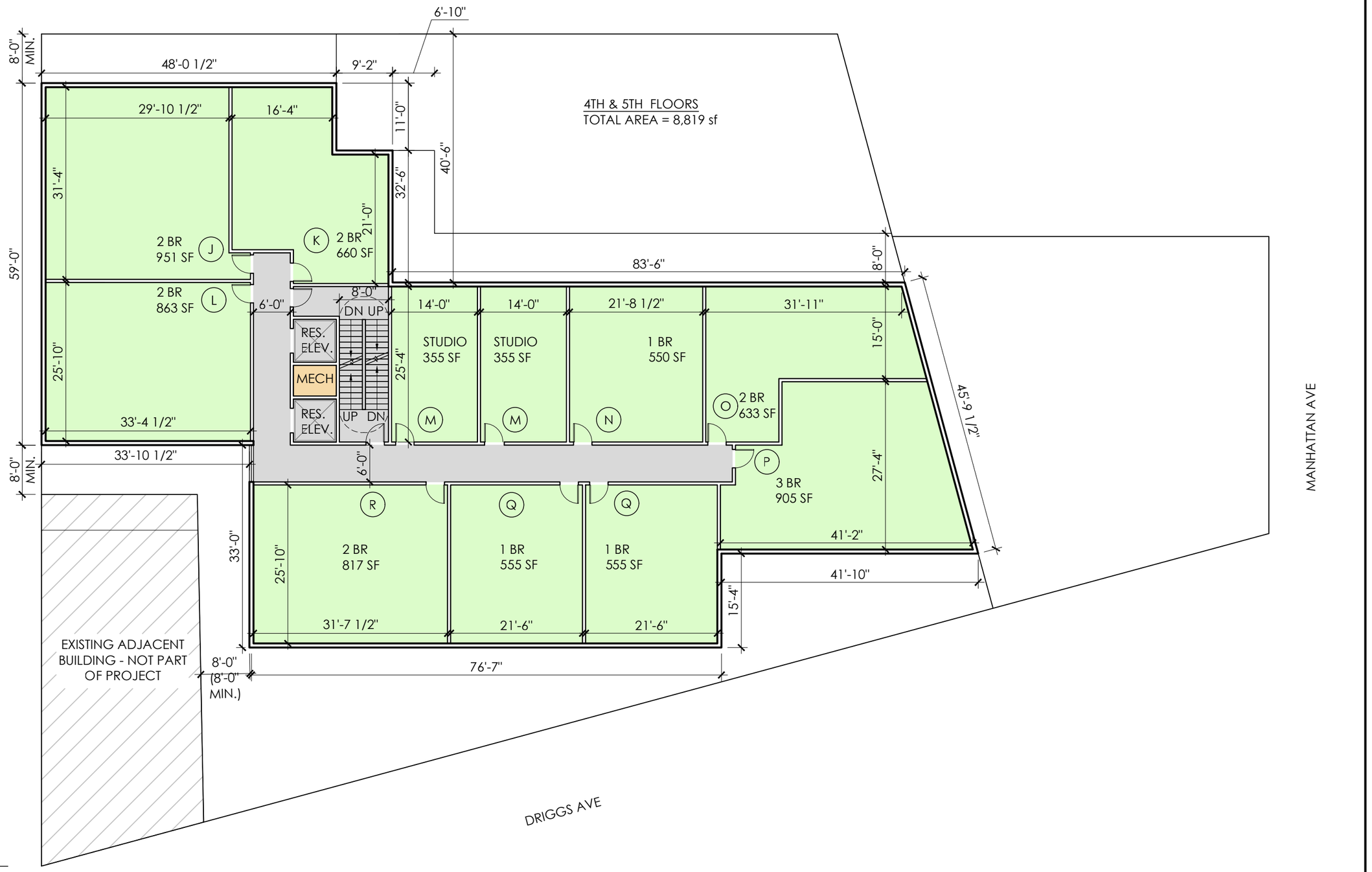
3RD FLOOR PLAN

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/31/2020
SCALE: AS NOTED

A-17



1 4TH & 5TH FLOOR PLAN TYP.
SCALE: 1/16" = 1'-0"

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4TH & 5TH FLOOR PLANS

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 18 OF 23

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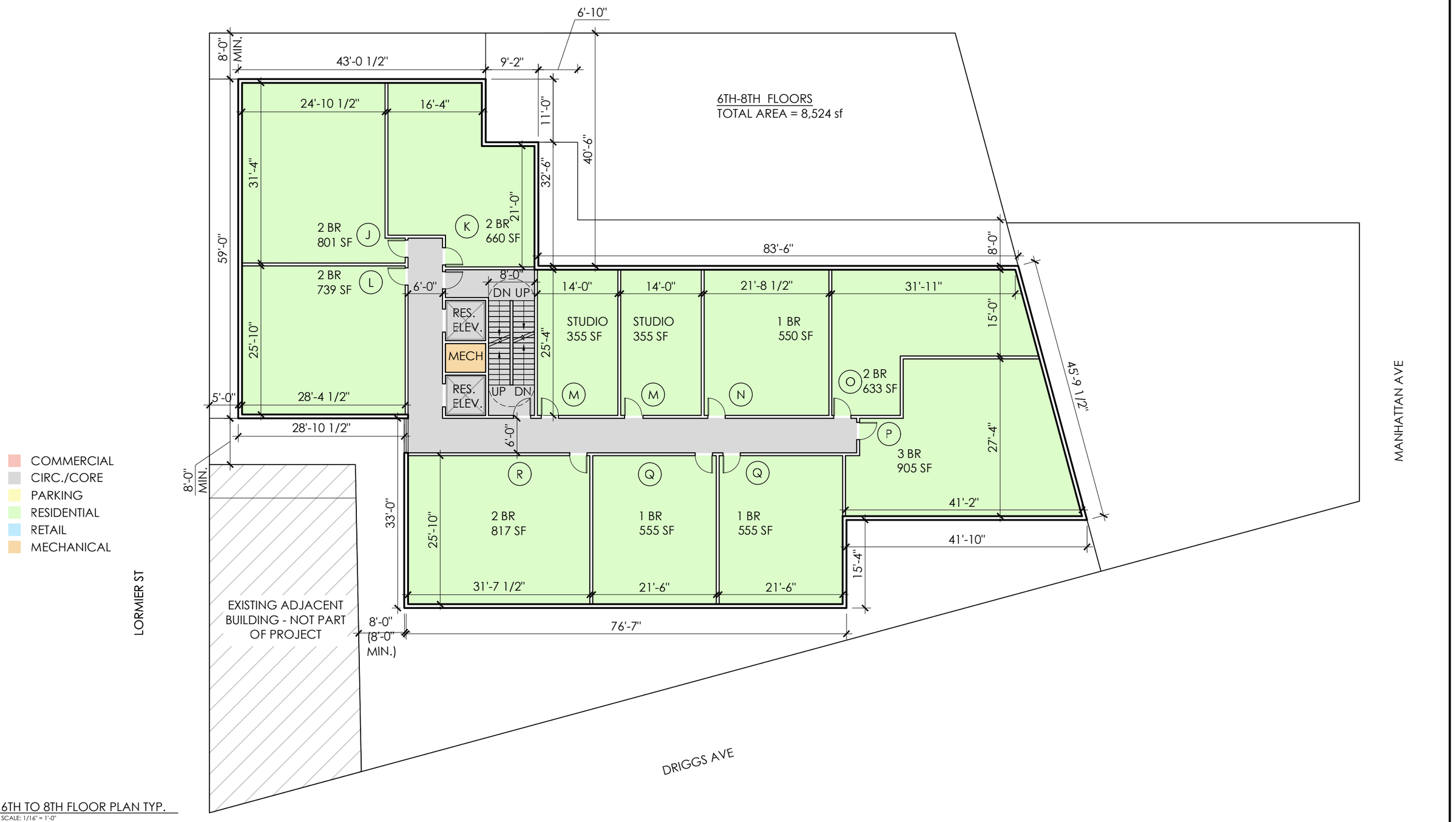

1 6TH TO 8TH FLOOR PLAN TYP.
SCALE: 1/16" = 1'-0"

