

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

# Caton Park Nursing Home Rezoning (1312 Caton Avenue Rezoning)

1312 Caton Avenue Brooklyn, NY

### Prepared for:

Michael Melnicke Beinefeld Architecture 271 North Avenue, Suite 613 New Rochelle, NY 10801

### Prepared by:

AECOM USA, Inc. 125 Broad Street New York, NY 10004

AECOM Project No. 60533255



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

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

Part I: GENERAL INFORMATION						
1. Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)?  NO						
If "yes," STOP and complete the	FULL EAS FORM	<u>//</u> .				
2. Project Name Caton Park Nu	rsing Home Rez	oning (1312 Cato	on Avenue Rezoning)			
3. Reference Numbers			_			
CEQR REFERENCE NUMBER (to be assig 18DCP118K	ned by lead agency	)	BSA REFERENCE NUMI	BER (if applicable)		
ULURP REFERENCE NUMBER (if applical	ole)		OTHER REFERENCE NUMBER(S) (if applicable)			
180394ZRK, 180393ZMK			(e.g., legislative intro, CAPA)			
4a. Lead Agency Information			4b. Applicant Information			
NAME OF LEAD AGENCY	tu Dlanning		NAME OF APPLICANT Beinefeld Architec	turo		
New York City Department of Cit NAME OF LEAD AGENCY CONTACT PERS				s representative or co	NITACT DEDSON	
Robert Dobruskin	,ON		Michael Melnicke	3 KEFKESENTATIVE ON CO	JNIACI FENSON	
ADDRESS 120 Broadway, 31 <sup>st</sup> Floor	 or			h Avenue, Suite 613		
CITY New York	STATE NY	ZIP 10271	CITY New Rochelle		ZIP 10801	
TELEPHONE (212) 720-3423	EMAIL	-	TELEPHONE	EMAIL	,_L	
	rdobrus@plan	ning.nyc.gov				
5. Project Description  The proposed rezoning will facilitate an enlargement of the Caton Park Nursing Home, a 119 - bed nursing and rehabilitation center. The proposed enlargement would add approximately 4,830 square feet of floor area to the existing fifth floor. This new space would function as new space for programmatic use such as recreational and physical therapy for the residents. Specifically, the enlargement would create a new recreation room, a new physical therapy/occupational therapy room, new offices, new solarium, and new storage rooms. The number of beds would remain unchanged. The R6A portion of the lot permits a community facility FAR of 3.0 for a total permitted floor area of 11,001 square feet. The R3X portion of the lot permits a maximum community facility FAR of 1.0. Together between the R3X and R6A portions of the lot, the total permitted floor area for the nursing home is 18,489.5 square feet which is less than the currently built 34,385 square feet. The proposed expansion of the R6A zoning district would permit a 3.0 FAR. The proposed 5th floor enlargement would increase the floor area of the building to 39,215 square feet (2.1 FAR).						
Project Location  BOROUGH Brooklyn	COMMUNITY DIS	TDICT(S) 1/I	STREET ADDRESS 131	12 Caton Avenue		
TAX BLOCK(S) AND LOT(S) Applicant			ZIP CODE 11218			
Rezoning Area: Block 5074, Lot 4						
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Proposed Project Area is generally bounded by Caton Avenue to the north, Rugby Road to the east, Church Avenue to the south and Argyle Road to the west.						
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R3X/R6A ZONING SECTIONAL MAP NUMBER 16				NUMBER 16D		
6. Required Actions or Approvals (check all that apply)						
City Planning Commission:       ✓ YES       NO       UNIFORM LAND USE REVIEW PROCEDURE (ULURP)         CITY MAP AMENDMENT       ZONING CERTIFICATION       CONCESSION         ZONING MAP AMENDMENT       ZONING AUTHORIZATION       UDAAP         ZONING TEXT AMENDMENT       ACQUISITION—REAL PROPERTY       REVOCABLE CONSENT						

SITE SELECTION—PUE	BLIC FACILITY DISE	POSITION—REAL PROPERTY	FRANCH	IISE
HOUSING PLAN & PRO	=	HER, explain:		
=		modification; renewal;	other); EXPIRATION DA	TF·
_	NS OF THE ZONING RESOLUTION	· <u> </u>	outlery, Ext not rect by	
Board of Standards a		NO NO		
VARIANCE (use)	1471ppcuis: 125			
VARIANCE (bulk)				
=	ppropriate, specify type: r	modification; renewal;	other); EXPIRATION DA	тс.
	NS OF THE ZONING RESOLUTION	<u>—</u>	other), Explication ba	16.
Department of Enviro		YES NO	If "yes," specify:	
	Subject to CEQR (check al		ii yes, specify.	
LEGISLATION	Jubject to CLQN (check at	п тпат арргу)	FUNDING OF CONSTRUCTION	N. specifu
RULEMAKING		H		on, specify.
$\equiv$	LIBLIC EACH ITIES	H	POLICY OR PLAN, specify:	
CONSTRUCTION OF P	JELIC FACILITIES	H	FUNDING OF PROGRAMS, s	ресіту:
384(b)(4) APPROVAL			PERMITS, specify:	
OTHER, explain:	Note that a contra			
	Not Subject to CEQR (che			
	S OFFICE OF CONSTRUCTION I	MITIGATION AND	LANDMARKS PRESERVATIO	N COMMISSION APPROVAL
COORDINATION (OCMC)	/* //= !'		OTHER, explain:	
	ns/Approvals/Funding:		If "yes," specify:	
•	ne directly affected area consi			in regulatory controls. Except
	, provide the following inform			
-				te. Each map must clearly depict
	n size and, for paper filings, m			ries of the project site. Maps may
SITE LOCATION MAP		NING MAP		RN OR OTHER LAND USE MAP
TAX MAP	=			
	<del></del>			T DEFINES THE PROJECT SITE(S)
	HE PROJECT SITE TAKEN WITH		33ION AND RETED TO THE 31	TE LOCATION WAP
•	developed and undeveloped a		hanka da ana (an (b) an da ma	NI/A
Total directly affected area			terbody area (sq. ft) and type	:: IN/A
	r paved surfaces (sq. ft.): 18,		er, describe (sq. ft.): N/A	
=			sites, provide the total devel	opment facilitated by the action)
	VELOPED (gross square feet):	•		
NUMBER OF BUILDINGS: 1			DR AREA OF EACH BUILDING	
HEIGHT OF EACH BUILDING			STORIES OF EACH BUILDING	i: 5
	involve changes in zoning on	_	S 🔀 NO	
	square feet owned or control			
	square feet not owned or cor			
		or subsurface disturbance, i	ncluding, but not limited to f	oundation work, pilings, utility
lines, or grading?				
	ated area and volume dimens	· · · · · · · · · · · · · · · · · · ·		
	TURBANCE: 18,644 sq. ft. (w	= :	E OF DISTURBANCE: TBD cu	ubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 18,644 sq. ft. (width x length)				
Description of Propos	ed Uses (please complete the			
	Residential	Commercial	Community Facility	Industrial/Manufacturing
<i>Size</i> (in gross sq. ft.)	67,118 (under			
	RWCDS)			
Type (e.g., retail, office,	78 (Under RWCDS)			
school)	units			
	increase the population of re	esidents and/or on-site worke	ers? 🛛 YES 📗 N	0
If "yes," please specify:	NUMBER	OF ADDITIONAL RESIDENTS:	Approx NUMBER OF	additional workers: N/A
	200			

### **EAS SHORT FORM PAGE 3**

Provide a brief explanation of how these numbers were determined: 2.6 persons per household in Brooklyn Cd 14					
Does the proposed project create new open space? YES NO If "yes," specify size of project-created open space: sq. ft.					
Has a No-Action scenario been defined for this project that differs from the existing condition? YES NO					
If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:					
9. Analysis Year CEQR Technical Manual Chapter 2					
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2021					
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 20					
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? YES NO IF MULTIPLE PHASES, HOW MANY?					
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: ULURP, Design, Financing, Construction					
10. Predominant Land Use in the Vicinity of the Project (check all that apply)					
RESIDENTIAL MANUFACTURING COMMERCIAL PARK/FOREST/OPEN SPACE OTHER, specify:					
Community Facility					

### **Part II: TECHNICAL ANALYSIS**

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

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

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

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

	YES	NO			
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?		$\boxtimes$			
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?		$\boxtimes$			
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?		$\boxtimes$			
11. SOLID WASTE AND SANITATION SERVICES: CEQR Technical Manual Chapter 14					
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per wee	ek): 319	98			
<ul> <li>Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?</li> </ul>		$\boxtimes$			
<b>(b)</b> Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?					
12. ENERGY: CEQR Technical Manual Chapter 15					
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 6,30	 09.092				
MBtu's	,				
(b) Would the proposed project affect the transmission or generation of energy?					
13. TRANSPORTATION: CEQR Technical Manual Chapter 16					
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?		$\square$			
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following q	uestions				
<ul> <li>Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?</li> </ul>					
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection?					
**It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.					
Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?					
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?					
Would the proposed project result in more than 200 pedestrian trips per project peak hour?					
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?					
14. AIR QUALITY: CEQR Technical Manual Chapter 17					
(a) Mobile Sources: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?					
(b) Stationary Sources: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	$\boxtimes$				
<ul> <li>If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in <u>Chapter 17</u>?</li> <li>(Attach graph as needed) See Supp. Studies</li> </ul>					
(c) Does the proposed project involve multiple buildings on the project site?		$\square$			
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?					
(e) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to					
air quality that preclude the potential for significant adverse impacts?					
15. GREENHOUSE GAS EMISSIONS: CEQR Technical Manual Chapter 18					
(a) Is the proposed project a city capital project or a power generation plant?		$\boxtimes$			
(b) Would the proposed project fundamentally change the City's solid waste management system?		$\boxtimes$			
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?		$\boxtimes$			
16. NOISE: CEQR Technical Manual Chapter 19		1			
(a) Would the proposed project generate or reroute vehicular traffic?	$\boxtimes$				
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked					
roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?					
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?		$\boxtimes$			
(d) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to		$\boxtimes$			
noise that preclude the potential for significant adverse impacts?					
17. PUBLIC HEALTH: CEQR Technical Manual Chapter 20					

### **EAS SHORT FORM PAGE 7**

	YES	NO			
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?		$\boxtimes$			
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Healt	h." Attac	ch a			
preliminary analysis, if necessary.					
18. NEIGHBORHOOD CHARACTER: CEQR Technical Manual Chapter 21					
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning,					
and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual	$\boxtimes$				
Resources; Shadows; Transportation; Noise?					
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "N	leighborl	hood			
Character." Attach a preliminary analysis, if necessary.					
19. CONSTRUCTION: CEQR Technical Manual Chapter 22					
(a) Would the project's construction activities involve:					
<ul> <li>Construction activities lasting longer than two years?</li> </ul>		$\boxtimes$			
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?		$\boxtimes$			
<ul> <li>Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?</li> </ul>	$\boxtimes$				
<ul> <li>Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?</li> </ul>		$\boxtimes$			
The operation of several pieces of diesel equipment in a single location at peak construction?		$\boxtimes$			
Closure of a community facility or disruption in its services?		$\overline{\boxtimes}$			
Activities within 400 feet of a historic or cultural resource?					
<ul> <li>Disturbance of a site containing or adjacent to a site containing natural resources?</li> </ul>		$\boxtimes$			
Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to everlap or lest for more than two years everal?					
construction timelines to overlap or last for more than two years overall?  (b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter					
22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction					
equipment or Best Management Practices for construction activities should be considered when making this determination.					
20. APPLICANT'S CERTIFICATION					
I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity					
with the information described herein and after examination of the pertinent books and records and/or after inquiry of have personal knowledge of such information or who have examined pertinent books and records.	persons	who			
Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of	the ent	ity			
that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.					
APPLICANT/REPRESENTATIVE NAME DATE					
Max Meltzer August, 17 <sup>th</sup> , 2018					
SIGNATURE MOSS Meltyer					
PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM A	THE				
DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICAN	CE.				

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)						
IN	NSTRUCTIONS: In completing Part III, the lead agency sho	uld consult 6 NYCRR 617.7 and 43 RCNY § 6-0	06 (Execut	ive		
Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.						
1. For each of the impact categories listed below, consider whether the project may have a significant			Potentially			
adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c)			Significant			
	duration; (d) irreversibility; (e) geographic scope; and (f	duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.  Adver		Impact		
	IMPACT CATEGORY		YES NO			
	Land Use, Zoning, and Public Policy					
	Socioeconomic Conditions					
	Community Facilities and Services			$\square$		
	Open Space					
	Shadows	7.1				
	Historic and Cultural Resources					
	Urban Design/Visual Resources					
	Natural Resources					
	Hazardous Materials					
	Water and Sewer Infrastructure					
	Solid Waste and Sanitation Services					
	Energy					
	Transportation					
	Air Quality					
	Greenhouse Gas Emissions					
	Noise					
	Public Health					
	Neighborhood Character					
	Construction					
	2. Are there any aspects of the project relevant to the dete	ermination of whether the project may have a				
	significant impact on the environment, such as combine	ed or cumulative impacts, that were not fully				
	covered by other responses and supporting materials?					
	If there are such impacts, attach an explanation stating	whether, as a result of them, the project may				
	have a significant impact on the environment.					
	3. Check determination to be issued by the lead agen	cy:				
Г	Positive Declaration: If the lead agency has determined the	nat the project may have a significant impact on t	he environ	ment.		
	and if a Conditional Negative Declaration is not appropr			1		
	a draft Scope of Work for the Environmental Impact Sta	tement (EIS).				
	Conditional Negative Declaration: A Conditional Negative	ue Declaration (CND) may be appropriate if there	is a nrivate			
_	applicant for an Unlisted action AND when conditions in					
	no significant adverse environmental impacts would res					
	the requirements of 6 NYCRR Part 617.					
	Negative Declaration: If the lead agency has determined	that the project would not result in notentially sig	nificant ac	lverse		
	environmental impacts, then the lead agency issues a N					
	separate document (see template) or using the embedo		-,			
	4. LEAD AGENCY'S CERTIFICATION					
TIT	ITLE	LEAD AGENCY				
	eputy Director, EARD	Department of City Planning				
	AME	DATE				
$\vdash$	Nga Abinader	August 17, 2018				
SIC	SIGNATURE					

**Project Name: Caton Park Nursing Home** 

**CEQR #: 18DCP118K** 

**SEQRA Classification: Unlisted** 

### **NEGATIVE DECLARATION** (Use of this form is optional)

### **Statement of No Significant Effect**

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

### **Reasons Supporting this Determination**

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would have no significant effect on the quality of the environment. Reasons supporting this determination are noted below.

Air Quality and Noise: An (E) designation for Air Quality and Noise (E-492) has been incorporated into the proposed action. Refer to "Appendix I: (E) Designation" for a list of the sites affected by the proposed (E) designation and applicable (E) designation requirements. With these measures in place, the proposed actions would not result in significant adverse impacts to Air Quality or Noise.

Shadows: A detailed analysis of shadows is included in this EAS. The analysis concludes that, incremental shadows would be cast on two sunlight sensitive resources: The Prospect Park Parade Grounds and P.S. 249 Playground. New incremental shadows from the proposed actions would result in less than .25 acres of additional shadow coverage on the Parade Grounds. The largest shadows would be cast in December, when the active spaces are least likely to be used. Incremental shadows from the proposed actions would be cast on the playground on the March 21st, May 6th, and June 21st analysis days for between 2 and 3 hours. The playground would continue to receive over 4 hours per day of sunlight. No other open space, historic, or other resources would be affected by shadows generated by the proposed actions. The proposed actions would not result in any significant adverse shadows impacts.

**Urban Design and Visual Resources:** The EAS contains a detailed analysis of urban design and visual resources. It concludes that the proposed actions would not result in any significant impacts to the visual resources, or any change to the arrangement or orientation of surrounding streets or sidewalks in the vicinity of the affected area. The proposed actions would not result in significant adverse impacts to urban design or visual resources.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA).

TITLE	LEAD AGENCY		
Deputy Director, Environmental Assessment and Review	Department of City Planning, acting on behalf of the City		
Division	Planning Commission		
NAME	DATE		
Olga Abinader	08/17/2018		

### **EAS SHORT FORM PAGE 10**

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE 08/20/2018
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# Caton Park Nursing Home Rezoning

## Supplemental Studies to the Environmental Assessment Statement

August 17<sup>th</sup>, 2018

### **Proposed Development Site:**

1312 Caton Avenue Brooklyn, NY 11218

### Prepared for:

Michael Melnicke c/o Beinefeld Architecture 271 North Avenue, Suite 613 New Rochelle, NY 10801

### Prepared by:

AECOM 125 Broad Street New York, NY, 10004

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Appendix A - Plans

Appendix B – Correspondence with New York City Landmark's Preservation Commission

Appendix C – Jamaica Bay Watershed Protection Plan Project Tracking Form

Appendix D- Phase I ESA

Appendix E- E- Designations (E-492)

#### 1.0 PROPOSED ACTIONS

Supplemental Studies to the EAS

Caton Park Nursing Home and Rehabilitation Center (the "Applicant") seeks a zoning map amendment to rezone portions of Brooklyn Block 5074, Lot 4 from an R3X zoning district to an R6A district to facilitate an enlargement of the Caton Park Nursing Home, a 119-bed and 41,176 gross square feet (gsf), nursing and rehabilitation center. The proposed enlargement would add approximately 5,313 (gsf) of floor area to the existing fifth floor. This new space would function as space for programmatic use such as recreational and physical therapy for residents. Specifically, the enlargement would create a recreation room, a physical therapy/occupational therapy room, offices, solarium, and storage rooms. The number of beds would remain unchanged. The R6A portion of the split-zoned lot permits a community facility FAR of 3.0 for a total permitted floor area of 11,001 square feet. The R3X portion of the lot permits a maximum community facility FAR of 1.0. Together between the R3X and R6A portions of the lot, the total permitted floor area for the nursing home is 18,489.5 square feet which is less than the currently built 34,385 square feet, making the improved lot not compliant with its current zoning designation. The proposed expansion of the R6A zoning district would permit a 3.0 FAR permitting the improved building to comply with the new zoning. The proposed 5<sup>th</sup> floor enlargement would increase the floor area of the building to 39,215 square feet (2.1 FAR).

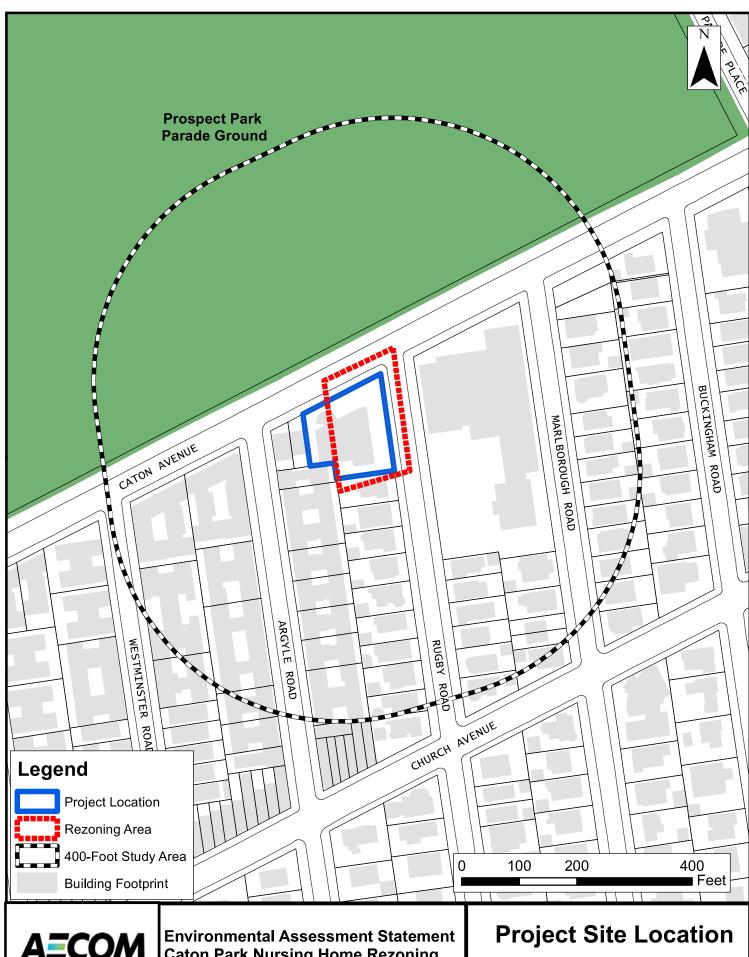
### 1.1 **Project Location**

The rezoning area is located in the Ditmas Park neighborhood of Brooklyn's Community District 14 and is a single tax lot Block 5074, Lot 4. (Figure 1.2-3). The proposed development site is located at 1312 Caton Avenue on Block 5074, Lot 4 (Figure 1.2-1). The total lot area is approximately 18,567 (sf), and the site is presently improved the five-story, approximately 41,176 gsf community facility building occupied by the Caton Park Nursing Home. A key to photographs of the site and surrounding area is shown in Figure **1.2-4** with the photographs displayed in **Figure 1.2-5**.

This EAS studies the potential for individual and cumulative environmental impacts related to the proposed actions occurring in a study area of approximately 400 feet around the rezoning area. This study area is generally bound by Prospect Park Parade Ground to the north, the midblock point between Marlborough Road to the east, Westminster Road to the west, and Church Avenue to the south.

#### 1.2 **Proposed Development**

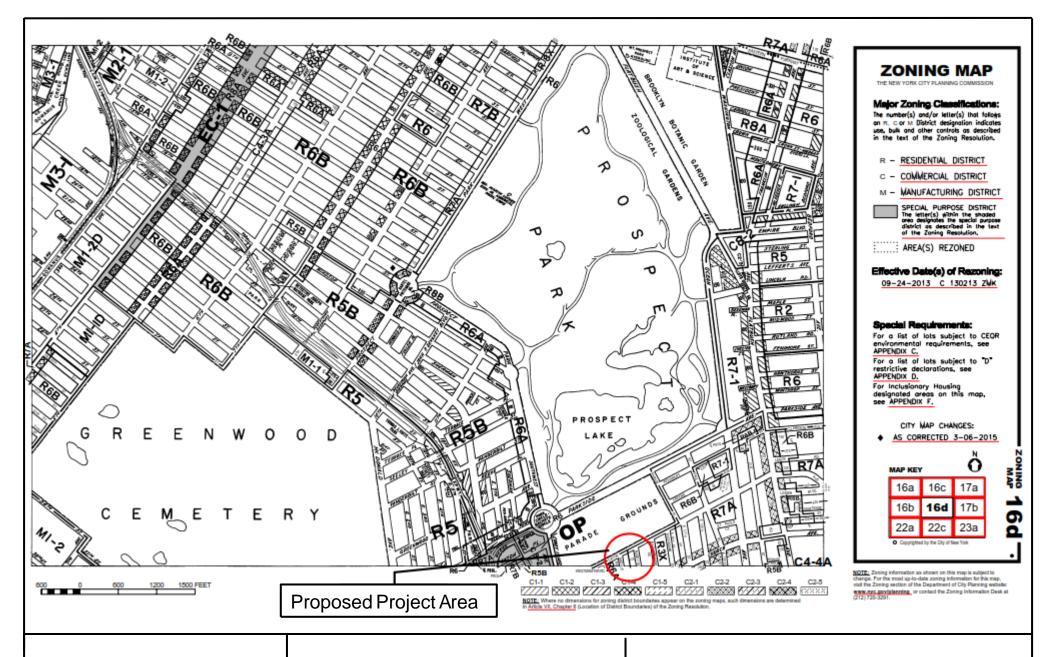
The proposed rezoning will facilitate an enlargement of the Caton Park Nursing Home, a 119 - bed nursing and rehabilitation center. The proposed enlargement would add approximately 4,830 square feet of floor area to the existing fifth floor. This new space would function as new space for programmatic use such as recreational and physical therapy for the residents. Specifically, the enlargement would create a new recreation room, a new physical therapy/occupational therapy room, new offices, new solarium, and new storage rooms. The number of beds would remain unchanged. The R6A portion of the lot permits a community facility FAR of 3.0 for a total permitted floor area of 11,001 square feet. The R3X portion of the lot permits a maximum community facility FAR of 1.0. Together between the R3X and R6A portions of the lot, the total permitted floor area for the nursing home is 18,489.5 square feet which is less than the currently built 34,385 square feet. The proposed expansion of the R6A zoning district would permit a 3.0 FAR. The proposed 5<sup>th</sup> floor enlargement would increase the floor area of the building to 39,215 square feet (2.1 FAR).



**AECOM** 

**Caton Park Nursing Home Rezoning** Brooklyn, NY

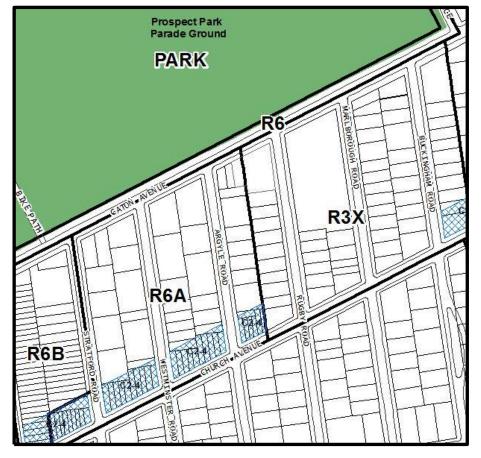
**Figure 1.2-1** 



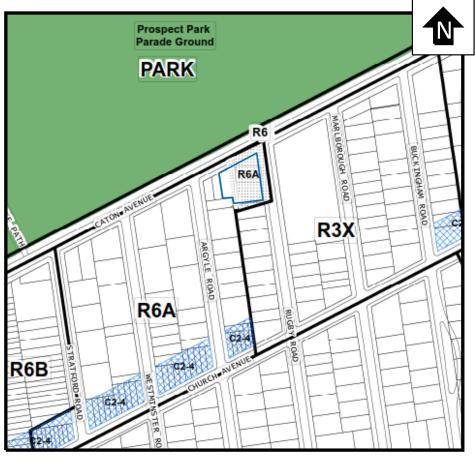


Environmental Assessment Statement Caton Park Nursing Home Rezoning Brooklyn, NY **Zoning Sectional Map** 

**Figure 1.2-2** 



Current Zoning Map (16d)



Proposed Zoning Map (16d) – Project Area is outlined in blue. Rezoning from R3X to R6A.



