## 77 Commercial Street Special Permit and Related Actions

### **Revised Environmental Assessment Statement\***

\*Supersedes the EAS issued on August 2, 2013

CEQR No. 14DCP010K

ULURP Nos. N140046 ZRK 140047 ZSK N140048 ZAK

N140048 ZAK N140049 ZAK

N140050 ZCK



Prepared for:

**Waterview at Greenpoint LLC** 

Prepared by:

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Originally Filed August 2, 2013 REVISED November 6, 2013

## 77 Commercial Street – Special Permit and Related Actions REVISED

#### ENVIRONMENTAL ASSESSMENT STATEMENT

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# City Environmental Quality Review ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM Please fill out and submit to the appropriate a

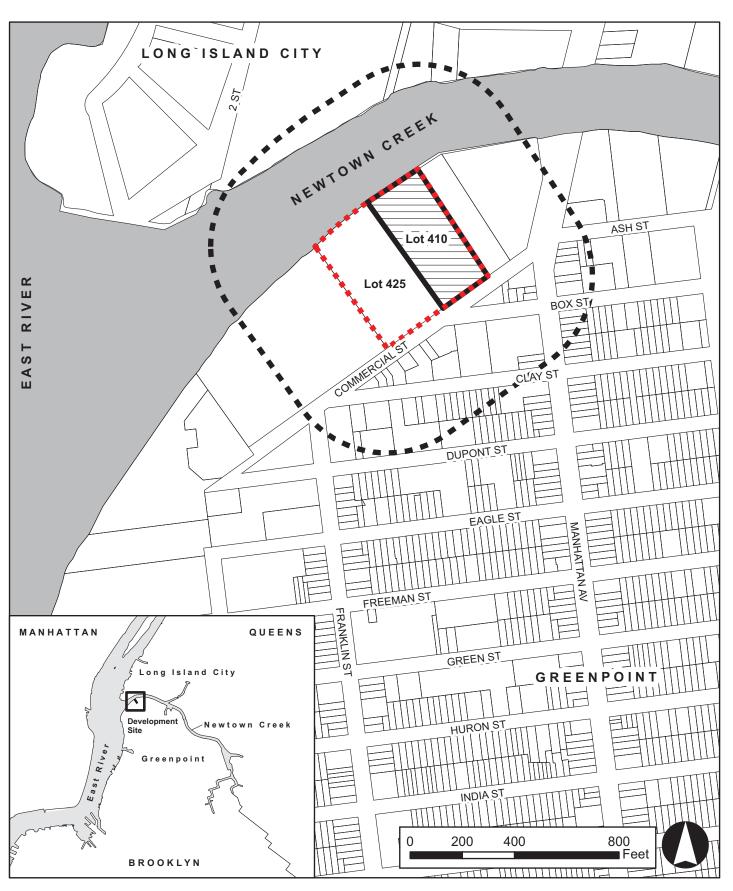
Please fill out and submit to the appropriate agencysee instructions)

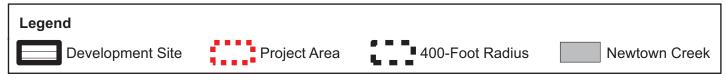
Part I: GENERAL INFORMATIO	N		11 1 3	<u> </u>	,			
PROJECT NAME 77 Commerc		ial Permit and F	Related Actions					
1. Reference Numbers								
CEQR REFERENCE NUMBER (to be as	signed by lead age	ncy)	BSA REFERENCE NUMBER (if applicable)					
ULURP REFERENCE NUMBER (if appli	icable)		OTHER REFERENCE NUMBE		plicable)			
2. Lead Assess to be former time.			(e.g., legislative intro, CAPA					
2a. Lead Agency Information NAME OF LEAD AGENCY			2b. Applicant Informa	ition				
New York City Department of	City Planning		Waterview at Greenpo	nint II C				
NAME OF LEAD AGENCY CONTACT P			NAME OF APPLICANT'S REF		TIVE OR CONTACT I	PERSON		
Robert Dobruskin, AICP	LNOON		David Bistricer	ILSEIVI7	TIVE ON CONTINCT	ENSON		
ADDRESS 22 Reade Street, Roc	m 4F		ADDRESS c/o Clipper E	auity II (	7 4611 12 <sup>th</sup> Stre	et Suite 11		
CITY New York	STATE NY	ZIP 10007	CITY Brooklyn	quity LLC	STATE NY	ZIP 11219		
	EMAIL	ZIP 10007	•	04	EMAIL	ZIP 11219		
TELEPHONE 212-720-3423	rdobrus@plan	ning nyc gov	TELEPHONE 718-438-28	04	david@clipper	equity com		
3. Action Classification and Ty		11118.1170.801			davia@enpper	equity.com		
SEQRA Classification  UNLISTED TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): 6 NYCRR 617.4 (5)  Construction of new residential units that meet or exceed the following thresholds: (v) in a City or town having a population of greater than 1,000,000, 2,500 units to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works; (10) any Unlisted action, that exceeds 25 percent of any threshold in this section [§617.4], occurring wholly or partially within or substantially contiguous to any publicly owned or operated parkland, recreation area or designated open space, including any site in the Register of National Natural Landmarks pursuant to 36 CFR Park 62, 1994.  In the future 2016 Build Year, the proposed development would be located adjacent to a public park. In addition, the proposed development would include a total of 720 dwelling units, which triggers the threshold of a quarter of 2,500 units (625 units) as stated in §617.4 (5)(v).  Action Type (refer to Chapter 2, "Establishing the Analysis Framework" for guidance)  LOCALIZED ACTION, SITE SPECIFIC  LOCALIZED ACTION, SMALL AREA  GENERIC ACTION  4. Project Description  The proposed project consists of the development of a 6-story building, a 30-story building and a 40-story building, which would contain an aggregate of up to approximately 693,320 gsf of residential uses (520 market rate DU's and 200 affordable DU's), up to 25,750 gsf of local retail use, up 6,200 gsf of community facility use and 320 attended accessory parking spaces, plus 34,850 sf of publicly accessible watefront open space,								
for a maximum of 760,650 gsf, on the applicant's property ("development site"). The project would incorporate up to 368,000 gsf (343,923 zsf) of development rights from the adjacent City-owned property which would be developed as a publicly accessible open space (Box Street Park). The proposed actions include a special permit per ZR 62-836 for height and setback waivers; an authorization per ZR 62-822(a) and (b) to allow the level of the waterfront public access areas to be raised; a text amendment of ZR 11-13 and ZR 62-351 to provide that the City-owned property will continue to generate floor area even after it is developed as a "public park" as defined in ZR 12-10 and a certification per ZR 62-811 confirming compliance with applicable waterfront design requirements and techical amendments to provisions of the Zoning Resolution to allow the project to be developed as proposed.*  Project Location  BOROUGH Brooklyn  COMMUNITY DISTRICT(S) 1 STREET ADDRESS 77 Commercial Street								
TAX BLOCK(S) AND LOT(S) Block 24	472, Lot 410		ZIP CODE 11222					
DESCRIPTION OF PROPERTY BY BOUI		TREETS The prop	erty is located on a block	bounded	by Manhattan Av	enue to the		
east, Commercial Street to the southeast, the prolognations of West and Eagle Streets to the south, and the Newtown Creek along								
the waterfront to the north and waterfront to the north an	the waterfront to the north and west.							
EXISTING ZONING DISTRICT, INCLUD	ING SPECIAL ZONIN	IG DISTRICT DESIGN	IATION, IF ANY	ZONING	SECTIONAL MAP N	UMBER 12c		
R6 and R6/C2-4								