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6TH TO 8TH FLOOR PLANS

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 19 OF 23

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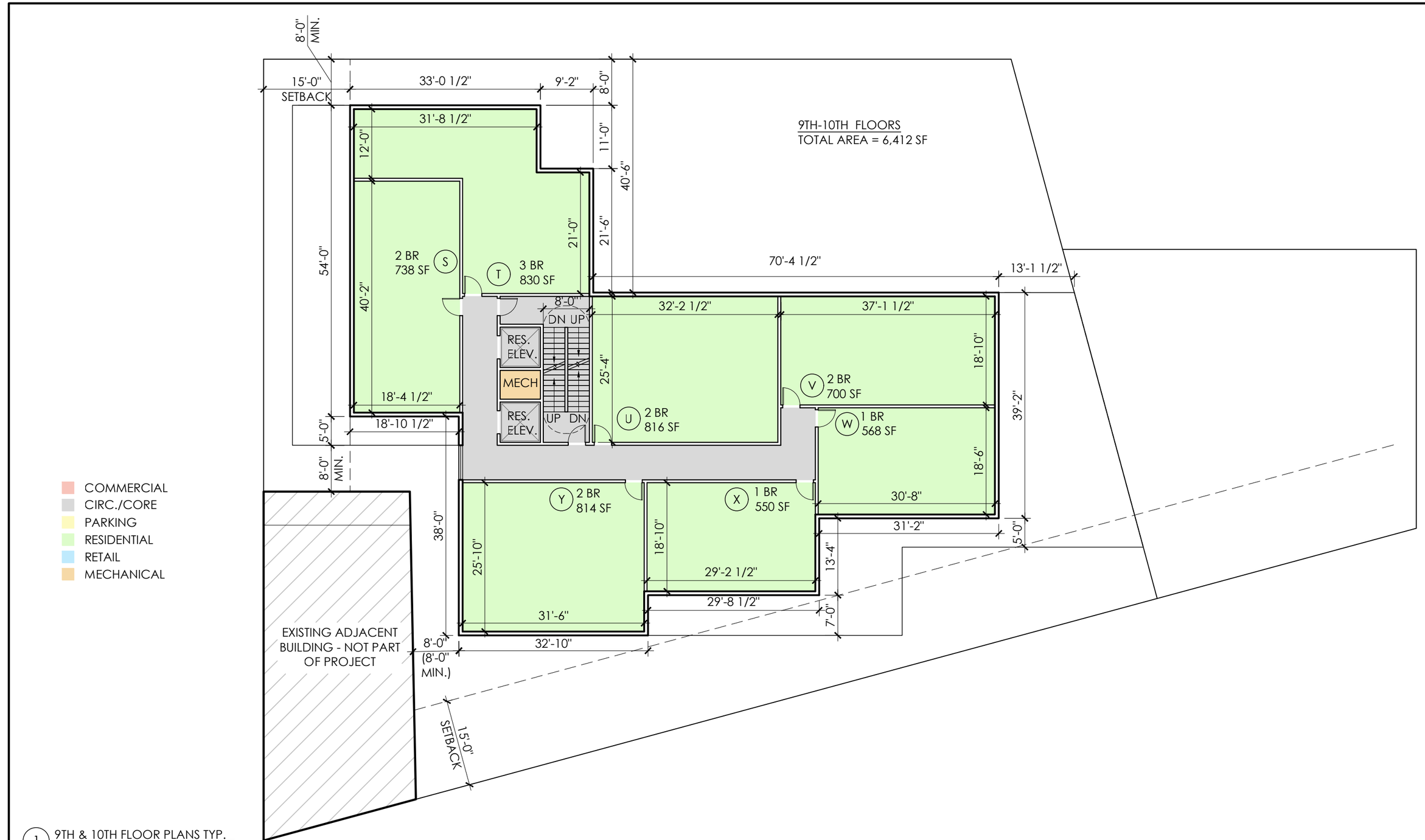

1 9TH & 10TH FLOOR PLANS TYP.
SCALE: 1/16" = 1'-0"

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9TH & 10TH FLOOR PLANS

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 20 OF 23

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		Proposed Floor Area					
Floor	Existing	Gross Commercial	Gross Residential	Gross FA (Com.+ Res.)	Approx. Parking, Mech & Plumbing Deduct. 2%	Qual. Housing Deductions	Zoning FA (Com.+ Res.)
Cellar		6,348 SF	8,760 SF	15,108 SF			0 SF
Ground Floor	15,108.00 SF	8,281 SF	6,708 SF	14,989 SF	4,561 SF	0	10,428 SF
2nd Floor	11,654.00 SF	8,374 SF	4,152 SF	12,526 SF	251 SF	2,650 SF	9,625 SF
3rd Floor	11,654.00 SF	8,374 SF	4,152 SF	12,526 SF	251 SF	211 SF	12,065 SF
4th Floor	n/a	0	8,819 SF	8,819 SF	251 SF	656 SF	7,912 SF
5th Floor	n/a	0	8,819 SF	8,819 SF	176 SF	656 SF	7,987 SF
6th Floor	n/a	0	8,524 SF	8,524 SF	176 SF	656 SF	7,692 SF
7th Floor	n/a	0	8,524 SF	8,524 SF	170 SF	656 SF	7,698 SF
8th Floor	n/a	0	8,524 SF	8,524 SF	170 SF	656 SF	7,698 SF
9th Floor	n/a	0	6,412 SF	6,412 SF	128 SF	561 SF	5,723 SF
10th Floor	n/a	0	6,412 SF	6,412 SF	128 SF	561 SF	5,723 SF
Roof	n/a	0	500.00 SF	500.00 SF	0		500 SF
Total SF	**38,416.00 SF**	**31,377.00 SF**	**80,306.00 SF**	**111,683.00 SF**	**6,262.54 SF**	**7,262.50 SF**	**83,050 SF**

1) Qual Housing Deduction for Residential Lobby - 1st floor
2) Qual. Housing Deduction for required recreation space - 2nd floor
3) Qual. Housing Deductions for corridors - 50% for density of less than 11 units per floor - 3rd floor
4) Qual. Housing Deductions for corridors - 50% for density of less than 11 units per floor, 50% for daylight in corridors - 4th-10th floors

1 PROPOSED FAR

Proposed Unit Type Matrix					
Floor	0 BR Type B, I-1, I-2, I-3, M	1 BR Type A, L, F, G, N, Q, W, X	2 BR Type D, E, H, J, K, L, O, R, S, U, V, Y	3 BR Type P, T	Totals per floor
Cellar	-	-	-	-	n/a
1st Floor	-	-	-	-	n/a
2nd Floor	0	0	0	0	0
3rd Floor	2	3	0	0	5
4th Floor	2	3	5	1	11
5th Floor	2	3	5	1	11
6th Floor	2	3	5	1	11
7th Floor	2	3	5	1	11
8th Floor	2	3	5	1	11
9th Floor	0	1	5	1	7
10th Floor	0	1	5	1	7
Roof	-	-	-	-	n/a
Totals per Type	12	20	35	7	74

2 PROPOSED UNIT TYPE MATRIX

Proposed MIH / Market Apartments & Parking			
Total Number of apts	Estimated MIH apts (20%)	Estimated market apts (80%)	Required parking spaces (50% market)
74	15	59	30

3 PROPOSED MIH / MARKET APARTMENTS & PARKING

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FAR CALCULATION & UNIT TYPE MATRIX

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/31/2020
SCALE: N.T.S.
SHEET 21 OF 23

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LEGEND

- PROPOSED 10-STORY BUILDING - LOT 43
- POSSIBLE 8 STORY BUILDING - LOT 34
- POSSIBLE 13 STORY BUILDING - LOT 32
- POSSIBLE 8 STORY BUILDING - LOT 42



1 SITE PLAN - PROPOSED & POSSIBLE BUILDINGS
SCALE: 1/32" = 1'-0"

MANHATTAN AVE



2 BUILDING ENVELOPE - AXONOMETRIC - PROPOSED & POSSIBLE BUILDINGS
SCALE: N.T.S.

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PROPOSED & POSSIBLE DEVELOPMENT SCENARIO