Environmental Assessment Statement Caton Park Nursing Home Rezoning Brooklyn, NY

**Zoning Change Map** 

**Figure 1.2-2a** 



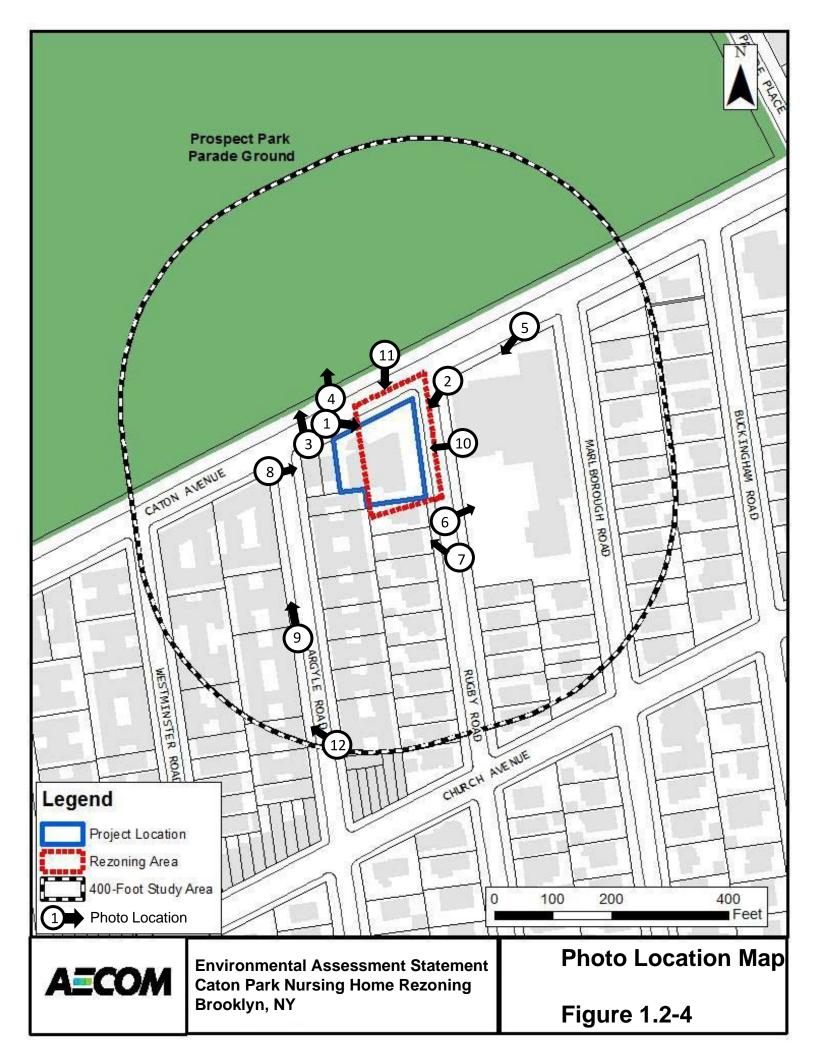


Figure 1.2-5 Photographs of the Site and Surrounding Area (Photos Taken July 2018)



Photo 1: View of project site from Caton Avenue and Argyle Road facing east.



Photo 2: View of project site from Caton Avenue and Rugby Road facing southwest.



Photo 3: View of Prospect Park Parade Ground, located across the street from the project site. Photo taken from the midblock point between Rugby Road and Argyle Road on Caton Avenue facing northwest.



Photo 4: View of Parade Ground soccer fields from Caton Avenue facing north.



Photo 5: View of The Caton School (PS 249) from the midblock point between Rugby Road and Marlborough Road on Caton Avenue facing southwest.



Photo 6: View of The Caton School's outdoor recreation space on Rugby Road facing northeast.



Supplemental Studies to the EAS

Photo 7: View of nearby one-and-two family residences on Rugby Road, facing northwest.



Photo 8: View of nearby residential building from the corner of Argyle Road and Caton Avenue facing East.



Supplemental Studies to the EAS

Photo 9: View of nearby multi-family walkup residences on Argyle Road facing north.



Photo 10 Close up view of Nursing Home from Rugby Road looking west



Photo 11 Close up View of the front of Caton Park Nursing Home



Photo 12: View of local businesses on Argyle Road facing west.

### 1.3 Purpose and Need

The actions necessary to facilitate the Proposed Development at the Proposed Development Site are: (1) a zoning map amendment to rezone the Proposed Project Area from an R3X zoning district to an R6A zoning district and (2) a zoning text map amendment to amend ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Brooklyn Community District 14.

### Rational for R6A zoning district at the Proposed Project Area

This application seeks to rezone the Proposed Project Area from an R3X zoning district to an R6A zoning district. R6A zoning districts are contextual residential districts where the Quality Housing bulk regulations are mandatory. These regulations produce high lot coverage, six- or seven-story apartment buildings set at or near the street line. The maximum FAR in an R6A district is 3.0, or 3.6 with inclusionary housing. Above a maximum base height of 60 feet, a 10 foot setback is required on a wide street and a15 foot setback is required on a narrow street, before rising to a maximum height of 85 feet. Off-street parking is required for 50% of all dwelling units, or can be waived if five or fewer spaces are required. The proposed rezoning would enlarge the already existing R6A zoning district that partially covers the Proposed Development Site. The proposed rezoning will allow the applicant to enlarge the already existing nursing home by enlarging the existing 5th floor. This proposal is consistent with the intentions of the 2009 Flatbush rezoning, discussed above, that rezoned a portion of the Proposed Development Site. Further, the Surrounding Area currently consists of residential and community facilities. The proposed rezoning would facilitate the enlargement of an existing building and not change the character of the neighborhood.

## Rationale for the ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas Text Map Amendment

The City's Census enumerated population has been growing steadily since the 1980 Census and is currently estimated at 8,405,837 for July 2013. This is the highest estimated or enumerated population in the City's history, and projections by the Department of City Planning and the New York Metropolitan Transportation Council ("NYMTC") predict continued growth in the City's population. NYMTC's draft project for 2050 forecasts a population of close to 9.2 million residents. Over the last 15 years the demands for housing, both in this community and throughout the City, have steadily increased. This has resulted in rising prices for for-sale residences and rising rents for rental housing. The shortage of affordable housing and housing in general has been highlighted by the current administration as an urgent issue that needs addressing. The administration has released *Housing New York, A Five-Borough, Ten-Year Housing Plan*, which calls for the production and preservation of 200,000 affordable housing units within a decade. Although there are currently no plans to demolish the nursing home, the proposed text map amendment to ZR Appendix F will provide for compliance with the MIH program if a residential building is ever built.

### 1.4 Required Approvals

The proposed zoning map amendment is a discretionary public action which is subject to the City Environmental Quality Review (CEQR) as an Unlisted Action. Through CEQR, agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment. The proposed zoning map and text amendments are also discretionary public actions which are subject to public comment under the Uniform Land Use Review Procedure (ULURP). The ULURP process was established to assure adequate opportunity for public review of proposed actions. ULURP dictates that every project be reviewed at four levels: the Community Board; the Borough President; the City Planning Commission; and, in some cases the City Council. The procedures mandate time limits for each stage to ensure a maximum review period of seven months.

### 1.5 Analysis Framework (Reasonable Worst Case Development Scenario)

### **Existing Conditions**

The Proposed Development Site is comprised of the R3X portion of 1312 Caton Avenue (Block 5074, Lot 4). The Proposed Development Site is an irregularly shaped lot that has approximately 148.27 square feet of frontage on Caton Avenue, approximately 166.28 square feet of frontage on Rugby Road, for a total lot area of approximately 18,644 square feet. The Proposed Development Site is currently improved with a five-story nursing home (built in1966) with approximately 6,622 square feet of floor area within the R6A portion of the Lot and 27,763 square feet of floor area within the R3X portion of the Lot.

Block 5074, Lot 14 has a lot area of 5,000 square feet and is improved with a Buddhist temple with approximately 4,005 square feet of floor area (0.8 FAR). Lot 14 is within the existing R3X zoning district. The proposed zoning district boundaries would extend onto Lot 14 by less than 10 feet over the northern boundary of Lot 14, which represents approximately 10-15 percent of the total lot area.

### **Future No-Action Scenario**

The No-Action Scenario is the same as existing conditions.

### **Future With-Action Scenario**

The With-Action scenario assumes that a residential building would be constructed at full FAR (3.6) and height (85 feet) on the Projected Development Site (Site 1- Applicant Site). It assumes that the existing Caton Park Nursing Home on Lot 4 would be demolished. It is assumed that the With-Action scenario residential apartment building, on an approximately 18,644 sf lot, the building would contain approximately 67,118 gross square feet of residential space. Assuming approximately 850 square feet per apartment, it is assumed that 78 residential units would be created on site with 202 people living in those 78 units (2.6 persons/HH in Brooklyn CD 14). Approximately 15 of those units would be available for persons at or below 80 percent AMI. It is assumed the building would have a height of 85 feet. It is assumed that the applicant would need to provide 27 parking spaces for the market rate units.

It is assumed that Lot 14 would be unaffected by the proposed rezoning as only a portion of the Lot is included in the rezoning area.

### Development Site Criteria:

- The uses and bulk allowed: Buildings built to substantially less than the maximum allowable FAR under the existing zoning are considered "soft" enough such that there would likely be sufficient incentive to develop in the future, depending on other factors specific to the area, listed below; and
- Size of the development site: Lots must be large enough to be considered "soft." Generally, lots with a small lot size are not considered likely to be redeveloped, even if currently built to substantially less than the maximum allowable FAR. A small lot is often defined for this purpose as 5,000 square feet or less, but the lot size criteria is dependent on neighborhood specific trends, and common development sizes in the study area should be examined prior to establishing this criteria.

If sites meet both of the criteria above, then the following factors are considered:

- The amount and type of recent as-of-right development in the area;
- Recent real estate trends in the area;
- Recent and expected future changes in residential population and employment in the study area;

- Government policies or plans, such as a building on site being identified for a landmark designation, that may affect the development potential of a site or sites;
- Site specific conditions that make development difficult; and
- Issues relating to site control or site assemblage that may affect redevelopment potential.

Once sites are considered as development sites, they are divided into two categories – projected development sites and potential development sites. Projected development sites are considered more likely to be developed within analysis period (build year 2021) because of their size (they are either large lots or contiguous small lots in common ownership that together comprise a large site). Potential development sites are less likely to be developed within the analysis period because they are not entirely under common ownership, have an irregular shape or have some combination of these features.

### **Projected Development Sites**

Based on these criteria, Block 5074, Lot 4 has been identified as the only projected development site.

Data for the lots located in the proposed rezoning area are shown in **Table 1**.

Table 1 Projected Development under the Proposed Rezoning

Site No.	Block	Lot	Lot Area	Existing Zoning	Existing FAR	Proposed Zoning	Projected Residential Floor Area (sf)	Projected Com Facility Floor Area (sf)	Projected Commercial Floor Area (sf)	Projected FAR	DUs	Parking Requirements	Height and Floor Count
1	5074	4	18,644	R3X, R6A	1.86	R6A	67,118	-	-	3.6	78	27	85 feet 5 floors
	Total												

### Block 5074, Lot 4 – Projected Development Site No. 1

The With-Action scenario assumes that a residential building would be constructed at full FAR (3.6) and height (85 feet) on the Projected Development Site (Site 1- Applicant Site). It assumes that the existing Caton Park Nursing Home on Lot 4 would be demolished. It is assumed that the With-Action scenario residential apartment building, on an approximately 18,644 sf lot, the building would contain approximately 67,118 gross square feet of residential space. Assuming approximately 850 square feet per apartment, it is assumed that 78 residential units would be created on site with 202 people living in those 78 units (2.6 persons/HH in Brooklyn CD 14). Approximately 15 of those units would be available for persons at or below 80 percent AMI. It is assumed the building would have a height of 85 feet.

Assuming ULURP, Environmental review, design and financing, and a construction phase of 18 months, a build year of 2021 is appropriate for the project.

### Sites Where Development Would Not Be Induced or Precluded by the Proposed Actions

### Block 5074, Lot 14

Block 5074, Lot 14 has a lot area of 5,000 square feet and is improved with a Buddhist temple with approximately 4,005 square feet of floor area (0.8 FAR). Lot 14 is within the existing R3X zoning district. The proposed zoning district boundaries would extend onto Lot 14 by less than 10 feet over the northern boundary of Lot 14, which represents approximately 10-15 percent of the total lot area. Therefore, Lot 14 is not considered a development site because less than 50 percent of the total lot area lies within the rezoning boundaries.

.

	EXISTING CONDITION			NO-ACTION CONDITION		WITH-ACTION CONDITION		INCREMENT
Land Use								
Residential	☐ Yes	✓ No		Yes	☑ No	✓ Yes	☐ No	)
If "yes," specify the following:								
						Mult	:i-Family	Multi-Family
Describe type of residential structures	ſ	N/A		N/A		Res	idential	Residential
No. of dwelling units	ſ	N/A		N/A			78	78
No. of low- to moderate-income units	ſ	N/A		N/A			15	15
Gross floor area (sq. ft.)	ſ	N/A		N/A		6	7,118	67,118
Commercial	☐ Yes	☑ No		Yes	☑ No	☐ Yes	✓ No	
If "yes," specify the following:								
Describe type (retail, office, other)	ſ	N/A		N/A			N/A	
Gross floor area (sq. ft.)	Ī	N/A		N/A			N/A	
Manufacturing/Industrial	1	N/A		N/A			N/A	
If "yes," specify the following:								
Type of Use	ſ	N/A	Т	N/A			N/A	
Gross floor area (sq. ft.)		/ N/A		N/A			N/A	1
Open storage area (sq. ft.)		/ N/A		N/A			 N/A	1
If any enclosed activities, specify:	1	N/A		N/A			N/A	
Community Facility	✓ Yes	-	0 🔽		N	o 🗌 Yes	<u>√</u> N	
If "yes," specify the following:								
Type of Use	Nursii	ng Home		Nursing H	lome		N/A	(Nursing Home)
Gross floor area (sq. ft.)		41,17			41,176		N/A	-41,176
Vacant Land	Yes	✓ N	$\overline{}$	Yes		o 📗 Yes		
If "yes", describe:	1	N/A		N/A			N/A	1
Publicly Accessible Open Space	☐ Yes	✓ N	0 🗌	Yes	✓ N	lo 🗌 Yes	✓ N	10
If "yes," specify type (mapped City, State, or								
Federal Parkland, wetland-mapped or	ı	N/A		N/A			N/A	
otherwise known, other):								
Other Land Uses	☐ Yes	✓ N	0 🗆	Yes	✓ N	Yes	✓ N	•
If "yes," describe:	1	N/A		N/A			N/A	
Parking								
Garages	☐ Yes	✓ N	0 🗆	Yes	✓ N	o 🗹 Yes	□ N	Φ
If "yes," specify the following:								
No. of public spaces	ſ	N/A		N/A			0	
No. of accessory spaces	ſ	N/A		N/A			27	27
Operating hours	ſ	N/A		N/A		FOR R	ESIDENTS	
Attended or non-attended	ſ	N/A	$\perp$	N/A			TBD	
Lots	✓ Yes	N	0 🗹	Yes	N	Yes 🗌	✓ N	9
If "yes," specify the following:								
No. of public spaces		0		0			N/A	
No. of accessory spaces	<b>+</b>	20		20			N/A	-20
Operating hours		NA	$\perp$	NA			N/A	
Other (includes street parking)	☐ Yes		0 🗆	Yes	✓ N	Yes 🗌	✓ N	Φ
If "yes," describe:	1	N/A		N/A			N/A	

	EXISTING	NO-ACTION	WITH-ACTION	INCREMENT					
	CONDITION	CONDITION	CONDITION						
Population									
Residents			o ☑ Yes ☐ No						
If "yes," specify number:	119	119	202	83					
Briefly explain how the number of residents	119 bed nursing ho	2.6 persons/HH in							
was calculated:	Brooklyn CD 14	1		<b>1</b>					
Businesses	☐ Yes ☑ No	☐ Yes ☑ No	Yes 🗸 No						
If "yes," specify the following:									
No. and type									
No. and type of workers by business									
No. and type of non-residents who are not									
workers									
Briefly explain how the number of businesses	No businesses (com	No businesses (commercial, retail, office) on site in existing or projected							
was calculated:	conditions.								
Other (students, visitors, concert-goers, etc.)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ✓ No	)					
If any, specify type and number:	N/A	N/A	N/A						
Briefly explain how the number was calculated:									
Zoning	Table Box	Table Box	1	1/- 2/4					
Zoning classification	R3X, R6A	R3X, R6A	R6A	(R3X)					
	R3X portion-	R3X portion-							
Maximum amount of floor area that can be	14,977 R6A	14,977 R6A							
developed	portion- 11,001	portion- 11,001	67,118	41,120					
Predominant land use and zoning	overlay, PARK- Community Facility and Institution, Opens Space, Mixed Residential and Commercial, Residential, (one	and Institution, Opens Space, Mixed Residential and Commercial, Residential, (one	and Commercial, Residential, (one						
classifications within land use study area(s) or	and two family,	and two family,	and two family,						
a 400 ft. radius of proposed project	and multi-family)	and multi-family)	and multi-family)						
Attach any additional information that may be r  If your project involves changes that affect one appropriate to include total development proje	or more sites not as	ssociated with a spe	·	= :					

\*RWCDS Scenario is analyzed here

development scenarios for each site.

### 2.0 ENVIRONMENTAL REVIEW

The following technical sections are provided as supplemental assessments to the Environmental Assessment Statement ("EAS") Short Form Part II: Technical Analyses of the EAS forms a series of technical thresholds for each analysis area in the respective chapter of the *CEQR Technical Manual*. If the proposed project was demonstrated not to meet or exceed the threshold, the 'NO' box in that section was checked; thus additional analyses were not needed. If the proposed project was expected to meet or exceed the threshold, or if this was not able to be determined, the 'YES' box was checked on the EAS Short Form, resulting in a preliminary analysis to determine whether further analyses were needed. For those technical sections, the relevant chapter of the *CEQR Technical Manual* was consulted for guidance on providing additional analyses (and supporting information, if needed) to determine whether detailed analysis was needed.

A 'YES' answer was provided in the following technical analyses areas on the EAS Short Form:

- Land Use, Zoning and Public Policy
- Shadows
- Historic and Cultural Resources
- Urban Design and Visual Resources
- Natural Resources
- Hazardous Materials
- Air Quality
- Noise
- Neighborhood Character
- Construction

In addition, although the proposed actions did not require a 'YES' answer on the EAS Short Form, a preliminary assessment of neighborhood character was included to provide additional background information.

In the following technical sections, where a preliminary or more detailed assessment was necessary, the discussion is divided into Existing Conditions, the Future No-Action Conditions (the Future Without the Proposed Actions), and the Future With-Action Conditions (the Future With the Proposed Actions).

### 2.1 LAND USE, ZONING AND PUBLIC POLICY

The CEQR Technical Manual recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the surrounding area. Land use, zoning and public policy are described in detail below.

### 2.1.1 Land Use

The CEQR Technical Manual defines land use as the activity that is occurring on the land and within the structures that occupy it. Types of land use can include single- and multi-family residential, commercial (retail and office), community facility/institutional and industrial/manufacturing uses, as well as vacant land and public parks (open recreational space). The 2014 CEQR Technical Manual recommends that a proposed action be assessed in relation to land use, zoning, and public policy. For each of these areas, a determination is made of the potential for significant impact by the proposed action. If the action does have a potentially significant impact, appropriate analytical steps are taken to evaluate the nature of the impact, possible alternatives and possible mitigation.

### **Existing Conditions**

The CEQR Technical Manual recommends a land use; zoning and public policy study area extending 400 feet from the site of a proposed action. In this case, the study area is generally bound by Prospect Park Parade

Ground to the north, Westminster Road to the east, the midblock point between Marlborough Road and Buckingham Road to the west, and Church Avenue to the south (**Figure 1.2-1**).

A field survey was undertaken to determine the existing land use patterns and neighborhood characteristics of the study area. Land use in the area immediately surrounding the project area is a mix of single- and multi-family residential buildings, mixed residential and commercial buildings, and public facilities and institutions. The prevailing built form of the area is a mix of one and two family homes and four-story multi-family walk-up residential buildings. The Prospect Park Parade ground is across Caton Avenue and an elementary school

The proposed rezoning area consists of Block 5074, Lot 4 and p/o Lot 14(see **Figure 1.2-1**). The properties within the proposed rezoning area are used as follows: Block 5074, Lot 4 contains a five-story nursing home; Lot 14 contains a one-story Buddhist Temple.

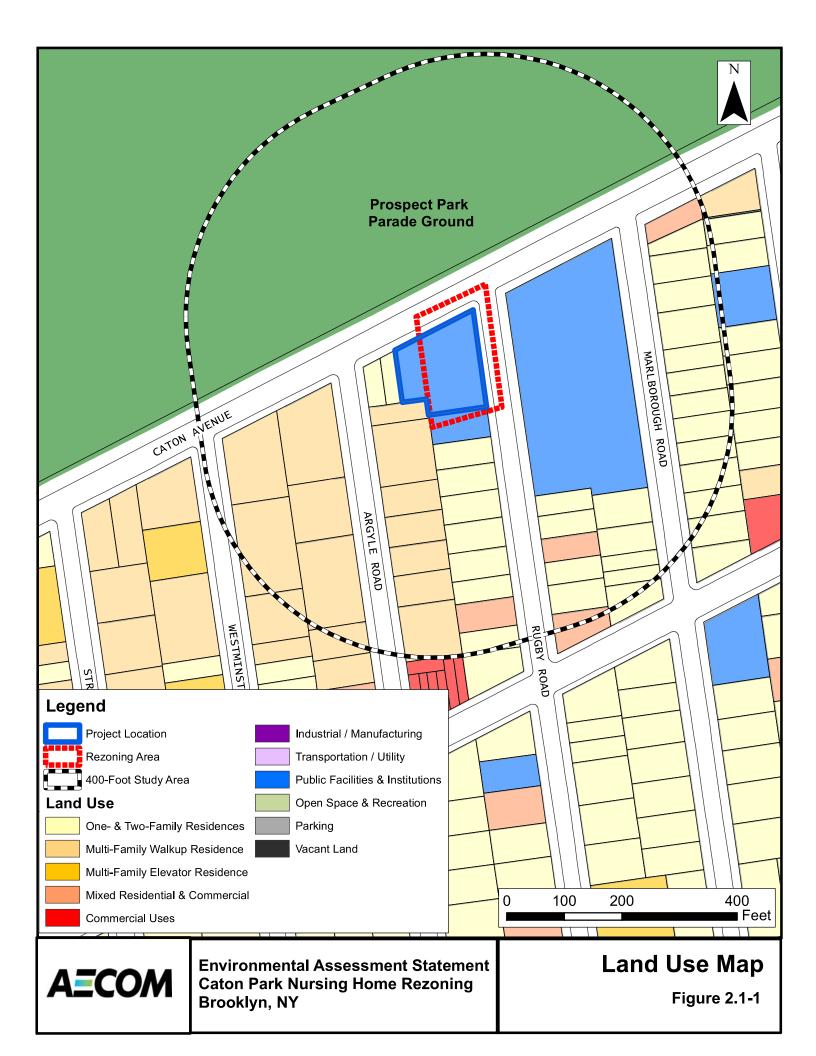
The surrounding area consists of a mix of residential, commercial and community facility uses. To the north of the facility, across the street, is the Parade Ground, a roughly 40 acre park with a sprawling area for recreational and sports activities. Directly to the west and southwest of the proposed project area are residential buildings. Directly to the south is a Buddhist temple, which operates inside a single-family detached home, in addition to other single-family detached homes. To the east, across the street, is Public School 249, an elementary school with an enrollment of 877 students. In regards to the area's built character, the surrounding area can be characterized as a mix of single-family detached homes with Victorian-style character and four- to five-story multi-family residences (walk-ups).

Church Avenue, located one block to the south, is a local retail corridor served by the Church Avenue Business Improvement District (BID). The area is well-served by public transit. There are bus routes on Caton Avenue (B16) and Church Avenue (B35). The Church Avenue subway station of the "B" and "Q" lines is located a few blocks from the project area. Caton Avenue is also a local truck route.

Along both sides of Rugby Road to the south of the proposed rezoning area, are one and two family detached homes. Along both sides of Argyle Road, to the west of the proposed rezoning area, are and four-story multi-family residential buildings.

No large-scale retail uses are located in the project area or its immediate vicinity.

In addition to the proposed development site, two public facilities and institutions are located in the vicinity of the study area. The Caton School, aka P.S. 249, is located at 18 Marlborough Road (Block 5075, Lot 1) and includes a large surface track. The Watt Samakki Buddhist Temple is located at 26 Rugby Road (Block5074, Lot 14).



There are no vacant lots in the study area.

The mix of land use observed in the study area generally reflects the distribution of land use observed throughout Brooklyn CD 14, which is summarized in **Table 2.1-1**. The most prominent land use within Brooklyn CD 14 is one- to two- family residential, followed by multi-family residential, and transportation/utility uses.

Table 2.1-1 2014 Land Use Distribution - Brooklyn Community District 14

LAND USE	PERCENT OF TOTAL					
Residential Uses						
1-2 Family	48.2					
Multi-Family	24.5					
Mixed Residential/Commercial	5.1					
Subtotal of Residential Uses	77.8					
Non-Residential Uses						
Commercial/Office	5.3					
Industrial	0.4					
Transportation/Utility	2.5					
Institutions	8.6					
Open Space/Recreation	3.7					
Parking Facilities	1.1					
Vacant Land	0.8					
Miscellaneous	0.1					
Subtotal of Non-Residential Uses	22.5					
TOTAL	100.3					

Source: Community District Profiles, New York City Department of City Planning.

Note: Percentages may not add up to 100.0 percent due to rounding.

### Future No-Action Scenario

The proposed development sites are located in a densely developed neighborhood and no vacant lots were observed within 400 feet of the proposed rezoning area, and all lots located in the proposed rezoning area are improved. Therefore, as there are no known development plans on any of these parcels, it is assumed that future no-action conditions would remain consistent with existing conditions.

Under the Future No-Action scenario, Block 5074, Lot 4 would remain improved with a five-story, approximately 41,176 gross square foot nursing home.

### Future With-Action Scenario

Under the Future With-Action scenario, the proposed rezoning would amend the zoning map to change the existing R6A and R3X district to an R6A district to facilitate the Applicant's proposed development of an approximately 4,830 gsf addition to the fifth floor of the existing nursing home.

However, in the interest of a conservative analysis, The With-Action scenario assumes that a residential building would be constructed at full FAR (3.6) and height (85 feet) on the Projected Development Site (Site 1- Applicant Site). It assumes that the existing Caton Park Nursing Home on Lot 4 would be demolished.

It is assumed that the With-Action scenario residential apartment building, on an approximately 18,644 sf lot, the building would contain approximately 67,118 gross square feet of residential space.

Assuming approximately 850 square feet per apartment, it is assumed that 78 residential units would be created on site with 202 people living in those 78 units (2.6 persons/HH in Brooklyn CD 14).

Approximately 15 of those units would be available for persons at or below 80 percent AMI. The With-Action land use would be compatible with the surrounding medium density apartment buildings to the west, which are approximately 4-5 floors in height and 40-50 feet tall. With this compatibility, no significant adverse impacts related to land use are expected and no further analysis is required.

### 2.1.2 Zoning

The New York City Zoning Resolution dictates the use, density and bulk of developments within New York City. Additionally, the Zoning Resolution provides required and permitted accessory parking regulations. The City has three basic zoning district classifications — residential (R), commercial (C), and manufacturing (M). These classifications are further divided into low-, medium-, and high-density districts.

### **Existing Conditions**

Zoning designations within and around the study area are depicted in **Figure 2.1-2**, while **Table 2.1-2a** summarizes use, floor area and parking requirements for the zoning districts in the study area.

