Court Square Block 3 Text Amendment

Environmental Assessment Statement (EAS)

CEQR Number: 19DCP038Q

Lead Agency: New York City Department of City Planning Olga Abinader, Acting Director, EARD

> Prepared By: Philip Habib & Associates

> > February 11, 2019

Court Square Block 3 Text Amendment Environmental Assessment Statement (EAS)

Environmental Assessment Statement	Long Form
Project Description	Attachment A
Supplemental Screening	Attachment B
Land Use, Zoning, and Public Policy	Attachment C
Shadows	Attachment D
Urban Design and Visual Resources	Attachment E
Noise	Attachment F

Appendices

Proposed Zoning Text Amendment	. Appendix 1
LPC Correspondence	. Appendix 2
DEP Correspondence and Phase I and II ESA Executive Summaries	. Appendix 3
Noise Analysis Backup Information	Appendix 4



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

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

Part I: GENERAL INFORMAT	IUN					
PROJECT NAME Court Squa	are Block 3 Text /	Amendment				
1. Reference Numbers						
CEQR REFERENCE NUMBER (to be assigned by lead agency) 19DCP038Q			BSA REFERENCE NUMBER (if applied	cable)		
ULURP REFERENCE NUMBER (if ap	plicable)		OTHER REFERENCE NUMBER(S) (if	applicable)		
N190036ZRQ			(e.g., legislative intro, CAPA)			
2a. Lead Agency Informatio	n		2b. Applicant Information			
NAME OF LEAD AGENCY			NAME OF APPLICANT			
NYC Department of City Plan			Court Square 45 th Ave LLC			
NAME OF LEAD AGENCY CONTACT			NAME OF APPLICANT'S REPRESEN			
Olga Abinader, Acting Directo			Jay Segal, Shareholder, Gree	nberg Trau	rig, LLP	
ADDRESS 120 Broadway, 31st	Floor	1	ADDRESS 200 Park Avenue			
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10166	
TELEPHONE 212-720-3493	EMAIL		TELEPHONE 212-801-9265	EMAIL seg	galj@gtlaw.com	
	oabinad@planr	ning.nyc.gov				
3. Action Classification and	Туре					
SEQRA Classification						
UNLISTED TYPE I: Spe	ecify Category (see 6	NYCRR 617.4 and I	NYC Executive Order 91 of 1977, as a	mended): 6	NYCRR §617.4(b)(9)	
Action Type (refer to Chapter 2						
LOCALIZED ACTION, SITE SPEC	· _	, LOCALIZED ACTIO		IERIC ACTION	N	
4. Project Description						
	45th Avenue IIC	is seeking annro	oval for a zoning text amendme	ant and zor	ning certification (the	
			plicant-owned project site at 2			
		• •	in the Long Island City neighbo			
-		-	ibdistrict in the Special Long Isl		•	
		•	• •	-		
	-		Ild modify height, setback, and	-		
-), 11, 12)(the "project area") by	-	-	
			Resolution (ZR). The proposed			
	•		re flexible design and a more e		-	
		-	from the Chair of the City Plan	-		
			proposed to demonstrate the a	pplicant's	compliance with	
mandatory subway improver	ment requiremen	its within the Co	urt Square Subdistrict.			
	•		Development Scenario (RWCD	-		
		-	ttachment A, "Project Descript		-	
assumes that in the future w	ith the proposed	actions, the app	licant would redevelop the pro	oject site w	/ith a 45-story,	
approximately 308,565 gross	square foot (gsf)	building with a	pproximately 272 dwelling unit	ts (DUs), 9,	481 gsf of local retail,	
and 68,133 gsf of office space	e. No accessory o	ff-street parking	spaces are required in the Lor	ng Island Ci	ity Parking Area and	
no parking would be provide	d. Construction is	s expected to be	gin in 2020 with all component	ts complet	e and operational in	
2022.						
Project Location			1			

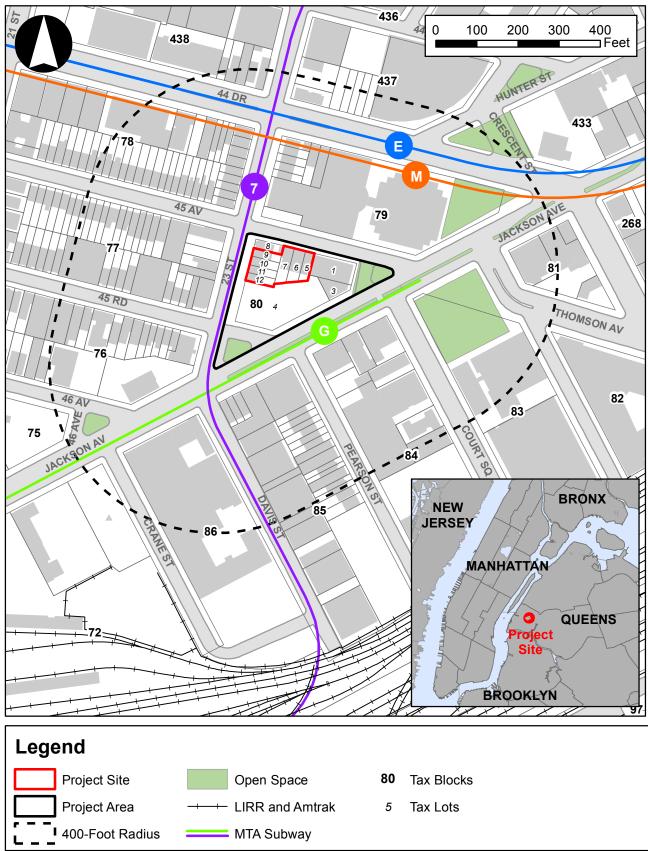
BOROUGH Queens	COMMUNITY DISTRICT(S) 2	STREET ADDRESS 23-10 – 23-16 45 th Avenue and 45-03 – 45-09
		23 rd Street

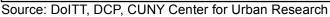
TAX BLOCK(S) AND LOT(S) Block 80, Lots 1, 3, 5, 6, 7, 9, 10, 11, 12	ZIP CODE 11101			
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The proje	ct site occupies a through lot with frontage on two streets,			
including approximately 75 feet along 45 th Avenue to the north an				
text amendment would affect the entirety of Tax Block 80 (Block 3	B of the Court Square Subdistrict), which is bounded by Jackson			
Avenue to the south and east, 23 rd Street to the west, and 45 th Av	enue to the north.			
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGN	ATION, IF ANY C5-3, ZONING SECTIONAL MAP NUMBER 9b			
Long Island City Mixed Use Special District				
5. Required Actions or Approvals (check all that apply)				
City Planning Commission: X YES NO	UNIFORM LAND USE REVIEW PROCEDURE (ULURP)			
CITY MAP AMENDMENT				
ZONING MAP AMENDMENT				
SITE SELECTION—PUBLIC FACILITY DISPOSITION—REA	L PROPERTY FRANCHISE			
HOUSING PLAN & PROJECT OTHER, explain:				
	renewal; other); EXPIRATION DATE:			
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION § 117-421(c)(1) and (2) and Appendix B, § 117-45			
Board of Standards and Appeals: YES XO				
VARIANCE (use)				
VARIANCE (bulk)				
SPECIAL PERMIT (if appropriate, specify type: modification;	renewal; 🗌 other); EXPIRATION DATE:			
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION				
Department of Environmental Protection: 🗌 YES 🛛 🔀	NO If "yes," specify:			
Other City Approvals Subject to CEQR (check all that apply)				
	FUNDING OF CONSTRUCTION, specify:			
	POLICY OR PLAN, specify:			
CONSTRUCTION OF PUBLIC FACILITIES	FUNDING OF PROGRAMS, specify:			
384(b)(4) APPROVAL	PERMITS, specify:			
OTHER, explain:				
Other City Approvals Not Subject to CEQR (check all that apply)				
	LANDMARKS PRESERVATION COMMISSION APPROVAL			
PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION				
AND COORDINATION (OCMC)	OTHER, explain:			
State or Federal Actions/Approvals/Funding: YES	NO If "yes," specify:			
6. <i>Site Description:</i> The directly affected area consists of the project si				
where otherwise indicated, provide the following information with regard t				
Graphics: The following graphics must be attached and each box must b the boundaries of the directly affected area or areas and indicate a 400-foc				
not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.				
SITE LOCATION MAP	SATE MENES.			
	DR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)			
PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF E	AS SUBMISSION AND REFED TO THE SITE LOCATION MAP			
Physical Setting (both developed and undeveloped areas)				
Total directly affected area (sq. ft.): Approx. 37,444 sf	Waterbody area (sq. ft.) and type: N/A			
Roads, buildings, and other paved surfaces (sq. ft.): Approx. 37,444	Other, describe (sq. ft.): N/A			
sf				
7. Physical Dimensions and Scale of Project (if the project affects				
SIZE OF PROJECT TO BE DEVELOPED (gross square feet): Approx. 308,56	-			
NUMBER OF BUILDINGS: 1	GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 308,565 gsf			
HEIGHT OF EACH BUILDING (ft.): 524'	NUMBER OF STORIES OF EACH BUILDING: 45			
Does the proposed project involve changes in zoning on one or more sites?	P 🔀 YES 🗌 NO			
If "yes," specify: The total square feet owned or controlled by the applicant: 11,145 sf				
The total square feet not owned or controlled by the app	icant: 26,299 sf			

Г

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility
lines, or grading? 🔀 YES 🗌 NO
If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 11,145 sq. ft. (width x length) VOLUME OF DISTURBANCE: 167,175 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 11,145 sq. ft. (width x length)
8. Analysis Year <u>CEQR Technical Manual Chapter 2</u>
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2022
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18-24 months
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? YES IN IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: See Attachment B, "Supplemental Screening"
9. Predominant Land Use in the Vicinity of the Project (check all that apply)
RESIDENTIAL MANUFACTURING COMMERCIAL PARK/FOREST/OPEN SPACE OTHER, specify:
Transportation

Figure 1 Project Site Location





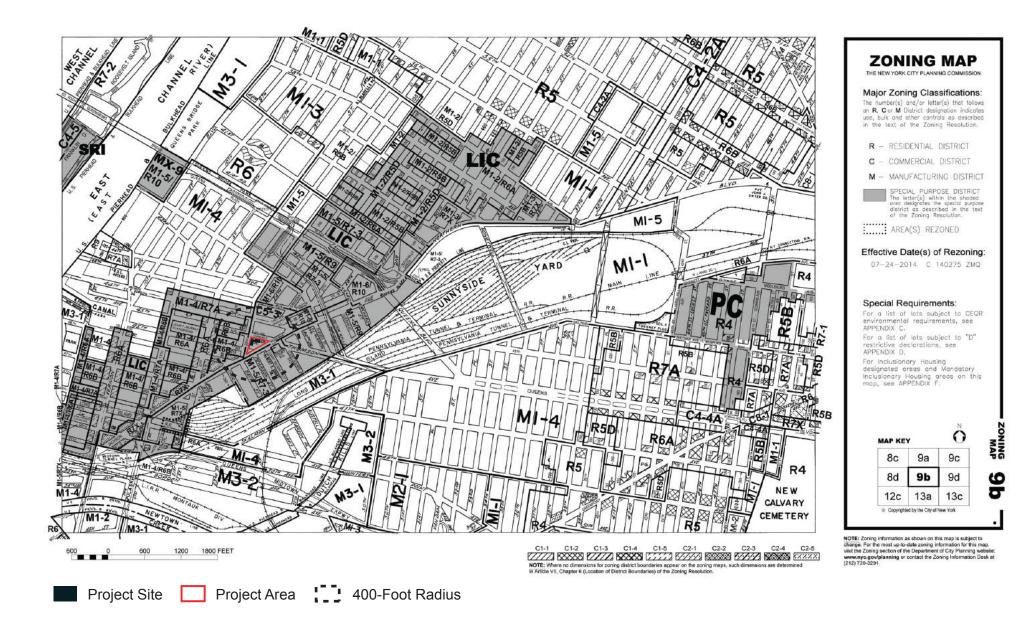
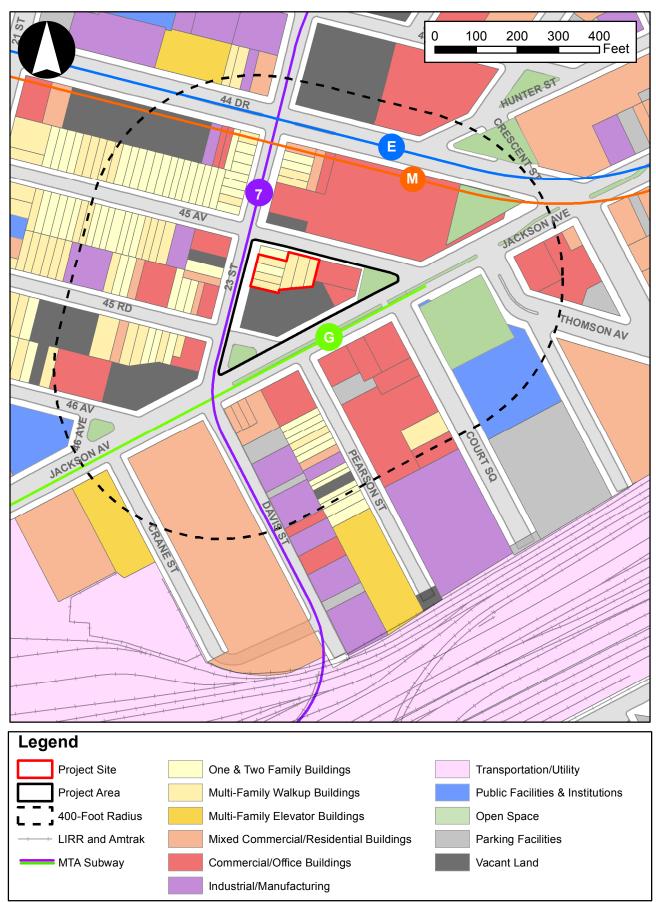
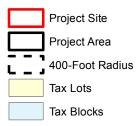


Figure 3 Land Uses



Legend



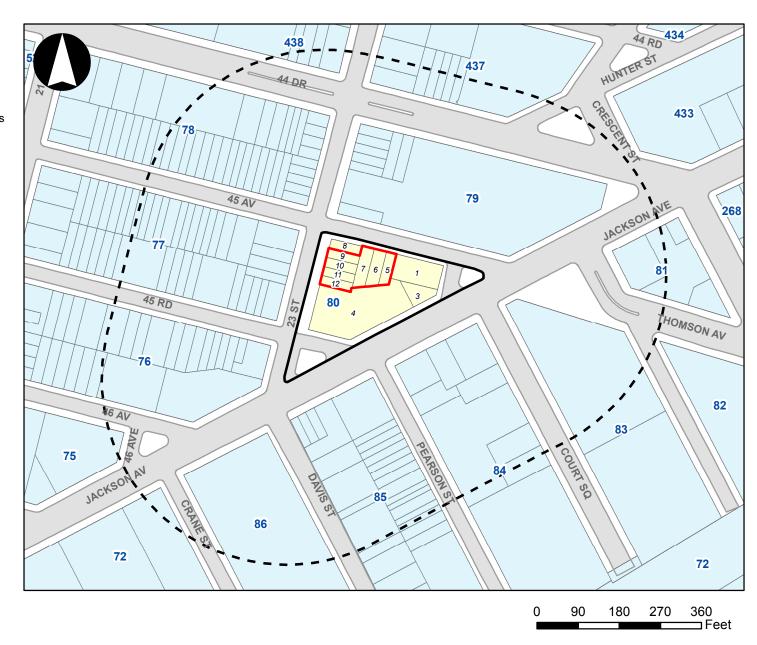


Figure 5a Project Area Photo Locations



Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, cNES/Airbus DS, USDA, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



1. Looking east at the project site from 23rd Street



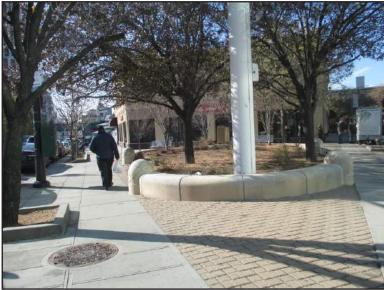
3. Looking south at the project site from 45th Avenue



2. Looking east along 45th Avenue from 23rd Street



4. Looking south at the project site along 23rd Street near 45th Avenue



5. Looking west at the project area from McKenna Triangle



6. Looking west at the project area from Jackson Avenue



7. Looking southwest along Jackson Avenue towards entrance to Court Square No. 7 subway station



8. Looking southwest at Short Triangle and entrance to Court Square No. 7 subway station

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory control. The increment is the difference between the No-Action and the With-Action conditions.

Action and the With-Action condition	1	TING				ACTION	
							INCREMENT
	CONDITION CONDITION CONDITION						
LAND USE							
Residential	YES	NO NO	YES	NO NO	YES	NO NO	
If "yes," specify the following:							
Describe type of residential structures	Single and r	multi-family	Multi-fami	ly elevator	Multi-famil	y elevator	No change
	walkup build	dings	building		building		
No. of dwelling units	21		247		272		+25 DUs
No. of low- to moderate-income units	0		0		0		No change
Gross floor area (sq. ft.)	22,150		210,028		230,951		+20,923 sf
Commercial	YES	🖂 NO	YES	NO	YES	NO	
If "yes," specify the following:							
Describe type (retail, office, other)			Retail, Offic	ce	Retail, Offic	e	No change
Gross floor area (sq. ft.)			79,505		77,614		-1,891 sf
Manufacturing/Industrial	YES	🛛 NO	YES	NO 🔀	YES	🛛 NO	
If "yes," specify the following:							
Type of use							
Gross floor area (sq. ft.)							
Open storage area (sq. ft.)							
If any unenclosed activities, specify:							
Community Facility	YES	🛛 NO	YES	NO 🛛	YES	NO 🛛	
If "yes," specify the following:							
Туре							
Gross floor area (sq. ft.)							
Vacant Land	YES	NO 🛛	YES	NO 🛛	YES	NO 🛛	
If "yes," describe:	. 125						
Publicly Accessible Open Space	YES	NO NO	YES	NO NO	YES	NO NO	
If "yes," specify type (mapped City, State, or							
Federal parkland, wetland—mapped or							
otherwise known, other):							
Other Land Uses	YES	NO NO	YES	NO 🛛	YES	NO 🛛	
If "yes," describe:							
PARKING							
Garages	YES	NO NO	YES	NO 🔀	YES	NO NO	
If "yes," specify the following:							
No. of public spaces							
No. of accessory spaces							
Operating hours							
Attended or non-attended		\square		<u> </u>		<u> </u>	
Lots	YES	NO 🔀	YES	NO 🔀	YES	NO NO	
If "yes," specify the following:							
No. of public spaces	L						
No. of accessory spaces							
Operating hours							
Other (includes street parking)	YES	NO	YES	NO	YES	NO	
lf "yes," describe:	Street parki	ng on all	Street park	ing on all	Street parking on all		No change
	frontages		frontages		frontages		
POPULATION							
Residents	YES	NO	YES	NO	YES	NO	
lf "yes," specify number:	54		640		704		+64 residents

	EXISTING	NO-ACTION	WITH-ACTION	
	CONDITION	CONDITION	CONDITION	INCREMENT
Briefly explain how the number of residents was calculated:	Assumes 2.59 persons	per DU (based on 2010 U.S	. Census data for Queens	Community District 2).
Businesses	YES NO	YES NO	YES NO	
If "yes," specify the following:				
No. and type		Retail, Office	Retail, Office	No change
No. and type of workers by business		Residential: 10 Retail: 31 Office: 277	Residential: 11 Retail: 28 Office: 273	Residential: +1 Retail: -3 Office: -4
No. and type of non-residents who are not workers		N/A	N/A	N/A
Briefly explain how the number of businesses was calculated:		mates are based on indust units; 3 workers per 1,000 e.		
Other (students, visitors, concert-goers, <i>etc.</i>)	YES NO	YES NO	YES 🛛 NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				1
ZONING	L			
Zoning classification	C5-3 (LIC)	C5-3 (LIC)	C5-3 (LIC) modified	Modifications to Block 3 of the Court Square Subdistrict are proposed that would modify building height, setback, and tower regulations.
Maximum amount of floor area that can be developed	167,175 zsf (15.0 FAR) permitted based on 11,145-sf project area.	Same as existing	Same as existing/No- Action	No change
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project Attach any additional information that may	Land uses within a 400- foot radius include residential, commercia light industrial, public facility and institutiona uses, open space, transportation, and vacant land. Zoning designations include M1-4/R6B, M1-5/R7-3. R7X, R6B.	I, I	Same as existing/No- Action	No change

If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.

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. ٠
- 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 Full 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: <u>CEQR Technical Manual Chapter 4</u>		
(a) Would the proposed project result in a change in land use different from surrounding land uses?		\square
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	\square	
(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. See Attachment C		
(e) Is the project a large, publicly sponsored project?		\square
 If "yes," complete a PlaNYC assessment and attach. 		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?		\square
 If "yes," complete the <u>Consistency Assessment Form</u> 		
2. SOCIOECONOMIC CONDITIONS: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		N
• Generate a net increase of more than 200 residential units <i>or</i> 200,000 square feet of commercial space?		\bowtie
If "yes," answer both questions 2(b)(ii) and 2(b)(iv) below.		·
 Directly displace 500 or more residents? 		\square
If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
 Directly displace more than 100 employees? 		\square
If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
 Affect conditions in a specific industry? 		\boxtimes
If "yes," answer question 2(b)(v) below.		
(b) If "yes" to any of the above, attach supporting information to answer the relevant questions below. If "no" was checked for each category above, the remaining questions in this technical area do not need to be answere	ed.	
i. Direct Residential Displacement		
 If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population? 		
 If "yes," is the average income of the directly displaced population markedly lower than the average income of the of the study area population? 	rest	
ii. Indirect Residential Displacement		
• Would expected average incomes of the new population exceed the average incomes of study area populations?		
○ If "yes:"		
Would the population of the primary study area increase by more than 10 percent?		
 Would the population of the primary study area increase by more than 5 percent in an area where there is the 		
 potential to accelerate trends toward increasing rents? o If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and 		
unprotected?		
iii. Direct Business Displacement		•
 Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade are either under existing conditions or in the future with the proposed project? 	ea,	
 Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it? 		
iv. Indirect Business Displacement		•
• Would the project potentially introduce trends that make it difficult for businesses to remain in the area?		
 Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets 		
v. Effects on Industry	I	1
 Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area? 		
 Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses? 		
3. COMMUNITY FACILITIES: CEQR Technical Manual Chapter 6	1	1

	YE	S	NO
(a) Direct Effects			
 Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations? 			\square
(b) Indirect Effects			
i. Child Care Centers			
 Would the project result in 20 or more eligible children under age 6, based on the number of low or low/mo income residential units? (See Table 6-1 in <u>Chapter 6</u>) 	derate		\boxtimes
 If "yes," would the project result in a collective utilization rate of the group child care/Head Start centers in t area that is greater than 100 percent? 	he study]	
 If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action so 	enario?]	
ii. Libraries			
 Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in <u>Chapter 6</u>) 			\boxtimes
 If "yes," would the project increase the study area population by 5 percent or more from the No-Action level 	s?]	
 If "yes," would the additional population impair the delivery of library services in the study area? 			
iii. Public Schools			
 Would the project result in 50 or more elementary or middle school students, or 150 or more high school stubased on number of residential units? (See Table 6-1 in <u>Chapter 6</u>) 	idents		\square
 If "yes," would the project result in a collective utilization rate of the elementary and/or intermediate school study area that is equal to or greater than 100 percent? 	s in the		
o If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action se	cenario?]	
iv. Health Care Facilities			
 Would the project result in the introduction of a sizeable new neighborhood?]	\square
 If "yes," would the project affect the operation of health care facilities in the area? 			
v. Fire and Police Protection			
 Would the project result in the introduction of a sizeable new neighborhood? 			\boxtimes
 If "yes," would the project affect the operation of fire or police protection in the area?]	
4. OPEN SPACE: CEQR Technical Manual Chapter 7			
(a) Would the 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?]	\boxtimes
(c) If "yes," would the project generate more than 50 additional residents or 125 additional employees?]	
(d) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?]	\boxtimes
(e) If "yes," would the project generate more than 350 additional residents or 750 additional employees?]	
(f) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 residents or 500 additional employees?	additional		\square
(g) If "yes" to questions (c), (e), or (f) above, attach supporting information to answer the following:			
 If in an under-served area, would the project result in a decrease in the open space ratio by more than 1 per 	cent?]	
 If in an area that is not under-served, would the project result in a decrease in the open space ratio by more percent? 	than 5		
 If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:]	
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?			\square
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the st a sunlight-sensitive resource?	reet from	3	
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow sensitive resource at any time of the year. See Attachment D	would reach any	sunl	ight-
6. HISTORIC AND CULTURAL RESOURCES: CEQR Technical Manual Chapter 9			
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark (- IX]	

		YES	NO
	Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the <u>GIS System for</u> <u>Archaeology and National Register</u> to confirm)		
(b)	Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?		\boxtimes
(c)	If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting informative whether the proposed project would potentially affect any architectural or archeological resources. See Attachment B	tion on	
7. L	IRBAN 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	\boxtimes	
(b)	to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning? Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by		
(c)	existing zoning? If "yes" to either of the above, please provide the information requested in <u>Chapter 10</u> See Attachment E		
	IATURAL RESOURCES: CEQR Technical Manual Chapter 11		
	Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of		
(4)	Chapter 11?		\bowtie
	o If "yes," list the resources and attach supporting information on whether the project would affect any of these resources		
(b)	Is any part of the directly affected area within the Jamaica Bay Watershed?		\square
	 If "yes," complete the <u>Jamaica Bay Watershed Form</u> and submit according to its <u>instructions</u>. 		
9. H	AZARDOUS 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?	\boxtimes	
(b)	Does the proposed project site have existing institutional controls (<i>e.g.</i> , (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?		\square
(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 <u>Appendix 1</u> (including nonconforming uses)?	\square	
(d)	Would the project result in the development of a site where there is reason to suspect the presence of hazardous		
	materials, contamination, illegal dumping or fill, or fill material of unknown origin?		\square
	Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (<i>e.g.</i> , gas stations, oil storage facilities, heating oil storage)?	\square	
(f)	Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?		\square
(g)	Would the project result in development on or near a site with potential hazardous materials issues such as government- listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	\boxtimes	
(h)	Has a Phase I Environmental Site Assessment been performed for the site?	\boxtimes	
	O If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Attachment B	\boxtimes	
(i)	Based on the Phase I Assessment, is a Phase II Investigation needed?	\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?		\square
(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?		\boxtimes
(c)	If the proposed project located in a <u>separately sewered area</u> , would it result in the same or greater development than that listed in Table 13-1 in <u>Chapter 13</u> ?		\boxtimes
	Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?		\boxtimes
(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?		\boxtimes
(f)	Would the proposed project be located in an area that is partially sewered or currently unsewered?		\square
	Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or contribute contaminated stormwater to a separate storm sewer system?		
(h)	Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?		\square
(i)	If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation.		لالتع

	YES	NO
11. SOLID WASTE AND SANITATION SERVICES: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in <u>Chapter 14</u> , the project's projected operational solid waste generation is estimated to be (pounds per we pounds per week, based on the sum of 41 lb x 272 DUs; 79 lb x 28 retail employees; and 13 lb x 273 office employees.	eek): 16,	913
 Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week? 		\square
(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?		\square
 If "yes," would the proposed project comply with the City's Solid Waste Management Plan? 		
12. ENERGY: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in <u>Chapter 15</u> , the project's projected energy use is estimated to be (annual BTUs): 46, based on sum of 126.7 MBtu x 230,951 sf residential; 216.3 MBtu x 9,481 sf retail; and 216.3 MBtu x 68,133 sf office.	,049,400	MBtu,
(b) Would the proposed project affect the transmission or generation of energy?		\square
13. TRANSPORTATION: CEQR Technical Manual Chapter 16	1	
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?		\square
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following	g questior	
 Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour? 		
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? **It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of <u>Chapter 16</u> 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/rail 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?		\square
(b) Stationary Sources: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	\square	\Box
 If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in <u>Chapter</u> <u>17</u>? (Attach graph as needed) See Attachment B 		
(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?		\square
(e) Does the proposed project site have existing institutional controls (<i>e.g.</i> , (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?		
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See Attachment B		
15. GREENHOUSE GAS EMISSIONS: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?		\square
(b) Would the proposed project fundamentally change the City's solid waste management system?		
(c) Would the proposed project result in the development of 350,000 square feet or more?		\square
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?		
 If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation. 		
16. NOISE: CEQR Technical Manual Chapter 19	4	1
(a) Would the proposed project generate or reroute vehicular traffic?	\square	
(b) Would the proposed project introduce new or additional receptors (see Section 124 in <u>Chapter 19</u>) 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 reliberation of the proposed flight path.		
 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 recenter or introduce receptors into an area with high ambient stationary poice? 		\square
sight to that receptor or introduce receptors into an area with high ambient stationary noise? (d) Does the proposed project site have existing institutional controls (<i>e.g.</i> , (E) designation or Restrictive Declaration) relating		
to noise that preclude the potential for significant adverse impacts?		\square

	YES	NO		
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See Attachment I	2			
17. PUBLIC HEALTH: CEQR Technical Manual Chapter 20				
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?				
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in <u>Chapter 20</u> , "Public Health." Attach a preliminary analysis, if necessary. The proposed actions do not have the potential to result in significant adverse impacts related to air quality, hazardous materials, or noise. Nor would the proposed actions result in a combination of moderate effects to several elements that cumulatively may affect public health. Therefore, an assessment of public health is not warranted.				
18. NEIGHBORHOOD CHARACTER: CEQR Technical Manual Chapter 21				
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?				
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in <u>Chapter 21</u> , "Neighborhood Character." Attach a preliminary analysis, if necessary. The proposed actions do not have the potential to result in significant adverse impacts related to land use, zoning, and public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise. Nor would the proposed actions result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. Therefore, an assessment of neighborhood character is not warranted.				
19. CONSTRUCTION: CEQR Technical Manual Chapter 22				
(a) Would the project's construction activities involve:				
 Construction activities lasting longer than two years? 		\boxtimes		
 Construction activities within a Central Business District or along an arterial highway or major thoroughfare? 	\square			
 Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)? 	\square			
 Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out? 				
 The operation of several pieces of diesel equipment in a single location at peak construction? 		Ц		
 Closure of a community facility or disruption in its services? 		\boxtimes		
 Activities within 400 feet of a historic or cultural resource? 				
 Disturbance of a site containing or adjacent to a site containing natural resources? 		\boxtimes		
 Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall? 		\boxtimes		
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in <u>Chapter</u> 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. Proposed new construction on the project site may result in temporary disruptions, including noise, dust, and traffic associated with the delivery of materials and arrival of workers on the project site. The effects, however, would be temporary (approximately 18-24 months) and all applicable city, state, and federal guidelines and regulations would be followed. Therefore, none of the disruptions should be considered significant. Refer to Attachment B, "Supplemental Screening" for additional information.				
20. APPLICANT'S CERTIFICATION				
I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records. Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity				
that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.				
APPLICANT/REPRESENTATIVE NAME SIGNATURE DATE Philip Habib, P.E. DATE	y 11, 2019)		

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

Part III: DETERMINATION OF SIGNIFICANCE (To be complete INSTRUCTIONS: In completing Part III, the lead agency show Order 91 or 1977, as amended), which contain the State an	uld consult 6 NYCRR 617.7 and 43 RCNY § 6-0	06 (Execu	tive
 For each of the impact categories listed below, consider adverse effect on the environment, taking into account i duration; (d) irreversibility; (e) geographic scope; and (f) 	whether the project may have a significant its (a) location; (b) probability of occurring; (c)	Signi	ntially ficant e Impact
IMPACT CATEGORY		YES	NO
Land Use, Zoning, and Public Policy			
Socioeconomic Conditions			
Community Facilities and Services			
Open Space			
Shadows			
Historic and Cultural Resources			
Urban Design/Visual Resources			
Natural Resources			
Hazardous Materials			
Water and Sewer Infrastructure			
Solid Waste and Sanitation Services			
Energy Transportation			<u> </u>
Air Quality			
Greenhouse Gas Emissions			
Noise			
Public Health	110 mm		
Neighborhood Character Construction			
2. Are there any aspects of the project relevant to the deters ignificant impact on the environment, such as combine covered by other responses and supporting materials? If there are such impacts, attach an explanation stating variables.	d or cumulative impacts, that were not fully		
 have a significant impact on the environment. 3. Check determination to be issued by the lead agence Positive Declaration: If the lead agency has determined th	cy:	he enviror	iment,
and if a Conditional Negative Declaration is not appropri a draft Scope of Work for the Environmental Impact Stat Conditional Negative Declaration: A Conditional Negative applicant for an Unlisted action AND when conditions in no significant adverse environmental impacts would res	tement (EIS). <i>The Declaration</i> (CND) may be appropriate if there apposed by the lead agency will modify the propos	is a privato sed projec	e t so that
the requirements of 6 NYCRR Part 617. Negative Declaration: If the lead agency has determined t environmental impacts, then the lead agency issues a New separate document (see template) or using the embedd	egative Declaration. The Negative Declaration m		
4. LEAD AGENCY'S CERTIFICATION			
TILE Acting Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning, acting on be Planning Commission	ehalf of th	e City
JAME Dian Altimation	DATE		
Diga Abinader	February 8, 2019		
- Y-V			

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 action sought before the City Planning Commission would have no significant effect on the quality of the environment. Reasons supporting this determination are noted below.

Hazardous Materials, Air Quality, and Noise

To ensure that the proposed action would not result in significant adverse hazardous materials, air quality, and noise impacts an (E) Designation (E-523) will be placed on the Proposed Development Site (Block 80; Lots 5, 6, 7, 9, 10, 11, and 12). Refer to "Determination of Significance Appendix: (E) Designation" for the applicable (E) designation requirements. The analyses conducted for hazardous materials, air quality, and noise conclude that with the (E) Designation requirements in place the proposed action would not result in significant adverse impacts related to hazardous materials, air quality, or noise.

Land Use, Zoning, and Public Policy

A detailed analysis of the effects of the proposed action on Land Use, Zoning, and Public Policy was included in the EAS. The proposed text amendment to the bulk provisions governing Block 3 of the Court Square Subdistrict would only affect limited portions of the project area and minorly alter existing site-specific zoning regulations. The analysis concludes that no significant adverse impacts related to Land Use, Zoning and Public Policy would result from the proposed action.

Shadows

A detailed assessment of the potential for the proposed action to result in significant adverse shadows impacts is included in the EAS. A shadows impact has the potential to occur when incremental shadows would fall on a sunlight-sensitive resource or feature and reduces its direct sunlight exposure. The determination of the significance of the impact is based on the extent and duration of the incremental shadow and the specific context in which the impact occurs. Incremental shadows would reach six sunlight-sensitive resources identified in the Tier 3 assessment included in the EAS. Increases in shadow coverage would occur at three resources on the March 21/September 21 analysis day; four resources on the May 6/August 6 analysis day; and three resources on the June 21 analysis day. The extent and duration of project-generated incremental shadows would not significantly affect the viability of vegetation or the usability of open space. Additionally, the significance of the historic resources which would have the potential to be cast in incremental shadow is not derived from sunlight-sensitive features. Therefore, it was determined that the proposed action would not result in significant adverse impacts related to shadows.

Urban Design and Visual Resources

The proposed zoning text amendment to height, setback, and tower provisions governing Block 3 of the Court Square Subdistrict would result in a shorter and more contextual development from the pedestrian perspective as compared to the No-Action condition and the proposed development's bulk and height would be more consistent with existing and planned buildings in the surrounding area. At street level, the proposed development and the No-Action development would appear identical, sharing the same amount of street frontage, a street wall location set at or near the street line, and active ground-floor uses. In addition, the proposed development would result in slight improvements to view corridors and visual resources both within the study area and visible from the study area, compared to No-Action condition. Therefore, it was determined the proposed actions would not have the potential to result in significant adverse impacts on urban design and 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	
Acting Director, Environmental Assessment and Review	Department of City Planning, acting on behalf of the City	
Division	Planning Commission	
NAME	DATE	
Olga Abinader	February 8, 2019	
SIGNATURE		
TITLE U		
Chair, City Planning Commission		
NAME	DATE	
Marisa Lago	February 11, 2019	
SIGNATURE		

Determination of Significance Appendix: (E) Designation

To ensure that the proposed action would not result in significant adverse hazardous materials, air quality, and noise impacts, an (E) Designation (E-523) will be placed on the **Proposed Development Site** (Block 80; Lots 5, 6, 7, 9, 10, 11, and 12) as described below:

Hazardous Materials

The (E) Designation requirements for hazardous materials would apply to the **Proposed Development Site** (Block 80; Lots 5, 6, 7, 9, 10, 11, and 12) and are as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

<u>Air Quality</u>

The (E) Designation requirements for air quality would apply to the **Proposed Development Site** (Block 80; Lots 5, 6, 7, 9, 10, 11, and 12) and are as follows:

Any new development or enlargement on the above-referenced property must exclusively use natural gas as the type of fuel for the heating, ventilating, air conditioning, and hot water (HVAC) system and ensure that the HVAC stack is located at the top of the bulkhead and at least 544 feet above grade to avoid any potential significant adverse air quality impacts.

<u>Noise</u>

The (E) Designation requirements for noise would apply to the **Proposed Development Site** (Block 80; Lots 5, 6, 7, 9, 10, 11, and 12) and are as follows:

To ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum attenuation as shown in Table F-13 of the EAS in order to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial uses. To achieve up to 42 dBA of building attenuation, special design features that go beyond the normal double-glazed windows are necessary and may include using specifically designed windows (i.e., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.), and additional building attenuation. In order 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, central air conditioning.

ATTACHMENT A PROJECT DESCRIPTION

I. INTRODUCTION

The applicant, Court Square 45th Avenue LLC, is seeking approval for a zoning text amendment and zoning certification (the "proposed actions") to facilitate the redevelopment of the applicant-owned project site at 23-10 – 23-16 45th Avenue and 45-03 – 45-09 23rd Street (Tax Block 80, Lots 5, 6, 7, 9, 10, 11, 12) in the Court Square neighborhood of Queens Community District 2. The site is located on Block 3 of the Court Square Subdistrict in the Special Long Island City Mixed Use District (the "Special District"). The proposed zoning text amendment would modify height, setback, and tower regulations applicable to Block 3 of the Subdistrict (Tax Block 80, Lots 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)(the "project area") by amending Section 117-421(c)(1) and (2) and Appendix B of the New York City Zoning Resolution (ZR). The proposed zoning text amendment would allow the applicant's proposed development to achieve a more flexible design and a more efficient floor plate size than would be permitted by existing zoning. A zoning certification from the Chair of the City Planning Commission (CPC) to the Department of Buildings (DOB) pursuant to § ZR 117-45 is also proposed to demonstrate the applicant's compliance with mandatory subway improvement requirements within the Court Square Subdistrict.

For conservative analysis purposes, a Reasonable Worst-Case Development Scenario (RWCDS) that differs from the applicant's proposed development has been identified. The RWCDS assumes that in the future with the proposed actions, the applicant would redevelop the project site with a 45-story, approximately 308,565 gross square foot (gsf) building with approximately 272 dwelling units (DUs), 9,481 gsf of local retail¹, and 68,133 gsf of office space . No accessory off-street parking spaces are required in the Long Island City Parking Area and no parking would be provided. Construction is expected to begin in 2020 with all components complete and operational in 2022.

The New York City Department of City Planning (DCP) acting on behalf of the CPC, will serve as the lead agency for environmental review. This document has been prepared in accordance with the guidance presented in the 2014 *CEQR Technical Manual*.

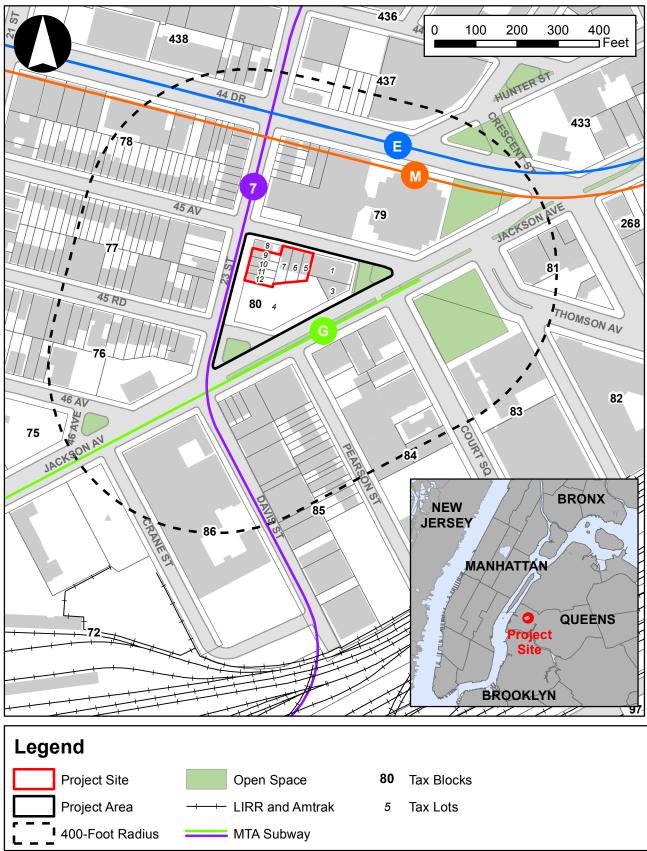
II. BACKGROUND AND EXISTING CONDITIONS

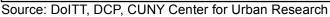
Applicant-Owned Project Site

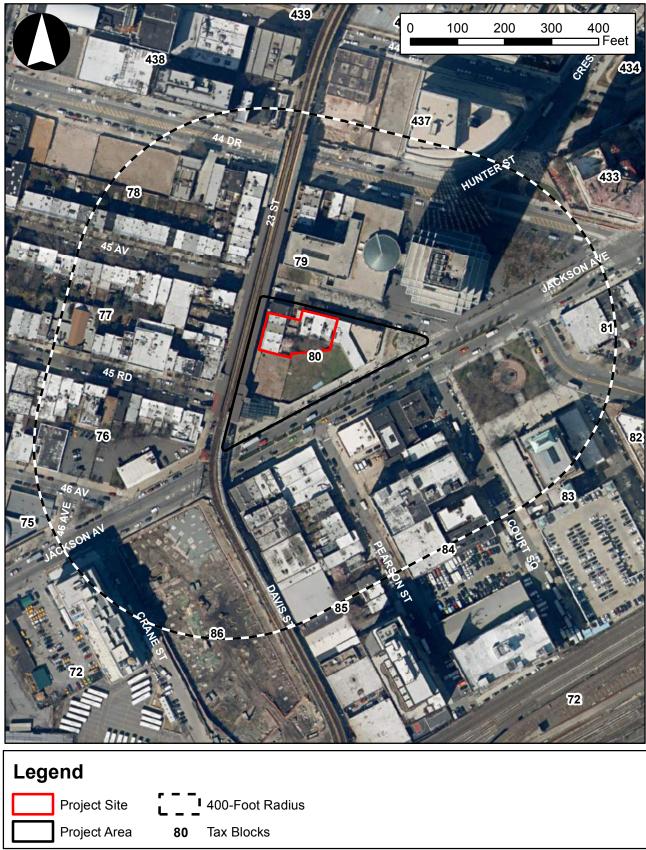
The applicant-owned project site is comprised of seven tax lots (Tax Block 80, Lots 5, 6, 7, 9, 10, 11, 12) and has an area of approximately 11,145 square feet (sf) (see Figures A-1 and A-2). The site is irregularly shaped and occupies a through lot with frontage on two streets, including approximately 75 feet along 45th Avenue to the north and 80 feet along 23rd Street to the west. 45th Avenue has a width of 60 feet and is therefore considered a narrow street, while 23rd Street has a width of 80 feet and is considered a wide street. Each tax lot of the site is occupied by a 2- or 3-story residential building, including one single- and two-family walkup building (Lot 10) and six multi-family walkup buildings (Lots 5, 6, 7, 9, 11, 12). DOB

¹ This accounts for all ground-floor commercial space including a lobby for the commercial office use.