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 22 OF 23

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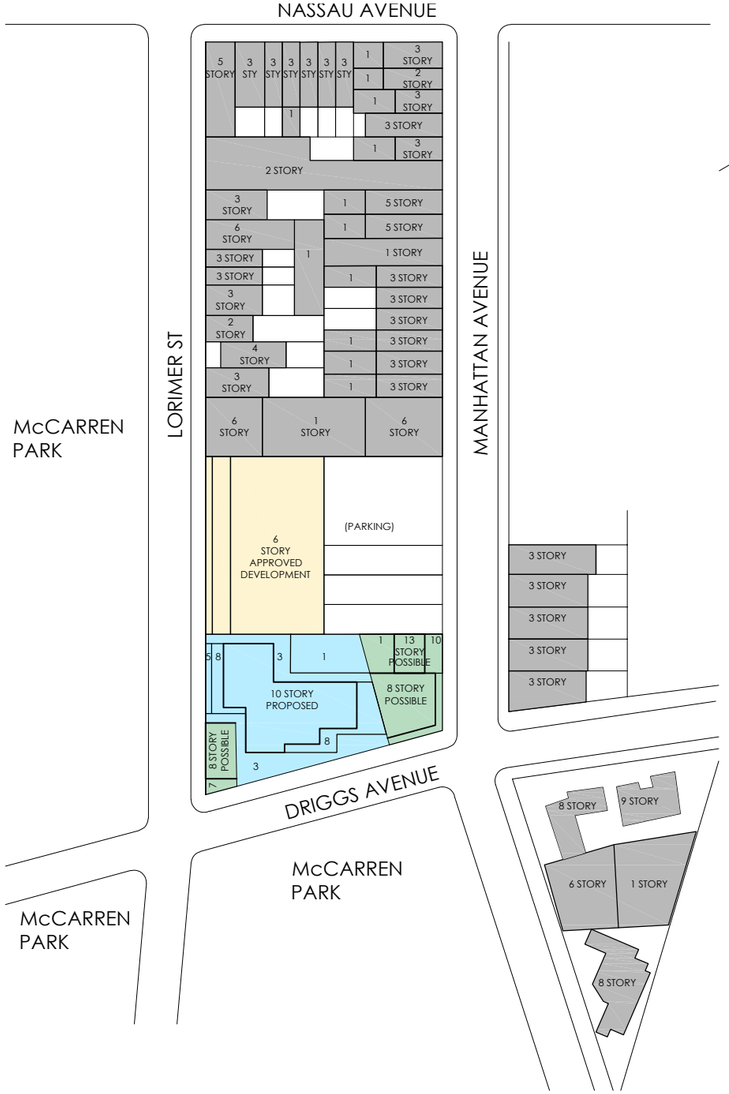

1 SITE PLAN - EXISTING & POSSIBLE DEVELOPMENT
SCALE: 1/128" = 1'-0"



2 MASSING DIAGRAM - EXISTING & POSSIBLE DEVELOPMENT
SCALE: N.T.S.

LEGEND

- PROPOSED BUILDING - LOT 43
- POSSIBLE BUILDINGS - LOTS 34, 32, 42
- APPROVED BUILDINGS
- EXISTING BUILDINGS

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PROPOSED & POSSIBLE DEVELOPMENT SCENARIO

840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 01/22/2020
SCALE: AS NOTED
SHEET 23 OF 23

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Appendix C: WRP Assessment

FOR INTERNAL USE ONLY	WRP No. 20-029
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

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

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

A. APPLICANT INFORMATION

Name of Applicant: Shabsi Parnes

Name of Applicant Representative: Equity Environmental Engineering

Address: 500 International Dr. Suite 150, Mount Olive NJ 07828

Telephone: 917-470-3077 Email: kira.xiang@equityenvironmental.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The Applicant, Shabsi Parnes, is seeking the approval of a zoning map amendment and a zoning text amendment to facilitate the development of 563 Manhattan Avenue (Block 2679, Lot 32), 561 Manhattan Avenue (Block 2679, Lot 34), 334 Driggs Avenue (Block 2679, Lot 42), and 840 Lorimer Street (Block 2679, Lot 43).

The zoning map amendment would rezone Block 2679, Lots 42 and p/o 43 from a M1-2/R6 (MX-8) zoning district to a C4-5D zoning district and Block 2679, Lots 32, 34, and p/o 43 from a R6A/C2-4 zoning district to a C4-5D zoning district. The zoning text amendment would affect Zoning Resolution Appendix F by modifying Brooklyn CD 1 Map with MIHA.

2. Purpose of activity

The Proposed Project would demolish the existing massing on 840 Lorimer Street (Block 2679, Lot 43) and construct a new 111,683 GSF, 10-story, 115-foot-tall mixed-use building to help induce the development of an underutilized lot within a mixed residential and commercial district in a growing neighborhood of Brooklyn as well as to provide permanently affordable housing units in align with the needs of city's affordable housing provision goals.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 2679, Lots 32, 34, 42, 43

Street Address: 563 and 561 Manhattan Avenue, 334 Driggs Avenue, 840 Lorimer Street

Name of water body (if located on the waterfront): _____

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

☐ City Map Amendment	☐ Zoning Certification	☐ Concession
☑ Zoning Map Amendment	☐ Zoning Authorizations	☐ UDAAP
☑ Zoning Text Amendment	☐ Acquisition – Real Property	☐ Revocable Consent
☐ Site Selection – Public Facility	☐ Disposition – Real Property	☐ Franchise
☐ Housing Plan & Project	☐ Other, explain: _____	
☐ Special Permit		

(if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Board of Standards and Appeals ☐ Yes ☑ No

☐ Variance (use)
☐ Variance (bulk)
☐ Special Permit

(if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

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

State Actions/Approvals/Funding

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

Federal Actions/Approvals/Funding

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

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

E. LOCATION QUESTIONS

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

   ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)

   ☐ Special Natural Waterfront Area (SNWA) (*4.1*)

   ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)

   ☐ Recognized Ecological Complex (REC) (*4.4*)

   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

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

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

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

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

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

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

G. CERTIFICATION

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

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

Applicant/Agent's Name: Equity Environmental Engineering

Address: 500 International Dr, Suite 150 Mount Olive NJ 07828

Telephone: 917-470-3077 Email: kira.xiang@equityenvironmental.com

Applicant/Agent's Signature: Kira Xiang

Date: 5/6/20

Submission Requirements

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

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

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

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

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

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

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

Applicant Checklist

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

New York City Coastal Zone

The Project Site is located within the boundaries of the New York City Coastal Zone and is subject to CEQR discretionary review procedures; therefore, the proposed action must be reviewed and assessed for consistency with the policies set forth in the New York City Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation and public use of the waterfront while minimizing any potential conflicts among these objectives. The WRP Consistency Assessment Form (CAF) was completed and is provided in Appendix C. The CAF assists applicants in identifying the relevant WRP policies and certifying that the project is consistent with the WRP.

The Proposed Action places one new mixed-use structure in a designated "AE Zone" within the 1% annual chance floodplain (100-year flood zone) as per the 2007 effective Flood Insurance Rate Maps (FIRMS).

High Risk Areas

Zone AE are areas that have a 1% probability of flooding every year (also known as the "100-year floodplain"), and where predicted flood water elevations above mean sea level have been established. Properties in Zone AE are considered to be at high risk of flooding under the National Flood Insurance Program (NFIP). Buildings located in an AE Zone are required to comply with Appendix G of the Building Code.

The WRP Consistency Assessment Form (CAF) was completed to determine the consistency of the proposed project with the Waterfront Revitalization Program's (WRP's) ten policies. Additionally, as the site is located within the boundaries of a flood zone, the Flood Evaluation Worksheet was also completed. The Flood Evaluation Worksheet allows applicants to calculate future flood elevations and assess site-specific risks to vulnerable or critical project features. (Refer to Appendix C and Policy 6).

Based on the information provided in the CAF, a Detailed Methodology and policy response is provided below, which incorporates the findings of the Flood Evaluation Worksheet, and the Proposed Actions consistency with the applicable WRP Policies (Policy 1 and 6) and Sub-Policies (Policy 1.1, 1.3, 1.5, 6.1, 6.2).

Waterfront Revitalization Program

Because the Project Site is within the Coastal Management Zone, it is subject to consistency review under the New York City Waterfront Revitalization Program (WRP). The WRP Form was completed, and is attached. Based on the information provided in the WRP Form, the proposed project requires assessment relative to the following policies:

Policy 1: Support and Facilitate Commercial and Residential Development in Areas Well-Suited to Such Development

Sub-Policy 1.1: Encourage commercial and residential development in appropriate coastal zone areas.

Criteria that should be considered to determine areas appropriate for reuse through public and private actions include: compatibility with the continued functioning of the designated Special Natural Waterfront Areas, the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or Significant Maritime and Industrial Areas, where applicable; the absence of unique or significant

natural features or, if present, the potential for compatible development; the presence of substantial vacant or underused land; proximity to existing residential or commercial uses; the potential for strengthening upland residential or commercial areas and for opening up the waterfront to the public; transportation access; the maritime and industrial jobs potentially displaced or created; and the new opportunities created by redevelopment. Public actions— such as property disposition, urban renewal plans, and infrastructure provision—should facilitate

redevelopment of underused property to promote housing and economic development and enhance the city's tax base, subject to consideration of Policy 2, where applicable.

The proposed action is consistent with this policy. It would allow redevelopment of an underutilized site in close proximity to established and newly emerging residential, commercial and retail areas that is well served by public transit, local commercial services, and open space and community facilities.

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

Encourage development at a density compatible with the capacity of surrounding roadways, mass transit, and essential community services such as public schools. Lack of adequate local infrastructure need not preclude development, but it may suggest the need to upgrade or expand inadequate or deteriorated local infrastructure.

The proposed action is consistent with this policy. The project would redevelop an underutilized site for retail, office, and residential uses in close proximity to high capacity roadways, mass transit infrastructure, and would integrate the site into the surrounding residential and commercial area.