The proposed development site is located in both an R6A zoning district and an R3X zoning district. The R6A district is generally mapped along Caton Avenue to the north, Stratford Road to the west, Church Avenue to the south, and the midblock point between Argyle Road and Rugby Road to the east. Residential uses (UGs 1 and 2) as well as community facility uses (UGs 3 and 4) are allowed as-of-right in R6A zoning districts. The built floor area ratio (FAR) for R6A districts is 3.0 (with 3.6 under the Mandatory Inclusionary Housing Act) for residential and community facility uses. Building heights within R6A districts are 85 feet and parking is required for 50 percent of all dwelling units (waived if 5 or fewer spaces are required).

The eastern portion of the proposed rezoning area lies within in R3X zoning district. The R3X district is generally mapped along Caton Avenue to the north, the mid-block point between Buckingham Road and XX Road to the east, and the mid-block point between Argyle Road and Rugby Road to the west. Residential uses (UGs 1 and 2) as well as community facility uses (UGs 3 and 4) are allowed as-of-right in R3X zoning districts. The built floor area ratio (FAR) for R3X districts can reach a maximum of 0.5 with a 0.6 attic allowance and 1.0 for a community facility. Building heights limits within R3X districts are 35 feet and one parking space is per dwelling unit is required.

### Flatbush Rezoning

On July 29th, 2009, the City Council approved the Flatbush Rezoning (C 090336zmk) which included the proposed project area.

The New York City Department of City Planning (DCP), at the request of Community Board 14, elected officials and civic groups, proposed zoning map changes and zoning text amendments for one hundred and eighty blocks located in the Flatbush neighborhood of Community District 14, Brooklyn. The project area, which includes the rezoning area and the area of a proposed zoning text amendment, is bounded by; Caton Avenue, Parkside Avenue and Clarkson Avenue on the north, Bedford Avenue and the Community District 14 boundary to the east, Campus Road and the Long Island Railroad's Bay Ridge freight line on the south, and Coney Island Avenue on the west. The proposed zoning primarily matched new zoning to the existing built character which includes areas of detached homes, row houses and apartment buildings.

Currently, existing zoning does not reflect the built character of lower-density detached and apartment building areas. Under the current R6 zoning, development of tall apartment buildings without height limitation is permitted and has resulted in demolition of existing detached, one- and two-family homes.

The new zoning also provided incentives for affordable housing development in the area in addition to strengthening commercial corridors.

As part of these actions, the zoning district of the proposed project area was changed from R3-1 to R3X.

The study area is also located within an area designated for the FRESH Program (zoning discretionary tax incentives area).

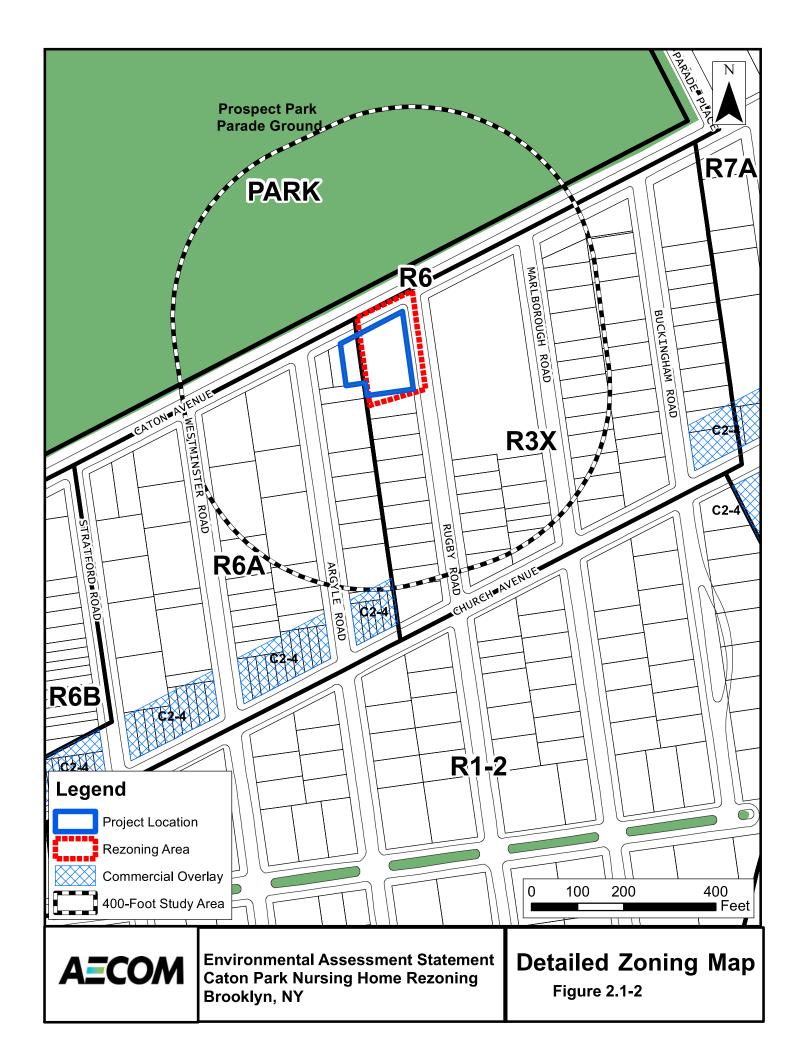
Table 2.1-2a Summary of Existing Zoning Regulations

Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
R3X	Residential UGs 1 - 4	0.5 FAR for Residential (0.6 with attic allowance) 1.0 FAR for Community Facility	1 per dwelling unit
R6A	Residential UGs 1 - 4	3.0 FAR for Residential (3.6 under MIH) 3.0 FAR for Community Facility	50% of dwelling units. Waived if 5 or fewer spaces required

Source: New York City Zoning Resolution, October 2016.

#### Future No-Action Scenario

In the Future No-Action Scenario, zoning changes are not expected to occur on the project site or in the surrounding study area. No expansion or new construction would occur within the project area. The project site would remain within both R6A and R3X districts.



### Future With-Action Scenario

Supplemental Studies to the EAS

This application seeks to rezone the Proposed Project Area from an R3X zoning district to an R6A zoning district. R6A zoning districts are contextual residential districts where the Quality Housing bulk regulations are mandatory. These regulations produce high lot coverage, six- or seven-story apartment buildings set at or near the street line. The maximum FAR in an R6A district is 3.0, or 3.6 with inclusionary housing. Above a maximum base height of 60 feet, a 10 foot setback is required on a wide street and a 15 foot setback is required on a narrow street, before rising to a maximum height of 85 feet.

The proposed rezoning will facilitate an enlargement of the Caton Park Nursing Home, a 119 - bed nursing and rehabilitation center. The proposed enlargement would add approximately 4,830 square feet of floor area to the existing fifth floor. This new space would function as new space for programmatic use such as recreational and physical therapy for the residents. Specifically, the enlargement would create a new recreation room, a new physical therapy/occupational therapy room, new offices, new solarium, and new storage rooms. The number of beds would remain unchanged. The R6A portion of the lot permits a community facility FAR of 3.0 for a total permitted floor area of 11,001 square feet. The R3X portion of the lot permits a maximum community facility FAR of 1.0. Together between the R3X and R6A portions of the lot, the total permitted floor area for the nursing home is 18,489.5 square feet which is less than the currently built 34,385 square feet. The proposed expansion of the R6A zoning district would permit a 3.0FAR. The proposed 5<sup>th</sup> floor enlargement would increase the floor area of the building to 39,215 square feet (2.1 FAR).

However, as previously indicated, in the interest of a conservative analysis, The With-Action scenario assumes that a residential building would be constructed at full FAR (3.6) and height (85 feet) on the Projected Development Site (Site 1- Applicant Site). It assumes that the existing Caton Park Nursing Home on Lot 4 would be demolished. It is assumed that the With-Action scenario residential apartment building, on an approximately 18,644 sf lot, the building would contain approximately 67,118 gross square feet of residential space. Assuming approximately 850 square feet per apartment, it is assumed that 78 residential units would be created on site with 202 people living in those 78 units (2.6 persons/HH in Brooklyn CD 14). Approximately 15 of those units would be available for persons at or below 80 percent AMI.

In a Future With-Action Scenario, Lot 4 would be improved with an approximately seven floor, 85 foot UG 2 residential apartment building with approximately 67,118 gross square feet of floor area and 78 units built to an FAR of 3.6.

The existing structure on Lot 4 is five stories and approximately has 41,176 gsf of nursing home floor area. The With-Action Scenario would result in a building approximately 25,000 gsf larger and two stories higher.

The surrounding area is comprised generally of residential and community facility and institutional uses. including a public elementary school (P.S. 249) across the street of the project site which has a gross floor area of 138,240 sf. Additionally, a number of the apartment buildings in the immediate area of the project site are four to five stories in height. Furthermore, approximately 500 feet to the east of the project site along Caton Avenue, are a number of apartment buildings with similar bulk as the full build-out scenario in the With-Action scenario. Therefore, the proposed actions not have a significant impact on the extent of conformity within the current surrounding area and it would not adversely affect the viability of conforming uses on nearby properties. Therefore, significant impacts to zoning are not anticipated and further zoning analysis is not warranted.

**Table 2.1-2b** summarizes the Future With-Action zoning regulations.

Table 2.1-2b Summary of Future With-Action Zoning Regulations

Zoning	Type and Use	Floor Area Ratio	Parking
District	Group (UG)	(FAR)	(Required Spaces)
R6A	Residential UGs 1 - 4	3.0 FAR for Residential (3.6 under MIH) 3.0 FAR for Community Facility	50% of dwelling units. Waived if 5 or fewer spaces required

Source: New York City Zoning Resolution, October 2016.

# 2.1.3 Public Policy

The project site is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The proposed action is also not a large publically sponsored project, and as such, consistency with the City's *PlaNYC 2030* for sustainability is not warranted. In addition, the rezoning area is not located in the Coastal Management Zone; therefore a consistency review is not

# Waterfront Revitalization Program

The rezoning area is not located within New York City's designated coastal zone boundary and therefore is not subject to review for its consistency with the City's Waterfront Revitalization Program.

### 2.2 COMMUNITY FACILITIES

The CEQR Technical Manual defines community facilities and services as public or publicly funded schools, hospitals, libraries day care centers, and police and fire services. A community facility analysis examines a proposed actions potential effect on the provision of services by those community facilities. Direct effects occur when a particular action physically alters or displaces a community facility; indirect effects result from increased in population, which creates additional demand on service delivery.

The applicant is proposing an enlargement to the existing facility. The proposed enlargement would add approximately 4,830 square feet of floor area to the existing fifth floor. This new space would function as new space for programmatic use such as recreational and physical therapy for the residents. Specifically, the enlargement would create a new recreation room, a new physical therapy/occupational therapy room, new offices, new solarium, and new storage rooms. The number of beds would remain unchanged.

For purposes of a conservative assessment, the analysis assumes that the applicant would construct a UG2 residential apartment building on the project site. While this action would potentially displace the nursing home, the nursing home is a private enterprise and is not publicly funded. Therefore, a community facilities analysis is not warranted and no impacts are expected with regards to community facilities.

#### 2.3 SHADOWS

The CEQR Technical Manual defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space or feature. An incremental shadow is the additional or new shadow that a building or other built structure resulting from a proposed project would cast on a sunlight-sensitive resource during the year. Sunlight-sensitive resources are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use and important landscaping and vegetation. In general, increases in shadow coverage make parks feel darker and colder, affecting the experience of park

patrons. Shadows can also have impacts on historic resources whose features are sunlight-sensitive, such as stained-glass windows, by obscuring the features or details which make the resources significant.

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

## 2.3.1 Preliminary Shadow Screening Assessment

The shadow assessment begins with a preliminary screening assessment to ascertain whether a project's shadow may reach any sunlight-sensitive resources at any time of the year. If the screening assessment does not eliminate this possibility, a detailed shadow analysis is generally warranted in order to determine the extent and duration of the net incremental shadow resulting from the project.

#### Tier 1 Screening Assessment

The first step in the preliminary shadow screening is a Tier 1 Screening Assessment. A base map is developed that illustrates the proposed site location in relationship to any sunlight-sensitive resources (**Figure 2.3-1**).

The longest shadow study area is then determined, which encompasses the site of the proposed project and a perimeter around the site's boundary with a radius equal to the longest shadow that could be cast by the proposed structure, which is 4.3 times the height of the structure that occurs on December 21<sup>st</sup>, the winter solstice. To find the longest shadow length, the maximum height of the structure (including any rooftop mechanical equipment) was multiplied by the factor of 4.3.

A shadow radius of 4.3 times the maximum allowable height on the projected development sites (85 feet) was calculated, resulting in a shadow radius of approximately 365 feet.

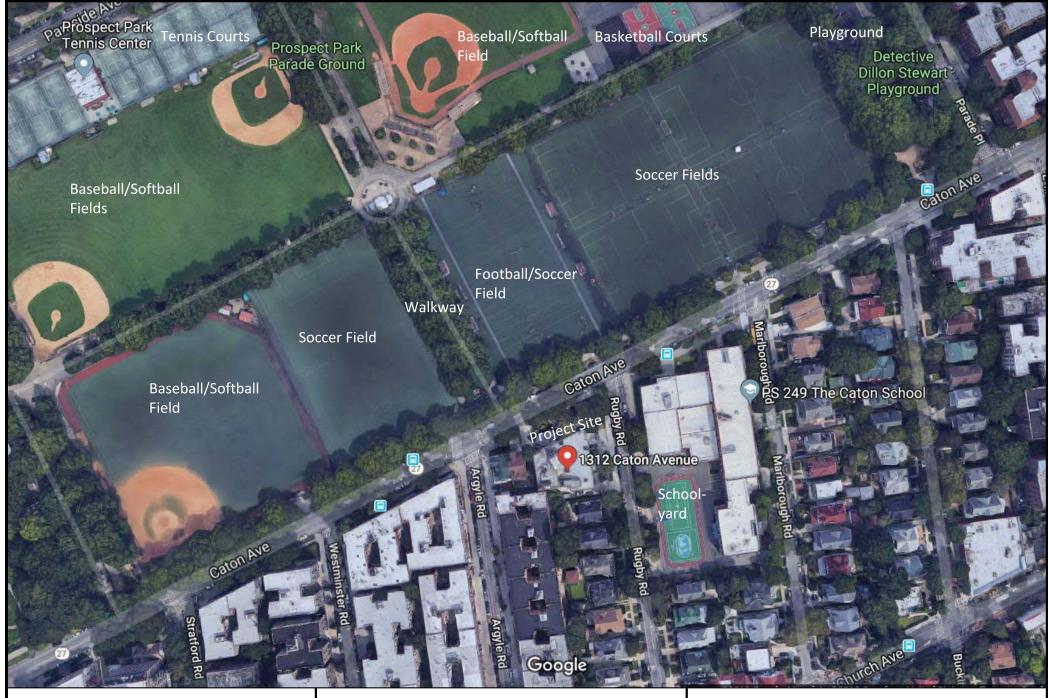
The Prospect Park Parade Ground is located just to the north of the project site across Caton Avenue. Additionally, the schoolyard at P.S. 249 is also located adjacent to the project site, just to the east of the project sit across Rugby Road. As both of these are considered to be sunlight sensitive resources, further analysis will be performed to determine whether shadows will potentially adversely impact this park

## Tier 2 Screening Assessment

The CEQR Technical Manual states that if any portion of a sunlight-sensitive resource lies within the longest shadow study area, a Tier 2 screening assessment should be performed. Because of the path the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. For a Tier 2 screening assessment, sunlight-sensitive resources within the triangular area cannot be shaded by new development sites, and are screened out. The complementing portion to the north within the longest shadow study area is the area that can be shaded by the proposed project.

As shown in **Figure 2.3-2**, the Tier 2 screening assessment showed that both the Prospect Park Parade and the schoolyard at P.S. 249 open space resources are located within the area that can be shaded by any of the potential shadows from project-generated development from the proposed rezoning. Therefore further analysis is required for both the Prospect Park Parade ground and the P.S. 249 playground to access the extent of the impact on shadows on this resource.

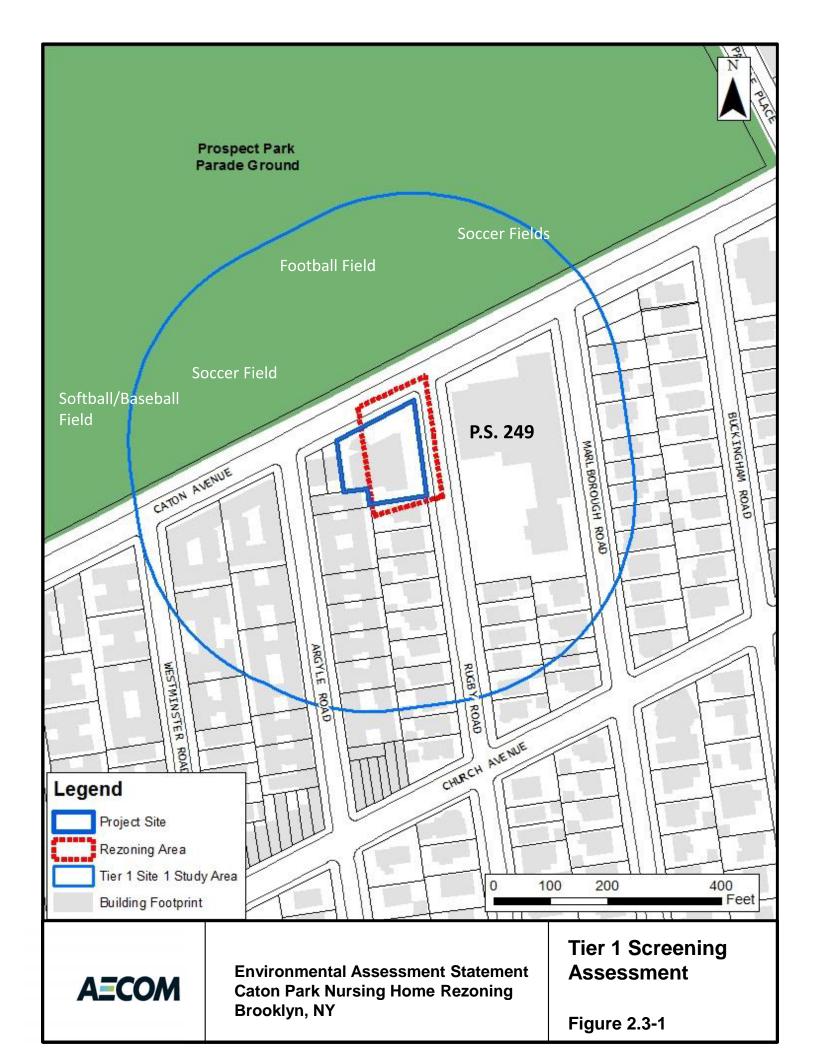
**Figure 2.3** is an aerial view of the Prospect Park Parade Ground and the PS 249 schoolyard, highlighting each resource's features.

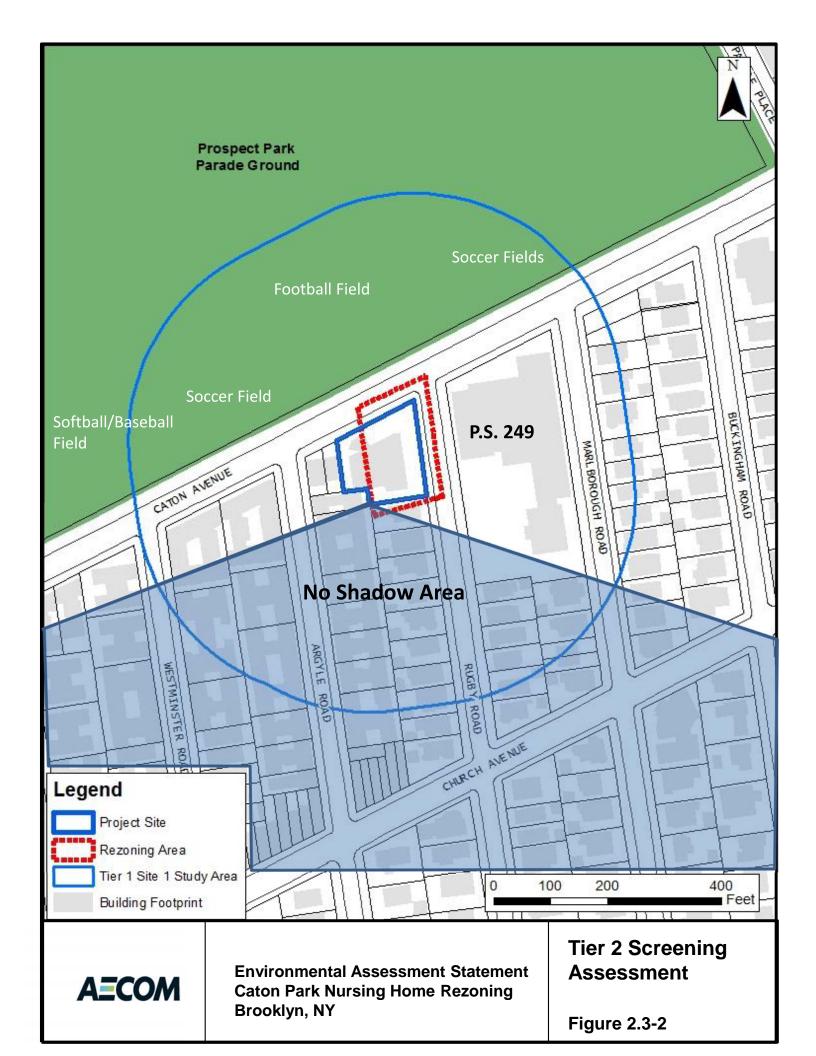


**Environmental Assessment Statement Caton Park Nursing Home Rezoning** Brooklyn, NY

**Open Space Resources** 

Figure 2.3





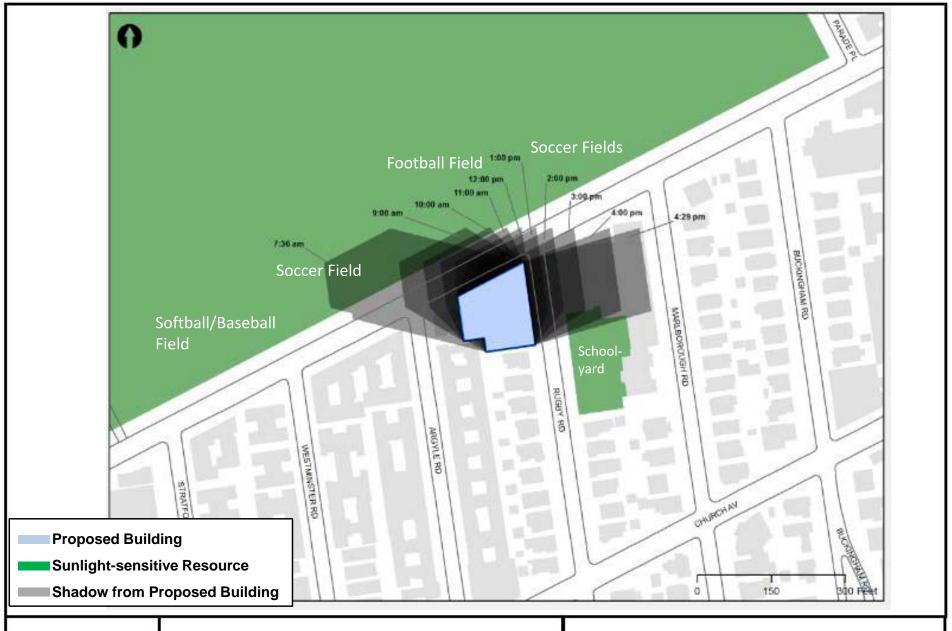
## Tier 3 Screening Assessment

Based on the results of the Tier 2 screening assessment, a Tier 3 screening assessment should be performed if any portion of a sunlight-sensitive resource is within the area that could be shaded by the proposed project. Because the sun rises in the east and travels across the southern part of the sky to set in the west, a project's earliest shadows would be cast almost directly westward. Throughout the day, shadows shift clockwise (moving northwest, then north, then northeast) until sunset, when they would fall east. Therefore, a project's earliest shadow on a sunlight-sensitive resource would occur in a similar pattern, depending on the location of the resource in relation to the project site.

The CEQR Technical Manual states that for the New York City area, the months of interest for an open space resource encompass the growing season (March through October) and one month between November and February (usually December) representing a cold-weather month. Assessments of the incremental shadows cast during four representative dates were made in accordance with the CEQR Technical Manual to encompass a cold-weather month and months during the growing season. The four representative dates of the Tier 3 screening assessment are:

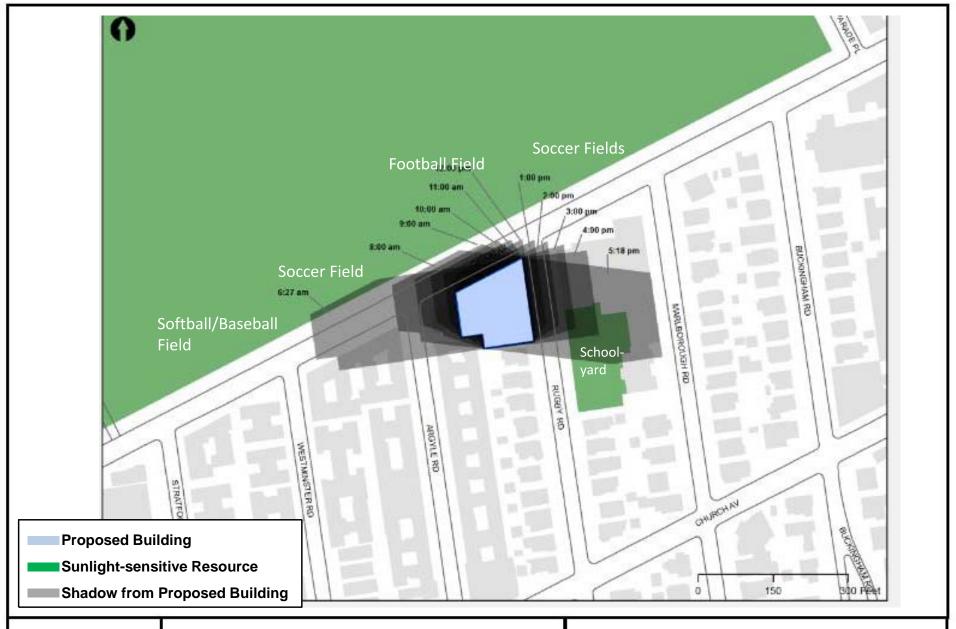
December 21<sup>st</sup> March 21<sup>st</sup> May 6<sup>th</sup> June 21<sup>st</sup>

As shown in **Figure 2.3-6** through **Figure 2.3-6**, the Tier 3 screening assessment showed that project generated shadows have the potential to reach The Prospect Park Parade and the PS 249 playground on all four representative analysis days, and a detailed shadow analysis is warranted for December 21<sup>st</sup>, March 21<sup>st</sup>, May 6<sup>th</sup>, and June 21<sup>st</sup>. Based on the Tier 3 screening, detailed shadow study was performed for this resource for the four representative analysis dates.





Tier 3 Shadow Analysis
March 21st
Figure 2.3-3





Tier 3 Shadow Analysis
May 6th





Tier 3 Shadow Analysis
June 21st

**Figure 2.3-5** 





Tier 3 Shadow Analysis
December 21st
Figure 2.3-6

# 2.3.2 Detailed Shadow Analysis

The CEQR Technical Manual states that a detailed shadow analysis is warranted when the screening analyses does not rule out the possibility that project-generated shadows would reach any sunlight sensitive resources. The purpose of the detailed analysis is to determine the extent and duration of new incremental shadows that fall on a sunlight-sensitive resource as a result of the proposed project. As previously discussed, The Prospect Park parade Ground and the schoolyard at P.S. 249 warrants a detailed shadows assessment based on the tier screening assessment. The results of the detailed shadow analyses on the identified resources of concern are summarized in **Table 2.3-1**.