Figure A-1 Project Site Location







Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, cNES/Airbus DS, USDA, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

estimates that some buildings on the site were constructed as early as the 1880s. The site has a built floor area of approximately 20,200 sf (FAR 1.81).

The applicant-owned site was rezoned from M3-1 to its current C5-3 designation in 1986 and its tax block (Tax Block 80) was placed within the Court Square Subdistrict (designated Block 3) of the Special Hunters Point Mixed-Use District along with the two tax blocks to the north, Blocks 437 and 70 (designated Blocks 1 and 2, respectively). The creation of the Court Square Subdistrict increased the allowable floor area from 2 FAR to 15 FAR, provided that for developments containing at least 70,000 sf of floor area on a zoning lot of at least 10,000 sf, certain mandatory subway improvements and pedestrian circulation improvements were built by the developer of the zoning lot to which they apply, as set forth in Appendix B of the Special District's regulations. The Special Hunters Point Mixed-Use District was incorporated as part of the Special Long Island City (LIC) Mixed Use District when it was created in 2001. There were no changes to the boundaries or regulations of the Court Square Subdistrict as a result of the 2001 rezoning (see Figures A-3 and A-4).

C5-3 commercial zoning districts are a restricted central commercial district intended for office and a variety of retail uses, as well as community facility and residential uses. Manufacturing uses are not permitted. The Special Court Square Subdistrict modifies bulk and use provisions of the underlying C5-3 zoning district. Developments meeting the floor area and zoning lot standards and providing the mandatory subway improvements required within the Court Square Subdistrict may develop to an FAR of up to 15, all of which could be commercial or community facility uses, and of which up to 10 FAR can be residential. Floor area increases are permitted for providing a public plaza or inclusionary housing. Per ZR § 117-421, developments that do not meet these criteria are subject to the bulk provisions of an M1-4/R6B zoning district, which allows a maximum FAR of 2.0 for all uses (ZR § 123-63, § 23-153, § 43-12). The applicant-owned site is also located within a "FRESH" area where discretionary tax incentives apply.

Project Area

The project area is Block 3 of the Court Square Subdistrict and is comprised of eleven privately-owned tax lots on Tax Block 80 (see Figure A-1). The project area is irregularly shaped and is bounded by Jackson Avenue (a wide street) to the south and east, 23rd Street (a wide street) to the west, and 45th Avenue (a narrow street) to the north. The four non-applicant owned tax lots within the project area include Lots 1, 3, 4, and 8. Lots 1 and 3 are improved with a 2-3 story commercial building occupied by a bank and office space containing approximately 17,241 sf (2.43 FAR). Lot 4 is currently unimproved but plans have been filed with DOB for a 50-story, approximately 363,700 gsf hotel (15 FAR). Lot 8 is a two-family dwelling unit with approximately 1,950 sf (1.5 FAR). In total, the project area has an area of approximately 37,444 sf and a built floor area of approximately 39,391 gsf (FAR 1.05).

As shown in Figure A-5, two open spaces are located within the project area including, McKenna Triangle (0.01 acre) at the intersection of Jackson Avenue and 45th Avenue, and Short Triangle (0.01 acre) at the intersection of Jackson Avenue and 23rd Street. Both open spaces are operated by the New York City Department of Parks and Recreation (NYC Parks). Transportation uses are also located nearby, an elevated rail line serving the 7 train runs along 23rd Street to the west of the project area. A subway station entrance is located within the project area at the northeast corner of Jackson Avenue and 23rd Street, which provides access to the 7, E, M, and G trains at the Court Square station (a State and National Register of Historic Places (S/NR) listed resource). Local bus lines in the area include the B62 and Q67 along Jackson Avenue.

Figure A-3



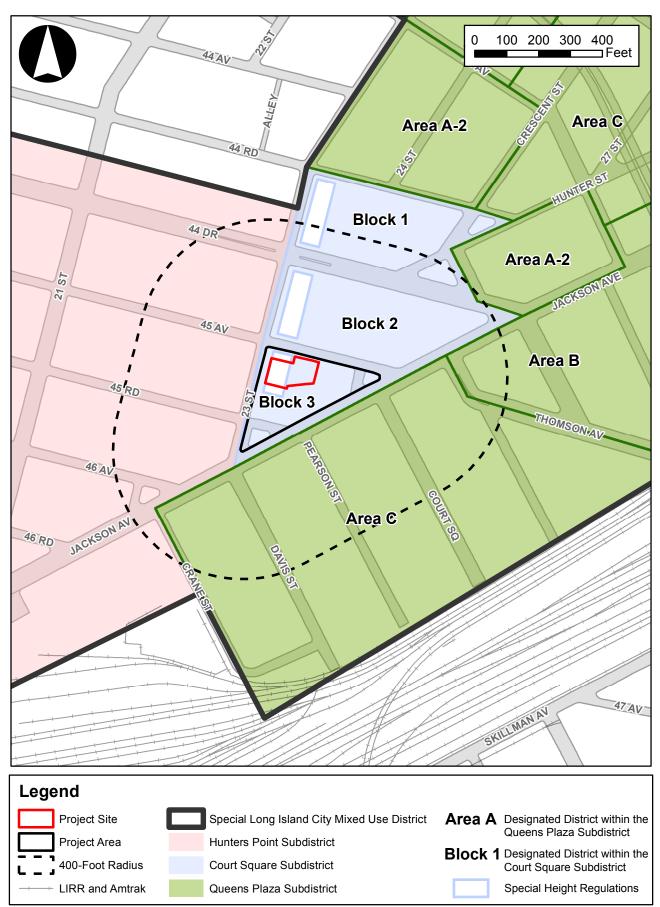


Figure A-4

Zoning

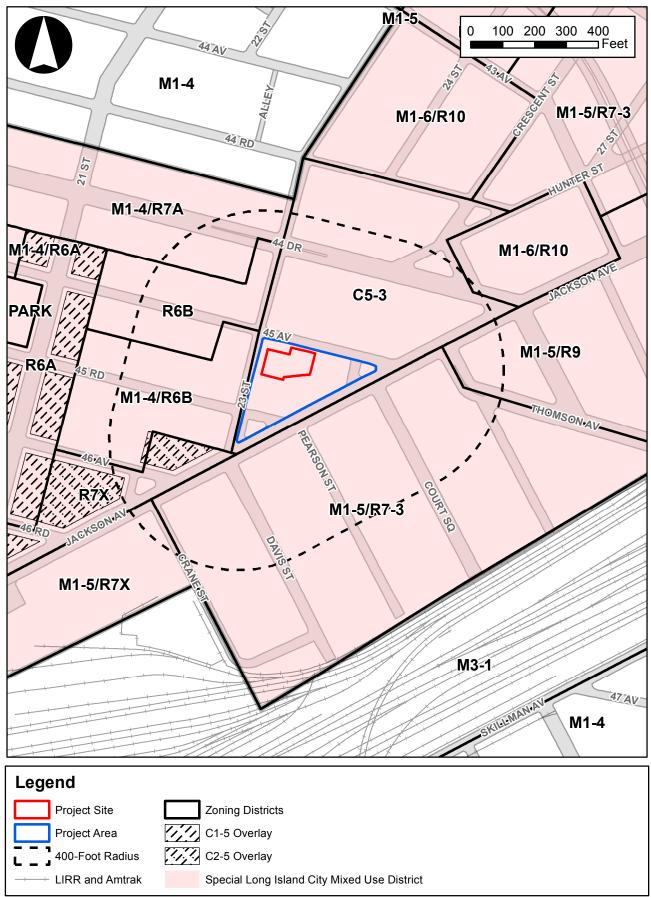
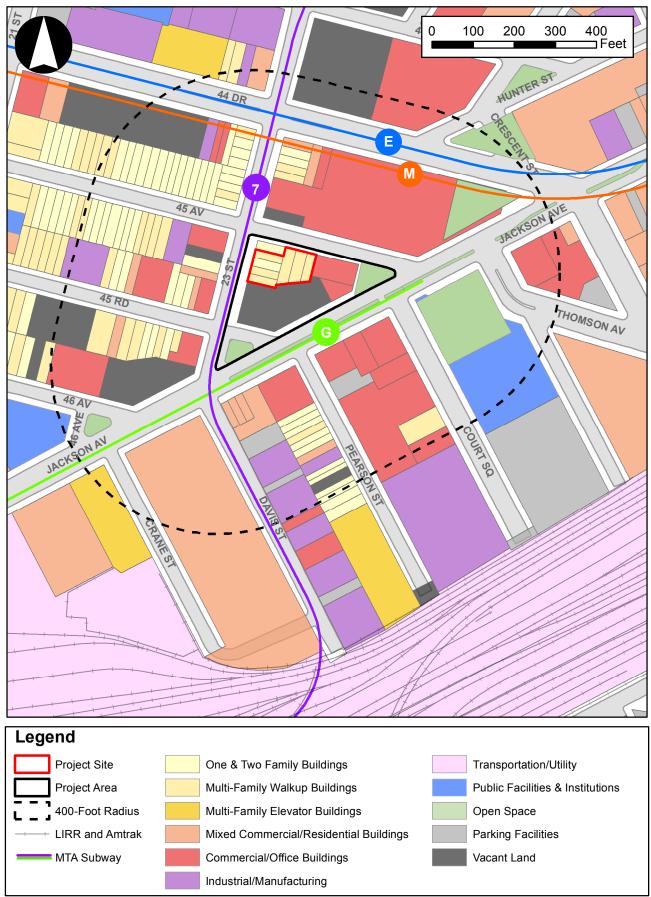


Figure A-5 Land Uses



The project area is located entirely within a C5-3 commercial zoning district within the Court Square Subdistrict of the Special Long Island City Mixed-Use District (see "Applicant-Owned Site" discussion above for more detail).

Surrounding Area

The surrounding area is characterized by a mix of land uses, including: residential, commercial, light industrial, and public/private institutional (see Figure A-5). Long Island City is experiencing a wave of new development and a variety of mid and high-rise buildings are present or under construction in the immediate vicinity of the project area. Recently completed developments in the surrounding area include an approximately 50-story residential building at 43-25 Hunter Street (Block 433, Lot 7501), a 15-story mixed commercial office/institutional building at 23-21 44th Drive (Block 437, Lot 7501), a 15-story residential building at 45-50 Pearson Street (Block 85, Lot 41), and an 11-story residential building at 22-22 Jackson Avenue (Block 72, Lot 73). Notable new developments currently under construction in the surrounding area include a 66-story residential development at 23-14 44th Drive (Block 437, Lots 5, 7, 8, 9, 10, 11, 13, 15, 20), a 7-story residential development at 21-59 44th Drive (Block 438, Lot 1), an 11-story residential development at 22-43 Jackson Avenue (Block 76, Lot 16), a 48-story residential development at 22-44 Jackson Avenue (Block 86, Lot 1), an 11-story residential development at 45-07 Court Square (Block 81, Lot 9), an 8-story residential development at 21-30 44th Drive (Block 78, Lot 41), and an 11-story residential development at 22-18 Jackson Avenue (Block 72, Lot 5).

The surrounding area is well served by public transportation including the 7, E, M, and G trains at the Court Square station. The next closest subway stations are Queens Plaza and Queensboro Plaza, both of which are located approximately a half mile to the northeast of the project area, and are serviced by the E, M, R and 7, N, W trains, respectively. The area is also well served by the Long Island Railroad (LIRR), with stations located at Hunters Point Avenue, a quarter-mile south of the project area, and Long Island City, a half-mile southwest of the project area. Local bus lines in the area include the B32, B62, Q39, Q67, and Q69.

Jackson Avenue, which borders the project area on the south, is a main thoroughfare in the neighborhood, running northeast to Queens Plaza and southwest to the Pulaski Bridge. Jackson Avenue is a two-way street that features a planted median between 23rd and Queens Streets. 23rd Street, which borders the project area on its west, runs northeast from Jackson Avenue, crossing below elevated approaches to the Ed Koch Queensboro Bridge and continuing into Dutch Kills/Ravenswood. The portion of 23rd Street from Jackson Avenue to Queens Plaza South also contains the elevated tracks for the 7-train, directly adjacent to the western frontages of the project area. 45th Avenue, bordering the project area to its north, runs east from the Long Island City waterfront and Anable Basin and terminates at Jackson Avenue.

The Special District is mapped on blocks in the Hunter's Point and Dutch Kills neighborhoods, generally bounded by 5th, 11th, 23rd, and 21st Streets on the west, 44th Drive and 37th Avenue on the north, the Sunnyside Yards on the east and Borden Avenue on the south. The Special District was established in 2001 to facilitate commercial development at increased densities and allow new residences to mix with commercial and light industrial businesses. The goal of creating the Special District was to foster reinvestment and redevelopment that takes advantage of Long Island City's excellent mass transit access and its supply of large, underdeveloped properties.

Within the Special District, four subdistricts were created—the Hunters Point Subdistrict, the Queens Plaza Subdistrict, the Dutch Kills Subdistrict and the Court Square Subdistrict—each with special use, bulk

and urban design controls, to ensure that development occurs at a scale in keeping with the unique characteristics of each subdistrict. The project area's Court Square Subdistrict comprises the three blocks bounded by 44th Road, 23rd Street, Jackson Avenue, and Hunter Street (see Figure A-3).

Across 23rd Street west of the project area is an M1-4/R6B zoning district in the Hunters Point Subdistrict, which allows a maximum FAR of 2.0 (ZR § 117-21, § 123-63, § 23-153, § 43-12) and a maximum base height of 40 feet and maximum building height of 50 feet, which can be increased to 45 feet and 55 feet, respectively, with the provision of a qualifying ground floor (ZR § 117-21, § 123-662, § 23-662). The blocks east and south of the project area, across Jackson Avenue, are in the Queens Plaza Subdistrict, Area C, within an M1-5/R7-3 district, which allows a maximum FAR of 5.0 for all uses (ZR § 117-522) and sets a maximum base height of 100 feet; after set back of 10 feet from a wide street and 15 feet from a narrow street, a building may rise without limit (ZR § 117-532).

Consistent with the mixed-use zoning, the immediate vicinity of the project area is characterized by a mix of low-rise residential buildings, office buildings, and buildings with a mix of both uses. A privately-owned public space is located directly north of the project area on Tax Block 79. The public space is located adjacent to the 49-story Citi Tower. To the south and west of the project area across Jackson Avenue are buildings ranging from 1 to 4 stories with various retail uses on the ground floor, such as cafes, restaurants and banks, and apartments and offices on the upper floors. To the west across 23rd Street are 1-2 story buildings, primarily with local retail use on the ground floor.

Institutions in the surrounding area include the Court Square branch of the Queens Public Library, located at 25-01 Jackson Avenue, directly north of the project area, the New York State Supreme Court, located one block northeast of the project area, across Jackson Avenue, designated a landmark by the Landmarks Preservation Commission (LPC) and S/NR listed, MoMA PS 1 at 22-43 Jackson Avenue, a block to the southwest, and CUNY Law School at 2 Court Square, two blocks to the north. A number of open spaces and parks are located within the surrounding area including: the Jackson Avenue Greenstreet between 23rd Street and Queens Street; Court Square Park fronting on Jackson Avenue and Thomson Avenue one block to the northeast of the project area; Citicorp at Court Square Plaza, located at the intersection of Jackson Avenue and 44th Drive; Rafferty Triangle, located at the intersection of 44th Drive and Hunter Street; and the Jackson Avenue/46th Avenue Greenstreet. The only historic district in the surrounding area is the Hunters Point Historic District (LPC-designated, S/NR-listed), on the block to the northwest. Much of the surrounding area is in a "FRESH" area where discretionary tax incentives apply.

III. DESCRIPTION OF THE PROPOSED ACTIONS

Zoning Text Amendment

The applicant is seeking a number of text amendments to the zoning regulations governing development within Block 3 of the Court Square Subdistrict, including: (1) changing the maximum building height on the west side of the applicant-owned site along 23rd Street from 85 feet to a 125-foot maximum base height; (2) increasing the maximum base height on the west side of the applicant-owned site along 23rd Street from 85 feet to 125 feet; (3) making the underlying C5-3 district height and setback regulations applicable only above the highest applicable maximum street wall height; and (4) making the underlying C5-3 district tower encroachment regulations of ZR § 33-451 inapplicable along the applicant-owned site's 45th Avenue frontage. Each of these text amendments is described in further detail below and the complete text amendment is provided in Appendix 1.

- 1. Changing the maximum building height on the west side of the applicant-owned site along 23rd Street from 85 feet to a 125-foot maximum base height. ZR § 117-421(c)(1) supersedes the underlying C5-3 district height and setback regulations by setting a maximum building height of 85 feet within the area bounded by 23rd Street, 44th Road, a line 60 feet east of and parallel to 23rd Street, and a line 75 feet north of and parallel to 45th Road. This area is shown on a map in Appendix B of Article XI, Chapter 7 of the ZR. The proposed amendment would modify this section and the map in Appendix B to remove Block 3 from such limitations and replace it with a 125-foot maximum base height along 23rd Street (discussed below). This would allow the proposed development to rise along 23rd Street to a height of 125 feet before setting back 20 feet, above which height it would comply with the underlying C5-3 district tower regulations (discussed further below).
- 2. Increasing the maximum base height on the west side of the applicant-owned site along 23rd Street from 85 feet to 125 feet. ZR § 117-421(c)(2), which provides that the maximum base height before setback is 85 feet, would be amended so that the maximum base height for portions of buildings on Block 3 fronting 23rd Street would be 125 feet, which would allow the proposed development to have the 125-foot street wall height along 23rd Street discussed immediately above.
- 3. Making the underlying C5-3 district height and setback regulations applicable only above the highest applicable maximum street wall height. Per ZR § 117-421(c)(2), on Blocks 1 and 3 in the Court Square Subdistrict, above a height of 85 feet, the underlying C5-3 district height and setback regulations apply except as modified by this ZR Section. This section would be amended so that such regulations would apply to the proposed development only above a height of 125 feet, the highest maximum street wall height applicable to the proposed development (per the amendment discussed immediately above).
- 4. Making the underlying C5-3 district tower encroachment regulations of ZR § 33-451 inapplicable along the applicant-owned site's 45th Avenue frontage. As discussed above, the underlying C5-3 district height and setback regulations would apply above a height of 125 feet, except as modified by ZR § 117-421(c)(2). The proposed text amendment would add language to ZR § 117-421(c)(2) making the provisions of ZR § 33-451 inapplicable along Block 3's 45th Avenue frontage, and would instead require a 15-foot setback from 45th Avenue above a height of 85 feet.

Zoning Certification

The applicant is also seeking the approval of a zoning certification pursuant to ZR § 117-45. In the Court Square Subdistrict, the provisions of the underlying C5-3 zoning district are modified to require subway improvements listed in Appendix B of the Special District's regulations, for developments containing at least 70,000 sf of floor area on a zoning lot of at least 10,000 sf. As the applicant-owned site's zoning lot is 18,230 sf and the proposed development would contain approximately 256,198 sf of floor area, the subway improvement is required. Consequently, the applicant would construct the mandatory subway improvement (discussed further below) and is seeking a certification by the Chair of the CPC to the DOB, pursuant to ZR § 117-45(b), that drawings and documents required by ZR § 117-45 have been submitted and comply with the requirements of the Subdistrict Plan for the subway improvement, and that as a

result, the applicant may develop the site's zoning lot to a maximum FAR of 15 as-of-right, pursuant to ZR § 117-421. The applicant will sign a legally enforceable instrument running with the land containing complete drawings of the improvement. A temporary certificate of occupancy will not be issued by DOB until the Metropolitan Transportation Authority (MTA) has determined that the subway improvements are substantially complete.

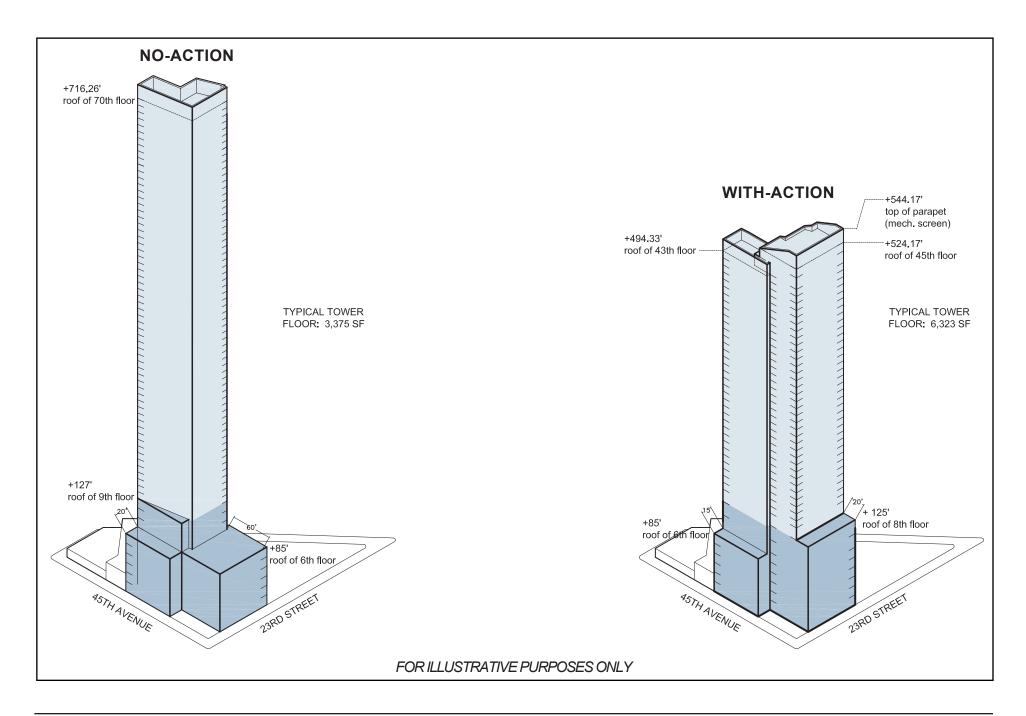
IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

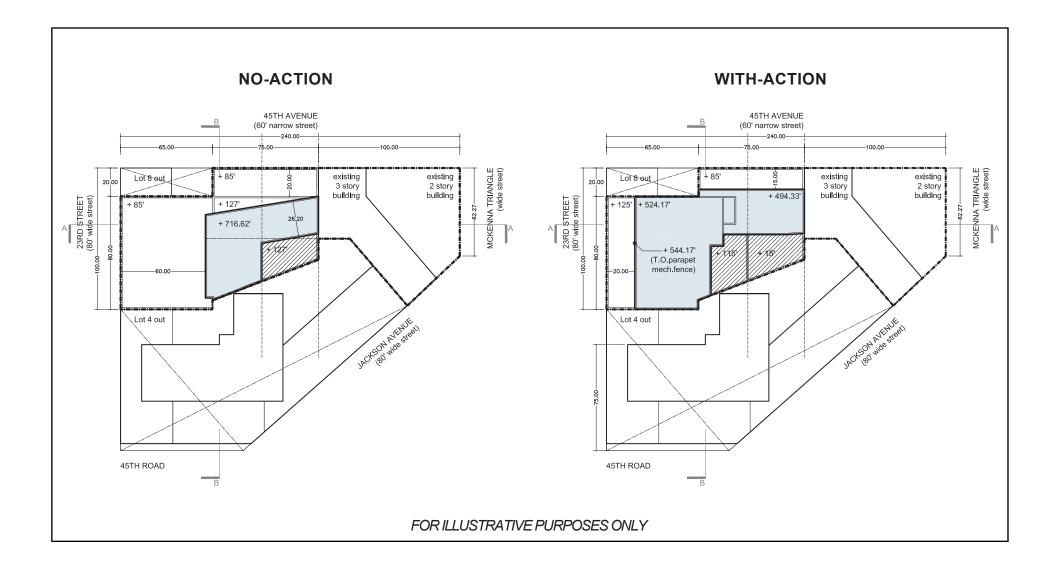
The proposed zoning text amendments are intended to modify specific height, setback, and tower regulations in order to allow for a more flexible building design and floor plan than would be permitted under existing zoning. Per existing zoning under ZR § 117-421(c)(2), the proposed development would be required to setback 25 feet from 45th Avenue and would have a height limit of 85 feet within 60 feet of 23rd Street. Combined with the irregular shape of the site, existing zoning regulations would result in a tower floor plate of only 3,375 sf. To accommodate the permitted floor area on the site, the building would need to be constructed to 70 stories at a height of approximately 716 feet. These small, irregularly shaped floor plates would be less efficient than a traditional layout, as the building would only be able to accommodate a single-loaded corridor, and one-third of each floor would be core and circulation space. With the proposed zoning text amendment, the tower floor plate size would increase to approximately 6,323 sf, resulting in a building of only 45 stories at a height of approximately 524 feet to accommodate the maximum permitted floor area (see Figures A-6, A-7, A-8). These floors would be able to fit a double-loaded corridor and would result in a significantly more efficient and compact building.

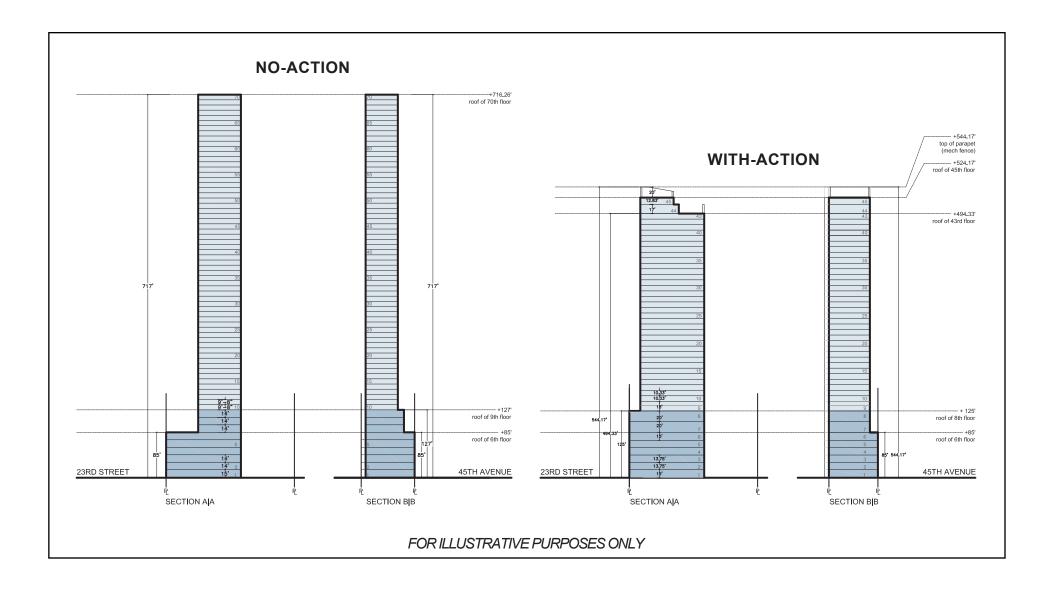
V. DESCRIPTION OF THE PROPOSED DEVELOPMENT

As described above, the proposed actions are intended to modify specific height, setback, and tower regulations in order to allow for a more flexible building design and floor plan than would be permitted under existing zoning. The applicant intends to develop an approximately 308,565 gsf (14.05 FAR), 45-story mixed-use building on the applicant-owned site. The proposed building would be comprised of approximately 368 DUs, 9,481 gsf of retail, and 68,133 gsf of commercial office space. Based on schematic designs provided by the applicant, retail uses would be located on the ground floor, with commercial uses located on the second through eighth floors and residential uses above. DUs are expected to have an average size of approximately 629 sf. The ground floor's retail use would comply with the restrictions applicable in C5 districts for certain uses in Use Groups 6, 9, and 11, whereby such uses are not allowed on the ground floor within 50 feet from the street wall of the building (ZR § 32-423). These excluded uses include (but are not limited to) laundry establishments, loan offices, and clothing rental establishments (ZR § 32-00). No parking is required in the Long Island City Area (ZR § 16-10) and none would be provided; no curb cuts are proposed. Since there would be less than 25,000 sf of retail use and 100,000 sf of office use, no loading berth would be required (ZR § 36-62) and none would be provided.

With the proposed text amendment, the proposed development would have a 125-foot, 8-story street wall with a 20-foot setback on the 23rd Street frontage, and an 85-foot, 6-story street wall with a 15-foot setback on the 45th Avenue frontage. The proposed development's 15-foot high ground floor would cover the entirety of the applicant-owned site and contain retail uses, with an entrance on 23rd Street, and a residential lobby on 45th Avenue. At a height of 85 feet, the maximum base height per ZR § 117-421(c)(2), the 7th story would set back 15 feet from 45th Avenue (a narrow street), in compliance with the underlying tower regulations of ZR § 33-451, applicable per ZR § 117-421(c) and § 35-64(c), so the floor plates of







commercial floors 7 and 8 would be approximately 8,909 sf. At a height of 125 feet, the 9th floor would set back 20 feet from 23rd Street as allowed by the proposed text amendment, which would replace the existing 85-foot height limit applicable within 60 feet of 23rd Street on the applicant-owned site, and would have a floor plate of 6,769 sf. Residential floors 10-43 would have floor plates of 6,323 sf. The highest residential floor, floor 44, would have a floor plate of 4,035 sf and the 45th floor would be a mechanical floor, reaching the total building height of 524 feet.

VI. ANALYSIS FRAMEWORK

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

Analysis Year

Development of the proposed project would occur in one phase and commence as soon as all necessary public approvals are granted. Accounting for DCP Pre-Application and Pre-Certification review time and public review (approximately seven months), as well as building demolition activities, construction of the proposed project is expected to begin in 2020. Construction is expected to last for an approximately 18-to 24-month period with all components complete and fully operational in 2022. Accordingly, the proposed project will use a 2022 build year for analysis purposes. As the proposed project would be operational in 2022, its environmental setting is not the current environment, but the future environment. Therefore, the technical analyses assess current conditions and forecast these conditions to the expected 2022 build year for the purposes of determining potential impacts. Each attachment of the EAS will provide a description of the "Existing Condition" and assessment of future conditions without the proposed actions ("Future without the Proposed Actions") and with the proposed actions ("Future with the Proposed Actions").

Reasonable Worst-Case Development Scenario (RWCDS)

In order to provide a conservative assessment of the possible effects of the proposed actions, a Reasonable Worst-Case Development Scenario (RWCDS) that differs from the proposed development described above was established for both Future No-Action and Future With-Action conditions.² The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis of the impact category analyses in the EAS.

Under both No-Action and With-Action conditions, the applicant-owned site (11,145 sf) would be merged with adjacent Lots 1 and 3 (totaling 7,085 sf) into a single zoning lot of approximately 18,230 sf. These lots would remain separate tax lots in separate ownership with the existing buildings thereon but would benefit from the mandatory subway certification, resulting in 106,275 sf (15 FAR) of development rights. Accounting for the approximately 17,241 sf of commercial floor area used by the existing buildings on Lots

² As discussed above, schematic designs provided by the applicant assume an average dwelling unit size of approximately 629 sf whereas the RWCDS uses a standard dwelling unit size of 850 sf for CEQR analysis purposes.

1 and 3, there would be approximately 89,034 sf available, which the applicant intends to acquire and would permit the proposed development to have 256,198 sf (14.05 FAR).

The applicant would also commit to obtaining the subway improvement certification, as described previously, under both the No-Action and With-Action scenarios. It is anticipated that potential subway improvements could include the provision of a new elevator from the Manhattan-bound E/M platform to the transfer mezzanine for Court Square Station. The applicant will sign a legally enforceable instrument running with the land containing complete drawings of the improvement. Once the subway improvement measures are provided, development on the zoning lot would be permitted up to a maximum FAR of 15. Under both scenarios, the maximum FAR would be achieved through the construction of a 14.05 FAR development and the existing 17,241 sf of development on Lots 1 and 3 (0.95 FAR).

Development Site Criteria

Pursuant to the *CEQR Technical Manual*, several factors were considered in projecting the potential for new development on the non-applicant owned lots within the project area. These include known development proposals, past development trends, and the development site criteria described below. The first step in establishing the RWCDS was to identify those sites where new development could reasonably occur.

According to the *CEQR Technical Manual* the following factors, commonly referred to as "soft site criteria," are generally considered when evaluating whether some amount of development would likely be constructed by the build year as a result of the proposed actions:

- <u>The uses and bulk allowed</u>: Lots located in areas where changes in use would be permitted and/or contain 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 (e.g., the amount and type of recent as-of-right development in the area, recent real estate trends, site specific conditions that make development difficult, and issues relating to site control or site assemblage that may affect redevelopment potential); and
- <u>Size of the development site</u>: 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 these criteria.

However, the following uses and types of buildings that meet the soft site criteria are typically excluded from development scenarios because they are unlikely to be redeveloped as a result of the proposed project:

- Full block and newly constructed buildings with utility uses, as these uses are often difficult to relocate;
- Lots where construction is actively occurring, or has recently been completed, as well as lots with recent alterations that would have required substantial capital investment, unless recently

constructed or altered lots were built to less than or equal to half of the maximum allowable FAR under the proposed zoning;

- Lots whose location or irregular shape would preclude or greatly limit future as-of-right development. Generally, development on irregular lots does not produce marketable floor space;
- Long-standing institutional uses with no known development plans; or
- Residential buildings with six or more units constructed before 1974. These buildings are likely to be rent-stabilized and difficult to legally demolish due to tenant re-location requirements.

Table A-1 lists each of the non-applicant owned tax lots on Block 3 that could be affected by the proposed actions (see Figure 5 of the EAS Form for photos). To help determine the eligibility of each lot as a soft site, the table provides the existing lot area, ownership, existing FAR and compares the existing and proposed maximum allowable floor areas under the No-Action and With-Action scenarios.

 Table A-1

 Project Area Tax Lots – Existing and Proposed Maximum Allowable FAR

	Lot Area			Primary	Max. Allowable FAR ¹		Existing	
Lot	(sf)	Ownership	Existing Use	Existing Zoning	Existing (R/CF/C)	Proposed (R/CF/C)	FAR	
1, 3	7,085	2429 Jackson Ave LLC	Commercial	C5-3; LIC SD	10.0/15.0/15.0	10.0/15.0/15.0	2.43	
4	17,914	Toyoko Inn New York	Commercial	C5-3; LIC SD	10.0/15.0/15.0	10.0/15.0/15.0	0.0	
8	1,300	Jaime Salazar	Residential	C5-3; LIC SD	10.0/15.0/15.0	10.0/15.0/15.0	1.5	

¹ Maximum allowable FAR with mandatory subway certification.

As the proposed actions are block-specific and would only result in modifications to height and setback requirements, there would be no changes to underlying zoning requirements, permitted land uses, or maximum allowable FAR within the project area. As such, it is not expected that any sites on Block 3, aside from the project site, would redevelop or develop differently as a result of the proposed actions and no soft sites have been identified for inclusion within the RWCDS analysis. An explanation for why each site was excluded is provided below.

- <u>Tax Block 80, Lots 1, 3</u>: In connection with the proposed project, approximately 89,000 sf of development rights from these tax lots would be purchased by the applicant. These lots would remain separate tax lots in separate ownership with existing buildings thereon remaining, but would be merged with the project site into a single zoning lot. As such, this site would not be considered a soft site for CEQR analysis purposes.
- <u>Tax Block 80, Lot 4</u>: This is a known development project that was issued a CPC certification with respect to proposed subway improvements in 2009 to allow construction of a 15 FAR building. In 2016, plans were filed with DOB for a 50-story approximately 270,000 sf hotel (15 FAR). The proposed text amendment to modify the maximum building height along 23rd Street from 85 feet to a 125-foot maximum base height, would only affect ¼ (25 feet) of Lot 4's 23rd Street frontage. While the proposed actions would allow floor area to be redistributed and could result in a shorter building on this site, the amount of redistributable floor area would not reduce the height of the building enough to provide cost-savings on building construction. Furthermore, a shorter building would not allow for views of the Manhattan skyline, resulting in a lower financial return.

Therefore, it is not expected that the proposed actions would result in changes to future development on this site and it would not be considered a soft site for CEQR analysis purposes.

• <u>Tax Block 80, Lot 8</u>: This is a small lot (1,300 sf) that is currently improved with an approximately 1,950 sf two-family residential building (FAR 1.5). As this lot is less than 10,000 sf, pursuant to ZR 117-42, it would be subject to the bulk provisions of an M1-4/R6B district. The maximum heights imposed by this district would not permit a new building on the site to reach the current or proposed setback heights. Therefore, the proposed text amendments would not alter the viability of development on Lot 8. Lot 8 was also evaluated for its potential as an air rights transfer parcel, but this was ruled out given the applicant's previous unsuccessful attempt to purchase this lot and its development rights, as well as the small amount of air rights that would be available. Furthermore, as the same amount of air rights transfer would have no effect on the RWCDS for CEQR analysis.

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

In the future without the proposed actions (the No-Action condition), the project site is expected to be redeveloped with a program that does not require any discretionary approvals. Thus, no zoning text changes would occur and the applicant would redevelop the site with an as-of-right building pursuant to C5-3 and Special District zoning regulations, including an FAR increase pursuant to the subway improvement certification. The applicant would develop an approximately 289,533 gsf (14.05 FAR), 70story mixed-use building on the site. The building would be comprised of approximately 247 DUs, 10,367 gsf of retail³, and 69,138 gsf of commercial office space. For CEQR analysis purposes, a standard DU size of 850 sf was assumed. Retail uses would be located on the ground floor, with commercial uses located on the second through ninth floors and residential uses above. The ground floor's retail use would comply with the restrictions applicable in C5 districts for certain uses in Use Groups 6, 9, and 11, whereby such uses are not allowed on the ground floor within 50 feet from the street wall of the building (ZR § 32-423). These excluded uses include (but are not limited to) laundry establishments, loan offices, and clothing rental establishments (ZR § 32-00). No parking is required in the Long Island City Area (ZR § 16-10) and none would be provided; no new curb cuts would be provided. Since there would be less than 25,000 sf of retail use and 100,000 sf of office use, no loading berth would be required (ZR § 36-62) and none would be provided.

The No-Action development on the project site would have an 85-foot, 6-story street wall with a 60-foot setback on the 23rd Street frontage, and an 85-foot, 6-story street wall with a 20-foot setback on the 45th Avenue frontage. The No-Action development's 15-foot high ground floor would cover the entirety of the site and contain retail use, with an entrance on 23rd Street, and a residential lobby on 45th Avenue. At a height of 85 feet, the maximum base height per ZR § 117-421(c)(2), the 7th story would set back 20 feet from 45th Avenue (a narrow street), in compliance with the underlying tower regulations of ZR § 33-451, applicable per ZR § 117-421(c) and 35-64(c), so the floor plates of commercial floors 7-9 would be approximately 4,471 sf. Residential floors 10-70 would have floor plates of 3,375 sf. Above the 70th floor would be a mechanical floor (see Figures A-6, A-7, A-8).

³ This accounts for all ground-floor commercial space including a lobby for the commercial office space.

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

In the future with the proposed actions, the applicant would develop an approximately 308,565 gsf (14.05 FAR), 45-story mixed-use building on the project site. The building would be comprised of approximately 272 DUs, 9,481 gsf of retail, and 68,133 gsf of commercial office space. For CEQR analysis purposes, a standard DU size of 850 sf was assumed. Retail uses would be located on the ground floor, with commercial uses located on the second through eighth floors and residential uses above. The ground floor's retail use would comply with the restrictions applicable in C5 districts for certain uses in Use Groups 6, 9, and 11, whereby such uses are not allowed on the ground floor within 50 feet from the street wall of the building (ZR § 32-423). These excluded uses include (but are not limited to) laundry establishments, loan offices, and clothing rental establishments (ZR § 32-00). No parking is required in the Long Island City Area (ZR § 16-10) and none would be provided; no curb cuts are proposed. Since there would be less than 25,000 sf of retail use and 100,000 sf of office use, no loading berth would be required (ZR § 36-62) and none would be provided.