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

Residential, commercial, and other non-industrial projects that comply with Article 6 Chapter 2 of the New York City Zoning Resolution satisfy the consistency requirements for Policy 1.2. If the project is not subject to the Zoning Resolution, the standards of Article 6 Chapter 2 of the Zoning Resolution should be used as guidelines for development and the inclusion of open space, visual access, upland connections, and water-related uses.

The proposed action is consistent with this policy. The new development would incorporate building features as required by the New York City Building Code Appendix G Flood Resistant Construction Standards.

Policy 6: Minimize Loss of Life, Structures, Infrastructure, and Natural Resources Caused by Flooding and Erosion, And Increase Resilience to Future Conditions Created by Climate Change.

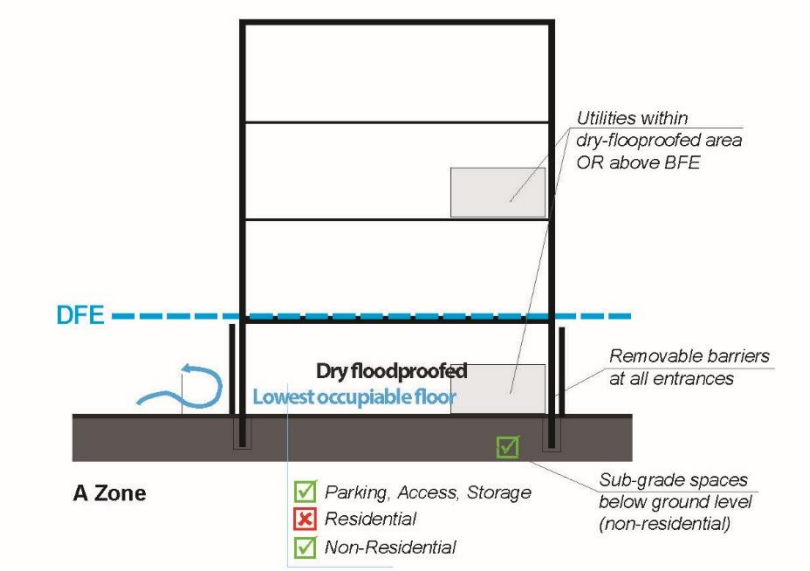
Policy 6.1 Minimize losses from flooding and erosion by employing non-structural and structural design measures appropriate to the site, the use of the property to be protected, and the surrounding area.

Where shoreline protection is necessary to protect development, it should incorporate climate change projections into its design, pursuant to Policy 6.2. Shoreline protection can be structural, natural, or a hybrid. An appropriate form of shoreline protection should protect public health and safety while minimizing impacts on ecosystems and public access.

As indicated below in **Figure 2.1-2**, the Project Site is located within the 2007 FIRMs 1% annual chance floodplain (100-year flood zone). Under Policy 6, the primary goal for projects within flood hazard areas is to reduce the risks posed by current and future flood events, mainly major storms that are likely to increase due to climate change and sea level rise.

As the project site falls within the 1% annual chance floodplain, the proposed building would be subject to compliance with NYC Building Code Appendix G. Appendix G requires owners of severely damaged or destroyed buildings in the 1% annual chance floodplain to comply with the flood resistant construction standards of the Building Code when they rebuild. The same requirements are applicable to any new development, or substantially improved properties, whether the development is located in whole or in part within the 1% annual chance floodplain. However, as further discussed in Policy 6.2 below, the proposed building design incorporates dry-floodproofing building features below-grade to protect the critical features (*mechanical and utility systems*) contained within the cellar level. Dry-floodproofing, as shown below in **Figure 2.1-1**, is a flood resilient construction practice that is designed to seal a building's exterior walls to flood waters, while ensuring that the building has the ability to resist water loads below the expected level of flooding. Therefore, the Proposed Project would meet the requirements of building-scale resiliency measures to reduce the risks of damage from current and future coastal hazards and would be consistent with Policy 6.1.

Figure 2.1-1: Flood Zone Construction – Dry Floodproofing[1]



[1] While floodproofing can be employed as a construction measure for any building, the below figure shows the requirements under the building code related to sites within an A Zone.

Figure 2.1-2: 2007 FIRM vs. 2015 PFIRM

Comparison of Flood Hazard

Effective & Preliminary Flood Hazards

FEMA

Effective



Preliminary



Effective	
POI Longitude/Latitude	-73.9508, 40.7221
Effective FIRM Panel	3604970202F
Effective Date	9/5/2007
Flood Zone	AE
Static BFE*	10.0 Feet
Flood Depth	Not Available
Vertical Datum	NGVD29

Preliminary	
POI Longitude/Latitude	-73.9508, 40.7221
Preliminary FIRM Panel	3604970202G
Preliminary Issue Date	1/30/2015
Flood Zone	X
Estimated Static BFE*	Not Available
Estimated Flood Depth	Not Available
Vertical Datum	Not Available

* A **Base Flood Elevation** is the expected elevation of flood water during the 1% annual chance storm event. Structures below the estimated water surface elevation may experience flooding during a base flood event.

Hazard Level	Flood Hazard Zone
High Flood Hazard	**AE, A, AH, AO, VE and V Zones.** Properties in these flood zones have a 1% chance of flooding each year. This represents a 26% chance of flooding over the life of a 30-year mortgage.
Moderate Flood Hazard	**Shaded Zone X.** Properties in the moderate flood risk areas also have a chance of flooding from storm events that have a less than 1% chance of occuring each year. Moderate flood risk indicates an area that may be provided flood risk reduction due to a flood control system or an area that is prone to flooding during a 0.2% annual chance storm event. These areas may have been indicated as areas of shallow flooding by your community.
	Unshaded Zone X. Properties on higher ground and away from local flooding sources have a reduced flood risk when compared to the Moderate and High Flood Risk categories. Structures in these areas may be affected by larger storm events, in excess of the 0.2% annual chance storm event.
Low Flood Hazard	**Insurance Note:** High Risk Areas are called 'Special Flood Hazard Areas' and flood insurance is mandatory for federally backed mortgage holders. Properties in Moderate and Low Flood Risk areas may purchase flood insurance at a lower-cost rate, known as Preferred Risk Policies. See your local insurance agent or visit https://www.fema.gov/national-flood-insurance-program for more information.

Disclaimer: This report is for informational purposes only and is not authorized for official use. The positional accuracy may be compromised in some areas. Please contact your local floodplain administrator for more information or go to msc.fema.gov to view an official copy of the Flood Insurance Rate Maps.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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

The following assessment was prepared in accordance with *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance Document for Policy 6.2*[2]. The three basic steps to assessing an action's consistency with Policy 6.2 of the Waterfront Revitalization Program include identifying vulnerabilities and consequences, identifying adaptive strategies, and assessing policy consistency.

Sub-Policy 6.2 Detailed Methodology

1. Identify Vulnerabilities and Consequences

a) Assess the Project Area's Exposure to current and future flood risk (Flood-Evaluation Worksheet)

The information in the following subsections is based on the results of the completed flood evaluation worksheet, which is provided in Appendix C.

New York City is highly susceptible to coastal hazards such as flooding, hurricanes, and storm surges as a result of climate change and sea level rise. As indicated below in **Table 2.1-1**, according to the New York City Panel on Climate Change (NPCC)[3] 2015 projections, sea levels have risen 1.1 feet at the Battery since 1900, and higher sea levels in the future are highly anticipated.

Table 2.1-1: Sea Level Rise Projections

	Low Estimate	Middle Range			High Estimate
	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2020s	+ 2 in.	+ 4 in.	+ 6 in.	+8 in.	+10 in.
2050s	+8 in.	+ 11 in.	+16 in.	+21 in.	+30 in.
2080s	+13 in/	+18 in.	+29 in.	+39 in.	+58 in.
2100	+15 in.	+22 in.	+36 in.	+50 in.	+75 in.

Sea level rise projections, relative to the 2000-2004 base period (NPCC, 2015).