\*This Revised Environmental Assessment Statement, which supersedes the EAS issued for the proposed project on August 2, 2013, has been issued to reflect modifications to the analysis to consider the potential for significant adverse environmental impacts from a potential revision to the affordability threshold or number of low-income affordable housing units to be provided as part of the project. The analysis has also been revised to include additional information regarding repairs to be made to the bulkhead to facilitate development of the waterfront esplanade, potential construction of sewer outfalls, and to update the language regarding E-designation for hazardous materials. The refinements result in updates to the following impact categories: Community Facilities (Attachment E), Natural Resources (Attachment B), Water and Sewer Infrastructure (Attachment B), Hazardous Materials (Attachment B), Open Space (Attachment F) and the WRP (Appendix 1). The revised analysis resulted in a commitment by the applicant to enter into a Restrictive Declaration that would provide for funding of up to 11 day care slots if needed to offset the potential incremental increase in demand for child care generated by the project should additional funding be obtained to provide for an increase in the number of affordable housing units to be provided as part of the project. The analysis, as discussed in detail in the Revised EAS dated November 6, 2013, concludes that the proposed modifications would not result in any significant adverse environmental impacts for the proposed project.

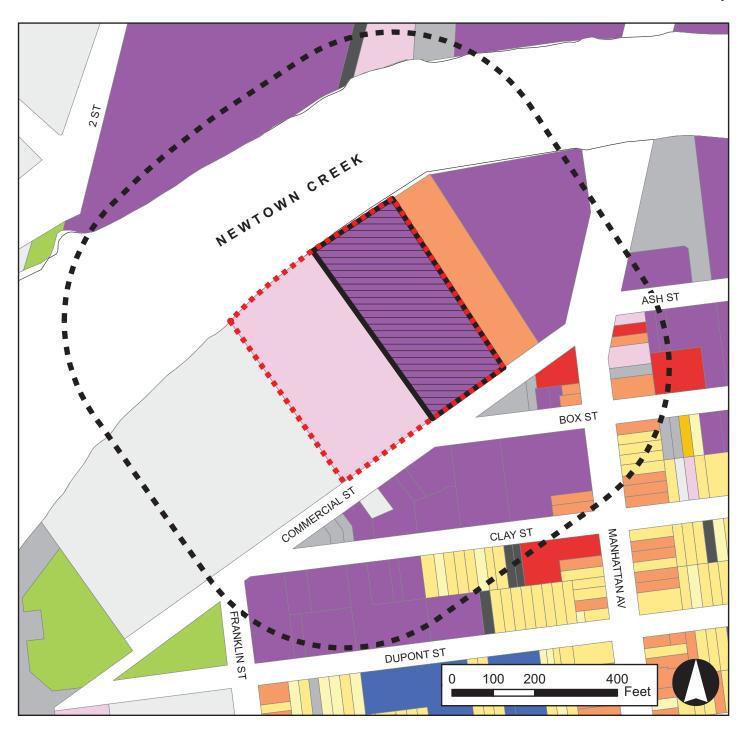
5. Required Actions or Approvals (check all that apply)	
City Planning Commission: YES NO UNIFORM LAND USE REVIEW PROCEDURE (ULURP)	
CITY MAP AMENDMENT ZONING CERTIFICATION CONCESSION	
ZONING MAP AMENDMENT  ZONING AUTHORIZATION  UDAAP	
ZONING TEXT AMENDMENT ACQUISITION—REAL PROPERTY REVOCABLE CONSENT	
SITE SELECTION—PUBLIC FACILITY DISPOSITION—REAL PROPERTY FRANCHISE	
HOUSING PLAN & PROJECT OTHER, explain:	
SPECIAL PERMIT (if appropriate, specify type: modification; renewal; other); EXPIRATION DATE:	
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION 11-13, 62-332, 62-341, 62-351, 62-353, 62-354, 62-50, 62-60, 62-811,	
62-822, 62-836, 62-931	
Board of Standards and Appeals: YES NO	_
VARIANCE (use)	
VARIANCE (bulk)	
SPECIAL PERMIT (if appropriate, specify type: modification; renewal; other); EXPIRATION DATE:	
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION	
<b>Department of Environmental Protection:</b> ☐ YES ☐ NO If "yes," specify:	
Other City Approvals Subject to CEQR (check all that apply)	
LEGISLATION FUNDING OF CONSTRUCTION, specify:	
RULEMAKING POLICY OR PLAN, specify: Waterfront Revitalization	
Program	
CONSTRUCTION OF PUBLIC FACILITIES FUNDING OF PROGRAMS, specify:	
☐ 384(b)(4) APPROVAL ☐ PERMITS, specify: Department of Buildings Permit	
OTHER, explain: Transfer of Development Rights from adjacent City-owned property (Block 2472, Lot 425) to development site (Block 2472),	
Lot 410.	
Other City Approvals Not Subject to CEQR (check all that apply)	
PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION LANDMARKS PRESERVATION COMMISSION APPROVAL	
AND COORDINATION (OCMC)  OTHER, explain:	
State or Federal Actions/Approvals/Funding: XES NO If "yes," specify: DEC permit for bulkhead repair and/or	ŕ
construction or repair of storm sewer outfall	
<b>6. Site Description:</b> The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except	
where otherwise indicated, provide the following information with regard to the directly affected area.	
<b>Graphics:</b> The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict	
the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may	/
not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.	
TAX MAP FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S	S)
PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP	
Physical Setting (both developed and undeveloped areas)	_
Total directly affected area (sq. ft.): 110,519 gsf Waterbody area (sq. ft.) and type: N/A	
Roads, buildings, and other paved surfaces (sq. ft.): 110,519 gsf  Other, describe (sq. ft.): N/A	
7. Physical Dimensions and Scale of Project (if the project affects multiple sites, provide the total development facilitated by the action)	
SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 760,650 gsf	
NUMBER OF BUILDINGS: 3 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): Base Building:	
291,535 gsf; North Tower: 281,000 gsf; South Tower:	
188,115 gsf	
HEIGHT OF EACH BUILDING (ft.): Base Building: up to 68' above NUMBER OF STORIES OF EACH BUILDING: Base Building: up to 6	
base plane (ABP); North Tower: up to 404' ABP; South stories; North Tower: up to 40 stories; South Tower: up to	1
Tower: up to 305.7' ABP; plus 25' mechanical bulkheads. 30 stories	
Does the proposed project involve changes in zoning on one or more sites? YES NO	
If "yes," specify: The total square feet owned or controlled by the applicant:	
The total square feet non-applicant owned area:	

