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* 4541 Furman Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
20DCP159X	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
200228ZMX, N200229ZRX	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			Markland 4551, LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shelloe, Deputy Director, EARD			John Strauss for Hiram A. Rothkrug, Environmental Studies Corp.		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 55 Water Mill Road		
CITY New York	STATE NY	ZIP 10271	CITY Great Neck	STATE NY	ZIP 11021
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 718-343-0026	EMAIL jstrauss@environmentalstudiescorp.com	

5. *Project Description*

The Applicant, Markland 4551, LLC, is proposing a Zoning Map Amendment to rezone Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140 (the Project Area) from M1-1 to R7D and R7D/C2-4 zoning districts. The Proposed Actions would also include a Zoning Text Amendment to ZR Appendix F to establish the Project Area as a Mandatory Inclusionary Housing Area, and a Zoning Text Amendment to ZR Appendix I to extend Transit Zone 1 to be coterminous with the Project Area.

The proposed zoning map amendment would facilitate the development on Projected Development Site 1 with a 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors. The proposed development would contain 185,973 gsf of total floor area. In Building segment A, the first floor would contain 7,146 gsf of commercial space and the remainder of the building would contain 53,239 gsf of residential floor area. In Building segment B, the cellar level would contain 11,098 gsf of community facility space, the cellar and sub-cellar levels would contain 11,956 gsf of space for 22 accessory residential parking spaces, storage, and building utility space, and the remainder of the building would contain 102,534 gsf of residential floor area. The proposed development will have a total of 150 dwelling units and is proposed to be 100% affordable under HPD's ELLA program. (The final plans have been refined and the total gross floor area of the project has been reduced from 187,673 gsf to 185,973 gsf. For purposes of a conservative environmental analysis, the EAS analyzes a RWCDS that maximizes FAR and the analyses are based on 187,673 gsf.)

The remainder of the Project Area is not proposed for development and is not controlled by the Applicant. However, it is anticipated that new development would occur on five additional Projected Development Sites as follows.

Projected Development Site 2 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 36,025 gsf of floor area. The building would include 40 residential dwelling units including 10 to 12 affordable units and 28 to 30 market rate units. No parking would be provided. The existing structures and uses on the site would be demolished and removed.

Projected Development Site 3 would be developed with a new 95' tall, 9-story and cellar, residential and commercial building with approximately 49,301 gsf of floor area. The 44,730 gsf of residential floor area would include 41 residential dwelling units including 10 to 12 affordable units and 29 to 31 market rate units. The proposed development would also include 4,571 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and uses on the site would be demolished and removed.

Projected Development Site 4 would be developed with a new 75' tall, 7-story and cellar, residential and commercial building with approximately 61,587 gsf of floor area. The 55,186 gsf of residential floor area would include 50 residential dwelling units including 12 to 15 affordable units and 35 to 38 market rate units. The proposed development would also include 6,401 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed.

Projected Development Site 5 would be developed with a new 75' tall, 7-story and cellar, residential and community facility building with approximately 32,559 gsf of floor area. The 29,696 gsf of residential floor area would include 28 residential dwelling units including 7 to 8 affordable units and 20 to 21 market rate units. The proposed development would also include 2,863 gsf of community facility space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed.

Projected Development Site 6 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 26,424 gsf of floor area. The building would include 29 residential dwelling units including 7 to 8 affordable units and 21 to 22 market rate units. No parking would be provided. The existing structure and use on the site would be demolished and removed.

No new development is anticipated on Other Sites 1 through 8. See attached Project Description.

Project Location

BOROUGH Bronx	COMMUNITY DISTRICT(S) 11	STREET ADDRESS 4541 Furman Avenue
TAX BLOCK(S) AND LOT(S) Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, and 63		ZIP CODE 10470

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Area bounded by East 240th Street, White Plains Road, and Furman Avenue 300 feet north of East 239th Street

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1 | ZONING SECTIONAL MAP NUMBER 2a

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION 23-933, Appendix F

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

☐ LEGISLATION

☒ FUNDING OF CONSTRUCTION, specify: HPD-Extremely Low & Low-Income Affordability (ELLA) Program

☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☐ OTHER, explain:
☐ 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: Dept. of Buildings building permit

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 90,595 (Rezoning Area); 24,729 (Proposed Development Site)
Waterbody area (sq. ft) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 90,595 (Rezoning Area); 24,729 (Proposed Development Site)
Other, describe (sq. ft.): 0

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): 185,973
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 185,973
HEIGHT OF EACH BUILDING (ft.): 101'-6"
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: 24,729
The total square feet not owned or controlled by the applicant: 65,866

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: sq. ft. (width x length)
VOLUME OF DISTURBANCE: 291,797 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 24,729 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.)	155,773	7,146	11,098	0
Type (*e.g.,* retail, office, school)	150 units	retail	medical offices	0

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 450 NUMBER OF ADDITIONAL WORKERS: 79
Provide a brief explanation of how these numbers were determined: Residents: Based on average household size of 3.0 residents per dwelling unit (2014-2018 ACS data) in Census Tracts 50% or more within 1/4 mile (tracts 434 and 436); Workers: assumes 3 workers per 1,000 gsf retail, 4 workers per 1,000 gsf medical offices,.04 workers per dwelling unit

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): 2028
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 84
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☐ YES ☒ NO IF MULTIPLE PHASES, HOW MANY? 6
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: up to 24 months for Projected Development Site 1, 12 months each for

Projected Development Sites 2 through 6
10. ***Predominant Land Use in the Vicinity of the Project*** (check all that apply) ☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: community facility, transportation related, vacant

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. See attached report.		
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:	☐	☒
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒

	YES	NO
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 8,347		
○ 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): 24,029,466		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☒
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See attached report.	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;	☐	☒

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

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
John Strauss, Environmental Studies Corp.	December 30, 2021

SIGNATURE John Strauss

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potentially Significant Adverse Impact YES	NO
Land Use, Zoning, and Public Policy	☐	☒
Socioeconomic Conditions	☐	☒
Community Facilities and Services	☐	☒
Open Space	☐	☒
Shadows	☐	☒
Historic and Cultural Resources	☐	☒
Urban Design/Visual Resources	☐	☒
Natural Resources	☐	☒
Hazardous Materials	☐	☒
Water and Sewer Infrastructure	☐	☒
Solid Waste and Sanitation Services	☐	☒
Energy	☐	☒
Transportation	☐	☒
Air Quality	☐	☒
Greenhouse Gas Emissions	☐	☒
Noise	☐	☒
Public Health	☐	☒
Neighborhood Character	☐	☒
Construction	☐	☒

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ YES ☒ NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

3. Check determination to be issued by the lead agency:

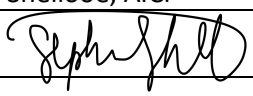
☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

☒ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	NYC Dept of City Planning on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe, AICP	December 30, 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 Applicant, Markland 4551, LLC, is proposing a Zoning Map Amendment to rezone Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140 (the Project Area) from M1-1 to R7D and R7D/C2-4 zoning districts. The Proposed Actions would also include a Zoning Text Amendment to Zoning Resolution (ZR) Appendix F to establish the Project Area as a Mandatory Inclusionary Housing (MIH) Area, and a Zoning Text Amendment to ZR Appendix I to extend Transit Zone 1 to be coterminous with the Project Area. The Proposed Actions would result in the incremental development of 334 residential dwelling units (DUs), including up to 205 affordable DUs pursuant to MIH, approximately 18,000 gross square feet (gsf) of commercial uses, approximately 16,000 gsf of community facility uses, and 22 parking spaces, and a decrease in auto, vacant industrial and parking uses currently occupying the sites in the Project Area. For the purpose of a conservative analysis, in addition to the applicant-controlled site, five additional sites within the Project Area are projected for development, included in the total incremental development described above. The analysis finds that while the proposed actions would result in a change of land uses for the area, the future development facilitated by the proposed actions would include affordable housing, commercial and community facility uses that would be consistent with current emerging land use patterns in the area, and increase density near public transit. The proposed R7D/C2-4 zoning would also be compatible with and similar to nearby zoning designations, and the mapping of MIH would encourage the development of affordable housing, which would further City and State policy goals. By locating density near public transit, the proposed actions would be consistent with the sustainability goals listed in OneNYC, New York City's leading sustainability policy, and the proposed actions would not adversely affect other public policies. The Proposed Actions would therefore not result in any significant adverse impacts to land use, zoning and public policy, and no further analysis is required.

Socioeconomic Conditions

A detailed analysis related to socioeconomic conditions (indirect residential displacement) is included in this EAS. The Proposed Actions would result in an increase approximately 334 DUs, exceeding the threshold described in the 2020 CEQR Technical Manual for a detailed analysis. The analysis finds that while the incremental development would result in an increase of approximately 1,002 new residents, the Proposed Actions would not introduce a substantial new population with incomes higher than the area average. The Proposed Actions would therefore not result in any significant adverse impacts to socioeconomic conditions, and no further analysis is required.

Community Facilities and Services

A detailed analysis related to community facilities and services (public primary schools and child care) is included in this EAS. The analysis finds that the Proposed Actions would result in an increment of 80 new primary school students, exceeding the threshold described in the 2020 CEQR Technical Manual for a detailed analysis of primary schools. The analysis finds that while the increase would result in a utilization rate of 162% for primary schools in the study area, the incremental increase from the Proposed Actions would only be 1%, which is below the threshold of a 5% increase in utilization rate. The Proposed Actions would result in an increment of 28 new children in need of publicly funded child care facilities. The analysis finds that while this would result in an 11% increase in utilization rate for the study area, exceeding the 5% threshold, other qualitative considerations would prevent an impact to child care facilities. Qualitative considerations include access to the newly implemented, widely available publicly funded NYC Pre-K for All program, for which utilization rates are not yet known due to the recent implementation of the program; and proximity of the Project Area to the neighboring Westchester County, where some new residents may choose to use child care facilities. The Proposed Actions would therefore not result in any significant adverse impacts to community facilities and services, and no further analysis is required.

Open Space

A detailed analysis related to open space (indirect-active) is included in this EAS. The Project Area is not located in an "underserved" or "well-served" area, as identified in the 2020 CEQR Technical Manual The Proposed Actions would result in an increase of approximately 1,002 new residents, which is above the threshold described in the CEQR Technical Manual for a detailed analysis of residential (active) open space. The open space ratio for residents in the study area would decrease by approximately 3% as a result of the Proposed Actions, which is below the 5% threshold for impacts to open space, but above 1%, which may be considered if the existing open space ratio is low. The analysis finds that while there would be a decrease in open space ratio as a result of the increase in population, a number of qualitative factors would help to prevent an impact to open space resources, including the location of the PS 87 playground, a 1.3 acre space that is within the ½ mile study area but was not included as it was not in an applicable census tract; proximity to the Bronx River Parkway Greenway and Wakefield Park, which are within the ½ mile study area but separated from the Project Area by the Bronx River, the Bronx River Parkway, and the Metro-North railroad tracks; and many acres of parkland located within a mile of the Project Area. The Proposed Actions would therefore not result in any significant adverse impacts to open space, and no further analysis is required.

Urban Design and Visual Resources

A detailed analysis related to urban design and visual resources is included in this EAS. There are no visual resources in the project area, and the Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. The analysis finds that while the Proposed Actions would result in buildings with higher density and height than the immediately surrounding area, the density and building height and form would be consistent with the development pattern in residential areas further to the north and west of the Project Area. The Proposed Actions would also facilitate new affordable housing and commercial and community facility uses, which would serve the surrounding area. The Proposed Actions would therefore not result in any significant adverse impacts to urban design or visual resources, and no further analysis is required.

Project Name: 4541 Furman Avenue Rezoning
CEQR # 20DCP159X
SEQRA Classification: Unlisted

Transportation
A detailed analysis related to transportation (pedestrian traffic) is included in this EAS. The Proposed Actions would result in over 200 pedestrian trips at more than one peak-hour period, exceeding the threshold described in the 2020 CEQR Technical Manual for a detailed analysis. The analysis finds that while there would be more pedestrian trips at the weekday a.m., mid-day and p.m. peak hours and the Saturday mid-day peak hours, the increase in trips would not affect the level of service (LOS) of intersections studied in the Project Area study area, and all intersections would continue to operate at LOS A (highest standard). The Proposed Actions would therefore not result in any significant adverse impacts to transportation, and no further analysis is required.

Construction
A detailed analysis related to construction is included in this EAS. Construction of Projected Development Site 1 would be complete within less than two years, and itself would be under the threshold identified in the 2020 CEQR Technical Manual for a detailed analysis, however, as the analysis assumes development on the applicant-controlled site as well as five other sites projected for development within the Project Area (Projected Development Sites 2-6), the overall construction schedule assumes periods of overlapping construction between the sites over a period of five years. Relatively short periods of exterior construction activities would occur on these Projected Development Sites, and the likelihood that exterior construction activities would be separated by periods of time where no such activities would occur.
The exterior construction and demolition periods for Projected Development Sites 2 through 6 would typically be five months per Site. No significant traffic, noise or air quality impacts would be anticipated from construction activities occurring within the interiors of the buildings. The Proposed Actions would therefore not result in any significant adverse impacts related to construction, and no further analysis is required.

Hazardous Materials, Air Quality, and Noise
An (E) designation (E-656) 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 Annabelle Meunier at (212) 720-3426.

TITLE 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 | 212.720.3328
NAME Stephanie Shellooe	DATE December 30, 2021
SIGNATURE	
TITLE Chair, City Planning Commission	
NAME Anita Laremont	DATE January 3, 2022
SIGNATURE	

Project Name: 4541 Furman Avenue Rezoning
CEQR # 20DCP159X
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	BX	Block 5084, Lot 63
Projected Development Site 2	BX	Block 5084, Lots 58, 59, 60
Projected Development Site 3	BX	Block 5084, Lots 35, 39
Projected Development Site 4	BX	Block 5084, Lot 41
Projected Development Site 5	BX	Block 5084, Lot 49
Projected Development Site 6	BX	Block 5084, Lot 61

(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-656**) would be established as part of approval of the proposed actions on **Projected Development Sites 1 through 6** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1	X	X	X
Projected Development Site 2	X	X	X
Projected Development Site 3	X	X	X
Projected Development Site 4	X	X	X
Projected Development Site 5	X	X	X
Projected Development Site 6	X	X	X

Hazardous Materials

The (E) designation requirements applicable to **Projected Development Sites 1-6** 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.

Air Quality

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

Block 5084, Lot 63 (Projected Development Site 1 Building Segment A)
Any new residential, commercial and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 101.5 feet above grade and at least 122'-8" feet away from the eastern lot line facing Furman Avenue to avoid any potential significant adverse air quality impacts.

Block 5084, Lot 63 (Projected Development Site 1 Building Segment B)
Any new residential, commercial, and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 104.5 feet above grade and at least 121'-2" away from the western lot line facing White Plains Road to avoid any potential significant adverse air quality impacts.

Block 5084, Lots 58, 59, 60 (Projected Development Site 2)
Any new residential development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level at a minimum of 93 feet above the grade, and that the stack is located at least 40 feet from the southern lot line facing East 239th Street to avoid any potential significant adverse air quality impacts.

Block 5084, Lots 35, 39 (Projected Development Site 3)
Any new residential/commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 98 feet above grade to avoid any potential significant adverse air quality impacts.

Block 5084, Lot 41 (Projected Development Site 4)
Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s)and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level at a minimum of 78 feet above the grade, and that the stack is located at least 60 feet from the southern lot line facing East 239th Street to avoid any potential significant adverse air quality impacts.

Block 5084, Lot 49 (Projected Development Site 5)

Any new residential, commercial and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 78 feet above grade, and that the stack is located at least 40 feet from the western lot line facing White Plains Road and 30 feet from the northern lot line facing 240th Street to avoid any potential significant adverse air quality impacts.

Block 5084, Lot 61 (Projected Development Site 6)
Any new residential development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level at a minimum of 93 feet above the grade, and that the stack is located at least 50 feet from the southern lot line facing East 239th Street to avoid any potential significant adverse air quality impacts.

Noise

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

Block 5084, Lot 63 (Projected Development Site 1)
To ensure an acceptable interior noise environment, future residential/commercial office/community facility uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street within 104 feet of White Plains Road and the facades facing East 239th Street within 84 feet of White Plains Road and 31 dBA of attenuation on the facades facing East 239th Street beyond 84 feet of White Plains Road and the facades facing Furman Avenue within 352 feet of East 239th Street to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lots 58, 59, 60 (Projected Development Site 2)
To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road to maintain an interior noise level not greater than 45 dBA for residential uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lots 35 & 39 (Projected Development Site 3)
To ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street and the facades facing 239th Street to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lot 41 (Projected Development Site 4)
To ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street and the facades facing 239th Street to maintain an interior noise level not greater

than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lot 49 (Projected Development Site 5)

To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road to maintain an interior noise level not greater than 45 dBA for residential and community facility uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lot 61 (Projected Development Site 6)

To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road to maintain an interior noise level not greater than 45 dBA for residential uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

4541 FURMAN AVENUE PROJECT DESCRIPTION

Reasonable Worst-Case Development Scenario

INTRODUCTION AND ACTIONS NECESSARY TO FACILITATE THE PROPOSAL

The Applicant, Markland 4551, LLC, is proposing the following actions:

- A Zoning Map Amendment to rezone Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140 (the Project Area) in the Wakefield neighborhood of the Bronx, Community District 12 from M1-1 to R7D and R7D/C2-4. The Applicant-owned property, Projected Development Site 1 (Lot 63), would be rezoned from M1-1 to an R7D/C2-4 district as would Projected Development Site 3 (Lots 35 and 39), Projected Development Site 4 (Lot 41), Projected Development Site 5 (Lot 49), Other Site 1 (Lot 19), Other Site 2 (Lots 30 and 138), Other Site 3 (Lot 53), Other Site 4 (Lot 54), Other Site 5 (Lot 55), and Other Site 8 (Lots 40 and 140). The remaining Sites, including Projected Development Site 2 (Lots 58, 59, 60), Projected Development Site 6 (Lot 61), Other Site 6 (Lot 56), and Other Site 7 (Lot 57), would be rezoned from M1-1 to R7D.

- A Zoning Text Amendment to Appendix F to designate the newly mapped R7D and R7D/C2-4 districts as Mandatory Inclusionary Housing designated areas. All 150 units on the Applicant property would be considered affordable. For the purposes of a conservative analysis under CEQR, either 25% or 30% of the gross residential floor area on the Non-Applicant Sites would be affordable to households with incomes at 60% of AMI or 80% of AMI, respectively, depending on the relevant analysis category.

- A Zoning Text Amendment to ZR Appendix I to extend Transit Zone 1 to be coterminous with the Project Area.

- In a related action, the project will undergo a coordinated review with the NYC Department of Housing Preservation and Development (HPD) because the project seeks discretionary financing.

The Proposed Actions would facilitate the development of Projected Development Site 1 with a 10-story two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors. The proposed development would contain 185,973 gsf of total floor area. In Building Segment A, the first floor would contain 7,146 gsf of commercial space and the remainder of the building segment would contain 53,239 gsf of residential floor area. In Building Segment B, the cellar level would contain 11,098 gsf of community facility space, the cellar and sub-cellar levels would contain 11,956 gsf of space for 22 accessory residential parking spaces, storage, and building utilities, and the remainder of the building segment would contain 102,534 gsf of residential floor area. The proposed development will have a total of 150 dwelling units and is proposed to be 100% affordable under HPD's Extremely Low & Low-Income Affordability (ELLA) Program.

The remainder of the Project Area is not proposed for development and is not controlled by the Applicant. However, as defined in the Reasonable Worst Case Development Scenario (RWCDS) memorandum, it is anticipated that new development could occur on five additional Projected Development Sites as follows.

Projected Development Site 2 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 32,065 gsf of floor area. The building would include 40 residential dwelling units including 10 to 12 affordable units and 28 to 30 market rate units. No parking would be provided. The existing structures and uses on the site would be demolished and removed.

Projected Development Site 3 would be developed with a new 95' tall, 9-story and cellar, residential and commercial building with approximately 49,301 gsf of floor area. The 44,730 gsf of residential floor area would include 41 residential dwelling units including 10 to 12 affordable units and 29 to 31 market rate units. The proposed development would also include 4,571 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and uses on the site would be demolished and removed.

Projected Development Site 4 would be developed with a new 75' tall, 7-story and cellar, residential and commercial building with approximately 61,587 gsf of floor area. The 55,186 gsf of residential floor area would include 50 residential dwelling units including 12 to 15 affordable units and 35 to 38 market rate units. The proposed development would also include 6,401 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed.

Projected Development Site 5 would be developed with a new 75' tall, 7-story and cellar, residential and community facility building with approximately 32,559 gsf of floor area. The 29,696 gsf of residential floor area would include 28 residential dwelling units including 7 to 8 affordable units and 20 to 21 market rate units. The proposed development would also include 2,863 gsf of community facility space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed.

Projected Development Site 6 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 26,424 gsf of floor area. The building would include 29 residential dwelling units including 7 to 8 affordable units and 21 to 22 market rate units. No parking would be provided. The existing structure and use on the site would be demolished and removed.

No new development is anticipated on Other Sites 1 through 8.

DESCRIPTION OF THE SURROUNDING AREA

The proposed Project Area is located in the Wakefield neighborhood within Bronx Community District 12. The area surrounding the Project Area is characterized by a mix of commercial/manufacturing uses (mainly ground floor retail or automotive/transportation related) and residential uses (multi-family, mixed residential and commercial, and one- and two-family homes). Several community facility uses including churches, schools and health centers are scattered throughout the surrounding area. Directly east of the Project Area is the MTA 239th Street Yard and Maintenance Shop which contains storage of trains not in use. The Project Area is also directly adjacent to an elevated subway line that runs along White Plains Road and carries the 2 and 5 subway lines.

The area immediately to the east and south of the Project Area is zoned M1-1. Residential districts comprise the remainder of the surrounding area including an R7D district to the north; R4A, R5, R5A, and R6 districts to the west; R5 and R6 districts to the south; and R4, R4A, and R4-1 districts to the east. The Project Area is located immediately east of the boundaries of the Wakefield/Eastchester Rezoning (ULURP Application No.: 070409 ZMX; CEQR No.: 07DCP058X), effective July 25, 2007, and immediately south of the 241st Street Rezoning (ULURP Application Nos.: 180083 ZMX, 180084 ZRX; CEQR No.: 18DCP094X), effective February 13, 2019, which rezoned the entirety of Block 5087 from an Ml-1 zoning district to an R7D/C2-4 zoning district.

DESCRIPTION OF THE PROJECT AREA

The Project Area includes the Applicant's property, Block 5084, Lot 63, and Non-Applicant owned properties, identified as Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 138, and 140. The existing conditions on these lots are described below. The Project Area was mapped in 1961 with the current Ml-1 zoning district.

Project Site (Applicant-owned)

1. Projected Development Site 1 (Block 5084, Lot 63) – The Applicant-owned property has a lot area of approximately 24,729 sf. The Development Site has 102.17 feet of frontage on White Plains Road and 192.73 feet of frontage on Furman Avenue. The Development Site is improved with a one-story (16') 24,729 gsf manufacturing/factory building. The existing building is currently unoccupied (FAR: 1.0). The property has Certificates of Occupancy dated 01/25/1957, 12/13/1957, and 06/26/1958 for "factory, metal stamping, metal spinning, loading, storage, warehouse, and offices". It appears from Department of Buildings records that the structure on the site was constructed between 1955 and 1958 with additional construction occurring in 2001. The existing building and site are currently unoccupied. The Site is currently zoned M1-1.

Non-Applicant owned Sites

The Non-Applicant properties, all of which are zoned M1-1, are described as follows:

2. Projected Development Site 2 (Block 5084, Lots 58, 59, 60) – This Site consists of three lots owned by the same entity and totaling approximately 5,650 sf in area. (FAR: 0.34) The three lots are described below.

   Lot 58 – 2,025 sf lot used as a parking lot.

   Lot 59 - 1,875 sf lot used as a parking lot.

   Lot 60 – 1,750 sf lot developed with 2 two-story dwellings totaling 1,897 gsf in floor area and containing a total of 2 dwelling units.

3. Projected Development Site 3 (Block 5084, Lots 35 and 39) – This Site consists of two lots owned by the same entity and totaling approximately 6,595 sf in area. (FAR: 0.19) The two lots are described below.

Lot 35 – 4,970 sf lot developed with a two-story dwelling containing 1,256 gsf of floor area and containing 2 dwelling units.

Lot 39 – 1,625 sf lot used as a parking lot.

4. Projected Development Site 4 (Block 5084, Lot 41) – This Site consists of a 7,650 sf lot containing 2 two-story auto repair garages totaling 5,494 gsf in floor area. (FAR: 0.72).

5. Projected Development Site 5 (Block 5084, Lot 49) – This Site consists of a 4,230 sf lot containing a two-story 7,500 gsf auto body repair garage (FAR: 1.77).

6. Projected Development Site 6 (Block 5084, Lot 61) – This Site consists of a 3,975 sf lot containing a two-story 5,018 gsf auto body repair garage (FAR: 1.26).

7. Other Site 1 (Block 5084, Lot 19) – This Site consists of an approximately 7,700 sf lot containing a one- and two-story approximately 9,160 gsf utility building used as a substation by the MTA (FAR: 1.19).

8. Other Site 2 (Block 5084, Lots 30 and 138) – This Site consists of two lots owned by the same entity and totaling approximately 15,400 sf in area. (FAR: 0.81) The two lots are described below. (No new development would occur on Other Site 2, which is owned by a church where new development would require Attorney General and court approval in order for a sale to occur.)

   Lot 30 – 11,500 sf lot developed with a two-story 12,450 gsf warehouse building occupied by a church.

   Lot 138 – 3,900 sf vacant lot.

9. Other Site 3 (Block 5084, Lot 53) – This Site consists of a 2,889 sf lot developed with a two-story, 1,700 gsf dwelling containing one dwelling unit (FAR: 0.59).

10. Other Site 4 (Block 5084, Lot 54) – This Site consists of a 2,602 sf lot developed with a two-story, 1,336 gsf dwelling containing two dwelling units (FAR: 0.51).

11. Other Site 5 (Block 5084, Lot 55) – This Site consists of a 2,600 sf lot developed with a two-story, 2,200 gsf dwelling containing two dwelling units (FAR: 0.85).

12. Other Site 6 (Block 5084, Lot 56) – This Site consists of a 2,325 sf lot developed with a two-story, 2,875 gsf dwelling containing two dwelling units (FAR: 1.24).

13. Other Site 7 (Block 5084, Lot 57) – This Site consists of a 2,325 sf lot developed with a two-story, 2,422 gsf dwelling containing two dwelling units (FAR: 1.04).

14. Other Site 8 (Block 5084, Lots 40 and 140) – This Site consists of two lots with the same address totaling approximately 1,925 sf in area. The lots are under different ownership but adjoin each other with one lot being very small (375 sf) and are likely affiliated/under the same control. (FAR: 1.56) The two lots are described below.

Lot 40 – 1,550 sf lot developed with a two-story 3,000 gsf mixed residential/commercial building comprised of a an approximately 1,000 gsf ground floor retail store plus three dwelling units totaling approximately 2,000 gsf.

Lot 140 – 375 sf vacant lot.

DESCRIPTION OF THE PROPOSED DEVELOPMENT

As explained above, the Applicant intends to rezone a portion of Block 5084, the Project Area, from an M1-1 to R7D and R7D/C2-4 zoning districts. The proposed R7D/C2-4 district would facilitate the development on the Applicant's property of a new 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar and on the ground floor, and residential space on the upper floors. The proposed development would contain 185,973 gsf of total floor area and 136,544 zoning square feet (zsf) of floor area and would have an FAR of 5.52. In Building Segment A, the first floor would contain 7,146 gsf/zsf of commercial space and the remainder of the building segment would contain 53,239 gsf/45,266 zsf of residential floor area. In Building Segment B, the cellar level would contain 11,098 gsf/0 zsf of community facility space, the cellar and sub-cellar levels would contain 11,956 gsf/0 zsf of space for 22 accessory residential parking spaces, storage, and building utilities, and the remainder of the building segment would contain 102,534 gsf/84,132 zsf of residential floor area. The proposed development would have a total of 150 dwelling units and is proposed to be 100% affordable under HPD's ELLA program. The existing structure on the Site would be demolished and removed.

BUILD YEAR/PROJECT PHASING

It is assumed that the Proposed Actions would be approved by mid- to late-2021. The Proposed Development on the Project Site is expected to be completed by late 2023. As the Proposed Actions would result in the creation of multiple development sites that are not controlled by the Applicant, it is anticipated that these sites would be developed over an additional five-year period with a Build Year of late 2028.

PURPOSE AND NEED OF THE PROPOSED ACTIONS

On the Applicant-owned site, the Proposed Actions would permit the development of approximately 150 new affordable housing units on underutilized land in the Wakefield neighborhood of the Bronx. The Proposed Actions, including the proposed rezoning from M1-1 to R7D and R7D/C2-4 zoning districts, are needed to provide sufficient residential floor area for the project to be economically feasible. The Applicant seeks to develop the zoning lot with housing consistent with the standards of the Quality Housing Program as well as affordable units under HPD's ELLA program and the Mandatory Inclusionary Housing (MIH) Program zoning regulations. The development of the building with affordable units is consistent with the expressed desires of the City's current mayoral administration to substantially increase the amount of affordable housing. The Proposed Actions would also permit the development on the Applicant-owned site of approximately 7,146 gsf of commercial space, 11,098 gsf of community facility space, and 22 garage parking spaces accessory to the proposed residential uses.

The project cannot be developed under the current M1-1 zoning district as new residential uses are not permitted. The proposed rezoning would allow the many existing residential uses within the Project Area to comply with zoning, would allow for the replacement of longstanding parking lots, manufacturing/warehouse, and garage uses with more viable development, and would reinforce emerging land use patterns in the immediately surrounding area. The Applicant believes that the proposed increase in density is appropriate at this location because it is located along a major street (White Plains Road) near public transit and is located immediately south of the 241st Street Rezoning area, which rezoned the entirety of Block 5087 from an Ml-1 zoning district to an R7D/C2-4 zoning district and established an MIH Area on 02/13/19 (C180083ZMX). (The 20 lots on Block 5087 were located in an Ml-1 manufacturing district and the block contained non-conforming residential uses that were present before the adoption of the 1961 Zoning Resolution. In total, approximately 9,477 gsf of residential uses (11 dwelling units), approximately 11,224 gsf of commercial uses, and approximately 11,405 gsf of industrial uses were present on Block 5087 at the time of the rezoning. The R7D/MIH district allows for residential uses with a maximum FAR of 5.6. The C2-4 commercial overlay also allows for ground floor commercial uses with a maximum FAR of 2.0. Manufacturing uses are no longer be permitted in the R7D/C2-4 zoning district.) The Project Area is also located immediately east of an area zoned R4A/C2-4 on the opposite side of White Plains Road. The proposed R7D/C2-4 zoning district would promote mixed-use development consistent with the commercial overlays mapped along White Plains Road immediately north and south of the Project Area. The proposed zoning text amendment to Appendix F is required when rezoning from a manufacturing district to a residential district. The mapping of an MIH district on the property also increases the maximum allowable residential and community facility FAR in the R7D zoning district from 4.2 to 5.6. The inclusion of the property in the transit zone under the proposed zoning text amendment to Appendix I allows a waiver of required parking for affordable housing. The proposed rezoning would promote new mixed-use development including affordable housing on a suitable, unutilized property.

The proposed zoning change from M1-1 to an R7D/C2-4 zoning district for Projected Development Sites 3, 4, and 5 is required in order to legally allow for the development of new residential uses on these Sites. The mapping of a C2 commercial overlay would expand the scope of permitted commercial uses to include Use Groups 7, 8, and 9 local service uses which are not permitted in C1 commercial districts.

The proposed zoning change from M1-1 to an R7D/C2-4 zoning district for Other Sites 1 and 2 is needed in order to maintain a consistent R7D/C2-4 zoning line extending along the White Plains Road frontage of the Project Area. No new development would occur on Other Site 1, which is an MTA substation, or on Other Site 2, which is owned by a church where new development would require Attorney General and court approval in order for a sale to occur.

The proposed zoning change from M1-1 to an R7D/C2-4 zoning district for Other Sites 3, 4, 5, and 8 would serve to make the residential uses on these Sites conforming under zoning. These Sites are currently zoned M1-1 which does not permit residential use. The proposed R7D zoning under the proposed Mandatory Inclusionary Housing would permit a maximum residential FAR of 5.6. The developed FAR on these Sites range from 0.51 to 1.56. Although expansions of these primarily residential properties would be permitted, no significant additional development is anticipated as the Sites consist of relatively small parcels of

between 1,925 sf and 2,889 sf. The mapping of a C2 commercial overlay would expand the scope of permitted commercial uses to include Use Groups 7, 8, and 9 local service uses which are not permitted in C1 commercial districts.

The proposed zoning change from M1-1 to an R7D zoning district for Projected Development Sites 2 and 6 is required in order to legally allow for the development of new residential uses on these Sites.

The proposed zoning change from M1-1 to an R7D zoning district for Other Sites 6 and 7 is required to make the residential uses on these Sites conforming under zoning. These Sites are currently zoned M1-1 which does not permit residential use. The proposed R7D zoning under the proposed Mandatory Inclusionary Housing would permit a maximum residential FAR of 5.6. The developed FAR on these Sites range from 1.04 to 1.24. Although expansions of these residential properties would be permitted, no significant additional development is anticipated as the Sites consist of relatively small parcels of 2,325 sf in size.

NO-ACTION SCENARIO

It is assumed that under the No-Action Scenario, existing conditions would continue on the Applicant-owned Projected Development Site 1, the Non-Applicant owned Projected Development Sites 2 through 6, and Other Sites 1 through 8.

WITH-ACTION SCENARIO

The With-Action Scenario includes a Zoning Map Amendment to rezone Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140 (the Project Area) from M1-1 to R7D and R7D/C2-4. The Applicant property, Projected Development Site 1, would be rezoned from M1-1 to an R7D/C2-4 zoning district as would Projected Development Sites 3, 4, and 5 and Other Sites 1, 2, 3, 4, 5, and 8. The remaining Sites, including Projected Development Sites 2 and 6 and Other Sites 6 and 7, would be rezoned from M1-1 to an R7D zoning district. The Proposed Actions would also include a Zoning Text Amendment to ZR Appendix F to establish the Project Area as a Mandatory Inclusionary Housing Area, and a Zoning Text Amendment to ZR Appendix I to extend the Transit Zone to be coterminous with the Project Area.

The development projected to occur in the Project Area as a result of the Proposed Actions is presented below and summarized in Table 1.

Proposed Project Site

For purposes of a conservative environmental analysis, this EAS analyzes a Reasonable Worst Case Development Scenario (RWCDS) that differs from the Applicant's proposed development. As defined in the RWCDS memorandum, the EAS analyses for Projected Development Site 1 are based on a maximum 5.6 FAR scenario with 187,673 gsf of floor area.

1. Projected Development Site 1 (Block 5084, Lot 63) would be developed with a 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors which would be the same as the proposed development discussed above. Projected Development Site 1 would contain 187,673 gsf of total floor area and 138,484 zsf of floor area

and would have an FAR of 5.6. In Building Segment A, the first floor would contain 7,391 gsf/zsf of commercial space and the remainder of the building would contain 52,995 gsf/42,680 zsf of residential floor area. In Building Segment B, the cellar level would contain 12,784 gsf/0 zsf of community facility space, the cellar and sub-cellar levels would contain 12,284 gsf/0 zsf of space for 22 accessory residential parking spaces, storage, and building utilities, and the remainder of the building would contain 102,219 gsf/88,413 zsf of residential floor area.

Projected Development Site 1 will have a total of 150 dwelling units and is proposed to be 100% affordable under HPD's ELLA program. For environmental analysis purposes, the buildings' 142,934 gsf of occupiable residential floor area (basement and cellar space is not included) would typically be converted to 143 dwelling units at the standard size of approximately 1,000 gsf per unit. However, as the development is proposed to be 100% affordable under HPD's ELLA program, the number of units is based on HPD's requirements and the standard 1,000 gsf per unit would not be applicable. HPD typically suggests an average unit size of 780 sf. In this case, since the building would be constructed with single-loaded corridors, the average unit size is approximately 874 sf. Therefore, the number of dwelling units has been determined based on an average size of 874 sf as applied to the 131,093 zoning square feet of the building.

The Applicant is proposing that the proposed development be 100% affordable under HPD's ELLA program, and the EAS assumes that 100% of the gross residential floor area would be affordable to households with incomes at or below 80% of the AMI. Under the proposed Zoning Text Amendment to Appendix F to designate the newly mapped R7D and R7D/C2-4 districts as Mandatory Inclusionary Housing designated areas, the Applicant is proposing to map MIH Options 1 and 2. MIH Option 1 requires that 25% of the 142,934 gsf residential floor area be affordable to households with incomes averaging at or below 60% of AMI. Under this option, 38[1] permanently affordable units would be required. MIH Option 2 requires that 30% of the 142,934 gsf residential floor area be affordable to households with incomes averaging at or below 80% of AMI. Under this option, 45[2] permanently affordable units would be required. The final MIH Option will be chosen by the City Council through the ULURP process. Although no parking is required for affordable units within the Transit Zone, 22 parking spaces would be provided.

Other Projected Development Sites

Although there are currently no plans for any development on Projected Development Site 2 through 6, the following levels of development would be permitted and anticipated to occur under the proposed R7D(MIH) and R7D/C2-4(MIH) zoning districts. The existing structures and uses on all Projected Development Sites would be demolished and removed.

2. Projected Development Site 2 (Block 5084, Lots 58, 59, 60) would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 32,065 gsf/31,371 zsf of floor area on the 5,602 square foot site for an FAR of 5.6. The building would include 40 residential dwelling units including 10 to 12 affordable units and 28 to 30 market rate units.

[1] Calculated at 25% of 131,093 zsf divided by 874 sf per unit.
[2] Calculated at 30% of 131,093 zsf divided by 874 sf per unit.

No parking would be provided. The residential entrance would be on Furman Avenue. The existing structures and uses on the site would be demolished and removed.

3. Projected Development Site 3 (Block 5084, Lots 35, 39) would be developed with a new 95' tall, 9-story and cellar, residential and commercial building with approximately 49,301 gsf/36,736 zsf of floor area on the 6,560 square foot site for an FAR of 5.6. The 44,730 gsf/32,165 zsf of residential floor area would include 41 residential dwelling units including 10 to 12 affordable units and 29 to 31 market rate units. The proposed development would also include 4,571 gsf/zsf of commercial space on the ground-floor of the building. No parking would be provided. Residential and commercial entrances would be on White Plains Road. The existing structure and uses on the site would be demolished and removed.

4. Projected Development Site 4 (Block 5084, Lot 41) would be developed a new 75' tall, 7-story and cellar, residential and commercial building with approximately 61,587 gsf/45,365 zsf of floor area on the 8,101 square foot site for an FAR of 5.6. The 55,186 gsf/38,964 zsf of residential floor area would include 50 residential dwelling units including 12 to 15 affordable units and 35 to 38 market rate units. The proposed development would also include 6,401 gsf/zsf of commercial space on the ground-floor of the building. No parking would be provided. The residential entrance would be on White Plains Road while the commercial entrance would be on East 240th Street. The existing structure and use on the site would be demolished and removed.

5. Projected Development Site 5 (Block 5084, Lot 49) would be developed with a new 75' tall, 7-story and cellar, residential and community facility building with approximately 32,559 gsf/24,433 zsf of floor area on the 4,363 square foot site for an FAR of 5.6. The 29,696 gsf/21,570 zsf of residential floor area would include 28 residential dwelling units including 7 to 8 affordable units and 20 to 21 market rate units. The proposed development would also include 2,863 gsf/zsf of community facility space on the ground-floor of the building. No parking would be provided. The residential entrance and one community facility entrance would be on East 240th Street while a second community facility entrance would be provided on Furman Avenue. The existing structure and use on the site would be demolished and removed.

6. Projected Development Site 6 (Block 5084, Lot 61) would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 26,424 gsf/22,908 zsf of floor area on the 4,091 square foot site for an FAR of 5.6. The building would include 29 residential dwelling units including 7 to 8 affordable units and 21 to 22 market rate units. No parking would be provided. The residential entrance would be on Furman Avenue. The existing structure and use on the site would be demolished and removed.

Other Sites

No new development is anticipated on Other Sites 1 through 8.

Table 1 Furman Avenue Rezoning Development by Parcel					
Site ID	**Lot #[3]**	**Res. GSF; DUs (affordable)**	**Commercial GSF**	**Community Facility GSF**	**Total Proposed GSF**
Projected Site 1	Lot 63	155,214; 150 (150)	7,391	12,784	187,673[4]
Projected Site 2	Lots 58, 59, 60	32,065; 40 (10-12)	0	0	32,065
Projected Site 3	Lots 35 and 39	44,730; 41 (10-12)	4,571	0	49,301
Projected Site 4	Lot 41	55,186; 50 (12-15)	6,401	0	61,587
Projected Site 5	Lot 49	29,696; 28 (7-8)	0	2,863	32,559
Projected Site 6	Lot 61	26,424; 29 (7-8)			26,424
TOTAL		**343,315; 338 (181)**	**18,363**	**15,647**	**389,609**

INCREMENT BETWEEN NO-ACTION AND WITH-ACTION SCENARIOS

Under the With-Action Scenario for the project build year of 2028, the six Projected Development Sites would be developed with six new buildings containing a total of 389,609 gsf of floor area. The buildings would contain 343,315 gsf/278,071 zsf of residential floor area for 338 dwelling units (based on an average size of 874 zsf per dwelling unit on Projected Development Site 1 and an average of 780 zsf per dwelling unit on Projected Development Sites 2 through 6), 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces within 12,284 gsf of building floor area. The existing/No-Action 45,894 gsf of floor area, comprised of 42,741 gsf of manufacturing, warehouse, and automobile repair floor area, and 3,153 gsf of residential floor area for 4 market rate dwelling units, plus parking areas would be removed. This would result in an increase of 343,715 gsf of total floor area and would include the addition of 340,162 gsf of residential floor area for 334 dwelling units, 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces, and the removal of 42,741 gsf of manufacturing, warehouse, and automobile repair floor area. No changes would occur to Other Sites 1 through 8.

[3] All lots are on Bronx Block 5084.

[4] Also includes 12,284 gsf of floor area for 22 accessory parking spaces, storage, and building utilities.

Table 2 Furman Avenue Rezoning Increment Table				
Site ID	**Existing**	**No-Action**	**With-Action**	**Increment**
Projected Site 1	24,729 gsf manuf	24,729 gsf manuf	155,214 gsf resid, [150 DUs (150 afford)]; 7,391 gsf comm'l; 12,784 gsf comm facil; 22 pkg sp; 187,673 gsf total[5]	(24,729 gsf manuf); +155,214 gsf resid, [150 DUs (150 afford)]; +7,391 gsf comm'l; +12,784 gsf comm facil; +22 pkg; +162,944 gsf total
Projected Site 2	1,897 gsf resid (2 DUs); parking lot	1,897 gsf resid (2 DUs); parking lot	32,065 gsf resid, [40 DUs (10-12 afford)]; 32,065 gsf total	(parking lot); +30,168 gsf resid, [38 DUs (10-12 afford)]; +30,168 gsf total
Projected Site 3	1,256 gsf (2 DUs); parking lot	1,256 gsf (2 DUs); parking lot	44,730 gsf resid, [41 DUs (10-12 afford); 4,571 gsf comm'l; 49,301 gsf total	(parking lot); +43,474 gsf resid, [39 DUs (10-12 afford); +4,571 gsf comm'l; +48,045 gsf total
Projected Site 4	5,494 gsf auto repair garage	5,494 gsf auto repair garage	55,186 gsf resid, [50 DUs (12-15 afford)]; 6,401 gsf comm'l; 61,587 gsf total	(5,494 gsf garage); +55,186 gsf resid, [50 DUs (12-15 afford)]; +6,401 gsf comm'l; +56,093 gsf total
Projected Site 5	7,500 gsf auto repair garage	7,500 gsf auto repair garage	29,696 gsf resid, [28 DUs (7-8 afford)]; 2,863 gsf comm facil; 32,559 gsf total	(7,500 gsf garage); +29,696 gsf resid, [28 DUs (7-8 afford)]; +2,863 gsf comm facil; +25,059 gsf total
Projected Site 6	5,018 gsf auto repair garage	5,018 gsf auto repair garage	26,424 gsf resid, [29 DUs (7-8 afford); 26,424 gsf total	(5,018 gsf garage); +26,424 gsf resid, [29 DUs (7-8 afford); +21,406 gsf total
TOTAL GSF	24,729 gsf manuf, 18,012 gsf garage, 3,153 gsf resid (4 DUs), parking; 45,894 gsf total	24,729 gsf manuf, 18,012 gsf garage, 3,153 gsf resid (4 DUs), parking; 45,894 gsf total	343,315 gsf resid [338 DUs (196-205 afford)]; 18,363 gsf comm'l; 15,647 gsf comm facil; 22 pkg sp; 389,609 gsf total	(24,729 gsf manuf, 18,012 gsf garage); +340,162 gsf resid [334 DUs (196-205 afford)]; +18,363 gsf comm'l; +15,647 gsf comm facil; +22 pkg sp; +343,715 gsf total

[5] Also includes 12,284 gsf of floor area for 22 accessory parking spaces, storage, and building utilities.

4541 Furman Avenue Rezoning, Bronx

Figure 1: Site Location



Data Source: MapPLUTO 2018v2.1

Urban Cartographics

4541 Furman Avenue Rezoning, Bronx

Figure 2: Tax Map

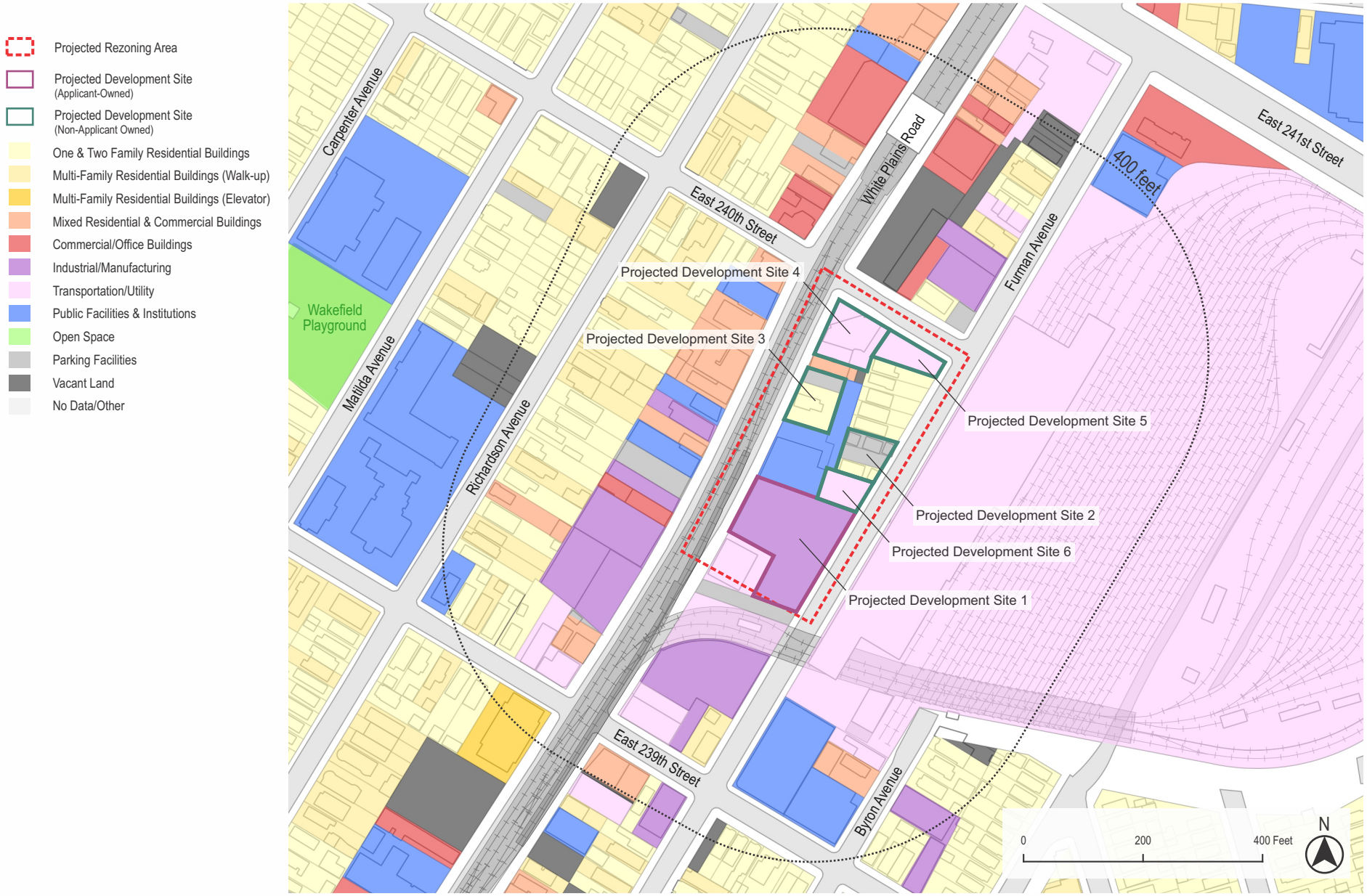


Data Source: MapPLUTO 2018v2.1, NYC DOF Digital Tax Map 2/22/19

Urban Cartographics

4541 Furman Avenue Rezoning, Bronx

Figure 3: Land Use Map

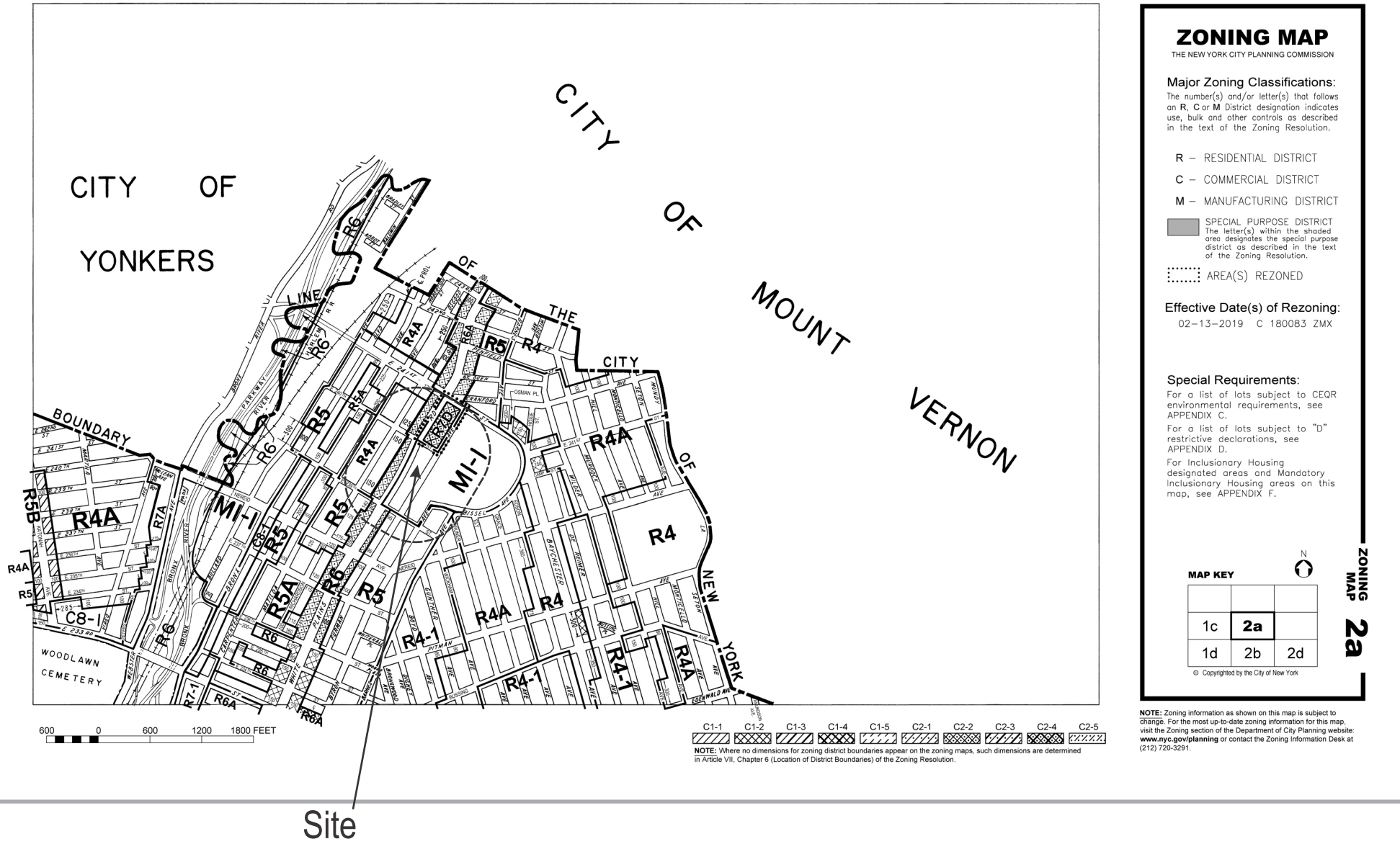


Data Source: MapPLUTO 2018v2.1, NYC DOF Digital Tax Map 2/22/19

Urban Cartographics

4541 Furman Avenue Rezoning, Bronx

Figure 4: Zoning Map



ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

The number(s) and/or letter(s) that follows an **R**, **C** or **M** District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.

R – RESIDENTIAL DISTRICT

C – COMMERCIAL DISTRICT

M – MANUFACTURING DISTRICT

SPECIAL PURPOSE DISTRICT The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.

AREA(S) REZONED

Effective Date(s) of Rezoning:

02–13–2019 C 180083 ZMX

Special Requirements:

For a list of lots subject to CEQR environmental requirements, see APPENDIX C.

For a list of lots subject to "D" restrictive declarations, see APPENDIX D.

For Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas on this map, see APPENDIX F.

MAP KEY

N

1c	**2a**	
1d	2b	2d

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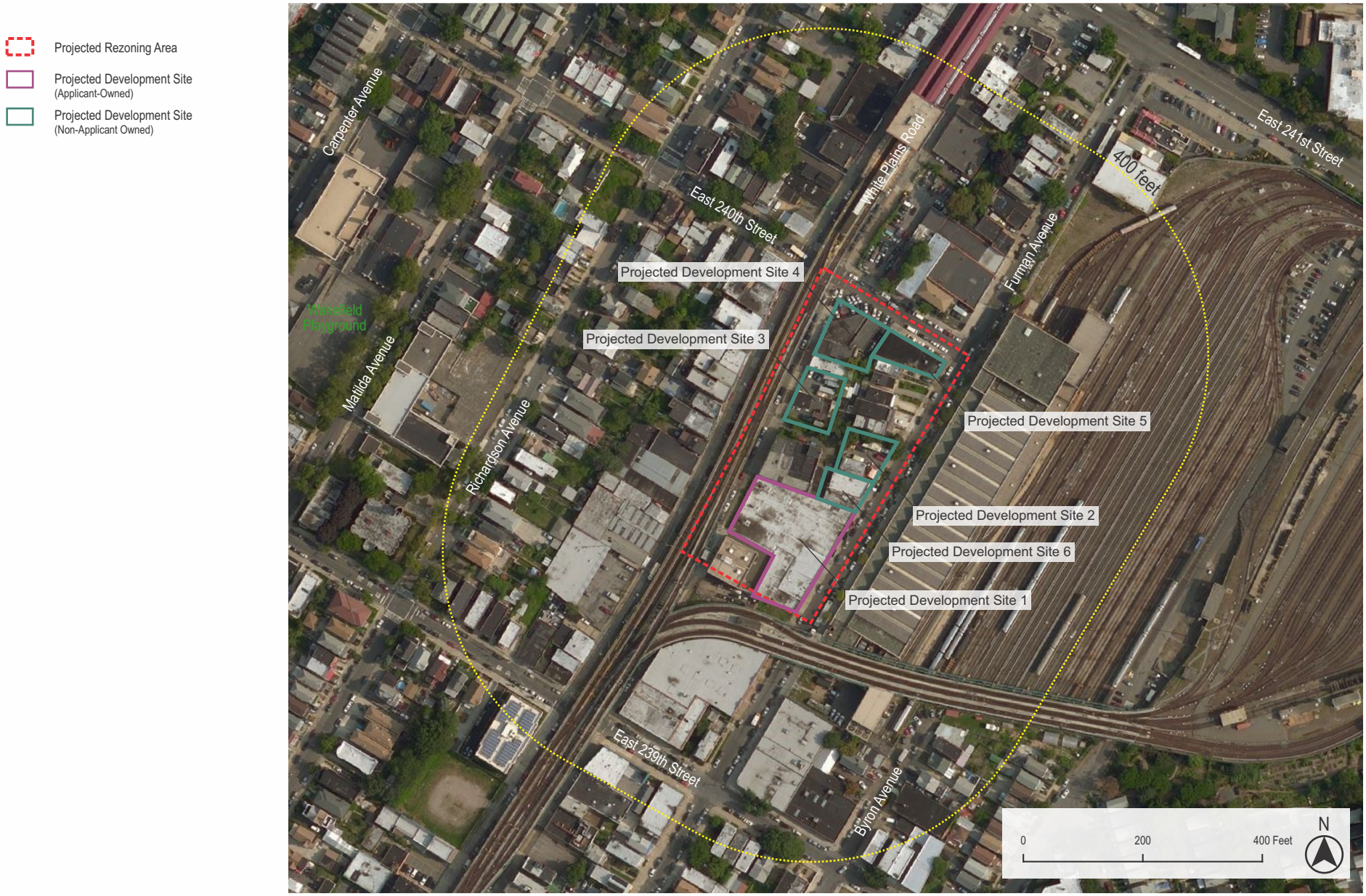
ZONING MAP **2a**

NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: **www.nyc.gov/planning** or contact the Zoning Information Desk at (212) 720-3291.

Urban Cartographics

4541 Furman Avenue Rezoning, Bronx

Figure 5: Aerial Map



Imagery Source: 2019 Bing, Microsoft Corporation (OR) 2019 Google

Urban Cartographics



1. View of the Site facing north from Furman Avenue.



2. View the Site facing north from Furman Avenue.



3. View of the Site facing southwest from Furman Avenue.





4. View of the Site facing southwest from Furman Avenue.



5. View of the west side Furman Avenue facing northwest (Site at right).



6. View of the Site facing south from White Plains Road.





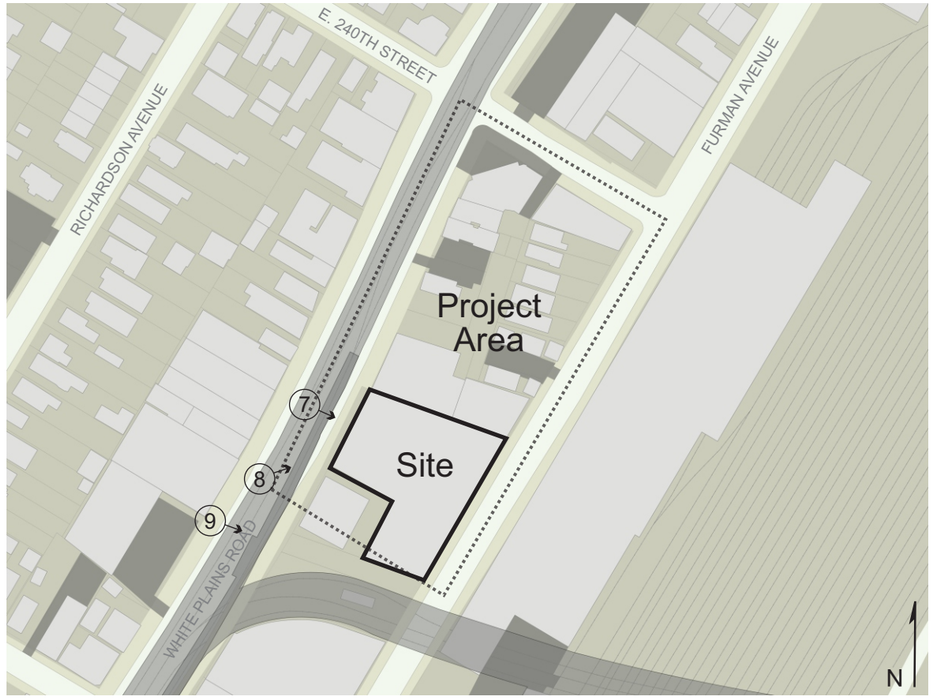
7. View of the Site facing southeast from White Plains Road.



8. View of the Site facing northeast from White Plains Road.



9. View of the east side of White Plains Road facing southeast.





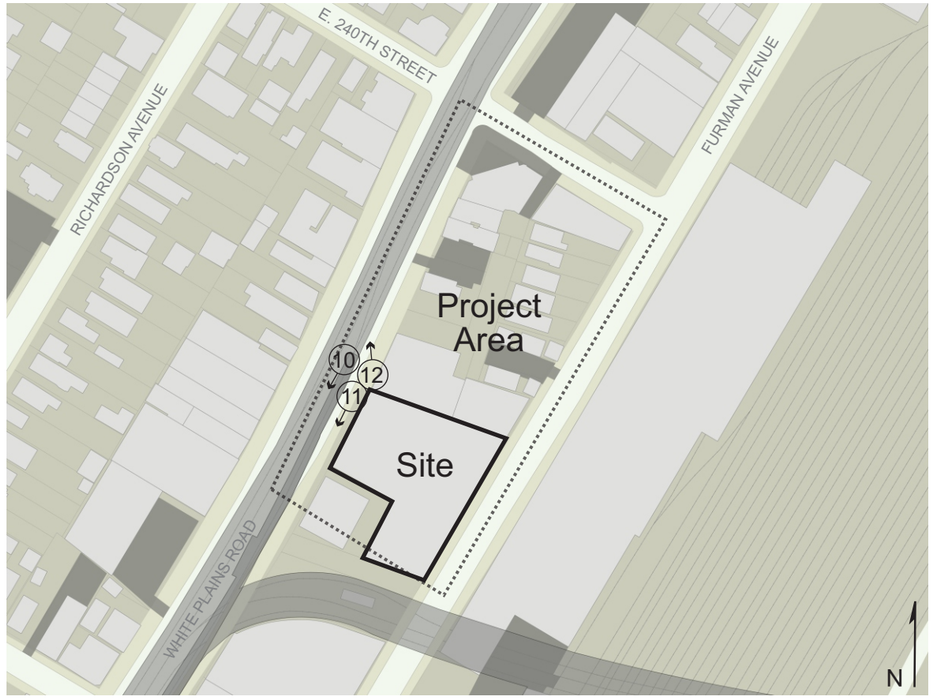
10. View of White Plains Road facing southwest (Site at left).



11. View of the sidewalk along the east side of White Plains Road facing southwest (Site at left).



12. View of the west side of White Plains Road facing north from the Site.





13. View of the west side of White Plains Road facing southwest from the Project Area.



14. View of the Sidewalk along the east side of White Plains Road facing northeast (Site ahead at right).



15. View of White Plains Road facing northeast (Site at right).





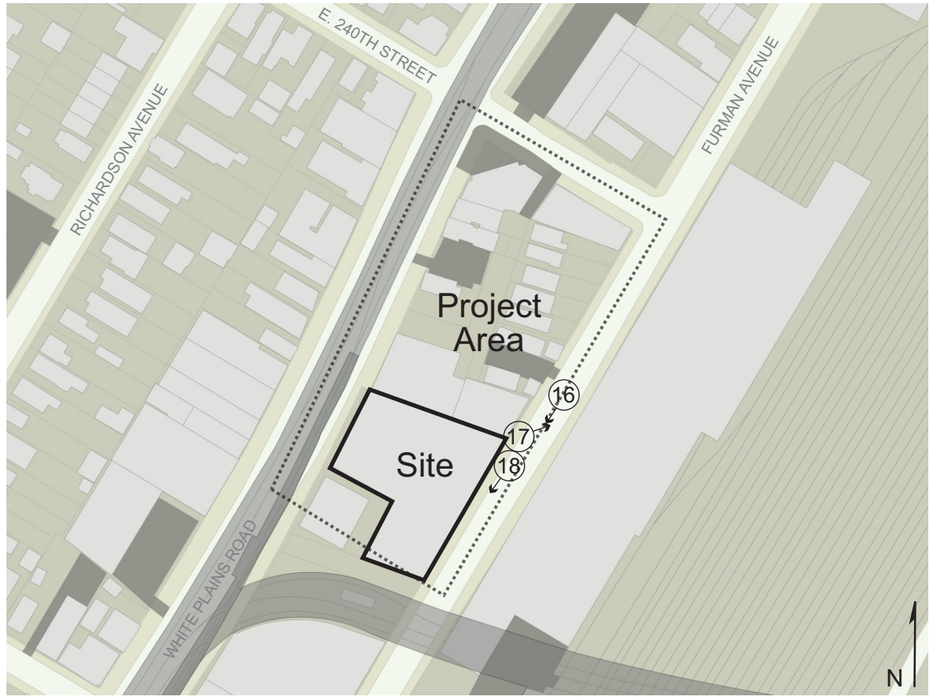
16. View of Furman Avenue facing southwest (Site at right).



17. View of the east side of Furman Avenue facing northeast from the Site.



18. View of the sidewalk along the west side of Furman Avenue facing southwest (Site at right).





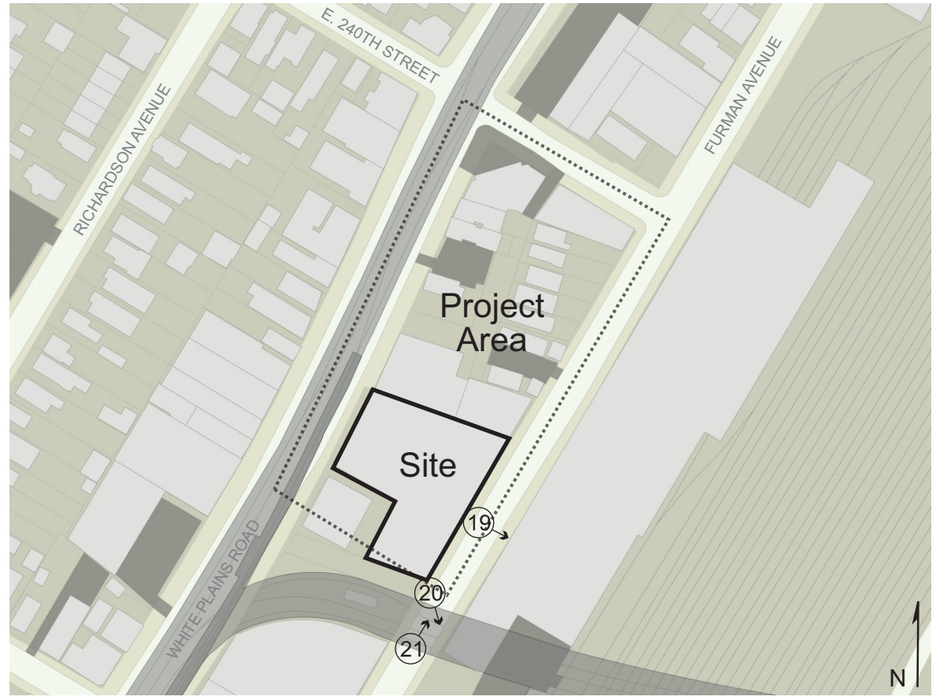
19. View of the east side of Furman Avenue facing southeast from the Site.



20. View of east side of Furman Avenue facing south from the Project Area.



21. View of Furman Avenue facing northeast (Site at left).





22. View of the sidewalk along the west side of Furman Avenue facing northeast (Site at left).



23. View of the sidewalk along the west side of Furman Avenue facing southwest from the Site.



24. View of the Project Area facing southwest from East 240th Street.

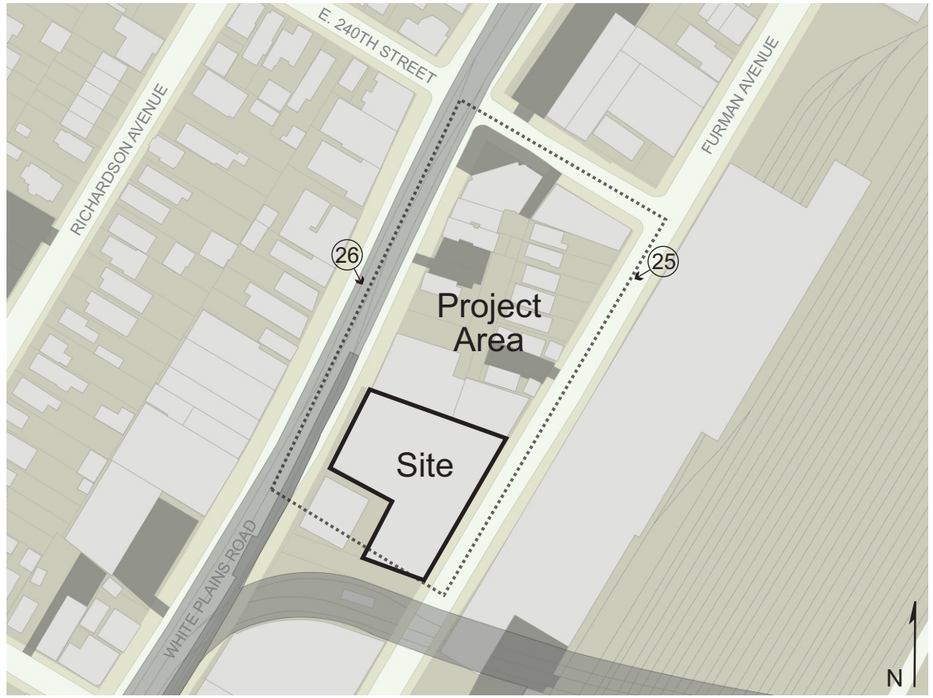




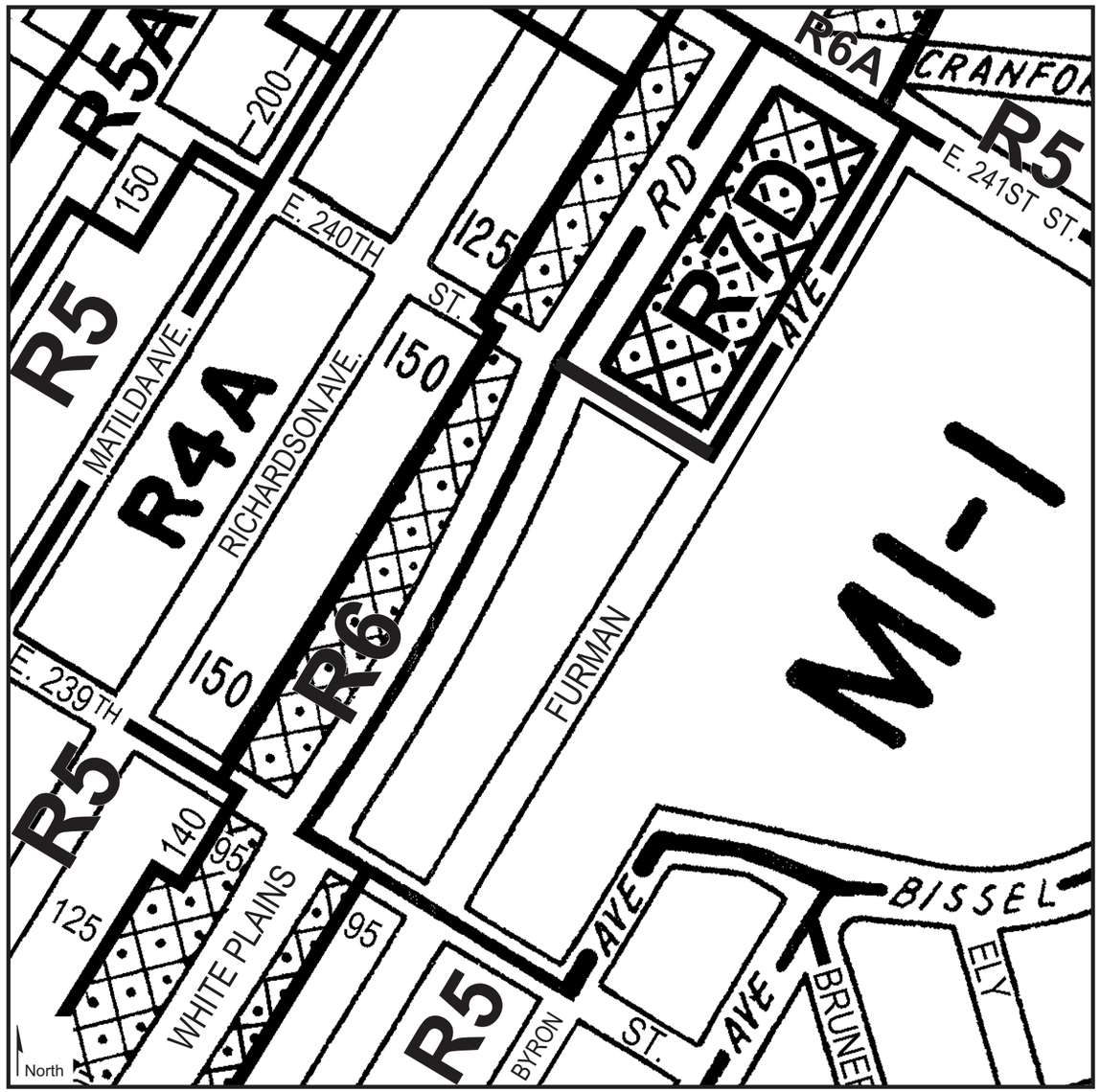
25. View of the Project Area facing southwest from Furman Avenue between East 239th Street and East 240th Street.



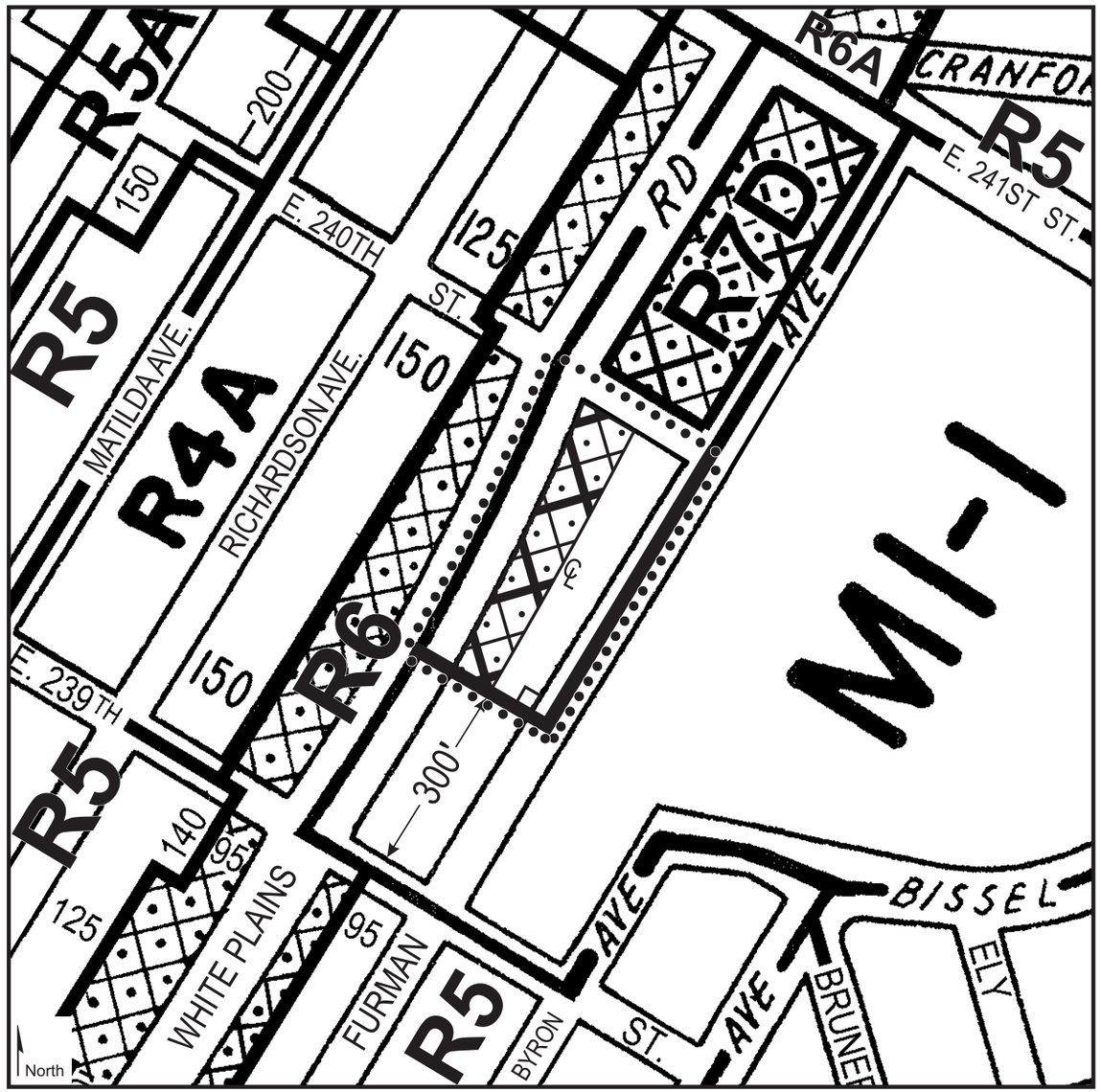
26. View of the Project Area facing southeast from White Plains Road between East 239th Street and East 240th Street.



Zoning Change Map



Current Zoning Map (2a)



Proposed Zoning Map (2a) - Area being rezoned is outlined with dotted lines

Rezoning from M1-1 to R7D
Rezoning from M1-1 to R7D/C2-4

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.