The Project Site is located within the boundaries of 1% annual chance floodplain pursuant to the 2007 Effective FIRMs. **Figure 2.1-3** and **Figure 2.1-4** show future flood and high tide projections for 2020, **Figure 2.1-5** and **Figure 2.1-6** show future flood and high tide projections for 2050,

[2] https://www1.nyc.gov/assets/planning/download/pdf/planning-level/waterfront/wrp/revisions-2017/policy-62-guidance-document-nov2018.pdf

[3] http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc

Figure 2.1-7 and **2.1-8** show future flood and high tide projections for 2080, and **Figure 2.1-9** and **Figure 2.1-10** show Future flood and high tide projections for 2100.[4]

Figure 2.1-3: Future 2020's Flood Projections

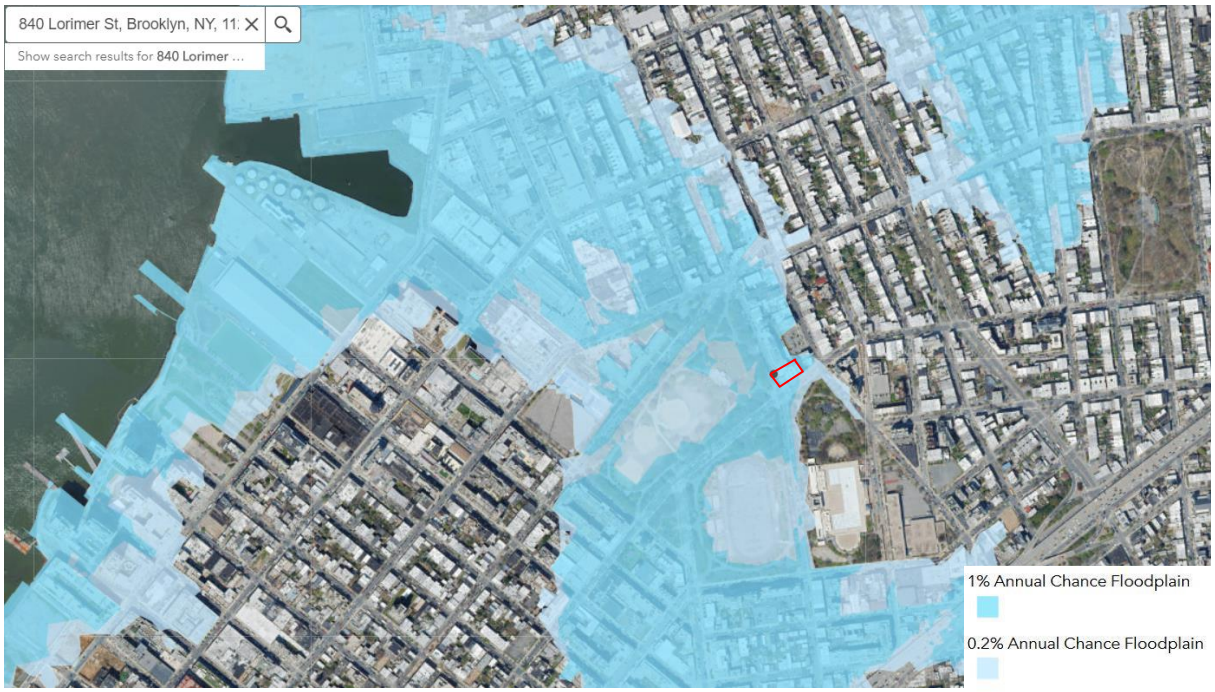


Figure 2.1-4: Future 2020's High Tide



[4] https://www1.nyc.gov/site/planning/data-maps/flood-hazard-mapper.page

Figure 2.1-5: Future 2050's Flood Projections

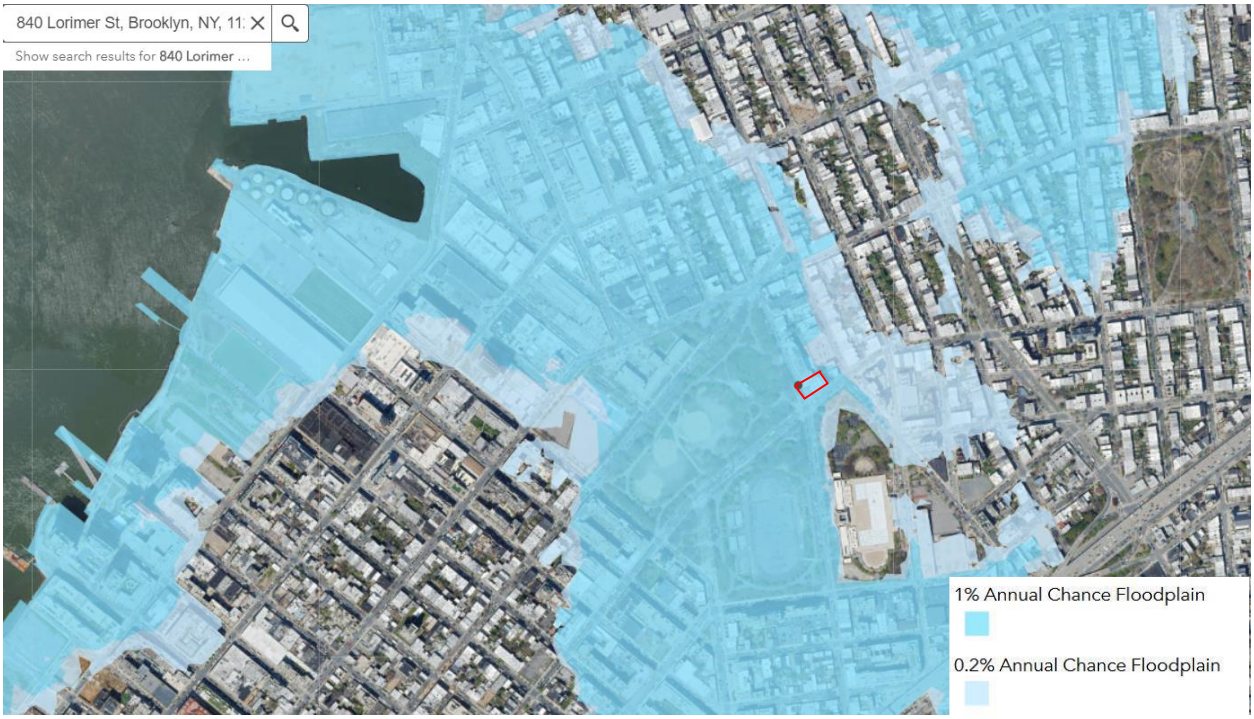


Figure 2.1-6: Future 2050's High Tide



Figure 2.1-7: Future 2080's Flood Projections

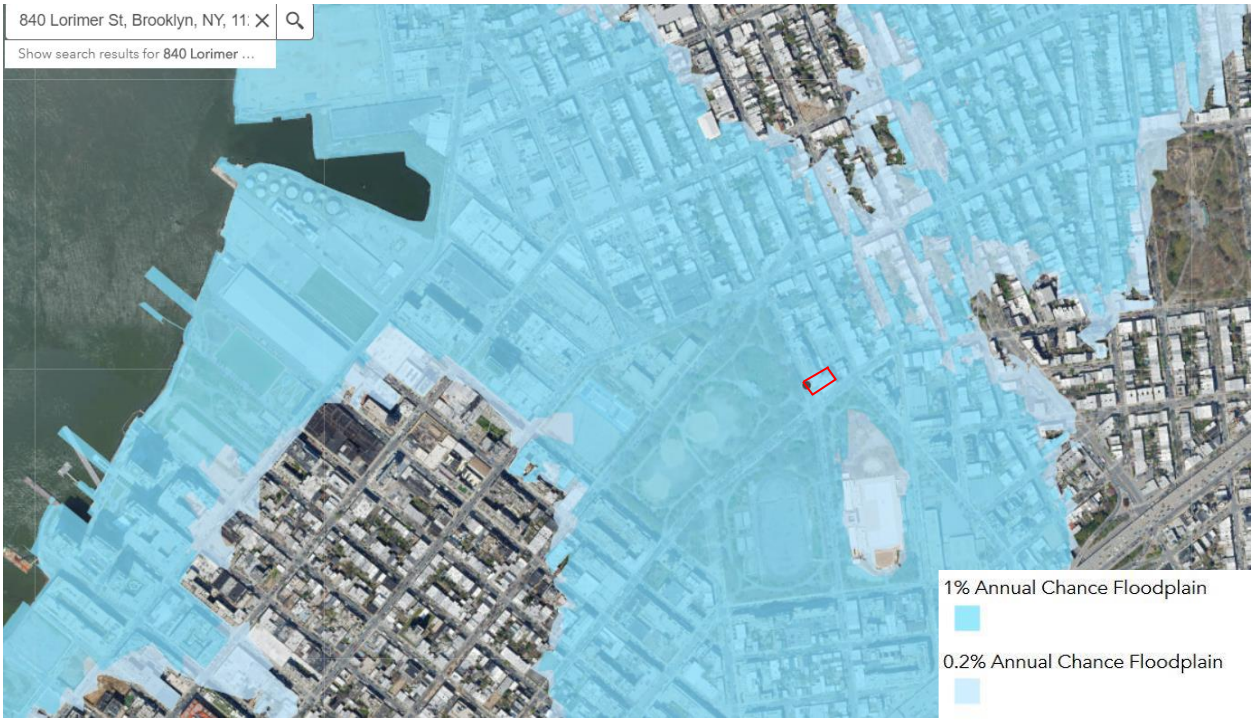


Figure 2.1-8: Future 2080's High Tide



Figure 2.1-9: Future 2100's Flood Projections

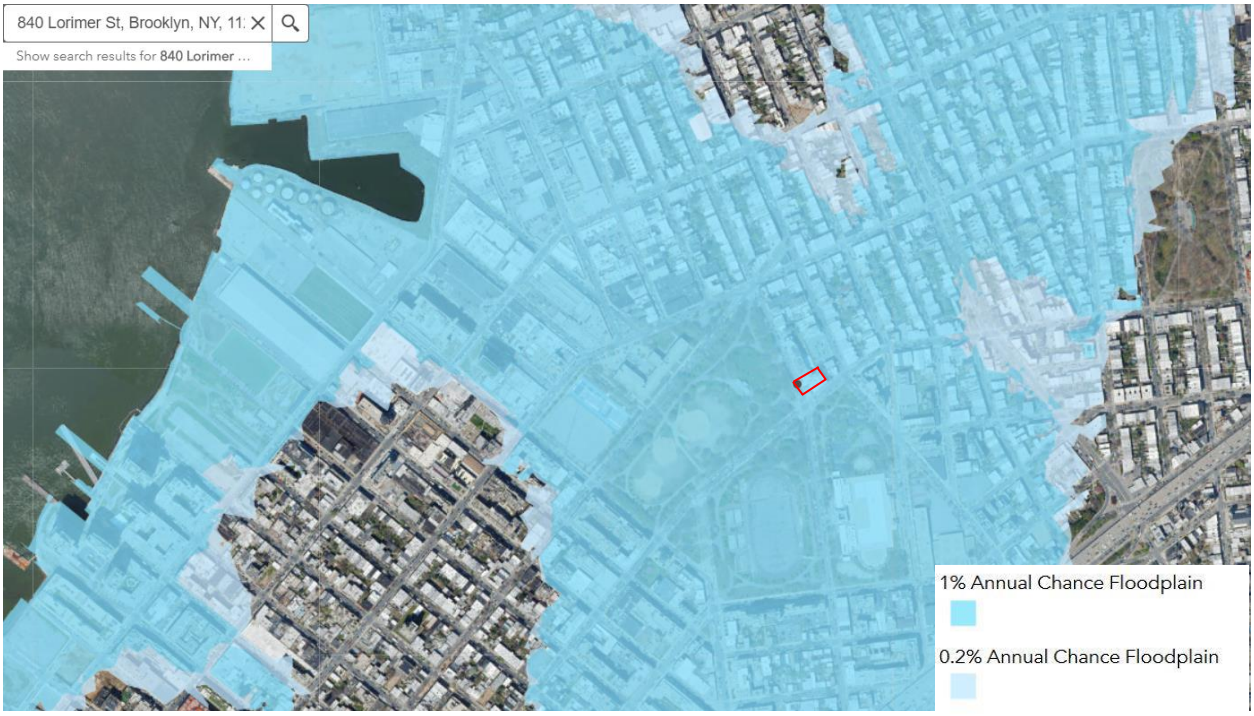


Figure 2.1-10: Future 2100's High Tide



As shown in **Figure 2.1-2** above, the Project Site is located within the 1% chance annual floodplain based on FEMA's FIRM maps. Furthermore, as indicated in **Figures 2.1-3** to **2.1-10** above, the Project Site will continue to be in Zone AE under future flood projections according to the NYC flood hazard mapper[5]. Based on these projections, the Project Site is anticipated to be impacted by future hide tides under sea level rise projections.