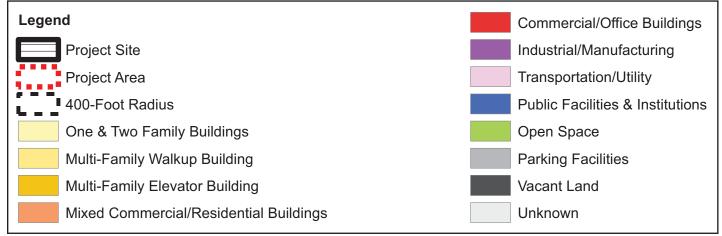
**Location Map** 

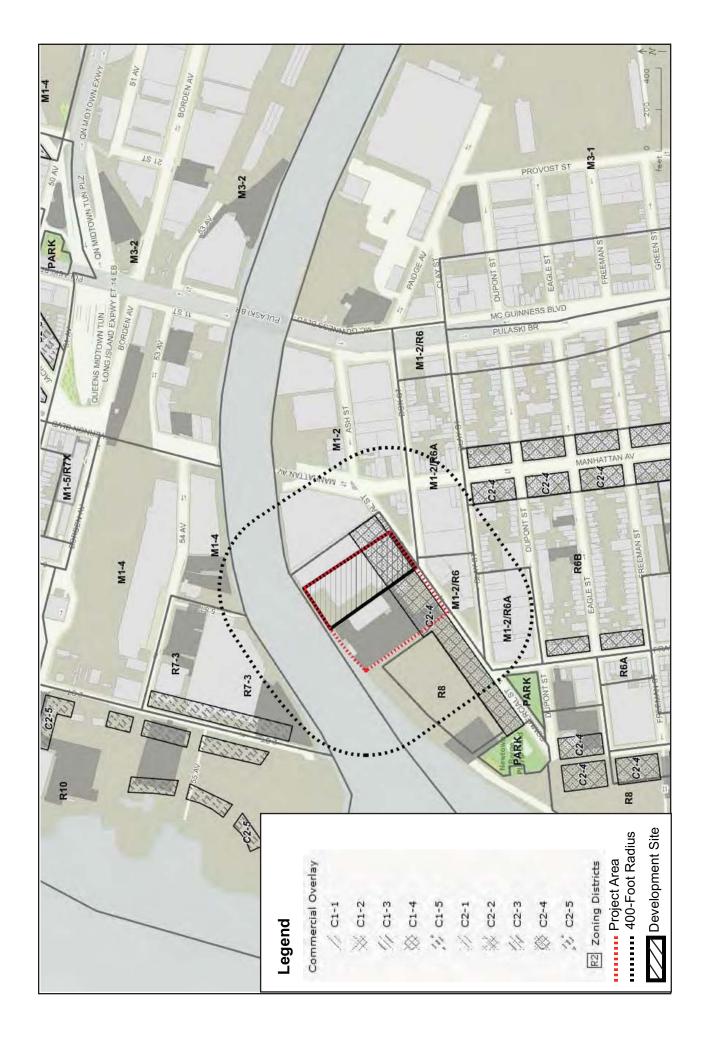




**Land Use Map** 







77 Commercial Street EAS



77 Commercial Street façade, looking north from Box Street



3 Looking across Commercial Street at the property's southern lot line



2 Looking southwest along Commercial Street in front of existing building



4 Entrance of the existing building on the development site

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility
lines, or grading? XES NO
If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: Slightly more than 70,891 VOLUME OF DISTURBANCE: 212,673 cubic ft. (width x length x depth)
sq. ft. (width x length)
AREA OF PERMANENT DISTURBANCE: 70,891 sq. ft. (width x length)
8. Analysis Year CEQR Technical Manual Chapter 2
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2016
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: Up to 24 months
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? YES NO IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:
9. Predominant Land Use in the Vicinity of the Project (check all that apply)
RESIDENTIAL MANUFACTURING COMMERCIAL PARK/FOREST/OPEN SPACE OTHER, specify:

#### **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.

			STING			NO-A			'	WITH-			INC	CREMENT
LAND USE									1					
Residential	П	YES	$\overline{\times}$	NO		YES		NO		YES	T	] NO		
If "yes," specify the following:		, .=-		<u>,</u>										
Describe type of residential structures														
No. of dwelling units	<del>                                     </del>				276				720				444	
No. of low- to moderate-income units	$\vdash$				0				72				72	
Gross floor area (sq. ft.)					265,9	960			693,	,320			427,360	
Commercial	Г	YES	$\overline{}$	NO	X	YES		NO	$\boxtimes$	YES		Тио		
If "yes," specify the following:		•		<u>,                                      </u>										
Describe type (retail, office, other)	_				Local	Retail			Loca	al Retail				
Gross floor area (sq. ft.)	$\vdash$				25,75				25,7				0	
Manufacturing/Industrial	┢	YES	X	NO		YES	$\boxtimes$	NO	ΙĆ	YES	$\overline{}$	NO		
If "yes," specify the following:		,		<u>y</u>								<u> </u>		
Type of use	_													
Gross floor area (sq. ft.)	<del>                                     </del>													
Open storage area (sq. ft.)	$\vdash$													
If any unenclosed activities, specify:	T													
Community Facility	Т	YES	$\times$	NO	X	YES		NO	X	YES		NO		
If "yes," specify the following:				_										
Type					Club				Club	)				
Gross floor area (sq. ft.)	$\vdash$				6,200	)			6,20					
Vacant Land	匸	YES	$\overline{\times}$	] NO		YES	$\boxtimes$	NO	ΙΉ	YES	$\overline{}$	NO NO		
If "yes," describe:	_	,		7	╫				Ш			<u> </u>		
Publicly Accessible Open Space	Т	YES	$\times$	NO		YES		NO		YES	Т	По		
If "yes," specify type (mapped City, State, or	٢	, 0		4		rfront p	<u> </u>			erfront	<u> </u>		Increase	d Waterfront
Federal parkland, wetland—mapped or						sible op		•		ssible o	•	•		accessible open
otherwise known, other):					(16,0	25 sf)				850 sf)			space (18	3,825 sf)
Other Land Uses	$\boxtimes$	YES		] NO		YES	$\boxtimes$	NO		YES	$\geq$	ON [		
If "yes," describe:	wa	rage (2-s rehouse 200 gsf)		ox.										
PARKING									,					
Garages	П	YES	$\overline{}$	NO		YES		NO		YES	Т	NO		
If "yes," specify the following:		•		<u> </u>										
No. of public spaces					0				0				0	
No. of accessory spaces	$\vdash$				138				320				182	
Operating hours	T				24/7				24/7	7			N/A	
Attended or non-attended					Atter	nded			Atte	nded			N/A	
Lots		YES	$\times$	NO		YES	$\boxtimes$	NO		YES	$\triangleright$	ОИ		
If "yes," specify the following:		-										<del></del>		
No. of public spaces														
No. of accessory spaces	T								1					
Operating hours									L					
Other (includes street parking)		YES	$\times$	NO		YES	$\boxtimes$	NO		YES	$\triangleright$	NO		
If "yes," describe:				_								_		

#### **EAS FULL FORM PAGE 5**

	EXISTING NO-ACTION		WITH-ACTION			ON	INICOENAENIT				
	CONDIT	ION		COND	ITIO	N		COND	ITIO	N	INCREMENT
POPULATION							•				<u> </u>
Residents	YES	NO NO	$\boxtimes$	YES		NO		YES		NO	
If "yes," specify number:			720				1,879	)			1,159
Briefly explain how the number of residents	2.61 persons/h	ousehold	based	d on Dem	ogra	phic Pr	ofile fo	or Brook	lyn C	ommur	nity District 1 (Source:
was calculated:	Census 2010).										
Businesses	XES YES	☐ NO	$\boxtimes$	YES		NO	$\boxtimes$	YES		NO	
If "yes," specify the following:											
No. and type	CitiBike Storage	9	Loca	l Retail (	25,75	50 gsf)	Local	Retail (	25,75	0 gsf)	0
No. and type of workers by business	50 warehouse		77 lc	cal retai	l wor	rkers,	77 lo	cal retai	l wor	kers,	18 building employees, 4
	employees (So	urce:	19 co	ommunit	ty fac	cility		mmunit			parking employees
	applicant)			loyees, 1				oyees, 2			
				loyees,3	park	ing		oyees,7	park	ing	
				loyees				oyees			
No. and type of non-residents who are	N/A			etermine	ed nu	ımber		etermine	ed nu	mber	None
not workers				noppers				oppers		41.	
Briefly explain how the number of				-					acılıt	y, 1 bui	lding employee per 25
businesses was calculated:	DUs, 1 parking				lea p	1	16 2			1	
Students (non-resident)	YES	⊠ NO		YES		NO		YES		NO	
If any, specify number:				lementai	•			elementa			129 elementary, 53
				dle schoo	,			le schoo			middle school, and 62
Briefly explain how the number of students	2012 CEOR Too	hnical Ma		school s				school s			high school students hool Students Generated
was calculated:	by New Housin				Ia IV	/iuitipiie	215 101	EStimat	ing P	ublic Sc	noor students Generated
was calculated.	by New Housin	g Offics Of	AII 312	263 .							
ZONING											
Zoning classification	R6 and R6/C2-4	1	R6 a	nd R6/C2	2-4		R6 ar	nd R6/C2	2-4		No zoning map change
Maximum amount of floor area that can be	303,927 zsf (re	sidential	303,	927 zsf (ı	resid	ential	303,9	927 zsf (ı	resid	ential	347,923 zsf
developed	FAR 2.75 with			2.75 with				2.75 with			(development rights)
	inclusionary ho			ısionary l				sionary l			
	221,038 zsf (co	mmercial		038 zsf (	comr	mercial		038 zsf (			
	FAR 2.0)		FAR	2.0)				2.0). App			
								d obtain		0	
								923 zsf o			
							Lot 4	lopment 25.	righ	ts from	
Predominant land use and zoning	Refer to Attach	ment C,	Refe	r to Atta	chme	ent C,	+	r to Atta	chme	ent C,	
classifications within land use study area(s)	"Land Use, Zon			d Use, Zo			"Land	d Use, Zo	oning	and	
or a 400 ft. radius of proposed project	Public Policy"			ic Policy'	1		Publi	c Policy'	'		
Attach any additional information that may l	be needed to de	escribe the	proje	ect.							