With the proposed text amendment, the With-Action development on the project site would have a 125foot, 8-story, street wall with a 20-foot setback on the 23rd Street frontage, and an 85-foot, 6-story, street wall with a 15-foot setback on the 45th Avenue frontage. The With-Action development's 15-foot high ground floor would cover the entirety of the site and contain retail use, with an entrance on 23rd Street, and a residential lobby on 45th Avenue. At a height of 85 feet, the maximum base height per ZR § 117-421(c)(2), the 7th story would set back 15 feet from 45th Avenue (a narrow street), in compliance with the underlying tower regulations of ZR § 33-451, applicable per ZR § 117-421(c) and § 35-64(c), so the floor plates of commercial floors 7 and 8 would be approximately 8,909 sf. At a height of 125 feet, the 9th floor would set back 20 feet from 23rd Street as allowed by the Amendment, which would replace the existing 85-foot height limit applicable within 60 feet of 23rd Street on the site, and would have a floor plate of 6,769 sf. Residential floors 10-43 would have floor plates of 6,323 sf. The highest residential floor, floor 44, would have a floor plate of 4,035 sf and the 45th floor would be a mechanical floor, reaching the total building height of 524 feet (see Figures A-6, A-7, A-8).

Possible Effects of the Proposed Project

Table A-2 below provides a comparison of the No-Action and With-Action conditions for the project site. As shown, while no change in FAR is proposed, the incremental difference between the No-Action and With-Action developments would result in a net increase of 25 DUs and a net loss of 886 gsf of local retail space and 1,005 gsf of commercial office space.⁴ In terms of height and bulk, the incremental difference between developments would result in a net decrease of 192 feet in maximum building height, a net increase of 40 feet in maximum base height, and a net increase of 2,948 sf in tower floor plate size (see Figures A-6, A-7, A-8). The proposed project would also result in a net increase of approximately 64 residents and a net loss of 6 workers.

⁴ The incremental change in gross square feet is due to changes in zoning deductions between the No-Action and With-Action designs. The Quality Housing deduction for the With-Action development is higher than the deduction for the No-Action because of the size of the corridor on each floor. Deductions were taken from both daylight in the corridor and the density per corridor.

Use	No-Action Scenario	With-Action Scenario Incre	
Residential ¹	247 DUs (210,028 gsf)	272 DUs (230,951 gsf)	+25 DUs (20,923 gsf)
Local Retail	10,367 gsf	9,481 gsf	-886 gsf
Commercial Office Space	69,138 gsf	68,133 gsf	-1,005 gsf
Height/Bulk	No-Action Scenario	With-Action Scenario	Increment
Maximum Building Height	716 feet	524 feet	-192 feet
Maximum Base Height	85 feet	125 feet	+40 feet
Bulk/Tower Floor Plate	3,375 sf	6,323 sf	+2,948 sf
Floor Area Ratio (FAR)	14.05 FAR	14.05 FAR	No change
Population/Employment ²	No-Action Scenario	With-Action Scenario	Increment
Residents	640 residents	704 residents	+64 residents
Workers	318 workers	312 workers	-6 workers

Table A-2 Comparison of No-Action and With-Action Development Scenarios

Notes: ¹The number of dwelling units reflects an average unit size of 850 sf.

² Assumes 2.59 persons per DU (based on 2010 U.S. Census data for Queens Community District 2), 1 worker per 25 DUs, 3 workers per 1,000 sf of retail space, and 1 worker per 250 sf of commercial office space.

VII. PUBLIC REVIEW PROCESS

The applicant requires a zoning text amendment to implement the proposed project, which is a discretionary public action that is subject to the provisions of the New York City Charter and CEQR.

Sections 197-d 200 and 201 of the New York City Charter, are designed to allow public review of zoning text amendments at four levels: the Community Board; the Borough President; the CPC; and the City Council. The process begins with referral by CPC once it determines that the application is complete to the relevant Community Board (in this case Queens Community Board 2) and the Queens Borough President, which are typically given up to 60 days to review and discuss the proposal, hold a public hearing, and adopt an advisory resolution on the application. The CPC then holds a public hearing on the application. If CPC approved, the application is then forwarded to the City Council, to review the application and enact or deny the proposed text amendment.

CEQR is a process by which agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment. The City of New York established CEQR regulations in accordance with the New York State Environmental Quality Review Act (SEQRA). In addition, the City has published a guidance manual for environmental review, the *CEQR Technical Manual*. CEQR rules guide environmental review through the following steps:

- *Establish a Lead Agency*. Under CEQR, the "lead agency" is the public entity responsible for conducting environmental review. The lead agency for the environmental review of the proposed actions is DCP.
- Environmental Review and Determination of Significance. The lead agency will determine whether the proposed actions may have a significant impact on the environment. To do so, an EAS must be prepared. This EAS will be reviewed by the lead agency, which will determine if the proposed actions and development would result in any significant adverse impacts on the environment.

ATTACHMENT B SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement (EAS) has been prepared in accordance with the guidance and methodologies presented in the 2014 *CEQR Technical Manual*. For each technical area, thresholds are defined which if met or exceeded, require that a detailed technical analysis be undertaken. Using these guidelines, preliminary screening assessments were conducted for the proposed actions to determine whether detailed analysis of any technical area may be appropriate. Part II of the EAS Form identifies those technical areas that warrant additional assessment. The technical areas that warranted a "Yes" answer in Part II of the EAS form were Land Use, Zoning, and Public Policy, Shadows, Historic and Cultural Resources, Urban Design and Visual Resources, Hazardous Materials, Air Quality, Noise, and Construction. For these technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds and/or are unlikely to result in significant adverse impacts.

The supplemental screening assessment contained herein identified that a detailed analysis is required in a number of technical areas. Table B-1 identifies for each CEQR technical area whether (a) the potential for impacts can be screened out based on the EAS Form, Part II, Technical Analyses; (b) the potential for impacts can be screened out based on a supplemental screening per the *CEQR Technical Manual*, (c) or whether a more detailed assessment is required.

TECHNICAL AREA	SCREENED OUT PER EAS FORM	SCREENED OUT PER SUPPLEMENTAL SCREENING	DETAILED ANALYSIS REQUIRED	
Land Use, Zoning, & Public Policy			Х	
Socioeconomic Conditions	x			
Community Facilities & Services	Х			
Open Space	Х			
Shadows			Х	
Historic & Cultural Resources		х		
Urban Design & Visual Resources			Х	
Natural Resources	x			
Hazardous Materials		х		
Water & Sewer Infrastructure	Х			
Solid Waste & Sanitation Services	x			
Energy	x			
Transportation	Х			
Air Quality		х		
Greenhouse Gas Emissions	x			
Noise			X	
Public Health	Х			
Neighborhood Character	Х			
Construction		Х		

Table B-1

Summary	of CEQR Technical Areas Screening	
Summary	of CLQR reclinical Areas Screening	

As outlined in the Reasonable Worst-Case Development Scenario (RWCDS) in Attachment A, "Project Description," while no change in FAR is proposed, the incremental difference between the No-Action and With-Action developments would result in a net increase of 25 DUs and a net loss of 886 gsf of local retail space and 1,005 gsf of commercial office space. In terms of height and bulk, the incremental difference between developments would result in a net decrease of 192 feet in maximum building height, a net increase of 40 feet in maximum base height, and a net increase of 2,948 sf in tower floor plate size. The proposed project would also result in a net increase of approximately 64 residents and a net loss of 6 workers. These incremental differences are presented below in Table B-2 and serve as the basis for the impact category analyses of this EAS.

Table B-2

Use	No-Action Scenario	With-Action Scenario	enario Increment	
Residential	247 DUs (210,028 gsf)	272 DUs (230,951 gsf)	+25 DUs (20,923 gsf)	
Local Retail	10,367 gsf	9,481 gsf	-886 gsf	
Commercial Office Space	69,138 gsf	68,133 gsf	-1,005 gsf	
Height/Bulk	No-Action Scenario	With-Action Scenario	Increment	
Maximum Building Height	716 feet	524 feet	-192 feet	
Maximum Base Height	85 feet	125 feet	+40 feet	
Bulk/Tower Floor Plate	3,375 sf	6,323 sf	+2,948 sf	
Floor Area Ratio (FAR)	14.05 FAR	14.05 FAR	No change	
Population/Employment ²	No-Action Scenario	With-Action Scenario	Increment	
Residents	640 residents	704 residents	+64 residents	
Workers	318 workers	312 workers	-6 workers	

Comparison of No-Action and With-Action Development Scenarios

Notes: ¹The number of dwelling units reflects an average unit size of 850 sf.

² Assumes 2.59 persons per DU (based on 2010 U.S. Census data for Queens Community District 2), 1 worker per 25 DUs, 3 workers per 1,000 sf of retail space, and 1 worker per 250 sf of commercial office space.

II. SUPPLEMENTAL SCREENING

LAND USE, ZONING, AND PUBLIC POLICY

According to *CEQR Technical Manual* guidance, a detailed analysis of land use and zoning is appropriate if a proposed action would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the action would change the zoning on the site or result in the loss of a particular use.

As the proposed actions include a zoning text amendment, a detailed analysis of land use, zoning and public policy is provided in Attachment C, "Land Use, Zoning, and Public Policy." As discussed in Attachment C, the proposed actions would change the bulk provisions governing Block 3 of the Court Square Subdistrict, but would not result in land use or zoning conditions that would be incompatible with or adversely affect conditions in the surrounding area. Accordingly, the proposed actions would not result in significant adverse impacts to land use, zoning, or public policies.

SHADOWS

A shadow assessment considers actions that result in new shadows long enough to reach a publicly accessible open space or historic resource (except within an hour and a half of sunrise or sunset). For actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary

unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight).

The proposed actions would facilitate the construction of a building with a maximum height of approximately 524 feet (plus a 20-foot parapet mechanical screen). While the RWCDS With-Action development at the project site would be approximately 192 feet shorter than the RWCDS No-Action development, it would be bulkier than the RWCDS No-Action development and would therefore have the potential to cast new shadows on sunlight sensitive resources. A shadow assessment has been provided in Attachment D, "Shadows." As described in the attachment, the proposed project is not anticipated to result in significant adverse impacts on any sunlight-sensitive resources.

HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources are defined as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. These include properties that have been designated or are under consideration as New York City Landmarks (NYCL) or Scenic Landmarks, or are eligible for such designation by the New York City Landmarks Preservation Commission (LPC); properties within New York City Historic Districts; properties listed on the State and/or National Register of Historic Places (S/NR); and National Historic Landmarks. An assessment of architectural and archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

Archaeological Resources

In accordance with CEQR guidance, archaeological resources are considered only in those areas where excavation is likely and would result in new in-ground disturbance compared to No-Action conditions. As detailed in Attachment A, "Project Description," the footprints of the RWCDS No-Action and With-Action buildings on the project site would be identical and excavation would be at the same depth. Therefore, no new in-ground disturbance would occur on the project site as a result of the proposed actions, and an archaeological assessment is not warranted.

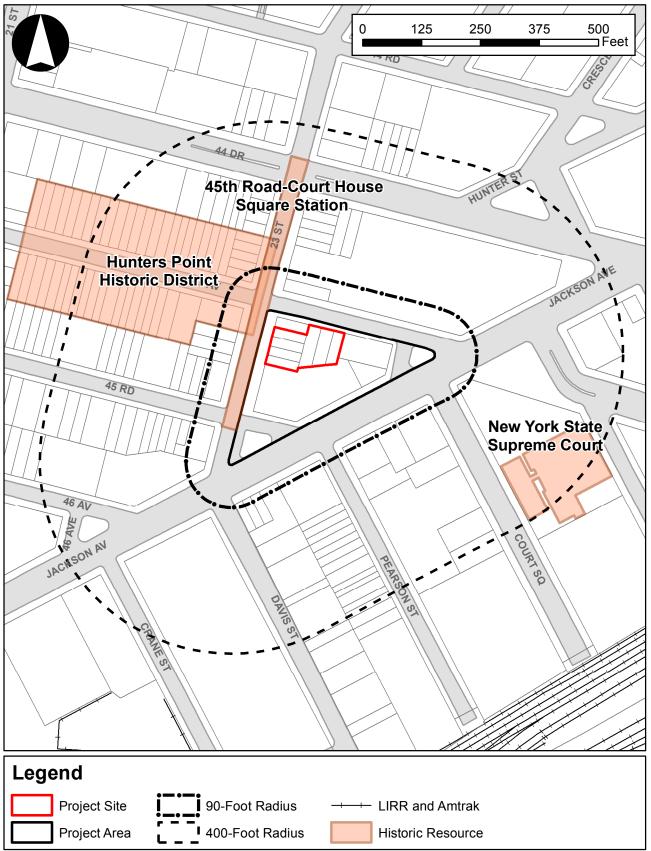
Architectural Resources

As shown in Figure B-1a, the project site is located in the Court Square neighborhood of Queens, in close proximity to several designated landmarks. According to CEQR guidance, an assessment of historic resources considers both resources located within the project area and the surrounding area. The historic resources study area is therefore defined as the project area plus an approximately 400-foot radius around the site, which is typically adequate for the assessment of historic resources in terms of physical, visual, and historical relationships (refer to Figure B-1a).

Existing Conditions

There are no designated or eligible historic architectural resources located on the project site (refer to LPC correspondence in Appendix 2). As shown in Figure B-1a, there are three designated historic resources within 400-feet of the project area: the Hunters Point Historic District; the 45th Road – Court House Square Station; and the New York State Supreme Court. The following provides a brief description of these three historic resources, photos of which are provided in Figure B-1b.

Figure B-1a Historic Resources



Source: DoITT, DCP, LPC, SHPO, CUNY Center for Urban Research



Looking south from the elevated 7-train subway platform that runs along 23rd Street



Looking east towards the project site and the 46-story Citi building from 45th Av. in the Hunters Point Historic District



Looking southeast from Jackson Avenue at the New York State Supreme Court



Looking west away from the project site from 45th Avenue in the Hunters Point Historic District

1. Hunters Point Historic District (S/NR-listed, LPC-designated) 45th Avenue between 21st & 23rd Streets

The Hunters Point Historic District encompasses a residential block of Long Island City with predominately 3.5-story rowhouses constructed in the late-19th century. The district is uniform in character, with architectural styles ranging from Italianate to French Second Empire to Neo-Grec. Most buildings on the block retain their original features, including high stoops and cornices, resulting in a cohesive streetscape with a practically unbroken cornice line along 45th Avenue. Particularly significant buildings in the district include Nos. 21-12 through 21-20 and 21-21 through 21-29, all of which were built by Spencer Root and John Rust. As shown in Figure B-1b, these houses contain pedimented entrances and segmental-arched windows with arched lintels carried on brackets. The Hunters Point Historic District was designated by the LPC in 1968, listed on the NR in 1973, and listed on the SR in 1980.

45th Road – Court House Square Station (S/NR-listed) 23rd Street between 44th Drive & 45th Road

Constructed in 1914-16 during the "Dual Contracts Era" of subway expansion, the elevated 45th Road-Court House Square Station is simple and unadorned, a well-preserved example of the restrained designs associated with the era. As shown in Figure B-1b, the wooden deck of the structure rests on a series of webbed trusses attached to four riveted steel piers on the corners of the station, reinforced by diagonal struts. The original platform is covered by steel-framed canopies of standing seam metal on slender, trussed columns; the 1950s platform extension is not covered. The walls of the platform are covered in corrugated metal windscreens, obscuring views of the surrounding area. The station also contains three unadorned, covered steel stairways with simple balustrades and cantilevered porches. It was listed on the SR in 2004 and NR in 2005.

3. New York State Supreme Court (S/NR-listed, LPC-designated) 25-10 Court Square (Block 83, Lot 1)

The New York State Supreme Court building is an example of monumental civic architecture noted for its symmetry, bold fenestration, and large-scale Classical decoration. The original structure, built in 1872-76, was gutted in a fire in 1904, and subsequently rebuilt in 1908 to the designs of Peter M. Coco. The new building retained the walls of the original structure, but replaced the destroyed mansard roof with two additional stories and removed most of the remaining exterior ornament. As shown in Figure B-1b, the main façade of the four-story building contains a two-story entrance set in an arched-stone enframement flanked by projecting, paired lonic columns supporting small balconies. Inside the arch are double-doors topped with a three-panel transom and a broken pediment. The side bays of the façade contain large limestone-enframed windows, and below the main cornice, the corners of the building are adorned with ornamental stone eagles set above cartouches flanked by foliate consoles, below which are three tablets set on scrolls. The courthouse was designated a NYCL in 1976 and listed on the S/NR in 1983.

No-Action Conditions

Under No-Action conditions, changes to the historic resources identified above or to their settings could occur. It is possible that some architectural resources in the study area could deteriorate, while others could be restored. Future projects could affect the settings of architectural resources, and could accidentally damage architectural resources through adjacent construction.

Properties that are designated NYCLs are protected under the New York City Landmarks Law, which requires LPC review and approval before any alteration or demolition of those resources can occur. All properties within LPC-designated historic districts, such as the Hunters Point Historic District detailed above, also require LPC permit and approval prior to new construction, additions, enlargements, or demolition. The owners of a property may work with LPC to modify their plans to make them appropriate. Properties that have been calendared for consideration for designation as NYCLs are also afforded a measure of protection insofar as, due to their calendared status, permits may not be issued by the New York City Department of Buildings (DOB) for any structural alteration to the buildings for any work requiring a building permit, without at least 40 days prior notice being given to LPC. During the 40-day period, LPC has the opportunity to consider the case and, if it so chooses, schedule a hearing and move forward with designation.

The New York City Building Code provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. Additional protective measures apply to designated NYCLs and S/NR-listed historic buildings located within 90 linear feet of a proposed construction site. For these structures, DOB's Technical Policy and Procedure Notice (TPPN) #10/88 applies. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent NYCL-designated or S/NR-listed historic resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

Additionally, historic resources that are listed on the S/NR or that have been found eligible for listing are given a measure of protection from the effects of federally-sponsored or federally-assisted projects under Section 106 of the National Historic Preservation Act, and are similarly protected against impacts resulting from State-sponsored or State-assisted projects under the New York State Historic Preservation Act. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. Private property owners using private funds can, however, alter or demolish their S/NR-listed or S/NR-eligible properties without such a review process.

Anticipated Developments in the No-Action Condition

Under No-Action conditions, the proposed actions would not be approved, and an as-of-right building would be constructed on the project site. The proposed building would be mixed residential and commercial, and would have a six-story (85-foot) streetwall before setting back and rising to a total building height of 70 stories (716 feet). As the Hunters Point Historic District and the 45th Road – Court House Square Station are located within 90 feet of the project site (see Figure B-1a), the anticipated RWCDS No-Action building on the site would require a Construction Protection Plan in order to protect the adjacent historic structures from potential construction damage.

Additionally, as detailed in Attachment C, "Land Use, Zoning, & Public Policy," there are ten predominantly residential developments expected to be completed in the study area under No-Action conditions. These projects include a seven-story building at 21-59 44th Drive (Block 438, Lot 1), an 11-story building at 22-43 Jackson Avenue (Block 76, Lot 16), a 48-story building at 22-44 Jackson Avenue (Block 86, Lot 1), and a 66-story building at 23-14 44th Drive (Block 437, Lots 5, 7, 8, 9, 10, 11, 13, 15, 20). Other developments currently under construction in the surrounding area include an 11-story residential development at 45-07 Court Square (Block 81, Lot 9), an 8-story residential development at 21-30 44th Drive (Block 78, Lot 41), and an 11-story residential development at 22-18 Jackson Avenue (Block 72, Lot 65). As the Hunters Point Historic District and the 45th Road – Court House Square Station are located within 90 feet of the 23-14 44th Drive site, the anticipated development would require a Construction Protection Plan in order to protect the adjacent historic structures from potential construction damage.

The project site and the ten identified No-Action development sites do not contain historic resources, and as such, no demolitions or alterations to historic architectural resources are expected in the future without the proposed actions. However, as the project site and No-Action development sites are located in close proximity to several designated historic resources, they would alter the setting of these resources under No-Action conditions. For example, the 70-story tower on the project site would be seen from various vantage points looking east on 45th Avenue in the Hunters Point Historic District, east of the platform of the 45th Road-Court House Square Station, and northwest of the New York State Supreme Court, changing the setting of each historic resource under No-Action conditions.

With-Action Conditions

According to the *CEQR Technical Manual*, generally, if a project would affect those characteristics that make a resource eligible for NYCL designation or S/NR listing, this could be a significant adverse impact. The proposed actions were assessed in accordance with guidance established in the *CEQR Technical Manual* (Chapter 9, Part 420), to determine (a) whether there will be a physical change to any designated or listed property as a result of the proposed actions; (b) whether there will be a physical change to the setting of any designated or listed resource, such as context or visual prominence, as a result of the proposed actions; and (c) if so, whether the change is likely to diminish the qualities of the resource that make it important. Whereas this assessment focuses specifically on the proposed actions' effect on the visual context of historic architectural resources, an assessment of the proposed actions' effect on the urban design and visual character of the study area in general is provided separately in Attachment E, "Urban Design & Visual Resources."

As detailed in Attachment A, "Project Description," under With-Action conditions, the proposed actions would be approved, and the proposed building would be constructed on the project site. The building would include a mix of residential and commercial uses, and would have an eight-story (125-foot) street wall on 23rd Street and a six-story (85-foot) street wall on 45th Avenue before various setbacks, rising to a total building height of 45 stories (524 feet). The RWCDS With-Action building on the project site would be 192 feet shorter than the RWCDS No-Action development, with a 40-foot taller street wall on 23rd Street and a wider overall tower (refer to Figure A-6 in Attachment A).

Direct (Physical) Impacts

Historic resources can be directly affected by physical destruction, demolition, damage, alteration, or neglect of all or part of a historic resource. Direct effects also include changes to an architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural

features. As shown in Figure B-1a, there are no historic architectural resources on the project site. As such, the proposed actions would not result in direct impacts to historic architectural resources.

Indirect (Contextual) Impacts

Contextual impacts may occur to architectural resources under certain conditions. According to the *CEQR Technical Manual*, possible impacts to architectural resources may include isolation of the property from, or alteration of, its setting or visual relationships with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. Significant indirect impacts can occur if a proposed action would cause a change in the quality of a property that qualifies it for listing on the S/NR or for designation as a NYCL.

The proposed actions would not result in significant adverse indirect impacts on existing historic resources in the study area, as compared to No-Action conditions. As detailed above, the proposed actions would facilitate the construction of a 45-story building on the project site. The RWCDS With-Action development would be 192 feet shorter than the RWCDS No-Action development. No incompatible visual, audible, or atmospheric elements would be introduced by the RWCDS With-Action development to any historic architectural resource's setting. The RWCDS With-Action building on the project site would not alter the relationship of any identified historic architectural resource to the streetscape, since all streets in the study area would remain open and each resource's relationship to the street would remain unchanged in the future with the proposed actions.

The RWCDS With-Action development would not eliminate public views of surrounding historic resources. All buildings in the Hunters Point Historic District as well as the 45th Road – Court House Square Station and the New York State Supreme Court building would remain visible from view corridors on adjacent public streets and sidewalks and no primary facades, significant architectural ornamentation, or notable features of these buildings would be obstructed by the new building on the project site. Both the RWCDS No-Action and With-Action buildings on the project site would be visible from various vantage points looking east on 45th Avenue in the Hunters Point Historic District, east of the platform of the 45th Road-Court House Square Station, and northwest of the New York State Supreme Court. As detailed above, the taller RWCDS No-Action building on the project site would also be visible from these various vantage points. Additionally, as detailed further in Attachment E, "Urban Design & Visual Resources," the area surrounding the project area is located in a dense urban environment with multiple existing and planned high-rises, which currently form the backdrop to the surrounding historic resources. Therefore, the proposed project would not significantly alter the visual setting of the surrounding historic resources so as to affect those characteristics that make the surrounding buildings eligible for listing on the S/NR or for designation by the LPC. As such, the proposed actions would not result in any significant adverse indirect or contextual impacts on historic architectural resources.

Construction-Related Impacts

As discussed above, any new construction taking place adjacent to historic resources has the potential to cause damage from ground-borne construction vibrations. As shown in Figure B-1a, the project area is located within 90 feet of the S/NR-listed and LPC-designated Hunters Point Historic District and the S/NR-listed 45th Road – Court House Square Station. Therefore, both the RWCDS No-Action and With-Action developments on the project site would require a Construction Protection Plan in order to protect the nearby historic buildings from potential construction damage. The Construction Protection Plan would be

developed in consultation with LPC and/or SHPO and would take into account the guidance provided in the *CEQR Technical Manual*, Chapter 9, Section 523, "Construction Protection Plan" and requirements laid out in TPPN #10/88. With the implementation of the construction protection measures outlined in the Construction Protection Plan for the project site, no construction-related impacts on historic resources would be anticipated as a result of the proposed actions.

Shadows Impacts

As detailed in Attachment D, "Shadows," new development on the project site would have the potential to cast incremental shadows on the LPC-designated and S/NR-listed Hunters Point Historic District, the S/NR-listed 45th Road – Court House Square Station, the S/NR-listed United States Post Office – Long Island City, and the LPC-designated and S/NR-eligible Fire Engine Company No. 258 – Hook and Ladder Co. No. 115. However, the significance of these historic resources is not derived from design elements that depend on the contrast between light and dark. Therefore, as direct sunlight does not play a notable role in the special character of these historic resources, none were identified as sunlight-sensitive resources (refer to LPC correspondence in Appendix 2). Therefore, no shadows impacts on historic resources would occur as a result of the proposed actions.

URBAN DESIGN AND VISUAL RESOURCES

A preliminary analysis of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning, including the following: (1) projects that permit the modification of yard, height, and setback requirements; and (2) projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed actions.

As the proposed actions include a zoning text amendment that would allow changes beyond what is permitted under existing zoning, an assessment of the proposed project's potential to affect the pedestrian experience is required and has been provided in Attachment E, "Urban Design and Visual Resources." As described in the attachment, the proposed project is not anticipated to result in significant adverse impacts to urban design or visual resources.

HAZARDOUS MATERIALS

As detailed in the *CEQR Technical Manual*, the goal of a hazardous materials assessment is to determine whether a proposed action may increase the exposure of people or the environment to hazardous materials, and if so, whether this increased exposure would result in potential significant public health or environmental impacts. 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 semivolatile organic compounds, methane, polychlorinated biphenyls 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) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

An assessment was conducted in conformance with the American Society of Testing and Materials' (ASTM) International Standard Practice E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Practice). A Phase I Environmental Site Assessment (ESA) was

prepared by EBI Consulting for each tax lot of the project site. The findings of the Phase I ESA's are summarized below and presented in Appendix 3.

Phase I Environmental Site Assessments

The Phase I ESAs consisted of a site description and history, records review, site reconnaissance, interviews and user provided information for each tax lot of the project site. The Phase I ESAs revealed that prior uses on the tax lots were primarily residential but also included commercial uses, a hospital, and a surface level parking lot.

Based on the information gathered as a result of the Phase I ESA process, EBI Consulting did not identify evidence of Recognized Environmental Conditions (RECs) at any tax lot of the project site.¹ Based upon the findings of the investigations, EBI Consulting provided the following recommendations:

All Tax Lots:

- Based upon the location of the subject property in an urban area and the planned redevelopment of the property, testing of the soil and groundwater is recommended.
- EBI recommends that a comprehensive asbestos inspection be conducted by a licensed asbestos inspector prior to demolition of the building. Any materials that are determined to be asbestos-containing through bulk sampling should be removed by a licensed abatement contractor prior to demolition activities that would disturb these materials.

Lots 5 and 6:

- EBI recommends that the approximate 200 linear feet of thermal system insulation suspect asbestos-containing materials (ACM) be properly abated by a licensed asbestos abatement contractor in accordance with federal, state, and local requirements.
- EBI recommends the development and implementation of a Lead-Based Paint Operations and Maintenance (O&M) Plan for the subject property. This O&M Plan provides the procedures and guidelines that, when used during facility cleaning, maintenance, and general operations, will minimize human exposure to lead and minimize release of lead to the environment. This O&M Plan is a long term management approach.

Phase II Environmental Site Assessment and (E) Designations

In place of conducting a Phase II ESA at this time, an (E) designation would be placed on the project site (Tax Block 80, Lots 5, 6, 7, 9, 10, 11, 12), which would require site investigation prior to issuance of building permits. By placing an (E) designation on the site, the potential for an adverse impact to human health and the environment resulting from the proposed actions would be reduced or avoided. Pursuant to Section 11-15 of the New York City Zoning Resolution, the New York City Office of Environmental Remediation would provide the regulatory oversight of the required environmental investigation and, if required, remediation. Building permits are not issued by the New York City Department of Buildings (DOB) without prior OER approval of the investigation and/or remediation.

The (E) designation would require the completion of a testing and sampling protocol and the approval of a remediation plan, where appropriate, to the satisfaction of OER. DOB will typically issue the foundation permits when OER approves the remedial action work plan – the remediation, if necessary, is typically

¹ While no RECs have been identified, EBI Consulting did identify a number of conditions outside the scope of ASTM Practice E1527-13. See Appendix 3 for additional information.

performed concurrently with construction activities, pursuant to a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) approved by OER.

The (E) designation (E-523) text related to hazardous materials is as follows:

TASK 1 – Sampling Protocol

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

TASK 2 – Remediation Determination and Protocol

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

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

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

With the measures outlined above, no significant adverse impacts related to hazardous materials would be expected to occur as a result of the proposed project.

AIR QUALITY

Stationary Sources

Actions can result in stationary source air quality impacts when they (1) create new stationary sources of pollutants such as emission stacks from industrial plants, hospitals, or other large institutional uses, or building's boiler stack(s) used for heating/hot water, ventilation, or air conditioning systems (HVAC) that can affect surrounding uses; (2) introduce new sensitive receptors near existing (or planned future)

emissions stacks that may adversely affect the new use; or (3) introduce potentially significant odors. No odors are associated with the proposed project. A preliminary HVAC source assessment has been provided below to determine if new development at the project site would have the potential to affect existing buildings.

Heat and Hot Water Systems

Pursuant to CEQR guidance, Figure 17-3 of the *CEQR Technical Manual* should be used to assess the potential effects of a building on existing land uses. If the source building (the RWCDS With-Action development) is taller than the receptor building or the distance between the two buildings falls below the applicable curve provided in Figure 17-3, a potential significant impact due to boiler stack emissions is unlikely and no further analysis is needed. If the distance between the source and receptor buildings is less than or equal to the threshold distance, further analysis is required.

Project-on-Existing Assessment

The floor area (308,565 gsf) and height (524 feet) of the RWCDS With-Action development at the project site were used to determine the distance at which an impact to an existing receptor building may occur. As shown in Figure B-2a, based on the use of No. 2 oil for heating and hot water systems, if any building of similar or greater height were identified within approximately 252 feet of the project site, further analysis would be required. As the closest existing building of similar or greater height is located approximately 152-feet from the project site at 1 Court Square West (Block 79, Lot 30), further screening was performed using Figure 17-7 of the *CEQR Technical Manual*. As shown in Figure B-2b, restricting new development at the project site to natural gas would ensure that any buildings of similar or greater height located beyond approximately 126 feet would not be impacted. Furthermore, of the developments expected to be completed in the surrounding area by 2022, none were found to be of similar or greater height and located within 126 feet of the project site.

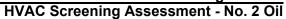
In order to preclude the potential for significant adverse stationary source (HVAC) impacts resulting from the proposed project, (E) designations are required to specify the exclusive use of natural gas. Any future construction on the project site (Block 80, Lots 5, 6, 7, 9, 10, 11, 12) would be required to comply with the following (E) designation (E-523):

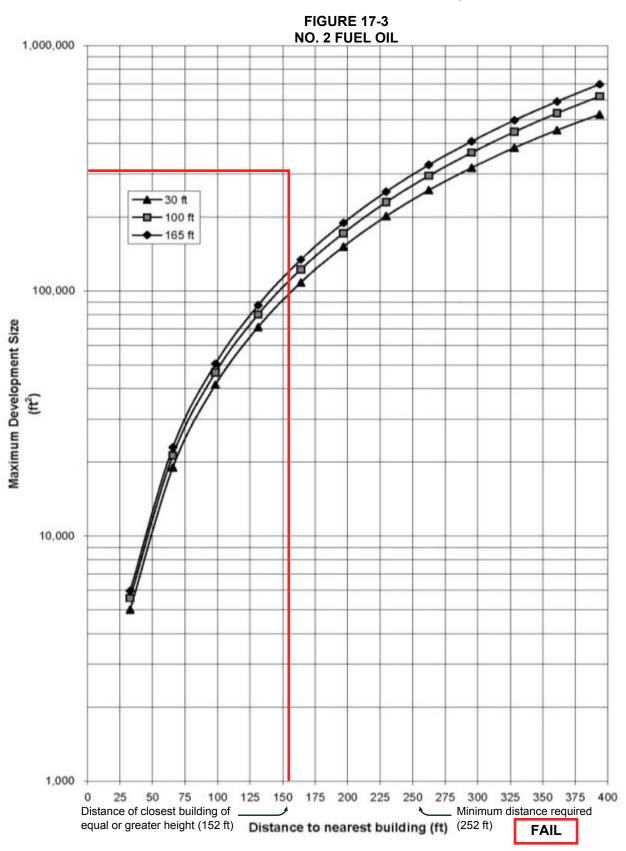
Any new development or enlargement on the above-referenced property must exclusively use natural gas as the type of fuel for the heating, ventilating, and air conditioning, and hot water (HVAC) system and ensure that the HVAC stack is located at the top of the bulkhead and at least 544 feet above grade to avoid any potential significant adverse air quality impacts.

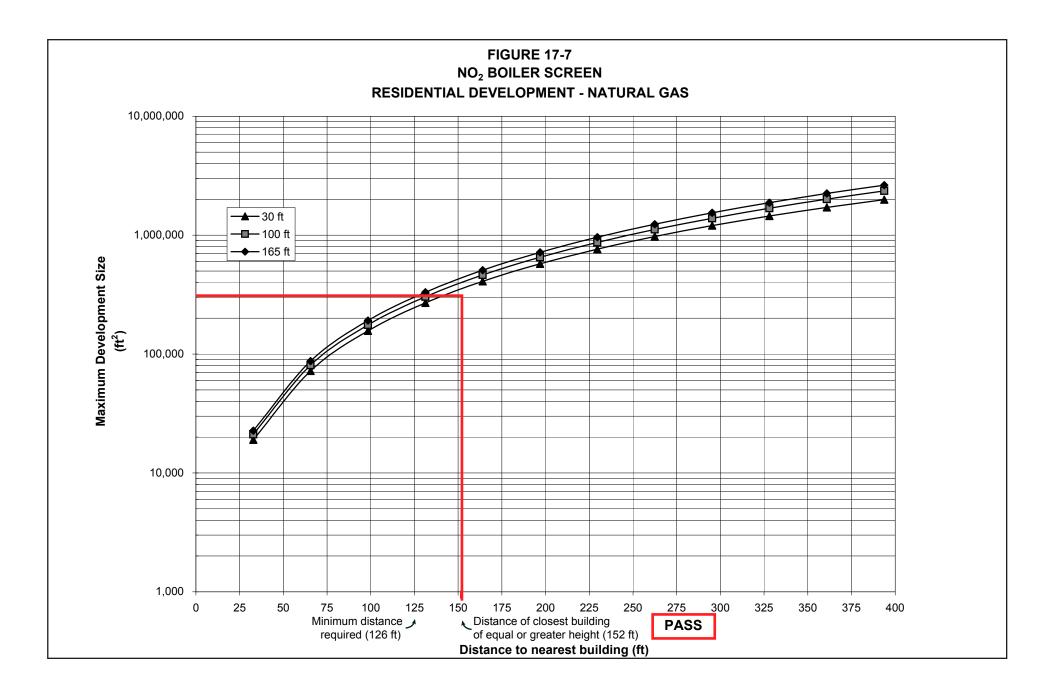
With these restrictions in place, the HVAC system of the RWCDS With-Action development is not expected to have a significant adverse impact on any existing or planned future buildings and a detailed analysis of project-on-existing impacts is not warranted.

Industrial Sources

As the area surrounding the project site contains a number of manufacturing and/or industrial land uses, a preliminary assessment was performed to determine if any industrial emission sources exist within a 400-foot radius of the project site. A property record search of available DEP permits provided by DEP on







10/23/2018 did not identify any industrial sources of concern within a 400-foot radius (see Appendix 4). In addition, no existing major or large emission sources (power plants, cogeneration facilities, solid waste or medical incinerators, or asphalt and concrete plants) that may contribute to the pollutant concentration at the project site have been identified within 1,000 feet of the project site. As no large emission sources have been identified, no existing land uses are expected to have a significant impact on new development at the project site, and no further analysis is warranted.

NOISE

The purpose of a noise analysis is to determine both a proposed project's potential effects on sensitive noise receptors and the effects of ambient noise levels on new sensitive uses introduced by the proposed project. The principal types of noise sources affecting the New York City environment are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building heating, ventilating, and air conditioning systems or above-grade subways) and construction noise. As the proposed project would generate new vehicular traffic, a preliminary assessment of noise is warranted.

Mobile Sources

According to the *CEQR Technical Manual*, a detailed mobile source analysis is generally performed if the proposed actions would increase noise passenger car equivalent (Noise PCE) values by 100 percent or more. As the proposed actions would generate fewer than 50 vehicle trips and a traffic analysis is not warranted based on CEQR guidance thresholds, the proposed project would not have the potential to double PCE values in this developed area of Queens. Therefore, no significant mobile source noise impacts are expected as a result of the proposed action and no further analysis is warranted.

Stationary Sources

According to the *CEQR Technical Manual*, a detailed stationary source analysis is generally performed if a proposed action would cause a substantial stationary source (i.e., unenclosed equipment for building ventilation purposes) 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.

The proposed project would not meet any of these criteria. It is expected that the rooftop mechanical equipment would be located within enclosed mechanical bulkheads or would be designed to meet all applicable noise regulations and to avoid producing levels that would result in any significant adverse noise impacts. The proposed project would also not be located in an area with high ambient noise levels resulting from stationary sources. Therefore, the proposed project would not result in any stationary source noise impacts and no further analysis is warranted.

Sensitive Receptor Analysis

According to the *CEQR Technical Manual*, a detailed noise analysis may be warranted if a proposed action would introduce a new noise-sensitive location in an area with high ambient noise levels. The proposed project would introduce new residential uses, which would be considered sensitive receptors. As receptors would be located adjacent to an elevated subway line along 23rd Street, a detailed noise analysis has been provided in Attachment F, "Noise." As discussed in the attachment, noise monitoring was

conducted along each street frontage of the project site. These measurements were used as a baseline for determining total noise levels in the future with the proposed project. As discussed in Attachment F, "Noise", composite window-wall attenuation would be required in order to comply with CEQR guidance. These measures would be required through an (E) designation.

CONSTRUCTION

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

The proposed project would result in temporary disruptions including construction related traffic, dust, noise, or mobile source emissions. However, these effects would be temporary, as the duration of construction activities for the proposed project are not expected to exceed 18-24 months and construction activity would be limited to the hours of 7:00 AM to 5:00 PM on weekdays. Construction staging would primarily occur on the site, and construction is not expected to adversely affect surrounding land uses. As required by City regulations, sidewalk protection bridges and full height plywood barriers would be installed to protect the public right of way. Periodic lane and sidewalk closures likely would be required to facilitate material delivery, construction debris removal, and related activities. Standard practices would be followed to ensure safe pedestrian and vehicular access to nearby buildings and along affected streets and sidewalks. During construction, access to all adjacent buildings, residences, and other uses would be maintained according to the regulations established by DOB. As discussed in "Historic and Cultural Resources" above, additional protective measures including DOB's TPPN #10/88 would apply to designated NYCLs and S/NR-listed historic buildings located within 90 linear feet of the construction site. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent NYCL-designated or S/NR-listed historic resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed. While the proposed project would result in temporary disruptions, these effects are not considered significant or adverse, thus detailed analysis is not required.

ATTACHMENT C LAND USE, ZONING, AND PUBLIC POLICY

I. INTRODUCTION

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

As discussed in Attachment A, "Project Description," the Reasonable Worst-Case Development Scenario (RWCDS) assumes that in the future with the proposed actions, the applicant would redevelop the project site with a 45-story, approximately 308,565 gross square foot (gsf) building with approximately 272 dwelling units (DUs), 9,481 gsf of local retail, and 68,133 gsf of office space. No accessory off-street parking spaces are required in the Long Island City Parking Area and no parking would be provided. Construction is expected to begin in 2020 with all components complete and operational in 2022.

According to the *CEQR Technical Manual*, a land use and zoning analysis is warranted for projects involving a change in land use or zoning. As the proposed actions include a zoning text amendment and would result in changes to bulk that are not currently permitted, analysis is warranted. Furthermore, the *CEQR Technical Manual* recommends that if a preliminary assessment cannot succinctly describe land use conditions in the study area, or if a detailed assessment is required in the technical analyses of socioeconomic conditions, neighborhood character, transportation, air quality, noise, infrastructure, or hazardous materials, a detailed land use assessment is appropriate. Both thresholds are applicable, as the proposed actions involve a zoning text amendment that would result in changes to bulk in an area where land uses on other sites will change under No-Action conditions and the proposed project requires detailed analysis of the technical areas cited. As such, a detailed land use and zoning assessment is necessary to provide a sufficient description and assessment of the effects on conditions.

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the future with the proposed actions within the project area or study area. The Proposed Actions would have no direct effect on land use regulations within the project area and would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with land uses, zoning, or public policies in the study area.

The Proposed Actions would only affect zoning regulations on limited portions of the project area, and would result in minor modifications to existing site-specific zoning regulations. The proposed zoning text amendments would allow for the construction of a new building that would be compatible with other existing and planned buildings in the surrounding area and would result in only minimal changes to shadow coverage and duration. Therefore, as the proposed modifications would allow for relatively minor modifications that would be limited to specific portions of the project area and would not allow for new development that would be out of context with the surrounding area or substantially reduce access to

light and air, the proposed actions are not expected to result in significant adverse zoning impacts in the project area. Therefore, the Proposed Actions would not result in significant adverse impacts to land use, zoning, or public policy.

III. METHODOLOGY

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

As described in Attachment A, "Project Description," in order to assess the possible effects of the proposed actions, a RWCDS was established for the future without the proposed actions (the No-Action condition) and future with the proposed actions (the With-Action condition) for the project area in the 2022 analysis year.

As the proposed actions include a zoning text amendment that would result in changes to bulk on a site in an area where land uses on other sites will change under No-Action conditions, a detailed assessment is necessary to provide a sufficient description and assessment of the effects on conditions. In addition, a detailed assessment is needed to sufficiently inform other technical reviews and determine whether changes in land use could affect conditions analyzed in those technical areas. Following the guidance of the *CEQR Technical Manual*, the detailed analysis describes existing and anticipated future conditions to a level necessary to understand the relationship of the proposed project to such conditions, assesses the nature of any changes on these conditions that would be created by the proposed project, and identifies those changes, if any, that could be significant or adverse.

