City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT SHORT FORM ● FOR UNLISTED ACTIONS ONLY

Please fill out, print and submit to the appropriate agency (see instructions)

PART I: GENERAL INFORMATION

1. *Does 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**

2. *Project Name* 580 Gerard Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (To Be Assigned by Lead Agency)	BSA REFERENCE NUMBER (If Applicable)
11DCP143X	
ULURP REFERENCE NUMBER (If Applicable))	**OTHER REFERENCE NUMBER(S) (If Applicable) (e.g. Legislative Intro, CAPA, etc)**
130064ZMX; N130065ZRX	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			NR Property 2 LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Robert Dobruskin			Richard Bass c/o Herrick Feinstein		
ADDRESS 22 Reade Street			ADDRESS 2 Park Avenue		
CITY New York	STATE NY	ZIP 10007	CITY New York	STATE NY	ZIP 10016
TELEPHONE 212 720 3423	FAX		TELEPHONE 212 592 6144	FAX 212 592 1500	
EMAIL ADDRESS rdobrus@planning.nyc.gov			EMAIL ADDRESS rbass@herrick.com		

5. *Project Description*:

This is an application to the New York City Department of City Planning (NYC DCP) for a zoning map change that would rezone the western half of Block 2353, extending from East 150th Street in the south to 360 feet north of East 150th Street in the north (the "Rezoning Area") from M1-2 to R7A with C2-4 overlay. (In the affected area, Lots 1 and 16 are within an M1-2 district; Lots 45-49 are within an R6 district.) An amendment to the text of the Zoning Resolution is also proposed to apply the Inclusionary Housing Program to the Rezoning Area. The Rezoning Area would encompass the entirety of Lot 1 and parts of Lots 16, 45, 46, 47, 48, and 49; the proposed rezoning would not affect the development potential of Lots 16, 45, 46, 47, 48, or 49. The Inclusionary Housing Program Bonus would allow a Floor Area Ratio of 4.6 resulting in a development program consistent with the Reasonable Worst Case Development Scenario: a 152,190 gross s.f., 80-foot high mixed use building comprised of 124 residential units (24 units would be affordable), 24,900 gross s.f. of local retail and 89 accessory parking spaces (the "Proposed Action").

6a. *Project Location*: *Single Site* *(for a project at a single site, complete all the information below)*

ADDRESS 580 Gerard Avenue	NEIGHBORHOOD NAME Concourse Village	
TAX BLOCK AND LOT Block 2353, Lot 1, p/o Lots 16, 45,46,47,48,49	BOROUGH Bronx	COMMUNITY DISTRICT 4
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS		
The block containing the Rezoning Area (Block 2353) is bounded by East 150th St. to the south, East 151st St. to the north, Gerard Ave. to the west and Walton Ave. to the east.		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION IF ANY: M1-2		ZONING SECTIONAL MAP NO: 6a

6b. *Project Location*: *Multiple Sites* *(Provide a description of the size of the project area in both City Blocks and Lots. If the project would apply to the entire city or to areas that are so extensive that a site-specific description is not appropriate or practicable, describe the area of the project, including bounding streets, etc.)*

N/A

7. *REQUIRED ACTIONS OR APPROVALS* *(check all that apply)*

City Planning Commission: YES ☑ NO ☐

- ☐ CITY MAP AMENDMENT
- ☑ ZONING MAP AMENDMENT
- ☑ ZONING TEXT AMENDMENT
- ☑ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)
- ☐ CONCESSION
- ☐ UDAAP
- ☐ REVOCABLE CONSENT
- ☐ ZONING CERTIFICATION
- ☐ ZONING AUTHORIZATION
- ☐ HOUSING PLAN & PROJECT
- ☐ SITE SELECTION — PUBLIC FACILITY
- ☐ FRANCHISE
- ☐ DISPOSITION — REAL PROPERTY

ZONING SPECIAL PERMIT, SPECIFY TYPE:

- ☐ MODIFICATION OF
- ☐ RENEWAL OF
- ☐ OTHER

Board of Standards and Appeals: YES ☐ NO ☑

- ☐ SPECIAL PERMIT

EXPIRATION DATE MONTH DAY YEAR

- ☐ VARIANCE (USE)
- ☐ VARIANCE (BULK)

SPECIFY AFFECTED SECTION(S) OF THE ZONING RESOLUTION

Department of Environmental Protection: YES ☐ NO ☑ IF YES, IDENTIFY:

Other City Approvals: YES ☐ NO ☑

- ☐ LEGISLATION
- ☐ RULEMAKING
- ☐ FUNDING OF CONSTRUCTION; SPECIFY:
- ☐ CONSTRUCTION OF PUBLIC FACILITIES
- ☐ POLICY OR PLAN; SPECIFY:
- ☐ FUNDING OF PROGRAMS; SPECIFY:
- ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL *(not subject to CEQR)*
- ☐ PERMITS; SPECIFY:
- ☐ 384(b)(4) APPROVAL
- ☐ OTHER; EXPLAIN
- ☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) *(not subject to CEQR)*

State or Federal Actions/Approvals/Funding: YES ☐ NO ☑ IF "YES," IDENTIFY:

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

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 11×17 inches in size and must be folded to 8.5×11 inches for submission*

- ☑ Site location map
- ☑ Zoning map
- ☑ Photographs of the project site taken within 6 months of EAS submission and keyed to the site location map
- ☑ Sanborn or other land use map
- ☑ Tax map
- ☐ For large areas or multiple sites, a GIS shape file that defines the project sites

PHYSICAL SETTING *(both developed and undeveloped areas)*

Total directly affected area (sq. ft.):	Type of Waterbody and surface area (sq. ft.):	Roads, building and other paved surfaces (sq. ft.)
32,884	N/A	30,345

Other, describe (sq. ft.):

9. *Physical Dimensions and Scale of Project* *(if the project affects multiple sites, provide the total development below facilitated by the action)*

Size of project to be developed: 152,190 (gross sq. ft.)

Does the proposed project involve changes in zoning on one or more sites? YES ☑ NO ☐

If 'Yes,' identify the total square feet owned or controlled by the applicant: 32,135 Total square feet of non-applicant owned development: 749

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 disturbance (if known):

Area: 32,135 sq. ft. (width × length) Volume: 481,950 cubic feet (width × length × depth)

DESCRIPTION OF PROPOSED USES *(please complete the following information as appropriate)*

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	127,290	24,900		
Type (e.g. retail, office, school)	124 units	local retail		

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

Provide a brief explanation of how these numbers were determined: 300 residents and 77 workers. Residents/workers based on assumptions in Lower Concourse Rezoning FEIS.

Does the project create new open space? YES ☐ NO ☑ if Yes (sq. ft)

Using Table 14-1, estimate the project's projected operational solid waste generation, if applicable: 11,183 (pounds per week)

Using energy modeling or Table 15-1, estimate the project's projected energy use: 1,626,860,000 (annual BTUs)

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:

10. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (DATE THE PROJECT WOULD BE COMPLETED AND OPERATIONAL): 2014	ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18 months
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? YES ☑ NO ☐	IF MULTIPLE PHASES, HOW MANY PHASES:
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:	

11. *What is the Predominant Land Use in Vicinity of Project?* *(Check all that apply)*

☑ RESIDENTIAL ☑ MANUFACTURING ☑ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☐ OTHER, Describe:

PART II: TECHNICAL ANALYSES

INSTRUCTIONS: The questions in the following table refer to the thresholds for each analysis area in the respective chapter of the CEQR Technical Manual.

- 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.
- Often, a 'Yes' answer will result in a preliminary analysis to determine whether further analysis is needed. For each 'Yes' response, consult the relevant chapter of the CEQR Technical Manual for guidance on providing additional analyses (and attach supporting information, if needed) to determine whether detailed analysis is needed. Please note that a 'Yes' answer does not mean that an EIS must be prepared—it often only means that more information is required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant either to provide additional information to support this Short EAS Form or complete a Full EAS Form. For example, if a question is answered 'No,' an agency may request a short explanation for this response. In addition, if a large number of the questions are marked 'Yes,' the lead agency may determine that it is appropriate to require completion of the Full EAS Form.

	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 or zoning that is different from surrounding land uses and/or zoning? Is there the potential to affect an applicable public policy? If "Yes", complete a preliminary assessment and attach.	✔	
(b) Is the project a large, publicly sponsored project? If "Yes", complete a PlaNYC assessment and attach.		✔
(c) 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) Does the proposed project exceed any of the thresholds outlined in Table 6-1 of Chapter 6?	✔	
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?		✔
(b) Is the proposed project within an underserved area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island? If "Yes," would the proposed project generate 50 or more additional residents?		✔
If "Yes," would the proposed project generate 125 or more additional employees?		
(c) Is the proposed project in a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island? If "Yes," would the proposed project generate 300 or more additional residents?		✔
If "Yes," would the proposed project generate 750 or more additional employees?		
(d) If the proposed project is not located in an underserved or well-served area, would the proposed project generate: 200 or more additional residents?	✔	
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; is listed or eligible for listing on the New York State or National Register of Historic Places; or is within a designated or eligible New York City, New York State, or National Register Historic District? If "Yes," list the resources and attach supporting information on whether the project would affect any of these resources.		✔
7. *URBAN DESIGN*: *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 that is not currently allowed by existing zoning?		✔
8. *NATURAL RESOURCES*: *CEQR Technical Manual Chapter 11*		
(a) Is any part of the directly affected area within the Jamaica Bay Watershed? If "Yes," complete the Jamaica Bay Watershed Form.		✔
(b) 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 project would affect any of these resources.		✔
9. *HAZARDOUS MATERIALS*: *CEQR Technical Manual Chapter 12*		
(a) Would the project allow commercial or residential use in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	✔	
(b) Does the project site have existing institutional controls (*e.g.* (E) designations or a Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?		✔
(c) Would the project require soil disturbance in a manufacturing zone or any development on or near a manufacturing zone 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 where underground and/or aboveground storage tanks (*e.g.* gas stations) are or were on or near the site?	✔	
(f) Would the project result in renovation of interior existing space on a site with potential compromised air quality, vapor intrusion from on-site or off-site sources, asbestos, PCBs or lead-based paint?		✔
(g) Would the project result in development on or near a government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, municipal incinerators, coal gasification or gas storage sites, or railroad tracks and rights-of-way?		✔
(h) Has a Phase I Environmental Site Assessment been performed for the site? If 'Yes," were RECs identified? Briefly identify: Gas tanks, fuel oil tanks, suspected asbestos materials, lead based paint surfaces	✔	
10. *INFRASTRUCTURE*: *CEQR Technical Manual Chapter 13*		
(a) Would the proposed project result in water demand of more than one million gallons per day?		✔
(b) Is the proposed project located in a combined sewer area and result in at least 1,000 residential units or 250,000 SF or more of commercial space in Manhattan or at least 400 residential units or 150,000 SF or more of commercial space in the Bronx, Brooklyn, Staten Island or Queens?		✔
(c) Is the proposed project located in a separately sewered area and result in the same or greater development than that listed in Table 13-1 of Chapter 13?		✔
(d) Would the project involve development on a site five acres or larger where the amount of impervious surface would increase?		✔
(e) Would the project involve development on a site one acre or larger where the amount of impervious surface would increase and 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?		✔
(f) Is the project 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 WWTP 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) 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?		✔

	YES	NO
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) 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 of Chapter 16?	✔	
(b) If "Yes," conduct the screening analyses, attach appropriate back up data as needed for each stage, and answer the following questions:		
(1) 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, "Transporation," for information.*		
(2) 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?		✔
(3) 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 of Chapter 17?		✔
(b) *Stationary Sources:* Would the proposed project result in the conditions outlined in Section 220 of Chapter 17?	✔	
If 'Yes,' would the proposed project exceed the thresholds in the Figure 17-3, Stationary Source Screen Graph? (attach graph as needed)		✔
(c) Does the proposed project involve multiple buildings on the project site?		✔
(d) Does the proposed project require Federal approvals, support, licensing, or permits subject to conformity requirements?		✔
(e) Does the proposed project site have existing institutional controls (*e.g.* E-designations or a 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, a power plant, or would fundamentally change the City's solid waste management system?		✔
(b) If "Yes," would the proposed 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 of 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-designations or a Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?		✔
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Would the proposed project warrant a public health assessment based upon the guidance in Chapter 20?		✔
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted for the following technical areas, check yes if any of the following technical areas required 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	✔	
If "Yes," explain here why or why not an assessment of neighborhood character is warranted based on the guidance of in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		

The proposed rezoning may result in a combination of moderate changes in a number of technical areas that may potentially have a significant effect on neighborhood character.

		YES	NO
19.	***CONSTRUCTION IMPACTS:*** *CEQR Technical Manual Chapter 22* Would the project's construction activities involve (check all that apply):		
	• Construction activities lasting longer than two years;		✓
	• Construction activities within a Central Business District or along an arterial or major thoroughfare;		✓
	• Require 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 community facilities or disruption in its service;		✓
	• Activities within 400 feet of a historic or cultural resource; or		✓
	• Disturbance of a site containing natural resources.		✓

If any boxes are checked, explain why or why not a preliminary construction assessment is warranted based on the guidance of 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.

It is anticipated that Proposed Action would be constructed within a short term period -- approximately 18 months by the Build Year of 2014. Construction activities would be typical for a residential development of this size, and it can be reasonably assumed that a sidewalk bridge, sidewalk narrowing and removal of the parking lane for construction staging would be needed. The east side of Gerard Avenue between 150th and 151st streets has relatively low pedestrian volumes and the sidewalk operates at an LOS A as described in the Transportation Analysis and would not be impacted by short term sidewalk narrowing. In addition, street closures are not expected.

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 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

Authority Signatory (APPLICANT/SPONSOR) of NR Property 2 LLC (NAME THE ENTITY OR OWNER)

the entity which seeks the permits, approvals, funding or other governmental action described in this EAS.

Check if prepared by: ☑ APPLICANT/REPRESENTATIVE or ☐ LEAD AGENCY REPRESENTATIVE (FOR CITY-SPONSORED PROJECTS)

Gary M. Tischler
APPLICANT/SPONSOR NAME:

LEAD AGENCY REPRESENTATIVE NAME:

SIGNATURE:

November 7, 2012
DATE:

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 of 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 effect on the environment. 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.

	Potential Significant Adverse Impact	
IMPACT CATEGORY	**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 Impacts		✓

2. Are there any aspects of the project relevant to the determination 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? If there are such impacts, explain them and state where, as a result of them, the project may have a significant impact on the environment.

3. ***LEAD AGENCY CERTIFICATION***

Director, Environmental Assessment and Review Division
TITLE

NYC Department of City Planning
LEAD AGENCY

Robert Dobruskin
NAME

Robert Dobruskin
SIGNATURE

580 GERARD AVENUE EAS

November 9, 2012

580 Gerard Avenue Rezoning - Environmental Assessment Statement

ANALYSIS SECTION

Part I: General Information

This Environmental Assessment Statement application is consistent with the requirements and methodologies stated in January 2012 *City Environmental Quality Review (CEQR) Technical Manual,* which updates the methodologies presented in the 2010 *CEQR Technical Manual*.

Project Description

Introduction
This application has been prepared on behalf of NR Property 2 LLC (the "Applicant"), and would affect a part of the western half of Block 2353, extending from East 150th Street in the south to 360 feet north of East 150th Street in the north (the "Rezoning Area"). The block is bounded by East 151st Street to the north, East 150th Street to the south, Gerard Avenue to the west, and Walton Avenue to the east, located in Concourse Village, the Bronx (see Figure I.1.1, Sanborn Map; Figure I.1.2, Tax Map; Figure I.1.3, Land Use Map; and Figure I.1.4, Zoning Map). Photographs keyed to the Site Location Map are also provided (see Figure I.1.6, Site Location Map; Photo I.1.1, 580 Gerard Avenue, Facing East, Photo I.1.2, 580 Gerard Avenue, Facing North; Photo I.1.3, 580 Gerard Avenue, Facing Northeast; Photo I.1.4, 580 Gerard Avenue, Facing Southeast). The Rezoning Area is located on Lot 1 and parts of Lots 16, 45, 46, 47, 48, and 49.

Proposed Action
The Proposed Action consists of a zoning map change that would rezone the Rezoning Area from M1-2 and R6 zoning districts to R7A/C2-4 (overlay) zoning district. Within the Rezoning Area, Lots 1 and 16 are located within an M1-2 zoning district; Lots 45-49 are located within an R6 zoning district. Because the portions of the adjacent lots (Lots 16, 45-49), that would be included in the Rezoning Area are so small, the Proposed Action is not increasing the development potential for any lots other than the Applicant-owned site. Additionally, the Proposed Action would require an amendment to the text of the Zoning Resolution to apply the Inclusionary Housing program to the Rezoning Area. The Inclusionary Housing Program Bonus would allow a Floor Area Ratio of 4.6 resulting in a development program consistent with the Reasonable Worst Case Development Scenario: a 152,190 gross square feet (g.s.f.), 80-foot high mixed use building comprised of 124 residential units, 24,900 g.s.f. of local retail and 89 accessory parking spaces (the "Proposed Action") (see Figure I.1.7, Proposed Site Plan and Figure I.1.8, Proposed Building Section).

Framework for Analysis

Existing Conditions
The existing conditions consist of a one-story, 32,135 square foot (s.f.), former auto repair facility, located at 580 Gerard Avenue (Block 2353, Lot 1). The building is owned by the Applicant and currently leased to a furniture retailer for storage purposes. All properties within the Rezoning Area are in conformance and compliance with the regulations of the existing zoning districts.

Properties within the Rezoning Area not owned by the Applicant include parts of Lots 16, 45, 46, 47, 48, and 49. Lot 16, located north of the Applicant's property, is within the M1-2 zoning district and is occupied by a one-story printing facility. Lots 45 through 49, located east of the

Applicant's property, are primarily located within an R6 zoning district and are occupied by three- to four-story one and two family residences. The total area of the Rezoning Area is 32,884 s.f.

Reasonable Worst Case Development Scenario—No Action Scenario (No Build)
The existing M1-2 zoning permits light manufacturing uses and a maximum allowable floor area ratio (FAR) of 2.0. Lot 1 is currently developed to 32,135 s.f., and could be developed to approximately 62,400 s.f. under the existing zoning. The Applicant anticipates that the existing use of the building located on Lot 1 as a storage facility for a furniture retailer would continue in the No Action scenario. Therefore, it is assumed that the No Action scenario would consist of a 32,135 s.f. storage facility.

Future No-Action Development Projects
As described in the Land Use, Zoning and Public Policy section, there are several future development projects and rezoning projects proposed within the study area (see Table I.1.1 below). These projects would result in changes to land use on specific sites. Due to the early stages of the planning process for the projects at 580 River Avenue and on Block 2345, these projects are not reasonably expected to be constructed or implemented by the 2014 Build Year. The Lower Concourse and East 161st Street rezoning projects have been approved but no specific project sites have been identified for development by 2014. Therefore, these projects have not been accounted for in the Future without the Proposed Action analysis.

An additional development is proposed for the Yankees parking garage at East 153rd Street. While this project is far from certain, the Bronx Borough President and Bronx Overall Economic Development Corporation are working to encourage the development of the lot, subject to discretionary actions. Due to the uncertainty of this project, it was not considered in the Future without the Proposed Action analysis.

Table I.1.1: Development Projects Planned within Study Area

Project Name	Future Use
580 River Avenue	246 dwelling units, 350,000 sf of retail
62 E. 161st Street	77 dwelling units, 10,362 sf of retail
Block 2345, Lots 20 and 62	500 dwelling units, 80,000 sf of retail
Source: *New York City Department of City Planning*	

Reasonable Worst Case Development Scenario (RWCDS)—With Action Scenario (Build)
The Applicant proposes to rezone an area that encompasses the entirety of Lot 1 on Block 2353, as well as parts of Lots 16, 45, 46, 47, 48 and 49 from M1-2 and R6 zoning districts to an R7A/C2-4 district. Additionally, the Proposed Action would require an amendment to the text of the Zoning Resolution to apply the Inclusionary Housing program to the Rezoning Area. The Build Condition would maximize the FAR allowed by this Proposed Action (R7A/C2-4 zoning districts with an Inclusionary Housing bonus). Twenty four (24) affordable units would be included as part of this proposal.

The RWCDS consists of a seven-story, 152,190 g.s.f. mixed-use building comprised of 124 residential units and 24,900 g.s.f. of local retail space (split into two establishments) on Lot 1. In addition, the proposed building would include 4,820 g.s.f. of recreational residential use and a parking area, located partially at-grade and partially below-grade, consisting of 63 residential parking spaces and 26 commercial parking spaces accessed from Gerard Avenue. No commercial loading is required or provided. The proposed building resulting from the RWCDS

on Lot 1 would be built to the streetline up to the sixth story, after which it would be set back 15 feet. The building would rise to a base height of 64 feet and a building height of 80 feet after a 15 foot front setback and 10 foot minimum rear setback. The building would comply with the Quality Housing program.

Screening analyses, provided on the following pages, were conducted for the Proposed Action using guidelines presented in the January 2012 *CEQR Technical Manual* to determine whether a detailed analysis of a given technical area is appropriate.