*The Flood Evaluation Worksheet, provided in **Appendix C**, was completed using the site-specific data as follows:*

The Proposed Development has one integrated building structure on the project lots. As shown in **Figure 2.1-11 to 2.1-12** below, the cellar floor level (base plane) is located 2.75 feet in elevation below grade (NAVD88 Datum). The first-floor building space level is located 12.25 feet in elevation above grade (NAVD88 Datum). The first-floor mechanicals level is located 16.25 feet in elevation above grade (NAVD88 Datum).

Regulatory floodplains are defined by the elevation of the base flood (BFE) in relation to the elevation of the ground. According to datum (NAVD88) obtained from the National Oceanic and Atmospheric Administration (NOAA)[6] website for the nearest NOAA station – Williamsburg Bridge Station (Station ID 8518699) - the adjusted mean of the higher high-water height (MHHW) is 2.47 feet. Pursuant to the 2007 Effective FIRMs, the 1% flood height for the AE zone in which the project is located in is 10.0 feet in NGVD29, which equals to 8.90 feet in NAVD88.

*Based on the results of the calculations completed in the flood evaluation worksheet using site-specific data, **Figure 2.1-13** shows the results of the 1% Flood Elevation and Sea Level Rise projections, and **Figure 2.1-14** shows the results of the MHHW and SLR projections.*

[5] Not intended for site-specific analysis, but serves as an estimate of future flood risk.