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

Analysis Year

As outlined in the RWCDS, construction at the project site is expected to be complete with all components operational by 2022. Therefore, for the purposes of determining potential impacts, this analysis assesses current conditions and forecasts those conditions to 2022. Future No-Action conditions account for land use and development projects, initiatives, and proposals that are expected to be completed by 2022.

Study Area Definition

According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning, and public policy is related to the type and size of the proposed project, as well as the location and context of the area that

could be affected. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project. Land use, zoning, and public policy are addressed and analyzed for two geographical areas: (1) the project area (Block 3) including the project site; and (2) a study area. The study area identified for this analysis encompasses all areas within a 400-foot radius from the boundary of the project area. As a result, the study area boundary encompasses and extends as far north as 44th Drive, as far south as the midblock area between Jackson Avenue and the Long Island Railroad (LIRR) railyard, as far west as the midblock area between 23rd Street and 21st Street, and as far east as the intersection of Jackson Avenue and 44th Drive (see Figure C-1).

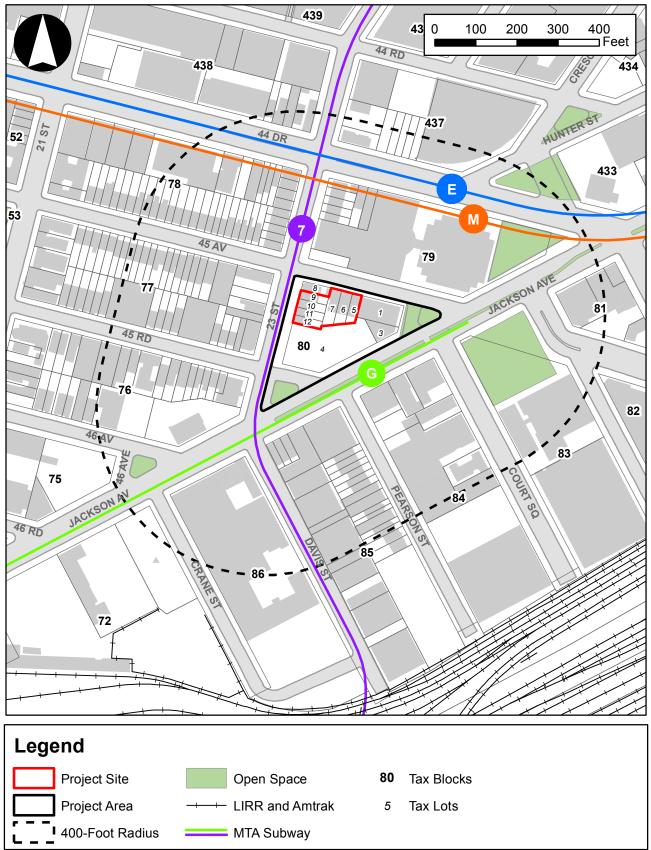
IV. BACKGROUND AND DEVELOPMENT HISTORY

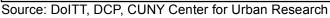
Until the mid-1800s the area that is now Long Island City was primarily utilized for agricultural purposes. In 1861, the LIRR relocated their terminus from Brooklyn to Hunters Point. Over time new commercial businesses were opened in the area to accommodate the growing number of travelers visiting the area. Throughout the 1870s the construction of the street network in the area expanded significantly. The area's shift toward commercial and manufacturing uses continued into the early 20th century when in 1909 the Queensboro Bridge opened, connecting Long Island City and Manhattan. In the years that followed, elevated trains were extended into the area providing workers access to newly opened factories. Areas on the eastern edge of Long Island City were developed with residential uses to house factory workers.

The 1961 Zoning Resolution primarily permitted manufacturing uses in Long Island City, specifically in the western areas along the waterfront. In 1986, three blocks including the project area were rezoned for high density development. The rezoning facilitated the construction of the Citibank building, a 1.25 million sf office tower. The project area's tax block (Block 80) was placed within the Court Square Subdistrict (designated Block 3) of the then-Special Hunters Point Mixed-Use District. The creation of the Court Square Subdistrict increased the allowable floor area from 2 FAR to 15 FAR, provided that for developments containing at least 70,000 sf of floor area on a zoning lot of at least 10,000 sf, certain mandatory subway improvements or pedestrian circulation improvements were built by the developer of the zoning lot to which they apply, as set forth in Appendix B of the Special District's regulations. These three tax blocks were included as part of the Special Long Island City Mixed-Use District (LIC) (the "Special District") when it was created in 2001.

In 2001, in response to the departure of many of Long Island City's manufacturing firms, DCP rezoned much of the area and mapped the Special District. There were no changes to the boundaries or regulations of the Court Square Subdistrict. The Special District incorporated a variety of paired districts which permitted both residential and manufacturing uses. The area is currently experiencing a wave of new development.

Figure C-1 Land Use Study Area





V. EXISTING CONDITIONS

Land Use

Project Area

The project area is irregularly shaped and is bounded by Jackson Avenue (a wide street) to the south and east, 23rd Street (a wide street) to the west, and 45th Avenue (a narrow street) to the north (see Figure C-1). The project area is occupied by nine buildings, including two one- and two-family walkup buildings (Lots 8, 10), six multi-family walkup buildings (Lots 5, 6, 7, 9, 11, 12), and a 2-3 story commercial building occupied by a bank (Lots 1, 3). The project area has an area of approximately 37,444 sf and a built floor area of approximately 39,391 gsf (FAR 1.05). Lot 4 is the only unimproved lot but plans have been filed with the New York City Department of Buildings (DOB) for a 50-story, approximately 363,700 gsf hotel (15 FAR). All tax lots are privately-owned. Other land uses within the project area include two open spaces, McKenna Triangle (0.01 acre) at the intersection of Jackson Avenue and 23rd Street. Both open spaces are operated by the New York City Department of Parks and Recreation (NYC Parks) and feature trees, plantings, and a plaza with benches.

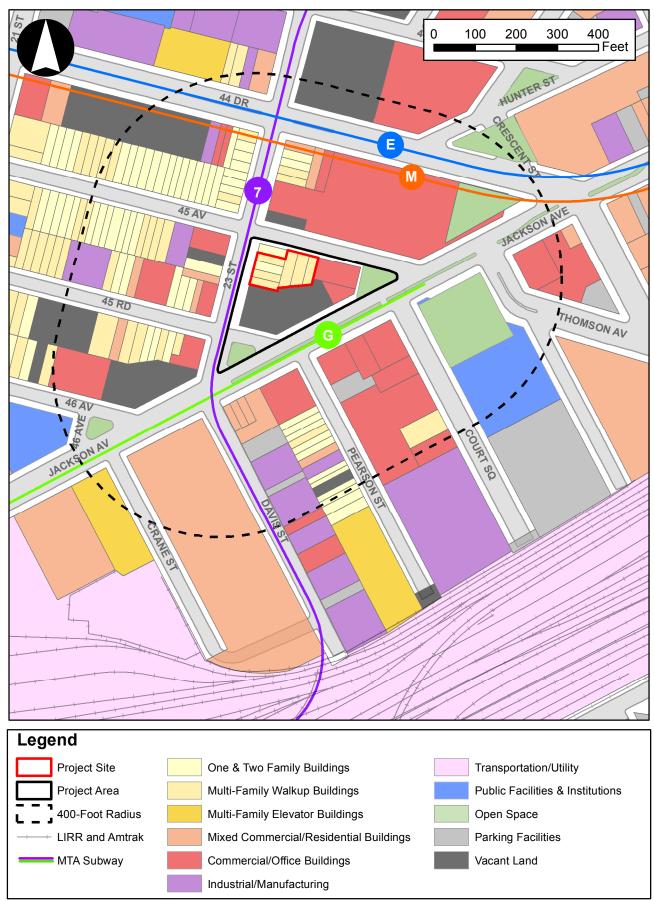
Study Area

The study area includes the area within an approximate 400-foot radius of the project area. As shown in Figure C-2, the surrounding area is characterized by an interrupted rectilinear grid pattern. Jackson Avenue cuts diagonally across the street grid in an east-west direction, resulting in a number of irregular intersections and irregularly shaped parcels of land. Surrounding the project area, the study area includes all or portions of 14 blocks. The study area is well served by public transportation including the 7, E, M, and G trains at the Court Square station as well as the B62, Q39, Q67, and Q69 local bus routes. As shown in Table C-1, predominant land uses in the study area include residential and commercial uses. These uses are not evenly distributed throughout the study area and the neighborhood character varies widely.

The area to the south of Jackson Avenue is characterized by a mix of uses including residential, commercial, public facilities, open space, and light industrial uses. Residential uses are generally set on narrow lots and include a number of low-rise structures including multi-family walkup buildings and mixed-use residential/commercial buildings with ground-floor retail. Most walkup buildings on Pearson Street are set back approximately 15 feet from the street line, providing small front yards often used for parking. A new approximately 498-foot residential building is currently under construction at a vacant lot at 22-44 Jackson Avenue (Block 86, Lot 1). Commercial uses are generally limited to office buildings and ground-floor retail uses such as cafes, restaurants, and banks. Ground-floor retail activity is primarily concentrated along Jackson Avenue. Commercial buildings tend to range from one to six stories in height. Industrial uses are interspersed throughout the study area, including along Davis Street, 23rd Street north of 44th Drive, and midblock areas along 44th Drive, 45th Avenue, and 45th Road between 23rd Street and 21st Street. Industrial uses are generally limited to low-rise, one- to two-story warehouse buildings. Other land uses to the south of Jackson Avenue include the New York State Supreme Court (LPC designated) and Court Square Park, which are located along Court Square West. Court Square Park is an approximately 0.49-acre open space operated by NYC Parks that features trees, plantings, benches, and a plaza with a fountain.

Beyond the study area to the south is Sunnyside Yards, an approximately 18-acre active rail yard serving LIRR, New Jersey Transit, and Amtrak. The yard stretches over 1.5 miles from east to west and has a limited

Figure C-2 Land Uses



Source: DoITT, DCP, CUNY Center for Urban Research

number of pedestrian and vehicular crossings, isolating Long Island City from the adjacent neighborhoods of Queens. The surrounding area is well served by the LIRR, with stations located at Hunters Point Avenue, a quarter-mile south of the project area, and Long Island City, a half-mile southwest of the project area.

Land Use	No. of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential	81	56%	169,285	21%	456,507	12%
One- & Two-Family Buildings	51	35%	81,324	10%	110,115	3%
Multi-Family Walkup Buildings	28	19%	55,661	7%	111,714	3%
Multi-Family Elevator Buildings	2	1%	32,300	4%	234,678	6%
Mixed Commercial/Residential Buildings	13	9%	155,963	19%	1,157,791	30%
Commercial/Office Buildings	21	14%	258,017	32%	2,063,774	54%
Industrial/Manufacturing	7	5%	38,400	5%	43,465	1%
Transportation/Utility	0	0%	0	0%	0	0%
Public Facilities & Institutions	2	1%	79,104	10%	72,865	2%
Open Space	0	0%	0	0%	0	0%
Parking Facilities	3	2%	9,100	1%	7,600	0%
Vacant Land ¹	18	12%	96,752	12%	0	0%
Total	145	100%	806,621	100%	3,802,002	100%

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

Source: NYC Department of City Planning (PLUTO 2018v1)

 $^{\rm 1}$ Includes some sites that are currently under construction.

The area to the north of the project area is predominantly commercial. Notable commercial uses to the east of the elevated rail line serving the 7 train along 23rd Street include the 49-story Citi Tower directly north of the project area as well as 2 Court Square, an approximately 15-story office building across 44th Drive. Some institutional uses are housed within these predominantly commercial buildings including the Court Square branch of the Queens Public Library within the Citi Tower complex and CUNY Law School within 2 Court Square. A small number of residential uses are located on Tax Block 79 along 44th Drive and 23rd Street. Residential buildings are generally three-story walkups set on narrow lots. An approximately 750-foot residential building is under construction adjacent to 2 Court Square.

Land uses to the west of the project area are predominantly residential with some commercial and industrial/manufacturing uses interspersed. Residential buildings are generally set on narrow lots and include a number of 2- to 4-story one- and two-family and multifamily walkup buildings. A new 11-story residential building is currently under construction at a vacant lot at 22-43 Jackson Avenue (Block 76, Lot 16). A variety of commercial uses, such as cafes, restaurants, banks, and convenience stores, are located between 45th and 46th Avenues along Jackson Avenue. These include ground-floor retail as well as standalone low-rise commercial buildings with surface level parking. Industrial/manufacturing uses are generally 1- to 2-stories in height and include a variety of warehouse/light industrial uses such as a movie studio and plumbing company.

Zoning

Project Area

As shown in Figure C-3, the project area is zoned C5-3 and is coterminous with Block 3 of the Court Square Subdistrict of the Special Long Island City Mixed Use District. C5-3 commercial zoning districts are a restricted central commercial district intended for office and a variety of retail uses, as well as community facility and residential uses (R10 residential district equivalent). Manufacturing uses are not permitted. The Special Court Square Subdistrict modifies bulk and use provisions of the underlying C5-3 zoning district. Developments meeting the floor area and zoning lot standards and providing the mandatory subway improvements required within the Court Square Subdistrict may develop to an FAR of up to 15, all of which could be commercial or community facility uses, and of which up to 10 FAR can be residential uses. Floor area increases are permitted for providing a public plaza or inclusionary housing. Bulk and height in C5-3 districts are governed by tower regulations. Per ZR § 117-421(c)(2), on Block 3 of the Court Square Subdistrict, above a height of 85 feet, the underlying C5-3 district height and setback regulations apply except as modified by this ZR section. Portions of buildings ("towers") may penetrate the required sky exposure plane if the applicable tower regulations are complied with. The sky exposure plane begins at a height of 85 feet and rises at 2.7:1 from a narrow street, such as 45th Avenue, and 5.6:1 from a wide street, such as 23rd Street. Per ZR § 117-421, developments that do not meet the mandatory subway improvements criteria are subject to the bulk provisions of an M1-4/R6B zoning district, which allows a maximum FAR of 2.0 for all uses (ZR § 123-63, § 23-153, § 43-12). The project site is also located within a "FRESH" area where discretionary tax incentives apply. Per ZR § 16-10, no parking is required within the Long Island City Area.

Study Area

As shown in Figure C-3, a variety of zoning districts are located within the surrounding area including R6B, R7X, R7X/C2-5, M1-4/R6B, M1-4/R7A, M1-5/R7-3, M1-5/R7X, and M1-5/R9. R6B, R7A, and R7X are contextual zoning districts and are subject to Quality Housing bulk regulations in order to encourage development consistent with the character of the surrounding area. Underlying zoning requirements within each of these districts are modified by the provisions of the Special District and each respective subdistrict (Hunters Point, Court Square, Queens Plaza). All mixed manufacturing/residential zoning districts are special mixed-use districts where the use provisions of the Special District allow residential and non-residential uses (commercial, community facility, and light industrial) to be developed as-of-right and located side-by-side or within the same building. As a result, all uses permitted under the respective manufacturing (M1-4, M1-5) or residential (R6B, R7A, R7-3, RX, R9) district are permitted in MX districts, including residential uses (Use Groups 1 and 2), community facility uses (Use Groups 3 and 4), commercial uses (Use Groups 5 to 14), and industrial uses (Use Group 16 and 17) except animal pounds, crematoriums, or public transit yards. Residential uses are generally subject to the bulk controls of the governing residence district; commercial, industrial, and community facility uses are subject to the M1 district bulk controls, except that community facilities are subject to residential FAR limits. As all portions of the study area are located within the Long Island City Area, no parking is required per ZR § 16-10. A detailed zoning summary of each district is provided below.

R6B

To the west of the project area along portions of 45th Avenue is an R6B contextual zoning district in the Hunters Point Subdistrict. Permitted uses within R6B districts include residential (Use Groups 1 and 2) and community facility (Use Groups 3 and 4). Industrial and manufacturing uses are not permitted.

Figure C-3a Zoning

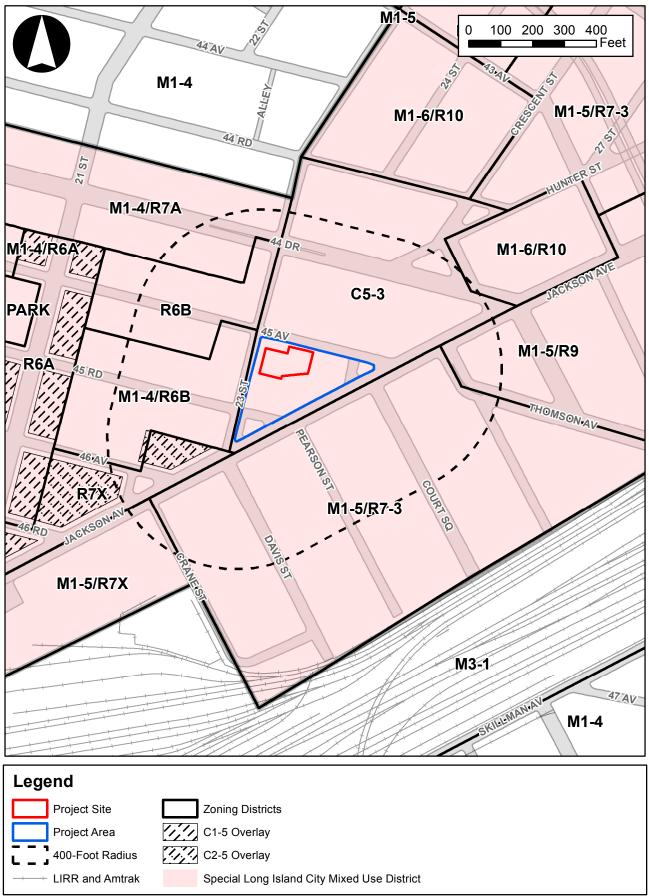
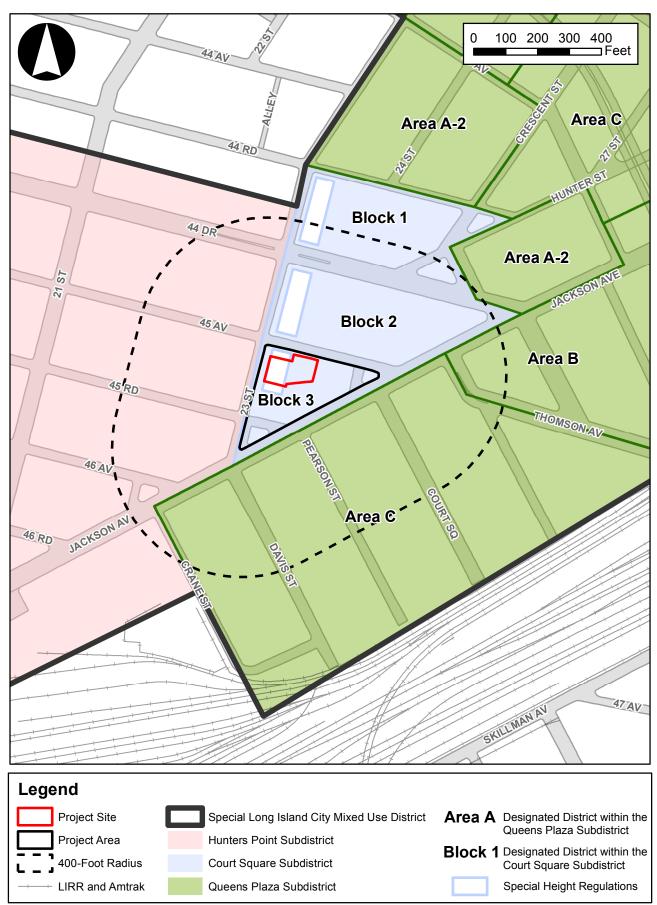


Figure C-3b

Special Long Island City Mixed Use District



Source: DoITT, DCP

The bulk provisions of R6B within the Hunters Point Subdistrict allow a maximum FAR of 2.0 (ZR § 23-153) and a maximum base height of 40 feet; after a 10-foot setback from a wide street and 15 feet from a narrow street, a building may rise to a maximum height of 50 feet (ZR § 23-662). The maximum base and building heights may be increased to 45 and 55 feet, respectively, with the provision of a qualifying ground floor.

R7X

To the southwest of the project area along portions of 46th and Jackson Avenues is an R7X contextual zoning district in the Hunters Point Subdistrict. Portions of the R7X district are mapped with C2-5 commercial overlays. Permitted uses within R7X districts include residential (Use Groups 1 and 2) and community facility (Use Groups 3 and 4), as well as commercial uses (Use Groups 5 to 9) if located within a C2-5 commercial overlay. Industrial and manufacturing uses are not permitted.

The bulk provisions of R7X within the Hunters Point Subdistrict allow a maximum FAR of 5.0 for all uses (ZR § 23-153) and sets a maximum base height of 85 feet; after a 10-foot setback from a wide street and 15 feet from a narrow street, a building may rise to a maximum height of 120 feet (ZR § 23-662). The maximum base and building heights may be increased to 95 and 125 feet, respectively, with the provision of a qualifying ground floor.

M1-4/R6B

Across 23rd Street west of the project area is an M1-4/R6B zoning district in the Hunters Point Subdistrict. The bulk provisions of M1-4/R6B within the Hunters Point Subdistrict allow a maximum FAR of 2.0 (ZR § 117-21, § 123-63, § 23-153, § 43-12) with FAR varying by land use. M1-4/R6B allows a maximum base height of 40 feet and maximum building height of 50 feet, which can be increased to 45 feet and 55 feet, respectively, with the provision of a qualifying ground floor (ZR § 117-21, § 123-662, § 23-662).

M1-4/R7A

Areas along 44th Drive to the northwest of the project area are zoned M1-4/R7A and are located within the Hunters Point Subdistrict. The bulk provisions of M1-4/R7A within the Hunters Point Subdistrict allow a maximum FAR of 4.0 for all uses (ZR § 23-153) and sets a maximum base height of 65 feet; after a 10-foot setback from a wide street and 15 feet from a narrow street, a building may rise to a maximum height of 80 feet (ZR § 23-662). The maximum base and building heights may be increased to 75 and 85 feet, respectively, with the provision of a qualifying ground floor.

M1-5/R7-3

The blocks east and south of the project area, across Jackson Avenue, are zoned M1-5/R7-3 and are located within the Queens Plaza Subdistrict, Area C. The bulk provisions of M1-5/R7-3 within the Queens Plaza Subdistrict, Area C, allow a maximum FAR of 5.0 for all uses (ZR § 117-522) and sets a maximum base height of 100 feet; after a 10-foot setback from a wide street and 15 feet from a narrow street, a building may rise without limit (ZR § 117-532).

M1-5/R7X

Across Jackson Avenue to the southwest of the project area is an M1-5/R7X zoning district in the Hunters Point Subdistrict. The bulk provisions of M1-5/R7X within the Hunters Point Subdistrict allow a maximum FAR of 5.0 for all uses (ZR § 23-153) and sets a maximum base height of 85 feet; after a 10-foot setback from a wide street and 15 feet from a narrow street, a building may rise to a maximum height of 120 feet (ZR § 23-662). The max base and building heights may be increased to 95 and 125 feet, respectively, with the provision of a qualifying ground floor.

M1-5/R9

The blocks east of the project area, across Jackson Avenue, are zoned M1-5/R9 and are located within the Queens Plaza Subdistrict, Area B. The bulk provisions of M1-5/R9 within the Queens Plaza Subdistrict, Area B, allow a maximum FAR of 8.0 for all uses (ZR § 117-522) and sets a maximum base height of 150 feet; after a 10-foot setback from a wide street and 15 feet from a narrow street, a building may rise without limit (ZR § 117-532).

Public Policy

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

Besides zoning, other public policies and guidelines applicable to portions of the project area and study area include the Food Retail Expansion to Support Health (FRESH), Housing New York 2.0, the Long Island City Core Neighborhood Study, the Long Island City Comprehensive Plan, the Western Queens Transportation Study, and the Statement of Community District Needs and Community Board Budget Requests for Queens Community District 2. Additionally, while there are not specific initiatives and goals in PlaNYC and OneNYC that relate to the project area or study area, they are citywide initiatives that would be applicable to the proposed project and are, therefore, included in this analysis. These policies and citywide initiatives are applicable to most areas of the project area and study area and are discussed below.

Project Area and Study Area

FRESH

The FRESH program provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in communities that lack full-line grocery stores throughout the five boroughs. The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator. Stores that benefit from the program must fall within designated FRESH-eligible areas. Stores that benefit from the FRESH program must also meet the following criteria:

a. Provide a minimum of 6,000 sf of retail space for a general line of food and nonfood grocery products intended for home preparation, consumption, and utilization;

- b. Provide at least 50 percent of a general line of food products intended for home preparation, consumption, and utilization;
- c. Provide at least 30 percent of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish, and frozen foods; and
- d. Provide at least 500 sf of retail space for fresh produce.

To facilitate and encourage FRESH food stores in the designated neighborhoods, one additional sf of residential floor area is permitted in a mixed-use building for every sf provided for a FRESH food store up to a maximum of 20,000 sf.

The project area and all portions of the study area north of 44th Drive, east of 23rd Street, and south of Jackson Avenue are located within a designated FRESH-eligible area, where zoning and discretionary tax incentives are available.

HOUSING NEW YORK 2.0

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

LONG ISLAND CITY CORE NEIGHBORHOOD STUDY

The LIC Core Neighborhood Planning Study is part of *Housing New York 2.0* and is in the process of being developed with input from the community and other key stakeholders as well as a number of city and state agencies. The study aims to examine key land use and zoning issues in Long Island City, but also take a broader, more comprehensive look at current and future community needs to identify a wide range of strategies and investments for LIC's growth and vitality. The four primary objectives of the study include: (1) foster commercial development to support entrepreneurship, job creation, and strengthen the character of the area as a mixed-use zoning district; (2) ensure increased affordable housing opportunities through the implementation of the city's MIH program; (3) enhance neighborhood livability by identifying new investments in infrastructure and neighborhood services; and (4) identify economic opportunities to benefit neighborhood residents and businesses.

LONG ISLAND CITY COMPREHENSIVE PLAN

In 2016, the Long Island City Partnership released Phase I of the *Long Island City Comprehensive Plan*. Some objectives of Phase I were to gather and synthesize information to understand the current market conditions and the perspective of various stakeholders, and to discover new information or trends that should inform future policies and actions. Based on the results of the study, a number of recommendations were developed, including:

- Make incentive programs work for the businesses that need and want to be in LIC. In addition, look for creative ways to build more space for businesses.
- Work with the City to incentivize new commercial office construction through appropriate zoning and incentives to serve pent-up demand, take advantage of new growth, and simultaneously reduce pressures on viable industrial and cultural space.
- Capture and retain growing, entrepreneurial businesses in LIC to anchor their job creation here.
- Increase opportunities for cultural institutions and artists to maintain and operate active, permanent spaces in LIC. Expand the integration of arts and culture into the LIC urban fabric and communities.
- Develop a strategy to foster a cluster of biotechnology, life sciences, and technology related industries in LIC by leveraging LIC's relevant and unique advantages, anchoring an important sector for NYC.
- Work to relieve parking strain on LIC businesses and organizations. Maintain truck and vehicular movement necessary for efficient business activity.
- Work with transportation agencies to update routes and frequencies of buses and subways in order to move people within LIC from where they are to where they need to go.
- Bridge neighborhood barriers and improve connections between sub-areas of LIC.
- Maximize economic benefits for LIC residents and businesses.

WESTERN QUEENS TRANSPORTATION STUDY

The Western Queens Transportation Study was launched by DCP in 2013 and addresses transportation issues and concerns in the neighborhoods of Long Island City, Ravenswood, and Astoria in Queens. The study considers transportation issues on both the regional and local scale, and makes recommendations for improvements that can be made by the City and the Metropolitan Transportation Authority (MTA). The study has four main objectives: (1) enhance the connections between neighborhoods and destinations, such as waterfront parks and cultural institutions; (2) create and enhance connections to neighborhoods outside Western Queens; (3) create and enhance connections to Roosevelt Island; and (4) improve mobility throughout the neighborhood by establishing new bike lanes, transit services, and enhanced streetscapes. Recommendations in the final report include: identifying ways to improve transit service for waterfront communities on the East River; changes to the bus network to improve access to Roosevelt Island, Hallett's Point, and Hunter's Point; expanding East River ferry service; a new entrance ramp to the Long Island Expressway; traffic calming, intersection improvements, and streetscape enhancements along the 21st Street and Vernon Boulevard corridors; improved access to Roosevelt Island via a protected bike lane and a redesigned bridge/parking garage complex; a proposed new approach to urban design and streetscape improvements for mixed-use industrial streets; and strategic intersection improvements throughout the study area.

STATEMENT OF DISTRICT NEEDS AND COMMUNITY BOARD BUDGET REQUESTS FOR QUEENS CD2

Community Boards issue an annual *Statement of Community District Needs and Community Board Budget Requests* and submit the document to the City, as required by the City Charter. These documents can play an important role in consultations of community boards with agencies, elected officials, and other key stakeholders on a broad range of local planning and budget priorities. These tools also provide a valuable public resource for neighborhood planning and research purposes and are used by a wide audience seeking information about New York City's diverse communities.

The most recent *Statement* by CD 2 for Fiscal Year 2019 identifies the three most pressing issues facing the community district as affordable housing, health care services, and schools. Specific concerns related to these issues include: the need to identify additional sites for possible rezoning to expand the availability of affordable housing; the need to increase the number of health care facilities due to hospital closings in Western Queens; the need for a new senior center in Hunters Point; space/funding for Youth Service Programs; the need for a high level early children center; the need for a new middle school; and funding for a Beacon Program.

PLANYC/ONENYC

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

- Land Use: pursue transit-oriented development; preserve and upgrade current housing; promote walkable destinations for retail and other services; reclaim underutilized waterfronts; adapt outdated buildings to new uses; develop underused areas to knit neighborhoods together; deck over rail yards, rail lines, and highways; extend the Inclusionary Housing Program in a manner consistent with such policy; preserve existing affordable housing; and redevelop brownfields.
- *Open Space*: complete underdeveloped destination parks; provide more multi-purpose fields; install new lighting at fields; create or enhance public plazas; plant trees and other vegetation; upgrade flagship parks; convert landfills into parkland; increase opportunities for water-based recreation; and conserve natural areas.
- *Water Quality*: expand and improve wastewater treatment plants; protect and restore wetlands, aquatic systems, and ecological habitats; expand and optimize the sewer network; build high level storm sewers; expand the amount of green, permeable surfaces across the City; expand the Bluebelt system; use "green" infrastructure to manage stormwater; be consistent with the Sustainable Stormwater Management Plan; build systems for on-site management of stormwater runoff; incorporate planting and stormwater management within parking lots; build green roofs; protect wetlands; use water-efficient fixtures; and adopt a water conservation program.
- *Transportation*: promote transit-oriented development; promote cycling and other sustainable modes of transportation; improve ferry services; make bicycling safer and more convenient; enhance pedestrian access and safety; facilitate and improve freight movement; maintain and improve roads and bridges; manage roads more efficiently; increase capacity of mass transit; improve and expand bus service; improve local commuter rail service; and improve access to existing transit.

- Air Quality: promote mass transit; use alternative fuel vehicles; install anti-idling technology; use retrofitted diesel trucks; use biodiesel in vehicles and in heating oil; use ultra-low sulfur diesel and retrofitted construction vehicles; use cleaner-burning heating fuels; and plant street trees and other vegetation.
- Energy: exceed the energy code; improve energy efficiency in historic buildings; use energy efficient appliances, fixtures, and building systems; participate in peak load management systems, including smart metering; repower or replace inefficient and costly in-City power plants; build distributed generation power units; expand the natural gas infrastructure; use renewable energy; use natural gas; install solar panels; use digester gas for sewage treatments plants; use energy from solid waste; and reinforce the electrical grid.
- *Natural Resources*: plant street trees and other vegetation; protect wetlands; create open space; minimize or capture stormwater runoff; and redevelop brownfields.
- *Solid Waste*: promote waste prevention opportunities; increase the reuse of materials; improve the convenience and ease of recycling; create opportunities to recover organic material; identify additional markets for recycled materials; reduce the impact of the waste systems on communities; and remove toxic materials from the general waste system.

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

Goals of the plan are to make New York City:

- A Growing, Thriving City by fostering industry expansion and cultivation, promoting job growth, creating and preserving affordable housing, supporting the development of vibrant neighborhoods, increasing investment in job training, expanding high-speed wireless networks, and investing in infrastructure.
- A Just and Equitable City by raising the minimum wage, expanding early childhood education, improving health outcomes, making streets safer, and improving access to government services.
- A Sustainable City by reducing greenhouse gas emissions, diverting organics from landfills to attain Zero Waste, remediating contaminated land, and improving access to parks.
- A Resilient City by making buildings more energy efficient, making infrastructure more adaptable and resilient, and strengthening coastal defenses.

As the *CEQR Technical Manual* has yet to be updated to address the approach of OneNYC, the PlaNYC sustainability assessment, as described below, will continue to be utilized on large publicly-sponsored projects.

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

In the future without the proposed actions (the No-Action condition), the project site is expected to be redeveloped on an as-of-right basis without any discretionary approvals. Thus, no zoning text changes would occur and the applicant would redevelop the site with an as-of-right building pursuant to C5-3 and Special District zoning regulations. As discussed in Attachment A, "Project Description," under RWCDS conditions the applicant would develop an approximately 289,533 gsf (14.05 FAR), 70-story mixed-use building on the site. The proposed building would be comprised of approximately 247 dwelling units (DUs), 10,367 gsf of retail, and 69,138 gsf of commercial office space.

Land Use

Project Area

In the 2022 future without the proposed actions, the project site would be redeveloped with new residential, local retail, and commercial office uses. Retail uses would be located on the ground floor, with commercial office space located on the second through ninth floors and residential uses above. The ground floor's retail use would comply with the restrictions applicable in C5 districts for certain uses in Use Groups 6, 9, and 11, whereby such uses are not allowed on the ground floor within 50 feet from the street wall of the building (ZR § 32-423).

Study Area

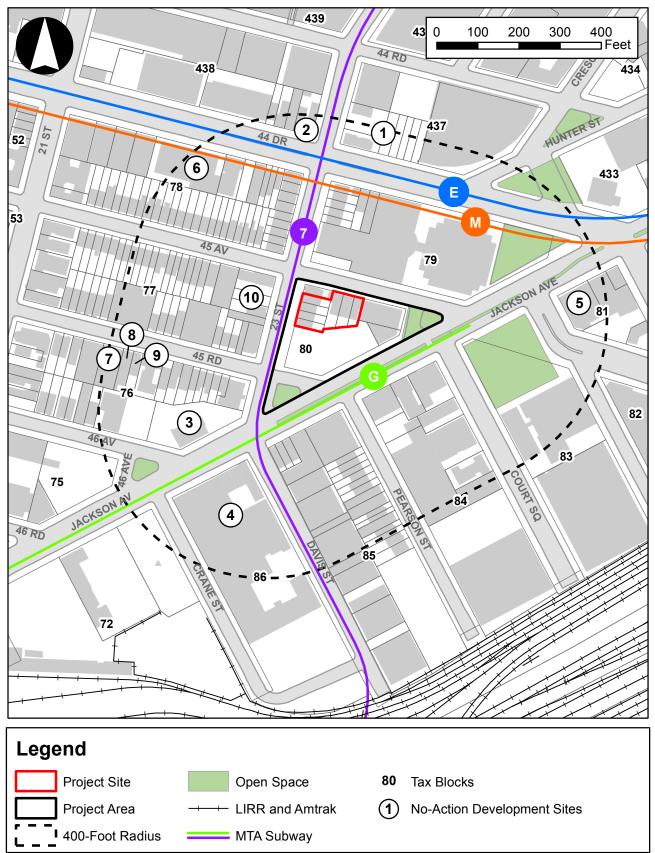
As shown in Table C-2 and Figure C-4, there are ten new developments anticipated to be completed within the study area by 2022. Most notably, these developments would include two mixed-use towers at 23-14 44th Drive and 22-44 Jackson Avenue. To the north of the project area, 23-14 44th Drive would rise 66-stories and would include approximately 802 DUs and 15,052 sf of commercial space. At a height of approximately 778 feet, it would be the tallest building in Queens. To the south of the project area, 22-44 Jackson Avenue would rise 48-stories and would include approximately 1,115 DUs and 39,929 sf of commercial space. In total, new development is expected to result in the addition of approximately 2,172 DUs and 92,090 sf of commercial space to the study area by 2022.

Site No.1	Address	Block & Lot	Residential (DUs)	Commercial (sf)	Number of Floors	Build Year
1	23-14 44 th Drive	Block 437, Lots 5, 7, 8, 9, 10, 11, 13, 15, 20	802	15,052	66	2020
2	21-59 44 th Drive	Block 438, Lot 1	20	9,000	7	2021
3	22-43 Jackson Avenue	Block 76, Lot 16	70	13,001	11	2020
4	22-44 Jackson Avenue	Block 86, Lot 1	1,115	39,929	48	2018
5	45-07 Court Square	Block 81, Lot 9	58	4,994	11	2019
6	21-30 44 th Drive	Block 78, Lot 41	85	10,114	8	2019
7	21-26 45 th Road	Block 76, Lot 40	6	0	4	2020
8	21-28 45 th Road	Block 76, Lot 39	6	0	4	2020
9	21-30 45 th Road	Block 76, Lot 38	6	0	4	2020
10	45-08 23 rd Street	Block 77, Lot 31	4	0	3	2020
		Totals:	2,172	92,090		

Table C-2 No-Action Developments within the Study Area

Source: DCP Community Portal; DOB Active Major Construction portal and NB applications; newspaper articles; PHA site visits. Notes: ¹ Refer to Figure C-4

Figure C-4 No-Action Development



Source: DoITT, DCP, CUNY Center for Urban Research, DCP Community Portal, DOB

Zoning

Project Area

In the 2022 future without the proposed actions, no changes to zoning are anticipated within the project area. No other zoning map or text amendments are currently pending that would affect properties located within the project area under 2022 No-Action conditions.

Study Area

DCP is proposing a zoning text amendment to establish a new Special Permit under the jurisdiction of the City Planning Commission (CPC) for new hotels, motels, tourist cabins and boatels in M1 light manufacturing districts citywide. A Special Permit is a discretionary action by the CPC, subject to ULURP, which may modify use regulations if certain conditions specified in the Zoning Resolution are met. If passed, the proposed zoning text amendment could potentially affect M1 districts within the study area. No other zoning map or text amendments are currently pending that would affect properties located within the study area under 2022 No-Action conditions.

Public Policy

There are no changes related to public policies and their effects on the project area and study area are anticipated to remain the same as under existing conditions.

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

As discussed in Attachment A, "Project Description," under RWCDS conditions the proposed actions would facilitate the development of an approximately 308,565 gsf (14.05 FAR), 45-story mixed-use building on the project site. The proposed building would be comprised of approximately 272 dwelling units (DUs), 9,481 gsf of retail, and 68,133 gsf of commercial office space. No accessory off-street parking spaces are required in the Long Island City Parking Area and no parking would be provided. Construction is expected to begin in 2020 with all components complete and operational in 2022.

Land Use

Project Area

In the future with the proposed actions, the project site would be redeveloped with residential, local retail, and commercial office uses. Retail uses would be located on the ground floor, with commercial office space located on the second through eighth floors and residential uses above. The ground floor's retail use would comply with the restrictions applicable in C5 districts for certain uses in Use Groups 6, 9, and 11, whereby such uses are not allowed on the ground floor within 50 feet from the street wall of the building (ZR § 32-423). These excluded uses include (but are not limited to) laundry establishments, loan offices, and clothing rental establishments (ZR § 32-00). No parking is required in the Long Island City Area (ZR § 16-10) and none would be provided; no curb cuts are proposed. Since there would be less than 25,000 sf of retail use and 100,000 sf of office use, no loading berth would be required (ZR § 36-62) and none would be provided.

ASSESSMENT

The proposed actions would have no direct effect on land use regulations within the project area. While the RWCDS With-Action development on the project site would result in slight changes to the development program compared to No-Action conditions, including a net increase of 25 DUs and a net loss of 1,005 gsf of commercial space and 886 gsf of local retail space, the site would be redeveloped at the same density (FAR 14.05) and with the same land uses as under No-Action conditions. The proposed mix of land uses would be consistent with uses already present in the surrounding area and would not directly displace any land uses so as to adversely affect surrounding land uses. Additionally, the project area is located within a Transit Zone immediately adjacent to public transportation and is well-situated to accommodate new development. Therefore, the proposed project would not result in significant adverse impacts to land use within the project area.

Study Area

ASSESSMENT

The proposed project would have no direct effect on land uses in the study area and would not result in significant adverse land use impacts. As noted above, the study area is primarily comprised of a mixture of uses including residential, commercial, public facilities, open space, and light industrial uses, and the proposed project would not introduce new land uses that would be incompatible with these existing uses and future conditions. Therefore, the proposed actions are not expected to result in significant adverse land use impacts in the study area.

Zoning

Project Area

As discussed in Attachment A, "Project Description," the applicant is seeking a number of text amendments to the zoning regulations governing development within Block 3 of the Court Square Subdistrict, including: (1) changing the maximum building height on the west side of the project site along 23rd Street from 85 feet to a 125-foot maximum base height; (2) increasing the maximum base height on the west side of the project site along 23rd Street from 85 feet to 125 feet; (3) making the underlying C5-3 district height and setback regulations applicable only above the highest applicable maximum street wall height; and (4) making the underlying C5-3 district tower encroachment regulations of ZR § 33-451 inapplicable along the project site's 45th Avenue frontage. A summary of each of the proposed text amendments is provided below and the complete text amendment is provided in Appendix 1. Table C-3 provides a comparison of certain zoning regulations under existing and future conditions with the proposed actions.