7. Site Description

Figure I.1.1 - Sanborn Map

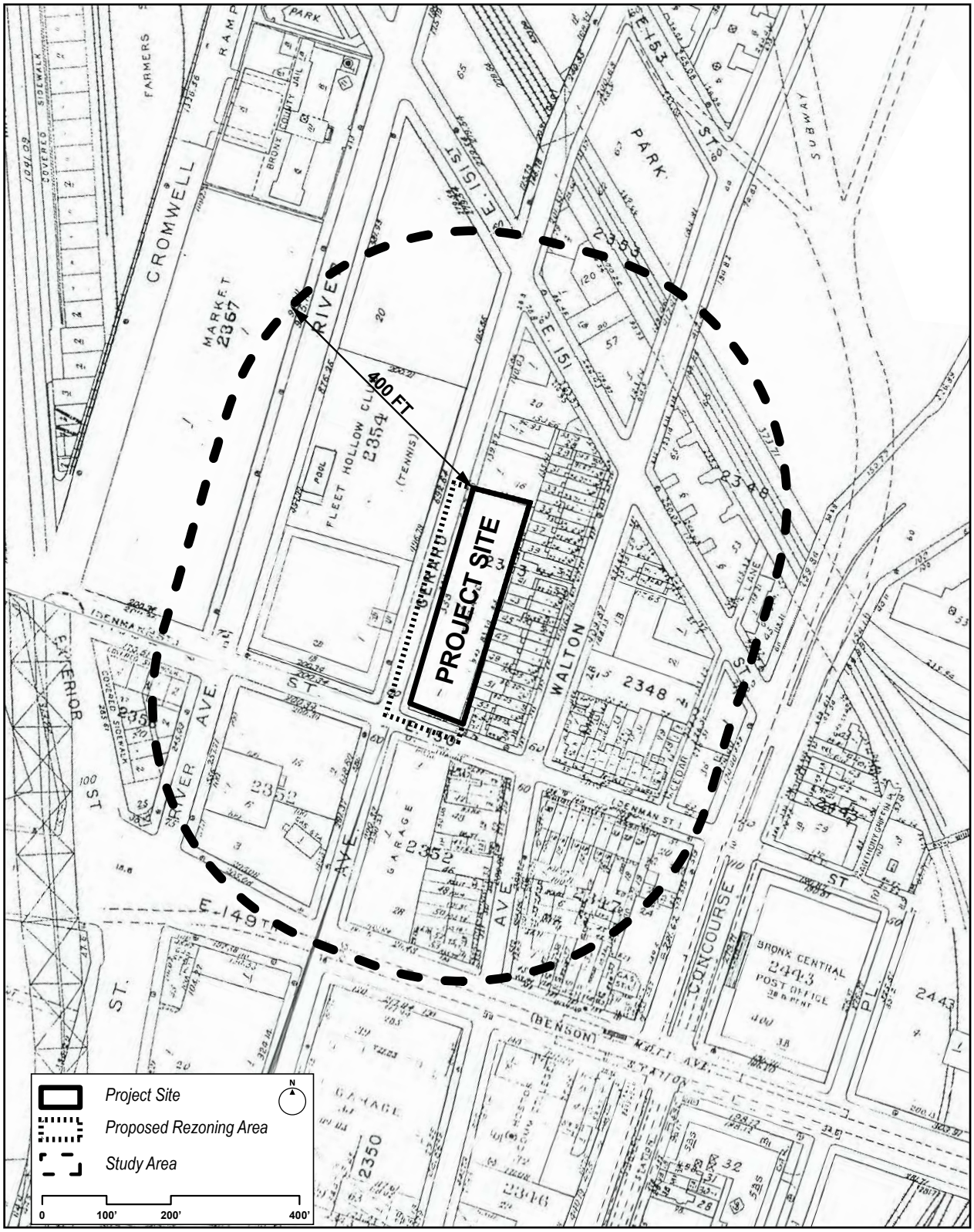


Figure I.1.2 - Tax Map

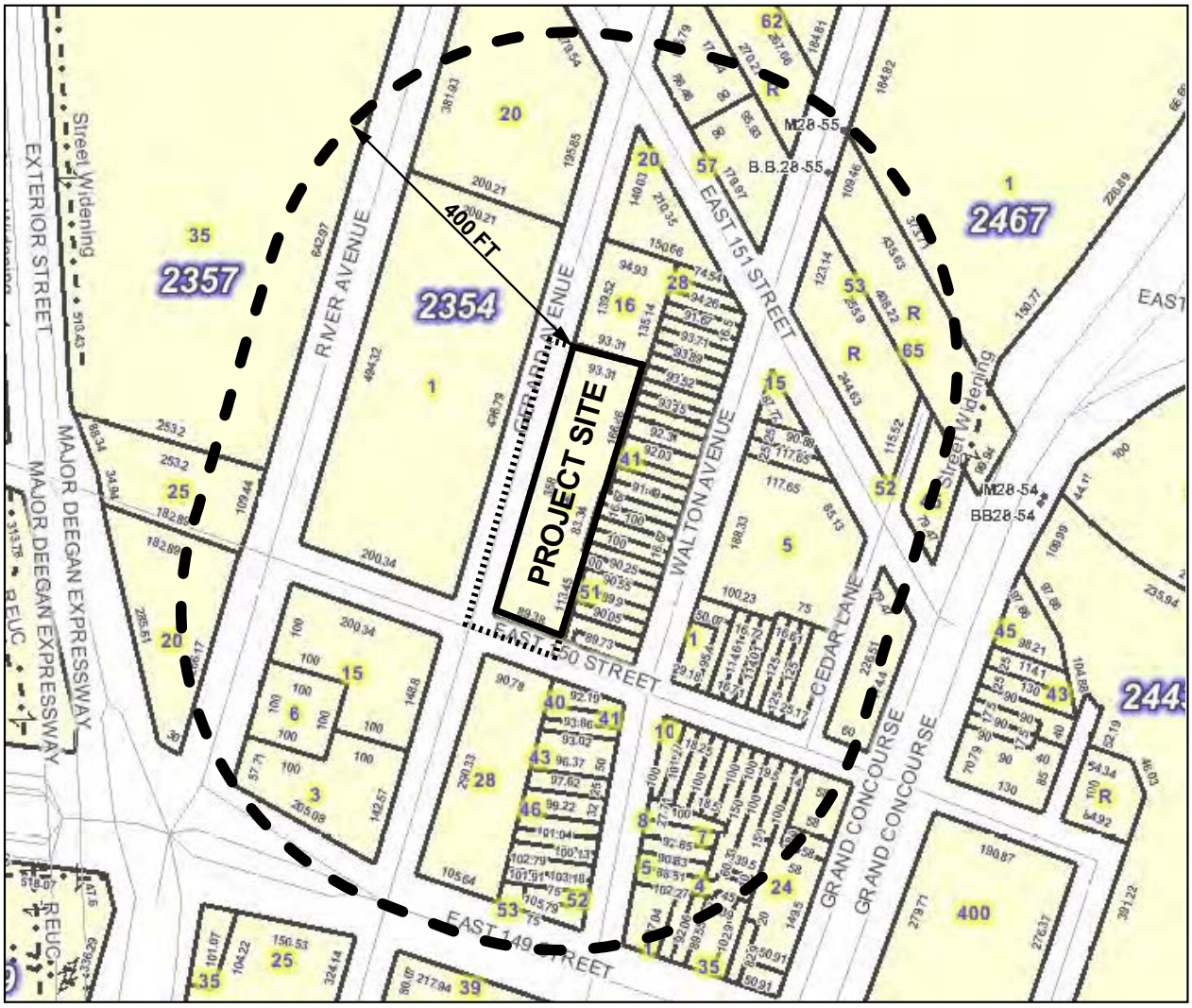


Figure I.1.3 - Land Use Map

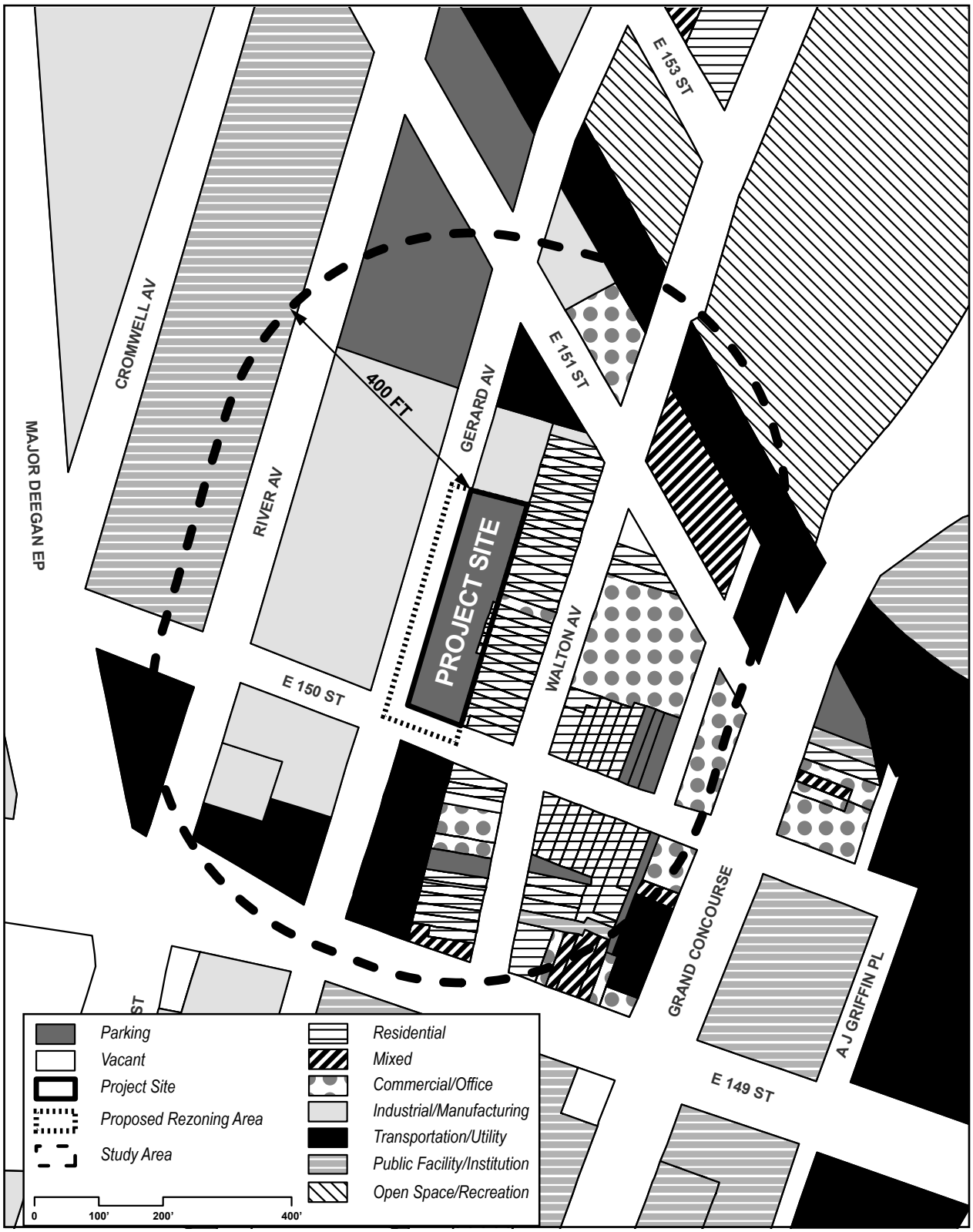


Figure I.1.4 - Zoning Map

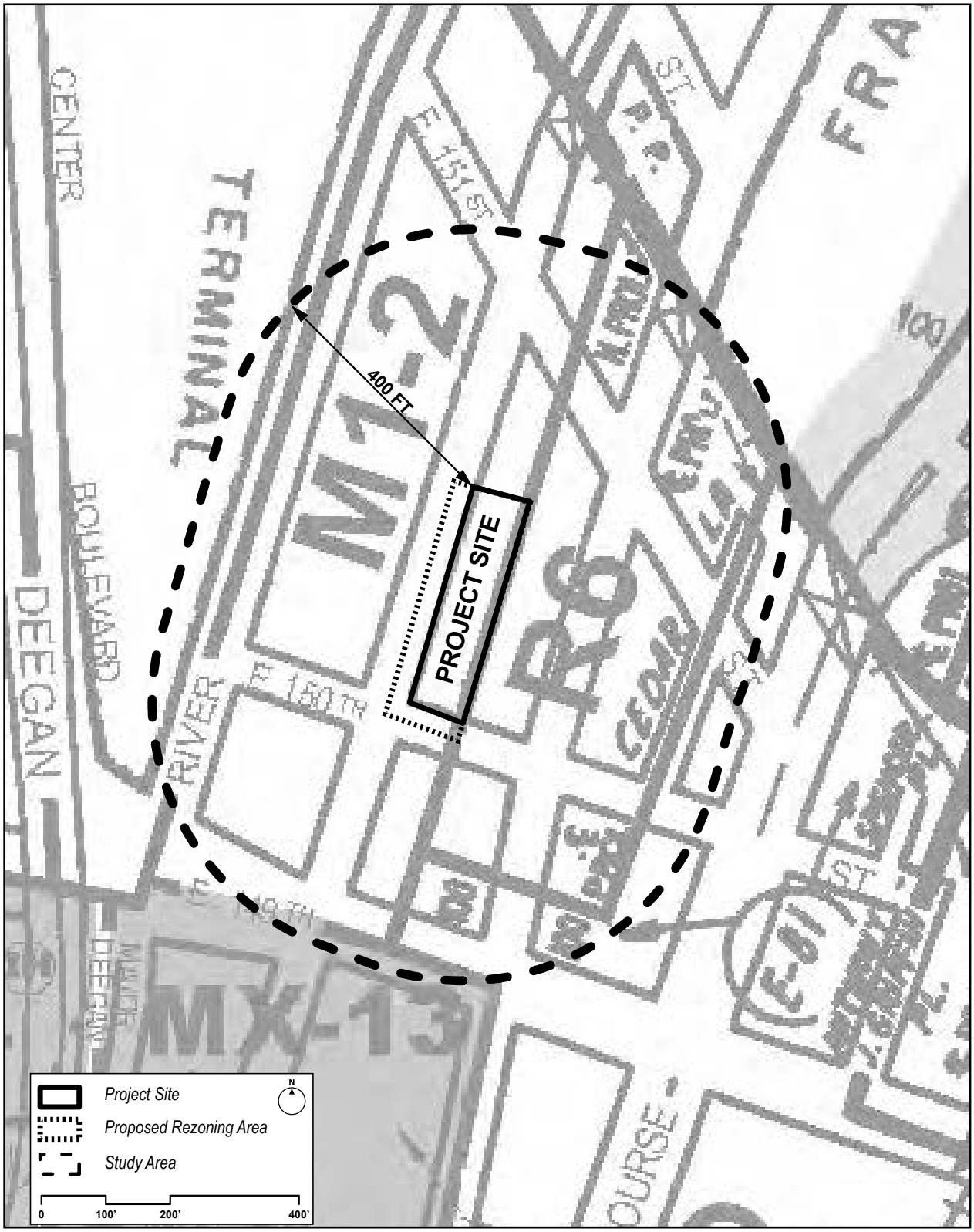


Figure I.1.5 - Proposed Zoning Map

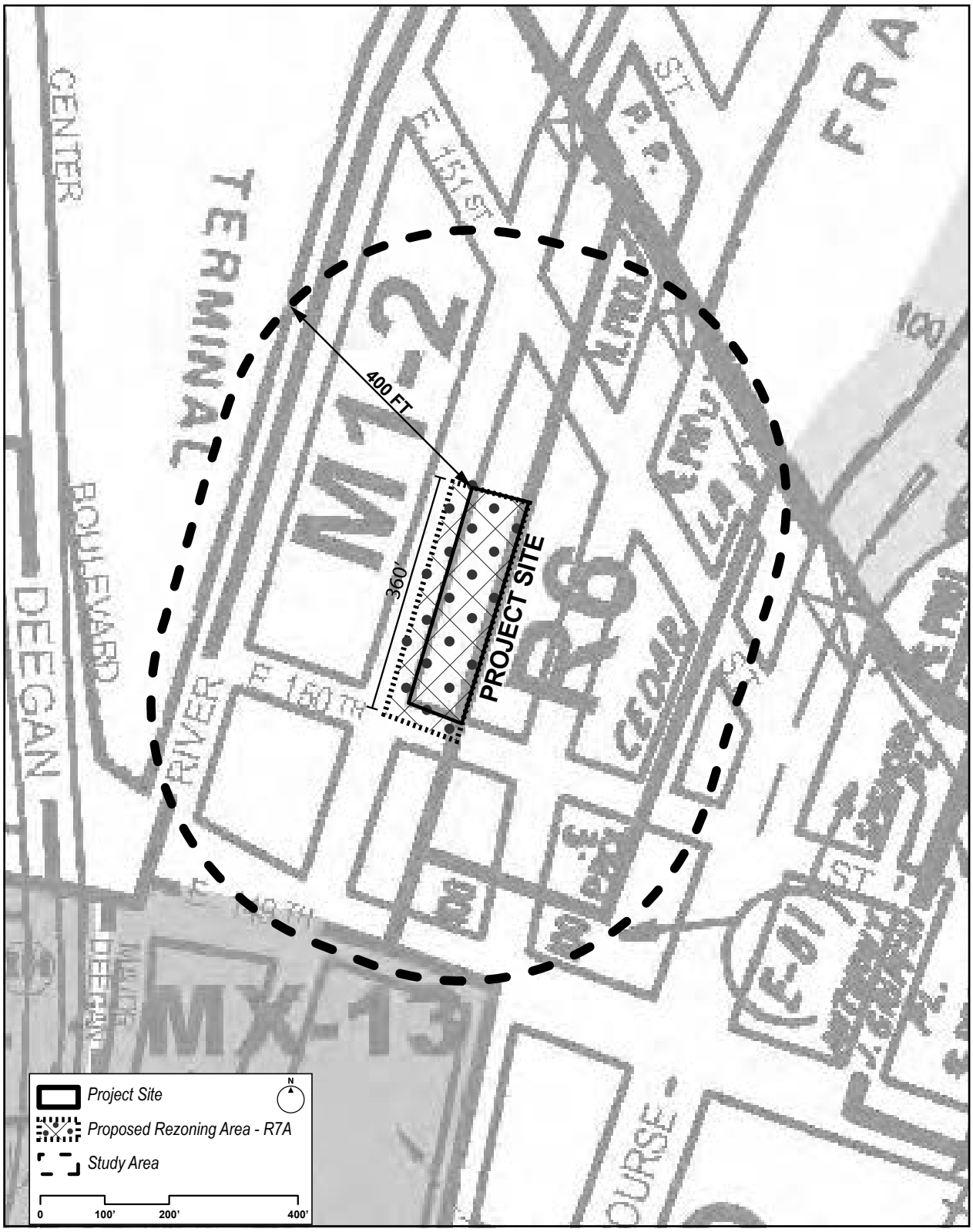


Figure I.1.6 - Site Location Map

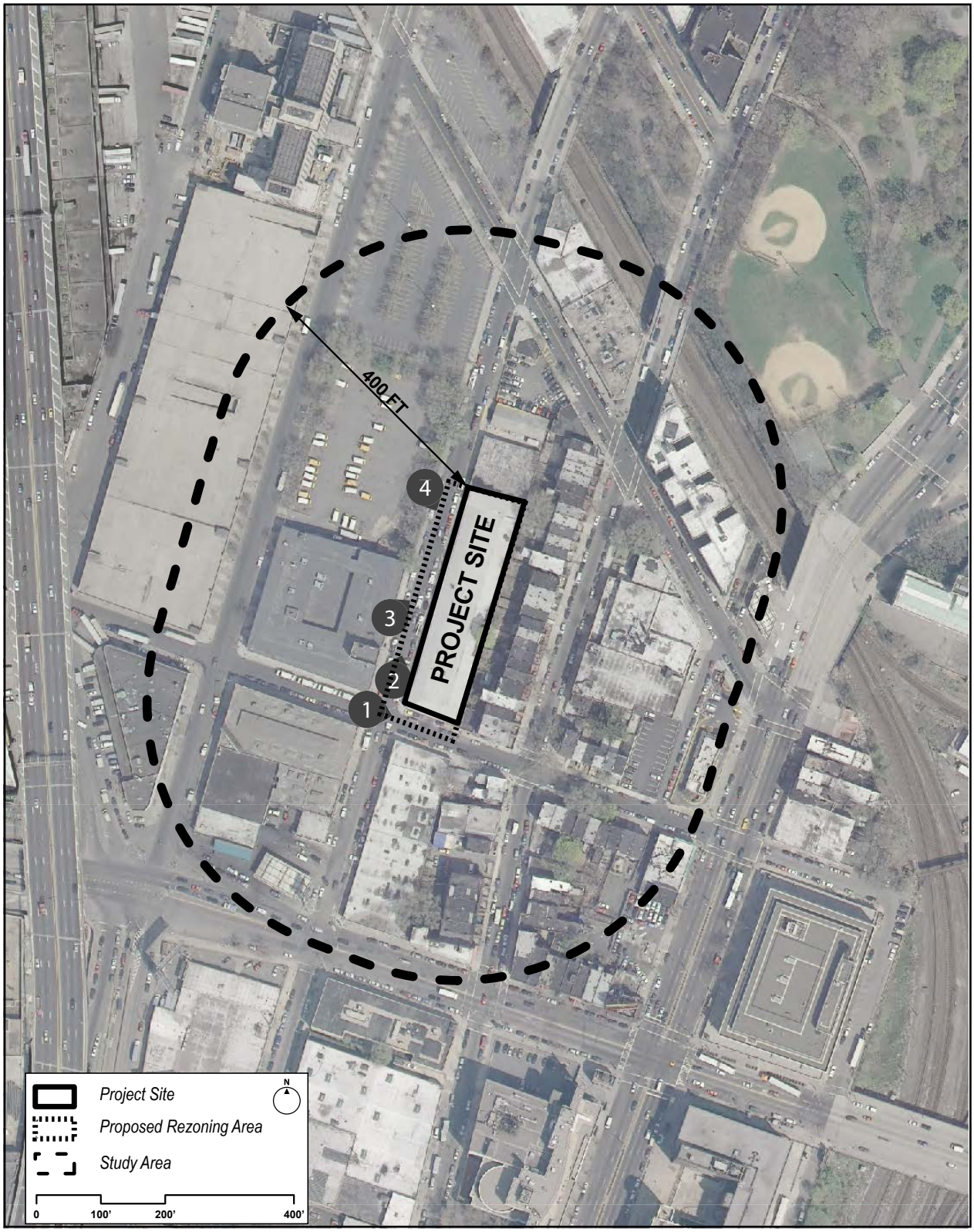


Photo I.1.1. 580 Gerard Avenue, Facing East



Photo I.1.2. 580 Gerard Avenue, Facing North



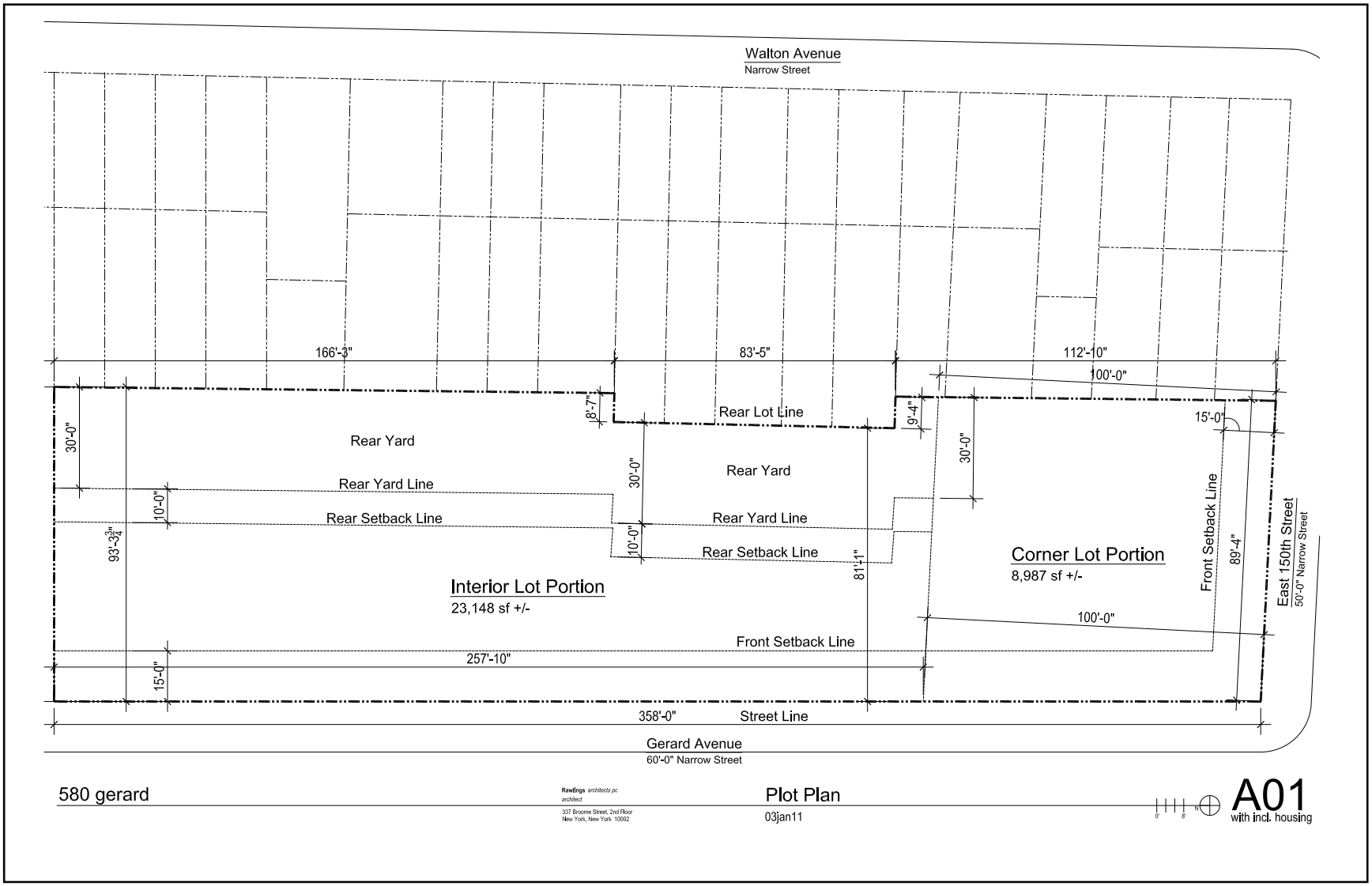
Photo I.1.3. 580 Gerard Avenue, Facing Northeast



Photo I.1.4. 580 Gerard Avenue Rezoning, Facing Southeast

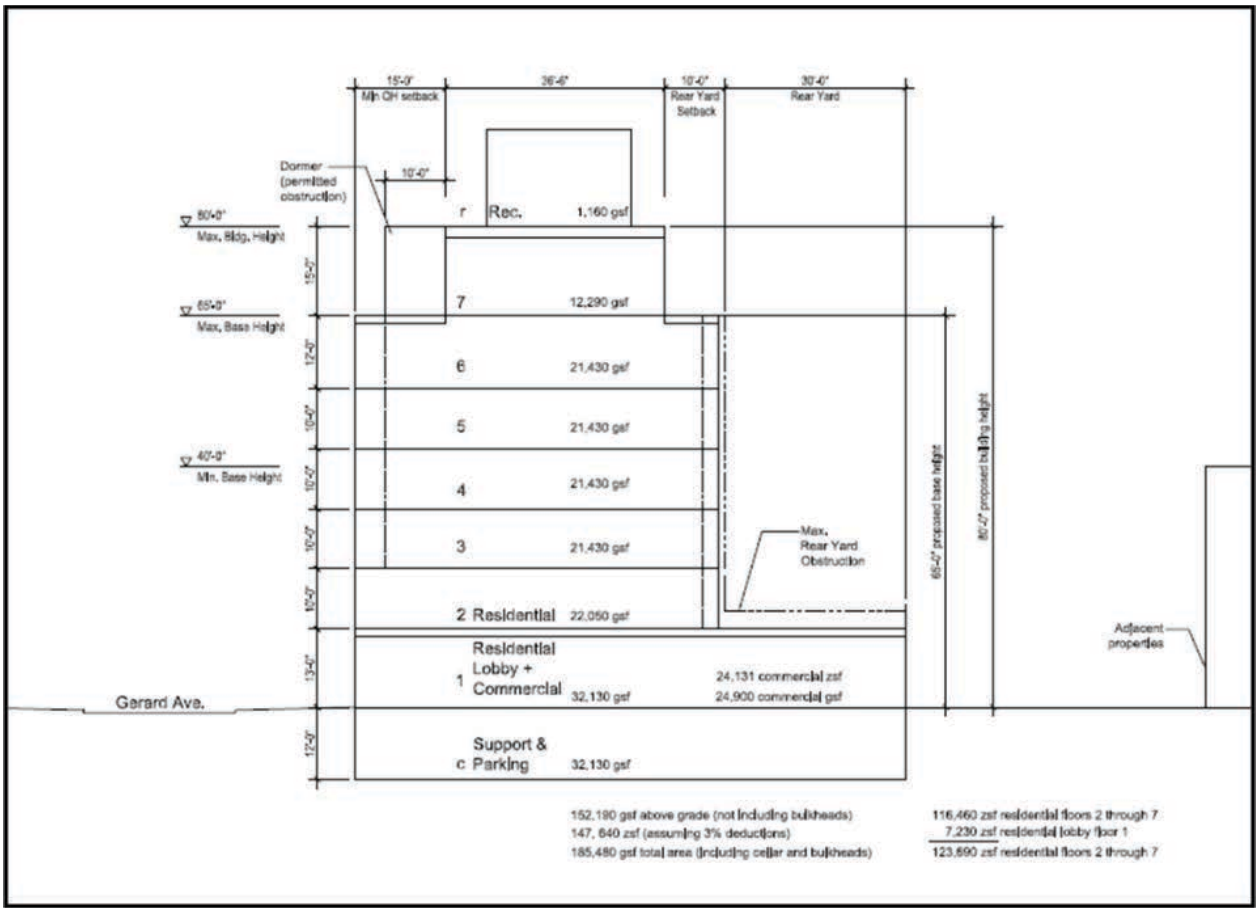


Figure I.1.7 - Site Plan



Note: For Illustrative Purposes Only

Figure I.1.8 - Proposed Building Section



Note: For Illustrative Purposes Only

Part II: Technical Analyses

1. Land Use, Zoning, and Public Policy

INTRODUCTION

As described in the *CEQR Technical Manual* (page 4-8), the Land Use, Zoning and Public Policy assessment considers whether a project "would affect land use or would change the zoning on a site, regardless of the project's anticipated effects" and "would be located within areas governed by public policies controlling land use, or has the potential to substantially affect land use regulation or policy controlling land use requires an analysis of public policy." The following section describes the land use and zoning issues for the Existing Conditions, No Action and With Action scenarios. As required by the *CEQR Technical Manual*, the changes between the No Action and With Action scenario are assessed.

EXISTING CONDITIONS

Land Use and Zoning

The predominant land uses within 400 feet of the Rezoning Area are characterized by a variety of uses, including residential, commercial, and light industrial/manufacturing. Residential uses are located directly east and southeast of the Rezoning Area; light industrial/manufacturing are found to the north, west, and southwest of the Rezoning Area; and commercial uses are present to the east and west of the Rezoning Area. The Rezoning Area shares Block 2353 with residential uses: three- to four-story, one- and two-family row houses face Walton Avenue. Similar residential uses can be found southeast of the Rezoning Area along both sides of East 150th Street on Block 2348 and Block 2347. Other residential uses include a six-story mixed use multi-family building, northeast of the Rezoning Area on Block 2348.

Lot 16 is located just north of the Rezoning Area and is occupied by a one-story printing facility. A two- and three-story building located directly across from the Rezoning Area contains a self storage facility that shares space with the Child and Adolescent Day Treatment Program for Special Education Students (P723X). Directly to the north of this lot is a City-owned vacant parcel currently used for parking; this site is the subject of a rezoning proposal to permit an affordable housing development. A large two-story commercial office building dominates the mid-block portion of Block 2348. Other commercial uses include the Gateway Center at Bronx Terminal Market, a large regional retail destination that opened in 2009. The shopping center is located on the western edge of the 400-foot radius on Block 2357, in close proximity to the Major Deegan Expressway.

A seven-story family intake center sponsored by the New York City Department of Homeless Services and a nine-story commercial building are located north of the Rezoning Area on Block 2353. Southwest of the Rezoning Area, the southern part of Block 2354 is characterized by auto-related uses including a gas station and car wash; it also contains one- to two-story buildings for light manufacturing and ice storage. Directly south of the Rezoning Area, a Department of Sanitation garage encompasses most of Block 2352, while the eastern part contains a mix of low-rise commercial and residential uses, including the Pregones Theatre located mid-block on Walton Avenue.

As shown in Figure I.1.4, Zoning Map, the Rezoning Area is located in a M1-2 zoning district that encompasses the western half of Block 2353; the eastern half is zoned R6. (Lots 1 and 16

are located within an M1-2 zoning district; Lots 45-49 are located within an R6 zoning district.) An M1-2 district generally permits light industrial, commercial and limited community facility uses. Manufacturing and commercial uses have a maximum FAR of 2.0 and community facilities have a maximum FAR of 4.8. There are no height limits, and building heights and setbacks are governed by the sky exposure plane. The commercial, manufacturing, and community facility parking requirements vary with use. An R6 zoning district, which characterizes the eastern portion of the 400-foot radius, allows for a maximum FAR of 2.43 for residential and 4.8 for community facility.

Public Policy
The following City public policies affect the study area: the New York City Department City Planning (NYCDCP)-sponsored Lower Concourse Rezoning of 2009, the 161st Street/River Avenue Rezoning, the Port Morris Empire Zone, and the Federal Empowerment Zone.

To the south of the Rezoning Area, the Lower Concourse Rezoning rezoned a 30-block area surrounding the lower end of the Grand Concourse; mapped a new waterfront park; established a Waterfront Access Plan; made the provisions of Inclusionary Zoning applicable in the area; and enacted other related actions in order to create new investment opportunities and open space in the underutilized but transit-rich Lower Concourse area.

Another recently-approved rezoning, the 161st Street/River Avenue Rezoning, seeks to foster new residential and commercial development north of the Rezoning Area. This 2009 rezoning seeks to capitalize on recent investments in the area surrounding the 161st Street corridor that have led to the renewal of the civic center of the Bronx and the South Bronx overall. Recent investments include the new Yankee Stadium, on the northwest corner of 161st Street and River Avenue. Recently completed parks stemming from this rezoning include Mill Pond Park along the Harlem River, Heritage Field, along River Avenue, and Macombs Dam Park, near the new Yankee Stadium.

Additionally, the Rezoning Area lies within the Port Morris Empire Zone, which seeks to give companies the opportunity to operate on an almost “tax-free” basis for up to 15 years. Certain companies may be eligible for sales tax exemption, as well as real property and tax credits. The Rezoning Area is also within the boundaries of the Federal Empowerment Zone. Businesses in the Bronx Empowerment Zone have access to financing at affordable terms in exchange for hiring Empowerment Zone residents. Programs are available to finance real estate purchases and improvements, equipment, machinery, and working capital.

NYCDCP revised its *New York City Waterfront Revitalization Program* (WRP) in 2012; the Program revisions were certified in June 2012. The Waterfront Revitalization program defines the City's Coastal Zone and establishes policies to address economic development, environmental preservation, and public use of the City’s waterfront while minimizing conflicts among those objectives. The 2012 revisions incorporate climate change considerations into the Coastal Zone Management Program, as well as the promotion of ecological objectives and strategies, facilitation of interagency permitting review, and the support of a sustainable working waterfront. As the proposed Rezoning Area does not fall within the City's designated coastal zone, no further Waterfront Revitalization Program analysis is warranted.

NO ACTION SCENARIO

Land Use and Zoning
Since the Rezoning Area has not been developed to its zoning potential despite the allowable FAR under the M1-2 zoning district, it is reasonable to assume that further development of the Rezoning Area would not occur under the existing zoning. As discussed in the Framework for Analysis section, it is assumed that the 32,135 s.f. building located on Lot 1 would continue to be used as a storage facility.

There are several future development projects and rezoning projects proposed within the study area (see Table II.2.1 below). These projects would result in changes to land use on specific sites. Due to the early stages of the planning process for the projects at 580 River Avenue and on Block 2345, these projects are not reasonably expected to be constructed or implemented by the 2014 Build Year. The Lower Concourse and East 161st Street rezoning projects have been approved but no specific project sites have been identified for development by 2014. Therefore, these projects have not been accounted for in the Future without the Proposed Action analysis.

An additional development is proposed for the Yankees parking garage at East 153rd Street. While this project is far from certain, the Bronx Borough President and Bronx Overall Economic Development Corporation are working to encourage the development of the lot, subject to discretionary actions. Due to the uncertainty of this project, it was not considered in the Future without the Proposed Action analysis.

Table II.2.1: Development Projects Planned within Study Area

Project Name	Future Use
580 River Avenue	246 dwelling units, 350,000 sf of retail
62 E. 161st Street	77 dwelling units, 10,362 sf of retail
Block 2345, Lots 20 and 62	500 dwelling units, 80,000 sf of retail
Source: *New York City Department of City Planning*	

Public Policy
NYCDCP revised its *New York City WRP* in 2012; the Program revisions were certified in June 2012.

WITH ACTION SCENARIO

Land Use and Zoning
The Proposed Action consists of a zoning map change that would rezone the Rezoning Area from M1-2 and R6 to R7A with a C2-4 overlay. Additionally, the Proposed Action would require an amendment to the text of the Zoning Resolution to apply the Inclusionary Housing program to the Rezoning Area.

Through the Inclusionary Housing program, the Proposed Action would provide needed affordable housing for New York City residents and Bronx Community District 4 in particular. The RWCDS consists of a seven-story, 152,190 g.s.f. mixed-use building comprised of 24,900 g.s.f. of local retail space and 124 residential units, of which 24 residential units would be designated for affordable housing on Lot 1. The total FAR of this proposed development is 4.6. assuming an inclusionary housing bonus.

The Proposed Action is not anticipated to create a significant land use or zoning impact. The Proposed Action would be consistent with existing land uses and would provide a much-needed, public benefit. The proposed land uses would be consistent with the existing residential and institutional uses within the study area. This preliminary analysis has determined that the Proposed Action would not directly displace an active land use, adversely affect surrounding land uses, generate a land use that would be incompatible with surrounding uses, nor alter or accelerate development patterns. Therefore, no significant adverse impacts are anticipated as a result of the Proposed Action, and no further analysis of land use and zoning is necessary.

Public Policy

NYCDCP revised its *New York City WRP* in 2012; the Program revisions were certified in June 2012. Recent City-lead rezoning efforts near the Proposed Action, specifically NYCDCP's Lower Concourse Rezoning proposal, are consistent with the goals and objectives of the Proposed Action by facilitating new residential development, creating opportunities to redevelop underutilized property and furthering the area's economic growth potential. The proposed rezoning is consistent with the overall goal of providing new opportunities for redevelopment and growth in the South Bronx.

The Proposed Action is consistent with City policies promoting the creation of affordable housing, as expressed in the 161st Street / River Avenue Rezoning and the Lower Concourse Rezoning because it includes an Inclusionary Housing Bonus to support the creation of on-site affordable housing units, even though financing is currently not being pursued. As recognized by the City of New York, there is a need for affordable housing in the South Bronx and in the city as a whole. Mayor Bloomberg's New Housing Marketplace Plan aims to create more than 165,000 units of affordable housing within 10 years. Including Inclusionary Zoning in the Proposed Action encourages the provision of new permanently-affordable housing to help meet the City's affordable housing needs. Since the Proposed Action is consistent with public policies in the study area and the surrounding area of the South Bronx and does not have the potential to alter or conflict with the above identified policies, no significant adverse impacts are anticipated, and no further analysis of public policy is necessary.

3. Community Facilities

INTRODUCTION

This section examines the Proposed Action's potential effect on services provided by public or publicly funded community facilities. A preliminary analysis was initially conducted to determine if the Proposed Action would exceed the established thresholds in the *CEQR Technical Manual* for community facilities and if more detailed analyses would therefore be necessary. Where detailed analyses are required, the chapter describes existing conditions and examines and compares conditions in the Future without the Proposed Action with conditions in the Future with the Proposed Action to determine the Proposed Action's potential impacts. The Reasonable Worst Case Development scenario of 124 dwelling units was considered to conduct a conservative community facilities analysis.

The *CEQR Technical Manual* recommends community facilities analyses for any proposed project that results in direct or indirect impacts to Public Schools, Group Child Care/Head Start Centers, Libraries, Police/Fire Services, or Health Care Facilities. As shown in Table II.3.1, different types of community facilities have different thresholds that trigger the need for detailed analyses.

For projects located in the Bronx, the number of residential units that trigger the need to analyze Elementary/Intermediate Public Schools, Public High Schools, Child Care, and Libraries is listed in Table II.3.1. The Proposed Action would generate 124 dwelling units. Based on the *CEQR Technical Manual* methodology, the Proposed Action would generate 69 elementary and middle school students, and therefore triggers the threshold for detailed analysis of Elementary/Intermediate Public Schools. A detailed analysis of the Proposed Action's impact on Public High Schools, Child Care, and Libraries are not warranted because the project would have fewer residential units than the *CEQR Technical Manual* thresholds.

Table II.3.1. Preliminary Screening Analysis Criteria

	Public Schools	**Group Child Care and Head Start Centers (Publicly Funded)**	**Libraries**	**Police/Fire Services and Health Care Facilities**
Thresholds for Detailed Analyses	50 or more elementary/ middle school students (total of elementary and intermediate) or 150 or more high school students based on # of residential units OR Direct Effect	20 or more eligible children under age 6 based on # of low or low/moderate income residential units OR Direct Effect	More than 5% increase in ratio of residential units to library branches OR Direct Effect	Introduction of Sizeable New Neighborhood OR Direct Effect
Minimum Number of Residential Units that Trigger Detailed Analysis	90 units (Elementary/Intermediate) 787 units (High School)	141 units	682 units	n/a

Source: *CEQR Technical Manual (January 2012),* Table 6-1

Methodology for Detailed Analysis

Public Schools
Elementary and intermediate schools are located in geographically defined school districts, comprised of smaller "sub-districts." The primary study area for the analysis of elementary and intermediate schools examines schools located within the school districts' "sub-district" in which the Proposed Action is located. The Proposed Action is located within "sub-district" 3 of Community School District (CSD) 7, as shown in Figure II.3.1. Public elementary and intermediate schools located within the "sub-district," as well as any zoned schools that would serve students generated by the Proposed Action, all within CSD 7, are shown on Figure II.3.2.

Impacts are identified if the Proposed Action would result in:

- A collective utilization rate of the elementary and/or intermediate schools in the sub-district area that is equal or greater than 100 percent in the With-Action Condition; and
- An increase of 5 percent or more increase in the collective utilization rate between the No-Action and With-Action conditions.

EXISTING CONDITIONS

Information regarding public school enrollment, capacity, and utilization was based on the 2010-2011 Department of Education *Utilization Profiles: Enrollment/Capacity/Utilization "Classic Edition"* publication, which is updated annually.

Public Elementary Schools
Information about public elementary schools in the "sub-district" study area is provided in the following sections. Some New York City public elementary schools provide pre-kindergarten (pre-K) programs; however, these programs are discretionary and are therefore not considered in the CEQR analysis. However, the individual enrollment data provided in Table II.3.2 includes Pre-K enrollment, as enrollment data excluding Pre-K are not available. Additionally, some New York City public school buildings house multiple schools and/or multiple grades. This analysis accounts for enrollment in the elementary grades of these schools.