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.
- For each "yes" response, provide additional analyses (and attach supporting information, if needed) 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: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?		$\boxtimes$
(b) Would the proposed project result in a change in zoning different from surrounding zoning?		$\boxtimes$
(c) Is there the potential to affect an applicable public policy?	$\boxtimes$	
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?		$\boxtimes$
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?		
o If "yes," complete the Consistency Assessment Form.	•	
2. SOCIOECONOMIC CONDITIONS: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
<ul> <li>Generate a net increase of more than 200 residential units or 200,000 square feet of commercial space?</li> </ul>		
■ If "yes," answer questions 2(b)(ii) and 2(b)(iv) below.		
Directly displace 500 or more residents?		$\boxtimes$
■ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
Directly displace more than 100 employees?		$\boxtimes$
■ 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 answered.		
i. Direct Residential Displacement	ı	
<ul> <li>If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?</li> </ul>		
o If "yes," is the average income of the directly displaced population markedly lower than the average income of the rest		
of the study area population?		
ii. Indirect Residential Displacement		
<ul> <li>Would expected average incomes of the new population exceed the average incomes of study area populations?</li> </ul>		
o If "yes:"		
Would the population of the primary study area increase by more than 10 percent?		Ш
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		
iii. Direct Business Displacement		

	YES	NO
<ul> <li>Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area,</li> <li>either under existing conditions or in the future with the proposed project?</li> </ul>		
<ul> <li>Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it?</li> </ul>		
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. Affects on Industry		
Would the project significantly affect business conditions in any industry or any category of businesses within or outside		
the study area?		
<ul> <li>Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?</li> </ul>		
3. COMMUNITY FACILITIES: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
<ul> <li>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?</li> </ul>		
(b) Indirect Effects		
i. Child Care Centers		
<ul> <li>Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in <u>Chapter 6</u>)</li> </ul>	$\boxtimes$	
<ul> <li>If "yes," would the project result in a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent?</li> </ul>	$\boxtimes$	
<ul> <li>If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?</li> </ul>		$\boxtimes$
ii. Libraries		
<ul> <li>Would the project result in a 5 percent or more increase in the ratio of residential units to library branches?</li> <li>(See Table 6-1 in Chapter 6)</li> </ul>		$\boxtimes$
o If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?		
If "yes," would the additional population impair the delivery of library services in the study area?		
iii. Public Schools		
<ul> <li>Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in <u>Chapter 6</u>)</li> </ul>	$\boxtimes$	
<ul> <li>If "yes," would the project result in a collective utilization rate of the elementary and/or intermediate schools in the study area that is equal to or greater than 100 percent?</li> </ul>		$\boxtimes$
<ul> <li>If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?</li> </ul>		
iv. Health Care Facilities		
Would the project result in the introduction of a sizeable new neighborhood?		
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?		
(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 additional residents or 500 additional employees?		

	YES	NO
(g) If "yes" to questions (c), (e), or (f) above, attach supporting information to answer the following:		
o If in an under-served area, would the project result in a decrease in the open space ratio by more than 1 percent?		
<ul> <li>If in an area that is not under-served, would the project result in a decrease in the open space ratio by more than 5 percent?</li> </ul>		
<ul> <li>If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered?</li> <li>Please specify: See attached.</li> </ul>	$\boxtimes$	
5. SHADOWS: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?		
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?		
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reac sensitive resource at any time of the year.	h any sun	light-
6. HISTORIC AND CULTURAL RESOURCES: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)		$\boxtimes$
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?		
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information whether the proposed project would potentially affect any architectural or archeological resources.	ation on	
7. URBAN DESIGN AND VISUAL RESOURCES: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	$\boxtimes$	
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?		
(c) If "yes" to either of the above, please provide the information requested in Chapter 10.		
8. NATURAL RESOURCES: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of <a href="Chapter 11">Chapter 11</a> ?		
o If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these	esources	
(b) Is any part of the directly affected area within the <u>Jamaica Bay Watershed</u> ?		
<ul> <li>If "yes," complete the <u>Jamaica Bay Watershed Form</u> and submit according to its <u>instructions</u>.</li> </ul>		
9. HAZARDOUS MATERIALS: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?		
<b>(b)</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?		
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in <a href="Appendix 1">Appendix 1</a> (including nonconforming uses)?		
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?		
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (e.g., gas stations, oil storage facilities, heating oil storage)?		
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?		$\boxtimes$
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?		
(h) Has a Phase I Environmental Site Assessment been performed for the site?		$\boxtimes$
<ul> <li>If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: Project Site has an (E) designation</li> </ul>	$\boxtimes$	
(i) Based on the Phase I Assessment, is a Phase II Investigation needed?		

	YES	NO
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?		$\boxtimes$
(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> ?		
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?		
(e) If the project is located within the <u>Jamaica Bay Watershed</u> or in certain <u>specific drainage areas</u> , including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?		$\boxtimes$
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?		
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or 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?		
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation.		
11. SOLID WASTE AND SANITATION SERVICES: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per we	ek): 16,	236
<ul> <li>Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?</li> </ul>		
(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?		
o 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 Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 86.	7 Mio.	BTUs
(b) Would the proposed project affect the transmission or generation of energy?		
13. TRANSPORTATION: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?		
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following	question	ns:
<ul> <li>Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?</li> </ul>		
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection?  **It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.		
<ul> <li>Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?</li> </ul>		П
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?		
(b) Stationary Sources: Would the proposed project result in the conditions outlined in Section 220 in <a href="Chapter 17">Chapter 17</a> ?		
<ul> <li>If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in <u>Chapter</u></li> <li>17? (Attach graph as needed)</li> </ul>	$\boxtimes$	
(c) Does the proposed project involve multiple buildings on the project site?		
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?		
(e) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?		
(f) If "yes" to any of the above conduct the appropriate analyses and attach any supporting documentation		