1. Changing the maximum building height on the west side of the project site along 23rd Street from 85 feet to a 125-foot maximum base height. ZR § 117-421(c)(1) supersedes the underlying C5-3 district height and setback regulations by setting a maximum building height of 85 feet within the area bounded by 23rd Street, 44th Road, a line 60 feet east of and parallel to 23rd Street, and a line 75 feet north of and parallel to 45th Road. This area is shown on a map in Appendix B of Article XI, Chapter 7 of the ZR. The proposed amendment would modify this section and the map in Appendix B to remove Block 3 from such limitations and replace it with a 125-foot maximum base height along 23rd Street

(discussed below). This would allow new development at the project site to rise along 23rd Street to a height of 125 feet before setting back 20 feet, above which height it would comply with the underlying C5-3 district tower regulations (discussed further below).

- 2. Increasing the maximum base height on the west side of the project site along 23rd Street from 85 feet to 125 feet. ZR § 117-421(c)(2), which provides that the maximum base height before setback is 85 feet, would be amended so that the maximum base height for portions of buildings on Block 3 fronting 23rd Street would be 125 feet, which would allow new development at the project site to have the 125-foot street wall height along 23rd Street discussed immediately above.
- 3. Making the underlying C5-3 district height and setback regulations applicable only above the highest applicable maximum street wall height. Per ZR § 117-421(c)(2), on Blocks 1 and 3 in the Court Square Subdistrict, above a height of 85 feet, the underlying C5-3 district height and setback regulations apply except as modified by this ZR Section. This section would be amended so that such regulations would apply to new development at the project site only above a height of 125 feet, the highest maximum street wall height applicable to the project site (per the amendment discussed immediately above).
- 4. Making the underlying C5-3 district tower encroachment regulations of ZR § 33-451 inapplicable along the project site's 45th Avenue frontage. As discussed above, the underlying C5-3 district height and setback regulations would apply above a height of 125 feet, except as modified by ZR § 117-421(c)(2). The proposed text amendment would add language to ZR § 117-421(c)(2) making the provisions of ZR § 33-451 inapplicable along Block 3's 45th Avenue frontage, and would instead require a 15-foot setback from 45th Avenue above a height of 85 feet.

The applicant is also seeking the approval of a zoning certification pursuant to ZR § 117-45. In the Court Square Subdistrict, the provisions of the underlying C5-3 zoning district are modified to require subway improvements listed in Appendix B of the Special District's regulations, for developments containing at least 70,000 sf of floor area on a zoning lot of at least 10,000 sf. As the project site's zoning lot is 18,230 sf and the RWCDS With-Action development would contain approximately 256,198 sf of floor area, the subway improvement is required. Consequently, the applicant would construct the mandatory subway improvement and is seeking a certification by the Chair of the CPC to the DOB, pursuant to ZR § 117-45(b), that drawings and documents required by ZR § 117-45 have been submitted and comply with the requirements of the Subdistrict Plan for the subway improvement, and that as a result, the applicant may develop the project site's zoning lot to a maximum FAR of 15 as-of-right, pursuant to ZR § 117-421. The applicant will sign a legally enforceable instrument running with the land containing complete drawings of the improvement. A temporary certificate of occupancy will not be issued by DOB until the MTA has determined that the subway improvements are substantially complete.

	EXISTING C5-3 SPECIAL LIC MIXED USE DISTRICT ZONING REGULATIONS	PROPOSED ZONING CONDITIONS
Use Groups:	1-6, 9-11	1-6, 9-11
Max. Floor Area Ratio (FAR) ¹ :		
- Residential	10.0	10.0
- Community Facility	15.0	15.0
- Commercial	15.0	15.0
- Manufacturing	N/A (not permitted)	N/A (not permitted)
Tower Regulation Bulk:		
- Max. street wall height	85'	85' on 45 th Avenue; 125' on 23 rd Street
- Setback above max. street wall	15' narrow street; 10' wide street	15' narrow street; 10' wide street
- Max. aggregate area	1,875 sf within 50' of a narrow street; 1,600 sf within 40' of a wide street	1,875 sf within 50' of a narrow street ² ; 1,600 sf within 40' of a wide street
- Max. building height	Tower regulations apply above 85'; can penetrate sky exposure plane	Tower regulations apply above 125'; can penetrate sky exposure plane
Required Accessory Parking:	None required for all uses	None required for all uses

Table C-3 Comparison of Certain Existing and Proposed Zoning Regulations within the Project Area

Source: New York City Zoning Resolution

Note: ¹ Provided that for developments containing at least 70,000 sf of floor area on a zoning lot of at least 10,000 sf, certain mandatory subway improvements and pedestrian circulation improvements are provided, as set forth in Appendix B of the Special District's regulations.

² The provisions of ZR § 33-451 regulating the aggregate area of a tower within 50 feet of a narrow street shall not apply to Block 3 buildings fronting upon 45th Avenue.

ASSESSMENT

As discussed above and presented in Table C-3, the proposed zoning text amendments would only affect limited portions of the project area and would allow for relatively minor modifications of existing site-specific zoning regulations. The proposed text amendment to permit a 40-foot increase in the maximum street wall height from 85 feet to 125 feet would only be permitted along the 23rd Street frontage of the project area and the maximum street wall height on all other project area frontages would not be affected. Similarly, the proposed text amendment to make underlying C5-3 height and setback regulations applicable only above a height of 125 feet would only affect the 23rd Street frontage of the project area, as the maximum street wall height within all other areas of the project area would remain limited to 85 feet. Aggregate area requirements under tower regulations would only be eliminated along the 45th Avenue frontage of the project area, and regulations on all other frontages would not be affected.

Street wall, setback, and sky exposure plane regulations are generally intended to result in new buildings that are contextual with neighboring buildings, create a predictable framework for new development, and provide light and air to building occupants and pedestrians on the street. As discussed in other attachments of this EAS, including Attachment D, "Shadows" and Attachment E, "Urban Design," the proposed zoning text amendments would allow for the construction of a new building that would be compatible with other existing and planned buildings in the surrounding area and would result in only minimal changes to shadow coverage and duration. Therefore, as the proposed modifications would allow for relatively minor modifications that would be limited to specific portions of the project area and would not allow for new development that would be out of context with the surrounding area or substantially reduce access to light and air, the proposed actions are not expected to result in significant adverse zoning impacts in the project area.

Study Area

ASSESSMENT

The study area would not undergo any changes as a result of the proposed actions. The proposed actions are site-specific and would have no direct effect on zoning in the study area. The proposed project would provide zoning regulations compatible with those already present in the study area and would not result in any changes to permitted density or substantial changes to permitted building bulk.

Similar to No-Action conditions, if passed, a DCP proposal to establish a new Special Permit for new hotels, motels, tourist cabins and boatels in M1 light manufacturing districts citywide could potentially affect M1 districts within the study area. No other zoning map or text amendments are currently pending that would affect properties located within the study area. Therefore, the proposed actions are not expected to result in significant adverse zoning impacts in the project area.

Public Policy

Project Area and Study Area

ASSESSMENT

The proposed actions would not result in any significant adverse public policy impacts to the project area or study area.

FRESH

Although the proposed project does not include an application for a certification for a FRESH designated grocery store, zoning regulations within the project area and many portions of the surrounding area would allow for an as-of-right FRESH grocery store. As such, the proposed project would not alter or conflict with the objectives of the FRESH program, and no significant adverse impacts would result.

HOUSING NEW YORK 2.0

Although the proposed project would not include new affordable housing units, it would provide a substantial number of new rental units in a rapidly-growing area of the City where housing units are in high demand. As such, the proposed project would not alter or conflict with the objectives of *Housing New York 2.0*.

LONG ISLAND CITY CORE NEIGHBORHOOD STUDY

The proposed project would meet a number of objectives identified in the *LIC Core Neighborhood Planning Study*. Specifically, the proposed project would introduce approximately 9,481 gsf of retail and 68,133 gsf of commercial office space, creating new jobs and strengthening the character of this area of Long Island City as a mixed-use district. Additionally, the proposed project would provide mandatory subway improvements at Court Square Station, investing in existing infrastructure and enhancing neighborhood livability. Therefore, the proposed project would not alter or conflict with the objectives of the *Long Island City Core Neighborhood Study*.

LONG ISLAND CITY COMPREHENSIVE PLAN

The proposed project would meet a number of objectives identified in the *Long Island City Comprehensive Plan.* Specifically, the proposed project would introduce approximately 9,481 gsf of retail and 68,133 gsf of commercial office space, creating space for new businesses and job creation. Additionally, the proposed project would provide mandatory subway improvements at Court Square Station, improvements that are expected to help people in LIC get where they need to go. Therefore, the proposed project would not alter or conflict with the objectives of the *Long Island City Comprehensive Plan.*

WESTERN QUEENS TRANSPORTATION STUDY

The proposed project would meet some of the transportation objectives identified in the *Western Queens Transportation Study*. The proposed project would provide mandatory subway improvements at Court Square Station, which are expected to increase mobility and enhance the subway user experience in this area of Long Island City. As such, the proposed project would not alter or conflict with the objectives of the *Western Queens Transportation Study*.

STATEMENT OF DISTRICT NEEDS AND COMMUNITY BOARD BUDGET REQUESTS FOR QUEENS CD2

Although the proposed project would not directly address the issues identified in the most recent *Statement of District Needs*, the proposed project would provide a substantial number of new rental units in a rapidly-growing area of the City where housing units are in high demand. The proposed project would also result in the construction of new retail and commercial office space, resulting in job creation. As such, the proposed project would not alter or conflict with the *Statement of District Needs*.

PLANYC/ONENYC

As outlined in detail below, the proposed project would not alter or conflict with the goals of PlaNYC/OneNYC.

Land Use

The proposed project would be consistent with PlaNYC/OneNYC's land use goals. The proposed project would provide a mix of residential, retail, and commercial office uses that would help create a livable community, providing destinations within walking distance. The proposed project would also locate a significant number of dwelling units as well as businesses immediately adjacent to public transportation. Therefore, the proposed project would not alter or conflict with PlaNYC/OneNYC's land use goals.

Open Space

Although the proposed project does not provide public open space on-site, the proposed project is not expected to significantly worsen open space conditions compared to No-Action conditions. Therefore, the proposed project would not alter or conflict with PlaNYC/OneNYC's open space goals.

Water Quality

The proposed project would have to comply with all applicable regulations regarding the implementation of low-flow, water efficient fixtures, as per the New York City Plumbing Code, Local Law 33 of 2007 and the U.S. Environmental Protection Agency's (EPA's) WaterSense Program. Therefore, the proposed project would not alter or conflict with PlaNYC/OneNYC's water quality goals.

Transportation

The proposed project would support PlaNYC/OneNYC's transportation goals by facilitating transitoriented development in an area in immediate proximity to public transportation. Varied retail offerings and a mix of uses are a key part of livable communities, providing destinations within walking distance and reducing the need for vehicle trips and travel outside of the neighborhood. Therefore, the proposed project would not alter or conflict with PlaNYC/OneNYC's transportation goals.

Air Quality

The proposed project would meet PlaNYC/OneNYC's air quality goals by promoting the use of mass transit through encouraging development in close proximity to existing public transportation. Given the project site's location within the Long Island City Parking Area and proximity to public transportation, no accessory off-street parking spaces are required and no parking would be provided. Therefore, the proposed project would not alter or conflict with PlaNYC/OneNYC's air quality goals.

Energy

As with all new development in New York City, the proposed project would be required to meet the green building practices established in the 2010 update to the New York City Building Code as part of the Greener, Greater Buildings Law. The updated Building Code requires energy audits and benchmarking for larger buildings. Therefore, the proposed project would not alter or conflict with PlaNYC/OneNYC's energy goals.

Natural Resources

The proposed project would facilitate the redevelopment of currently developed sites. As such, the proposed project would not use a greenfield site where natural resources are present. As with all new developments in New York City, the project site would be required to ensure a maximum stormwater release rate of 0.25 cubic feet per second (cfs) or ten percent of the allowable flow from their respective sites pursuant to the 2012 amendment to Title 15, Chapter 31 of the Rules of the City of New York (RCNY), the existing rules governing house and site connections to the City's sewer system. Therefore, the proposed project would not alter or conflict with PlaNYC/OneNYC's natural resources goals.

Solid Waste

The proposed project would not result in any significant adverse impacts to the City's solid waste system. As with all properties in New York City, the project site would be subject to mandatory recycling requirements. As such, the proposed project would not alter or conflict with PlaNYC/OneNYC's solid waste management goals.

ATTACHMENT D SHADOWS

I. INTRODUCTION

This chapter assesses the potential for the RWCDS With-Action development at the project site to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, a shadows assessment is required if a proposed action would result in structures (or additions to existing structures) of 50 feet in height or greater, or those that would be located adjacent to, or across the street from, a sunlight sensitive resource. As discussed in Attachment B, "Supplemental Screening," while the RWCDS With-Action development at the project site would be shorter than the RWCDS No-Action development, it would be bulkier and would therefore have the potential to cast new shadows on nearby sunlight sensitive resources. As such, a detailed shadows analysis was prepared to determine the potential for future development at the project site to result in significant adverse impacts on sunlightsensitive resources in the surrounding area.

II. PRINCIPAL CONCLUSIONS

The proposed project would result in incremental shadow coverage on six open space resources. Projectgenerated shadows would not affect the utilization or enjoyment of any sunlight-sensitive resources and all vegetation would continue to receive a minimum of four to six hours of direct sunlight throughout the growing season. Therefore, the proposed actions are not expected to result in significant adverse shadows impacts at any sunlight-sensitive resources.

III. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects or actions resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

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

• *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. This

sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.

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

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

In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern are modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21st vernal equinox (or the September 21st autumnal equinox, which is approximately the same), the June 21st summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6th or August 6th (which are approximately the same). For the cold- weather months, the December 21st winter

solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive historic and natural resources.

The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

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

- *Vegetation:* a substantial reduction in sunlight available to sunlight-sensitive features of the resource to less than the minimum time necessary for its survival (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum time necessary for its survival).
- *Historic and cultural resources:* a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- Open space utilization: a substantial reduction in the usability of open space as a result of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected time periods.
- For any sunlight-sensitive feature of a resource: complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse shadow impact occurs when the incremental shadow added by a proposed action falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

IV. PRELIMINARY SCREENING

Tier 1 Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The maximum shadow radius of 2,339

feet was determined using the project site's maximum height of approximately 524 feet (plus a 20-foot parapet mechanical screen)(Tier 1 Assessment).

Within this longest shadow study area, there are a number of potentially sunlight-sensitive open spaces and historic resources. Therefore, further screening was warranted in order to determine whether any resources could be affected by project-generated shadows.

Tier 2 Screening Assessment

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

Figure D-1 provides a base map illustrating the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from southernmost portions of the project site). A total of 15 open spaces were identified as sunlight-sensitive resources that warranted further assessment (see Table D-1).

Table D-1

Sunlight-Sensitive Resources
Gordon Triangle
Murray Playground
11 th Street Greenstreet
Queens Plaza South Greenstreet
Queensbridge Park
Queensboro Bridge Greenway
Dutch Kills Green
Hunter/42 nd Road Greenstreet
Hunter/27 th Street Greenstreet
Jackson Avenue Greenstreet
Captain Malcolm A. Rafferty Memorial
Rafferty Triangle
Citicorp at Court Square Plaza
Court Square Park
McKenna Triangle

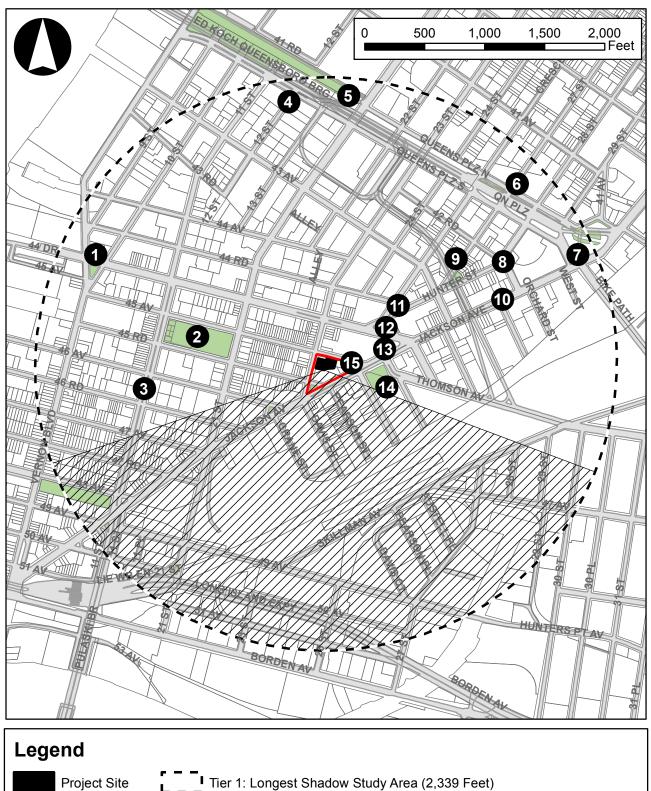
Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 1 and 2 Screening

¹ Numbers keyed to Figure D-1

Additionally, the RWCDS With-Action development at the project site would have the potential to cast incremental shadows on the Hunters Point Historic District (LPC, S/NR), the 45th Road Courthouse Square Station (S/NR), the Long Island City Courthouse (LPC, S/NR), the United States Post Office – Long Island City (S/NR), and Fire Engine Company No. 258 – Hook and Ladder Co. No. 115 (LPC, S/NR-eligible). However, the significance of these historic resources is not derived from design elements that depend on the contrast between light and dark. Therefore, as direct sunlight does not play a notable role in the special character of these resources, none have been identified as sunlight-sensitive resources warranting further analysis (refer to LPC correspondence in Appendix 2).

Tier 1 and 2 Shadow Assessment

Figure D-1



Tier 2: Area That Cannot Be Shaded

Open Space Note: Open space keyed to Table D-1

1)

Project Area

Tier 3 Screening Assessment

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

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

The Tier 3 analysis showed that some sunlight-sensitive resources would not receive project-generated shadows on any of the four analysis days, and these resources therefore did not require any further analysis. Table D-2 presents a summary of the Tier 3 assessment, showing the nine open spaces that could, in the absence of intervening buildings, receive project-generated shadows, and on which analysis days the new shadows would occur (see Figure D-2).

No.1	Name	March 21/Sept. 21 7:36 AM - 4:29 PM	May 6/August 6 6:27 AM - 5:18 PM	June 21 5:57 AM - 6:01 PM	December 21 8:51 AM - 2:53 PM	Number of Analysis Days
2	Murray Playground	YES	YES	NO	NO	2
3	11 th Street Greenstreet	YES	YES	YES	NO	3
6	Queensboro Bridge Greenway	NO	NO	NO	YES	1
10	Jackson Av. Greenstreet	YES	YES	YES	NO	3
11	Cpt. Rafferty Memorial	YES	NO	NO	NO	1
12	Rafferty Triangle	YES	NO	NO	NO	1
13	Citicorp Plaza	YES	YES	YES	NO	3
14	Court Square Park	NO	YES	YES	NO	2
15	McKenna Triangle	YES	YES	YES	NO	3

Table D-2 Tier 3 Assessment Results

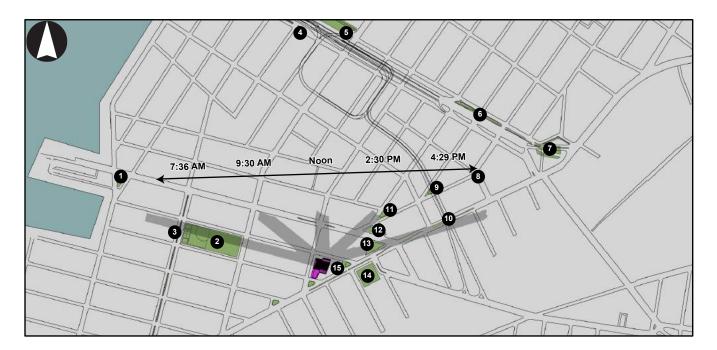
¹ Numbers keyed to Figures D-1 and D-2

V. DETAILED ASSESSMENT

Resources of Concern

Murray Playground

Murray Playground is an approximately 2.52-acre open space located west of the project area bounded by 45th Avenue to the north, 45th Road to the south, 21st Street to the east, and 11th Street to the west. The playground is owned and operated by NYC Parks and is open to the public 24 hours a day. Features



MARCH 21/SEPTEMBER 21



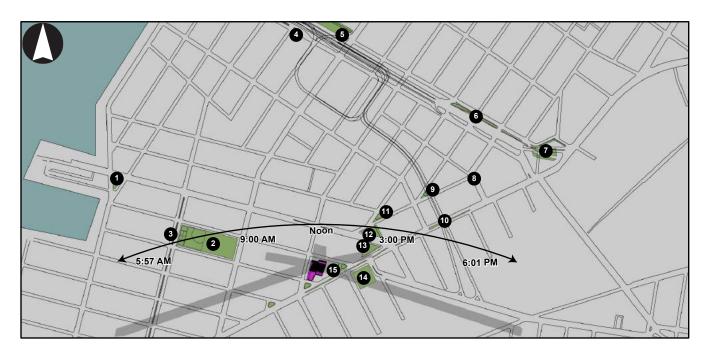
MAY 6/AUGUST 6



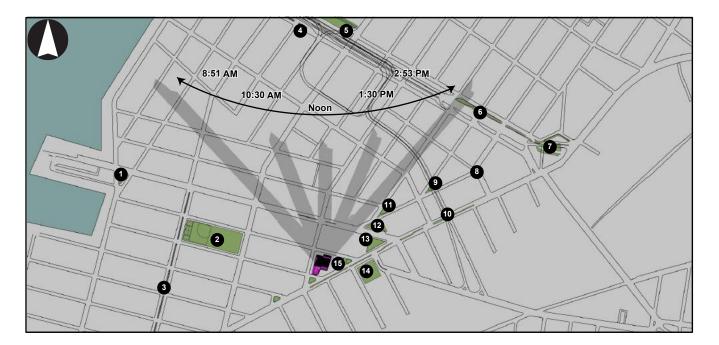
Proposed Project

1 Open Space Note: Resources keyed to Table D-1

Incremental Shadow



JUNE 21



DECEMBER 21



Proposed Project

1 Open Space Note: Resources keyed to Table D-1 **Incremental Shadow**

of the playground include a synthetic turf field, handball courts, a basketball court, playgrounds, spray showers, a dog park, a comfort station, benches, landscaping, trees, and plantings.

11th Street Greenstreet

The 11th Street Greenstreet stretches seven blocks between 44th Drive in the north and 48th Avenue in the south. The greenstreet features a number of trees on each block and is maintained by NYC Parks.

Queensboro Bridge Greenway

Queensboro Bridge Greenway is an approximately seven-block greenway located north of the project area. The greenway runs along Queens Plaza between 29th Street to the east and 21st Street to the west. This sunlight-sensitive open space resource is owned and operated by DOT, is open to the public 24 hours a day, and features a two-way bike path, a pedestrian path, benches, landscaping, and tree plantings.

Jackson Avenue Greenstreet

A seven-block stretch of Jackson Avenue contains a landscaped median located south and east of the project area. This sunlight-sensitive resource is bounded by Queens Street to the east and Davis Street to the west, and is owned and operated by NYC Parks and features trees.

Captain Malcolm A. Rafferty Memorial

The Captain Malcolm A. Rafferty Memorial is an approximately 0.10-acre open space located northeast of the project area bounded by 44th Road to the north, Crescent Street to the west, and Hunter Street to the south. This open space is owned and operated by NYC Parks, is open to the public 24 hours a day, and features a monument, benches, landscaping, and trees.

Rafferty Triangle

Rafferty Triangle is an approximately 0.27-acre open space located northeast of the project area bounded by Hunter Street to the north and 44th Drive to the south. This sunlight-sensitive open space resource is owned and operated by NYC Parks, is open to the public 24 hours a day, and features an area with seating and tables, benches, landscaping, and trees.

Citicorp at Court Square Plaza

Citicorp at Court Square Plaza is an approximately 0.53-acre open space located northeast of the project area bounded by 44th Drive to the north and Jackson Avenue to the south. This open space resource is privately-owned and operated, is open to the public 24 hours a day, and features benches, landscaping, and trees.

Court Square Park

Court Square Park is an approximately 0.49-acre open space located east of the project area bounded by Jackson Avenue to the north, Court Square West to the west, and Thomson Avenue to the east. This sunlight-sensitive open space resource is owned and operated by NYC Parks, is open to the public 24 hours a day, and features a fountain, benches, landscaping, and trees.

McKenna Triangle

McKenna Triangle is an approximately 0.01-acre open space located in the northeastern corner of the project area bounded by 45th Avenue to the north and Jackson Avenue to the south. This sunlight-sensitive open space resource is owned and operated by NYC Parks, is open to the public 24 hours a day, and features benches and trees.

Shadows Analysis

Per *CEQR Technical Manual* guidance, shadow analyses were performed for the nine sunlight-sensitive resource identified above on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. CEQR guidance defines the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see Table D-3).

As shown in Table D-3, incremental project-generated shadows would reach six of the sunlight-sensitive resources identified in the Tier 3 assessment. Increases in shadow coverage would occur at three resources on the March 21/September 21 analysis day; four resources on the May 6/August 6 analysis day; and three resources on the June 21 analysis day. Increases in shadow coverage would not occur on the December 21 representative analysis day. Figures D-3 through D-5, provided at the end of this attachment, show representative shadow views for the six sunlight-sensitive resources of concern on three of the four representative analysis days: March 21/September 21, May 6/August 6, and June 21.

_		March 21/Sept. 21	May 6/August 6	June 21	December 21
Resource	Analysis Day	7:36 AM – 4:29 PM	6:27 AM – 5:18 PM	5:57 AM - 6:01 PM	8:51 AM – 2:53 PM
Murray	Shadow enter-exit time	7:36 – 7:39 AM 7:50 – 8:00 AM	7:26 – 8:03 AM		
Playground	Incremental shadow duration	3 minutes 10 minutes	37 minutes		
11 th Street	Shadow enter-exit time	7:36 – 7:41 AM 7:47 – 7:56 AM	6:38 – 6:45 AM		
Greenstreet	Incremental shadow duration	5 minutes 9 minutes	7 minutes		
Jackson Av.	Shadow enter-exit time		4:17 – 5:18 PM	3:44 – 5:35 PM	
Greenstreet	Incremental shadow duration		1 hour 1 minute	1 hour 51 minutes	
Cpt. Rafferty	Shadow enter-exit time	2:44 – 3:08 PM			
Memorial	Incremental shadow duration	24 minutes			
Court Course Doub	Shadow enter-exit time		4:51 – 5:18 PM	4:18 – 6:01 PM	
Court Square Park	Incremental shadow duration		27 minutes	1 hour 43 minutes	
Makanna Triangla	Shadow enter-exit time			4:27 – 5:15 PM	
McKenna Triangle	Incremental shadow duration			48 minutes	

Table D-3

Duration of Shadows on Sunlig	int Sensitive Resources (Incre	ement Compared to No-Action)

Note: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per CEQR Technical Manual guidance.

Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

It should be noted that, per the *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this chapter for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight Saving Time.

March 21/September 21

On March 21/September 21 the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. March is considered the beginning of the growing season in New York City, and September 21, which has the same shadow patterns as March 21, is also within the growing season. On the March 21/September 21 analysis day, incremental shadows from the proposed development would reach Murray Playground, the 11th Street Greenstreet, and Captain Rafferty Memorial.

Murray Playground

The proposed development would cast incremental shadows on Murray Playground from 7:36 to 7:39 AM and 7:50 to 8 AM for a total duration of approximately 13 minutes. As indicated in Figure D-3a, at 7:36 AM incremental shadows would be limited to a small area along the northern edge of the open space that is primarily comprised of trees and portions of a synthetic turf field. Incremental shadows would exit the open space minutes after the start of the analysis day, before reentering shortly thereafter at 7:50 AM. As shown in Figure D-3a, at 7:55 AM incremental shadows would be limited to the northwestern corner of the open space where a basketball court is located. Incremental shadows would exit at 8 AM and the open space would not experience any incremental shadow coverage for the remainder of the analysis day.

11th Street Greenstreet

The proposed development would cast incremental shadows on a one-block portion of the 11th Street Greenstreet between 45th Road and 45th Avenue adjacent to Murray Playground. Incremental shadow coverage would last from 7:36 to 7:41 AM and 7:47 to 7:56 AM for a total duration of approximately 14 minutes. As indicated in Figure D-3a, at 7:36 AM incremental shadows would be limited to a small northern area of the greenstreet that is comprised of trees. Incremental shadows would exit the open space minutes later before reentering at 7:47 AM. As shown in Figure D-3a, at 7:55 AM incremental shadows would continue to be limited to a small northern area of the greenstreet where trees are located. Incremental shadows would exit at 7:56 AM and the greenstreet would not experience any incremental shadow coverage for the remainder of the analysis day.

Captain Rafferty Memorial

The Captain Rafferty Memorial open space would not experience any incremental shadow coverage as a result of the proposed development until 2:44 PM. Incremental shadow coverage would last from 2:44 PM to 3:08 PM for a brief duration of approximately 24 minutes. As shown in Figure D-3b, by 3 PM incremental shadows would reach a small central area of the open space that includes trees, benches, and tables. After 3:08 PM the open space would not experience any incremental shadow coverage.

May 6/August 6

On May 6/August 6 the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. On the midpoint between the equinoxes and the solstices, incremental shadows from the proposed development would reach Murray Playground, the 11th Street Greenstreet, Jackson Avenue Greenstreet, and Court Square Park.

Murray Playground

The proposed development would cast incremental shadows on Murray Playground from 7:26 to 8:03 AM for a duration of approximately 37 minutes. As indicated in Figure D-4a, at 7:45 AM incremental shadows would be limited to a small portion of the southeastern corner of the open space. The affected area is comprised of a dog park and trees. Incremental shadows would exit the open space at 8:03 AM and the open space would not experience any incremental shadow coverage for the remainder of the analysis day.

11th Street Greenstreet

The proposed development would cast incremental shadows on the 11th Street Greenstreet between 46th Road and 46th Avenue beginning at 6:38 AM and continuing until 6:45 AM for a brief duration of approximately 7 minutes. As indicated in Figure D-4a, at 6:40 AM incremental shadows would be limited to a small northern portion of the greenstreet that is comprised of trees. Incremental shadows would exit the open space minutes later at 6:45 AM and the greenstreet would not experience any incremental shadow coverage for the remainder of the analysis day.

Jackson Avenue Greenstreet

The proposed development would cast incremental shadows on the Jackson Avenue Greenstreet between Court Square West and Thomson Avenue from 4:17 to 5:18 PM for a duration of approximately 1 hour and 1 minute. The greenstreet would not experience any incremental shadow coverage before 4:17 PM. As indicated in Figure D-4b, at 5 PM incremental shadows would be limited to a small central portion of the greenstreet that is comprised of trees and other plantings.

Court Square Park

The proposed development would cast incremental shadows on Court Square Park beginning at 4:51 PM and continuing until the end of the analysis day at 5:18 PM for a brief duration of approximately 27 minutes. The park would not experience any incremental shadow coverage before 4:51 PM. As indicated in Figure D-4b, at 5 PM incremental shadows would be limited to the northern corner of the park, which is occupied by trees and grass.

June 21

On June 21 the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On the summer solstice, which is the day of the year with the longest period of daylight, the sun is most directly overhead and generally shadows are shortest and move across the widest angular range from west to

east. On this date the proposed development would cast incremental shadows on the Jackson Avenue Greenstreet, Court Square Park, and McKenna Triangle.

Jackson Avenue Greenstreet

The proposed development would cast incremental shadows on the Jackson Avenue Greenstreet between Court Square West and Thomson Avenue from 3:44 to 5:35 PM for a duration of approximately 1 hour 51 minutes. The greenstreet would not experience any incremental shadow coverage before 3:44 PM. As indicated in Figure D-5a, at 4 PM incremental shadows would be limited to a small northern portion of the greenstreet that is comprised of trees and other plantings. As shadows shift throughout the late afternoon, incremental shadows would move south towards central and southern portions of the greenstreet before exiting at 5:35 PM (see Figures D-5a and D-5b).

Court Square Park

The proposed development would cast incremental shadows on Court Square Park beginning at 4:18 PM and continuing until the end of the analysis day at 6:01 PM for a duration of approximately 1 hour and 43 minutes. The park would not experience any incremental shadow coverage before 4:18 PM. As indicated in Figure D-5a, at 4:45 PM incremental shadows would be limited to a portion of the northern corner of the park, which is comprised of grass, trees, and other plantings. As shadows shift throughout the late afternoon, incremental shadows would move south towards a central area of the park comprised of a plaza, walkways, fountain and reflection pool, and trees (see Figure D-5b).

McKenna Triangle

The proposed development would cast incremental shadows on McKenna Triangle from 4:27 to 5:15 PM for a duration of approximately 48 minutes. The open space would not experience any incremental shadow coverage before 4:27 PM. As shown in Figure D-5a, from 4:27 to 4:46 PM (19 minutes) incremental shadows would be limited to a small area of the open space but would result in the complete elimination of sunlight at McKenna Triangle. As indicated in Figure D-5a, at 4:45 PM incremental shadows would be limited to the northeastern corner of the open space, which is comprised of trees and a flagpole. Incremental shadows would move south throughout the afternoon and would exit the open space completely by 5:15 PM.

Assessment

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

For open spaces, the uses and features of the space indicate its sensitivity to shadows. Shadows occurring during the cold-weather months of interest generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. Therefore, this sensitivity is assessed for both (1) warm-weather-dependent features like wading pools and sand boxes, or vegetation that could be affected by a loss of sunlight during the growing season; and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as

gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants and plots in community gardens. Generally, 4 to 6 hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Consequently, the assessment of an open space's sensitivity to increased shadow focuses on identifying the existing conditions of its facilities, plantings, and uses, and the sunlight requirements for each.

Murray Playground

The proposed development would cast incremental shadows on Murray Playground on the March 21/September 21 and May 6/August 6 representative analysis days. Incremental shadow duration would range from a total of 13 minutes (March 21/September 21) to 37 minutes (May 6/August 6) and would generally be limited to the early morning hours before 8 AM. On both days, incremental shadows would be limited to small portions of the open space that feature active recreational uses including a basketball court and synthetic turf field, as well as trees. As shadows are not static and move from west to east throughout the day, these amenities would continue to receive some direct sunlight on these two representative analysis days (see Figures D-3a and D-4a). Additionally, incremental shadows on active recreational uses during the months surrounding the summer solstice when temperatures are warmer would not significantly affect the usability of the open space. Furthermore, the open space would continue to receive adequate sunlight during the growing season (at least the four to six hour minimum specified in the *CEQR Technical Manual*) and vegetation would not be affected. Therefore, the incremental shadows that could result from the RWCDS With-Action development at the project site are not anticipated to adversely impact Murray Playground.

11th Street Greenstreet

The shadows analysis determined that the duration and coverage of incremental shadows on the 11th Street Greenstreet would be limited. Incremental shadows would be limited to small portions of the greenstreet for approximately 14 minutes on March 21/September 21 and 7 minutes on May 6/August 6 (see Figures D-3a and D-4a). While all of the greenstreet's affected areas are comprised of trees, the open space would still receive adequate sunlight during the growing season (at least the four to six hours specified in the *CEQR Technical Manual*), and vegetation would not be affected. Therefore, the incremental shadows that could result from the RWCDS With-Action development are not anticipated to adversely impact the 11th Street Greenstreet.

Jackson Avenue Greenstreet

The shadows analysis determined that the duration and coverage of incremental shadows on the Jackson Avenue Greenstreet would be limited. Incremental shadows would be limited to small portions of the greenstreet between Court Square West and Thomson Avenue for approximately 1 hour and 1 minute on May 6/August 6 and 1 hour and 51 minutes on June 21 (see Figures D-4b, D-5a, and D-5b). While all of the greenstreet's affected areas are comprised of trees and other plantings, the open space would still receive adequate sunlight during the growing season (at least the four to six hours specified in the *CEQR Technical Manual*), and vegetation would not be affected. Therefore, the incremental shadows that could result from the RWCDS With-Action development are not anticipated to adversely impact the Jackson Avenue Greenstreet.

Captain Rafferty Memorial

The shadows analysis determined that the duration and coverage of incremental shadows on the Captain Rafferty Memorial open space would be limited. The proposed development would result in incremental shadows on small western and central portions of the open space for a total of approximately 24 minutes on March 21/September 21 (see Figure D-3b). As the open space would still receive adequate sunlight during the growing season (at least the four to six hours specified in the *CEQR Technical Manual*), vegetation would not be affected. Furthermore, the short duration of incremental shadows is not anticipated to have a significant effect on the open space's utilization or enjoyment. Therefore, the incremental shadows that could result from the RWCDS With-Action development are not anticipated to adversely impact the Captain Rafferty Memorial open space.

Court Square Park

The proposed development would cast incremental shadows on Court Square Park on the May 6/August 6 and June 21 representative analysis days. Incremental shadow duration would range from a total of 27 minutes (May 6/August 6) to 1 hour and 43 minutes (June 21) and would generally be limited to the later afternoon hours shortly before sunset. Incremental shadows would be limited to small portions of the open space that feature grass, trees, plantings, a plaza, walkways, and a fountain and reflection pool. As shadows are not static and move from west to east throughout the day, these amenities would continue to receive some direct sunlight throughout the morning and afternoon periods (see Figures D-4b, D-5a, D-5b). Additionally, the open space would continue to receive adequate sunlight during the growing season (at least the four to six hour minimum specified in the *CEQR Technical Manual*) and vegetation would not be affected. Therefore, the incremental shadows that could result from the RWCDS With-Action development are not anticipated to adversely impact Court Square Park.

McKenna Triangle

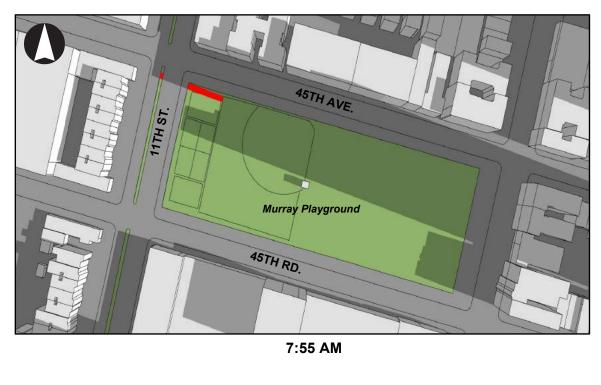
The shadows analysis determined that the duration and coverage of incremental shadows on McKenna Triangle would be limited. The proposed development would result in incremental shadows on small northern portions of the open space for a total of approximately 48 minutes on June 21 (see Figure D-5a). As the open space would still receive adequate sunlight during the growing season (at least the four to six hours specified in the *CEQR Technical Manual*), vegetation would not be affected. Furthermore, the short duration of incremental shadows is not anticipated to have a significant effect on the open space's utilization or enjoyment. Therefore, the incremental shadows that could result from the RWCDS With-Action development are not anticipated to adversely impact McKenna Triangle.