CSD 7 Sub-District 3
According to the latest available data from the Department of Education (DOE), presented in Table II.3.2, there are six public elementary schools and two combined public elementary/public intermediate schools within CSD 7 "sub-district" 3. All of these public elementary schools operate below capacity. The overall utilization rate for the eight public elementary schools in the "sub-district" study area is 80%, with seats available for 1,099 students. These schools are shown on Figure II.3.2.

Table II.3.2. Public Elementary Schools within Sub-District 3

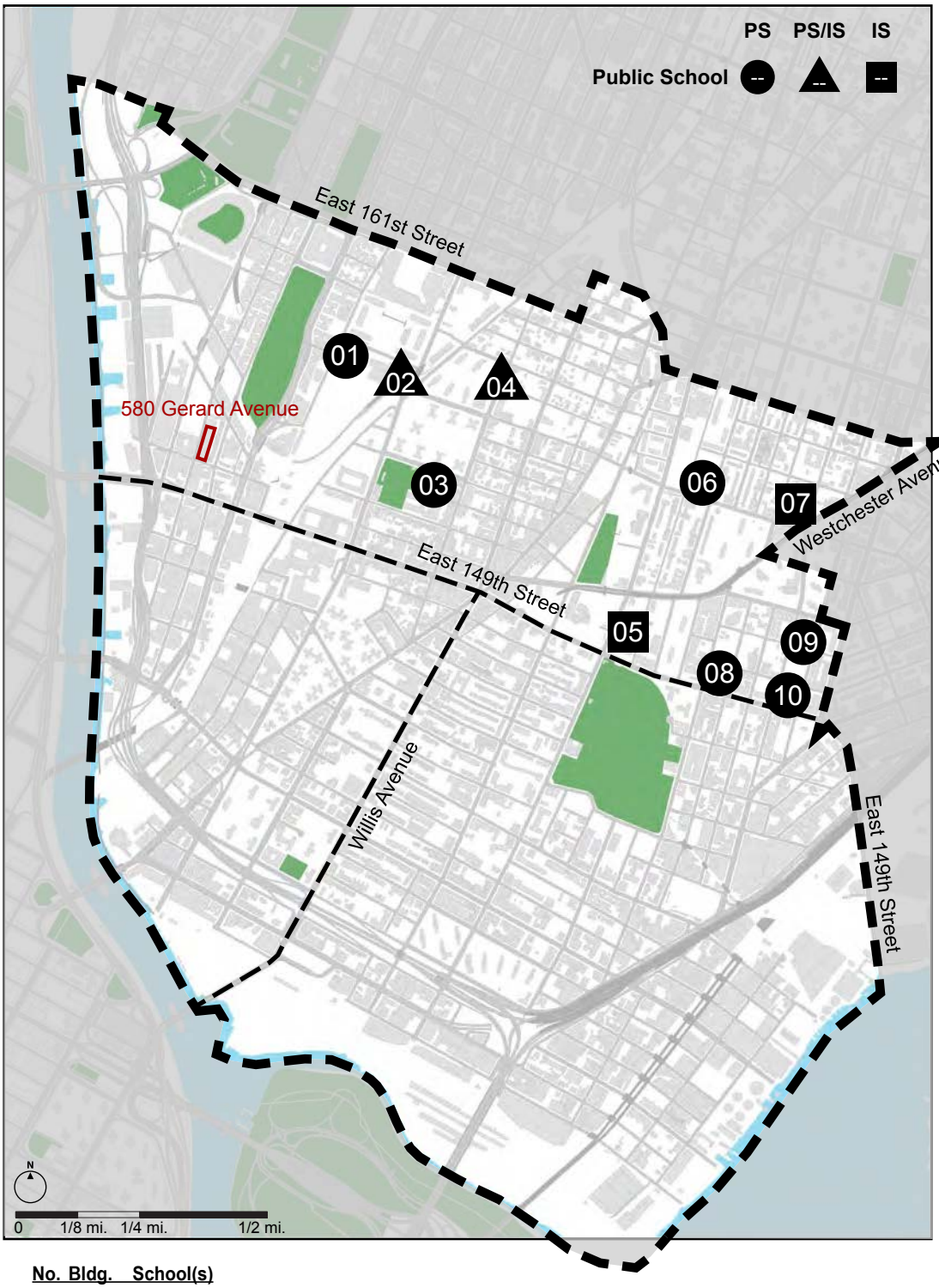
School Name		Address	Grades	Enrollment	Target Capacity	Seats Available	% Utilization
PS 1	Courtland School	335 East 152nd Street	PK-5, SE	694	757	63	92%
PS 5	Port Morris	564 Jackson Avenue	PK-5, SE	556	759	203	73%
PS 25	Bilingual School	811 East 149th Street	PK-5, SE	350	593	243	59%
PS 29 (PS Component)	Melrose School	758 Courtlandt Avenue	PK-8, SE	478	570	92	84%
PS 31 (PS Component)	William Garrison	250 East 156th Street	PK-8, SE	430	546	116	79%
PS 157	Grove Hill	757 Cauldwell Avenue	PK-5, SE	604	785	181	77%
PS 161	Ponce De Leon	628 Tinton Avenue	PK-5, SE	729	737	8	99%
PS 385	Performance School	750 Concourse Village West	PK-5, SE	605	797	192	76%
Total for Elementary Schools in Sub-district 3				**4,446**	**5,544**	**1,099**	**80%**

Source: 2010-2011 Department of Education *Utilization Profiles: Enrollment/Capacity/Utilization "Classic Edition"*

Figure II.3.1 - Community School District 7



Figure II.3.2 - Elementary and Intermediate Schools in CSD 7



No.	Bldg.	School(s)
01	X156	- PS 385 / Performance School
02	X151	- PS 31 / William Garrison - IS 151 / Lou Gehrig
03	X001	- Courtland School
04	X029	- PS 29 / Melrose School
05	X162	- Lola Rodriguez de Tio
06	X157	- PS 157 / Grove Hill
07	X184	- IS 296 / South Bronx Academy for Applied Media - IS 298 / Academy of Public Relations
08	X005	- PS 5 / Port Morris
09	X161	- PS 161 / Ponce de Leon
10	X025	- PS 25 / Bilingual School

Public Intermediate Schools

Information about public intermediate schools in the "sub-district" study area is provided below. Some New York City public school buildings house multiple schools and/or multiple grades. This analysis accounts for enrollment in the intermediate grades of these schools.

CSD 7 Sub-district 3

According to the latest available data from the DOE, presented in Table II.3.3, there are four public intermediate schools and two combined public elementary/public intermediate schools within CSD 7 "sub-district" 3. All of these public intermediate schools operate below capacity. The overall utilization rate for the six public intermediate schools in the "sub-district" study area is 71%, with seats available for 820 students. These schools are shown on Figure II.3.2.

Table II.3.3. Public Intermediate Schools within Sub-District 3

School Name		Address	Grades	Enrollment	Target Capacity	Seats Available	% Utilization
PS 29 (IS Component)	Melrose School	758 Courtlandt Avenue	PK-8, SE	257	307	50	84%
PS 31 (IS Component)	William Garrison	250 East 156th Street	PK-8, SE	236	300	64	79%
IS 151	Lou Gehrig	250 East 156th Street	6, 7, 8, SE	279	334	55	84%
IS 162	Lola Rodriguez De Tio	600 Saint Ann's Avenue	6, 7, 8, SE	731	1,002	271	73%
IS 296	South Bronx Academy for Applied Media	778 Forest Avenue	6, 7, 8, SE	272	522	250	52%
IS 298	Academy of Public Relations	778 Forest Avenue	6, 7, 8, SE	247	378	131	65%
Total for Intermediate Schools in Sub-district 3				**2,022**	**2,843**	**820**	**71%**

Source: 2010-2011 Department of Education *Utilization Profiles: Enrollment/Capacity/Utilization "Classic Edition"*

Charter Schools

Charter schools are not included in the community facilities analysis. However, the charter schools located in the study area have been identified for informational purposes. According to the latest available data from the DOE there are four charter schools within CSD 7 "sub-district" 3. These schools are listed in Table II.3.4 and shown on Figure II.3.2.

Table II.3.4. Charter Schools in Sub-District 3

School Name		Address
PS 156	Bronx Global Learning Institute for Girls Charter School	750 Concourse Village West
PS 31/IS 151	KIPP Academy Charter School	250 East 156th Street
IS 162	Greendot Charter School	600 Saint Ann's Avenue

Source: 2010-2011 Department of Education *Utilization Profiles: Enrollment/Capacity/Utilization "Classic Edition"*

NO ACTION SCENARIO

In the Future without the Proposed Action, the existing zoning controls would remain in place.

In the absence of the Proposed Action, the New York City School Construction Authority (NYCSCA) has identified the projected number of new elementary and intermediate school students that would be generated for the No-Action scenario for District 7, Sub-District 3 as part of the Projected New Housing Starts for the 2010-2014 Five Year Capital Plan.

Under the No-Action scenario, there are several future development projects and rezoning projects proposed within the study area, as presented in Table II.2.1. These projects would result in changes to land use on specific sites. Due to the early stages of the planning process for the projects at 580 River Avenue and on Block 2345, these projects are not reasonably expected to be constructed or implemented by 2014. The Lower Concourse and East 161st Street rezoning projects have been approved but no specific project sites have been identified for development by 2014. Therefore NYC DCP has determined that these projects should not be accounted for in the Future without the Proposed Action analysis.

An additional project is proposed to redevelop the Yankees parking garage at East 153rd Street. While this project is far from certain, the Bronx Borough President and Bronx Overall Economic Development Corporation are working to encourage the development of the lot, subject to discretionary actions. Due to the uncertainty of this project, it was not considered in the Future without the Proposed Action analysis.

Public Schools

No Action conditions are based on several factors including growth projections, proposed and approved changes to school utilization, and ongoing construction projects that would result in changes to school capacity.

The public school enrollment for the No Action condition was estimated based on the Department of Education's Grier Enrollment Projection Series (Actual 2008, Projected 2009-2018) and data from the New York City School Construction Authority (SCA) Projected New Housing Starts for the 2010-2014 Five Year Capital Plan. Since the Proposed Action's analysis year is 2014, the 2014 projections were used. These projections are shown in Tables II.3.5 and II.3.6.

According to the Panel for Education Policy's public notice website, changes to the utilization of P.S. 5 Port Morris were approved in December 2011 under the DOE's "Significant Changes in School Utilization." Starting in the 2012-2013 school year, P.S. 5 will begin a grade expansion that will modify the school from a K-5 school to a K-8 school. One grade (6, 7, and 8) will be added per year, completing the grade expansion by the 2014-2015 school year. The existing number of seats available was considered to be used for the grade expansion. These changes were incorporated into the school capacity calculations for the No Action condition.

The proposed February 2012 Amendment to the DOE's *2010-2014 Five Year Capital Plan* does not include any capacity changes to schools in CSD 7.

Public Elementary Schools

DOE's CSD 7 projections indicate an increasing trend in elementary school student enrollment. For CSD 7 "sub-district" 3, projections show that enrollment is expected to increase by 1,726 students by 2014. Given the significant increase in elementary school enrollment without any

approved capacity improvements, these projections suggest that the elementary schools within "sub-district" 3 will operate beyond the utilization threshold for overcrowding. These results are shown in Table II.3.5.

Table II.3.5. Projected Public Elementary School Enrollment, Capacity, and Utilization: No Action

	2014 Projected Enrollment (w/ Pre-K)	Students Generated by Development (Without Action)	Total 2014 Projected Enrollment	Program Capacity	Seats Available	Program Utilization (%)
Sub-district 3 [1,2]	5,496	676	6,172	5,341	830	115.5%

Notes:
1. To estimate student enrollment for elementary schools in sub-district 3 of CSD 7, sub-district percentages provided by the Department of City Planning were applied to the 2014 projections. The elementary school percentage for CSD 7's sub-district 3 is 50.76%.
2. Grier Enrollment Projection Series (Actual 2008, Projected 2009-2018) for 2014 and NYCSCA projected enrollment (2010-2014 Five Year Capital Plan).

Public Intermediate Schools

DOE's CSD 7 projections indicate a slight increasing trend in intermediate school student enrollment. For CSD 7 "sub-district" 3, projections show that enrollment is expected to increase by students by 2014. Intermediate schools within "sub-district" 3 will continue to operate below capacity in 2014, as shown in Table II.3.6.

Table II.3.6. Projected Public Intermediate School Enrollment, Capacity, and Utilization: No Action

	2014 Projected Enrollment	Students Generated by Development (Without Action)	Total 2014 Projected Enrollment	Program Capacity	Seats Available	Program Utilization (%)
Sub-district 3 [1,2]	1,771	260	2,031	3,046	1,015	66.7%

Notes:
1. To estimate student enrollment for intermediate schools in sub-district 3 of CSD 7, sub-district percentages provided by the Department of City Planning were applied to the 2014 projections. The intermediate school percentage for CSD 7's sub-district 3 is 46.49%.
2. Grier Enrollment Projection Series (Actual 2008, Projected 2009-2018) for 2014 and NYCSCA projected enrollment (2010-2014 Five Year Capital Plan).

WITH ACTION SCENARIO

As described in the Project Description, the Proposed Action would generate 124 dwelling units. Using the ratios provided in Table 6-1a of the *CEQR Technical Manual*, an estimated 49 elementary school and 20 middle school students would be generated by the Proposed Action, as shown in Table II.3.7.

Table II.3.7. Public School Students Generated by the Proposed Action

	Dwelling Units	Bronx Multipliers	Total
Elementary School Students	124	0.39	49
Intermediate School Students	124	0.16	20
		Total	**69**

Source: *CEQR Technical Manual (January 2012),* Table 6-1a

Public Elementary Schools

As shown in Table II.3.8, the 49 elementary school students that would be introduced to "sub-district" 3 would cause total enrollment in elementary schools to rise from 6,172 to 6,221, with an increase in the utilization rate of 115.5% to 116.5%. Although the elementary schools in the "sub-district" would operate over capacity, the Proposed Action would not cause a five percent or greater change in the utilization rate between the No Action and With Action conditions. Therefore, no significant adverse impacts on elementary schools are expected.

Table II.3.8. Projected Public Elementary School Enrollment, Capacity, and Utilization: With Action

	2014 No-Build Projected Enrollment (1)	Students Generated by Proposed Action	2014 Total Projected Enrollment	Program Capacity	Seats Available	Program Utilization (%)
Sub-district 3	6,172	49	6,221	5,341	879	116.5%

Notes:
1. See Table II.3.5.

Public Intermediate Schools

As shown in Table II.3.9, the 20 intermediate school students that would be introduced to "sub-district" 3 would cause total enrollment in intermediate schools to rise from 2,031 to 2,051, with an increase in the utilization rate of 66.7% to 67.3%. Since the intermediate schools would operate below capacity and the Proposed Action would not cause a five percent or greater change in the utilization rate between the No Action and With Action conditions, no significant adverse impacts on intermediate schools are expected.

Table II.3.9. Projected Public Intermediate School Enrollment, Capacity, and Utilization: With Action

	2014 No-Build Projected Enrollment (1)	Students Generated by Proposed Action	2014 Total Projected Enrollment	Program Capacity	Seats Available	Program Utilization (%)
Sub-district 3	2,031	20	2,051	3,046	995	67.3%

Notes:
1. See Table II.3.6.

CONCLUSIONS

The Proposed Action would not create any significant adverse impacts on community facilities and services. The Reasonable Worst Case Development scenario of 124 dwelling units would introduce approximately 300 residents to the study area, and would generate approximately 49 elementary school and 20 intermediate school students to the area. While elementary schools in "sub-district" 3 would exceed the *CEQR Technical Manual* utilization threshold of 100% under the No Action condition, the utilization rate would not increase by more than 5% with the addition of elementary school students generated by the Proposed Action. Therefore, no

significant adverse impacts on public elementary schools would occur as a result of the Proposed Action.

Intermediate schools within “sub-district” 3 would operate at a base utilization under 100% under the No Action condition. The utilization rate would increase by less than 5% with the addition of intermediate school students generated by the Proposed Action. Therefore, no significant impacts on public intermediate schools would occur as a result of the Proposed Actions.

The Proposed Action would not meet the thresholds described in the *CEQR Technical Manual* to conduct analyses for Group Child Care Centers, Libraries, Police/Fire Services and Health Care Facilities. Therefore, the Proposed Action would not cause significant adverse impacts to these community facilities.

4. Open Space

INTRODUCTION

Open space is publicly or privately owned land that is accessible by the public and operates, functions, or is available for leisure, play, or sport on a regular basis. In some instances, this land may be set aside for the protection and/or enhancement of the natural environment. If a proposed action could potentially have a direct or indirect effect on open space resources in the project area, an open space assessment may be necessary. According to the *CEQR Technical Manual*, a direct effect may occur when the proposed project would "result in a physical loss of public open space," "change the use of an open space so that it no longer serves the same user population," or affect the usefulness of a public open space. An indirect effect may occur when "the population generated by the proposed project would be sufficiently large to noticeably diminish the ability of an area's open space to serve the future population."

According to guidelines established in the *CEQR Technical Manual* (p. 7-4), a project that would add fewer than 200 residents or 500 employees, or a similar number of users to an area, is typically not considered to have an indirect effect on open space. If the area is well-served or underserved by open space, the need for an open space assessment may vary. The Rezoning Area is in an area that is neither well-served nor under-served by open space resources. As the Proposed Action would result in an increase of approximately 300 residents[1], an assessment of the Proposed Action's potential to have an effect on open space and recreational facilities is necessary. In addition to new residents, the Proposed Action would result in a net increase of an estimated 77 retail employees[2]. (Under the No Action scenario in which the Rezoning Area is developed as a storage facility, it would have a limited number of workers). Thus, the Proposed Action would not exceed the 500-employee CEQR screening threshold and an assessment of the effects of the new worker population associated with the Proposed Action is not warranted.

With an inventory of available resources and potential users, a preliminary, quantitative assessment of the adequacy of open space in the study area can be conducted. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares the ratio with certain criteria. In accordance with the guidelines established in the *CEQR Technical Manual*, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. This distance is typically a ½-mile for residential projects.

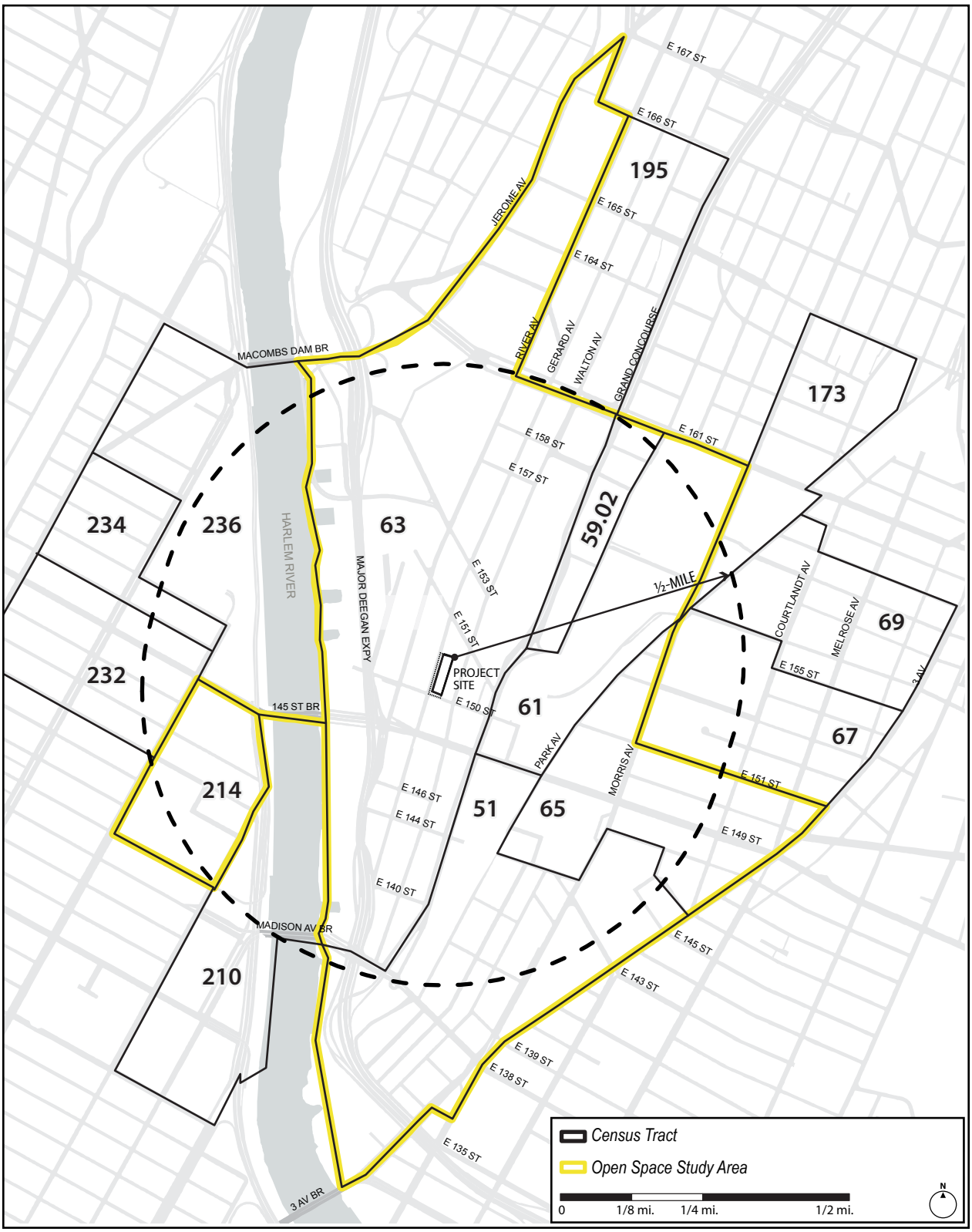
For purposes of analysis, the study area was determined by identifying the area within a ½-mile of the boundaries of the Rezoning Area. As described in the *CEQR Technical Manual*, census tracts with 50% or greater of their area located within the area of ½-mile radius were included in the calculation of population and open space; those with less than 50% of their area in the ½-mile radius were excluded. While the Harlem River presents a natural barrier to open space access in the study area, the 145th Street Bridge spans the river and is a convenient and well-used means of access. Therefore, Manhattan census tract 214 is included in the study area. While more than 50% of the area of Manhattan census tracts 210 and 236 is within ½-mile of the Rezoning Area, these census tracts were excluded from the open space study area. Because less than 50% of their *land* area, where open space users reside, is within ½-mile of

[1]Number of residents based on average population per dwelling unit size described in Lower Concourse Rezoning FEIS

[2]Number of retail employees based on Table 3.2-2 of the Lower Concourse Rezoning FEIS, in which a ratio of 7 workers per 2,200 s.f. of "retail space" was determined through NYCDCP surveys.

the Rezoning Area, they were excluded. Based on this methodology, the open space study area is defined by the boundaries of six census tracts as shown in Figure II.4.1, Open Space Study Area.

Figure II.4.1 - Open Space Study Area



Source: U.S. Census Bureau

PRELIMINARY ASSESSMENT

Study Area Residential Population

To determine the residential population served by existing open space resources, 2010 Census data were compiled for the census tracts comprising the study area. With an inventory of available open space resources and the number of potential users, open space ratios can be calculated.

The population of the study area are listed in Table II.4.1. The study area is comprised of census tracts 51, 59.02, 61, 63, 65, and 214. Table II.4.1 presents data from the 2010 Census and indicates that the study area had a residential population of 25,723 persons in 2010. According to the 2010 Census, the residential population of Bronx County is estimated to have grown by 3.9% between 2000 and 2010. Applying the 2000 – 2010 growth rate to 2014 (1.15% average annual growth) results in a No Action residential population projection of 26,109 persons for the 2014 Build Year. (The 2014 No Action development projects within the open space study area (see Table I.1.1) are not reasonably expected to be constructed or implemented by 2014 and were not accounted for in the No Action residential population.) The Proposed Action would increase the residential population by 300 persons. Thus, the With Action residential population projection is 26,409.

Table II.4.1. Residential Population

Study Area Census Tract	Population
51	5,810
59.02	2,582
61	3,713
63	5,280
65	5,337
214	3,001
Total (2010)[1]	25,723
Bronx (2010)	1,385,108
No-Action (2014)[2]	**26,109**
Rezoning Area (2014)	**300**
With-Action (2014)	**26,409**

Notes:

1. U.S. Census 2010.
2. Derived by application of 1.15% average annual growth rate to Census 2010 data.

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual,* open space may be public or private and may be used for active or passive recreational purposes. Public open space is defined as facilities open to the public at designated hours on a regular basis and should be assessed for impacts under CEQR. Private open space is not accessible to the general public on a regular basis and should only be considered qualitatively.

Open space is determined to be active or passive by the uses that the design of the space allows. Active open space is used for activities 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.

Publicly accessible open space facilities within the study area were inventoried and identified by their location, size, owner, description, utilization, hours, and condition. As listed in Table II.4.2, Inventory of Existing Open Space, the condition of each open space facility was categorized as "Excellent," "Good," or "Fair." A facility was considered to be in excellent condition if the area was clean, attractive, and all equipment was present and well-maintained. A good facility had minor problems such as litter, or older but operative equipment. A fair facility was one which was poorly maintained, had broken or missing equipment, and/or other factors that might diminish the facility's attractiveness. Determinations were made subjectively, based on a visual assessment of the facilities. The locations of the open spaces inventoried for this assessment are mapped in Figure II.4.2, Open Space Resources. The Map # provided in the first column of Table II.4.2 indicates each open space in Figure II.4.2.

Judgments as to the intensity of use and conditions of the facilities were qualitative, based on an observed degree of activity or utilization. If a facility seemed to be at or near capacity, for instance, and the majority of benches and/or equipment were in use, then utilization was considered heavy. If the facility or equipment was in use, but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. As shown in Table II.4.2, the study area has a number of publicly accessible open space facilities, ranging from large-sized neighborhood parks to playgrounds. In total, 13 sites have been identified, with a total of approximately 96.57 acres of open space in the study area. The features of the 13 open spaces shown in Figure II.4.2 are described below.

There are four large open space resources in the open space study area – Franz Sigel Park (#1), Mill Pond Park (#6), Mullaly Park (#10), and Macombs Dam Park (#11). Franz Sigel Park is a 15.99-acre park located between East 158th Street and the Metro-North Railroad tracks, the Grand Concourse, and Walton Avenue. The design of Franz Sigel Park incorporates the topography of the land which is evident with walkways on two levels and an 'overlook' section at the park's highest point with benches, lighting, and landscaping. Most of Franz Sigel's park capacity, 13.59 acres, is for passive recreational purposes. The remaining is active recreational space that includes baseball fields that are in good condition and heavily used. Mill Pond Park, a 15.53-acre waterfront park on the Bronx bank of the Harlem River, was formerly a vacant industrial site. Mill Pond Park features multiple tennis courts, an outdoor classroom, beach area, picnic area, sitting/viewing platforms, and an esplanade that facilitates accessibility of these and other features. Also, the historically significant Power House building located at this site was restored to provide the Department of Parks and Recreation with a district office that was displaced by Yankee Stadium Construction. The north and south sections of Mullaly Park were renovated in Spring 2008 and Spring 2009, respectively. The 15.05-acre park features a new multi-purpose field, basketball courts, skate parks, playgrounds, pools, seating areas, and green

space. Macombs Dam Park consists of a seven-acre portion constructed atop Ruppert Plaza that provides a running track/grandstand, soccer/football field, handball courts, basketball courts, fitness equipment, and picnic areas. The pedestrian promenade along Ruppert Plaza features walking space and terraces with seating and landscaping. A 10-acre section occupies the former footprint of Yankee Stadium and features fields for baseball, softball, little league, discus, shot put, and the javelin; a perimeter walking path; and a combination of viewing mounds, overlooks, bleachers, and seating. A field-level comfort station includes a rain garden and play area with water features.

River Avenue Parks, consisting of a skate plaza and pocket playground, was opened to the community in the summer of 2010 (#5 a-b). The skate plaza features half-pipes, ramps, stairs, rails, and a small seating area surrounded by green space. The pocket playground features play equipment, spray showers, lighting, benches, and a drinking fountain. The spray showers and lights are activated by subway trains that pass adjacent to the site. The parks are heavily utilized and are in excellent condition.

There are six playgrounds within the open space study area – Garrison Playground, Melrose Playground, Patterson Playground, Paul Robeson School Playground, Governor Smith Playground, and Colonel Young Playground (#2, #3, #4, #7, #12, and #13, respectively). Garrison Playground has play equipment, swings, basketball hoops, and slides, but is in poor condition and utilization is light. Melrose Playground, reconstructed in 2009, features swings, seating, water showers, basketball courts, and handball walls. This playground is in excellent condition and heavily used as it is adjacent to Melrose Houses. Patterson Playground is on East 148th Street between Morris Avenue and College Avenue, and features basketball courts, swings, and two handball walls. Paul Robeson School Playground, also known as MS 203 Playground, has soccer and baseball fields. Governor Smith Playground has playgrounds, a multi-purpose field supporting football and baseball, a running track, and tennis and handball courts. Colonel Young Playground has playgrounds; baseball fields; and basketball, tennis, and handball courts.

Patterson Houses, located between East 138th Street and East 144th Street from Morris Avenue to Third Avenue, contain nearly 1.50 acres of open space (#8 a-d). These spaces feature playgrounds, basketball courts and seating. Although these spaces are maintained by the New York City Housing Authority, they are accessible by the general public.

Graham Square Park (#9 a-b), is a small park that offers seating, is moderately used, and is in excellent condition.

Table II.4.2. Inventory of Existing Open Space

Map #	Name	Location	Owner[1]	Description	Hours of Access	Total Acres	Condition/ Utilization
1	Franz Sigel Park	Grand Concourse (btwn 158th and 153rd Streets)	DPR	Park: walkways, overlook with benches, dirt baseball fields with lights, restrooms	Sunrise to 1 AM	15.99	Excellent/ Heavy
2	Garrison Playground	E. 146th Street (btwn Walton Avenue & Grand Concourse)	DPR	Playground: swings, slides, bars, benches, basketball hoops	8 AM to Dusk	0.70	Fair/ Light
3	Melrose Playground	E. 154th Street to E. 155th Street (btwn Morris Avenue & Courtlandt Avenue)	DPR	Playground: swings, jungle gym, seating, basketball courts and handball	8 AM to Dusk	1.00	Excellent/ Heavy
4	Patterson Playground	E. 148th Street (btwn Morris Avenue & College Avenue)	DPR	Playground: basketball courts, swings, benches, and junior swings	8 AM to Dusk	2.78	Excellent/ Heavy
5 a, b	River Avenue Pocket Parks	E. 157th Street (btwn River Avenue & Gerard Avenue)	DPR	Playground and skate park in a plaza setting	Sunrise to 1 AM	0.67	Excellent/ Heavy Excellent/ Moderate
6	Mill Pond Park	Harlem River and E. 149th Street (btwn Morris Avenue & College Avenue)	DPR	Tennis courts, an outdoor classroom, beach area, picnic area, water feature, sitting/viewing platforms, esplanade	Sunrise to 1 AM	15.53	Excellent/ Moderate
7	Paul Robeson School Playground (MS 203 Playground)	E. 141st to E. 146th Street (btwn Rider Avenue & Morris Avenue)	SCA	Multi-purpose field for school: soccer and baseball fields	8 AM to Dusk	0.30	Excellent/ Heavy
8 a,b,c, and d	Patterson Houses Open Space	E. 138th to E. 144th Street (btwn Morris Avenue & 3rd Avenue)	NYCHA	Playgrounds, basketball courts and passive open space	8 AM to Dusk	1.50	Fair/Light Good/Moderate Good/Light Excellent/Heavy
9 a, b	Graham Square Park (Graham Triangle)	E. 137th to E. 138th Street (btwn Third Avenue & Lincoln Avenue)	DPR	Triangle: landscaped area, column statue with eagle, column with ball on top, benches	24hrs/ day	0.10	Excellent/ Moderate Excellent/ Moderate
10	Mullaly Park	Jerome Avenue to River Avenue (btwn E. 164th and Mcclellan Streets)	DPR	Multi-purpose field, basketball courts, skate parks, playgrounds, pools, seating areas	8 AM to Dusk	15.05	Excellent/ Moderate
11	Macombs Dam Park	River Avenue to the Harlem River (btwn E. 157th, W. 161st, and E. 164th Streets)	DPR	Running track/grandstand, soccer/football field, basketball courts, handball, fitness equipment, picnic areas, pedestrian promenade, viewing areas, seating	8 AM to Dusk	32.97	Excellent/ Heavy
12	Governor Smith Playground	Morris Avenue (btwn E. 151st & 153rd Streets)	DPR	Playgrounds, multi-purpose field, handball and tennis courts, running track	Unknown	3.56	Good/ Heavy
13	Colonel Young Playground	Lenox Avenue (btwn 143rd and 145 Streets)	DPR	Playgrounds, baseball fields; basketball, tennis, and handball courts	Unknown	6.42	Good/ Heavy
	Total Acres					**96.57**	

Notes:
1. Department of Parks and Recreation (DPR); New York City School Construction Authority (SCA); New York City Housing Authority (NYCHA)
Sources: Field Survey, March 2011 and February 2012; Lower Concourse Rezoning FEIS

Figure II.4.2 - Open Space Resources



Source: U.S. Census Bureau, NY City Map 2012

CONCLUSIONS

The *CEQR Technical Manual* establishes quantitative measures for conducting a preliminary assessment of the adequacy of open and recreational space within a neighborhood. The citywide median ration of 1.5 acres per 1,000 persons provides a measure of open space adequacy, while the planning goal for large scale developments is 2.5 acres per 1,000 persons.