4541 Furman Avenue Rezoning
Community District 12, The Bronx
3/29/19
Zoning Map 2a

Matter <u>underlined</u> is new, to be added;
Matter ~~struck out~~ is to be deleted;
Matter within # # is defined in Section 12-10;
* * * indicates where unchanged text appears in the Zoning Resolution

* * *

APPENDIX F
Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas

* * *

The Bronx

* * *

The Bronx Community District 12

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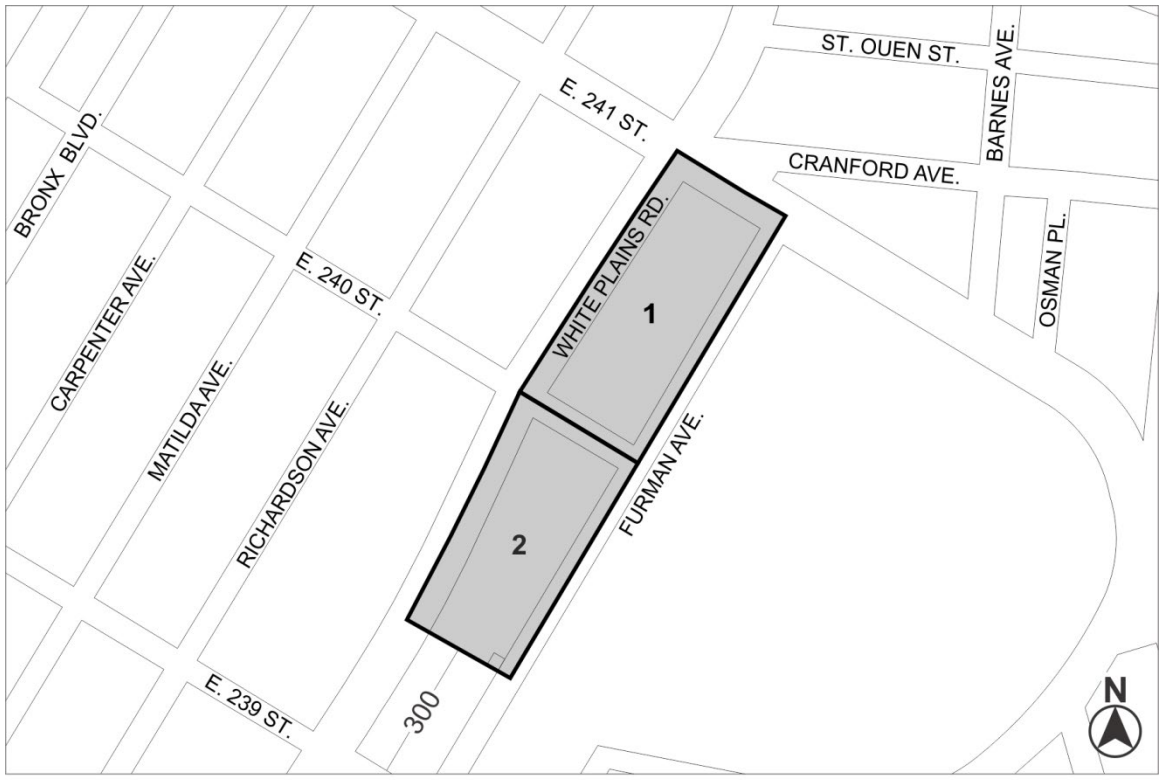
Map 2 – (2/13/19)



Mandatory Inclusionary Housing Area *(see Section 23-154(d)(3))*
Area **1** — 2/13/19 — MIH Program Option 1 and Option 2
<u>Area **2** — [date of adoption] — MIH Program Option 1 and Option 2</u>

Portion of Community District 12, The Bronx

* * *

Proposed Transit Zone Map 1



ENVIRONMENTAL ASSESSMENT STATEMENT

INTRODUCTION

Based on the analysis and the screenings contained in the Environmental Assessment Statement Short Form, the analysis areas that require further explanation include land use, zoning, and public policy, socioeconomic conditions, community facilities, open space, shadows, historic and cultural resources, urban design and visual resources, hazardous materials, transportation, air quality, noise, neighborhood character, and construction as further detailed below. The subject heading numbers below correlate with the relevant chapters of the *CEQR Technical Manual*.

4. LAND USE, ZONING AND PUBLIC POLICY

Introduction

Under the *City Environmental Quality Review (CEQR) Technical Manual* guidelines, a land use analysis evaluates the use and development trends in the area that may be affected by a proposed action and determines whether the proposed action is compatible with those conditions or may affect them. Similarly, the analysis considers the proposed action's compliance with, and effect on, the area's zoning and other applicable public policies.

The Proposed Actions consist of a Zoning Map Amendment to rezone Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140 (the Project Area) in the Wakefield neighborhood of the Bronx, Community District 12 from M1-1 to R7D and R7D/C2-4. The Proposed Actions also include two Zoning Text Amendments: to modify Zoning Resolution (ZR) Section 23-933, Appendix F to designate the newly mapped R7D and R7D/C2-4 districts as a Mandatory Inclusionary Housing (MIH) designated area, and to modify ZR Appendix I to extend the Transit Zone to be coterminous with the Project Area. In a related action, the project will undergo a coordinated review with the NYC Department of Housing Preservation and Development (HPD) because the project seeks discretionary financing.

The Proposed Actions would facilitate the development of Projected Development Site 1 with a 10-story two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors. Projected Development Site 1 would contain 185,973 gsf of total floor area including 7,146 gsf of commercial space, 11,098 gsf of community facility space, and 22 accessory residential parking spaces. Projected Development Site 1 will have a total of 150 dwelling units and is proposed to be 100% affordable under HPD's Extremely Low & Low-Income Affordability (ELLA) Program.

As discussed in the Project Description, Projected Development Site 1 is expected to be completed by 2024. As the Proposed Actions would result in the creation of multiple

development Sites that are not controlled by the Applicant, it is anticipated that these Sites would be developed over a five-year period with a Build Year of 2028. Absent the Proposed Actions (the No-Action condition) it is assumed that existing conditions would continue on the Applicant's Site and the Non-Applicant owned Sites.

According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning and public policy is related to the type and size of the project, as well as the location and context of the area that could be affected by the project. To assess the potential for project related impacts, the land use study area has been defined as the area located within a 400-foot radius of the proposed Project Area. The 400-foot radius study area is generally bounded by an area between East 240th and East 241st Streets on the north, an area slightly south of East 239th Street on the south, Richardson Avenue on the west, and the MTA rail yards east of Furman Avenue on the east. Various sources have been used to prepare a comprehensive analysis of land use, zoning, and public policy characteristics of the area, including field surveys, studies of the neighborhood, census data, and land use and zoning maps.

LAND USE

Existing Conditions

Project Area

The Project Area (the area subject to the Zoning Map and Zoning Text Amendments) consists of approximately two-thirds of one block in the Wakefield neighborhood of the Bronx bounded by East 240th Street, White Plains Road, and Furman Avenue starting approximately 301.61 feet north of East 239th Street. The Project Area includes Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140. Block 5084, Lot 63 constitutes the Applicant's property which is proposed for development. Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 138, and 140 would be rezoned but are not controlled by the Applicant. Development is projected to occur on Block 5084, Lots 35, 39, 41, 49, 58, 59, 60, 61, and 63. No development would occur on Block 5084, Lots 19, 30, 40, 53, 54, 55, 56, 57, 138, or 140.

The 90,595 sf Project Area is developed with 1,000 gsf of retail space, 42,741 gsf of warehouse, manufacturing and automobile repair floor area, 15,686 gsf of residential floor area for 16 market rate dwelling units, 21,610 gsf of utility and community facility space (churches), parking areas, and vacant land. The existing development on each of the Projected Development Sites as well as Other Sites is detailed below.

Projected Development Sites

1. Projected Development Site 1 (Block 5084, Lot 63) – The Applicant-owned property has a lot area of approximately 24,729 sf. The Development Site has 102.17 feet of frontage on White Plains Road and 192.73 feet of frontage on Furman Avenue. The Development Site is improved with a one-story (16') 24,729 gsf manufacturing/factory

building. The existing building is currently unoccupied (FAR: 1.0). The property has Certificates of Occupancy dated 01/25/1957, 12/13/1957, and 06/26/1958 for "factory, metal stamping, metal spinning, loading, storage, warehouse, and offices". It appears from Department of Buildings records that the structure on the site was constructed between 1955 and 1958 with additional construction occurring in 2001. The existing building and site are currently unoccupied.

2. Projected Development Site 2 (Block 5084, Lots 58, 59, 60) – This Site consists of three lots owned by the same entity and totaling approximately 5,650 sf in area. (FAR: 0.34) The three lots are described below.

- Lot 58 – 2,025 sf lot used as a parking lot.

- Lot 59 - 1,875 sf lot used as a parking lot.

- Lot 60 – 1,750 sf lot developed with 2 two-story dwellings totaling 1,897 gsf in floor area and containing a total of 2 dwelling units.

3. Projected Development Site 3 (Block 5084, Lots 35 and 39) – This Site consists of two lots owned by the same entity and totaling approximately 6,595 sf in area. (FAR: 0.19) The two lots are described below.

- Lot 35 – 4,970 sf lot developed with a two-story dwelling containing 1,256 gsf of floor area and containing 2 dwelling units.

- Lot 39 – 1,625 sf lot used as a parking lot.

4. Projected Development Site 4 (Block 5084, Lot 41) – This Site consists of a 7,650 sf lot containing 2 two-story auto repair garages totaling 5,494 gsf in floor area. (FAR: 0.72).

5. Projected Development Site 5 (Block 5084, Lot 49) – This Site consists of a 4,230 sf lot containing a two-story 7,500 gsf auto body repair garage (FAR: 1.77).

6. Projected Development Site 6 (Block 5084, Lot 61) – This Site consists of a 3,975 sf lot containing a two-story 5,018 gsf auto body repair garage (FAR: 1.26).

Other Sites

7. Other Site 1 (Block 5084, Lot 19) – This Site consists of an approximately 7,700 sf lot containing a one- and two-story approximately 9,160 gsf utility building used as a substation by the MTA (FAR: 1.19).

8. Other Site 2 (Block 5084, Lots 30 and 138) – This Site consists of two lots owned by the same entity and totaling approximately 15,400 sf in area. (FAR: 0.81) The two lots are described below.

- Lot 30 – 11,500 sf lot developed with a two-story 12,450 gsf warehouse building occupied by a church.

- Lot 138 – 3,900 sf vacant lot.

9. Other Site 3 (Block 5084, Lot 53) – This Site consists of a 2,889 sf lot developed with a two-story, 1,700 gsf dwelling containing one dwelling unit (FAR: 0.59).

10. Other Site 4 (Block 5084, Lot 54) – This Site consists of a 2,602 sf lot developed with a two-story, 1,336 gsf dwelling containing two dwelling units (FAR: 0.51).

11. Other Site 5 (Block 5084, Lot 55) – This Site consists of a 2,600 sf lot developed with a two-story, 2,200 gsf dwelling containing two dwelling units (FAR: 0.85).

12. Other Site 6 (Block 5084, Lot 56) – This Site consists of a 2,325 sf lot developed with a two-story, 2,875 gsf dwelling containing two dwelling units (FAR: 1.24).

13. Other Site 7 (Block 5084, Lot 57) – This Site consists of a 2,325 sf lot developed with a two-story, 2,422 gsf dwelling containing two dwelling units (FAR: 1.04).

14. Other Site 8 (Block 5084, Lots 40 and 140) – This Site consists of two lots with the same address totaling approximately 1,925 sf in area. The lots are under different ownership but adjoin each other with one lot being very small (375 sf) and are likely affiliated/under the same control. (FAR: 1.56) The two lots are described below.

- Lot 40 – 1,550 sf lot developed with a two-story 3,000 gsf mixed residential/commercial building comprised of a an approximately 1,000 gsf ground floor retail store plus three dwelling units totaling approximately 2,000 gsf.

- Lot 140 – 375 sf vacant lot.

400-Foot Radius Project Study Area

The proposed Project Area is located in the Wakefield neighborhood within Bronx Community District 12. The area surrounding the Project Area is characterized by a mix of commercial/manufacturing uses (mainly ground floor retail or automotive/transportation related) and residential uses (multi-family, mixed residential and commercial, and one- and two-family homes). Several community facility uses including churches, schools and health centers are scattered through the surrounding area. Directly east of the Project Area is the MTA 239th Street Yard and Maintenance Shop which contains storage of trains not in use. The Project Area is also directly adjacent to an elevated subway line that runs along White Plains Road and carries the 2 and 5 subway lines. There are no open space resources within 400 feet of the Project Area.

Future No-Action Scenario

Project Area

Under the No-Action Scenario for the project build year of 2028, it is assumed that the six Projected Development Sites and the eight Other Sites would remain in their existing condition as detailed above.

No new as-of-right development would occur on the Projected Development Sites and the Other Sites based on the provisions of the existing M1-1 zoning and the amount of development currently existing on each of these Sites, if any (some parcels are currently used as parking lots). No new residential uses would be permitted on these Sites under the existing M1-1 zoning. The maximum permitted manufacturing/commercial FAR is 1.0. No new manufacturing or commercial development would be anticipated in this small M1-1 zoned area surrounded increasingly by new residential development. In addition, all Sites with the exception of Projected Development Sites 2 and 3, are developed in excess of 50% of the permitted manufacturing/commercial FAR of 1.0 with three Projected Development Sites and four Other Sites developed in excess of the maximum 1.0 FAR. No new community facility development is anticipated as no significant demand for such uses would be expected from the existing manufacturing, utility, auto repair, and low-density residential uses on the block and in the immediately surrounding area. Most of the community facility uses within 400 feet of the Project Area are churches many of which, including the existing church in the Project Area, occupy buildings that might otherwise remain vacant.

400-Foot Radius Project Study Area

Based on reviews conducted on March 3, 2021, no new development projects were identified for the 400-foot radius project study area on the NYC Department of City Planning's (DCP) ZAP Search of Zoning and Land Use Applications. However, the NYC Active Major Construction website and a search of the NYC Department of Buildings (DOB) website indicated that the following developments are planned within 400 feet of the Project Area.

- 4519 White Plains Road – A 9-story, 72,701 square foot mixed-use building containing 20 Affordable Independent Residences for Seniors (AIRS) units, 49 non-profit institutional with sleeping accommodations (NPISA) units, 29 income restricted quality housing dwelling units, and a community center to be constructed on the 15,800 square foot property currently developed with a 7,674 gsf, 1-story manufacturing building. NYC Department of Buildings records indicate that the application was approved on 1/5/20.

- 4600 White Plains Road – A 2-story hotel approved on 10/11/18.

- 700 East 241st Street – A 9-story, 207,925 gsf mixed-use building containing 186 affordable dwelling units, 24,972 gsf of ground floor commercial space, and 47 parking spaces. A NYC Department of Buildings permit was issued on 04/09/21.

No development plans are known to exist for any other undeveloped parcels or other uses within the project study area as identified above by the project build year of 2028.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2028.

Future With-Action Scenario

Project Area

Under the With-Action Scenario for the project build year of 2028, the six Projected Development Sites are anticipated to be developed with six new buildings containing a total of 389,609 gsf of floor area. The buildings would contain 343,315 gsf/278,071 zsf of residential floor area for 338 dwelling units (based on an average size of 874 zsf/1,035 gsf per dwelling unit on Projected Development Site 1 and an average of 780 zsf/1,001 gsf per dwelling unit on Projected Development Sites 2 through 6), 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces within 12,284 gsf of building floor area. The existing 45,894 gsf of floor area on the six Projected Development Sites, comprised of 42,741 gsf of manufacturing, warehouse, and automobile repair floor area, and 3,153 gsf of residential floor area for 4 market rate dwelling units, plus parking areas would be removed. The projected development on each of the six Development Sites is detailed below.

For purposes of a conservative environmental analysis, this EAS analyzes a RWCDS that differs from the Applicant's proposed development, as detailed further below. The existing structures and uses on the Site would be demolished and removed.

Projected Development Site 1 would be developed with a 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors. Projected Development Site 1 would contain 187,673 gsf[1] of total floor area and 138,484 zsf of floor area and would have an FAR of 5.6. In Building Segment A, the first floor would contain 7,391 gsf/zsf of commercial space and the remainder of the building segment would contain 52,995 gsf/42,680 zsf of residential floor area. In Building Segment B, the cellar level would contain 12,784 gsf/0 zsf of community facility space,

[1] The final plans have been refined and the total gross floor area of the project has been reduced from 187,673 gsf to 185,973 gsf. For purposes of a conservative environmental analysis, the EAS analyzes a RWCDS that maximizes FAR and the analyses are based on 187,673 gsf.

the cellar and sub-cellar levels would contain 12,284 gsf/0 zsf of space for 22 accessory residential parking spaces, storage, and building utilities, and the remainder of the building segment would contain 102,219 gsf/88,413 zsf of residential floor area.

Projected Development Site 1 will have a total of 150 dwelling units and is proposed to be 100% affordable under HPD's ELLA program. The buildings' 142,934 gsf of occupiable residential floor area (basement and cellar space is not included) would typically be converted to 143 dwelling units at the standard size of approximately 1,000 gsf per unit. However, as the development is proposed to be 100% affordable under HPD's ELLA program, the number of units is based on HPD's requirements and the standard 1,000 gsf per unit would not be applicable. HPD typically suggests an average unit size of 780 sf. In this case, since the building would be constructed with single-loaded corridors, the average unit size is approximately 874 sf. Therefore, the number of dwelling units has been determined based on an average size of 874 sf as applied to the 131,093 zoning square feet of the building.

The Applicant is proposing that the proposed development be 100% affordable under HPD's ELLA program, and the EAS assumes that 100% of the gross residential floor area would be affordable to households with incomes at or below 80% of the AMI. The Applicant is also proposing to map MIH Options 1 and 2 on the property. MIH Option 1 requires that 25% of the 142,934 gsf residential floor area be affordable to households with incomes averaging at or below 60% of AMI. Under this option, 38[2] permanently affordable units would be required. MIH Option 2 requires that 30% of the 142,934 gsf residential floor area be affordable to households with incomes averaging at or below 80% of AMI. Under this option, 45[3] permanently affordable units would be required. Although no parking is required for affordable units within the Transit Zone, 22 parking spaces would be provided.

Finally, in a related action, the project would undergo a coordinated review with the NYC Department of Housing Preservation and Development (HPD) because the project seeks discretionary financing. The Applicant is requesting public financing from HPD's ELLA program to help fund construction of low-income multi-family rental units within the proposed development. The ELLA program requires units to be set aside for formerly homeless households and extremely low and very low-income households. The requested public financing would facilitate the creation of approximately 150 affordable units in an area where there is a strong need for affordable housing that reaches a broad range of incomes.

[2] Calculated at 25% of 131,093 zsf divided by 762 sf per unit.
[3] Calculated at 30% of 131,093 zsf divided by 762 sf per unit.

Although there are currently no plans for any development on Projected Development Sites 2 through 6, the developments described below are anticipated under the proposed R7D(MIH) and R7D/C2-4(MIH) zoning. Residential units on Projected Development Sites 2 through 6 have been calculated based on average size of 780 zsf per dwelling unit. A range of affordable units is provided for each Projected Development Site below assuming that either 25% or 30% of the gross residential floor area would be affordable to households with incomes at 60% of AMI or 80% of AMI, respectively. For CEQR analysis purposes, the more conservative MIH Option on each of the Projected Development Sites will be assumed for each relevant analysis category. The existing structures and uses on all Projected Development Sites would be demolished and removed.

Projected Development Site 2 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 32,065 gsf/31,371 zsf of floor area on the 5,602 square foot site for an FAR of 5.6. The building would include 40 residential dwelling units including between 10 and 12 affordable units and 28 to 30 market rate units. No parking would be provided. The residential entrance would be on Furman Avenue.

Projected Development Site 3 would be developed with a new 95' tall, 9-story and cellar, residential and commercial building with approximately 49,301 gsf/36,736 zsf of floor area on the 6,560 square foot site for an FAR of 5.6. The 44,730 gsf/32,165 zsf of residential floor area would include 41 residential dwelling units including between 10 and 12 affordable units and 29 to 31 market rate units. The development would also include 4,571 gsf/zsf of commercial space on the ground-floor of the building. No parking would be provided. Residential and commercial entrances would be on White Plains Road.

Projected Development Site 4 would be developed a new 75' tall, 7-story and cellar, residential and commercial building with approximately 61,587 gsf/45,365 zsf of floor area on the 8,101 square foot site for an FAR of 5.6. The 55,186 gsf/38,964 zsf of residential floor area would include 50 residential dwelling units including between 12 and 15 affordable units and 35 to 38 market rate units. The development would also include 6,401 gsf/zsf of commercial space on the ground-floor of the building. No parking would be provided. The residential entrance would be on White Plains Road while the commercial entrance would be on East 240th Street.

Projected Development Site 5 would be developed with a new 75' tall, 7-story and cellar, residential and community facility building with approximately 32,559 gsf/24,433 zsf of floor area on the 4,363 square foot site for an FAR of 5.6. The 29,696 gsf/21,570 zsf of residential floor area would include 28 residential dwelling units including between 7 and 8 affordable units and 20 to 21 market rate units. The development would also include 2,863 gsf/zsf of community facility space on the

ground-floor of the building. No parking would be provided. The residential entrance and one community facility entrance would be on East 240th Street while a second community facility entrance would be provided on Furman Avenue.

Projected Development Site 6 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 26,424 gsf/22,908 zsf of floor area on the 4,091 square foot site for an FAR of 5.6. The building would include 29 residential dwelling units including between 7 and 8 affordable units and 21 to 22 market rate units. No parking would be provided. The residential entrance would be on Furman Avenue.

No new development is anticipated on Other Sites 1 through 8.

400-Foot Radius Project Study Area

The Proposed Actions would not result in any changes in land use within the 400-foot radius project study area.

Conclusion

The Applicant seeks to develop the Project Site to provide 150 affordable dwelling units under HPD's ELLA program, together with 7,391 gsf of retail space, 12,784 gsf of community facility (medical office) space, and 22 residential accessory parking spaces. Five additional Sites within the Project Area are projected to be developed with five new buildings containing 188 dwelling units, 46 to 55 of which would be affordable units, 10,972 gsf of commercial retail/office space, and 2,863 gsf of community facility space (medical offices).

The With-Action incremental development relative to the No-Action development on Projected Development Sites 1 through 6 would total 334 dwelling units, 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces, and the removal of 42,741 gsf of manufacturing, warehouse, and automobile repair floor area.

The Proposed Actions would constitute a significant land use change in the Project Area but the Applicant believes this change would be beneficial as it would fully develop these underutilized Sites and would provide new housing, including affordable housing, commercial and community facility space, and accessory parking. The Proposed Actions would also allow for the replacement of longstanding parking lots, auto repair garage uses, and low density residential uses with more viable development, and would reinforce emerging land use patterns in the immediately surrounding area. The replacement of these existing uses would not be considered to be a significant land use impact. The Applicant believes that the proposed increase in density is appropriate at this location because it is located along a major street (White Plains Road) near public transit.

The projected developments could alter existing development patterns in the surrounding project study area in the future, especially of the underutilized parking lots and vacant parcels, by encouraging the development of new residential uses. However, this would be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City.

Based on the above analyses, it has been determined that no potentially significant adverse impacts related to land use are expected to occur as a result of the Proposed Actions. Therefore, further analysis of land use is not warranted.

ZONING

Existing Conditions

Project Area

The Project Area was mapped with the current M1-1 zoning in 1961. The M1 district is often a buffer between M2 and M3 districts and adjacent residential or commercial districts. Light industries typically found in M1 areas include woodworking shops, auto storage and repair shops, and wholesale service and storage facilities. Offices, most retail uses, and some community facility uses are also permitted but residential uses are not allowed. Strict performance standards are common to all M1 districts. The M1-1 district permits a maximum FAR of 1.0 for manufacturing and commercial uses and 2.4 for Use Group 4 community facility uses. The M1-1 district requires a setback of 20 feet on narrow streets and 15 feet on wide streets and permits a maximum building height of 30 feet or two-stories, whichever is less. No front or side yards are generally required but a standard rear yard of 20 feet is required in the M1-1 district. Parking is required based on the type of use and the size of the establishment.

400-Foot Radius Project Study Area

Most of the 400-foot radius project study area around the Project Area is zoned M1-1 including the area to the east and most of the area to the south (north of East 239th Street). The radius area south of East 239th Street is zoned in a combination of R5 and R6 residential zoning districts with a C2-2 commercial overlay mapped over both sides of White Plains Road. The project study area to the west of the Project Area is zoned R6 with a C2-2 commercial overlay along White Plains Road, and R4A and R5 further west. An R7D district is mapped directly north of the project study area. The R4A, R5, R6, R7D, and C2-2 districts are discussed below.

The R4A zoning district allows only detached one- and two-family residences and community facility uses. The R4A zone permits a maximum residential FAR of 0.75 with an attic allowance of up to 0.15 for a total FAR of 0.9, and a maximum community facility FAR of 2.0. The R4 zone permits a maximum building height of 35 feet resulting in buildings generally no taller than three stories, and it requires one parking space per

dwelling unit. Lots sizes are a minimum of 2,850 square feet with a minimum lot width of 30 feet.

R5 zoning districts allow all housing types including detached, semi-detached, attached and multi-family residences. The maximum FAR for all housing types is 1.25. On blocks that are predominantly built up, a maximum FAR of 1.65 is permitted through the R5 infill provision. Detached residences are limited to lots with a minimum of 3,800 square feet in area and a minimum lot width of 40 feet. All other housing types are limited to lots with a minimum of 1,700 square feet in area and a minimum lot width of 18 feet. The maximum building height is 40 feet with a maximum perimeter wall height of 30 feet. Community facilities are permitted at an FAR of 2.0. Off-street parking in a grouped parking facility is required for at least 85 percent of the dwelling units.

R6 zoning districts are widely mapped in built-up, medium-density areas of the City. The character of R6 districts can range from neighborhoods with a diverse mix of building types and heights to large-scale "tower in the park" developments. Two sets of bulk regulations apply in the R6 district. Standard height factor regulations produce small multi-family buildings on small zoning lots and, on larger lots, tall buildings that are set back from the street. Optional Quality Housing regulations produce high lot coverage buildings within height limits that often reflect the scale of older, pre-1961 apartment buildings in the neighborhood.

Buildings developed pursuant to height factor regulations are often tall buildings set back from the street and surrounded by open space and on-site parking. The FAR in R6 districts ranges from 0.78 (for a single-story building) to 2.43 at a typical height of 13 stories. It allows a community facility FAR of up to 4.8. There are no height limits for height factor buildings although they must be set within a sky exposure plane which begins at a height of 60 feet above the street line and then slopes inward over the zoning lot. Off-street parking is required for 70% of a building's dwelling units.

The optional Quality Housing regulations produce high lot coverage buildings set at or near the street line. The FAR is 3.0; the maximum base height before setback is 60 feet with a maximum building height of 70 feet. On a narrow street (beyond 100 feet of a wide street), the maximum FAR is 2.2; the maximum base height before setback is 45 feet with a maximum building height of 55 feet. Off-street parking is required for 50% of all dwelling units.

The R7D zoning district is a contextual zoning district that requires development to be in accordance with Quality Housing standards. For Inclusionary Housing, the district typically produces 11-story apartment buildings set at or near the street line. The maximum residential and community facility FAR in the R7D zone is 4.2. The residential FAR can be increased up to 5.6 with the Inclusionary Housing Program bonus. For Inclusionary Housing, above a base height of 60 to 95 feet, the building must

set back to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum height of 115 feet. Parking is required for 50% of the market rate dwelling units but may be waived if 15 or fewer spaces are required. No parking is required for affordable units within a Transit Zone.

C2 commercial overlay districts accommodate the retail and personal service shops needed in residential neighborhoods, and are generally mapped along major avenues. C2 districts permit a slightly wider range of uses than C1 districts, such as funeral homes and repair shops. The maximum commercial FAR for C2-2 overlays in the R5 zone is 1.0 while the maximum commercial FAR for C2-2 overlays in the R6 zone is 2.0. Residential uses are permitted within these overlays with residential bulk being governed by the provisions of the surrounding residential zone. Parking requirements vary by use within the C2-2 zone with one parking space required for each 300 square feet of commercial floor area.

The Project Area is located immediately east of the boundaries of the Wakefield/Eastchester Rezoning (ULURP Application No.: 070409 ZMX; CEQR No.: 07DCP058X), effective July 25, 2007, and immediately south of the 241st Street Rezoning (ULURP Application Nos.: 180083 ZMX, 180084 ZRX; CEQR No.: 18DCP094X), effective February 13, 2019, which rezoned the entirety of Block 5087 from an Ml-1 zoning district to an R7D/C2-4 zoning district.

Future No-Action Scenario

Project Area

In the future and absent the Actions, the Project Area would continue to be zoned M1-1.

400-Foot Radius Project Study Area

Based on a review of DCP's LUCATS listings for Bronx Community District 12, no rezoning applications are proposed for the 400-foot radius project study area. No rezoning actions are presently being contemplated by the DCP, as indicated on the DCP website, for the study area by the final project build year of 2028.

Future With-Action Scenario

Project Area

The Proposed Actions consist of a Zoning Map Amendment, two Zoning Text Amendments, and a related financing action with HPD. The zoning map amendment from M1-1 to R7D and R7D/C2-4 would involve a rezoning of the Applicant's property, Block 5084, Lot 63, and non-Applicant properties, identified as Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 138, and 140. Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 63, 138, and 140 would be zoned R7D/C2-4 and Block 5084, Lots 56, 57, 58, 59, 60, and 61 would be zoned R7D.

A zoning text amendment is proposed to modify ZR §23-933, Appendix F to designate the newly mapped R7D and R7D/C2-4 districts as Mandatory Inclusionary Housing designated areas. According to the U.S. Census Bureau, approximately 50.4 percent of area households in Bronx Community District 12 are rent burdened and there is a strong need for affordable housing that reaches a broad range of incomes. Under the MIH provisions applicable to the project, and as approved by HPD, all 150 units on the Applicant property would be considered affordable. In order to provide a conservative CEQR analysis (depending on the relevant analysis category), either 25% or 30% of the dwelling units on the Non-Applicant Sites would be considered affordable at 60% or 80% AMI, respectively.

The MIH program requires that permanently affordable housing be provided within new residential developments, enlargements, and conversions from non-residential to residential use within the mapped MIH Areas. Within the MIH Area, all housing developments, enlargements and conversions that meet the criteria set forth in the MIH program must comply with the requirements of either Option 1 or Option 2 described below.

- Option 1: 25 percent of the residential floor area shall be provided as housing affordable to households at an average of 60 percent of the Income Index (AMI), with no unit targeted at a level exceeding 130 percent of AMI.
- Option 2: 30 percent of the residential floor area shall be provided as housing affordable to households at an average of 80 percent of the Income Index (AMI), with no unit targeted at a level exceeding 130 percent of AMI.

The Applicant is proposing that the proposed development be 100% affordable under HPD's ELLA program, and the EAS assumes that 100% of the gross residential floor area would be affordable to households with incomes at or below 80% of the AMI. The Applicant is also proposing to map MIH Options 1 and 2 on the property. MIH Option 1 requires that 25% of the 142,934 gsf residential floor area be affordable to households with incomes averaging at or below 60% of AMI. Under this option, 38[4] permanently affordable units would be required. MIH Option 2 requires that 30% of the 142,934 gsf residential floor area be affordable to households with incomes averaging at or below 80% of AMI. Under this option, 45[5] permanently affordable units would be required. The final MIH Option will be chosen by the City Council through the ULURP process.

A second zoning text amendment would modify ZR Appendix I to extend the Transit Zone to be coterminous with the Project Area. The Project Area is currently well-served by public transit, with the Wakefield-241st Street subway station one block north or an approximately two-minute walk from the Development Site. The Transit Zone

[4] Calculated at 25% of 131,093 zsf divided by 762 sf per unit.
[5] Calculated at 30% of 131,093 zsf divided by 762 sf per unit.

boundary currently includes blocks immediately to the north, west, and south of the Project Area. These blocks were either already mapped with residential zoning districts when Appendix I was adopted into the Zoning Resolution, along with the Zoning for Quality and Affordability ("ZQA") text amendments, on March 22, 2016, or have since been rezoned to allow residential uses and were subsequently included in the Transit Zone at that time. As the proposed zoning map amendment would rezone the Project Area to R7D and R7D/C2-4 zoning districts, the proposed inclusion within the Transit Zone would facilitate the creation of a substantial number of affordable dwelling units by reducing the amount of required parking for households with incomes at or below 80 percent of AMI. The proposed zoning text amendment would also encourage further transit-oriented development in the immediate vicinity of the Wakefield-241st Street subway station.

As indicated above, the Project Area is projected to be developed with six new buildings containing a total of 389,609 gsf of floor area. The buildings would contain 343,315 gsf of residential floor area for 338 dwelling units (based on an average size of 874 zsf/1,035 gsf per dwelling unit on Projected Development Site 1 and an average of 780 zsf/1,001 gsf per dwelling unit on Projected Development Sites 2 through 6), 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces within 12,284 gsf of building floor area. The existing 45,894 gsf of floor area, comprised of 42,741 gsf of manufacturing, warehouse, and automobile repair floor area, and 3,153 gsf of residential floor area for 4 market rate dwelling units, plus parking areas would be removed.

The proposed R7D zoning district is a contextual zoning district that requires development to be in accordance with Quality Housing standards. For Inclusionary Housing, the district typically produces 11-story apartment buildings set at or near the street line. The maximum residential and community facility FAR in the R7D zone is 4.2. The residential FAR can be increased up to 5.6 with the Inclusionary Housing Program bonus. For Inclusionary Housing, above a base height of 60 to 95 feet, the building must set back to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum height of 115 feet. Parking is required for 50% of the market rate dwelling units but may be waived if 15 or fewer spaces are required. No parking is required for affordable units within a Transit Zone.

The proposed Zoning Map Amendment also includes a C2-4 commercial overlay mapped over a portion of the Project Area. The C2-4 overlay is proposed to a depth of 100 feet from White Plains Road. The C2-4 overlay would permit a maximum commercial FAR of 2.0 for local retail services. The C2-4 district requires one parking space required for each 1,000 square feet of general retail and ambulatory diagnostic floor area. No loading spaces are required for the first 8,000 square feet of floor area,

and one loading berth is required for the next 17,000 square feet of commercial retail floor area.

The Proposed Actions, including the proposed rezoning from M1-1 to R7D/C2-4, are needed to provide sufficient residential floor area for the proposed project to be economically feasible. The Applicant seeks to develop the zoning lot with housing consistent with the standards of the Quality Housing Program as well as affordable units under HPD's ELLA program and the Mandatory Inclusionary Housing (MIH) Program zoning regulations. The development of the building with affordable units is consistent with the expressed desires of the City's current mayoral administration to substantially increase the amount of affordable housing.

The proposed project cannot be developed under the current M1-1 zoning district as new residential uses are not permitted. The proposed rezoning would allow the many existing residential uses within the Project Area to comply with zoning, would allow for the replacement of longstanding parking lots and garage uses with more viable development, and would reinforce emerging land use patterns in the immediately surrounding area. The Applicant believes that the proposed increase in density is appropriate at this location because it is located along a major street (White Plains Road) near public transit and is located immediately south of the 241st Street Rezoning area, which rezoned the entirety of Block 5087 from an Ml-1 zoning district to an R7D/C2-4 zoning district and established an MIH Area on 02/13/19 (C180083ZMX). The Project Area is also located immediately east of an area zoned R4A/C2-4 on the opposite side of White Plains Road. The proposed R7D/C2-4 zoning district would promote mixed-use development consistent with the commercial overlays mapped along White Plains Road immediately north and south of the Project Area. The proposed Zoning Text Amendment to Appendix F is required when rezoning from a manufacturing district to a residential district. The inclusion of the property in the Transit Zone under the proposed Zoning Text Amendment to Appendix I allows a waiver of required parking for affordable housing. The proposed rezoning would promote new mixed-use development including affordable housing on a suitable, unutilized property.

The proposed zoning change from M1-1 to an R7D/C2-4 district for Projected Development Sites 3, 4, and 5 is required in order to legally allow for the development of new residential uses on these Sites. The mapping of a C2 commercial overlay would expand the scope of permitted commercial uses to include Use Groups 7, 8, and 9 local service uses which are not permitted in C1 commercial districts.

The proposed zoning change from M1-1 to R7D/C2-4 for Other Sites 1 and 2 is needed in order to maintain a consistent R7D/C2-4 zoning line extending along the White Plains Road frontage of the Project Area. No new development would occur on Other Site 1, which is an MTA substation, or on Other Site 2, which is owned by a church

where new development would require Attorney General and court approval in order for a sale to occur.

The proposed zoning change from M1-1 to R7D/C2-4 for Other Sites 3, 4, 5, and 8 would serve to make the residential uses on these Sites conforming under zoning. These Sites are currently zoned M1-1 which does not permit residential use. The proposed R7D zoning under the proposed Mandatory Inclusionary Housing would permit a maximum residential FAR of 5.6. The existing developed FAR on these Sites range from 0.51 to 1.56. Although expansions of these primarily residentially developed properties would be permitted, no significant additional development is anticipated as the Sites consist of relatively small parcels of between 1,925 sf and 2,889 sf relative to the typical soft site size of 5,000 square feet. It would allow also expand the scope of permitted commercial uses to include Use Groups 7, 8, and 9 local service uses which are not permitted in C1 commercial districts.

The proposed zoning change from M1-1 to R7D district for Projected Development Sites 2 and 6 is required in order to legally allow for the development of new residential uses on these Sites.

The proposed zoning change from M1-1 to R7D district for Other Sites 6 and 7 is required to make the residential uses on these Sites conforming under zoning. These Sites are currently zoned M1-1 which does not permit residential use. The proposed R7D zoning under the proposed Mandatory Inclusionary Housing would permit a maximum residential FAR of 5.6. The developed FAR on these Sites range from 1.04 to 1.24. Although expansions of these residentially developed properties would be permitted, no significant additional development is anticipated as the Sites consist of relatively small parcels of 2,325 sf in size relative to the standard soft site size of 5,000 square feet.

400-Foot Radius Project Study Area

The Proposed Actions would not result in any changes in zoning in the 400-foot radius project study area.

Conclusion

The Applicant believes that the Proposed Actions would not result in any significant impacts to zoning patterns in the area since the mapping of the proposed R7D and R7D/C2-4 zoning districts in the Project Area would result in development that would be compatible with the existing mixed neighborhood context while also providing enough floor area to develop affordable dwelling units on the Applicant Site and on certain non-Applicant owned Sites. The Applicant believes the change in zoning would be appropriate for this area as the proposed R7D/C2-4 zoning district is located immediately south of the 241st Street Rezoning area, which rezoned the entirety of Block 5087 from an Ml-1 zoning district to an R7D/C2-4 zoning district on 02/13/19. The

Applicant believes the current M1-1 zoning is no longer believed to be appropriate for the Project Area given the lack of demand for manufacturing facilities in this area, which is underdeveloped, and the location of the Project Area along a major street (White Plains Road) near public transit.

The proposed project would meet the City's public policy goals related to MIH as well as similar State and national public policy goals related to the provision of affordable housing.

Based on the above analysis, it has been determined that no potentially significant adverse impacts related to zoning are expected to occur as a result of the Proposed Actions. Therefore, further analysis of zoning is not warranted.

PUBLIC POLICY

Existing Conditions

According to the *CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. Public policies applicable to the Project Area and 400-foot radius project study area are discussed below.

Project Area and 400-Foot Radius Project Study Area

The Food Retail Expansion to Support Health (FRESH)

The Food Retail Expansion to Support Health (FRESH) program is mapped over the entire Project Area and over the 400-foot radius project study area. The City has established the FRESH program in response to the issues raised in neighborhoods that are underserved by grocery stores. FRESH provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in underserved communities throughout the five boroughs. The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator. Stores that benefit from the FRESH program must provide a minimum of 6,000 square feet of retail space for a general line of food and nonfood grocery products intended for home preparation, consumption and utilization. The Project Site is eligible for various tax incentives related to grocery store development and operation.

OneNYC

In April 2015, Mayor Bill de Blasio released OneNYC, a comprehensive plan for a sustainable and resilient city for all New Yorkers that speaks to the profound social, economic, and environmental challenges faced. OneNYC is the update to the sustainability plan for the City started under the Bloomberg administration, previously known as PlaNYC 2030: A Greener, Greater New York. Growth, sustainability, and

resiliency remain at the core of OneNYC, but with the poverty rate remaining high and income inequality continuing to grow, the de Blasio administration added equity as a guiding principle throughout the plan. In addition to the focuses of population growth; aging infrastructure; and global climate change, OneNYC brings new attention to ensuring the voices of all New Yorkers are heard and to cooperating and coordinating with regional counterparts. Since the 2011 and 2013 updates of PlanNYC, the City has made considerable progress towards reaching original goals and completing initiatives. OneNYC includes updates on the progress towards the 2011 sustainability initiatives and 2013 resiliency initiatives and also sets additional goals and outlines new initiatives under the organization of four visions: growth, equity, resiliency, and sustainability.

PlaNYC

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

Waterfront Revitalization Program (WRP)

The Project Area and the 400-foot radius project study area are not located within the City's Coastal zone boundary. Therefore, these areas are not subject to the provisions of the City's Waterfront Revitalization Program (WRP).

No other public policies would apply to the Proposed Actions as the Project Area and the surrounding 400-foot radius study area are not located within the boundaries of any 197-a Community Development Plans or Urban Renewal Area plans, and also are not within a critical environmental area, a significant coastal fish and wildlife habitat, a wildlife refuge, or a special natural waterfront area. No Historic Districts or individually designated historic resources are located within the Project Area or the surrounding 400-foot radius study area.

Future No-Action Scenario

In the future, without the Proposed Actions, new development in the Project Area and within the 400-foot radius project study area would remain subject to the provisions of the FRESH Program. No other public policy initiatives would pertain to the Project Area or to the 400-foot study area around the Area by the project build year of 2028. In addition, no changes are anticipated to any public policy documents relating to the Project Area or the surrounding study area by the project build year.

Future With-Action Scenario

The Proposed Actions are consistent with the City's sustainability goals, including those outlined in OneNYC. Notably, the Proposed Actions would support OneNYC's land use goals of creating new housing for a range of incomes, including permanently affordable housing; redeveloping underutilized parcels with new active uses; focusing development in areas that are served by mass transit; and fostering walkable retail destinations. The Proposed Actions would not result in significant adverse impacts related to business displacement as the existing business to be displaced consist of automotive repair shops which exist in abundance in the surrounding area. The Proposed Actions are expected to introduce approximately 18,363 gsf of new local retail floor area plus approximately 15,647 gsf of new medical office space which would be consistent with the OneNYC goal of fostering an environment in which small businesses can succeed. Overall, the Proposed Actions would be supportive of the applicable goals and objectives of OneNYC.

PlaNYC

- The Proposed Actions would be consistent with PlaNYC's land use goals. The Proposed Actions would encourage increased development in an area well served by public transportation. The Proposed Actions would encourage mixed-use development, including residential, commercial, and community facility uses, thereby promoting walkable destinations for retail and other services. In addition, the proposed development would facilitate new affordable housing.

- The Proposed Actions would support PlaNYC's transportation goals by facilitating transit-oriented development in an area served by multiple public transportation options. Varied retail offerings and a mix of uses are a key part of livable communities, providing destinations within walking distance and reducing the need for vehicle trips outside of the neighborhood.

- The Proposed Actions would meet PlaNYC's air quality goals by promoting the use of mass transit through encouraging development in close proximity to existing transit stops.

- The proposed development facilitated by the Proposed Actions would have to comply with all applicable regulations regarding the implementation of low-flow, water efficient fixtures, as per the New York City Plumbing Code, Local Law 33 of 2007 and the United Stated Environmental Protection Agency's (EPA's) WaterSense Program. In addition, any development facilitated by the Proposed Actions would comply with the City's laws and regulations. Therefore, the Proposed Actions are consistent with PlaNYC's water quality goals.

- Development facilitated by the Proposed Actions would be required to meet the more stringent green building practices established in the 2010 update to the New York City Building Code as part of the Greener, Greater Buildings Law. The updated Building Code requires energy audits and benchmarking for larger buildings, among other requirements. The 2011 Enterprise Green Communities Criteria constitute the only comprehensive green building framework designed for affordable housing and provide proven, cost-effective standards for creating healthy and energy- efficient homes.

- The Proposed Actions would not result in any significant adverse impacts to natural resources as such resources are not present in the Project Area or in the immediate surroundings.

- The Proposed Actions would not result in any significant adverse impacts to the City' solid waste system. The proposed development in the Project Area would be subject to mandatory recycling requirements. As such, the Proposed Actions would be consistent with PlaNYC's solid waste management goals.

- The Proposed Actions would not alter or conflict with the policies of the Industrial Action Plan. The Proposed Actions would not alter zoning within an IBZ.

- The Proposed Actions would not result in new development within an LPC designated and/or S/NR-listed historic districts.

The FRESH program would not be relevant to the Proposed Actions as grocery stores are not currently located on any of the Projected or Potential Development Sites and are not proposed.

Conclusion

No impact to public policies would occur as a result of the Proposed Actions. The Applicant believes that the Proposed Actions would be an appropriate development in the Project Area and would be a positive contribution to Bronx Community District 12 and to the surrounding neighborhood.

Based on the above analyses, it has been determined that no potentially significant adverse impacts related to public policy are expected to occur as a result of the Proposed Actions. Therefore, further analysis of public policy is not warranted.

5. SOCIOECONOMIC CONDITIONS

Introduction

According to the *CEQR Technical Manual*, an analysis of socioeconomic conditions is conducted to determine whether a proposed project would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of an area. The *CEQR Technical Manual* considers the socioeconomic character of an area to include its population, housing, and economic activity.

The *CEQR Technical Manual* primarily considers four types of potential impacts relative to socioeconomic conditions: *direct residential displacement, direct business displacement, indirect residential displacement* and *indirect business displacement*. The *CEQR Technical Manual* recommends an analysis of socioeconomic conditions if a project would directly displace residents or businesses, or if a project has the potential to indirectly displace them by altering any of the underlying forces that shape socioeconomic conditions in an area. If a project is expected to directly displace 500 residents or 100 workers by, for example, demolishing existing residential or commercial buildings, the *CEQR Technical Manual* considers that this may have a significant impact on the socioeconomic conditions of the Study Area. Further, a proposed project may result in significant changes to the socioeconomic conditions of a Study Area if the project introduces more than 200 dwelling units or 200,000 square feet of commercial space to the Study Area. As the Proposed Actions would facilitate the construction of greater than 200 dwelling units, a preliminary assessment of socioeconomic conditions is warranted and is provided below.

Preliminary Assessment

Study Area

Per the *CEQR Technical Manual*, the Study Area for an assessment of socioeconomic conditions may be 400 feet, a 0.25-mile radius, or a 0.5-mile radius depending on the size of the development facilitated by the Proposed Actions. The *CEQR Technical Manual* suggests that if a project increases the population of the 0.25-mile radius by more than 5 percent, a 0.5-mile Study Area should be used.

Table 2-1 (No-Action vs. With-Action Population in the 0.25 Mile Radius)

Census Tracts (Bronx)	Existing Condition (Residents)	No-Action Scenario (Residents)	With-Action Scenario (Residents)	No-Action vs. With-Action Population (%)
434 and 436	5,926[1]	6,133[2]	7,135[3]	1,002 (16.34%)

[1] Source: Population FactFinder, DCP; ACS 2014-2018 5-year Estimate

[2] Assumed annual growth factor of 0.5% per year through the 2028 Build Year

[3] Includes the development of 334 incremental dwelling units in the Project Area and average household size of 3.00 persons per household in the 0.25-mile radius (ACS 2014-2018 5-year estimate)

The With-Action Scenario would introduce an incremental 1,002 residents within the 0.25-mile radius, which includes Bronx Census Tracts 434 and 436 (census tracts which are 50 percent or more within the 0.25-mile radius). In the Existing Condition, this area includes 5,926 residents, and in the No-Action Scenario this area includes 6,133 residents. In the With-Action Scenario, the 0.25-mile radius would include 7,135 residents. This represents a 16.34 percent increase in the population. Per the *CEQR Technical Manual,* a 0.50-mile Study Area is therefore appropriate. See Figure 5-1, Socioeconomics Analysis Map. This area is described further below.

Direct Residential Displacement

There are currently four existing residential units on Projected Development Sites 1-6. Assuming an average household size of 3.00 persons per household, 12 people would potentially be displaced from the Projected Development Sites in the With-Action Scenario.[6] The *CEQR Technical Manual* states that directly displacing 500 or more people may cause a direct residential displacement impact. As the number cited is below this threshold, there would not be a direct residential displacement impact in the With-Action Scenario and no further analysis is required.

Direct Business Displacement

Projected Development Site 1 is improved with a one-story 24,729 gsf manufacturing/factory building. The existing building is currently unoccupied. The property has Certificates of Occupancy dated 01/25/1957, 12/13/1957, and 06/26/1958 for "factory, metal stamping, metal spinning, loading, storage, warehouse, and offices".

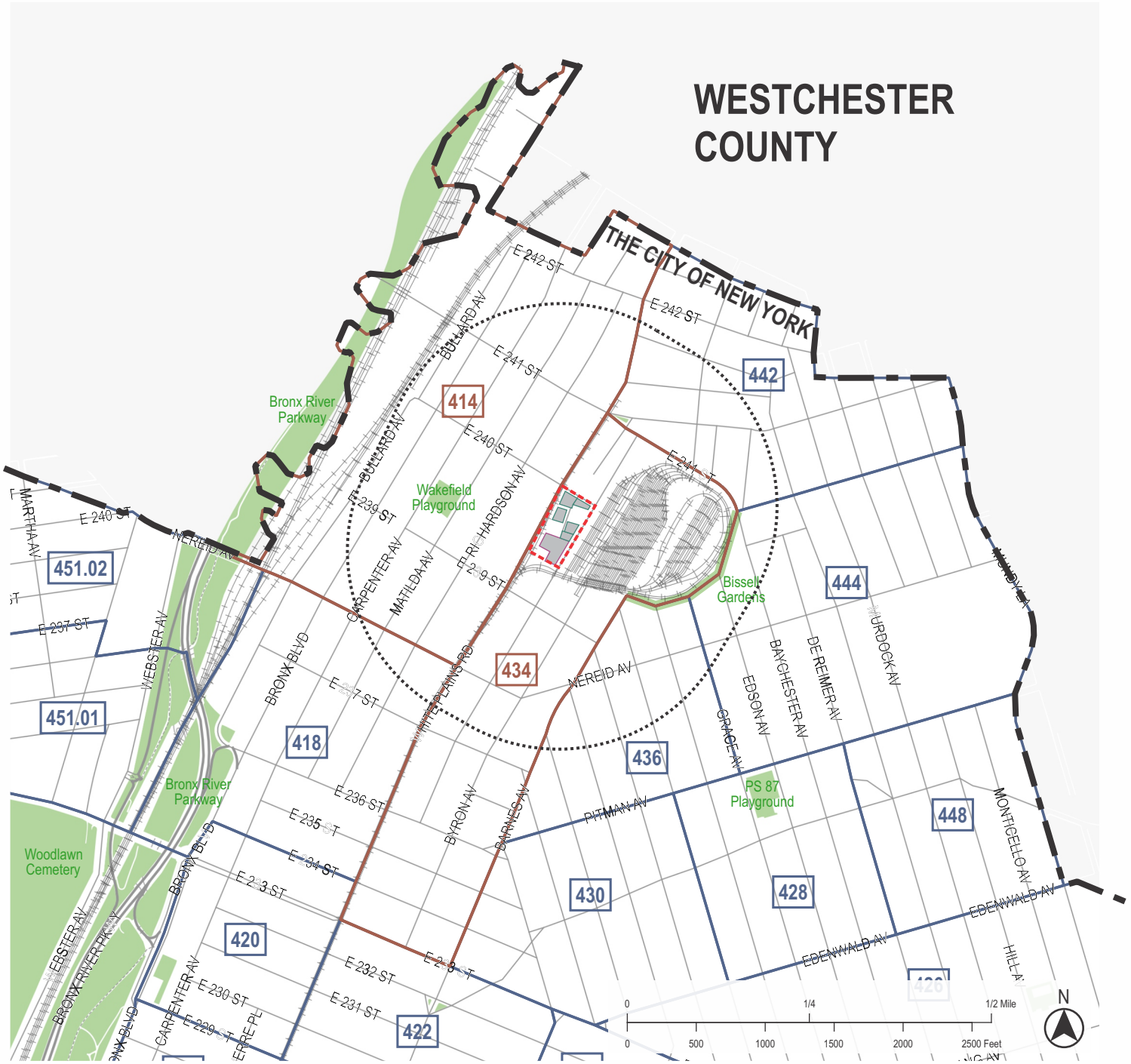
On Projected Development Site 2 (Block 5084, Lots 58, 59, 60), the existing three lots contain a 2,025 sf lot used as a parking lot, a 1,875 sf lot used as a parking lot, and a

[6] Population FactFinder, DCP; ACS 2014-2018 5-year Estimate

4541 Furman Avenue Rezoning, Bronx

Figure 5-1: Socioeconomic Analysis Map

- Proposed Rezoning Area
- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- 1/4-Mile Study Area
- Census Tract Boundaries
- 123 — 50% or More of Census Tract Within Study Area
- 123 — Less Than 50% of Census Tract Within Study Area



Urban Cartographics

1,897 gsf two-unit residential building. On Projected Development Site 3 (Block 5084, Lots 35 and 39), the existing two lots contain a 1,256 gsf two-unit residential building and a 1,625 sf lot used as a parking lot. On Projected Development Site 4 (Block 5084, Lot 41), the existing lot contains a 5,494 gsf auto repair garage. On Projected Development Site 5 (Block 5084, Lot 49), the existing lot contains a 7,500 gsf auto body repair garage. On Projected Development Site 6 (Block 5084, Lot 61), the existing lot contains a 5,018 gsf auto body repair garage.

In the With-Action Scenario, it is anticipated that the existing buildings on Projected Development Sites 1-6 would be demolished and replaced with new development, as detailed above. The *CEQR Technical Manual* states that there may be a direct business displacement impact when any of the following is true:

- The project would directly displace more than 100 employees;
- The businesses to be displaced provide products or services essential to the local economy that would no longer be available in its "trade area" to local residents or businesses due to the difficulty of either relocating the businesses or establishing new, comparable businesses; and/ or
- A category of businesses is the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it.

In terms of direct business displacement, the With-Action Scenario would directly displace an existing untenanted manufacturing space on Projected Development Site 1, as well as parking lots and auto repair garages on Projected Development Sites 2-6. These businesses do not employ more than 100 employees. None of these sites contain "products or services essential to the local economy that would no longer be available in its "trade area" to local residents or businesses" in the With-Action Scenario, nor are any of the existing uses "subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect [them]." As such, there would be no direct business displacement impacts related to the proposed project and no further analysis is required.

Indirect Residential Displacement

The *CEQR Technical Manual* states that "the objective of the indirect residential displacement analysis is to determine whether the proposed project may either introduce a trend or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change." The risk of indirect residential displacement is typically associated with rising rents. These rising rents may contribute to increased area housing costs to an extent that could potentially force lower-income residents out of the neighborhood. The potential for impact is generally limited to households in unprotected, private rental units.

As noted above, a 0.50-mile Study Area is appropriate for this project, which includes Bronx Census Tracts 414, 418, 430, 434, 436, 442 and 444 (census tracts which are 50 percent or more within the 0.5-mile Study Area). The population of the Study Area in the Existing Conditions is 26,534; in the No-Action Scenario (assuming a conservative 0.5% annual background growth rate) the population is 27,465; and in the With-Action Scenario the population would be 28,467.[7] This represents a 3.6 percent increase (see Table 2-2).

Table 2-2 (No-Action vs. With-Action Population in the 0.50 Mile Study Area)

Census Tracts (Bronx)	Existing Condition (Residents)	No-Action Scenario (Residents)	With-Action Scenario (Residents)	No-Action vs. With-Action Population
414, 418, 430, 434, 436, 442, 444	26,534[1]	27,465[2]	28,467[3]	1,002 (3.6%)

[1] Source: Population FactFinder, DCP; ACS 2014-2018 5-year Estimate

[2] Assumed annual growth factor of 0.5% per year through the 2028 Build Year

[3] Includes the development of 334 incremental dwelling units in the Project Area and average household size of 3.00 persons per household (ACS 2014-2018 5-year estimate)

The dwelling unit characteristics, income distribution, and median and average incomes for the Study Area are illustrated in Tables 2-3, 2-4, and 2-5.

Table 2-3 (Dwelling Unit Characteristics in the Study Area)

Census Tracts (Bronx)	Total Dwelling Units	Occupied Dwelling Units	Renter Occupied Dwelling Units	Owner Occupied Dwelling Units
414, 418, 430, 434, 436, 442, 444	8,985	8,578	4,962	3,616

Source: Population FactFinder, DCP (ACS 2014-2018 5-year Estimate)

[7] Includes the development of 356 incremental dwelling units in the Project Area and average household size of 3.00 persons per household (ACS 2014-2018 5-year estimate)

Table 2-4 (Income Distribution in the Study Area)

Census Tracts (Bronx)	Total Households	Percent earning less than $24,999	Percent earning $25,000-$49,999	Percent earning $50,000-$99,999	Percent earning $100,000-$199,999	Percent earning $200,000+
414, 418, 430, 434, 436, 442, 444	8,578	2,158 (25.2%)	1,672 (19.5%)	2,854 (33.3%)	1,561 (18.2%)	333 (3.9%)*

Source: Population FactFinder, DCP (ACS 2014-2018 5-year Estimate)
*Figure is approximate

Table 2-5 (Median and Average Household Incomes for Households in the Study Area)

Census Tracts (Bronx)	Median Household Income in Study Area	Average Household Income in Study Area	Median Household Income in the Bronx	Average Household Income in the Bronx	Median Household Income in New York City	Average Household Income in New York City
414, 418, 430, 434, 436, 442, 444	$55,577	$70,279	$38,085	$56,328	$60,762	$97,647

Source: Population FactFinder, DCP (ACS 2014-2018 5-year Estimate)

The Proposed Actions would introduce 334 incremental dwelling units to the Study Area, including 196 affordable units at or below an average of 80% AMI ($81,920 per year for a family of three)[8]. While some units will have an AMI greater than 80%, none of the designated units will exceed an AMI of 130%. The existing population of the Study Area has a higher median and average income than the Bronx as a whole, while at the same time having a lower median and average income than New York City as a whole. As such, the Proposed Actions would facilitate development in character with the neighborhood's existing socioeconomic conditions. The Proposed Actions would not introduce a substantial new population with incomes higher than the area average.

[8] Area Median Income, NYC (2020), https://www1.nyc.gov/site/hpd/services-and-information/area-median-income.page

Furthermore, per the CEQR *Technical Manual*, populations changes of 5 percent or less within the Study Area "would not be expected to affect real estate market conditions." As the change between the No-Action and With-Action Scenarios is 3.6 percent, no further analysis is necessary.

Indirect Business Displacement

The *CEQR Technical Manual* states that there may be an indirect business displacement impact when any of the following is true:

- The project would directly displace more than 100 employees;

- A commercial development contains more than 200,000 square feet of space that is "markedly different than existing uses";

- The project would add to, or create, a retail concentration that may draw a substantial amount of sales from existing businesses within the Study Area to the extent that certain categories of business close and vacancies in the area increase, thus resulting in a potential for disinvestment on local retail streets (i.e. retail market saturation); or

- Certain regulatory changes that could cause adverse impacts to specific industries.

In the With-Action Scenario, approximately 16 employees would potentially be displaced. This is below the 100-employee threshold established by the *CEQR Technical Manual*. The *CEQR Technical Manual* additionally states that "projects resulting in less than 200,000 square feet of retail on a single development site would not typically result in socioeconomic impacts," nor would projects under 200,000 square feet across numerous development sites. In the With-Action Scenario, only 18,363 gsf of commercial space would be provided. Therefore, the proposed project would not have potential impacts related to retail market saturation or constitute a development greater than 200,000 square feet with uses "markedly different than existing uses." The proposed project would also not introduce any changes that would adversely impact a specific industry. As such, there would be no indirect business displacement impacts related to the proposed project and no further analysis is required.

Conclusion

Per the methodology described in the *CEQR Technical Manual*, in the With-Action Scenario there would be no potential significant adverse impacts to socioeconomic conditions. The proposed project would not lead to direct or indirect residential or business displacement in the Study Area. As such, no further analysis is required.

6. COMMUNITY FACILITIES AND SERVICES

Introduction

According to the *CEQR Technical Manual,* community facilities are public or publicly funded schools, libraries, child care centers, health care facilities, and fire and police protection. The CEQR analysis looks at a project's potential effect on the services provided by these facilities. A project can affect facility services when it physically displaces or alters a community facility or causes a change in population that may affect the services delivered by a community facility, as might happen if a facility is already over-utilized, or if a project is large enough to create a demand that could not be met by the existing facility. The CEQR analysis examines potential impacts on existing facilities and generally focuses in detail on those services that the City is obligated to provide to any member of the community. These services also have precisely defined measures of utilization (e.g., enrollment/available seats for public education). The CEQR analysis is not a needs assessment for new or additional services. Service providers like schools or libraries conduct their own needs assessments on a continuing basis.

The CEQR analysis considers both *direct effects*--such as if a proposed project would displace existing community facilities--and *indirect effects*. An analysis of *indirect effects* considers whether the introduction of new residents to a given area may increase the utilization rate of a given community facility, thereby triggering a potential significant adverse impact.

Preliminary Assessment

Direct Effects

The Proposed Actions would not physically displace or affect any existing community facilities and would therefore have no direct effect on any community facilities or services. As such, further assessment of direct effects is not required.

Indirect Effects

The *CEQR Technical Manual* provides a set of thresholds to use in determining whether detailed studies of potentially significant adverse indirect impacts related to community facilities and services are warranted. The With-Action Scenario assumes the development of 338 dwelling units on Projected Development Sites 1-6, totaling 334 incremental dwelling units in the Project Area. No new residential development is anticipated to occur under the No-Action Scenario.

<u>Public Schools</u>

According to the *CEQR Technical Manual*, the introduction of 50 or more incremental students requires a detailed analysis of potential impacts to public elementary and middle schools. An increase of 150 incremental high school students would likewise warrant a detailed analysis.

Table 6-1 (Incremental Public-School Students) summarizes the total students expected to be generated in the With-Action Scenario.

Table 6-1: Incremental Public School Students

Incremental Dwelling Units	School Type	Public School Students per Unit[1]	Total Estimated Students	Analysis Threshold
334	Elementary	0.24	80	50
334	Middle School	0.11	37	
334	High School	0.13	43	150

[1] Based on SCA/DCP 2019 housing multiplier data via CEQR App

In the With-Action Scenario, 80 students would be generated for elementary schools, 36 students for middle schools, and 44 students for high schools. In total, 116 estimated elementary/ middle school students would be generated in the With-Action Scenario. High schools do not exceed the threshold and no further analysis is required. A detailed analysis of the potential significant adverse impacts to elementary schools/ intermediate schools is included below.

Child Care Centers

According to the *CEQR Technical Manual*, the introduction of 20 or more eligible children under age 6 (based on the number of low or low/moderate income dwelling units) would warrant a detailed analysis. The minimum number of low or low/ moderate income dwelling units required in the Borough of the Bronx to trigger a detailed analysis is 141 dwelling units. For conservative analysis purposes, the Child Care analysis will assume that MIH Option 2 is selected in conjunction with the Proposed Actions. Projected Development Site 1 would provide 150 affordable dwelling units financed under HPD's ELLA program. The With-Action Scenario further assumes the development of 181 new dwelling units on the non-applicant controlled Projected Development Sites 2-6. Under MIH Option 2, 30% of the dwelling units on Projected Development Sites 2-6 are therefore assumed to be affordable (54 dwelling units). A total of 204 dwelling units are assumed for Child Care analysis purposes. As the With-Action Scenario exceeds the indicated threshold, a detailed analysis is included below.

Libraries

According to the *CEQR Technical Manual*, a more than 5% increase in the ratio of residential units to library branches would warrant a detailed analysis. The minimum number of residential units required in the Borough of the Bronx to trigger a detailed analysis is 682 dwelling units. The With-Action Scenario would produce 334

incremental dwelling units. As this number is below the threshold provided in the *CEQR Technical Manual,* no further analysis is required.

Police/Fire Services and Health Care Services

According to the *CEQR Technical Manual*, a detailed analysis for police/fire services and health care services is only required if the With-Action Scenario would introduce a "sizeable new neighborhood, e.g. Hunter's Point South." The With-Action Scenario would introduce an incremental 334 dwelling units to an already built-up area and would not therefore create a "sizeable new neighborhood." As such, no further analysis is required.

Detailed Analysis

Public Schools

According to the *CEQR Technical Manual*, the study area for the analysis of elementary and intermediate schools should be the "sub-district" in which the project is located (see map below). The *CEQR Technical Manual* further states that the detailed analysis should include information on the relevant "sub-district" in the Existing Conditions, No-Action, and With-Action Scenarios.

Existing Conditions

The Project Area is located in Bronx Community School District (CSD) 11, Sub-district 2, which is considered to be the primary study area for the analysis of elementary and intermediate schools. Figure 6-1, Public Schools Within CSD 11, Subdistrict 2, illustrates the locations of these schools.

Table 6-2 (Existing Elementary Schools) provides a listing of the elementary and intermediate schools within this sub-district. The table identifies the schools by school number/name, address, and grades served, and includes the latest available enrollment and school capacity numbers.

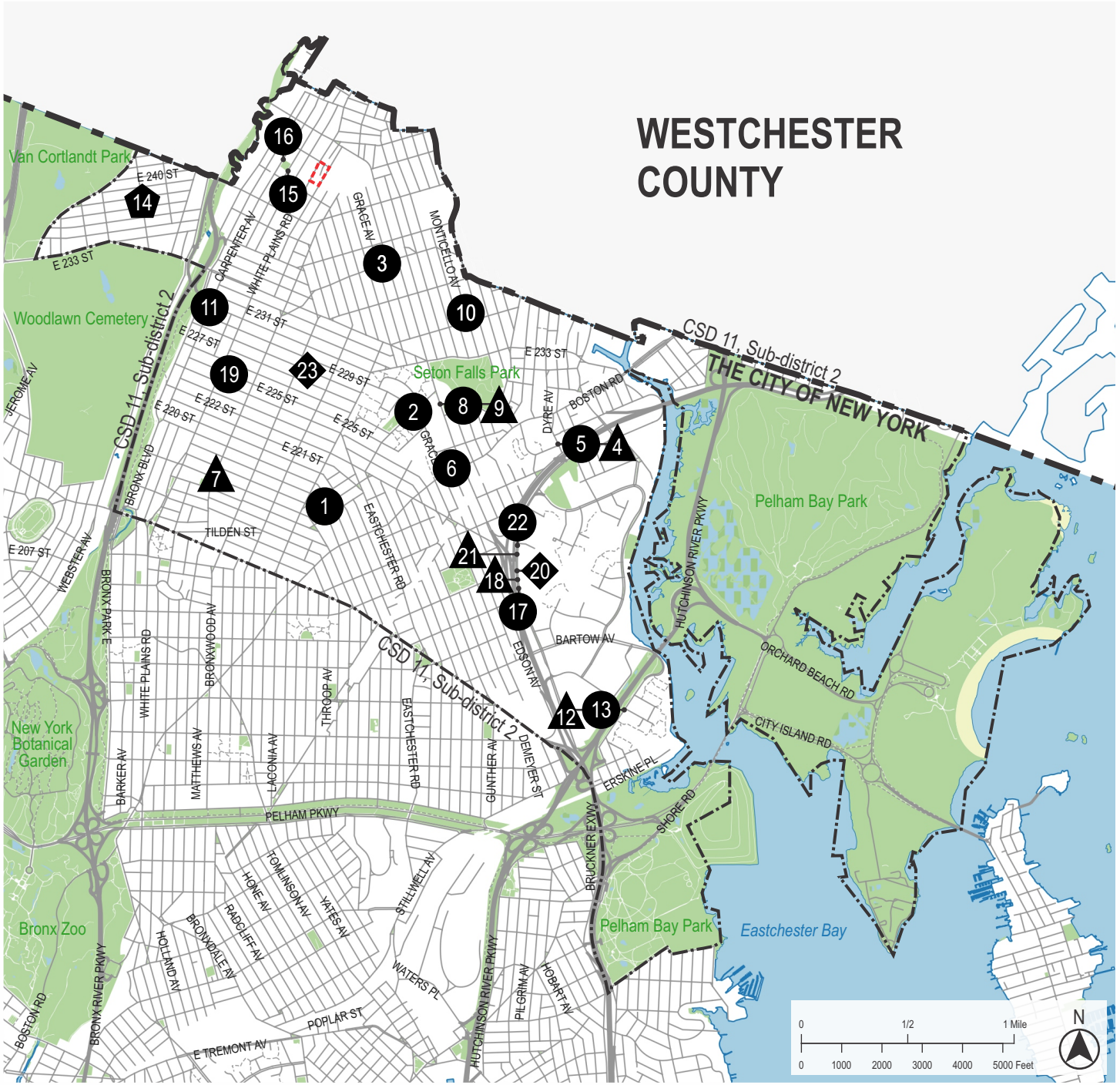
Elementary school capacity numbers are less than actual building capacities, as they assume a class size reduction of 20 students for kindergarten through the third grades, 28 students for grades 4 to 8, and 30 students for grades 9 to 12. This is defined as their "target capacity."

Table 6-2 indicates that the elementary schools within the sub-district are generally over capacity, with an average utilization rate of approximately 107%. The elementary schools within the sub-district have a total enrollment of 8,022 students relative to a target capacity of 7,484 seats, resulting in a shortfall of 538 seats.

4541 Furman Avenue Rezoning, Bronx

Figure 6-1: Public Elementary and Intermediate Schools Within CSD 11, Sub-district 2

- Proposed Rezoning Area
- # Elementary Schools (see Table 6-1)
- # Elementary/Intermediate Schools (see Table 6-1)
- # Intermediate Schools (see Table 6-1)
- # High Schools (see Table 6-1)



Urban Cartographics

Table 6-2: Existing Elementary Schools

Bldg. ID	School Name	Address	Enrollment	Available Seats	Utilization (%)
X916	P.S. 016 Wakefield *P.S. 16 TRANSPORTABLE - X*	4550 Carpenter Avenue	18	-18	N/A
X016	P.S. 016 Wakefield *P.S. 16 - BRONX*	4550 Carpenter Avenue	299	66	82%
X942	P.S. 016 Wakefield *P.S. 16 TRANSPORTABLE - X*	4550 Carpenter Avenue	18	-18	N/A
X019	P.S. 019 Judith K. Weiss *P.S. 19 - BRONX*	4318 Katonah Avenue	346	-149	176%
X021	P.S. 021 Philip H. Sheridan *P.S. 21 - BRONX*	715 East 225 Street	647	-12	102%
X068	P.S. 068 Bronx *P.S. 68 - BRONX*	4011 Monticello Avenue	643	9	99%
X918	P.S. 068 Bronx *P.S. 68 TEMP. C.R. BLDG. - X*	4011 Monticello Avenue	0	165	0%
X078	P.S. 078 Anne Hutchinson *P.S. 78 - BRONX*	1400 Needham Avenue	817	-170	126%
X087	P.S. 087 Bronx *P.S. 87 - BRONX*	1935 Bussing Avenue	401	-8	102%
X945	P.S. 087 Bronx *P.S. 87 TRANSPORTABLE - X*	1935 Bussing Avenue	187	-187	N/A

Bldg. ID	School Name	Address	Enrollment	Available Seats	Utilization (%)
X103	P.S. 103 Hector Fontanez *P.S. 103 - BRONX*	4125 Carpenter Avenue	793	11	99%
X923	P.S. 103 Hector Fontanez *P.S. 103 TEMP. C.R. BLDG. - X*	4125 Carpenter Avenue	226	-32	117%
X111	P.S. 111 Seton Falls *P.S. 111 - BRONX*	3740 Baychester Avenue	644	52	93%
X112	P.S. 112 Bronxwood *P.S. 112 - BRONX*	1925 Schieffelin Avenue	414	103	80%
X153	P.S. 153 Helen Keller *P.S. 153 - BRONX*	650 Baychester Avenue	623	-2	100%
X160	P.S. 160 Walt Disney *P.S. 160 - BRONX*	4140 Hutchinson River Pkway Ea	377	-61	119%
X169	Baychester Academy *THE WILLIE ELLA PASCHAL BOWMAN CAMPUS - X*	3500 Edson Avenue	424	-158	159%
X175	P.S. 175 City Island *P.S. 175 - BRONX*	200 City Island Avenue	189	-38	125%
X906	P.S. 175 City Island *P.S. 175 TRANSPORTABLE - X*	200 City Island Avenue	0	0	N/A
X178	P.S. 178 - Dr. Selman Waksman *P.S. 178 - BRONX*	850 Baychester Avenue	410	-29	108%
X189	Cornerstone Academy	3441 Steenwick	383	-12	103%

Bldg. ID	School Name	Address	Enrollment	Available Seats	Utilization (%)
	for Social Action *P.S./I.S. 189 - BRONX*	Avenue			
X314	The Matilda Avenue School *P.S. 314 - BRONX*	4520 Matilda Avenue	163	-50	144%

* Transportable classroom capacity is excluded from the analysis
[1]Data obtained from the CEQR App (a Beta Project of New York City Department. of City Planning)

Table 6-3 (Existing Intermediate Schools) indicates that the intermediate schools within the sub-district are generally under-capacity, with an average utilization rate of approximately 81%. Schools have enrollments ranging from 57% to 175% of target capacity at individual schools. The intermediate schools within the sub-district have a total enrollment of 4,379 students relative to a target capacity of 5,424 seats. This results in a surplus of 1,045 seats.

Table 6-3: Existing Intermediate Schools

Bldg. ID	School Name	Address	Enrollment	Available Seats	Utilization (%)
X019	P.S. 019 Judith K. Weiss *P.S. 19 - BRONX*	4318 Katonah Avenue	175	-75	175%
X175	P.S. 175 City Island *P.S. 175 - BRONX*	200 City Island Avenue	124	-25	125%
X906	P.S. 175 City Island *P.S. 175 TRANSPORTABLE - X*	200 City Island Avenue	0	0	N/A
X180	M.S. 180 Dr. Daniel Hale Williams *I.S. 180 - BRONX*	700 Baychester Avenue	1016	108	90%
X181	I.S. 181 Pablo Casals *I.S. 181 - BRONX*	800 Baychester Avenue	890	-15	102%

X113	North Bronx School of Empowerment *I.S. 113 - BRONX*	3710 Barnes Avenue	563	374	60%
X142	Bronx Alliance Middle School *I.S. 142 - BRONX*	3750 Baychester Avenue	300	179	63%
X113	Leaders of Tomorrow *I.S. 113 - BRONX*	3710 Barnes Avenue	429	323	57%
X189	Cornerstone Academy for Social Action Middle School (CASA) *P.S./I.S. 189 - BRONX*	3441 Steenwick Avenue	257	30	90%
X142	One World Middle School at Edenwald *I.S. 142 - BRONX*	3750 Baychester Avenue	344	98	78%
X142	Baychester Middle School *I.S. 142 - BRONX*	3750 Baychester Avenue	281	48	85%
TOTALS			4379	1045	81%

* Transportable classroom capacity is excluded from the analysis

[1]Data obtained from the CEQR App (a Beta Project of New York City Department. of City Planning)

No-Action Scenario

This section presents an analysis of public school enrollments (including pre-kindergarten enrollments) and capacities for the project build year of 2028 in the No-Action Scenario. The analysis includes the primary study area of CSD 11, Sub-district 2 and is derived from Department of Education enrollment projections.

In the No-Action Scenario, it is assumed that no new residential development would occur in the Project Area by the project build year of 2028. However, based on the NYC School Construction Authority's (SCA) "Projected New Housing Starts" (a.k.a. Housing Pipeline) projections, additional student enrollments would occur in CSD 11, Sub-district 2 in the No-Action Scenario by the project build year. This information is presented in Table 6-4 below.

According to the *CEQR Technical Manual*, No-Action school capacity changes considered in a community facilities analysis include information on proposed and adopted "Significant Changes in School Utilization" and the Department of Education's (DOE) Five-Year Capital Plan. Per DOE's "Significant Changes in School Utilization" information, there are a number of proposed changes to elementary/intermediate school capacities within the sub-district. Two additions to existing schools are also planned within the sub-district (PS 19 and PS 87 additions). These assumptions are included in the analysis.

Table 6-4: No-Action Enrollment and Capacity

Study Area	Projected 2028 Enrollment	Students Introduced by No Action Development	Total No Action Enrollment	Capacity	Available Seats	Utilization (%)
Primary Schools						
D11, S2	11,879	129	12,008	7,484	-4,525	160%
Intermediate Schools						
D11, S2	4,429	80	4,509	5,424	915	83%

[1] Data obtained from the CEQR App (a Beta Project of New York City Department of City Planning)

In the No-Action Scenario, the utilization rate for elementary schools would be 160%; for intermediate schools the utilization rate would be 83%. These figures represent a 43% increase and a 2% increase in the respective utilization rates as compared to the Existing Conditions.

With-Action Scenario

According to the *CEQR Technical Manual,* a significant impact on schools may occur if the following two conditions are met:

- if the project results in a collective utilization rate of the elementary and/or intermediate schools in the sub-district study area that is equal to or greater than 100% in the With-Action Scenario, and if the project results in an increase of 5% or more in the collective utilization rate between the No-Action and With-Action Scenario.

In the With-Action Scenario, the utilization rate for elementary schools would increase to 162% and the utilization rate for intermediate schools would increase to 84%. The

difference between the No-Action and With-Action Scenarios is 1.07% for elementary schools and 0.66% for middle schools, respectively. The projected increase of elementary and middle school students resulting from the Proposed Actions in 2028 would have a limited impact upon the utilization rates of the schools in the sub-district and would not exceed the impact threshold described in the *CEQR Technical Manual.*

Table 6-5: With Action Enrollment and Capacity

School Level	Projected Enrollment w/o Project	Students Generated by Project	Projected Enrollment w/ Project	Projected Capacity	Available Seats	Utilization with Project
Primary Schools	12,008	80	12,088	7,484	-4,604	162% (1.07%)
Intermediate Schools	4,509	36	4,545	5,424	879	84% (0.66%)

It is expected that DOE will continue to monitor enrollment trends within Bronx Community School District (CSD) 11, Sub-district 2, as new housing units identified in the No-Action and With-Action conditions are developed and will plan for new capacity or administrative actions to accommodate new students accordingly.