Table 2.3-1 Detailed Shadow Analysis Summary

Analysis Date	December 21	March 21	May 6	June 21				
Analysis Period	5:57a.m2:53p.m.	7:36a.m4:29p.m.	6:27a.m5:18p.m.	5:57a.m6:01p.m.				
Prospect Park Parade Ground								
Shadows Enter/Exit Time	8:51am-2:53pm	7:36am-10:40am	6:27am-7:00am	N/A				
Shadow Duration	6 hours & 2 mins	3 hours & 4 mins	33mins	N/A				
P.S. 249 Playground								
Shadows Enter/Exit Time	NA	2:20pm-4:29pm	2:33pm-5:18pm	3:00pm-6:01pm				
Shadow Duration	NA	2 hours & 9 mins	2 hours & 45 mins	3 hours & 1 mins				

Note: Daylight Saving Time not used/applied (Per CEQR)

## Prospect Park Parade Ground

The Prospect Park Parade ground is due north of the project site, running along Caton Avenue. The Parade Ground is a 40 acre park, part of the larger Prospect Park and contains ball fields, a track, soccer fields, tennis courts, and various other active and passive open spaces.

At no time does this shadow impact the functioning of the park. In addition to shadows that are already being cast on the park in a similar area in which the proposed project would cast a shadow, the new incremental shadow from the proposed action would only result in a very tiny portion (less than .25 acres) of additional shadow coverage. The largest shadows would be cast in December, when the active and passive spaces are least likely to be used and during the warmer months of May and June, either no shadows or a very small amount of shadowing would occur in the With-Action Scenario.

Additionally, the shadow would be cast on a soccer field adjacent to the project site, which is unlikely to affect the use of the soccer field.

The entering and exiting shadows for Prospect Park Parade ground are shown on the Tier 3 screening assessment figures (see **Figure 2.3-3** through **Figure 2.3-6**). The following is an assessment of project-generated shadows on Prospect Park Parade Ground for each of the representative analysis dates:

- On December 21st, the project-generated shadow from the projected development site would enter The Prospect Park Parade ground at 8:51 a.m. and remain on a small portion of the resource through the end of the analysis period at 2:53 p.m., for a total duration of approximately six hours and 2 minutes. The shadow cast on The Prospect Park Parade at 8:51 AM represents the maximum extent of the project generated shadow on the resource. After this point, the shadow recedes off The Prospect Park Parade as shown in **Figures 2.3-7** and **2.3-8**.

- On March 21st, the project-generated shadow from the projected development site would enter Prospect Park Parade Ground at 7:36 a.m., the beginning of the analysis period and exits the resource at 10:40 a.m., for a total duration of approximately three hours and 4 minutes. The shadow cast on The Prospect Park Parade at the beginning of the analysis period represents the maximum extent of the project-generated shadow on the resource, as shown in **Figures 2.3-9** and **2.3-10**.
- On May 6th, the project-generated shadow from the projected development site would enter Prospect Park Parade Ground at 6:27 a.m. and remain on the resource until 7:00am with a total duration of approximately 33minutes. The shadow cast on The Prospect Park Parade at 6:27am represents the maximum extent of the project-generated shadow on the resource. After this point, the shadow recedes off The Prospect Park Parade and ultimately exits the resource at 7:00 a.m., as shown in **Figures 2.3-13** and **2.3-14**.
- On June 21st, the project-generated shadow from the projected development site would not enter the Prospect Park Parade Ground.

### P.S 249 Playground

The PS. 249 Playground is due east of the project site, on Rugby Road between Caton Avenue and Church Avenue. The playground has a track, and some additional outdoor space which is used by children of the school during gym, recess, and after school. The space is open to the public during non-school hours, weekends, and holidays.

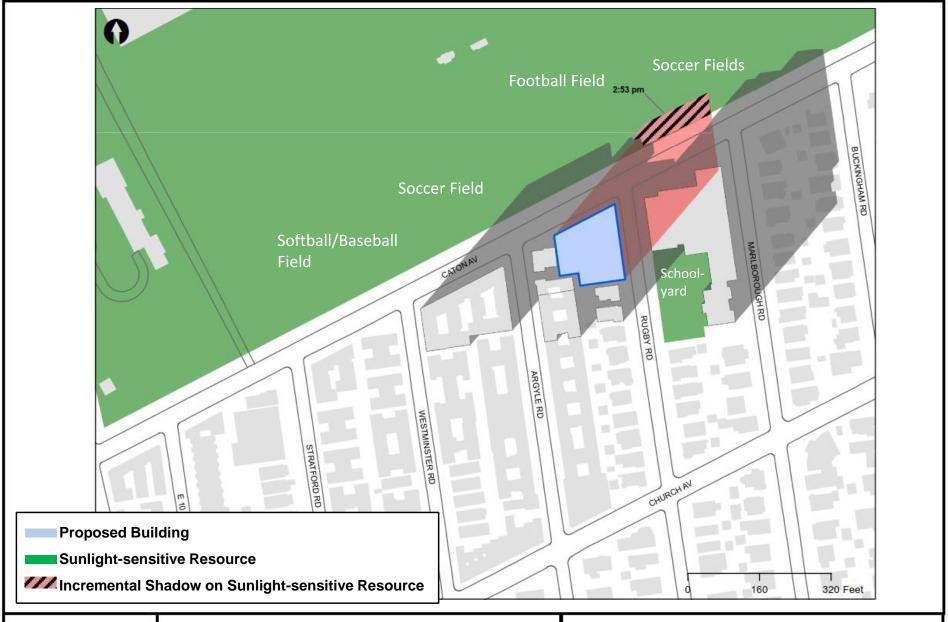
Overall, the playground is not significantly affected by the incremental shadow from the projected development. Entering and exiting shadows for the PS 249 Playground are shown on the Tier 3 screening assessment figures (see **Figure 2.3-3** through **Figure 2.3-6**). The following is an assessment of project-generated shadows on for the PS 249 playground for each of the representative analysis dates:

- On December 21st, the project-generated shadow from the projected development site would not enter the PS 249 Playground.
- On March 21st, the project-generated shadow would the PS 249 Playground at 2:20 p.m., the beginning of the analysis period and exits the resource at 4:29 p.m. the end of the analysis period, for a total duration of approximately two hours and 9 minutes. The shadow cast on the PS 249 Playground 4:29 pm during the analysis period represents the maximum extent of the project-generated shadow on the resource, as shown in **Figures 2.3-11** to **2.4-12**.
- On May 6th, the project-generated shadow would enter the PS 249 Playground at 2:33 p.m. and remain on the resource through the end of the analysis period at 5:18 with a total duration of approximately two hours and 45 minutes. The shadow cast on the PS 249 Playground at 5:18 represents the maximum extent of the project-generated shadow on the resource as shown in **Figures 2.3-15** to **2.3-16**.
- On June 21st, the project-generated shadow would enter the PS 249 Playground at 3:00 p.m. and remain through the end of the analysis period at 6:01 p.m., for a total duration of approximately three hours and 1 minute. The shadow cast on the PS 249 Playground at the end of the analysis period represents the maximum extent of the project-generated shadow on the resource, as shown in **Figures 2.4-17** and **2.4-17**.





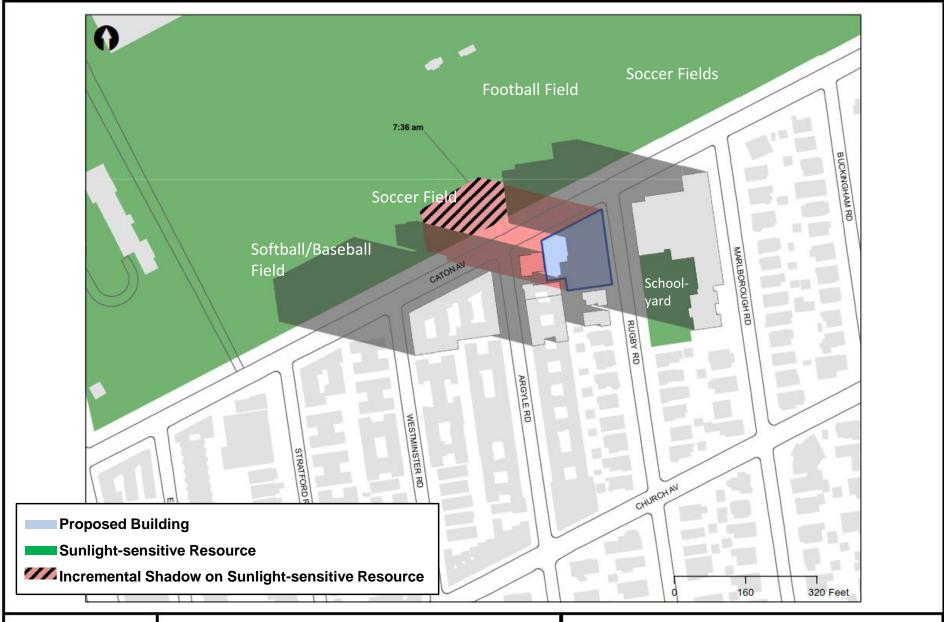
Detailed Shadow Analysis December 21<sup>st</sup>, 8:51 A.M Figure 2.3-7.





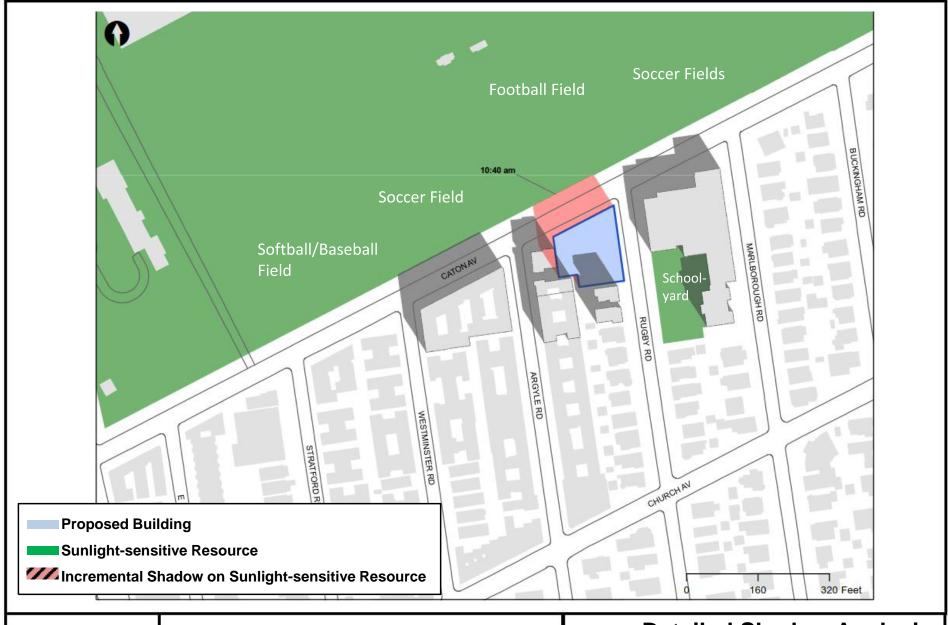
Detailed Shadow Analysis December 21<sup>st</sup>, 2:53 P.M Figure 2.3-8.

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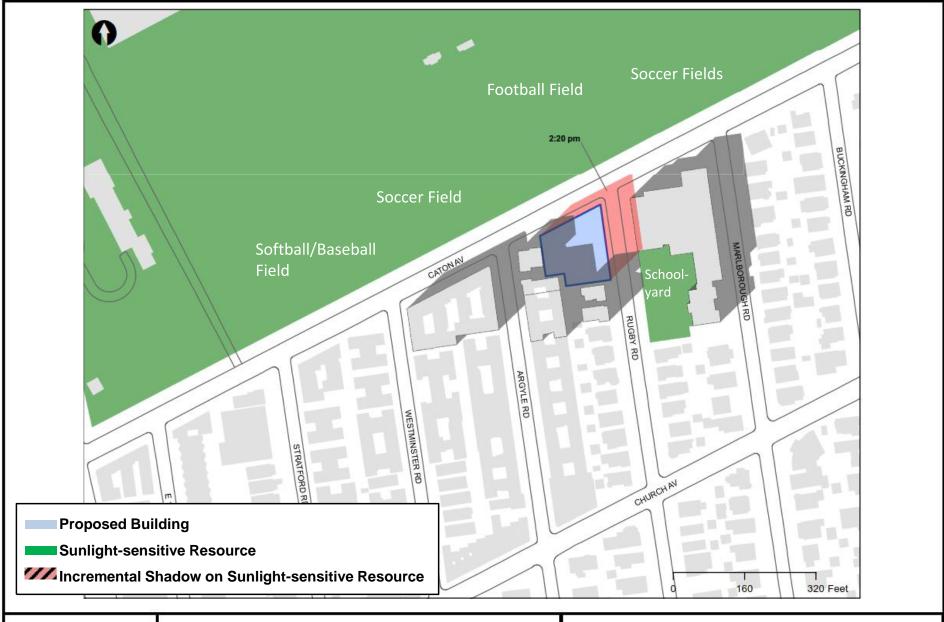


Detailed Shadow Analysis March 21<sup>st</sup>, 7:36 A.M. Figure 2.3-9



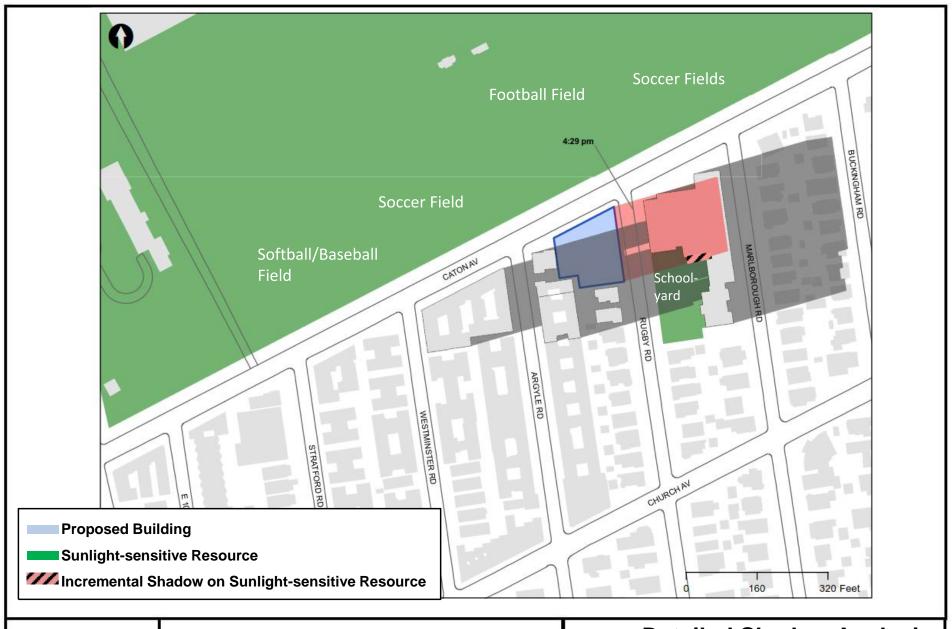


Detailed Shadow Analysis March 21<sup>st</sup>, 10:40 A.M. Figure 2.3-10





Detailed Shadow Analysis March 21<sup>st</sup>, 2:20 P.M. Figure 2.3-11



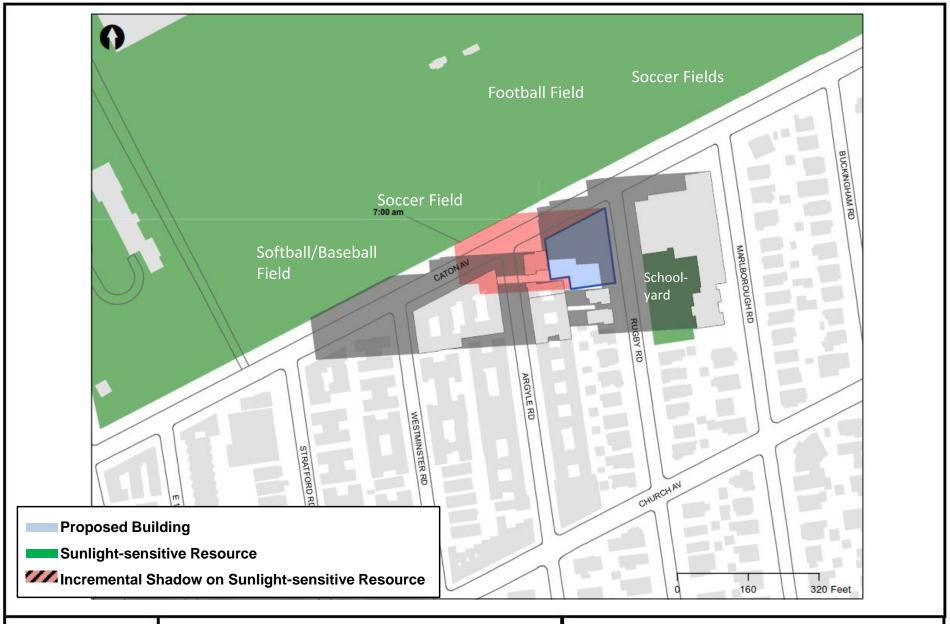


Detailed Shadow Analysis March 21<sup>st</sup>, 4:29 P.M. Figure 2.3-12



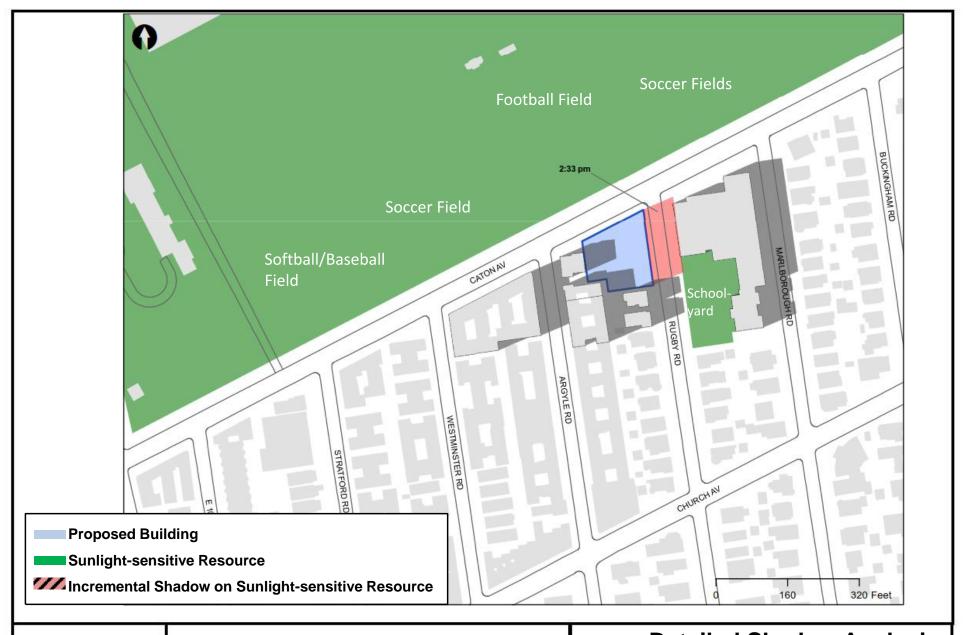


Detailed Shadow Analysis May 6<sup>th</sup>, 6:27 A.M. Figure 2.3-13



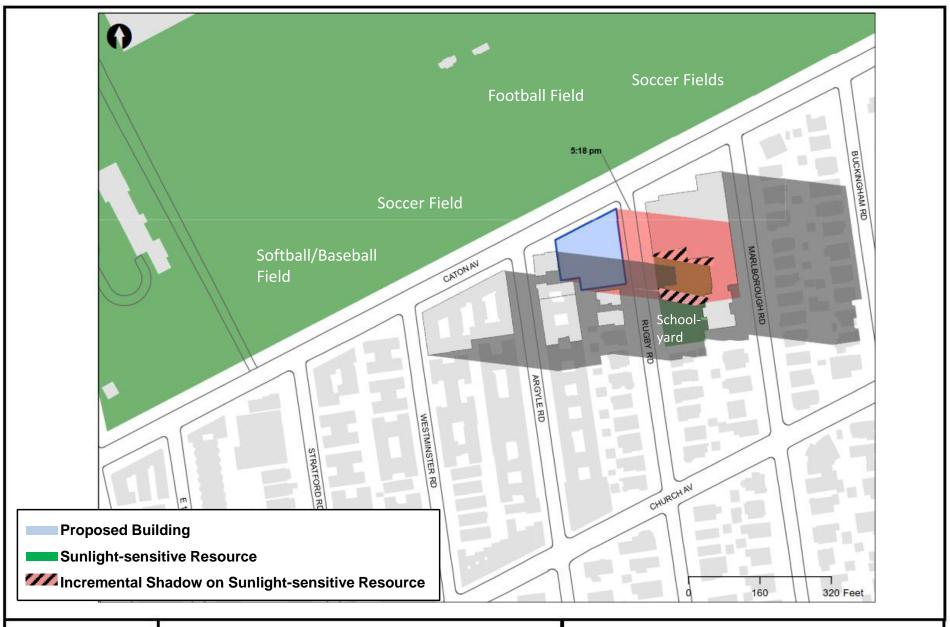


Detailed Shadow Analysis May 6<sup>th</sup> , 7:00 A.M. Figure 2.3-14





Detailed Shadow Analysis May 6<sup>th</sup> , 2:33 P.M. Figure 2.3-15



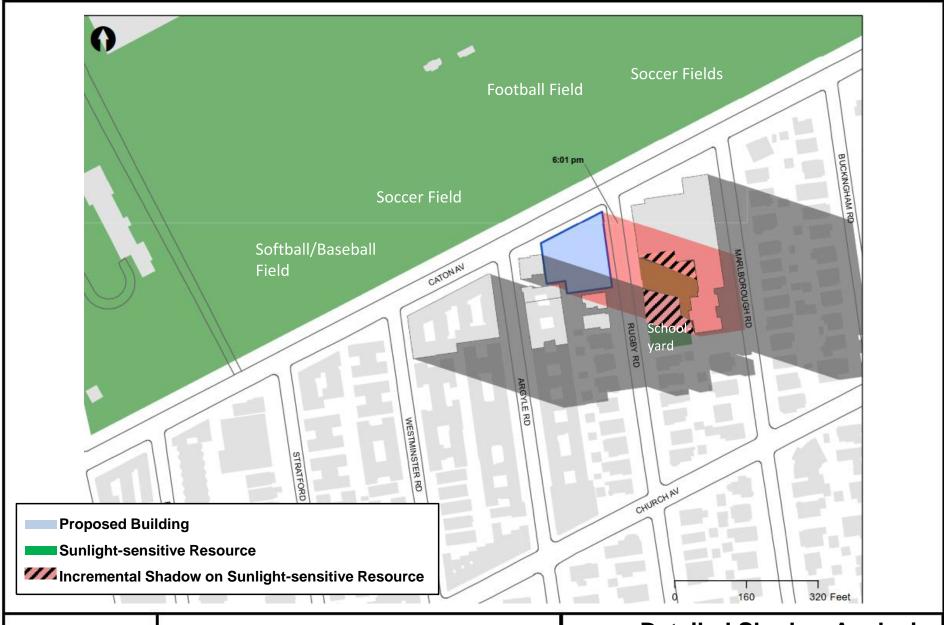


Detailed Shadow Analysis May 6<sup>th</sup>, 5:18 P.M. Figure 2.3-16





Detailed Shadow Analysis June 21<sup>st</sup>, 3:00 P.M. Figure 2.3-17





Detailed Shadow Analysis June 21<sup>st</sup> , 6:01 P.M. Figure 2.3-18

## **Determination of Shadow Impact**

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

For open space and natural resources, the uses and features of a resource is an indicator of its sensitivity to shadows. Shadows occurring during the cold-weather months generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. This sensitivity is assessed for warm-weather-dependent features (such as wading pools and sand boxes) or vegetation that could be affected by a loss of sunlight during the growing season, and for features (such as benches) that could be affected by a loss of winter sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Where the incremental shadows from the project fall on sunlight-sensitive features or uses, the analysis assesses the loss of sunlight relative to sunlight that would be available without the project.

As stated in the CEQR Technical Manual, in order to determine impact significance, an incremental shadow is generally not considered significant when its duration is no longer than 10 minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of 10 minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

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

Open Space Utilization - A substantial reduction in the usability of open space as a result of increased shadow.

For Any Sunlight-Sensitive Feature of a Resource - Complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

### Prospect Park Parade Ground

The Prospect Park Parade ground is due north of the project site, running along Caton Avenue. The Parade Ground is a 40 acre park, part of the larger Prospect Park and contains ball fields, a track, soccer fields, tennis courts, and various other active and passive open spaces.

The shadow cast would not significant affect the very limited amount of vegetation on the playground and certainly is not substantial enough to impact survival of the tree canopy that covers the site, nor would it impact the utilization of the space. The resources would still receive over 4 hours per day of sunlight which is the CEQR Technical Manual minimum vegetation standard. The shadow from projected development site would not result in a substantial reduction in sunlight on the Prospect Park Parade Ground

At no time does this shadow impact the functioning of the park. In addition to shadows that are already being cast on the park in a similar area in which the proposed project would cast a shadow, the new incremental shadow from the proposed action would only result in a very tiny portion (less than .25 acres) of additional shadow coverage. The largest shadows would be cast in December, when the active and

passive spaces are least likely to be used and during the warmer months of May and June, either no shadows or a very small amount of shadowing would occur in the With-Action Scenario.

Additionally, the shadow would be cast on a soccer field adjacent to the project site, which is unlikely to affect the use of the soccer field.

As such, no significant adverse impacts related to shadows are expected in the With-Action Scenario.

# P.S. 249 Playground

The P.S. 249 playground is directly east of the project site on Rugby Road. The playground is generally used for by the students of P.S. 249 for gym, recess, and after school programs. The playground's surface is entirely concrete. As discussed previously,

On December 21st, the project-generated shadow from the projected development site would not enter the PS 249 Playground.

- On March 21st, the project-generated shadow would the PS 249 Playground at 2:20 p.m., the beginning of the analysis period and exits the resource at 4:29 p.m. the end of the analysis period, for a total duration of approximately two hours and 9 minutes. The shadow cast on the PS 249 Playground 4:29 pm during the analysis period represents the maximum extent of the project-generated shadow on the resource, as shown in **Figures 2.3-11** to **2.4-12**.
- On May 6th, the project-generated shadow would enter the PS 249 Playground at 2:33 p.m. and remain on the resource through the end of the analysis period at 5:18 with a total duration of approximately two hours and 45 minutes. The shadow cast on the PS 249 Playground at 5:18 represents the maximum extent of the project-generated shadow on the resource as shown in **Figures 2.3-15** to **2.3-16**.
- On June 21st, the project-generated shadow would enter the PS 249 Playground at 3:00 p.m. and remain through the end of the analysis period at 6:01 p.m., for a total duration of approximately three hours and 1 minute. The shadow cast on the PS 249 Playground at the end of the analysis period represents the maximum extent of the project-generated shadow on the resource, as shown in **Figures 2.4-17** and **2.4-17**.