The open space area study contains a total of approximately 96.57 acres of open space. With a projected study area residential population of approximately 26,109 in 2014, the projected 2014 No Action open space ratio in the study area is approximately 3.699 acres of open space per 1,000 residents.

The estimated 2014 With Action open space ratio in the study area is approximately 3.654 acres of open space per 1,000 residents. The estimated future With Action open space ratio is similar to the No Action ratio, as listed Table II.4.3. The change in estimated open space ratios between the No Action and With Action scenarios is a decrease of 1.236%. As indicated in the *CEQR Technical Manual* (p. 7-7), a detailed analysis of open space effects on residents is generally unnecessary if the open space ratios are near or above 2.5 and the open space ratio decrease is less than five percent. Thus, with open space ratios above 2.5 and a ratio decrease of less than five percent, a detailed analysis is not required and a significant adverse open space impact is not anticipated.

Table II.4.3. Open Space Ratios

Ratio	City Guideline	2014 No Action	2014 With Action	% Change
Open Space Acres/ 1,000 Residents	2.5	3.699	3.654	-1.236%

5. Shadows

INTRODUCTION

According to the *CEQR Technical Manual* (Chapter 8, Shadows), a shadow assessment considers projects that would result in new shadows long enough to reach a sunlight-sensitive resource, such as public open space, architectural resources, and natural resources. New structures or additions to existing structures, including the addition of rooftop mechanical equipment of 50 feet or more to be located adjacent to, or across the street from, a sunlight-sensitive resource require a shadow assessment. The Proposed Action would result in a new seven-story, 80-foot high mixed-use building. As the proposed building exceeds the 50-foot height threshold, a shadows assessment was conducted.

TIER 1 SCREENING

A base map was developed (see Figure II.5.1, Base Map) to illustrate the Proposed Action in relationship to sunlight-sensitive resources in the study area -- Franz Sigel Park and Garrison Playground. The Tier 1 screening assessment identifies the longest shadow that could be cast by the proposed structure, or 4.3 times the height of the structure which occurs on December 21, the winter solstice. Figure II.5.2, Longest Potential Shadow, illustrates that the proposed 80-foot tall building would cast its longest potential shadow out to a radius of 344 feet. Because this longest shadow study area would not reach any sunlight sensitive resource, no significant adverse shadows impact would result from the Proposed Action and a detailed shadows analysis is not required.

Figure II.5.1 - Shadows Base Map

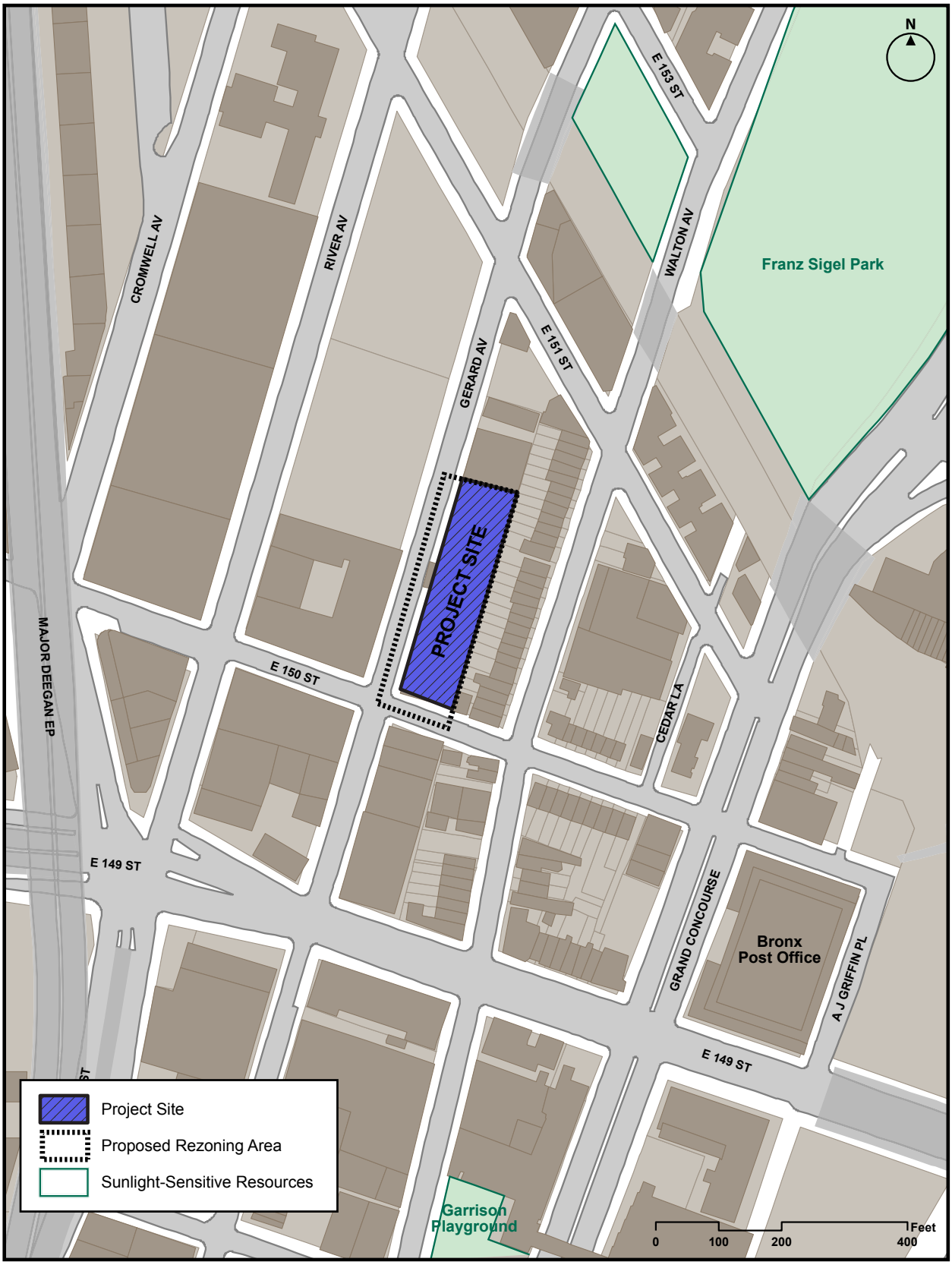
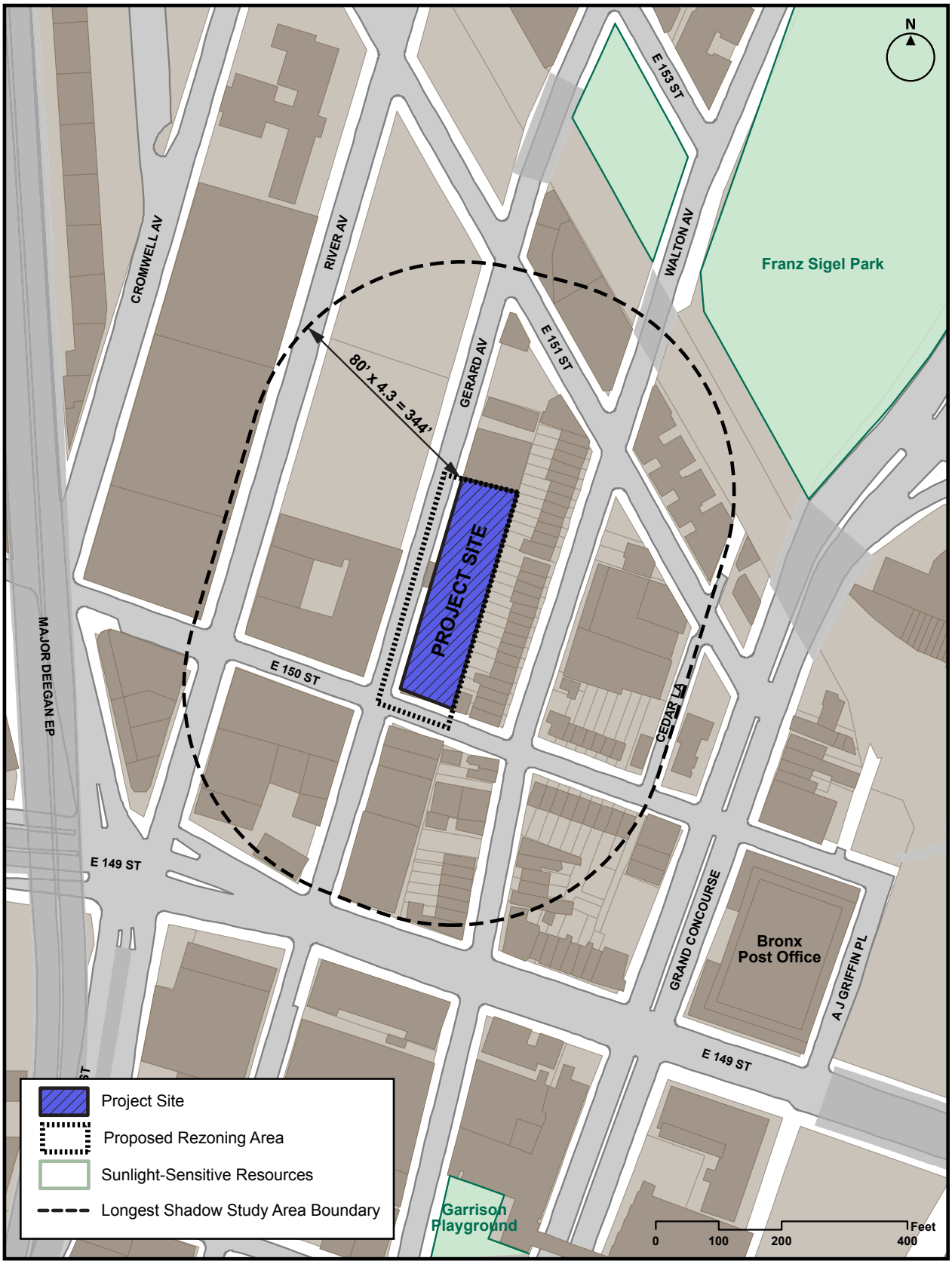


Figure II.5.2 - Longest Potential Shadow



7. Urban Design and Visual Resources

INTRODUCTION

As described in the *CEQR Technical Manual* (page 10-1), the urban design assessment considers "whether and how a project may change the experience of a pedestrian in the project area." The components of the pedestrian experience are defined as the arrangement and orientation of streets, building bulk and placement, visual resources (such as significant natural or built features), open space, natural features, wind, and sunlight. As stated in the *CEQR Technical Manual*, only changes to the pedestrian experience that are observable from street level or public space are assessed.

As the proposed rezoning would result in physical changes beyond the bulk and form permitted "as-of-right," a preliminary assessment for urban design and visual resources impacts was conducted to determine the potential effect resulting from a physical alteration beyond that allowed by existing zoning.

The urban design study area is consistent with the study area used for the land use analysis and consists of the area within 400 feet of the Rezoning Area where the Proposed Action may influence land use patterns and the built environment (see Figure II.7.1, Aerial Map). As described in the *CEQR Technical Manual* (page 10-1), visual resources include views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources. As the study area does not include notable visual resources, no view corridors have been identified in this assessment. For instance, the Major Deegan Expressway and the study area's topography limit views of the Harlem River from the study area. Similarly, the New York City Landmarks Preservation Commission (see Appendix C) did not identify historic resources within the study area.

EXISTING CONDITIONS

The existing urban design in the area surrounding the Proposed Action is characterized by a mix of three-story rowhouses, multi-unit residential buildings, and one- and two-story story light manufacturing buildings. The predominant land uses within 400 feet of the Rezoning Area are characterized by a mix of uses, including residential, commercial, and light industrial/manufacturing. Residential uses are located directly east and southeast of the Rezoning Area; light industrial/manufacturing uses are located directly to the north, west, and southwest of the Rezoning Area; and commercial uses are located to the east and west of the Rezoning Area. Ground level photographs of the Rezoning Area with the immediate context show the location of the Proposed Action (see Photo II.7.1, 580 Gerard Avenue, Facing North; Photo II.7.2, 580 Gerard Avenue, Facing Northeast; Photo II.7.3, 580 Gerard Avenue Rezoning, Facing Southeast).

The street grid within the study area is generally regular and consistent with that of Concord Village and surrounding areas of the Bronx. Blocks within the study area are typically 200 feet wide, although there is a fair amount of variation. Block length varies considerably given that East 151st Street is diagonal, resulting in blocks of increasing length as one moves across the study area from east to west.

On the east side of the study area at the southwest corner of the intersection of Grand Concourse and East 150th Street, the predominant land use consists of neighborhood retail and

commercial contained in one-story buildings constructed to the lot line and generally not set-back (see Photo II.7.4, East 150th Street at Grand Concourse, Facing West). To the north, on the west side of Grand Concourse between East 150th Street and the Metro North Railroad right-of-way, the predominant land use consists of commercial/retail land uses contained in one-story buildings. The buildings are set back considerably to accommodate off-street automobile access to the buildings (see Photo II.7.5, Grand Concourse at East 150th Street, Facing North).

On the north side of the study area, the buildings on the north side of East 151st Street on Walton Avenue are seven- to nine-stories high with no setbacks and generally constructed of brick. The building on the west side of Walton Avenue is a recently-constructed family intake center sponsored by the New York City Department of Homeless Services (see Photo II.7.6, Walton Avenue at East 151st Street, Facing Northwest). The apartment building on the east side of Walton Avenue occupies its entire small block, and includes small neighborhood retail uses on its Walton Avenue side (see Photo II.7.7, East 151st Street at Cedar Lane, Facing Northwest).

A one- to three-story brick warehouse/office building and associated small parking lot dominates much of the block east of the Rezoning Area (bounded by East 150th Street, Walton Avenue, East 151st Street, and Grand Concourse) (see Photo II.7.8, Walton Avenue at East 150th Street, Facing Northeast).

While no urban form predominates in the study area, the most prevalent, with the possible exception of parking, is the attached rowhouse. These are typically three-story brick buildings, but four-story buildings and other façade materials are common as well (see Photo II.7.9, Walton Avenue at East 150th Street, Facing Northwest). They are typically located on 100- to 115-foot deep lots, with the building set back approximately 10 feet from the sidewalk to accommodate stoops, small yards, and/or storage. These buildings are found on the west side of Walton Avenue between East 150th and East 151st streets adjacent to the rear of the Rezoning Area and on East 150th Street between Walton Avenue and the commercial buildings fronting Grand Concourse.

Walton Avenue between East 149th and East 150th streets consists of a mix of apartment buildings (up to five-stories high), three- and four-story brick and siding rowhouses, and one-story commercial buildings (see Photo II.7.10, Walton Avenue at East 149th Street, Facing Northeast).

On the southwestern side of the study area, the western half of the block bounded by Gerard Avenue, East 149th Street, East 150th Street, and Walton Avenue and the block bounded by Gerard Avenue, 149th Street, 150th Street, and River Avenue consists of automobile-related uses (including a gas station) contained in newer metal and concrete-block buildings and older one- and two-story brick and stucco warehouse buildings. The gas station is set back to accommodate off-street automobile access, while the warehouses are constructed to the lot line (see Photo II.7.11, Gerard Avenue at East 149th Street, Facing Northwest).

West of the Project Site, the block bounded by Gerard Avenue, East 150th Street, East 151st Street and River Avenue includes a two-story brick and glass Modernist building, including a four-story portion (see Photo II.7.12, Gerard Avenue at East 150th Street, Facing Northwest); two parking lots comprise the northern two-thirds of the block.

Immediately north of the Rezoning Area, the northwest corner of the block that includes the Rezoning Area and the southwest corner of the block bounded by East 151st Street, Gerard

Avenue, East 153rd Street, and Walton Avenue include a mix of parking, a one-story brick commercial building, and one- and two-story sheet metal and brick warehouse buildings (see Photo II.7.13, Gerard Avenue btwn East 150th and East 151st Streets, Facing Northeast).

The western edge of the study area on River Avenue between East 150th and East 151st streets includes the Gateway Center at Bronx Terminal Market retail shopping center, a contemporary stucco, glass, and metal structure of varying heights (up to six stories) (see Photo II.7.14, River Avenue at East 151st Street, Facing Northwest).

As shown in Figure I.1.4, Zoning Map, the Rezoning Area is located in a M1-2 zoning district which encompasses the western half of Block 2353; the eastern half is zoned R6. An M1-2 district generally permits light industrial, commercial and limited community facility uses. Manufacturing and commercial uses have a maximum floor-area ratio (FAR) of 2.0 and community facilities have a maximum FAR of 4.8. Building heights and setbacks are governed by the sky exposure plane. The commercial, manufacturing, and community facility parking requirements vary with use. An R6 zoning district, which characterizes the eastern portion of the 400-foot radius, allows for a maximum FAR of 2.43 for residential and 4.8 for community facility.

Existing building sizes vary widely in the study area, as three-story rowhouses and six-story multi-unit apartment buildings characterize the immediate area, in addition to a small amount of one- to two-story buildings with light industrial uses. As mentioned previously, a newly constructed seven-story family intake center sponsored by the New York City Department of Homeless Services is located directly north of the Rezoning Area, as is a nine-story residential building with ground-floor commercial uses. The Gateway Center at Bronx Terminal Market, a multi-story (up to six stories) shopping center with 913,000 s.f. of destination retail space, was completed in 2009 on River Avenue, between East 150th and East 151st streets.

NO ACTION SCENARIO

Under the No Action scenario, the existing building characteristics, land uses and street grid will remain consist with existing conditions. However, two NYCDCP-sponsored rezoning actions will change the zoning in the neighborhoods surrounding the Rezoning Area. To the south of the Rezoning Area, the Lower Concourse Rezoning and Related Actions Final Environmental Impact Statement (Lower Concourse FEIS) of 2009 rezoned a 30-block area surrounding the lower end of the Grand Concourse, mapped a new waterfront park, established a Waterfront Access Plan, made the provisions of Inclusionary Zoning applicable in the area, and enacted other related actions in order to create new investment opportunities and open space in the underutilized but transit-rich Lower Concourse area. This rezoning changed an area formerly mapped as M1-2, M2-1, C4-4, and R6 to include commercial districts (C4-4 and C6-2A), Special Mixed Use Districts (M1-4/R8A, M1-4/R7A, and M1-4/R6A), and conventional manufacturing districts (M1-2 and M1-4). In addition, a C2-4 commercial overlay is mapped on waterfront lots within a R7-2 district. This rezoning would facilitate the development of mixed-use and residential developments in the currently industrial area, with substantial increases in building heights along the waterfront.

Another recently approved rezoning, the 161st Street/River Avenue Rezoning, seeks to foster new residential and commercial development north of the Rezoning Area. This 2009 rezoning seeks to capitalize on recent investments in the area surrounding the 161st Street corridor that have led to the renewal of the civic center of the Bronx and the South Bronx overall. Recent investments include the new Yankee Stadium, on the northwest corner of 161st Street and River

Avenue. Parks are planned for the existing Yankee Stadium site and sites along River Avenue and the Harlem River.

As described in the Land Use, Zoning and Public Policy section, there are several future development projects and rezoning projects proposed within the study area which would result in changes to land use on specific sites. However, due to the early stages of the planning process for the projects at 580 River Avenue and on Block 2345, these projects are not reasonably expected to be constructed or implemented by the 2014 Build Year. The Lower Concourse and East 161st Street rezoning projects have been approved but no specific project sites have been identified for development by 2014. Therefore, these projects have not been accounted for in the Future without the Proposed Action analysis. An additional development is proposed for the Yankees parking garage at East 153rd Street. While this project is far from certain, the Bronx Borough President and Bronx Overall Economic Development Corporation are working to encourage the development of the lot, subject to discretionary actions. Due to the uncertainty of this project, it was not considered in the Future without the Proposed Action analysis.

WITH ACTION SCENARIO

The Build condition would allow the construction of a seven-story, 152,190 gross s.f. mixed-use building comprised of 124 residential units and 24,900 gross s.f. of local retail space on Lot 1. The Applicant is requesting to rezone an area that encompasses the entirety of Lot 1 on Block 2353, as well as parts of Lots 16, 45, 46, 47, 48 and 49 from a M1-2 and R6 zoning district to a R7A/C2-4 district (see Figure II.7.2) . The rezoning would allow a maximum of 147,821 zoning square feet (zsf) following the regulations of an Inclusionary Housing Program Bonus which would allow a FAR of 4.6. The height of the new building would be 80 feet, the base height 64 feet (see Figures II.7.3-II.7.6). The existing M1-2 zoning permits light manufacturing uses and a maximum allowable FAR of 2.0. Lot 1 is currently developed to 32,135 s.f., and could be developed to approximately 62,400 s.f. under the existing zoning. However, given historical trends in the area and given the Rezoning Area has not been developed to this potential despite the allowable FAR under the M1-2 zoning district, it is unreasonable to expect further development of the Rezoning Area under the existing zoning. As discussed in the Framework for Analysis section, it is assumed that the 32,135 s.f. building located on Lot 1 would continue to be used as a storage facility in the No Action condition.

The addition of new retail space to the ground floor of the proposed seven-story building would generate more pedestrian traffic in the neighborhood (see Figure II.7.7, Pedestrian Experience. The building would be in context with the wide variety of building heights in the area, including the seven-story Prevention and Temporary Housing building located on East 151st Street at Walton Avenue, and would providing an appropriate mix of residential and commercial uses (see Figure II.7.8, Building Height Rendering). The streetwall would be maintained throughout the new building's perimeter and would serve to enhance the pedestrian experience in the immediate area as new ground-level activity provides more vitality to the neighborhood. The requirement of street trees along each 25 feet of street frontage and removal of roll-down metal gates would also improve the streetscape.

CONCLUSION

As discussed in the previous section, the proposed rezoning and resulting new structure would not block a view corridor or built visual resource, nor would it alter the context of a natural or built visual resource, given the expected developments in the area as a result of recent

rezonings. As shown in Figures II.7.3-II.7.6, the Proposed Action would maintain the existing streetwall and seek to enhance the pedestrian experience as new ground-level activities and sidewalk amenities complement recent NYC DCP actions to revitalize the South Bronx area. The preliminary assessment shows that changes to the pedestrian environment would not adversely affect elements of urban design or visual resources are not significant. Therefore, no significant impact on urban design or visual resources is anticipated and a detailed analysis is not required.

Figure II.7.1 - Aerial Map

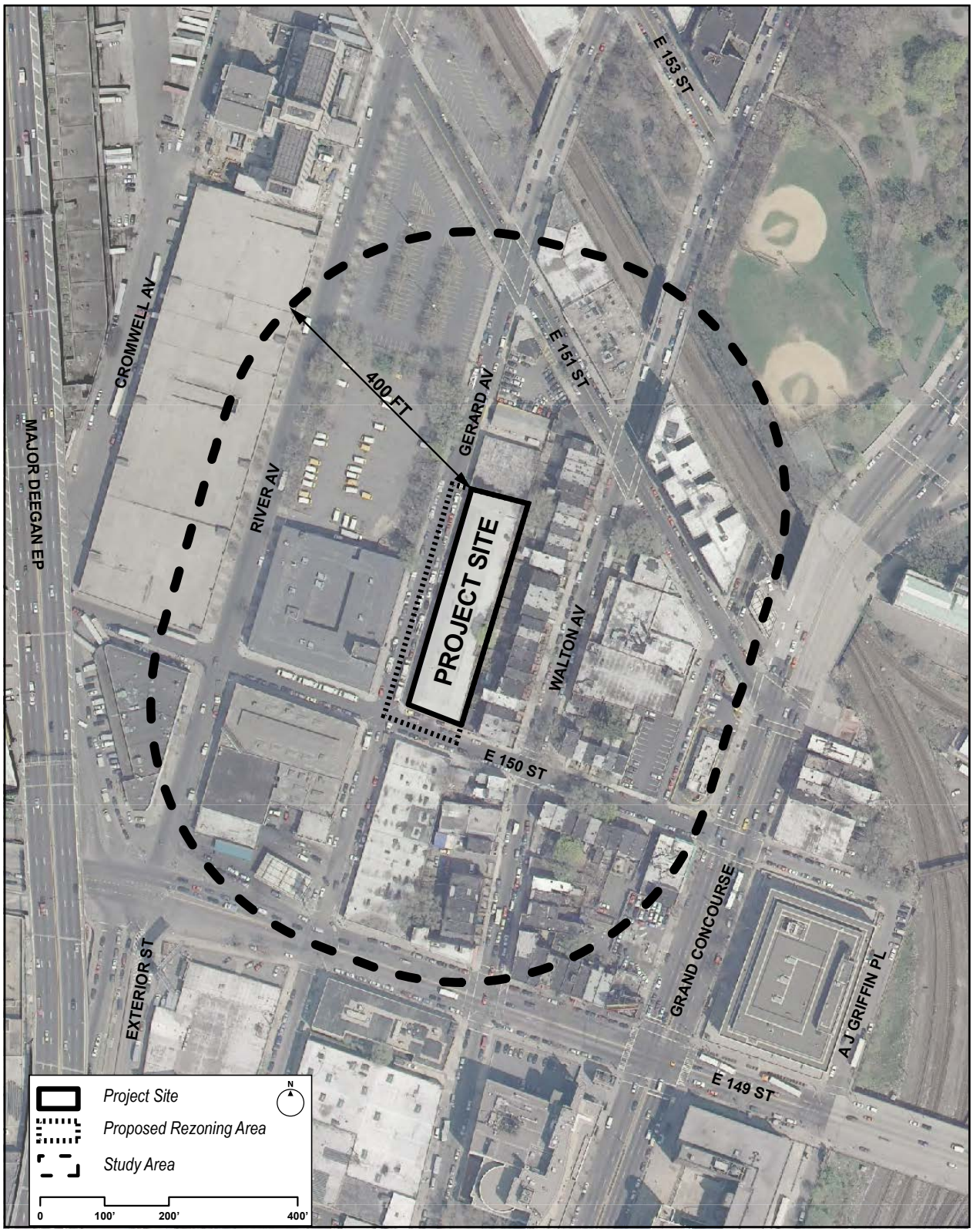
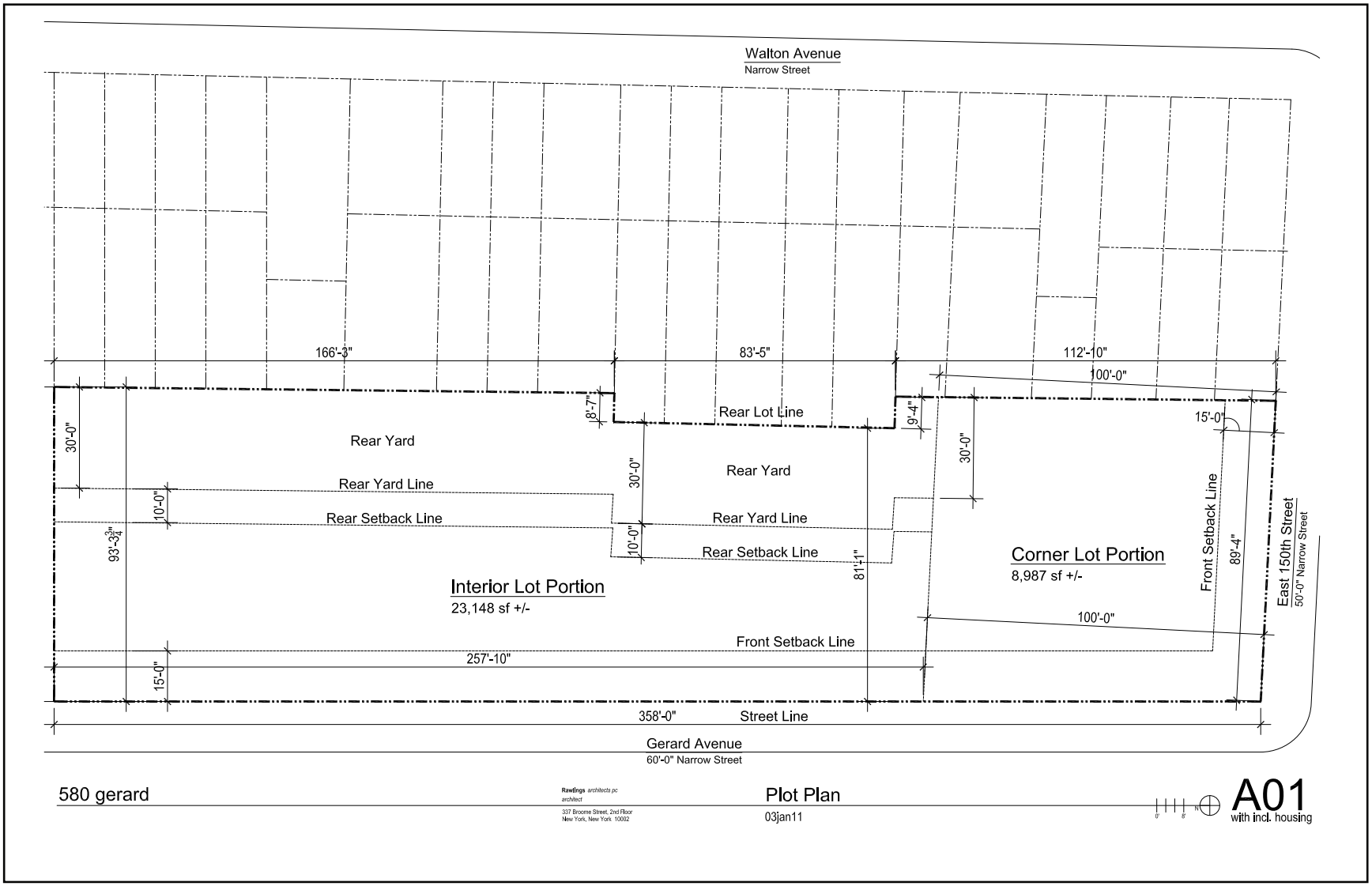