Court Square Block 3 Text Amendment EAS

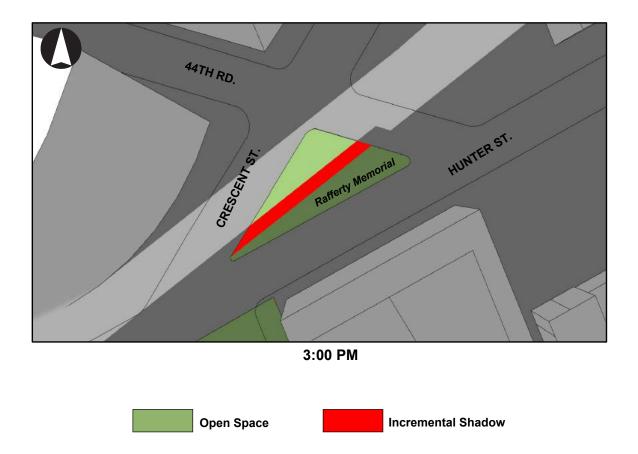
AS Figure D-3a 11th Street Greenstreet and Murray Playground Incremental Shadows on May 6/August 6



7:36 AM

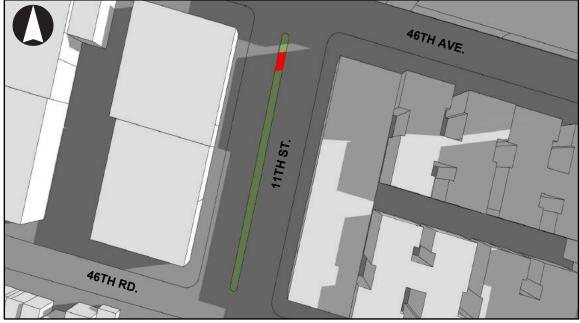


EAS Figure D-3b Captain Malcolm A. Rafferty Memorial Incremental Shadows on March 21/September 21

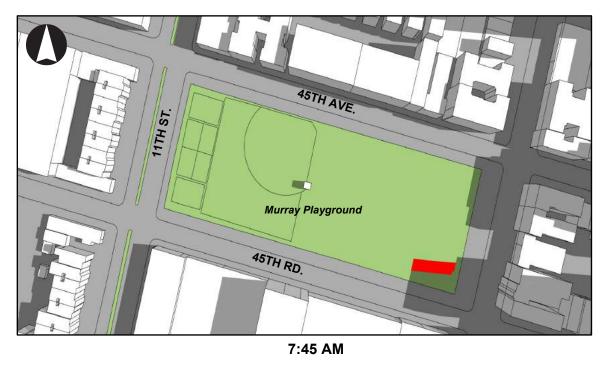


Court Square Block 3 Text Amendment EAS

AS Figure D-4a 11th Street Greenstreet and Murray Playground Incremental Shadows on May 6/August 6

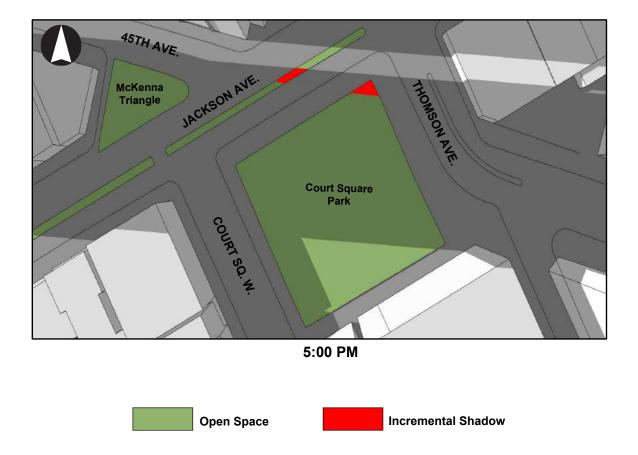


6:40 AM

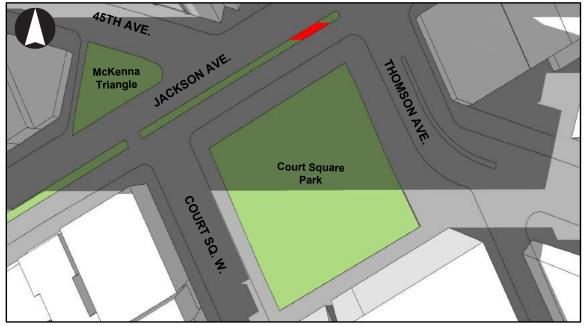


Court Square Block 3 Text Amendment EAS

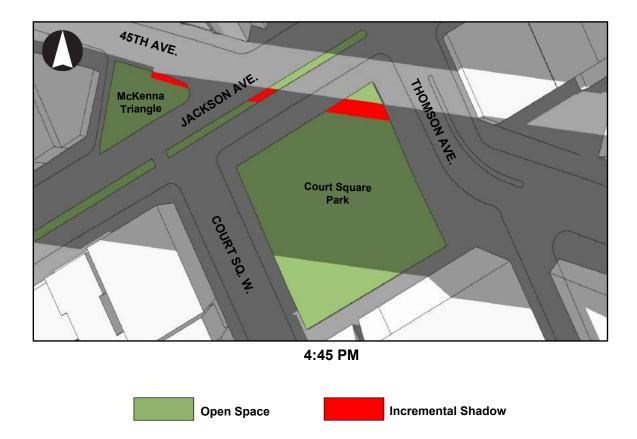
ent EAS Figure D-4b Jackson Avenue Greenstreet and Court Square Park Incremental Shadows on May 6/August 6



Court Square Block 3 Text Amendment EAS Figure D-5a McKenna Triangle, Jackson Avenue Greenstreet, and Court Square Park Incremental Shadows on June 21

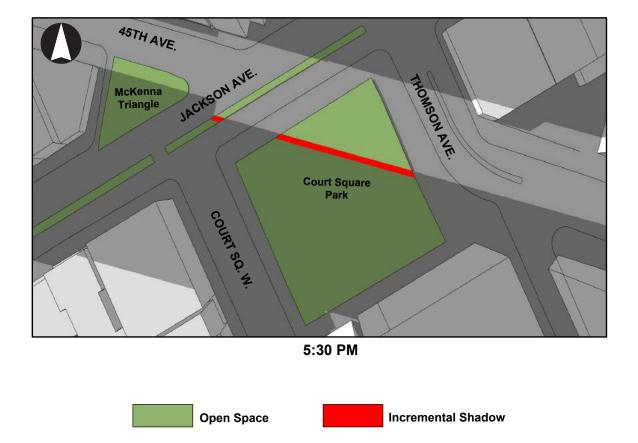


4:00 PM



 Court Square Block 3 Text Amendment EAS
 Figure D-5b

 McKenna Triangle, Jackson Avenue Greenstreet, and Court Square Park
 Incremental Shadows on June 21



ATTACHMENT E URBAN DESIGN

I. INTRODUCTION

This attachment considers the potential for the proposed project to result in significant adverse impacts on urban design and visual resources. According to the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, urban design is defined as the totality of components that may affect a pedestrian's experience of public space. These components include streets, buildings, visual resources, open spaces, natural resources, and wind. An urban design assessment considers whether and how a project may change the experience of a pedestrian in a given area. The *CEQR Technical Manual* guidelines recommend the preparation of a preliminary assessment of urban design and visual resources, followed by a detailed analysis, as warranted, based on the conclusions of the preliminary assessment. The analysis provided below addresses urban design characteristics and visual resources for existing conditions, the future without the proposed actions (the No-Action condition), and the future with the proposed actions (the With-Action condition).

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts to urban design or visual resources, as defined by the guidance for determining impact significance set forth in the *CEQR Technical* Manual, are anticipated in the future with the proposed actions within the project area or study area. The proposed actions would result in a bulkier but shorter building compared to No-Action conditions that would be more consistent with existing and planned buildings in the surrounding area. While the proposed zoning text amendments would modify building height, setback, and tower requirements, these changes would take place high above street level and would result in a shorter and more contextual development as viewed by pedestrians on sidewalks adjacent to the project area. At street level, the RWCDS With-Action and No-Action developments would appear identical, sharing the same amount of street frontage, a street wall location set at or near the street line, and active ground-floor uses. This would create an attractive condition and add pedestrian activity to sidewalks bounding the project area.

Similar to other existing high-density residential buildings in the surrounding area, the RWCDS With-Action development would employ a tower-on-base design with the building base set at or near the street line topped by a tower set back at least 15 feet from the nearest street line. From a pedestrian's vantage point within the study area, there would be a noticeable reduction in building height compared to the RWCDS No-Action development, which could result in slight improvements to views of the midtown Manhattan skyline.

Overall, the proposed actions would not result in any negative effects on the urban design characteristics of the project area or study area and therefore would not result in any significant adverse urban design impacts. In addition, the RWCDS With-Action development would result in slight improvements to view corridors and visual resources from pedestrian vantage points, compared to No-Action conditions. Therefore, the proposed actions would not have any significant adverse impacts on visual resources.

III. METHODOLOGY

The *CEQR Technical Manual* indicates that there is no need to conduct an urban design analysis if a proposed project would be constructed within the existing zoning envelope and would not result in physical changes beyond the bulk and form permitted "as-of-right." As the proposed actions would allow for modification of height, setback, and tower regulations applicable to Block 3 of the Court Square Subdistrict in the Special Long Island City Mixed Use District, a preliminary assessment of urban design is provided below.

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

In accordance with the *CEQR Technical Manual,* the analysis in this attachment considers the effects of the proposed project on the following elements that collectively form an area's urban design:

- Street Pattern and Streetscape: The arrangement and orientation of streets define location, flow of activity, and street views and create blocks on which buildings and open spaces are arranged. Other elements, including sidewalks, plantings, street lights, curb cuts, and street furniture, also contribute to an area's streetscape.
- *Buildings:* Building size, shape, pedestrian and vehicular entrances, lot coverage, and orientation to the street are important urban design components that define the appearance of the built environment.
- Open Space: For the purpose of urban design, open space includes public and private areas that do not include structures, including parks and other landscaped areas, cemeteries, and parking lots.
- *Natural Features:* Natural features include vegetation and geologic and aquatic features that are natural to the area.
- *View Corridors and Visual Resources:* Visual resources include significant natural or built features, including important view corridors, public parks, landmark structures or districts, or otherwise distinct buildings.

The *CEQR Technical Manual* recommends an analysis of pedestrian wind conditions for projects that would result in the construction of multiple, tall buildings at or in close proximity to waterfront sites, which may result in an exacerbation of wind conditions due to "channelization" or "downwash" effects that may affect pedestrian safety. Factors to be considered in determining whether such a study should be conducted include: whether the location is exposed to high wind conditions, such as along west- and northwest-facing waterfronts; the size of the project; the number of proposed buildings to be constructed; the size and orientation of the buildings that are proposed to be constructed; and the site plan and surrounding pedestrian context of the project. As the proposed project is not located in the immediate vicinity of the waterfront and would not result in the construction of multiple, tall buildings, a study of wind conditions and their effect on pedestrian level of safety is not warranted.

Study Area

According to the *CEQR Technical Manual*, the study area for urban design is the area where the project may influence land use patterns and the built environment and is generally consistent with the land use

analysis study area. For visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. The land use study area may serve as the initial basis for analysis. However, in many cases where significant visual resources exist, it may be appropriate to look beyond the land use study area to encompass views outside of this area, as is often the case with waterfront sites or sites within or near historic districts.

Consistent with the analysis of land use, zoning, and public policy, the study area for the urban design analysis consists of both the project area (Tax Block 80, Lots 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12), and a study area, which has been defined as the area within a 400-foot radius of the project area. As shown in Figure E-1, the study area extends as far north as 44th Drive, as far south as the midblock area between Jackson Avenue and the Long Island Railroad (LIRR) railyard, as far west as the midblock area between 23rd Street and 21st Street, and as far east as the intersection of Jackson Avenue and 44th Drive.

As stated in the *CEQR Technical Manual*, for visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. While the land use study area may serve as the initial basis for analysis, in many cases where significant visual resource exist, it may be appropriate to look beyond the land use study area to encompass views outside of the area, as is often the case with waterfront sites or sites within or near historic districts. For the purpose of this analysis, prominent visual resources (both within and outside of the urban design study area) that are visible from the project area and study area were identified. The primary view sheds of these visual resources that would be affected by the proposed project were the focus of the visual resources analysis.

The analysis of urban design and visual resources is based on field visits, photography, and computer imaging of the project area and surrounding study area.

IV. PRELIMINARY ASSESSMENT

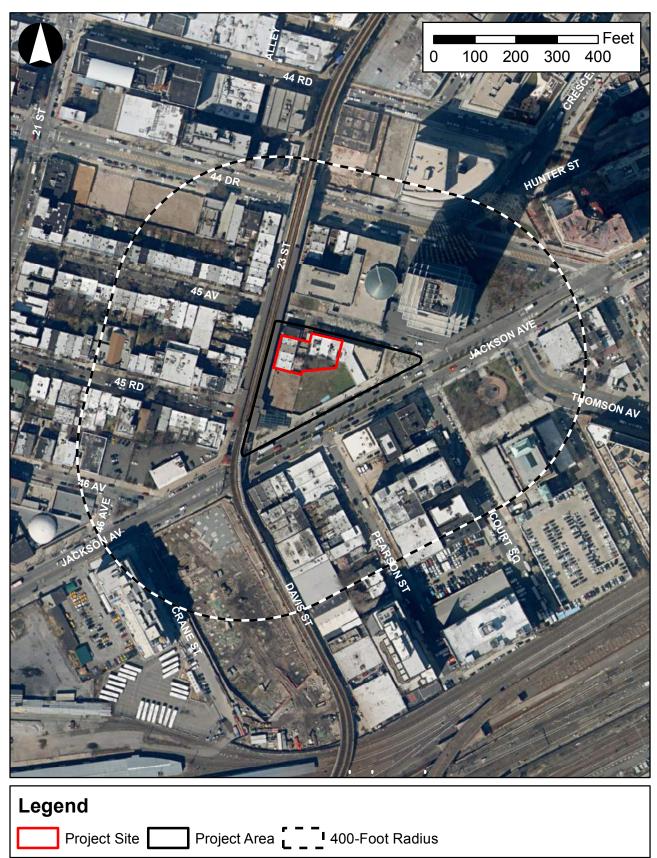
Existing Conditions

Urban Design

Project Area

The project area is an irregularly shaped block bounded by Jackson Avenue to the east, 23rd Street to the west, and 45th Avenue to the north. The project area is located in a C5-3 commercial zoning district within the Court Square Subdistrict (Block 3) of the Special Long Island City Mixed Use District. C5-3 commercial zoning districts are a restricted central commercial district intended for office and a variety of retail uses, as well as community facility and residential uses (R10 residential district equivalent). Manufacturing uses are not permitted. Within the Court Square Subdistrict, the provisions of the underlying C5-3 zoning district are modified. Developments meeting the floor area and zoning lot standards and providing the mandatory subway improvements required within the Court Square Subdistrict may develop to an FAR of up to 15, all of which could be commercial or community facility uses, and of which up to 10 FAR can be residential. With an area of approximately 37,444 sf and nine buildings totaling approximately 39,391 gsf, the project area has a built FAR of approximately 1.05. Approximately half of the project area (17,914 sf) is currently vacant, but plans have been filed with DOB for construction of a 50-story, approximately 363,700 gsf hotel (15 FAR) on Lot 4 (see Figure E-2, Photo 6).

Figure E-1 Urban Design Study Area



Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure E-2a Project Area Photo Locations



Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



1. Looking east at the project site from 23rd Street



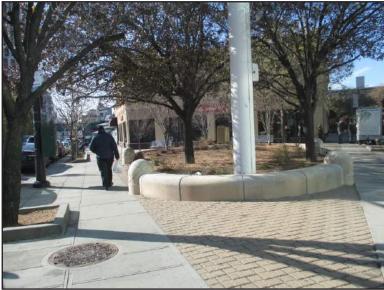
3. Looking south at the project site from 45th Avenue



2. Looking east along 45th Avenue from 23rd Street



4. Looking south at the project site along 23rd Street near 45th Avenue



5. Looking west at the project area from McKenna Triangle



6. Looking west at the project area from Jackson Avenue



7. Looking southwest along Jackson Avenue towards entrance to Court Square No. 7 subway station



8. Looking southwest at Short Triangle and entrance to Court Square No. 7 subway station

STREET PATTERN AND STREETSCAPE

To the east, the project area is bounded by Jackson Avenue, an 80-foot wide street that runs on a diagonal in a north-south direction, which is a major pedestrian and vehicular thoroughfare serving Long Island City. Jackson Avenue has two travel lanes in each direction and a raised median planted with trees and shrubs. Parking is permitted on both sides of the street.

To the west, the project area is bounded by 23rd Street, an 80-foot wide street that operates with one travel lane in each direction and intersects with Jackson Avenue at the southern boundary of the project area. Parking is typically permitted on both sides of the street. Vehicular access to the project area is provided by a curb cut located mid-block between 45th Road and 45th Avenue. The streetscape of 23rd Street is dominated by the elevated No. 7 subway line and Court Square Station located overhead (see Figure E-2, Photos 1, 2, 4, 7, 8).

To the north, the project area is bounded by 45th Avenue, a 60-foot wide east-west local street. It has one travel lane in the westbound direction. Parking is permitted on both sides of the street. Vehicle access to a residential driveway at 45-01 23rd Street (Lot 8) and 24-29 Jackson Avenue (Lots 1, 3) is provided by two curb cuts on 45th Avenue.

As shown in Figure E-2, sidewalks lining the project area vary in width, from approximately 10 to 15 feet wide along 23rd Street and 45th Avenue to approximately 20 feet wide along Jackson Avenue. Public open spaces such as McKenna Triangle (0.01 acre) at the intersection of Jackson Avenue/45th Avenue and Short Triangle (0.01 acre) at the intersection of Jackson Avenue/23rd Street diversify the streetscape with small public plazas, bench seating, and landscaped areas with trees, shrubs, and plantings. The streetscape in the vicinity of 23rd Street and Jackson Avenue is defined by the entrance to Court Square Station and the number of stairwells that provide access. Streetscape elements on 23rd Street are limited to truss supports for the elevated subway line, streetlights, parking signage, and fire hydrants. Other typical streetscape elements on sidewalks lining the project area include trees, streetlights, utility poles, bicycle racks, parking meters, and trash receptacles.

BUILDINGS

As shown in Figure E-2, the project area is occupied by nine buildings, including two one- and two-family walkup buildings (Lots 8, 10), six multi-family walkup buildings (Lots 5, 6, 7, 9, 11, 12), and a 2-3 story commercial building occupied by a bank and office space (Lots 1, 3).

The similarity of architectural styles and building types within the project area generally result in even and uninterrupted street walls. Residential buildings within the project area are limited to three story rowhouses set back from the street line on narrow lots. On 23rd Street, residential buildings were built in the same style and are characterized by a number of distinctive features including brick pattern work, stoops, matching cornices, and matching lintels. Residential buildings on 45th Avenue possess fewer façade details but are similarly styled with stoops, cornices, and lintels. At the northwest corner of the project area, Lot 8 has a small rear driveway and curb cut that creates an approximately 20-foot gap in the 45th Avenue street wall. At ground level, all residential buildings are physically separated from the sidewalk by iron or chain link fences (see Figure E-2, Photo 4).

The only commercial building is located at the northeast corner of the project area (Lots 1, 3) and has frontage on both 45th Avenue and Jackson Avenue. The building's façade is a stucco material painted light brown, with darker brown trim around windows and doors. The ground floor of the building's 45th Avenue

frontage is a blank wall that features a shutter door and curb cut for truck delivery access. The Jackson Avenue frontages feature large display windows at ground-level with smaller windows on the floors above. The remainder of the project area's frontage along Jackson Avenue and 23rd Street is lined with plywood and chain link construction fencing.

NATURAL FEATURES AND OPEN SPACE

Two open spaces are located within the project area including McKenna Triangle at the intersection of Jackson Avenue/45th Avenue and Short Triangle at the intersection of Jackson Avenue/23rd Street. Both open spaces feature trees, shrubs, and plantings (see Figure E-2, Photos 5, 8).

Study Area

STREET PATTERN AND STREETSCAPE

The street plan in the surrounding area is characterized by an interrupted rectilinear grid pattern. A number of streets to the north of Jackson Avenue run on an angle in an east-west direction, resulting in irregularly-shaped parcels of land. To the south of Jackson Avenue, streets change alignment and are oriented perpendicular to Jackson Avenue. All streets south of Jackson Avenue are dead-ended by Sunnyside Yards, an approximately 18-acre active rail yard that is located just beyond the study area to the south. All streets south of Jackson Avenue serve two-way traffic, including Crane Street, Davis Street, Pearson Street, Court Square West, and Court Square East. Major thoroughfares in the area such as 44th Drive and Jackson Avenue also serve two-way traffic, while all other local streets (46th Avenue, 45th Road, and 45th Avenue) serve one-way traffic.

There are various streetscape elements present within the study area. Typical streetscape elements such as trees, streetlights, fire hydrants, parking signage, and utility poles can be found throughout the study area. Street trees are more prevalent along residential streets directly west of the project area. The streetscapes along 23rd Street and Davis Street are defined by the truss supports for the elevated subway line (see Figure E-3, Photos 10, 12). 44th Drive and Jackson Avenue possess some of the most unique streetscape features within the project area. In addition to standard streetscape elements, these thoroughfares each possess bike lanes and Citi Bike docking stations, bollards adjacent to high-rise office buildings, benches adjacent to open spaces, and two-way roadways separated by a landscaped median (see Figure E-3, Photos 11, 12, 13, 14, 15).

BUILDINGS

As shown in Figure E-4, the study area supports a variety of building types and land uses. Higher density, taller buildings are generally located along 44th Drive and Jackson Avenue while lower density, shorter buildings are concentrated west of 23rd Street, generally corresponding with the boundaries of the Hunters Point Historic District. As shown in Figures E-5, many buildings in the study area have a built FAR of 4.0 or less, with a small number of buildings exceeding 8.0 FAR, including, most notably, Citi Tower (16.0 FAR) across 45th Avenue from the project area. Study area buildings are generally less than 6-stories in height with some buildings exceeding 12-stories such as the 49-story Citi Tower (see Figure E-6).

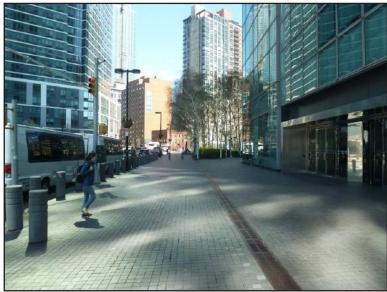
Predominant land uses in the study area include residential, commercial, and light industrial uses. Residential uses account for approximately 56 percent of total tax lots, approximately 21 percent of total tax lot area, and approximately 17 percent of total building area. Residential uses are generally located to



9. View looking east on 45th Avenue



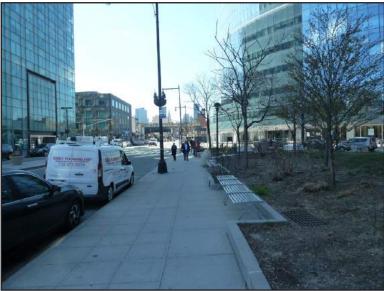
10. View looking north on 23rd Street from 45th Avenue



11. Looking east on 44th Drive near Hunter Street



12. View looking north on Jackson Avenue from 23rd Street



13. View looking west on 44th Drive near Hunter Street



14. View looking east on 44th Drive near Hunter Street



15. Looking west on 44th Drive near 23rd Street



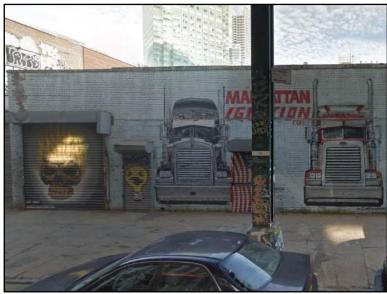
16. View looking west on 45th Road



17. One- and two-family residential buildings on 45th Avenue



18. Multi-family residential with ground-floor retail on Jackson Av.



19. Light industrial warehouse uses on Davis Street



20. Residential buildings with parking along Pearson Street



21. A low-rise commercial office building on Court Square West



22. A 50-story residential tower on the corner of Jackson Avenue and 44th Drive

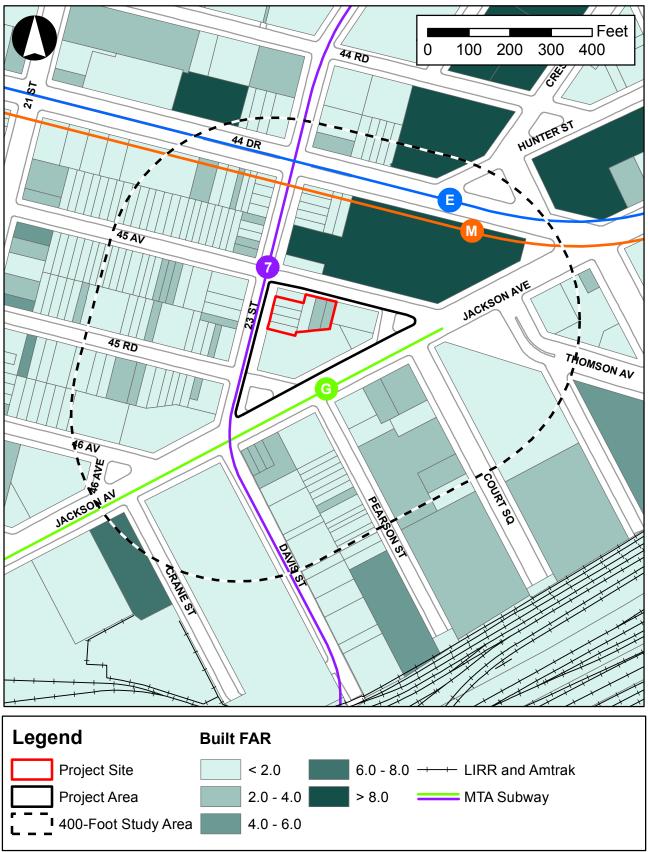


23. A commercial office building on the corner of 44th Drive and Hunter Street



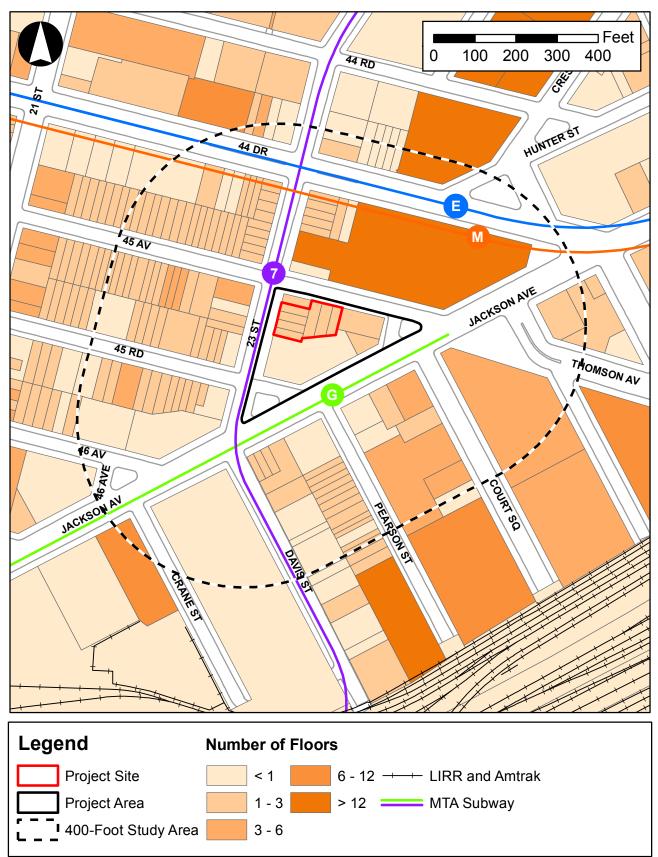
24. The 49-story Citi Tower on the corner of Jackson Avenue and 44th Drive

Figure E-5 Built FAR



Source: DoITT, DCP, CUNY Center for Urban Research

Figure E-6 Building Height



Source: DoITT, DCP, CUNY Center for Urban Research

the west and south of the project area. Lower density one- and two-family buildings are generally located along the local streets such as 45th Avenue, 45th Road, 46th Avenue, and Pearson Street (see Figure E-4, Photos 17, 20), while higher density multi-family elevator buildings are located along 44th Drive and Jackson Avenue (see Figure E-4, Photo 22). One- and two-family residences generally occupy attached rowhouse buildings set on small, narrow lots, and rise without setback to their final height. One- and two-family residential buildings to the west of the project area within the Hunters Point Historic District occupy attached rowhouse buildings and share a uniform character, including high stoops, cornices, and lintels (see Figure E-4, Photo 17). Rowhouses are set near the street line at an even distance, further contributing to the area's cohesive streetscape. One- and two-family residences in other areas of the study area generally occupy attached rowhouses but vary in built character. Multi-family elevator buildings in the study area are generally high-rise buildings set on larger lots. While some multi-family buildings rise without setback to their final height, higher-density buildings generally employ a tower-on-base design with the building base set at or near the street line topped by a tower setback above the base height (see Figure E-4, Photo 22).

Commercial uses are also common in the study area, accounting for approximately 15 percent of total lots, 34 percent of total tax lot area, and 76 percent of total building area. Commercial uses are generally located to the north of the project area with some commercial uses interspersed in areas to the west and south. Notable commercial uses in the study area include the 49-story Citi Tower directly north of the project area as well as 2 Court Square, an approximately 15-story office building across 44th Drive (see Figure E-4, Photos 23, 24). Higher-density commercial buildings are generally located along 44th Drive and Jackson Avenue, while lower density buildings are generally located along the local streets such as Pearson Street and Court Square West (see Figure E-4, Photo 21). Commercial buildings are set on lots of varying sizes, with higher-density, taller buildings generally occupying large, wide lots, while lower-density, shorter buildings generally occupy small lots. Higher-density buildings are generally set back from the street line and many rise without setback to their final height (see Figure E-4, Photos 11, 14, 24).

Light industrial uses account for approximately 6 percent of total lots, 6 percent of total tax lot area, and 2 percent of total building area. Light industrial uses are interspersed throughout the study area, including along Davis Street, 23rd Street north of 44th Drive, and midblock areas along 44th Drive, 45th Avenue, and 45th Road between 23rd Street and 21st Street (see Figure E-4, Photo 19). Light industrial buildings in the surrounding area are generally limited to low-rise, one- to two-story warehouse buildings set at or near the street line.

NATURAL FEATURES AND OPEN SPACE

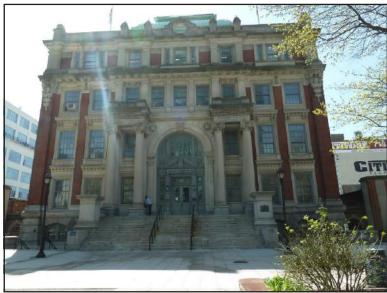
A number of open spaces are located within the study area, including Court Square Park, Captain Rafferty Memorial Triangle, and Citicorp at Court Square Plaza (see Figure E-7, Photos 28, 31, 32). Court Square Park is an approximately 0.49-acre open space that features a fountain, benches, landscaping, and trees. Citicorp at Court Square Plaza is an approximately 0.53-acre privately-owned public space that features benches, landscaping, and trees. Rafferty Triangle is an approximately 0.10-acre park that features an area with seating and tables, benches, landscaping, and trees. Additional open areas in the study area are limited to vacant land.



25. 45th Road - Court House Square Station (S/NR)



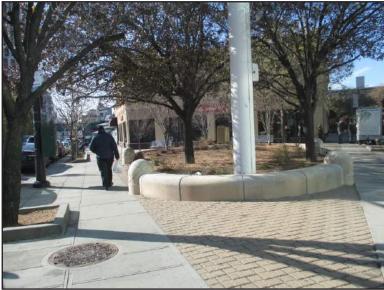
26. Hunter's Point Historic District (S/NR, LPC)



27. New York State Supreme Court (S/NR, LPC)



28. Court Square Park with New York State Supreme Court in the background



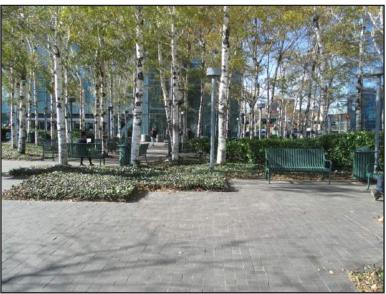
29. McKenna Triangle



30. Short Triangle



31. Captain Rafferty Memorial Triangle



32. Citicorp at Court Square Plaza



33. View of Midtown Manhattan from 44th Drive near 23rd Street



34. View of the World Trade Center from Jackson Avenue near 46th Avenue

Visual Resources

Project Area

Two visual resources, McKenna Triangle and Short Triangle, are located within the project area (see Figure E-7, Photos 29, 30). Two additional visual resources, the Hunters Point Historic District and Court Square Park, can be seen from the project area (see Figure E-7, Photos 26 and 28). Views of the Hunters Point Historic District are partially obstructed by the elevated subway line running along 23rd Street and Court Square Park is partially obstructed by the Jackson Avenue Greenstreet. While the exterior of the 45th Road – Court House Square Station (LPC-designated, S/NR-listed) is visible from the project area, this historic resource derives its significance from the design of its interior and platform spaces (refer to Attachment B, "Supplemental Screening" for additional information) and is therefore not considered a visual resource for analysis purposes (see Figure E-7, Photo 25).

<u>Study Area</u>

A number of visual resources are located within the study area, including: the Hunters Point Historic District (LPC-designated, S/NR-listed), the New York State Supreme Court (LPC-designated, S/NR-listed), Court Square Park, Captain Rafferty Memorial Triangle, and Citicorp at Court Square Plaza (see Figure E-7, Photos 26, 27, 28, 31, 32). The midtown Manhattan skyline and the World Trade Center are the only visual resources located outside of the study area that can be seen from within the study area (see Figure E-7, Photos 33, 34). The midtown Manhattan skyline is only visible looking west on 44th Drive and Thomson Avenue while the World Trade Center is only visible looking south on Jackson Avenue near 46th Avenue.

Future Without the Proposed Actions (No-Action)

Urban Design

Project Area

In the future without the proposed actions (the No-Action condition), the project site is expected to be redeveloped with a program that does not require any discretionary approvals. Thus, no zoning text changes would occur and the applicant would redevelop the project site with an as-of-right building pursuant to C5-3 and Special District zoning regulations. Construction of a 50-story hotel within the project area is also expected to be complete by 2022.

STREET PATTERN AND STREETSCAPE

In the No-Action condition, street patterns and street directions adjacent to the project area are not expected to change. Both the applicant's as-of-right development and the planned 50-story hotel on Lot 4 are expected to be constructed at or near the street line and would not result in any substantial changes to sidewalk width. The applicant's as-of-right development would not provide any parking and no new curb cuts would be provided. While detailed plans of the proposed hotel development are not available at this time, DOB filings indicate the hotel would have a small number of on-site parking spaces, which would require a new curb cut on the 23rd Street and/or Jackson Avenue frontages. No other changes to the streetscape are anticipated as a result of No-Action development and sidewalks lining the project area would generally remain similar to existing conditions.

BUILDINGS

In the No-Action condition, two new buildings would be constructed within the project area. The applicant would redevelop the project site with an approximately 289,533 gsf (14.05 FAR), 70-story mixed-use building comprised of approximately 247 DUs, 10,367 gsf of retail, and 69,138 gsf of commercial office space. The RWCDS No-Action development would be set at or near the street line with an 85-foot, 6-story, street wall with a 60-foot setback on the 23rd Street frontage, and an 85-foot, 6-story, street wall with a 20-foot setback on the 23rd Street frontage. The building's 15-foot high ground floor would cover the entirety of the site and contain retail use, with an entrance on 23rd Street, and a residential lobby on 45th Avenue. At a height of 85 feet, the 7th story would set back 20 feet from 45th Avenue (a narrow street). Floors 2 through 9 would contain commercial office uses and residential uses would be located on floors 10 through 70.

Adjacent to the project site, a vacant site on Lot 4 would be redeveloped with a 50-story, approximately 363,700 gsf hotel (15 FAR). While detailed plans of the proposed hotel development are not available at this time, DOB filings indicate the hotel would be set at or near the street line with an 85-foot, 8-story street wall with setbacks on the 23rd Street and Jackson Avenue frontages and the hotel tower rising from the center of the site.

NATURAL FEATURES AND OPEN SPACE

In the No-Action condition, no changes in the project area's natural features are expected. The existing open space resources would remain the same. There are no known NYC Parks capital projects or improvement plans for either McKenna Triangle or Short Triangle.

Study Area

STREET PATTERN AND STREETSCAPE

In the No-Action condition, street patterns in the study area would not change. The existing interrupted grid pattern and street directions would remain the same. While DOT is in the preliminary design stages of an area-wide streetscape reconstruction project affecting portions of Long Island City and Hunters Point, no construction funding has been allocated and a timeline for completion has not been identified. As such, this streetscape improvement plan has been excluded from this analysis. No other improvement plans have been identified in the surrounding area. Ground-floor local retail uses at the development site are expected to enhance the pedestrian realm, making the surrounding area beneath and adjacent to the elevated subway line more attractive and inviting.

BUILDINGS

As shown in Table E-1, there are ten new development projects anticipated to be completed within the study area under 2022 No-Action conditions. Most notably, these developments would include two mixed-use towers at 23-14 44th Drive and 22-44 Jackson Avenue. To the north of the project area, 23-14 44th Drive would rise 66-stories and would include approximately 802 DUs and 15,052 sf of commercial space. At a height of approximately 778 feet, it would be the tallest building in Queens. To the south of the project area, 22-44 Jackson Avenue would rise 48-stories and would include approximately 1,115 DUs and 39,929 sf of commercial space. In total, new development is expected to result in the addition of approximately 2,172 DUs and 92,090 sf of commercial space to the study area by 2022. These developments would reinforce existing development patterns within the study area, with new high-rise

developments (No. 1, 4) located on 44th Drive and Jackson Avenue and low-rise residential development (No. 7, 8, 9, 10) located on side streets such as 45th Road and the western frontage of 23rd Street.

	Address	Block & Lot	Residential (DUs)	Commercial (sf)	Number of Floors	Build Year
1	23-14 44 th Drive	Block 437, Lots 5, 7, 8, 9, 10, 11, 13, 15, 20	802	15,052	66	2020
2	21-59 44 th Drive	Block 438, Lot 1	20	9,000	7	2021
3	22-43 Jackson Avenue	Block 76, Lot 16	70	13,001	11	2020
4	22-44 Jackson Avenue	Block 86, Lot 1	1,115	39,929	48	2018
5	45-07 Court Square	Block 81, Lot 9	58	4,994	11	2019
6	21-30 44 th Drive	Block 78, Lot 41	85	10,114	8	2019
7	21-26 45 th Road	Block 76, Lot 40	6	0	4	2020
8	21-28 45 th Road	Block 76, Lot 39	6	0	4	2020
9	21-30 45 th Road	Block 76, Lot 38	6	0	4	2020
10	45-08 23 rd Street	Block 77, Lot 31	4	0	3	2020
Totals: 2,172 92,090						

Table E-1No-Action Developments within the Study Area

Source: DCP Community Portal; DOB NB applications; newspaper articles; PHA site visits.

NATURAL FEATURES AND OPEN SPACE

In the No-Action condition, no changes in the study area's natural features are expected. The existing open space resources would remain the same. There are no known NYC Parks capital projects or improvement plans for any open spaces located within the study area.

Visual Resources

Project Area

In the No-Action condition, the visual character of the project area would be altered by new high-rise development. These buildings would not interfere with view corridors or obstruct views of McKenna Triangle or Short Triangle, the only visual resources located within the project area. Views from the project area of nearby visual resources (the Hunters Point Historic District and Court Square Park) would remain partially obstructed. Therefore, in the future without the proposed actions, view corridors and visual resources adjacent to and within the project area, and visible from the project area, would remain similar to existing conditions.

Study Area

In addition to new high-rise development within the project area, the visual character of the study area would be altered by ten anticipated No-Action developments. The height of many of these buildings would be noticeable from a pedestrian's vantage point within the study area. The new buildings would not interfere with view corridors or obstruct views of any visual resources located within the study area (the Hunters Point Historic District, the New York State Supreme Court, Court Square Park, Captain Rafferty Memorial Triangle, Citicorp at Court Square Plaza). Views of visual resources located outside the study area (midtown Manhattan skyline) could become partially obstructed as a result of new development under No-Action conditions. It is expected that these changes would be limited to Thomson Avenue and other public areas outside of the study area. Therefore, in the future without the proposed actions, view

corridors and visual resources in the study area, and visible from the study area, would remain similar to existing conditions.

Future With the Proposed Actions (With-Action)

Urban Design

As detailed in Attachment C, "Land Use, Zoning, and Public Policy," the proposed zoning text amendments would allow bulk changes within Block 3 of the Court Square Subdistrict, including: (1) changing the maximum building height on the west side of the project site along 23rd Street from 85 feet to a 125-foot maximum base height; (2) increasing the maximum base height on the west side of the project site along 23rd Street from 85 feet to 125 feet; (3) making the underlying C5-3 district height and setback regulations applicable only above the highest applicable maximum street wall height; and (4) making the underlying C5-3 district tower encroachment regulations of ZR 33-451 inapplicable along the project site's 45th Avenue frontage. A zoning certification from the Chair of the City Planning Commission (CPC) to the Department of Buildings (DOB) is also proposed to demonstrate the applicant's compliance with mandatory subway improvement requirements within the Court Square Subdistrict.

The proposed zoning text amendment would allow new development at the project site to achieve a more flexible design and a more efficient floor plate size than would be permitted by existing zoning. Views of the proposed project from a pedestrian vantage point, compared to No-Action conditions, are shown in Figure E-8.

Project Area

STREET PATTERN AND STREETSCAPE

In the With-Action condition, street patterns and street directions adjacent to the project area are not expected to change compared to No-Action conditions. The RWCDS With-Action development is expected to be constructed at or near the street line and would not result in any substantial changes to sidewalk width. The With-Action development would not provide any on-site parking and no new curb cuts would be placed on either the 23rd Street or 45th Avenue frontage. No other changes to the streetscape are anticipated as a result of the RWCDS With-Action development and sidewalks lining the project area would generally remain similar to No-Action conditions.

BUILDINGS

In the With-Action condition, the applicant would redevelop the project site with an approximately 308,565 gsf (14.05 FAR), 45-story mixed-use building comprised of approximately 272 DUs, 9,481 gsf of retail, and 68,133 gsf of commercial office space. The RWCDS With-Action development would be set at or near the street line with a 125-foot, 8-story, street wall with a 20-foot setback on the 23rd Street frontage, and an 85-foot, 6-story, street wall with a 15-foot setback on the 45th Avenue frontage. The building's 15-foot high ground floor would cover the entirety of the site and contain retail use, with an entrance on 23rd Street, and a residential lobby on 45th Avenue. At a height of 85 feet, the 7th story would set back 15 feet from 45th Avenue (a narrow street). Floors 2 through 9 would contain commercial office uses and residential uses would be located on floors 10 through 44. No changes are expected to any other buildings within the project area compared to No-Action conditions.



No-Action



With-Action Note: The proposed development is shown in white and anticipated No-Action development sites are shown in gray.



No-Action



With-Action Note: The proposed development is shown in white and anticipated No-Action development sites are shown in gray.



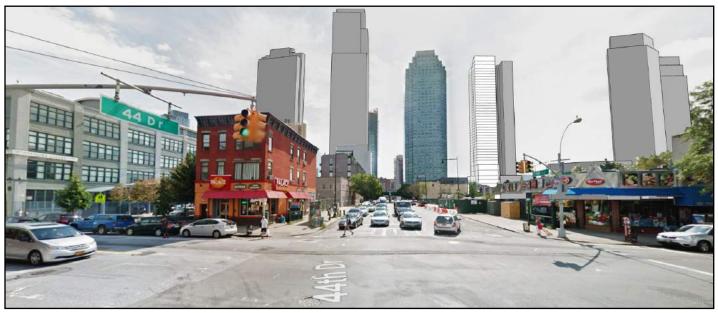
No-Action



With-Action Note: The proposed development is shown in white and anticipated No-Action development sites are shown in gray.



No-Action



With-Action Note: The proposed development is shown in white and anticipated No-Action development sites are shown in gray.

NATURAL FEATURES AND OPEN SPACE

In the With-Action condition, no changes in the project area's natural features are expected compared to No-Action conditions. The existing open space resources would remain the same. There are no known NYC Parks capital projects or improvement plans for either McKenna Triangle or Short Triangle.

Study Area

In the With-Action condition, no changes to study area street pattern and streetscape, buildings, or natural features and open space are expected compared to No-Action conditions. As such, the urban design character of the study area would remain similar to No-Action conditions.

Visual Resources

Project Area

In the future with the proposed actions, the visual character of the project area would be altered by new development. These buildings would not interfere with view corridors or obstruct views of McKenna Triangle or Short Triangle, the only visual resources located within the project area. Views from the project area of nearby visual resources (the Hunters Point Historic District and Court Square Park) would remain partially obstructed. Therefore, in the future with the proposed actions, view corridors and visual resources adjacent to and within the project area, and visible from the project area, would remain similar to No-Action conditions.