Measures utilized by DOE to address increased elementary school enrollment could include: relocating administrative functions to other sites, thereby freeing up space for classrooms; making space within the study area available to DOE; restructuring or reprogramming existing school space within the district; or providing for new capacity by constructing a new school or an addition to an existing school. It should also be noted that the analysis of public elementary school conditions relies on conservative assumptions regarding both background growth in the student population and the development of new residential units in future conditions. Should this level of background growth and residential development in the district not occur, the shortage of elementary school seats in CSD 11, Sub-district 2 could be reduced or potentially eliminated.

While the utilization rate for elementary schools exceeds the 100% threshold in the With-Action Scenario, the Proposed Actions do not lead to an "increase of 5% or more in the collective utilization rate." As such, the With-Action Scenario would not be expected to result in a significant adverse impact on elementary or intermediate schools. No further analysis is required.

Child Care

According to the *CEQR Technical Manual*, "the study area for publicly funded group child care and Head Start centers is approximately 1.5 miles around a project site." The *CEQR Technical Manual* further states that child care study areas may—in certain transit rich areas—be larger than 1.5 miles. Additionally, as there are no locational requirements for enrollment in day care centers, some parents/guardians choose a day care center close to their employment rather than their residence.

To better illustrate the number of child care facilities available in the study area, Figure 6-2 (Day Care Facilities Within 1.5 Miles) shows both city-funded child care facilities and other child care facilities which do not receive city funding. Information on city-funded child care centers is found in Table 6-6 below. Information regarding existing child care facilities within the study area has been obtained from the Department of City Planning and is based on relevant DOE data (2018). Oversight and administration for New York City's publicly funded child care facilities has been transferred from ACS to the Department of Education since 2019.

Existing Conditions

Table 6-6 (Existing Publicly Funded Group Child Care Facilities Within 1.5-Miles of Project Area) shows that there are available child care slots in the 1.5-mile radius around the Project Area. In total, the two child care facilities in the study area have an overall capacity of 243 slots. At the time of the publication of the most-recent ACS data (2018), 225 of these slots were in use, resulting in an overall utilization rate of approximately 93%.

Table 6-6: Existing Publicly Funded Group Child Care Facilities Within 1.5-Miles of Project Area

Map ID	Program Name	Program Address	Capacity	Enrolled	% of Enrollment
7, 21, 27	NORTH BRONX NCNW CDC	4035 WHITE PLAINS RD.	160	151	94%
11, 17, 29	SUSAN E. WAGNER DCC	1140 E 229 STREET	83	74	89%
	Total		243	225	93%

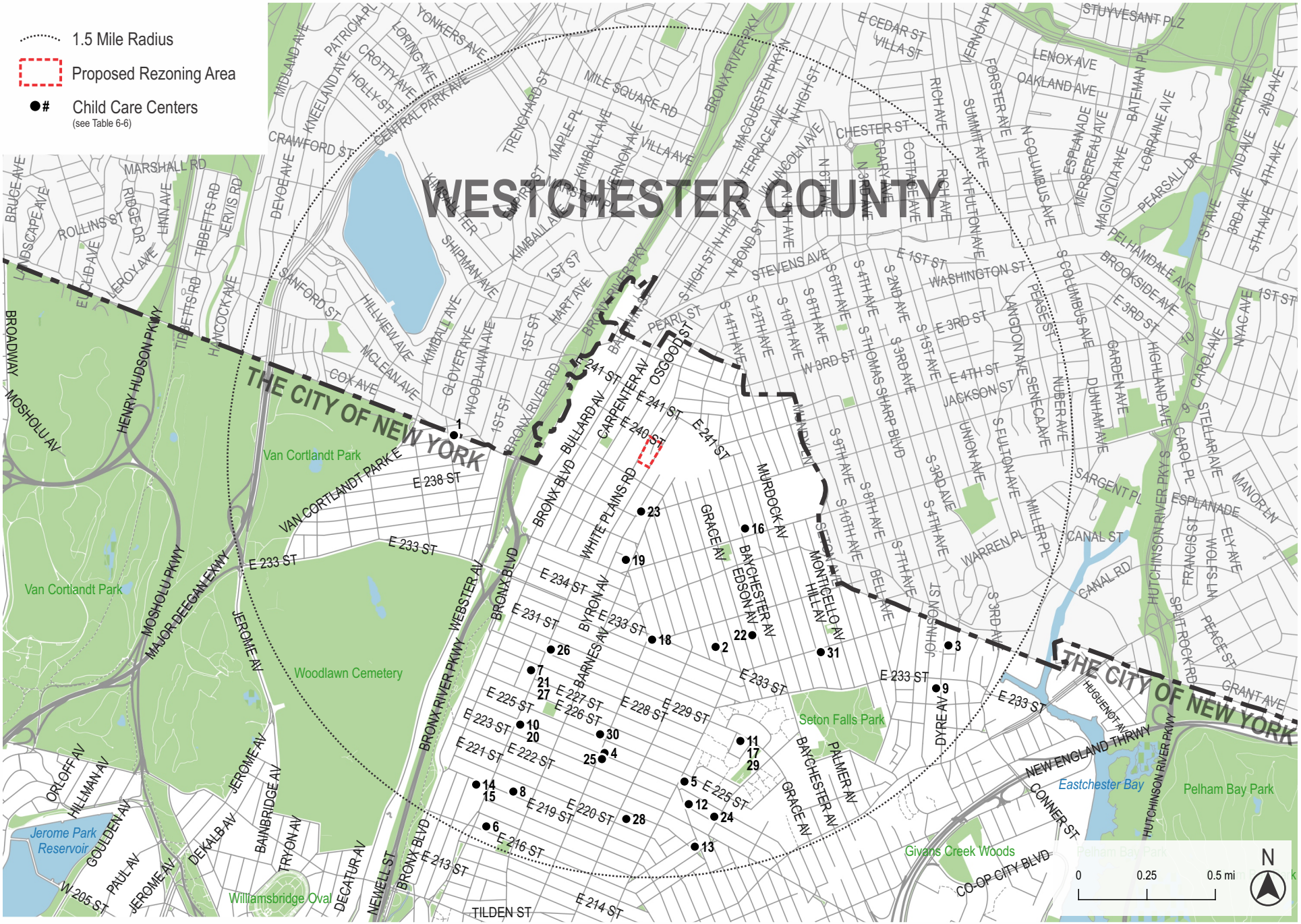
Source: Data provided by the Department of City Planning

No-Action Scenario

Per the *CEQR Technical Manual,* "since enrollment projections for child care facilities are not available, CEQR analysis assumes that the existing enrollment and capacity would

4541 Furman Avenue, Bronx

Figure 6-2: Child Care Facilities



Urban Cartographics

stay the same for the build year and be the baseline for the No-Action Scenario, unless affordable housing is identified." In the No-Action Scenario, it is assumed that no new affordable residential development would occur in the Project Area or the surrounding study area. At this time, no changes to the capacities of child care facilities in the study area are anticipated by the project build year of 2028.

With-Action Scenario

In the With-Action Scenario, it is projected that an incremental 334 dwelling units would be developed in the Project Area. Of these, the applicant intends to develop a 100% affordable building containing 150 dwelling units on Projected Development Site 1. On Projected Development Sites 2-6, for conservative analysis purposes in the Child Care section, it is assumed that an additional 54 affordable units would be developed pursuant to MIH. In total, the With-Action Scenario (for Child Care) assumes the development of approximately 204 affordable dwelling units.

Per the *CEQR Technical Manual,* the household multiplier for child care analysis in the Bronx is 0.139. Based on this multiplier, in the With-Action Scenario (for Child Care) there would be an estimated 28 additional children who would qualify for subsidized child care in the study area. The addition of these children to the 225 children in the Existing Condition/ No-Action Scenario would result in 253 children in the With-Action Scenario. The utilization rate in the With-Action Scenario would increase from 93% to 104% (an 11% increase as compared to the Existing Condition/No-Action Scenario).

Table 6-7: With-Action Scenario Enrollment and Capacity

	Projected Enrollment (No-Action)	Children Generated in With-Action	Projected Enrollment (With-Action)	Capacity	Utilization
Child Care Facilities	225	28	253	243	104% (11%)

The utilization rate for child care facilities would therefore exceed the 100% threshold in the With-Action Scenario by 4%. The increase in the utilization rate is greater than 5% and above 100% in total. However, additional qualitative factors limit the practical implications of this increase.

Qualitative Factors

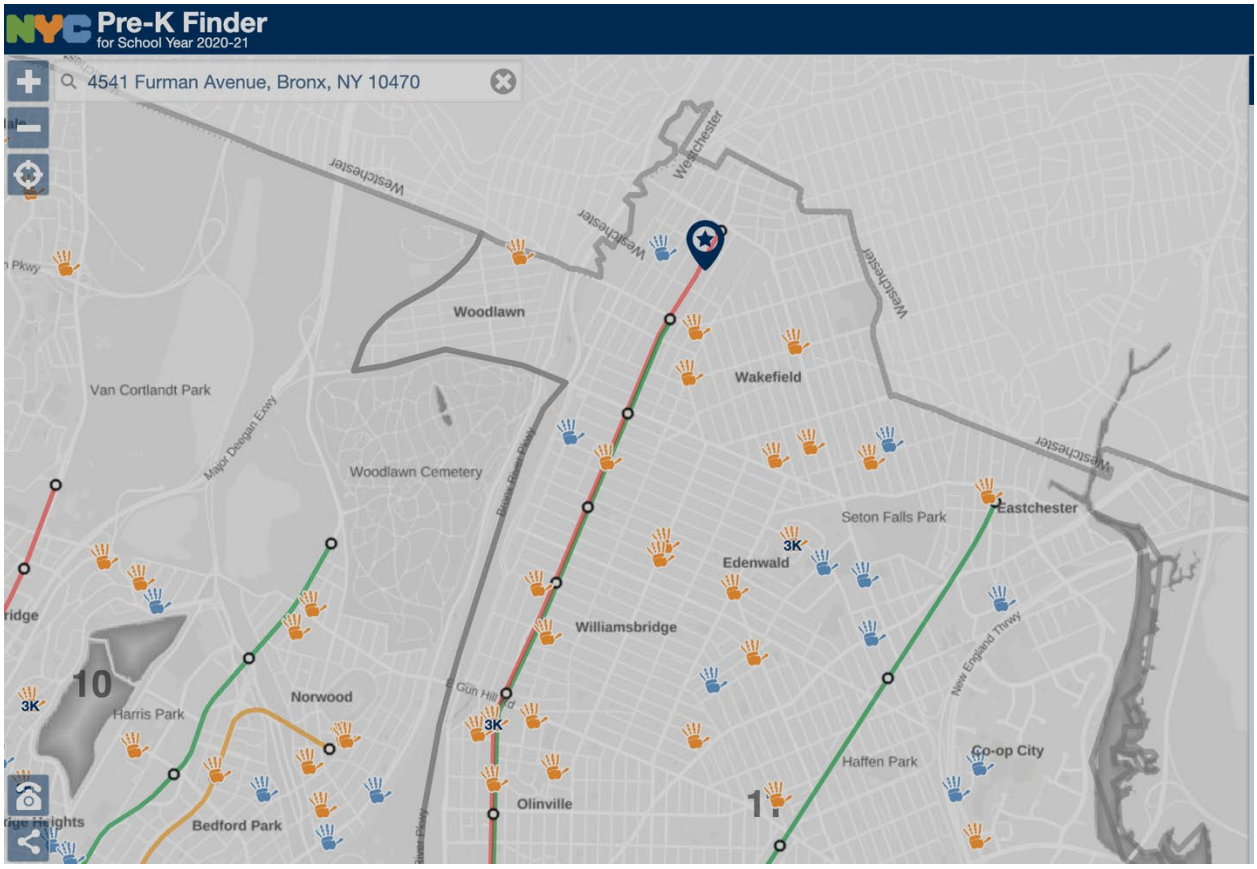
Despite the exceedance of the *CEQR Technical Manual* 5% threshold, no significant adverse impacts to child care would result from the Proposed Actions. The Proposed

Actions would facilitate the development of much-needed affordable housing in the North Bronx, providing up to 204 affordable dwelling units (for Child Care analysis purposes). Despite the estimated percentage increase in the utilization of the area's two publicly funded childcare facilities, the absolute number of children who would exceed the available number of slots (10) is low.

Given the limited number of children generated by the Proposed Actions, a number of other relevant qualitative considerations indicate that these children could be served by alternate means and/or facilities.

Figure 6-2 shows the locations of a number of other child care facilities in the 1.5-mile study area radius that could provide alternative accommodations for children generated by the Proposed Actions. Figure 6-3 below, Pre-K Finder for School Year 2020-21, further illustrates the number of facilities in the area which are able to enroll area children. These facilities include day cares, district schools, 3K facilities, early ed centers and some charter schools, providing 5-hour, half-day or full-day care (depending on the facility). While the quantitative analysis in this section is limited to contracted child care facilities in accordance with the methodology described in the *CEQR Technical Manual*, DOE also contracts with childcare providers to provide additional publicly-funded early education opportunities that are available to all residents, regardless of family income. Since 2014, the City has made significant investments to provide free, full-day, high-quality early childhood education through Pre-K for All and 3-K for All, as part of a broader effort to create a continuum of high-quality early care and education programs for New York City children from birth to five years old. Furthermore, all programs previously managed by ACS have shifted to management by DOE, enabling consistent high-quality standards under a single agency since the second half of 2019.

Figure 6-3:
Pre-K Finder for School Year 2020-21



Source: Pre-K Finder for School Year 2020-21; New York City Department of Education

In addition to the qualitative factors detailed above, the Project Area is located less than ½ mile from the city's border with Westchester County. Approximately 50% of the 1.5-mile study area is composed of portions of Westchester County, Van Cortlandt Park and Woodlawn Cemetery. Many area residents may therefore utilize other child care facilities located in nearby Westchester County or elsewhere; some parents may, as noted above, choose day care providers that are closer to their workplace rather than their home. The New York State Office of Children and Family Services, Division of Child Care Services, indicates there are at least six additional child care facilities within an approximately 1.5 to 2-mile radius.[9] Approximately 20 child care facilities are located in Mount Vernon, the Westchester County municipality which borders the Wakefield area of the North Bronx. Westchester County is easily accessible from the Project Area

[9]The New York State Office of Children and Family Services, Division of Child Care Services; https://ocfs.ny.gov/main/childcare/

via the Bronx River Parkway or public transportation options including MetroNorth commuter rail and Westchester County Bee Line buses.

Based on these qualitative considerations—including the limited number of children (10) above the threshold generated by the Proposed Actions, the number of 3K and alternative facilities in the surrounding area, and the availability of child care facilities in nearby Westchester County, no significant adverse impacts to publicly funded child care facilities are anticipated and no further analysis is warranted.

Conclusion

The With-Action Scenario would not physically displace or alter a community facility or cause a change that could affect the service delivery of a community facility. As such, there would be no direct effects on community facilities and services.

A preliminary analysis of the indirect effects of the With-Action Scenario found that the applicable thresholds described in the *CEQR Technical Manual* for libraries, police/ fire services and health care centers were not exceeded. Therefore, detailed analyses were not required. The preliminary analysis of the indirect effects of the With-Action Scenario relative to public schools and child care found that a detailed analysis was required. These detailed analyses concluded that there would be no significant adverse impact to schools or child care facilities in the With-Action Scenario.

7. OPEN SPACE

Introduction

For the purpose of CEQR, open space is defined as publicly or privately owned land that is publicly accessible and has been designated for leisure, play, or sport; or land that is set aside for the protection and/or enhancement of the natural environment. Under CEQR, an open space analysis is conducted to determine whether or not a proposed action would have either a direct impact resulting from the elimination or alteration of open space or an indirect impact resulting from overtaxing the use of open space. The analyses focus only on officially designated existing or planned public open space. Open space may be public or private and may include active and/or passive areas. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation with benches, walkways, and picnicking areas. Certain spaces such as lawns, can be used for both active and passive recreation.

Open space analyses may be necessary when an action would potentially have a direct or indirect effect on open space. A direct impact would physically change, diminish or eliminate an open space or reduce its utilization or aesthetic value. An indirect impact could result from an action introducing a substantial new user population that would create or exacerbate an overutilization of open space resources.

Direct Effects

Direct effects to open space occur when a project would directly eliminate existing open space. The Proposed Actions would not directly eliminate any existing open space resources. Further, as discussed in the Shadows section below, there are no publicly accessible open space facilities located within the maximum shadows radius of the six Projected Development Sites within the Project Area. Therefore, there would be no direct effects on open space resulting from the Proposed Actions.

Indirect Effects

Introduction

On the basis of *CEQR Technical Manual* criteria, the projected developments in the Project Area could potentially result in indirect effects to open space resources within the project study area and must be further assessed to determine whether significant indirect effects would be expected to occur. For projects that are not located in "underserved" or "well-served" areas identified in the *CEQR Technical Manual,* an open space assessment is conducted if that project would generate more than 200 residents or 500 workers.

The With-Action RWCDS includes the development of 338 dwelling units of housing on Projected Development Sites 1 through 6 in the Project Area. Four existing units would be displaced for a net increase of 334 dwelling units. No new residential development is anticipated to occur under the No-Action RWCDS. Therefore, the Proposed Actions would result in the development of a net increase of 334 dwelling units in the Project Area. Based on American Community Survey (ACS) 2014-2018 5-year estimate data, the average household size is 3.0 persons per dwelling unit in the Census Tracts located within ¼ -mile of the Project Area (tracts 434 and 436). Therefore, the development of 334 dwelling units would be expected to generate approximately 1,002 residents in the Project Area. The Proposed Actions would result in a development that would exceed the threshold number of 200 new residents and a preliminary quantitative analysis of indirect open space impacts is therefore required.

The Proposed Actions would generate approximately 130 workers in the Project Area based on an estimate of 3 workers per 1,000 gsf of retail space (18,363 gsf), 4 workers per 1,000 gsf of medical office space (15,647 gsf), and 0.04 workers per dwelling unit for the 334 dwelling units noted above. (It should be noted that this is a very conservative analysis as it does not take into account the existing 42,741 gsf of manufacturing, warehouse, and automobile repair floor area and the 4 existing residences that would be removed by projected development within the Project Area). New employees would therefore not exceed the threshold number of 500 new workers, and a quantitative analysis of indirect open space impacts for employees would not be required.

Preliminary Assessment

Based on the methodologies presented in the *CEQR Technical Manual*, an initial quantitative open space assessment involves a determination of an area's open space ratio based on the population of the study area and the acreage of all publicly accessible open space resources within this study area. If an area's open space ratio decreases significantly as a result of a proposed action or if an area has a very low open space ratio, a more detailed assessment may be required.

Based on the calculation of the ratio of publicly accessible open space acres to the study area population, a determination of the adequacy of open space resources in the study area was quantified. The resultant computation for the study area was then compared with the median ratio for New York City, which is 1.5 acres per 1,000 residents, and with the City's benchmarks of 2.5 acres per 1,000 population as identified in the *CEQR Technical Manual.*

The *CEQR Technical Manual* considers an action to result in significant adverse impacts to open space resources if it would decrease the open space ratio substantially, thereby reducing the availability of open spaces for an area's population. A decrease in the open space ratio of 5 percent or more is generally considered to be a significant adverse impact on open space resources. However, if the existing open space ratio is low even

an open space ratio change of less than 1 percent may result in potential significant open space impacts.

The project study area exhibits a below average open space ratio of 0.172 acres per 1,000 residents, (based on 4.57 acres of existing open space divided by ACS 2014-2018 5-year estimate data study area population of 26,534 persons).

Existing Conditions

Study Area Population

The study area population was estimated using ACS 2014-2018 5-year estimate data for the accessible census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 7-1, in 2018 the study area contained an estimated 26,534 residents within the seven relevant census tracts.

Table 7-1
Study Area Population

Census Tract	**Total Population (2018)**
414	5,163
418	3,957
430	3,551
434	3,884
436	2,042
442	3,760
444	4,177
Study Area Total	**26,534**

Study Area Open Space

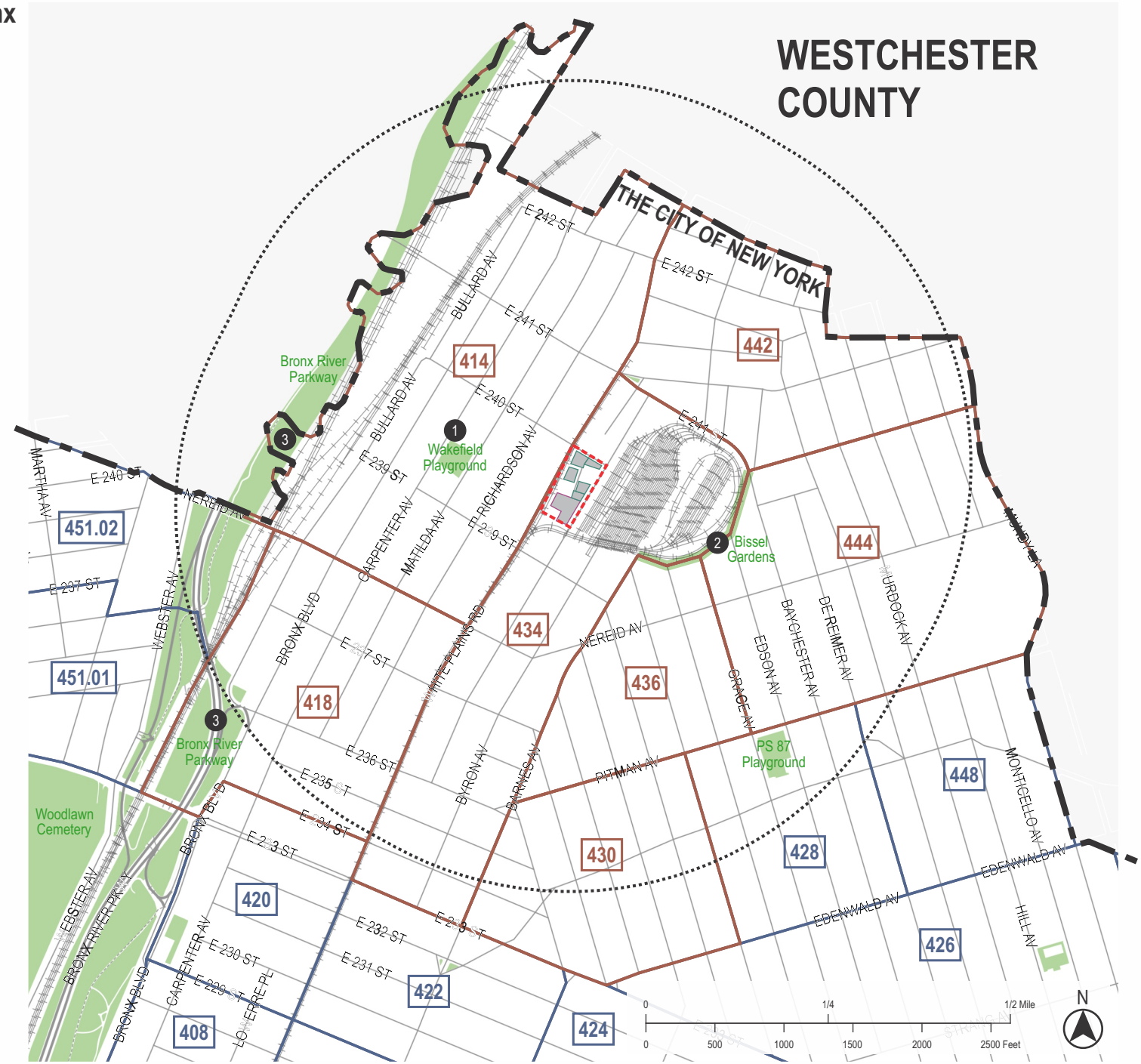
The half mile open space study area is generally bounded by East 243rd Street/City line on the north, East 234th Street on the south, Mundy Lane on the east, and the Bronx River Parkway/City Line on the west. Within the census tracts that are fully or at least 50 percent within this area, there are three publicly owned and accessible facilities (See Figure 7-1, Open Space Facilities and Census Tracts and Table 7-2, Inventory of Open Space Resources), providing a total of approximately 4.57 acres of open space resources including 2.79 acres of active open space and 1.78 acres of passive open space.

It should be noted that only a 2.57-acre portion of the 206.72-acre Bronx River Park Greenway is located within the ½ -mile project study area radius and is accessible to the Project Area. Although 10.7 acres of the Greenway is located within a ½ mile radius of the Project Area, most of the Greenway is cut off from the Project Area by the Bronx

4541 Furman Avenue Rezoning, Bronx

Figure 7-1: Open Space Facilities and Census Tracts

- Proposed Rezoning Area
- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant-Owned)
- 1/2-Mile Study Area
- Census Tract Boundaries
- 123 — 50% or More of Census Tract Within Study Area
- 123 — Less Than 50% of Census Tract Within Study Area
- 1 — Open Space Resources (see Table 7-1)



Urban Cartographics

River, the Bronx River Parkway, and the Metro-North railroad tracks. There are two accessible portions of the Bronx River Park Greenway. The southern portion is bounded on the south by East 233rd Street, on the east by Bronx Boulevard, on the west by Bronx River Parkway, and it extends a few feet north of East 236th Street. The northern portion is bounded on the north and south by the boundary line between Westchester County and Bronx County, to the west by the Bronx River Parkway, and to the east by the Bronx River, and is accessible by a path.

The following estimate of publicly-available open space in Bissel Gardens was calculated using field observations of the site made on 4/29/2020, from current New York City Tax Maps from the New York City Department of Finance, and from Google Maps. The Measure Distance tool in Google Maps was used to enclose polygons around publicly-available open space in Bissel Gardens. The area inside the polygon is shown in square feet. Google Maps Satellite View and Street View were also used in conjunction with observations made during the fieldwork to determine in the accurate placement of polygon points around publicly-available open space.

- The easternmost part of Bissel Gardens, located between Baychester Avenue and Edson Avenue, contains 23,115 square feet of publicly-available open space. This part constitutes the largest portion of publicly-available open space in Bissel Gardens, with the entire area being accessible to the public. It contains pathways, open grass areas, seating areas, and shade trees. The Market at Bissel Gardens, also open to the public, operates on this part of the site on Wednesdays and Saturdays from July through mid-November.

- The portion of the gardens located between Edson Avenue and Grace Avenue contains approximately 11,850 square feet of publicly-available open space. The area consists essentially of a wide, tree-lined path with a slightly wider, open area on the east side, near Grace Avenue. There are planting beds located along the entire north side of this part of the gardens.

- The part of the site between Grace Avenue and Ely Avenue consists of a narrow pathway with planting beds and storage areas along both the north and south sides of the path. The area contains approximately 1,880 square feet.

- The portion of Bissel Gardens between Ely Avenue and Barnes Avenue also consists of a wide, tree-lined path with a larger, open area on the west side. This part of the gardens contains 2,430 square feet of publicly-available open space.

- A part of Bissel Gardens continues to the east of Barnes Avenue; however, the entire portion of the gardens east of Barnes Avenue consists of planting beds and storage areas, and does not contain pathways or other publicly-available open space.

-The total estimate of publicly-available open space in Bissel Gardens is 39,275 square feet or 0.9 acres. According to the Bissel Gardens website, the entire property is 2.2 acres, or 95,832 square feet, in area. Therefore, approximately 41% of the area of Bissel Gardens is available to the general public.

Table 7-2
Inventory of Open Space Resources

Map Key	Open Space Name & Location	Owner	Total Size (acres)	Size/ Access in Study Area (acres)	Passive Acres	Active Acres	Features
1	Wakefield Playground Matilda Ave. to Carpenter Ave. bet. E. 239 St. & E. 240 St.	DPR	1.1	1.1	0.11	0.99	Basketball courts, playground, spray shower, seating
2	Bissel Gardens Bissel Ave. betw. Baychester & Barnes Aves.	DPR Green Thumb	2.2	0.9	0.9	0	Gardens, walking path
3	Bronx River Parkway Greenway E. 236 St. to Abbott St.	DPR	206.72	2.57 (Muskrat Cove: E.233 St. to E. 244 St.)	0.77	1.8	Pathway used for walking, jogging, skating, biking; landscaping
Tot			**210.02**	**4.57**	1.78	2.79	

Assessment of Open Space Adequacy

The open space ratio was calculated based on the study area population of 26,534 persons shown in Table 7-1 and the total open space acreage of 4.57 acres including 2.79 acres of active open space and 1.78 acres of passive open space shown in Table 7-2. The resultant ratio is 0.172 acres of open space per 1,000 residents comprised of 0.105 acres of active open space per 1,000 residents and 0.067 acres of passive open space per 1,000 residents. This ratio falls below the citywide average of 1.5 acres as well as the benchmark of 2.5 acres per 1,000 population, indicating that the area has a below average amount of public open space resources. The area's residential active open space ratio is below DCP's planning guideline of 2.0 acres per 1,000 residents. The study area's residential passive open space ratio is below DCP's goal of 0.5 acres per 1,000 residents.

Future No-Action Condition

Study Area Population

As stated above, the ACS 2014-2018 5-year estimate population of the half-mile open space study area was 26,534 persons. In order to account for background growth to the 2028 project build year, a conservative annual growth rate of 0.5% per year (for 10 years) was applied to the 2018 estimated population of the ½-mile open space study area. This growth factor would result in the addition of 1,327 additional residents. Therefore, as projected to 2028, the base population is projected to be 27,861 residents. No new residential development would occur in the Project Area under the future No-Action scenario. Therefore, the open space study area would have a No-Action population of 27,861 persons in 2028.

Study Area Open Space

There would be no increase or decrease in the 4.57 acres of existing open space area including 2.79 acres of active open space and 1.78 acres of passive open space within the project study area by the project build year of 2028.

Assessment of Open Space Adequacy

The future no-action open space ratio within a ½ mile radius of the Project Area would be approximately 0.164 based on the area population of 27,861 persons in 2028 and the 4.57 acres of open space area. Based on 2.79 acres of active open space, the future no-action active open space ratio would be 0.100 per 1,000 population. Based on 1.78 acres of passive open space, the future no-action passive open space ratio would be 0.064 per 1,000 population.

Future With-Action Scenario

Study Area Population

As discussed above, the Proposed Actions are expected to generate approximately 1,002 new residents based on existing census data (average household size) in the Census Tracts located within ¼ -mile of the Project Area (tracts 434 and 436). Adding this population to the future no-action population of 27,861 would result in a total study area population of approximately 28,863 persons.

The Proposed Actions would generate approximately 130 new workers in the Project Area. (It should be noted that this is a very conservative analysis as it does not take into account the existing 42,741 gsf of manufacturing, warehouse, and automobile repair floor area and the 4 existing residences that would be removed by projected development within the Project Area). New employees would therefore not exceed the threshold number of 500 new workers and a quantitative analysis of indirect open space impacts for employees would not be required. The addition of 130 new workers to the

Project Area relative to existing and Future No-Action conditions would not affect the conclusions of this analysis in a substantive manner.

Study Area Open Space

No new publicly accessible open space and recreational resources are planned to be added to the study area by 2028 with the Proposed Actions. Therefore, in 2028 with the Proposed Actions, the project study area would contain approximately 4.57 acres of open space resources including 2.79 acres of active open space and 1.78 acres of passive open space, the same as under currently existing and future no-action conditions.

Assessment of Open Space Adequacy

Based on a population of 28,863 persons and 4.57 acres of open space resources, including 2.79 acres of active open space and 1.78 acres of passive open space, the projected open space ratio in 2028 with the Proposed Actions would be 0.158 acres per 1,000 residents including 0.097 acres of active open space per 1,000 residents and 0.061 acres of passive open space per 1,000 residents. This is compared to 0.164 acres of open space including 0.100 acres of active open space per 1,000 residents and 0.064 acres of passive open space per 1,000 residents in the future no-action condition. This represents a decrease of approximately 0.006 acres or 3.7 percent in the open space ratio. Therefore, the community would continue to have a below average amount of open space compared to the City as a whole and relative to DCP's open space planning goal.

Table 7-3 shows the calculation of open space ratios for the existing, Future No-Action, and Future With-Action Scenarios.

Table 7-3
Existing, Future No-Action, and Future With-Action Open Space Ratios

	Existing Conditions	**Future No-Action**	**Future With-Action**
Publicly Accessible Open Space (Acreage)	4.57 (2.79 active, 1.78 passive)	4.57 (2.79 active, 1.78 passive)	4.57 (2.79 active, 1.78 passive)
Study Area Population	26,534	27,861	28,863
Open Space Ratio (Acres/1,000 Residents)	0.172 (0.105 active, 0.067 passive)	0.164 (0.100 active, 0.064 passive)	0.158 – 0.006 acre/ 3.7% decrease (0.097 active, 0.061 passive)

Conclusion

The open space ratio for the ½-mile radius residential study area is under 0.2-acres per 1,000 population which is considered to be very low. In addition, the 3.7% decrease in the open space ratio is above 1% which is considered to be potentially significant for

study areas with a very low open space ratio. Therefore, a detailed open space analysis has been prepared and is provided below.

Detailed Analysis

Study Area Population by Age Group

The residential study area population and age breakdown was estimated using ACS 2014-2018 5-year estimate data for the accessible census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 7-4, the study area contained a total of 26,534 residents within the seven census tracts. 23.9% of the area population was younger than 20 years of age while 13.5% was 65 years of age or older. 62.6% of the area population was between the ages of 20 and 64.

Table 7-4
Residential Study Area Population by Age Group (2010)

Age Category	Persons	Percent of Population
5 and younger	1,524	5.7%
5-9	1,482	5.6%
10-14	1,488	5.6%
15-19	1,849	7.0%
20-64	16,607	62.6%
65 and older	3,584	13.5%
	26,534	100.0%

Study Area Open Space

The study area contains 3 publicly accessible open spaces, which total approximately 4.57 acres. This includes approximately 2.79 acres of active and 1.78 acres of passive open space (see Table 7-2 and Figure 7-1). In terms of publicly accessible open space, the study area includes passive open space consisting of walking paths, seating, and landscaped areas. The active open space consists of a children's playground, a spray shower, basketball courts, paths used for jogging and biking, and active gardening areas. The facilities in the study area are managed by the Department of Parks and Recreation and Bissel Gardens is a Green Thumb community garden.

The fieldwork for this open space analysis was conducted on Wednesday April 29th, 2020, during the COVID-19 pandemic and at a time when many facilities were closed and people were staying at home. Therefore, utilization of the spaces in the study area may have been affected at the time of the fieldwork. Both Bissel Gardens and Muskrat

Cove were open at the time of the site visit, however, all public playgrounds in New York City, including Wakefield Playground, were closed at the time of the fieldwork.

Wakefield Playground

Wakefield Playground is located on the block bounded by East 240th Street to the north, East 239th Street to the south, Matilda Avenue to the east and Carpenter Avenue to the west. The Playground is approximately 1.10 acres in size and contains a large, open asphalt-paved playground, basketball court, jungle-gyms, swings, hopscotch courts, a spray shower, benches, and a comfort station with public rest rooms. The operating hours are from 7:00 am to 8:00 pm between March 2nd and October 31st, and from 7:00 am to 6:00 pm from November 1st to March 1st. Based on the most recent DPR inspection conducted on December 23, 2019, the overall cleanliness and condition of Wakefield Playground was acceptable.

Wakefield Playground was visited on the morning of Wednesday April 29th, 2020. As noted previously, this playground was closed at the time of the fieldwork. The playground contains few facilities and did not appear to be well maintained. The basketball courts contain backboards with missing rims, the court lines were faded, and the open asphalt playground area contains no visible court lines (i.e., tennis courts, kickball, etc.). A new design for the playground has been completed and procurement is anticipated to be completed in June 2020. Reconstruction is expected to be completed by the end of 2021.

Bissel Gardens

According to their website, Bissel Gardens is the largest and one of the first Green Thumb community gardens in New York City. The site consists of 2.2 acres of gardens and a four-block path which runs from Barnes Avenue to Baychester Avenue in the Wakefield section of the Bronx. The property includes both passive and active open space, with a children's garden, bench seating along the trail, a gazebo, and many areas to grow crops sold at the Market at Bissel Gardens. The Market at Bissel Gardens operates seasonally from July to November at the Baychester Avenue end of the Bissel Trail. The site also hosts educational and environmental programs for the neighborhood and maintains a web site for the property. The DPR does not conduct inspection of community gardens so no reports of general conditions and cleanliness are posted for this facility on the DPR website.

Bissel Gardens was visited on Wednesday April 29th, 2020. The weather was mild, partly cloudy with temperatures in the high 50s to low 60s. At the time of the site visit, the gardens and trail appeared to be neat and well maintained. No visitors were present during site visits; however, given that this was a community garden it may have been too early to plant many of the crops. The property contains numerous planting beds, fences, storage sheds, greenhouses, enclosures, a gazebo, signage and

other well-maintained infrastructure that demonstrates that the utilization of this facility is high.

Muskrat Cove portion of the Bronx River Parkway Greenway

Muskrat Cove is an approximately ½-mile long, asphalt-paved nature-walk and bicycle path which runs along the Bronx River from just north of East 233rd Street to East 244th Street. This open space runs in and out of the study area along its route, and only a part of the space lies within the study area. The entrance to Muskrat Cove is located along Webster Avenue, just north of East 233rd Street. This entrance is located outside the study area but is easily accessible to pedestrians from the study area via East 233rd Street. No DPR inspection reports are posted for this portion of the Bronx River Parkway Greenway. The pathway and surrounding natural areas were reconstructed and upgraded in 2008.

Muskrat Cove contains both passive and active open space with a paved pathway, benches, grass and landscaped areas, educational and informational signage, as well as access to the shoreline and woods along the Bronx River. The hours of operation are from 6:00 am to 1:00 am. The pathway and surrounding area appeared generally clean and well maintained.

Table 7-5

Inventory of Open Space Resources

Map Key	Open Space Resource Name	Address	Total Size (Acres)	Agency	Features	Passive Acres	Active Acres	Condition
1	Wakefield Playground	Matilda Ave. to Carpenter Ave. bet. E. 239 St. & E. 240 St.	1.1	DPR	Basketball courts, playground, spray shower, seating	0.11	0.99	Poor
2	Bissel Gardens	Bissel Ave. betw. Baychester & Barnes Aves.	0.9	DPR Green-thumb	Gardens, walking path	0.9	0	Good
3	Bronx River Parkway Greenway (Muskrat Cove)	E. 233 St. to E. 244 St.	2.57	DPR	Pathway used for walking, jogging, skating, biking, landscaping	0.77	1.8	Good
Total			4.57			1.78	2.79	

Additional Open Space Resources

There are additional open space resources directly adjacent to the ½-mile project study area including the following:

- Approximately 204.15 acres of additional mixed active and passive use open space that is part of the Bronx River Parkway Greenway extending between Burke Avenue and the NYC-Westchester County Line.

- The 1.3-acre P.S. 87 Playground, a primarily active recreational resource located adjacent to the ½-mile project study area boundary along Pitman Avenue between Grace and Edson Avenues. (The playground is located within ½-mile of the Project Area but was not included in the quantitative analysis because it lies within a census tract that is less than 50% within the project study area). Approximately 90% or 1.17 acres of this facility consists of active recreational facilities including ball fields, basketball courts, a playground, and a running track.

Assessment of Open Space Adequacy

The existing residential open space ratio was calculated based on the residential study area population discussed above and shown in Table 7-4 and the passive, active, and total open space acreage within ½-mile shown in Table 7-5.

With a total of 4.57 acres of publicly accessible open space (of which 1.78 are for passive use and 2.79 are for active use) and a total residential population of 26,534 persons, the study area has a total open space ratio of 0.172 acres per 1,000 residents (see Table 7-3). This ratio is substantially less than the citywide average of 1.5 acres and the DCP benchmark of 2.5 acres per 1,000 population, indicating that the area is underserved by public open space resources.

The area's residential active open space ratio is 0.105 acres per 1,000 residents, which is well below DCP's planning guideline of 2.0 acres per 1,000 residents. The study area's current residential passive open space ratio is 0.067 acres of passive open space per 1,000 residents, which is also much less than DCP's goal of 0.5 acres per 1,000 residents.

Table 7-6

Residential Open Space Ratios (Existing Condition)

	Existing Conditions	**DCP Guideline**
Publicly Accessible Open Space (Acreage)	4.57	-
Study Area Residential Population	26,534	-
Open Space Ratio (Acres/1,000 Residents)	0.172	2.5
Active Open Space Ratio (Acres/1,000 Residents)	0.105	2.0

Passive Open Space Ratio (Acres/1,000 Residents)	0.067	0.5

Future No-Action Condition

The future no-action residential open space ratio was calculated based on the future no-action residential study area population discussed above and shown in Table 7-3 and the passive, active, and total open space acreage within ½-mile shown in Table 7-5.

With a total of 4.57 acres of publicly accessible open space (of which 1.78 acres are for passive use and 2.79 acres are for active use) and a total future no-action residential population of 27,861 persons, the study area would have a total open space ratio of 0.164 acres per 1,000 residents (see Table 7-7). This ratio is substantially less than the citywide average of 1.5 acres and the DCP benchmark of 2.5 acres per 1,000 population, indicating that the area would continue to be underserved by public open space resources.

The area's future no-action residential active open space ratio would be 0.100 acres per 1,000 residents, which is well below DCP's planning guideline of 2.0 acres per 1,000 residents. The study area's future no-action residential passive open space ratio would be 0.064 acres of passive open space per 1,000 residents, which is also much less than DCP's goal of 0.5 acres per 1,000 residents.

Table 7-7

Residential Open Space Ratios (No-Action Condition)

	No-Action Conditions	**DCP Guideline**
Publicly Accessible Open Space (Acreage)	4.57	-
Study Area Residential Population	27,861	-
Open Space Ratio (Acres/1,000 Residents)	0.164	2.5
Active Open Space Ratio (Acres/1,000 Residents)	0.100	2.0
Passive Open Space Ratio (Acres/1,000 Residents)	0.064	0.5

Future With-Action Condition

The residential open space ratio was calculated based on the future with-action residential study area population discussed above and shown in Table 7-3 and the passive, active, and total open space acreage within ½-mile shown in Table 7-5.

With a total of 4.57 acres of publicly accessible open space (of which 1.78 acres are for passive use and 2.79 acres are for active use) and a total future with-action residential population of 28,863 persons, the study area would have a total open space ratio of 0.158 acres per 1,000 residents (see Table 7-8). The future with action open space ratio would

decrease by 0.006 acres or 3.7% relative to the no-action open space ratio of 0.164. The future with-action open space ratio would remain substantially less than the citywide average of 1.5 acres and the DCP benchmark of 2.5 acres per 1,000 population, indicating that the area would continue to be underserved by public open space resources.

The area's future with-action residential active open space ratio would be 0.097 acres per 1,000 residents. The future with-action active open space ratio would decrease by 0.003 acres or 3.0% relative to the no-action active open space ratio of 0.100. The active open space ratio would remain well below DCP's planning guideline of 2.0 acres per 1,000 residents.

The area's future with-action residential passive open space ratio would be 0.061 acres of passive open space per 1,000 residents. The future with-action passive open space ratio would decrease by 0.003 acres or 4.7% relative to the no-action passive open space ratio of 0.064. The passive open space ratio would remain well below DCP's goal of 0.5 acres per 1,000 residents.

It should be noted that private open space would be provided on Projected Development Site 1, which would serve to meet at least a portion of the open space needs of the project's residents. The project will include exterior recreational areas for residents containing benches and tables totaling 8,497 square feet in size. The exterior recreational area on the west building will total 2,826 square feet in size and be located on the second floor of the building while the exterior recreational area on the east building will total 5,679 square feet in area and be located on the first floor. In addition, each building will contain an approximately 1,500 square foot interior recreational area for residents located on the first floor.

Although the proposed on-site open space has not been fully designed yet, the Applicant's intent is to provide flexible spaces that could be programmed for a variety of active and passive uses (e.g. yoga, picnics, kids game nights, etc.). At this time, it is contemplated that the open space on the ground-floor of Building Segment A would be utilized for both active and passive uses, given its larger size (5,679 square feet) and direct access to the building's lobby and residential amenities, including an indoor recreation/fitness center. The open space located on the second floor of Building Segment B would be more suitable for passive uses given its smaller size (2,826 square feet) and more remote location. All benches, tables, and furniture would be moveable in order to facilitate diverse programming options at both spaces.

Table 7-8
Residential Open Space Ratios (With-Action Condition and Incremental Change)

	Future No-Action	Future With-Action	DCP Guideline	Change
Publicly Accessible Open Space	4.57	4.57	-	
Study Area Residential Population	27,861	28,863	-	
Open Space Ratio (Acres/1,000 Residents)	0.164	0.158	2.5	- 0.006 acres (-3.7%)
Active Open Space Ratio (Acres/1,000) Residents	0.100	0.097	2.0	- 0.003 acres (-3.0%)
Passive Open Space Ratio (Acres/1,000 Residents)	0.064	0.061	0.5	-0.003 acres (-4.7%)

Assessment of Open Space Adequacy

Quantitative Assessment

Direct Effects

The *CEQR Technical Manual* considers an action to result in significant adverse impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users. The project development associated with the Proposed Actions would not result in the direct displacement of any parklands or recreational facilities. The Proposed Actions would, however, reduce the open space ratio as further discussed below.

Indirect Effects

The *CEQR Technical Manual* considers an action to result in significant adverse impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users or generate a substantial enough population to noticeably diminish the capacity of available open spaces to serve the affected neighborhood. A decrease in the open space ratio of 5 percent or more is generally considered to be a significant adverse impact on open space resources only if the area has an average open space ratio of 1.5 acres or less per 1,000 population. However, if the existing open space ratio is low, as in this case, even an open space ratio change of less than 1 percent may result in potential significant open space impacts.

At 0.158 acres per 1,000 population, the amount of publicly accessible open space with the Proposed Actions would remain below the average of 1.5 acres per 1,000 population in community districts in the City and below the benchmark of 2.5 acres per 1,000 population. Relative to indirect impacts on open space resources, the Proposed Actions would result in a decrease of 3.7% in the residential open space ratio in the project study area which would be considered potentially significant. However, the *CEQR*

Technical Manual indicates that the desired open space ratio is often not feasible for many areas of the City, and the City does not consider these ratios as its open space policy for every neighborhood. Consequently, the ratios do not represent an absolute impact threshold. Rather these are benchmarks that represent how well an area is served by its open space.

The future With-Action active open space ratio of 0.097 acres per 1,000 residents would represent a decrease by 0.003 acres or 3.0% relative to the No-Action active open space ratio of 0.100. The active open space ratio would remain well below DCP's planning guideline of 2.0 acres per 1,000 residents.

The future With-Action passive open space ratio of 0.061 acres of passive open space per 1,000 residents would decrease by 0.003 acres or 4.7% relative to the No-Action passive open space ratio of 0.064. The passive open space ratio would remain well below DCP's goal of 0.5 acres per 1,000 residents.

The City seeks to attain a planning goal of 80 percent active and 20 percent passive open space. Despite the low amount of open space in the study area, the open space in the study area comes close to this breakdown. The 2.79 acres of active open space would represent approximately 61% of the total open space acreage of 4.57 acres while the 1.78 acres of passive open space would represent approximately 39% of the total acreage.

Qualitative Assessment

While the open space study area provides a mix of active and passive open space resources – with approximately 39 percent utilized for passive uses and approximately 61 percent utilized for active uses – the open space ratios are below the *CEQR Technical Manual* recommended open space ratios, as well as the city-wide median ratio of 1.5 acres per 1,000 residents. However, these conditions are offset by a proposed new on-site open space resource as well as several nearby open space resources discussed below.

Although the Proposed Actions would not result in the creation of any new publicly accessible open space, Projected Development Site 1 would provide 8,497 square feet (0.195 acres) of common recreational space for building residents. As this space would not be publicly accessible, it has not been included in any calculations of publicly accessible open space. However, it would help satisfy some of the open space recreational needs of project residents.

The quantitative open space analysis did not include the 1.3-acre P.S. 87 playground[10] located within ½-mile of the Project Area. This playground is located approximately 0.4

[10] The playground is located within ½-mile of the Project Area but was not included in the quantitative analysis because it lies within a census tract that is less than 50% within the project study area.

miles from the Project Area and is accessible via the local street network. PS 87 is a Schoolyard to Playground site and is not available to the public during school hours. The facility consists primarily of active open space, and approximately 90% or 1.17 acres is comprised of active recreational uses including ball fields, basketball courts, a playground, and a running track. If the active recreational component of this facility were included in the active open space calculations, it would increase the amount of active recreational space within the ½ mile radius by approximately 42% from 2.79 acres to 3.96 acres. The quantitative open space analysis also did not include the approximately 204.15 acres of additional mixed active and passive use open space that is part of the nearby Bronx River Parkway Greenway or the 10.7 acres of the Greenway located within a ½ mile radius of the Project Area as most of these areas are separated from the Project Area by the Bronx River, the Bronx River Parkway, and the Metro-North railroad tracks. The fully accessible 2.57-acre portion of the 206.72-acre Greenway included in the open space analysis is located just short of ½-mile from the Project Area. The accessible adjoining area to the south contains a walking/biking path but no additional active recreational facilities and can be reached via the local street network. The accessible area of the Greenway to the north is accessible by a path but does not contain any additional active recreational facilities. While these areas would be more difficult to access, it is expected that some residents would utilize these open space resources.

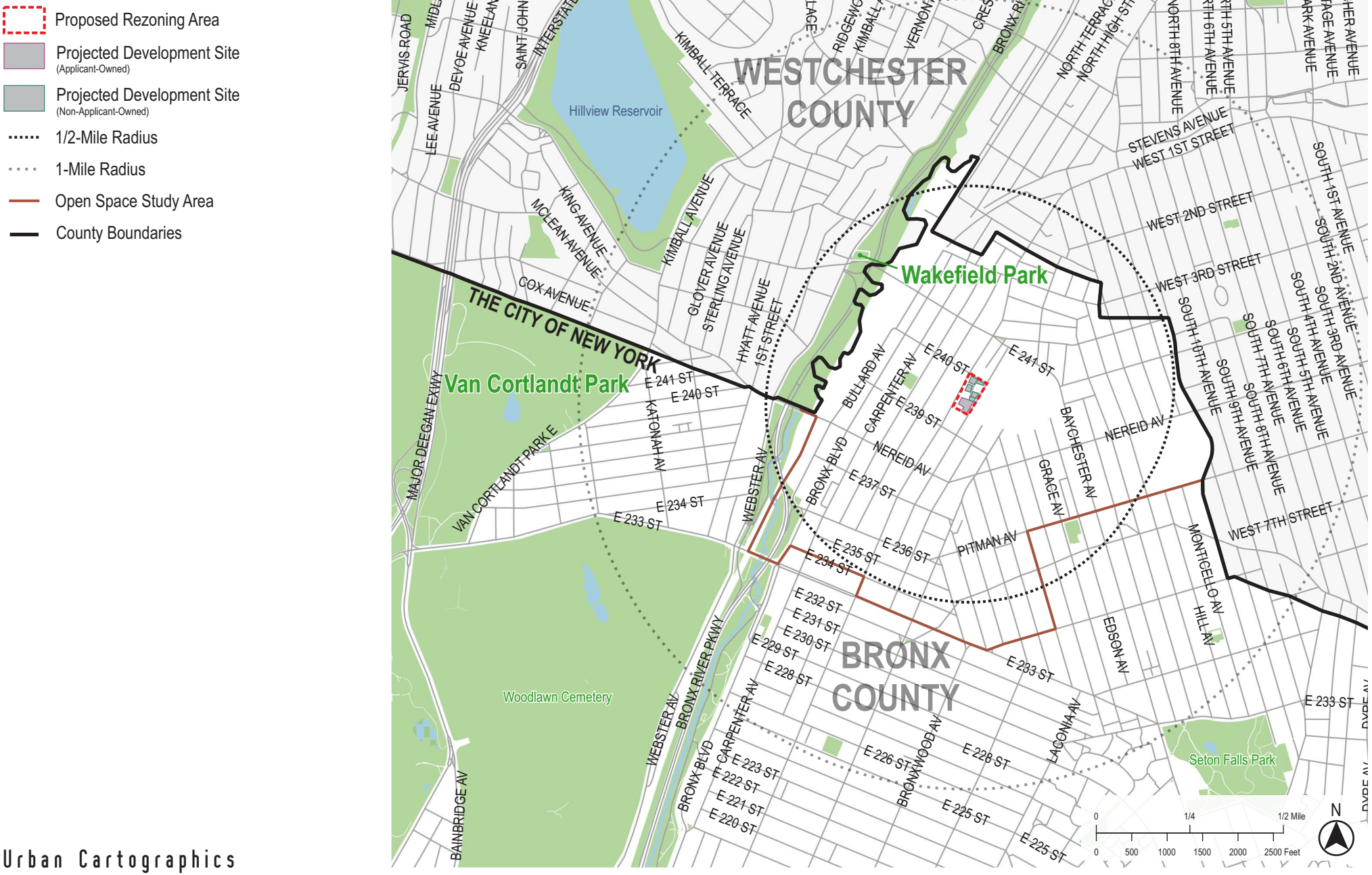
The quantitative analysis also did not include the 0.65-acre Wakefield Park[11], which is located approximately 0.45 miles from the Project Area and is accessible via the local street network. Wakefield Park is located within the Bronx River Park Reservation at the northeast corner of Wakefield Avenue and Bronx River Road, and is operated by the City of Yonkers, Westchester County. The Park contains playground equipment and benches.

Other resources located within an approximately 1-mile radius of the Project Area include portions of Van Cortlandt Park to the west, Seton Falls Park to the southeast, and Rienzi Playground to the south of the Project Area. These resources contain ball fields, basketball and handball courts, barbequing areas, fitness equipment, golf courses, playgrounds, dog friendly areas, outdoor pools, horseback riding trails, spray showers, benches, and a bird sanctuary and natural areas including watercourses, a waterfall, wetlands, and preserved natural lands. 18.28 of the total 1,183.43 acres of these open space areas are located within 1 mile of the Project Area. See Figure 17-2.

[11] The park is located within ½-mile of the Project Area but was not included in the quantitative analysis because it lies within a census tract that is less than 50% within the project study area.

4541 Furman Avenue Rezoning, Bronx

Figure 7-2: Open Space - Qualitative Analysis



Urban Cartographics

The *CEQR Technical Manual* considers an action to result in significant adverse impacts to open space resources if it would significantly increase shadows, noise, air pollutant emissions, or odors on existing public open spaces resources compared to the future without the action conditions. The projected development associated with the Proposed Actions would not significantly increase such impacts on existing public open spaces resources as further explained in the shadows, air quality, and noise chapters below. Indirect effects to open space resources would occur if the Proposed Actions would result in utilization increasing to the point that the open space could not adequately serve the population. Indirect effects are discussed under the Quantitative Assessment section above.

Based on *CEQR Technical Manual* criteria and as explained further in the Shadows section below, buildings on Projected Development Sites 1 through 6 would not cast new shadows or have any other adverse impacts on any open space resources as there are no publicly accessible open space areas located within the maximum shadow radius of these buildings.

Conclusion

The Proposed Actions would not result in any significant direct impacts on any open space resources. The Proposed Actions would result in a decrease of more than 1% in the With-Action open space ratios within the project study area which is considered to be potentially significant since the area has a very low existing open space ratio. However, the *CEQR Technical Manual* indicates that the desired open space ratios are often not feasible for many areas of the City, and the City does not consider these ratios as its open space policy for every neighborhood. Consequently, the ratios do not represent an absolute impact threshold, and these benchmarks instead represent how well an area is served by its open space.

As described in the qualitative assessment above, the low open space ratio would be offset by the proposed 8,497 square feet (0.195 acres) of private common recreational space to be provided for building residents on Projected Development Site 1 as well as private open space that would be required to be provided on Projected Development Sites 2 through 6 under the mandatory Quality Housing provisions of the proposed R7D zoning district. The Quality Housing zoning regulations require that at least 3.3% of the residential floor area of each building be provided as open space. The 146,978 zsf of residential floor area anticipated to be developed on Projected Development Sites 2 through 6 would require the provision of at least 4,850 square feet of private open space. In addition, the low open space ratio would be offset by the 1.3-acre P.S. 87 playground and the 0.65-acre Wakefield Park, both of which are located within ½-mile of the Project Area (where less than 50% of the census tract is located within ½ mile).

The Proposed Actions would not result in any direct impacts on any open space resource. Although the percentage change in the open space ratio exceeds CEQR

guidance, with the consideration of qualitative factors the Proposed Actions do not rise to the level of a significant impact. Therefore, the Proposed Actions would not result in any significant adverse impacts on open space resources and further analysis would not be required.

8. SHADOWS

Introduction

Under CEQR, a shadow is defined as the circumstance in which a building or other built structure blocks the sun from the land. An adverse shadow impact is considered to occur when the shadow from a proposed project falls upon a publicly accessible open space, a historic landscape, or other historic resource if the features that make the resource significant depend on sunlight, or if the shadow falls on an important natural feature and adversely affects its uses or threatens the survival of important vegetation. An adverse impact would occur only if the shadow would fall on a location that would otherwise be in sunlight; the assessment therefore distinguishes between existing shadows and new shadows resulting from a proposed project. Finally, the determination of whether the impact of new shadows on an open space or a natural or historic resource would be significant is dependent on their extent and duration. In general, shadows on City streets and sidewalks or on other buildings are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

The heights of the buildings to the roofs above the base[12], where relevant, and to the bulkheads on the roofs above the top floors on the Projected Development Sites would be as follows:

- Projected Development Site 1:
- Building Segment A: base height: 92′-2″; bulkhead height: 118′-6″
- Building Segment B: base height: 95′-2″; bulkhead height: 121′-6″

- Projected Development Site 2: base height: 83′-0″; bulkhead height: 110′-0″

- Projected Development Site 3: base height: 78′-0″; bulkhead height: 115′-0″

- Projected Development Site 4: bulkhead height: 95′-0″

- Projected Development Site 5: bulkhead height: 95′-0″

- Projected Development Site 6: base height: 73′-0″; bulkhead height: 110′-0″

According to the *CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure or an addition to a structure at least 50 feet in height or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource. A shadows

[12] Heights include a 3′ parapet wall.

analysis is required for this project because the Proposed Actions would result in the development of six new structures that would exceed 50 feet in height.

Preliminary Screening Assessment

Tier 1 Screening Assessment

There are no sunlight sensitive open space or historic resources in the vicinity of the Projected Development Sites as shown on the attached Figure 8-1: Tier 1 Screening Assessment diagram.

The longest shadows radius is calculated as 4.3 times the maximum proposed building height including rooftop bulkheads. The longest shadow cast by any of the buildings on the six Projected Development Sites is on Projected Development Site 1, Building Segment A as follows:

- Projected Development Site 1, Building Segment A: elevator bulkhead roof: 121'-6" x 4.3 = 522.5'

As shown on Figure 8-1, there are no publicly accessible open space or historic resources within this radius distance or within the maximum shadows radius of any of the other Projected Development Sites.

As the Tier 1 Screening Assessment indicates that no shadow impacts would result from the Proposed Actions, no further screening assessment would be required.

Conclusion

Buildings on Projected Development Sites 1 through 6 would not cast any new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant shadows impacts, and no further assessment is needed for the project.

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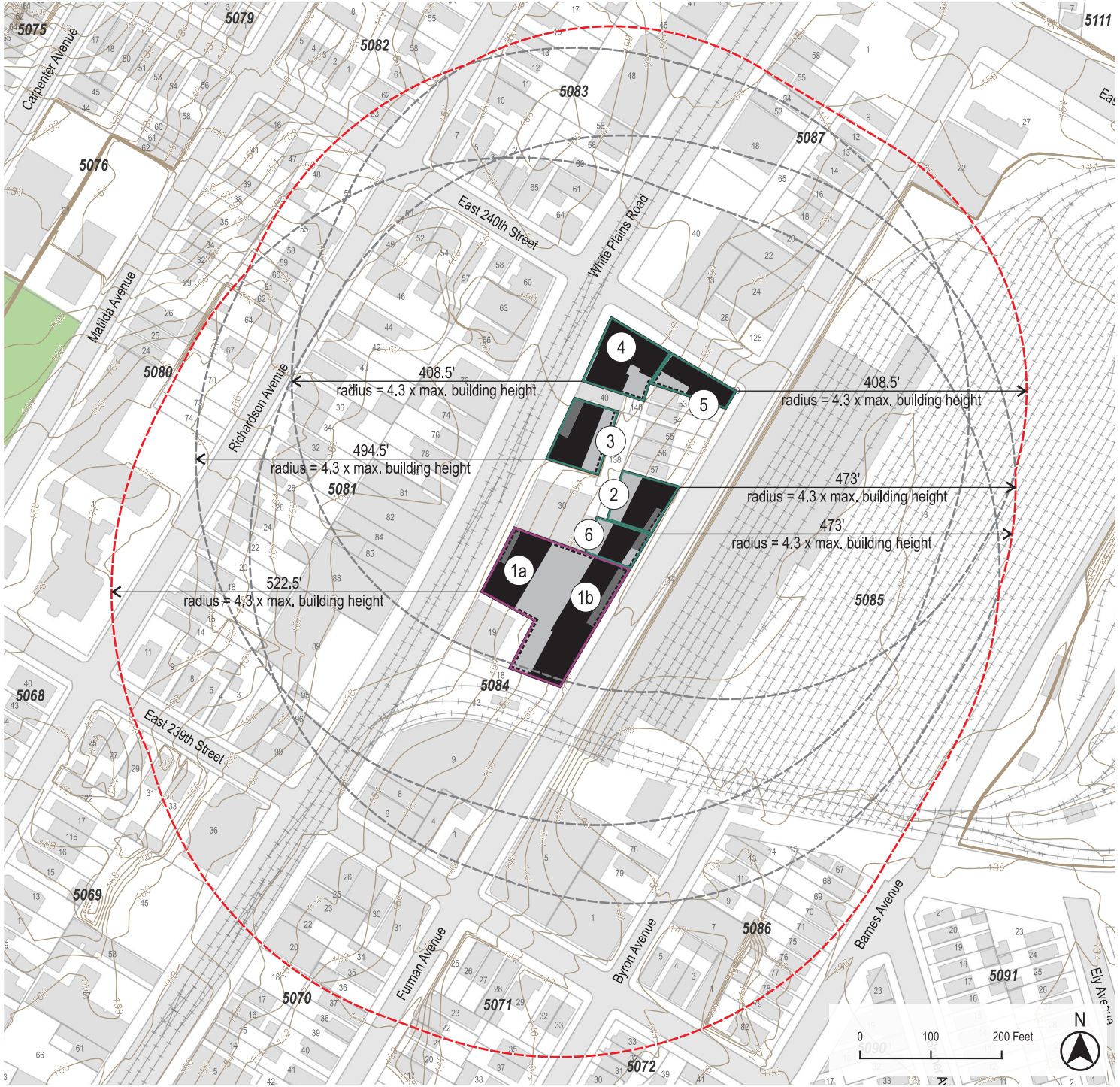
Figure 8-1: Tier 1 Screening Assessment

- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant Owned)
- (#) Projected Building Number
- Projected Building Footprint
- Roof Above Base
- Roof Above Top Floor
- Longest Shadow Study Area Boundary
- (#) Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource



Building Heights

	1a	1b	2	3
Base Height*	92' 2"	95' 2"	83'	78'
Bulkhead Height	118' 6"	121' 6"	110'	115'

	4	5	6
Base Height*	—	—	73'
Bulkhead Height	95'	95'	110'

*Heights include 3' parapet wall.

Urban Cartographics

9. HISTORIC AND CULTURAL RESOURCES

The 2020 *City Environmental Quality Review* (CEQR) *Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks (NYCL); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed in the State/National Registers of Historic Places (S/NR) or contained within a district listed in or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHL); and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic/archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

As discussed in the Project Description, the Applicant is seeking a Zoning Map Amendment from M1-1 to R7D and R7D/C2-4 which would involve a rezoning of the Applicant's property, Block 5084, Lot 63, and non-Applicant properties, identified as Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 138, and 140. Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 63, 138, and 140 would be zoned R7D/C2-4 and Block 5084, Lots 56, 57, 58, 59, 60, and 61 would be zoned R7D. The Applicant is also proposing a Zoning Text Amendment to modify ZR §23-933, Appendix F to designate the newly mapped R7D and R7D/C2-4 districts as Mandatory Inclusionary Housing designated areas, as well as a Zoning Text Amendment to modify ZR Appendix I to extend the Transit Zone to be coterminous with the Project Area. In a related action, the project will undergo a coordinated review with the NYC Department of Housing Preservation and Development (HPD) because the project seeks discretionary financing.

With the proposed map and text amendments, the Applicant would develop on Block 5084, Lot 63 a new a 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors. The Projected Development Site 1 would contain 187,673 gsf of total floor area. In Building Segment A, the first floor would contain 7,391 gsf of commercial space and the remainder of the building segment would contain 52,995 gsf of residential floor area. In Building Segment B, the cellar level would contain 12,784 gsf of community facility space, the cellar and sub-cellar levels would contain 12,284 gsf of space for 22 accessory residential parking spaces, storage, and building utilities, and the remainder of the building segment would contain 102,219 gsf of residential floor area. Projected Development Site 1 will have a total of 150 dwelling units and is proposed to be 100% affordable under HPD's Extremely Low & Low-Income Affordability (ELLA) Program.

The Project Area and the 400-foot radius project study area are not a Federal, State, or New York City designated Historic District and do not contain any individually designated historic resources. As such, a historic architectural analysis is not warranted for the Proposed Actions.

The New York City Landmarks Preservation Commission (LPC) has determined that the Applicant's Projected Development Site 1 does not have any historic or archaeological significance. LPC has also determined that there are no potential historic or archaeological resources on Projected Development Sites 2 through 6. (See 10/3/19 LPC letter in Historic and Archaeological Resources Appendix to this document.)

The Proposed Actions would not result in any significant adverse impacts to historic or archaeological resources and no further analysis is necessary.

10. URBAN DESIGN AND VISUAL RESOURCES

Introduction

An assessment of urban design is needed when a project may have effects on any of the elements that contribute to the pedestrian experience of public space. A preliminary assessment is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including the following:

1. Projects that permit the modification of yard, height, and setback requirements;

2. Projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed project.

The Proposed Actions include:

A. A Zoning Map Amendment to Sectional Map # 2a – Rezoning of the Projected Development Site 1, Block 5084, Lot 63 and the Non-Applicant owned Sites, identified as Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 138, and 140 from their existing M1-1 zoning to the proposed R7D/C2-4 zoning. Rezoning of the Non-Applicant owned Sites, identified as Block 5084, Lots 56, 57, 58, 59, 60, and 61 from their existing M1-1 zoning to the proposed R7D zoning.

B. A Zoning Text Amendment - Modify ZR §23-933, Appendix F to designate the newly mapped R7D and R7D/C2-4 districts as Mandatory Inclusionary Housing designated areas.

C. A Zoning Text Amendment – Modify ZR Appendix I to extend the Transit Zone to be coterminous with the Project Area.

D. Related Action – In a related action, the project will undergo a coordinated review with the NYC Department of Housing Preservation and Development (HPD) because the project seeks discretionary financing.

The Proposed Actions would permit the modification of the existing yard, height, and setback requirements of the lots within the Project Area and introduce new buildings with greater height. The maximum amount of floor area that would be permitted in the Project Area in the future under the existing and future No-Action zoning is up to 90,595 zoning square feet of manufacturing/commercial space or up to 217,428 square feet of community facility space. The maximum amount of floor area that would be permitted in the Project Area in the future With-Action zoning calculated on the basis of maximum FAR is up to 507,332 zoning square feet of residential floor area, up to 28,550 square feet of commercial space, or up to 380,499 square feet of community facility space. A preliminary urban design assessment is therefore required.

Preliminary Assessment

Existing Conditions

Project Area

The Project Area consists of approximately two-thirds of one block in the Wakefield neighborhood of the Bronx bounded by East 240th Street, White Plains Road, and Furman Avenue starting approximately 301.61 feet north of East 239th Street. The 90,595 square foot Project Area is developed with 1,000 gsf of retail space, 42,741 gsf of warehouse, manufacturing and automobile repair floor area, 15,686 gsf of residential floor area for 16 market rate dwelling units, 21,610 gsf of utility and community facility space (churches), parking areas, and vacant land. The existing development on each of the Projected Development Sites as well as Other Sites is detailed below.

Projected Development Sites

Projected Development Site 1 (Block 5084, Lot 63) has a lot area of approximately 24,729 square feet. The Development Site has 102.17 feet of frontage on White Plains Road and 192.73 feet of frontage on Furman Avenue. The Development Site is improved with a one-story (16') 24,729 gsf manufacturing/factory building. The existing building is currently unoccupied (FAR: 1.0). The property has Certificates of Occupancy dated 01/25/1957, 12/13/1957, and 06/26/1958 for "factory, metal stamping, metal spinning, loading, storage, warehouse, and offices". It appears from Department of Buildings records that the structure on the site was constructed between 1955 and 1958 with additional construction occurring in 2001. The existing building and site are currently unoccupied.

Projected Development Site 2 (Block 5084, Lots 58, 59, 60) consists of three lots totaling approximately 5,650 sf in area that would be merged. (FAR: 0.34) Lot 58 is a 2,025 sf lot used as a parking lot. Lot 59 is a 1,875 sf lot used as a parking lot. Lot 60 is a 1,750 sf lot developed with 2 two-story dwellings totaling 1,897 gsf in floor area and containing a total of 2 dwelling units.

Projected Development Site 3 (Block 5084, Lots 35 and 39) – This Site consists of two lots totaling approximately 6,595 sf in area that would be merged. Lot 35 is a 4,970 sf lot developed with a two-story dwelling containing 1,256 gsf of floor area and containing 2 dwelling units. Lot 39 is a 1,625 sf lot used as a parking lot.

Projected Development Site 4 (Block 5084, Lot 41) consists of a 7,650 sf lot containing 2 two-story auto repair garages totaling 5,494 gsf in floor area.

Projected Development Site 5 (Block 5084, Lot 49) consists of a 4,230 sf lot containing a two-story 7,500 gsf auto body repair garage.

Projected Development Site 6 (Block 5084, Lot 61) consists of a 3,975 sf lot containing a two-story 5,018 gsf auto body repair garage.

Other Sites

Other Site 1 (Block 5084, Lot 19) consists of an approximately 7,700 sf lot containing a one- and two-story approximately 9,160 gsf utility building used as a substation by the MTA.

Other Site 2 (Block 5084, Lots 30 and 138) consists of two lots totaling approximately 15,400 sf in area. Lot 30 is an 11,500 sf lot developed with a two-story 12,450 gsf warehouse building occupied by a church. Lot 138 is a 3,900 sf vacant lot.

Other Site 3 (Block 5084, Lot 53) consists of a 2,889 sf lot developed with a two-story, 1,700 gsf dwelling containing one dwelling unit.

Other Site 4 (Block 5084, Lot 54) consists of a 2,602 sf lot developed with a two-story, 1,336 gsf dwelling containing two dwelling units.

Other Site 5 (Block 5084, Lot 55) consists of a 2,600 sf lot developed with a two-story, 2,200 gsf dwelling containing two dwelling units.

Other Site 6 (Block 5084, Lot 56) consists of a 2,325 sf lot developed with a two-story, 2,875 gsf dwelling containing two dwelling units.

Other Site 7 (Block 5084, Lot 57) consists of a 2,325 sf lot developed with a two-story, 2,422 gsf dwelling containing two dwelling units.

Other Site 8 (Block 5084, Lots 40 and 140) consists of two lots with the same address totaling approximately 1,925 sf in area. Lot 40 is a 1,550 sf lot developed with a two-story 3,000 gsf mixed residential/commercial building comprised of a an approximately 1,000 gsf ground floor retail store plus three dwelling units totaling approximately 2,000 gsf. Lot 140 is a 375 sf vacant lot.

The Project Area does not contain any visual resources such as open space facilities, historic resources, or natural resources.

400-Foot Radius Project Study Area

The area surrounding the Project Area is characterized by a mix of commercial/manufacturing uses (mainly ground floor retail or automotive/transportation related) and residential uses (multi-family, mixed residential and commercial, and one- and two-family homes). Several community facility uses including churches, schools and health centers are scattered through the surrounding area. Most buildings are one- or two-stories in height with a few scattered three-story structures. While numerous buildings are built to the street line, many are setback 10 to 20 feet from the street. Directly east of the Project Area is the MTA 239th Street Yard and Maintenance Shop which contains storage of trains not in use. The Project Area is also directly adjacent to an elevated subway line that runs along White

Plains Road and carries the 2 and 5 subway lines. Most streets in the project study area are two-way and 50 to 60 feet in width except for White Plains Road which is 100 feet in width.

The 400-foot radius Project Study Area does not contain any visual resources such as open space facilities, historic resources, or natural resources.

An aerial photograph of the project study area and ground level photographs of the Project Area and the immediate context are attached which show existing conditions in the Project Area and in the surrounding area. Zoning calculations of the existing conditions in the Project Area, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below.

No-Action Scenario

Project Area

As explained in the Land Use section above, it is assumed that under the No-Action Scenario, existing conditions would continue on the Applicant-owned Projected Development Site 1, the Non-Applicant owned Projected Development Sites 2 through 6, and Other Sites 1 through 8. The existing 1,000 gsf of retail space, 42,741 gsf of warehouse, manufacturing and automobile repair floor area, 15,686 gsf of residential floor area for 16 market rate dwelling units, 21,610 gsf of utility and community facility space (churches), parking areas, and vacant land would remain as they currently exist. Therefore, no changes would occur to the existing urban design and visual character of the Project Area.

400-Foot Radius Project Study Area

The following new development project has been identified as under construction within the 400-foot radius across White Plains Road from the Project Area.

- 4519 White Plains Road – A 9-story, 72,701 square foot mixed-use building containing 20 Affordable Independent Residences for Seniors (AIRS) units, 49 non-profit institutional with sleeping accommodations (NPISA) units, 29 income restricted quality housing dwelling units, and a community center to be constructed on the 15,800 square foot property currently developed with a 7,674 gsf, 1-story manufacturing building. NYC Department of Buildings records indicate that the application was approved on 1/5/20.

No development plans are known to exist for any other undeveloped parcels or other uses within the project study area as identified above by the project build year of 2028.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2028.

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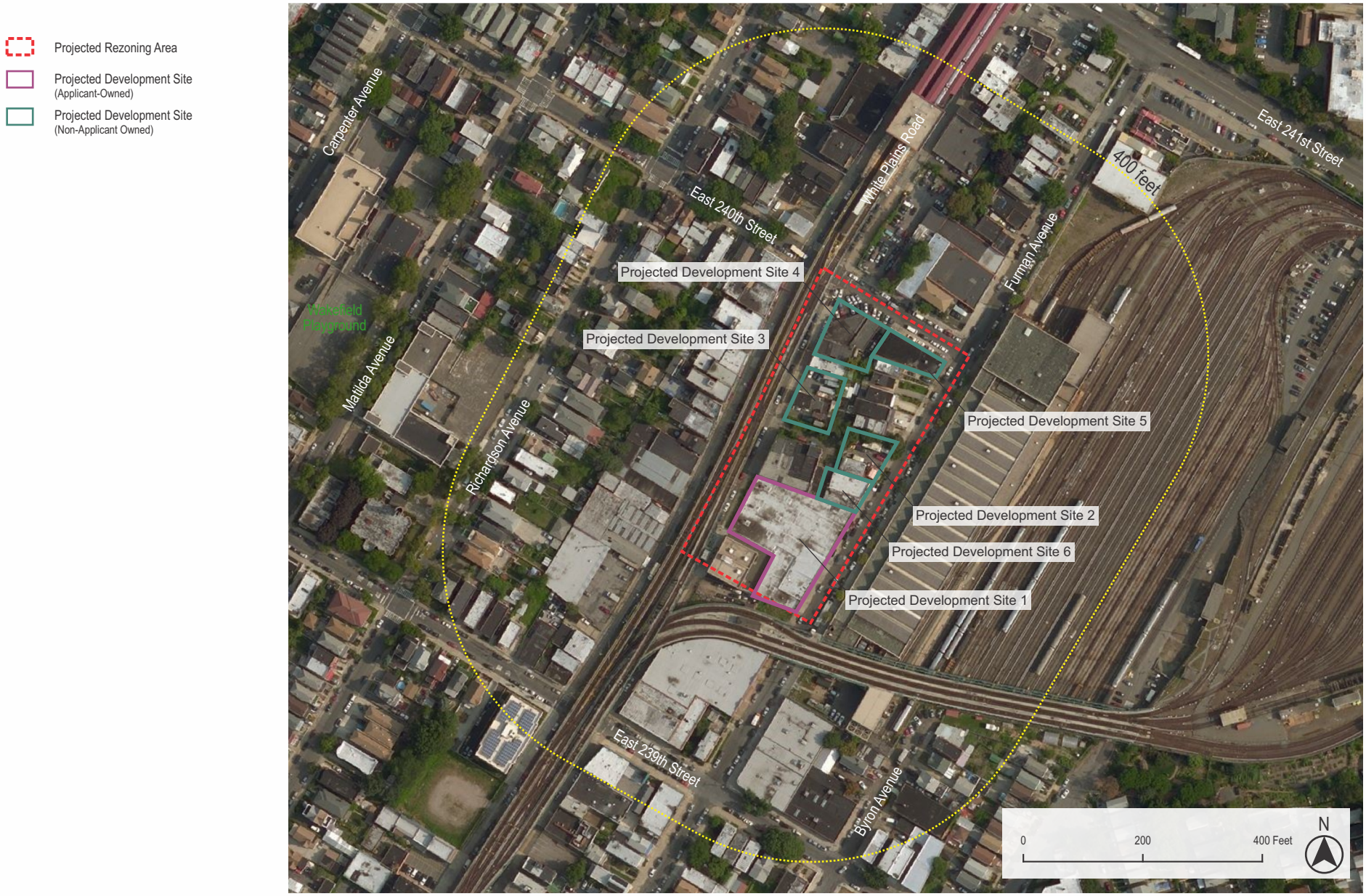
Figure 5: Aerial Map



Imagery Source: 2019 Bing, Microsoft Corporation (OR) 2019 Google

Urban Cartographics



1. View of the Site facing north from Furman Avenue.



2. View the Site facing north from Furman Avenue.



3. View of the Site facing southwest from Furman Avenue.





4. View of the Site facing southwest from Furman Avenue.



5. View of the west side Furman Avenue facing northwest (Site at right).



6. View of the Site facing south from White Plains Road.





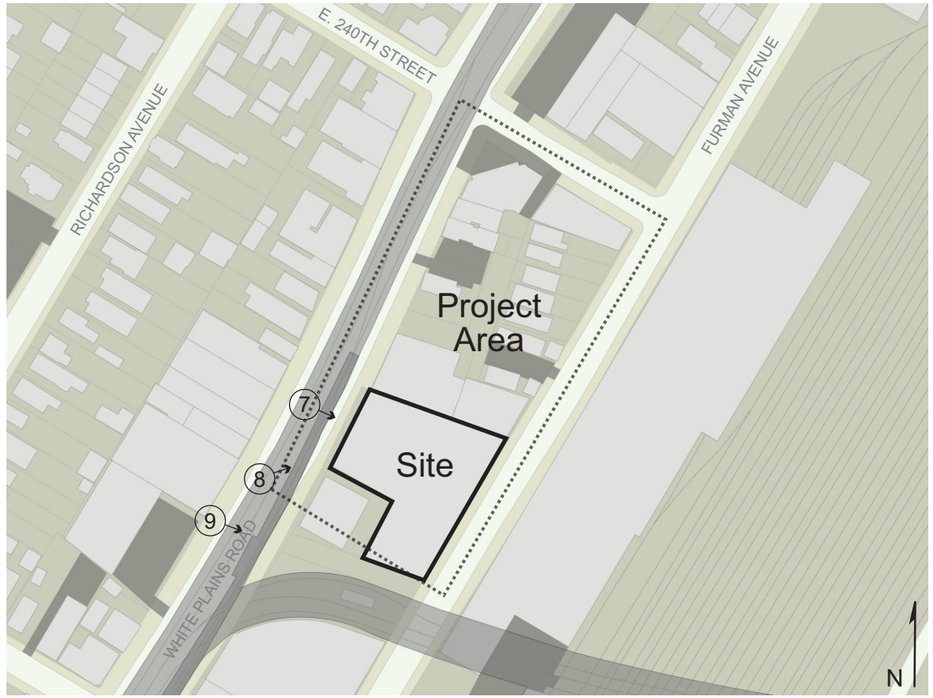
7. View of the Site facing southeast from White Plains Road.