The playground would still receive over 4 hours per day of sunlight which is the CEQR Technical Manual minimum vegetation standard. The shadow from projected development site would not result in a substantial reduction in sunlight on the playground. Additionally, as elementary schools are generally dismissed at around 2:30 or 3:00, the incremental shadows would not be cast on the playground during school recess or school gym class hours. Additionally, as previously mentioned the playground is closed to the public during non-school hours and only open to the public during non-school hours, weekends, and holidays. As such, no significant adverse impacts related to shadows are expected in the With-Action Scenario.

### 2.4 HISTORIC AND CULTURAL RESOURCES

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

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

#### Architectural Resources

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

The projected development site is not a designated local or S/NR historic resource or property, nor is the site part of any designated historic district. The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on August 15<sup>th</sup>, 2017, indicating that the projected development site has no architectural significance (see **Appendix B**).

In order to determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No historic or architectural resources were identified within the 400-foot study area. Therefore, no significant adverse impacts on historic or architectural resources are expected as a result of the proposed actions, and further assessment is not warranted.

### Cultural and Archaeological Resources

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

The existing rezoning area has not been recently disturbed and no recent or distant cultural or archaeological significance have been attached to this area. Further, utilizing the NYS Office of Parks, Recreation and Historic Preservation's "Cultural Resource Information System" (CRIS) mapper, the rezoning area does not fall within an archaeologically sensitive area. Based on both current and historic photoreconnaissance of the rezoning area, there is little potential for impact to any known or unknown resource due to development. The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on August 15<sup>th</sup>, 2017, indicating that the projected development site has no architectural significance (see **Appendix B**). Therefore, significant adverse impacts to archaeological resources are not expected as a result of the proposed actions, and further analysis is not warranted.

### 2.5 URBAN DESIGN AND VISUAL RESOURCES

According to the CEQR Technical Manual, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings. Furthermore, according to the CEQR Technical Manual, if a preliminary assessment determines that changes to the pedestrian environment are sufficiently significant to require greater explanation and further study, then a detailed urban design and visual resources analysis is appropriate. Detailed analyses are generally appropriate for all area-wide rezoning applications that include an increase in permitted floor area or changes in height and setback requirements, general large scale developments, or projects that would result in substantial changes to the built environment of a historic district, or components of an historic building that contribute to the resource's historic significance. Conditions that merit consideration for further analysis of visual resources include when the project partially or totally blocks a view corridor or a natural or built rare or defining visual resource. Further conditions that merit consideration are when the project changes urban design features so that the context of a natural or built visual resource is altered, such as if a project alters the street grid so that the approach to the resource changes, or if a project changes the scale of surrounding buildings so that the context changes.

The CEQR Technical Manual notes an urban design assessment considers whether and how a project may change the experience of a pedestrian in the project area. The assessment focuses on the components of a proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment. In general, an assessment of urban design is needed when the project may have effects on one or more of the elements that contribute to the pedestrian experience (e.g., streets, buildings, visual resources, open space, natural features, wind, etc.). An urban design analysis is not warranted if a proposed project would be constructed within existing zoning envelopes, and would not result in physical changes beyond the bulk and form permitted "as-of-right" with the zoning district.

As the proposed actions would result in the construction of a new building that is not allowed "as-of-right" under the existing zoning, a preliminary analysis was conducted.

# 2.5.1 Preliminary Analysis

As stated in the CEQR Technical Manual, the study area for urban design is the area where the project may influence land use patterns and the built environment, and is generally consistent with the study area used for the land use analysis (i.e., 400 feet around the project site). The purpose of the preliminary assessment is to determine whether any physical changes proposed by a project may raise the potential to significantly and adversely affect elements of urban design, which would warrant the need for a detailed urban design and visual resources assessment.

### **Existing Conditions**

A photographic key map is provided in the previously presented **Figure 1.2-4**; with ground-level photographs of the projected development site and the immediate surrounding area provided in the previously presented **Figure 1.2-5**.

The proposed development site is presently improved with a five-story, 41,176 gross square foot nursing home. Under the Future With-Action scenario, the proposed actions would amend the zoning map to change the existing R3X district mapped on Lot 4 to an R6A zoning district. It is assumed that the proposed development site would be developed to the maximum FAR of 3.6.

The study area is characterized by a mix of one- and two-family residential, multi-family residential, commercial and isolated public facility and institutional uses. There are some mixed residential and commercial uses sprinkled throughout the study area as well. A site visit confirmed that no vacant lots exist within the study area. The prevailing built form in the area is a mix of low- to mid-rise residential and small apartment buildings. A majority of the buildings within the study area are arranged regular (parallel) with respect to their lot

placement. Generally speaking, the mid-rise multi-family apartment buildings are located within the western portion of the study area, along Argyle Road and to the west of Argyle Road. These multi-family buildings are also generally attached to each other as opposed to free-standing detached structures. The One and two-family residences are located along Rugby Road and to the east of Rugby Road.

There is a large elementary school (P.S. 249) in the eastern portion of the study area that occupies the lot directly east of the Project Site, across Rugby Road. The school, built in 1951, is a three-story building with a gross floor area of 138,240 sf. The school has a playground with frontage on Rugby Road.

North of Project Site, across Caton Avenue, is the site of the Prospect Park Parade Ground, which dominates almost the entirety of the northern portion of the study area, which includes a number of soccer and athletic fields and represents a large area of active open space.

While Caton Avenue divides the neighborhood, (residential on the south side and Parade Ground on the north side) the cohesion of the study area is not disrupted, as the two sides complement each other. Caton Avenue provides for smooth transitioning from the Parade Ground to the north to the residential neighborhood to the south, as it helps facilitate the change in use and does not act like a buffer between two distinct neighborhoods.

Most of the streets contain street trees, which are generally located at irregular intervals, with the exception of Caton Avenue and Rugby Road. On the two aforementioned streets, trees are placed at regular intervals, near each other, on each side of the street, creating a "canopy like" effect (**Figure 2.5-1**). Aside from the Parade Ground, and the /School yard, no other notable streetscape elements (e.g. benches, plazas) are located within the study area.

As previously mentioned a majority of the northern portion of the study area is occupied by the Prospect Park Parade Ground. The study area does not contain historic resources and is generally void of visual resources. No buildings of particular not or design are located within the study area.

The street hierarchy includes several different functional classifications. Caton Avenue is classified as a Principal Arterial Other while Church Avenue, which is just south of the study area is classified as a Minor Arterial. All other roadways in the study area are classified as local roads.

#### Future No-Action Scenario

Under the Future No-Action Condition, significant changes to the study area are not expected by the analysis year of 2021. It is anticipated that while tenants within area buildings may change, the overall use of these buildings would remain the same, and any physical changes would comply with applicable zoning regulations. No significant changes to the area's urban character are anticipated.

### Future With-Action Scenario

While the With-Action scenario would bring a height (up to 8 stories and 85 feet) to the study area that does not currently exist within the 400-foot study area, the proposed action would not negatively affect urban design in the area. There are no architecturally significant buildings in the area and the building would not significantly affect any views of the area. The use of the new density would fit in well with the existing medium-density residential buildings (4-5 floors in height) in the R6A zoning district immediately to the west of the project site. Additionally, P.S. 249, which is adjacent to the project site, despite having a lower FAR, is built out to approximately 138,240 gsf. Additionally, three blocks to the west of the project site, just outside the 400-foot study area on Stratford Road, there is a 12-story, 98,524 gross square foot multi-family apartment building.

Because the proposed development would be built within the existing building footprint on the Project Site, the development in the With-Action Scenario would not alter or disrupt the existing street grid or change the arrangement and orientation of streets in the area. Additionally, the Proposed Action would not permanently alter the exiting sidewalks that bound the Project Site to the north and to the west.

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Furthermore, there would not be any changes to the existing sidewalk layout. Overall, the development in the Future With-Action would not alter with the existing streets, street grid, streetscape, and sidewalks.

The proposed action would not alter the "canopy like" effect of the trees on Cortelyou Road as previously mentioned.

While the proposed building would change views of the site as witnessed by pedestrians on Cortelyou Road and other local roadways and streets, significant adverse impacts to urban design and visual resources would not occur. The proposed actions would not result in any conditions that would merit further detailed assessment of urban design and visual resources. While no other 8-story buildings are located within the study area, several other four to five story 40 to 50 foot mid-rise buildings are found in the surrounding study area. The proposed actions would also not block any view corridors or views to/from any natural areas with rare or defining features, as the proposed building is contained to the subject site. Therefore, the proposed actions are not expected to result in any significant adverse urban design or visual resource related impacts. Figures 2.5-2 and 2.5-3 highlight the future With-Action Scenario of both the Applicant-owned and non-Applicant owned sites.



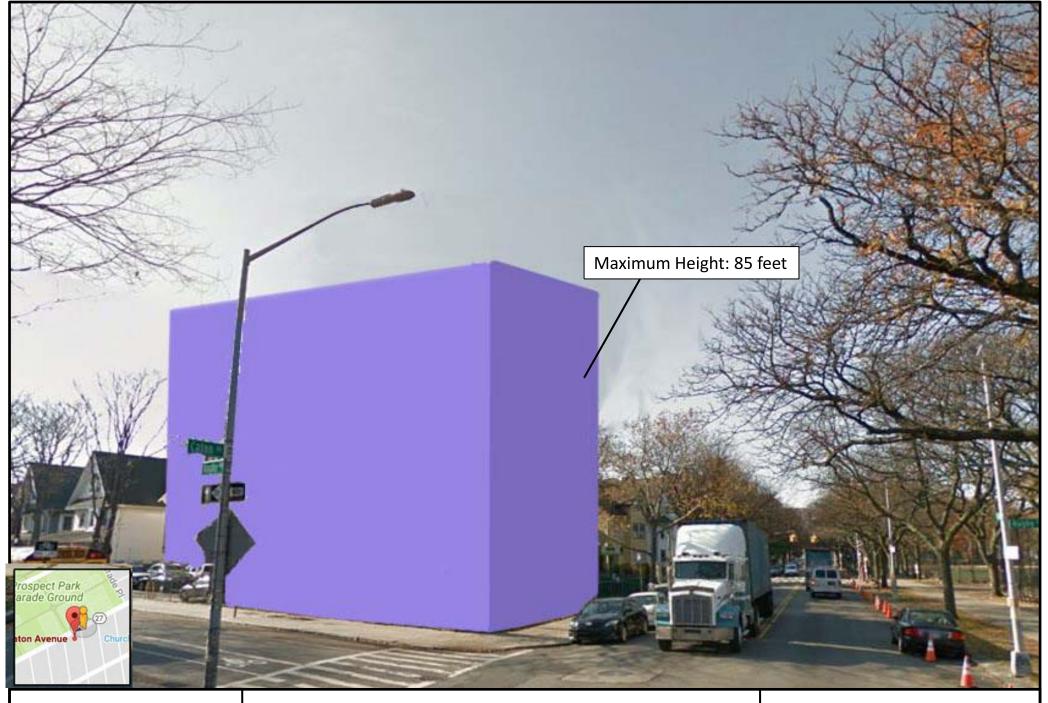
Environmental Assessment Statement Caton Park Nursing Home Rezoning Brooklyn, NY "Canopy Like" Effect of Trees

**Figure 2.5-1** 



Environmental Assessment Statement Caton Park Nursing Home Rezoning Brooklyn, NY No-Action Scenario View 1

**Figure 2.5-2** 



Environmental Assessment Statement Caton Park Nursing Home Rezoning Brooklyn, NY With-Action Scenario View 1

**Figure 2.5-3** 

# 2.6 NATURAL RESOURCES

The proposed project will not adversely affect natural resources. An assessment of a project's impact on natural resources is typically performed for actions that would either occur on or near natural resources (e.g., wetlands, woodlands, meadows, etc.) or for actions that would result in the direct or indirect disturbance of such resources.

The project site is located in a disturbed urban environment. The habitat value of the project site for native species is low as a result of the extensive development of the site, which no longer contains natural resources of any significance. Therefore, further analysis related to the impacts of the proposed project on natural resource is not warranted.

In light of the above, the proposed project would not result in a significant adverse impact to natural resources, and no further evaluation is required. The project site is located within the Jamaica Bay Watershed Protection Area. Consequently, the *Jamaica Bay Watershed Protection Plan Project Tracking Form* has been completed and is contained in **Appendix C.** 

### 2.7 HAZARDOUS MATERIALS

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

A Phase I Environmental Site Assessment (ESA) is currently being undertaken for this property.

# 2.7.1 Summary of Phase I ESA

Beinefeld Architecture contracted with AECOM Technical Services, Inc. (AECOM) to perform a Phase I Environmental Site Assessment (ESA) of the property identified as the Caton Park Rehabilitation and Nursing Center located at 1312 Caton Avenue, Brooklyn, Kings County, New York (subject property). This assessment was conducted as part of the potential commercial and residential redevelopment of the subject property. This Phase I ESA was performed in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice Designation E 1527-13 for ESAs. Exceptions to, or deletions from, this practice are described in this report.

The approximately 0.43-acre subject property is developed with a four-story 21,180 square-foot building with a basement consisting of a nursing and rehabilitation facility, an outdoor seating area, and a parking lot. During the site visit, no visual evidence of potable water wells, monitoring wells, dry wells, clarifiers, septic tanks, or leach fields was observed on the subject property. Sumps used to collect wastewater generated at the subject property are located in the boiler room and in the gas shutoff, sprinkler, and sanitation pump room, all located in the basement of the subject property building. This water is pumped into the New York City Department of Environmental Protection's (NYCDEP) combined sewer system. Stormwater drains were observed in the parking area located in the eastern portion of the property along Rugby Road which also connected into the NYCDEP combined sewer system. A concrete vault covered with a steel plate was observed in the northwestern portion of the property, near the entrance to the facility. A circular cover was observed at the base of this vault. The vault may be associated with the subject property's sanitary water discharge system. The site contact did not know the purpose of this vault. In addition, an apparent vent pipe was observed along the western side of the subject property building. This vent pipe may be associated with a 7,500-gallon No. 2 fuel oil vaulted underground storage tank (UST) that was reportedly closed in-place in 2009.

The subject property is bordered to the north by Caton Avenue, beyond which is a large recreational field known as The Parade Grounds of Prospect Park; to the east by Rugby Road, beyond which is Public

School 249; to the south by a Buddhist monastery and residential dwellings; and to the west by apartment buildings. Based on AECOM's site reconnaissance of the surrounding neighborhood and review of the regulatory status of the adjacent neighboring properties, no off-site sources of concern were identified.

Historical research indicates the subject property contained a residential dwelling in the southern portion by at least 1905. By 1929, three residential dwellings and two residential automobile garages were present. These residential dwellings and garages remained at the subject property until 1966 when the current building was constructed for use as a nursing home. The use of the subject property and the building configuration has remained relatively unchanged since its construction. No historical on-site or off-site sources of concern were identified during this assessment.

The subject property was identified in the site-specific environmental database report as having a 7,500-gallon No. 2 fuel oil UST that was closed in-place in 2009. No additional information was provided pertaining to this UST. A number of surrounding sites were identified in the environmental database search report. However, based on AECOM's review and analysis of the database listings, none of the surrounding sites are expected to present a recognized environmental condition (REC) to the subject property, based on their distance (generally greater than 500 feet), regulatory status (i.e. regulatory closure, no violations found), media impacted (soil only), and/or topographical position relative to the subject property (i.e. down-gradient or cross-gradient).

# 2.7.2 Conclusions

The following REC was identified in connection with the subject property:

• An apparent vent pipe was observed along the western side of the subject property building. This vent pipe is likely associated with a 7,500-gallon No. 2 fuel oil UST. This UST was reportedly closed in-place in 2009 and was reported to be in an inaccessible underground vault. No additional information was available for this UST and the associated closure, such as confirmatory closure sampling results. Therefore, the presence of this UST is considered a REC for the subject property.

Based on the above-described activities, no controlled RECs (CRECs), or historical RECs (HRECs) were identified in connection with the subject property.

De minimis soil staining (approximately 5 feet by 10 feet) due to of a leak of hydraulic fluid was identified adjacent to the trash compactor located along the southern portion of the subject property.

# 2.8 AIR QUALITY

When assessing the potential for air quality significant impacts, the CEQR Technical Manual seeks to determine a proposed action's effect on ambient air quality, or the quality of the surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during operation and/or construction of a project being proposed. The pollutants of most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates  $(PM_{10})$ , fine particulate matter  $(PM_{2.5})$ , and sulfur dioxide.

The CEQR Technical Manual generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The CEQR Technical Manual generally recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

# 2.8.1 Mobile Sources

According to the CEQR Technical Manual, projects, whether site-specific or generic, may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic; create

any other mobile sources of pollutants (such as diesel trains, helicopters, etc.); or add new uses near mobile sources (roadways, garages, parking lots, etc.). Projects requiring further assessment include:

Projects that would result in placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants.

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

The proposed actions would not result in any of the above thresholds being crossed and therefore would not require further mobile source assessment.

#### 2.8.2 **Stationary Sources**

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

- New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, other large institutional uses).
- Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use.
- Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected.
- Fossil fuels (fuel oil or natural gas) for heating/hot water, ventilation, and air conditioning systems are used.
- Large emission sources are created (e.g., solid waste or medical-waste incinerators, cogeneration facilities, asphalt/concrete plants, or power-generating plants, etc.).
- New sensitive uses are located near a large emission source.

- Medical, chemical, or research labs are created or result in new uses being located near them.
- Operation of manufacturing or processing facilities is created.
- New sensitive uses created within 400 feet of manufacturing or processing facilities.
- New uses created within 400 feet of a stack associated with commercial, institutional, or residential developments (and the height of the new structures would be similar to or greater than the height of the emission stack).
- Potentially significant odors are created.
- New uses near an odor-producing facility are created.
- "Non-point" sources that could result in fugitive dust are created.
- New uses near non-point sources are created.
- A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a stationary source.

Field surveys confirmed that no industrial sites are located within the 400-foot study area and no active permits in the area. Therefore, analysis related to air toxics is not required.

# HVAC and Hot Water Boiler Emissions Screening

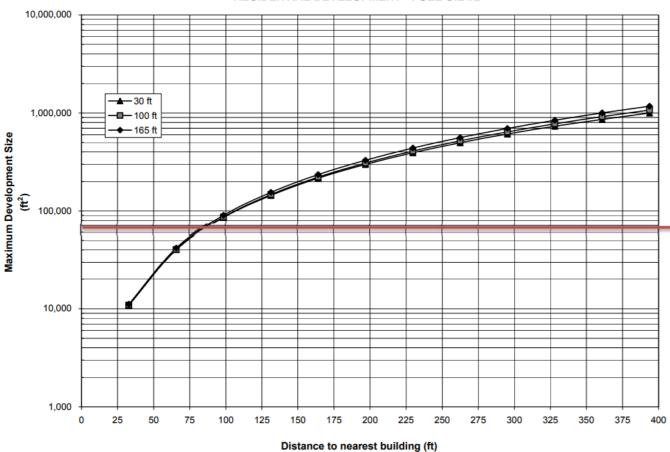
Impacts from boiler emissions from the projected development sites are a function of fuel type, stack height, minimum distance from the source to the nearest building, and square footage of the development. According to the applicant, the proposed building will likely utilize natural gas. However, for purposes of a conservative assessment, it was assumed that the proposed building and any building to be constructed on the remaining projected development site would use Oil #2. For the Projected Site, the stack height and projected development size was plotted on the graph for residential developments provided in the air quality appendix of the CEQR Technical Manual, as shown in Figures 2.8-1. This graph indicates the minimum distance between the projected development site and buildings of a similar or greater height in order to avoid a potential air quality impact. The projected 85-foot building would be located at the southwest corner of the intersection of Caton Avenue and Rugby Road. The stack height for the emissions vents was estimated as being three feet higher than the proposed building height.

A review of the surrounding area indicates that there are no sensitive receptors (with or without operable windows) taller than the projected 85-foot subject buildings located within the study area of the project, which is well beyond the located within the minimum distance feet of 87 feet needed to avoid the potential for a significant adverse air quality impact. The nearest building of equal or greater height to Projected Site 1 is an apartment building at 1600 Caton Avenue (Brooklyn Block 5077, Lot 1), approximately 602 feet east of the Project Site. Therefore the impact from the Projected Development Site does not warrant further analyses.

Air Quality Screening Graph – Block 5074, Lot 4 (RWCDS Scenario) **Figure 2.8-1** 

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FIG App 17-5 SO<sub>2</sub> BOILER SCREEN **RESIDENTIAL DEVELOPMENT - FUEL OIL #2** 



	No. 2 Fuel	
Fuel Type	Oil	
Land Use:	Residential	
Development Size:	67,118	ft <sup>2</sup>
Building Height:	85	ft
Distance to Nearest Building	602	ft
Screening Result	Pass	

In the interest of a an even more conservative assessment, the Department of City Planning requested that an analysis be performed that looked at the proposed project's height, as opposed to the Reasonable Worst Case Development Scenario for the Project Site.

The building's total gross square footage would be 67,117. Vertical expansion is not contemplated.

A review of the surrounding area indicates that the nearest building with sensitive receptors (taller than the proposed five floor building with the proposed fifth floor expansion, is a five-floor residential building located at 10 Westminster Road (Brooklyn Block 5072, Lot 6), approximately 399 feet west of the Project Site, well beyond the approximately 87 foot distance needed to pass the HVAC screen per CEQR thresholds (Figure 2.8-2). Therefore the impact from the Proposed Development and Proposed Development Site does not warrant further analyses.

# **E-Designation**

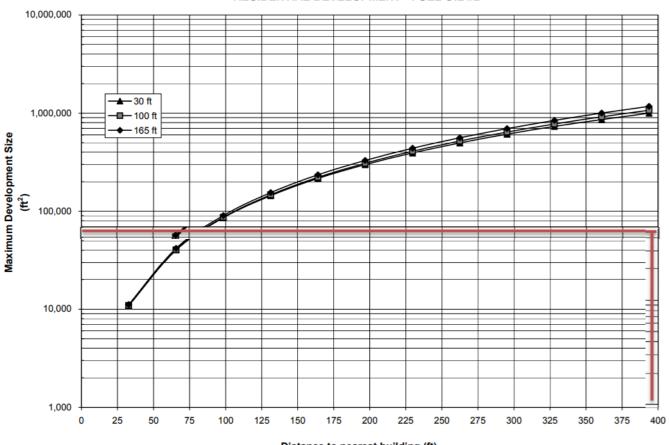
To ensure that there would be no significant adverse air quality impacts associated with the proposed project, an E-designation (E-492) will be placed on the project site as follows:

# Projected Site 1: Block 5074, Lot 14

Any new development or enlargement on Brooklyn Block 5074, Lot 4 must ensure that the HVAC stack is located at least 63 feet above the grade to avoid any potential significant adverse air quality impacts.

Figure 2.8-2 Air Quality Screening Graph – Block 5074, Lot 4 (Applicant Proposal)





Distance to nearest building (ft)

	No. 2 Fuel	
Fuel Type	Oil	
	Residential	
	Nursing	
Land Use:	Home	
Development Size:	67,118	ft <sup>2</sup>
Building Height:	60	ft
	• • •	٠.
Distance to Nearest Building	399	ft

# 2.9 NOISE

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

In terms of hearing, humans are less sensitive to low frequencies (<250 Hz) than mid-frequencies (500-1,000 Hz). Humans are most sensitive to frequencies in the 1,000 to 5,000 Hz range. Since ambient noise contains many different frequencies all mixed together, measures of human response to noise assign more weight to frequencies in this range. This is known as the A-weighted sound level.

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 "dB(A)." 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(A), and the threshold of pain is about 140 dB(A). **Table 2.9-1** 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 dB(A) increase as 10 times louder; they perceive it as twice as loud. The following are typical human perceptions of dB(A) relative to changes in noise level:

- 3 dB(A) change is the threshold of change detectable by the human ear;
- 5 dB(A) change is readily noticeable; and
- 10 dB(A) increase is perceived as a doubling of the noise level.

As a change in land use may result in a change in type and intensity of noise perceived by residents, patrons and employees of a neighborhood, the *CEQR Technical Manual* recommends an analysis of the two principal types of noise sources: mobile sources and stationary sources. Both types of noise sources are examined in the following sections.

# 2.9.1 Mobile Sources

Mobile noise sources are those which move in relation to receptors. The mobile source screening analysis addresses potential noise impacts associated with vehicular traffic generated by the proposed actions.

According to the CEQR Technical Manual, if existing passenger car equivalent (PCE) values are increased by 100 percent or more due to a proposed action, a detailed analysis is generally performed. Vehicular traffic studies are not warranted, as the proposed actions are not expected to generate over 50 vehicle trips through any local intersection during peak periods.

As discussed in the CEQR Technical Manual, if the proposed project is located in an area with high ambient noise levels, which typically include those near heavily-traveled thoroughfares or other loud activities, further noise analysis may be warranted to determine the attenuation measures for the project. The proposed development sites are located at the corner of Eastern Parkway and Atlantic Avenue, in an area with high ambient noise levels. Although the project is unlikely to generate sufficient traffic volumes to warrant a mobile source analysis, the ambient noise levels were measured to provide an assessment of the potential for traffic noise to have a significant adverse effect on future residents.

Table 2.9-1 Sound Pressure Level & Loudness of Typical Noises in Indoor & Outdoor Environments

Noise	Subjective	Typical Sou	Relative	
dB(A) Impression		Outdoor	Indoor	Loudness (Human Response)
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 dB(A))
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 times 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.

The CEQR Technical Manual provides noise exposure guidelines in terms of  $L_{eq}$  and  $L_{10}$  for the maximum amount of allowable noise under existing regulations.  $L_{eq}$  is the continuous equivalent sound level. The sound energy from the fluctuating sound pressure levels (SPLs) is averaged over time to create a single number to describe the mean energy or intensity level. High noise levels during a measurement period will have 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. In comparison,  $L_{10}$  is the SPL exceeded 10 percent of the time. Similar descriptors include the  $L_{50}$ ,  $L_{01}$ , and  $L_{90}$  values.

The Applicant seeks a zoning map amendment to rezone portions of Brooklyn Block 5074, Lot 4 from an R3X zoning district to an R6A district to facilitate an enlargement of the Caton Park Nursing Home, a 119-bed and 41,176 gross square feet (gsf) nursing and rehabilitation center. The proposed enlargement would add approximately 5,313 gsf of floor area to the fifth floor. The enlargement would create a recreation room, a physical and occupational therapy room, offices, solarium, and storage rooms. The number of beds would remain unchanged.

This analysis describes the noise measurement results collected on October 5, 2017 at two locations in front of the project site, as shown in **Figure 2.9-1**. These measurements were then compared with New York City Department of Environmental Protection (NYCDEP)-established exterior noise exposure guidelines, Table 19-2 in the *City Environmental Quality Review (CEQR) Technical Manuel*, to determine the appropriate building noise attenuation values with potential to be required for any of proposed buildings to achieve acceptable interior noise levels per Table 19-3 in the *CEQR Technical Manual*.