Study Area

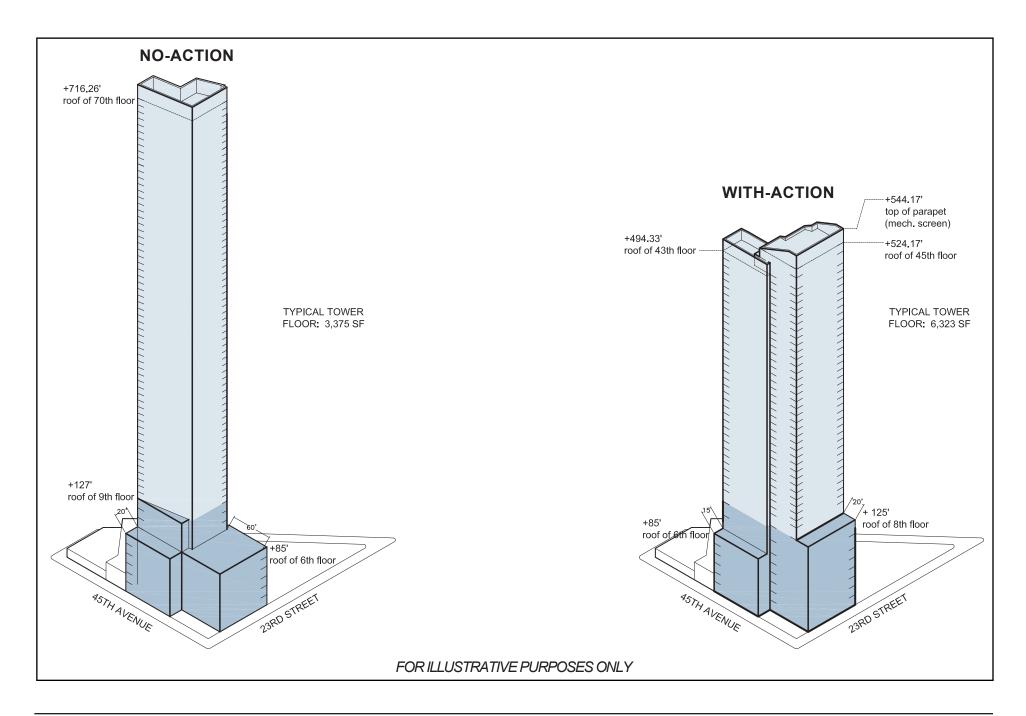
In the future with the proposed actions, the visual character of the study area would be altered by new development within the project area. As the proposed actions would result in height decreases, new development within the project area would be less noticeable from a pedestrian's vantage point in the surrounding area, compared to No-Action conditions.

Existing views from within the study area including the Hunters Point Historic District (LPC-designated, S/NR-listed), the New York State Supreme Court (LPC-designated, S/NR-listed), Court Square Park, Captain Rafferty Memorial Triangle, and Citicorp at Court Square Plaza would not be affected by the RWCDS With-Action development. New development could result in slight improvements to views of the midtown Manhattan skyline from Thomson Avenue and other public areas outside of the study area, compared to No-Action conditions. New development would not result in encroachment of any other visual corridors along public streets in the study area. Therefore, in the future with the proposed actions, the proposed actions would result in slight improvements to view corridors and visual resources both within the study area and visible from the study area.

Assessment

Project Area

The proposed actions would allow for a development with a larger floor plate size resulting in a bulkier but shorter building of only 45 stories (524 feet), compared to No-Action conditions (see Figure E-9). The RWCDS With-Action development's bulk and height would be more consistent with existing and planned



buildings in the surrounding area. While the proposed zoning text amendments would modify building height, setback, and tower regulations, these changes would take place high above street level and would result in a shorter and more contextual development as viewed by pedestrians on sidewalks adjacent to the project area. At street level, the RWCDS With-Action development and the RWCDS No-Action development would appear identical, sharing the same amount of street frontage, a street wall location set at or near the street line, and active ground-floor uses. This would create an attractive condition and add pedestrian activity to sidewalks bounding the project area.

Overall, the proposed actions would not result in any negative effects on the urban design characteristics of the project area and therefore would result in no significant adverse urban design impacts at the project area. In addition, the RWCDS With-Action development's bulk and height would be consistent with existing and planned buildings in the surrounding area and would not interfere with view corridors or obstruct views of visual resources located within or visible from the project area, compared to No-Action conditions. Therefore, the proposed actions would not have any significant adverse impacts on visual resources.

Study Area

The proposed actions would result in a bulkier but shorter building compared to No-Action conditions that would be more consistent with existing and planned buildings in the surrounding area (see Figure E-8). Similar to other existing high-density residential buildings in the surrounding area, the RWCDS With-Action development would employ a tower-on-base design with the building base set at or near the street line topped by a tower set back at least 15 feet above the base height. From a pedestrian's vantage point within the study area, there would be a noticeable reduction in building height between the RWCDS With-Action development and the RWCDS No-Action development, which could result in slight improvements to views of the midtown Manhattan skyline from Thomson Avenue and other public areas outside of the study area, compared to No-Action conditions.

Overall, the proposed actions would not result in any negative effects on the urban design characteristics of the study area and therefore would not result in any significant adverse urban design impacts within the study area. In addition, the RWCDS With-Action development would result in slight improvements to view corridors and visual resources both within the study area and visible from the study area, compared to No-Action conditions. Therefore, the proposed actions would not have any significant adverse impacts on visual resources.

ATTACHMENT F NOISE

I. INTRODUCTION

This attachment assesses the potential for the proposed actions to result in significant adverse noise impacts. The noise analysis for the proposed actions was carried out in compliance with 2014 *CEQR Technical Manual* guidance and consists of two parts:

- 1. A screening analysis to determine whether traffic changes resulting from the proposed actions would have the potential to result in significant noise impacts on existing sensitive receptors, and;
- 2. An analysis to determine the level of building attenuation necessary to ensure that the proposed project's interior noise levels satisfy applicable interior noise criteria.

This attachment does not include an analysis of mechanical equipment because such mechanical equipment would be designed to meet all applicable noise regulations (i.e., Subchapter 5, Section 24-227 of the New York City Noise Control Code and the New York City Department of Buildings Code) and, therefore, would not result in significant adverse noise impacts.

II. PRINCIPAL CONCLUSIONS

The increased traffic volumes generated by the proposed actions would not result in significant adverse noise impacts as the relative increases in noise levels would fall well below the applicable *CEQR Technical Manual* significant adverse impact threshold (3.0 dBA).

Based on the calculated With-Action L_{10} noise levels, the following composite window/wall attenuations were determined for future residential/community facility uses as well as commercial uses at the project site:

- A minimum of 42 dBA on the base 30 feet and 40 dBA for elevations of 30 feet and above of composite window/wall attenuation is required for residential/community facility uses on the project site's western frontage (23rd Street), as well as a portion of the site's northern (45th Avenue) and southern (Jackson Avenue) frontages at a depth of 50 feet from 23rd Street. The required composite window/wall attenuation for commercial uses would be 5 dBA less.
- A minimum of 31 dBA of composite window/wall attenuation is required for any remaining residential/community facility uses on the project site's northern (45th Avenue), eastern (Jackson Avenue), or southern (Jackson Avenue/45th Road) frontages. The required composite window/wall attenuation for commercial uses would be 5 dBa less.

The composite window/wall noise attenuations described above would be required through the assignment of an (E) designation for noise to the project site (Tax Block 80, Lots 5, 6, 7, 9, 10, 11, 12) in conjunction with the proposed zoning text amendment. With implementation of the attenuation levels outlined above and described in Table F-13, the proposed actions and subsequent development would

provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidance. Therefore, the proposed actions would not result in any significant adverse impacts related to noise attenuation.

III. NOISE FUNDAMENTALS

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

"A"-Weighted Sound Level (dBA)

Table F-1 Common Noise Levels

Sound Source	(dBA)
Military jet, air raid siren	130
Amplified rock music	110
Jet takeoff at 500 meters	100
Freight train at 30 meters	95
Train horn at 30 meters	90
Heavy truck at 15 meters	80–90
Busy city street, loud shout	80
Busy traffic intersection	70–80
Highway traffic at 15 meters, train	70
Predominantly industrial area	60
Light car traffic at 15 meters, city or commercial areas, or residential areas close to industry	50-60
Background noise in an office	50
Suburban areas with medium-density transportation	40–50
Public library	40
Soft whisper at 5 meters	30
Threshold of hearing	0

Note: A ten dBA increase in level appears to double the loudness, and a ten dBA decrease halves the apparent loudness.

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

In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human ear. This is known as the A-weighted sound level, or "dBA," and it is the descriptor of noise levels most often used for community noise. As shown in Table F-1 above, the threshold of human hearing is defined as 0 dBA; very quiet conditions (as in a library, for example) are approximately 40 dBA; levels between 50 dBA and 70 dBA define the range of noise levels generated by normal daily activity; levels above 70 dBA would be considered noisy, and then loud, intrusive, and deafening as the scale approaches 130 dBA.

In considering these values, it is important to note that the dBA scale is logarithmic, meaning that each increase of ten dBA describes a doubling of perceived loudness. Thus, the background noise in an office, at

50 dBA, is perceived as twice as loud as a library at 40 dBA. For most people to perceive an increase in noise, it must be at least three dBA. At five dBA, the change will be readily noticeable.

Table F-2

Averag	ge Ability	to Perceiv	e Change:	s in Noi	se Leve	els	
	(15.4)			-		6.0	

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

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

Noise Descriptors Used In Impact Assessment

Because the sound pressure level unit of dBA describes a noise level at just one moment and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level," L_{eq} , can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., one hour, denoted by $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound energy as the actual time-varying sound. The Day-Night Sound Level (i.e., L_{dn}) refers to a 24-hour average noise level with a 10 dB penalty applied to the noise levels during the hours between 10 PM and 7 AM, due to increased sensitivity to noise levels during these hours. Statistical sound level descriptors such as L_1 , L_{10} , L_{50} , L_{90} , and L_x , are used to indicate noise levels that are exceeded one, ten, 50, 90 and x percent of the time, respectively.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or the background level by ten or more decibels. Thus the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements, it has been observed that the L_{eq} is generally between L_{10} and L_{50} .

For purposes of this analysis, the maximum one-hour equivalent sound level (i.e., L_{eq}) has been selected as the noise descriptor to be used in this noise impact evaluation. L_{eq} is the noise descriptor recommended for use in the *CEQR Technical Manual* for vehicular traffic and is used to provide an indication of highest expected sound levels. The one-hour L_{10} is the noise descriptor used in the *CEQR Technical Manual* noise exposure guidance for city environmental impact review classification. The L_{dn} is the noise descriptor used in the *HUD Noise Guidebook* sets exterior noise standards for housing construction projects receiving federal funds.

IV. NOISE STANDARDS AND CRITERIA

New York CEQR Technical Manual Noise Standards

The New York City Noise Control Code, amended in December 2005, contains prohibitions regarding

unreasonable noise and specific noise standards, including plainly audible criteria for specific noise sources. In addition, the amended code specifies that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands at specified receiving properties. The NYC Department of Environmental Protection (DEP) has set external noise exposure standards based on L₁₀ noise levels. These standards are shown on the following page in Table F-3. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable.

Table F-3	
-----------	--

Receptor Type	Time Period	Acceptable General External Exposure	Airport ³ Exposure	Marginally Acceptable General External Exposure	Airport ³ Exposure	Marginally Unacceptable General External Exposure	Airport ³ Exposure	Clearly Unacceptable General External Exposure	Airport ³ Exposure	
 Outdoor area requiring serenity and quiet² 		$L_{10}{\leq}55\;dBA$			-					
2. Hospital, Nursing Home		$L_{10} \leq 55 \; dBA$		55 < L ₁₀ ≤ 65 dBA		$65 < L_{10} \le 80 \text{ dBA}$		L ₁₀ > 80 dBA		
3. Residence, residential	7 AM to 10 PM	$L_{10}{\leq}65\;dBA$	-	65 < L ₁₀ ≤ 70 dBA		$70 < L_{10} \le 80 \text{ dBA}$	Ldn	L ₁₀ > 80 dBA		
hotel or motel	10 PM to 7 AM	$L_{10}{\leq}55dBA$		$55 < L_{10} \le 70$ dBA		$70 < L_{10} \le 80 \text{ dBA}$	70 ≤ Ld	L ₁₀ > 80 dBA		
 School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility 		Same as Residential Day (7 AM-10 PM)	Ldn ≤ 60 dBA	Same as Residential Day (7 AM-10 PM)	60 < Ldn ≤ 65 dBA	Same as Residential Day (7 AM-10 PM)	Ldn ≤ 70 dBA, (II)]	Same as Residential Day (7 AM-10 PM)	Ldn ≤ 75 dBA	
5. Commercial or office	Same as Residential			Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	(1) 65 < 1	Same as Residential Day (7 AM-10 PM)		
 Industrial, public areas only⁴ 	Note 4	Note 4		Note 4		Note 4		Note 4		

Noise Exposure Guidance for Use in City Environmental Impact Review

Notes:

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

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

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

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

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

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

The *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level (see Table F-4). Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential uses and 50 dBA or lower for commercial uses, and are determined based on exterior L₁₀ noise levels.

Required Atte	required Attenuation values to Achieve Acceptable Interior Noise Levels													
		Marginally	Clearly Unacceptable											
Noise Level With Proposed Actions	$70 < L_{10} \le 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \le 78$	$78 < L_{10} \leq 80$	80 < L ₁₀									
Attenuation ^A	(I) 28 dBA	(II) 31 dBA	(III) 33 dBA	(IV) 35 dBA	36 + (L ₁₀ – 80) ^B dBA									

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

Notes:

^A The above composite window-wall attenuation values are for residential dwellings. Retail and office spaces would be five dBA less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.

^B Required attenuation values increase by one dBA increments for L_{10} values greater than 80 dBA. **Source:** DEP.

V. NOISE PREDICTION METHODOLOGY

General Methodology

Future noise levels were calculated using a proportional modeling technique, which was used as a screening tool to estimate changes in noise levels. The proportional modeling technique is an analysis methodology recommended for analysis purposes in the *CEQR Technical Manual*. The noise analysis examined the typical weekday AM (8:00 AM – 9:00 AM), midday (12:00 PM – 1:00 PM), and PM (5:00 PM – 6:00 PM) peak hours. The selected time periods are when development facilitated by the proposed actions would be expected to produce the maximum traffic generation (based on the trip generation located in Appendix 4) and, therefore, result in the maximum potential for significant noise level increases. The methodologies used for the noise analyses are described below.

Proportional Modeling

Proportional modeling was used to determine locations with the potential for having significant noise impacts. Proportional modeling is one of the techniques recommended in the *CEQR Technical Manual* for mobile source analysis.

Using this technique, the prediction of future noise levels where traffic is the dominant noise source is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. The proportional modeling utilized the future (2022) No-Action and With-Action traffic volumes anticipated in the surrounding area, consistent with the vehicle trips generated as a result of the proposed actions (refer to Appendix 4).

Vehicular traffic volumes are then converted into Passenger Car Equivalent (PCE) values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of 13 cars, and one heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. Future noise levels are calculated using the following equation:

 $F NL - E NL = 10 * log_{10} (F PCE / E PCE)$

where:

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

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

To calculate the No-Action noise levels, an annual background growth rate of 0.25 percent for the 2022 build year was applied to the PCE noise values based on counted vehicles.¹ To calculate the 2022 With-Action PCE values, a With-Action trip generation was prepared based on the incremental development program compared to No-Action conditions and included the proposed number of incremental dwelling units (25 DUs), the incremental amount of local retail uses (approximately -886 gsf), and the incremental amount of commercial office uses (approximately -1,005 gsf).² The total incremental vehicles generated per hour in the With-Action condition were estimated at 1, 0, and 0 during the weekday AM, midday, and PM peak hours, respectively. For trip assignment purposes, it was conservatively assumed that all project-generated trips would be analyzed along the two adjacent thoroughfares: 45th Avenue and 23rd Street.

Train Noise Modeling

Pursuant to the guidance of the *CEQR Technical Manual* Section 332.3, "Train Noise," noise from train operations on the elevated tracks of the 7-train (located along 23rd Street adjacent the project area) were calculated using the detailed noise analysis methodology contained in the May 2006 FTA *Transit Noise and Vibration Impact Assessment* guidance manual.

Using this methodology, L_{eq} values are calculated as a function of a number of factors: the distance between the track and the receptor, number of trains, average number of cars per train, train speed, track conditions, and whether the track is on grade or on structure. Values calculated using the FTA methodology may either be used directly or adjusted based on adjustment factors developed to account for site-specific differences between measured and model-predicted values.

The FTA analysis starts with predicting the source noise levels, expressed in terms of Sound Exposure Level (SEL) at a reference distance and a reference speed. These are given in Table 5-1 of the FTA guidance manual and are reproduced in Table F-6, below.

After determining the reference levels for each of the noise sources, the next step is to determine the noise exposure at 50 feet expressed in terms of $L_{eq(h)}$ and L_{dn} . The additional data needed include: number of train passbys during the day (defined as 7 AM to 10 PM) and night (defined as 10 PM to 7 AM); peak hour train volume; number of vehicles per train; maximum speed; guideway configuration; noise barrier location; and location of highway and street grade crossings, if any. These data are used to obtain adjustment factors to calculate $L_{eq(h)}$ and L_{dn} at 50 feet.

¹ The background growth rate is based on information provided in Table 16-4 of the 2014 CEQR Technical Manual.

² Based on T128. Means of Transportation to Work, Queens Census Tract 19, 2012-16 Five Year ACS.

S	ource/Type	Reference Conditions	Reference SEL (SEL _{ref}), dBA
	Locomotives	Diesel-electric, 3000hp, throttle 5	92
Commuter	Locomotives	Electric	90
Rail, At- Grade	Diesel Multiple Unit	Diesel-powered, 1200hp	85
Grade	Horns	Within ¼-mile of grade crossing	110
	Cars	82	
Rail Transit		At-grade, ballast, welded rail	82
Transit Whis	tles/Warning Devices	Within 1/8-mile of grade crossing	93
ACT	Steel Wheel	Aerial, concrete, welded rail	80
AGT	Rubber Tire	Aerial, concrete guideway	78
Monorail		Aerial straddle beam	82
Maglev		Aerial, open guideway	72

Table F-6 Reference SELs at 50 Feet from Track and 50 mph

Source: FTA Transit Noise and Vibration Impact Assessment guidance manual, Table 5-1 (May 2006).

Using the FTA methodology described above, existing noise levels from the elevated tracks were calculated for the weekday daytime (7AM to 10PM) and nighttime (10PM to 7AM) periods for Receptor Location 1a according to the current Metropolitan Transportation Authority (MTA) subway timetable for the 7-train. This included calculating the L_{eq} SEL values at 50 feet and comparing these to the monitored noise levels at Receptor Location 1a, as summarized in Table F-7, below.

As presented in Table F-7, the forecasted L_{eq} and L_{10} values at Receptor Location 1a were higher than the monitored noise levels.

Table F-7

FTA Forecasted Noise Levels For Receptor Location 1a

Receptor	Maximum Monitored Leq	Maximum Monitored L ₁₀	FTA Forecasted Leq	FTA Forecasted L ₁₀
1a	77.16	81.79	78.94	83.57

20 BR 828	MOTIVES'	$L_{eqL}(h) = SEL_{eef} + 10 \log (N_{local}) + K \log \left(\frac{S}{50}\right) + 10 \log (V) - 35.6$
Hourly	L _{eg} at 50 ft:	Cuol.
1.00		Where K = -10 for passenger diesel; = 0 for DMU; = +10 for electric
LOCON	MOTIVE WARNING	
HORN:	S	$L_{mil}(h) = SEL_{mf} + 10\log(V) - 35.6$
Hourby	L _{eo} at 50 ft:	
RAIL	/EHICLES!	L_{mC} (h) = SEL _{nf} + 10 log (N _{nm}) + 20 log ($\frac{S}{2}$) + 10 log (V) - 35.6
		$L_{m/C}(n) = 3LL_{m}f + 10 \log (14_{mm}) + 20 \log (\frac{2}{50}) + 10 \log (4) = 33.0$
Hourly	L _{eg} at 50 ft:	
		use the following adjustments as applicable:
		+ 5 → 10INTED TRACK
		+ 5 → JOINTED TRACK + 3 → EMBEDDED TRACK ON GRADE
		$+4 \rightarrow$ AERIAL STRUCTURE WITH SLAB TRACK
		(except ACT & monorall)
		$-5 \rightarrow$ if a NOISE BARRIER blocks the line of sight
TRANS	SIT WARNING HORNS	$L_{spll}(h) = SEL_{sol} - 10\log\left(\frac{S}{50}\right) + 10\log(V) - 35.6$
		- mil (1) - second - 10 log(50) + 10 log(1) - 35.0
	L _{eq} at 50 ft:	
COMB	INED	$L_{eq}(h) = 10 \log \left[10^{(1+\gamma_0)} + 10^{(1+\gamma_0)} \right]$
Hourly	L _{eg} at 50 ft:	
Dayuna	e L _{eg} at 50 ft:	$L_{eq}(day) = L_{eq}(h)$ $v = v_d$
Nighttic	ne L _{es} at 50 ft:	$L_{eq} (night) = L_{eq} (h) v = v_n$
L _{dn} at 50) ft:	$L_{ds} = 10 \log \left[(15) \times 10^{\binom{L_{q} (dsy)}{0}} + (9) \times 10^{\binom{L_{q} (ug6) + 10}{10}} - 13.8 \right]$
	and the second second second second second	
Nkeine	= average number of locomoti	 A state of the sta
Nam	= average number of cars per t	rain
s	= train speed, in miles per hou	r
v	= average hourly volume of tra	ain traffic, in trains per bour
Va	= average hourly daytime volu	ume of train traffic, in trains per hour
	= number of trains,7am to10p	m
	- 15	
v.	= average hourly nightime vo	lumes of train traffic, in trains per hour
	= number of trains,10 pm to7a	m
	=	

Table F-8

Computation of Noise Exposure at 50 feet for Fixed-Guideway General Assessment

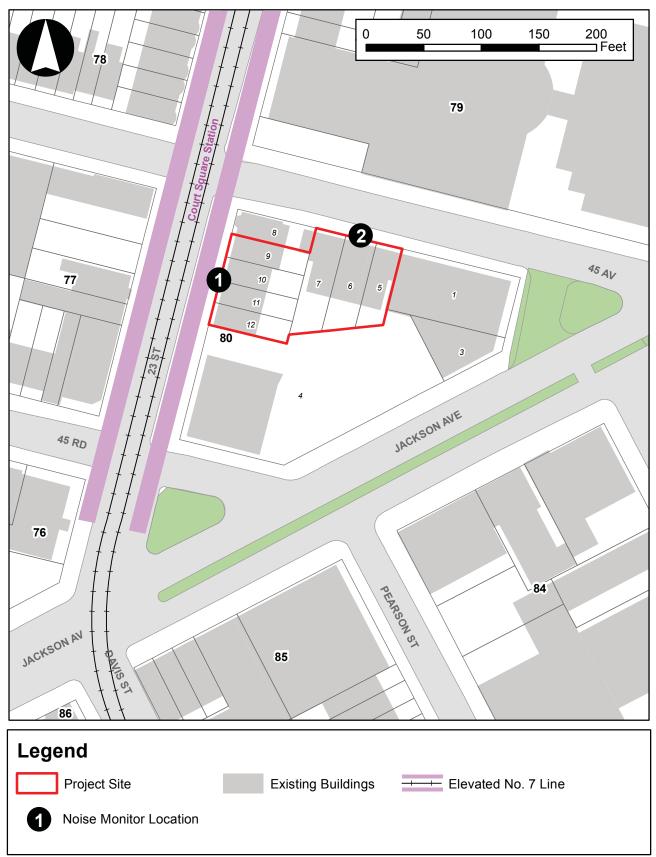
VI. EXISTING NOISE LEVELS

Selection of Noise Receptor Locations

A total of three receptor locations along the project site's frontage were selected for evaluation of noise attenuation requirements. The receptor locations are shown in Figure F-1 and described below:

- Receptor Location 1a Western frontage of the project site (Queens-bound platform of the elevated 7-train's Court Square Station); approximate midpoint of frontage (approximately 60 feet south of 45th Avenue);
- Receptor Location 1b Western frontage of the project site (23rd Street); approximate midpoint of frontage (approximately 60 feet south of 45th Avenue);

Figure F-1 Noise Monitor Locations



Note: Receptor Location 1 represents both Location 1a and Location 1b. Measurements at Location 1a were taken on the Queens-bound 7-train platform at Court Square Station. Measurements at Location 1b were taken at street level along 23rd Street.

 Receptor Location 2 – Northern frontage of the project site (45th Avenue); approximate midpoint of frontage (approximately 102 feet east of 23rd Street).

Noise Monitoring

At each receptor site, existing noise levels were determined by field measurements. At Receptor Locations 1b and 2, 20-minute spot measurements were performed for the following weekday peak periods: AM (8:00AM to 9:00AM), midday (12:00PM-1:00PM), and PM (5:00PM-6:00PM). At Receptor Location 1a (located on the Queens-bound platform of the elevated 7-train's Court Square Station, along the project site's western frontage), one-hour spot measurements were performed, to accurately capture noise related to train operations in the area. Noise monitoring was performed on November 15, 2017. The weather was mostly cloudy and in the mid-40s °F with an average wind speed of 5 miles per hour.

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of 5 feet above the ground surface on a tripod and at least six feet away from any sound-reflecting surfaces to avoid major interference with source sound level that is being measured. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L₁, L₁₀, L₅₀, and L₉₀. A windscreen was used during all sound measurements except for calibration. Only traffic- and train-related noise was measured; noise from other sources (e.g., emergency sirens, aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Noise Receptor Locations

Measured Noise Levels

The results of the 20-minute and one-hour measurements of existing noise levels at the three receptor locations are summarized in Table F-9. As shown in the table, the project site is located in an area with relatively high ambient noise levels. Noise levels at the receptor locations varied and reflect the proximity of receptors to major roadways and elevated rail lines and their respective level of vehicular and train activity. Vehicular traffic was the dominant noise source at Receptor Locations 1b and 2, while elevated subway noise was the dominant noise source at Receptor Locations 1a. Vehicular traffic volumes were counted during the noise recording for each peak period and converted into hourly PCE values.

As shown in Table F-9, the results of the monitoring indicated that noise levels are generally highest during the weekday AM and PM peak periods. The highest L_{10} noise levels were observed at Receptor Location 1b, measuring 85.3 in the weekday PM peak period. Existing L_{10} noise levels at Receptor Location 1a ranged from 80.0 dBA to 81.8 dBA; existing L_{10} noise levels at Receptor Location 1b ranged from 80.2 dBA to 85.3 dBA; and existing L_{10} noise levels at Receptor Location 2 ranged from 68.6 dBA to 71.4 dBA. In terms of *CEQR Technical Manual* criteria, existing noise levels at Receptor Location 2 is in the "Marginally Unacceptable (I)" CEQR Noise Exposure category, and existing noise levels at Receptor Locations 1a and 1b are in the "Clearly Unacceptable" CEQR Noise Exposure category.

Table F-9 Existing Noise Levels (in dBA)

Receptor ¹	Measurement Location	Time	L _{max}	L _{min}	L _{eq}	L1	L ₁₀ ²	L ₅₀	L ₉₀	CEQR Noise Exposure Category
	Queens-bound platform of the	AM	90.9	57.0	77.2	85.9	81.8	71.5	61.8	
Id	1a elevated No.7 subway line's Court Square Station	MD	89.8	53.2	74.7	85.0	80.0	64.5	58.1	Clearly Unacceptable
		PM	92.7	53.8	76.3	85.1	81.0	70.5	62.2	
		AM	92.2	60.8	79.4	89.4	84.0	71.4	64.2	
1b	23 rd Street	MD	91.7	55.7	76.5	88.6	80.2	66.4	59.7	Clearly Unacceptable
		PM	93.6	58.1	80.5	89.3	85.3	75.1	65.8	
		AM	88.5	56.0	67.5	74.6	71.4	64.4	59.2	
2	45 th Avenue	MD	81.7	53.5	65.0	73.7	68.6	60.9	57.0	Marginally Unacceptable (I)
		PM	87.4	52.3	67.3	75.0	70.9	63.9	56.4	

Notes: Field measurements were performed by Philip Habib & Associates on Wednesday, November 15, 2017.

¹ Refer to Figure F-1 for noise monitoring receptor locations.

 2 The highest L_{10} at each receptor location is shown in $\boldsymbol{bold}.$

VII. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION)

Using the methodologies previously described, No-Action noise levels for the 2022 analysis year were calculated at Receptor Locations 1a, 1b, and 2. The projected No-Action values are shown in Table F-11, below.

As presented in Table F-11, in the 2022 No-Action condition, the increase in L_{eq} noise levels at the receptor locations would range from 0.15 dBA to 2.13 dBA. According to the *CEQR Technical Manual*, changes of this magnitude would be barely perceptible. In terms of *CEQR Technical Manual* criteria, No-Action noise levels at Receptor Locations 1a and 1b would remain in the "Clearly Unacceptable" CEQR Noise Exposure category, while No-Action noise levels at Receptor Location 2 would fall in the "Marginally Unacceptable (II)" category.

Receptor	Location	Time	Existing Total PCE	No-Action Total PCE	Existing L _{eq}	No-Action L _{eq}	L _{eq} Change	No-Action L ₁₀₁	CEQR Noise Exposure Category
Queens-bound platform of the elevated No.7 subway line's Court Square Station	AM	N/A ²	N/A ²	77.2	77.2	0.0	81.8		
	MD	N/A ²	N/A ²	74.7	74.7	0.0	80.0	Clearly Unacceptable	
	PM	N/A ²	N/A ²	76.3	76.3	0.0	81.0		
		AM	1005.0	1057.1	79.4	79.6	0.23	84.2	
1b	23 rd Street	MD	1449.0	1498.5	76.5	76.7	0.15	80.4	Clearly Unacceptable
		PM	1200.0	1274.0	80.5	80.7	0.27	85.6	
		AM	150.0	195.5	67.5	68.7	1.16	72.6	
2	45 th Avenue	MD	123.0	160.2	65.0	66.1	1.16	69.7	Marginally Unacceptable (II)
		PM	105.0	171.1	67.3	69.4	2.13	73.0	(1)

Table F-112022 No-Action Condition Noise Levels (in dBA)

Notes:

 $^{\rm 1}$ The highest $L_{\rm 10}$ at each receptor location is shown in **bold**.

 2 N/A = Not Applicable.

No-Action Train Noise Levels

Based on the FTA noise prediction methodology, as no significant changes in train operations are anticipated in the 2022 No-Action condition, the maximum predicted L_{10} noise level would remain at 83.57 dBA at Receptor Location 1a, as under existing conditions (refer to Table F-7).

VIII. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION)

Noise Impact Identification

Using the methodologies previously described, With-Action noise levels were calculated at the three receptor locations for the 2022 analysis year. The With-Action noise levels for all receptors are shown in Table F-12. As presented in Table F-12, the maximum increase in Leq noise levels in the With-Action condition (compared to No-Action conditions) for all receptor sites would be 0.02 dBA (at Receptor Location 2). Changes of this magnitude would be barely perceptible and would not constitute a significant noise impact according to *CEQR Technical Manual* impact criteria. In terms of CEQR noise exposure guidance, future With-Action noise levels at Receptor Locations 1a and 1b would remain in the "Clearly Unacceptable" CEQR Noise Exposure category, and future With-Action noise levels at Receptor Locations 2 would remain in the "Marginally Unacceptable (II)" CEQR Noise Exposure category, as in No-Action conditions.

With-Action Train Noise Levels

Based on the FTA noise prediction methodology, as no significant changes in train operations are anticipated in the 2022 With-Action condition, the maximum predicted L_{10} noise level would remain at 83.57 dBA at Receptor Location 1a, as under existing conditions (refer to Table F-7). Using this methodology, the maximum L_{10} noise levels at Receptor Location 1a are higher than the projected L_{10} noise levels using the proportional modeling technique presented in Table F-12.

Receptor	Location	Time	No-Action Total PCE	With- Action Total PCE	No-Action L _{eq}	With-Action L _{eq}	L _{eq(} Change	With-Action L ₁₀ 1	CEQR Noise Exposure Category
	Queens-bound platform of the	AM	N/A ²	N/A ²	77.2	77.2	0.00	81.8	
1a	elevated No.7 subway line's	MD	N/A ²	N/A ²	74.7	74.7	0.00	80.0	Clearly Unacceptable
	Court Square Station	PM	N/A ²	N/A ²	76.3	76.3	0.00	81.0	Onacceptable
		AM	1057.1	1058.1	79.6	79.6	0.00	84.2	
1b	23 rd Street	MD	1498.5	1498.5	76.7	76.7	0.00	80.4	Clearly Unacceptable
		PM	1274.0	1274.0	80.7	80.7	0.00	85.6	onacceptable
		AM	195.5	196.5	68.7	68.7	0.02	72.6	
2	45 th Avenue	MD	160.2	160.2	66.1	66.1	0.00	69.7	Marginally Unacceptable (II)
		PM	171.1	171.1	69.4	69.4	0.00	73.0	Chacceptable (II)

Table F-12 2022 With-Action Condition Noise Levels (in dBA)

Note:

 $^{\scriptscriptstyle 1}$ The highest $L_{\scriptscriptstyle 10}$ at each receptor location is shown in **bold**.

 2 N/A = Not Applicable.

IX. ATTENUATION REQUIREMENTS

The *CEQR Technical Manual* has set noise attenuation requirements for buildings based on exterior noise levels. Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential uses and 50 dBA or lower for commercial uses, and are determined based on exterior L10 noise levels.

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Typically, a building façade is composed of the wall, windows, and any vents or louvers for HVAC systems in various ratios of area. Since the proposed buildings would most likely be of masonry construction, which typically provides a high level of sound attenuation, the attenuation requirements for HUD or CEQR purposes apply primarily to the windows, but may also represent a composite window/wall attenuation value. Window/wall attenuation can be described in terms of sound transmission class (STC), transmission loss (TL), and outdoor-indoor transmission class (OITC). Although these terms are sometimes used interchangeably, they are unique from each other. Transmission loss refers to how many decibels of sound a façade (wall) or façade accessory (window or door) can stop at a given frequency. The TL for a given construction material varies with the individual frequencies of the noise.

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

The OITC is similar to the STC, except that it is weighted more towards the lower frequencies associated with aircraft, rail, and truck traffic. The OITC classification is defined by the American Society of Testing and Materials (ASTM E1332-90 (Reapproved 2003)) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise. NYCDEP uses the OITC when identifying the required sound attenuation for a façade.

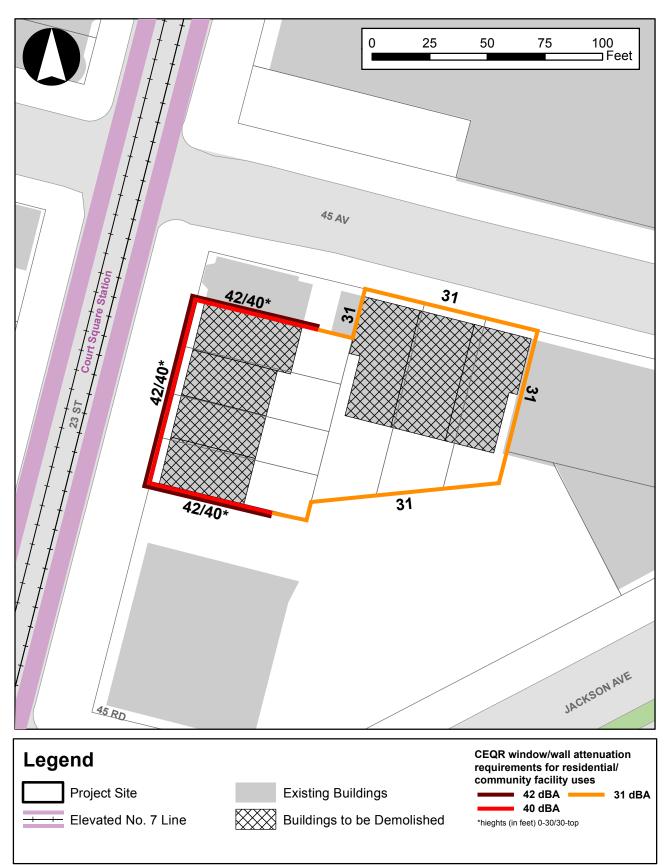
Noise Attenuation Measures

As described above and presented in Table F-12, the maximum predicted With-Action L_{10} noise levels adjacent to the project site are expected to be 85.6 dBA (up to 30 feet in height) and 83.57 dBA (30 feet and above) along the project site's 23rd Street frontage, and 73.0 dBA along the project site's 45th Avenue frontage. Composite building attenuation requirements for each frontage were calculated based on these maximum With-Action L_{10} noise levels and are presented in Table F-13 and shown in Figure F-2.

Table F-13 shows the minimum window/wall attenuation necessary to meet *CEQR Technical Manual* requirements for internal noise levels at each of the noise measurement locations based on the predicted With-Action L₁₀ noise levels discussed above. As presented in Table F-13 and shown in Figure F-2, to satisfy CEQR interior noise level requirements and ensure acceptable interior noise levels for residential/community facility uses, a minimum composite window/wall attenuation rating of 42 dBA for the base 30 feet, and 40 dBA for elevations of 30 feet and above would be required for residential/community facility uses on any western (23rd Street) frontage of the project site, as well as a portion of the site's northern (45th Avenue) and southern (Lot 4) frontages at a depth of 50 feet from 23rd Street; and a minimum composite window/wall attenuation rating of 31 dBA would be required for

Figure F-2

Building Attenuation Requirements



residential/community facility uses on any remaining northern (45th Avenue), eastern (Jackson Avenue), or southern (Jackson Avenue/45th Road) frontages of the site. Future commercial uses on tall frontages of the project site would be required to provide an attenuation rating of 5 dBA less than the residential/community facility requirement.

Project Site	Frontage	Associated Receptor Location ¹	Maximum Calculated Total L10 Noise Level in dBA	CEQR Minimum Required Attenuation in dBA ²
		1b	85.6	42 (up to 30 feet)
	Western Frontage (23 rd Street)	1a	83.57 ³	40 (30 feet to top)
	Eastern Frontage (Jackson Avenue)	2	73.0	31
	Northern Frontage	1b	85.6	42 (up to 30 feet)
Block 80;	(45 th Avenue <u><</u> 50 ft from 23 rd Street)	1a	83.57 ³	40 (30 feet to top)
Lots 5, 6, 7, 9, 10, 11, 12	Northern Frontage (45 th Avenue > 50 ft from 23 rd Street))	2	73.0	31
	Southern Frontage	1b	85.6	42 (up to 30 feet)
	(Jackson Avenue/45 th Road < 50 ft from 23 rd Street)	1a	83.57 ³	40 (30 feet to top)
	Southern Frontage (Jackson Avenue/45 th Road > 50 ft from 23 rd Street)	2	73.0	31

 Table F-13

 Required Attenuation at Noise Measurement Locations (CEQR)

Notes:

¹Receptor locations shown in Figure F-1; required attenuation levels are shown in Figure F-2.

² The above composite window-wall attenuation values are for residential/community facility uses. Commercial office and retail uses would be 5.0 dBA less in each category. All the above categories require a closed window situation and an alternate means of ventilation.

³ Maximum calculated L₁₀ noise levels for Receptor Location 1a based on train noise modeling calculations, as the maximum L₁₀ noise levels predicted using the FTA methodology are higher than those estimated using proportional modeling.

(E) Designation

The composite window/wall noise attenuations described above in Table F-13 would be required through the assignment of an (E) designation for noise to the project site (Tax Block 80, Lots 5, 6, 7, 9, 10, 11, 12) in conjunction with the proposed text amendment. With the implementation of this composite window/wall noise attenuation, no significant adverse noise impacts would occur as a result of the proposed actions. The text of the (E) designation (E-523) for window/wall attenuation would be as follows:

Queens Block 80, Lots 5, 6, 7, 9, 10, 11, 12

To ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum attenuation as shown in Table F-13 in order to maintain an interior noise level not greater than 45 dBA for residential uses or not greater than 50 dBA for commercial uses. To achieve up to 42 dBA of building attenuation, special design features that go beyond the normal double-glazed windows are necessary and may include using specifically designed windows (i.e. windows with small sizes, windows with air gaps, windows with thicker glazing, etc.), and additional building attenuation. In order 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, central air conditioning.

With the implementation of the attenuation levels outlined above and described in Table F-13, the

proposed project would provide sufficient attenuation to achieve *CEQR Technical Manual* interior noise level guidance. Therefore, the proposed project would not result in any significant adverse noise impacts.

X. OTHER NOISE CONCERNS

Mechanical Equipment

It is assumed that building mechanical systems (i.e., heating, ventilation, and air conditioning [HVAC] systems) for all buildings associated with the proposed actions would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the proposed actions would not result in any significant adverse noise impacts related to building mechanical equipment.

Aircraft Noise

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

APPENDIX 1 PROPOSED ZONING TEXT AMENDMENT

COURT SQUARE – BLOCK 3 TEXT AMENDMENT

September 20, 2018

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

ARTICLE XI SPECIAL PURPOSE DISTRICTS

Chapter 7 Special Long Island City Mixed Use District

* * *

117-40 COURT SQUARE SUBDISTRICT

117-421 Special bulk regulations

* * *

*

*

(c) The height and setback regulations of the underlying C5-3 District shall apply, except that:

no #building or other structure# shall exceed a height of 85 feet above the
 #base plane# within the area bounded by 23rd Street, 44th Road, a line 60 feet
 east of and parallel to 23rd Street, and a line 75 feet north of and parallel to 45th
 Road 45th Avenue; and

(2) on Blocks 1 and 3, the #street wall# of a #building or other structure# shall be located on the #street line# or sidewalk widening line, where applicable, and extend along the entire #street# frontage of the #zoning lot# up to at least a height of 60 feet and a maximum height of 85 feet before setback, except any portion of a #building# on Block 3 fronting upon 23rd Street may rise to a maximum height of 125 feet before setback. Recesses, not to exceed three feet in depth from the #street line#, shall be permitted on the ground floor where required to provide access to the #building#. Above the level of the second #story#, up to 30 percent of the #aggregate width of street walls# may be located beyond the #street line#, provided no such recesses are within 15 feet of an adjacent #building#.