Figure II.7.2- Site Plan



Note: For Illustrative Purposes Only

Figure II.7.3. 580 Gerard Avenue (Existing), Facing North



Figure II.7.4. 580 Gerard Avenue (Proposed), Facing North



Figure II.7.5. 580 Gerard Avenue (Existing), Facing South



Figure II.7.6. 580 Gerard Avenue (Proposed), Facing South



Figure II.7.7 Pedestrian Experience



Figure II.7.8 Building Height Rendering as Project Site



Photo II.7.1. 580 Gerard Avenue, Facing North



Photo II.7.2. 580 Gerard Avenue, Facing Northeast



Photo II.7.3. 580 Gerard Avenue Rezoning, Facing Southeast



Photo II.7.4. E. 150th Street at Grand Concourse, Facing West



Photo II.7.5. Grand Concourse at E. 150th Street, Facing North



Photo II.7.6. Walton Avenue at E. 151st Street Facing Northwest,



Photo II.7.7. E. 151st Street at Cedar Lane, Facing Northwest



Photo II.7.8. Walton Avenue at E. 150th Street, Facing Northeast



Photo II.7.9. Walton Avenue at E. 150th Street, Facing Northwest



Photo II.7.10. Walton Avenue at E. 149th Street, Facing Northeast



Photo II.7.11. Gerard Avenue at E. 149th Street, Facing Northwest



Photo II.7.12. Gerard Avenue at E. 150th Street, Facing Northwest

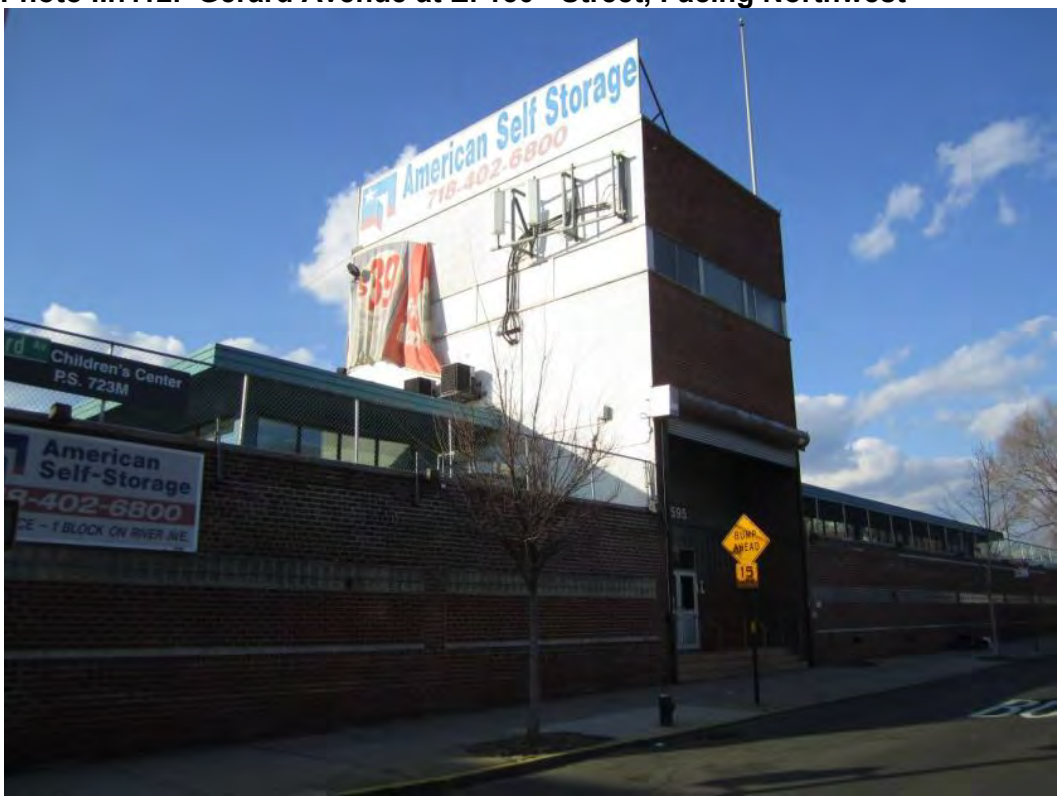
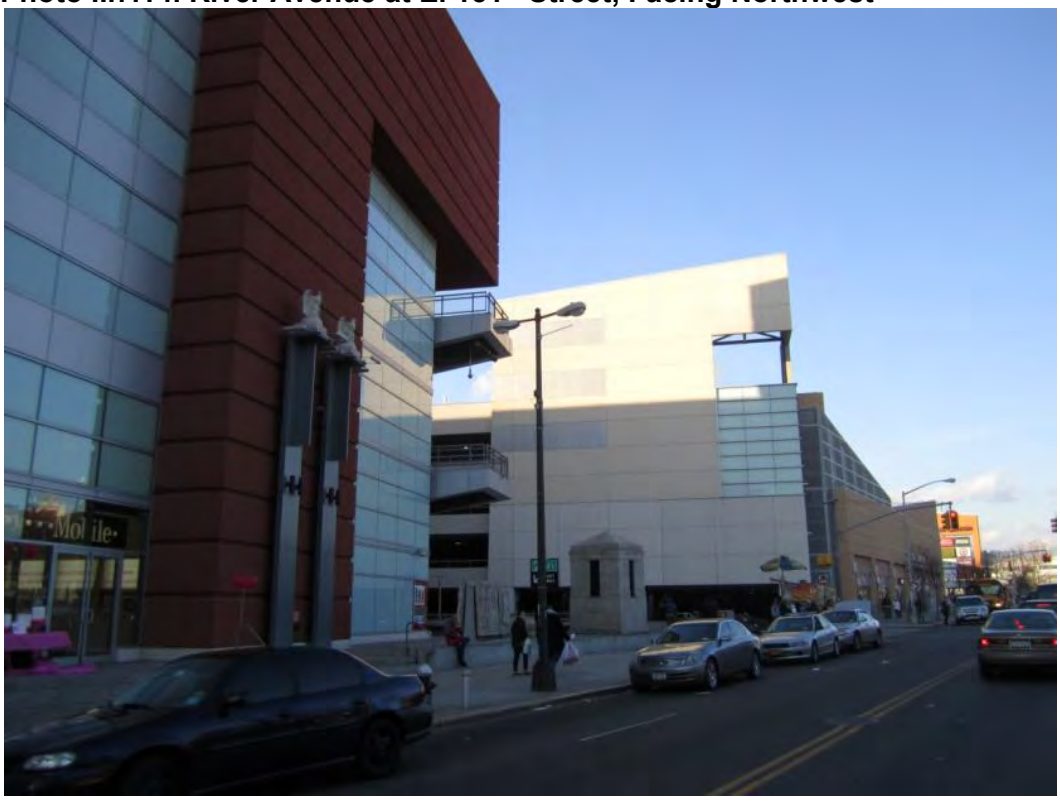


Photo II.7.13. Gerard Avenue btwn E. 150th and E. 151st Streets, Facing Northeast



Photo II.7.14. River Avenue at E. 151st Street, Facing Northwest



9. Hazardous Materials

According to the *CEQR Technical Manual* (Chapter 12), a hazardous materials assessment may be necessary when the site of a proposed project or the proposed action could lead to increased exposure of people or the environment to hazardous materials. Hazardous materials are substances that pose a threat to human health or the environment and can include heavy metals, volatile and semi-volatile organic compounds, methane, polychlorinated biphenyls, and other hazardous wastes.

In March 2011, a Phase I Environmental Site Assessment (ESA) was completed to investigate the potential presence of hazardous materials at Lot 1 of Block 2353. This Phase I ESA is provided in Appendix A of this EAS. The Phase I concluded there was no evidence of recognized environmental conditions in connection with the property, although the following items warrant mentioning:

Gasoline Storage Tanks
An area within the building where underground gasoline storage tanks had been located was identified. According to information obtained from the Toxic Targeting Database Report, the tanks had been removed in 1993 and that subsequent soil sampling showed no evidence of significant contamination. However, it is recommended that a comprehensive site investigation be completed in this area of the building to confirm that the tanks and soils have been removed.

Hydraulic Lift Units
Three large underground hydraulic lift units were observed within the existing building; oil or a black fluid was observed in the base of one of the lift units on the eastern side of the building. A comprehensive site investigation is recommended to determine the integrity of the soils in the vicinity of the underground hydraulic fluid reservoirs.

Fuel Oil Storage Tank
According to the Toxic Targeting Database Report, an underground 2,500-gallon fuel oil tank is currently buried on the project site and is located the existing building. Further, a 5,000-gallon fuel oil tank was removed and replaced in 1993 with the present 2,500-gallon fuel oil tank. In 2,000, a subsurface investigation was performed, and reportedly subsequent soil sampling showed no evidence of significant contamination. However, an investigation should be performed to confirm that soils are free of significant contamination.

Drains
Floor drains were observed throughout the existing building. Based on the construction date of the building (1950s), it is likely that these drains discharge to the municipal sewer system. Therefore, it is recommended that these drains be dye tested to confirm final discharge into the municipal sewer system.

Asbestos-Containing Material (ACM)
Due to the age of the building, ACMs are most likely present in the building. Prior to any planned demolition and renovation work for the building, a survey should be conducted by a New York City-licensed Asbestos Investigator. Based on the results of the survey, the required New York City Department of Environmental Protection (NYCDEP), New York State and Federal filings and notifications should be completed prior to any asbestos abatement activities, according to all applicable regulatory requirements.

Lead Based Paint
Due to the age of the building, it is likely that lead-based paint is present in all painted surfaces within the interior portions of the building. As part of any future demolition activity, all contractors should take the appropriate and necessary precautions, according to all applicable regulatory requirements, relating to the presence of lead-based paint during these operations.

On December 7, 2011, NYCDEP issued a response based on the agency's review of the Phase I ESA (see Appendix B). NYCDEP requested that a Phase II ESA be conducted to identify and characterize the surface and subsurface soils at the project site. However, due to the fact that the site is currently being utilized by a tenant who is using the entire building for storage and warehousing, it was determined that the preparation of the Phase II report is not feasible. Therefore, an (E) designation for Hazardous Materials is appropriate to preclude the potential for significant adverse impacts on the site.

The (E) designation requires that, prior to redevelopment, the property owner conduct a Phase I ESA in accordance with the American Society of Testing Materials (ASTM) E1527-05, a soil and groundwater testing protocol, and remediation where appropriate, to the satisfaction of the New York City Office of Environmental Remediation (OER) before issuance of construction-related New York City Department of Buildings (DOB) permits (pursuant to Section 11-15 of the *Zoning Resolution*—Environmental Requirements). The E-designation also requires mandatory construction-related health and safety plans, which must also be approved by OER. Under the E-designation, the following tasks must be undertaken:

> Task 1. The applicant must submit to the Mayor's Office of Environmental Remediation for review and approval, a Phase 1 of the site along with a soil and groundwater 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 sample sites should be selected to adequately characterize the site, the specific source 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. A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER. If remediation is indicated from the test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

Applying the (E) Designation to the site will provide a mechanism to ensure that testing for and mitigation and/or remediation of hazardous materials, if necessary, are completed as part of the future development of the site. Therefore, with this designation in place, no significant hazardous materials impact is expected as a result of the Proposed Action.

13. Transportation

INTRODUCTION

According to the *CEQR Technical Manual* (page 16-1), the objective of the transportation analysis is to determine whether a proposed project could significantly impact any mode of transportation, including traffic flow and operating conditions, rail and subway facilities and services, bus service, pedestrian facilities, pedestrian, bicycle and vehicular safety assessments, parking conditions, goods delivery, and construction phase impacts. These individual elements are assessed separately to determine whether a potential significant impact could occur. The first step in conducting an analysis is to determine if detailed transportation analyses are needed by consulting the minimum development densities table contained in the *CEQR Technical Manual* (Table 16-1, page 16-3). As the Proposed Action is located in Zone 2 and would contain over 20,000 square feet of retail space, a preliminary trip generation analysis was conducted.

According to the *CEQR Technical Manual* (page 16-3), a trip generation and travel demand factors (TDF) memorandum is required to disclose the projected trips generated by the proposed development through the two-tiered screening process. A Level 1 screening assessment includes a trip generation analysis to determine whether the project would result in more than 50 vehicle trips, 200 subway/rail or bus riders, or 200 pedestrian trips in a peak hour. The Level 2 screening is a trip assignment review that identifies intersections with 50 or more vehicle trips, pedestrian elements with 200 or more pedestrian trips, 50 bus trips in a single direction on a single route, or 200 passengers at a subway station or line during any analysis peak hour which would require detailed analyses.

The reasonable worst-case development scenario resulting from the proposed rezoning would consist of a mixed use building comprised of 124 residential units and 24,900 square feet of local retail space. As discussed in the Framework for Analysis section, it is assumed that the 32,135 s.f. building located on Lot 1 would continue to be used as a storage facility in the No Action condition. The screening analysis is contained in *Preliminary Trip Generation and TDF Memorandum: 580 Gerard Avenue Rezoning* (see Appendix B) dated July 12, 2012. The Level 1 screening analysis showed that the total project-generated trip increment would result in a maximum sum of 15 peak hour vehicle trips (Saturday), 55 peak hour subway trips (weekday evening), 32 peak hour bus trips (weekday midday), and 301 peak hour total walk trips (weekday midday).

Based on the Level 1 screening assessment for vehicle, subway, and bus trips, the Proposed Action would not exceed the thresholds described in the *CEQR Technical Manual* and further analysis of traffic and transit is not required. A parking analysis is only required if a quantitative traffic analysis is required.

Based on the Level 1 screening assessment for pedestrians, the Proposed Action would result in more than 200 walk trips in a peak hour; therefore, a Level 2 screening was performed to distribute the new walk trips to the surrounding pedestrian network.

Based on the Level 2 screening criteria, during the weekday midday peak hour, the following pedestrian elements were found to require a quantitative impact analyses:

1. Northeast corner of East 150th Street and Gerard Avenue
2. East sidewalk of Gerard Avenue, between East 150th Street and East 151st Street, south of the project site

Methodology

A detailed pedestrian analysis was prepared for the corner and sidewalk previously described following procedures detailed in the *CEQR Technical Manual* (page 16-44) and pedestrian flow conditions were analyzed using methodology contained in the *2000 Highway Capacity Manual (HCM)*.

Under this methodology, conditions for a sidewalk or walkway are analyzed by developing a ratio of the peak 15-minute pedestrian volume and the effective walkway width, with the effective walkway width derived by subtracting any obstructions (i.e., trees, signs, hydrants, etc.) and their appropriate shy distances from the total walkway width. This ratio is called the pedestrian unit flow rate and is expressed as pedestrians per minute per foot of width (pmf). Each pedestrian flow rate corresponds to a particular pedestrian level of service (LOS) grade; these are shown in Table II.13.1.

Table II.13.1. Sidewalk/Walkway LOS for Non-Platoon and Platoon Conditions[3]

	Non-Platoon Flow	Platoon Flow
LOS A	≤ 5 pmf	≤ 0.5 pmf
LOS B	> 5 to 7 pmf	> 0.5 to 3 pmf
LOS C	> 7 to 10 pmf	> 3 to 6 pmf
LOS D	> 10 to 15 pmf	> 6 to 11 pmf
LOS E	> 15 to 23 pmf	> 22 to 18 pmf
LOS F	> 23 pmf	> 18 pmf

The analysis of sidewalks and walkways can also include a "platoon" factor. According to the *CEQR Technical Manual* (page 16-46), "non-platoon" flow occurs when the pedestrian volume within the peak 15-minute period is relatively uniform. "Platoon" flow occurs when the pedestrian volume varies significantly within the peak 15-minute period.

Street corners and crosswalks are also analyzed using *HCM* procedures but are more complicated as they require a time-space analysis that takes into account pedestrian volumes, walking speed and pedestrian signal timing. The performance measure for corners and crosswalks is pedestrian space and is expressed as square feet per pedestrian (ft^2/p); the LOS grades that correspond with each pedestrian space level are shown in Table II.13.2.

[3] *CEQR Technical Manual (January 2012),* (Table 16-9, page 16-47).

Table II.13.2. Corner/Crosswalk LOS Pedestrian Space[4]

LOS A	> 60 ft^2/p
LOS B	> 40 to 60 ft^2/p
LOS C	> 24 to 40 ft^2/p
LOS D	> 15 to 24 ft^2/p
LOS E	> 8 to 15 ft^2/p
LOS F	≤ 8 ft^2/p

EXISTING CONDITIONS

Data Collection

Pedestrian volumes at the study sidewalk and corner were collected during the weekday midday peak period (12 PM to 2 PM) in 5-minute increments on Thursday, January 20, and Tuesday, February 8, 2011. The higher of these two days was found to be February 8 and those volumes were used in the analysis. The midday peak hour was found to be 1 PM to 2 PM and the peak 15-minute period occurred from 1:25 PM to 1:40 PM.

Analysis Results

The total width of the east sidewalk of Gerard Avenue, between East 150th Street and East 151st Street, south of the Rezoning Area, is 10.5 feet; however various street furniture and a fuel oil fill port box adjacent to the existing building on Lot 1 result in an effective width of 3 feet. The sidewalks in the study area are generally lightly traveled and the Existing (2011) peak 15-minute, two-way pedestrian volumes on the east side of Gerard Avenue, north of East 150th Street, was found to be 2 persons during the weekday midday peak hour. As shown in Table II.13.3, the analyzed sidewalk currently operates at LOS A in both platoon and non-platoon conditions during the midday peak hour.

Table II.13.3. 2011 Existing Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Effective Width (feet)	Peak 15-Min 2-Way Volume	Non-Platoon Conditions		Platoon Conditions
			PMF	LOS	LOS
Weekday Midday					
East Side of Gerard Avenue, north of E 150th Street	3.0	2	0.0	A	A

For the corner study location, peak 15-minute, two-way pedestrian volumes were found to be somewhat higher than on the sidewalk, with 22 persons during the weekday midday peak hour. As shown in Table II.13.4., the analyzed corner currently operates at LOS A during the midday peak hour.

[4] *CEQR Technical Manual (January 2012),* (Table 16-10, page 16-47).

Table II.13.4. 2011 Existing Conditions: Pedestrian LOS Analysis for Corners

Location	Peak 15-Minute Volume	Average Conditions	
		ft^2/p	LOS
Weekday Midday			
Northeast Corner of Gerard Ave and E 150th Street	22	1,024.0	A

NO-ACTION SCENARIO

The Future without Proposed Action builds on the Existing Conditions analysis by incorporating background growth, other nearby projects expected to be completed and anticipated changes in the transportation network. The Future without the Proposed Action analysis focuses on conditions in 2014, when the project is expected to be completed. The analysis of the No Action Condition serves as the baseline to which the impacts of the project will be compared.

In accordance with *CEQR Technical Manual* guidelines (Table 16-4) for projects in the Bronx, the 2014 Future without Proposed Action background traffic, pedestrian, transit, and parking volumes were developed by applying a compounded 0.25 percent annual growth rate, over a period of three years, to the 2011 Existing Condition volumes. In addition to the background growth, the development projects described in Chapter 2, "Land Use, Zoning, and Public Policy" were considered to forecast the No Action Condition volumes. However, as described in Chapter 2, these projects are not reasonably expected to be constructed or implemented by 2014 and were therefore not accounted for in the Future without the Proposed Action analysis. Due to the relatively low existing pedestrian volumes, even with the background growth factor applied, no changes to the pedestrian network are anticipated by the analysis year.

Analysis Results

As shown in Tables II.13.5 and II.13.6, both the sidewalk and corner analyzed during the weekday midday peak hour would operate at LOS A in the 2014 No-Action condition.

Table II.13.5. 2014 No-Action Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Effective Width (feet)	Peak 15-Min 2-Way Volume	Non-Platoon Conditions		Platoon Conditions
			PMF	LOS	LOS
Weekday Midday					
East Side of Gerard Avenue, north of E 150th Street	3.0	2	0.0	A	A

Table II.13.6. 2014 No-Action Conditions: Pedestrian LOS Analysis for Corners

Location	Peak 15-Minute Volume	Average Conditions	
		ft^2/p	LOS
Weekday Midday			
Northeast Corner of Gerard Ave and E 150th Street	22	1,024.0	A

WITH-ACTION SCENARIO

The With-Action condition was developed to assess future pedestrian operations with the Proposed Action. This condition was then compared to the No-Action condition to determine whether or not the Proposed Action would likely have any significant adverse impacts on the study area's pedestrian facilities that could require mitigation. To do this, expected project-generated pedestrian trips were added into the future No-Action study area to compare pedestrian operations in 2014 with and without the Proposed Action.

For sidewalks and walkways in a non-Central Business District (CBD), the *CEQR Technical Manual* (page 16-59) states that if the pedestrian flow rate under the With-Action condition deteriorates from the No-Action condition within an acceptable LOS (LOS C or better), it should not be considered a significant impact.

For corners and crosswalks in a non-CBD, the *CEQR Technical Manual* (page 16-56) states that if the average pedestrian space available under the With-Action condition deteriorates from the No-Action condition within an acceptable LOS (LOS C or better), it should not be considered a significant impact.

As part of the Proposed Action, the fuel oil fill port box adjacent to the building on the east sidewalk of Gerard Avenue would be removed, increasing the effective width of this study location from 3 feet to 6 feet. There are no other changes to pedestrian infrastructure planned as part of the Proposed Action.

Trip Generation

As described in *Preliminary Trip Generation and TDF Memorandum: 580 Gerard Avenue Rezoning* (see Appendix B) the project is expected to generate a net total of 301 pedestrian trips (including all transit and walk person trips) during the 2014 weekday midday peak hour.

Trip Distribution and Assignment

The Proposed Action would provide pedestrian access on the east side of Gerard Avenue, between East 150th and East 151st streets; therefore, walk trips were assigned to the local roadway network coming to and from the Proposed Action, arriving either from the north or south along Gerard Avenue.

Distribution of pedestrian trips to the network was based on expected travel paths to/from the project site. It was also assumed that the majority of the subway trips would be traveling to and from the Number 2, 4, and 5 subway lines located at the Grand Concourse and East 149th Street Station.

Pedestrian trips generated by the Proposed Action were distributed in the network in the following manner (see Appendix B):

- 20% to/from the north along Gerard Avenue
- 80% to/from the south along Gerard Avenue
  - 50% originating from East 150th Street, east of Gerard Avenue
  - 30% originating from Gerard Avenue, south of East 150th Street

Analysis Results

As shown in Table II.13.7, the east sidewalk on Gerard Avenue, between East 150th Street and East 151st Street, would deteriorate from LOS A (with a flow rate of 0.0 pmf) to LOS B (with a flow rate of 2.6 pmf) during the weekday midday peak hour. As the sidewalk would continue to operate at an acceptable LOS C or better, this deterioration in LOS from the No-Action to the With-Action condition would not be considered a significant impact.

As shown in Table II.13.8, the northeast corner of Gerard Avenue and East 150th Street would deteriorate from LOS A to LOS B, with the average pedestrian space decreasing from 1,024.0 ft^2/p to 58.1 ft^2/p during the weekday midday peak hour. As the corner would continue to operate at an acceptable LOS C or better, this deterioration in LOS from the No-Action to the With-Action condition would not be considered a significant impact. Therefore, significant transportation impacts are not anticipated as a result of the Proposed Action and further analysis is not required.

Table II.13.7. 2014 With-Action Conditions LOS Analysis for Sidewalks

Location	Effective Width (feet)	Peak 15-Min 2-Way Volume	Non-Platoon Conditions		Platoon Conditions
			PMF	LOS	LOS
No-Action Condition: Weekday Midday					
East Side of Gerard Avenue, north of E 150th Street	3.0	2	0.0	A	A
With-Action Condition: Weekday Midday					
East Side of Gerard Avenue, north of E 150th Street	6.0	244	2.7	A	B

Table II.13.8. 2014 With-Action Conditions: Pedestrian LOS Analysis for Corners

Location	Peak 15-Minute Volumes	Average Conditions	
		ft^2/p	LOS
No-Action Conditions: Weekday Midday			
Northeast Corner of Gerard Ave and E 150th Street	22	1,024.0	A
With-Action Conditions: Weekday Midday			
Northeast Corner of Gerard Ave and E 150th Street	264	58.1	B

14. Air Quality

INTRODUCTION

An air quality analysis was conducted to evaluate the potential air quality impacts of the Proposed Action. The methods, input parameters, and calculations used in the analysis were based on the procedures contained in the 2012 *CEQR Technical Manual*. The scope of the analysis focused on the carbon monoxide (CO) impacts resulting from traffic generated by the proposed building's accessory parking garage and on HVAC impacts from the proposed building. The results of the garage analysis are shown in the attached tables, and discussed below.

National Ambient Air Quality Standards
National Ambient Air Quality Standards (NAAQS) were promulgated by the US Environmental Protection Agency (EPA) for six major pollutants, deemed criteria pollutants, because threshold criteria can be established for determining adverse effects on human health. They consist of primary standards, which were established to protect public health, and secondary standards, which were established to protect plants and animals and to prevent economic damage. The six pollutants are the following:

- Carbon Monoxide (CO), which is a colorless, odorless gas produced from the incomplete combustion of gasoline and other fossil fuels.
- Lead (Pb), which is a heavy metal principally associated with industrial sources.
- Nitrogen dioxide (NO_2), which is formed by chemical conversion from nitric oxide (NO), which is emitted primarily by industrial furnaces, power plants, and motor vehicles.
- Ozone (O_3), a principal component of smog, which is formed through chemical reactions between hydrocarbons and nitrogen oxides in the presence of sunlight.
- Inhalable Particulates (PM_{10}/$PM_{2.5}$), which are primarily generated by diesel fuel combustion, brake and tire wear on motor vehicles, and the disturbance of dust on roadways. The PM_{10} standard covers those particulates with diameters of 10 micrometers or less. The $PM_{2.5}$ standard covers particulates with diameters of 2.5 micrometers or less.
- Sulfur dioxide (SO_2), which is a heavy gas primarily associated with the combustion of sulfur-containing fuels such as coal and oil.

Table II.14.1 shows the New York and National Ambient Air Quality Standards, as well as monitored values at the monitoring stations closest to the site.

Table II.14.1. National and New York State Ambient Air Quality Standards

Pollutant	Averaging Period	Standard	2011 Value	Monitor
Sulfur Dioxide (SO_2)	3-hour average	0.5 ppm (1,300 µg/m^3)	0.04 ppm	Botanical Garden (Bronx)
	1-hour average	75 ppb (197 µg/m^3)	41.3 ppb	
Inhalable Particulates (PM_{10})	24-hour average	150 µg/m^3	57 µg/m3	Queens College 2 (Queens)
Inhalable Particulates ($PM_{2.5}$)	3-yr average annual mean	15 µg/m^3	10.0 µg/m3	Botanical Gardens (Bronx)
	Maximum 24-hr. 3-yr. avg.[d]	35 µg/m^3	25.0 µg/m3	
Carbon Monoxide	8-hour average[a]	9 ppm (10,000 µg/m^3)	3.1 µg/m3	CCNY (Manhattan)
	1-hour average[a]	35 ppm (40,000 ug/m^3)	2.0 ppm	
Ozone	Maximum daily 8-hr avg.[c]	0.075 ppm	0.072 ppm	Botanical Gardens (Bronx)
Nitrogen Dioxide	12-month arithmetic mean	0.053 ppm (100 µg/m^3)	0.021 ppm	Botanical Gardens (Bronx)
	1-hr average[f]	0.100 ppm	0.065	
Lead	Quarterly mean	0.15 µg/m^3	0.008 µg/m3	Morrisania (Bronx)

Notes: ppm = parts per million; ug/m^3 = micrograms per cubic meter
a Not to be exceeded more than once a year.
b Final rule signed June 2, 2010. The 1971 annual and 24-hour SO_2 standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.
c Three-year average of the annual fourth highest maximum 8-hour average concentration.
d Not to be exceeded by the 98th percentile of 24-hour $PM_{2.5}$ concentrations in a year (averaged over 3 years).
e Three-year average of the annual fourth highest maximum 8-hour average concentration effective May 27, 2008.
f The 0.100 ppm standard was effective 1/22/2010. It is the 3-year average of the 98th percentile of the daily maximum 1-hour average.
Sources: New York State Department of Environmental Conservation; New York State Ambient Air Quality Development Report, 2009 and U.S. Environmental Protection Agency, 2012.

Background Concentrations

For SO_2, and NO_2, and PM_{10}, the background values were based on the 2011 monitored values available from the New York State Department of Environmental Conservation (NYSDEC) as shown below. The closest monitor is the Bronx Botanical Gardens for SO_2 and NO_2 and Queens College 2 for PM_{10}.

- 135 for the 1-hour SO_2 average
- 116 µg/m^3 for the 3-hour SO_2 average,
- 39 µg/m^3 for the annual NO_2 average, and
- 57 µg/m^3 for the 24-hour PM_{10} average.

As a conservative approach for CO, the highest value from the past five years of monitored values was used as the background value. Based on the Botanical Gardens Pfizer Lab station, the CO background would be 3.4 ppm for the 1-hour average and 2.8 ppm for the 8-hour average as shown in Table II.14.2.

Table II.14.2. Monitored CO Values (ppm)

Monitor	Year	1-Hour Value	8-Hour Value
Botanical Gardens, Pfizer Lab, Bronx	2007	3.1	2.0
	2008	2.3	1.8
	2009	**3.4**	2.5
	2010	2.1	1.6
	2011	3.2	**2.8**

Notes: Numbers in bold type are the highest in their category.
Source: New York State Department of Environmental Conservation

NYC De Minimis Criteria and Interim Guidelines

For carbon monoxide from mobile sources, New York City's *de minimis* criteria are used to determine the significance of the incremental increases in CO concentrations that would result from a proposed action. These set the minimum change in an 8-hour average carbon monoxide concentration that would constitute a significant environmental impact. According to these criteria, significant impacts are defined as follows:

- An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average carbon monoxide concentration at a location where the predicted No Action 8-hour concentration is equal to or above 8 ppm.
- An increase of more than half the difference between the baseline (i.e., No Action) concentrations and the 8-hour standard, where No Action concentrations are below 8 ppm.

For $PM_{2.5}$ analyses at the microscale level, the City's interim guidelines for developing significance are the following:

- More than 5.0 $\mu g/m^3$ for the 24-hour period,
- More than 2 ug/m^3 but no greater than 5 ug/m^3 for the 24-hour period, depending on the magnitude, frequency, duration, location, and size of the area of the predicted concentrations; and
- More than 0.3 $\mu g/m^3$ for the annual period.

At the neighborhood scale of analysis, for mobile and stationary sources combined, the average $PM_{2.5}$ concentration within a 1 km-square grid centered on the worst-case receptor has an interim guidance value of:

- 0.1 ug/m^3 for the annual period.

Garage Analysis

Impact Criteria

A significant air quality impact would occur if CO emissions due to the Proposed Action would cause a violation of the 1-hour or 8-hour ambient standards. Since the 1-hour CO ambient

standard of 35 ppm has not been exceeded for many years, the garage analysis focused on the 8-hour ambient standard of 9 ppm. The City of New York also applies *de minimis* criteria to determine the minimum change in the 8-hour average concentration (between the Build and No Build levels) that constitutes a significant impact. For the project, a significant CO impact is defined as: (1) an increase in the 8-hour concentration of 0.5 ppm or more where the No Build concentration is predicted to be 8 ppm to 9 ppm, or (2) an increase of more than half of the difference between the 8-hour standard (9 ppm) and the No Build concentration where the No Build concentration is below 8 ppm.

Methodology

The Proposed Action would result in the construction of a seven-story, mixed-use building with a basement. It would include a garage with 63 spaces for residents on the cellar level and 26 commercial spaces on the first floor. Table II.14.3 shows the peak period garage demand based on the traffic study. As a worst case analysis, the highest volumes of arriving (11) and exiting (11) vehicles were used for the analysis.

Table II.14.3. Peak Period Garage Use

Period	In	Out
AM	2	11
MD	3	3
PM	11	5
SAT	6	6
Source: Sam Schwartz Engineering		

The ground-level parking area would have a length of 113 feet and a width of 93 feet for a total size of 10,509 s.f. The cellar would have a total of 32,139 s.f. Of this, the parking area would have a length of 358 feet and a width of 78 feet for a total of 27,924 s.f. The remaining cellar space would be used for mechanical equipment and storage. The path from the street to the cellar ramp is 93 feet long, and the ramp into the cellar is 75 feet long. Autos would access the garage from Gerard Avenue. As a worst case, all peak-hour vehicles were assumed to be residents using the cellar level. Therefore, only the cellar level was used in the analysis.

The garage ventilation exhaust would have a four-foot stack on the first floor roof in the rear of the building, approximately 17 feet above street level. Consequently, the nearest sensitive receptors would be the building's second floor residences and an adjacent residential building at the residential property line, approximately 21.5 feet and 80 feet from the garage exhaust vent, respectively, as shown in Figures II.14.1 and II.14.2. The windows were assumed to be at the same height as the garage vent.

The garage was analyzed according to the guidelines in the 2012 *CEQR Technical Manual Appendices*. Parking garage emissions were determined based on the hourly volumes of entering and exiting vehicles, the distance traveled, the average speed, CO emission factors, and the amount of idling time. Background concentrations for CO were based on the highest 1-hour and 8-hour concentrations observed during the past five years as shown in Table II.14.2. Emission factors were obtained from MOBILE6.2 for Bronx County for a temperature of 43^{o} F. Composite emission factors were calculated based on a typical vehicular mix of 76% autos and 24% SUVs.

The assessment utilizes the following conservative assumptions from the *CEQR Technical Manual*:

- All outgoing vehicles are considered cold-starts (cold engines emit more CO than hot engines);
- All outgoing vehicles idle for one minute;
- All incoming vehicles are hot starts (engine is hot);
- Vehicle speed inside the garage is 5 mph;
- Mean travel distance is half the width plus two-thirds of the length of the garage;
- Mechanical ventilation rate is conservatively equal to the minimum New York City Building Code of one cubic foot per minute per gross square foot of garage space; and
- Wind velocity of one meter per second.