[6] https://tidesandcurrents.noaa.gov/datums.html?id=8518699

Figure 2.1-11 Proposed Site Plan and Building Envelope

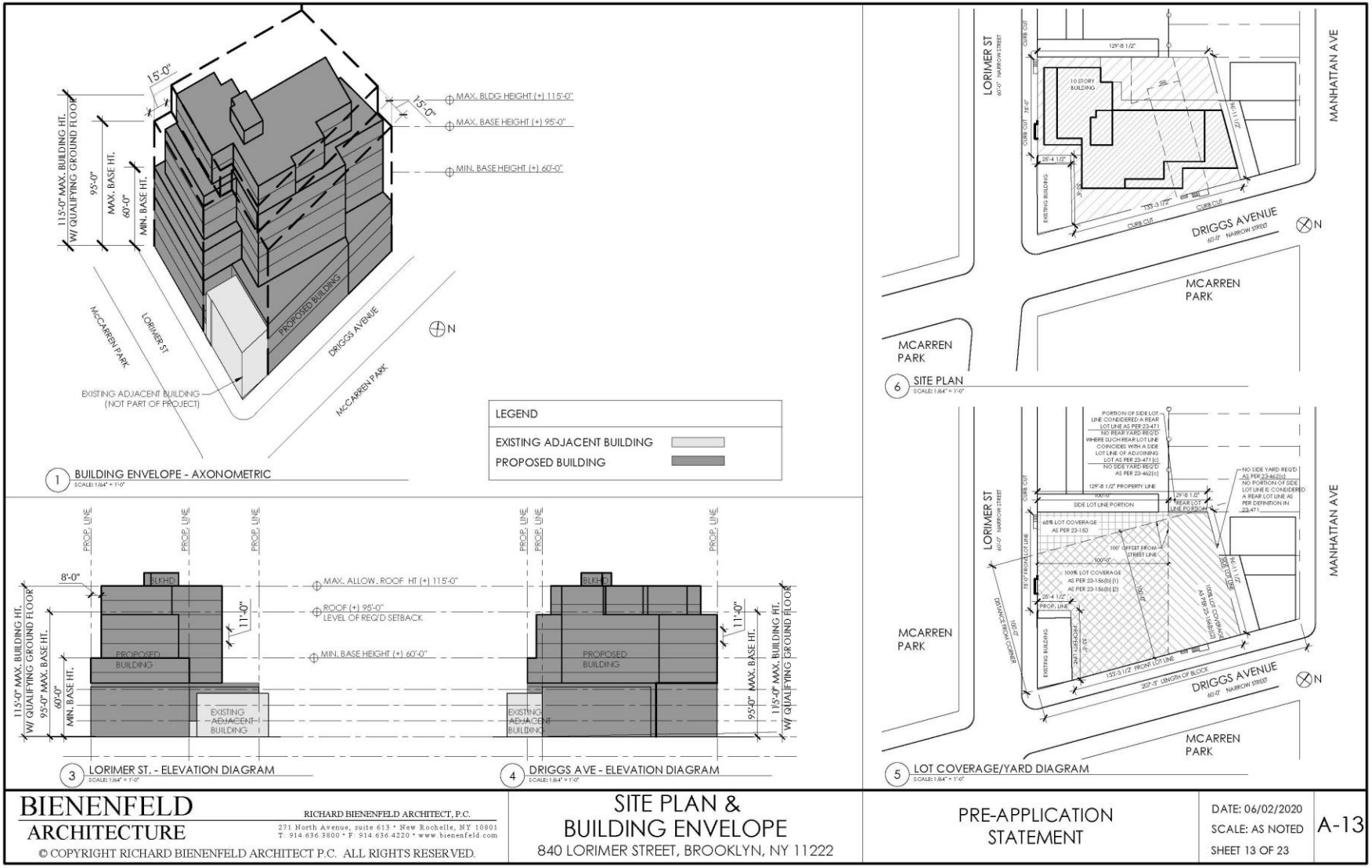


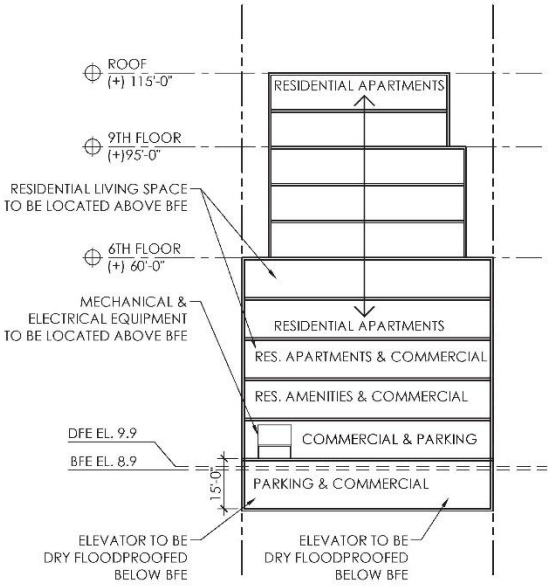
Figure 2.1-12 Proposed Building Section



1 EFFECTIVE FIRM 2007 - 3604970202F



2 PRELIMINARY FIRM 2013 - 3604970202G



3 DIAGRAMMATIC SECTION

FLOOD DESIGN NOTES
1. BASE FLOOD ELEVATION (BFE) IS 10 USING NAGD 29 DATUM TO CONVERT NAGD 29 TO NAVD 88, SUBTRACT 1.10 BFE 10 - 1.10 = 8.9 BFE IN NAVD 88 DATUM
2. DESIGN FLOOD ELEVATION (DFE) IS 9.9 ,WHICH IS 1'-0" ABOVE BFE FOR PROPOSED MIXED-USE BUILDING
3. MECHANICAL AND ELECTRICAL EQUIPMENT TO BE LOCATED ABOVE THE BFE
4. IN CELLAR, ELEVATOR REQUIRES DRY FLOODPROOFING
5. IN CELLAR, PARKINGAND COMMERCIAL SPACE REQUIRE WET FLODOPROOFING

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FIRM & BFE
840 LORIMER STREET, BROOKLYN, NY 11222

PRE-APPLICATION STATEMENT

DATE: 06/02/2020
SCALE: N.T.S.
SHEET 24 OF 24

A-24

Figure 2.1-13: 1% Flood Elevation and SLR Projections

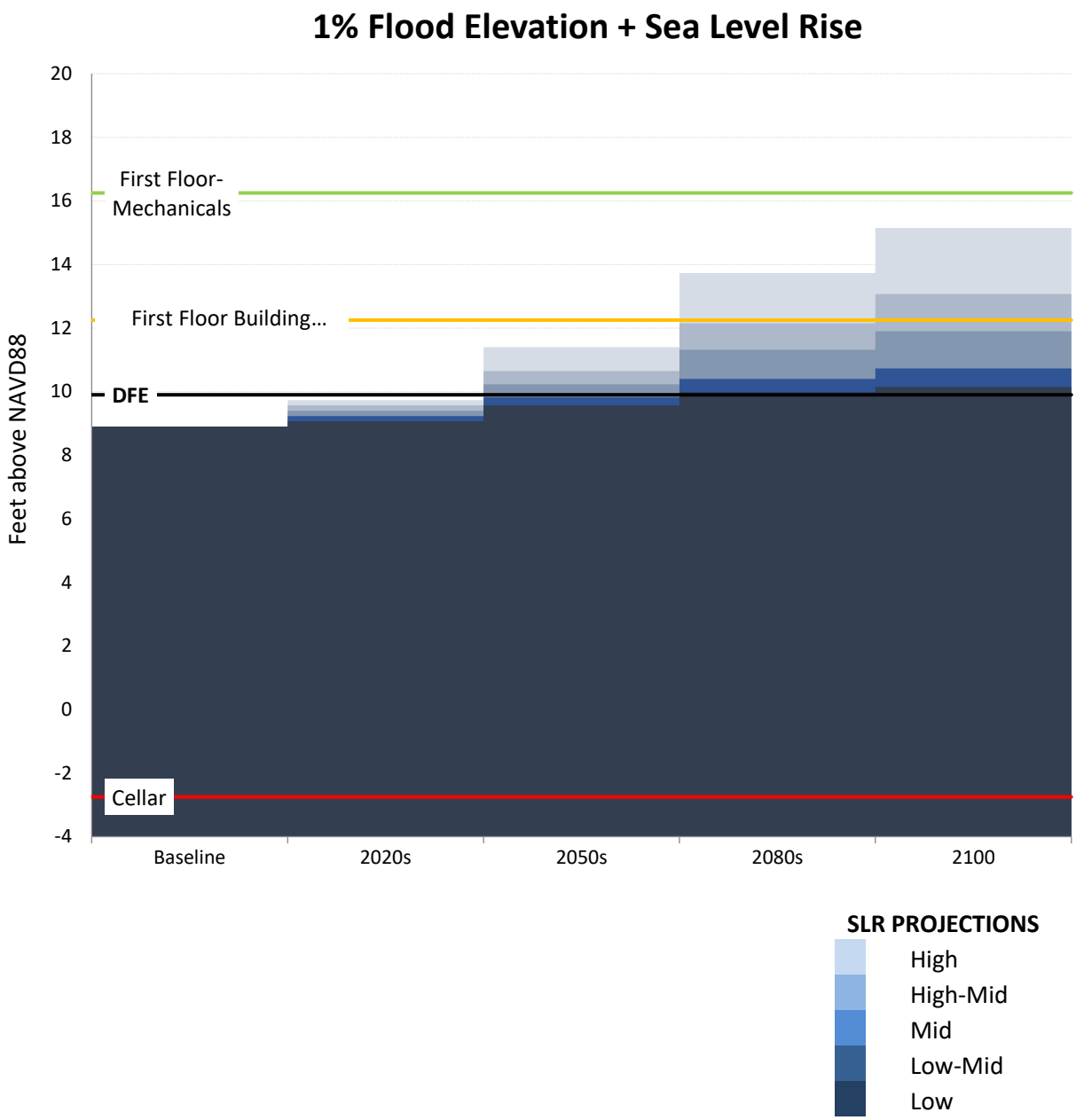
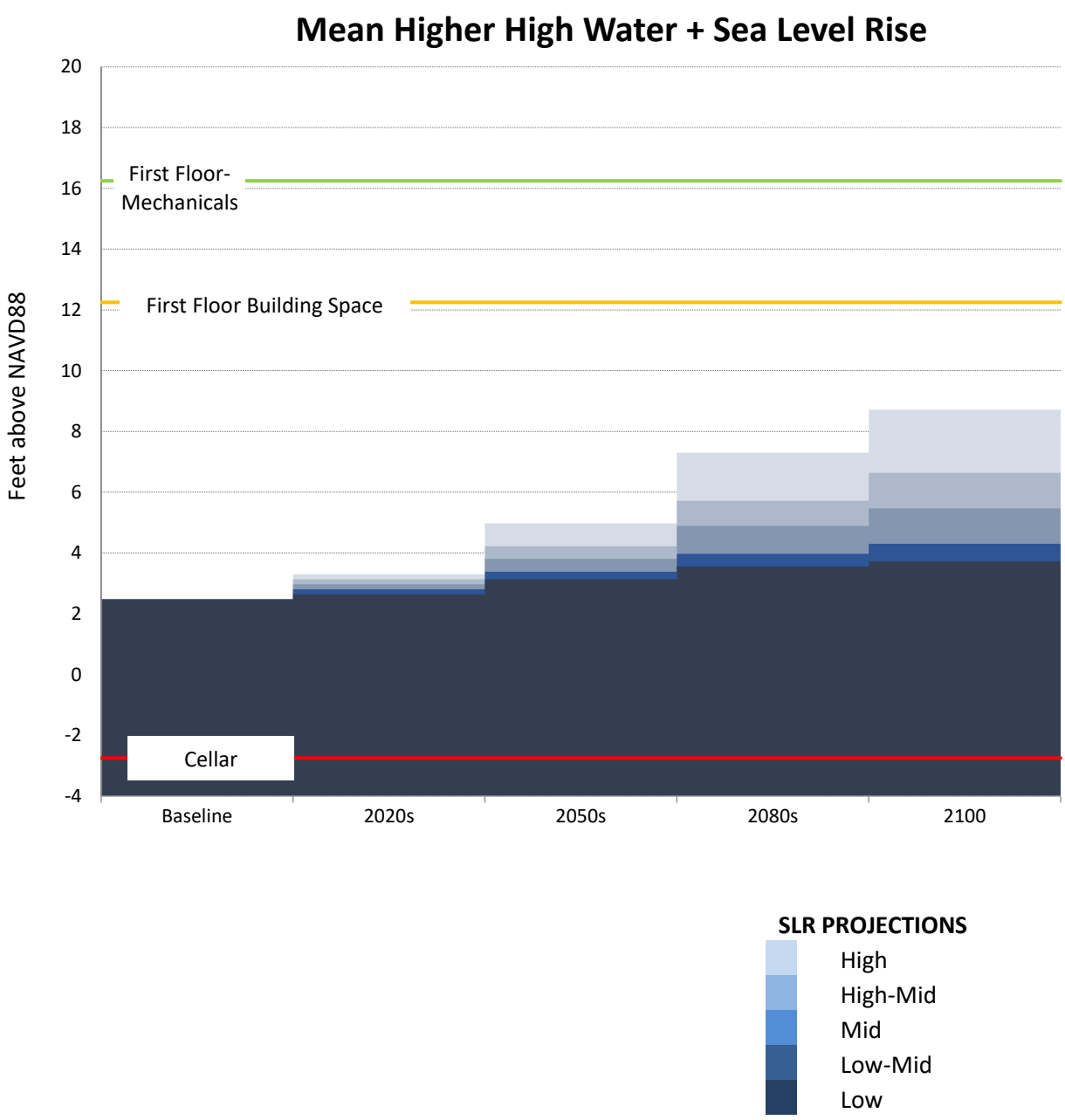