Above a height of 85 feet the highest applicable maximum #street wall# height, the underlying height and setback regulations shall apply. However, the underlying tower regulations shall be modified:

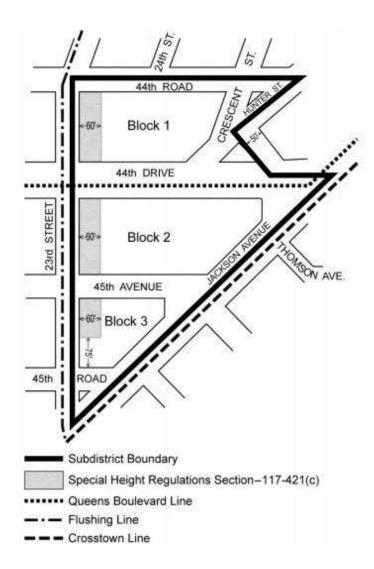
- to permit portions of #buildings# that exceed a height of 85 feet to be set back at least five feet from a #wide street line#, provided no portion of such #building# that exceeds a height of 85 feet is located within 15 feet of a #side lot line#., and
- (ii) so that the provisions of Section 33-451 (In certain specified Commercial Districts) regulating the aggregate area of a tower within 50 feet of a #narrow street# shall not apply to any #building# or portion of such #building# on Block 3 fronting upon 45th Avenue.

The provisions of this paragraph (c)(2) shall not apply to #enlargements# on #zoning lots# existing on June 30, 2009, where such #zoning lot# includes an existing #building# to remain with at least 300,000 square feet of #floor area#.

* * *

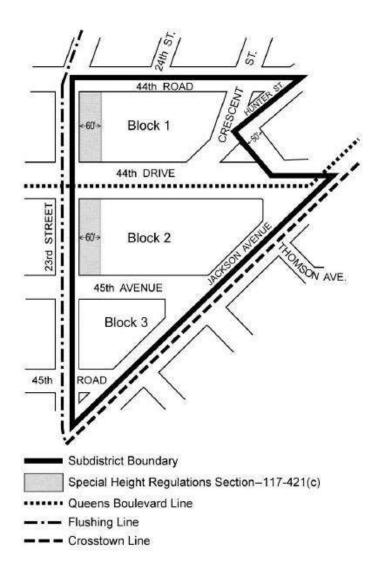
Appendix B Court Square Subdistrict Plan Map and Description of Improvements

(EXISTING)



Appendix B Court Square Subdistrict Plan Map and Description of Improvements

(PROPOSED)



APPENDIX 2 LPC CORRESPONDENCE



ENVIRONMENTAL REVIEW

Project number:DEPARTMENT OF CITY PLANNING / LA-CEQR-QProject:COURT SQUARE 45 AVENUE EASDate received:4/18/2018

Properties with no Architectural or Archaeological significance:

- 1) ADDRESS: 23-16 45 Avenue, BBL: 4000800005
- 2) ADDRESS: 23-14 45 Avenue, BBL: 4000800006
- 3) ADDRESS: 23-10 45 Avenue, BBL: 4000800007
- 4) ADDRESS: 45-03 23 Street, BBL: 4000800009
- 5) ADDRESS: 45-05 23 Street, BBL: 4000800010
- 6) ADDRESS: 45-07 23 Street, BBL: 4000800011
- 7) ADDRESS: 45-09 23 Street, BBL: 4000800012

LPC AND NR LISTED LISTED IN RADIUS: HUNTERS POINT HD AND NEW YORK STATE SUPREME COURTHOUSE; NR LISTED: COURT SQUARE STATION.

Ginin SanTucci

4/23/2018

DATE

SIGNATURE Gina Santucci, Environmental Review Coordinator

File Name: 33274_FSO_DNP_04232018.doc



1 Centre Street 9th Floor North New York, NY 10007 Voice (212)-669-7700 Fax (212)-669-7960 http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number:DEPARTMENT OF CITY PLANNING / 77DCP504QProject:COURT SQUARE 45 AVENUE EASDate received:8/13/2018

Properties with no Architectural or Archaeological significance:

- 1) ADDRESS: 23-14 45 Avenue, BBL: 4000800006
- 2) ADDRESS: 23-10 45 Avenue, BBL: 4000800007
- 3) ADDRESS: 45-03 23 Street, BBL: 4000800009
- 4) ADDRESS: 45-05 23 Street, BBL: 4000800010
- 5) ADDRESS: 45-07 23 Street, BBL: 4000800011
- 6) ADDRESS: 45-09 23 Street, BBL: 4000800012
- 7) ADDRESS: 24-19 JACKSON AVENUE, BBL: 4000800004
- 8) ADDRESS: 23-16 45 Avenue, BBL: 4000800005

The LPC is in receipt of the EAS for the Court Square Block 3 Text Amendments, including the shadow study and the addition of lot 4. There are no additional concerns.

LPC AND NR LISTED IN RADIUS: HUNTERS POINT HD AND NEW YORK STATE SUPREME COURTHOUSE; NR LISTED: COURT SQUARE STATION.

Ginin SanTucci

9/10/2018

DATE

SIGNATURE Gina Santucci, Environmental Review Coordinator

File Name: 33274_FSO_GS_09102018.doc

APPENDIX 3 DEP CORRESPONDENCE AND PHASE I ESA EXECUTIVE SUMMARIES

Phase I Environmental Site Assessment

23-10 45th Ave; Block 80, Lot 5 and 6

23-14 and 13-26 45th Ave Long Island City, New York

EBI Project No. 1116006739

December 13, 2016



Prepared for:

Tavros Holdings LLC Court Square 45th Ave LLC 27 West 24th Street, New York, NY 10010



December 13, 2016

Court Square 45th Ave LLC c/o Tavros Holdings LLC 27 West 24th Street, New York, NY 10010

Subject: Phase I Environmental Site Assessment 23-14 and 13-26 45th Ave, Long Island City, New York EBI Project No. 1116006739

To Whom It May Concern:

Attached please find our *Phase I Environmental Site Assessment* (the report) for the above-mentioned asset (the Subject Property). During the survey and research, our surveyor met with agents representing the Subject Property, or agents of the owner, and reviewed the Subject Property and its history. The report was completed according to the terms and conditions authorized by you. This report has been completed in general conformance with the ASTM Standard E 1527-13.

The purpose of this report is to acquire environmental information, observe the general condition and maintenance status of the Subject Property, to suggest remediation and/or maintenance practices considered customary for the Subject Property to continue in its current operation, compared to properties of similar age and condition, and to identify recognized environmental conditions in connection with the Subject Property described in this report.

Reliance on the report and the information contained herein shall mean (i) the report may be relied upon by a lender to be selected by *Court Square 45th Ave LLC*, in determining whether to make a loan evidenced by a note secured by the Subject Property ("the Mortgage Loan"); (ii) the report may be relied upon by any purchaser in determining whether to purchase the Mortgage Loan (but not the Subject Property) from that lender, or an interest in the Mortgage Loan or securities backed or secured by the Mortgage Loan, and any rating agency rating securities representing an interest in the Mortgage Loan or backed or secured by the Mortgage Loan; (iii) the report may be referred to in and included, in whole or in part, with materials offering for sale the Mortgage Loan or an interest in the Mortgage Loan or securities backed or secured by the Mortgage Loan; (iv) the report speaks only as of its date in the absence of a specific written update of the report signed and delivered by EBI Consulting.

There are no intended or unintended third party beneficiaries to this report, except as expressly stated herein.

EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the report or on the closing of any business transaction.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Thank you very much for the opportunity to provide environmental consulting services to *Court Square 45th Ave LLC*. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted, **EBI CONSULTING**

Scott Barta Author / Staff Scientist Emily Celano Reviewer / Program Manager ecelano@ebiconsulting.com 781.418.2336

EXECUTIVE SUMMARY

At the request of Court Square 45th Ave LLC, EBI has performed a Phase I Environmental Site Assessment (ESA) of the property located at 23-14 and 13-26 45th Ave in Long Island City, New York, herein referred to as the Subject Property. The main objective of this ESA was to identify *recognized environmental conditions* in connection with the Subject Property, defined in ASTM Practice E 1527-13 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. De minimis conditions are not recognized environmental conditions. This ESA also includes a preliminary evaluation of certain potential environmental conditions that are outside the scope of ASTM Practice E 1527-13.

The Subject Property includes two contiguous irregular-shaped parcels, cumulatively totaling approximately 0.08 acres. The Subject Property is currently improved with two, three-story residential multifamily apartment buildings. The buildings consist of three tenant spaces each and amass a gross area of approximately 7,500± square feet. Each structure was reportedly constructed in 1911 and both contain a basement.

At the time of the inspection, the Subject Property was observed as a residential property. No industrial or manufacturing activities were observed at the Subject Property during this assessment.

Below is the Assessment Summary Table presenting our recommended actions for the Subject Property. EBI's Findings and Opinions are presented in Section 8.0, and recommendations for further action or investigation are presented in Section 9.0.

							-				
						IARY TABI					
						80, LOT 5					
		23-14 AND	13-26	<u>45тн А</u>	/E, LONC	S ISLAND	CITY, NEW YORK				
Assessment Component	NENT SECTION FURTHER REC HREC CREC OTHER RECOMMENDED ACTION COST										
Current Occupants/ Operations	2.3, 5.0						No Further Action				
Historical Review	4.3	\square					No Further Action				
Regulatory Review	4.1	\boxtimes					No Further Action				
Potential Off-site Sources	2.5, 4.1						No Further Action				
Hazardous Substances / Petroleum Products	5.2						No Further Action				
Other Suspect Containers	5.2						No Further Action				
Waste Generation	5.3						No Further Action				
USTs	5.4						No Further Action				
ASTs	5.4						No Further Action				
PCBs	5.5						No Further Action				

Phase I Environmental Site Assessment

23-10 45th Avenue Long Island City, New York

EBI Project No. 1116004792

September 26, 2016



Prepared for:

Court Square 45th Ave LLC c/o Tavros Holdings LLC 27 West 24th Street, Suite 702 New York, NY 10010





21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com

September 26, 2016

Court Square 45th Ave LLC c/o Tavros Holdings LLC 27 West 24th Street, Suite 702 New York, NY 10010

Subject: Phase I Environmental Site Assessment 23-10 45th Avenue, Long Island City, New York EBI Project No. 1116004792

To Whom It May Concern:

Attached please find our *Phase I Environmental Site Assessment* (the report) for the above-mentioned asset (the Subject Property). During the survey and research, our surveyor met with agents representing the Subject Property, or agents of the owner, and reviewed the Subject Property and its history. The report was completed according to the terms and conditions authorized by you. This report has been completed in general conformance with the ASTM Standard E 1527-13.

The purpose of this report is to acquire environmental information, observe the general condition and maintenance status of the Subject Property, to suggest remediation and/or maintenance practices considered customary for the Subject Property to continue in its current operation, compared to properties of similar age and condition, and to identify recognized environmental conditions in connection with the Subject Property described in this report.

Reliance on the report and the information contained herein shall mean (i) the report may be relied upon by a lender to be selected by *Court Square 45th Ave LLC*, in determining whether to make a loan evidenced by a note secured by the Subject Property ("the Mortgage Loan"); (ii) the report may be relied upon by any purchaser in determining whether to purchase the Mortgage Loan (but not the Subject Property) from that lender, or an interest in the Mortgage Loan or securities backed or secured by the Mortgage Loan, and any rating agency rating securities representing an interest in the Mortgage Loan or in part, with materials offering for sale the Mortgage Loan or an interest in the Mortgage Loan; (iv) the report speaks only as of its date in the absence of a specific written update of the report signed and delivered by EBI Consulting.

There are no intended or unintended third party beneficiaries to this report, except as expressly stated herein.

EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the report or on the closing of any business transaction.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Thank you very much for the opportunity to provide environmental consulting services to *Court Square 45th Ave LLC*. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted, **EBI CONSULTING**

Jessica Barbere Author / Project Scientist Jon Hickey Reviewer / Program Manager jhickey@ebiconsulting.com 917.804.5470

EXECUTIVE SUMMARY

At the request of Court Square 45th Ave LLC, EBI has performed a Phase I Environmental Site Assessment (ESA) of the property located at 23-10 45th Avenue in Long Island City, New York, herein referred to as the Subject Property. The main objective of this ESA was to identify *recognized environmental conditions* in connection with the Subject Property, defined in ASTM Practice E 1527-13 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. De minimis conditions are not recognized environmental conditions. This ESA also includes a preliminary evaluation of certain potential environmental conditions that are outside the scope of ASTM Practice E 1527-13.

The Subject Property includes one irregular-shaped parcel, totaling approximately 0.05 acres. The Subject Property is currently improved with a three-story multi-family residential building, with a gross area of approximately 3,600 square feet. A basement is located beneath the Subject Property building. The existing improvements were reportedly constructed in 1911. At the time of assessment, the Subject Property was partially occupied by the Kupferman family. The first and second floors were unoccupied at the time of assessment. There are currently no commercial or industrial operations conducted at the Subject Property.

Below is the Assessment Summary Table presenting our recommended actions for the Subject Property. EBI's Findings and Opinions are presented in Section 8.0, and recommendations for further action or investigation are presented in Section 9.0.

Phase I Environmental Site Assessment

Block 80 Lot 9 - 45-03 23rd Street

45-03 23rd Street Long Island City, New York

EBI Project No. 1115008019

November 19, 2015



Prepared for:

Tavros Holdings LLC 524 Broadway, 3rd Floor New York, NY 10012





21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com

November 19, 2015

Mr. Scott Hupe Tavros Holdings LLC 524 Broadway, 3rd Floor New York, NY 10012

Subject: Phase I Environmental Site Assessment Block 80 Lot 9 - 45-03 23rd Street 45-03 23rd Street, Long Island City, New York EBI Project No. 1115008019

Dear Mr. Hupe:

Attached please find our *Phase I Environmental Site Assessment* (the report) for the above-mentioned asset (the Subject Property). During the survey and research, our surveyor met with agents representing the Subject Property, or agents of the owner, and reviewed the Subject Property and its history. The report was completed according to the terms and conditions authorized by you. This report has been completed in general conformance with the ASTM Standard E 1527-13.

The purpose of this report is to acquire environmental information, observe the general condition and maintenance status of the Subject Property, to suggest remediation and/or maintenance practices considered customary for the Subject Property to continue in its current operation, compared to properties of similar age and condition, and to identify recognized environmental conditions in connection with the Subject Property described in this report.

Reliance on the report and the information contained herein shall mean (i) the report may be relied upon by a lender to be selected by *Tavros Holdings LLC*, in determining whether to make a loan evidenced by a note secured by the Subject Property ("the Mortgage Loan"); (ii) the report may be relied upon by any purchaser in determining whether to purchase the Mortgage Loan (but not the Subject Property) from that lender, or an interest in the Mortgage Loan or securities backed or secured by the Mortgage Loan, and any rating agency rating securities representing an interest in the Mortgage Loan or backed or secured by the Mortgage Loan; (iii) the report may be referred to in and included, in whole or in part, with materials offering for sale the Mortgage Loan or an interest in the Mortgage Loan or securities backed or secured by the report speaks only as of its date in the absence of a specific written update of the report signed and delivered by EBI Consulting.

There are no intended or unintended third party beneficiaries to this report, except as expressly stated herein.

EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the report or on the closing of any business transaction.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Thank you very much for the opportunity to provide environmental consulting services to *Tavros Holdings LLC*. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted, **EBI CONSULTING**

Tayyaba Nasar Author / Project Scientist Jennifer Callaghan Reviewer / Program Manager jcallaghan@ebiconsulting.com 484.680.2757

EXECUTIVE SUMMARY

At the request of Tavros Holdings LLC, EBI has performed a Phase I Environmental Site Assessment (ESA) of the property located at 45-03 23rd Street in Long Island City, New York, herein referred to as the Subject Property. The main objective of this ESA was to identify *recognized environmental conditions* in connection with the Subject Property, defined in ASTM Practice E 1527-13 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. De minimis conditions are not recognized environmental conditions. This ESA also includes a preliminary evaluation of certain potential environmental conditions that are outside the scope of ASTM Practice E 1527-13.

The Subject Property includes one rectangular-shaped parcel, totaling approximately 0.029 acres. The Subject Property is currently improved with a two-story, multi-family walk-up residential building, with a gross area of approximately 2,400± square feet. There is a basement present beneath the existing structure. The existing improvements were reportedly constructed in 1880.

At the time of assessment, the Subject Property was occupied by two residential units. One vacant tenant space was identified at the time of assessment. There are currently no manufacturing or industrial operations conducted at the Subject Property. The Subject Property is reportedly planned to be razed and redeveloped.

Below is the Assessment Summary Table presenting our recommended actions for the Subject Property. EBI's Findings and Opinions are presented in Section 8.0, and recommendations for further action or investigation are presented in Section 9.0.

Phase I Environmental Site Assessment

45-05 23rd Street;Block 80, Lot 10 Long Island City, New York

EBI Project No. 1116004785

September 19, 2016



Prepared for:

Court Square 45th Ave LLC C/O Tavros 27 West 24th Street, suite 702 New York, NY 10010





21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com

September 19, 2016

To Whom It May Concern Court Square 45th Ave LLC C/O Tavros 27 West 24th Street, suite 702 New York, NY 10010

Subject: Phase I Environmental Site Assessment 45-05 23rd Street;Block 80, Lot 10, Long Island City, New York EBI Project No. 1116004785

Dear To Whom It May Concern:

Attached please find our *Phase I Environmental Site Assessment* (the report) for the above-mentioned asset (the Subject Property). During the survey and research, our surveyor met with agents representing the Subject Property, or agents of the owner, and reviewed the Subject Property and its history. The report was completed according to the terms and conditions authorized by you. This report has been completed in general conformance with the ASTM Standard E 1527-13.

The purpose of this report is to acquire environmental information, observe the general condition and maintenance status of the Subject Property, to suggest remediation and/or maintenance practices considered customary for the Subject Property to continue in its current operation, compared to properties of similar age and condition, and to identify recognized environmental conditions in connection with the Subject Property described in this report.

Reliance on the report and the information contained herein shall mean (i) the report may be relied upon by a lender to be selected by *Court Square 45th Ave LLC*, in determining whether to make a loan evidenced by a note secured by the Subject Property ("the Mortgage Loan"); (ii) the report may be relied upon by any purchaser in determining whether to purchase the Mortgage Loan (but not the Subject Property) from that lender, or an interest in the Mortgage Loan or securities backed or secured by the Mortgage Loan, and any rating agency rating securities representing an interest in the Mortgage Loan or in part, with materials offering for sale the Mortgage Loan or an interest in the Mortgage Loan; (iv) the report speaks only as of its date in the absence of a specific written update of the report signed and delivered by EBI Consulting.

There are no intended or unintended third party beneficiaries to this report, except as expressly stated herein.

EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the report or on the closing of any business transaction.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Thank you very much for the opportunity to provide environmental consulting services to *Court Square 45th Ave LLC*. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted, **EBI CONSULTING**

isias Borber

Jessica Barbere Author / Project Scientist

handy latter

Jennifer Callaghan Reviewer / Program Manager jcallaghan@ebiconsulting.com

484.680.2757

EXECUTIVE SUMMARY

At the request of Court Square 45th Ave LLC, EBI has performed a Phase I Environmental Site Assessment (ESA) of the property located at 45-05 23rd Street;Block 80, Lot 10 in Long Island City, New York, herein referred to as the Subject Property. The main objective of this ESA was to identify *recognized environmental conditions* in connection with the Subject Property, defined in ASTM Practice E 1527-13 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. De minimis conditions are not recognized environmental conditions. This ESA also includes a preliminary evaluation of certain potential environmental conditions that are outside the scope of ASTM Practice E 1527-13.

The Subject Property includes one rectangular-shaped parcel, totaling approximately 0.03 acres. The Subject Property is currently improved with a two-story, two-family residential building, with a gross area of approximately 2,400 square feet. A basement apartment unit is located beneath the Subject Property building. The existing improvements were reportedly constructed in 1880.

At the time of assessment, the Subject Property was fully occupied by the Gaudiello family. There are currently no commercial or industrial operations conducted at the Subject Property.

Below is the Assessment Summary Table presenting our recommended actions for the Subject Property. EBI's Findings and Opinions are presented in Section 8.0, and recommendations for further action or investigation are presented in Section 9.0.

Phase I Environmental Site Assessment

Block 80, Lots 11 & 12 - 45-07 and 45-09 23rd Street

45-07 and 45-09 23rd Street Long Island City, New York

EBI Project No. 1115008020

November 19, 2015



Prepared for:

Tavros Holdings LLC 524 Broadway, 3rd Floor New York, NY 10012





21 B Street Burlington, MA 01803 Tel: (781) 273-2500 Fax: (781) 273-3311 www.ebiconsulting.com

November 19, 2015

Mr. Scott Hupe Tavros Holdings LLC 524 Broadway, 3rd Floor New York, NY 10012

Subject: Phase I Environmental Site Assessment Block 80, Lots 11 & 12 - 45-07 and 45-09 23rd Street 45-07 and 45-09 23rd Street, Long Island City, New York EBI Project No. 1115008020

Dear Mr. Hupe:

Attached please find our *Phase I Environmental Site Assessment* (the report) for the above-mentioned asset (the Subject Property). During the survey and research, our surveyor met with agents representing the Subject Property, or agents of the owner, and reviewed the Subject Property and its history. The report was completed according to the terms and conditions authorized by you. This report has been completed in general conformance with the ASTM Standard E 1527-13.

The purpose of this report is to acquire environmental information, observe the general condition and maintenance status of the Subject Property, to suggest remediation and/or maintenance practices considered customary for the Subject Property to continue in its current operation, compared to properties of similar age and condition, and to identify recognized environmental conditions in connection with the Subject Property described in this report.

Reliance on the report and the information contained herein shall mean (i) the report may be relied upon by a lender to be selected by *Tavros Holdings LLC*, in determining whether to make a loan evidenced by a note secured by the Subject Property ("the Mortgage Loan"); (ii) the report may be relied upon by any purchaser in determining whether to purchase the Mortgage Loan (but not the Subject Property) from that lender, or an interest in the Mortgage Loan or securities backed or secured by the Mortgage Loan, and any rating agency rating securities representing an interest in the Mortgage Loan or backed or secured by the Mortgage Loan; (iii) the report may be referred to in and included, in whole or in part, with materials offering for sale the Mortgage Loan or an interest in the Mortgage Loan; (iv) the report speaks only as of its date in the absence of a specific written update of the report signed and delivered by EBI Consulting.

There are no intended or unintended third party beneficiaries to this report, except as expressly stated herein.

EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the report or on the closing of any business transaction.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Thank you very much for the opportunity to provide environmental consulting services to *Tavros Holdings LLC*. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted, **EBI CONSULTING**

Payyaba Nasag

Tayyaba Nasar Author / Project Scientist

hanty latter

Jennifer Callaghan Reviewer / Program Manager jcallaghan@ebiconsulting.com

484.680.2757

EXECUTIVE SUMMARY

At the request of Tavros Holdings LLC, EBI has performed a Phase I Environmental Site Assessment (ESA) of the property located at 45-07 and 45-09 23rd Street in Long Island City, New York, herein referred to as the Subject Property. The main objective of this ESA was to identify recognized environmental conditions in connection with the Subject Property, defined in ASTM Practice E 1527-13 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. De minimis conditions are not recognized environmental conditions. This ESA also includes a preliminary evaluation of certain potential environmental conditions that are outside the scope of ASTM Practice E 1527-13.

The Subject Property includes two contiguous rectangular-shaped parcels, cumulatively totaling approximately 0.058 acres. The Subject Property is currently improved with two two-story, multi-family residential buildings, with a gross area of approximately 4,540± square feet. There are basements present beneath each of the existing structures. The existing improvements were reportedly constructed circa 1880.

At the time of assessment, the Subject Property was occupied by three residential units at 45-09 23rd Street and one residential unit at 45-07 23rd Street. Two vacant tenant spaces were identified at 45-07 23rd Street at the time of assessment. There are currently no manufacturing or industrial operations conducted at the Subject Property. The Subject Property is reportedly planned to be razed and redeveloped.

Below is the Assessment Summary Table presenting our recommended actions for the Subject Property. EBI's Findings and Opinions are presented in Section 8.0, and recommendations for further action or investigation are presented in Section 9.0.

Subject: RE: Industrial Source Permits - 45th Avenue Queens
From: "Cofield, Brenda" <BCofield@dep.nyc.gov>
Date: 10/23/2018 10:03 AM
To: Michael Curley <mcurley@phaeng.com>, "Narvaez, Angel" <AngelN@dep.nyc.gov>
CC: "Liang, Kit Y." <KLiang@dep.nyc.gov>

Good Morning Michael,

Below, please find my findings regarding the searches you requested. Also attached is all documentation we have on the expired permit of CA2306-92.

<u>BLOCK</u>	LOT	<u>Column1</u>	ADDRESS	INDUSTRIAL INSTALLATION NUMBERS
45th	Avenue	Queer	ns, NY	
76	40		21-26 45 ROAD	No Record
76	39		21-28 45 ROAD	No Record
77	12		21-29 45 ROAD	CA230692 - This was a Registration which expired 7/15/95; because it was a Registration, there is no folder.
77	35		21-50 45 AVENUE	No Record
78	37		21-48 44 DRIVE	No Record
85	17		45-31 DAVIS STREET	No Record
85	52		45-24 PEARSON STREET	No Record
85	13		45-17 DAVIS STREET	No Record
437	13		44-45 23 STREET	No Record
438	3		21-51 44 DRIVE	No Record
80	4		23-03 45 ROAD	Boiler was Cancelled in 2009 - No Record
80	5		WAS NOT PROVIDED	No Record
80	6		WAS NOT PROVIDED	No Record
80	7		WAS NOT PROVIDED	No Record
80	9		WAS NOT PROVIDED	No Record
80	10		WAS NOT PROVIDED	No Record
80	11		WAS NOT PROVIDED	No Record
80	12		WAS NOT PROVIDED	No Record

From: Michael Curley <mcurley@phaeng.com>

Sent: Friday, October 19, 2018 10:45 AM

To: Cofield, Brenda <BCofield@dep.nyc.gov>; Narvaez, Angel <AngelN@dep.nyc.gov>

Cc: Liang, Kit Y. <KLiang@dep.nyc.gov>

Subject: Re: Industrial Source Permits - 45th Avenue Queens

Hi Angel and Brenda,

Our project site has changed slightly and now includes an additional tax lot, which alters our search radius slightly. The new project site is comprised of Queens Tax Block 80, Lots 4, 5, 6, 7, 9, 10, 11, and 12. Would it be possible for you to

• 916/92 BUREAU OF AIR RESOURCES		ON (718) 595-3855
· · · · · · · · · · · · · · · · · · ·	ION FOR REGISTRATION IONS ON REVERSE SIDE)	A 2306 92K
FEE ENCLOSED: \$ 110.00	4XSAC	(AGENCY USE ONLY)
PREMISE ADDRESS: 21-29 45TH ROAD		QUEENS
· · · · · · · · · · · · · · · · · · ·		(BORO) ·
NUMBER OF APTS. OR TOTAL SQUARE FEET OF		<u> </u>
BOILER OR HOT WATER HEATER MARE: COLUMN	SIA (NEW) BURNER MAKE	ECONOMITE(NEW)
MODEL CT-	10 NODE	L: F400N33
MAX. OUTPUT, FIRING RATE: 420,0	00 MAX OUTPUT:	336,000
MAX. FIRING RATE: (BTU'S HOUR)	OR 420	(BIU'S BOUR)
(GALLONS PER BOU	R) (CUBIC FEET PER	HOUR) F GRAN
FUEL TYPE: #2 OIL NATURAL GAS	<u> </u>	
NEW X OR EXISTING UNIT?	**	E HERE
IS THIS EQUIPMENT A REPLACEMENT FOR EQU	IPMENT PRESENTLY REGISTERED	? YES NO X
IP YES, WHAT IS THE INSTALLATION NUMBER	OF THE EQUIPMENT IT IS REP.	
AVERAGE USE OF THIS BOILER/BOT WATER HE	ATER: 3 6 5 HR/DAY DAY/WK W	52 R/YEAR
IDENTIFY BY INSTALLATION NUMBER, IF KNO	N, OTHER COMBUSTION BOULPM	ENT CONNECTED TO CHLIMEY:
CA N/A CA N/A	CA N/A OR MAKE	N/A MODEL N/A
	/*********************************	
		•
I HEREBY AFFIRM UNDER PENALTY OF PERJUR TRUE TO THE BEST OF MY KNOWLEDGE AND BE ACCORDANCE WITH THE REQUIREMENTS OF THE NEW YORK CITY ADMINISTRATIVE CODE, AND A RECOGNIZE THAT FALSE STATEMENTS ARE PUN OF THE AIR POLLUTION CONTROL CODE AND S	LIEF AND THAT THE EQUIPMENT AIR POLLUTION CONTROL CODE APPROPRIATE REQUIREMENTS OF ISHABLE AS A MISDEMEANOR PU	WILL BE OPERATED IN , CHAPTER 1 OF TITLE 24, OTHER AGENCIES. I RSUANT TO SECTION 24-190
- 11-		· ·
	EL HO FASHIONS INC. R NAME (PLEASE PRINT)	7/9/92
21-27 45TH ROAD, LIC.NY 11101		
OWNER ADDRESS		8) 937-5695 PHONE RUMBER
AGENT FOR OWNER:		
NEAL M.RUDIKOFF, P.E. P.O. BOX 350	Fee \$ 110 Receipt	No
PLAINVIEW, N.Y. 11803	D. A. R. Clerk	156610
Harris Daw		



THE CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Environmental Compliance 59-17 Junction Blvd. 9th Floor, Flushing, NY 11373 Records Control (718) 595-3855 APPLICATION FOR REGISTRATION FOSSIL FUEL BURNING EQUIPMENT APC 501

APPLICATION ID: CA230692 REQUEST ID: 56398 UPDATED DATE: 11/15/2016

	wner / Representativ me / If individual then O			Business Repres	acontathes i Am	nto Nome		Telephone		
WEI-HO FASHIO		wher's Manie				516 932-330				
	ss / Owner's Address		Telephone	NEAL M.RUDIKOFF P.E. 516 932-33 Business Representative / Agent's Address						
21-2745 ROAD			718 937-5695							
City / Borough	Email Address	State	Zip	City / Borough	Email	Address	State	Zip		
L.I.C.		NY	11101							
Type of Ownership:	None			Title:	None					
Premise Infor	mation(Location wh	ere equipm	ent is located)	:						
Building Owner's	Name			Owner's Teleph	one	Email /	Address			
WEI-HO FASHION	IS INC.			718 937-5695						
Building Owner's	Address			City / Borough		State		Zip		
21-2945 ROAD				L.I.C.		NY		11101		
Premise House #	Premise Street Name	Premise	Name (if Any)		Borough			Zip		
21-29	45 ROAD				Queens			11101		
Floor	Room Number (If Any) BIN	Block	Lot	;# of Apartmer	nts Total S area				
		000589	00077	0012						
Fee Exemptio	n									
Tax Exempt	Tax Exempt Agency			Fee Walver	Fee Walver I	Reason				
No				Νο						
Chimney Infor	mation									
Height (feet)	Diam	eter (Inches)		Radial Distance	Above (feet)	Radial	Distance Belo	w (feet)		
LIST ALL UNITS (CONNECTED / VENTING	TO SAME CHI	WNEY USE ADDIT	IONAL SHEETS IF	NECESSARY					
Boiler										
Manufacturer		Model		Input Re	ating	Firing Rate	Gros	s Output		
(NEW) COLUMBIA	#CT-10	(NEW) COLUN	MBIA #CT-10	0		420	4200			
Fuel Type 1		Fuel Type 1 H		Fuel Type 1 Days/Week				Identical Units		
Natural Gas		3		6		52	1			
Fuel Type 2		Fuel Type 2 H	ours/day	Fuel Ty Days/We		Fuel Type 2 Weeks/Yea				
None										
BURNER: Manufacturer		Model			is Replacen	nent	Installation #	(CA/CB#)		

FOR GENERAL INFORMATION, QUESTIONS, AND INQUIRIES: Please visit our website at www.nyc.gov/dep or call 311



THE CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Environmental Compliance 59-17 Junction Blvd. 9th Floor, Flushing, NY 11373 Records Control (718) 595-3855 APPLICATION FOR REGISTRATION FOSSIL FUEL BURNING EQUIPMENT APC 501 Michael Gilsenan Assistant Commissioner Environmental Compliance

APPLICATION ID: CA230692 REQUEST ID: 58396 UPDATED DATE: 11/15/2016

Additional Equip	ment		A CONTRACT OF A CONTRACT OF
Make	Model	Description	: input (BTU/hr)
Below is a summ	ary of the changes to your application:		
Box No.	Field Name	Old Value	Proposed Value
1B	Equipment Owner Email	r	
1D	Equipment Owner Fax		
1F	Equipment Owner Floor/ Suite No.		
2C	Equipment Representative Email		
2E	Equipment Representative Fax		
2F	Equipment Representative Address		
2F	Equipment Representative Address		
2G	Equipment Representative Borough/ City		
2H	Equipment Representative State		
21	Equipment Representative Zip Code		
3C	Premises Owner Address	21-27	21-29
3H	Premises Owner Fax		
31	Premises Owner Email		
зк	Premises House No.	.21-27	21-29
3L	Premises Floor/ Suite No.	3	
3Q	Premises Lot	00012	0012
ЗR	Premises BIN		000589
6G	Boiler Replaced Installation Number		

"I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT THE INFORMATION PROVIDED ON THIS FORM IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THE EQUIPMENT WILL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AIR POLLUTION CONTROL CODE, CHAPTER 1 OF TITLE 24, NEW YORK CITY ADMINISTRATIVE CODE, AND APPROPRIATE REQUIREMENTS OF OTHER AGENCIES. I RECOGNIZE THAT FALSE STATEMENTS ARE PUNISHABLE AS A MISDEMEANOR PURSUANT TO SECTION 24-190 OF THE AIR POLLUTION CONTROL CODE AND SECTION 210.45 OF THE PENAL LAW."

Owner / Representative / Agent Signature

Print Name

FEE: \$0

FOR GENERAL INFORMATION, QUESTIONS, AND INQUIRIES: Please visit our website at www.nyc.gov/dep or call 311





NYC DEP CATS Information Internal

PREMISES: 21-29 46 ROAD QUEENS BIN: 000589 BLOCK: 00077	LOT: 0012			
Dwner: WEI-HO FASHIONS INC.		Type: REGISTRATION - BOILER	Expiration Date: 7.	/15/1995
Business Type: NA	Request Type: Renewal - Boiler	Status: EXPIRED	Submitted Date: NA	Decision Date: 7/13/1992
Boller Make / Model: (NEW) COLUMBIA #CT-10 / (NEW) COLUMBIA #CT-10	Fuel Type 1: NATURALGAS	Fuel Type 2: NONE	Heat Input (BTU/H	r.): O
Burner Make / Model: (NEW) ECONOMITE F400N33 / (NEW) ECONOMITE F400N33	Number of Identical Units: 1			
FaceForward: Click Here	ſ			

APPENDIX 4 NOISE ANALYSIS BACKUP INFORMATION

Table 1: Transportation Planning Assumptions

Land Use:		<u>Resid</u>	<u>ential</u>	Local	<u>Retail</u>	Offic	<u>e</u>	
Size/Units:		25	DU	-886	gsf	-1,005	gsf	
Trip Generation:		(1)	(1	L)	(1)		
-	ekday	-	-,)75	20	-	18.0		
	urday		500	24		3.9		
	,		DU	per 1,0		per 1,000 gsf		
						(
Temporal Distr			1)	(1	-	(1)		
AM			.0%	3.(12.0		
AM MD PM)% 	19.		15.0		
Sati	MD		.0% 0%	10. 10.		14.0' 17.0'		
		ľ	2)	(4	1)	(6)		
Modal Splits:		-	eriods	Weekday	•, Sat	AM/PM/Sat	MD	
Aut	0		.0%	10.0%	7.0%	28.0%	2.0%	
Taxi			0%	1.0%	1.0%	0.0%	1.0%	
	way		.0%	4.0%	7.0%	52.0%	7.0%	
Bus	-		0%	3.0%	4.0%	15.0%	7.0%	
	k/Other		0%	82.0%	81.0%	5.0%	83.0%	
		100	0.0%	100.0%	100.0%	100.0%	100.0%	
		(3	3)	(5	(5)		(6)	
In/Out Splits:		In	Out	In	Out	In	Out	
AM		16.0%	84.0%	50%	50%	96%	4%	
MD		50.0%	50.0%	50%	50%	39%	61%	
AM MD PM Sat MD		67.0%	33.0%	50%	50%	5%	95%	
Sat	MD	53.0%	47.0%	50%	50%	60%	40%	
Vehicle Occupa	ancy:	-	2)	(3	-	(6)		
			eriods	All Pe		All Peri		
Aut			07	1.6		1.09		
Tax	i	1.	07	1.4	1.40		1.09	
Truck Trip Gen	eration:	(1)	(1	L)	(1)		
We	ekday	0.	06	0.3	35	0.32	2	
Satu	urday	0.	02	0.0	04	0.01	L	
		per DU		per 1,	per 1,000 sf		per 1,000 sf	
1		(1	1)	(1	L)	(1)		
AM		12	.0%	8.0)%	10.0	%	
MD		9.	0%	11.0%		11.0%		
PM			0%	2.0%		2.0%		
Sat	MD	9.	0%	11.	0%	11.0	%	
		In	Out	In	Out	In	Out	
AM,	/MD/PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	
Notes :								
(1)	Based on 2014 C	ity Environn	nental Qual	lity Review (CE	QR) Techn	ical Manual.		
(2)	Based on 2012-20 to Work Table for) 16 America	n Commun	ity Survey (AC	,		on	
(3)	Based on <i>Triangle</i>	-						
(4)	Based on data pro				cated in Oi	ueens Transit 70	ones	
(5)	Based on East Ne							
(3)					-			

Table 2: Travel Demand Forecast

Land Use	: Travel Demand :		lential	Local I	Retail	Of	lice	<u>To</u>	tal	
Size/Unit	s:	25 DU		-886	gsf	-1,005	gsf			
Peak Hou	r Person Trips:				U		-			
	AM	22		-6	-6		4	1	2	
	MD	1	12	-3	6	-	4	-2	28	
	PM		24	-2	-20		4	(C	
	Sat MD	20		-2	2	-	2	-	4	
Person Tr	rips:				_				_	
	•	In	Out	In	Out	In	Out	In	Out	
AM	Auto	0	2	0	0	-1	0	-1	2	
	Taxi	0	0	0	0	0	0	0	0	
	Subway Bus	3 0	15 0	0 0	0 0	-2 -1	0 0	1 -1	15 0	
	Walk/Other	0 <u>1</u>	1	<u>-3</u>	<u>-3</u>	<u>0</u>	0	-1 -2	<u>-2</u>	
	Total	<u>⊥</u> 4	18	- <u>-</u> -3	-3	<u>-4</u>	0	-2	<u>-2</u> 15	
	Iotai	4	10	-5	-5	-4	0	-5	15	
		In	Out	In	Out	In	Out	In	Out	
MD	Auto	1	1	-2	-2	0	0	-1	-1	
	Тахі	0	0	0	0	0	0	0	0	
	Subway	5	5	-1	-1	0	0	4	4	
	Bus	0	0	-1	-1	0	0	-1	-1	
	Walk/Other	<u>0</u>	<u>0</u>	<u>-14</u>	<u>-14</u>	<u>-2</u>	<u>-2</u>	<u>-16</u>	<u>-16</u>	
	Total	6	6	-18	-18	-2	-2	-14	-14	
		In	Out	In	Out	In	Out	In	Out	
РМ	Auto	2	1	-1	-1	0	-1	1	-1	
	Тахі	0	0	0	0	0	0	0	0	
	Subway	13	6	0	0	0	-2	13	4	
	Bus	0	0	0	0	0	-1	0	-1	
	Walk/Other	<u>1</u>	<u>1</u>	<u>-9</u>	<u>-9</u>	<u>0</u>	<u>0</u>	<u>-8</u>	<u>-8</u>	
	Total	16	8	-10	-10	0	-4	6	-6	
		In	Out	In	Out	In	Out	In	Out	
Sat MD	Auto	1	1	-1	-1	0	0	0	0	
	Тахі	0	0	0	0	0	0	0	0	
	Subway	8	8	-1	-1	-1	0	6	7	
	Bus	0	0	0	0	0	0	0	0	
	Walk/Other	<u>1</u>	<u>1</u>	<u>-9</u>	<u>-9</u>	<u>-1</u>	<u>0</u>	<u>-9</u>	<u>-8</u>	
	Total	10	10	-11	-11	-2	0	-3	-1	
Vehicle T	rips :									
	/=	In	Out	In	Out	In	Out	In	Out	
AM	Auto (Total) Taxi	0 0	2 0	0 0	0 0	-1 0	0 0	-1 0	2 0	
	Taxi Balanced	0	0	0	0	0	0	0	0	
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
	Total	0	2	0	0	-1	0	<u>-1</u>	2	
	lotal									
	A	In	Out	In	Out	In	Out	In	Out	
MD	Auto (Total)	1	1	-1	-1	0	0	0	0	
	Taxi Taxi Balanced	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
	Truck	0 <u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
	Total	<u>0</u> 1	1	-1	-1	0	0	0	0	
DAA	Auto (Tet-I)	ln 2	Out	In 1	Out	In	Out	In 1	Out	
PM	Auto (Total) Taxi	2	1	-1	-1	0	-1	1	-1	
	Taxi Taxi Balanced	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
	Truck	<u>0</u>	<u>0</u>		<u>0</u>	0 0	0	0 0		
	Total	2	<u>0</u> 1	<u>0</u> -1	<u>0</u> -1	0	<u>0</u> -1	<u>0</u> 1	<u>0</u> -1	
	. otai									
C - + • · · -	A	In	Out	In	Out	In	Out	In	Out	
Sat MD	Auto (Total)	1	1	-1	-1	0	0	0	0	
	Taxi Taxi Balanced	0	0	0	0	0	0	0	0	
	Taxi Balanced Truck	0	0	0	0	0	0	0	0	
	Total	<u>0</u> 1	<u>0</u> 1	<u>0</u> -1	<u>0</u> -1	<u>0</u> 0	<u>0</u> 0	<u>0</u> 0	<u>0</u> 0	
					1	0	U	0	0	
		Tot In	al Vehicle Out	e Trips Total						
	АМ	In -1	Out 2	1 otai						
	MD	-1 0	2	0						
	PM	1	0 -1	0						
	Sat MD	0	-1	0						
	Satind	U	0	U						