### **Noise Measurement**

Noise measurement was conducted at two locations (**Figure 2.9-1**) during peak vehicular travel periods, 8:00-9:00 am, 12:00-1:00 pm, and 5:00-6:00 pm. The weather condition was normal with calm wind and was considered suitable for an ambient noise measurement.

A Type 1 Larson Davis 831 sound level meter with wind shield was used to conduct the noise monitoring. The meter was placed on a tripod at a height of approximately five feet above the ground, away from any reflective surfaces. The meter was calibrated prior to and following each monitoring session.

Noise measurements were conducted in front of the projected development sites on the sidewalk at two locations:

Location 1: The mid- block of Caton Avenue between Rugby Road and Argyle Road

Location 2: The mid- block of Rugby Road between Caton Avenue and Church Ave

Traffic volumes and vehicle classification along the adjacent roads at each location were counted concurrently during the noise measurement duration.

# **Measurement Summary**

**Tables 2.9-2a and 2.9-2b** present the ambient noise levels in terms of various noise metrics measured at two locations during three daytime periods. L<sub>10</sub> is the metric used by NYCDEP in establishing the exterior noise exposure guidelines.

Table 2.9-2a: Noise Levels in dBA at Location 1

Noise Metric	Time Period		
Noise Metric	8:04-8:25 AM	12:37-12:58 PM	5:00-5:21PM
L <sub>eq</sub>	67.5	68.6	82.5
L <sub>max</sub>	87.3	90.9	116.4
L <sub>10</sub>	70.1	72.1	69.7
L <sub>50</sub>	63.3	64.1	62.3
L <sub>90</sub>	58.3	55.5	55.2
L <sub>min</sub>	53.3	51.1	50.6

Table 2.9-2b: Noise Levels in dBA at Location 2

Naisa Matria	Time Period			
Noise Metric	8:28-8:49 AM	12:14-12:35 PM	5:23-5:44 PM	
L <sub>eq</sub>	64.1	64.9	60.5	
L <sub>max</sub>	86.6	82.8	78.2	
L <sub>10</sub>	66.3	67.8	63.2	
L <sub>50</sub>	61.2	63.2	58.0	
L <sub>90</sub>	58.3	59.3	55.1	
L <sub>min</sub>	55.5	54.5	52.5	

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the *City Environmental Protection Order-City Environmental Quality Review* (CEPO-CEQR) noise standards at the exterior façade to achieve interior noise levels of 45 dB(A) or below. *CEPO-CEQR Noise Standards* classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable. As noted in the *CEQR Technical Manual*, these standards are the basis for classifying noise exposure into the following categories based on the  $L_{10}$  measured directly outside the projected development site:

Table 2.9-3 Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable			Clearly Unacceptable	
Noise Level with Proposed Project	70 < L <sub>10</sub> ≤ 73	73 < L <sub>10</sub> ≤ 76	76 < L <sub>10</sub> ≤ 78	78 < L <sub>10</sub> ≤ 80	80 < L <sub>10</sub>
Attenuation <sup>1</sup>	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)^2 dB(A)$

Source: 2014 CEQR Technical Manual

# Notes:

<sup>1</sup> The above composite window-wall attenuation values are for residential dwellings. Commercial and office spaces/meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.

<sup>&</sup>lt;sup>2</sup> Required attenuation values increase by 1 dB(A) increments for L<sub>10</sub> values greater than 80 dBA.



**AE**COM

**Environmental Assessment Statement Caton Park Nursing Home Rezoning Brooklyn, NY** 

Noise Measurement Locations

**Figure 2.9-1** 



Meter Setup at Location 1



Meter Setup at Location 2

# **Observation and Assessment**

Based on field observation and recorded data during noise the measurement, Caton Avenue has quite a bit of trucks, since it connects to a major thoroughfare and truck route, Linden Boulevard. Traffic moves slow during AM and PM peak periods. There is a speed bump, and a speed limit of 15 miles per hour in front of P.S. 294 on Rugby Road, about 20 feet away from the projected site boundary.

During midday peak period measurement at Location 2, children from P.S. 249 were playing on the playground for the duration of the noise measurement. The noise levels monitored during this period can be considered the worst case conditions that include additional noise from playground activities.

P.S. 249 is an elementary school. The classes general end between 2:30-3:00pm. Many students stay in after school programs until 5:00-5:30pm. During the measurement periods, it was found that there were only a handful of students using the playground after 3:00 pm and contributing minimal noise to ambient levels.

At about 3:30 pm, football and soccer training and practice started on the Prospect Park Parade Ground across Caton Avenue. The training didn't stop until after the PM peak period noise measurement was completed.

During PM peak period measurement at Location 1, the training at Prospect Park Parade Ground across Caton Avenue was still going on. Two kids shouted at the microphone at the end of the measurement, resulting in an unusually high  $L_{eq}$ . However, such elevated short duration noise does not impact the  $L_{10}$  level.

Comparing to CEQR Technical Manual guidelines, the existing noise level  $L_{10}$  measured at Location 1 is 72.1 dBA, is in the "marginally unacceptable" category. To ensure acceptable interior noise levels for the Proposed Actions and associated RWCDS, a minimum of 28 dBA of attenuation is needed on the North façade (facing Caton Avenue). The noise attenuation specifications for the rezoning area would be mandated through the assignment of an (E) designation on Lot 4 on Block 5074 (E-XXX).

The (E) designation text related to noise would be as follows:

# E-Designation

Block 5074, Lot 4 (Projected Development Site 1): To ensure an acceptable interior noise environment, future nursing home/residential uses must provide a closed-window condition with a minimum of 33 dB(A) window/wall attenuation on all facades facing north (Caton Avenue) and 28 dB(A) of attenuation on all facades facing east (Rugby Road) to maintain an interior noise level of 45 dB(A). To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

# Conclusion

With the implementation of the attenuation levels outlined above, the Proposed Actions and associated RWCDS would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines. Therefore, the Proposed Actions would not result in any significant adverse noise impacts.





**Environmental Assessment Statement Caton Park Nursing Home Rezoning Brooklyn, NY** 

Required Window-Wall Attenuation

**Figure 2.9-2** 

# 2.9.2 Stationary Sources

The CEQR Technical Manual states that based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there are no structures that provide shielding), it is unusual for stationary sources to have significant impacts at distances beyond 1,500 feet. A detailed analysis may be appropriate if the proposed project would: cause a substantial stationary source (i.e., unenclosed mechanical equipment for manufacturing or building ventilation purposes, playground, etc.) to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses. Machinery, mechanical equipment, heating, ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor, and is unenclosed.

No unenclosed stationary noise sources of concern were observed during field inspections. As the proposed development sites are not subject to high ambient noise levels from any nearby stationary source, no stationary source noise impacts from surrounding uses are anticipated. Additionally, as the proposed project would not introduce a new stationary noise source, no significant adverse stationary source impacts are anticipated as a result of the proposed actions, and no further analysis is warranted.

# 2.10 NEIGHBORHOOD CHARACTER

As defined by the CEQR Technical Manual, neighborhood character is considered to be an amalgam of the various elements that give a neighborhood its distinct personality. The elements, when applicable, typically include land use, socioeconomic conditions, open space and shadows, historic and cultural resources, urban design and visual resources, transportation, and noise, as well as any other physical or social characteristics that help to define a community. Not all of these elements affect neighborhood character in all cases; a neighborhood usually draws its distinctive character from a few defining features.

If a project has the potential to result in any significant adverse impacts on any of the above technical areas, a preliminary assessment of neighborhood character may be appropriate. A significant impact identified in one of these technical areas is not automatically equivalent to a significant impact on neighborhood character; rather, it serves as an indication that neighborhood character should be examined.

In addition, depending on the project, a combination of moderate changes in several of these technical areas may potentially have a significant effect on neighborhood character. As stated in the *CEQR Technical Manual*, a "moderate" effect is generally defined as an effect considered reasonably close to the significant adverse impact threshold for a particular technical analysis area. When considered together, there are elements that may have the potential to significantly affect neighborhood character. Moderate effects on several elements may affect defining features of a neighborhood and, in turn, a pedestrian's overall experience. If it is determined that two or more categories may have potential "moderate effects" on the environment, CEQR states that an assessment should be conducted to determine if the proposed project result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. If a project would result in only slight effects in several analysis categories, then further analysis is generally not needed.

This chapter reviews the defining features of the neighborhood and examines the proposed action's potential to affect the neighborhood character of the surrounding study area. The study area is generally coterminous with the study area used for the land use and zoning analysis in Chapter 2.1. The impact analysis of neighborhood character that follows below focuses on changes to the technical areas listed above that exceeded CEQR preliminary screening thresholds that were assessed in this EAS Short Form.

The assessment begins with a review of existing conditions and the neighborhood of the study area. The information is drawn from the preceding sections of this EAS, but is presented in a more integrated way. While the other sections present all relevant details about particular aspects of the environmental setting, the discussion for neighborhood character focuses on a limited number of important features that gives the neighborhood its own sense of place and that distinguish them from other parts of the city. A concise discussion of the changes anticipated by the 2021 analysis year under the Future No-Action Condition is then included. A brief overview of the Proposed Action is then presented, along with an analysis of whether any anticipated significant adverse impacts and moderate adverse effects, regarding the relevant technical CEQR assessment categories for neighborhood character, would adversely affect any of the defining features.

# 2.10.1 Existing Conditions

# Land Use, Zoning and Public Policy

Under the Future With-Action scenario, the proposed rezoning would amend the zoning map to change the existing R6A and R3X district to an R6A district to facilitate the Applicant's proposed development of an approximately 4,830 gsf addition to the fifth floor of the existing nursing home.

However, in the interest of a conservative analysis, The With-Action scenario assumes that a residential building would be constructed at full FAR (3.6) and height (85 feet) on the Projected Development Site (Site 1- Applicant Site). It assumes that the existing Caton Park Nursing Home on Lot 4 would be demolished.

It is assumed that the With-Action scenario residential apartment building, on an approximately 18,644 sf lot, the building would contain approximately 67,118 gross square feet of residential space.

Assuming approximately 850 square feet per apartment, it is assumed that 78 residential units would be created on site with 202 people living in those 78 units (2.6 persons/HH in Brooklyn CD 14).

Approximately 15 of those units would be available for persons at or below 80 percent AMI. The With-Action land use would be compatible with the surrounding medium density apartment buildings to the west, which are approximately 4-5 floors in height and 40-50 feet tall. With this compatibility, no significant adverse impacts related to land use are expected and no further analysis is required.

The proposed development site is located in both an R6A zoning district and an R3X zoning district. The R6A district is generally mapped along Caton Avenue to the north, Stratford Road to the west, Church Avenue to the south, and the midblock point between Argyle Road and Rugby Road to the east. Residential uses (UGs 1 and 2) as well as community facility uses (UGs 3 and 4) are allowed as-of-right in R6A zoning districts. The built floor area ratio (FAR) for R6A districts is 3.0 (with 3.6 under the Mandatory Inclusionary Housing Act) for residential and community facility uses. Building heights within R6A districts are 85 feet and parking is required for 50 percent of all dwelling units (waived if 5 or fewer spaces are required).

The eastern portion of the proposed rezoning area lies within in R3X zoning district. The R3X district is generally mapped along Caton Avenue to the north, the mid-block point between Buckingham Road and XX Road to the east, and the mid-block point between Argyle Road and Rugby Road to the west. Residential uses (UGs 1 and 2) as well as community facility uses (UGs 3 and 4) are allowed as-of-right in R3X zoning districts. The built floor area ratio (FAR) for R3X districts can reach a maximum of 0.5 with a 0.6 attic allowance and 1.0 for a community facility. Building heights limits within R3X districts are 35 feet and one parking space is per dwelling unit is required.

# Urban Design and Visual Resources

The proposed development site is presently improved with a five-story, 41,176 gross square foot nursing home. Under the Future With-Action scenario, the proposed actions would amend the zoning map to change the existing R3X district mapped on Lot 4 to an R6A zoning district. It is assumed that the proposed development site would be developed to the maximum FAR of 3.6.

The study area is characterized by a mix of one- and two-family residential, multi-family residential, commercial and isolated public facility and institutional uses. There are some mixed residential and commercial uses sprinkled throughout the study area as well. A site visit confirmed that no vacant lots exist within the study area. The prevailing built form in the area is a mix of low- to mid-rise residential and small apartment buildings. A majority of the buildings within the study area are arranged regular (parallel) with respect to their lot placement. Generally speaking, the mid-rise multi-family apartment buildings are located within the western portion of the study area, along Argyle Road and to the west of Argyle Road. These multi-family buildings are also generally attached to each other as opposed to free-standing detached structures. The One and two-family residences are located along Rugby Road and to the east of Rugby Road.

There is a large elementary school (P.S. 249) in the eastern portion of the study area that occupies the lot directly east of the Project Site, across Rugby Road. The school, built in 1951, is a three-story building with a gross floor area of 138,240 sf. The school has a playground with frontage on Rugby Road.

North of Project Site, across Caton Avenue, is the site of the Prospect Park Parade Ground, which dominates almost the entirety of the northern portion of the study area, which includes a number of soccer and athletic fields and represents a large area of active open space.

While Caton Avenue divides the neighborhood, (residential on the south side and Parade Ground on the north side) the cohesion of the study area is not disrupted, as the two sides complement each other. Caton Avenue provides for smooth transitioning from the Parade Ground to the north to the residential neighborhood to the south, as it helps facilitate the change in use and does not act like a buffer between two distinct neighborhoods.

### Noise

Based on field observation and recorded data during noise the measurement, Caton Avenue has quite a bit of trucks, since it connects to a major thoroughfare and truck route, Linden Boulevard. Traffic moves slow during AM and PM peak periods. There is a speed bump, and a speed limit of 15 miles per hour in front of P.S. 294 on Rugby Road, about 20 feet away from the projected site boundary.

During midday peak period measurement at Location 2, children from P.S. 249 were playing on the playground for the duration of the noise measurement whole time. The noise levels monitored during this period can be considered the worst case conditions that include additional noise from playground activities.

P.S. 249 is an elementary school. The classes general end between 2:30-3:00pm. Many students stay in after school programs until 5:00-5:30pm. During the measurement periods, it was found that there were only a handful of students using the playground after 3:00 pm and contributing minimal noise to ambient levels.

# 2.10.2 Future No-Action Scenario

In the Future No-Action Scenario, the proposed actions would not occur, and it is expected that the existing uses within the rezoning area would remain in their current form.

Significant changes to the study area are not expected by the analysis year of 2021. In the Future No-Action Scenario, it is expected that while tenants within surrounding area buildings may change, the overall use of these buildings would remain the same, and any physical changes would comply with designated zoning regulations and other surrounding districts.

# 2.10.3 Future With-Action Scenario

The elements that comprise neighborhood character are reviewed individually below, with a following supporting and cumulative conclusion.

# Land Use, Zoning and Public Policy

Under the Future With-Action scenario, the proposed rezoning would amend the zoning map to change the existing R6A and R3X district to an R6A district to facilitate the Applicant's proposed development of an approximately 4,830 gsf addition to the fifth floor of the existing nursing home.

However, in the interest of a conservative analysis, The With-Action scenario assumes that a residential building would be constructed at full FAR (3.6) and height (85 feet) on the Projected Development Site (Site 1- Applicant Site). It assumes that the existing Caton Park Nursing Home on Lot 4 would be demolished.

It is assumed that the With-Action scenario residential apartment building, on an approximately 18,644 sf lot, the building would contain approximately 67,118 gross square feet of residential space.

Assuming approximately 850 square feet per apartment, it is assumed that 78 residential units would be created on site with 202 people living in those 78 units (2.6 persons/HH in Brooklyn CD 14).

Approximately 15 of those units would be available for persons at or below 80 percent AMI. The With-Action land use would be compatible with the surrounding medium density apartment buildings to the west, which are approximately 4-5 floors in height and 40-50 feet tall. With this compatibility, no significant adverse impacts related to land use are expected and no further analysis is required

In a Future With-Action Scenario, Lot 4 would be improved with an approximately seven floor, 85 foot UG 2 residential apartment building with approximately 67,118 gross square feet of floor area and 78 units built to an FAR of 3.6.

The existing structure on Lot 4 is five stories and approximately has 41,176 gsf of nursing home floor area. The With-Action Scenario would result in a building approximately 25,000 gsf larger and two stories higher.

The surrounding area is comprised generally of residential and community facility and institutional uses, including a public elementary school (P.S. 249) across the street of the project site which has a gross floor area of 138,240 sf. Additionally, a number of the apartment buildings in the immediate area of the project site are four to five stories in height. Furthermore, approximately 500 feet to the east of the project site along Caton Avenue, are a number of apartment buildings with similar bulk as the full build-out scenario in the With-Action scenario. Therefore, the proposed actions not have a significant impact on the extent of conformity within the current surrounding area and it would not adversely affect the viability of conforming uses on nearby properties. Therefore, significant impacts to zoning are not anticipated and further zoning analysis is not warranted.

# Historic and Cultural Resources

According to CEQR, when an action results in substantial direct changes to a historic or cultural resource or substantial changes to public views of a resource, or when a historic or cultural resource analysis identifies a significant impact in this category, there is a potential to affect neighborhood character.

The project site is not a designated local LPC or S/NR historic resource or property, nor is the site part of any designated historic district. The LPC was contacted for their initial review of the project's potential to impact nearby historic and cultural resources, and a response was received on August 15<sup>th</sup>, 2017, indicating that the projected development site has no architectural or archaeological significance. Therefore, significant adverse impacts to these resources are not expected as a result of the proposed actions and further analysis is not warranted.

# **Urban Design and Visual Resources**

While the With-Action scenario would bring a height (up to 8 stories and 85 feet) to the study area that does not currently exist within the 400-foot study area, the proposed action would not negatively affect urban design in the area. There are no architecturally significant buildings in the area and the building would not significantly affect any views of the area. The use of the new density would fit in well with the

existing medium-density residential buildings (4-5 floors in height) in the R6A zoning district immediately to the west of the project site. Additionally, P.S. 249, which is adjacent to the project site, despite having a lower FAR, is built out to approximately 138,240 gsf. Additionally, three blocks to the west of the project site, just outside the 400-foot study area on Stratford Road, there is a 12-story, 98,524 gross square foot multi-family apartment building.

Supplemental Studies to the EAS

# **Shadows**

According to CEQR, when shadows from a proposed project fall on a sunlight-sensitive resource and substantially reduce or completely eliminate direct sunlight exposure such that the public's use of the resource is significantly altered or the viability of vegetation or other resources is threatened, there is a potential to affect neighborhood character.

As noted in Section 2.2, a shadow radius of 4.3 times the maximum allowable height on the projected development sites (85 feet) was calculated. The results of the Tier 1 and Tier 2 screening assessment indicated that the shadow study area continued two sunlight sensitive resources However, based on the small incremental shadows cast, the portions of which it was cast on the parade ground (active uses such as soccer field and baseball field), and the schoolyard not being publically accessible and the limited number of hours it is used by the students in the school (ie, recess/gym and after school activities during school), it was determined that no significant adverse impacts related to shadows would occur in the With-Action Scenario.

### Noise

According to the CEQR Technical Manual, for an action to affect neighborhood character with respect to noise, it would need to result in a significant adverse noise impact and a change in acceptability categories.

As demonstrated in Section 2.9, the maximum  $L_{10}$  measured within the rezoning area was 72.1 dB(A) at both monitoring locations during both the AM and PM peak periods.

As such, an E- Designation will be placed on the project site as previously discussed in the noise section (Section 2.9).

# **Conclusions**

Of the relevant technical areas specified in the *CEQR Technical Manual* that comprise neighborhood character, the proposed actions would not cause significant adverse impacts with regard to any of them. Moderate adverse effects that would potentially impact such a defining feature, either singly or in combination, have also not been identified for more than one technical area. Therefore, as the proposed actions would not have a significant adverse neighborhood character impact and would not result in a significant adverse impact to a defining feature of the neighborhood, further analysis is not necessary.

# 2.11 CONSTRUCTION

Construction, although temporary, can result in disruptive and noticeable effects on a proposed action area. A determination of the significance of construction and the need for mitigation is based on the duration and magnitude of these effects. Construction is typically of greatest importance when it could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns and air quality conditions. All analyses were undertaken in accordance with the guidelines contained in the CEQR Technical Manual.

There is only one projected development site in the rezoning area (applicant site) and the duration of construction on the applicant's site is expected to last approximately 20-24 months.

The following is a brief discussion of the effects associated with construction related activities on traffic, air quality, noise, historical resources and hazardous materials resulting from the construction of the projected development sites.

# Effect of Construction on Traffic

The proposed actions would result in new development, over a four-year period, on up to two projected development sites. These developments would replace existing uses on the each site. During construction, the sites would generate trips from workers traveling to and from the construction sites, and from the movement of materials and equipment.

Given typical construction hours of 7:00 AM to 4:00 PM, worker trips would be concentrated in off-peak hours typically before both the AM and PM peak commuter periods. Truck movements typically would be spread throughout the day on weekdays, and would generally occur between the hours of 7:00 AM and 4:30 PM. Traffic generated by construction workers and construction truck traffic would not represent a substantial increment during the area's peak travel periods.

Construction activities may result in short-term disruption of both traffic and pedestrian movements at the development sites. This would occur primarily due to the temporary loss of curbside lanes from the staging of equipment and the movement of materials to and from the site. Additionally, construction would result in the temporary closing of sidewalks adjacent to the site at times. These conditions would not lead to significant adverse effects on traffic and transportation conditions.

# Effect of Construction on Air Quality

Possible impacts on local air quality during construction induced by the proposed actions include fugitive dust (particulate) emission from land clearing operation and demolition as well as mobile source emissions (hydrocarbons, nitrogen oxide, and carbon monoxide) generated by construction equipment and vehicles.

Fugitive dust emissions from land clearing operations can occur from excavation, hauling, dumping, spreading, grading, compaction, wind erosion, and traffic over unpaved areas. Actual quantities of emissions depend on the extent and nature of the clearing operations, the type of equipment employed, the physical characteristics of the underlying soil, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. Much of the fugitive dust generated by construction activities would be of a short-term duration and relatively contained within a proposed site, not significantly impacting nearby buildings or residents. All appropriate fugitive dust control measures – including watering of exposed areas and dust covers for trucks – would be employed during construction of the development sites. Therefore, the fugitive source emissions generated by the proposed actions would not be significant.

Mobile source emissions may result from the operation of construction equipment, trucks delivering materials and removing debris, workers' private vehicles, or occasional disruptions in traffic near the construction site. As the number of construction-related vehicle trips generated by the proposed actions would be relatively small and the emissions from such vehicles as well as construction equipment would occur over a four-year period and be dispersed throughout the proposed rezoning area, the mobile source emissions generated by the proposed actions would not be significant. Overall, the proposed actions would not have the potential to result in significant adverse air quality impacts.

# Effect of Construction on Noise

Noise and vibration from construction equipment operation and noise from construction workers' vehicles and delivery vehicles traveling to and from the construction sites can affect community noise levels. The level of impact of these noise sources depends on the noise characteristics of the equipment and activities involved the construction schedule, and the location of potentially sensitive noise receptors.

Noise and vibration levels at a given location are dependent on the kind and number of pieces of construction equipment being operated, as well as the distance of the location from the construction site and the types of structures, if any, between the location and the noise source. Noise levels caused by construction activities can vary widely, depending on the phase of construction (e.g. demolition, land clearing and excavation, foundation, erection of structure, construction of exterior walls) and the specific task being undertaken.

Construction noise associated with the proposed actions is expected to be similar to noise generated by other residential construction projects in the city. Increased noise level caused by construction activities can be expected to be more significant during early excavation phases of construction and would be of relatively short duration. Increases in noise levels caused by delivery trucks and other construction vehicles would not be significant.

Construction noise is regulated by the *New York City Noise Control Code* and by the Environmental Protection Agency noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction material be handled and transported in such a manner as not to create unnecessary noise. In addition, whenever possible, appropriate low noise emission level equipment and operational procedures can be utilized to minimize noise and its effect on adjacent uses.

Thus, while there may be short periods of time when noise is greater than the Noise Control Code, these regulations would be followed in such a matter that no significant adverse noise impacts would be expected to result from the proposed actions.

# Effect of Construction on Historic Resources

In order to determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. No historic or architectural resources were identified within the 400-foot study area. Therefore, adverse construction-related impacts are not expected to any historic resource in the vicinity of the rezoning area.

# Effect of Construction on Hazardous Materials

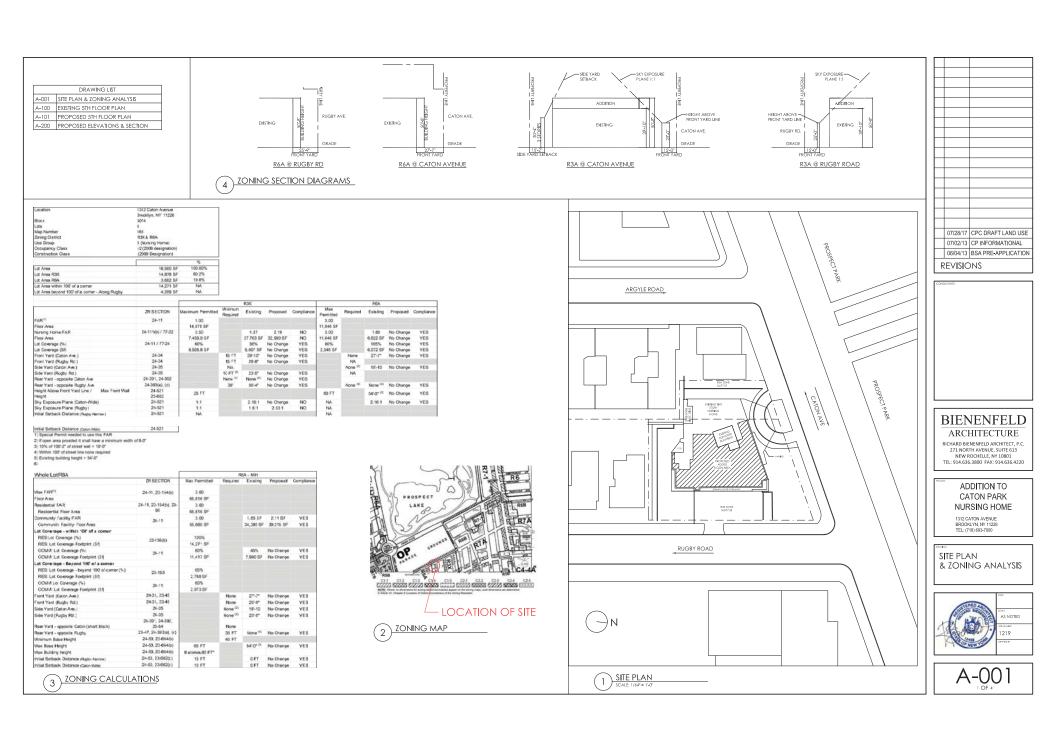
The proposed actions would result in new development in the rezoning area. As such, a hazardous materials assessment was undertaken, as presented in Section 2.7 above. As discussed in the section, all contaminants and contaminated materials are expected to be removed in accordance with environmental regulations and no significant adverse impacts are expected.