	YES	NO
15. GREENHOUSE GAS EMISSIONS: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?		
(b) Would the proposed project fundamentally change the City's solid waste management system?		
(c) Would the proposed project result in the development of 350,000 square feet or more?	$\boxtimes$	
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?		$\boxtimes$
o 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		
<ul><li>(a) Would the proposed project generate or reroute vehicular traffic?</li><li>(b) Would the proposed project introduce new or additional receptors (see Section 124 in <u>Chapter 19</u>) near heavily trafficked</li></ul>		
roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?		
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?		
(d) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?		
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
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 Healt		
preliminary analysis, if necessary. (E) designations have been assigned to the site to preclude the potential for significant advantage 18. NEIGHBORHOOD CHARACTER CEQR Technical Manual Chapter 21	rerse imp	acts.
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?		
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "I		
Character." Attach a preliminary analysis, if necessary. N/A-no significant adverse impacts are anticipated in the applicable to 19. CONSTRUCTION: CEQR Technical Manual Chapter 22	echnical:	areas.
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?		
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	$\Box$	
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?		
<ul> <li>Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?</li> </ul>		
o The operation of several pieces of diesel equipment in a single location at peak construction?	$\boxtimes$	
o Closure of a community facility or disruption in its services?		
o Activities within 400 feet of a historic or cultural resource?		
o Disturbance of a site containing or adjacent to a site containing natural resources?	$\boxtimes$	
o Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?		
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidar 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology f equipment or Best Management Practices for construction activities should be considered when making this determination. See Attachment B, "Screening Analyses" for information about anticipated construction activities.		

#### 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.

	make this statement in my capacity as the applicant	t 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
Waterview at Greenpoint, LLC /	State Stall	11/6/2013
Philip Habib, P.E. (Agent)	X Z Harris	

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

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)										
	ISTRUCTIONS: In completing Part III, the lead agency shou		06 (Executi	ve						
Or	rder 91 or 1977, as amended), which contain the State and	l City criteria for determining significance.								
	1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c)  Significant									
	Significant Adverse Impact									
	duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.									
Į	IMPACT CATEGORY		YES NO							
	Land Use, Zoning, and Public Policy									
	Socioeconomic Conditions									
	Community Facilities and Services									
	Open Space									
	Shadows									
	Historic and Cultural Resources	listoric and Cultural Resources								
	Urban Design/Visual Resources									
	Natural Resources									
	Hazardous Materials									
	Water and Sewer Infrastructure									
	Solid Waste and Sanitation Services									
	Energy									
	Transportation									
	Air Quality									
	Greenhouse Gas Emissions									
	Noise	oise								
	Public Health									
	Neighborhood Character			X						
	Construction									
	<ol><li>Are there any aspects of the project relevant to the dete significant impact on the environment, such as combined</li></ol>									
	covered by other responses and supporting materials?									
	If there are such impacts, attach an explanation stating v	whother as a result of them, the project may								
	have a significant impacts, attach an explanation stating v	vilettier, as a result of them, the project may								
3. Check determination to be issued by the lead agency:										
_	•		tha anuiran	mont						
╽┕	Positive Declaration: If the lead agency has determined th									
	and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a <i>Positive Declaration</i> and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).									
	Conditional Negative Declaration: A Conditional Negative Declaration (CND) may be appropriate if there is a private									
	applicant for an Unlisted action AND when conditions im									
	no significant adverse environmental impacts would resu	alt. The CND is prepared as a separate documer	nt and is sub	oject to						
_	the requirements of 6 NYCRR Part 617.									
Negative Declaration: If the lead agency has determined that the project would not result in potentially significant adverse										
environmental impacts, then the lead agency issues a <i>Negative Declaration</i> . The <i>Negative Declaration</i> may be prepared as a										
	separate document (see <u>template</u> ) or using the embedded Negative Declaration on the next page.  4. LEAD AGENCY'S CERTIFICATION									
TIT	4. LEAD AGENCY'S CERTIFICATION	LEAD AGENCY								
1	Director, Environmental Assessment and Review Division	NYC Department of City Planning								
-	AME	DATE								
1	obert Dobruskin, AICP	November 6, 2013								
-	SIGNATURE Robers									

Statement of No Significant Effect								
found at Title 62, Chapter 5 of the Rules of th Review, [ ] assumed the role of lead age review of information about the project conta	mended, and the Rules of Procedure for City Ene City of New York and 6 NYCRR, Part 617, Startney for the environmental review of the proposition in this environmental assessment statem herein, the lead agency has determined that the environment.	te Environmental Quality osed project. Based on a nent and any attachments						
Reasons Supporting this Determination								
The above determination is based on informa	ition contained in this EAS, which that finds the	e proposed project:						
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								
IIILE	LEAD AGENCT							
NAME	SIGNATURE	DATE						