8. View of the Site facing northeast from White Plains Road.



9. View of the east side of White Plains Road facing southeast.





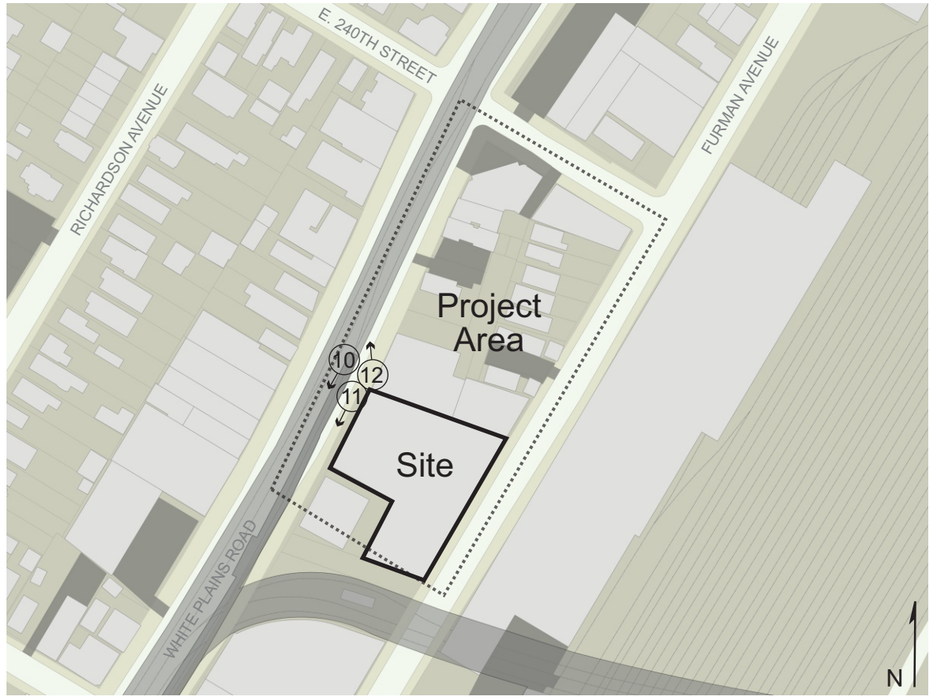
10. View of White Plains Road facing southwest (Site at left).



11. View of the sidewalk along the east side of White Plains Road facing southwest (Site at left).



12. View of the west side of White Plains Road facing north from the Site.





13. View of the west side of White Plains Road facing southwest from the Project Area.



14. View of the Sidewalk along the east side of White Plains Road facing northeast (Site ahead at right).



15. View of White Plains Road facing northeast (Site at right).





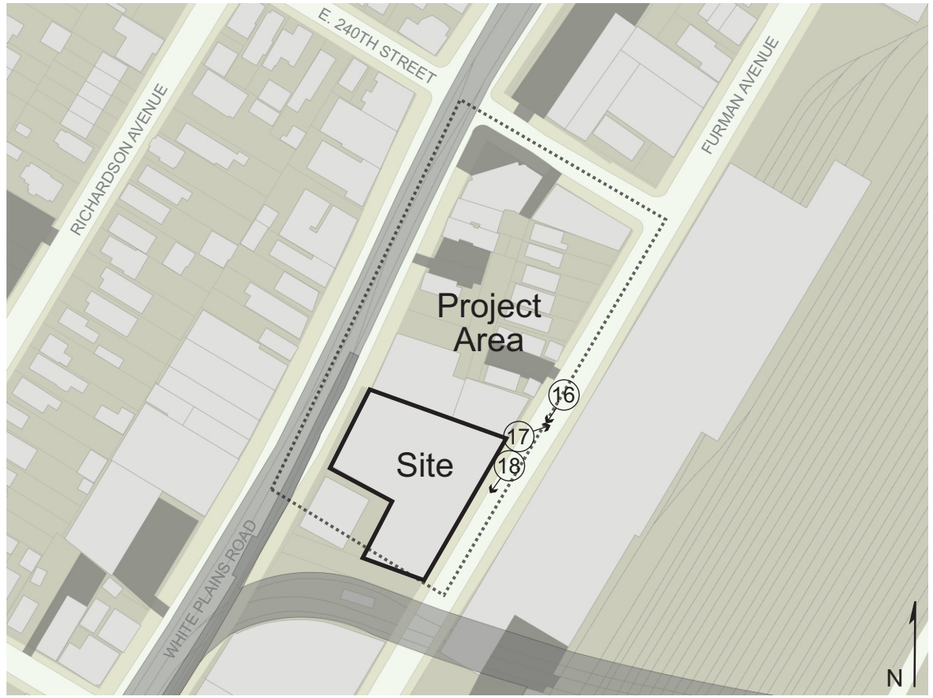
16. View of Furman Avenue facing southwest (Site at right).



17. View of the east side of Furman Avenue facing northeast from the Site.



18. View of the sidewalk along the west side of Furman Avenue facing southwest (Site at right).





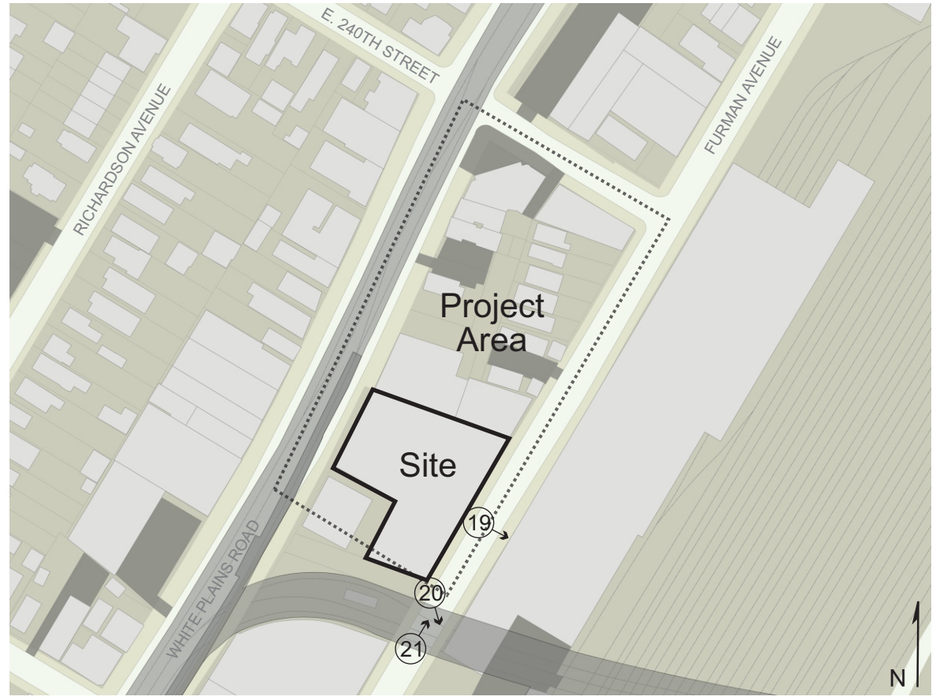
19. View of the east side of Furman Avenue facing southeast from the Site.



20. View of east side of Furman Avenue facing south from the Project Area.



21. View of Furman Avenue facing northeast (Site at left).





22. View of the sidewalk along the west side of Furman Avenue facing northeast (Site at left).



23. View of the sidewalk along the west side of Furman Avenue facing southwest from the Site.



24. View of the Project Area facing southwest from East 240th Street.

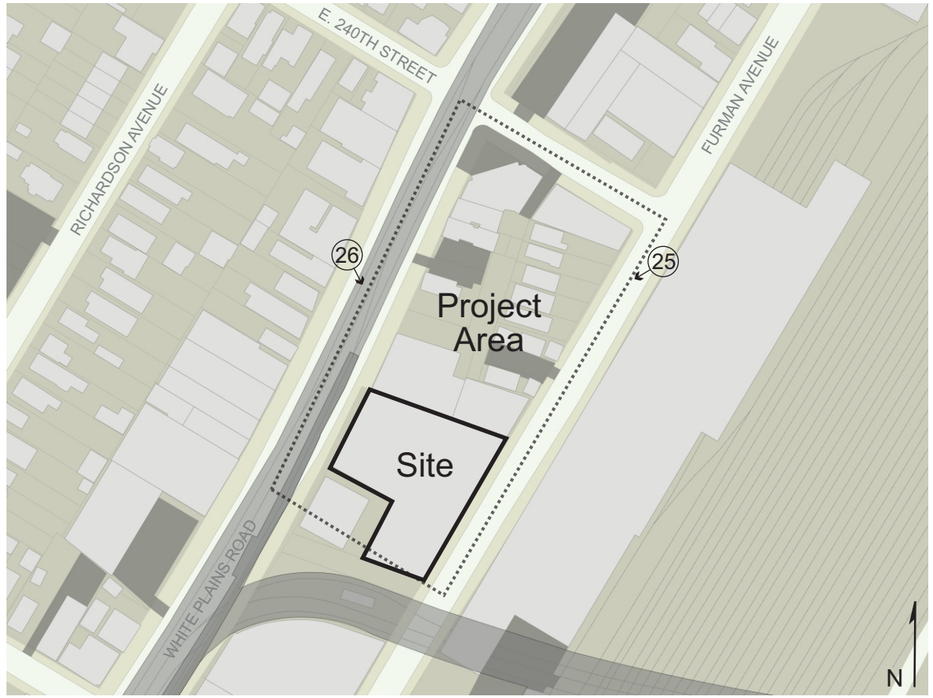




25. View of the Project Area facing southwest from Furman Avenue between East 239th Street and East 240th Street.



26. View of the Project Area facing southeast from White Plains Road between East 239th Street and East 240th Street.



With the exception of one new building located across White Plains Road from the project area, the character of the surrounding project study area would not be expected to change significantly in the absence of the project. Zoning calculations of future No-Action conditions on the Site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below.

Future With-Action Scenario

The future With-Action Development Scenario would result in a denser development on the property as compared to the Existing/No-Action Development Scenario. Under the With-Action Scenario for the project build year of 2028, the six Projected Development Sites would be developed with six new buildings containing a total of 389,609 gsf of floor area. The buildings would contain 343,315 gsf of residential floor area for 338 dwelling units, 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces within 12,284 gsf of building floor area. The existing 45,894 gsf of floor area, comprised of 42,741 gsf of manufacturing, warehouse, and automobile repair floor area, and 3,153 gsf of residential floor area for 4 market rate dwelling units, plus parking areas would be removed. No changes would occur to the existing/No-Action conditions on Other Sites 1-8. The projected development on each of the six Development Sites is detailed below.

The Applicant seeks to develop Projected Development Site 1 with a new 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors. In Building Segment A, the first floor would contain 7,391 gsf of commercial space and the remainder of the building segment would contain 52,995 gsf of residential floor area. In Building Segment B, the cellar level would contain 12,784 gsf of community facility space, the cellar and sub-cellar levels would contain 12,284 gsf of space for 22 accessory residential parking spaces, storage, and building utilities, and the remainder of the building segment would contain 102,219 gsf of residential floor area. Projected Development Site 1 will have a total of 150 affordable dwelling units.

Projected Development Site 2 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 32,065 gsf of floor area. The building would include 40 residential dwelling units including 10 to 12 affordable units. No parking would be provided. The residential entrance would be on Furman Avenue.

Projected Development Site 3 would be developed with a new 95' tall, 9-story and cellar, residential and commercial building with approximately 49,301 gsf. The 44,730 gsf of residential floor area would include 41 residential dwelling units including 10 to 12 affordable units. The development would also include 4,571 gsf of commercial space on the ground-floor of the building. No parking would be provided. Residential and commercial entrances would be on White Plains Road.

Projected Development Site 4 would be developed a new 75' tall, 7-story and cellar, residential and commercial building with approximately 61,587 gsf of floor area. The 55,186 gsf of residential floor area would include 50 residential dwelling units including 12 to 15 affordable units. The development would also include 6,401 gsf of commercial space on the ground floor of the building. No parking would be provided. The residential entrance would be on White Plains Road while the commercial entrance would be on East 240th Street.

Projected Development Site 5 would be developed with a new 75' tall, 7-story and cellar, residential and community facility building with approximately 32,559 gsf of floor area. The 29,696 gsf of residential floor area would include 28 residential dwelling units including 7 to 8 affordable units. The development would also include 2,863 gsf of community facility space on the ground floor of the building. No parking would be provided. The residential entrance and one community facility entrance would be on East 240th Street while a second community facility entrance would be provided on Furman Avenue.

Projected Development Site 6 would be developed with a new 90' tall, 9-story and cellar, residential building with approximately 26,424 gsf of floor area. The building would include 29 residential dwelling units including 7 to 8 affordable units. No parking would be provided. The residential entrance would be on Furman Avenue.

This would result in an increase of 343,715 gsf of total floor area and would include the addition of 340,162 gsf of residential floor area for 334 dwelling units, 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces, and the removal of 42,741 gsf of manufacturing, warehouse, and automobile repair floor area.

The difference between the No-Action and With-Action Scenarios on the six Projected Development Sites would be the removal of all existing development and the development under the With-Action Scenario of six new buildings resulting in an increase of 343,715 gsf of total floor area including the addition of 340,162 gsf of residential floor area for 334 dwelling units, 196 to 205 of which would be affordable units, 18,363 gsf of commercial retail/office space, 15,647 gsf of community facility space (medical offices), and 22 accessory parking spaces.

The existing development on Projected Development Site 1 consists of a one-story manufacturing/factory building. The existing building has a continuous street wall along Furman Avenue punctuated by garage entrances and doorways and a solid brick wall along White Plains Road. There are no street trees adjacent to the building along either street frontage. The With-Action development on Projected Development Site 1 would result in the replacement of the existing one-story building with a new 9-story and 10-story, two-tower building with active commercial retail uses on the ground floor

and residential space on the upper floors. The street walls of Projected Development Site 1 along both White Plains Road and Furman Avenue would be contiguous. The proposed commercial uses would front on White Plains Road in the 9-story structure. Separate commercial, community facility, and residential entrances to the building would be located along White Plans Road, and the Furman Avenue frontage of the building would contain separate community facility and residential entrances as well as an entrance/exit to the proposed garage. Three new street trees would be installed along the White Plains Road frontage of the building and seven new street trees would be installed along the Furman Avenue frontage of the development. The existing sidewalks adjacent to the property would be replaced with new 15' wide sidewalks. See Urban Design figures 10-1 through 10-7.

The With-Action development would change the low-density residential use, manufacturing/warehouse, automobile related, parking, and vacant land character of the Project Area to a higher density mixed-use residential, commercial, and community facility development with limited accessory parking. The With-Action development would increase the density of development on the six Projected Development Sites. In addition to a significantly greater amount of floor area, the building heights would be significantly greater under the With-Action Scenario with the development of new 7- to 10-story buildings. The existing buildings in the Project Area on the Applicant-owned and the non-Applicant owned Projected Development Sites are one- to two-stories in height.

Zoning calculations of future With-Action conditions on the Site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below. A three-dimensional representation of the future With-Action condition streetscape is also attached.

Table 10-1
Zoning Calculations Relevant to Urban Design Analysis – Projected Development Sites

Item	Existing Conditions	No-Action Conditions	With-Action Conditions
Development Scenario	42,741 gsf manuf, warehouse, automobile repair; 4 market rate dwelling units; parking	42,741 gsf manuf, warehouse, automobile repair; 4 market rate dwelling units; parking	338 dwelling units including 196 to 205 affordable units; 18,363 gsf retail/office; 15,647 gsf community facility (medical offices); 22 accessory parking spaces
Building Floor Area (except parking)	45,894 gsf	45,894 gsf	389,609 sf

Building Heights	One- to two-story	One- to two-story	Two 7-story (75′), two 9-story (90′), one 9-story (95′), one 9-10 story (101′-6″)

Conclusion

The Proposed Actions would result in the development of residential, commercial, and community facility uses and accessory parking on six Projected Development Sites located in an area characterized by a mixture of residential, manufacturing/warehouse, and automotive related uses, parking, and vacant land.

The proposed R7D/C2-4 district was chosen for the Project Area in order to develop residential uses on the Applicant's property which is not allowed under its current M1-1 zoning. It is also required to allow the proposed bulk of the new building to be increased from the current permitted FAR of 1.0 for manufacturing and commercial uses and 2.4 for community facility uses to 4.2 for all permitted residential and community facility uses (manufacturing uses would not be allowed), 2.0 for commercial uses, and 5.6 as a bonus for inclusionary housing. The increase in permitted bulk is appropriate given the City's policy of promoting increased development in close proximity to transit stops. The change is also appropriate given the lack of demand for manufacturing facilities in this area, which is underdeveloped. The establishment of a Mandatory Inclusionary Housing area for this application was developed in consultation with DCP in order to facilitate the development of affordable housing at a higher FAR in the area to be rezoned.

The proposed R7D zoning district is a contextual zoning district that requires development to be in accordance with Quality Housing standards. For Inclusionary Housing, the district typically produces 11-story apartment buildings set at or near the street line. R7D/C2-4 zoning was chosen for the Project Area as the Project Area is located immediately south of the 241st Street Rezoning area, which rezoned the entirety of Block 5087 from an Ml-1 zoning district to an R7D/C2-4 zoning district on 02/13/19. The Project Area is also located immediately east of an area zoned R4A/C2-4 on the opposite side of White Plains Road. The proposed R7D/C2-4 zoning district would promote mixed-use development consistent with the commercial overlays mapped along White Plains Road immediately north and south of the Project Area.

The With-Action Development Scenario would not result in any significant impacts to visual resources as no such resources are located in proximity to the Project Area. The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. The Applicant believes that the development that would be facilitated by the rezoning would represent a visual improvement to the area and would result in new development on the underdeveloped Projected Development Sites that is believed

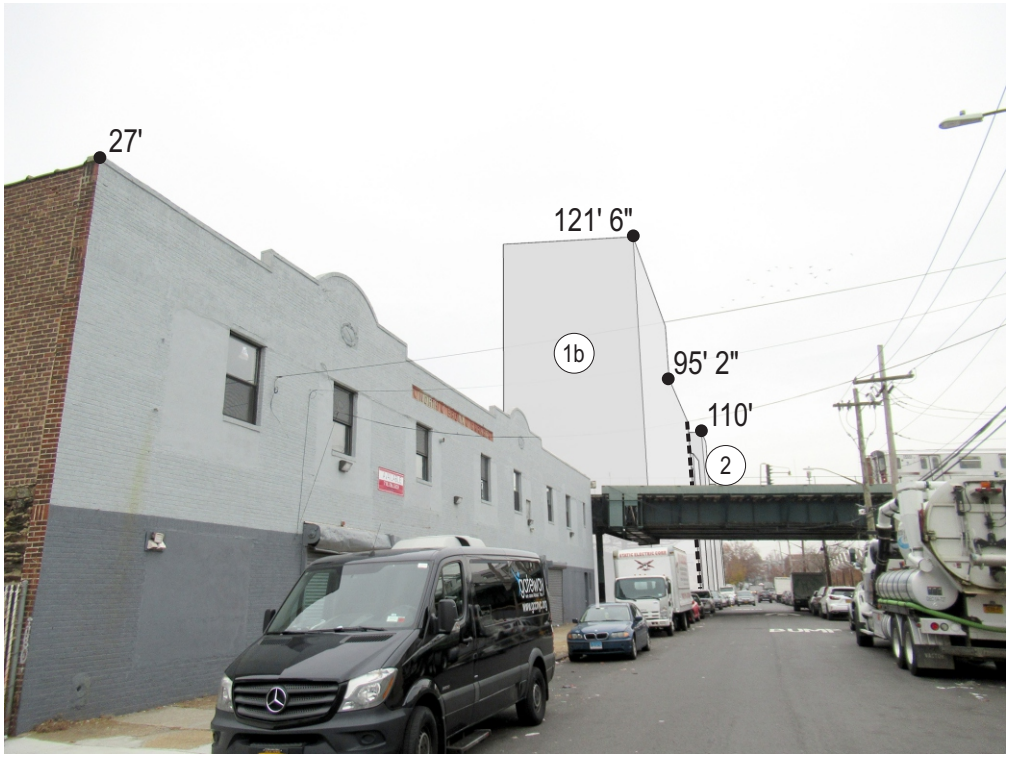
to be more compatible with the development pattern in residential areas further to the north and west. A detailed urban design analysis would not be required.

4541 Furman Avenue Rezoning, Bronx
Figure 10-1: Urban Design Diagram

No-Action Scenario
Furman Avenue facing north (Site at left)



With-Action Scenario
Furman Avenue facing north (Site at left)

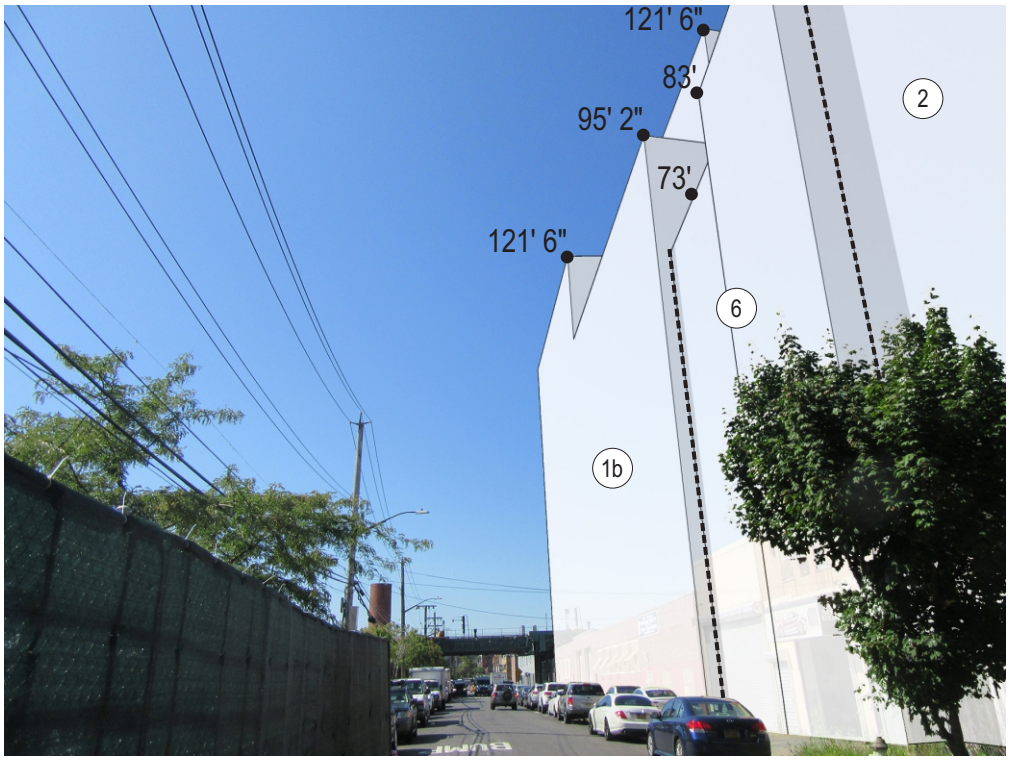


4541 Furman Avenue Rezoning, Bronx
Figure 10-2: Urban Design Diagram

No-Action Scenario
Furman Avenue facing south (Site at right)



With-Action Scenario
Furman Avenue facing south (Site at right)

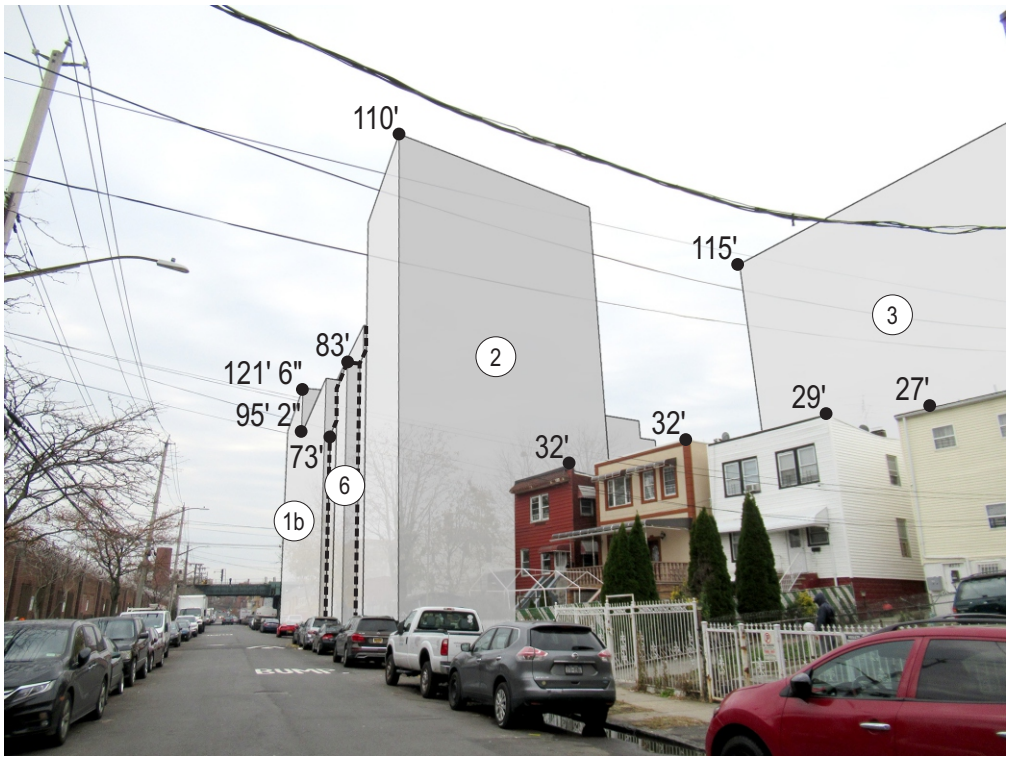


4541 Furman Avenue Rezoning, Bronx
Figure 10-3: Urban Design Diagram

No-Action Scenario
Furman Avenue facing south (Site at right)



With-Action Scenario
Furman Avenue facing south (Site at right)

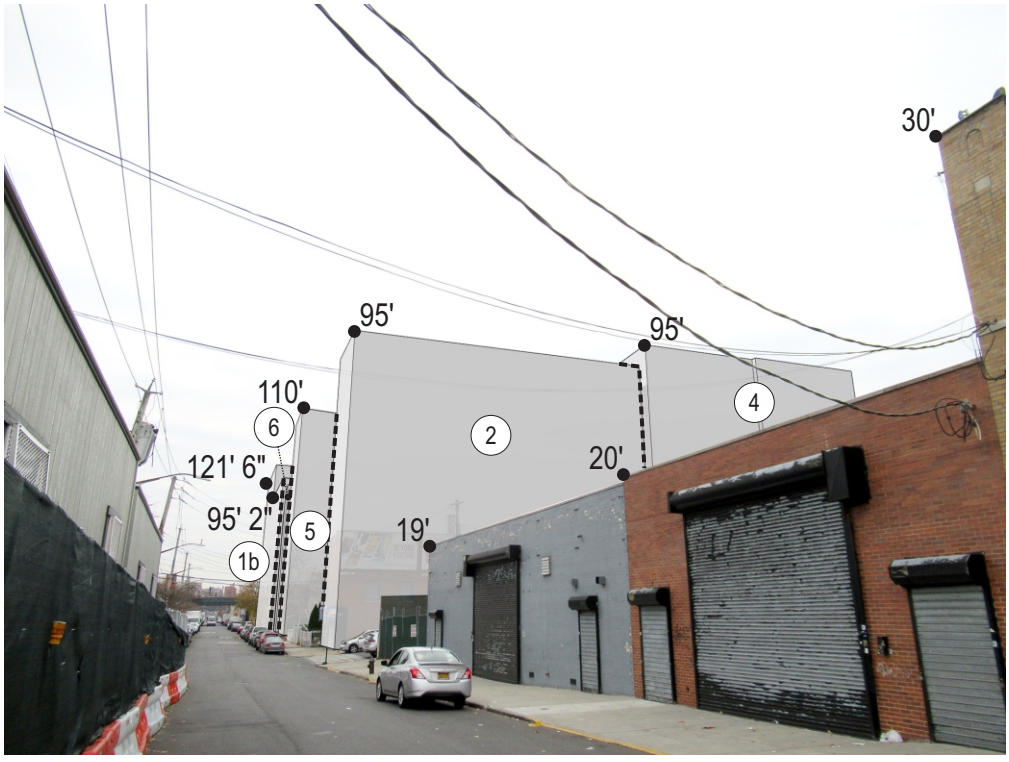


4541 Furman Avenue Rezoning, Bronx
Figure 10-4: Urban Design Diagram

No-Action Scenario
Furman Avenue facing south (Site at right)



With-Action Scenario
Furman Avenue facing south (Site at right)



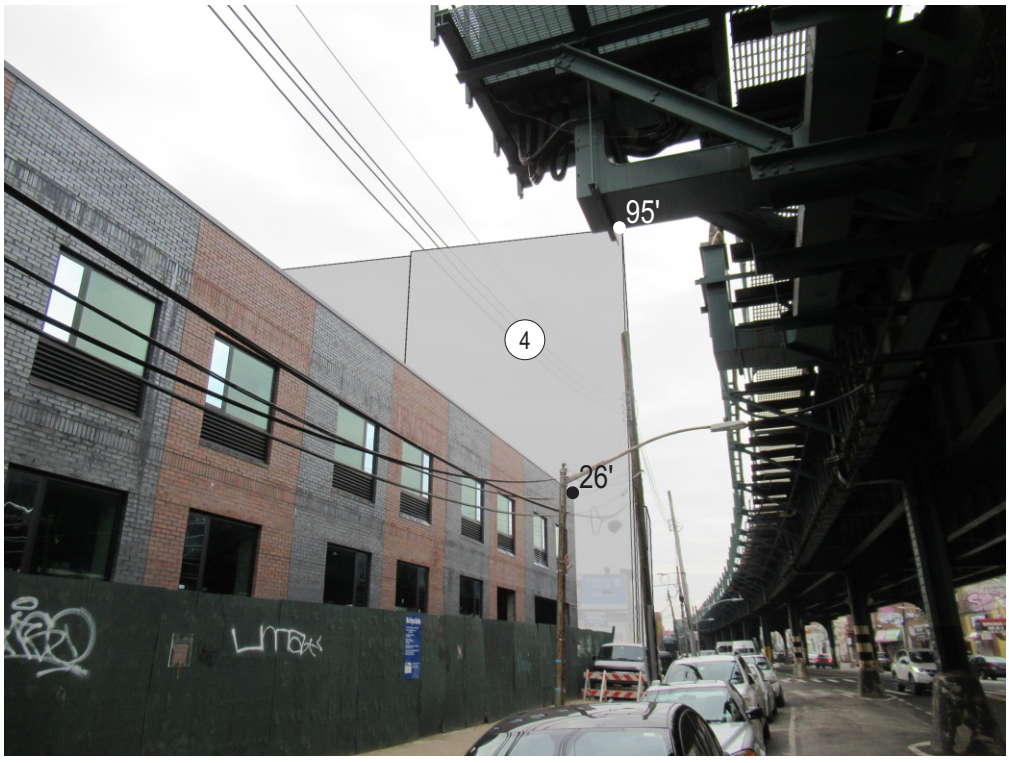
No-Action Scenario

White Plains Road facing south (Site at left)



With-Action Scenario

White Plains Road facing south (Site at left)

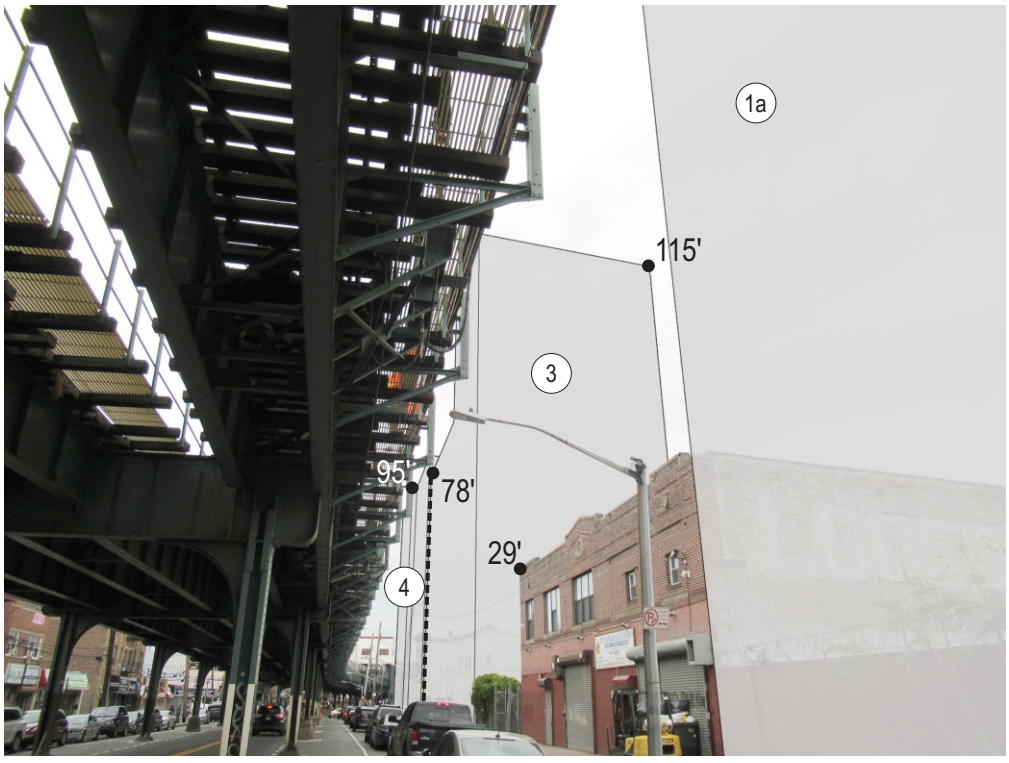


4541 Furman Avenue Rezoning, Bronx
Figure 10-6: Urban Design Diagram

No-Action Scenario
White Plains Road facing north (Site at right)



With-Action Scenario
White Plains Road facing north (Site at right)

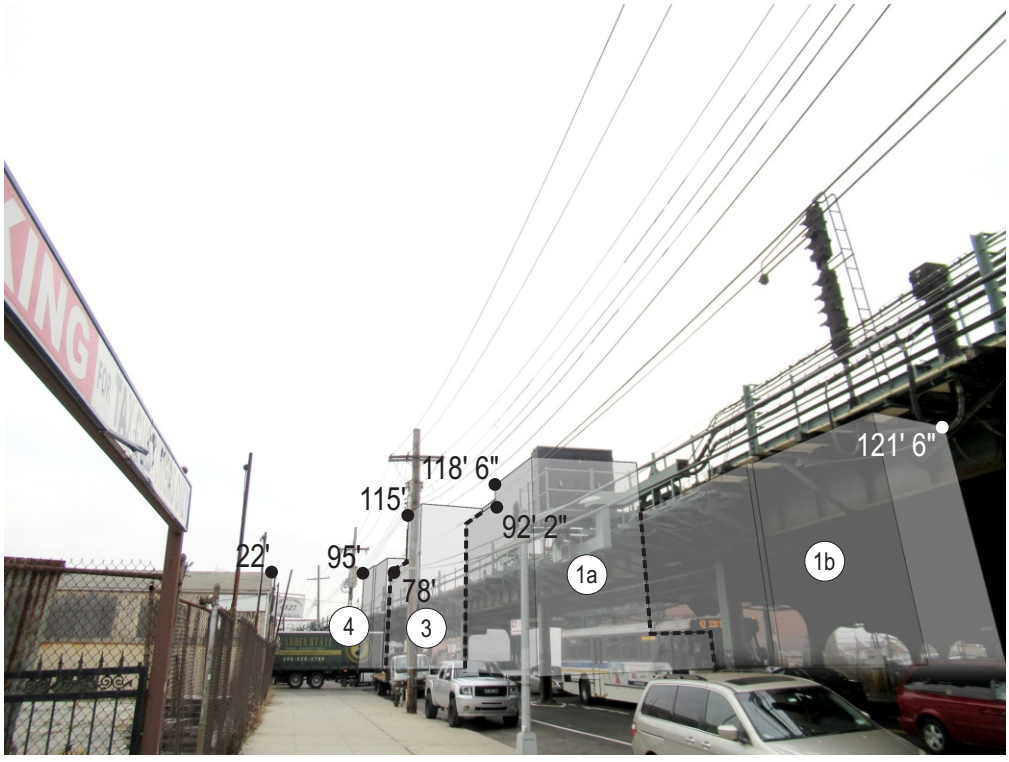


4541 Furman Avenue Rezoning, Bronx
Figure 10-7: Urban Design Diagram

No-Action Scenario
White Plains Road facing north (Site at right)



With-Action Scenario
White Plains Road facing north (Site at right)



12. HAZARDOUS MATERIALS

Introduction

Team Environmental Consultants, Inc. (TEAM) was authorized by Altmark Capital LLC to conduct a Phase I Environmental Site Assessment (ESA) dated May 11, 2018 of a commercial property located at 4541-4551 Furman Avenue in the New York City Borough of Bronx, New York. TEAM'S Phase I ESA was conducted in general conformance with ASTM Practice E 1527-13 (Standard Practice for Phase I ESA Process) guidelines. The objective of this effort was to identify significant environmental impairments and liabilities associated with the subject property. The scope of work included the following tasks: 1) Review of readily available historical and regulatory Information; 2) Performance of site interviews and a walk-through property inspection; 3) Review of a federal and state environmental database report; and 4) Documentation of findings within a Phase I ESA report.

Based on the property setting and continued commercial site use, availability of a municipal water supply, review of available information, performance of Phase I ESA interviews, and findings of the property walk-through inspection, no significant and immediate environmental liability issues or "recognized environmental conditions" (RECs) associated with the property were identified.

Site Description

The property is located along the northwestern side of Furman Avenue, approximately 2,000-feet southeast of the Bronx River Parkway, in the Borough of Bronx (Wakefield), City and State of New York. The site is situated within an urban setting and is bordered to the northeast by commercial properties found along Furman Avenue and White Plains Road, to the southeast by Furman Avenue and a New York City Transit Authority (NYCTA) Subway Car Inspection and Equipment Maintenance Facility, to the southwest by an undeveloped commercial parcel and overhead NYCTA railway line, and to the northwest by White Plains Road, NYCTA passenger railway, and commercial properties. The site topography is at grade with Furman Avenue and slopes gradually upward towards the northwest.

The irregularly shaped 0.57-acre (24,850 sq ft) property is improved with an unoccupied one-story (slab on grade) steel framed masonry block and brick sided office/warehouse structure which is presently used by a Toyota dealership for new car storage. The building was formerly tenanted by a property owner operated metal spinning and stamping business (Metropolis Industries) which ceased active site use in 2002. According to City of New York Building Department records, the structure has a floor area of 24,810 square feet and was built during 1956-1957. The building houses a former office section, open warehouse (accessed from Furman Avenue via two overhead bay

doors), restrooms, electrical meters/panels, water supply and fire sprinkler system, natural gas meter/regulator, and utility service connections. No exterior vehicle parking areas are provided. No documentation detailing historic site development or performance of building renovation efforts was available. Property purchaser representative, Adi Altmark (Altmark Capital LLC), informed TEAM that planned site improvement work calls for renovation of the building interior to house a future commercial tenant. He confirmed that no renovation or construction activities requiring the performance of soil excavation work are planned.

The site is located within a City of New York zoning class M1-1 (Manufacturing) district. The potable water supply and sanitary waste treatment service are provided by the City of New York (New York City Department of Environmental Protection). Facility heating is supplied by natural gas fired equipment (ceiling mounted Modine blower units are found in the warehouse sections). Electrical service and natural gas are provided to the area by Consolidated Edison Utilities (Con Ed). No site or regulatory information concerning the current or former onsite presence of any underground petroleum storage tanks (USTs) was available. This was confirmed by property owner, Howard Puhn, who has been associated with the subject property since 1980. Nonhazardous solid waste was formerly removed for offsite disposal by a private hauler. Utility service connections are located underground.

Site History

An on-line New York City Department of Finance Database indicated the subject parcel (City of New York Block 5084, Lot 63) to have been acquired by Howard and Arthur Puhn in October of 2016. Former property owners have reportedly included the Howard and Arthur Puhn Trust (7-2016), Sydelle Prince (1999-?), Howard Puhn (1980-?), Hicks Associates (1978-1980), Balint Realty Corp. (1978), and Hicks Associates, Inc. (1968-1978). No previously conducted title searches, documentation detailing historic ownership, or contact information for former property owners was available. None of the owners on record appear to have been an industrial concern that would be expected to have used the property for the generation, storage, treatment, or disposal of hazardous materials.

Sanborn Fire Insurance Maps from 1897-1950 identified the subject property to be undeveloped. An on-line City of New York Building Department web site noted the issuance of Temporary Certificate of Occupancy No. 21716 on June 25, 1957 for a "New Building." Site use was indicated to be for "Factory, Metal Stamping, Metal Spinning, Loading, Storage, and Warehouse." No fuel oil use was referenced. A Final Certificate of Occupancy (No. 22969) was issued on December 13, 1957. The Date of Building Completion was listed as November 18, 1957. Howard Puhn reported that the building was historically used for metal spinning and stamping purposes and that he acquired the business and property in 1980. Active site use ceased in 2002. The building has been

utilized for new vehicle parking purposes (Toyota of Yonkers) since 2002. Mr. Puhn indicated that no underground or aboveground petroleum storage tanks have ever been located onsite and that he was unaware of any issues of environmental concern associated with the property or historic commercial site use. No information as to historic property use for large scale industrial purposes (i.e., activities that would be expected to have routinely produced regulated hazardous materials or waste products) was available.

User Provided Information

No previously prepared title records, Phase I or II Environmental Site Assessment (ESA) reports, information concerning environmental liens, property use limitations, valuation reduction based on environmental issues, or commonly known/reasonably ascertainable information that is material to recognized environmental conditions (RECs) in connection with the 4541-4551 Furman Avenue property was provided to TEAM during the performance of the Phase I ESA.

Aerial Photograph Review

Aerial photographs of the subject property vicinity were reviewed by TEAM to assist with the evaluation of historic site use. Photographs from 1954, 1966, 1974, and 1980 were inspected on an on-line National Environmental Title Research (NETA) website. Photographs were also obtained from an on-line Google Earth web site (April 1994, March 2004, March 2007, June 2010, and April 2016). The property was noted to be undeveloped on the 1954 figure. The current commercial structure was depicted on the 1966-2016 photographs. Neighboring properties appeared to be utilized for commercial and railway purposes. The scale and clarity of these images precluded an in-depth inspection of the property for visual evidence of environmental impairment (e.g., aboveground petroleum storage tanks, fuel dispensing pumps, or illegal dumping). None of the figures revealed evidence of historic industrial site use.

Sanborn Fire Insurance Map Review

Sanborn Fire Insurance Maps were obtained for the Furman Avenue property location for the years 1887, 1892, 1897, 1908, 1918, 1935, 1950, 1977, 1981 , 1983, 1986, 1988, 1991, 1992, 1993, 1995, 1996, 1998, 2001, 2002, 2003, 2004, 2005, 2006, and 2007. The inspection of these maps was difficult due to poor clarity and absence of readily identifiable property boundaries. No site coverage was provided on the 1887 and 1892 figures. The target property was shown to be undeveloped on the 1897-1950 maps. The present day structure (noted to have been built in 1957) was illustrated on the 1977-2007 figures. No site use or tenancy was referenced. Neighboring properties were indicated to have historically been undeveloped or utilized tor residential, railway, and commercial purposes. None of the maps identified historic site use for industrial purposes (i.e., operations that would be expected to have routinely utilized or produced regulated

hazardous materials or waste products) or the presence of any underground petroleum (i.e., gasoline) storage tanks.

Site Inspection

On May 8, 2018, TEAM together with Matthew Lev (Ariel Property Advisors), conducted an inspection of accessible sections of the building and surrounding property. The authorized scope of work did not include performance of any field sampling activities (e.g., asbestos, soil, mold, lead-based paint, or groundwater) or completion of a formal regulatory compliance audit, as it would relate to the use, storage, permitting, treatment, or disposal of regulated materials and generated waste products.

Property Inspection

The inspection of accessible exterior property areas revealed no unusual odors or visual evidence of significant surface stains that could be indicative of leaking petroleum storage tanks, chemical spills, or industrial waste disposal. No PCB-labeled electrical equipment, suspected underground petroleum storage tank fill ports or vent pipes, aboveground petroleum or chemical storage tanks, unmarked waste storage drums/containers, potable water supply or groundwater monitoring wells, stormwater collection drains, or industrial waste storage or disposal facilities within the property confines were observed. No surface water bodies or freshwater wetland habitat areas were observed within or adjacent to the subject property. This was confirmed during review of a USGS topographic map. The nearest surface water body (Bronx River) is located approximately 2,000-feet to the northwest. The authorized Phase I ESA scope of work did not include the performance of formal wetland or flood plain delineation surveys.

Building Inspection

The inspection of accessible interior building areas (difficult due to the absence of interior lighting and the presence of numerous parked vehicles) revealed no unusual odors or visual evidence of PCB-labeled electrical equipment, suspected underground petroleum storage tank fill ports or vent pipes, aboveground petroleum/chemical storage tanks, unmarked waste storage containers, chemical spillage or significant surface stains, exposed mold, or industrial waste storage or disposal facilities. No floor drainage systems were observed within the building (confirmed by Howard Puhn). No exposed suspected friable asbestos containing materials (ACM} were identified during the walk-through inspection. No information concerning the performance of asbestos inspection or abatement activities associated with historic interior building renovation efforts was available. The Phase I ESA scope of work did not include the performance of formal asbestos or lead-based paint Inspection or sampling surveys. TEAM was informed by Howard Puhn that no regulated or hazardous waste products requiring

RCRA manifesting and tracking procedures were generated as a result of historic commercial site operations or routine building maintenance activities.

RECORDS REVIEW AND DOCUMENTATION

Regulatory Review - NYSDEC/City of New York

The requested Phase I ESA time frame and scope of work precluded submittal of written Freedom of Information Legislation (FOIL) requests to the New York State Department of Environmental Conservation (NYSDEC) Region 2 Petroleum Bulk Storage Program, New York City Department of Environmental Protection (NYCDEP), or the City of New York Bureau of Fire Prevention. As the 4541-4551 Furman Avenue property location was not identified within the NYSDEC PBS (Petroleum Bulk Storage), CBS (Chemical Bulk Storage), RCRIS, or SPILLS/LUST Databases, these regulatory agencies would not appear to maintain documentation pertaining to issues of adverse environmental concern.

Federal and State Environmental Database Report

TEAM has obtained an Environmental Data Resources (EDR) Site Assessment Report, which provides information concerning the target property and those sites listed within any of the following Federal and State environmental databases:

- National Priority List (NPL);
- Resource Conservation and Recovery Information System (RCRIS), Large Quantity Generators and TSD Facilities, Small Quantity Generators and Transporters;
- New York State/Tribal Brownfield Sites (BROWNFIELD);
- New York State Spills Database (SPILLS);
- Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS);
- CERCLIS "No Further Remedial Action Planned" Sites (NFRAP);
- New York State Registry of Inactive Hazardous Waste Disposal Sites (SHWS):
- Facility Index System (FINDS);
- Air Facility System (US AIRS);
- Integrated Compliance Information System (ICIS);
- Hazardous Materials Incident Report System (HMIRS);
- Toxic Substances Control Act Tracking System (FTTS);
- Environmental Restoration Program (ERP);
- State Pollutant Discharge Elimination (SPDES);
- Registered Dry Cleaners (DRYCLEANERS);
- Hazardous Waste Manifest Data (MANIFEST);
- Major Oil Storage Facility (MOSF);
- Emergency Response Notification System (EANS);
- New York Leaking Storage Tanks (LUST);
- New York State DEC Voluntary Cleanup Program (VCP);
- New York Active Solid Waste Facility Register (SWL); and

• New York Registered Bulk Storage Tanks (UST/AST).

The EDR Database Report identified no NPL, CERCLIS, NFRAP, ERNS, SHWS, VCP, SWL, MOSF, DRYCLEANERS, or ERP or sites within the survey radius. One BROWNFIELD, thirteen LUST, and fifteen SPILLS sites are located within a one-eighth to one-quarter mile distance. The nearest of these is a LUST site (Ramona Property) found approximately 200-feet to the north at 4563 White Plains Road. The Spill Date was listed as August 30, 1989 (reported 1,500-gallon No. 2 fuel oil storage tank tightness test failure-NYSDEC Spill No. 89-05357). The issued Spill Number was shown to have been "closed" on November 5, 1993. The closest SPILLS site is situated approximately 300-feet to the southwest at 701 East 239th Street. The Spill Date was referenced as May 4, 1989 ("Fumes from autobody business are driving tenants out of building at night" - NYSDEC Spill No. 93-01 586). The Spill Number was noted to have been "closed" on June 20, 1995. The BROWNFIELD site ("Enclave on 241st Street Development") is situated to the northwest at 714 East 241st Street. No significant offsite environmental issues or regulatory concerns were indicated in the database description.

As the subject property is serviced with a municipal water supply, the proximity of EDA identified sites would not appear to impact or pose significant environmental liabilities with respect to current commercial use site use or water quality issues. The 4541-4551 Furman Avenue property location was not identified within any of the EDR accessed environmental databases.

Conclusions

Based on the property setting and continued commercial site use, availability of a municipal water supply, review of available historical and regulatory information, performance of Phase I ESA interviews, and findings of the property walk-through inspection, no significant and immediate environmental liability issues or "recognized environmental conditions" (RECs) associated with the 4541-4551 Furman Avenue property were identified. No follow-up environmental site investigations are recommended.

NYC Department of Environmental Protection (NYCDEP) Review*August 24, 2020 Letter*

Projected Development Site 1

The NYC Department of Environmental Protection (NYCDEP) reviewed the EAS and Phase I report discussed above and by letter dated August 24, 2020 requested that, based on the historical on-site and/or surrounding area land uses, a Phase II Environmental Site Investigation (ESI) be prepared for the Applicant property (Block 5084, Lot 63). See Hazardous Materials Appendix.

A Phase II ESI was prepared and submitted to DCP-EARD and concluded the following:

·The geophysical survey did not identify subsurface anomalies indicative of a UST.

·Fill material, generally consisting of dark brown, brown, and black silt with varying amount of sand, gravel, glass wood/timber, coal, coal ash, slag, twigs, and tile, was encountered from beneath the surface to a maximum depth of 3.5 feet bgs. Fill material contains concentrations of SVOCs, pesticides and metals above UU and/or RURR SCOs. Detected concentrations of SVOCs, pesticides, and metals above UU SCOs are consistent with those typically found in historic fill in New York City.

·Visual and olfactory evidence of petroleum impacts were observed in SB06 and SB07 at 3 feet bgs and in SB08 between 1.5 feet and 5.5 feet bgs. Petroleum-related VOCs were not detected in the samples collected from these intervals; however petroleum-related SVOCs were detected in samples collected from these intervals.

·Chlorinated VOCs, SVOCs, and metals were detected in groundwater samples at concentrations above the SGVs. Chlorinated VOCs in groundwater may be related to an unidentified off-site source. SVOCs were also detected in soil samples collected from intervals with observed impacts, and their presence in groundwater may be related to entrained sediment in the groundwater sample. The detected dissolved metals are naturally occurring and are not indicative of a release.

·PCE, TCE, cis-1,2-DCE, and vinyl chloride were detected in sub-slab soil vapor samples at concentrations that warrant "no further action" to "identify source and resample or mitigate" when evaluated using the 2006 NYSDOH Guidance (with updates). PCE, TCE, and cis-1,2-DCE were also detected in the groundwater at concentrations above SGVs. The presence of chlorinated VOCs in vapor may be attributed to an unidentified off-site source that has migrated to the site via groundwater.

Projected Development Sites 2 through 6

Projected Development Sites 2 through 6 are not under the control or ownership of the Applicant and are not proposed for development as part of this project. An "E" designation for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these properties. These applicant(s) should be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-656) will be assigned for hazardous materials on the following properties:

Block 5084, Lots 35, 39, 41, 49, 58, 59, 60, and 61

The text for the (E) designations related to hazardous materials is 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.

The August 24, 2020 NYCDEP letter referenced above states that based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties (Block 5084, Lots 35, 39, 41, 49, 58, 59, 60, and 61). The (E) designation will ensure that testing and mitigation will be

provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Actions to result in significant adverse impacts related to hazardous materials on Projected Development Sites 2 through 6.

February 18, 2021 Letter

In a letter dated February 18, 2021, the NYC Department of Environmental Protection (DEP) Bureau of Sustainability states that it has reviewed the January 2021 Environmental Assessment Statement and the December 2019 Phase II Environmental Site Assessment Report (Phase II) prepared by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. on behalf of Markland 4551, LLC (applicant) for the above referenced project.

Based upon DEP's review of the submitted documentation, they have the following comments and recommendations to DCP:

Projected Development Site 1: Block 5084, Lot 63 (Site under the control or ownership of the applicant)

DCP should instruct the applicant to develop and submit a Remedial Action Plan (RAP) for the proposed project for review and approval. The RAP should delineate the requirements for items including: transportation and disposal of soil; soil stockpiling; dust control; air monitoring; dewatering; removal/closure of underground storage tanks and/or aboveground storage tanks if encountered; engineering controls; capping with concrete/asphalt and/or imported clean fill, etc.

DCP should instruct that applicant that at a minimum, a vapor barrier with a minimum thickness of 20-mil should be incorporated into the design plan of the proposed project. The manufacturer's specifications with thickness information of the proposed vapor barrier should be included in the RAP.

DCP should instruct the applicant to submit a site-specific Construction Health and Safety Plan (CHASP) on the basis of possible exposure of both on-site personnel and the surrounding community to contaminants from the proposed project. The CHASP should identify the possible locations and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate concerns.

DCP should instruct the applicant that a Community Air Monitoring Plan should be developed and implemented in accordance with NYSDEC DER-10 Appendix 1A.

DCP should instruct the applicant that for all areas, which will be landscaped or covered with grass (not capped), a minimum of two feet of DEP approved clean fill/top soil must be imported from an approved facility/source and graded across all landscaped/grass covered areas of the site not capped with concrete/asphalt. The clean fill/top soil must be segregated at the source/facility, have qualified environmental personnel collect representative samples at a frequency of one (1) sample for every 250 cubic yards, analyze the samples for Target Compound List VOCs by EPA Method 8260, SVOCs by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, and TAL metals by a NYSDOH Environmental Laboratory Approval Program certified laboratory, compared to NYSDEC 6NYCRR Part 375 Environmental Remediation Programs. Upon completion of the investigation activities, the applicant should submit a detailed clean soil report for DEP review and approval prior to importation and placement on-site. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data, and comparison of soil analytical results (i.e., NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs).

DCP should instruct the applicant that soil disturbance should not occur without DEP's written approval of the RAP and CHASP.

As further testing may be required if the foundation of the building will be deeper than that assumed for the current illustrative plans, the Applicant is requesting an E Designation so that any further testing can be conducted after project approval.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-656) will be assigned for hazardous materials on the following properties:

Block 5084, Lot 63

The text for the (E) designations related to hazardous materials is 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.

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Actions to result in significant adverse impacts related to hazardous materials on Projected Development Site 1.

16. TRANSPORTATION

INTRODUCTION

To determine the potential for the Proposed Actions to result in significant adverse transportation impacts, trip generation Level 1 and trip assignment Level 2 screening analyses were performed pursuant to the methodologies identified in the 2020 *CEQR Technical Manual*. Based on the proposed mixed-use development trip generation Level 1 and trip assignment screening Level 2 analyses results, it was determined that the Proposed Actions would not result in significant adverse impacts, as further discussed below.

PROJECT AREA

The zoning lots that comprise the Project Area (Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140) are located within the block bounded by Furman Avenue, a two-way northbound/southbound roadway on the east; East 240th Street, a two-way eastbound/westbound roadway on the north; East 239th Street, a two-way eastbound/ westbound roadway on the south; and White Plains Road, a two-way northbound/southbound roadway on the west.

PROJECTED DEVELOPMENT SITES

The transportation analysis is based on six Projected Development Sites, as listed below, and shown in **Figures 1 and 2 (**Transportation Appendix)**,** and on the proposed Site Plan.

- Site 1, Block 5084, Lot 63;
- Site 2, Block 5084, Lots 58, 59, and 60;
- Site 3, Block 5084, Lots 35 and 39;
- Site 4, Block 5084, Lot 41;
- Site 5, Block 5084, Lot 49, and
- Site 6, Block 5084, Lot 61.

EXISTING CONDITIONS

The six Projected Development Sites within the Project Area currently contain a total of 4 residential dwelling units (3,153 gsf), 18,012 gsf of auto repair space, and 24,729 gsf of light industrial space, as summarized in **Table 1.**

NO-ACTION SCENARIO

Absent the Proposed Actions, it is assumed that the development on the six Projected Development Sites within the Project Area would remain the same as the existing condition.

Table 1 – Existing, No-Action Scenario, With-Action Scenario, and Increment on Projected Development Sites

Land Use	Existing	No-Action	With-Action	Increment
Residential d.u.	**4 d.u. (3,153 gsf)**	**4 d.u. (3,153 gsf)**	**338 d.u. (343,315 gsf)**	**334 d.u. (340,162 gsf)**
Local Retail (gsf)	**0**	**0**	**18,363 gsf**	**18,363 gsf**
Light Industrial (gsf)	**24,729 gsf**	**24,729 gsf**	**0**	**-24,729 gsf**
Auto Repair (gsf)	**18,012 gsf**	**18,012 gsf**	**0**	**-18,012 gsf**
Medical Office (gsf)	**0**	**0**	**15,647 gsf**	**15,647 gsf**
Accessory Parking	**0**	**0**	**22**	**22**

Source: Approved RWCDS.

WITH-ACTION SCENARIO

The Proposed Actions would result in a development comprised of 338 residential dwelling units (343,315 gsf), 18,363 gsf of commercial retail (local) space, and 15,647 gsf of medical office space. The project would also provide an on-site accessory parking garage with 22 spaces. The proposed garage would be accessed from Furman Avenue.

INCREMENT

The transportation analyses are based on the net difference between the proposed with action and no-action scenarios. The Proposed Actions would result in an increase of 334 net new residential dwelling units (340,162 gsf), 18,363 gsf of commercial retail (local) space, 15,647gsf of medical office space, and decrease of 18,012 gsf of auto repair space and 24,729 gsf of light industrial space, as summarized in **Table 1**. The proposed project would also provide an on-site accessory parking garage with 22 spaces. The proposed garage would be accessed from Furman Avenue

PRINCIPAL CONCLUSIONS

The following detailed trip generation (Level-One Screening) and trip assignment (Level-Two Screening) analyses have been conducted for the project increment, which is summarized and shown in **Table 1**.

Traffic and Parking

Based on the results of trip generation and trip assignment screening analyses, it is concluded that in the future with the Proposed Actions, none of the intersections in the study area would experience 50 or more peak hour vehicle trip-ends, as summarized in **Table 4 (**Transportation Appendix) and shown in **Figures 3 through 6** (Transportation Appendix) for the AM, MD, PM, and Saturday MD peak hours, respectively. Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-ends threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic and parking impacts.

Parking

An on-site accessory parking garage with 22 spaces would be provided on Projected Development Site 1. The proposed garage would be accessed from Furman Avenue. The proposed project would screen for vehicular traffic as detailed below, and per the *CEQR Technical Manual,* no detailed parking assessment would be required.

Transit

Subway

Based on the results of the trip generation screening analysis, the Proposed Actions would generate fewer than 200 peak hour subway trip-ends, as summarized in **Table 3** (Transportation Appendix) for the AM and PM peak hour periods, respectively. Therefore, in accordance with the *CEQR Technical Manual* 200 subway trip-ends threshold, the subway trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of subway impacts.

Bus

Based on the results of the trip generation screening analysis, the Proposed Actions would generate fewer than 50 peak hour bus trip-ends in one direction along a bus route during any peak hour, as summarized in **Table 3** (Transportation Appendix) for the AM and PM peak hour periods, respectively. Therefore, in accordance with the *CEQR Technical Manual* 200 bus trip-ends threshold/50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour, the bus trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of bus impacts.

Pedestrian

Based on the results of the trip generation **Table 3** (Transportation Appendix) and trip assignment **Figures 16, 17, 18, and 19** (Transportation Appendix) analysis, it is concluded that in the future with the Proposed Actions, one pedestrian element in the AM peak hour period, three pedestrian elements in the weekday Midday peak hour period, and four pedestrian elements in the PM and Saturday Midday peak hour

periods would experience 200 or more peak hour pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold per pedestrian element, a detailed assessment of pedestrian impacts will be conducted as detailed below.

BUILD YEAR

It is assumed that the Proposed Actions would be approved by mid- to late-2021. The project on Projected Development Site 1 (Applicant site) is expected to be completed by 2024 (approximately 24 months or less). As the Proposed Actions would result in the creation of multiple Development Sites that are not controlled by the Applicant, it is anticipated that these Sites would be developed over an additional five-year period with a Build Year of 2028.

TRANSPORTATION PLANNING ASSUMPTIONS

Trip generation factors for the Proposed Actions were determined based on information from the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, U.S. Census Data, trip generation and modal split data provided by the NYCDOT, and other approved EASs and EISs. The travel demand assumptions and trip generation sources are summarized in **Table 2** (Transportation Appendix), and detailed below.

Residential Development

The 2020 *CEQR Technical Manual* Table 16-2 was utilized for trip generation rates, including truck trips, and daily temporal distribution. The 2014-2018 American Community Survey (ACS) Journey-to Work (JTW) data for Census Tract #'s 414, 418, 420, 422, 430, 434, 436, 442, and 444 in the Bronx, NY was used for modal split information and auto occupancy rates, as is estimated in **Exhibits 1 and 2** and summarized in **Table 2** (Transportation Appendix).

The estimated modal split data for residential use found that approximately 41.4% would travel by car, 0.7% would travel by taxi, 12.6% would travel by bus, 38.7% would travel by subway, and 6.6% would travel by foot and other mode of travel, such as bicycle, as shown and summarized in Exhibit 1. The auto occupancy rate is 1.08, based on the 2014-2018 ACS JTW data for Census Tract #'s 414, 418, 420, 422, 430, 434, 436, 442, and 444 in the Bronx, NY, as summarized in Exhibit 2.

Local Commercial Retail Development

The 2020 *CEQR Technical Manual* Table 16-2 was utilized for trip generation rates, including daily temporal distribution and truck trip rates. Modal split information and vehicle occupancy rates are based on NYCDOT survey results for a similar local retail space, located within a ¼-mile radius of a subway station (Bronx Transit Zone), as is summarized in **Table 2** (Transportation Appendix).

The estimated modal split results for local commercial retail use found that approximately 11% would travel by car, 0% would travel by taxi, 2% would travel by bus, 3% would travel by subway, and 84% would travel by foot.

Medical Office Development

Trip generation rates, daily temporal distribution, modal split information, vehicle occupancy rates, and truck trip rates are based on NYCDOT survey results for a similar medical office space in the Bronx, located within a ¼-mile radius of a subway station (Bronx Transit Zone, 241st Street subway station for train number 2 and Nereid Avenue subway station for train numbers 2 and 5; both subway stations are located within a ¼ mile radius from the proposed project). Medical office use has been assumed for conservative analysis purposes.

The surveyed modal split results for medical office use found that approximately 26% would travel by car, 10% would travel by taxi, 23% would travel by bus, 14% would travel by subway, and 27% would travel by foot and other, such as bicycles. The above information is summarized in **Table 2** (Transportation Appendix).

Auto Repair Shop Development

Trip generation rates, daily temporal distribution, modal split information, vehicle occupancy rates, and truck trip rates were estimated utilizing the recently approved *Jerome Avenue Rezoning FEIS,* 2018 Table 13-8 rates as is summarized in **Table 2** (Transportation Appendix).

The estimated modal split results for auto repair use found that approximately 85% would travel by car, 5% would travel by taxi, 1% would travel by bus, 1% would travel by subway, and 8% would travel by foot and other mode of travel, such as bicycles.

Light Industrial Development

Trip generation rates, daily temporal distribution, and truck trip rates are based on the recently approved *Jerome Avenue Rezoning and Related Actions FEIS* Table 13.15-8 rates. 2012-2016 ACS Reverse-Journey-to Work (RJTW) data for Census Tract #'s 414, 418, 420, 422, 430, 434, 436, 442, and 444 in the Bronx, NY was used for modal split information and auto occupancy rates, as summarized in **Exhibits 3 and 4** (Transportation Appendix).

The estimated modal split results for manufacturing use found that approximately 58% would travel by car, 2% would travel by taxi, 7% would travel by bus, 17% would travel by subway, and 16% would travel by foot and other mode of travel, such as bicycle, as shown in **Exhibits 3 and 4 and Table 2** (Transportation Appendix).

PERSON AND VEHICULAR TRIPS

Person Trips

The Proposed Actions would generate a total of 403, 761, 597, and 648 net person trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 3** (Transportation Appendix).

Vehicle Trips

The Proposed Actions would generate a total of 89 (8 inbound and 81 outbound), 83 (41 inbound and 42 outbound), 101 (68 inbound and 33 outbound), and 117 (54 inbound and 63 outbound) net vehicle trip-ends during the AM, Midday, PM, and Saturday Midday Peak hour periods, respectively, as summarized in **Table 4** (Transportation Appendix).

PRELIMINARY ANALYSIS METHODOLOGY AND SCREENING ASSESSMENTS

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

LEVEL 1 SCREENING ASSESSMENTS

A Level 1 trip generation screening assessment was conducted for the project increment, as summarized in **Table 1,** to estimate the numbers of person and vehicle trip-ends by mode generated by the Proposed Actions during the Weekday AM, midday, PM, and Saturday peak hours, as summarized in **Tables 2 through 4** (Transportation Appendix). These trip estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

The Proposed Actions would generate a total of 89 (8 inbound and 81 outbound), 83 (41 inbound and 42 outbound), 101 (68 inbound and 33 outbound), and 117 (54 inbound

and 63 outbound) net vehicle trip-ends; 118, 85, 131, and 123 net subway trip-ends; 63, 62, 64, and 62 net bus trip-ends; and 296, 641, 471, and 504 net pedestrian trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. Based on the results of trips generated by the Proposed Actions, as summarized in **Tables 3 and 4** (Transportation Appendix), a level-two vehicle and pedestrian assessment would be required for Weekday AM, Midday, PM, and Saturday Midday peak hours, as described below.

LEVEL 2 SCREENING ASSESSMENTS

A Level 2 screening assessment involves the distribution and assignment of projected trips to the transportation network and the determination of whether specific locations are expected to experience incremental trips exceeding *CEQR Technical Manual* thresholds. Typically, if the results of this analysis show that the Proposed Actions would result in 50 or more peak hour vehicle trip-ends through an intersection, 50 or more peak hour bus trip-ends on a bus route in a single direction, 200 or more peak hour subway trip-ends per station, or 200 or more peak hour pedestrian trip-ends per pedestrian element, further quantified analyses may be warranted to evaluate the potential for significant adverse traffic, transit, pedestrian, and parking impacts.

VEHICLE TRIPS

Vehicular Trip-Ends

The Proposed Actions would generate a total of 89 (8 inbound and 81 outbound), 83 (41 inbound and 42 outbound), 101 (68 inbound and 33 outbound), and 117 (54 inbound and 63 outbound) net vehicle trip-ends, during the AM, Midday, PM, and Saturday Midday Peak hour periods, respectively. Vehicular trips are assigned conservatively to the Projected Development Sites and the proposed on-site parking garage on Furman Avenue, instead of on-street parking supply. Based on trip assignments, and as shown in **Figures 3 through 6** (Transportation Appendix) for Weekday AM, Midday, PM, and Saturday Midday peak hours**,** none of the intersections in the study area would experience 50 or more vehicle trip-ends (**Figures 3 through 6** show the highest vehicle trip-ends of 35, 32, 39, and 44 at the intersection of East 241st Street and White Plains Road, during AM, Midday, PM and Saturday Midday peak hours, respectively). Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-end threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic and parking impacts.

TRANSIT

Bus Trip-Ends

The Proposed Actions would generate a total of 63 and 64 net bus trip ends during the AM and PM peak hour time periods, respectively, as summarized in **Table 3** (Transportation Appendix). Currently four bus lines serve the Project Area, including

bus lines Bx39 and 0042 which run along White Plains Road; bus line BxM11 which runs along 241st Street; and bus line Bx16 which runs along Nereid Avenue in the study area. The Proposed Actions would generate less than 50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour time period, and in accordance with the *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of bus impacts.

Subway Trip-Ends

The Proposed Actions would generate a total of 118 and 131 net subway trip-ends during the AM and PM peak hour time periods, respectively, as summarized in **Table 3** (Transportation Appendix). Currently there are two subway stations in the study area. The 241st Street subway station for the number 2 train and the Nereid Avenue subway station for the numbers 2 and 5 trains are both located within a ¼ mile radius of the Project Area (Bronx Transit Zone). The Proposed Actions would generate less than 200 subway trip-ends per subway station during the AM and PM peak hour time periods, and in accordance with CEQR *Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of subway impacts.

Pedestrian Trip-Ends

The Proposed Actions would generate a total of 296, 641, 471, and 504 net pedestrian trip-ends during the AM, Midday, PM, and Saturday Midday peak hour periods, respectively. Based on the results of the trip generation **Table 3** (Transportation Appendix) and trip assignment **Figures 20, 21, 22, and 23** (Transportation Appendix) analyses, it is concluded that in the future with the Proposed Actions, the following pedestrian elements in the study area would experience 200 or more peak hour pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold per pedestrian element, a detailed assessment of pedestrian impacts for the following pedestrian elements will be conducted.

AM Peak Hour

- Northeast corner of East 239th Street and White Plains Road intersection.

Weekday Midday Peak Hour

- Northeast and southeast corners of East 239th Street and White Plains Road intersection, and
- East sidewalk of White Plains Road between East 239th and East 240th Streets.

PM Peak Hour

- Northeast and southeast corners of East 239th Street and White Plains Road intersection;
- East sidewalk of White Plains Road between East 239th and East 240th Streets, and
- East crosswalk of East 239th Street and White Plains Road intersection.

Saturday Midday Peak Hour

- Northeast and southeast corners of East 239th Street and White Plains Road intersection;
- East sidewalk of White Plains Road between East 239th and East 240th Streets, and
- East crosswalk of East 239th Street and White Plains Road intersection.

PEDESTRIANS

The analysis methodology peak 15-minute pedestrian flow conditions during the weekday AM, midday, PM, and Saturday Midday peak hours are analyzed using the Highway Capacity Manual 2010 methodology and procedures outlined in the *CEQR Technical Manual*. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volumes, measuring the sidewalk or crosswalk width, determining the available pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with Levels of Service (LOS) standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corners is more complicated as these spaces cannot be treated as corridors due to the time incurred for traffic lights. To effectively evaluate these facilities, a "time-space" analysis methodology is employed, which takes into consideration the traffic light cycle at intersections. LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. The LOS criteria are shown below in **Table 5** for pedestrian crosswalk/corner area and sidewalk conditions, as based on the Highway Capacity Manual methodology. The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to estimate the dynamics of walking more accurately. "Platooning" is the tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where cross traffic required them to wait. Platooning generally results in an LOS one level poorer than that determined for average flow rates.

Table 5: Level of Service Criteria for Pedestrian Elements

LOS	Sidewalks			Corners Reservoirs and Crosswalks
		Non-Platoon Flow	Platoon Flow	
A	(Unrestricted)	> 60	> 530	> 60
B	(Slightly Restricted)	> 40 to 60	> 90 to 530	> 40 to 60
C	(Restricted but fluid)	> 24 to 40	> 40 to 90	> 24 to 40
D	(Restricted, necessary to continuously alter walking stride and direction)	> 15 to 24	> 23 to 40	> 15 to 24
E	(Severely restricted)	> 8 to 15	> 11 to 23	> 8 to 15
F	(Forward progress only by shuffling; no reverse movement possible)	<8	< 11	<8

Notes:
SEP: square feet per pedestrian.
Source: *CEQR Technical Manual*

2019 EXISTING CONDITIONS

Pedestrian counts were collected on October 8 and October 12, 2019 for the Weekday AM, midday, PM, and the Saturday Midday peak periods, respectively. These pedestrian counts were used to develop balanced pedestrian networks for the weekday AM, midday, and PM peak hours, as well as the Saturday Midday peak hour, which are defined as 7:30 to 8:30AM, 1:00 to 2:00PM, 5:15 to 6:15PM, and 1:00 to 2:00 PM, respectively.

Inventories of roadway geometry, traffic controls, bus stops, and subway locations were recorded to provide appropriate inputs for the operational analyses. Official signal timings were measured in the field and obtained from NYCDOT for use in the analysis of the study area signalized intersections**. Figure 7** (Transportation Appendix) shows measurements for roadway pedestrian elements and **Figures 8 through 11** (Transportation Appendix) show the 2019 existing traffic volumes for the Weekday AM, Midday, PM, and Saturday peak hours, respectively.

LEVELS OF SERVICE (LOS)

AM Peak Hour

A summary of the 2019 existing conditions pedestrian analysis result with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS are presented in **Table 6.** The LOS analysis indicates that the northeast corner of E. 239th Street and White Plains Road intersection would operate at LOS A for the AM analysis peak hour.

Midday Peak Hour

A summary of the 2019 existing conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS adjusted for platoon are presented in **Tables 7 and 8**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the Midday analysis peak hour.

PM Peak Hour

A summary of the 2019 existing conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), LOS, and LOS adjusted for platoon are presented in **Tables 9, 10, and 11**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the PM analysis peak hour.

Saturday Midday Peak Hour

A summary of the 2019 existing conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS adjusted for platoon are presented in **Tables 12, 13, and 14**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the Saturday Midday analysis peak hour.

2019 Existing Weekday AM Peak:

Table 6 2019 Existing Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday AM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	68	2975.8	A

2019 Existing Weekday MD Peak:

Table 7 2019 Existing Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Weekday MD Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St	13	82	2168.8	A	A

and E. 240th St (east sidewalk)				

Table 8 2019 Existing Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	129	1639.6	A
	Southeast	177	1218.8	A

2019 Existing Weekday PM Peak:

Table 9 2019 Existing Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Weekday PM Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	67	2598.4	A	A

Table 10 2019 Existing Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday PM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	102	2094.7	A
	Southeast	128	1684.2	A

Table 11 2019 Existing Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Weekday PM Peak Hour		
		Volume	Average	LOS

		(ped/hr)	Pedestrian Space (sf/ped)	
White Plains Rd and E. 239th St	East	44	881.4	A

2019 Existing Saturday MD Peak:

Table 12 2019 Existing Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Saturday MD Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	84	2117.1	A	A

Table 13 2019 Existing Pedestrian Levels of Service – Corners

Intersection	Corner	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	139	1501.5	A
	Southeast	189	1149.1	A

Table 14 2019 Existing Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	East	62	911.8	A

2028 NO-BUILD CONDITIONS

The 2028 no-build pedestrian volumes are constructed by **a):** increasing the existing pedestrian volumes by 1.75 percent (0.25 percent per year for first 5 years and 0.125 per

year beyond, per *CEQR Technical Manual* guidelines - Table 16-4, Pages 16-30*)*, **b)**: a mixed-use development, located at 4519 WhitePlains Road, planned for construction in the study area, and **c):** a mixed-use development, located at 700 east 241st Street, as described below.