Calculations for the garage CO concentrations were calculated using the spreadsheet provided on the website for the *CEQR Technical Manual.* Two scenarios were prepared. One was for the vent at the rear of the building with receptors at an elevation of 17 feet and horizontal distances of 21.5 feet and 80 feet. Since the vent would be located behind the proposed building, no line source component of CO was included in the analysis for this scenario. The second analysis was for a vent above the garage entrance, approximately 12 feet above the ground, on Gerard Avenue with receptors six feet high at horizontal distances of 7.5 feet (near sidewalk) and 74 feet (far sidewalk) from the vent. The traffic for the CO contribution from traffic on Gerard Avenue (line source contribution) was based on peak-hour volumes observed during noise monitoring and projected to 2014 for Build Conditions. It was added to the CO concentration on the far sidewalk.

Figure II.14.1. Garage Exhaust Vent and Receptors – Plan View

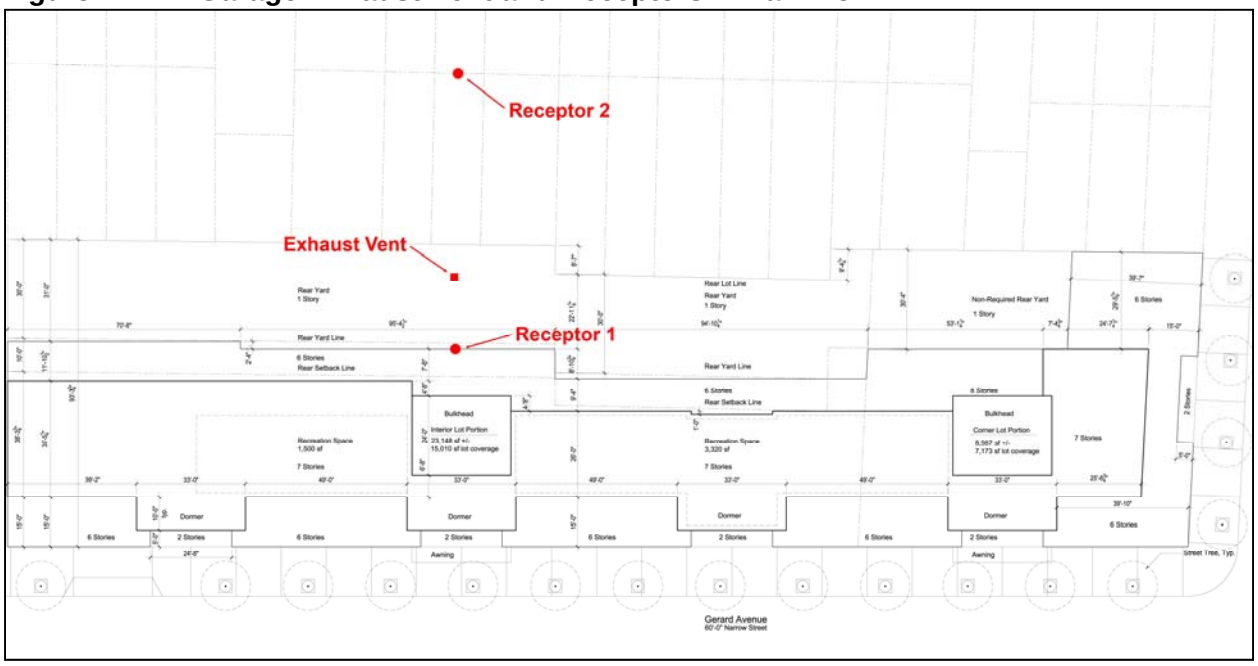
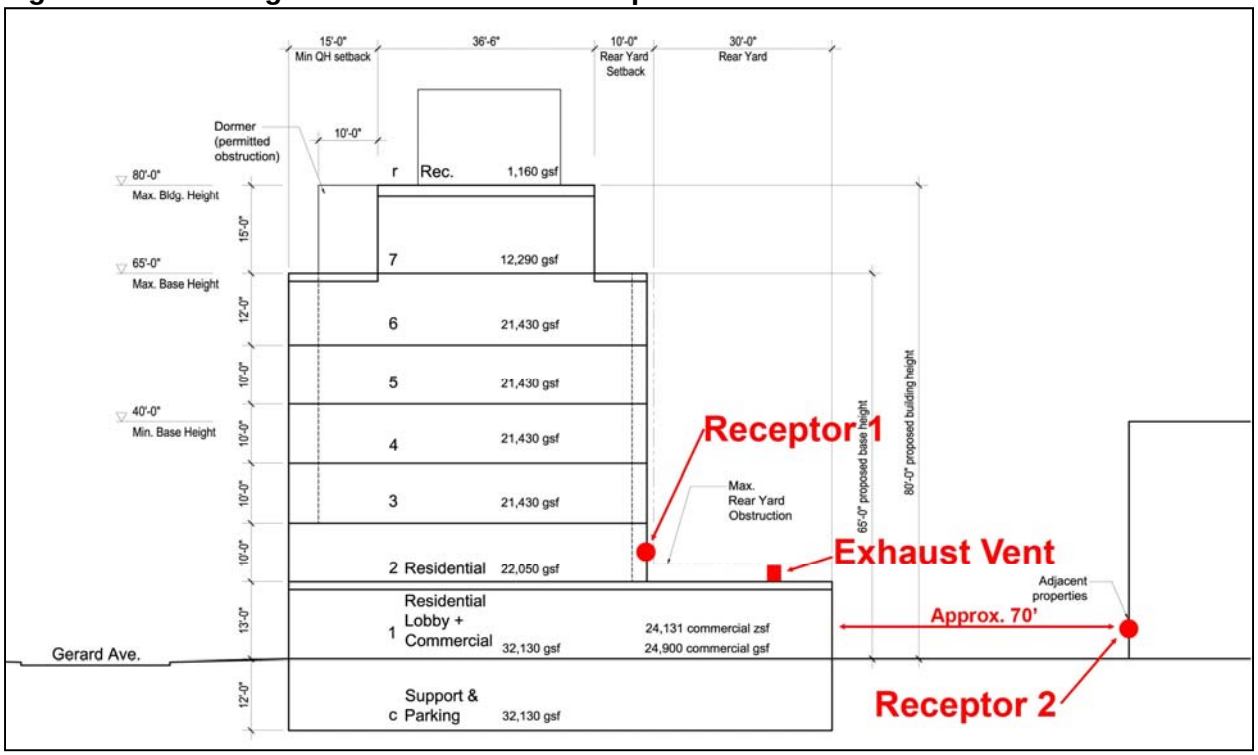


Figure II.14.2. Garage Exhaust Vent and Receptors



Garage Results

Tables II.14.4 and II.14.5 show the results of the garage analysis. The resulting concentrations are below the NAAQS and the NYCDEP de minimis values. Therefore, no air quality impacts are anticipated.

Table II.14.4. CO Concentrations, 580 Gerard Garage, Rear Vent

	Near Window		Far Window	
Distance to Vent	21.5 ft.		80 ft.	
Averaging Period	1-Hour	8-Hour	1-Hour	8-Hour
Garage CO result (ppm)	0.3	0.2	0.1	0.07
Background Value (ppm)	3.4	2.8	3.4	2.8
Total Concentration (ppm)	3.7	3.0	3.5	2.9
NAAQS, CO (ppm)	35.0	9.0	35.0	9.0
Impact	No		No	

Source: Sandstone Environmental Associates, Inc.

Table II.14.5. CO Concentrations, 580 Gerard Garage, Vent at Street Entrance

	Near Sidewalk		Far Sidewalk	
Distance to Vent	7.5 ft.		74 ft.	
Averaging Period	1-Hour	8-Hour	1-Hour	8-Hour
Garage CO result (ppm)	0.3	0.2	0.1	0.2
Background Value (ppm)	3.4	2.8	3.4	2.8
Total Concentration (ppm)	3.7	3.0	3.5	3.0
NAAQS, CO (ppm)	35.0	9.0	35.0	9.0
Impact	No		No	

Source: Sandstone Environmental Associates, Inc.

HVAC Analysis

Impact Criteria

A significant impact would occur if the Proposed Action would cause an exceedance of the NAAQS or exacerbate an existing exceedance. Conversely, an impact would also occur if an existing facility would cause an adverse air quality condition on the proposed action. The stationary source analysis evaluated the potential for a significant air quality impact either to a nearby sensitive receptor from emissions from the proposed building's boiler systems or to the Proposed Action from the exhaust from existing nearby buildings. The Proposed Action would result in an approximately 152,190 g.s.f. residential building with ground floor commercial and community uses.

Impacts from the Proposed Action

The proposed building would have seven floors and an elevation of 80 feet. The building would use natural gas for heating, hot water, and air conditioning. The stack on the building would vent 10 feet above the roof line.

Figure II.14.3 illustrates a 400 foot view of the surrounding neighborhood indicating block and lot features. The stack on the proposed building would be higher than all existing buildings within 400 feet of the site, with the exception of a 10-story institutional building used by the Human Resources Administration located at 151 East 151st Street (Block 2353, Lot 57) 235 feet from the Proposed Action.

To evaluate the potential for the proposed development to have an impact on the existing commercial building, Figure 17-3 in the *CEQR Technical Manual* was used to plot the minimum distance between the stack on the proposed building and the nearest buildings of similar or greater height. This figure serves as a preliminary conservative screen that does not take into account the type of heating fuel used for water and HVAC operations. Figure II.14.4 indicates the results. Based on the stack height and location, no impacts are anticipated from the HVAC system of the proposed building.

Figure II.14.3. Project Site Location with 400 Foot Radius

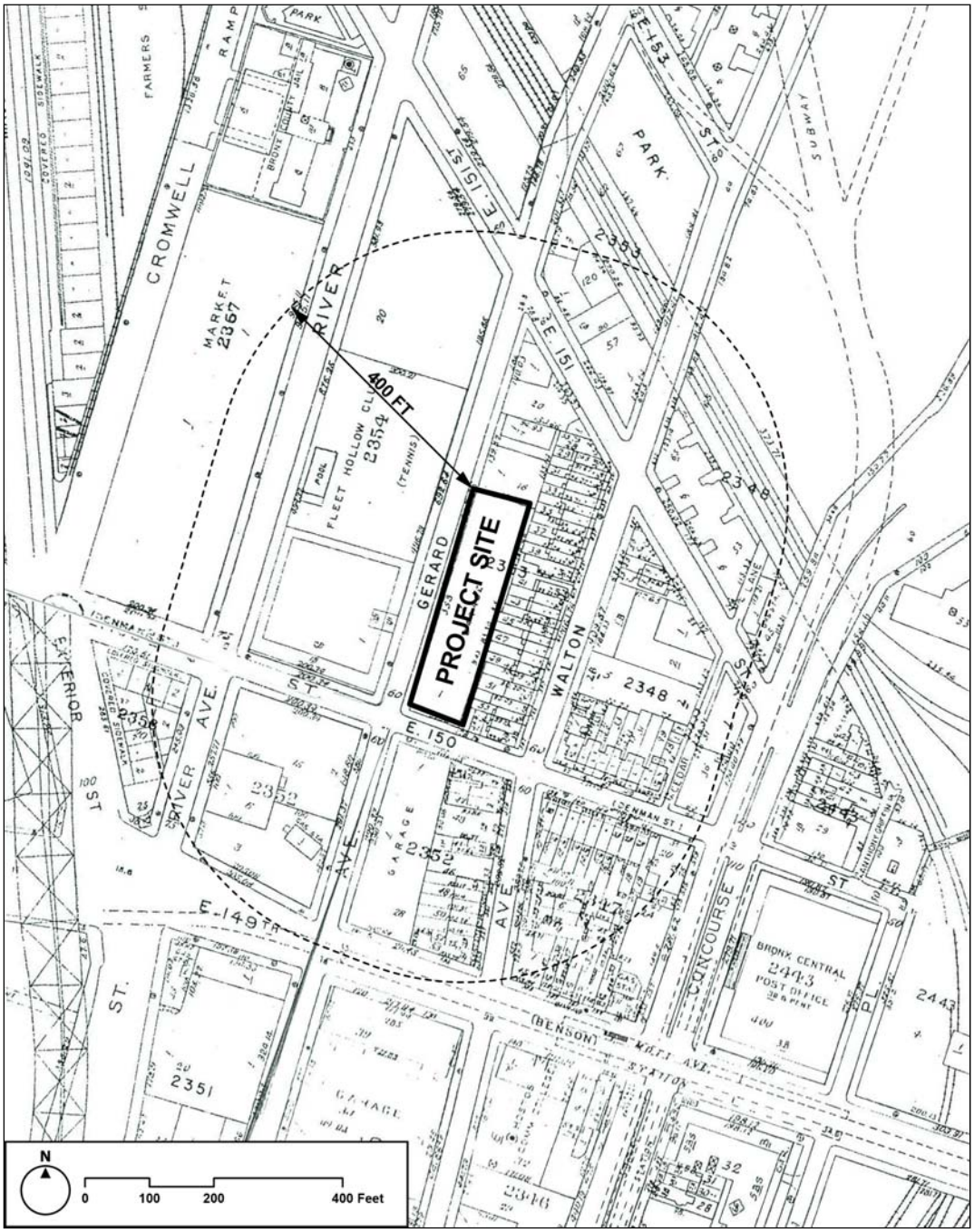
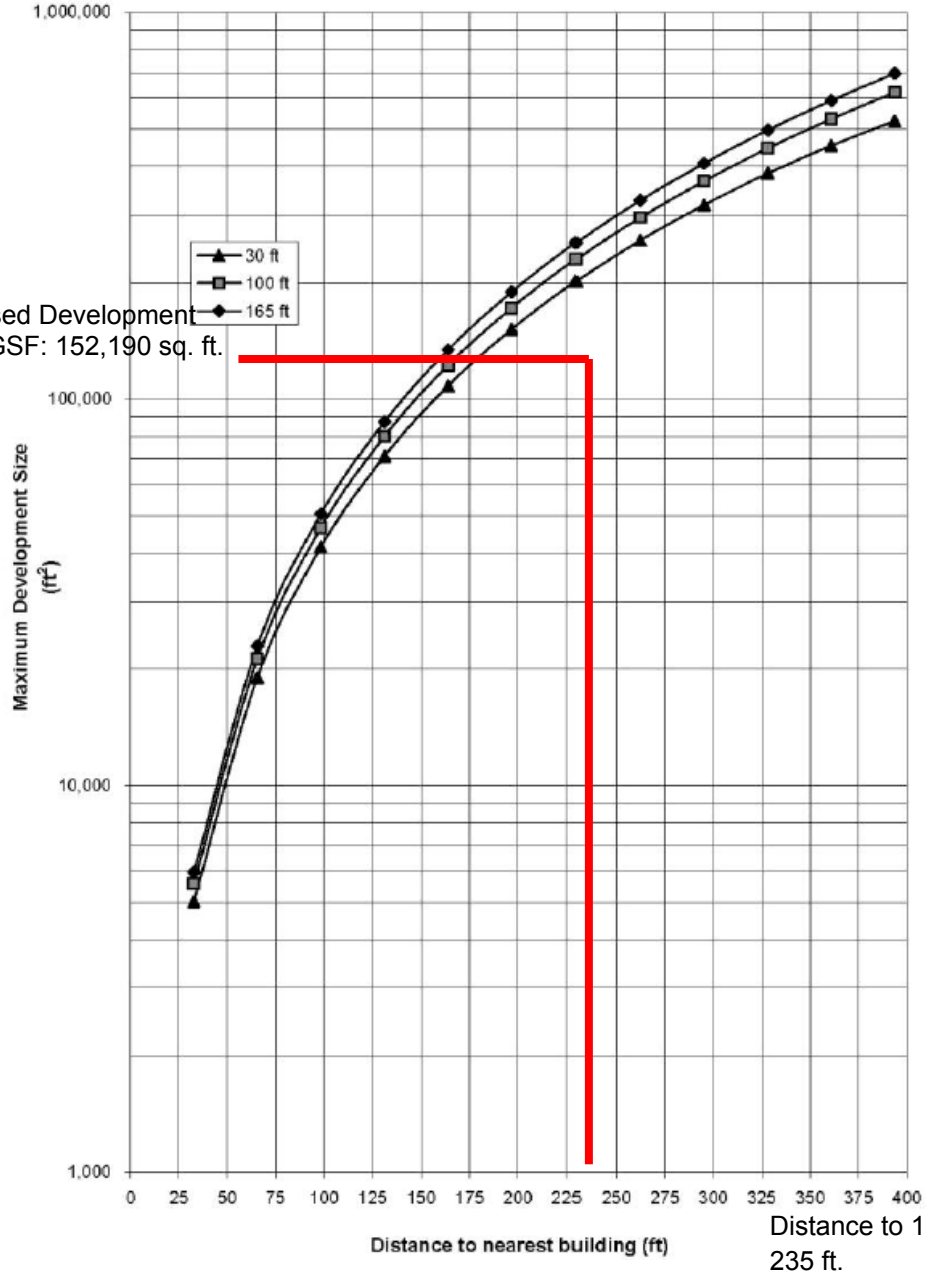


Figure II.14.4. HVAC Screen Analysis



Proposed Development Bldg. GSF: 152,190 sq. ft.

Distance to 151 E. 151st St: 235 ft.

Source: CEQR Technical Manual, Figure 17-3 Stationary Source Screen
Proposed Development Screened Against Existing Buildings

Impacts from Surrounding Uses

Potential impacts from existing HVAC uses would be a source of concern if the proposed action would result in the location of new sensitive receptors within:

- 1,000 feet of a large emission source, or
- 400 feet of a stack associated with commercial, institutional, or large-scale residential developments, and the height of the new structures would be similar to or greater than the height of the emission stack.

No large emission sources are within 1,000 feet of the Proposed Action. The 10-story institutional building at 151 East 151st Street is the only major use within 400 feet of the Rezoning Area, but the stack is 126 feet high, which is higher than the rooftop height of the Proposed Action. Therefore, it would not warrant further analysis.

A search for NYCDEP boiler permits was initiated to determine whether any existing boiler stacks within 400 feet of the Rezoning Area would be a source of potential impacts due to existing HVAC emissions. Seven permits were found, corresponding to six nearby facilities. Two permits belong to 151 East 151 Street, which is not a building of concern because its HVAC stack is higher than the height of the proposed building. One site with a NYC DEP boiler permit, Heating & Burner Supply Inc. at 479 Walton Avenue, is outside the 400-foot radius and therefore not included in the screening analysis. One permit exists for 175 East 151 Street, which is a seven-story residential apartment building that uses natural gas. At a minimum distance of 200 feet from the Rezoning Area and an area of 115,500 s.f., this site would be subject to an HVAC screen using the nomograms available in the *CEQR Technical Manual* Air Quality Appendix. Another site with a permit, 192 East 151 Street, is located approximately 160 feet away from the Rezoning Area and has a total area of 51,746 s.f. This site is also included in the screening analysis for natural gas. Two more sites across Gerard Avenue from the proposed development, Gal Manufacturing at 585 Gerard Avenue and the American Self Storage / P.S. 723X at 580 River Avenue, also were included in the screening analysis. The locations described above are summarized in the Table II.14.6 below.

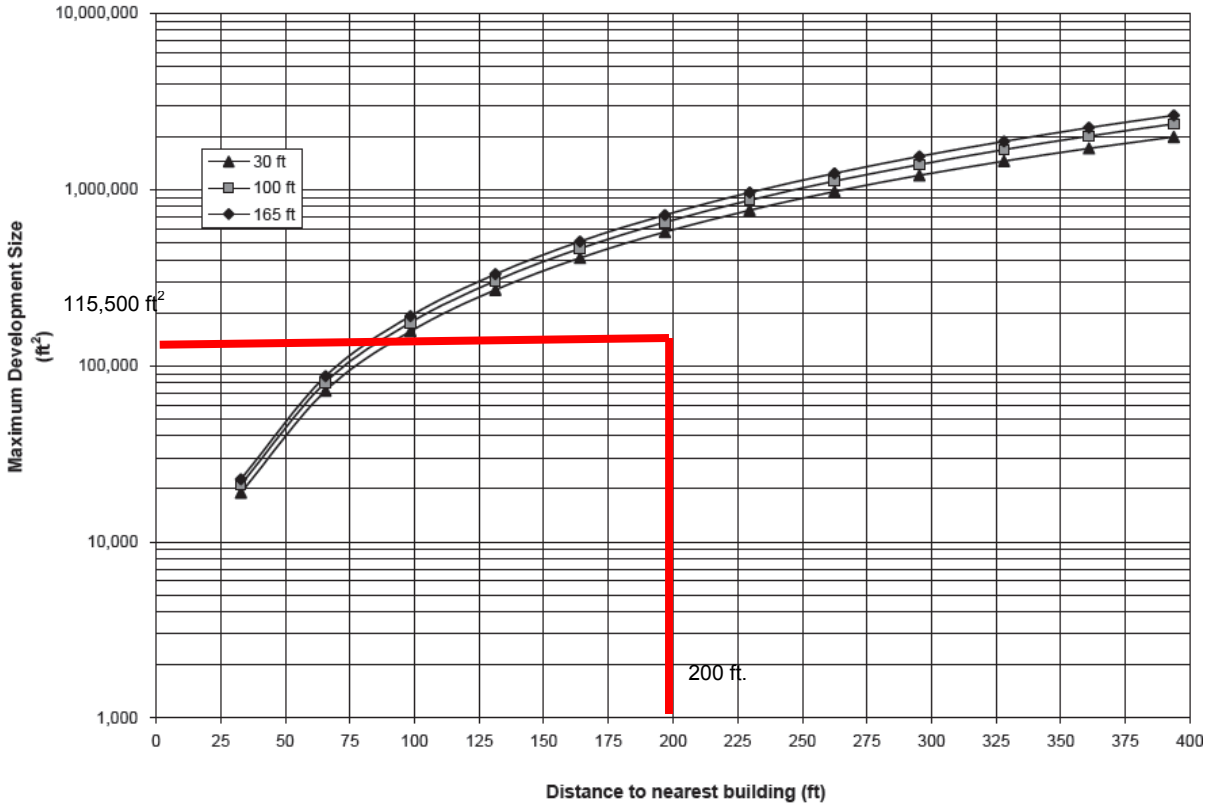
Table II.14.6. Existing Buildings with NYCDEP Boiler Permits

Address	NYCDEP Permit	Distance to 580 Gerard Avenue	Building Height	Land Use	Area	Fuel Type	Screen Needed?
479 Walton Avenue	CA29988H	720 ft.	20 ft.	Industrial	8,825 s.f.	N/A	No
175 E. 151st Street	CA147480L	200 ft.	70 ft.	Res.	115,500 s.f.	Natural Gas	**Yes**
192 E. 151st Street	CA024893J	160 ft.	30 ft.	Comm.	51,746 s.f.	Natural Gas	**Yes**
585 Gerard Avenue	CA260194P	75 ft.	30 ft.	Industrial	50,000 s.f.	Natural Gas	**Yes**
580 River Avenue	CA410490K	85 ft.	32 ft.	Industrial	118,000 s.f.	No. 4 Oil	**Yes**
151 E. 151st Street	CB230001H CB009002Y	235 ft.	126 ft.	Comm.	76,743 s.f.	N/A	No

Source: Sandstone Environmental Associates, Inc.

Figures II.14.5, II.14.6, and II.14.7 present the CEQR screening nomograms for natural gas and fuel oil #4 for the four buildings that require a screen. As shown in these figures, all of the existing buildings screen out for potential air quality impacts except for 580 River Avenue, which is directly located across the street to the west of the proposed development. Because the nomogram in Figure II.14.7 indicates that a potential air quality impact may exist, a more detailed analysis using the Industrial Source Screen was conducted.

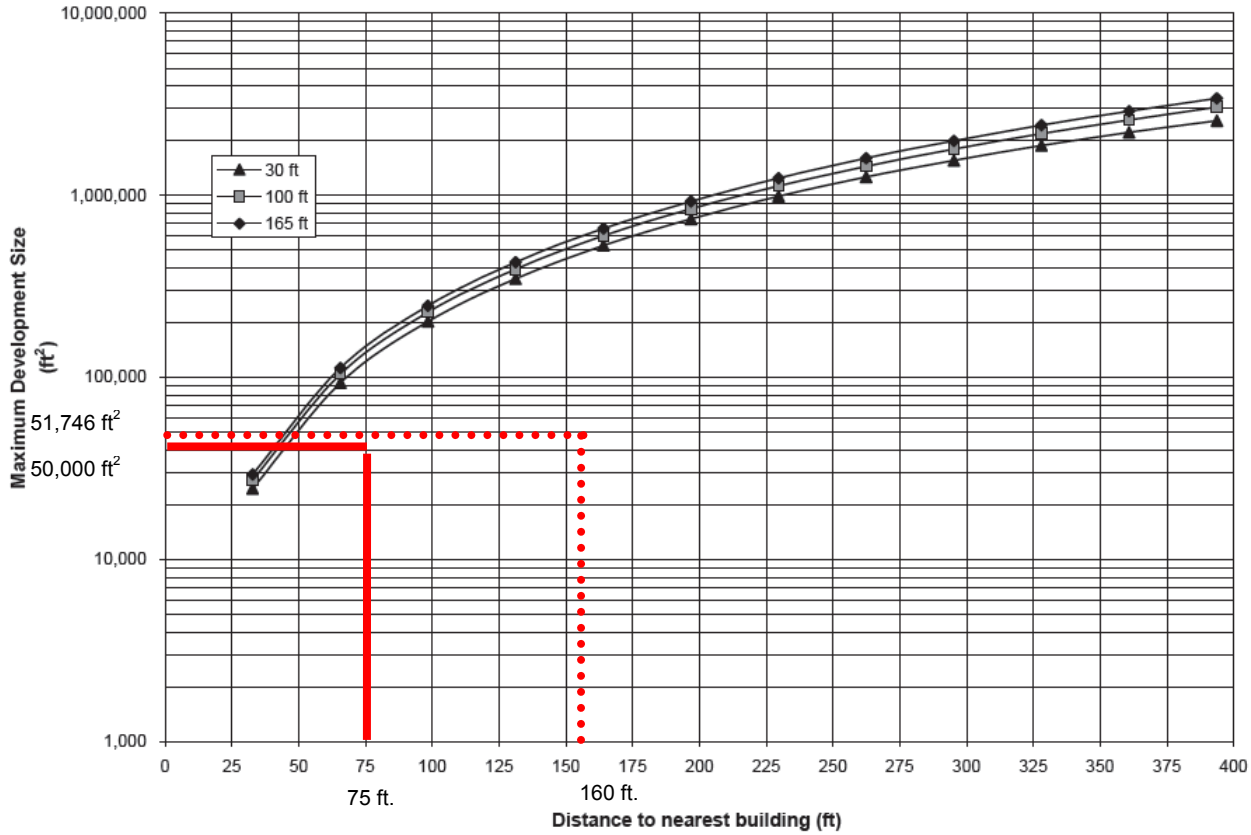
Figure II.14.5. HVAC Screen Analysis



Source: CEQR Technical Manual, Figure 17-7 NO_2 Boiler Screen, Residential Development, Natural Gas

Gerard Avenue Screen
175 E. 151st Street on Proposed Action
Bldg. GSF: 115,500 sq. ft.
Stack Height: 70 ft.
Stack Distance to Proposed Development: 200 ft.

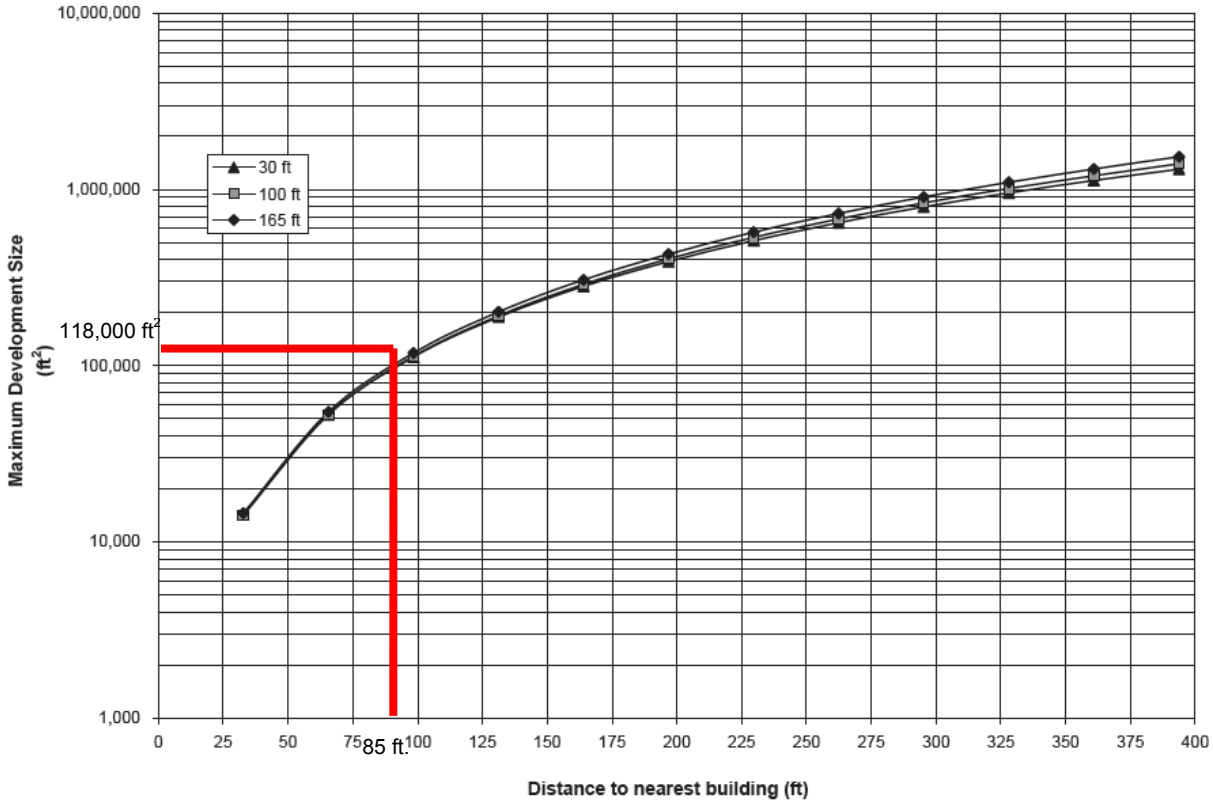
Figure II.14.6. HVAC Screen Analysis



Source: CEQR Technical Manual, Figure 17-8 NO_2 Boiler Screen, Commercial and Other Non-Residential Development, Natural Gas

Gerard Avenue Screen
Screen on Proposed Action
192 E. 151st Street Screen on Proposed Action
585 Gerard Avenue Screen on Proposed Action

Figure II.14.7. HVAC Screen Analysis



Source: CEQR Technical Manual, Figure 17-4 SO_2 Boiler Screen, Commercial and Other Non-Residential Development, Fuel Oil #4

Gerard Avenue Screen
580 River Avenue on Proposed Action
Bldg. GSF: 118,000 sq. ft.
Stack Height: 32 ft.
Stack Distance to Proposed Action: 85 ft.

Industrial Source Screen

To determine whether the emissions from American Self Storage and the adjoining public school (P.S. 723X) at 580 River Avenue would cause any significant adverse impacts to the Proposed Development, a secondary analysis using the Industrial Source Screen was conducted. The *CEQR Technical Manual* provides a table showing pollutant concentrations ($\mu g/m^3$) at various distances resulting from a point source emitting 1 g/s of a generic pollutant. Shown in Table II.14.7, it assumes that all inputs represent worst-case conditions for stack temperature, exhaust velocity, and other variables. Both the receptor height and stack height are assumed to be 20 feet high, which are typical input parameters for worse-case conditions. Distances from the emission source located at the addresses above to the project lot were determined by aerial and satellite photography.

Most point sources emit pollutants at a lower rate than 1 g/s. Thus, the estimated emissions at each distance would be scaled downward accordingly. If the Industrial Source Screen shows no potential for exceeding the evaluation criteria, then no further analysis is required.