## ATTACHMENT A PROJECT DESCRIPTION

#### I. INTRODUCTION

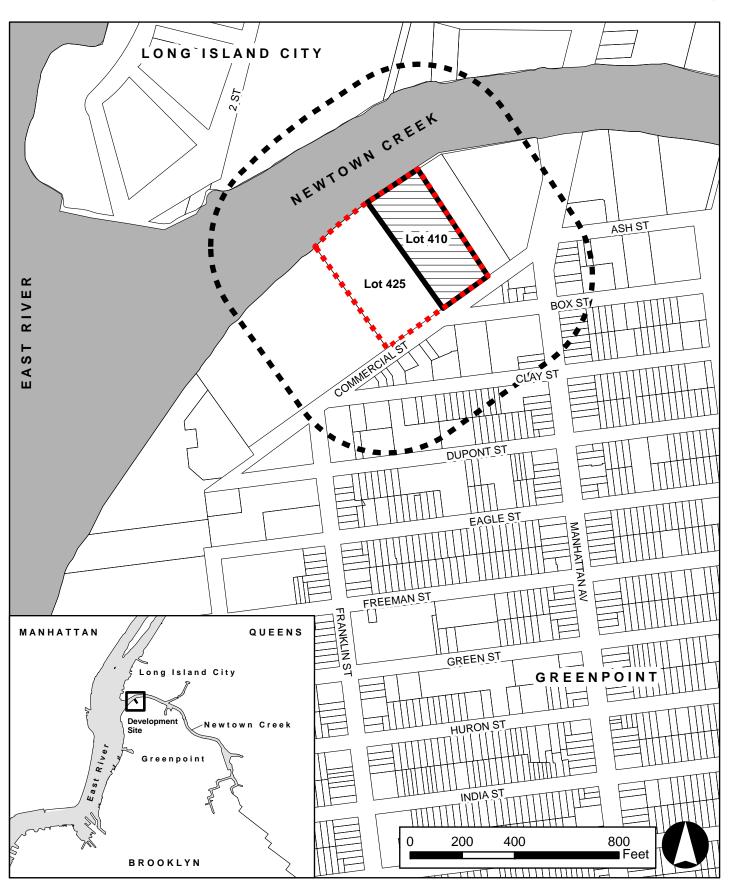
This Revised Environmental Assessment Statement, which supersedes the EAS issued for the proposed project on August 2, 2013, has been issued to reflect modifications to the analysis to consider the potential for significant adverse environmental impacts from a possible increase in the number of low-income affordable housing units to be provided as part of the project. The analysis has also been revised to include additional information regarding repairs to be made to the bulkhead to facilitate development of the waterfront esplanade, potential construction of sewer outfalls, and to update the language regarding the E-designation for hazardous materials. The refinements resulted in updates to the following impact categories: Community Facilities (Attachment E), Natural Resources (Attachment B), Water and Sewer Infrastructure (Attachment B), Hazardous Materials (Attachment B), Open Space (Attachment F) and the WRP (Appendix 1). The revised analysis resulted in a commitment by the applicant to enter into a Restrictive Declaration that would provide for funding of up to 11 day care slots if needed to offset the potential incremental increase in demand for child care generated by project should additional funding be obtained to provide for an increase in the number of affordable housing units to be provided as part of the project. The analysis, as discussed in detail in the Revised EAS dated November 6, 2013, concludes that the proposed modifications would not result in any significant adverse environmental impacts for the proposed project.

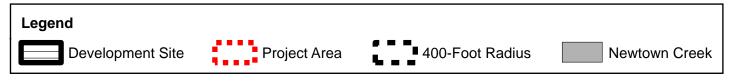
Waterview at Greenpoint, LLC (the "applicant") is seeking approval of the actions listed below (the "proposed actions") by the New York City Planning Commission (CPC) to facilitate the proposed redevelopment of the property located at 77 Commercial Street (Block 2472, Lot 410, the "development site") in the Greenpoint neighborhood of Brooklyn Community District 1. The development site is adjacent to a parcel owned by the City of New York located at 65 Commercial Street (Lot 425, the "City-owned property" and, collectively with the development site, the "project area"). The project area, also referred to as Parcels 3 and 4 within the Greenpoint-Williamsburg Waterfront Access Plan ("WAP") BK-1, is located on an irregular-shaped block bounded by Manhattan Avenue to the east, Commercial Street to the southeast, the prolongation of Eagle Street to the south, and Newtown Creek to the northwest (refer to Figure A-1).

#### The proposed actions are:

- A special permit (the "Special Permit") pursuant to Section 62-836 (Bulk modifications on waterfront blocks) of the New York City Zoning Resolution (the "Zoning Resolution" or "ZR") to waive requirements regarding maximum base and building heights and minimum setbacks;
- An authorization (the "Location Authorization") pursuant to ZR Section 62-822(a) (Authorization to modify requirements for location, area and minimum dimensions of waterfront public access areas and visual corridors) to waive requirements regarding the location of visual corridors and upland connections and to permit the levels of visual corridors and waterfront yards to be raised;
- An authorization (the "Design Authorization" and, collectively, with the Location Authorization, the "Authorizations") pursuant to ZR Section 62-822(b) (Authorization to modify requirements within waterfront public access areas) to allow modifications to permitted obstruction requirements for visual corridors and waterfront public access areas and to permit minor variations in the design of waterfront public access areas;

**Location Map** 





- With the Department of City Planning as co-applicant, an amendment (the "Text Amendment") to the text of ZR Section 11-13 (Public Parks) and ZR Section 62-351 (Special floor area regulations) to provide that the City-owned property will continue to generate floor area even after it is developed as a "public park" as defined in ZR Section 12-10; and
- A certification (the "Certification") pursuant to ZR Section 62-811 (Waterfront public access areas and visual corridors) that except with respect to the waivers granted pursuant to the Authorizations, the design of the proposed waterfront public access areas would comply with the applicable requirements set forth in ZR Sections 62-50, 62-60 and 62-931.

In addition, the applicant and the City of New York have executed a contract of sale for the disposition of development rights from the City-owned property for use on the development site. The grant of the Special Permit, the Authorizations and the Text Amendment and the disposition of the development rights are discretionary actions subject to City Environmental Quality Review (CEQR), while the grant of the Certification is a ministerial action not subject to environmental review. The grant of the Special Permit is also subject to the Uniform Land Use Review Procedure (ULURP) and the grant of the Text Amendment is subject to a similar land use review process.

#### **Project Description**

The proposed actions would facilitate the redevelopment of the development site by the applicant with a mixed-used development comprised of up to approximately 693,320 gross square feet ("gsf") of residential uses (720 units), up to approximately 25,750 gsf of ground floor commercial uses, up to approximately 6,200 gsf of community facility uses, and approximately 46,730 gsf of attended, offstreet accessory parking (320 spaces), for a total new development of up to approximately 760,650 gsf. The proposed development would be housed in three separate buildings: a 2- to 6-story base building containing the commercial, community facility and affordable housing components ("Building 1") wrapping a 30-story market rate residential tower ("Building 2") and a 40-story market-rate residential tower ("Building 3"). The proposed development would also include the development of approximately 25,450 square feet ("sf") of waterfront public access areas consisting of a shore public walkway along Newtown Creek and an upland connection linking the shore public walkway to Commercial Street along the western lot line of the development site, plus approximately 9,400 sf of additional publicly accessible open space providing a landscaped pedestrian walkway linking Commercial Street and the shore public walkway along the eastern lot line.