- 4519 WhitePlains Road-A 9-story, 72,701 square foot mixed-use building containing 20 Affordable Independent Residences for Seniors (AIRS) units, 49 non-profit institutional with sleeping accommodations (NPISA) units, 29 income restricted quality housing dwelling units, and a community center is proposed for the 15,800 square foot property currently developed with a 7,674 gsf, 1-story manufacturing building. NYC Department of Buildings records indicate that the application was approved on 1/5/20.

- 700 East 241st Street (East 241st Street Rezoning)–A 9-story, 207,925 gsf mixed-use building, containing 186 affordable dwelling units, 24,972 gsf of ground floor commercial space, and 47 parking spaces. A NYC Department of Buildings permit was issued on 04/09/21.

Pedestrian trips, generated by the 4519 White Plains Road mixed-use development (**Tables AA and BB**), and pedestrian trip assignments (**Figures 12 through 15**) were prepared and added to the 2028 no-build pedestrian volumes (Transportation Appendix).

Pedestrian trip assignments for the 700 East 241st Street (East 241st Street Rezoning) are taken directly from the approved East 241st Street Rezoning EAS (CEQR # 18DCP094X) and added to the 2028 no-build pedestrian volumes (Transportation Appendix).

Figures 16 through 19 (Transportation Appendix) show the 2028 no-build pedestrian volumes for the Weekday AM, midday, PM, and Saturday peak hours, respectively.

AM Peak Hour

A summary of the 2028 no-build conditions pedestrian analysis result with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS are presented in **Table 15.** The LOS analysis indicates that the northeast corner of the E. 239th Street and White Plains Road intersection would operate at LOS A for the AM analysis peak hour.

Midday Peak Hour

A summary of the 2028 no-build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), LOS, and LOS adjusted for platoon are presented in **Tables 16 and 17**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the Midday analysis peak hour.

PM Peak Hour

A summary of the 2028 no-build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), LOS, and LOS adjusted for platoon are presented in **Tables 18, 19, and 20**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the PM analysis peak hour.

Saturday Midday Peak Hour

A summary of the 2028 no-build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), LOS, and LOS adjusted for platoon are presented in **Tables 21, 22, and 23**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the Saturday Midday analysis peak hour.

2028 No Build Weekday AM Peak:

Table 15 2028 No Build Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday AM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	150	1313.4	A

2028 No Build Weekday MD Peak:

Table 16 2028 No Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Weekday MD Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	264	673.6	A	A

Table 17 2028 No Build Pedestrian Levels of Service – Corners

	Corner	Weekday MD Peak Hour

Intersection		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	336	616.8	A
	Southeast	369	572.9	A

2028 No Build Weekday PM Peak:

Table 18 2028 No Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Weekday PM Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	198	879.2	A	A

Table 19 2028 No Build Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday PM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	249	869.6	A
	Southeast	264	831.5	A

Table 20 2028 No Build Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Weekday PM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	East	179	215.9	A

2028 No Build Saturday MD Peak:

Table 21 2028 No Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Saturday MD Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	216	823.3	A	A

Table 22 2028 No Build Pedestrian Levels of Service – Corners

Intersection	Corner	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	289	731.0	A
	Southeast	329	661.9	A

Table 23 2028 No Build Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	East	200	278.1	A

2028 BUILD CONDITIONS

The 2028 build pedestrian volumes are prepared by adding the project generated incremental pedestrian trips **Figures 20 through 23** (Transportation Appendix) to the no-build pedestrian volumes **Figures 16 through 19** (Transportation Appendix) as shown in **Figures 20 through 23** (Transportation Appendix)**.** The 2028 build pedestrian volumes are shown for the Weekday AM, midday, PM, and Saturday peak hours, respectively, in the attached **Figures 24 through 27 (**Transportation Appendix).

<u>AM Peak Hour</u>

A summary of the 2028 build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), and LOS are presented in **Table 24**. The LOS analysis indicates that the northeast corner of the E. 239th Street and White Plains Road intersection would operate at LOS A for the AM analysis peak hour.

Midday Peak Hour

A summary of the 2028 build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), LOS, and LOS adjusted for platoon are presented in **Tables 25 and 26**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the Midday analysis peak hour.

PM Peak Hour

A summary of the 2028 build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), LOS, and LOS adjusted for platoon are presented in **Tables 27, 28, and 29**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the PM analysis peak hour.

Saturday Midday Peak Hour

A summary of the 2028 build conditions pedestrian analysis results with details on pedestrian volumes (ped/hr), average pedestrian space (sf/ped), LOS, and LOS adjusted for platoon are presented in **Tables 30, 31, and 32**. Overall, the LOS analysis indicates that all of the study area's pedestrian elements would operate at LOS A for the Saturday Midday analysis peak hour.

2028 Build Weekday AM Peak:

Table 24 2028 Build Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday AM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	362	534.6	A

2028 Build Weekday MD Peak:

Table 25 2028 Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Weekday MD Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	538	330.4	A	B

Table 26 2028 Build Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	634	323.7	A
	Southeast	589	354.4	A

2028 Build Weekday PM Peak:

Table 27 2028 Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Weekday PM Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	436	399.2	A	B

Table 28 2028 Build Pedestrian Levels of Service – Corners

Intersection	Corner	Weekday PM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E.	Northeast	528	407.7	A

239th St	Southeast	494	444.6	A

Table 29 2028 Build Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Weekday PM Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	East	391	97.2	A

2028 Build Saturday MD Peak:

Table 30 2028 Build Pedestrian Levels of Service – Sidewalks

Sidewalk	Effective Width (ft)	Saturday MD Peak Hour			
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS	Platoon ADJ LOS
White Plains Rd between E. 239th St and E. 240th St (east sidewalk)	13	459	387.3	A	B

Table 31 2028 Build Pedestrian Levels of Service – Corners

Intersection	Corner	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS
White Plains Rd and E. 239th St	Northeast	569	366.5	A
	Southeast	554	390.7	A

Table 32 2028 Build Pedestrian Levels of Service – Crosswalks

Intersection	Crosswalk	Saturday MD Peak Hour		
		Volume (ped/hr)	Average Pedestrian Space (sf/ped)	LOS

White Plains Rd and E. 239th St	East	407	133.4	A

Overall, the LOS analysis indicates that all the study area's pedestrian elements would operate at LOS A for the AM, Midday, PM, and Saturday Midday analysis peak hour periods.

CONCLUSION

In accordance with the threshold guidelines as detailed in the 2020 *CEQR Technical Manual,* the Proposed Actions are not expected to result in significant adverse impacts related to transportation. Specifically, the Proposed Actions are unlikely to have a significant effect on the neighborhood traffic, parking, transit, and pedestrian movements.

17. AIR QUALITY

INTRODUCTION

Analysis Framework

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under CEQR, an air quality assessment determines both a proposed project's effects on ambient air quality as well as the effects of ambient air quality on the project. The analysis framework, as mandated by the State Environmental Review Act, followed the *New York City Environmental Quality Review 2020 Technical Manual*.

Air Pollutants and Applicable Standards and Guidelines

Criteria Pollutants - National Air Quality Standards

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants, which are of concern nationwide. 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 pollutants for which detailed analyses were conducted, together with their averaging time periods, are presented in **Table 17-1.**

NYC Guidelines

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply $PM_{2.5}$ and CO significant impact (*de minimis* threshold), which are based on concentration increments.

Background Concentrations

Background concentrations, at the nearest New York State Department of Environmental Conservation (NYSDEC) monitoring station(s), of the criteria pollutants for which detailed analyses were conducted were obtained from the NYSDEC's annual report for 2018. **Table 17-1** shows the background concentrations and the NAAQS.

Table 17-1: Background Concentration at the NYSDEC Nearest Monitoring Station

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
PM_{10}	24-Hour	150 µg/m^3	41 µg/m^3	IS 52
$PM_{2.5}$	24-Hour	35 µg/m^3	19.9 µg/m^3	Botanical Garden
	Annual	12 µg/m^3	8.1 µg/m^3	
SO_2	1-Hour	196 µg/m^3	16.3 µg/m^3	
	Annual(1)	80 µg/m^3	1.7 µg/m^3	
NO_2	1-Hour	188 µg/m^3	103.8 µg/m^3	
	Annual	100 µg/m^3	27.2 µg/m^3	

1. 6 CRR-NY 257-2.3 for annual SO_2 standard: "During any 12 consecutive months, the annual average of the 24-hour average concentrations shall not exceed 0.03 ppm.

NO_2 NAAQS

Nitrogen oxide (NOx) emissions from combustion consist predominantly of nitric oxide (NO) at the source. The NOx in these emissions are 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). For determining compliance with the 1-hour standard, the EPA has developed a three-tiered modeling approach: Tier 1, the most conservative approach, assumes a full (100%) conversion of NOx to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NOx 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.

Non-Criteria Pollutants

In addition, the 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 August 10, 2016. NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic, or duration.

MOBILE SOURCE

Introduction

Projects may result in significant mobile source impacts when they create mobile sources of pollutants, change traffic patterns, or add new uses near mobile sources of pollutants. Per CEQR guidelines, a detailed analysis is conducted to predict whether the proposed actions could potentially have a significant adverse air quality impact if certain threshold criteria are met or exceeded, while proposed projects that do not meet or exceed the threshold criteria (screen out) are not expected to have a mobile source impact. Projects that require a detailed analysis, model the ambient air CO and $PM_{2.5}$ concentrations—the mobile source pollutants of concern—and evaluate the modeled concentrations with the applicable air quality standards.

Per the transportation analysis for this project, the Proposed Actions would generate a total of 89, 83, 101, and 117 vehicles (inbound and outbound combined) during the AM,

MD, PM, and Saturday Midday peak hours, respectively. The total project generated traffic would include 2 trucks during the Saturday Midday peak-hour and no trucks otherwise. In addition, the With-Action scenario would include a 22-space parking facility in Projected Development Site 1 Building Segment B.

Mobile Source Screen

Existing Sources

According to the *CEQR Technical Manual*, projects that would result in new sensitive uses within 200 feet of an atypical roadway or near other significant mobile sources of pollutants may result in significant adverse mobile source air quality impacts. As the Project Area is not located within 200 feet of an atypical roadway or any other significant mobile sources of pollutants, no analysis was required.

Parking Garage

Based on CEQR guidelines, the maximum capacity of a parking garage is evaluated against a threshold criterion to predict whether the potential impacts associated with mobile source emissions are significant. The threshold criteria level for the Project Area, per CEQR guidelines, is 85 new off-street parking spaces. If the threshold is met or exceeded, a detailed analysis is warranted. The proposed project would facilitate 22 new off-street parking spaces. Therefore, the parking facility screens out and no analysis was required.

Project-Generated Traffic

Screening analyses for the project's peak hour auto traffic and peak hour heavy-duty diesel vehicle (HDDVs) traffic were conducted. Per the *CEQR Technical Manual*, a detailed analysis for carbon monoxide (CO) is required if the generated peak hour auto traffic or diversion of existing peak hour traffic would result in an increment of 170 auto trips (in this area of the city). A detailed analysis for particles with an aerodynamic diameter of less than or equal to 2.5 micrometers ($PM_{2.5}$) is required if the generated peak hour HDDVs traffic or its equivalent in vehicular emissions, depending on the type of road, would be exceeded.

Per the transportation analysis for this project, the Proposed Actions would generate a total of 89, 83, 101, and 117 vehicles (inbound and outbound combined) during the AM, MD, PM, and Saturday Midday peak hours, respectively. These peak-hour project-generated traffic would not exceed the threshold of 170 vehicular trips (condition outlined in Sections 210 of Chapter 17 of *the CEQR Technical Manual*). Therefore, no CO detailed analysis was required.

The $PM_{2.5}$ equivalent truck calculation in vehicular emission screen depends on the type of road. White Plains Road, Nereid Avenue, and 241st Street east of White Plains Road

are arterial roadways, and all other roadways are local streets[13]. The *CEQR Technical Manual* threshold criterions for these roadways are 23 HDDVs for arterial roadways and 12 HDDVs for local streets (paved roads with less than 5,000 vehicle per day). Peak-hour project-generated traffic on each roadway segment was obtained from the transportation analysis for this project. The transportation analysis also included the total number of trucks at each peak-hour period (2 trucks during the Saturday Midday peak-hour and no trucks otherwise). The HDDVs screen does not apply to passenger cars; however, the HDDVs screen assumed that all autos (passenger cars and passenger trucks combined) are LDGT1 class vehicles, based on guidance from the Department of City Planning. The worst-case HDDVs or its equivalent in vehicular emissions would result in a maximum of 17 equivalent trucks traveling on Furman Avenue, which is a paved road (12 HDDVs threshold). **Table 17-2** shows the worst-case results of the *CEQR Technical Manual* Equivalent Truck Calculation for each peak-hour period.

Table 17-2: *CEQR Technical Manual* Equivalent Truck Calculations

Roadway	Roadway Classification (Threshold HDDVs screen)	Peak-Hour Period	Truck Per Hour	Auto Per Hour	Equivalent Truck	Pass / Fail
Furman Avenue	Paved (12)	AM	0	23	11	Pass
Furman Avenue	Paved (12)	MD	0	22	11	Pass
Furman Avenue	Paved (12)	PM	0	29	14	Fail
Furman Avenue	Paved (12)	Sat MD	2	32	17	Fail

As seen in Table 17-2, the Proposed Actions $PM_{2.5}$ equivalent truck calculation in vehicular emissions exceed the HDDVs screening threshold criterion on Furman Avenue during the PM and Saturday Midday peak-hour periods. Therefore, a detailed analysis for this roadway was required.

Project-Generated Traffic – Detailed Analysis

$PM_{2.5}$ detailed analysis was conducted for the intersection of Furman Avenue and Nereid Avenue using MOVES2014b and CAL3QHCR. The Saturday Midday peak hour traffic was analyzed as the equivalent truck calculation in vehicular emissions which were the greatest during that peak-hour period. Existing traffic counts and vehicle classifications on Furman Avenue were obtained in the field (see Noise Chapter, Table 19-12 *Location 3: Traffic volumes and vehicle classifications*). Existing traffic counts and percent trucks on Nereid Avenue were obtained from the New York State Department

[13]https://gis3.dot.ny.gov/html5viewer/?viewer=FC

of Transportation (NYSDOT) for Station 012042. The annual average daily traffic count and daily average traffic count were used to project the Saturday Midday peak-hour traffic. The traffic annual background growth rates, obtained from the *CEQR Technical Manual,* were used to project the No-Action traffic. The project-increment was added to the No-Action traffic to project the With-Action traffic.

Vehicular emissions were compiled with the EPA Motor Vehicle Emission Simulator (MOVES) version 2014b. Fugitive dust emissions were added to the MOVES output to calculate the short-term $PM_{2.5}$ emission factors (per the New York City Department of Environmental Protection (DEP), annual fugitive dust emissions are negligible). Slit loading factors for Furman Avenue and Nereid Avenue were obtained from the *CEQR Technical Manual*. In addition, based on DEP guidance, the conservative assumptions of "dry" road condition was used for the short-term calculation (precipitation reduced silt loading).

Dispersion analysis was conducted with the EPA's CAL3QHCR dispersion model version 13196. $PM_{2.5}$ concentrations were predicted with model-ready meteorology data from LaGuardia Airport. The meteorology data was obtained from Breeze Software / Trinity Consultants. Other inputs were obtained from the *CEQR Technical Manual.*

Roadways were modeled as free flowing, at grade, links. Short-term receptors were placed in the middle of sidewalks around the intersection. Annual receptors were placed 15-meters from the curb side. The $PM_{2.5}$ short-term and annual concentrations were evaluated with the NYC Guideline (*de minimis*). Significant impact concentrations for mobile source analysis were evaluated as follows:

- 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 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations).

The *de minimis* threshold concentrations are 24-hour $PM_{2.5}$ of 7.55 $\mu g/m^3$ and annual $PM_{2.5}$ of 0.1 $\mu g/m^3$.

Table 17-3 shows the dispersion analysis results.

Table 17-3: Project-Generated Traffic Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour Tier 1	1.93 $\mu g/m^3$	**7.55 $\mu g/m^3$**	*de minimis*
$PM_{2.5}$ Annual	0.098 $\mu g/m^3$ (1)	**0.1 $\mu g/m^3$**	*de minimis*
Note: 1. The result is the With-Action traffic. As the result is less than the *de minimis*, analysis of the No-Action was not required.			

As seen in **Table 17-3**, the $PM_{2.5}$ 24-hour and annual increment concentrations do not exceed the NYC *de minimis*. Therefore, no significant adverse air quality impacts are expected at intersections affected by the project-generated traffic.

HVAC SYSTEMS ANALYSIS

Introduction

The HVAC analysis considers the potential for emissions from the HVAC system of the proposed project to significantly impact existing land uses. Per the *CEQR Technical Manual*, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impact 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 potential for the heat and hot water system(s) to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used by the HVAC system, the height of the stack venting the emissions, the distance to the nearest building, the building's residential or non-residential use, and the square footage of the development that would be served by the system. The *CEQR Technical Manual* provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the proposed building's HVAC system(s).

If the actual distance between the source building and the affected building is greater than the threshold distance for a building size, then that building passes the screening analysis (and no significant impact is predicted). However, if the actual distance is less than the threshold distance for a building, then there is a potential for a significant impact and a detailed analysis would be required. As screening analysis is only applicable to a single smokestack, for purpose of a cumulative analysis, emissions from multiple stacks at approximately similar heights were combined in a single stack situated as close as possible to a receiving building. In addition, according to 15 RCNY

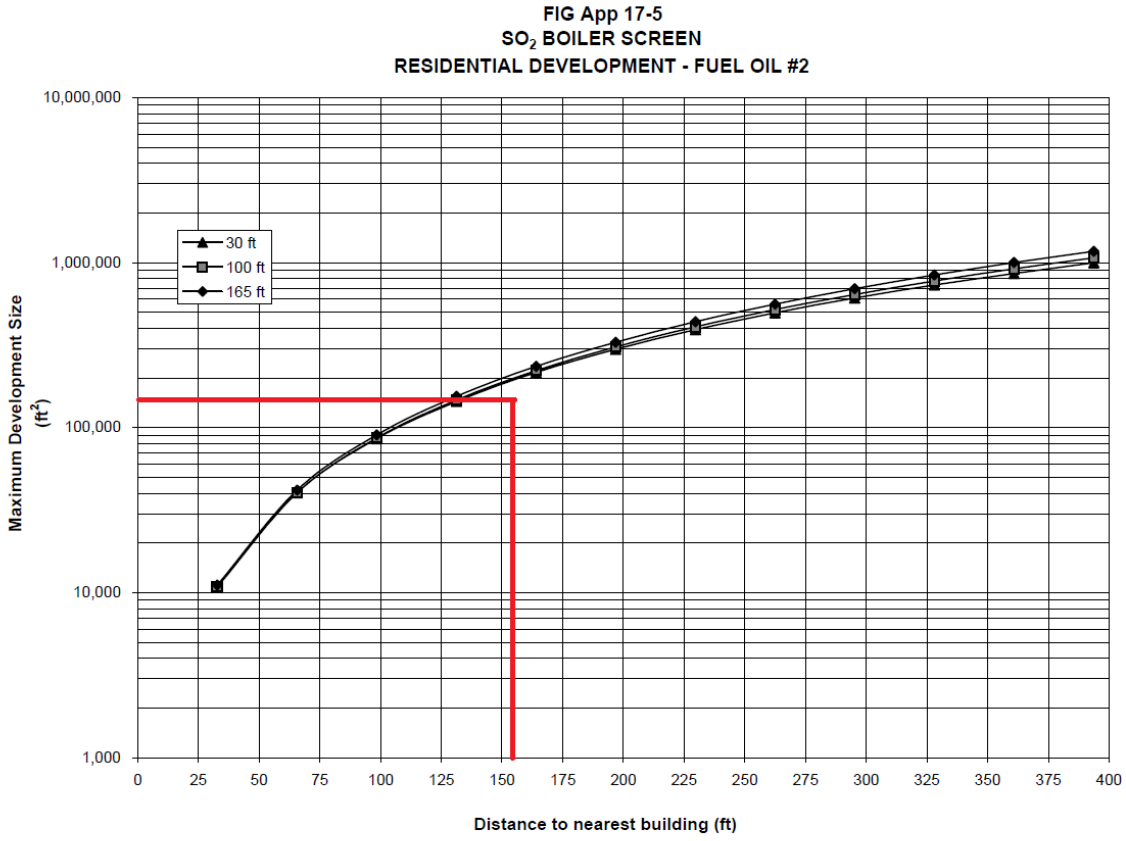
2-15, no new boiler or burner installations may use No. 6 or No. 4 fuel oils. Therefore, the highest-emitting fuel that could be used is No. 2 fuel oil. The following screening analyses were performed (or considered):

1. Project-on-Project: As each Projected Development Site is adjacent to at least one other Projected Development Site (less than 30 feet distance, and less than the applicable screening analysis distance), a detailed analysis was required.

2. Project-on-Existing (Block 5081, Lot 89): Cumulative screening analysis on the 9-story, 89 feet high, mixed use building, located at 4519 White Plains Road. According to the Department of Buildings (DOB), this building is under construction. The building applied in the cumulative screening analysis is of a single, 89 feet high, residential building, containing 156,595 gsf of floor area, which is the sum of Projected Development Sites 2, 4, 5, and 6 (the developments which are not taller than 90 feet). A distance of 160 feet was applied, which is the distance between the Project Area and the property at 4519 White Plains (Block 5081, Lot 89).

   The CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendices* was used for the screening analysis. This nomograph is for a No. 2 fuel oil HVAC system serving a residential development. **Figure 17-1** (using Figure 17-5 of the *CEQR Technical Manual Appendices)* shows the screening analysis.

Figure 17-1: Project on 4519 White Plains Road (Block 5081, Lot 89) - HVAC Screen

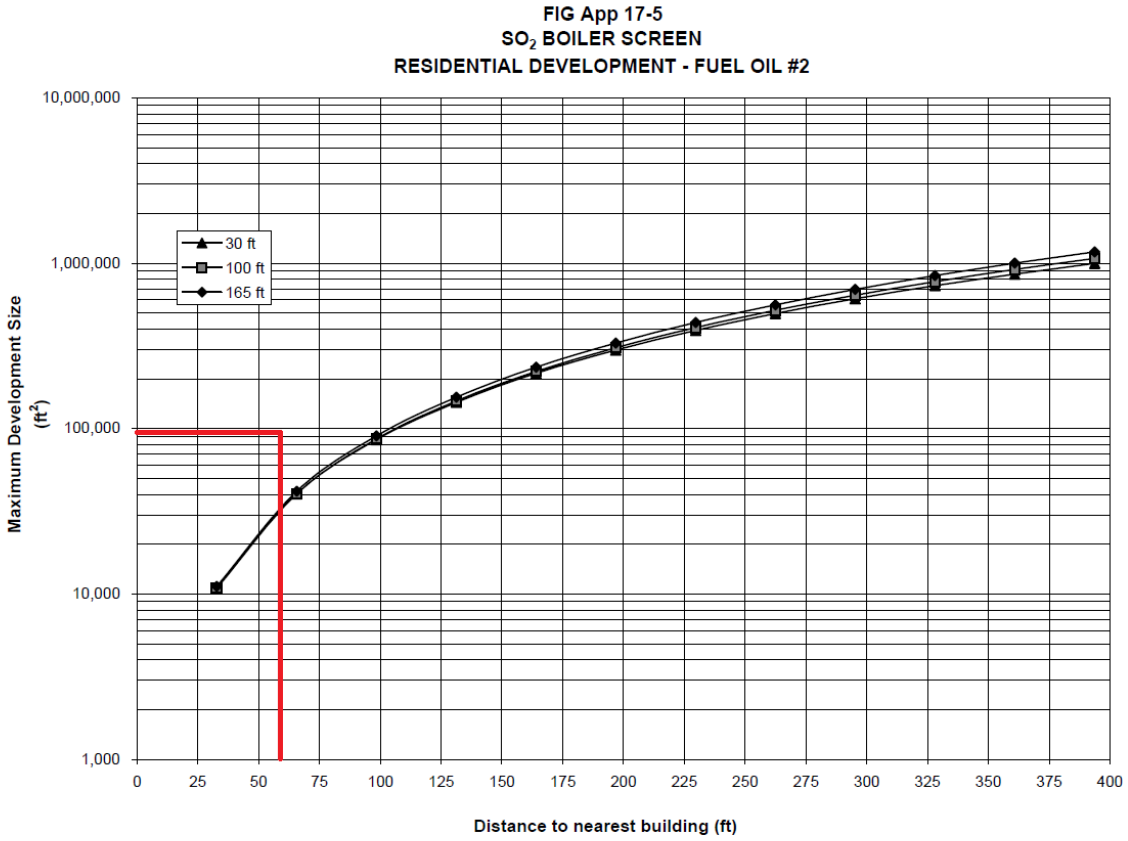


The screening analysis **Figure 17-1** (using Figure 17-5 of the *CEQR Technical Manual Appendices*) shows that the line is below the curve. Therefore, the HVAC emissions of the proposed project would not pose significant adverse impacts to the under construction 9-story building located at 4519 White Plains Road (Block 5081, Lot 89).

3. Project-on-Existing (Proposed Action: East 241st Street Rezoning CEQR No. *18DCP094X*): Cumulative screening analysis on the 115-foot tall RWCDS development, located on the south side of Block 5087 and on the north side of East 241st Street. A screening analysis of a single residential building, 75 feet high, containing 94,146 gsf of floor area, which is the sum of Projected Development Sites 4 and 5 (the developments which are 75 feet high). A distance of 60 feet was applied, which is the shortest distance between Projected Development Sites 4 and 5 and Block 5087.

   The CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendices* was used for the screening analysis. **Figure 17-2** (using Figure 17-5 of the *CEQR Technical Manual Appendices)* shows the screening analysis.

Figure 17-2: Projected Developments Sites 4 and 5 on the Proposed Actions East 241st Street Rezoning CEQR No. *18DCP094X* - HVAC Screen

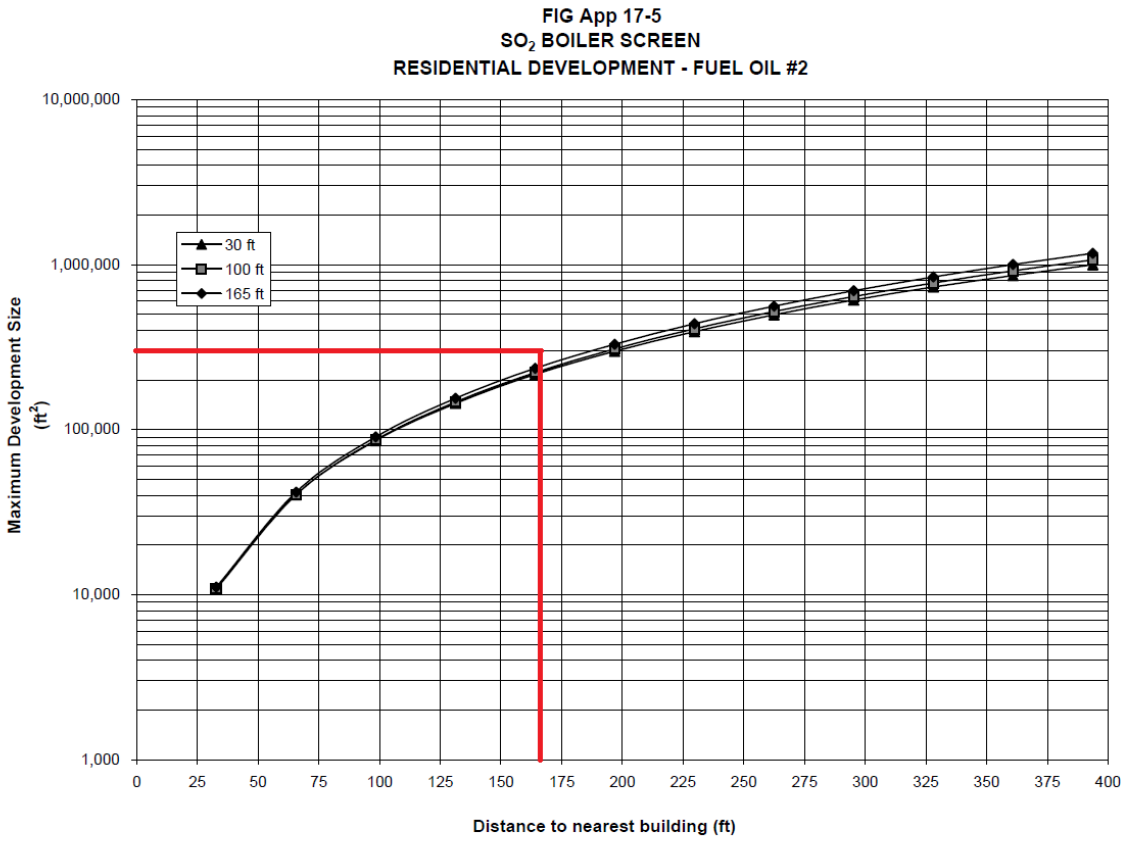


The screening analysis **Figure 17-2** (using Figure 17-5 of the *CEQR Technical Manual Appendices*) shows that the curve is above the line. Therefore, a detailed analysis was required to predict the potential for significant adverse air quality impact on the RWCDS development on Block 5087.

4. Project-on-Existing (Proposed Action: East 241st Street Rezoning CEQR No. *18DCP094X*): Cumulative screening analysis on the 115-foot tall RWCDS development, located on Block 5087 and on the north side of East 241st Street. A screening analysis of a single residential building, 98 feet high, containing 299,423 gsf of floor area, which is the sum of Projected Development Site 1, 2, 3, and 6 (the developments which are at least 90 feet high). A distance of 168 feet was applied, which is the distance between the Projected Development Site 3 and Block 5087.

   The CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendices* was used for the screening analysis. **Figure 17-3** (using Figure 17-5 of the *CEQR Technical Manual Appendices)* shows the screening analysis.

Figure 17-3: Projected Development Sites 1, 2, 3, and 6 on the Proposed Actions East 241st Street Rezoning CEQR No. *18DCP094X* – HVAC Screen



The screening analysis **Figure 17-3** (using Figure 17-5 of the *CEQR Technical Manual Appendices*) shows that the curve is above the line. Therefore, a detailed analysis was required to predict the potential for significant adverse air quality impacts on the RWCDS development on Block 5087.

The screening analysis determined that a project-on-project detailed analysis was required, that a detailed analysis was required for the RWCDS buildings associated with the East 241st Street Rezoning (CEQR No. *18DCP094X*), and that all other existing buildings in the 400-foot area surrounding the Project Area passed the screening analysis.

Detailed Analysis

Methodology

The EPA's AERMOD modeling system version 19191 was used to predict pollutants' concentrations. In accordance with CEQR guidance, this analysis was conducted assuming stack tip downwash and elimination of calms. Models specified flat terrain,

urban dispersion surface roughness, and population of 2,000,000. The Building Profile Input Program (BPIP) was run with the downwash effect enabled.

All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from LGA Airport, upper air data was obtained from Brookhaven station, New York. The meteorology data, processed by Lakes Environmental Software, was processed using AERMET version 18081, AERMINUTE version 15272, and AERSURFACE version 13016. No data filling was conducted as the raw data quality was more than sufficient for the modeling purposes (99.47 percent of raw data). These meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Meteorological data were combined to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs and Anemometer height of 9.4 meters was specified per Lakes Environmental Software.

The pollutants of concern of oil #2 fueled boilers are SO_2, $PM_{2.5}$, and NO_2. The pollutants of concern of natural gas fueled boilers are $PM_{2.5}$ and NO_2. The Projected Development Sites' boilers' energy intensities were calculated from the annual fuel usage, the developments' gross floor area, and the developments' usage (assumed residential use). Pertinent values were obtained from the *CEQR Technical Manual Appendices* and the assumption that all fuel would be consumed during the 100-day (or 2,400 hour) heating season.

The Projected Development Sites 2, 4, and 6 boilers were modeled as Low NOx, natural gas fueled boilers. The NOx emission factor of 37.6 pound per million cubic feet of natural gas was obtained from the Department of City Planning (DCP) for a similar project. All other emission factors were obtained from the EPA's AP-42 manual for external combustion sources. **Table 17-4** shows the HVAC systems calculated emission rates, both short-term and annual.

Table 17-4: RWCDS Buildings Estimated Short-term and Annual Emission Rates

Site ID	Development Floor Area (gsf)	Boiler's Energy Intensity (MMBtu) & Other	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Projected Development Site 1 – Building Segment A	60,386	1.52; Fuel oil No. 2	NO_2	2.74E-02	7.50E-03
			$PM_{2.5}$	2.92E-03	7.99E-04
			SO_2	2.92E-04	7.99E-05
Projected Development Site 1 – Building Segment B	127,287	3.20; Fuel oil No. 2	NO_2	5.77E-02	1.58E-02
			$PM_{2.5}$	6.15E-03	1.68E-03
			SO_2	6.15E-04	1.68E-04
Projected Development Site 2	36,025[1]	0.91; Natural gas, Low NOx	NO_2	4.14E-03	1.14E-03
			$PM_{2.5}$	8.50E-04	2.33E-04

			SO_2	N.A.	N.A.
Projected Development Site 3	49,301	1.24; Fuel oil No. 2	NO_2	2.24E-02	6.13E-03
			$PM_{2.5}$	2.38E-03	6.52E-04
			SO_2	2.38E-04	6.52E-05
Projected Development Site 4	61,587	1.55; Natural gas, Low NOx	NO_2	7.08E-03	1.94E-03
			$PM_{2.5}$	1.45E-03	3.98E-04
			SO_2	N.A.	N.A.
Projected Development Site 5	32,559	0.82; Fuel oil No. 2	NO_2	1.48E-02	4.05E-03
			$PM_{2.5}$	1.57E-03	4.31E-04
			SO_2	1.57E-04	4.31E-05
Projected Development Site 6	26,424	0.66; Natural gas, Low NOx	NO_2	3.04E-03	8.33E-04
			$PM_{2.5}$	6.23E-04	1.71E-04
			SO_2	N.A.	N.A.

1. The RWCDS would be 32,065 gsf. Emissions were calculated based on 36,025 gsf, which over predicted the emissions. Therefore, the impact concentrations would be less than the reported impact concentrations. As such, the analysis was conservative.

The diameters of the stacks and the exhausts' exit velocities of boilers with energy intensities less than 1-million Btu were assumed to be 0.0 feet and 0.001 meter per second, respectively, based on values obtained from the *CEQR Technical Manual*. The diameters of the stacks and exhaust exit velocities of boilers with energy intensities greater or equal to 1-million Btu were estimated based on values obtained from the New York City Department of Environmental Protection (DEP) "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million Btu per hour). All the stacks exit temperatures were assumed to be 300°F (423°K), which is appropriate for boilers. The HVAC stacks were placed 3 feet above the RWCDS rooflines and 10 feet from the property lines, based on the New York City Building Code (Building Code). In addition, a stack set back distance from the receiving building was applied if an impact was predicted. This stack setback distance was then applied in the other models.

Projected Development Site 1 Building Segments A and B were modeled based on Site Plans provided by the building's architect for this project. The other Projected Development Sites RWCDS buildings were modeled as buildings that cover their entire lot areas (the wall façade located on the outer lot lines) and rise to their RWCDS heights. Buildings in the surrounding area were accounted for in the downwash effect on plums dispersions (BPIP).

Receptors on the receiving building were placed all around the receiving building(s) envelope, at 10 feet horizontal increments and on all floor levels. Ground floor receptors were placed at a height of 6 feet above grade. Receptors on the second to top floors of Projected Development Sites 2 and 6 were placed 6 feet above each floor level, assuming 10-foot high floor levels. For the other Projected Development Sites, the second-floor receptors were placed at a height of 21 feet, assuming a 15-foot high ground floor level, and on the third to the top floors 6 feet above each floor level, assuming 10-foot high floor levels.

The SO_2, annual NO_2, and a few other models were run with generic emissions of 1 gram per second and maximum predicted concentrations. The modeled concentration from each stack was added to predict the cumulative concentration. Other models, such as most of the 1-hour NO_2, were run with the calculated emission rates and the 8th highest concentration (the NAAQS design value), where the cumulative concentration was evaluated within the model.

Results of Dispersion Analyses

As previously mentioned, each pollutant averaging time was modeled twice, with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The NO_2 and SO_2 modeled concentrations were added to the background concentrations, and the results evaluated with the NAAQS design values. The $PM_{2.5}$ modeled concentrations were evaluated with the NYC Guidelines threshold, *de minimis*, for stationary sources. Significant impact concentrations for stationary source analysis were evaluated as follows:

- 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.

The *de minimis* threshold concentrations are 24-hour $PM_{2.5}$ of 7.55 $\mu g/m^3$ and annual $PM_{2.5}$ of 0.3 $\mu g/m^3$.

Result of the HVAC dispersions analyses are shown in **Table 17-5**.

Table 17-5: HVAC Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration ($\mu g/m^3$)[2]	Background Concentration ($\mu g/m^3$)	Evaluated Concentration [(1)] ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Concentrations at Projected Development Site 1 – Building Segment A					
1-hour NO_2	41.78	103.78	**146**	**188**	NAAQS
Annual NO_2	1.49	27.2	**29**	**100**	NAAQS
24-hour $PM_{2.5}$	3.79	N.A.	**3.79**	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.23	N.A.	**0.23**	**0.3**	*de minimis*
1-hour SO_2	1.04	16.28	**17**	**196**	NAAQS
Annual SO_2	0.009	1.7	**2**	**80**	NAAQS
Concentrations at Projected Development Site 1 – Building Segment B					
1-hour NO_2	75.68	103.78	179	**188**	NAAQS
Annual NO_2	1.14	27.2	28	**100**	NAAQS
24-hour $PM_{2.5}$	7.50	N.A.	7.50	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.27	N.A.	0.27	**0.3**	*de minimis*

1-hour SO_2	0.75	16.28	17	**196**	NAAQS
Annual SO_2	0.01	1.7	2	**80**	NAAQS
Concentrations at Projected Development Site 2					
1-hour NO_2	51.03	103.78	155	**188**	**NAAQS**
Annual NO_2	0.91	27.2	28	**100**	NAAQS
24-hour $PM_{2.5}$	5.55	N.A.	5.55	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.12	N.A.	0.12	**0.3**	*de minimis*
1-hour SO_2	0.77	16.28	17	**196**	NAAQS
Annual SO_2	0.01	1.7	2	**80**	NAAQS
Concentrations at Projected Development Site 3					
1-hour NO_2	77.17	103.78	181	**188**	NAAQS
Annual NO_2	2.82	27.2	30	**100**	NAAQS
24-hour $PM_{2.5}$	6.08	N.A.	6.08	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.20	N.A.	0.20	**0.3**	*de minimis*
1-hour SO_2	1.51	16.28	18	**196**	NAAQS
Annual SO_2	0.01	1.7	2	**80**	NAAQS
Concentrations at Projected Development Site 4					
1-hour NO_2	57.44	103.78	161	**188**	NAAQS
Annual NO_2	0.61	27.2	28	**100**	NAAQS
24-hour $PM_{2.5}$	2.07	N.A.	2.07	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.07	N.A.	0.07	**0.3**	*de minimis*
1-hour SO_2	1.27	16.28	18	**196**	NAAQS
Annual SO_2	0.01	1.7	2	**80**	NAAQS
Concentrations at Projected Development Site 5					
1-hour NO_2	10.6	103.78	114	**188**	NAAQS
Annual NO_2	0.16	27.2	27	**100**	NAAQS
24-hour $PM_{2.5}$	0.67	N.A.	0.67	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.033	N.A.	0.03	**0.3**	*de minimis*
1-hour SO_2	0.00	16.28	16	**196**	NAAQS
Annual SO_2	0.00	1.7	2	**80**	NAAQS
Concentrations at Projected Development Site 6					
1-hour NO_2	71.3	103.78	175	**188**	NAAQS
Annual NO_2	0.75	27.2	28	**100**	NAAQS
24-hour $PM_{2.5}$	4.39	N.A.	4.39	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.145	N.A.	0.15	**0.3**	*de minimis*
1-hour SO_2	0.31	16.28	17	**196**	NAAQS
Annual SO_2	0.003	1.7	2	**80**	NAAQS
Concentrations at Existing (East 241st Street Rezoning CEQR No. *18DCP094X*)					
1-hour NO_2	74.89	103.78	179	**188**	NAAQS
Annual NO_2	3.57	27.2	31	**100**	NAAQS
24-hour $PM_{2.5}$	4.85	N.A.	4.85	**7.55**	*de minimis*
Annual $PM_{2.5}$	0.24	N.A.	0.24	**0.3**	*de minimis*
1-hour SO_2	2.16	16.28	18	**196**	NAAQS

Annual SO_2	0.03	1.7	2	**80**	NAAQS

1. Evaluated concentration rounded to applicable significant number.
2. The Projected Development Site 2 emissions were based on larger building size (36,025 gsf instead of 32,065 gsf), which over predicted the concentrations resulting from the Projected Development Site 2 HVAC system.

As seen in **Table 17-5**, the NO_2 and SO_2 predicted concentrations do not exceed the NAAQS and the $PM_{2.5}$ concentrations do not exceed the NYC *de minimis*. Therefore, with (E) Designations in place, the emissions of the Projected Development Sites' HVAC systems would not pose significant adverse impacts to another Projected Development Site or to existing land uses.

As previously mentioned, some Projected Development Sites required stack set back distances or other restrictions. These stacks setback distances or restrictions were specified in the E-Designation language.

(E) Designation (E-656)

Block 5084, Lot 63 (Projected Development Site 1 Building Segment A): Any new residential, commercial and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 101.5 feet above grade and at least 122'-8" feet away from the eastern lot line facing Furman Avenue to avoid any potential significant adverse air quality impacts.

Block 5084, Lot 63 (Projected Development Site 1 Building Segment B): Any new residential, commercial, and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 104.5 feet above grade and at least 121'-2" away from the western lot line facing White Plains Road to avoid any potential significant adverse air quality impacts.

Block 5084, Lots 58, 59, 60 (Projected Development Site 2): Any new residential development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level at a minimum of 93 feet above the grade, and that the stack is located at least 40 feet from the southern lot line facing East 239th Street to avoid any potential significant adverse air quality impacts.

Block 5084, Lots 35, 39 (Projected Development Site 3): Any new residential/commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 98 feet above grade to avoid any potential significant adverse air quality impacts.

<u>Block 5084, Lot 41 (Projected Development Site 4)</u>: Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level at a minimum of 78 feet above the grade, and that the stack is located at least 60 feet from the southern lot line facing East 239th Street to avoid any potential significant adverse air quality impacts.

<u>Block 5084, Lot 49 (Projected Development Site 5):</u> Any new residential, commercial and/or community facility development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC) and hot water system(s) stack is located at the highest tier or at least 78 feet above grade, and that the stack is located at least 40 feet from the western lot line facing White Plains Road and 30 feet from the northern lot line facing 240th Street to avoid any potential significant adverse air quality impacts.

<u>Block 5084, Lot 61 (Projected Development Site 6)</u>: Any new residential development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level at a minimum of 93 feet above the grade, and that the stack is located at least 50 feet from the southern lot line facing East 239th Street to avoid any potential significant adverse air quality impacts.

INDUSTRIAL SOURCES

Introduction

Per the *CEQR Technical Manual*, projects that would introduce new uses near industrial sources may result in potentially significant adverse air quality impacts. The study area considers industrial sources within 400 feet of the Projected Development Sites. Industrial sources are categorized as the operation of manufacturing or processing facilities, or medical, chemical, or research labs. These facilities are likely to have New York City Department of Environmental Protection (DEP) processing permits. The analysis first determines if there are any existing industrial sources located in the study area excluding Projected Development Sites. An air dispersion analysis is then performed for any existing industrial source that is in the study area. Otherwise no analysis is required.

A fieldwork observation took place in November 2019. Findings related to facilities which have expired or disapproved status DEP permit applications, active (current status) DEP permit applications, and facilities where emissions are expected based on the type of manufacturing processing of the facilities but which do not have DEP permit applications are summarized below:

Facilities with Expired or Disapproved Status DEP Permits

Two facilities with expired status DEP permits and one facility with a disapproved status DEP permit application are located in the 400-foot study area around the Projected Development Sites. A description of these facilities is as follows:

- The facility located at 4519 White Plains Road (Block 5081, Lot 89) appeared vacant. The facility has an expired DEP permit application PA038886, registered to Space Age Plastic Fabrica. As mentioned in the HVAC System Analysis, the property has a zoning document in the DOB database for a 9-story mixed-used building and this building is presently under construction. As such, the facility was screened out.

- The facility located at 4550 White Plains Road (Block 5084, Lot 30) was identified as a religious facility. The facility has expired DEP permit applications PB005508 for woodworking equipment and PB005808 for spray booth/area, registered to Round Tower Interiors, Inc. No woodworking facility or manufacturing processing operation(s) was observed. In addition, the facility has two disapproved DEP permit applications PB023906 registered to Round Tower Interiors, Inc. and PB023606 registered to Atlantic Custom Contracting, Inc. The facility was identified as a religious facility. Therefore, the facility was screened out.

- The facility located at 4510 White Plains Road (Block 5084, Lot 9) was identified as a warehouse, North Bronx Garage and parking, which appeared to be vacant. The facility has a disapproved DEP permit application PA051488, dated June 2014 registered to Mona Sliding Fastners, Inc. Per the PA051488 DEP permit application, there are no contaminants being emitted from the facility. The facility was screened out.

Facilities with Current Status DEP Permits

Two auto body facilities with current status DEP permit applications were identified in the fieldwork observation as currently active. A description of these facilities is as follows:

- The R&E Auto Collision Repairs facility, located at 4500 White Plains Road (Block 5084, Lot 6), was identified as an active auto body repair facility. The facility has a current status DEP permit application PA010897 for auto paint spraying. An analysis was conducted for this facility.

- The Rich Automotive Corp./Navin Bijnath facility, located at 4506 White Plains Road (Block 5084, Lot 8), was identified as an active auto body repair facility. The facility has a current status DEP permit application PB512003 for auto paint spraying. An analysis was conducted for this facility.

Emission Sources of Facilities Operating with No DEP Permits

One auto body facility with no DEP permit application(s) was identified in the fieldwork observation as a likely emission source. A description of the facility is as follows:

- The Alijah Auto Body facility, located at 4515 Byron Avenue (Block 5085, Lot 78), was identified as an active auto body repair facility. An analysis was conducted for this facility.

No other facility in the 400 feet study area around the Projected Development Sites was identified as a toxic air emission source based on the manufacturing processing operation. The Caribbean Auto facility, located at 4619 Furman Avenue (Block 508, Lot 18) was identified as an auto mechanic facility, based on a phone call to the facility and no other data suggests otherwise. A detailed analysis was conducted for the R&E Auto Collision Repairs, Rich Automotive Corp./Navin Bijnath, and Alijah Auto Body facilities.

Emission Sources

The R&E Auto Collision Repairs and Rich Automotive Corp./Navin Bijnath operate with DEP permit applications. The emissions from these facilities and stacks parameters were obtained from the DEP permit applications. The Alijah Auto Body facility operates with no DEP permit. The emissions from this facility were based on guidance from the NYC Department of City Planning for similar projects.

The contaminants associated with auto body spray booths are solids (particulates) and solvents. Solvents are VOCs (volatile organic compounds) which evaporate during the spraying activity and while the coating substance dries. The solids that bind to the sprayed item dries to a hard surface. The coatings contain 30 to 85 percent solvents by weight and this amount is regulated by the EPA and NYSDEC. Per the DEP guidance and as outlined in the EPA AP-42, the analysis assumes that all VOCs are emitted. Each VOC contaminant is analyzed with the SGC/AGC guideline concentration. Particulates are fluid or solids particles grouped together. Particulates concentrations are collectively evaluated with the NAAQS and *de minimis* threshold concentrations.

A review of numerous DEP permits for auto body facilities shows that most operate 4-6 hours per day (hr/day), 200-275 days per year (day/yr), and spray a maximum of 1.0 gallon per hour (gal/hr) and 750 gallon per year. Per guidance from the NYC Department of City Planning for similar projects, the maximum solids emissions from these facilities are 0.065 lb/hr, 97.6 lb/yr; the maximum volatile organic compounds (VOC) emissions are 3.1 pound per hour (lb/hr), 4,650 pounds per year (lb/yr). The Alijah Auto Body facility actual short-term emission rates were based on these factors. The activity rate of the Alijah Auto Body facility was assumed to be 6 hours per day,

275 day per year. The 1-hour emission rates and activity rate were used to calculate the Alijah Auto Body daily and annual emission rates.

Emissions of solids were analyzed as PM_{10} and $PM_{2.5}$. The particle size distribution was obtained from the EPA AP-42, *Appendix B1, Page B.1-12, Particle Size Distribution Data and Sized Emission Factors for Selected Sources, Table 4.2.2.8 Automobile and Light-Duty Track Surface Coating Operations, Automobile Spray Booths*. **Table 17-6** shows the PM_{10} and $PM_{2.5}$ emission rates.

Table 17-6: PM_{10}/$PM_{2.5}$ Emission Rates from the Auto Body Spray Booths

Contaminant	Emission Rate		Fraction of Particle Size	Emission Rate			
				24-Hour Average		Annual	
	lb/hr	lb/yr	Percent	lb/day	g/s	lb/yr	g/s
R&E Auto Collision PA010897							
$PM_{2.5}$	0.008	6.5	28.6	9.15E-03	4.80E-05	1.9	2.67E-05
PM_{10}			46.7	1.49E-02	7.85E-05	3.0	4.37E-05
Rich Automotive Corp./Navin Bijnath PB12003							
$PM_{2.5}$	0.065	65	28.6	7.44E-02	3.90E-04	18.6	2.67E-04
PM_{10}			46.7	1.21E-01	6.37E-04	30.4	4.37E-04
Alijah Auto Body							
$PM_{2.5}$	0.065	107	28.6	1.12E-01	5.86E-04	30.7	4.41E-04
PM_{10}			46.7	1.82E-01	9.56E-04	50.1	7.20E-04

The facilities daily activity rates (hr/day) were used to calculate the daily averaged emission rates for the particulates short-term analysis.

Per the DEP permit application PA010897, the R&E Auto Collision emits 0.775 lb/hr, 620 lb/yr of VOC. Per the DEP permit application PB12003, the Rich Automotive Corp./Navin Bijnath emits 3.1 lb/hr, 6,200 lb/yr of VOC. The Alijah Auto Body VOC emission rate was assumed at 3.1 lb/hr, 5,115 lb/yr as explained above.

The mixture of different compounds, identified collectively as VOC, have no guideline values in the NYSDEC DAR-1 database. The mixture is comprised of compounds of varying toxicities. As the composition of the coating substance was not known, a representative composition by percent weight was obtained from the approved CEQR action *139-01, 135-05, and 135-09 Northern Boulevard 07DCP029Q, Table 3, Typical Composition of VOC Emissions from Auto Spray Paint Booths* (hereinafter "Solow Report Table 3"). The Solow Report analyzed the emissions of auto body facilities operating without a DEP permit. Table 3 of the Solow Report shows the VOC chemicals that make up the representative paint, and each chemical quantity in percentage weight. The Solow Report shows VOC chemicals by percentage weight and the facility 1-hour and annual total VOC emissions were used to calculate each chemical emission rates. The

ingredients that make up the representative paint, along with their Chemical Abstract Service (CAS) number, by percent weight, and the hourly and annual emission rates are presented in **Table 17-7**.

Table 17-7: VOC Short-term and Annual Emission Rates from the Auto Body Facilities (Chemicals and their Percentage Weight from the Solow Report, Table 3)

Contaminant name	CAS No.	Percent Weight	1-Hour		Annual	
			lb/hr	g/s	lb/yr	g/s
R&E Auto Collision PA010897						
Acetone	67-64-1	43%	3.33E-01	4.20E-02	266.6	3.83E-03
Aromatic Petroleum Distillate	64742-94-5	10%	7.75E-02	9.77E-03	62	8.92E-04
Butane	106-97-8	11%	8.53E-02	1.07E-02	68.2	9.81E-04
Ethanol	64-17-5	2%	1.55E-02	1.95E-03	12.4	1.78E-04
Ethyl 3-Ethoxypropionate	763-69-9	9%	6.98E-02	8.79E-03	55.8	8.03E-04
Ethylbenzene	100-41-4	5%	3.88E-02	4.88E-03	31	4.46E-04
Methyl Ethyl Ketone	78-93-3	8%	6.20E-02	7.81E-03	49.6	7.13E-04
N-Butyl Acetate	123-86-4	5%	3.88E-02	4.88E-03	31	4.46E-04
Propane	74-98-6	11%	8.53E-02	1.07E-02	68.2	9.81E-04
Stoddard Solvent	8052-41-3	10%	7.75E-02	9.77E-03	62	8.92E-04
Toluene	108-88-3	10%	7.75E-02	9.77E-03	62	8.92E-04
Xylene	1330-20-7	10%	7.75E-02	9.77E-03	62	8.92E-04
Rich Automotive Corp. / Navin Bijnath PB12003						
Acetone	67-64-1	43%	1.33E+00	1.68E-01	2666	3.83E-02
Aromatic Petroleum Distillate	64742-94-5	10%	3.10E-01	3.91E-02	620	8.92E-03
Butane	106-97-8	11%	3.41E-01	4.30E-02	682	9.81E-03
Ethanol	64-17-5	2%	6.20E-02	7.81E-03	124	1.78E-03
Ethyl 3-Ethoxypropionate	763-69-9	9%	2.79E-01	3.52E-02	558	8.03E-03
Ethylbenzene	100-41-4	5%	1.55E-01	1.95E-02	310	4.46E-03
Methyl Ethyl Ketone	78-93-3	8%	2.48E-01	3.12E-02	496	7.13E-03
N-Butyl Acetate	123-86-4	5%	1.55E-01	1.95E-02	310	4.46E-03
Propane	74-98-6	11%	3.41E-01	4.30E-02	682	9.81E-03
Stoddard Solvent	8052-41-3	10%	3.10E-01	3.91E-02	620	8.92E-03
Toluene	108-88-3	10%	3.10E-01	3.91E-02	620	8.92E-03
Xylene	1330-20-7	10%	3.10E-01	3.91E-02	620	8.92E-03
Alijah Auto Body						
Acetone	67-64-1	43%	1.33E+00	1.68E-01	2199	3.16E-02
Aromatic Petroleum Distillate	64742-94-5	10%	3.10E-01	3.91E-02	512	7.36E-03
Butane	106-97-8	11%	3.41E-01	4.30E-02	563	8.09E-03
Ethanol	64-17-5	2%	6.20E-02	7.81E-03	102	1.47E-03
Ethyl 3-Ethoxypropionate	763-69-9	9%	2.79E-01	3.52E-02	460	6.62E-03
Ethylbenzene	100-41-4	5%	1.55E-01	1.95E-02	256	3.68E-03

Methyl Ethyl Ketone	78-93-3	8%	2.48E-01	3.12E-02	409	5.89E-03
N-Butyl Acetate	123-86-4	5%	1.55E-01	1.95E-02	256	3.68E-03
Propane	74-98-6	11%	3.41E-01	4.30E-02	563	8.09E-03
Stoddard Solvent	8052-41-3	10%	3.10E-01	3.91E-02	512	7.36E-03
Toluene	108-88-3	10%	3.10E-01	3.91E-02	512	7.36E-03
Xylene	1330-20-7	10%	3.10E-01	3.91E-02	512	7.36E-03

Dispersion Analysis

CEQR Screening Analysis

For estimating potential impacts from industrial emission sources of toxic air pollutants, the *CEQR Technical Manual* recommends using a screening procedure as a first step in an analysis. This procedure, the "Industrial Source Screen", is based on a generic emission rate of 1 gram per second of a pollutant from a point source. This approach, which can be used to estimate maximum short-term and annual average concentration values at various distances (from 30 to 400 feet) from an emission source, was utilized to assess the potential impacts from a few of these facilities. The analysis assumed distances of less than or equal to the tabulated *CEQR Technical Manual* Table 17-3 distances from a source. The pre-tabulated concentrations are displayed in **Table 17-8**.

Table 17-8: *CEQR Technical Manual* Table 17-3 Industrial Source Screen Pre-Tabulated Concentrations

Facility Name	**Distance from Source (ft) Actual (CEQR)**	**1-Hour ($\mu g/m^3$)**	**8-Hour ($\mu g/m^3$)**	**24-Hour ($\mu g/m^3$)**	**Annual ($\mu g/m^3$)**
R&E Auto Collision PA010897 (Block 5084, Lot 6)	244/ 230	2,657	1,720	924	131
Rich Automotive Corp. / Navin Bijnath PB12003 (Block 5084, Lot 8)	218/ 200	3,335	2,153	1,174	167
Alijah Auto Body (Block 5085, Lot 78)	204 / 200	3,335	2,153	1,174	167

All values obtained from Table 17-3 of the *CEQR Technical Manual* for an emission rate of 1 gram per second were multiplied by the pollutants' actual emission rates to estimate the impact concentrations. Impact concentrations of each pollutant were added to predict the cumulative impact concentrations.

AERMOD Detailed Analysis

Methodology

The EPA's AERMOD modeling system version 19191 was used to predict the 1-hour Ethyl 3-Ethoxypropionate concentration. In accordance with CEQR guidance, this analysis was conducted assuming stack tip downwash and elimination of calms. Models specified flat terrain, urban dispersion surface roughness, and population of

2,000,000. The Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Meteorological data were combined to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs, and Anemometer height of 9.4 meters was specified per Lakes Environmental Software.

Receptors were placed on the nearest receiving buildings, Projected Development Site 1, all around the building envelope in 10-foot increment on all floor levels. Receptors were placed 6 feet above each floor level.

Impact concentration of the 1-hour Ethyl 3-Ethoxypropionate (CAS No. 763-69-9) was modeled with the emission rates previously discussed. The 1-hour Ethyl 3-Ethoxypropionate cumulative impact was calculated within the model.

The R&E Auto Collision Repairs and Rich Automotive Corp./Navin Bijnath spray booth stacks location and stacks parameters (diameters, height, flow rate, exit temperature) were obtained from information included in the DEP permit applications. The roof line height of the R&E Auto Collision Repairs was obtained from the NYC Open Data Building Footprints shapefile[14]. The stack was located 6 feet above the roof line per the DEP PA010897 permit application.

The Alijah Auto Body spray booth/area stack was assumed to be located 3 feet above the roof line, which is the *CEQR Technical Manual* default stack's height. The roof line height was obtained from the NYC Open Data Building Footprints shapefile[15]. The *CEQR Technical Manual* default stack's diameter, exit velocity, and exit temperature were used (default values of 0-meter, 0.001 meter per second, and 293 Kelvin, respectively).

Dispersion Analysis Results

The predicted concentrations of the noncriteria pollutants were evaluated with the NYSDEC DAR-1 SGC/AGC guidelines. Particulate matter $PM_{2.5}$ concentrations were evaluated with the NYC *de minimis*. PM_{10} cumulative impact concentration (impact from all sources added) were added to the background concentration, and results evaluated with the NAAQS design value.

$PM_{2.5}$ significant impact concentrations for stationary source analysis were evaluated as follows:

[14] https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh/data.

[15] https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh/data.

- 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.

The *de minimis* threshold concentrations are 24-hour $PM_{2.5}$ of 7.55 $\mu g/m^3$ and annual $PM_{2.5}$ of 0.3 $\mu g/m^3$.

The criteria pollutants PM_{10} and $PM_{2.5}$ cumulative impact concentrations are presented in **Table 17-9**.

Table 17-9: PM_{10} and $PM_{2.5}$ Dispersion Analysis Results

Source	Predicted Conc. ($\mu g/m^3$)	Background Conc. ($\mu g/m^3$)	Total Conc. ($\mu g/m^3$)	Threshold Criteria ($\mu g/m^3$)	Threshold Standard
	PM_{10} 24-hour				
R&E Auto Collision	0.07	41	41.1	150	NAAQS
Rich Automotive Corp. / Navin Bijnath	0.75	41	41.8	150	NAAQS
Alijah Auto Body	1.12	41	42.1	150	NAAQS
Cumulative	**1.9**	**41**	**43**	**150**	**NAAQS**
	$PM_{2.5}$ 24-hour				
R&E Auto Collision	0.04	N.A.	0.04	7.55	*de minimis*
Rich Automotive Corp. / Navin Bijnath	0.46	N.A.	0.46	7.55	*de minimis*
Alijah Auto Body	0.69	N.A.	0.69	7.55	*de minimis*
Cumulative	**1.19**	**N.A.**	**1.19**	**7.55**	***de minimis***
	$PM_{2.5}$ Annual				
R&E Auto Collision	0.004	N.A.	0.004	0.3	*de minimis*
Rich Automotive Corp. / Navin Bijnath	0.045	N.A.	0.045	0.3	*de minimis*
Alijah Auto Body	0.074	N.A.	0.074	0.3	*de minimis*
Cumulative	**0.12**	**N.A.**	**0.12**	**0.3**	***de minimis***

As seen in **Table 17-9**, the $PM_{2.5}$ predicted concentrations do not exceed the *de minimis* threshold concentrations, and the PM_{10} predicted concentration does not exceed the NAAQS.

The noncriteria pollutants dispersion analysis results are presented in **Table 17-10**.

Table 17-10: Noncriteria Pollutants Dispersion Analyses Results

Contaminant Name	CAS No.	1-Hour	SGC	Annual	AGC
		µg/m³	µg/m³	µg/m³	µg/m³
R&E Auto Collision PA010897					
Acetone	67-64-1	111.57	180000	0.50	30000.0
Aromatic Petroleum	64742-94-5	25.95	--	0.12	100.0
Butane	106-97-8	28.54	238000.0	0.13	--
Ethanol	64-17-5	5.19	--	0.02	45000.0
Ethyl 3-Ethoxypropionate	763-69-9	8.22	140.0	0.11	64.0
Ethylbenzene	100-41-4	12.97	--	0.06	1000.0
Methyl Ethyl Ketone	78-93-3	20.76	13000.0	0.09	5000.0
N-Butyl Acetate	123-86-4	12.97	95000.0	0.06	17000.0
Propane	74-98-6	28.54	--	0.13	43000.0
Stoddard Solvent	8052-41-3	25.95	--	0.12	900.0
Toluene	108-88-3	25.95	37000.0	0.12	5000.0
Xylene	1330-20-7	25.95	22000.0	0.12	100.0
Rich Automotive Corp. / Navin Bijnath PB12003					
Acetone	67-64-1	560.14	180000.0	6.40	30000.0
Aromatic Petroleum	64742-94-5	130.27	--	1.49	100.0
Butane	106-97-8	143.29	238000.0	1.64	--
Ethanol	64-17-5	26.05	--	0.30	45000.0
Ethyl 3-Ethoxypropionate	763-69-9	32.74	140.0	1.34	64.0
Ethylbenzene	100-41-4	65.13	--	0.74	1000.0
Methyl Ethyl Ketone	78-93-3	104.21	13000.0	1.19	5000.0
N-Butyl Acetate	123-86-4	65.13	95000.0	0.74	17000.0
Propane	74-98-6	143.29	--	1.64	43000.0
Stoddard Solvent	8052-41-3	130.27	--	1.49	900.0
Toluene	108-88-3	130.27	37000.0	1.49	5000.0
Xylene	1330-20-7	130.27	22000.0	1.49	100.0
Alijah Auto Body					
Acetone	67-64-1	560.14	180000	5.28	30000.0
Aromatic Petroleum	64742-94-5	130.27	--	1.23	100.0
Butane	106-97-8	143.29	238000.0	1.35	--
Ethanol	64-17-5	26.05	--	0.25	45000.0
Ethyl 3-Ethoxypropionate	763-69-9	112.49	140.0	1.11	64.0
Ethylbenzene	100-41-4	65.13	--	0.61	1000.0
Methyl Ethyl Ketone	78-93-3	104.21	13000.0	0.98	5000.0
N-Butyl Acetate	123-86-4	65.13	95000.0	0.61	17000.0
Propane	74-98-6	143.29	--	1.35	43000.0
Stoddard Solvent	8052-41-3	130.27	--	1.23	900.0
Toluene	108-88-3	130.27	37000.0	1.23	5000.0
Xylene	1330-20-7	130.27	22000.0	1.23	100.0

Cumulative					
Acetone	67-64-1	1231.8	180000.0	12.2	30000.0
Aromatic Petroleum	64742-94-5	286.5	--	2.8	100.0
Butane	106-97-8	315.1	238000.0	3.1	--
Ethanol	64-17-5	57.3	--	0.6	45000.0
Ethyl 3-Ethoxypropionate	763-69-9	112.5	140.0	2.6	64.0
Ethylbenzene	100-41-4	143.2	--	1.4	1000.0
Methyl Ethyl Ketone	78-93-3	229.2	13000.0	2.3	5000.0
N-Butyl Acetate	123-86-4	143.2	95000.0	1.4	17000.0
Propane	74-98-6	315.1	--	3.1	43000.0
Stoddard Solvent	8052-41-3	286.5	--	2.8	900.0
Toluene	108-88-3	286.5	37000.0	2.8	5000.0
Xylene	1330-20-7	286.5	22000.0	2.8	100.0

As seen in **Table 17-10**, the independent and cumulative impact concentrations from the facilities are less than the SGC/AGC threshold concentrations. Therefore, no significant adverse air quality impacts are predicted from industrial sources.

MAJOR AND LARGE SOURCES

As outlined in the *CEQR Technical Manual*, projects that would introduce new uses near major sources, large sources, and odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers major sources, large sources, and odor producing facilities within 1,000 feet of the Projected Development Sites. Major emission sources are identified as those sources located at Title V facilities that require Prevention of Significant Deterioration permits; large emission sources are identified as sources located at facilities which require a State facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large boilers of large public facilities, and large industrial facilities are typical type of sources requiring these permits. Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

No existing large combustion sources, such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Project Area were identified[16]. In addition, no odor producing facility was identified within 1,000 feet of the Project Area. The nearest Air State Facility is Unitex, located at 401 S Macquesten Pkwy Mount Vernon, NY 10550, is located 1,800 feet to the north of the Project Area. As such, no analysis was warranted, and no significant adverse air quality impacts are predicted from these types of facilities.

[16] https://gisservices.dec.ny.gov/gis/dil/

CONCLUSION

Based on the analysis, conditions associated with the Proposed Actions would not result in any violations of the ambient air quality standards. Therefore, there is no reason to believe that the Proposed Actions would result in any potentially significant adverse stationary or mobile source air quality impacts, and further assessment is not warranted.

19. NOISE

Introduction

Two types of potential noise impacts are considered under CEQR. These are potential mobile source and stationary source noise impacts. Mobile source impacts are those which could result from a proposed project adding a substantial amount of vehicular and/or rail traffic to an area, or introducing new noise-sensitive land uses into an area where vehicular and/or rail traffic creates high ambient noise levels. Potential stationary source noise impacts are considered when a proposed development would cause a stationary noise source to be operating within 1,500 feet of a sensitive land use (receptor), with a direct line of sight to that receptor, if the project would include unenclosed mechanical equipment for building ventilation purposes, or if the project would introduce a sensitive land use into an area with high ambient noise levels.

Noise Analysis

Environmental Studies Corp. (ESC) conducted noise monitoring on Wednesday September 11th, Thursday September 12th, 2019, and Thursday October 17th, 2019 in support of a Zoning Map Amendment to rezone the Project Area from M1-1 to R7D and R7D/C2-4. The Project Area includes Projected Development Site 1 – Block 5084 / Lot 63; Projected Development Site 2 – Block 5084 / Lots 58, 59, 60; Projected Development Site 3 – Block 5084 / Lots 35 and 39; Projected Development Site 4 – Block 5084 / Lot 41; Projected Development Site 5 – Block 5084 / Lot 49; Projected Development Site 6 – Block 5084 / Lot 61; and Other Sites 1 – 8 – Block 5084 / Lots 53, 54, 55, 56, 57, 40, 140 within Bronx Community District 12.

Furman Avenue is a two-way street with one moving north-bound lane and one moving south-bound lane with curbside parking. White Plains Road is a two-way street with two moving north-bound lanes and two moving south-bound lanes with curbside parking. East 240th Street is a two-way street with one moving east-bound lane and one moving west-bound lane with curbside parking. Local intersections are controlled by traffic signals and stop signs. The Project Area is located directly adjacent to the elevated rail line over White Plains Road and the 239th Street MTA Rail Yard.

The Proposed Actions would allow noise-sensitive residential development in an area where such use is not permitted under existing zoning, as well as allowing commercial 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 Project Area is vehicular and rail movements.

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 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.
- Lmax is the highest SPL measured during a given period of time. It is useful in evaluating Leqs 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 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 19-2: Noise Exposure Guidelines for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposur	Marginally Acceptable General External Exposure	Airport[3] Exposur	Marginally Unacceptable General External Exposure	Airport[3] Exposur	Clearly Unacceptable General External Exposure	Airport[3] Exposur
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		$55 < L_{10} \leq 65$ dBA		$65 < L_{10} \leq 80$ dBA		$L_{10} > 80$dBA	
3. Residence, residential hotel or motel	7 am to 10 pm	$L_{10} \leq 65$dBA		$65 < L_{10} \leq 70$		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$dBA	
	10 pm to 7 am	$L_{10} \leq 55$dBA		$55 < L_{10} \leq 70$		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$dBA	
4. School, museum, library, court house of worship, transient hotel or motel, public meeting room,		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		Same as Residential Day (7 AM-10		Same as Residential Day (7 AM –10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas	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 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 L10 values greater than 80 dBA.

Measurement Location and Equipment

Noise monitoring was conducted on Wednesday September 11th and Thursday September 12th, 2019 and Thursday October 17th, 2019. Because the predominant noise sources in the area of the proposed project consist of vehicular traffic and train movements, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day. Pursuant to *CEQR Technical Manual* methodology, measurements were conducted for a 1-hour period during each of the peak periods at each monitoring location in the Project Area: Location One (1) was at ground level on the northern portion of the White Plains Road frontage; Location Two (2) was at ground level on the southern portion of the White Plans Road frontage; Location Three (3) was at ground level at the center of the Furman Avenue frontage; Location Four (4) was located at ground level at the center of the East 240th Street frontage; Pursuant to *CEQR Technical Manual* methodology for assessing noise from a rail yard, a 24-hour measurement was taken: Location Five (5) was located at the southern portion of the Furman Avenue façade on the rooftop with a clear line of sight to the rail yard. The noise monitoring locations are shown in Figure 19-1 and Photos 19-1 through 19-5 below.

Noise monitoring was conducted using a using Type 1 Casella CEL-633 sound level meter with wind screen. The monitor was placed on a tripod at a height of approximately four feet above the ground, away from any other noise-reflective surfaces. The monitor was calibrated prior to and following each monitoring session. Periods of peak vehicular traffic around the Project Area constitute a worst-case

condition for noise. Noise meter calibration certification and back up data are provided in the Noise Appendix.

Photo 19-1: ***Noise Monitoring Location One (1)***

White Plains Road



Photo 19-2: ***Noise Monitoring Location Two (2)***

White Plains Road



Photo 19-3: ***Noise Monitoring Location Three (3)***

Furman Avenue



Photo 19-4: ***Noise Monitoring Location Four (4)***

East 240th Street



Photo 19-5: ***Noise Monitoring Location Five***

Furman Avenue (elevated, 24-hours)



Figure 19-1: Noise Monitoring Locations



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Wednesday September 11th and Thursday September 12th, 2019 and Thursday October 17th, 2019. The weather was dry and wind speeds were moderate during all monitoring periods. The sound meter was calibrated before and after each monitoring session.

Existing Conditions

Based on the noise measurements, the predominant source of noise is vehicular traffic and train movements.

Table 19-4, 19-5, 19-6, 19-7, and 19-8 *below contains the results for the measurements taken in the Project Area:*

Table 19-4 *Noise Levels (dB) at Location 1*			
Thursday October 17th, 2019			
Time	**7:30 am – 8:30 am**	**12:00 pm – 1:00 pm**	**4:30 pm – 5:30 pm**
L_{max}	91.1	99.9	91.1
L_{10}	**81.0**	**81.0**	**80.5**
L_{eq}	**75.9**	**77.0**	**76.2**
L_{50}	67.0	66.5	68.5
L_{90}	58.5	59.5	63.0
L_{min}	52.2	56.9	56.2

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the *CEQR Technical Manual*

Table 19-5 *Noise Levels (dB) at Location 2*			
Thursday October 17th, 2019			
Time	**7:36 am – 8:37 am**	**12:07 pm – 1:07 pm**	**4:30 pm – 5:30 pm**
L_{max}	92.0	99.4	98.7
L_{10}	**81.0**	**80.0**	**80.2**
L_{eq}	**77.2**	**76.5**	**76.7**
L_{50}	67.5	65.0	64.5
L_{90}	58.5	58.0	58.5
L_{min}	53.4	53.0	53.2

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the *CEQR Technical Manual*

Table 19-6 *Noise Levels (dB) at Location 3*			
Wednesday, September 11th, 2019			
Time	**7:31 am – 8:31 am**	**12:00 pm – 1:00 pm**	**4:31 pm – 5:31 pm**
L_{max}	95.3	86.7	91.1
L_{10}	65.0	62.5	65.0
L_{eq}	66.3	61.8	66.1
L_{50}	59.0	55.5	57.5
L_{90}	55.5	53.5	53.0
L_{min}	54.1	48.8	45.8

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the *CEQR Technical Manual*

Table 19-7 *Noise Levels (dB) at Location 4*			
Thursday October 17th, 2019			
Time	**7:30 am – 8:30 am**	**12:00 pm – 1:00 pm**	**4:30 pm – 5:30 pm**
L_{max}	84.7	85.1	83.1
L_{10}	67.0	68.0	68.5
L_{eq}	64.1	64.7	65.9
L_{50}	58.0	60.5	60.5
L_{90}	54.0	56.0	56.0
L_{min}	50.3	52.2	52.6

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the *CEQR Technical Manual*

Table 19-8 *Noise Levels (dB) at Location 5*						
Start Date & Time	LAeq	LAS 10%	LAS 50%	LAS 90%	LASmin	LASmax
9/11/2019 16:26	63.1 dB	67.0 dB	55.0 dB	49.5 dB	46.3 dB	81.3 dB
9/11/2019 17:26	69.0 dB	68.5 dB	56.0 dB	50.0 dB	46.5 dB	92.8 dB
9/11/2019 18:26	**74.8 dB**	**75.5 dB**	60.0 dB	53.0 dB	48.5 dB	93.5 dB
9/11/2019 19:26	**70.2 dB**	69.0 dB	56.5 dB	50.0 dB	46.7 dB	94.1 dB
9/11/2019 20:26	66.6 dB	65.5 dB	57.0 dB	50.5 dB	46.5 dB	88.8 dB
9/11/2019 21:26	65.6 dB	66.5 dB	55.5 dB	50.0 dB	46.6 dB	86.4 dB
9/11/2019 22:26	**70.3 dB**	67.0 dB	54.0 dB	49.0 dB	46.7 dB	92.6 dB
9/11/2019 23:26	69.1 dB	69.0 dB	54.5 dB	49.5 dB	47.0 dB	89.5 dB
9/12/2019 0:26	70.5 dB	68.5 dB	52.0 dB	49.0 dB	46.9 dB	91.4 dB
9/12/2019 1:26	64.0 dB	63.5 dB	50.5 dB	47.5 dB	45.7 dB	85.8 dB
9/12/2019 2:26	54.4 dB	54.0 dB	47.5 dB	46.5 dB	45.2 dB	69.5 dB
9/12/2019 3:26	58.2 dB	59.5 dB	50.0 dB	48.0 dB	46.0 dB	77.2 dB
9/12/2019 4:26	56.0 dB	59.0 dB	50.5 dB	48.5 dB	46.8 dB	75.0 dB
9/12/2019 5:26	63.8 dB	68.0 dB	54.5 dB	49.5 dB	47.3 dB	81.7 dB
9/12/2019 6:26	67.2 dB	**71.0 dB**	62.0 dB	56.5 dB	53.7 dB	84.9 dB
9/12/2019 7:26	69.3 dB	**73.5 dB**	63.5 dB	56.5 dB	51.3 dB	84.3 dB
9/12/2019 8:26	67.8 dB	66.5 dB	54.5 dB	50.5 dB	47.7 dB	91.2 dB
9/12/2019 9:26	68.0 dB	**71.5 dB**	58.0 dB	52.0 dB	48.6 dB	88.4 dB
9/12/2019 10:26	**70.5 dB**	**73.5 dB**	62.5 dB	55.0 dB	50.9 dB	92.4 dB
9/12/2019 11:26	62.3 dB	64.5 dB	55.5 dB	51.5 dB	48.2 dB	84.3 dB
9/12/2019 12:26	59.9 dB	62.5 dB	54.0 dB	51.0 dB	48.0 dB	79.5 dB
9/12/2019 13:26	60.3 dB	63.5 dB	57.0 dB	52.5 dB	48.3 dB	77.9 dB
9/12/2019 14:26	60.7 dB	64.0 dB	57.0 dB	52.0 dB	49.0 dB	79.0 dB
9/12/2019 15:26	63.5 dB	66.5 dB	58.5 dB	53.5 dB	47.5 dB	83.3 dB

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the *CEQR Technical Manual*

Table 19-10, 19-11, 19-12, and 19-13 *below contain the traffic counts and vehicle classifications during each monitoring period for 20 minutes:*

Table 19-10

Location 1: *Traffic volumes and vehicle classifications*

	7:30 am – 8:30 am	**12:00 pm – 1:00 pm**	**4:30 pm – 5:30 pm**
Car/ Taxi	150	159	148
Van/Light Truck/SUV	164	141	130
Medium Truck	11	18	13
Heavy Truck	3	3	2
Bus	18	9	13
Train	33	21	25

Table 19-11

Location 2: *Traffic volumes and vehicle classifications*

	7:36 am – 8:37 am	**12:07 pm – 1:07 pm**	**4:30 pm – 5:30 pm**
Car/ Taxi	150	159	148
Van/Light Truck/SUV	164	141	130
Medium Truck	11	18	13
Heavy Truck	3	3	2
Bus	18	9	13
Train	33	21	25

Table 19-12 ***Location 3:*** *Traffic volumes and vehicle classifications*			
	7:31 am – 8:31 am	**12:00 pm – 1:00 pm**	**4:31 pm – 5:31 pm**
Car/ Taxi	57	45	56
Van/Light Truck/SUV	48	40	51
Medium Truck	2	3	4
Heavy Truck	0	1	2
Bus	10	2	3
Train	13	10	8

Table 19-13 ***Location 4:*** *Traffic volumes and vehicle classifications*			
	7:30 am – 8:30 am	**12:00 pm – 1:00 pm**	**4:30 pm – 5:30 pm**
Car/ Taxi	38	33	37
Van/Light Truck/SUV	52	287	45
Medium Truck	4	3	5
Heavy Truck	2	0	2
Bus	0	0	1
Train	33	21	25

Determination of Impacts/Building Attenuation Requirements

The 2020 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the Proposed Actions, an L_{10} of between 65 and 70 dB(A) is identified as a marginally acceptable general external exposure. An L_{10} of between 70 and 80 dB(A) is identified as a marginally unacceptable general external exposure. The highest recorded L_{10} at Location One (1) of the Project Area was 81.0 dB(A) during the morning and midday monitoring periods. The highest recorded L_{10} at Location Two (2) of the Project Area was 81.0 dB(A) during the morning monitoring period. The highest recorded L_{10} at Location Three (3) of the Project Area was 65.0 dB(A) during the morning and evening monitoring periods. The highest recorded L_{10} at Location Four (4) of the Project Area was 68.5 dB(A) during the evening monitoring period. The highest recorded L_{10} at Location Five (5) of the Project Area was 75.5 dB(A) during the 6:30 pm – 7:30 pm monitoring hour.