Table II.14.7. Generic Pollutant Concentrations

Generic Pollutant Concentrations (1 g/s emission rate)				
Distance from Source (ft.)	Averaging Periods ($\mu g/m^3$)			
	1-Hour	8-Hours	24-Hours	Annual
30	126,370	64,035	38,289	6,160
65	27,787	15,197	8,841	1,368
100	12,051	7,037	4,011	598
130	7,345	4,469	2,511	367
165	4,702	2,967	1,643	236
200	3,335	2,153	1,174	167
230	2,657	1,720	924	131
265	2,175	1,377	727	103
300	1,891	1,142	594	84
330	1,703	991	509	73
365	1,528	857	434	62
400	1,388	755	377	54

Source: CEQR Technical Manual, Air Quality Appendix (2012)

Table II.14.8 shows the results for the PM10 and SO_2 emissions from the boiler at this site. The total estimated concentrations at the lot line of the Proposed Action were compared to the National Ambient Air Quality Standards for the 3-hour period for SO_2 and the 24-hour period for PM_{10}. For SO_2, the 1-hour concentration was from the Industrial Source Screen was converted

into a three-hour concentration level by using a persistence factor of 0.9, as recommended in the Air Quality chapter of the *CEQR Technical Manual*.

Based on Table II.14.8, no air quality impacts from PM_{10} are projected. However, an adverse impact from SO_2 is possible because the total three-hour SO_2 concentration is higher than the NAAQS. Therefore, modeling with AERMOD is necessary for this pollutant.

Table II.14.8. Industrial Source Screen 580 River Avenue on 580 Gerard Avenue

Pollutant	CAS No.	Stack Distance to Subject Site	Total Concentration*(µg/m^3)		NAAQS Standards (µg/m^3)		Result
			3-Hour	24-Hour	3-Hour	24-Hour	
Sulfur Dioxide (SO_2)	07446-09-5	85 feet	2,698.5		1,300		**Fail**
Particulate Matter (PM_{10})	NY075-00-5			80.6		150	Pass

**Includes 2011 background values.*
Source: NYSDEC, Sandstone Environmental Associates

AERMOD

An analysis for potential HVAC impacts from the building at 580 River Avenue was carried out using EPA's AERMOD model. The pollutant modeled was SO_2 for fuel oil #4. For #4 fuel oil, AERMOD runs were conducted for the three-hour concentration of SO_2. The location of the HVAC stack was determined through satellite imagery and information from site visits. The stack was assumed to be three feet higher than the building's rooftop elevation of 35 feet. Background concentrations were added to the maximum modeled concentrations, and the total concentrations were compared to the NAAQS. Model parameters were obtained from the *CEQR Technical Manual* and the NYC DCP.

Emission Factors. Table II.14.9 shows the emission factors used for the AERMOD analysis. The hourly emission rate was used to model the three-hour concentration. Because the boiler is primarily for the school, the square footage was assumed to be residential as a worst-case assumption. The self-storage area was presumed to be unheated, which is typical of such facilities. As indicated on the boiler permit, heating use was for 4.5 hours per day and 365 days per year, or 1,642.5 hours per year. The resulting annual emissions for #4 fuel oil were converted to emission rates in grams/second based on 1,642.5 hours per year of use for heating.

Table II.14.9. Emission Factors for #4 Fuel Oil (grams/sec)

Site	Heated Sq. Ft.	Hourly EF (g/s)
580 River Avenue	83,000	0.103147

In calculating the emission rate for #4 fuel oil, a sulfur content of 0.3% was used, in addition to a consumption rate of 0.36 gallons/sq. ft., and an emission factor of 150 lbs/1000 gallons. Gallons of fuel consumed were converted to pounds of SO_2 using a conversion rate of 28.4 lbs per 1,000 gallons of fuel.

Urban/rural. Both the weather station providing meteorological data and the site are in urban locations, and AERMOD's URBAN option was selected. The population used for the urban area is 1,700,000, and the default urban surface roughness length of 1.0 m was used for the site.

Stack parameters. EPA defines GEP (good engineering practice) stack height as the height necessary to ensure that emissions from a building's stack do not result in excessive concentrations of any air pollutant in the immediate vicinity of the source as a result of atmospheric downwash, eddies, or wakes that may be created by the source itself, nearby structures, or nearby terrain obstacles. The Building Profile Input Program (BPIP) was run in conjunction with AERMOD. Per guidance from the NYC DCP, the stack parameters included an exhaust temperature of 300 K, inside stack diameters of 0.5 feet, and exhaust velocities of 3.9 m/s.

Meteorology Data. AERMOD was run with five years of meteorological data from LaGuardia Airport that included surface mixing height, wind speed, stability class, temperature, and wind direction for 2005 through 2009. The upper air station used with La Guardia is Brookhaven.

Sensitive Receptors. Thirty-nine receptor points were modeled at presumed window locations on the western and southern walls of the proposed seven-story building at 580 Gerard Avenue. The height of all receptors was set at 35 feet, coinciding with the plane of the stack's plume line.

Modeling Results. AERMOD was run for SO_2 for Future With Action Conditions. Table II.14.10 shows the maximum modeled concentrations, which occurred with the 2009 meteorological data. This concentration is within the 3-hour NAAQS standard for SO_2. Therefore, no significant adverse impacts are anticipated to the Proposed Action.

Table II.14.10. Maximum Modeled Pollutant Concentrations, 580 Gerard Avenue

Source Building		Receiving Building		SO_2 Maximum Concentrations ($\mu g/m^3$)
Address	**Stack Ht. (ft.)**	**Address**	**Ht. (ft.)**	**3-Hour**
580 River Avenue	38	580 Gerard Avenue	80	658.44
Background				116.0
Total Concentration				774.4
NAAQS				1,300
NAAQS Impacts?				**No**

Source: Sandstone Environmental Associates, Inc.

AIR TOXICS

Review of Surrounding Land Uses

According to the *CEQR Technical Manual*, facilities with the potential to cause adverse air quality impacts are those that would require permitting under city, state and federal regulations.

The *CEQR Technical Manual* lists the following types of uses that would be a source of concern for the proposed development:

- large emission source (e.g., solid waste or medical waste incinerators, cogeneration facilities, asphalt and concrete plants, or power generating plants) within 1,000 feet,
- a medical, chemical, or research laboratory nearby,
- a manufacturing or processing facility within 400 feet, and
- an odor-producing facility within 1,000 feet.

Data sources included online information from the New York City Department of Buildings, as well as telephone directory listings, internet websites, and a search for New York State Department of Environmental Conservation permits. Figure II.14.8 shows the area within 400 feet and 1,000 feet of the Rezoning Area, respectively. No major sources of air emissions were identified within 1,000 feet of the Rezoning Area. No odors were identified. No auto repair or auto painting establishments that may require permits were found within the 400-foot survey area. The AP Auto Repair Shop at 572 Walton Avenue does not do auto body painting.

Figure II.14.8. Area within 400 Feet and 1,000 Feet of the Rezoning Area



Table II.14.11 shows the industrial sites identified through field work, City agency websites, on-line directories, and other sources. NYCDEP searched for air quality operations permits for the sites shown in Table II.14.11 and found no permits in their directory for industrial or manufacturing uses.

Table II.14.11. Industrial Sites within 400 Feet of the Proposed Action

Block	Lot	Dept. of Finance Code	Address	Observed Land Use
2347	4	W4	564 Walton Avenue	Geel Clubhouse
2348	5	O1	192 E. 151st Street	Unsigned warehouse
2348	53	D7	175 E. 151st Street	Residential Apartments
2350	34	E1	500 Gerard Avenue	Unsigned warehouse
2350	63	E9	479 Walton Avenue	Heating & Burner Supply Inc.
2351	29	E9	110 E. 149th Street	Strauss Meat & Fish Market
2352	6	E9	556 River Avenue	Diamond Ice Cube Co., Inc.
2352	15	F1	585 Gerard Avenue	Unsigned warehouse
2353	16	F4	620 Gerard Avenue	Lino Press Same Day Printing
2353	20	F5	640 Gerard Avenue	Bautista Parking
2353	28	F9	148 E. 151st Street	Canaan Land Christian Church
2353	57	O9	151 E. 151st Street	Office Building
2353	120	E9	656 Gerard Avenue	Wipetex International Corp.
2354	1	E7	580 River Avenue	American Self-Storage, Parking
2357	1	N/A	610 Gateway Center Blvd.	Gateway Commercial Center & Parking

D7 – Elevator Apartment; E1 – Fireproof Warehouse; E7 – Self-storage Warehouse; E9 – Misc. Warehouse; F1 – Heavy Man. Factory; F4 – Industrial Semi-fireproof Factory; F5 – Light Manufacturing Factory; F9 – Industrial-Misc. Factory; O1 – Office Building; O9 – Office Building; W4 – Educational Institution
Source: Sandstone Environmental Associates.

Although it does not have a permit, Lino Press at 620 Gerard Avenue conducts many types of print operations. As a worst-case analysis, and because it is adjacent to the proposed action, this facility was analyzed using the Industrial Source Screen. To obtain estimates of air toxics, the permit for the Jeffrey & Foster printing facility located at 121 Varick Street in Manhattan was used. The floor area for this establishment is similar to the floor area for Lino Press. Thus, the establishments appear to be similar in size. The pollutants emitted are isopropyl alcohol and miscellaneous organics. This is typical of permits for other printing establishments. The methodology for the Industrial Source Screen is the same as previously described in the discussion of HVAC sources.

The approximate distance between the site emissions point and the project site at 580 Gerard Street was assumed to be 30 feet. Table II.14.12 shows the results of the Industrial Source Screen analysis compared with the NYSDEC SGCs and AGCs for Lino Press. All pollutants are within the guideline values established by NYSDEC. Based on this analysis, no impacts would occur to the proposed action from air toxic emissions at Lino Press.

Table II.14.12
Projected Pollutant Concentrations at 580 Gerard Avenue (Project Site)

Pollutant Concentrations		Lino Press		NYSDEC Guideline Criteria	
Chemical Name	**CAS #**	**1 Hr (µg/m^3)**	**Annual (µg/m^3)**	**SGC (µg/m^3)**	**AGC (µg/m^3)**
Misc. Organics	NY990-00-0	35,635	312	98,000	7,000
Isopropyl Alcohol	00067-63-0	16,261	143	98,000	7,000

Source: Sandstone Environmental Associates, Inc.

$PM_{2.5}$ Emissions from Sanitation Trucks

Due to the proximity of the DSNY truck depot at 125 East 149th Street (located directly to the south along Gerard Avenue across from East 150th Street), a mobile air quality screen involving $PM_{2.5}$ emissions was carried out to determine if impacts would occur at the Rezoning Area by trucks entering and exiting this facility.

Impacts would occur if the number of DSNY trucks traveling past the Rezoning Area would be greater than NYCDEP's predetermined threshold value, which is dependent upon the type of roadway used. Gerard Avenue and East 150th Street can be considered collector roads by NYCDOT since the daily volume of passenger vehicles and heavy-duty vehicles exceeds 5,000 trips. Under this designation, a threshold value of 19 heavy-duty diesel vehicles or vehicle-equivalent has been established in the *CEQR Technical Manual*. The DSNY sanitation trucks are heavy-duty diesel vehicles which utilize a different set of peak operating hours from normal vehicle traffic due to their collection cycle. The peak morning hour for truck volumes is 6 a.m. – 7 a.m., when a maximum number of trucks would depart the site and begin their collection route. A peak PM hour is not explicitly defined since each truck route varies in distance, but generally all trucks return back to the depot by 2 p.m. The peak AM volume out of the facility is 15 trucks. Given this information, a $PM_{2.5}$ screen was carried out using the supplied spreadsheet referenced in page 17-11 of the *CEQR Technical Manual* designating DSNY trucks as HDDV8B vehicles operating on a collector roadway network.

Table II.14.12 shows the results of the screen carried out using the referenced spreadsheet. As indicated, passages from DSNY trucks during their peak AM exit hour would not fail the screen. No impacts to the proposed action are projected.

Table II.14.12. Mobile $PM_{2.5}$ Screen for DSNY Trucks

Vehicle Trips			
Vehicle types	**Hourly Vehicles (6am-7am)**		
HDDV8B	15		
Total	**15**		
Equivalent Truck Calculation			
Road Types	**Equ. truck**	**Screen value**	**$PM_{2.5}$ Screen**
Paved road < 5000 vehicles/day	15	12	Fail Screen
Collector roads	15	19	*Pass Screen*
Principal and minor arterials	15	23	Pass Screen
Expressways and limited access roads	15	23	Pass Screen

Source: CEQR Technical Manual

CONCLUSION

A CO analysis was conducted to determine whether threshold levels for 1-hour and 8-hour concentrations would be exceeded by the development of the below-ground garage at 580 Gerard Avenue. No exceedances are anticipated.

The HVAC system for the proposed development site was screened against the nearest building of similar or greater height, 151 East 151st Street, to determine if emissions from natural gas would pose an adverse impact. According to the preliminary CEQR HVAC nomogram screen, no impacts would occur.

Stack emissions from existing boilers operating at six nearby buildings were analyzed to determine whether they would cause adverse air quality impacts to the proposed development at 580 Gerard Avenue. All buildings except for 580 River Avenue passed the HVAC screen and the Industrial Source Screen for SO_2 and PM_{10}. The AERMOD model was run for 580 River Avenue to better predict the short-term three-hour SO_2 impact on the Proposed Action. The results showed that no air quality impacts would occur to the proposed development due to fuel combustion at 580 River Avenue. Therefore, no HVAC emissions from nearby residential or commercial buildings would significantly affect the Proposed Action.

An Air Toxics Survey was carried out to ascertain if industrial or manufacturing facilities near the Proposed Action could cause an air quality impact on the proposed development. NYCDEP did not find any operations permits. Based on field work, however, the Lino Press was identified as an adjacent use that might generate air toxics even though no permit is listed with NYCDEP. As a precautionary worst case analysis, this site was analyzed using information from a permit for a typical printing establishment of similar size to Lino Press. No potential impacts were identified.

A mobile screen for $PM_{2.5}$ emissions stemming from DSNY truck emissions was carried out. No potential impacts are expected to occur at the Rezoning Area due to the operations at the DSNY facility.

19. Noise

INTRODUCTION

A noise analysis was conducted to determine future noise levels in the Rezoning Area and to identify potential impacts associated with the Proposed Action, as well as determine the appropriate window/wall attenuation for the proposed building. Of particular concern to the mixed use residential building resulting from the Proposed Action are buses from the school across the street on the west side of Gerard Avenue and trucks generated by a New York City Department of Sanitation (DSNY) garage located at 125 East 149th Street. The analysis was carried out in compliance with the January 2012 version of the *CEQR Technical Manual.*

Noise Background
Noise is measured in sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the A-weighted scale are termed "dBA." The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB, and the threshold of pain is about 140. Table II.19.1 on the following page shows the range of noise levels for a variety of indoor and outdoor noise levels.

Because the scale is logarithmic, a relative increase of 10 decibels represents a sound pressure level that is 10 times higher. However, humans do not perceive a 10 dBA increase as 10 times or louder; they perceive it as twice as loud. 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 increase is perceived as a doubling of noise level.

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

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating sound pressure levels is averaged over time to create a single number to describe the mean energy or intensity level. High noise levels during a monitoring period will have greater effect on the L_{eq} than low noise levels. The L_{eq} has an advantage over other descriptors because L_{eq} values from different noise sources can be added and subtracted to determine cumulative noise levels.
- L_{max} is the highest SPL measured during a given period of time. It is useful in evaluating L_{eq}s for time periods that have an especially wide range of noise levels.
- L_{10} is the SPL exceeded 10% of the time. Similar descriptors are the L_{50}, L_{01}, and L_{90}.
- L_{dn} is the day-night equivalent sound level. It is similar to a 24-hour L_{eq}, but with 10 dBA added to SPL measurements between 10 pm and 7 am to reflect the greater intrusiveness of noise experienced during these hours. L_{dn} is also termed DNL.

Although the SPL heard in the environment typically is composed of many different frequencies, it can be broken down into the numerous individual frequencies. These frequencies are grouped into octave bands. An octave band is a group of frequencies in the interval between a given

frequency (such as 350 Hz) and twice that frequency (e.g., 710 Hz). The standard octave bands are each named by their center frequencies. Thus, each octave band will be represented by a single SPL. When the representative SPLs from the individual octave bands are added together, they are weighted so that the resulting total SPL will represent dBA. Octave bands are used in some noise models because the different components of a noise source will have different frequencies. For example, a truck traveling downhill will have a different set of frequencies than a truck traveling uphill.

Standards and Guidelines
In 1983, NYCDEP adopted the City Environmental Protection Order-City Environmental Quality Review noise standards for exterior noise levels. These standards are the basis for classifying noise exposure into four categories based on the L_{10}: Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable, as shown in Table II.19.2.

Table II.19.3 shows the required attenuation for sensitive uses within the last three categories. For example, an L_{10} may approach 80 dBA provided that buildings are constructed of materials that reduce exterior to interior noise levels by at least 35 dBA.

Table II.19.1. Sound Pressure Level and Loudness of Typical Noises in Indoor and Outdoor Environments

Noise Level (dBA)	Subjective Impression	Typical Sources		Relative Loudness (Human Response)
		Outdoor	Indoor	
120-130	Uncomfortably Loud	Air raid siren at 50 feet (threshold of pain)	Oxygen torch	32 times as loud
110-120	Uncomfortably Loud	Turbo-fan aircraft at take-off power at 200 feet	Riveting machine Rock band	16 times as loud
100-110	Uncomfortably Loud	Jackhammer at 3 feet		8 times as loud
90-100	Very Loud	Gas lawn mower at 3 feet Subway train at 30 feet Train whistle at crossing Wood chipper shredding trees Chain saw cutting trees at 10 feet	Newspaper press	4 times as loud
80-90	Very Loud	Passing freight train at 30 feet Steamroller at 30 feet Leaf blower at 5 feet Power lawn mower at 5 feet	Food blender Milling machine Garbage disposal Crowd noise at sports event	2 times as loud
70-80	Moderately Loud	NJ Turnpike at 50 feet Truck idling at 30 feet Traffic in downtown urban area	Loud stereo Vacuum cleaner Food blender	Reference loudness (70 dBA)
60-70	Moderately Loud	Residential air conditioner at 100 feet Gas lawn mower at 100 feet Waves breaking on beach at 65 feet	Cash register Dishwasher Theater lobby Normal speech at 3 feet	2 as loud
50-60	Quiet	Large transformers at 100 feet Traffic in suburban area	Living room with TV on Classroom Business office Dehumidifier Normal speech at 10 feet	1/4 as loud
40-50	Quiet	Bird calls, Trees rustling, Crickets, Water flowing in brook	Folding clothes Using computer	1/8 as loud
30-40	Very quiet		Walking on carpet Clock ticking in adjacent room	1/16 as loud
20-30	Very quiet		Bedroom at night	1/32 as loud
10-20	Extremely quiet		Broadcast and recording studio	
0-10	Threshold of hearing			

Sources: Noise Assessment Guidelines Technical Background, by Theodore J. Schultz, Bolt Beranek and Newman, Inc., prepared for the US Department of Housing and Urban Development, Office of Research and Technology, Washington, D.C., undated; Sandstone Environmental Associates, Inc.; Highway Noise Fundamentals, prepared by the Federal Highway Administration, US Department of Transportation, September 1980; Handbook of Environmental Acoustics, by James P. Cowan, Van Nostrand Reinhold, 1994.

Table II.19.2. CEQR Noise Exposure Guidelines for use in City Environmental Impact Review[1]

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

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).

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

Table II.19.3. Required Attenuation Values to Achieve Acceptable Interior Noise Levels

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

Note: [A]The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dBA less in each category. All the above categories require a closed window situation and hence alternate means of ventilation.
[B]Required attenuation values increase by 1 dBA increments for L_{10} values greater than 80 dBA.
Source: *CEQR Technical Manual (January 2012)*

Noise Attenuation Ratings

Window/wall attenuation can be described in terms of sound transmission class (STC), transmission loss (TL), and outdoor-indoor transmission class (OITC). Although these terms are sometimes used interchangeably, they are unique from each other. Transmission loss refers to how many decibels of sound a façade (wall) or façade accessory (window or door) can stop at a given frequency. The TL for a given construction material varies with the individual frequencies of the noise.

To simplify the noise attenuation properties of a wall, the STC rating was developed. It is a single number that describes the sound isolation performance of a given material for the range of test frequencies between 125 and 4,000 Hz. These frequencies sufficiently cover the range of human speech. Higher STC values reflect greater efficiencies to block airborne sound.

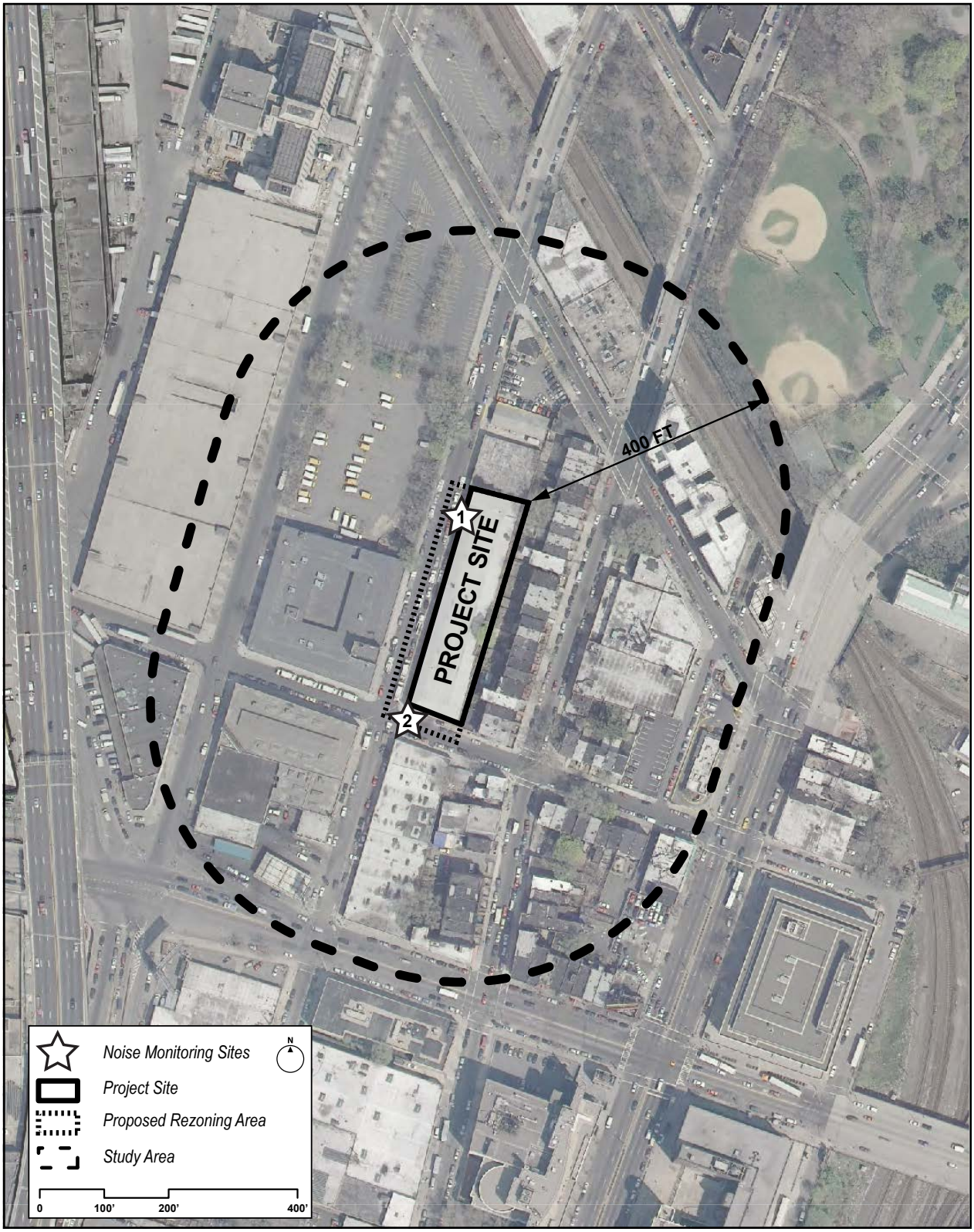
The OITC is similar to the STC, except that it is weighted more towards the lower frequencies associated with aircraft, rail, and truck traffic. It considers frequencies down to 80 Hz. In selecting suitable window material, the final attenuation level depends upon a variety of factors, among which include the type of material selected, the thickness of the panel, and quality of the installation.

EXISTING CONDITIONS

Noise monitoring was initially conducted on Thursday, December 1, 2011 at two locations near Block 2353 to determine existing outdoor noise levels at the Rezoning Area. Each monitoring site is listed below and shown in Figure II.19.1.

1. Gerard Avenue eastern sidewalk, midblock, and
2. Northeast corner of the intersection of East 150th Street / Gerard Avenue

Figure II.19.1 - Noise Monitoring Locations



Noise levels were monitored for the peak AM (8:00-9:00 a.m.), Midday (12:00-1:00 p.m.), and PM (5:00-6:00 p.m.) periods. The noise levels were monitored according to the procedures outlined in the *CEQR Technical Manual*. The instrument used was a Larson Davis 850, an ANSI Type I instrument. It was mounted on a tripod at a height of 5 feet above the ground. The noise monitor was calibrated before and after use. A wind screen was used during all sound measurements except for calibration. All measurement procedures conformed to the requirements of ANSI Standard S1.13-1971 (R1976). During the monitoring periods, the temperatures were in the low 40s (°F) during the morning hours to the high 40s (°F) at dusk, and the conditions ranged from sunny for the morning and midday measurements to dark for the evening measurement.

Local traffic volumes along Gerard Avenue and East 150th Street, in addition to aircraft flyovers, were the primary sources of noise. Other sources of noise included pedestrians walking along the sidewalks, and sanitation trucks idling at a DSNY garage facility at 125 East 149th Street. While the site is within 350 feet of a MTA Metro North Railroad right-of-way (ROW), at its closest point, the ROW is depressed in a cut, and was inaudible at the monitoring sites. Additionally, the nearby elevated highway to the west that carries Interstate 87 (Major Deegan Expressway) is 425 feet away and was not audible at the Rezoning Area.

Directly across Gerard Avenue to the west of the Rezoning Area is a self-storage facility (American Self-Storage) that shares space with a Special Education school (Public School 723X). The school, whose listed addresses are 595 Gerard Avenue and 580 River Avenue, occupies two stories starting on the ground floor. The school does not have an outdoor playground. According to the school's portal on the NYC Department of Education's website, school buses typically arrive at 8:00 a.m. and depart at 2:50 p.m. Because the AM Peak Period for noise monitoring falls within the 8:00 a.m. – 9:00 a.m. window, noise measurements and traffic counts for this period would include buses arriving with students to the school. If no adverse noise conditions exist due to bus activity for this period, then no noise impacts from the school buses are projected for the Rezoning Area.

In addition to the primary measurements taken on December 1, 2011, a supplementary noise and traffic measurement was carried out on the morning of January 4, 2012 at Site ID 2 to verify that environmental noise from arriving school buses and the adjacent DSNY truck garage would not pose a concern to the Proposed Action. This peak AM observation was conducted between 8:00 a.m. – 8:30 a.m. to coincide with peak traffic arriving at the school and is reflected in the subsequent tables.

In response to concerns that the highest noise levels would occur during an early morning hour when DSNY trucks would be leaving the garage, a third set of noise measurements was carried out on Friday, March 30, 2012. Two periods were measured: a peak AM period from 6:00 a.m. to 7:00 a.m. (when DSNY trucks would depart to start their collection schedule) and a peak MD period from 1:00 p.m. to 2:00 p.m. (the time when the trucks would return from disposing their collected trash.) For the AM period, the one-hour L_{10} value was 68.3 dBA. The MD period yielded a 1-hour L_{10} value of 69.4 dBA.

Table II.19.4 shows the noise monitoring results, and Table II.19.5 summarizes the traffic for the equivalent 1-hour period. Traffic classification counts were carried out for total vehicle movements at each observed street location. At Site 1, the highest observed L_{10} of 69.4 dBA occurred during the peak PM period on December 1, 2011. At Site 2, the highest observed L_{10} of 69.4 dBA occurred during peak MD period on March 30, 2012.

Table II.19.4. Monitored Noise Levels (dBA)

ID	Site	Time of Day	L_{eq}	L_{10}	L_{min}	L_{max}	L_{01}	L_{50}	L_{90}
December 1, 2011									
1	Gerard Avenue sidewalk	8:41 a.m. – 9:01 a.m.	65.0	67.6	55.2	85.2	75.6	59.9	57.2
		12:01 p.m. – 12:21 p.m.	62.1	63.8	56.1	77.8	72.1	59.9	57.9
		5:03 p.m. – 5:23 p.m.	**67.1**	**69.4**	53.9	87.1	77.8	61.6	55.9
2	E. 150th St. / Gerard Ave., NW corner	8:17 a.m. – 8:37 a.m.	66.9	68.2	60.6	86.6	76.1	64.4	62.7
		12:24 p.m. – 12:44 p.m.	64.9	65.9	56.3	81.3	75.2	61.1	58.8
		5:36 p.m. – 5:56 p.m.	65.4	68.1	57.6	80.3	74.8	62.6	59.9
January 4, 2012									
2	E. 150th St. / Gerard Ave., NW corner	8:02 a.m. – 8:22 a.m.	66.2	69.2	57.8	80.1	74.4	63.6	59.6
March 30, 2012									
2	E. 150th St. / Gerard Ave., NW corner	5:58 a.m. – 6:58 a.m.	66.7	68.3	56.7	85.0	78.8	61.7	59.3
		12:59 p.m. – 1:59 p.m.	**66.9**	**69.4**	52.2	84.9	78.0	62.1	55.6

Source: Sandstone Environmental Associates, Inc.
Note: Numbers in bold type are the highest for that location.

Table II.19.5 One-Hour Equivalent Traffic Volumes

ID	Site	Peak Period	Auto	Medium Trucks	Heavy Trucks	Buses	Motor-cycles	Total	Air-craft
December 1, 2011									
1	Gerard Avenue sidewalk	AM	156	18	0	6	0	180	3
		MD	165	0	0	0	0	165	3
		PM	249	0	0	0	0	249	12
2	E. 150th St. / Gerard Ave., NW corner	AM	150	3	3	6	0	162	3
		MD	141	0	0	0	0	141	6
		PM	249	9	0	0	0	258	3
January 4, 2012									
2	E. 150th St. / Gerard Ave., NW corner	AM	150	3	3	6	0	162	3
March 30, 2012									
2	E. 150th St. / Gerard Ave., NW corner	AM (6-7am)*	179	10	8	3	0	200	0
		MD (1-2pm)*	333	15	6	6	0	360	9

Source: Sandstone Environmental Associates, Inc.
**Traffic counts were conducted over a one-hour period.*

NO-ACTION SCENARIO

Under the No Action Condition, the Rezoning Area would remain unchanged. A 0.25% increase in background traffic from 2012 to 2014 (Build Year), as recommended by the *CEQR Technical Manual,* was carried out. A comparison of PCEs for Existing and No Action Conditions showed that it would not cause an audible increase in noise levels (0.0 dBA change).

WITH-ACTION SCENARIO

Under With Action Conditions, the Rezoning Area under the RWCDS would be rezoned and improved with a 152,190 gross s.f. mixed-use building comprised of retail space and 124 dwelling units. An 89-space subsurface accessory parking facility would be included in the development. To estimate environmental noise impacts under the Build Condition, an additional 89 autos were assumed to be present at the development in the morning and evening peak periods, either departing from or entering the parking lot. This traffic addition was added to the No Action traffic to establish the traffic volumes under With Action Conditions.

The traffic for both No Action and Action were converted to PCEs and compared using logarithmic computations to determine the noise levels under With Action Conditions. Table II.19.6 indicates the noise levels under both scenarios. The increments of 0.0 to 1.3 dBA are below the 3 dBA threshold value for impacts. Thus, no significant noise impacts to the existing school due to traffic noise are anticipated.

The highest L_{10} under With Action Conditions would be 70.7 dBA, which would occur during the peak PM period at Site ID 1 on Gerard Avenue using the data from December 1, 2011. The highest L_{10} at Site ID 2 on East 150th Street would be 70.0 dBA, which would occur during the peak AM period using data obtained during the January 4, 2012 measurement. Based on these future noise levels, the Rezoning Area would fall into the Marginally Unacceptable (I) category of exterior noise exposure for NYCDEP CEQR purposes. Based on Table II.19.6, to ensure interior noise levels of 45 dBA, the windows installed in the building should have a minimum OITC rating of 28 dBA.