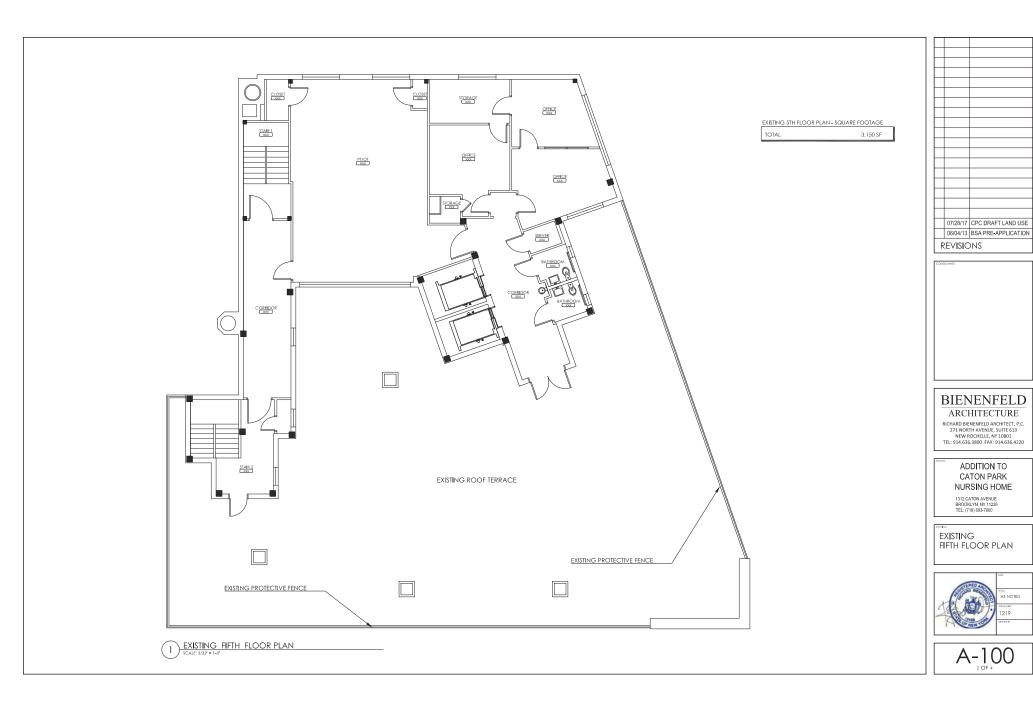
# **Conclusion**

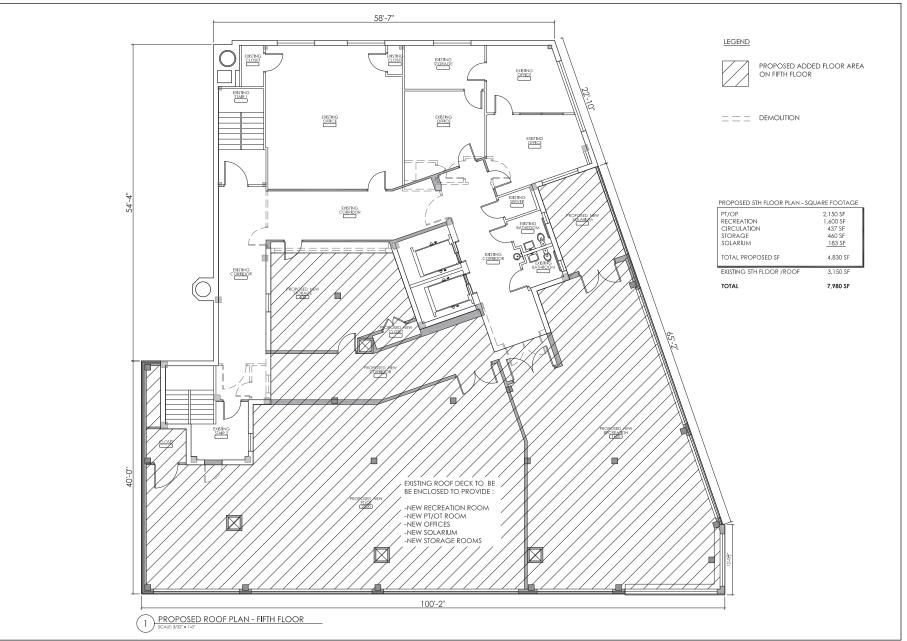
Construction-related activities are not expected to have any significant adverse impacts on traffic, air quality, noise, historic resources, or hazardous materials conditions as a result of the proposed actions.

# **Appendices**

# Appendix A Applicant Plans









# BIENENFELD

RICHARD BIENENFELD ARCHITECT, P.C.
271 NORTH AVENUE, SUITE 613
NEW ROCHELLE, NY 10801
TEL: 914.636.3800 FAX: 914.636.4220

#### ADDITION TO CATON PARK NURSING HOME

1312 CATON AVENUE BROOKLYN, NY 11226 TEL: (718) 693-7000

PROPOSED FIFTH FLOOR PLAN

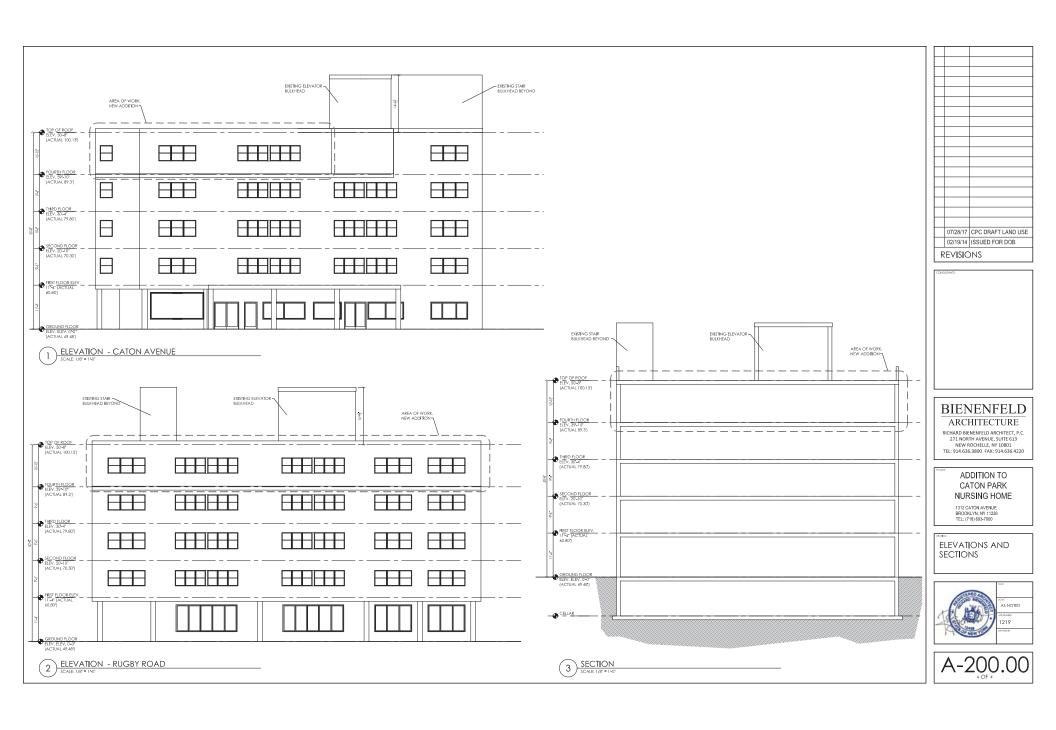


AS NOTED

JOHNHOER
1219

DEAPED BY

A-101



# **Appendix- B NYC LPC Correspondence**





# **ENVIRONMENTAL REVIEW**

**Project number:** DEPARTMENT OF CITY PLANNING / LA-CEQR-K

**Project:** CATON PARK NURSING HOME REZONING

**Date received:** 8/8/2017

Ging SanTucci

**Properties with no Architectural or Archaeological significance:** 

1) ADDRESS: 26 RUGBY ROAD, BBL: 3050740014

2) ADDRESS: 1312 CATON AVENUE, BBL: 3050740004,

8/15/2017

DATE

SIGNATURE
Gina Santucci, Environmental Review Coordinator

**File Name:** 32666\_FSO\_DNP\_08152017.doc

Appendix- C
Jamaica Bay Watershed
Protection Plan Form

**Print Form** 

# Jamaica Bay Watershed Protection Plan Project Tracking Form

The Jamaica Bay Watershed Protection Plan, developed pursuant to Local Law 71 of 2005, mandates that the New York City Department of Environmental Protection (DEP) work with the Mayor's Office of Environmental Coordination (MOEC) to review and track proposed development projects in the Jamaica Bay Watershed (http://www.nyc.gov/html/oec/downloads/pdf/ceqr/Jamaica\_Bay\_Watershed\_Map.jpg) that are subject to CEQR in order to monitor growth and trends. If a project is located in the Jamaica Bay Watershed, (the applicant should complete this form and submit it to DEP and MOEC. This form must be updated with any project modifications and resubmitted to DEP and MOEC.

The information below will be used for tracking purposes only. It is not intended to indicate whether further CEQR analysis is needed to substitute for the guidance offered in the relevant chapters of the CEQR Technical Manual.

A.	GE	NERAL PROJECT INFORMATION					
	1.	CEQR Number: TBD 1a. Modification					
	2.	Project Name: Caton Park Nursing Home Rezoning					
	3.						
		The proposed rezoning will facilitate an enlargement of the Caton Park Nursing Home, a 119- bed nursing and rehabiliation center. The proposed enlargement would add approximately 4,830 square feet of floor area to the existing fifth floor and would function as new space for programmatic use.					
	4.	Project Sponsor: Beinefeld Architecture					
	5.	Required approvals: ULURP					
	6.	Project schedule (build year and construction schedule): 2021					
В.	PR	OJECT LOCATION:					
	1.	Street address: 1312 Caton Avenue, Brooklyn, NY,					
	2.	Tax block(s): 5074 Tax Lot(s): 4					
	3.	Identify existing land use and zoning on the project site: Community Facility, R3X, R6A					
	4.	Identify proposed land use and zoning on the project site: Expansion of Community Facility or Res.					
	5.	Identify land use of adjacent sites (include any open space): Pros. Park Parade Ground, School, resi					
	6.						
		Existing Condition Proposed Condition					
		1.86 FAR					
	7.	Is project within 100 or 500 year floodplain (specify)?   100 Year   No					

C.	GR	OUND AND GROUNDWATER		
	1. Total area of in-ground disturbance, if any (in square feet): 18,644			
	2.	Will soil be removed (if so, what is the volume in cubic yards)? YES (TBD)		
	3.	Subsurface soil classification: (per the New York City Soil and Water Conservation Board): N/A, Urban		
	4.	If project would change site grade, provide land contours (attach map showing existing in 1' contours and proposed in 1' contours).		
	5.	Will groundwater be used (list volumes/rates)?		
		Volumes: NA . Rates: NA		
	6.	Will project involve dewatering (list volumes/rates)?		
		Volumes: NA Rates: NA		
	7.	Describe site elevation above seasonal high groundwater:		
		NA		
D.	HA	ABITAT		
	1.	Will vegetation be removed, particularly native vegetation?		
		<ul> <li>If YES,</li> <li>- Attach a detailed list (species, size and location on site) of vegetation to be removed (including trees &gt;2" caliper, shrubs, understory planting and groundcover).</li> <li>- List species to remain on site.</li> <li>- Provide a detailed list (species and sizes) of proposed landscape restoration plan (includin any wetland restoration plans).</li> </ul>		
	2.	Is the site used or inhabited by any rare, threatened or endangered species? Tyes X No		
	3.	Will the project affect habitat characteristics?		
		If YES, describe existing wildlife use and habitat classification using "Ecological Communities of New York State." at http://www.dec.ny.gov/animals/29392.html.		
	4.	Will pesticides, rodenticides or herbicides be used during construction?		
		If YES, estimate quantity, area and duration of application.		
	5.	Will additional lighting be installed? ☐ Yes		
		If YES and near existing open space or natural areas, what measures would be taken to reduce light penetration into these areas?		

# **E. SURFACE COVERAGE AND CHARACTERISTICS**

(describe the following for both the existing and proposed condition):

	<b>Existing Condition</b>	Proposed Condition
L. Surface area:		
Roof:	approx 8300	18,644
Pavement/walkway:	Approx 10,344	0
Grass/softscape:	NA	NA
Other (describe):	NA	NA
. <i>Wetland</i> (regulate	d or non-regulated) area and classif	ication:
	NA	NA
Water surface are	a:	
	NA	NA
Stormwater mana	gement (describe):	
Existing – how is th	ne site drained?	
Site Drains into adj	acent sewer system	
Proposed – describ	pe, including any infrastructure impr	ovements necessary off-site:
No related infrastro	ucture changes are proposed	, July 1

# Appendix- D Phase I ESA



Phase I Environmental Site
Assessment
Caton Park Rehabilitation and
Nursing Center
1312 Caton Avenue
Brooklyn, New York

**Beinefeld Architecture** 

60533255

November 2017

# Quality information

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November 2017 Final Text Phase I\_Caton Park\_112117

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# **Executive Summary**

Beinefeld Architecture contracted with AECOM Technical Services, Inc. (AECOM) to perform a Phase I Environmental Site Assessment (ESA) of the property identified as the Caton Park Rehabilitation and Nursing Center located at 1312 Caton Avenue, Brooklyn, Kings County, New York (subject property). This assessment was conducted as part of the potential commercial and residential redevelopment of the subject property. This Phase I ESA was performed in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice Designation E 1527-13 for ESAs. Exceptions to, or deletions from, this practice are described in this report.

The approximately 0.43-acre subject property is developed with a four-story 21,180 square-foot building with a basement consisting of a nursing and rehabilitation facility, an outdoor seating area, and a parking lot. During the site visit, no visual evidence of potable water wells, monitoring wells, dry wells, clarifiers, septic tanks, or leach fields was observed on the subject property. Sumps used to collect wastewater generated at the subject property are located in the boiler room and in the gas shutoff, sprinkler, and sanitation pump room, all located in the basement of the subject property building. This water is pumped into the New York City Department of Environmental Protection's (NYCDEP) combined sewer system. Stormwater drains were observed in the parking area located in the eastern portion of the property along Rugby Road which also connected into the NYCDEP combined sewer system. A concrete vault covered with a steel plate was observed in the northwestern portion of the property, near the entrance to the facility. A circular cover was observed at the base of this vault. The vault may be associated with the subject property's sanitary water discharge system. The site contact did not know the purpose of this vault. In addition, an apparent vent pipe was observed along the western side of the subject property building. This vent pipe may be associated with a 7,500-gallon No. 2 fuel oil vaulted underground storage tank (UST) that was reportedly closed in-place in 2009.

The subject property is bordered to the north by Caton Avenue, beyond which is a large recreational field known as The Parade Grounds of Prospect Park; to the east by Rugby Road, beyond which is Public School 249; to the south by a Buddhist monastery and residential dwellings; and to the west by apartment buildings. Based on AECOM's site reconnaissance of the surrounding neighborhood and review of the regulatory status of the adjacent neighboring properties, no off-site sources of concern were identified.

Historical research indicates the subject property contained a residential dwelling in the southern portion by at least 1905. By 1929, three residential dwellings and two residential automobile garages were present. These residential dwellings and garages remained at the subject property until 1966 when the current building was constructed for use as a nursing home. The use of the subject property and the building configuration has remained relatively unchanged since its construction. No historical on-site or off-site sources of concern were identified during this assessment.

The subject property was identified in the site-specific environmental database report as having a 7,500-gallon No. 2 fuel oil UST that was closed in-place in 2009. No additional information was provided pertaining to this UST. A number of surrounding sites were identified in the environmental database search report. However, based on AECOM's review and analysis of the database listings, none of the surrounding sites are expected to present a recognized environmental condition (REC) to the subject property, based on their distance (generally greater than 500 feet), regulatory status (i.e. regulatory closure, no violations found), media impacted (soil only), and/or topographical position relative to the subject property (i.e. down-gradient or cross-gradient).

The following REC was identified in connection with the subject property:

An apparent vent pipe was observed along the western side of the subject property building. This
vent pipe is likely associated with a 7,500-gallon No. 2 fuel oil UST. This UST was reportedly
closed in-place in 2009 and was reported to be in an inaccessible underground vault. No

additional information was available for this UST and the associated closure, such as confirmatory closure sampling results. Therefore, the presence of this UST is considered a REC for the subject property.

Based on the above-described activities, no controlled RECs (CRECs), or historical RECs (HRECs) were identified in connection with the subject property.

De minimis soil staining (approximately 5 feet by 10 feet) due to of a leak of hydraulic fluid was identified adjacent to the trash compactor located along the southern portion of the subject property.

# 1. Introduction

# 1.1 Purpose

This Phase I Environmental Site Assessment (ESA) was performed pursuant to AECOM's written proposal, dated September 1, 2017. This assessment was conducted per the request of Beinefeld Architecture (Client) as part of the rezoning activities associated with the subject property located in Brooklyn, New York. The purpose of this Phase I ESA is to provide the client with information for use in evaluating recognized environmental conditions (RECs) associated with the subject property.

Per the ASTM standard, potential findings can include RECs, including historical RECs (HRECs), controlled RECs (CRECs), and de minimis conditions (DMCs). A REC is defined by the ASTM standard as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. HRECs are a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. CRECs are a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. DMCs are those situations that do not present a material risk of harm to public health or the environment and generally would not be subject to enforcement action if brought to the attention of the regulating authority.

This assessment is based on a review of existing conditions, reported pre-existing conditions, and observed operations at the subject property and adjacent properties.

# 1.2 Scope of Work

The Phase I ESA included a site visit, regulatory research, historical review, and a review and an environmental database analysis of the subject property. In conducting the Phase I ESA, AECOM assessed the subject property for visible signs of possible contamination, researched public records for the subject property and adjacent properties (as applicable), and conducted interviews with persons knowledgeable about the subject property.

This project was performed in general accordance with ASTM Standard Practice Designation E 1527-13 and AECOM's proposal, dated September 1, 2017. Conclusions reached in this report are based upon the assessment performed and are subject to limitations set forth in Sections 1.3, 1.4, and 1.5 below.

# 1.3 Study Limitations

This report describes the results of AECOM's Phase I ESA to identify the presence of contamination-related liabilities materially affecting the subject facility and/or property. In the conduct of this assessment, AECOM assessed the presence of such problems within the limits of the established scope of work as described in our proposal.

As with any due diligence assessment, there is a certain degree of dependence upon oral information provided by facility or site representatives, which is not readily verifiable through visual

observations or supported by any available written documentation. AECOM shall not be held responsible for conditions or consequences arising from relevant facts concealed, withheld, or not fully disclosed by facility or site representatives at the time this assessment was performed. In addition, the findings and opinions expressed in this report are subject to certain conditions and assumptions, which are noted in the report. Any party reviewing the findings of the report must carefully review and consider all such conditions and assumptions.

This report and all field data and notes were gathered and/or prepared by AECOM in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of AECOM's assessment of the subject property. The statements, findings and opinions contained in this report are only intended to give approximations of the environmental conditions at the subject property.

As specified in the ASTM standard (referred to below as "this practice"), it is incumbent the client and any other parties who review and rely upon this report understand the following inherent conditions surrounding any Phase I ESA:

- Uncertainty Not Eliminated No ESA can wholly eliminate uncertainty regarding the potential
  for REC in connection with a property. Performance of this practice is intended to reduce, but
  not eliminate, uncertainty regarding the potential for REC in connection with a property, and
  this practice recognizes reasonable limits of time and costs. (Section 4.5.1 of the ASTM
  standard)
- Not Exhaustive "All appropriate inquiry" does not mean an exhaustive assessment of a
  clean property. There is a point at which the cost of information obtained outweighs the
  usefulness of the information and, in fact, may be a material detriment to the orderly
  completion of transactions. One of the purposes of this practice is to identify a balance
  between the competing goals of limiting the costs and time demands inherent in performing
  an ESA and the reduction of uncertainty about unknown conditions resulting from additional
  information. (Section 4.5.2 of the ASTM Standard)
- Comparison with Subsequent Inquiry ESAs must be evaluated based on the
  reasonableness of judgments made at the time and under the circumstances in which they
  were made. Subsequent ESAs should not be considered valid standards to judge the
  appropriateness of any prior assessment based on hindsight, new information, use of
  developing technology or analytical techniques, or other factors. (Section 4.5.4 of the ASTM
  Standard)

A similar set of inherent limitations exist in cases where the Phase I ESA included a screening-level assessment of vapor migration or vapor encroachment; such an assessment is a required part of a Phase I ESA when the ASTM E1527-13 standard is employed. According to the ASTM E2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, the following limitations apply:

- Uncertainty Not Eliminated in Screening No vapor encroachment screen (VES) can wholly
  eliminate uncertainty regarding the identifications of vapor encroachment conditions (VECs) in
  connection with the target property. (Section 4.5.1)
- Not Exhaustive The guide is not meant to be an exhaustive screening. There is a point at
  which the cost of information obtained outweighs the usefulness of the information and, in
  fact, may be a material detriment to the orderly completion of real estate transactions. One of
  the purposes of this guide is to identify a balance between the competing goals of limiting the
  costs and time demands inherent in performing a VES and the reduction of uncertainty about
  unknown conditions resulting from additional information. (Section 4.5.2)

Comparison with Subsequent Investigations - It should not be concluded or assumed that an
investigation was not adequate because the investigation did not identify any VECs in
connection with a property. The VES must be evaluated based on the reasonableness of
judgments made at the time and under the circumstances in which they were made.
Subsequent VESs should not be considered valid bases to judge the appropriateness of any
prior screening if based on hindsight, new information, use of developing technology or
analytical techniques, or similar factors. (Section 4.5.4)

This report was prepared pursuant to an agreement between the Client and AECOM and is for the exclusive use of the Client. No other party is entitled to rely on the conclusions, observations, specifications, or data contained herein without first obtaining AECOM's written consent and provided any such party signs an AECOM-generated Reliance Letter. A third party's signing of the AECOM Reliance Letter and AECOM's written consent are conditions precedent to any additional use or reliance on this report.

The passage of time may result in changes in technology, economic conditions, site variations, or regulatory provisions, which would render the report inaccurate. Reliance on this report after the date of issuance as an accurate representation of current site conditions shall be at the user's sole risk.

# 1.4 Site-Related Limiting Conditions

The following site-specific limitations were encountered during the course of this assessment:

- It was not feasible to evaluate every individual room or space within the building during the
  site visit. AECOM's evaluation of the building focused on areas where hazardous substances
  are handled. Based on the use of the subject property (office/administrative), this particular
  site-related limiting condition is not expected to have a significant limitation to this
  assessment.
- AECOM was unable to observe the elevator pits located at the subject property as elevator
  personnel are required to be present to lock out and lift the elevators. Based on the age of
  the subject property building, this particular site-related limiting condition has the potential to
  be significant. The site contact did not indicate any significant issues associated with the
  hydraulic elevators.

# 1.5 Data Gaps/Data Failure

The following data failure/data gaps were encountered during the course of this assessment:

- As specified in the agreed upon scope of work, title and environmental lien searches were not
  conducted as part of this ESA. However, based upon historical data collected from other
  sources, this data gap is not expected to impact the results of this assessment. In addition,
  the user was not aware of environmental liens or activity use limitations (AULs) that have
  been placed on the subject property.
- Per ASTM, past owners, operators, and occupants of the subject property who are likely to
  have material information regarding the potential for contamination at the subject property
  shall be contacted to the extent that they can be identified and that the information likely to be
  obtained is not duplicative of information already obtained from other sources. AECOM was
  unable to interview past owners and/or operators at the subject property. However, based
  upon historical data collected from other sources, this data gap is not expected to impact the
  results of this assessment.

- Per the agreed scope-of-work and the ASTM Standard, information related to certain site-specific items should be provided by the ESA report user to AECOM. To assist the user in gathering information that may be material to identifying RECs, AECOM provided the Client (the users) with the User Questionnaire from the ASTM Standard; at this time the completed form has not been returned for inclusion in this report. However, this data gap is not expected to represent a significant limitation to this investigation given the historical use of the subject property.
- A limitation was encountered in determining the historical use of the subject property. The earliest source of historical information reasonably ascertainable within the time frame of this report in which usage could be determined was a 1905 Sanborn Fire Insurance Map. The map shows the subject property with a residential dwelling. Therefore, the ASTM E1527 requirement to determine all obvious uses of the property from the present back to the property's first obvious developed use, or back to 1940, whichever is earlier, could not be achieved. However, based upon the identified land use, it is unlikely that there had been significant prior development; therefore, this data failure is not expected to impact the results of this assessment.
- As of the date of this report, AECOM has not received any responses to Freedom of Information Act (FOIA) requests made to the Fire Department of the City of New York (FDNY), New York City Department of Environmental Protection (NYCDEP), New York State Department of Health (NYSDOH), or New York State Department of Environmental Conservation (NYSDEC). However, based upon historical data collected from other sources, this data gap is not expected to impact the results of this assessment.

# 2. Site Description

# 2.1 Site Location and Parcel Description

The subject property is located at 1312 Caton Avenue, Brooklyn, Kings County, New York. The subject property is situated to the southwest of the intersection of Caton Avenue and Rugby Road. The subject property is accessed from Caton Avenue to the north and Rugby Road to the east.

According to the City of New York Department of Finance (NYCDOF), the subject property consists of a single parcel of land designated as Block 5074, Lot 4. The location of the subject property is illustrated on Figure 1 - Site Location Map.

# 2.2 Site Ownership

According to the NYCDOF, the subject property is owned by Melton Realty LLC.

#### 2.3 Site Visit

Mr. Nelson J. Abrams with AECOM's 125 Broad Street, New York, New York office visited the subject property on October 3, 2017. During the site visit, Mr. Abrams interviewed Mr. Roman Ayrieu, Environmental Services Director for the subject property. Site-related limiting conditions encountered during this assessment were previously summarized in Section 1.4.

The site visit methodology consisted of walking over accessible areas of the subject property, including the building interior and exterior, the perimeter, and the portions of the surrounding area. The following sections summarize the results of the site visit.

## 2.3.1 Site and Facility Description

The approximately 0.43-acre subject property is developed as a four four-story 21,180 square-foot building with a basement used as a nursing and rehabilitation facility, an outdoor seating area, and a parking lot. The basement level includes the boiler/mechanical room, laundry storage rooms, maintenance shop, housekeeping and medical supply storage rooms, maintenance supply room, electrical room, a gas shutoff, sprinkler, sanitation pump room, and the kitchen. The first floor consists of the lobby, administrative offices, dining area, television viewing area, and gift shop. The second through fourth floors are private and shared rooms for the residents with a nurse's station on each floor. The fifth floor contains additional administrative offices and the physical therapy center.

The building is considered to be of mixed construction with concrete blocks and brick with a protective steel frame. The roof appears of asphalt construction. The remainder of the subject property consisted of an asphalt parking area located to the east of the building, an asphalt driveway to the east of the parking area along Rugby Road which provides access the back (southern portion) of the building, an asphalt driveway in the northern portion of the property along Caton Avenue, and a fenced-in landscaped seating area used by the residents located in the northeastern portion of the property.

During the site visit, no visual evidence of potable water wells, monitoring wells, dry wells, clarifiers, septic tanks, or leach fields was observed on the subject property. Sumps used to collect wastewater generated at the subject property are located in the basement boiler room and in the gas shutoff, sprinkler, and sanitation pump room. This water is pumped into the New York City

Department of Environmental Protection's (NYCDEP) combined sewer system. Stormwater drains were observed in the parking area located in the eastern portion of the property along Rugby Road which also connects into the NYCDEP combined sewer system. A concrete vault covered with a steel plate was observed in the northwestern portion of the property, near the entrance to the facility. A circular cover was observed at the base of this vault. The site contact did not know the purpose of this vault. In addition, an apparent vent pipe was observed along the western side of the subject property building. This vent pipe may be associated with a 7,500-gallon No. 2 fuel oil underground storage tank (UST) that was reportedly closed in-place in 2009.