Based on the results of the noise monitoring, Projected Development Site 1 would require a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street within 104 feet of White Plains Road and the facades facing East 239th Street within 84 feet of White Plains Road and 31 dBA of attenuation on the facades facing East 239th Street beyond 84 feet of White Plains Road and the facades facing Furman Avenue within 352 feet of the East 239th Street; Projected Development Site 2 would require a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road; Projected Development Site 3 would require a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street and the facades facing 239th Street; Projected Development Site 4 would require a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street and the facades facing 239th Street; Projected Development Site 5 would require a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road; and Projected Development Site 6 would require a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road. With this level of attenuation, there would be no potential for adverse impacts related to ambient noise. Window-wall attenuation requirements for commercial office uses would be 5 dB(A) lower than the values specified in this paragraph. Figure 19-2 below shows the proposed required attenuation levels.

Figure 19-2: Proposed Attenuation Requirements



Conclusions and Recommendations

To avoid any potential impacts associated with noise, the Proposed Actions will place an (E) designation (E-656) for noise on the following properties. The text of the E-Designation would be as follows:

Block 5084, Lot 63 (Projected Development Site 1): To ensure an acceptable interior noise environment, future residential/commercial office/community facility uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street within 104 feet of White Plains Road and the facades facing East 239th Street within 84 feet of White Plains Road and 31 dBA of attenuation on the facades facing East 239th Street beyond 84 feet of White Plains Road and the facades facing Furman Avenue within 352 feet of East 239th Street to maintain an interior noise level not greater than 45 dBA for residential and community facility uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lots 58, 59, 60 (Projected Development Site 2): To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road to maintain an interior noise level not greater than 45 dBA for residential uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lots 35 & 39 (Projected Development Site 3): To ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street and the facades facing 239th Street to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lot 41 (Projected Development Site 4): To ensure an acceptable interior noise environment, future residential/commercial office uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road and the facades facing East 240th Street and the facades facing 239th Street to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial office uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be

provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lot 49 (Projected Development Site 5): To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road to maintain an interior noise level not greater than 45 dBA for residential and community facility uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 5084, Lot 61 (Projected Development Site 6): To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 37 dBA window/wall attenuation on the facades facing White Plains Road to maintain an interior noise level not greater than 45 dBA for residential uses as illustrated in the EAS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

The owner of the Project Site will record the above-referenced (E) designation related to noise with the Mayor's Office of Environmental Remediation (OER) prior to the City Planning Commission's approval of the Proposed Actions.

With the implementation of the (E) designations, no significant adverse impacts related to noise would occur.

Therefore, the Actions would not result in any potentially significant adverse stationary or mobile source noise impacts, and further assessment is not warranted.

22. NEIGHBORHOOD CHARACTER

The project would not have the potential to result in any significant adverse impacts to the following analysis areas related to neighborhood character as further discussed below.

A. Land Use, Zoning, and Public Policy – As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to land use, zoning or public policy. Although the Land Use, Zoning, and Public Policy technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Land Use, Zoning, or Public Policy impacts as further discussed below.

The Project Area and the surrounding 400-foot radius project study area consist of a mixture of commercial/manufacturing uses (mainly ground floor retail or automotive/transportation related), residential uses (multi-family, mixed residential and commercial, and one- and two-family homes), parking lots, and vacant parcels. Several community facility uses including churches, schools and health centers are scattered through the surrounding area. Directly east of the Project Area is the MTA 239th Street Yard and Maintenance Shop which contains storage of trains not in use. The Project Area is also directly adjacent to an elevated subway line that runs along White Plains Road and carries the 2 and 5 subway lines. As such, the proposed Project Area and the project study area do not have a unified neighborhood character. The introduction of the proposed mixed-use residential, commercial, and community facility development on Projected Development Site 1 as well as the mixed-use residential, commercial, and community facility development anticipated on the non-Applicant owned Projected Development Sites would fit in well with the eclectic mix of uses in both the Project Area and the surrounding project study area. The projected developments could alter existing development patterns in the future, especially of the underutilized parking and vacant parcels, by encouraging the development of new residential and mixed-use projects. However, this would be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City.

The proposed Zoning Map and Zoning Text Amendments would only apply to the Project Area and would not affect lots beyond this area. The Applicant believes that the Proposed Actions would not result in any significant impacts to zoning patterns in the area since the mapping of the proposed R7D and R7D/C2-4 zoning districts in the Project Area would result in development that is believed to be compatible with the existing mixed neighborhood context while also providing enough floor area to develop affordable dwelling units on the Applicant Site and the non-Applicant owned Projected Development Sites. The change in zoning is believed to be appropriate as the proposed

R7D/C2-4 zoning district would be the same as the zoning district mapped on Block 5087 immediately north of the Project Area which was rezoned from Ml-1 to R7D/C2-4 on 02/13/19. The Project Area is also located immediately east of an area zoned R4A/C2-4 on the opposite side of White Plains Road. The proposed R7D/C2-4 zoning district would promote mixed-use development consistent with the commercial overlays mapped along White Plains Road immediately north and south of the Project Area. The Applicant believes that the current M1-1 zoning is no longer appropriate for the project area given the lack of demand for manufacturing facilities in this area, which is very underdeveloped.

No impact to public policies would occur as a result of the Proposed Actions. The Applicant believes that the Proposed Actions would be an appropriate development in the Project Area and would be a positive contribution to Bronx Community District 12 and to the surrounding neighborhood. The proposed project would meet the City's public policy goals as well as similar State and national public policy goals related to the provision of affordable housing.

B. Socioeconomic Conditions – As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to socioeconomic conditions. The Proposed Actions would not result in the direct or indirect displacement of residences or businesses in excess of the *CEQR Technical Manual* thresholds.

C. Open Space - As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to open space. The Proposed Actions would not result in direct impacts on any open space resources and relative to indirect open space impacts, would result in a negligible decrease in the open space ratio in the future with action condition.

D. Historic and Cultural Resources - As stated in the conclusion to this section above, the Proposed Actions would not result in any significant adverse impacts to historic or archaeological resources as LPC has determined that no such resources are located within the Project Area or the surrounding 400-foot radius project study area.

E. Urban Design and Visual Resources - As stated in the conclusion to this section above, the Proposed Actions would not result in a significant adverse impact to urban design and visual resources. Although the Urban Design and Visual Resources technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Urban Design and Visual Resources impacts as further discussed below.

The Proposed Actions would result in the development of residential, commercial, and community facility uses and accessory parking on six Projected Development Sites

located in an area characterized by a mixture of residential and automotive related uses, parking, and vacant land.

The proposed R7D/C2-4 district was chosen for the Project Area in order to develop residential uses on the Applicant's property which is not allowed under its current M1-1 zoning. It is also required to allow the proposed bulk of the new building to be increased from the current permitted FAR of 1.0 for manufacturing and commercial uses and 2.4 for community facility uses to 4.2 for all permitted residential and community facility uses (manufacturing uses would not be allowed), 2.0 for commercial uses, and 5.6 as a bonus for inclusionary housing. The increase in permitted bulk is appropriate given the City's policy of promoting increased development in close proximity to transit stops. The change is also appropriate given the lack of demand for manufacturing facilities in this area, which is underdeveloped. The establishment of a Mandatory Inclusionary Housing area for this application was developed in consultation with DCP in order to facilitate the development of affordable housing at a higher FAR in the area to be rezoned.

The proposed R7D zoning district is a contextual zoning district that requires development to be in accordance with Quality Housing standards. For Inclusionary Housing, the district typically produces 11-story apartment buildings set at or near the street line. R7D/C2-4 zoning was chosen for the Project Area as an R7D/C2-4 district is mapped on a block immediately to the north of the Project Area. C2-4 commercial overlays are mapped along White Plains Road immediately north and south of the Project Area.

The With-Action Development Scenario would not result in any impacts to open space or other visual resources as no such resources are located within proximity to the Project Area. The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. The Applicant believes that the development that would be facilitated by the rezoning would represent a visual improvement to the area and would result in new development on the underdeveloped Projected Development Sites that would be more compatible with the development pattern in residential areas further to the west. A detailed urban design analysis would not be required.

F. Shadows - As stated in the conclusion to this section above, the Proposed Actions would not result in any significant adverse shadows impacts. Buildings on Projected Development Sites 1 through 6 would not cast any new shadows on shadow sensitive open space or historic resources. Therefore, the Proposed Actions would not result in any significant shadows impacts.

G. Transportation - As discussed in this section above, no significant adverse impacts related to transportation would occur as a result of the Proposed Actions. The Proposed

Actions would add vehicle trips to the study area. However, in the future with the Proposed Actions, none of the intersections in the study area would experience 50 or more net new vehicle trip-ends. Therefore, the traffic analysis shows that the Proposed Actions would not result in any significant adverse traffic impacts based on the impact criteria defined within the 2020 CEQR *Technical Manual*. The Proposed Actions would generate less than 50-bus trip-ends per direction during any peak hour time period, and would generate less than 200 subway trip-ends per subway station during the AM and PM peak hour time periods. Therefore, in accordance with the *CEQR Technical Manual* criteria, the Proposed Actions would not result in any conditions that would typically trigger the need for a detailed assessment of bus or subway impacts. The Proposed Actions would generate more than 200 pedestrian trip-ends during Weekday AM, Midday, PM, and Saturday Midday peak hour time periods. However, there are several pedestrian entrance and exit points along Furman Avenue, East 239th Street, and White Plains Road to service the projected development and therefore, no pedestrian elements would experience more than 200 pedestrian trip-ends. In accordance with the *CEQR Technical Manual* 200-pedestrian trip ends threshold, the Proposed Actions would not result in any conditions that would typically trigger the need for a detailed assessment of pedestrian impacts.

H. Noise - The Proposed Actions required a detailed noise analysis due to ambient noise levels in the vicinity of the Project Area that could have a potentially adverse impact on future residents of the Projected Development Sites. As discussed in the noise section above, window-wall noise attenuation will be incorporated into the project design and therefore there would be no adverse impacts related to noise for project occupants. In order to avoid a significant adverse impact related to noise, E designations will be placed on Block 5084, Lots 35, 39, 41, 49, 58, 59, 60, 61, and 63. In addition, no potential significant adverse noise impacts would be generated by the proposed project on the surrounding area.

22. CONSTRUCTION

Introduction

A preliminary construction analysis may be required because future development facilitated by the Proposed Actions could result in the following. Development on Projected Development Sites 1 through 6 could result in potential construction impacts.

- Construction activities would occur along an arterial or major thoroughfare;
- Construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out;
- The operation of several pieces of diesel equipment in a single location at peak construction; and
- Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap, and last for more than two years overall.

Proposed Construction Schedule

Construction would occur on six Development Sites including one Applicant-owned Site and five Non-Applicant owned parcels as further described below. It is assumed that the Proposed Actions would be approved by mid- to late 2021. Projected Development Site 1 is expected to be completed by late 2023 after an up to 24-month construction period. As the Proposed Actions would result in the creation of multiple development sites that are not controlled by the Applicant, it is anticipated that these sites would be developed over an additional five-year period with a Build Year of 2028. The total construction period is therefore projected to be approximately 7 years for the six Projected Development Sites.

Applicant-owned Site

Construction of Projected Development Site 1 is expected to begin in 2022 and be completed within 2 years or less by the late 2023.

Non-Applicant owned Sites

It is not known when construction on the Non-Applicant owned Sites would occur but it is assumed that it would occur following the completion of construction on the Applicant-owned Projected Development Site 1. It is assumed that construction on each of the Non-Applicant owned Sites would occur sequentially starting at the Sites closest to the Applicant-owned Site. Due to likely future market conditions in the Affected Area, it is likely that each building would need to be built and more or less fully occupied before construction of another nearby building would commence. Construction and occupancy of each new building would take approximately 12 months to complete based on the floor area of the structure relative to the Applicant-

owned Site (ranging from approximately 14% to 33% of the size of the building on Projected Development Site 1). Therefore, assuming a total construction and occupancy period of approximately 5 years on the Non-Applicant owned Sites, the final project build year would be 2028.

The construction sequence and timeline for each of the Non-Applicant Owned Sites is listed below and illustrated on the attached construction schedule for each Development Site.

- Projected Development Site 2 – start construction January 2024; complete construction December 2024.

- Projected Development Site 3 – start construction January 2025; complete construction December 2025.

- Projected Development Site 4 – start construction January 2026; complete construction December 2026.

- Projected Development Site 5 – start construction January 2027; complete construction December 2027.

- Projected Development Site 6 – start construction January 2028; complete construction December 2028.

Proposed Construction Activities

Applicant-owned Site

Construction activities would begin with the demolition of the existing structures on Projected Development Site 1 (1 month). Following this, the major construction activities would include site preparation and excavation (2 months), construction of the building foundation (3 months), construction of the superstructure, joists, and roof (3 months), and interior fit-out work (15 months). Therefore, only 9 months would involve exterior construction activities on the proposed building with the remaining 15 months required for interior fit-out activities.

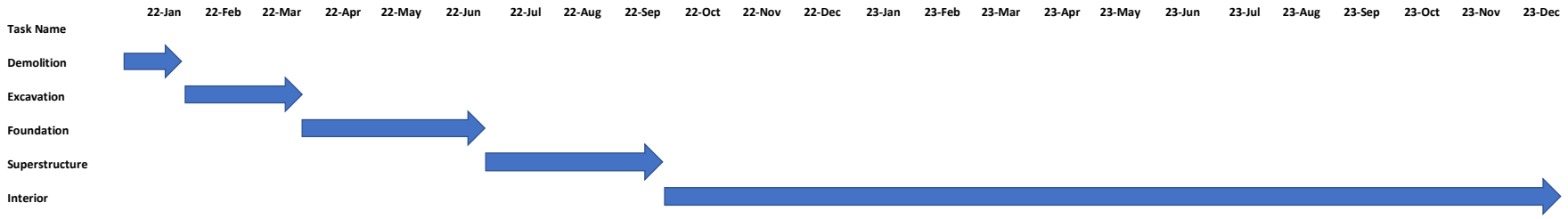
Non-Applicant owned Sites

Construction activities on the Non-Applicant owned Sites would be similar to those on the Applicant-owned Site described above. The anticipated timeframes on each Projected Development Site for demolition work, exterior and interior construction work, and time to occupy each building would be as follows:

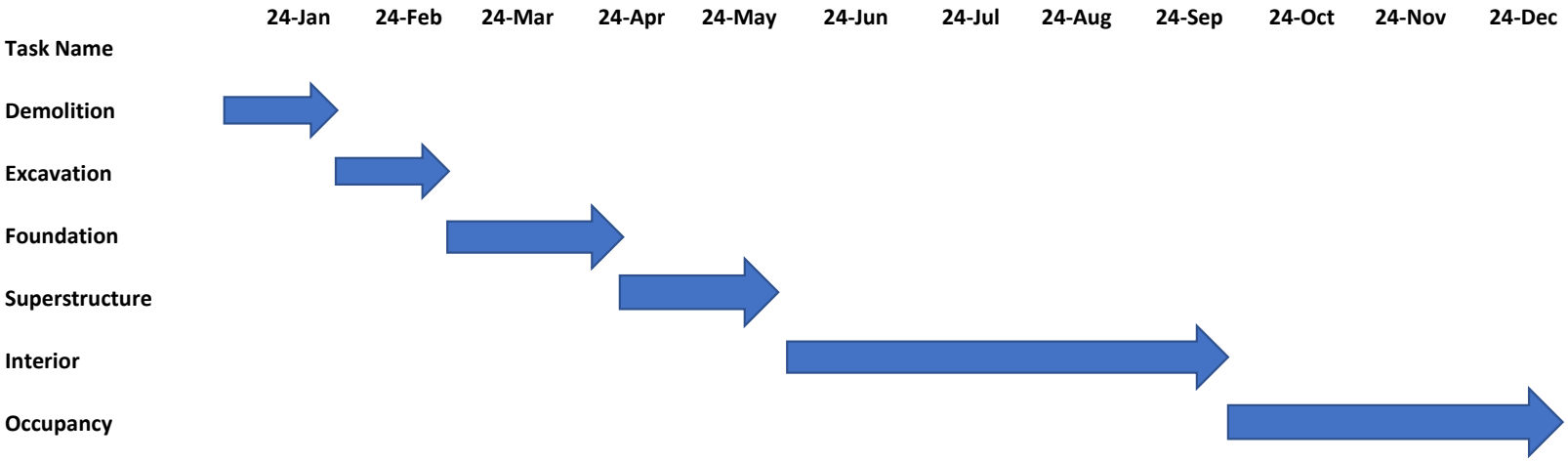
- demolition of existing structures on each site (1 month);

- site preparation and excavation (1 month);

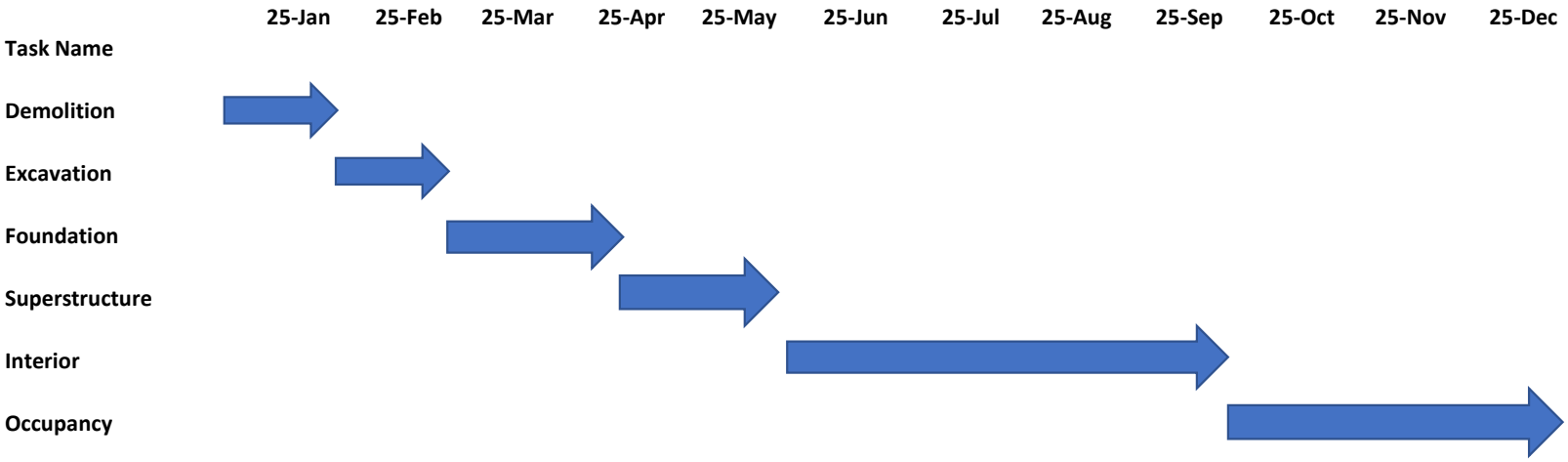
4541 Furman Avenue Construction Schedule



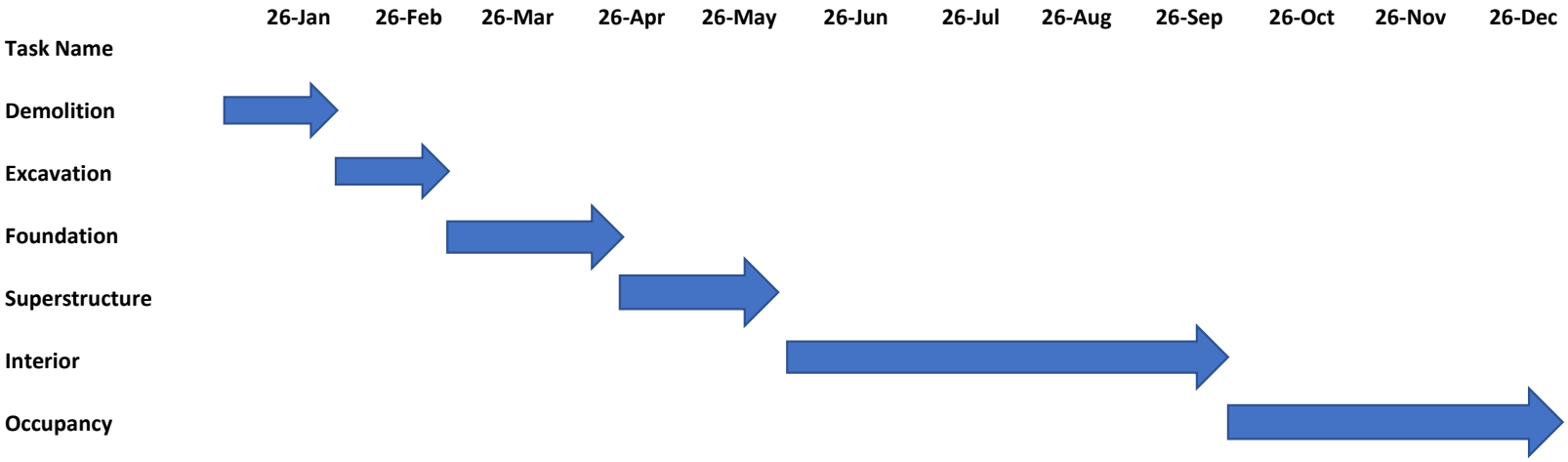
Furman Avenue Projected Development Site Site 2 Construction Schedule



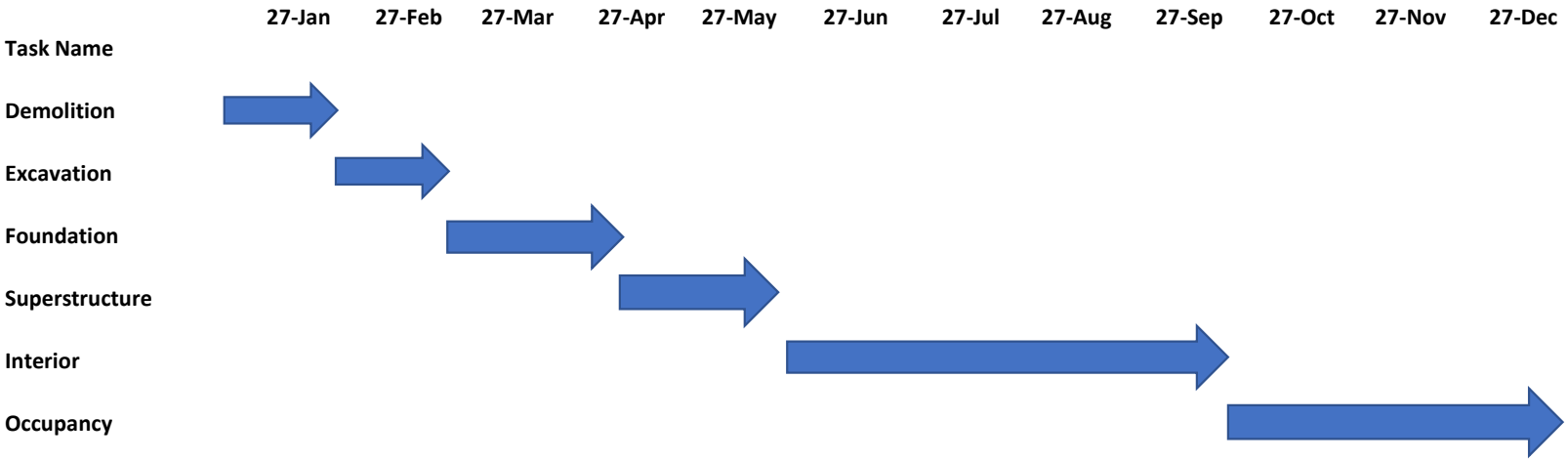
Furman Avenue Projected Development Site Site 3 Construction Schedule



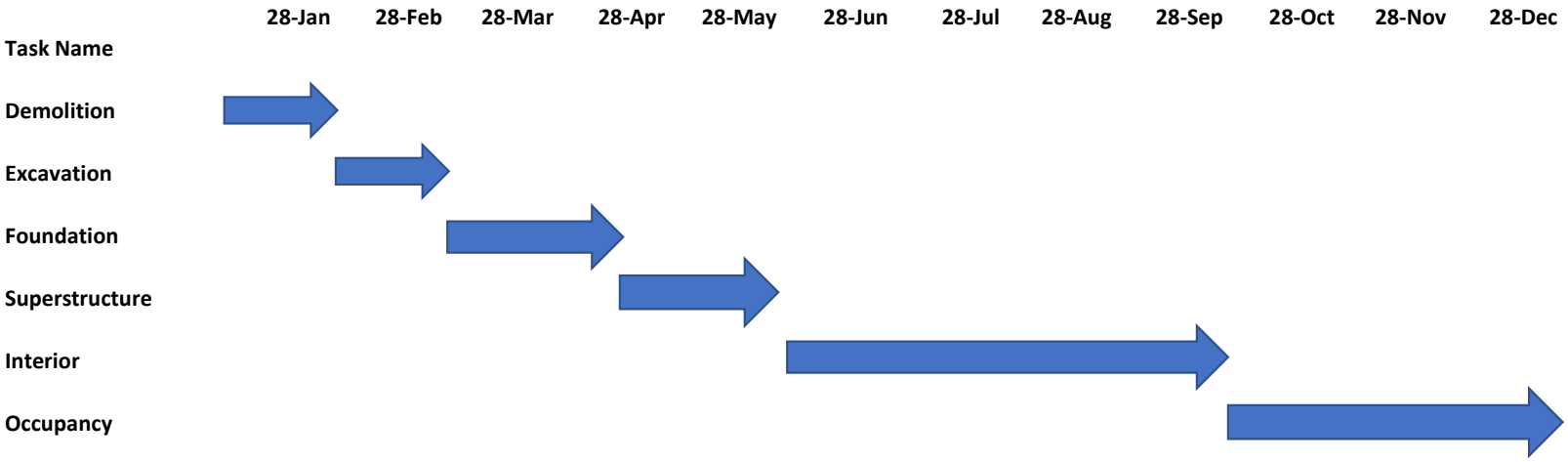
Furman Avenue Projected Development Site Site 4 Construction Schedule



Furman Avenue Projected Development Site Site 5 Construction Schedule



Furman Avenue Projected Development Site 6 Construction Schedule



- construction of building foundations (1.5 months);

- construction of superstructure, joists, and roof (1.5 months);

- interior fit-out work (4 months); and

- building occupancy (3 months).

Construction activities on each of the Non-Applicant owned Sites would occur sequentially in the order listed above (starting at the Sites closest to the Applicant-owned Site).

Project construction activities are expected to be typical for larger building construction projects in New York City. Construction activities would predominantly occur Monday through Friday, although limited delivery of certain critical pieces of equipment (e.g., cranes) may be necessary on weekend days if required in order to minimize traffic disruptions. Any weekend work would be contingent upon any conditions that may be imposed by City agencies that approve and monitor construction activities such as the NYC Department of Buildings (DOB) and the NYC Department of Transportation (DOT). DOB also regulates the permitted hours of construction. In accordance with those regulations, typical construction activities in New York City begin no earlier than 7 AM during the week, and workers typically arrive and begin to prepare work areas between 6 and 7 AM. The standard weekday construction workday ends by 3:30 PM with an occasional extended shift until 6 PM.

Potential Construction Impacts

In accordance with the 2020 *CEQR Technical Manual*, the proposed project was reviewed to determine whether further analysis of the proposed construction activities is needed for any technical area, as follows.

Transportation

According to the *CEQR Technical Manual*, a number of factors should be considered before determining whether a preliminary assessment of the effect of construction on transportation is needed including:

• *Whether the project's construction would be located in a Central Business District (CBD) or along an arterial or major thoroughfare;*

• *Whether the project's construction activities would require closing, narrowing, or otherwise impeding moving lanes, roadways, key pedestrian facilities, parking lanes and/or parking spaces, bicycle routes and facilities, bus lanes or routes, or access points to transit; and*

• *Whether the project would involve construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap, and last for more than two years overall.*

Three of the six projected buildings would be constructed along White Plains Road, a major thoroughfare (Projected Development Sites 1, 3, and 4). White Plains Road is a two-way north-south roadway that operates with two travel lanes in each direction and curbside parking on both sides of the street. It is not anticipated that the construction on Projected Development Sites 1 and 4 would require the closing of any transportation elements adjacent to these Sites as access to these Sites can also be obtained from Furman Avenue and East 240th Street which are minor streets adjoining these Sites. In addition, it is anticipated that there would be adequate space on Projected Development Site 3 to accommodate construction vehicles without blocking any transportation elements along White Plains Road.

It is not anticipated that the construction of the remaining Projected Development Sites, including Sites 2, 5, and 6, would require the closing, narrowing, or otherwise impeding moving lanes, roadways, key pedestrian facilities, parking lanes and/or parking spaces, bicycle routes and facilities, bus lanes or routes, or access points to transit. Construction access to Projected Development Site 5 can be obtained from both Furman Avenue and East 240th Street. In addition, it is anticipated that there would be adequate space on Projected Development Sites 2 and 6 to accommodate construction vehicles without blocking any transportation elements along Furman Avenue.

Although the project would involve construction on multiple Development Sites in the same geographic area and is anticipated to last more than two years overall, it is not anticipated that the construction on each Development Site would overlap as described in the proposed construction schedule above.

On the basis of the above, construction of the proposed project would not be expected to result in significant adverse impacts on transportation.

Air Quality and Noise

According to the *CEQR Technical Manual*, an assessment of air quality and noise for construction activities is likely not warranted if the project's construction activities:

- *Are considered short-term (less than two years);*
- *Are not located near sensitive receptors; and*
- *Do not involve construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final built-out.*

Construction of the proposed development on Projected Development Site 1 would be completed in two years or less. Although it is not known when construction on the Non-Applicant owned Sites would occur, it is assumed that these Sites would be developed over a five-year period resulting in a total construction period of approximately seven years for the six Projected Development Sites.

There are few sensitive receptors located near the six Projected Development Sites. The area in the immediate vicinity of the Project Area is primarily characterized by commercial, manufacturing, transportation/utilities, and automotive/parking uses. The MTA 239th Street Yard and Maintenance Shop, which contains storage of trains not in use, is located directly east of the Project Area across Furman Avenue. The area to the west is separated from the Project Area by the 100-foot wide, four travel lane White Plains Road which also contains the overhead elevated tracks for the number 2 and 5 subway trains. There is a row of five 1- and 2-family homes that would remain on Block 5084. The one-family home on Lot 53 would adjoin Projected Development Sites 4 and 6 and the two-family home on Lot 57 would adjoin Projected Development Site 2. The remaining homes on Lots 54 through 56 would not adjoin any of the Projected Development Sites and would be separated from them by a 30-foot wide vacant mid-block parcel plus the rear yards behind the homes on these lots. As exterior construction activities on Projected Development Sites 2, 4, and 6 would be limited to approximately 5 months per Site, significant air quality and noise impacts to sensitive receptors are anticipated to be minimal.

It is not known when construction on the Non-Applicant owned Sites would actually occur. As discussed above, it is anticipated that construction on each of the Non-Applicant owned Sites would occur sequentially starting at the Sites closest to the Applicant-owned Site. Therefore, the Proposed Actions could potentially result in the construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out.

Any air quality and noise impacts from the construction on Projected Development Sites 2 through 6 on each other or on Projected Development Site 1 (which would complete construction before construction would start on any other Sites) would be mitigated by the relatively short periods of exterior construction activities that would occur on these Sites and the likelihood that exterior construction activities would be separated by periods of time where no such activities would occur. The exterior construction and demolition periods for Projected Development Sites 2 through 6 would typically be 5 months per Site. No significant noise or air quality impacts would be anticipated from construction activities occurring within the interiors of the buildings.

The *CEQR Technical Manual* states that if a project meets one or more of the criteria above, a preliminary air quality or noise assessment is not automatically required. Instead, various factors should be considered, such as the types of construction equipment (*e.g.*, gas, diesel, electric), the nature and extent of any commitment to use the Best Available Technology (BAT) for construction equipment, the physical relationship of the Project Site to nearby sensitive receptors, the type of construction activity, and the duration of any heavy construction activity. These measures are discussed below.

Demolition, excavation, and foundation activities, which often generate the highest levels of air emissions, would be temporary and limited in duration and would take approximately 2.8 years (34 months) out of a total construction period of 7 years to complete. These activities would be spread out over six separate locations in the Project Area and would not overlap as discussed above. In addition, any heavy equipment associated with the construction of the buildings (such as a crane) would operate from at least six different locations during construction.

Air Quality

The project would make use of the Best Available Technology to minimize impacts to sensitive receptors in the vicinity of the Projected Development Sites as further discussed below.

As with most construction projects in the City, the proposed project would require the operation of several pieces of diesel equipment at one time during the heavier periods of construction, such as demolition and excavation. The Applicant would implement the following measures that would minimize air quality and noise impacts on the surrounding community.

• *Diesel Equipment Reduction.* Construction of the proposed project would minimize the use of diesel engines and use electric engines, to the extent practicable. This would reduce the need for on-site generators, and require the use of electric engines in lieu of diesel where practicable.

• *Clean Fuel.* To the extent practicable, ultra-low sulfur diesel (ULSD) would be used for diesel engines on the Projected Development Sites.

• *Best Available Tailpipe Reduction Technologies.* To the extent practicable, non-road diesel engines with a power rating of 50 horsepower (hp) or greater would utilize the best available tailpipe (BAT) technology for reducing diesel particulate matter (DPM) emissions. Diesel particle filters (DPF) have been identified as being the tailpipe technology currently proven to have the highest PM reduction capability.

To the extent practicable, construction contracts would specify that all diesel non-road engines rated at 50 hp or greater would utilize DPFs, either installed on the engine by the original equipment manufacturer (OEM) or retrofit with a DPF verified by EPA or the California Air Resources Board, and may include active DPFs if necessary; or other technology proven to reduce DPM by at least 90 percent.

• *Utilization of Newer Equipment.* EPA's Tier 1 through 4 standards for non-road engines regulate the emission of criteria pollutants from new engines, including PM, CO, NOx, and hydrocarbons (HC). To the extent practicable, all non-road construction equipment in the project would meet at least the Tier 2 emissions standard, and construction equipment meeting Tier 3 and/or Tier 4 emissions standards would be used where

conforming equipment is widely available, and the use of such equipment is practicable.

• *Dust Control.* Fugitive dust control plans will be implemented as part of the construction process. For example, stabilized truck exit areas would be established for washing off the wheels of all trucks that exit the construction sites. Truck routes within the Sites would be watered as needed to avoid the re-suspension of dust. All trucks hauling loose material will be equipped with tight fitting tailgates and their loads securely covered prior to leaving the Sites. In addition to regular cleaning by the City, streets adjacent to the Site would be cleaned as frequently as needed by the construction contractor. Water sprays will be used for all transfer of spoils to ensure that materials are dampened as necessary to avoid the suspension of dust into the air.

• *Restrictions on Vehicle Idling.* In addition to adhering to local laws restricting unnecessary idling on roadways, on-site vehicle idle time will also be restricted to three minutes, to the extent practicable, for all equipment and vehicles that are not using their engines to operate a loading, unloading, or a processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine.

Overall, these air emission control commitments would significantly reduce DPM emissions to a level otherwise achieved by applying the currently defined best available control technologies under NYC Local Law 77, which are required only for publically funded City capital projects. In addition as stated in the *CEQR Technical Manual*, all the necessary measures would be implemented to ensure compliance with the NYC Air Pollution Control Code regulating construction-related dust emissions. Based on the project size and the construction work involved, construction activities for the proposed project would not be considered out of the ordinary or exceptional in terms of intensity. Therefore, based on above and with the implementation of an emissions control program, the proposed project would not result in any significant adverse impacts on air quality.

Noise

While increases in ambient noise levels due to construction exceeding the *CEQR* impact criteria for two years or less may be noisy and intrusive, they are not considered to be significant adverse noise impacts. As described above, demolition, excavation, and foundation activities, which are the noisiest construction activities, would be temporary and limited in duration and would take approximately 2.8 years (34 months) out of a total construction period of 7 years to complete. These activities would be spread out over six separate locations in the Project Area and would not overlap. Projected Development Site 1 would require 9 months of exterior construction activities while exterior construction activities on the remaining Projected Development Sites 2 through 6 would be limited to approximately 5 months.

Construction noise is regulated by the NYC Noise Control Code and by EPA's noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. If weekend or after hour work is necessary, permits would be required to be obtained, as specified in the NYC Noise Control Code. In addition, the Applicant would commit to a preparing a noise control plan that would be implemented during project construction. The measures to be contained in the plan would avoid noise impacts on the community. The plan would be prepared to be compliant with the NYC Noise Control Code (which requires a "Construction Noise Mitigation Plan") and would include such measures as construction noise source controls, path controls, and receiver controls. With these measures in place, no significant noise impacts are expected to occur as a result of the project construction.

Historic and Cultural Resources

No construction activities would occur within 400 feet of a historic resource as no such resources are located within this distance from the Affected Area. LPC has determined that no historic or archaeological resources are located within the Project Area or the surrounding 400-foot radius project study area.

Hazardous Materials

As explained in the Hazardous Materials section above, the Phase I report conducted for Projected Development Site 1 has not identified any evidence of a Recognized Environmental Condition (REC) in connection with the Subject Property. A Phase II Environmental Site Investigation (ESI) was prepared for Projected Development Site 1 and DEP has requested the preparation of a RAP including specifications for a vapor barrier, a CHASP, a Community Air Monitoring Plan, and other related items. As further testing may be required if the foundation of the building will be deeper than that assumed for the current illustrative plans, the Applicant is requesting an E Designation so that any further testing can be conducted after project approval.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-656) will be assigned for hazardous materials on the following properties:

Block 5084, Lot 63

The text for the (E) designations related to hazardous materials is 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.

With this (E) designation in place, no significant adverse construction impacts related to hazardous materials are expected, and no further analysis is warranted. There is no potential for the Proposed Actions to result in significant adverse construction impacts related to hazardous materials on Projected Development Site 1.

Projected Development Sites 2 through 6

Projected Development Sites 2 through 6 are not under the control or ownership of the Applicant and it is therefore not feasible to conduct subsurface testing on these Projected Development Sites.

An "E" designation for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these properties. These applicant(s) should be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-656) will be assigned for hazardous materials on the following properties:

Block 5084, Lots 35, 39, 41, 49, 58, 59, 60, and 61

The text for the (E) designations related to hazardous materials is 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.

With this (E) designation in place, no significant adverse construction impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Actions to result in significant adverse construction impacts related to hazardous materials on Projected Development Sites 2 through 6.

Natural Resources

According to the *CEQR Technical Manual*, a construction assessment is not needed for natural resources unless the construction activities would disturb a site or be located adjacent to a site containing natural resources. The Projected Development Sites and the adjacent properties are fully developed and do not contain any natural resources. Therefore, there is no potential for significant adverse construction impacts on natural resources.

Open Space, Socioeconomic Conditions, Community Facilities, Land Use and Public Policy, Neighborhood Character, and Infrastructure

According to the *CEQR Technical Manual*, a preliminary construction assessment is generally not needed for these technical areas unless the following are true:

- *The construction activities are considered "long-term" (more than 2 years);*

- *Short-term construction activities would not directly affect a technical area, such as impeding the operation of a community facility.*

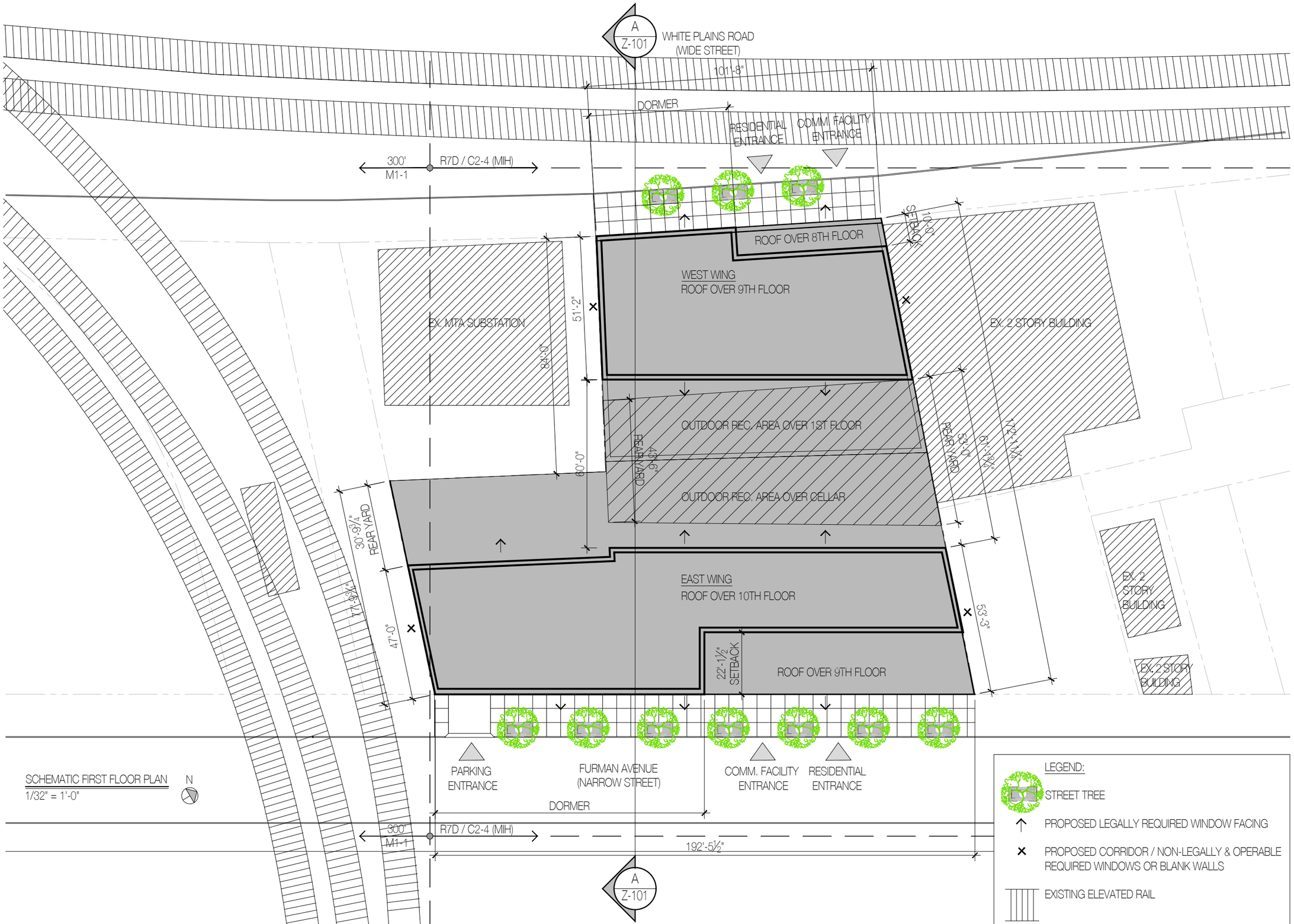
As discussed above, construction activities on the Applicant controlled parcel would be considered short term as they would occur over a period of 24 months or less. Although construction activities on the non-Applicant controlled parcels would extend the total construction period to more than two years (5 years), construction on these Sites would not have any significant direct effects on open space areas, socioeconomic conditions, community facilities, or infrastructure conditions, and would not have cumulative impacts on land use or neighborhood character. Therefore, construction of the proposed project would not be expected to result in any significant adverse construction impacts on these technical areas.

Conclusion

On the basis of the above analysis, the Proposed Actions would not have any potentially significant adverse construction impacts, and further analysis would not be warranted.

APPENDIX

Architectural Plans



SCHEMATIC FIRST FLOOR PLAN
1/32" = 1'-0"

N

PROPOSED NEW DEVELOPMENT FOR:

4541 FURMAN AVENUE

BRONX, NY

BLOCK: 5084 LOT: 63

ARCHITECT:

AUFGANG ARCHITECTS LLC
74 LAFAYETTE AVE.
SUFFERN, NY
INFO@AUFGANG.COM 845.368.0004

AUFGANG ARCHITECTS

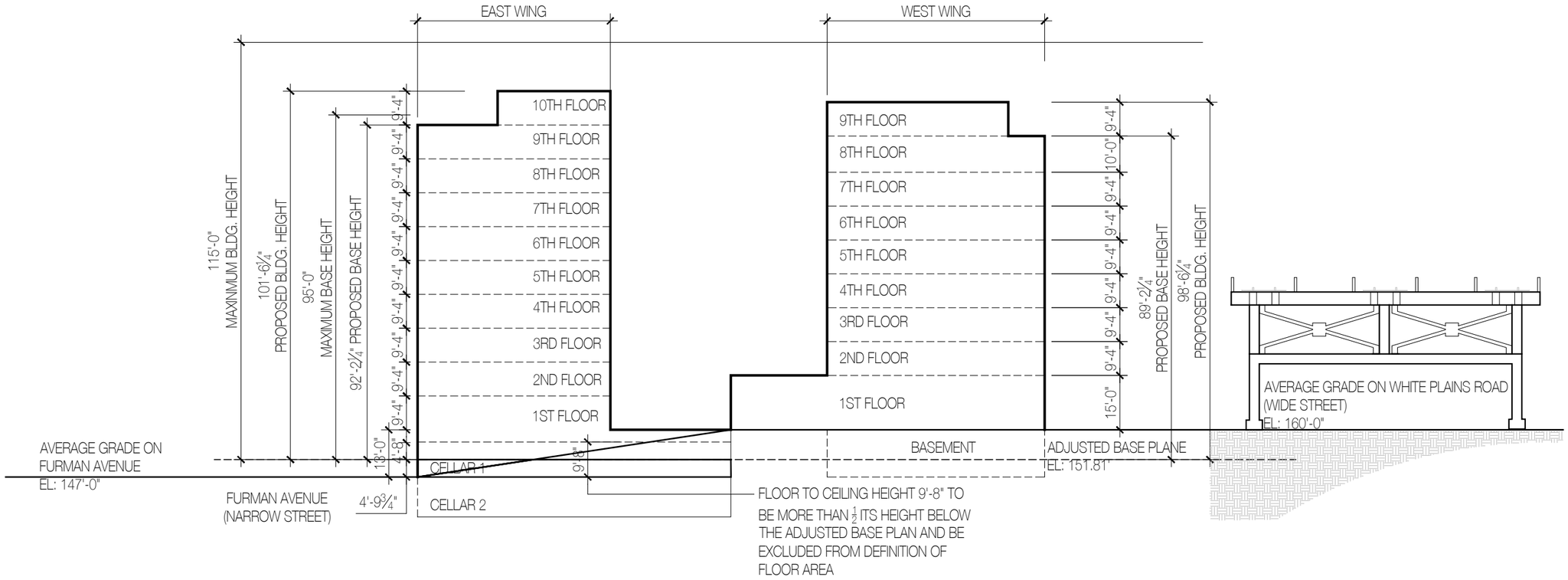
DATE	SUBMISSIONS / REVISIONS
09.28.21	PROGRESS SET
09.20.21	PROGRESS SET
10.23.19	PROGRESS SET
10.17.19	PROGRESS SET
04.29.19	PROGRESS SET
03.13.19	PROGRESS SET
01.04.19	PROGRESS SET
11.01.18	PROGRESS SET

SHEET TITLE:

SCHEMATIC PLOT PLAN



ISSUE DATE: 06/19/19
PROJECT NO: P-19025
PROPOSED ZONING: R7D / C2-4 (MIH)
EXISTING ZONING: M1-1
SCALE: AS NOTED
SHEET NO: 01OF 7
DRAWING NO: Z-100.00



SCHEMATIC HEIGHT DIAGRAM " A-A "
1/32" = 1'-0"

BLDG. "A"= 5780SF = 37%
BLDG. "B"= 9714SF = 63%

EL: 160' x 37% = 59.2'
EL: 147' x 63% = 92.61'
ADJUSTED BASE PLANE: 59.2' + 92.61' = 151.81'

(CELLAR MORE THAN ½ BELOW BASE PLANE AS PER DEFINITION)

PROPOSED NEW DEVELOPMENT FOR:

4541 FURMAN AVENUE

BRONX, NY

BLOCK: 5084 LOT: 63

ARCHITECT:

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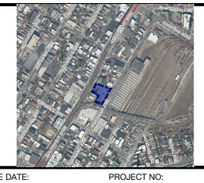
01.04.19	PROGRESS SET
11.01.18	PROGRESS SET

SHEET TITLE:

SCHEMATIC HEIGHT DIAGRAM



ISSUE DATE: 06/19/19
PROJECT NO: P-19025
PROPOSED ZONING: R7D / C2-4 (MIH)
EXISTING ZONING: M1-1
SCALE: AS NOTED
SHEET NO: 02 OF 7
DRAWING NO: Z-101.00



AERIAL MAP

SITE LOCATION



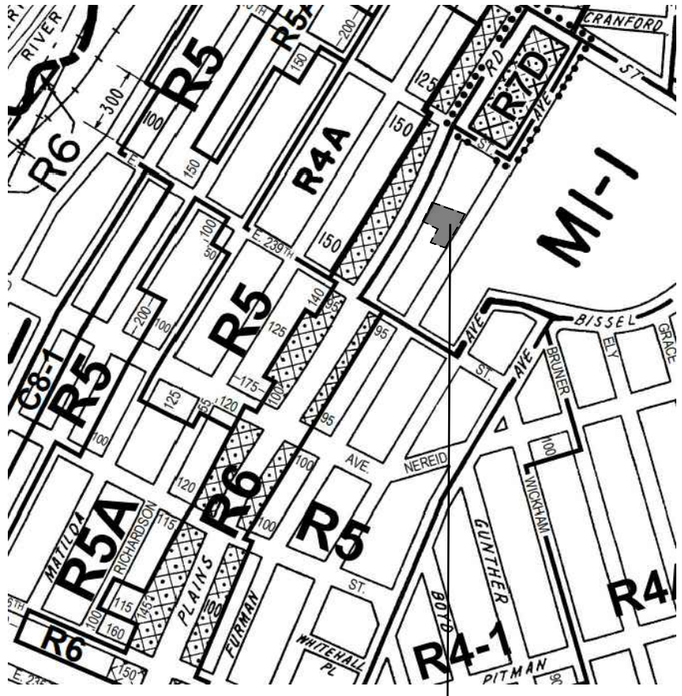
TAX MAP

SITE LOCATION



LAND USE MAP

SITE LOCATION



ZONING MAP

SITE LOCATION

PROPOSED NEW DEVELOPMENT FOR:

4541 FURMAN AVENUE

BRONX, NY

BLOCK: 5084 LOT: 63

ARCHITECT:

AUFGANG ARCHITECTS LLC
74 LAFAYETTE AVE.
SUFFERN, NY
INFO@AUFGANG.COM 845.368.0004

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03.13.19	PROGRESS SET
01.04.19	PROGRESS SET
11.01.18	PROGRESS SET

SHEET TITLE:

MAPS



ISSUE DATE: 06/19/19

PROJECT NO: P-19025

PROPOSED ZONING: R7D / C2-4 (MIH)

EXISTING ZONING: M1-1

SCALE: AS NOTED

SHEET NO: 03 OF 7

DRAWING NO: Z-102.00

ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	5084	REZONE R7D / C2-4 (MIH)	CONST. CLASS 1-B 2HR RATED	
Lots:	63	INCLUDED IN THE TRANSIT ZONE	BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	4541 FURMAN AVENUE		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	M1-1		BUILDING TO BE DESIGNED	
Proposed Zoning:	R7D / C2-4 (MIH)		PER 2014 NYC BUILDING CODE	
	(INCLUSIONARY HOUSING)		PER NYC ENERGY CODE	
Community District:	12, BRONX			
Zoning Section Map:	2a			
Zoning Lot Area	24,729.33			

ZR - Section	Title	Descriotion				Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
22-10	USES									
32-00		USE GROUP 1, 2, 3, 4, 5, 6, 6c, 7, 8, 9 & 14						2 & 6		OK
23-011	QUALITY HOUSING									
	PROGRAM	R7D / C2-4 (MIH)						YES		OK
23-32	MIN LOT AREA	1,700								
		INTERIOR LOT / THROUGH LOT	24,729.33							
77-11	FAR	R7D / C2-4 (MIH)								
23-154	R7D	RESIDENTIAL				5.6		5.23		OK
33-121	C2-4	COMMERCIAL				2.0		0.29	5.5	OK
33-121	C2-4	COMMUNITY FACILITY				4.2		0.00		OK
	FLOOR AREA									
23-154		RESIDENTIAL								
		24,729.33	X	5.6	=	138,484.25		129,398.00		OK
33-121		COMMERCIAL								
		24,729.33	X	2.0	=	49,458.66		7,146.00		OK
33-121		COMMUNITY FACILITY								
		24,729.33	X	4.2	=	103,863.19		0.00		OK
										11,098.00
										EXCLUDED FROM DEFINITION OF FLOOR AREA
	TOTAL FLOOR AREA									
23-154		24,729.33	X	5.6	=	138,484.25		136,544.00		OK
23-153	LOT COVERAGE									
		INTERIOR LOT / THROUGH LOT		65%		16,074.06		15,510.00		OK
	YARD REGULATION									
23-45		FRONT YARD				NONE		NONE		OK
23-46		SIDE YARD				NONE		NONE		OK
23-534		REAR YARD				23'-11"		30'-9 3/4"		OK
23-532		REQUIRED REAR YARD EQUIVALENT								OK
23-531, 33-281		EXCEPTED TROUGH LOTS				43'-6"		60'-0"		OK
	HEIGHT & SETBACKS	R7D / C2-4 (MIH)								
23-664 / 12-01		MIN BASE				60'-0"		92'-2 1/4"		OK - BASE PLANE DEFINITION (C)
23-664 / 12-01		MAX BASE				95'-0"		92'-2 1/4"		OK - BASE PLANE DEFINITION (C)
23-664 / 12-01		MAX BUILDING HEIGHT				115'-0" / 11		101'-6 1/4" / 10		OK - BASE PLANE DEFINITION (C)
23-692, 35-23	HEIGHT LIMITATION FOR									
	NARROW BLDGS.	STREET WALL LESS THAN 45' IN WIDTH						N/A		R7-2, R7D, R7X, R8, R9 & R10
	STREET WALL LOCATION									
23-661		STREET WALL SHALL BE NO CLOSER TO STREET LINE								
		THAN THE CLOSEST STREET WALL						YES		OK
	SETBACKS									
23-662		SETBACK @ WIDE STREETS				10'-0"		10'-0"		OK
23-662		SETBACK @ NARROW STREETS				15'-0"		22'-1"		OK
	PERMITTED OBS									
23-62		PERMITTED OBSTRUCTIONS - DORMERS						YES		OK

PROPOSED NEW DEVELOPMENT FOR:

4541 FURMAN AVENUE

BRONX, NY

BLOCK: 5084 LOT: 63

ARCHITECT:

AUFGANG ARCHITECTS LLC
74 LAFAYETTE AVE.
SUFFERN, NY
INFO@AUFGANG.COM 845.368.0004

AUFGANG ARCHITECTS

DATE	SUBMISSIONS / REVISIONS
09.28.21	PROGRESS SET
09.20.21	PROGRESS SET
10.23.19	PROGRESS SET
10.17.19	PROGRESS SET
04.29.19	PROGRESS SET
03.13.19	PROGRESS SET
01.04.19	PROGRESS SET
11.01.18	PROGRESS SET

SHEET TITLE:

ZONING CALCULATION



ISSUE DATE: 06/19/19
PROJECT NO: P-19025
PROPOSED ZONING: R7D / C2-4 (MIH)
EXISTING ZONING: M1-1
SCALE: AS NOTED
SHEET NO: 04 OF 7
DRAWING NO: Z-103.00

23-22	DENSITY							
		R7D / C2-4 (MIH)	680		193		150	OK
23-84	OUTER COURT REG.							
		NARROW / WIDE OUTER COURT					N/A	OK
23-851	INNER COURT REG.							
		1,200 SQ. FT. (MIN) AND 30' MIN DIMENSION					YES	OK
23-87	PERMITTED OBS							
	IN COURTS	FENCE, OPEN TERRACES, SOLAR ENERGY SYSTEMS, ETC.					YES	OK
	ACCESSORY OFF-STREET PARKING							SITE LOCATED IN A TRANSIT ZONE
		R7D						
25-251	100% ALL INCOME RESTRICTIVE UNITS	150	15%	=	0*		22	* PROPOSED TRANSIT ZONE EXTENSION
		C2-4						22
36-21 / 36-232		COMMERCIAL	1 X 1000		0		0	
36-21		COMMUNITY FACILITY	1 X 1000		0		0	
25-51	PARKING LOCATION							
		ON SITE					YES	OK
	BICYCLE PARKING							
36-711		RESIDENTIAL	50%	=	75		75	OK
36-711		COMMERCIAL	1X10,000	=	1		1	77 OK
36-711		COMMUNITY FACILITY	1X10,000	=	1		1	
36-62	REQ. OFF-STREET LOADING BERTH							
		RESIDENTIAL	NOT REQUIRED		0		0	OK
		COMMERCIAL	MORE THAN 8,000 SF.		0		0	0 OK
	LOADING BERTH REQ.							
36-683		LOCATION - 60' FROM RESIDENTIAL DISTRICT BOUDARY					YES	OK
36-684		SURFACING - ASPAHALT					YES	OK
36-685		SCREENING - PLANTINF STRIP OR WALL BARRIER					YES	OK

11,956 SQ. FT. OF AREA PROPOSED	0* PARKING SPACES REQUIRED	543 SQ. FT. PER CAR PROVIDED (ATT. PARKING REQ.)

PROPOSED NEW DEVELOPMENT FOR:

4541 FURMAN AVENUE

BRONX, NY

BLOCK: 5084 LOT: 63

ARCHITECT:

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03.13.19	PROGRESS SET
01.04.19	PROGRESS SET
11.01.18	PROGRESS SET

SHEET TITLE: ZONING CALCULATION & SQUARE FOOTAGE BREAKDOWN



ISSUE DATE: 06/19/19

PROJECT NO: P-19025

PROPOSED ZONING: R7D / C2-4 (MIH)

EXISTING ZONING: M1-1

SCALE: AS NOTED

SHEET NO: 05 OF 7

DRAWING NO: Z-104.00

WEST WING BUILDING					QUALITY HOUSING PROGRAM DEDUCTIONS					
FLOOR	GROSS SQ. FT.	COMMERCIAL SQ. FT.	PARKING / LOADING SQ. FT.	RESIDENTIAL SQ. FT.	CORRIDOR SQ. FT.	REFUSE SQ. FT.	REC. SQ. FT.	LAUNDRY SQ. FT.	MECH. SQ. FT.	TOTAL ZONING RESIDENTIAL SQ. FT.
B	5,780.00			5,780.00					2,100.00	3,680.00
1	8,891.00	7,146.00		1,745.00					0.00	1,745.00
2	5,780.00			5,780.00	591.00	12.00	730.00	319.00	0.00	4,128.00
3	5,780.00			5,780.00	591.00	12.00			0.00	5,177.00
4	5,780.00			5,780.00	591.00	12.00			0.00	5,177.00
5	5,780.00			5,780.00	591.00	12.00			0.00	5,177.00
6	5,780.00			5,780.00	591.00	12.00			0.00	5,177.00
7	5,780.00			5,780.00	591.00	12.00			0.00	5,177.00
8	5,780.00			5,780.00	591.00	12.00			0.00	5,177.00
9	5,254.00			5,254.00	591.00	12.00			0.00	4,651.00
TOTAL	60,385.00	7,146.00	0.00	53,239.00	4,728.00	96.00	730.00	319.00	2,100.00	45,266.00

EAST WING BUILDING					QUALITY HOUSING PROGRAM DEDUCTIONS					
FLOOR	GROSS SQ. FT.	COMM. FACILITY SQ. FT.	PARKING / LOADING SQ. FT.	RESIDENTIAL SQ. FT. *	CORRIDOR SQ. FT.	REFUSE SQ. FT.	REC. SQ. FT.	LAUNDRY SQ. FT.	MECH. SQ. FT.	TOTAL ZONING RESIDENTIAL SQ. FT.
C2	15,190.00		10,190.00	5,000.00					5,000.00	0.00
C1	15,190.00	* 11,098.00	1,766.00	* 2,326.00					0.00	0.00
1	9,730.00			9,730.00	997.00	12.00	600.00	386.00	0.00	7,735.00
2	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
3	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
4	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
5	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
6	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
7	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
8	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
9	9,730.00			9,730.00	997.00	12.00			0.00	8,721.00
10	7,638.00			7,638.00	997.00	12.00			0.00	6,629.00
TOTAL	125,588.00	11,098.00	11,956.00	102,534.00	9,970.00	120.00	600.00	386.00	5,000.00	84,132.00

QUALITY HOUSING DEDUCTIONS- BLDG TOTALS											
FLOOR	GROSS SQ. FT.	COMMERCIAL	COM. FACILITY	PARKING / LOADING SQ. FT.	RESIDENTIAL SQ. FT.	CORRIDOR SQ. FT.	REFUSE SQ. FT.	REC. SQ. FT.	LAUNDRY SQ. FT.	MECH. SQ. FT.	TOTAL ZONING RESIDENTIAL SQ. FT.
C2	15,190.00	0.00		10,190.00	5,000.00	0.00	0.00	0.00	0.00	5,000.00	0.00
C1/B	20,970.00	0.00	*11,098.00	* 1,766.00	8,106.00	0.00		0.00	0.00	2,100.00	3,680.00
1	18,621.00	7,146.00			11,475.00	997.00	12.00	600.00	386.00	0.00	9,480.00
2	15,510.00				15,510.00	1,588.00	24.00	730.00	319.00	0.00	12,849.00
3	15,510.00				15,510.00	1,588.00	24.00			0.00	13,898.00
4	15,510.00				15,510.00	1,588.00	24.00			0.00	13,898.00
5	15,510.00				15,510.00	1,588.00	24.00			0.00	13,898.00
6	15,510.00				15,510.00	1,588.00	24.00			0.00	13,898.00
7	15,510.00				15,510.00	1,588.00	24.00			0.00	13,898.00
8	15,510.00				15,510.00	1,588.00	24.00			0.00	13,898.00
9	14,984.00				14,984.00	1,588.00	24.00			0.00	13,372.00
10	7,638.00				7,638.00	997.00	12.00			0.00	6,629.00
TOTAL	185,973.00	7,146.00	11,098.00	11,956.00	150,773.00	14,698.00	216.00	1,330.00	705.00	7,100.00	129,398.00

* EXCLUDED FROM DEFINITION OF FLOOR AREA.
BASE PLANE DEFINITION (C) / % OF LOT COVERAGE

PROPOSED NEW DEVELOPMENT FOR:

4541 FURMAN AVENUE

BRONX, NY

BLOCK: 5084 LOT: 43

ARCHITECT:
AUFGANG ARCHITECTS LLC
74 LAFAYETTE AVE.
SUFFERN, NY
INFO@AUFGANG.COM 845.368.0004

AUFGANG ARCHITECTS

DATE	SUBMISSIONS / REVISIONS
09.28.21	PROGRESS SET
09.20.21	PROGRESS SET
10.23.19	PROGRESS SET
10.17.19	PROGRESS SET
04.29.19	PROGRESS SET
03.13.19	PROGRESS SET
01.04.19	PROGRESS SET
11.01.18	PROGRESS SET

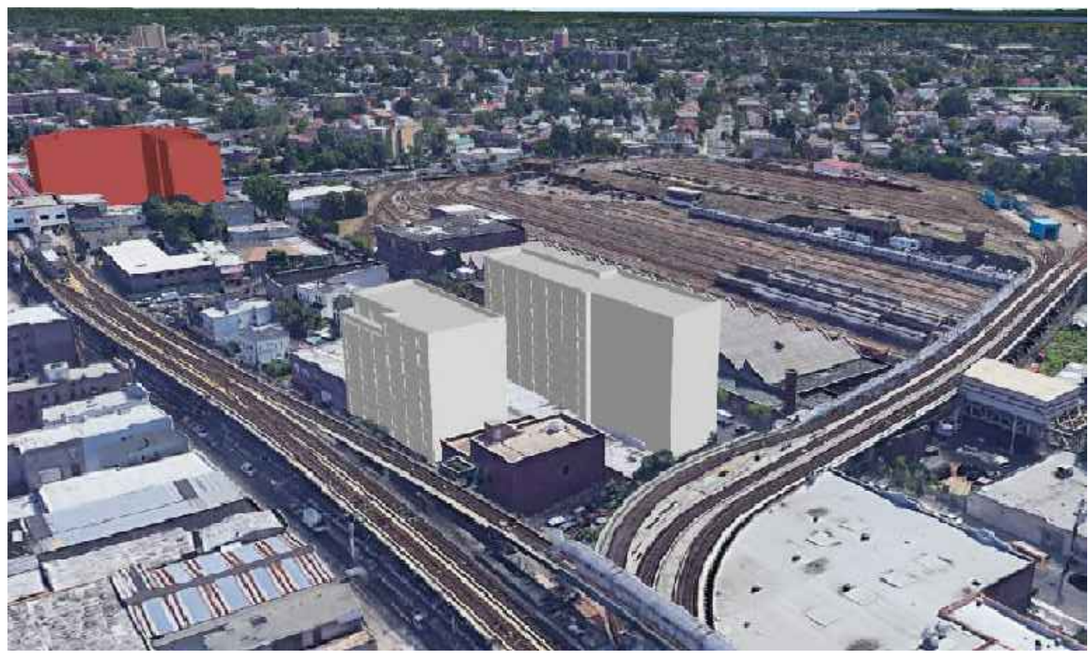
SHEET TITLE: ZONING CALCULATION & SQUARE FOOTAGE BREAKDOWN



ISSUE DATE: 06/19/19
PROJECT NO: P-19025
PROPOSED ZONING: R7D / C2-4 (MIH)
EXISTING ZONING: M1-1
SCALE: AS NOTED
SHEET NO: 06 OF 7
DRAWING NO: Z-105.00



1



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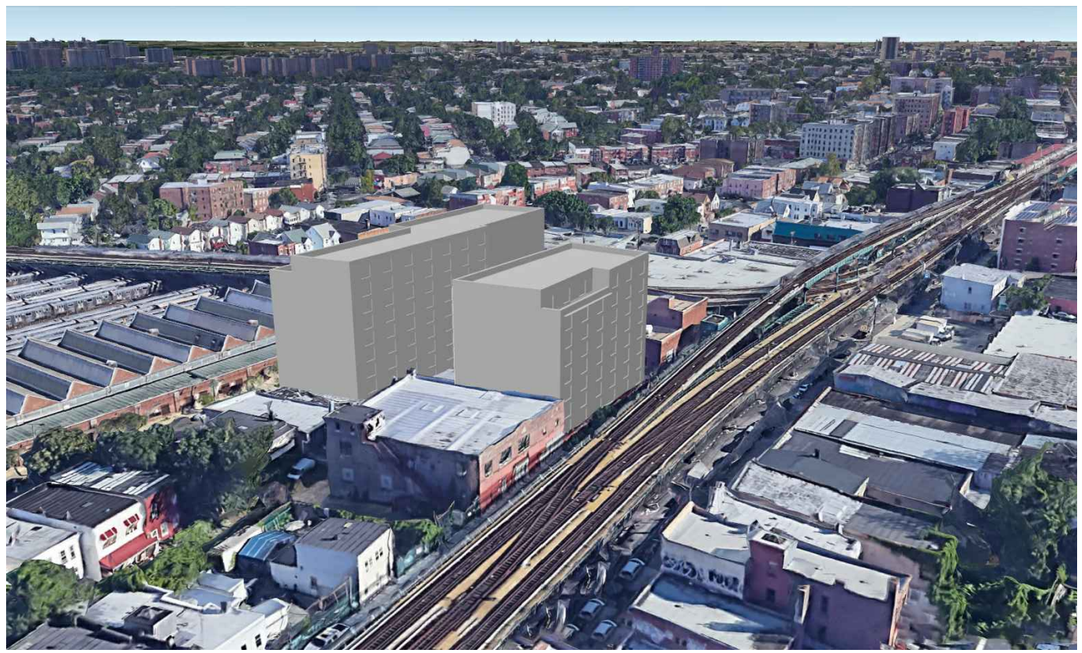

3



KEY PLAN

PROPOSED NEW
DEVELOPMENT FOR:

4541 FURMAN AVENUE

BRONX, NY

BLOCK: 5084 LOT: 63

ARCHITECT:

AUFGANG ARCHITECTS LLC
74 LAFAYETTE AVE.
SUFFERN, NY
INFO@AUFGANG.COM 845.368.0004

AUFGANG ARCHITECTS

DATE	SUBMISSIONS / REVISIONS
09.28.21	PROGRESS SET
09.20.21	PROGRESS SET
10.23.19	PROGRESS SET
10.17.19	PROGRESS SET
04.29.19	PROGRESS SET
03.13.19	PROGRESS SET
01.04.19	PROGRESS SET
11.01.18	PROGRESS SET

SHEET TITLE:

SCHEMATIC
3D MASSING



ISSUE DATE: 06/19/19
PROJECT NO: P-19025
PROPOSED ZONING: R7D / C2-4 (MIH)
EXISTING ZONING: M1-1
SCALE: AS NOTED
SHEET NO: 07 OF 7
DRAWING NO: Z-106.00



SCHEMATIC PLOT PLAN
SCALE: 1/32" = 1'-0"

N

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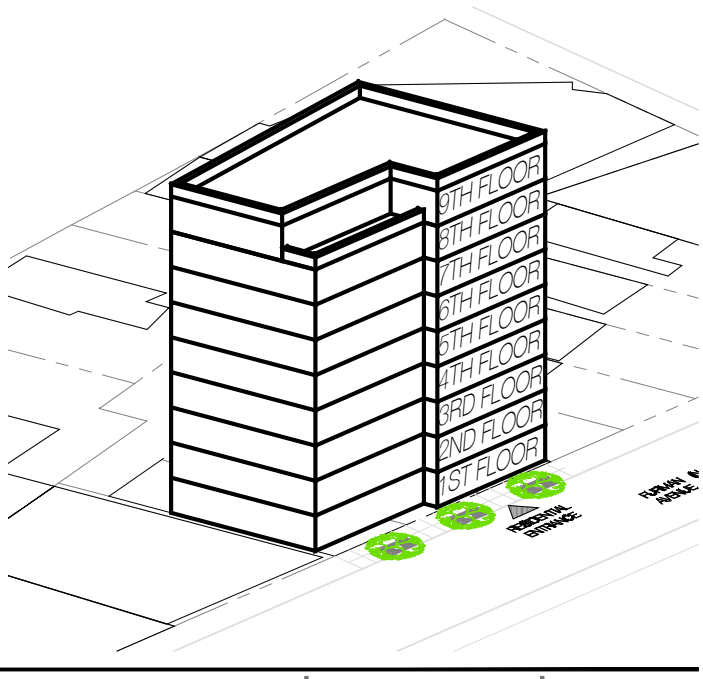
ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	5084	REZONE R7D / (MIH)	CONST. CLASS 1-B 2HR RATED	FRESH ZONE
Lots:	58, 59 & 60	INCLUDED IN THE TRANSIT ZONE	BUILDING CODE OCCUPANCY GROUP R-2	SIDEWALK CAFÉ
Street Address:	4567 FURMAN AVENUE		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	M1-1		BUILDING TO BE DESIGNED	
Proposed Zoning:	R7D / (MIH)		PER 2014 NYC BUILDING CODE	
	(INCLUSIONARY HOUSING)		PER NYC ENERGY CODE	
Community District:	12, BRONX			
Zoning Section Map:	2a			
Zoning Lot Area	5,602.00			

ZR - Section	Title	Descriotion	Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
22-10	USES						
32-00		USE GROUP 1, 2, 3, 4			2		OK
23-011	QUALITY HOUSING						
	PROGRAM	R7D / (MIH)			YES		OK
23-32	MIN LOT AREA	1,700					
		INTERIOR LOT / THROUGH LOT 5,602.00					
77-11	FAR	R7D / (MIH)					
23-154	R7D	RESIDENTIAL	5.6		5.60	5.6	OK
23-154	FLOOR AREA	RESIDENTIAL					
		5,602.00 X 5.6 =	31371.20		31371		OK
	TOTAL FLOOR AREA						
23-154		5,602.00 X 5.6 =	31371.20		31371		OK
23-153	LOT COVERAGE						
		INTERIOR LOT / THROUGH LOT 65%	3641.30		3,639		OK
	YARD REGULATION						
23-45		FRONT YARD	NONE		NONE		OK
23-46		SIDE YARD	NONE		NONE		OK
23-47 / 23-52		REAR YARD	18'-4 3/8"		18'-4 1/2"		OK
23-532		REQUIRED REAR YARD EQUIVALENT					OK
23-531, 33-281		EXCEPTED TROUGH LOTS	N/A		N/A		OK
	HEIGHT & SETBACKS	R7D / (MIH)					
23-664		MIN BASE	60'-0"		80'-0"		OK
23-664		MAX BASE	95'-0"		80'-0"		OK
23-664		MAX BUILDING HEIGHT	110'-0" / 11		90'-0" / 9		OK
	SETBACKS						
23-664		SETBACK @ WIDE STREETS	10'-0"		N/A		OK
23-664		SETBACK @ NARROW STREETS	15'-0"		15'-0"		OK
23-22	DENSITY						
		R7D 680	46		40		OK
	ACCESSORY OFF-STREET PARKING	R7D					
25-23 / 25-261	30	RESIDENTIAL MARKET RATE 50%	15		WAIVED	0	OK - (MARKET RATE)
25-251	10	RESIDENTIAL AFFORDABLE TRANSIT ZONE	0		0		OK - (AFFORDABLE)
	BICYCLE PARKING						
25-80		RESIDENTIAL 50% =	20		20	20	OK

QUALITY HOUSING DEDUCTIONS

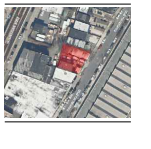
FLOOR	GROSS	RESIDENTIAL	REFUSE	REC. / LAUNDRY	MECH.	TOTAL ZONING RESIDENTIAL
	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.
C	3,639	3,639			3,639	0
1	3,639	3,639	12	907		2,720
2	3,639	3639	12			3,627
3	3,639	3639	12			3,627
4	3,639	3639	12			3,627
5	3,639	3639	12			3,627
6	3,639	3639	12			3,627
7	3,639	3639	12			3,627
8	3,639	3639	12			3,627
9	3,274	3274	12			3,262
TOTAL	36,025	36,025	108	907	3,639	31,371

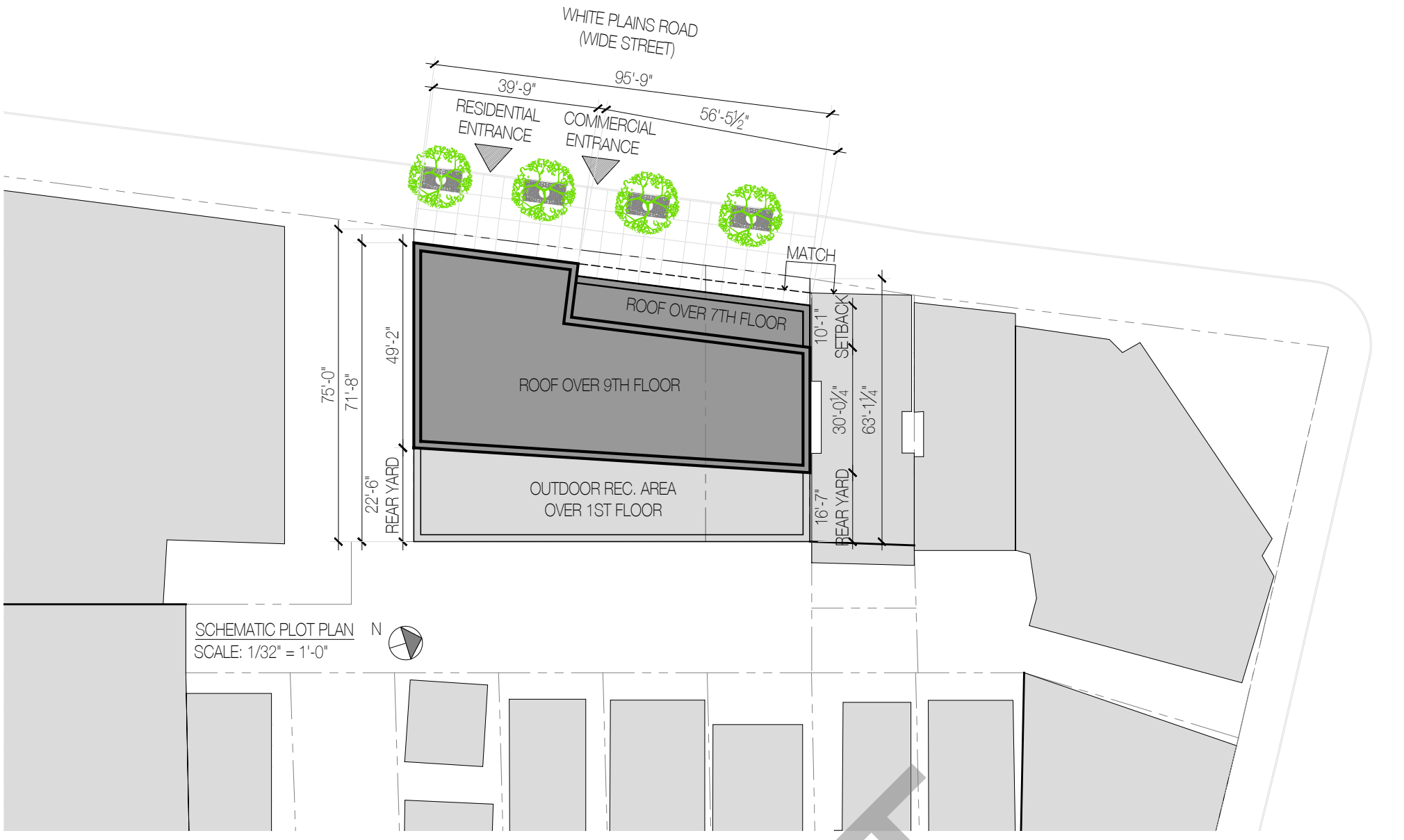


AUFGANG ARCHITECTS
74 Lafayette Ave., Suffern, NY 10901 tel: 845.368.0004 www.aufgang.com