Figure 2.1-14: MHHW and SLR Projections



b) Identify any Project Features that may be located below the elevation of the 1% floodplain over the lifespan of the project under any SLR scenario:

The Proposed Development's cellar floor level and first-floor building space level have the potential to be impacted by the 1% chance annual floodplain. The cellar-floor level, located at an elevation of -2.75' (NAVD88), would contain enclosed parking spaces, walls, flooring, elevator shaft, and building mechanicals. The first-floor building space level would contain enclosed parking spaces, walls, flooring, residential lobby, and elevator shaft.

c) ***Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.***

The project features that are listed as vulnerable on the cellar level include enclosed parking spaces, walls, flooring, and elevator shaft. The project feature listed as critical on the cellar level is building mechanicals. There are no project features that are listed as potentially hazardous below the level of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.

d) Identify if the project or action would facilitate the development of any vulnerable, critical, or potentially hazardous features, as defined under "Key Terms" below, within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections:

Vulnerable, Critical or Potentially Hazardous Features Pursuant to Policy 6.2 guidance[7]:

- ***Vulnerable Features if damaged have the potential to incur significant damage if flooded.***

  These include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures; storage areas; enclosed recreational facilities; and bulkheads, revetments, piers, platforms, and other in-water infrastructure elements.

  The project features that are listed as vulnerable are on the cellar level include enclosed parking areas, walls, flooring, and elevator shaft. On the first-floor building space level, the vulnerable features include enclosed parking spaces, walls, flooring, residential lobby, and elevator shaft.

- ***Critical Features if damaged, would have severe impacts on the project and its ability to function.***

  The project features that if damaged would have severe impacts on the project and its ability to function as designed. Examples include electrical utilities, building heating and cooling systems, telephone and data connection and distribution rooms, and other supporting and related building technology and utility spaces.

  The project feature listed as critical on the cellar level is building mechanicals. There are no project features that are listed as critical in the first-floor building space level.

- ***Potentially Hazardous Features, if damaged or made insecure by flooding, could potentially adversely affect the health and safety of the public and the***

[7] http://www1.nyc.gov/assets/planning/download/pdf/applicants/wrp/revisions-2017/policy-62-guidance-document.pdf

environment.

Examples include hazardous materials, including highly volatile, flammable, explosive, toxic, or water-reactive materials; and materials that have the potential to become waterborne in the event of a flood and would be dangerous to the health and safety of the public and the environment, such as the storage of construction materials, demolition debris, and aggregate materials.

The Proposed Development would not introduce any hazardous features, materials or substances that if made insecure, would result in a threat to public health or the environment.

The Following are Vulnerable and Critical Features Project Features:

- **The Cellar Level:** The cellar level, located at an elevation of -2.75' (NAVD88), is subject to flooding the 1% annual chance flood and MHHW currently, and in the future under all SLR projections from 1% annual chance flood and MHHW.

  The cellar-floor level, located at an elevation of -2.75' (NAVD88), would contain vulnerable features as enclosed parking spaces, walls, flooring, and elevator shaft. The critical feature at the cellar level is building mechanicals.

- **The First-Floor Building Space Level:** The first-floor building space level, located at an elevation of 12.25' (NAVD88), would contain vulnerable features as enclosed parking spaces, walls, flooring, residential lobby, and elevator shaft.

- **The First-Floor Mechanicals Level:** The first-floor mechanicals level, located at an elevation of 16.25' (NAVD88), would contain building mechanicals.

  These features, if flooded without protection features identified in Appendix G of the NYC Building Code, could be significantly damaged resulting in the potential disruption of the building's function.

  To protect these features from damage related to future flood events the project design includes the employment of dry-floodproofing by means of a waterproofing membrane at the full height of the foundation wall around the perimeter of the building. With these provisions in place, the features within this space would not be considered critical or vulnerable. Therefore, the Proposed Action complies with Policy 6.2.

2. Identify Adaptive Strategies

The goal of Step 2 under WRP Policy 6.2 is to assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning. Assess how applicable codes and regulations, planned flood damage reduction elements and adaptive measures, or likely future infrastructure investments (beyond the scope of the proposed project), would or would not reduce potential flood damage for any proposed vulnerable, critical, or potentially hazardous features.

Because the Project Site is susceptible to the impacts of sea level rise and future flood events, it is recommended that building scale resiliency measures and flood mitigation strategies be considered. Pursuant to *Policy 6.2: Climate Change Adaptation Guidance*, consideration of climate change projections for coastal flooding and sea level rise should be incorporated into the design and planning of projects. The proposed project should identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over its lifespan and identify and incorporate design techniques to address these risks.

Recommendations

As indicated above in Policy 6.0, and under Policy 6.2, Step 1(d), the Proposed Action would employ dry-floodproofing construction measures to protect the vulnerable and critical building features within the cellar level. However; the Proposed Project should consider employing future building-scale resiliency measures for the ground floor level to avoid the potential risks related to future coastal flooding. Site-specific vulnerable or critical features include electrical utilities, flooring, and walls. Based on the flood projections above, measures should be considered to increase first-floor building-scale resilience to future flood conditions.

a) Flood Damage Reduction Elements/Controls:

Building Scale Resilience Measures

The following are recommendations for flood resilience techniques and controls will minimize future damage and vulnerability to the subject building:

- Water-resistant flooring with waterproof adhesive or pressure-treated subfloor;
- Rigid, closed-cell foam insulation;
- Removable or hinged wainscot panels;
- Elevated outlets;
- Chair rail molding over a gap in the wallboard to prevent wicking; and
- Extra-wide snap on baseboard.

While not required, these building-scale resiliency controls, if implemented, will protect the cellar level, first-floor commercial space, residential lobby, electrical facilities, and first floor building mechanicals and reduce the susceptibility of water damage to the interior spaces. The applicant has been educated about flood risks and mitigation measures and may consider the implementation of the above listed future adaptive flood damage reduction elements.

b) Flood Protection of Adjacent Sites:

The Proposed Development would not increase stormwater runoff and would not introduce any hazardous features that would impact the health, safety, or welfare of surrounding residents in the event of a flood. Therefore, the proposed action would not affect the flood protection of adjacent sites.

3. Assess Policy Consistency

Pursuant to Policy 6.2 Guidance:

A project or action would advance the policy when:

- *No new vulnerable, critical, or potentially hazardous features would be located within area flooded by current or future high tide, or current or future 1% annual chance flood, over the project's lifespan, or*
- *All new vulnerable, critical or potentially hazardous features would be protected through flood damage reduction elements or future adaptive measures within the timeframe that they would be needed.*

A project or action would hinder the policy when:

- *Vulnerable, critical or potentially hazardous features would be introduced in areas that will be flooded by high tide during the project's lifespan and adaptive measures are not feasible.*
- *Industrial development would not be protected from 2050s high tides or the current 1% annual chance flood.*
- *Critical infrastructure would not be protected to the elevation of the 1% annual chance storm over its lifespan.*
- *Shoreline structures would not function as intended with increases in sea levels projected over their lifespan.*

The Proposed Action should incorporate dry-floodproofing and/or wet-flood proofing to protect the cellar, first-floor building space and first floor mechanicals levels from current, and future flood events; construction and remediation of the site would be performed pursuant to applicable Local, State, Federal regulations and laws; and the applicant would consider the employment of future building scale resiliency measures for the ground floor level based on the future flood projections related to the 1% annual chance flood elevation. These future building-scale resiliency measures and adaptive strategizes would minimize the potential damage to site-specific vulnerable or critical features. Therefore, the Proposed Action is consistent with Policy 6.2 of the Waterfront Revitalization Program and would not jeopardize the intent of the WRP.