AECOM observed a sub-grade vault near the entrance to the subject property along the northern portion of the subject property building. The vault was approximately 9 square feet and approximately 4 feet deep. The site contact did not have any information as to the current or former use of this vault. Based on the location and AECOM's observations during the site reconnaissance, it is believed to be associated with the wastewater system and not the UST, however this could not be confirmed.

The general layout of the subject property is illustrated on Figure 2 - Site Plan and Representative Site Photographs are provided in Appendix A.

#### 2.3.2 Surrounding Properties

The subject property is bordered to the north by Caton Avenue, beyond which is a large recreational field known as The Parade Grounds of Prospect Park; to the east by Rugby Road, beyond which is Public School 249 (PS 249); to the south by a Buddhist monastery and residential dwellings; and to the west by apartment buildings.

AECOM did not observe any gasoline service stations or dry cleaners in the immediate vicinity (500 feet) of the subject property. PS 249 is located directly east of subject property across Rugby Road and is considered a sensitive receptor. No other sensitive receptors (i.e. day care centers, additional schools, hospitals, water bodies) are located adjacent to the subject property. Based on AECOM's site reconnaissance of the surrounding neighborhood, no off-site sources of concern were identified.

#### 2.3.3 Petroleum Products and Hazardous Materials

Other than normal commercial cleaning supplies and typical maintenance materials (i.e. paints, spray lubricants), hazardous materials or petroleum products were not observed at the subject property, and none were reported by Mr. Ayrieu to be located at the subject property. No staining was observed of these materials. Oxygen cylinders are located in storage closets on each floor of the building. Staining observed in the vicinity of the hydraulic trash compactor is discussed further in Section 2.3.4.

#### 2.3.4 Polychlorinated Biphenyls

Polychlorinated biphenyl (PCB)-containing dielectric fluids have been widely used as coolants and lubricants in transformers, capacitors, and other electric equipment due to their insulating and nonflammable properties. Based on the age of the subject property (pre-1979), the potential exists for PCBs to be present on-site.

#### Transformers

No pad or pole-mounted transformers were observed on the subject property during the site visit.

#### **Light Ballasts**

Fluorescent light ballasts contain capacitors that may be filled with PCB-containing dielectric fluid. Typically, newer light ballasts will contain labeling stating "No PCBs". Based upon the age of the building, it is possible that the light ballasts at the subject property contain PCBs. An inspection of individual ballasts was not included within the scope of this assessment.

#### Other Hydraulic Equipment

Other hydraulic equipment observed at the subject property includes elevators and a trash compactor located in the southern part of the subject property. As previously discussed, AECOM did not have access to the hydraulic elevator pits at the time of the site reconnaissance. No staining was observed associated with the hydraulic reservoirs located in the elevator machine rooms. At the time of the site reconnaissance, de minimis soil staining (approximately 5 feet by 10 feet) was observed near the trash compactor located on the southern portion of the subject property. The compactor appeared to be leaking hydraulic fluid. Aboveground Storage Tanks

Aboveground storage tanks (ASTs) were not observed during the site visit and none were reported to be present on-site by the site contact. In addition, no ASTs were listed in the site-specific environmental database report reviewed by AECOM, or otherwise identified during AECOM's review of historical aerial photographs.

#### 2.3.5 Underground Storage Tanks

An apparent vent pipe was observed along the western side of the subject property building. This vent pipe is likely associated with a 7,500-gallon No. 2 fuel oil UST that was reportedly closed in-place in 2009 per the Environmental Data Resources (EDR) database report and the NYSDEC Petroleum Bulk Storage database. According to the database, the UST was reported to be in an inaccessible underground vault.

#### 2.3.6 Solid Waste

Solid waste consisting of general office trash along with kitchen and dining wastes are disposed of in dumpsters and in the trash compactor located in the southern portion of the subject property. The compacted trash is pickup on a regular basis by Action Environmental Services headquartered in Teaneck, New Jersey. The kitchen has three in-ground cooking grease traps that are cleaned every three months by Filta-Clean Company, Inc. located in Brooklyn, New York.

#### 2.3.7 Hazardous Waste

No evidence of hazardous waste generation was observed at the subject property, and the site contact reported no such activities. In addition, the subject property was not listed as a generator of hazardous waste in the site-specific database report. Medical waste that is generated at the subject property is stored in separate containers from solid waste as is pickup up for disposal on a regular basis by Approved Storage and Waste Handling located in Mount Vernon, New York.

#### 2.3.8 Water

The subject property receives its potable water supply from the NYCDEP. No potable water wells were observed at the subject property or reported by the site contact to be present on-site.

#### 2.3.9 Wastewater

Sanitary wastewater generated from the subject property including the effluent from human consumptive use, floor and sink drains in the kitchen (after discharging to the grease traps) and sumps in the basement discharges into the NYCDEP combined sewer system.

#### 2.3.10 Stormwater

Stormwater drains were observed in the parking lot and near the trash compactor on the subject property at the time of AECOM's site reconnaissance. In addition, stormwater is also expected to flow into the combined sewers maintained by the NYCDEP along Caton Avenue and Rugby Road.

#### 2.3.11 Heating and Cooling

Heating at the subject property is supplied via hot water baseboard heat by a natural gas-fired boiler located in the basement of the building. Natural gas is supplied by National Grid. A non-working boiler which was likely used when the former UST was operational is located adjacent to the gas fired boiler. A central air conditional and air handling unit is also located in the basement.

# 3. Environmental Setting

# 3.1 Topography

According to the United States Geological Survey (USGS) topographic map of the subject property area (Brooklyn, NY quadrangle map) and a review of the Google Earth application, the elevation of the subject property is approximately 50 feet above mean sea level (msl). Based on a review of these technical resources and AECOM's site visit, the subject property is generally flat with a slight downward slope toward the south.

# 3.2 Soil/Geology

Site-specific geologic information was not identified during the course of this assessment. The environmental database report indicates that the subject property is underlain with Urban Land, which is considered to be historic fill of unknown origin and is typically covered by streets, parking lots, buildings, and other structures of urban areas.

The Borough of Brooklyn lies within the glaciated portion of western Long Island. The local geologic stratum in the area surrounding the subject property likely consists of some historic fill. Below this fill, the strata consist of a surficial unit of unconsolidated glacial till overlying the metamorphic, micarich gneissic bedrock of the Cambro-Ordovician Hartland Formation. Holocene deposits of alluvium and marine tidal marsh deposits occur along streams and shoreline areas, and many low-lying areas have been filled to accommodate development. The bedrock surface inclination is toward the south-southeast, and is approximately 100 feet below grade near the subject property.

# 3.3 Groundwater/Hydrology

Site-specific hydrologic information was not identified during the course of this assessment. The overall groundwater flow in this area is likely to the south towards the Lower Bay of New York Harbor. Based upon the elevation of the subject parcel the estimated depth to ground water is between 50 to 60 feet below ground surface. However, the actual groundwater flow direction and depth in the vicinity of the subject property cannot be determined without site-specific groundwater monitoring well data.

# 4. Site and Area History

Historical information for the subject property and surrounding properties is based on AECOM's review and analysis of the following historical sources:

- Aerial photographs dated 1924, 1951, 1954, 1961, 1966, 1974, 1976, 1980, 1984, 1994, 2006, 2009, and 2011;
- <u>Sanborn® Fire Insurance Maps (Sanborn Maps)</u> dated 1905, 1929, 1950, 1969, 1977, 1979, 1981, 1983, 1986, 1987-1989, 1992–1995, and 2001 2007;
- Topographic maps dated 1897, 1898, 1900, 1947, 1956, 1967, 1979, 1995, and 2013;
- <u>City directories</u> for the years 1928, 1934, 1940, 1945, 1949, 1960, 1965, 1970, 1973, 1976, 1980, 1985, 1992, 1997, 2000, 2005, 2010 and 2014; and
- Online Property Information reviewed via the NYCDOF and the City of New York City Department of Buildings (NYCDOB) websites.

In addition, an interview was conducted with Mr. Roman Ayrieu, Environmental Service Director for the subject property. Mr. Ayrieu had only worked for the subject property for approximately 10 weeks at the time the site visit was conducted.

# 4.1 Subject Property

Historical research indicates the subject property contained a residential dwelling in the southern portion by at least 1905. By 1929, three residential dwellings and two residential automobile garages were present. These residential dwellings and garages remained at the subject property until 1966 when the current building was constructed for use as a nursing home. The use of the subject property and the building configuration has remained relatively unchanged since its construction. No historical on-site sources of concern were identified during this assessment. Offsite Properties

#### **NORTH**

The property to the north across Caton Avenue consists of a large open field known as the Parade Grounds. It was first developed after the Civil War to allow veterans to conduct military exercises. After 1885, the property was utilized for a variety of outdoor recreational uses including archery, lawn bowling and cricket matches. The configuration of the field has changed over time to include various uses including baseball, softball, football, and soccer. The property is currently configured with four baseball fields, two soccer fields, a multi-purpose field, a set of basketball courts, and two football fields with artificial turf.

#### **EAST**

The properties to the east of the subject property across Rugby Road were identified as residential dwellings in 1905 and remained as such until the construction of Public School (PS) 249 in 1951. The property has since remained a school since that time, with an addition wing added to the school building sometime around 1992.

#### SOUTH

The properties to the south have been residential dwellings since at least 1905. The only change since 1905 was that the residential home immediately adjacent to the subject property was converted into a Khmer Buddhist monastery in 1990.

#### **WEST**

The properties to the west were vacant in 1905. By 1924, these properties consisted of residential apartment buildings. There have been no significant changes to the use of these properties since 1924.

Based on a review of historical sources for the surrounding properties, no off-site sources of concern were identified that present a REC to the subject property.

# 4.2 Previously Prepared Environmental Reports

AECOM inquired about existing environmental reports associated with the subject property. Previously prepared environmental reports were not identified during this assessment. Mr. Ayrieu indicated that no previous environmental assessments or reports associated with the subject property.

# Database and Records Review

#### 5.1 User Provided Information

Section 6 of the ASTM Standard states that certain tasks, which will help to determine the possibility of RECs associated with the subject property, are generally conducted by the ESA report user. This includes the following: reviewing title records for environmental liens or activity and land use limitations and considering awareness of any specialized knowledge (e.g., information about previous ownership or environmental litigation), experience related to RECs at the subject property, or significant reduction in the purchase price of the subject property. Per the agreed scope-of-work, information related to these items should be provided by the ESA report user to AECOM. The User Questionnaire from the ASTM Standard was not provided to the client at the time of this report was prepared. This data gap is not expected to represent a significant limitation to this investigation based on other documentation reviewed as part of the Phase I ESA.

## 5.2 Title Records/Environmental Liens

Per the agreed upon scope of work, a chain-of-title and an environmental lien search were not performed as part of this assessment.

#### 5.3 Database Information

In accordance with the scope of work and ASTM Standard E-1527-13, a search of various governmental databases was conducted by EDR. The site-specific environmental database report was reviewed to evaluate if soil and or groundwater from an on-site and/or off-site sources of concern has the potential to impact the subject property. The database abbreviations are provided in the site-specific environmental database report.

The database report includes various reports detailing database information for each of the sites identified/geocoded within the specified radius. Additional sites were identified within the database report; however EDR was not able to map them to specific locations due to insufficient/contradicting address information. These sites were included in the database report as "orphan" sites. Based upon AECOM's review, there does not appear to be any significant concerns associated with any of the orphan sites. A summary of AECOM's review and analysis of the site-specific environmental database report is presented below. A copy of the database report is provided in Appendix B.

Based on AECOM's research, the subject property is not located on or within a one-mile radius of tribal lands.

#### 5.3.1 Subject Property

The subject property is identified on the NY UST environmental database reviewed for this assessment.

As previously stated, the subject property used a 7,500-gallon UST for the storage of No. 2 fuel oil. According to the database, the UST was closed in-place in 2009 as the UST was reported to be in an inaccessible underground vault.

#### 5.3.2 Surrounding Sites

According to the environmental database report, numerous (over 100) sites were identified within their respective ASTM and/or EDR search distances from the subject property. Based on AECOM's

review of these database listings, none of these sites are expected to present a REC to the subject property based on their distance from the subject property, regulatory status (i.e. closed, no violations found), media impacted (i.e. soil only), and/or topographical position from the subject property (i.e. down-gradient or cross-gradient).

# 5.4 Vapor Encroachment Screening

AECOM conducted a Tier 1 vapor encroachment screening (VES) as part of this assessment. This screening was conducted in general accordance with the ASTM E2600 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions dated October 2015. The objective of the VES was to determine if a VEC exists or if a VEC does not exist.

#### 5.4.1 Subject Property

No on-site sources of vapor encroachment (e.g. UST, contaminated soil, groundwater plume, etc.) were identified during this assessment. Based on this information, a VEC due to an on-site source does not appear to exist.

#### 5.4.2 Off-site

To conduct the VES of the nearby area, AECOM conducted a detailed review and analysis of the site-specific environmental database report with particular focus on the follow two types of sites:

- Off-site properties that are impacted by chlorinated volatile organic compounds (VOCs) and/or semi-volatile-organic compounds (SVOCs) and are located within approximately 1,750 feet of the subject property, and
- 2. Off-site properties that are impacted by petroleum hydrocarbons and are located within approximately 525 feet of the subject property.

The following paragraph summarizes the results of AECOM's VES of the nearby area.

A review of the site-specific environmental database indicates that no chlorinated VOC/SVOC and two petroleum hydrocarbon impacted sites are located with the above-described radii of the subject property. However, both of these sites can be ruled out due to their regulatory status (i.e. regulatory closure has been issued), media impacted (i.e. soil only), and/or topographical position from the subject property (i.e. down-gradient or cross-gradient). Based on this information, it is AECOM's opinion that a VEC at the subject property due to an off-site source does not appear to exist.

# 5.5 Agency File Review

## 5.5.1 Local

AECOM reviewed online information on the New York City Department of Finance and Department of Buildings websites. This information is incorporated throughout this report as appropriate.

AECOM submitted Freedom of Information Act (FOIA) requests to the NYCDEP and FDNY. As of the date of this report, responses to AECOM's FOIA requests to either agency have not been received. Based on AECOM's research to date, AECOM does not anticipate the response (if any) from this agency to our FOIA request will significantly alter the conclusions or recommendations of this report. However, if information is received from this FOIA request that significantly impacts the conclusions of this report, this information will be forwarded upon receipt.

#### 5.5.2 State

In addition, AECOM submitted a FOIA request to the NYSDEC and the NYSDOH. As of the date of this report, responses to AECOM's FOIA request to either agency have not been received. Based on AECOM's research to date, AECOM does not anticipate the response (if any) from this agency to our FOIA request will significantly alter the conclusions or recommendations of this report. However, if information is received from this FOIA request that significantly impacts the conclusions of this report, this information will be forwarded upon receipt.

AECOM also reviewed the following databases, in addition to those identified in Section 5.3.2:

- New York State Department of Environmental Conservation, Bulk Storage Database Search. The subject property was identified in the database with the UST that was closed in 2009.
- New York State Department of Environmental Conservation, Spill Incident Database Search. The subject property was not identified in the database.

#### 5.5.3 Federal

AECOM searched the U.S. EPA's Envirofacts and Superfund Enterprise Management System (SEMS) online databases. The SEMS database replaced the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) which has since been retired. SEMS includes the same data fields and content as CERCLIS. The Envirofacts database retrieves information obtained from 17 national systems, including the CERCLIS, Superfund program (NPL sites), hazardous waste sites, and potential hazardous waste sites. The subject property was not listed on either the Envirofacts or the SEMS databases.

# 6. Findings and Opinions

AECOM performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Practice E 1527-13, which meets the requirements of Title 40, Code of Federal Regulations Part 312 and is intended to constitute *all appropriate inquiry* for purposes of the landowner liability protections. Any exceptions to, or deletions from, this practice are described in Section 1.3 through 1.5 of this report.

The following sections summarize the findings and opinions of this Phase I ESA of the subject property.

# 6.1 Recognized Environmental Conditions

Based on the above-described activities, the following REC was identified in connection with the subject property:

 An apparent vent pipe was observed along the western side of the subject property building. This vent pipe is likely associated with a 7,500-gallon No. 2 fuel oil UST. This UST was reportedly closed in-place in 2009 and was reported to be in an inaccessible underground vault. No additional information was available for this UST and the associated closure, such as confirmatory closure sampling results. Therefore, the presence of this UST is considered a REC for the subject property.

# 6.2 Controlled Recognized Environmental Conditions

Based on the above-described activities, no CRECs were identified in connection with the subject property.

# 6.3 Historical Recognized Environmental Conditions

Based on the above-described activities, no HRECs were identified in connection with the subject property.

#### 6.4 De Minimis Conditions

De minimis soil staining (approximately 5 feet by 10 feet) due to a minor leak of hydraulic fluid was identified adjacent to the trash compactor located along the southern portion of the subject property.

# 7. Conclusions

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Caton Park Rehabilitation and Nursing Center located at 1312 Caton Avenue, Brooklyn, Kings County, New York, the subject property. Any exception to, or deletions from, this practice are described in Sections 1.3 through 1.5 of this report. This assessment has revealed no evidence of RECs or controlled RECs (CRECs in connection with the subject property with the exception of the following:

 An apparent vent pipe was observed along the western side of the subject property building. This vent pipe is likely associated with a 7,500-gallon No. 2 fuel oil UST. This UST was reportedly closed in-place in 2009 and was reported to be in an inaccessible underground vault. No additional information was available for this UST and the associated closure, such as confirmatory closure sampling results. Therefore, the presence of this UST is considered a REC for the subject property.

#### **Environmental Professional Statement** 8.

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Mr. Abrams was the Environmental Professional (EP) for this project. Mr. Abrams' EP statement is below and his resume is provided in Appendix C:

I declare that, to the best of my professional knowledge and belief, I meet the definition of an EP as defined in §312.10 of 40 Code of Federal Regulations (CFR) and that I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signature:

Date: November 21, 2017

## 9. References

#### 9.1 Persons Interviewed

Ayrieu, Roman, Environmental Service Director, Caton Park Rehabilitation and Nursing Center, 1312 Caton Avenue, Brooklyn, New York 11226, (718) 693-7000. rayriev@catonpark.com. Provided information regarding environmental issue at the subject property during site visit on October 3, 2017.

# 9.2 Agencies Contacted

Environmental Protection Agency Envirofacts database - http://www.epa.gov/enviro/

Environmental Protection Agency Superfund Enterprise Management System (SEMS) database, https://cumulis.epa.gov/supercpad/cursites/srchsites.cfm .

Fire Department of the City of New York, Public Records Unit / Tanks Section, 9 MetroTech Center, Brooklyn, New York 11201-3857. (718) 999-2441 or 2442.

New York City Department of Buildings. Building permits accessed online at: http://www.nyc.gov/html/dob/html/home/home.html

New York City Department of Finance. Review of Digital Tax Maps. System accessed online at: http://www1.nyc.gov/subject property/finance/taxes/property-digital-tax-map.page

New York State Department of Environmental Conservation, Bulk Storage Database Search, bulk storage information pertaining to the subject property, retrieved online at http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=4

New York State Department of Environmental Conservation, Spill Incidents Database Search, spill information pertaining to the subject property, retrieved online at http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=2

New York State Department of Environmental Conservation, Office of General Counsel, 625 Broadway, Albany, New York 12233-1500.

New York State Department of Health, 59-17 Junction Boulevard, Corona, New York 11368.

## 9.3 Documents Reviewed

ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, dated November 2013. www.astm.org.

ASTM E2600-15, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, dated October 2015. www.astm.org.

Brock, Pamela Chase, and Brock, Patrick W.G. Geologic Map of New York City, dated October 2001. State University of New York at Stony Brook, <a href="https://www.geo.sunusb/reports/ny-city/full-map.png">www.geo.sunusb/reports/ny-city/full-map.png</a>.

EDR 7.5 Minute Topographic Maps, prepared for Caton Park Rehab & Nursing Center, 1312 Caton Avenue, Brooklyn, New York 11226, dated October 2, 2017. Inquiry number 5065554.4. Topographic Maps 1897, 1898, 1900, 1947, 1956, 1967, 1979, 1995, and 2013. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, <a href="https://www.edrnet.com">www.edrnet.com</a>.

EDR Aerial Photos Decade Package prepared for Caton Park Rehab & Nursing Center, 1312 Caton Avenue, Brooklyn, New York 11226, dated October 2, 2017. Inquiry number 5065554.9. Aerial photographs dated 1924, 1951, 1954, 1961, 1966, 1974, 1976, 1980, 1984, 1994, 2006, 2009, and 2011. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, <a href="https://www.edrnet.com">www.edrnet.com</a>.

EDR City Directory Abstract prepared for Caton Park Rehab & Nursing Center, 1312 Caton Avenue, Brooklyn, New York 11226, dated October 2, 2017. Inquiry number 5065554.5. City directories reviewed included 1928, 1934, 1940, 1945, 1949, 1960, 1965, 1970, 1973, 1976, 1980, 1985, 1992, 1997, 2000, 2005, 2010 and 2014. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, <a href="https://www.edrnet.com">www.edrnet.com</a>.

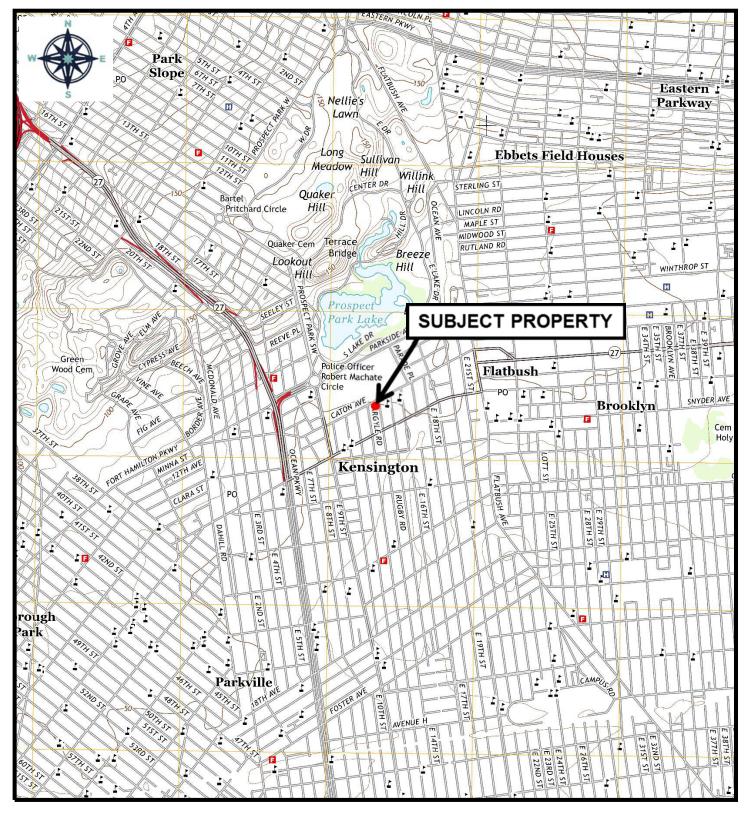
EDR Radius Map with GeoCheck<sup>®</sup>, prepared for Caton Park Rehab & Nursing Center, 1312 Caton Avenue, Brooklyn, New York 11226, dated October 2, 2017. Inquiry number 5065554.2s. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR Sanborn® Map Report, prepared for Caton Park Rehab & Nursing Center, 1312 Caton Avenue, Brooklyn, New York 11226, dated October 2, 2017. Inquiry number 5065554.3. Sanborn Maps dated 1905, 1929, 1950, 1969, 1977, 1979, 1981, 1983, 1986, 1987-1989, 1992–1995, and 2001 – 2007. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

Google Earth website, <u>www.google.earth.com</u>. This information was reviewed online by Mr. Abrams with AECOM on November 15, 2017.

AECOM Environment

**Figures** 



Scale 1:24,000

BROOKLYN, NY 7.5 Minute U.S.G.S. Quadrangles – 2013



Figure 1
Site Location Map
Caton Park Rehabilitation & Nursing Center
1312 Caton Avenue
Brooklyn, New York

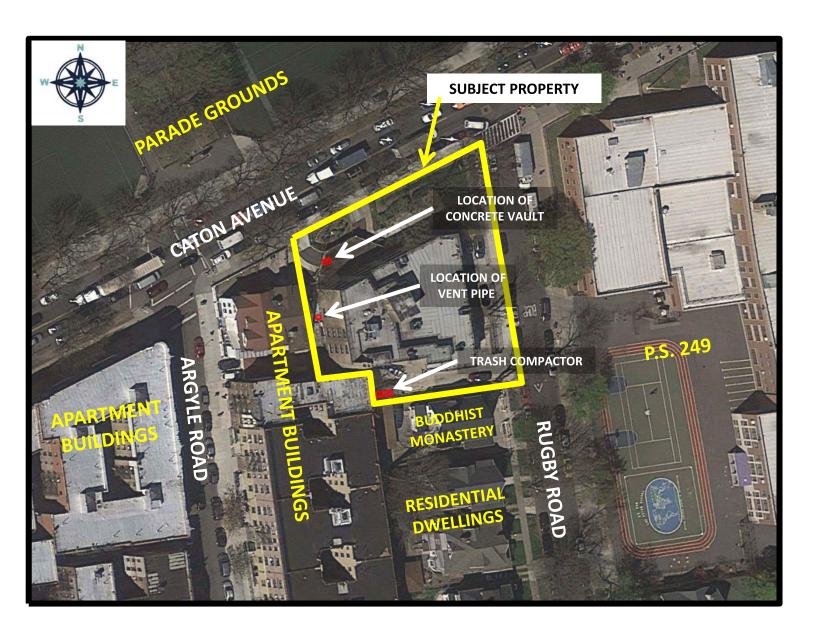




Figure 2
Site Plan
Caton Park Rehabilitation &
Nursing Center
1812 Caton Avenue
Brooklyn, New York

# **Appendix- E E-Designations (E-492)**

## Appendix 1: (E) Designations

To ensure that there would be no significant adverse air quality impacts associated with the proposed project, an E designation (E-492) will be placed on the project sites as follows:

Projected Development Site 1: Block 5074 Lot 4

Any new development or enlargement on Brooklyn Block 5074, Lot 4 must ensure that the HVAC stack is located at least 63 feet above the grade to avoid any potential significant adverse air quality impacts.

To ensure that there would be no significant adverse **noise** impacts associated with the proposed project, an E designation (E-492) will be placed on the project sites as follows:

## Projected Development Sites 1: Block 5074 Lot 4

To ensure an acceptable interior noise environment, future nursing home/residential uses must provide a closed-window condition with a minimum of 33 dB(A) window/wall attenuation on all facades facing north (Caton Avenue) and 28 dB(A) of attenuation on all facades facing east (Rugby Road) to maintain an interior noise level of 45 dB(A). 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.



#### About AECOM

AECOM (NYSE: ACM) is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental and energy. With approximately 95,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments.

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