4567 FURMAN AVENUE
BRONX, NY

BLOCK NO.: 5084
LOT NO.: 58, 59 & 60
DATE: 05.31.19
DRAWING NO: Z-100.00





SCHEMATIC PLOT PLAN
SCALE: 1/32" = 1'-0"

ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	5084	REZONE R7D / C2-4 (MIH)	CONST. CLASS 1-B 2HR RATED	FRESH ZONE
Lots:	35 & 39	INCLUDED IN THE TRANSIT ZONE	BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	4556 WHITE PLAINS ROAD		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	M1-1		BUILDING TO BE DESIGNED	
Proposed Zoning:	R7D / C2-4 (MIH)		PER 2014 NYC BUILDING CODE	
	(INCLUSIONARY HOUSING)		PER NYC ENERGY CODE	
Community District:	12, BRONX			
Zoning Section Map:	2a			
Zoning Lot Area	6,560.00			

ZR - Section	Title	Descriotion				Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
22-10	USES									
32-00		USE GROUP 1, 2, 3, 4, 5, 6, 6c, 7, 8, 9 & 14						2 & 6		OK
23-011	QUALITY HOUSING									
	PROGRAM	R7D / C2-4 (MIH)						YES		OK
23-32	MIN LOT AREA	1,700								
		INTERIOR LOT / THROUGH LOT			6,560.00					
77-11	FAR	R7D / C2-4 (MIH)								
23-154	R7D	RESIDENTIAL				5.6		4.90	5.6	OK
33-121	C2-4	COMMERCIAL				2.0		0.70		OK
	FLOOR AREA									
23-154		RESIDENTIAL								
		6,560.00	X	5.6	=	36736.00		32165		OK
33-121		COMMERCIAL								
		6560.00	X	2.0	=	13120		4571		OK
	TOTAL FLOOR AREA									
23-154		6,560.00	X	5.6	=	36736.00		36736.00		OK
23-153	LOT COVERAGE									
		INTERIOR LOT / THROUGH LOT		65%		4264.00		4216		OK
	YARD REGULATION									
23-45		FRONT YARD				NONE		NONE		OK
23-46		SIDE YARD				NONE		NONE		OK
23-47 / 23-52		REAR YARD				16'-6 5/8"		16'-7"		OK
23-532		REQUIRED REAR YARD EQUIVALENT								OK
23-531, 33-281		EXCEPTED TROUGH LOTS				N/A		N/A		OK
	HEIGHT & SETBACKS	R7D / C2-4 (MIH)								
23-664		MIN BASE				60'-0"		75'-0"		OK
23-664		MAX BASE				95'-0"		75'-0"		OK
23-664		MAX BUILDING HEIGHT				115'-0" / 11		95'-0" / 9		OK
	SETBACKS									
23-662		SETBACK @ WIDE STREETS				10'-0"		10'-0"		OK
23-662		SETBACK @ NARROW STREETS				15'-0"		N/A		OK
23-22	DENSITY									
		R7D		680		47		41		OK
	ACCESSORY OFF-STREET PARKING									
		R7D								
25-23 / 25-261	30	RESIDENTIAL	MARKET RATE		50%	15		WAIVED		OK
25-251	11	RESIDENTIAL	AFFORDABLE			0		0	0	OK - REQUIRED ACTION
		C2-4								
36-21		COMMERCIAL	1X1000		=	5		WAIVED		OK
	BICYCLE PARKING									
25-80		RESIDENTIAL	50%		=	21		21	21	OK
36-711		COMMERCIAL	1X10,000		=	1		WAIVED		OK

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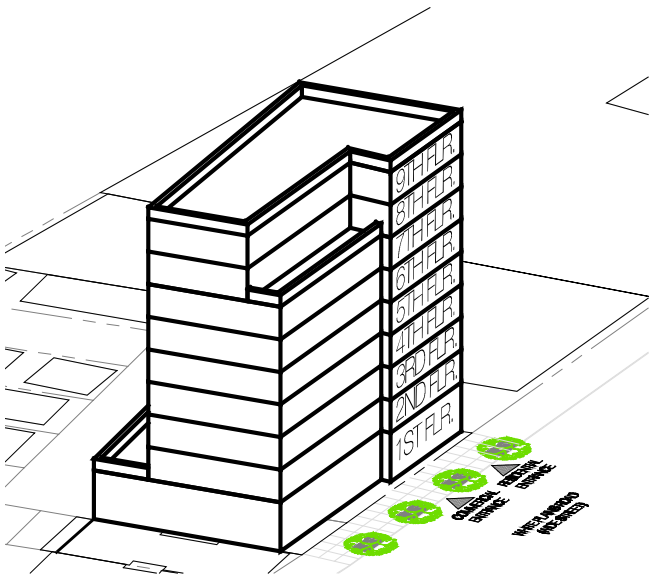
QUALITY HOUSING DEDUCTIONS

FLOOR	GROSS	COMMERCIAL	RESIDENTIAL	REFUSE	REC.	LAUNDRY	MECH.	TOTAL ZONING RESIDENTIAL
	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.
C	6,071		6,071				6,071	0
1	6,071	4,571	1500					1,500
2	4216		4216	12	1000	587	31	2,586
3	4216		4216	12			31	4,173
4	4216		4216	12			31	4,173
5	4216		4216	12			31	4,173
6	4216		4216	12			31	4,173
7	4216		4216	12			31	4,173
8	3646		3646	12			27	3,607
9	3646		3646	12			27	3,607
TOTAL	44,730	4571	40,159	96	1,000	587	6311	32,165

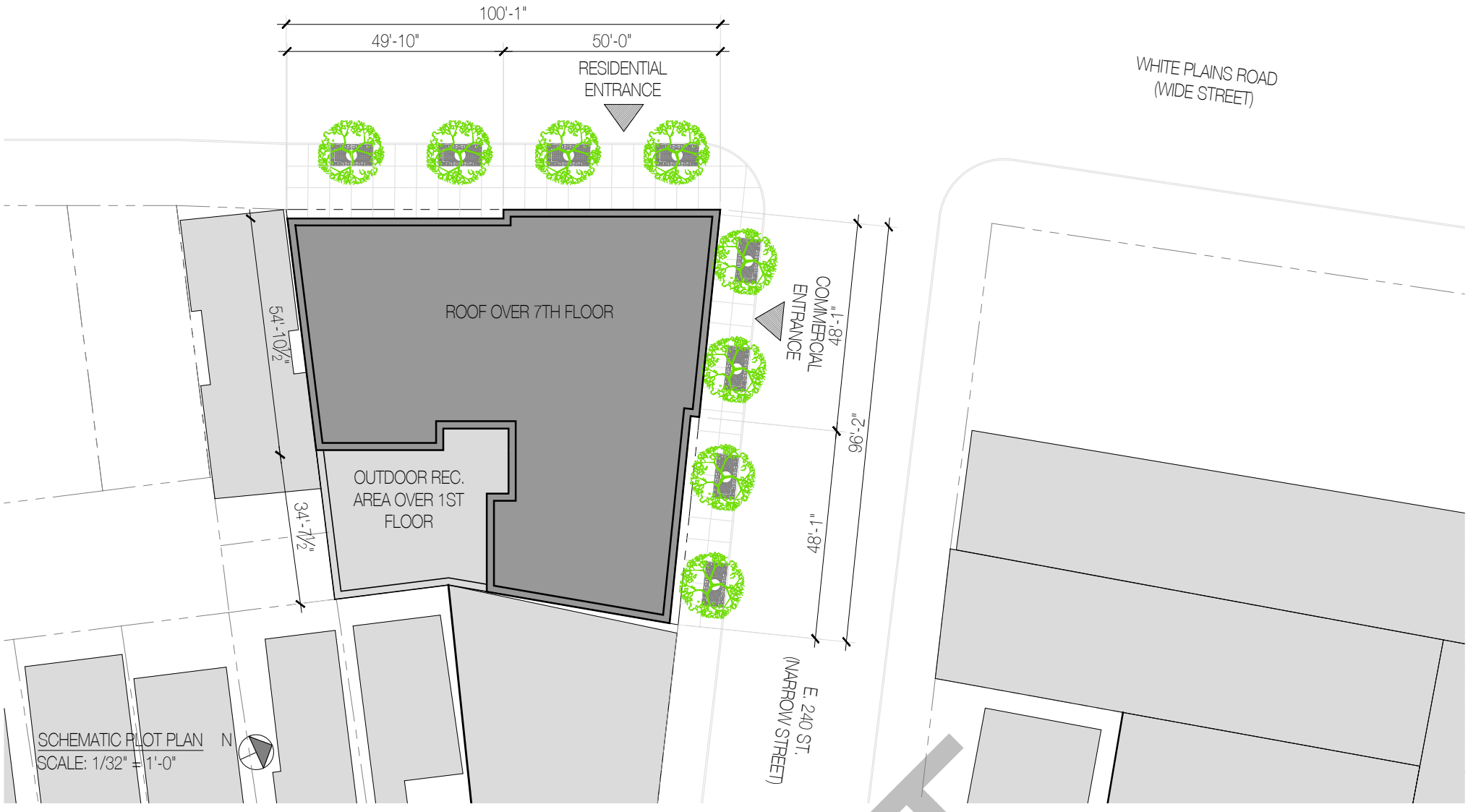


AUFGANG ARCHITECTS
74 Lafayette Ave., Suffern, NY 10901 tel: 845.368.0004 www.aufgang.com

4556 WHITE PLAINS ROAD
BRONX, NY

BLOCK NO.: 5084
LOT NO.: 35 & 39
DATE: 05.31.19
DRAWING NO: Z-100.00





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SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	5084	REZONE R7D / C2-4 (MH)	CONST. CLASS 1-B 2HR RATED	FRESH ZONE
Lots:	41	INCLUDED IN THE TRANSIT ZONE	BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	4564 WHITE PLAINS ROAD		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	M1-1		BUILDING TO BE DESIGNED	
Proposed Zoning:	R7D / C2-4 (MH)		PER 2014 NYC BUILDING CODE	
	(INCLUSIONARY HOUSING)		PER NYC ENERGY CODE	
Community District:	12, BRONX			
Zoning Section Map:	2a			
Zoning Lot Area	8,101.00			

ZR - Section	Title	Descriotion				Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
22-10	USES									
32-00		USE GROUP 1, 2, 3, 4, 5, 6, 6c, 7, 8, 9 & 14						2 & 6		OK
23-011	QUALITY HOUSING									
	PROGRAM	R7D / C2-4 (MH)						YES		OK
23-32	MIN LOT AREA	1,700								
		CORNER LOT			8,101.00					
77-11	FAR	R7D / C2-4 (MH)								
23-154	R7D	RESIDENTIAL				5.6		4.81	5.6	OK
33-121	C2-4	COMMERCIAL				2.0		0.79		OK
	FLOOR AREA									
23-154		RESIDENTIAL								
		8,101.00	X	5.6	=	45365.60		38964		OK
33-121		COMMERCIAL								
		8101.00	X	2.0	=	16202		6401		OK
	TOTAL FLOOR AREA									
23-154		8,101.00	X	5.6	=	45365.60		45365.00		OK
23-153	LOT COVERAGE									
		CORNER LOT		100%		8101.00		6564		OK
	YARD REGULATION									
23-45		FRONT YARD				NONE		NONE		OK
23-46		SIDE YARD				NONE		NONE		OK
23-541		REAR YARD				NONE		34'-7 1/2"		OK
23-532		REQUIRED REAR YARD EQUIVALENT								OK
23-531, 33-281		EXCEPTED TROUGH LOTS				N/A		N/A		OK
	HEIGHT & SETBACKS	R7D / C2-4 (MH)								
23-664		MIN BASE				60'-0"		75'-0"		OK
23-664		MAX BASE				95'-0"		75'-0"		OK
23-664		MAX BUILDING HEIGHT				115'-0" / 11		75'-0" / 7		OK
	SETBACKS									
23-662		SETBACK @ WIDE STREETS				10'-0"		N/A		OK
23-662		SETBACK @ NARROW STREETS				15'-0"		N/A		OK
23-22	DENSITY									
		R7D		680		57		50		OK
	ACCESSORY OFF-STREET PARKING									
		R7D								
25-23 / 25-261	30	RESIDENTIAL		MARKET RATE	50%	15		WAIVED		OK
25-251	20	RESIDENTIAL		AFFORDABLE	TRANSIT ZONE	0		0	0	OK - REQUIRED ACTION
		C2-4								
36-21		COMMERCIAL		1X1000	=	6		WAIVED		OK
	BICYCLE PARKING									
25-80		RESIDENTIAL		50%	=	25		25	26	OK
36-711		COMMERCIAL		1X10,000	=	1		1		OK

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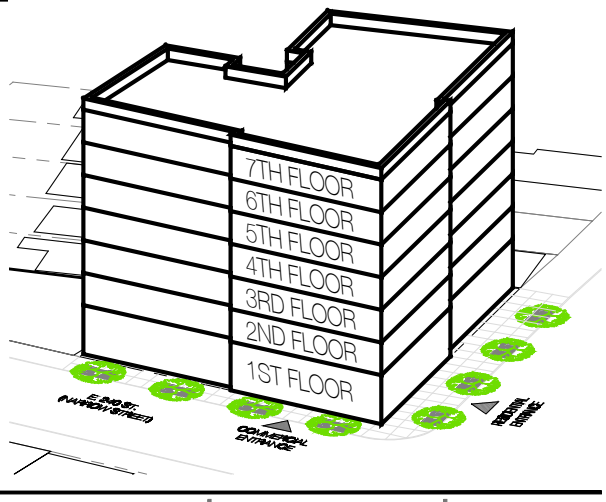
QUALITY HOUSING DEDUCTIONS								
FLOOR	GROSS SQ. FT.	COMMERCIAL SQ. FT.	RESIDENTIAL SQ. FT.	REFUSE SQ. FT.	REC. SQ. FT.	LAUNDRY SQ. FT.	MECH. SQ. FT.	TOTAL ZONING RESIDENTIAL SQ. FT.
C	7,901		7,901				7,901	0
1	7,901	6,401	1500					1,500
2	6564		6564	12	1154	400	49	4,949
3	6564		6564	12			49	6,503
4	6564		6564	12			49	6,503
5	6564		6564	12			49	6,503
6	6564		6564	12			49	6,503
7	6564		6564	12			49	6,503
TOTAL	55,186	6401	48,785	72	1,154	400	8195	38,964



AUFGANG ARCHITECTS
74 Lafayette Ave., Suffern, NY 10901 tel: 845.368.0004 www.aufgang.com

4564 WHITE PLAINS ROAD
BRONX, NY

BLOCK NO.: 5084
LOT NO.: 41
DATE: 05.31.19
DRAWING NO: Z-100.00





SCHEMATIC PLOT PLAN
SCALE: 1/32" = 1'-0"

N

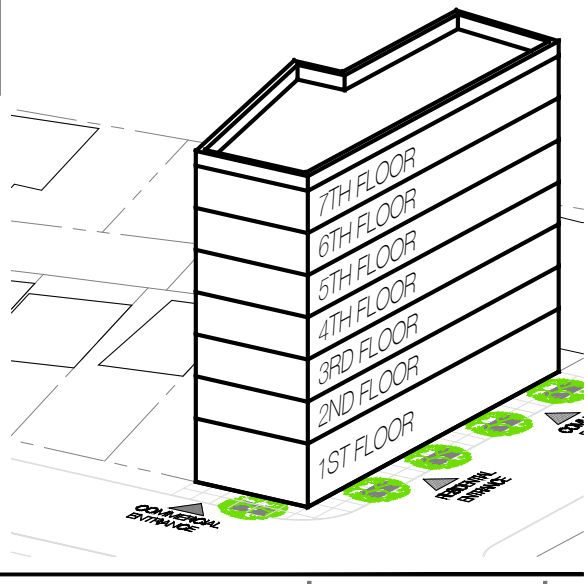
ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	5084	REZONE R7D (MIH)	CONST. CLASS: 1-B 2HR RATED	FRESH ZONE
Lots:	49	INCLUDED IN THE TRANSIT ZONE	BUILDING CODE OCCUPANCY GROUP: R-2	MANDATORY INCLUSIONARY HOUSING
Street Address:	4585 FURMAN AVENUE		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	M1-1		BUILDING TO BE DESIGNED	
Proposed Zoning:	R7D (MIH)		PER 2014 NYC BUILDING CODE	
Community District:	12, BRONX			
Zoning Section Map:	2a			
Zoning Lot Area	4,363.05			

ZR - Section	Title	Descriotion				Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
22-10	USES									
32-00		USE GROUP 1, 2, 3, 4, 6c						2 & 4		OK
23-011	QUALITY HOUSING									
	PROGRAM	R7D (MIH)						YES		OK
23-32	MIN LOT AREA	1,700								
		CORNER LOT			4,363.05					
77-11	FAR	R7D (MIH)								
23-154	R7D	RESIDENTIAL				5.6		4.94	5.6	OK
24-11		COMMUNITY FACILITY				4.2		0.66		OK
	FLOOR AREA									
23-154		RESIDENTIAL								
		4,363.05	X	5.6	=	24433.08		21570		OK
24-11		COMMUNITY FACILITY								
		4363.05	X	4.2	=	18324.81		2863		OK
	TOTAL FLOOR AREA									
23-154		4,363.05	X	5.6	=	24433.08		24433.00		OK
23-153	LOT COVERAGE									
		CORNER LOT		100%		4363.05		3495		OK
	YARD REGULATION									
23-45		FRONT YARD				NONE		NONE		OK
23-46		SIDE YARD				NONE		NONE		OK
23-541		REAR YARD				NONE		NONE		OK
23-532		REQUIRED REAR YARD EQUIVALENT								OK
23-531, 33-281		EXCEPTED TROUGH LOTS				N/A		N/A		OK
	HEIGHT & SETBACKS	R7D (MIH)								
23-664		MIN BASE				60'-0"		75'-0"		OK
23-664		MAX BASE				95'-0"		75'-0"		OK
23-664		MAX BUILDING HEIGHT				115'-0" / 11		75'-0" / 7		OK
	SETBACKS									
23-662		SETBACK @ WIDE STREETS				10'-0"		N/A		OK
23-662		SETBACK @ NARROW STREETS				15'-0"		N/A		OK
23-22	DENSITY									
		R7D		680		31		28		OK
	ACCESSORY OFF-STREET PARKING									
		R7D								
25-23 / 25-261	21	RESIDENTIAL	MARKET RATE		50%	11		WAIVED		OK
25-251	7	RESIDENTIAL	AFFORDABLE		=	0		0	0	OK - REQUIRED ACTION
25-31		COMMUNITY FACILITY	NONE REQUIRED			0		0		OK
	BICYCLE PARKING									
25-811		RESIDENTIAL	50%		=	14		14	14	OK
25-811		COMMUNITY FACILITY	1X10,000		=	0		0		OK

QUALITY HOUSING DEDUCTIONS

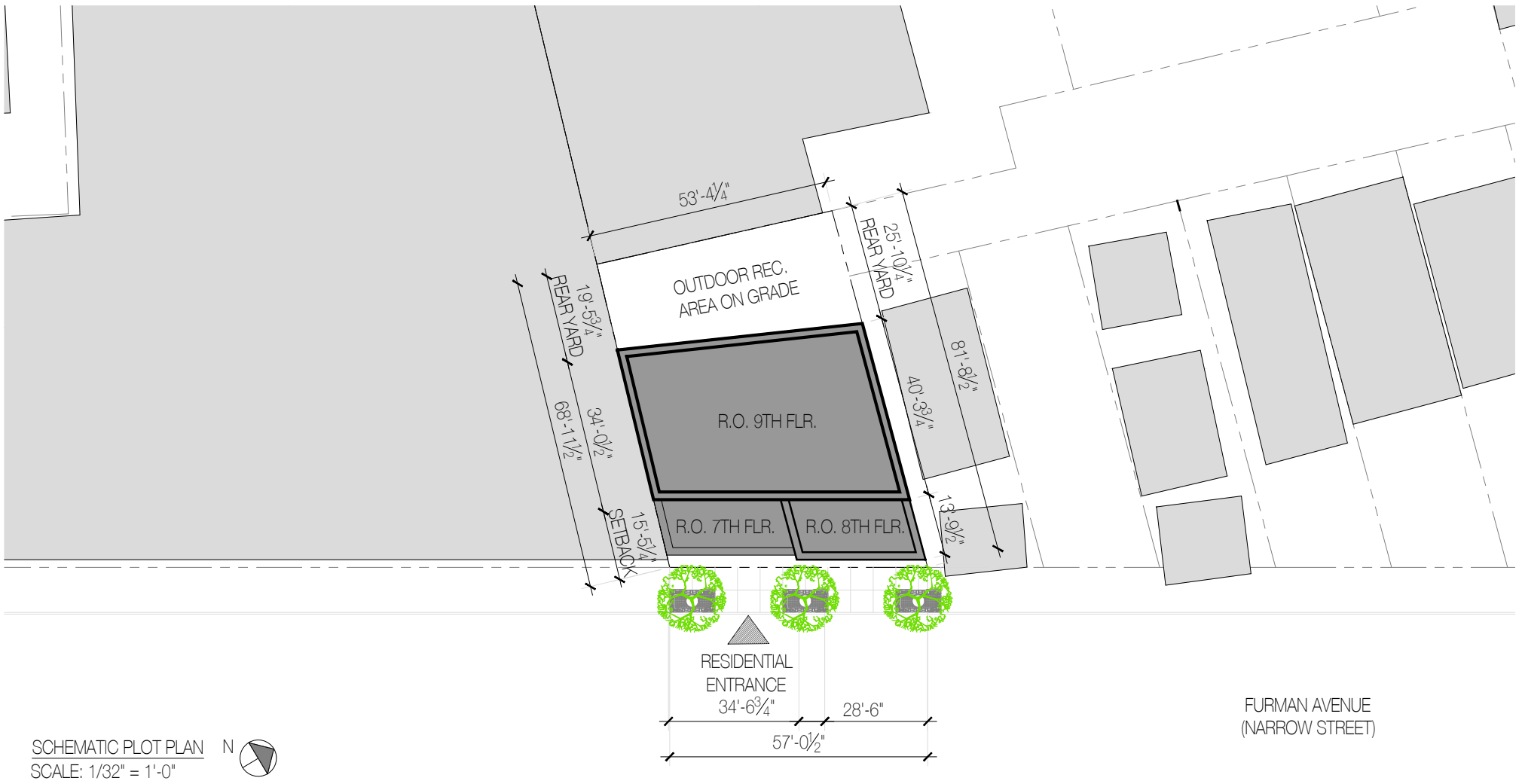
FLOOR	GROSS SQ. FT.	COMM. FACILITY SQ. FT.	RESIDENTIAL SQ. FT.	REFUSE SQ. FT.	REC. / LAUNDRY SQ. FT.	MECH. SQ. FT.	TOTAL ZONING RESIDENTIAL SQ. FT.
C	4,363		4,363			4,363	0
1	4,363	2,863	1500				1,500
2	3495		3495	12	828		2,655
3	3495		3495	12			3,483
4	3495		3495	12			3,483
5	3495		3495	12			3,483
6	3495		3495	12			3,483
7	3495		3495	12			3,483
TOTAL	29,696	2863	26,833	72	828	4363	21,570



AUFGANG ARCHITECTS
74 Lafayette Ave., Suffern, NY 10901 tel: 845.368.0004 www.aufgang.com

4585 FURMAN AVENUE
BRONX, NY

BLOCK NO.: 5084
LOT NO.: 49
DATE: 08.05.19
DRAWING NO: Z-100.00



SCHEMATIC PLOT PLAN
SCALE: 1/32" = 1'-0"

N

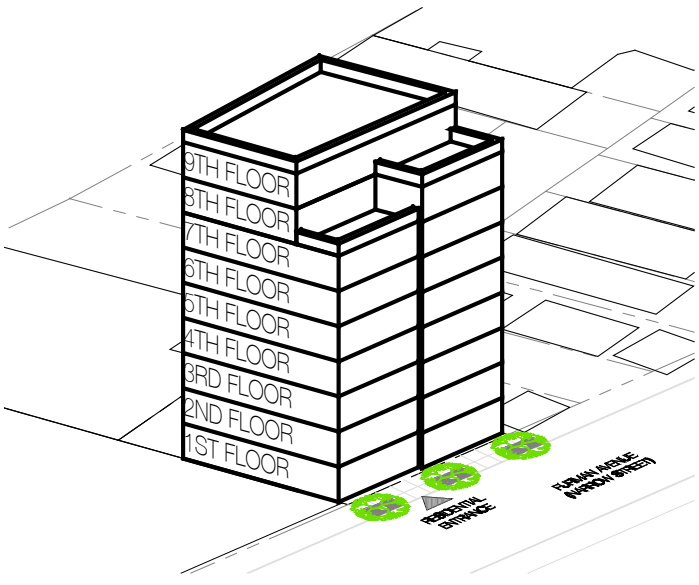
ALL FIGURES ARE PRELIMINARY AND APPROXIMATE. LOT AREAS AND EXISTING FLOOR AREAS ARE SUBJECT TO SURVEY CONFIRMATION. FINAL AREAS AND LOT ANGLES TO BE VERIFIED BY COMPLETE SURVEY

SITE DATA		LIST OF REQUIRED ACTIONS		QUALITY HOUSING PROGRAM
Block:	5084	REZONE R7D / (MIH)	CONST. CLASS 1-B 2HR RATED	FRESH ZONE
Lots:	61	INCLUDED IN THE TRANSIT ZONE	BUILDING CODE OCCUPANCY GROUP R-2	SIDEWALK CAFÉ
Street Address:	4557 FURMAN AVENUE		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	M1-1		BUILDING TO BE DESIGNED	
Proposed Zoning:	R7D /(MIH)		PER 2014 NYC BUILDING CODE	
	(INCLUSIONARY HOUSING)		PER NYC ENERGY CODE	
Community District:	12, BRONX			
Zoning Section Map:	2a			
Zoning Lot Area	4,090.63			

ZR - Section	Title	Descriotion			Permitted	Ex.to Remain	Proposed	Total	Compliance / Notes
22-10	USES								
32-00		USE GROUP 1, 2, 3, 4					2		OK
23-011	QUALITY HOUSING								
	PROGRAM	R7D /(MIH)					YES		OK
23-32	MIN LOT AREA	1,700							
		INTERIOR LOT / THROUGH LOT		4,090.63					
77-11	FAR	R7D /(MIH)							
23-154	R7D	RESIDENTIAL			5.6		5.60	5.6	OK
	FLOOR AREA								
23-154		RESIDENTIAL							
		4,090.63	X	5.6	= 22907.53		22908		OK
	TOTAL FLOOR AREA								
23-154		4,090.63	X	5.6	= 22907.53		22908		OK
23-153	LOT COVERAGE								
		INTERIOR LOT / THROUGH LOT		65%	2658.91		2,750		OK
	YARD REGULATION								
23-45		FRONT YARD			NONE		NONE		OK
23-46		SIDE YARD			NONE		NONE		OK
23-47		REAR YARD			19'-5 3/4"		19'-5 3/4"		OK
23-532		REQUIRED REAR YARD EQUIVALENT							OK
23-531, 33-281		EXCEPTED TROUGH LOTS			N/A		N/A		OK
	HEIGHT & SETBACKS	R7D /(MIH)							
23-664		MIN BASE			60'-0"		70'-0"		OK
23-664		MAX BASE			95'-0"		70'-0"		OK
23-664		MAX BUILDING HEIGHT			110'-0" / 11		90'-0" / 9		OK
	SETBACKS								
23-664		SETBACK @ WIDE STREETS			10'-0"		N/A		OK
23-664		SETBACK @ NARROW STREETS			15'-0"		15'-0"		OK
23-22	DENSITY								
		R7D		680	33		29		OK
	ACCESSORY OFF-STREET PARKING								
		R7D							
25-23 / 25-261	21	RESIDENTIAL	MARKET RATE	50%	11		WAIVED	0	OK
25-251	8	RESIDENTIAL	AFFORDABLE	=	0		0		OK- REQUIRED ACTION
	BICYCLE PARKING								
25-80		RESIDENTIAL	50%	=	15		15	15	OK

QUALITY HOUSING DEDUCTIONS

FLOOR	GROSS SQ. FT.	RESIDENTIAL SQ. FT.	REFUSE SQ. FT.	LAUNDRY / REC. SQ. FT.	MECH. SQ. FT.	TOTAL ZONING RESIDENTIAL SQ. FT.
C	2,750	2,750			2,750	0
1	2,750	2,750	12	658		2,080
2	2,750	2750	12			2,738
3	2,750	2750	12			2,738
4	2,750	2750	12			2,738
5	2,750	2750	12			2,738
6	2,750	2750	12			2,738
7	2,750	2750	12			2,738
8	2,402	2402	12			2,390
9	2,022	2022	12			2,010
TOTAL	26,424	26,424	108	658	2,750	22,908



DRAFT

AUFGANG ARCHITECTS
74 Lafayette Ave., Suffern, NY 10901 tel: 845.368.0004 www.aufgang.com

4557 FURMAN AVENUE
BRONX, NY

BLOCK NO.: 5084
LOT NO.: 61
DATE: 05.31.19
DRAWING NO: Z-100.00



HISTORIC AND CULTURAL RESOURCES APPENDIX

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-X
Project: 4541 FURMAN AVENUE
Date Received: 9/19/2019

Properties with no Architectural or Archaeological significance:

1) 4530 WHITE PLAINS ROAD, BBL: 2050840019
2) 4550 WHITE PLAINS ROAD, BBL: 2050840030
3) 4556 WHITE PLAINS ROAD, BBL: 2050840035
4) 4560 WHITE PLAINS ROAD, BBL: 2050840039
5) 4562 WHITE PLAINS ROAD, BBL: 2050840040
6) 4564 WHITE PLAINS ROAD, BBL: 2050840041
7) 712 EAST 240 STREET, BBL: 2050840049
8) 4562 GARDEN PLACE, BBL: 2050840053
9) 4575 FURMAN AVENUE, BBL: 2050840054
10) 4573 FURMAN AVENUE, BBL: 2050840055
11) 4571 FURMAN AVENUE, BBL: 2050840056
12) 4569 FURMAN AVENUE, BBL: 2050840057
13) 4567 FURMAN AVENUE, BBL: 2050840058
14) 4565 FURMAN AVENUE, BBL: 2050840059
15) 4563 FURMAN AVENUE, BBL: 2050840060
16) 4557 FURMAN AVENUE, BBL: 2050840061
17) 4541 FURMAN AVENUE, BBL: 2050840063

Gina Santucci 10/3/19

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 34528_FSO_ALS_09202019.docx

HAZARDOUS MATERIALS APPENDIX

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

August 24, 2020

Anthony Howard
Senior Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 4541 Furman Avenue Rezoning
Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140
CEQR # 20DCP159X

Dear Mr. Howard:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the June 2020 Environmental Assessment Statement (EAS) prepared by Environmental Studies Corp. and the May 2018 Phase I Environmental Site Assessment (Phase I) prepared by Team Environmental Consultants on behalf of Markland 4551, LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment and zoning text amendments from the New York City Department of City Planning (DCP) to facilitate the development on Block 5084, Lot 63 (Projected Development Site 1) with a 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors in the Wakefield neighborhood of Bronx Community District 12. The zoning map amendment would rezone Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140 (Project Area) from M1-1 to R7D and R7D/C2-4 zoning districts. The zoning text amendment to Zoning Resolution (ZR) Appendix F would establish the Project Area as a Mandatory Inclusionary Housing Area, and the zoning text amendment to ZR Appendix I would extend Transit Zone 1 to be coterminous with the Project Area. The proposed development would contain 187,673 gross square feet (gsf) of total floor area. In Building segment A, the first floor would contain 7,391 gsf of commercial space and the remainder of the building would contain 52,995 gsf of residential floor area. In Building segment B, the cellar level would contain 12,784 gsf of community facility space, the cellar and sub-cellar levels would contain 12,284 gsf of space for 22 accessory residential parking spaces, storage, and building utility space, and the remainder of the building would contain 102,219 gsf of residential floor area. The proposed development will have a total of 150 dwelling units. The remainder of the Project Area is not proposed for development and is not controlled by the applicant. However, it is anticipated that new development would occur on five additional Projected Development Sites. Projected Development Site 2 (Block

5084, Lots 58, 59, 60) would be developed with a new 9-story and cellar, residential building with approximately 36,025 gsf of floor area. The building would include 40 residential dwelling units including 7 affordable units and 33 market rate units. No parking would be provided. The existing structures and uses on the site would be demolished and removed. Projected Development Site 3 (Block 5084, Lots 35 and 39) would be developed with a new 9-story and cellar, residential and commercial building with approximately 49,301 gsf of floor area. The 44,730 gsf of residential floor area would include 41 residential dwelling units including 7 affordable units and 34 market rate units. The proposed development would also include 4,571 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and uses on the site would be demolished and removed. Projected Development Site 4 (Block 5084, Lot 41) would be developed with a new 7-story and cellar, residential and commercial building with approximately 61,587 gsf of floor area. The 55,186 gsf of residential floor area would include 50 residential dwelling units including 9 affordable units and 41 market rate units. The proposed development would also include 6,401 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed. Projected Development Site 5 (Block 5084, Lot 49) would be developed with a new 7-story and cellar, residential and community facility building with approximately 32,559 gsf of floor area. The 29,696 gsf of residential floor area would include 28 residential dwelling units including 4 affordable units and 24 market rate units. The proposed development would also include 2,863 gsf of community facility space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed. Projected Development Site 6 (Block 5084, Lot 61) would be developed with a new 9-story and cellar, residential building with approximately 26,424 gsf of floor area. The building would include 29 residential dwelling units including 4 affordable units and 25 market rate units. No parking would be provided. The existing structure and use on the site would be demolished and removed. No new development is anticipated on Other Sites 1 through 8 (Block 5084, Lots 19, 30, 138, 53, 54, 55, 56, 57, 40, and 140).

Projected Development Site 1: Block 5084, Lot 63 (Site under the control or ownership of the applicant)

The May 2018 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including a factory, metal stamping, metal spinning, a warehouse, railroad tracks, a lumber yard, auto repair, etc. Regulatory Databases identified 15 spills within 1/8-mile; 3 underground storage tank sites within 1/4 mile; and 15 leaking storage tank sites within a 1/2-mile of the subject property.

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

Projected Development Site 1: Block 5084, Lot 63 (Site under the control or ownership of the applicant)

- DCP should inform the applicant that based on the historical on-site and/or surrounding area land uses, a Phase II Environmental Site Assessment is necessary to adequately identify/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. A Phase II Investigation Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be developed in accordance with the *City Environmental Quality Review Technical Manual* and submitted for DEP review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting the proposed soil, groundwater, and soil vapor sampling locations. Soil and groundwater samples should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for the presence of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls by EPA Method 8082, and Target Analyte List metals (filtered and unfiltered for groundwater samples). The soil vapor sampling should be conducted in accordance with NYSDOH's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The soil vapor samples should be collected and analyzed by a NYSDOH ELAP certified laboratory for the presence of VOCs by EPA Method TO-15. An Investigation Health and Safety Plan (HASP) should also be submitted for DEP review and approval.

- DCP should also instruct the applicant that the Phase II Work Plan and HASP should be submitted for DEP review and approval prior to the start of any fieldwork.

Projected Development Sites 2, 3, 4, 5, and 6: Block 5084, Lots 35, 39, 41, 49, 58, 59, 60, and 61 (Sites not under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The (E) designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Future correspondence and submittals related to this project should include the following CEQR # **20DCP159X**. If you have any questions, you may contact Scott Davidow, P.G. at (718) 595-7716.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard; S. Davidow; T. Estesen; M. Wimbish; R. Lucas; O. Abinader (DCP); M. Bertini (OER)

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

February 18, 2021

Anthony Howard
Senior Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 4541 Furman Avenue Rezoning
Block 5084, Lot 63 (Projected Development Site 1)
CEQR # 20DCP159X

Dear Mr. Howard:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the January 2021 Environmental Assessment Statement and the December 2019 Phase II Environmental Site Assessment Report (Phase II) prepared by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. on behalf of Markland 4551, LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment and zoning text amendments from the New York City Department of City Planning (DCP) to facilitate the development on Block 5084, Lot 63 (Projected Development Site 1) with a 9-story and basement and a 10-story, cellar, and sub-cellar two-tower building with commercial uses on the ground floor, community facility space in the cellar, and residential space on the upper floors in the Wakefield neighborhood of Bronx Community District 12. The zoning map amendment would rezone Block 5084, Lots 19, 30, 35, 39, 40, 41, 49, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 138, and 140 (Project Area) from M1-1 to R7D and R7D/C2-4 zoning districts. The zoning text amendment to Zoning Resolution (ZR) Appendix F would establish the Project Area as a Mandatory Inclusionary Housing Area, and the zoning text amendment to ZR Appendix I would extend Transit Zone 1 to be coterminous with the Project Area. The proposed development would contain 187,673 gross square feet (gsf) of total floor area. In Building segment A, the first floor would contain 7,391 gsf of commercial space and the remainder of the building would contain 52,995 gsf of residential floor area. In Building segment B, the cellar level would contain 12,784 gsf of community facility space, the cellar and sub-cellar levels would contain 12,284 gsf of space for 22 accessory residential parking spaces, storage, and building utility space, and the remainder of the building would contain 102,219 gsf of residential floor area. The proposed development will have a total of 150 dwelling units. The remainder of the Project Area is not proposed for development and is not controlled by the applicant. However, it is anticipated that new development would occur on five additional Projected Development Sites. Projected

Development Site 2 (Block 5084, Lots 58, 59, 60) would be developed with a new 9-story and cellar, residential building with approximately 36,025 gsf of floor area. The building would include 40 residential dwelling units including 7 affordable units and 33 market rate units. No parking would be provided. The existing structures and uses on the site would be demolished and removed. Projected Development Site 3 (Block 5084, Lots 35 and 39) would be developed with a new 9-story and cellar, residential and commercial building with approximately 49,301 gsf of floor area. The 44,730 gsf of residential floor area would include 41 residential dwelling units including 7 affordable units and 34 market rate units. The proposed development would also include 4,571 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and uses on the site would be demolished and removed. Projected Development Site 4 (Block 5084, Lot 41) would be developed with a new 7-story and cellar, residential and commercial building with approximately 61,587 gsf of floor area. The 55,186 gsf of residential floor area would include 50 residential dwelling units including 9 affordable units and 41 market rate units. The proposed development would also include 6,401 gsf of commercial space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed. Projected Development Site 5 (Block 5084, Lot 49) would be developed with a new 7-story and cellar, residential and community facility building with approximately 32,559 gsf of floor area. The 29,696 gsf of residential floor area would include 28 residential dwelling units including 4 affordable units and 24 market rate units. The proposed development would also include 2,863 gsf of community facility space on the ground-floor of the building. No parking would be provided. The existing structure and use on the site would be demolished and removed. Projected Development Site 6 (Block 5084, Lot 61) would be developed with a new 9-story and cellar, residential building with approximately 26,424 gsf of floor area. The building would include 29 residential dwelling units including 4 affordable units and 25 market rate units. No parking would be provided. The existing structure and use on the site would be demolished and removed. No new development is anticipated on Other Sites 1 through 8 (Block 5084, Lots 19, 30, 138, 53, 54, 55, 56, 57, 40, and 140).

Projected Development Site 1: Block 5084, Lot 63 (Site under the control or ownership of the applicant)

During the October 2019 fieldwork, eight soil borings (SB01 through SB08) were advanced to depths ranging from 3 to 16 feet below the building slab. Refusal was encountered at 3 feet below grade surface (bgs) in SB02 and SB05, and 7 feet bgs in SB04 and SB08. Weathered rock was encountered at the bottom of borings SB04 and SB05 at depths of 7 and 3 feet bgs, respectively. Soil samples were collected from the top two feet of historic fill and/or at the interval of greatest observable impacts and/or the interval above the groundwater interface. Groundwater was encountered at depths ranging from about 3 to 9.5 feet below the building slab. Two soil borings (SB03 and SB08) were converted into temporary groundwater monitoring wells. Soil and groundwater samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls (PCBs) by EPA Method 8082, and Target Analyte List (TAL) metals by EPA Method 6010 (total and dissolved for groundwater samples). Three soil vapor samples (SSV01, SSV02,

and SSV03) and one indoor air sample (IA01) were collected and analyzed for VOCs by EPA Method TO-15.

The soil analytical results revealed that PCBs were either non-detect (ND) or below their New York State Department of Environmental Conservation (NYSDEC) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs). One VOC (acetone), several SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd) pyrene), one pesticide (4,4'-DDD), and several metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc) were detected above their NYSDEC Unrestricted Use and/or Restricted Residential Use SCOs.

The groundwater analytical results revealed that pesticides and PCBs were either ND or below their NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Ambient Water Quality Standards and Guidance Values. Several VOCs (cis-1,2-dichloroethene, tetrachloroethene (PCE), and trichloroethene (TCE)), several SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd) pyrene), and several metals (iron, lead, magnesium, manganese, and sodium) were detected above their NYSDEC TOGS 1.1.1 Class GA Ambient Water Quality Standards and Guidance Values.

The soil vapor analytical results revealed that several VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3-butadiene, 2,2,4-trimethylpentane, 4-ethyltoluene, acetone, benzene, carbon disulfide, chloroform, chloromethane, cis-1,2-dichloroethene, cyclohexane, dichlorodifluoromethane, ethanol, ethyl chloride, ethylbenzene, isopropanol, m,p-xylene, methyl ethyl ketone, methyl isobutyl ketone, n-heptane, n-hexane, o-xylene, styrene, tert-butyl alcohol, PCE, toluene, TCE, trichlorofluoromethane, and vinyl chloride) were detected.

The indoor air analytical results revealed that several VOCs (1,2,4-trimethylbenzene, 1,3-butadiene, 2,2,4-trimethylpentane, acetone, benzene, carbon tetrachloride, chloromethane, dichlorodifluoromethane, ethanol, ethylbenzene, isopropanol, m,p-xylene, methyl ethyl ketone, n-heptane, n-hexane, o-xylene, PCE, and toluene) were detected.

It should be noted that the Phase II investigation was conducted without DEP approval.

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

- DCP should instruct the applicant to develop and submit a Remedial Action Plan (RAP) for the proposed project for review and approval. The RAP should delineate the requirements for items including: transportation and disposal of soil; soil stockpiling; dust control; air monitoring; dewatering; removal/closure of underground storage tanks and/or aboveground storage tanks if encountered; engineering controls; capping with concrete/asphalt and/or imported clean fill, etc.

- DCP should instruct that applicant that at a minimum, a vapor barrier with a minimum thickness of 20-mil should be incorporated into the design plan of the proposed project. The

manufacturer's specifications with thickness information of the proposed vapor barrier should be included in the RAP.

- DCP should instruct the applicant to submit a site-specific Construction Health and Safety Plan (CHASP) on the basis of possible exposure of both on-site personnel and the surrounding community to contaminants from the proposed project. The CHASP should identify the possible locations and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate concerns.

- DCP should instruct the applicant that a Community Air Monitoring Plan should be developed and implemented in accordance with NYSDEC DER-10 Appendix 1A.

- DCP should instruct the applicant that for all areas, which will be landscaped or covered with grass (not capped), a minimum of two feet of DEP approved clean fill/top soil must be imported from an approved facility/source and graded across all landscaped/grass covered areas of the site not capped with concrete/asphalt. The clean fill/top soil must be segregated at the source/facility, have qualified environmental personnel collect representative samples at a frequency of one (1) sample for every 250 cubic yards, analyze the samples for Target Compound List VOCs by EPA Method 8260, SVOCs by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, and TAL metals by a NYSDOH Environmental Laboratory Approval Program certified laboratory, compared to NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs. Upon completion of the investigation activities, the applicant should submit a detailed clean soil report for DEP review and approval prior to importation and placement on-site. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data, and comparison of soil analytical results (i.e., NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs).

- DCP should instruct the applicant that soil disturbance should not occur without DEP's written approval of the RAP and CHASP.

Future correspondence and submittals related to this project should include the following CEQR # **20DCP159X**. If you have any questions, you may contact me at (718) 595-4358.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
T. Estesen
R. Lucas
M. Wimbish
O. Abinader - DCP

TRANSPORTATION APPENDIX

4541 Furman Avenue, Bronx NY-EAS

Transportation Appendix

Revised May 13, 2021

Table 2 : Transportation Planning Factors-Revised

4541 Furman Avenue, Bronx NY

Land Use:	Auto Repair	Light Industry	Medical Office	Residential	Local Retail
	gsf	gsf	gsf	d.u.	gsf
Size/Units:	-18,012	-24,729	15,647	334	18,363
	(3)	(3)	(4)	(1)	(1)
Trip Generation:					
Weekday	19.42	11.5	76	8.075	205
Saturday	19.42	1.7	39	9.6	240
	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per d.u.	per 1,000 gsf
Linked-Trip:	0%	0%	0%	0%	25%
Temporal Dist.:	(3)	(3)	(4)	(1)	(1)
AM Peak Hour	13.2%	13%	11%	10%	3%
MD Peak Hour	11.0%	10%	13%	5%	19%
PM Peak Hour	14.2%	14%	9%	11%	10%
Sat. MD Peak Hour	11%	10%	17%	8%	10%
	(3)	(2a)	(4)	(2)	(4)
Modal Split :	all periods	all periods	all periods	all periods	all periods
Auto	85%	58%	26%	41.4%	11%
Taxi	5%	2%	10%	0.7%	0%
Subway	1%	17%	14%	38.7%	3%
Bus	1%	7%	23%	12.6%	2%
Walk & Other	8%	16%	27%	6.7%	84%
Total	100%	100%	100%	100%	100%
	(3)	(3)	(4)	(3)	(3)
In/Out Splits:	In/Out	In/Out	In/Out	In/Out	In/Out
AM Peak Hour	65/35	88/12	62/38	24/76	50/50
MD Peak Hour	50/50	50/50	47/53	50/50	50/50
PM Peak Hour	50/50	12/88	35/65	61/39	50/50
Sat. MD Peak Hour	50/50	50/50	49/51	45/55	50/50
Vehicle Occupancy:	(3)	(2a&3)	(4)	(2&3)	(4)
Auto	1.3	1.1	1.6	1.08	2.1
Taxi	1.3	1.4	1.6	1.40	2.1
Truck Trip Gen.:	(3)	(3)	(3)	(1)	(1)
Weekday	0.89	0.52	0.29	0.06	0.35
Saturday	0.05	0.03	0.29	0.02	0.04
	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per d.u.	per 1,000 gsf
	(3)	(3)	(3)	(1)	(1)
AM Peak Hour	14%	12%	3%	12%	8%
MD Peak Hour	9%	9%	11%	9%	11%
PM Peak Hour	1%	2%	1%	2%	2%
Sat. MD Peak Hour	9%	9%	0%	9%	11%
AM/MD/PM/Sat. MD	50/50	50/50	50/50	50/50	50/50

Sources:

(1)-2014 CEQR Technical Manual, Table 16-2.

(2)-2014-2018 (ACS)-Journey-to-Work (JTW) Census Tract #'s 414, 418, 420, 422, 430, 434, 436, 442, and 444 in Bronx N.Y.

(2a)-2012-2016 (ACS)-Reverse- Journey-to-Work (RJTW)Census Tract #'s 414, 418, 420, 422, 430, 434, 436, 442, and 444 in Bronx N.Y.

(3)_Jerome Avenue Rezoning FEIS, Table 13.8.

(4)-Based on Survey conducted for a similar use in Bronx transit Zone, all provided by NYCDOT.

Table 3 : Estimated Person Trips-Revised

4541 Furman Avenue, Bronx NY

Land Use:	Auto Repair	Light Industry	Medical Office	Residential	Local Retail	*Total Net*	
	gsf	gsf	gsf	d.u.	gsf	*Demand*	
Size/Units:	-18,012	-24,729	15,647	334	18,363		
Peak hour Trips							
AM Peak Hour	-46	-37	131	270	85	402	
Midday Peak Hour	-38	-28	155	135	536	759	
PM Peak Hour	-50	-40	107	297	282	596	
Sat. MD Peak Hour	-38	-4	104	257	331	648	
Person Trips:							
AM Peak Hour							
Auto	-39	-21	34	112	9	95	
Taxi	-2	-1	13	2	0	12	
Subway	0	-6	18	104	3	118	118
Bus	0	-3	30	34	2	63	63
Walk & Other	-4	-6	35	18	71	115	115
Total	-46	-37	131	270	85	403	296
Midday Peak Hour							
Auto	-33	-16	40	56	59	106	
Taxi	-2	-1	15	1	0	14	
Subway	0	-5	22	52	16	85	85
Bus	0	-2	36	17	11	62	62
Walk & Other	-3	-5	42	9	451	494	494
Total	-38	-29	156	135	537	761	641
PM Peak Hour							
Auto	-42	-23	28	123	31	116	
Taxi	-2	-1	11	2	0	9	
Subway	0	-7	15	115	8	131	131
Bus	0	-3	25	37	6	64	64
Walk & Other	-4	-6	29	20	237	276	276
Total	-50	-40	107	297	282	597	471
Sat. MD Peak Hour							
Auto	-33	-2	27	106	36	134	
Taxi	-2	0	10	2	0	10	
Subway	0	-1	15	99	10	123	123
Bus	0	0	24	32	7	62	62
Walk & Other	-3	-1	28	17	278	319	319
Total	-38	-4	104	257	331	648	504

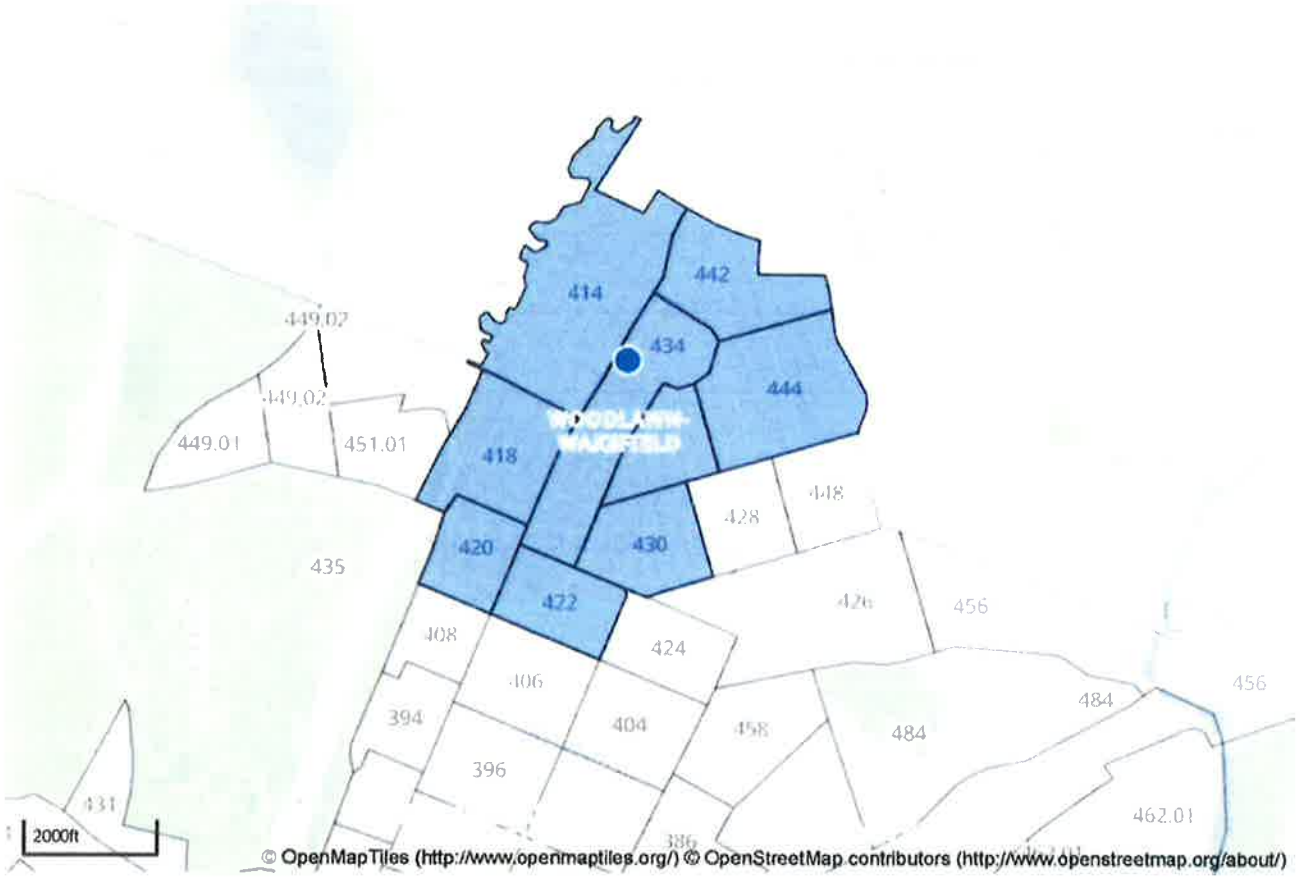
Table 4 : Estimated Vehicular Trips-Revised

4541 Furman Avenue, Bronx NY

Land Use:	Auto Repair	Light Industry	Medical Office	Residential	Local Retail	
	gsf	gsf	gsf	d.u.	gsf	Total
Size/Units:	-18,012	-24,729	15,647	334	18,363	
Vehicle Trips:						
Auto (Total)	-30	-19	21	103	4	79
Taxi	-2	-1	8	1	0	6
Taxi (Balanced)	-4	-2	14	2	0	10
Truck	-2	-2	0	2	1	-1
Truck(Balanced)	-2	-2	0	2	2	0
Total	-36	-23	35	107	6	89
In/Outbound Trips	***-23/-13***	***-19/-4***	***20/15***	***27/80***	***3/3***	***8/81***
Midday Peak Hour						
Auto (Total)	-25	-15	25	52	28	65
Taxi	-1	0	10	1	0	10
Taxi (Balanced)	-2	0	18	2	0	18
Truck	-1	-1	0	2	1	0
Truck(Balanced)	-2	-2	0	2	2	0
Total	-29	-17	43	56	30	83
In/Outbound Trips	***-15/-14***	***-8/-9***	***21/22***	***28/28***	***15/15***	***41/42***
PM Peak Hour						
Auto (Total)	-32	-21	17	114	15	93
Taxi	-2	-1	7	1	0	5
Taxi (Balanced)	-4	-2	12	2	0	8
Truck	0	0	0	0	0	0
Truck(Balanced)	0	0	0	0	0	0
Total	-36	-23	29	116	15	101
In/Outbound Trips	***-18/-18***	***-4/-19***	***12/17***	***71/45***	***7/8***	***68/33***
Sat. MD Peak Hour						
Auto (Total)	-25	-2	17	98	17	105
Taxi	-1	0	6	1	0	6
Taxi (Balanced)	-2	0	10	2	0	10
Truck	0	0	0	1	0	1
Truck(Balanced)	0	0	0	2	0	2
Total	-27	-2	27	102	17	117
In/Outbound Trips	***-13/-14***	***-1/-1***	***13/14***	***46/56***	***9/8***	***54/63***

NYC PLANNING (http://www1.nyc.gov/site/planning/index.page) **Population FactFinder (/)**

Census Block **Census Tract** **Neighborhood (NTA)** **PUMA**



Draw

Select individual census tracts to add them to the profile.

Polygon Radius

View Profile

9 Tracts

Advanced Options

Clear Selection

Exhibit 1

Modal Split Information

2014-2018 ACS 5-YEAR Journey-to-Work (JTW) for tract numbers 414, 418, 420, 422, 430, 434, 436, 442, and 444 in Bronx, NY

4541 Furman Avenue, Bronx New York

Census Tract	Total Workers	Car or Van Drive-Alone	Car Pool	Bus	Street Car	Subway	R.R.	Ferry	Taxi	Motor Cycle	Bicycle	Walk	Other	Worked @ Home	Total
414	2373	749	125	385	0	891	83	0	15	0	0	74	9	42	2373
418	1718	502	160	144	26	631	69	0	18	0	0	141	0	27	1718
420	1539	378	100	216	20	598	43	0	28	0	0	91	0	65	1539
422	1407	523	79	69	0	531	39	0	14	0	0	111	28	13	1,407
430	1610	765	65	118	16	513	0	0	12	0	0	75	22	24	1,610
434	1724	565	104	152	0	619	174	0	0	0	0	102	8	0	1,724
436	1016	481	21	165	0	277	37	0	10	0	19	6	0	0	1,016
442	1693	619	28	228	0	560	183	0	0	0	0	24	31	20	1,693
444	2029	833	153	363	0	485	108	0	15	0	0	65	0	7	2,029
Total	15,109	5,415	835	1,840	62	5,105	736	0	112	0	19	689	98	198	15,109
		0.358	*0.055*	*0.122*	*0.00*	*0.338*	*0.049*	*0.00*	*0.01*	*0.00*	*0.00*	*0.046*	*0.006*	*0.013*	*1.00*

Modal Split summary

Auto	**0.414**
Taxi	**0.007**
Bus	**0.126**
Subway	**0.387**
Walk	**0.046**
Other	**0.021**
Total	**1.000**

Exhibit 2

Vehicle Occupancy Information

2014-2018 ACS 5-YEAR Journey-to-Work (JTW) for tract numbers 414, 418, 420, 422, 430, 434, 436, 442, and 444 in Bronx, NY

4541 Furman Avenue, Bronx New York

Census Tract	Total	Drove alone	Total	Carpool 2person	3 Person	4 Person	5 or 6	7 or more	Total
414	874	749	125	74	22	29	0	0	125
418	662	502	160	160	0	0	0	0	160
420	478	378	100	75	0	25	0	0	100
422	602	523	79	69	0	0	0	10	79
430	830	765	65	52	13	0	0	0	65
434	669	565	104	104	0	0	0	0	104
436	502	481	21	9	0	0	0	12	21
442	647	619	28	28	0	0	0	0	28
444	986	833	153	74	68	11	0	0	153
persons	6,250	5,415	835	645	103	65	0	22	835
cars		5,415		323	34	16	0	6	###

Vehicle Occupancy = **1.08**

Exhibit 3

Modal Split Information

2012-2016 ACS 5-YEAR Reverse-Journey-to-Work (R JTW) for Census Tract #'s 414, 418, 420, 422, 430, 434, 436, 442 and 444 in the Bronx , NY

4541 Furman Avenue, Bronx New York

Census Tract	Total Workers	Car or Van Drive-Alone	Carpool	Bus	Street Car	Subway	R.R.	Ferry	Taxi	Motor cycle	Bicycle	Walked	Other Means	Worked @ Home	Total
414	830	560	65	10	0	45	45	0	60	0	0	25	0	20	830
418	470	190	0	40	20	55	10	0	0	0	0	40	0	115	470
420	1770	715	290	160	0	270	100	0	20	0	0	165	15	35	1,770
422	384	120	24	55	0	145	0	0	0	0	0	10	15	15	384
430	125	105	0	0	0	0	0	0	0	0	0	0	20	0	125
434	704	310	40	50	0	70	4	0	0	0	0	195	10	25	704
436	130	100	0	0	0	10	0	0	0	0	0	0	0	20	130
442	114	65	24	0	0	0	0	0	0	0	0	0	25	0	114
444	115	70	0	0	0	10	15	0	0	0	0	0	0	20	115
Total	4,642	2,235	443	315	20	605	174	0	80	0	0	435	85	250	4,642
		0.481	***0.095***	***0.068***	***0.00***	***0.130***	***0.037***	***0.00***	***0.02***	***0.00***	***0.00***	***0.094***	***0.02***	***0.054***	***1.00***

Modal Split summary

Auto	0.58
Taxi	0.02
Bus	0.07
Subway	0.17
Walk	0.09
Other	0.07
Total	1.00

Exhibit 4

Vehicle Occupancy Information

2012-2016 ACS 5-YEAR Reverse-Journey-to-Work (R JTW) for Census Tract #'s 414, 418, 420, 422, 430, 434, 436, 442 and 444 in the Bronx , NY

4541 Furman Avenue, Bronx New York

Census Tract	Total	Drove alone	Total	carpool 2person	carpool 3 Person	carpool 4 Person	carpool 5 or 6 Person	carpool 7 or more Person	Total
414	625	560	65	55	10	0	0	0	65
418	190	190	0	0	0	0	0	0	0
420	1005	715	290	260	30	0	0	0	290
422	144	120	24	20	4	0	0	0	24
430	105	105	0	0	0	0	0	0	0
434	350	310	40	30	10	0	0	0	40
436	100	100	0	0	0	0	0	0	0
442	89	65	24	4	10	0	10	0	24
444	70	70	0	0	0	0	0	0	0
Total	2678	2235	443	369	64	0	10	0	443
		2,235		185	21	0	2	0	2,443

Vehicle Occupancy = **1.10**

Table 13-8: Transportation Planning Factors

Land Use	Local Retail		Regional Retail		Office		Residential		Restaurant (sit-down)		Light Industrial		Auto Repair		Auto Dealership		Warehouse	
Trip Generation	(1)		(1)		(1)		(1)		(17)		(10, 11)		(2)		(18)		(19)	
Weekday	205		**78.2**		18		8.075		173		11.5		**19.42**		45.6		4.9	
Saturday	240		**92.5**		3.9		9.6		181		1.7		**19.42**		28.8		**1.7**	
	per 1,000 sf		**per 1,000 sf**		per 1,000 sf		per DU		per 1,000 sf		per 1,000 sf		**per 1,000 sf**		per 1,000 sf		**per 1,000 sf**	
Temporal Distribution	(1)		(1)		(1)		(1)		(17)		(10, 12)		(2)		(7,18)		(9,19)	
AM	3.0%		3.0%		12.0%		10.0%		0.9%		13.0%		13.2%		6.1%		8.4%	
MD	19.0%		9.0%		15.0%		5.0%		6.2%		10.0%		11.0%		12.0%		14.0%	
PM	10.0%		9.0%		14.0%		11.0%		8.3%		14.0%		14.2%		7.8%		8.9%	
Sat MD	10.0%		11.0%		17.0%		8.0%		11.0%		10.0%		11.0%		14.1%		10.6%	
Modal Splits	(2)		(4)		(4)		(5)		(17)		(4)		(2)		(7)		(4)	
Auto	3.0%		37.0%		37.0%		19.3%		25.0%		37.0%		85.0%		100.0%		37.0%	
Taxi	2.0%		2.0%		2.0%		1.8%		20.0%		2.0%		5.0%		0.0%		2.0%	
Bus	10.0%		21.0%		21.0%		15.4%		5.0%		21.0%		1.0%		0.0%		21.0%	
Subway	5.0%		21.0%		21.0%		49.2%		30.0%		21.0%		1.0%		0.0%		21.0%	
Railroad	0.0%		1.0%		1.0%		2.9%		0.0%		1.0%		0.0%		0.0%		1.0%	
Walk/Other	80.0%		18.0%		18.0%		11.4%		20.0%		18.0%		8.0%		0.0%		18.0%	
	(2)		(3)		(2)		(2)		(2,17)		(10, 12)		(2)		(7,18)		(9,19)	
In/Out Splits	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	50%	50%	52%	48%	96%	4%	15%	85%	94%	6%	88%	12%	65%	35%	74%	26%	**79%**	21%
MD	50%	50%	52%	48%	39%	61%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	**50%**	50%
PM	50%	50%	52%	48%	5%	95%	70%	30%	67%	33%	12%	88%	50%	50%	39%	61%	**25%**	75%
Sat MD	50%	50%	52%	48%	60%	40%	50%	50%	50%	50%	50%	50%	50%	50%	51%	49%	**64%**	36%
							(2, 5, 6)											
Vehicle Occupancy	(2)		(3)		(2,4)		AM/PM	MD/Sat	(17)		(10)		(2)		(7)		(9,19)	
Auto	1.60		2.20		1.13		1.21	1.69	2.20		1.65		1.30		1.30		1.30	
Taxi	1.20		2.00		1.40		1.4	1.4	2.30		1.40		1.30		1.50		2.00	
Truck Trip Generation	(1)		(3)		(1)		(1)		(17)		(10, 13)		(2)		(7)		(9)	
Weekday	0.35		0.35		0.32		0.06		3.60		0.52		0.89		0.15		0.67	
Saturday	0.04		0.35		0.01		0.02		3.60		0.03		0.05		0.15		0.03	
Temporal Distribution	(1)		(3)		(1)		(1)		(2,17)		(10, 12)		(2)		(7)		(9)	
AM	8.0%		8.0%		10.0%		12.0%		6.0%		12.0%		14.0%		9.6%		14.0%	
MD	11.0%		11.0%		11.0%		9.0%		6.0%		9.0%		9.0%		11.0%		9.0%	
PM	2.0%		2.0%		2.0%		2.0%		1.0%		2.0%		1.0%		1.0%		1.0%	
Saturday	11.0%		11.0%		11.0%		9.0%		6.0%		9.0%		9.0%		11.0%		9.0%	
In/Out Splits	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM/MD/PM/Sat	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Table 13-8 (continued): Transportation Planning Factors

Land Use	FRESH (Supermarket)	Pre-K (Student)	Pre-K (Staff)	Pre-K (Parent)	Day Care Center	Community Center	Medical Office (Clinic)	Gas Station (With Store)	Transitional Housing (Shelter)	House of Worship
Trip Generation	(7)	(7)	(7)	(7)	(7)	(2)	(7)	(9)	(15, 16)	(7)
Weekday	205	2	2	4	33	48	127	90	4.75	19.18
Saturday	271	0	0	0	2	19	127	90	5.65	21.83
	per 1,000 sf	per student	per staff	per parent	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
Temporal Distribution	(7)	(7)	(7)	(7)	(7)	(2)	(7)	(9)	(15, 16)	(7)
AM	3.0%	50.0%	50.0%	50.0%	16.0%	7.1%	4.0%	6.2%	7.0%	7.9%
MD	12.0%	0.0%	0.0%	0.0%	5.0%	10.0%	11.0%	5.5%	3.0%	4.0%
PM	10.0%	5.0%	5.0%	5.0%	19.0%	7.2%	12.0%	8.2%	10.0%	7.2%
Sat MD	12.0%	0.0%	0.0%	0.0%	12.0%	14.2%	11.0%	5.5%	4.8%	15.8%
Modal Splits	(7)	(5)	(4)	(5)	(7)	(2)	(7)	(9)	(15)	(7)
Auto	4.0%	18.6%	37.0%	18.6%	5.0%	5.0%	30.0%	100.0%	2.0%	5.0%
Taxi	3.0%	1.6%	2.0%	1.6%	1.0%	1.0%	2.0%	0.0%	1.0%	1.0%
Bus	5.0%	15.3%	21.0%	15.3%	6.0%	6.0%	18.0%	0.0%	1.0%	3.0%
Subway	5.0%	50.7%	21.0%	50.7%	3.0%	3.0%	33.0%	0.0%	2.0%	6.0%
Railroad	0.0%	2.5%	1.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Walk/Other	83.0%	11.3%	18.0%	11.3%	85.0%	85.0%	17.0%	0.0%	94.0%	85.0%
	(7)	(7)	(7)	(7)	(7)	(2)	(7)	(9)	(15)	(7)
In/Out Splits	In Out	In Out	In Out	In Out	In Out	In Out	In Out	In Out	In Out	In Out
AM	45% 55%	100% 0%	100% 0%	50% 50%	53% 47%	61% 39%	89% 11%	50% 50%	15% 85%	54% 46%
MD	46% 54%	0% 0%	0% 0%	0% 0%	50% 50%	55% 45%	51% 49%	50% 50%	50% 50%	50% 50%
PM	47% 53%	0% 100%	0% 100%	50% 50%	47% 53%	29% 71%	48% 52%	50% 50%	70% 30%	52% 48%
Sat MD	46% 54%	0% 0%	0% 0%	0% 0%	47% 53%	49% 51%	41% 59%	50% 50%	50% 50%	71% 29%
							(7)	(9)	(9)	(7)
Vehicle Occupancy	(7)	(5, 7)	(4, 7)		(7)	(2)	Weekday Sat	Weekday Sat	Weekday Sat	Weekday Sat
Auto	1.65	1.22	1.13	N/A	1.65	1.65	1.50 1.50	1.00 1.00	1.50 1.50	1.65 1.65
Taxi	1.40	1.30	1.40	N/A	1.40	1.40	1.50 1.50	1.00 1.00	1.50 1.50	1.40 1.40
Truck Trip Generation	(7)	(7)			(7)	(2)	(7)	(9)	(9)	(7)
Weekday	0.35	0.03	N/A	N/A	0.07	0.29	0.29	0.35	0.06	0.29
Saturday	0.04	0.03	N/A	N/A	0.00	0.01	0.29	0.02	0	0.29
Temporal Distribution	(7)	(7)			(7)	(2)	(7)	(9)	(9)	(7)
AM	10.0%	9.6%	N/A	N/A	9.6%	9.6%	3.0%	7.7%	12.2%	9.6%
MD	8.0%	11.0%	N/A	N/A	11.0%	11.0%	11.0%	11.0%	8.7%	11.0%
PM	5.0%	1.0%	N/A	N/A	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Saturday	10.0%	0.0%	N/A	N/A	0.0%	11.0%	0.0%	11.0%	0.0%	0.0%
In/Out Splits	In Out	In Out	In Out	In Out	In Out	In Out	In Out	In Out	In Out	In Out
AM/MD/PM/Sat	50.0% 50.0%	50.0% 50.0%	N/A N/A	N/A N/A	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%

Notes:

(1) Based on data from *City Environmental Quality Review (CEQR) Technical Manual.*
(2) Based on data from *Webster Avenue Rezoning EIS*, 2011.
(3) Based on data from *East Fordham Road Rezoning EIS*, 2013.
(4) RJTW based on CTTP 2006-2010 data for census tracts 197, 199, 209, 211, 213.02, 217, 219, 221.01, 223, 227.01, 227.02, 233.01, 239, 241, 243, and 251.
(5) JTW based on CTTP 2010-2014 data for census tracts 197, 199, 209, 211, 213.02, 217, 219, 221.01, 223, 227.01, 227.02, 233.01, 239, 241, 243, and 251.
(6) Midday and Saturday auto occupancy determined by applying a multiplier (1.4) to the AM/PM rate based on *East New York Rezoning EIS*, 2015.
(7) Based on data from *East New York Rezoning EIS*, 2015.
(8) Based on ITE's *Trip Generation Manual* rate for High-Turnover (Sit-Down) Restaurant (932) & Fast-Food Restaurant with Drive-Through (934).
(9) Based on data from *Lower Concourse Rezoning EIS*, 2009.
(10) *Crotona Park East / West Farms Rezoning EIS*, 2011.
(11) Saturday rate based on ITE's *Trip Generation Manual* (8th Edition) average rate proportion between weekday and
(12) Assumes weekday midday temporal distribution and in/out splits for Saturday
(13) Assumes 5 percent of weekday truck trip generation rate (consistent with Lower Concourse Rezoning EIS assumptions for Manufacturing and Warehousing land
(14) Assumed to be the same as Restaurant land use for *Webster Avenue Rezoning EIS*, 2011.
(15) Based on data for Covenant House from *NYCT - Number 7 Extension Project EIS*, 2003.
(16) Saturday trip rate based on ration between Saturday and weekday rates for Residential lane use. Similarly, Saturday temporal distribution based on weekday versus Saturday midday Residential proportion.
(17) Based on data from *Pier 57 Redevelopment Project EIS*, 2013.
(18) Based on ITE's *Trip Generation Manual* rate for Auto Dealership (841).
(19) Based on ITE's *Trip Generation Manual* rate for Warehousing (150).

Source: STV Incorporated, 2017.