Table II.19.6. 2014 Noise Levels (dBA)

ID	Site	Peak Period	No Action		Action		Noise Increment
			L_{eq}	L_{10}	L_{eq}	L_{10}	
December 1, 2011							
1	Gerard Avenue sidewalk	AM	65.0	67.6	65.7	68.3	0.7
		MD	62.1	63.8	62.1	63.8	0.0
		PM	67.1	69.4	68.4	70.7	1.3
2	E. 150th St. / Gerard Ave., NW corner	AM	66.9	68.2	67.8	69.1	0.9
		MD	64.9	65.9	64.9	65.9	0.0
		PM	65.4	68.1	66.4	69.1	1.0
January 4, 2012							
2	E. 150th St. / Gerard Ave., NW corner	AM	66.2	69.2	67.0	70.0	0.8
March 30, 2012							
2	E. 150th St. / Gerard Ave., NW corner	AM	66.7	68.3	67.2	68.8	0.5
		MD	66.9	69.4	67.3	69.8	0.4

CONCLUSIONS

Analysis of future noise levels shows that the Proposed Action would not cause significant adverse impacts to the surrounding community. Noise levels from existing nearby land uses include P.S. 723X across the street on Gerard Avenue and a DSNY garage across the street on East 150th Street. Noise from the elevated highway and depressed rail tracks were not audible at the Rezoning Area.

Along the western façade, facing Gerard Avenue, maximum projected future L_{10} noise levels would be 70.7 dBA. Along the southern façade, facing East 150th Street, projected L_{10} noise levels would be a maximum of 70.0 dBA, and this would also be applicable to the northern and eastern facades. The Rezoning Area would fall into the Marginally Unacceptable I category of the CEQR Noise Exposure Guidelines, which would require windows with a minimum OITC rating of 28 dBA. In addition, in areas with an exterior L_{10} of 70 dBA or more, the building must

provide alternate means of ventilation so that residents may keep their windows closed in warm weather. A noise (E) Designation would be applied to the rezoning area to ensure that no noise impacts would occur to future residents. The (E) Designation would include specifications such as the provision of a closed-window condition with a minimum of 28 dBA window/wall attenuation to maintain an interior noise level of 45 dBA. 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 sleeves or HUD-approved fans.

With the (E) Designation specified above, the Proposed Action would not result in any significant adverse noise impacts and would meet CEQR guidelines.

21. Neighborhood Character

INTRODUCTION

As described in the *CEQR Technical Manual* (page 21-3), the Neighborhood Character assessment describes the defining features of a neighborhood that work in concert to create its distinct personality. The assessment then analyzes whether the Proposed Action has the potential to create a significant adverse impact on that unique fusion of defining elements, or a combination of moderate effects on those elements. The defining features include land use, urban design, open space, historic resources, shadows, traffic, and noise. As required by the 2012 *CEQR Technical Manual*, the changes between the No Action and With Action scenario are assessed.

EXISTING CONDITIONS

The Rezoning Area contains a one-story, 32,135 square foot (s.f.), former auto repair facility at 580 Gerard Avenue (Block 2353, Lot 1), in a M1-2 zoning district. The building is currently rented to a furniture retailer for storage purposes. The Rezoning Area also includes parts of Lots 16, 45-49 on Block 2353; Lots 45-49 are located within an R6 zoning district.

The predominant land uses within 400 feet of the Rezoning Area are characterized by a wide variety of uses, including residential, commercial, and light industrial/manufacturing. Residential uses include three- to four-story, one- and two-family row houses in Block 2353 and southeast of the Rezoning Area, as well as a six-story mixed-use multi-family building northeast of the Rezoning Area on Block 2348. Surrounding the Rezoning Area is a one-story printing facility, a two- and three-story self storage facility, and a City-owned vacant parcel currently used for parking. A public school, the Child and Adolescent Day Treatment Program for Special Education Students (P723X), shares space with the self storage facility. Neighboring commercial uses include a two-story commercial office building and the Gateway Center shopping mall at Bronx Terminal Market. North of the Rezoning Area is a seven-story family intake center sponsored by the New York City Department of Homeless Services. A gas station and car wash share Block 2354 with one- to two-story buildings for light manufacturing and ice storage. Directly south of the Rezoning Area is a Department of Sanitation garage and the Pregones Theatre.

The existing furniture storage facility is accessed via Gerard Avenue, a one-lane, northbound street with an on-street bicycle lane west of the Rezoning Area. The study area's westward slope toward the Harlem River, combined with the elevated Major Deegan Expressway, obscures any waterfront views. As a result, there are no visual resources or interesting view corridors in the study area. The New York City Landmarks Preservation Commission did not identify historic resources within the study area.

The Rezoning Area is located within a five-minute walk from the 149th Street-Grand Concourse subway station on the 2, 4, and 5 lines. The Rezoning Area also within four blocks of two MTA bus lines and is readily accessible by automobile.

Recent public policies enacted in the vicinity of the Rezoning Area—the NYCDCP-sponsored Lower Concourse Rezoning of 2009, the 161st Street/River Avenue Rezoning, the Port Morris Empire Zone, and the Federal Empowerment Zone—share the goals of creating new investment opportunities, residential and commercial developments, and open space in the South Bronx.

NO ACTION SCENARIO

The existing M1-2 zoning permits light manufacturing uses and a maximum allowable FAR of 2.0. Lot 1 is currently developed to 32,135 s.f., and could be developed to approximately 62,400 s.f. under the existing zoning. However, based on historical trends in the area and the fact that the Rezoning Area has not been developed to this potential despite the allowable FAR under the M1-2 zoning district, it is reasonable to assume that further development of the Rezoning Area would not occur under the existing zoning. As discussed in the Framework for Analysis section, it is assumed that the 32,135 s.f. building located on Lot 1 would continue to be used as a storage facility.

WITH ACTION SCENARIO

The Proposed Action consists of a zoning map change that would rezone the Rezoning Area from M1-2/R6 to R7A with a C2-4 overlay and the application of the Inclusionary Housing program to allow a Floor Area Ratio of 4.6. The resulting Reasonable Worst Case Development Scenario would create a 152,190 g.s.f. 80-foot high mixed use building comprised of 124 residential units, 24,900 g.s.f. of local retail and 89 accessory parking spaces.

This Proposed Action would not directly displace an active land use, adversely affect surrounding land uses, generate an incompatible land use, nor alter or accelerate development patterns. The building would fit into the variety of existing building heights in the area and provide an appropriate mix of residential and commercial uses. As described in Section 7, "Urban Design and Visual Resources," the Proposed Action would not block a view corridor or built visual resource, nor would it impact a natural or built visual resource.

By providing new opportunities for redevelopment and growth in the South Bronx, the Proposed Action would support the goals of recent public policies enacted in the vicinity of the Rezoning Area such as the NYCDCP-sponsored Lower Concourse Rezoning of 2009, the 161st Street/River Avenue Rezoning, the Port Morris Empire Zone, and the Federal Empowerment Zone. The Proposed Action is also consistent with City policies promoting the creation of affordable housing, as expressed in the 161st Street / River Avenue Rezoning and the Lower Concourse Rezoning because it includes an Inclusionary Housing Bonus to support the creation of on-site affordable housing units, even though financing is currently not being pursued.

Analysis of future noise levels shows that the Proposed Action would not cause significant adverse impacts to the surrounding community. The Proposed Action would even protect residents from future noise impacts by applying an E-Designation on the Rezoning Area. According to the Transportation analysis, Proposed Action would not generate enough vehicle trips to require a detailed traffic study, but would add more than 200 walk trips in a peak hour. The additional foot traffic created by the Proposed Action would, in fact, help to invigorate street life and benefit the neighborhood. Additionally, the Proposed Action would improve the pedestrian experience in the area: ground-floor retail would enliven sidewalks, the streetwall would be maintained around the proposed building's perimeter, street trees would be required along each 25 feet of street frontage, and roll-down metal gates would be removed.

CONCLUSION

Through the following assessment, it has been determined that the Proposed Action does not have the potential to exceed any preliminary thresholds of the technical areas of land use, urban design, visual resources, historic resources, traffic, and noise. Nor does the Proposed Action

have the potential to create moderate effects on several of the aforementioned areas to impact the neighborhood character. Therefore, according to the *CEQR Technical Manual* (page 21-4), further analysis is not required.

APPENDICES

Appendix A. Phase I ESA

Appendix B. Preliminary Trip Generation and TDF Memorandum

SAM SCHWARTZ
ENGINEERING

Memorandum

To:	Robert Dobruskin, NYCDCP
From:	Jee Mee Kim
Date:	July 12, 2012
Re:	Preliminary Trip Generation and Travel Demand Factors (TDF) Memorandum 580 Gerard Avenue Rezoning
Project No:	NR-10-205

Sam Schwartz Engineering (SSE) has prepared a preliminary transportation screening for an Environmental Assessment Statement (EAS) for a proposed rezoning at 580 Gerard Avenue in the Bronx, NY from an M1-2 zoning district to an R7A district. According to the 2012 *City Environmental Quality Review (CEQR) Technical Manual*, a trip generation and travel demand factors (TDF) memorandum is required to disclose the projected trips generated by the proposed development through the two-tiered screening process. A Level 1 screening assessment includes a trip generation analysis to determine whether the project would result in more than 50 vehicle trips, 200 subway/rail or bus riders, or 200 pedestrian trips in a peak hour. The Level 2 screening is a trip assignment review that identifies intersections with 50 or more vehicle trips, pedestrian elements with 200 or more pedestrian trips, 50 bus trips in a single direction on a single route, or 200 passengers at a subway station or line during any analysis peak hour which would require detailed analyses.

The reasonable worst-case development scenario resulting from the proposed rezoning ("proposed action") would consist of a mixed use building comprised of 124 residential units and 24,900 square feet of local retail space. It is assumed that the 32,135 s.f. building located on Lot 1 would continue to be used as a storage facility in the No Action condition.

Level 1 (Project Trip Generation) Screening Assessment

Residential, local retail and storage facility trip generation assumptions (including trip generation/truck generation rates, modal splits, temporal distribution, in/out splits, and vehicle occupancy rates) are based on the trip generation assumptions contained in the Lower Concourse Rezoning and Related Actions Environmental Impact Statement (Lower Concourse FEIS), Table 3.15-8 (June 2009).

A preliminary trip generation analysis (see Table 1) was prepared for the following weekday and Saturday peak hours:

1. Weekday morning (AM) peak hour
2. Weekday midday (MD) peak hour
3. Weekday evening (PM) peak hour
4. Saturday peak hour

As the storage facility would be removed with the proposed action, trips generated by the facility were taken as a credit against trips generated by the proposed action. In other words, trips projected to be generated by the storage facility were subtracted from trips projected to be generated by the residential and local retail components to deduce the total project-generated trip increment.

The analysis shows that the proposed action would result in the generation of a maximum sum of 15 peak hour vehicle trips (Saturday), 55 peak hour subway trips (weekday PM), 32 peak hour bus trips (weekday MD), and 301 peak hour total walk trips (weekday MD).

Based on the Level 1 screening assessment for vehicle, subway, and bus trips, the proposed action would not exceed the thresholds described in the *CEQR Technical Manual* and further analysis of traffic and transit is likely not required. Per the *CEQR Technical Manual*, a parking analysis is only required if a quantitative traffic analysis is required.

Based on the Level 1 screening assessment for pedestrians, the proposed action would result in more than 200 walk trips in a peak hour; therefore, a Level 2 screening was performed to distribute the new walk trips to the surrounding pedestrian network.

Level 2 Screening

The proposed action would provide pedestrian access on the east side of Gerard Avenue between East 150th and East 151st streets; therefore, walk trips were assigned to the local roadway network coming to and from the proposed action, arriving either from the north or south along Gerard Avenue.

Distribution of pedestrian trips to the network was based on expected travel paths to/from the project site. It was also assumed that the majority of the subway trips would be traveling to and from the 2, 4, 5 subway station located at Grand Concourse and East 149th Street.

Pedestrian trips generated by the proposed action were distributed in the network in the following manner (see Figure 1):

- 20% to/from the north along Gerard Avenue
- 80% to/from the south along Gerard Avenue (divided between East 150th Street and Gerard Avenue)

Based on the Level 2 screening criteria, during the weekday MD peak hour, the following pedestrian elements would require a quantitative impact analyses:

1. Northeast corner of East 150th Street and Gerard Avenue
2. East sidewalk of Gerard Avenue between East 150th Street and East 151st Street, south of the project site

Table 1
Trip Generation Assumptions

	Project Component	Residential[1]	Local Retail[2]	Storage Facility[3] (credit)
Component	Area	124	24,900	-32,135
	Units	Dwelling Units	gsf	gsf
Person Trip Generation Rate	Weekday	8.075	82.56	5.80
	Saturday	7.678	82.56	1.40
	Units	per dwelling unit	per 1,000 gsf	per 1,000 gsf
Truck Generation Rate	Weekday	0.07	0.45	0.67
	Saturday	0.01	0.02	0.03
	Units	per dwelling unit	per 1,000 gsf	per 1,000 gsf

		Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Modal Split	Auto	22.0%	22.0%	3.0%	3.0%	46.0%	46.0%
	Taxi	0.0%	0.0%	2.0%	2.0%	2.0%	2.0%
	Subway	51.0%	51.0%	5.0%	5.0%	29.0%	29.0%
	Bus	15.0%	15.0%	10.0%	10.0%	16.0%	16.0%
	Walk/Bike	12.0%	12.0%	80.0%	80.0%	7.0%	7.0%
Vehicle Occupancy	Auto	1.50	1.50	1.60	1.60	1.04	1.04
	Taxi	1.40	1.40	1.20	1.20	2.00	2.00
Person Trip Peak Hour Percentage/ Rate	Weekday AM Peak	9.1%		3.1%		17.0%	
	Weekday MD Peak	4.7%		19.0%		14.0%	
	Weekday PM Peak	10.7%		9.6%		13.0%	
	Saturday Peak	8.2%		9.5%		11.4%	
Truck Trip Peak Hour Percentage/ Rate	Weekday AM Peak	12.2%		9.7%		14.0%	
	Weekday MD Peak	8.7%		7.8%		9.0%	
	Weekday PM Peak	1.0%		5.1%		1.0%	
	Saturday Peak	8.7%		11.0%		9.0%	
		IN	OUT	IN	OUT	IN	OUT
Person Trip Directional Distribution	Weekday AM Peak	15.0%	85.0%	50.0%	50.0%	83.0%	17.0%
	Weekday MD Peak	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Weekday PM Peak	70.0%	30.0%	50.0%	50.0%	25.0%	75.0%
	Saturday Peak	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Truck Directional Distribution	Weekday AM Peak	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Weekday MD Peak	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Weekday PM Peak	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Saturday Peak	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Linked Trips (%)		0%		25%		0%	

Trip Generation Estimate

Person Trips					Net Total
Daily Person Trips	Weekday	1,001	1,542	-186	2,357
	Saturday	952	1,542	-45	2,449
Peak Hour Subway Trips	Weekday AM Peak	46	2	-9	40
	Weekday MD Peak	24	15	-8	31
	Weekday PM Peak	55	7	-7	55
	Saturday Peak	40	7	-1	46
Peak Hour Bus Trips	Weekday AM Peak	14	5	-5	13
	Weekday MD Peak	7	29	-4	32
	Weekday PM Peak	16	15	-4	27
	Saturday Peak	12	15	-1	26
Peak Hour Walk Trips	Weekday AM Peak	11	38	-2	47
	Weekday MD Peak	6	234	-2	238
	Weekday PM Peak	13	118	-2	130
	Saturday Peak	9	117	0	126
Total Walk Trips[4]	Weekday AM Peak	71	45	-16	100
	Weekday MD Peak	37	278	-14	301
	Weekday PM Peak	84	141	-13	212
	Saturday Peak	61	139	-3	197

Vehicle Trips		IN	OUT	IN	OUT	IN	OUT
In/ Out Auto Trips	Weekday AM Peak	2	11	0	0	-12	-2
	Weekday MD Peak	3	3	3	3	-6	-6
	Weekday PM Peak	11	5	1	1	-3	-8
	Saturday Peak	6	6	1	1	-1	-1
In/ Out Taxi Trips (Based on In, Out)	Weekday AM Peak	0	0	0	0	0	0
	Weekday MD Peak	0	0	2	2	0	0
	Weekday PM Peak	0	0	1	1	0	0
	Saturday Peak	0	0	1	1	0	0
In/ Out Taxi Trips (Based on In = Out)	Weekday AM Peak	0	0	1	1	0	0
	Weekday MD Peak	0	0	4	4	0	0
	Weekday PM Peak	0	0	2	2	0	0
	Saturday Peak	0	0	2	2	0	0
In/ Out Truck Trips	Weekday AM Peak	0	0	1	1	-2	-2
	Weekday MD Peak	0	0	0	0	-1	-1
	Weekday PM Peak	0	0	0	0	0	0
	Saturday Peak	0	0	1	1	-1	-1

		IN	OUT	Total
Net Vehicle Trips	Weekday AM Peak	-10	9	-1
	Weekday MD Peak	3	3	7
	Weekday PM Peak	12	0	12
	Saturday Peak	7	7	15

Notes:
1. Residential trip generation assumptions are based on Lower Concourse Rezoning and Related Actions FEIS, Table 3.15-8, June 2009.
2. Local retail trip generation assumptions are based on Lower Concourse Rezoning and Related Actions FEIS, Table 3.15-8, June 2009.
3. Storate facility trip generation assumptions are based on Lower Concourse Rezoning and Related Actions FEIS, warehousing land use, Table 3.15-8, June 2009. Storage facility trip generation estimates were counted as a credit.
4. Total walk trips includes all trips via transit plus walk only trips.



580 Gerard Ave Rezoning

Pedestrian Trip Assignment

Figure 1

Appendix C. NYC Landmarks Preservation Commission Letter

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre Street, 9N, New York, NY 10007 (212) 669-7700 www.nyc.gov/landmarks

ENVIRONMENTAL REVIEW

NO LEAD AGENCY/NL-CEQR-X 1/4/2011

Project number **Date received**

Project: 580 GERARD AVENUE REZONING

Properties with no Architectural or archaeological significance:

580 GERARD AVENUE, BBL 2023530001
607 WALTON AVENUE, BBL 2023530045
605 WALTON AVENUE, BBL 2023530046
603 WALTON AVENUE, BBL 2023530047
601 WALTON AVENUE, BBL 2023530048
599 WALTON AVENUE, BBL 2023530049

Gina Santucci

1/13/2011

SIGNATURE DATE

27508_FSO_DNP_01072011.doc

Appendix D. NYCDEP Permit Request and Permits

October 27, 2011

Ms. Gerry Kelpin
City of New York Department of Environmental Protection
59-17 Junction Boulevard
Flushing, New York 11373

Re: 580 Gerard Avenue EAS

Dear Ms. Kelpin,

We are preparing an air quality survey of a proposed action in the Concourse Village neighborhood of the Bronx and have identified the following addresses as possible facilities that may have NYCDEP permits for HVAC or manufacturing/processing operations. Please let us know whether permits are available for the addresses listed below.

Block	Lot	Dept of Finance Code	Address	Observed Land Use
2347	4	W4	564 Walton Avenue	Geel Clubhouse
2348	5	O1	192 E. 151st Street	Unsigned warehouse
2348	53	D7	175 E. 151st Street	Residential Apartments
2350	34	E1	500 Gerard Avenue	Unsigned warehouse
2350	63	E9	479 Walton Avenue	Heating & Burner Supply Inc.
2351	29	E9	110 E. 149th Street	Strauss Meat & Fish Market
2352	6	E9	556 River Avenue	Diamond Ice Cube Co., Inc.
2352	15	F1	585 Gerard Avenue	Unsigned warehouse
2353	16	F4	620 Gerard Avenue	Lino Press Same Day Printing
2353	20	F5	640 Gerard Avenue	Bautista Parking
2353	28	F9	148 E. 151st Street	Canaan Land Christian Church
2353	57	O9	151 E. 151st Street	Office Building
2353	120	E9	656 Gerard Avenue	Wipetex International Corp.
2354	1	E7	580 River Avenue	American Self-Storage, Parking
2357	1	N/A	610 Gateway Center Blvd.	Gateway Commercial Center & Parking

D7 – Elevator Apartment; E1 – Fireproof Warehouse; E7 – Self-storage Warehouse; E9 – Misc. Warehouse; F1 – Heavy Man. Factory; F4 – Industrial Semi-fireproof Factory; F5 – Light Manufacturing Factory; F9 – Industrial-Misc. Factory; O1- Office Building; O9 – Office Building; W4 – Educational Institution

We would appreciate a response at your earliest convenience. Thank you for your assistance with this.

Sincerely,

William Grossett
Sandstone Environmental Associates, Inc.

SANDSTONE ENVIRONMENTAL ASSOCIATES, INC.
505 Main Street, Metuchen, N.J. 08840
P:732-494-1100 F:732-494-1107 www.sandstoneairnoise.com

Bureau of Environmental Compliance

59-17 Junction Blvd., Corona, N.Y. 11368
Records Control

Date: 01/04/12
Time 2:02 PM

Facility No.: 2 X5EP
Expires On: 09/15/2012

CA299888H

Registration
Active

Owner:

HEATING & BURNER SUPPLY, INC
479 WALTON AVENUE
BRONX NY 10451

Facility
HEATING & BURNER SUPPLY, INC
479 WALTON AVENUE
BRONX NY 10451

Last Fee Assessed:	$ 110.00	09/16/88
Last Pay Amount:	$ 110.00	08/28/09
Balance Due:	$ .00	

Floor: 1

Boiler Make & Model : H.B. SMITH 18-S08 # of Identical Units: 1
Input Rating: 700000 Gross BTU Rating: 638000

Burner 1 Make & Model : CARLIN 301 CRD Fuel Type: 0
# of Burners: 1

Usage : Hrs/Day: 5 Days/Week: 7 Weeks/Year: 52
Max Firing Rate: 5

Fuel Type: 0

Bureau of Environmental Compliance

59-17 Junction Blvd., Corona, N.Y. 11368
Records Control

Date: 01/04/12
Time 2:01 PM

Facility No.: 2 X1FE
Expires On: 11/04/2012

CA147480L

Certificate to Operate
Active

Owner:

PINNACLE PRIME LLC
P.O.BO. 1920
MANHATTAN NY 10116

Facility
PRIME REALTY, SERVICE, LLC.
175 EAST 151 STREET
BRONX NY 10451

Last Fee Assessed:	$ 595.00	08/27/97
Last Pay Amount:	$ 60.00	10/14/11
Balance Due:	$ .00	

Floor: B

Boiler Make & Model : ROCKMILLS MP4-212 # of Identical Units: 1
Boiler Type: 2 Source Code: A7320 Air Intake: 1 Heat Input: 8.2 x 10^6 Gross BTU Rating: 8.2

Burner 1 Make & Model : ICI HEV-E-OIL DEG84P Fuel Type: 52
Burner Type: 053 # of Burners: 1

Usage : Avg. Fuel/Hr: 34.3 Max Fuel/Hr: 34.3 Avg. Fuel/Year: 50078 Fuel Supplier: UNKNOWN

% By Season : Winter: 45 Spring: 15 Summer: 10 Fall: 30 Hours/Day: 4 Days/Year: 365

Burner 2 Make & Model : Fuel Type: 0
Burner Type: # of Burners: 0

Usage : Avg. Fuel/Hr.: 0 Max Fuel/Hr: 0 Avg. Fuel/Year: 0 Fuel Supplier:

% By Season : Winter: 0 Spring: 0 Summer: 0 Fall: 0 Hours/Day: 0 Days/Year: 0

Bureau of Environmental Compliance

59-17 Junction Blvd., Corona, N.Y. 11368
Records Control

Date: 01/04/12
Time 2:01 PM

Facility No.: 2 X5NB
Expires On: 02/11/2002

CA024893J

Registration
Unknown

Owner:

192 E.151 ST.ASSO/MEKLES
2050 CENTER AVENUE
FORT LEE NJ 07024

Facility
192 E.151 ST.ASSO/MEKLES M.
192 EAST 151 STREET
BRONX NY 10451

Last Fee Assessed:	$ 190.00	10/22/98
Last Pay Amount:	$ 190.00	10/15/98
Balance Due:	$ .00	

Floor:

Boiler Make & Model : WEIL MCLAIN 588 # of Identical Units: 1
Input Rating: 0 Gross BTU Rating: 1357000

Burner 1 Make & Model : POWERFLAME JA-50A-15 Fuel Type: 0
# of Burners: 0

Usage : Hrs/Day: 4 Days/Week: 5 Weeks/Year: 26

Max Firing Rate: 1357

Fuel Type: 0

Bureau of Environmental Compliance

59-17 Junction Blvd., Corona, N.Y. 11368
Records Control

Date: 01/04/12
Time 2:03 PM

Facility No.: 2 X27Y
Expires On: 01/31/2013

CA260194P

Certificate to Operate
Active

Owner:

GAL MANUFACTURING CORP.
50 EAST 153TH STREET
BRONX NY 10451

Facility
GAL MANUFACTURING
585 GERARD AVENUE
BRONX NY 10451

Last Fee Assessed:	$ 345.00	12/03/97
Last Pay Amount:	$ 345.00	10/15/09
Balance Due:	$ .00	

Floor: B

Boiler Make & Model : ROCKMILLS MP-125 # of Identical Units: 1
Boiler Type: 2 Source Code: A7320 Air Intake: 3 Heat Input: 5.25 x 10^6 Gross BTU Rating: 5.25

Burner 1 Make & Model : INDUSTRIAL COMB. DEG-54 (P) Fuel Type: 52
Burner Type: 62 # of Burners: 1

Usage : Avg. Fuel/Hr: 5250 Max Fuel/Hr: 5250 Avg. Fuel/Year: 53106 Fuel Supplier:

% By Season : Winter: 60 Spring: 20 Summer: 0 Fall: 20 Hours/Day: 4 Days/Year: 250

Burner 2 Make & Model : Fuel Type: 0
Burner Type: # of Burners: 0

Usage : Avg. Fuel/Hr.: 0 Max Fuel/Hr: 0 Avg. Fuel/Year: 0 Fuel Supplier:

% By Season : Winter: 0 Spring: 0 Summer: 0 Fall: 0 Hours/Day: 0 Days/Year: 0

Bureau of Environmental Compliance

59-17 Junction Blvd., Corona, N.Y. 11368
Records Control

Date: 01/04/12
Time 2:06 PM

Facility No.: 2 X3OT
Expires On: 02/06/2003

CA410490K

Certificate to Operate
Active

Owner:

ST.LUKE'S HOSPITAL REAL ESTATE SERVICES
555 WEST 57 STREET 5TH FL
MANHATTAN NY 10019

Facility
ST.LUKE'S ROOSEVELT HOSPITAL
595 GERARD AVENUE
BRONX NY 10451

Last Fee Assessed:	$ 470.00	10/26/99
Last Pay Amount:	$ .00	10/26/99
Balance Due:	$ .00	

Floor: B

Boiler Make & Model : FEDERAL FST 150 # of Identical Units: 1
Boiler Type: 2 Source Code: A7320 Air Intake: 1 Heat Input: 5.81 x 10^6 Gross BTU Rating: 5.81

Burner 1 Make & Model : HEVE MMG 63P Fuel Type: 34
Burner Type: 053 # of Burners: 1

Usage : Avg. Fuel/Hr: 38 Max Fuel/Hr: 41.5 Avg. Fuel/Year: 62415 Fuel Supplier: UNKNOWN
% By Season : Winter: 50 Spring: 20 Summer: 10 Fall: 20 Hours/Day: 4.5 Days/Year: 365

Burner 2 Make & Model : Fuel Type: 0
Burner Type: # of Burners: 0

Usage : Avg. Fuel/Hr.: 0 Max Fuel/Hr: 0 Avg. Fuel/Year: 0 Fuel Supplier:
% By Season : Winter: 0 Spring: 0 Summer: 0 Fall: 0 Hours/Day: 0 Days/Year: 0

Bureau of Environmental Compliance

59-17 Junction Blvd., Corona, N.Y. 11368
Records Control

Date: 01/04/12
Time 2:05 PM

Facility No.: 2 X6D1
Expires On: 10/23/2004

CB230001H

Registration
Active

Owner:

DEPT.OF HOMELESS SERVICE
645 WALTON AVE
BRONX NY 10451

Facility
DEPT. OF HOMELESS SERVICE
645 WALTON AVENUE
BRONX NY 10451

Last Fee Assessed: $ .00
Last Pay Amount: $ .00 10/22/01
Balance Due: $ .00

Floor: C

Boiler Make & Model : H.B. SMITH 28-S-5 # of Identical Units: 1
Input Rating: 1288000 Gross BTU Rating: 1054000

Burner 1 Make & Model : POWERFLAME C2 G15 Fuel Type: 0
# of Burners: 1

Usage : Hrs/Day: 3 Days/Week: 7 Weeks/Year: 35

Max Firing Rate: 1288

Fuel Type: 0

Bureau of Environmental Compliance

59-17 Junction Blvd., Corona, N.Y. 11368
Records Control

Date: 01/04/12
Time 2:05 PM

Facility No.: 2 X6D1
Expires On: 02/20/2005

CB009002Y

Registration
Unknown

Owner:

DEPT. OF HOMELESS SERVICES
645 WALTON AVE
BRONX NY 10451

Facility
DEPT. OF HOMELESS SERVICES
645 WALTON AVENUE
BRONX NY 10451

Last Fee Assessed: $ .00
Last Pay Amount: $ .00 01/11/02
Balance Due: $ .00

Floor:

Boiler Make & Model : H. B. SMITH 28-S-5 # of Identical Units: 1
Input Rating: 1288000 Gross BTU Rating: 1054000

Burner 1 Make & Model : POWERFLAME C2-G15 Fuel Type: 0
# of Burners: 1

Usage : Hrs/Day: 3 Days/Week: 7 Weeks/Year: 35
Max Firing Rate: 1288

Fuel Type: 0

Appendix E. DSNY Letter

sanitation

ABAS O. BRAIMAH
City Planner

Bureau of Legal Affairs
125 Worth Street, Room 708
New York, N.Y. 10013
Telephone (646) 885-4993
Fax Number (212) 442-9090

March 22, 2012

Jonathan Keller, City Planner
NYC Department of City Planning
Environmental Assessment and Review Division
22 Reade Street, 4th floor
New York, NY 10007

Re: CEQR #: 11DCP143X – 580 Gerard Avenue Rezoning

Dear Mr. Keller,

The following are New York City Department of Sanitation (DSNY)'s responses to your March 13, 2012 information request (posted on CEQR-View) regarding a DSNY Garage adjacent to the above-referenced project site:

- The peak hours of truck operation (leaving/returning). And number of trucks.

  The Manhattan CD 9 Garage operates 24/6 (with limited operations on Sundays). Peak shift is the day shift – 6:00 a.m. to 2:00 p.m. Employees arrive before 6:00 a.m. The Peak day is Friday with 15 collection trucks leaving the garage at 6:00 a.m. (peak hour). Trucks return to the garage between 11:00 a.m. and 2:00 p.m. This garage is privately owned and leased to NYC.
  Twenty One (21) collection trucks are assigned to this garage. Other equipment assigned to the garage are 1 cutdown, 1 haulster, 6 front end loaders, 4 salt spreaders, 1 large wrecker, 2 utility trucks, 1 four by four, 1 van, 1 fork lift, 3 passenger cars, and 1 mechanical broom.

- What type of maintenance is done on site? Are there any DEP or DEC permits for processing and or combustion emissions?

  Preventive maintenance is performed on all assigned equipment; minor repairs may also be performed. There are no DEP or DEC permits for processing and/or combustion emissions.

- Any idling/queuing waiting for maintenance? Where do the trucks park while waiting for service?

There is no idling or queuing of equipment waiting for maintenance. Trucks may queue at the end of the work shift while waiting to be fueled as equipment enters the garage. The queue would occur on Gerard Avenue. When not in use, most trucks will be parked in the garage. All equipment currently parked outdoors would be moved indoors when the ongoing interior renovations at the garage is completed in summer.

- The routes used by the trucks leaving and returning to the facility. Do they serve Manhattan and Bronx? Or just Manhattan?

Equipment housed at this garage only serves Manhattan CD 9. When exiting the garage, equipment heads north on Gerard Avenue; west on E 150th Street; south on River Avenue and west on E 149th Street to 145th Street Bridge into Manhattan. Returning equipment cross the 145 Street Bridge to E 149th Street and turn north at Gerard Avenue to the garage entrances.

- The routes used by the trucks parked on Gerard Avenue. How long do they stay on the streets and what is the warm up time of the trucks parked on the street before going in for service.

Trucks parked on Gerard Avenue are there because of the renovation work being performed on the garage building. Upon completion of the renovation work later this summer, these trucks will be parked indoors. Trucks do not need to be warmed up before starting the work day.

If you have any questions, please feel free to contact me at 646-885-4993.

Sincerely,

Abas Braimah
City Planner

c: R. Orlin, S. Brautigam, D. Klein