4541 Furman Ave, Bronx, NY



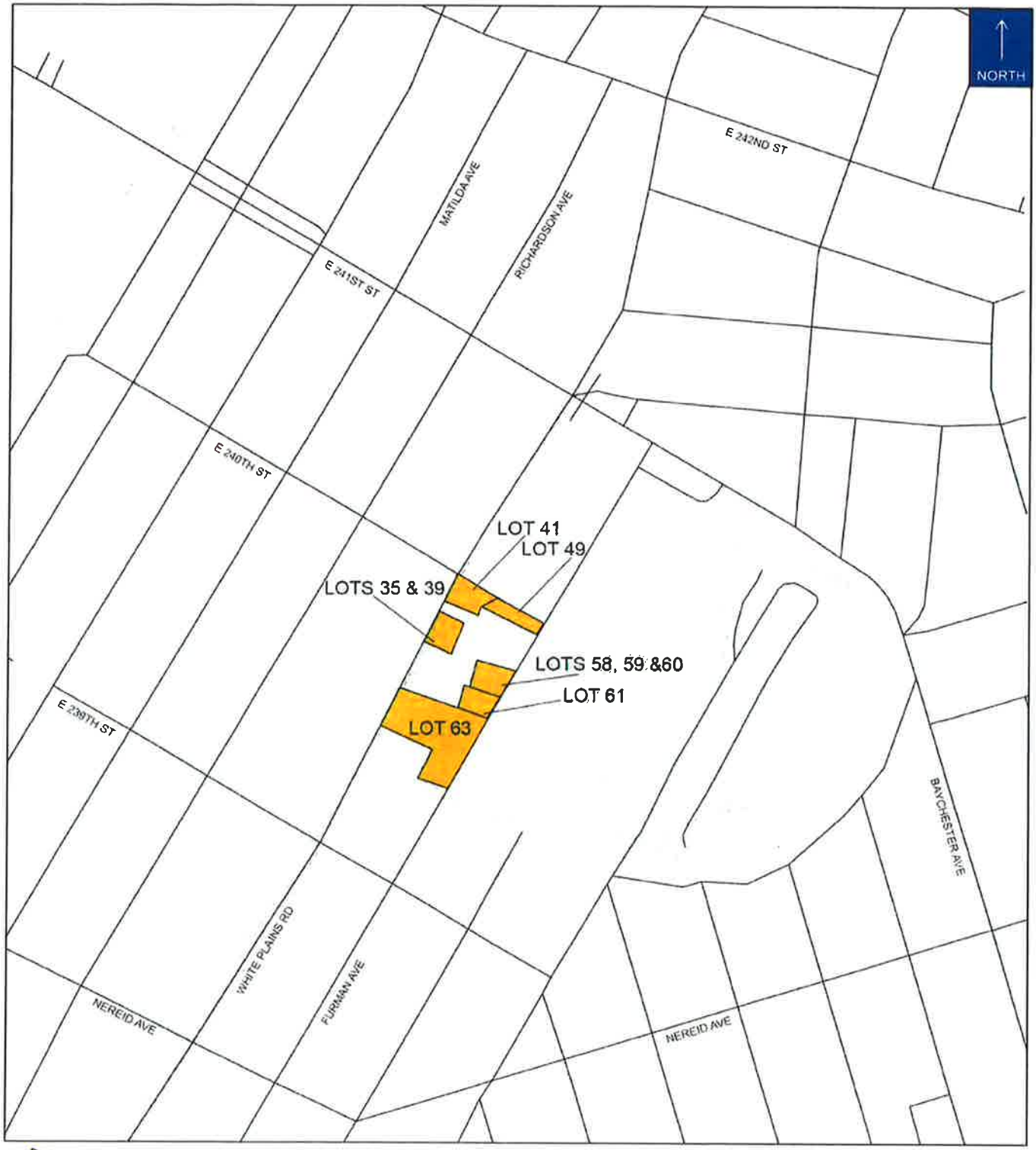
Rezoning Sites

Study Area Map

10/10/2020

Figure 1

4541 Furman Ave, Bronx, NY



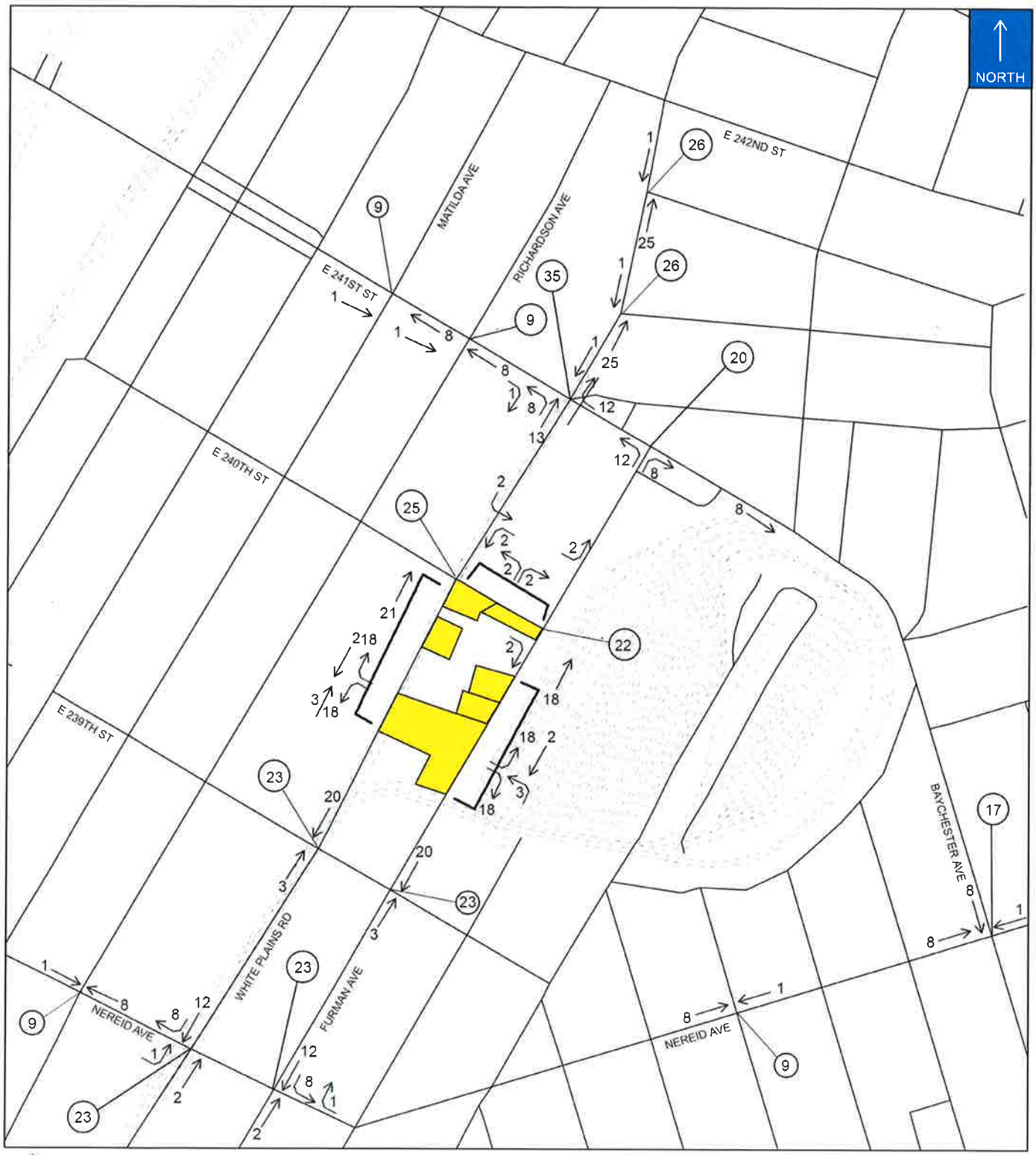
Rezoning Lots

Study Area Map

10/10/2020

Figure 2

4541 Furman Ave, Bronx, NY



Rezoning Sites

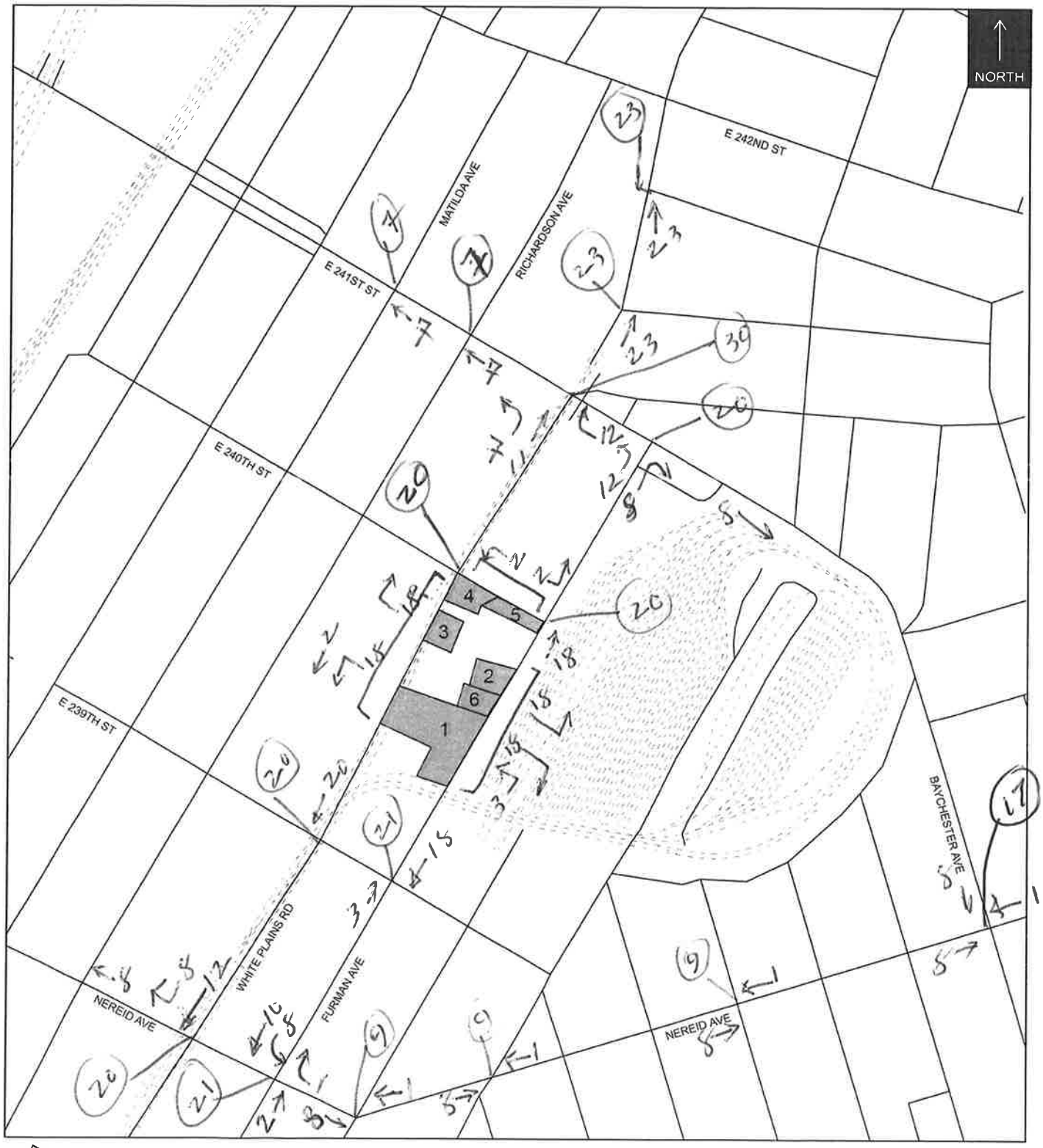
In/Out 8/81

Project Generated Vehicle Trips
AM Peak Hour

10/10/2020

Figure 3

4541 Furman Ave, Bronx, NY



Rezoning Sites

Study Area Map

3 in / 76 out

(Increment) AM Peak Hour Autos

10/10/2020

Figure 1

4541 Furman Ave, Bronx, NY



Rezoning Sites

5 in/5 out

(Increment) AM Peak Hour

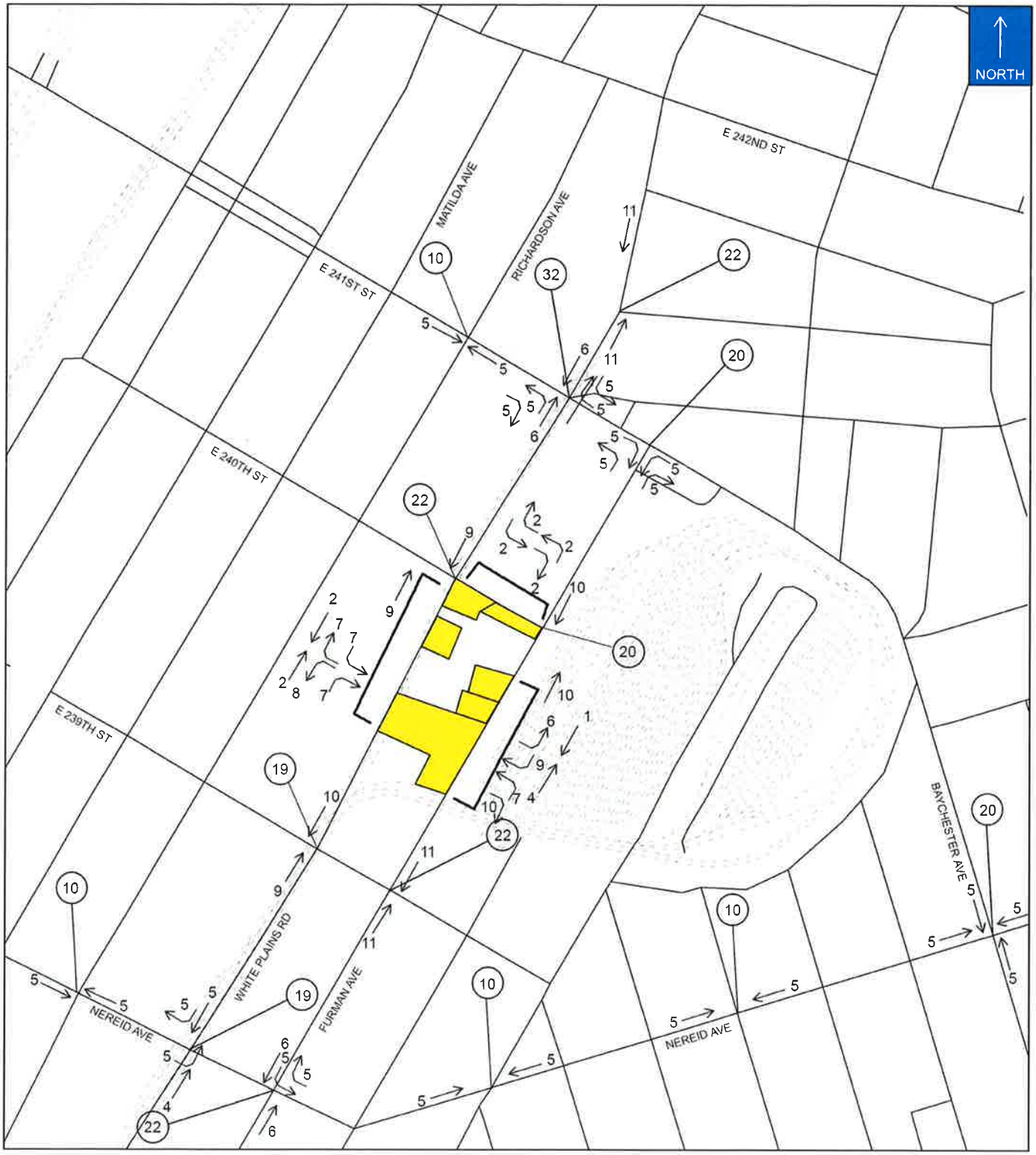
Taxis

Study Area Map

10/10/2020

Figure 1

4541 Furman Ave, Bronx, NY



Rezoning Sites

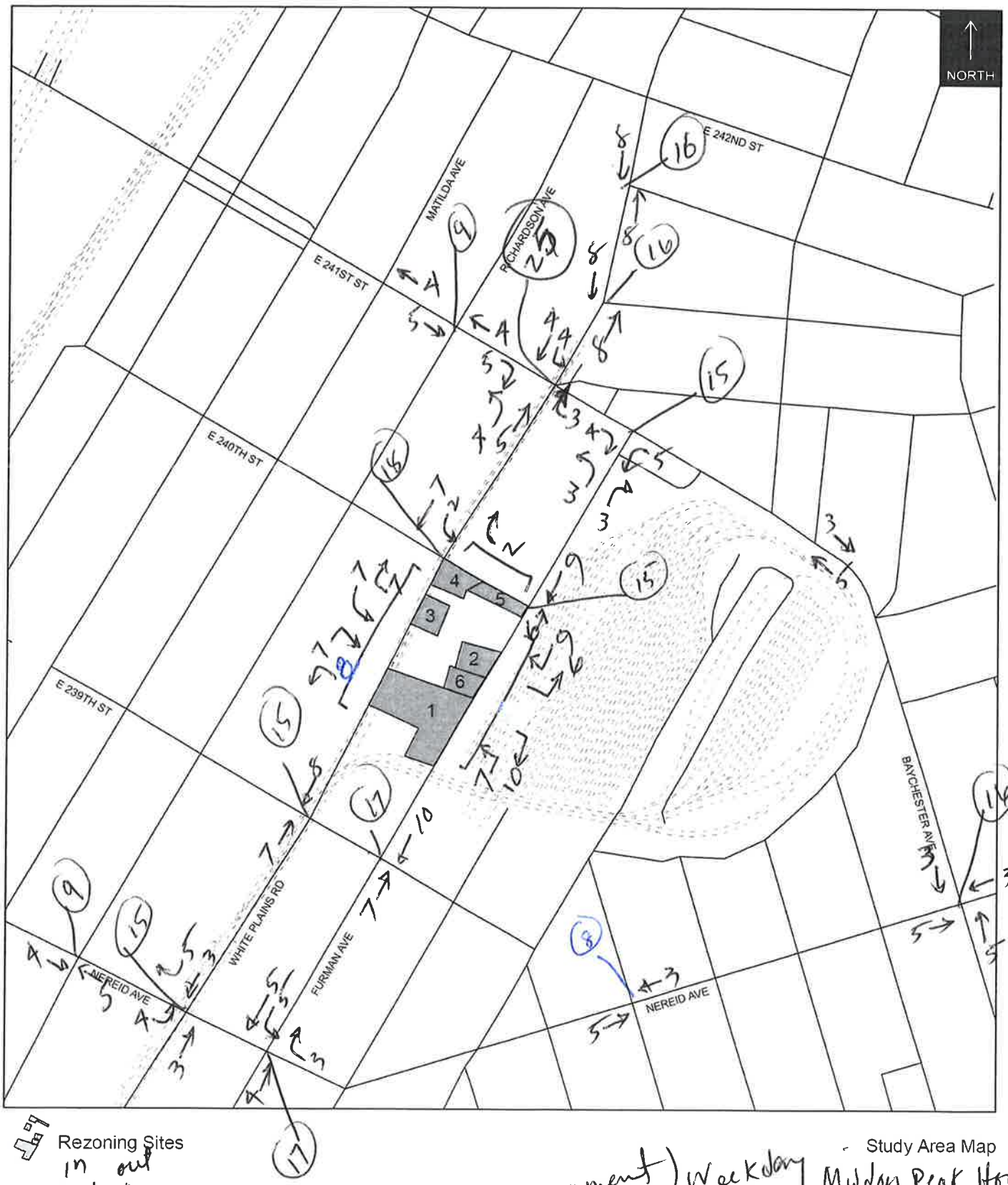
In/Out 41/42

Project Generated Vehicle Trips
Midday Peak Hour

10/10/2020

Figure 4

4541 Furman Ave, Bronx, NY



Rezoning Sites

Study Area Map

(Increment) Weekday Midday Peak Hour

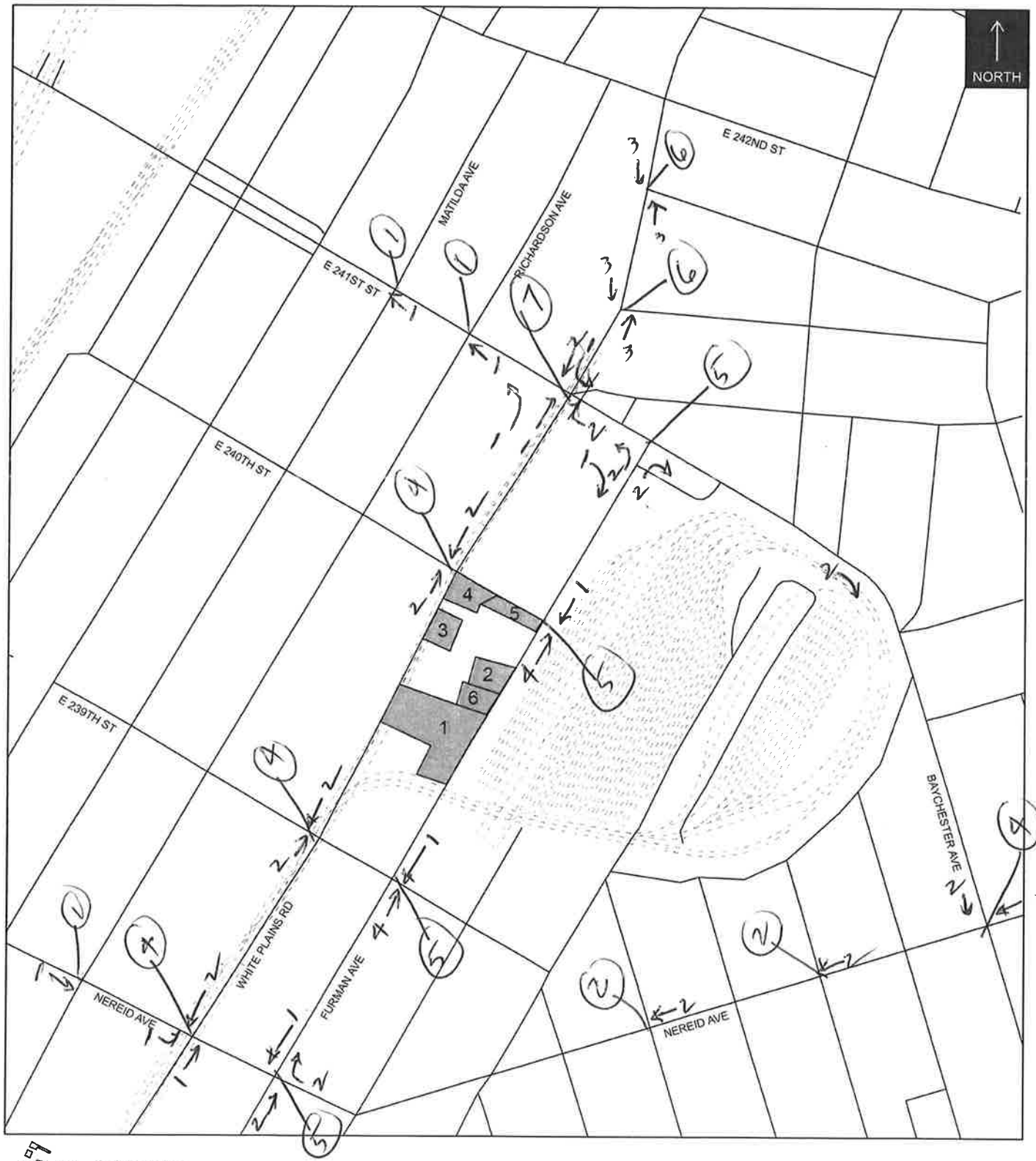
in out
32/ 33

Autos

10/10/2020

Figure 1

4541 Furman Ave, Bronx, NY



Rezoning Sites

Study Area Map

(Increment) Weekday Midday Peak Hour

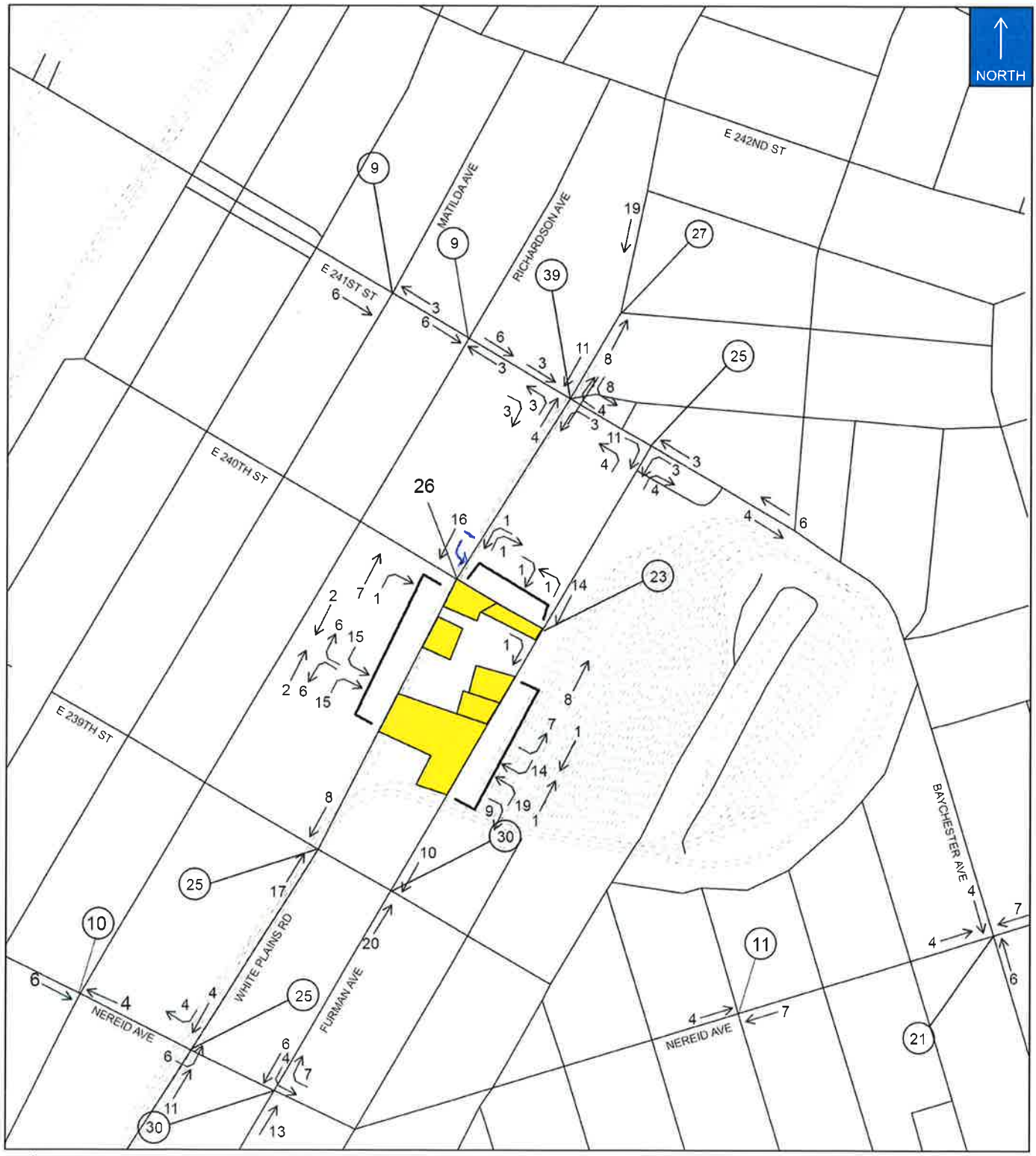
in 9/9 out

10/10/2020

Figure 1

Taxis

4541 Furman Ave, Bronx, NY



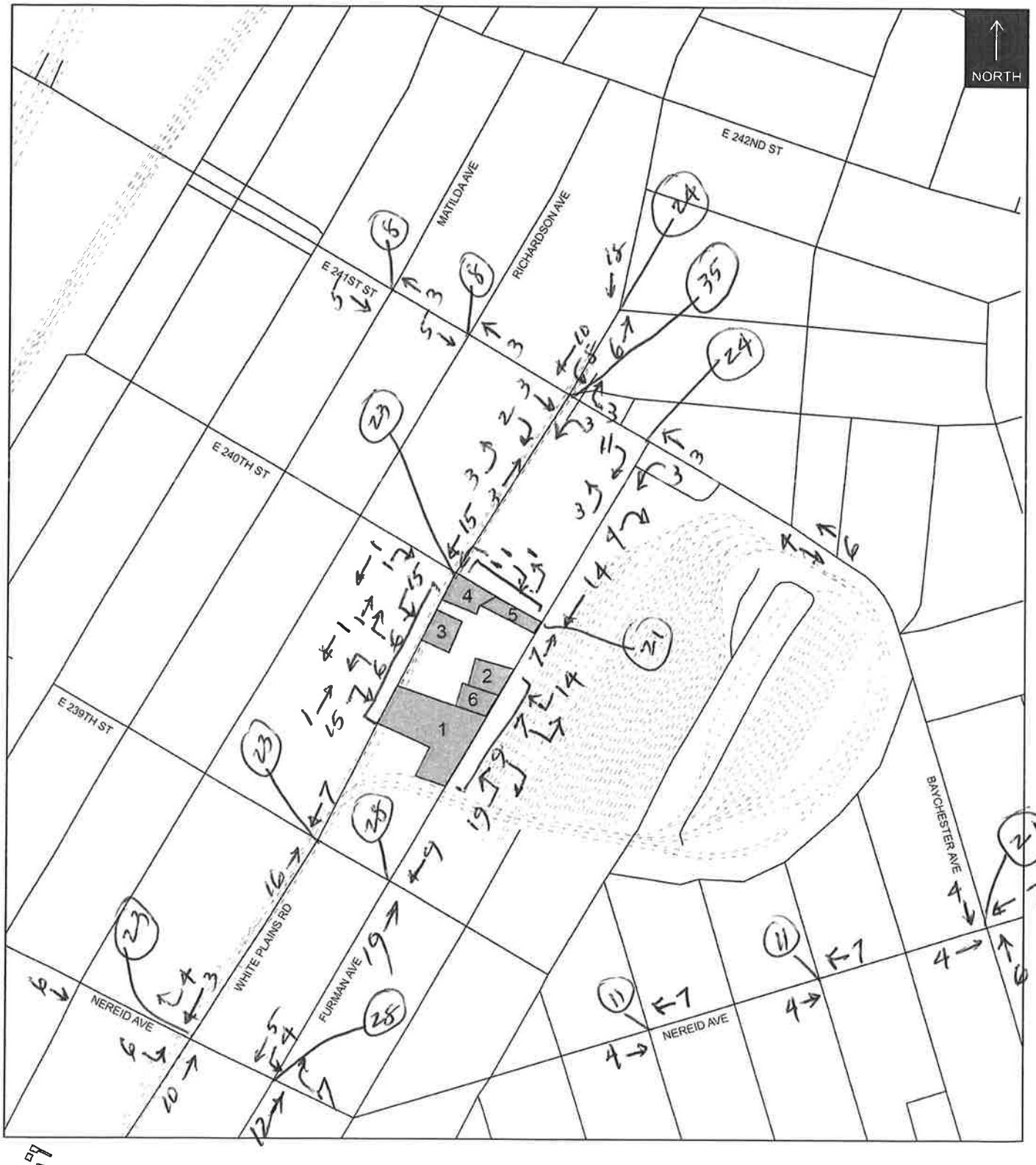
In/Out 68/33

Project Generated Vehicle Trips
PM Peak Hour

10/10/2020

Figure 5

4541 Furman Ave, Bronx, NY



Rezoning Sites

64 in / 29 out

10/10/2020

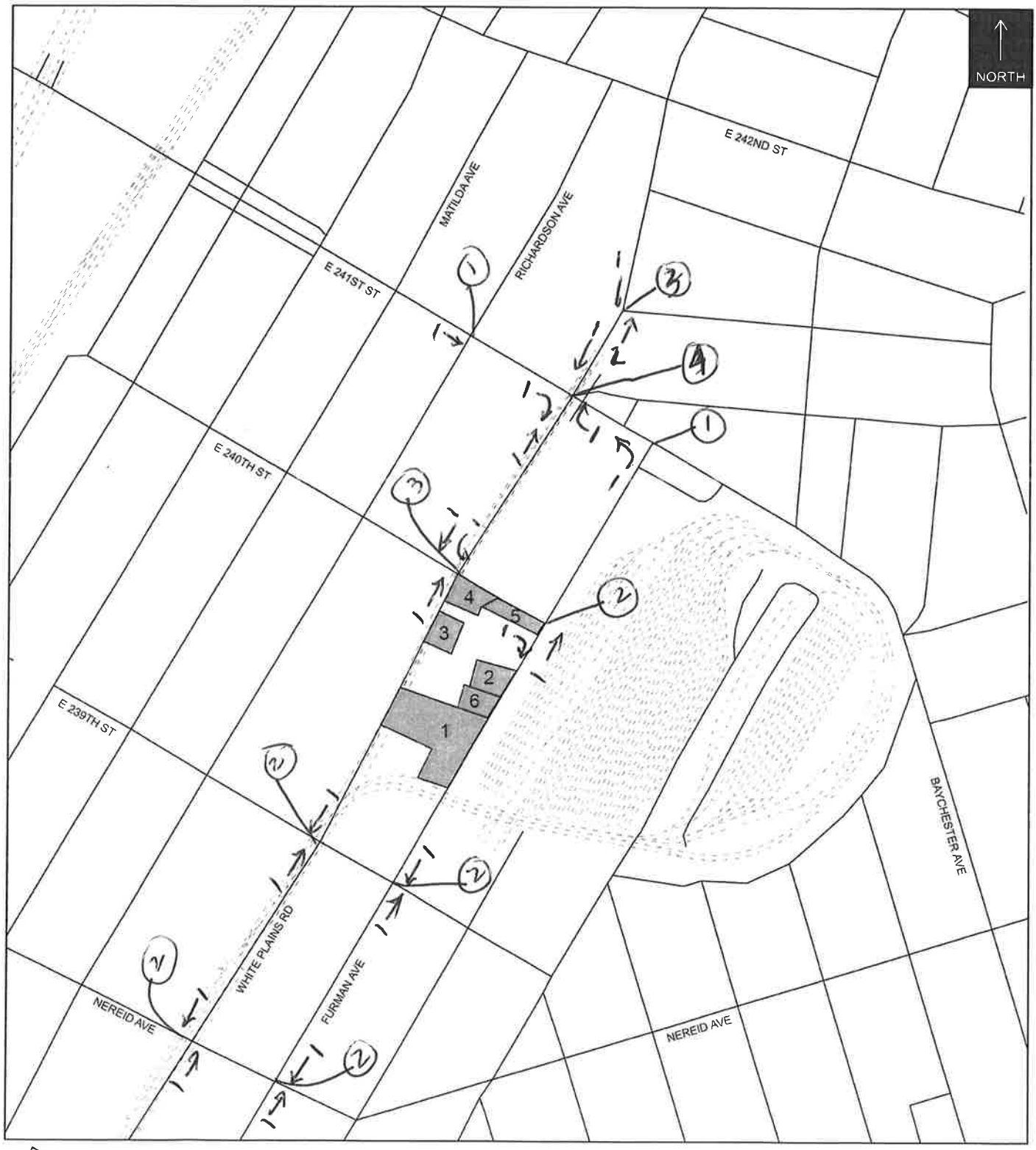
Study Area Map

Increment PM Peak Hour

~~Figure 1~~

Antos

4541 Furman Ave, Bronx, NY



Rezoning Sites

Study Area Map

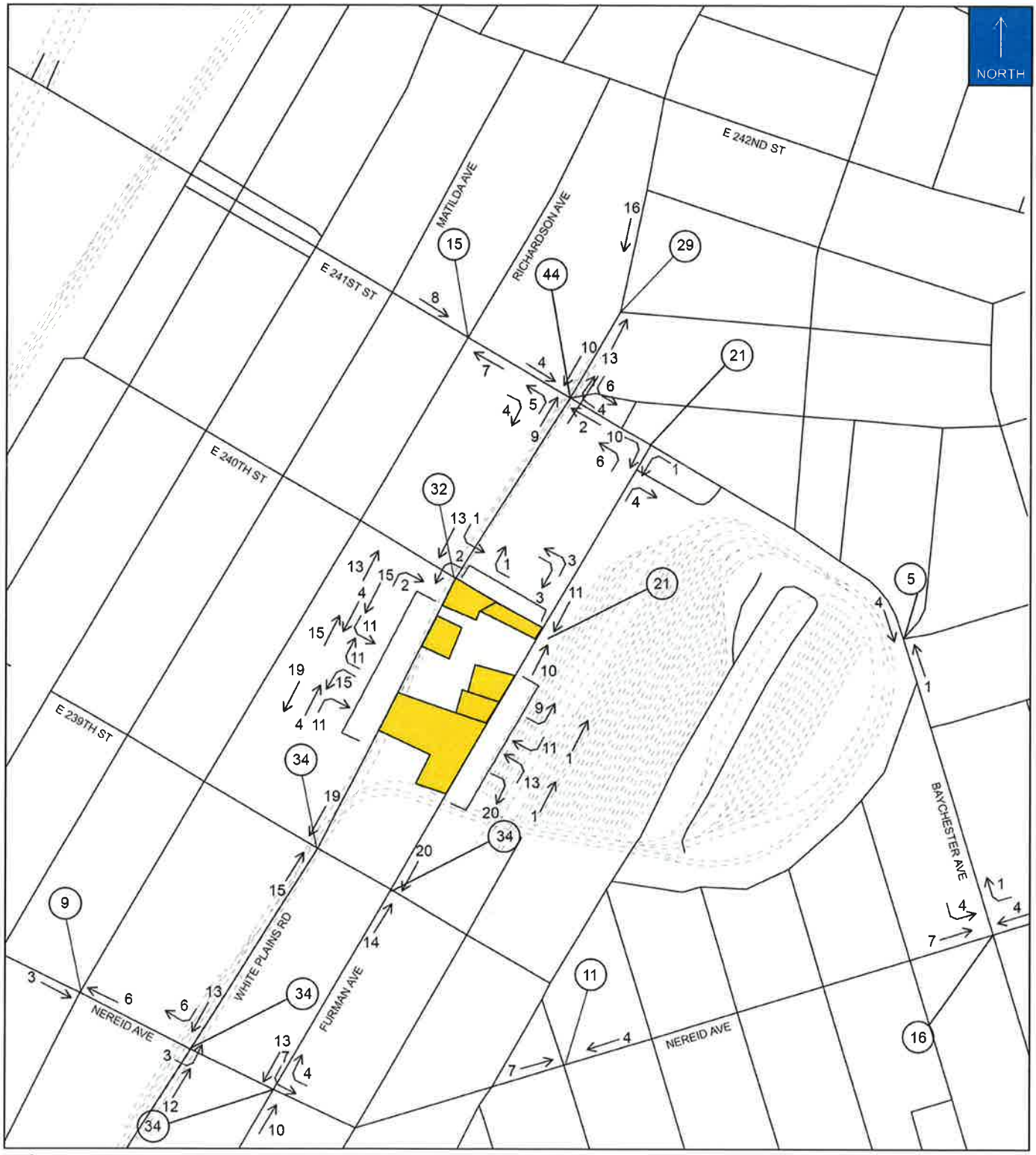
4in / 4 out (increment) (PM Peak Hour)

10/10/2020

~~Figure~~ 1

Taxis

4541 Furman Ave, Bronx, NY



Rezoning Sites

In/Out 54/63

Project Generated Vehicle Trips
Saturday Midday Peak Hour

10/10/2020

Figure 6

4541 Furman Ave, Bronx, NY



Rezoning Sites

48 in / 57 out

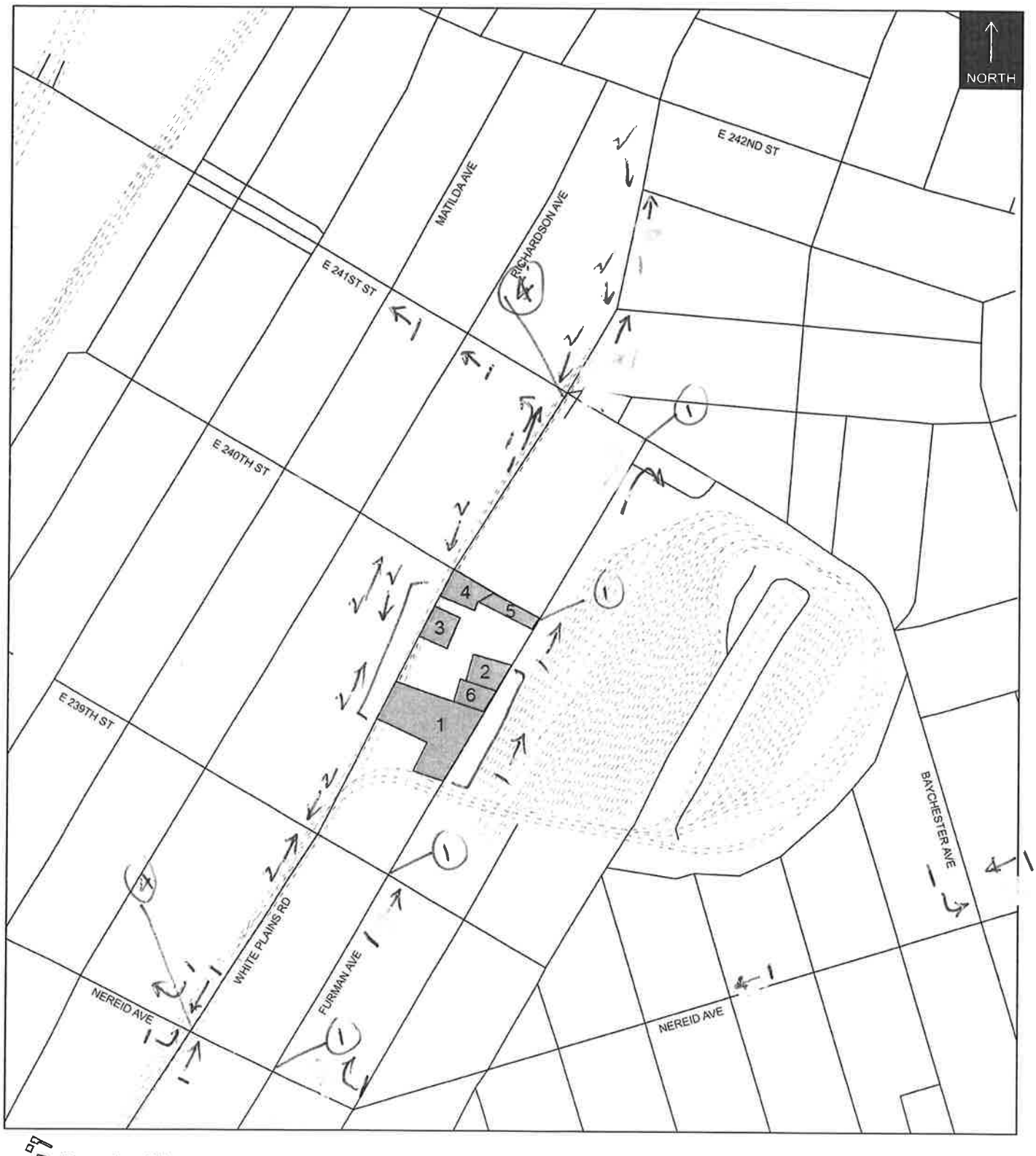
10/10/2020

Study Area Map

Increment (Sat. Midday Peak Hour Autos

Figure 1

4541 Furman Ave, Bronx, NY



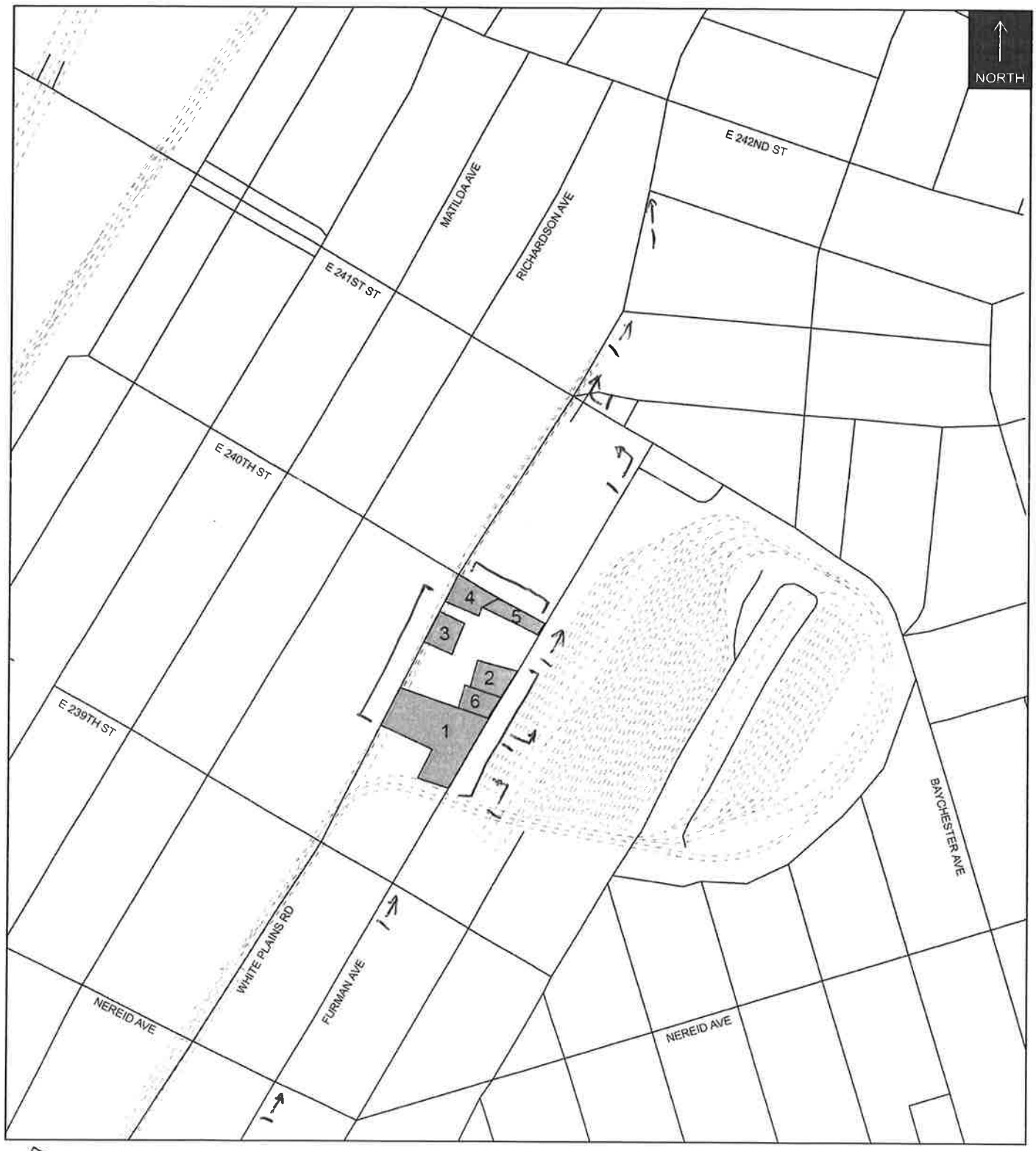
Rezoning Sites

Study Area Map

10/10/2020

Figure 1

4541 Furman Ave, Bronx, NY



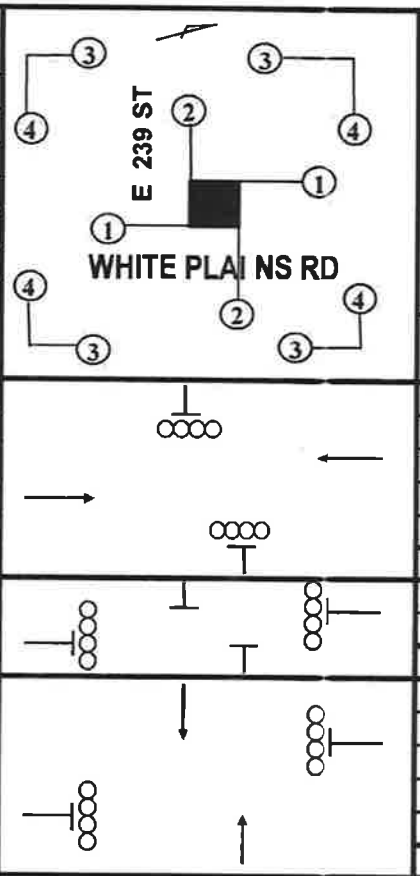
Rezoning Sites

Study Area Map

10/10/2020

Figure 1

	1	2	3	4	5
	R	R	DW	DW	
	A	A	WK	WK	
	G	G			
L/S #	1	2	5	6	
NEMA	1	3	1P	POL1	
				2+3	
PHASE A	G	R	WK	DW	
SPARE	G	R	WK	DW	
PED CL	G	R	FLDW	DW	
VEH CL	A	R	DW	DW	
VEH CL	R	R	DW	DW	
PHASE B	R	R	DW	WK	
LPI	R	R	DW	WK	
PHASE C	R	G	DW	WK	
SPARE	R	G	DW	WK	
PED CL	R	G	DW	FLDW	
VEH CL	R	A	DW	DW	
VEH CL	R	R	DW	DW	



	1	2	3		
	MON-FRI 06:00-10:30	AOT	MON-FRI 14:30-19:30		
	60 SEC	90 SEC	60 SEC		
	14	38	14		
	2	2	2		
	9	9	9		
	3	3	3		
	2	2	2		
	30	54	30		
	3	3	3		
	4	4	4		
	7	7	7		
	2	8	2		
	1	1	1		
	15	15	15		
	3	3	3		
	2	2	2		
	23	29	23		
OFFSET	4	0	38		

CITY OF NEW YORK
BUREAU OF TRAFFIC OPERATIONS
34-02 Queens Blvd. Long Island City, NY 11101

04/19	TH	ADD ACCESSIBLE PEDESTRIAN SIGNAL
DATE	BY	REVISIONS

NOTES: NON-ACTUATED
PC= 3.0 Ft/Sec
ACCESSIBLE PEDESTRIAN SIGNAL
PEDESTRIAN COUNTDOWN
INTERVAL PROGRAM
CABINET TYPE: ASTC-6
CABINET ADDRESS: 4120

WHITE PLAINS RD @ E 239 STREET

Prep. T.Hendrickson Date 04/08/19
Appr. _____ Date _____

NOISE
APPENDIX

Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	81 dB	Result
LASmax	99.9 dB	LAS 50%	66.5 dB	
LASmin	56.9 dB	LAS 90%	59.5 dB	
Start Date & Time	10/17/2019 12:00:03 PM	Calibration (Before) Date	10/17/2019 11:48:08 AM	
Duration	01:00:05 HH:MM:SS	Calibration (After) Date	10/17/2019 1:01:51 PM	
LAeq	77 dB	Calibration Drift	0.1 dB	
End Date & Time	10/17/2019 1:00:08 PM	Battery Low	No	
Notes				

Instrument Model	**CEL-633C**				
Serial Number	4278006	LAS	10%	80.5 dB	Result
LASmax	91.1 dB	LAS	50%	68.5 dB	
LASmin	56.2 dB	LAS	90%	63 dB	
Start Date & Time	10/17/2019 4:30:06 PM	Calibration (Before) Date		10/17/2019 4:26:13 PM	
Duration	01:00:02 HH:MM:SS	Calibration (After) Date		10/17/2019 5:31:55 PM	
LAeq	76.2 dB	Calibration Drift		0.1 dB	
End Date & Time	10/17/2019 5:30:08 PM	Battery Low		No	
Notes					

Instrument Model	**CEL-633C**			
Serial Number	4278006	LAS 10%	81 dB	Result
LASmax	91.1 dB	LAS 50%	67 dB	
LASmin	52.2 dB	LAS 90%	58.5 dB	
Start Date & Time	10/17/2019 7:30:46 AM	Calibration (Before) Date	10/17/2019 7:17:12 AM	
Duration	01:00:07 HH:MM:SS	Calibration (After) Date	10/17/2019 8:32:19 AM	
LAeq	75.9 dB	Calibration Drift	0.3 dB	
End Date & Time	10/17/2019 8:30:53 AM	Battery Low	No	
Notes				

Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**			
Serial Number	2670911	LAS 10%	80 dB	Result
LASmax	99.4 dB	LAS 50%	65 dB	
LASmin	53 dB	LAS 90%	58 dB	
Start Date & Time	10/17/2019 12:07:05 PM	Calibration (Before) Date	10/17/2019 12:05:54 PM	
Duration	01:01:09 HH:MM:SS	Calibration (After) Date	10/17/2019 1:08:25 PM	
LAeq	76.5 dB	Calibration Drift	0.3 dB	
End Date & Time	10/17/2019 1:07:14 PM	Battery Low	No	
Notes				

Instrument Model	**CEL-633C**			
Serial Number	2670911	LAS 10%	81 dB	Result
LASmax	92 dB	LAS 50%	67.5 dB	
LASmin	53.4 dB	LAS 90%	58.5 dB	
Start Date & Time	10/17/2019 7:36:47 AM	Calibration (Before) Date	10/17/2019 7:36:38 AM	
Duration	01:00:16 HH:MM:SS	Calibration (After) Date	10/17/2019 8:38:17 AM	
LAeq	77.2 dB	Calibration Drift	0.3 dB	
End Date & Time	10/17/2019 8:37:03 AM	Battery Low	No	
Notes				

Instrument Model	**CEL-633C**			
Serial Number	2670911	LAS 10%	80.2 dB	Result
LASmax	98.7dB	LAS 50%	64.5 dB	
LASmin	53.2 dB	LAS 90%	58.5 dB	
Start Date & Time	10/17/2019 4:30:05 PM	Calibration (Before) Date	10/17/2019 4:22:59 PM	
Duration	01:00:07 HH:MM:SS	Calibration (After) Date	10/17/2019 5:32:28	
LAeq	76.7 dB	Calibration Drift	PM 0.2 dB	
End Date & Time	10/17/2019 5:30:12 PM	Battery Low	No	
Notes				

Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633A**			
Serial Number	0166064	LAS 10%	65 dB	Result
LASmax	95.3 dB	LAS 50%	59 dB	
LASmin	54.1 dB	LAS 90%	55.5 dB	
Start Date & Time	9/11/2019 7:31:16 AM	Calibration (Before) Date	9/11/2019 7:28:53 AM	
Duration	01:00:26 HH:MM:SS	Calibration (After) Date	9/11/2019 8:33:30 AM	
LAeq	66.3 dB	Calibration Drift	-0.9 dB	
End Date & Time	9/11/2019 8:31:42 AM	Battery Low	No	
Notes				

Instrument Model	**CEL-633A**			
Serial Number	0166064	LAS 10%	65 dB	Result
LASmax	91.1 dB	LAS 50%	57.5 dB	
LASmin	45.8 dB	LAS 90%	53 dB	
Start Date & Time	9/11/2019 4:31:02 PM	Calibration (Before) Date	9/11/2019 4:30:55 PM	
Duration	01:00:04 HH:MM:SS	Calibration (After) Date	9/11/2019 5:31:27 PM	
LAeq	66.1 dB	Calibration Drift	0.1 dB	
End Date & Time	9/11/2019 5:31:06 PM	Battery Low	No	
Notes				

Instrument Model	**CEL-633A**			
Serial Number	0166064	LAS 10%	62.5 dB	Result
LASmax	86.7 dB	LAS 50%	55.5 dB	
LASmin	48.8 dB	LAS 90%	53.5 dB	
Start Date & Time	9/11/2019 12:00:09 PM	Calibration (Before) Date	9/11/2019 11:54:39 AM	
Duration	01:00:03 HH:MM:SS	Calibration (After) Date	9/11/2019 1:00:29 PM	
LAeq	61.8 dB	Calibration Drift	0.7 dB	
End Date & Time	9/11/2019 1:00:12 PM	Battery Low	No	
Notes				

Casella CEL Ltd.

Report On CEL-63X

Instrument Model	**CEL-633C**			
Serial Number	1274486	LAS 10%	68 dB	Result
LASmax	85.1 dB	LAS 50%	60.5 dB	
LASmin	52.2 dB	LAS 90%	56 dB	
Start Date & Time	10/17/2019 11:59:59 AM	Calibration (Before) Date	10/17/2019 11:58:26 AM	
Duration	01:00:04 HH:MM:SS	Calibration (After) Date	10/17/2019 1:00:25 PM	
LAeq	64.7 dB	Calibration Drift	0.2 dB	
End Date & Time	10/17/2019 1:00:03 PM	Battery Low	No	
Notes				

Instrument Model	**CEL-633C**			
Serial Number	1274486	LAS 10%	67 dB	Result
LASmax	84.7 dB	LAS 50%	58 dB	
LASmin	50.3 dB	LAS 90%	54 dB	
Start Date & Time	10/17/2019 7:29:58 AM	Calibration (Before) Date	10/17/2019 7:26:52 AM	
Duration	01:00:06 HH:MM:SS	Calibration (After) Date	10/17/2019 8:30:36 AM	
LAeq	64.1 dB	Calibration Drift	0.0 dB	
End Date & Time	10/17/2019 8:30:04 AM	Battery Low	No	
Notes				

Instrument Model	**CEL-633C**			
Serial Number	1274486	LAS 10%	68.5 dB	Result
LASmax	83.1 dB	LAS 50%	60.5 dB	
LASmin	52.6 dB	LAS 90%	56 dB	
Start Date & Time	10/17/2019 4:30:03 PM	Calibration (Before) Date	10/17/2019 4:27:24 PM	
Duration	01:00:03 HH:MM:SS	Calibration (After) Date	10/17/2019 5:30:24 PM	
LAeq	65.9 dB	Calibration Drift	0.0 dB	
End Date & Time	10/17/2019 5:30:06 PM	Battery Low	No	
Notes				

Start Date & Time	LAeq	LAS 10%	LAS 50%	LAS 90%	LASmin	LASmax	Notes
9/11/2019 16:26	63.1 dB	67.0 dB	55.0 dB	49.5 dB	46.3 dB	81.3 dB	
9/11/2019 17:26	69.0 dB	68.5 dB	56.0 dB	50.0 dB	46.5 dB	92.8 dB	
9/11/2019 18:26	74.8 dB	75.5 dB	60.0 dB	53.0 dB	48.5 dB	93.5 dB	
9/11/2019 19:26	70.2 dB	69.0 dB	56.5 dB	50.0 dB	46.7 dB	94.1 dB	
9/11/2019 20:26	66.6 dB	65.5 dB	57.0 dB	50.5 dB	46.5 dB	88.8 dB	
9/11/2019 21:26	65.6 dB	66.5 dB	55.5 dB	50.0 dB	46.6 dB	86.4 dB	
9/11/2019 22:26	70.3 dB	67.0 dB	54.0 dB	49.0 dB	46.7 dB	92.6 dB	
9/11/2019 23:26	69.1 dB	69.0 dB	54.5 dB	49.5 dB	47.0 dB	89.5 dB	
9/12/2019 0:26	70.5 dB	68.5 dB	52.0 dB	49.0 dB	46.9 dB	91.4 dB	
9/12/2019 1:26	64.0 dB	63.5 dB	50.5 dB	47.5 dB	45.7 dB	85.8 dB	
9/12/2019 2:26	54.4 dB	54.0 dB	47.5 dB	46.5 dB	45.2 dB	69.5 dB	
9/12/2019 3:26	58.2 dB	59.5 dB	50.0 dB	48.0 dB	46.0 dB	77.2 dB	
9/12/2019 4:26	56.0 dB	59.0 dB	50.5 dB	48.5 dB	46.8 dB	75.0 dB	
9/12/2019 5:26	63.8 dB	68.0 dB	54.5 dB	49.5 dB	47.3 dB	81.7 dB	
9/12/2019 6:26	67.2 dB	71.0 dB	62.0 dB	56.5 dB	53.7 dB	84.9 dB	
9/12/2019 7:26	69.3 dB	73.5 dB	63.5 dB	56.5 dB	51.3 dB	84.3 dB	
9/12/2019 8:26	67.8 dB	66.5 dB	54.5 dB	50.5 dB	47.7 dB	91.2 dB	
9/12/2019 9:26	68.0 dB	71.5 dB	58.0 dB	52.0 dB	48.6 dB	88.4 dB	
9/12/2019 10:26	70.5 dB	73.5 dB	62.5 dB	55.0 dB	50.9 dB	92.4 dB	
9/12/2019 11:26	62.3 dB	64.5 dB	55.5 dB	51.5 dB	48.2 dB	84.3 dB	
9/12/2019 12:26	59.9 dB	62.5 dB	54.0 dB	51.0 dB	48.0 dB	79.5 dB	
9/12/2019 13:26	60.3 dB	63.5 dB	57.0 dB	52.5 dB	48.3 dB	77.9 dB	
9/12/2019 14:26	60.7 dB	64.0 dB	57.0 dB	52.0 dB	49.0 dB	79.0 dB	
9/12/2019 15:26	63.5 dB	66.5 dB	58.5 dB	53.5 dB	47.5 dB	83.3 dB	

Certificate of Conformity and Calibration



Instrument Model:-	**CEL-633C**		
Serial Number	1274486		
Firmware revision	V006-03		
Microphone Type:-	**CEL-251**	**Preamplifier Type:-**	**CEL-495**
Serial Number	2467	Serial Number	003570
Instrument Class/Type:-	**1**		

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	24.3 °C	**Test Engineer:-**	Malcolm Neale
	52.4 %RH	**Date of Issue:-**	July 11, 2019
	1007 mBar		

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

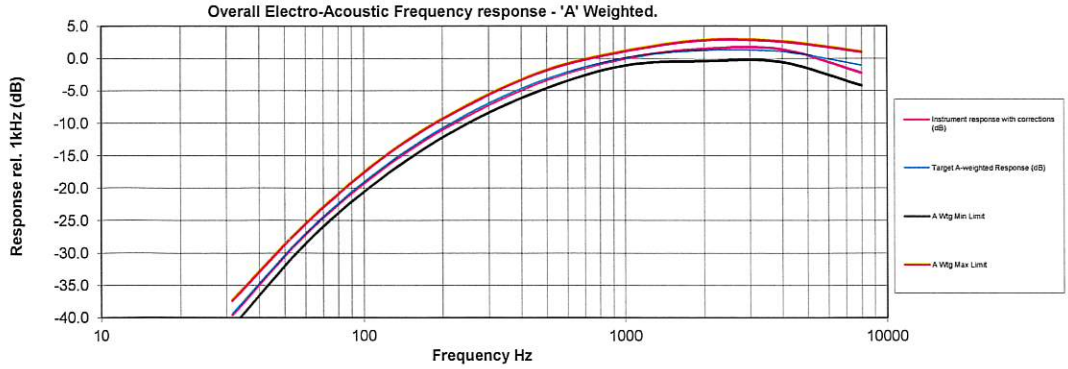
Test Summary:-

Self Generated Noise Test	**All Tests Pass**
Electrical Signal Test Of Frequency Weightings	**All Tests Pass**
Frequency & Time Weightings At 1 kHz	**All Tests Pass**
Level Linearity On The Reference Level Range	**All Tests Pass**
Toneburst Response Test	**All Tests Pass**
C-peak Sound Levels	**All Tests Pass**
Overload Indication	**All Tests Pass**
Acoustic Tests	**All Tests Pass**

Combined Electro-Acoustic Frequency Response - *A Weighted*

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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Tested to CEL-63X test sheet TP444 revision 01-00

CASELLA

Certificate of Conformity and Calibration

Customer:	Equity Environmental
Instrument:	CEL-120/1
Serial Number:	3574248
Job Number:	19468
Date of Issue:	11-Jul-2019
Engineer:	M Neale

Traceable Equipment:

Reference Calibrator	EQ11205
DVM type Fluke 45	EQ00318

Test Conditions:

Ambient Temperature	24.1	°C
Ambient Humidity	52.7	%RH
Ambient Pressure	1007	mBar

Results:

	Level 1	Level 2	Frequency
Initial Reading	113.92 dB	93.93 dB	1.0000 kHz
Final Reading	114.00 dB	93.99 dB	1.0000 kHz

Uncertainty:

Level	±	0.15	dB
Frequency	±	0.5	Hz

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications.
Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9000:2015 quality procedures.
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.
This certificate may not be reproduced other than in full, except with prior written approval of the issuing laboratory.

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VIC 3170, Australia
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E: australia@casellasolutions.com

CASELLA

Certificate of Conformity and Calibration

Customer:	Equity Environmental
Instrument:	CEL-120/1
Serial Number:	2045304
Job Number:	19468
Date of Issue:	11-Jul-2019
Engineer:	M Neale

Traceable Equipment:		
	Reference Calibrator	EQ11205
	DVM type Fluke 45	EQ00318

Test Conditions:

Ambient Temperature	24.1	°C
Ambient Humidity	53.8	%RH
Ambient Pressure	1007	mBar

Results:

	Level 1	Level 2	Frequency
Initial Reading	114.12 dB	94.06 dB	1.0000 kHz
Final Reading	114.00 dB	93.99 dB	1.0000 kHz

Uncertainty:

Level	±	0.15	dB
Frequency	±	0.5	Hz

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications.
Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9000:2015 quality procedures.
The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.
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CASELLA

Certificate of Conformity and Calibration

Instrument Model:-	CEL-633C	Preamplifier Type:-	CEL-495
Serial Number	2670911	Serial Number	3987
Firmware revision	V006-03		
Microphone Type:-	CEL-251	As Received:-	114.1
Serial Number	2803	As Adjusted:-	114.0
Instrument Class/Type:-	1		



Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- The test sequences performed in this report are in accordance with the current Sound level meter *Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	23.5 °C	Test Engineer:-	Ken Umbeer
	87.7 %RH	Date of Issue:-	August 22, 2019
	1013.5 mBar	Date Due:-	August 22, 2020

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to NIST. This product is certified as being compliant to the requirements of the CE Directive.

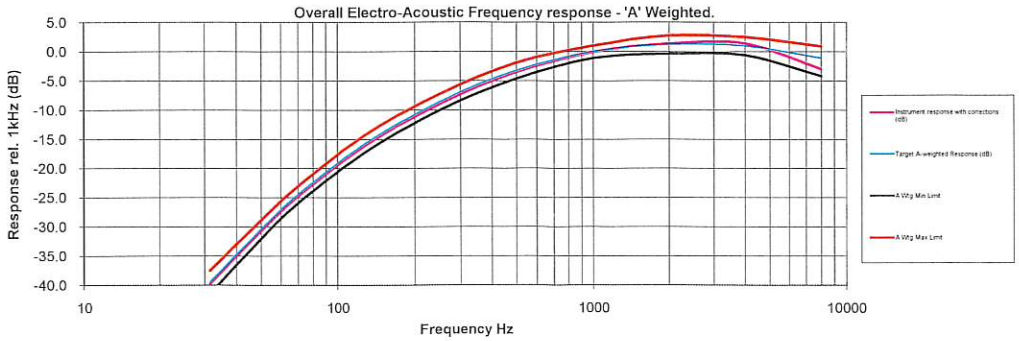
Test Summary:-

Self Generated Noise Test	All Tests Pass
Electrical Signal Test Of Frequency Weightings	All Tests Pass
Frequency & Time Weightings At 1 kHz	All Tests Pass
Level Linearity On The Reference Level Range	All Tests Pass
Toneburst Response Test	All Tests Pass
C-peak Sound Levels	All Tests Pass
Overload Indication	All Tests Pass
Acoustic Tests	All Tests Pass

Combined Electro-Acoustic Frequency Response - A Weighted

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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Tested to CEL-63X test sheet TP444 revision 00-12

CASELLA

Certificate of Conformity and Calibration

Instrument Model:-	**CEL-633C**	**Preamplifier Type:-**	**CEL-495**
Serial Number	4278006	Serial Number	4208
Firmware revision	V006-03		
Microphone Type:-	**CEL-251**	As Received:-	114.1
Serial Number	3796	As Adjusted:-	114.0
Instrument Class/Type:-	**1**		



Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- The test sequences performed in this report are in accordance with the current Sound level meter *Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	23.5 °C	Test Engineer:-	Ken Umbeer
	87.7 %RH	Date of Issue:-	August 22, 2019
	1013.5 mBar	Date Due:-	August 22, 2020

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to NIST. This product is certified as being compliant to the requirements of the CE Directive.

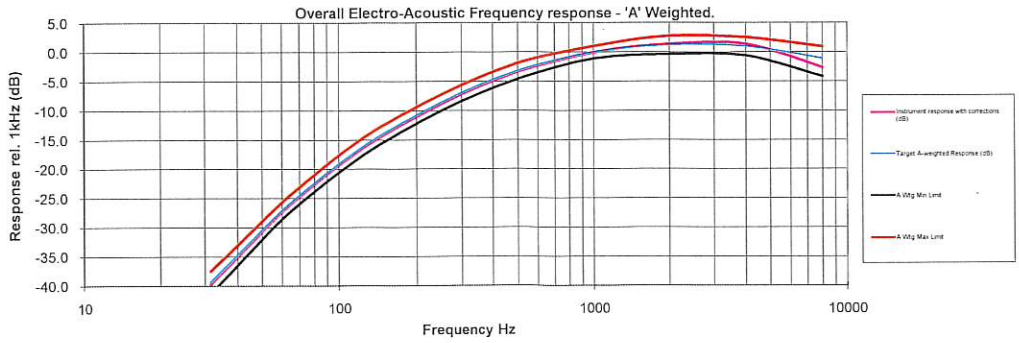
Test Summary:-

Self Generated Noise Test	All Tests Pass
Electrical Signal Test Of Frequency Weightings	All Tests Pass
Frequency & Time Weightings At 1 kHz	All Tests Pass
Level Linearity On The Reference Level Range	All Tests Pass
Toneburst Response Test	All Tests Pass
C-peak Sound Levels	All Tests Pass
Overload Indication	All Tests Pass
Acoustic Tests	All Tests Pass

Combined Electro-Acoustic Frequency Response - A Weighted

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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Tested to CEL-63X test sheet TP444 revision 00-12

Certificate of Conformity and Calibration

CASELLA CEL

Instrument Model: CEL-120/1 Acoustic Calibrator
Serial Number: 2383985

Certificate #: 19651-2



Calibration References:

Casella CEL hereby certifies that the above listed sound measuring instrument has been tested according to the manufacturer's specifications and meets the requirements of the relevant American National Standards Institute (ANSI) Standard for Sound Calibrators S1.40 - 1983 (R1997). This instrument was calibrated against standards which are either traceable to the National Institute of Standards and Technology (NIST) or they have been derived by approved ratio techniques.

Test Conditions:

23.5 °C
87.7 %RH
1013.5 mBar

Date of Issue:- August 22, 2019
Due Date:- August 22, 2020
Service Engineer:- Ken Umbeer

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards. This product is certified as being compliant to the requirements of the CE Directive. Test accuracy ratio (TAR) ≥1.

Summary:

The data represents the response of the sound level meter calibrator to the reference source corrected for atmospheric conditions at the time of calibration.

	Nominal Value	Tolerance	As Received	As Adjusted
Frequency (Hz)	1000.0	±5.0	1000.0	1000.0
Level (dB)	114.0	±0.3	114.1	114.0
Level (dB)	94.0	±0.3	94.1	94.0

Standards Used in Calibration:		Serial Number	Calibration Due Date	Certificate Number
Sound Level Meter:	CEL-620.A1	5130002	2/4/2020	29619-2
Multimeter:	Fluke 45	4995184	2/4/2020	1821321

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Certificate of Conformity and Calibration

CASELLA CEL

Instrument Model: CEL-120/1 Acoustic Calibrator
Serial Number: 4478708

Certificate #: 19651-1



Calibration References:

Casella CEL hereby certifies that the above listed sound measuring instrument has been tested according to the manufacturer's specifications and meets the requirements of the relevant American National Standards Institute (ANSI) Standard for Sound Calibrators S1.40 - 1983 (R1997). This instrument was calibrated against standards which are either traceable to the National Institute of Standards and Technology (NIST) or they have been derived by approved ratio techniques.

Test Conditions:

23.5 °C
87.7 %RH
1013.5 mBar

Date of Issue:- August 22, 2019
Due Date:- August 22, 2020
Service Engineer:- Ken Umbeer

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards. This product is certified as being compliant to the requirements of the CE Directive. Test accuracy ratio (TAR) ≥1.

Summary:

The data represents the response of the sound level meter calibrator to the reference source corrected for atmospheric conditions at the time of calibration.

	Nominal Value	Tolerance	As Received	As Adjusted
Frequency (Hz)	1000.0	±5.0	1000.0	1000.0
Level (dB)	114.0	±0.3	114.2	114.0
Level (dB)	94.0	±0.3	94.1	94.0

Standards Used in Calibration:		Serial Number	Calibration Due Date	Certificate Number
Sound Level Meter:	CEL-620.A1	5130002	2/4/2020	29619-2
Multimeter:	Fluke 45	4995184	2/4/2020	1821321

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INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC
92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 35634
Description Casella SLM TYPE 2
Calibrated 9/6/2019 12:16:50PM

Manufacturer Casella
Model Number CEL-63X - A
Serial Number/ Lot Number 0166064
Location New Jersey
Department

State Certified
Status Pass
Temp °C 23
Humidity % 44

Calibration Specifications

Group # 1
Group Name 114 db check / data transfer
Test Performed: N/A **As Found Result:** **As Left Result:**

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Next Cal Date / Last Cal Date/ Expiration Date Opened Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Roger Rambough

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Advanced Labs, Inc.

Pine Environmental Services, Inc

Instrument ID 35634
Description CEL-63X Sound Level Meter
Calibrated 1/23/2019

Manufacturer Casella
Model Number CEL-63X
Serial Number 166064
Location New Jersey
Temp 71

Classification
Status pass
Frequency Yearly
Department Lab
Humidity 20

Calibration Specifications

Group # 1
Group Name Acoustic Tests Performed
Test Performed: Yes **As Found Result: Fail** **As Left Result: Pass**

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Serial Number	(As Of Cal Entry Date) Last Cal Date	Next Cal Date
B&K 4226	Brüel & Kjær 4226	Brüel & Kjær	2590968	5/10/2018	5/10/2019
B&K 4228	Brüel & Kjær 4228	Brüel & Kjær	2667476	5/7/2018	5/7/2019

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated David Galego

Advanced Labs, Inc. hereby certifies that this instrument is calibrated and functions to meet the manufacture's specifications using NIST traceable standards, or is derived from accepted values of physical constants.

Noise Job Field Sheet

Name of Project: 4541 Furman Avenue - 2019078

Project Address: 4541 Furman Avenue Bronx, New York

Date(s) of Field Work: 9/11-9/12 2019

Personnel: John Vrabel – 9/11 John Vrabel, Gene Bove, Zach Landis - 9/12

Project Specific Scope of Work:

Day 1: Set up 24-hour location 6 on the roof. 1 x 1-hour location AM, Midday, and PM peak periods (Location 3) – Count road traffic on Furman (record 24-hour data on last page)

Day 2: 4 x 1-hour locations AM, Midday, and PM peak periods. – count all traffic and trains

Maximum Billable Hours for the Day: Day 1 – 15 Day 2 – 45 (15/person)

I. Start of Noise Monitoring Day

Departure Time: 5:00 Arrival Time: 6:30

Weather Conditions (temp, wind speed, precipitation): Sunny 70's low wind

Meter Type: Cesella Meter Serial #: 0166064 Meter Location: loc. 3
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
*If more locations are needed for a project use a second Field Sheet

Calibrator Serial #: 3339189 Meters used on: 0166064
Calibrator Serial #: _____ Meters used on: _____
Calibrator Serial #: _____ Meters used on: _____
Calibrator Serial #: _____ Meters used on: _____

Were Photos Taken of Each Location? Y / N *Discuss specific photo instructions w/ Project Manager

**On a separate sheet of paper (field book) make a sketch of the noise meter locations and the distances to nearest wall, fence, building, or other solid surfaces.*

II. Morning Session 7:30 AM – 9:00 AM

Before Measurement:

Meter Serial #: 0166064 Time: 7:25 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: ~~0166064~~ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: ~~0166064~~ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 0166064 Time: 8:31 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
Location 1	9/12/19 -	9/12/19 -
Location 2	9/12/19 -	9/12/19 -
Location 3	9/11/19 - 7:31	9/11/19 - 8:31
Location 4	9/12/19 -	9/12/19 -
Location 6	9/12/19 -	9/12/19 -

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
Location 1						
Location 2						
Location 3	57	48	2	0	10	13
Location 4						
Location 6						

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
Auto body work

Please place noise meters in their respective cases between sessions to avoid damage.

III. Midday Session 12:00 PM – 1:30 PM

Before Measurement:

Meter Serial #: 0166064 Time: 11:59 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 0166064 Time: 13:01 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
Location 1	9/12/19 -	9/12/19 -
Location 2	9/12/19 -	9/12/19 -
Location 3	9/11/19 - 12:00	9/11/19 - 13:00
Location 4	9/12/19 -	9/12/19 -
Location 6	9/12/19 -	9/12/19 -

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
Location 1						
Location 2						
Location 3	45	40	3	1	2	10
Location 4						
Location 6						

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
Auto body work

Please place noise meters in their respective cases between sessions to avoid damage.

IV. Evening Session 4:30 PM – 6:00 PM

Before Measurement:

Meter Serial #: 0166064 Time: 1630 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 0166064 Time: 1731 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
Location 1	9/12/19 -	9/12/19 -
Location 2	9/12/19 -	9/12/19 -
Location 3	9/11/19 - 1630	9/11/19 - 1730
Location 4	9/12/19 -	9/12/19 -
Location 6	9/12/19 -	9/12/19 -

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
Location 1						
Location 2						
Location 3	56	51	4	2	3	8
Location 4						
Location 6						

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
Auto Body work

Please place noise meters in their respective cases between sessions to avoid damage.

V. End of Noise Monitoring Day

- Please return all noise meters to their cases.
- Do not return dead batteries to the cases, throw them out.
- Did you take photos? (Y) / N
- Did you complete the site sketch? (Y) / N
- If a meter(s) was rented, please scan in calibration documents.

Anything of note/concern for the day: N/A

Departure Time: 17:35 Arrival Time: 16:30

Total Time to Be Billed: 9/11- 15 9/12-

Location 6 (24-hours)



Legend

Project Area

Noise Monitoring Locations

0 20 40 80 120 US Feet

N

equity environmental engineering

Noise Job Field Sheet

Name of Project: 4541 Furman Avenue - 2019078

Project Address: 4541 Furman Avenue Bronx, New York

Date(s) of Field Work: 10/17/19

Personnel: John Vrabel, , Zach Landis, Premier Field Services

Project Specific Scope of Work:

4 x 1-hour locations AM, Midday, and PM peak periods. – count all traffic and trains
Locations 1, 2, 4, 5

Maximum Billable Hours for the Day: 45 (15/person)

I. Start of Noise Monitoring Day

Departure Time: 5:00 Arrival Time: 6:30

Weather Conditions (temp, wind speed, precipitation): 50's, moderate wind, dry, cloudy

Meter Type: Cassella Meter Serial #: 4278056 Meter Location: 1
Meter Type: Cassella Meter Serial #: 2670911 Meter Location: 2
Meter Type: Cassella Meter Serial #: 3294486 Meter Location: 4
Meter Type: Cassella Meter Serial #: 1488256 Meter Location: 5
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
*If more locations are needed for a project use a second Field Sheet

Calibrator Serial #: 2383985 Meters used on: 1
Calibrator Serial #: 4478708 Meters used on: 2
Calibrator Serial #: _____ Meters used on: 4
Calibfator Serial #: 2383985 Meters used on: 5

Were Photos Taken of Each Location? (Y) / N *Discuss specific photo instructions w/ Project Manager

**On a separate sheet of paper (field book) make a sketch of the noise meter locations and the distances to nearest wall, fence, building, or other solid surfaces.*

II. Morning Session 7:30 AM – 9:00 AM

Before Measurement:

Meter Serial #: 4278006 Time: 07:17 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 2670911 Time: 07:18 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1294486 Time: 7:35 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1488256 Time: 7:29 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 4278006 Time: 0832 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 2670911 Time: 0838 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1294486 Time: 0831 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1488256 Time: 8:46 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
Location 1	7:30	8:30
Location 2	7:36	8:36
Location 4	730	830
Location 5	7:30	7:37

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
Location 1	150	164	11	3	18	35
Location 2	SAME AS	1				
Location 4	38	52	4	2	0	
Location 5	SAME AS	1				

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
Street cleaner @ LOC 1 + 2

Location 4 -> 0804 Garbage Truck, 0808 Impact Drill

Please place noise meters in their respective cases between sessions to avoid damage.

III. Midday Session 12:00 PM – 1:30 PM

Before Measurement:

Meter Serial #: 4228006 Time: 1147 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 2670411 Time: 1147 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1274486 Time: 1159 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1488256 Time: 1158 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 4228006 Time: 1302 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 2670411 Time: 1300 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1274486 Time: 1306 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1488256 Time: 1301 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
Location 1	12:00	13:00
Location 2	12:00	13:00
Location 4	12:00	13:00
Location 5	12:00	13:06

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
Location 1	159	141	18	3	9	21
Location 2	SAME AS 1					
Location 4	~~333~~	28	3			
Location 5	SAME AS 1					

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):

Location 4 → 1206 = Construction on corner of White Plains + E 240 St.
1222 Ambulance passed side St.

Please place noise meters in their respective cases between sessions to avoid damage.

IV. Evening Session 4:30 PM – 6:00 PM

Before Measurement:

Meter Serial #: 4278006 Time: 1626 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 2670911 Time: 1626 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1274486 Time: 16:25 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1488256 Time: 1625 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: 4278006 Time: 17:30 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 2670911 Time: 17:30 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1274486 Time: 17:31 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: 1488256 Time: 17:36 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: _____ Time: _____ Calibration Passed at 114 dB? Y / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
Location 1	16:30	17:30
Location 2	16:30	17:30
Location 4	16:30	17:30
Location 5	16:30	17:36

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
Location 1	148	130	13	2	13	25
Location 2	SAME AS 1					
Location 4	37	45	5	2	1	
Location 5	SAME AS 1					

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):

Location 4 - Car Alarm @ 1722

Please place noise meters in their respective cases between sessions to avoid damage.

V. End of Noise Monitoring Day

- Please return all noise meters to their cases.
- Do not return dead batteries to the cases, throw them out.
- Did you take photos? (Y) / N
- Did you complete the site sketch? (Y) / N

- If a meter(s) was rented, please scan in calibration documents.

Anything of note/concern for the day: _____

_____

_____

Departure Time: 17:45 Arrival Time: 19:45

Total Time to Be Billed: 9/11- 9/12-_____

Location 6 (24-hours)



Legend

Project Area

Noise Monitoring Locations

0 20 40 80 120 US Feet

N

equity environmental engineering



Legend

Project Area

Noise Monitoring Locations

0 20 40 80 120 US Feet

N

equity environmental engineering



Legend

Project Area

Noise Monitoring Locations

0 20 40 80 120 US Feet

N

equity environmental engineering