#### **City-Owned Parcel**

In connection with the 2005 Williamsburg-Greenpoint Rezoning (C0500111(A) ZMK), the City executed a memorandum of Points of Agreement ("POA") in which the City stated its intention to relocate the existing NYCTA facilities from the City-owned property and to redevelop the site as a public park. The POA also stated the City's intention to sell excess development rights from the City-owned parcel to an adjacent property owner and to require that the purchaser of the development rights provide 200 affordable housing units as part of the future development of its property. The City and the applicant have executed a contract of sale pursuant to which the applicant would acquire the development rights from the City-owned property for use in the proposed development on the development site. The City would use the proceeds from the sale of the development rights as partial funding for the construction of the park on the City-owned property.

Source: Points of Agreement, Greenpoint-Williamsburg Rezoning, City of New York, Office of the Mayor, May 2, 2005.

#### Reasonable Worst-Case Development Scenario

A Reasonable Worst-Case Development Scenario (RWCDS) was identified for analysis purposes. In the future without the proposed action (the "No-Action Scenario"), the development site would be developed with mixed use development comprising approximately 265,690 gsf of residential uses (276 market-rate dwelling units), 25,750 gsf of ground-floor local retail and service uses, 6,200 gsf of community facility uses, 138 off-street parking spaces and 16,025 sf of publicly accessible open space.

In the future with the proposed actions (the "With-Action Scenario"), the development site would be developed with approximately 720 dwelling units (200 of which would be affordable to low-, moderate-and middle-income households<sup>2</sup>), up to 25,750 gsf of ground-floor local retail and service uses, up to 6,200 gsf of community facility uses, 320 off-street parking spaces and 34,850 sf of publicly accessible open space.

The increment between the No-Action and With-Action Scenarios would comprise a net increase in development of approximately 444 dwelling units (of which 72 would be affordable to low-income households, 128 would be affordable to moderate-income households and 20 would be affordable to middle-income households), 182 off-street parking spaces and 18,825 sf of publicly accessible open space.

#### **Existing Uses**

The majority of the development site is currently occupied by an existing 2-story warehouse building, which would be demolished prior to construction of the proposed development. The City-owned property is currently leased to the New York City Transit Authority (NYCTA) and used for vehicle storage and offices for its Office of Emergency Response and for vehicle maintenance and storage for its paratransit program (i.e., transit services primarily for elderly and disabled individuals that does not follow fixed routes).

#### **Zoning**

The development site and City-owned property were rezoned to R6 in 2005 under the Greenpoint Williamsburg Rezoning, which also mapped a C2-4 commercial overlay within 150 feet of Commercial Street. Under special rules for this area, the R6 district mapped on the sites permits residential uses to an FAR of 2.43, which is bonusable to 2.75 under the Inclusionary Housing program. Community facility uses are permitted to an FAR of 4.8 if no residences are present on the zoning lot, but are limited to residential FARs if residences are present. Commercial uses are permitted to an FAR of 2.0 within the C2-4 overlays and to a limited extent elsewhere as well. Maximum building heights are generally 110 feet above base plane ("ABP"), plus a 40-foot penthouse, while maximum street wall heights are generally 65 feet ABP.

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The proposed development would comply with (1) the Inclusionary Housing provisions set forth in ZR Section 62-352(b)(2)(ii), which require at least 5 percent of the total floor area of the project (exclusive of ground-floor non-residential floor area) to be reserved for low-income households and an additional 5 percent to be reserved for moderate-income households, to and (2) the programmatic requirements of Section 421-a(6)(b) of the Real Property Tax Law, which would require that at least 10 percent of the dwelling units be reserved for low-income households and 15 percent of the dwelling units be reserved for moderate-income households. Accordingly, the proposed breakdown of the 200 affordable housing units would be as follows: 72 low-income units (household income below 80 percent of the Area Median Income (AMI)), 108 moderate-income units (household income below 125 percent of the AMI) and 20 middle-income units (household income below 175 percent of the AMI).

#### **Build Year**

The anticipated build year for the proposed project is 2016.

#### (E) Designations

To avoid the potential for significant adverse impacts related to hazardous materials, air quality and noise, an (E) designation (E-318) has been incorporated into the proposed project. This new (E) designation supersedes an (E) designation (E-138) previously assigned to the two sites pursuant to the prior Greenpoint Williamsburg rezoning (CEQR No. 04DCP003K). Refer to the "hazardous materials" and "noise" sections of Attachment B, "Supplemental Screening" and Attachment I, "Air Quality," for the applicable (E) designation text.

#### II. EXISTING CONDITIONS

#### Land Use

#### Project Area

#### Development Site

The development site is located on an irregularly shaped block bounded by Manhattan Avenue to the east, Commercial Street to the southeast, the prolongation of Eagle Street to the south and Newtown Creek to the northwest. The lot area of the development site is approximately 110,519.1 sf (2.54 acres) (plus approximately 1,209 sf of additional land under water). The development site has approximately 217.5 of frontage along Commercial Street and approximately 232.3 feet of frontage along Newtown Creek (refer to Figure A-2). The majority of the development site is currently occupied by an existing 2-story warehouse building, which would be demolished prior to construction of the proposed development. The existing two-story warehouse building on the development site (built around 1960) is currently utilized on a short term, temporary basis as storage space by NYC Bike Share, LLC (the operator of CitiBike NYC, New York City's bikeshare program). NYC Bike Share, LLC is expected to vacate the existing building by the end of 2013.

#### City-Owned Property

The City-owned property has a lot area of approximately 125,063 sf (2.87 acres) (plus approximately 6,409 sf of additional land under water), approximately 260 feet of frontage along Commercial Street and approximately 260 feet of frontage along Newtown Creek. This parcel is currently leased to the NYCTA and is improved with four 1- to 2-story buildings (refer to Figure A-2), consisting of a small 2-story office building and a small storage shed located toward the south end of the parcel and used for NYCTA's emergency response program and a larger 1- to 2-story vehicle maintenance building and smaller 1-story out building located toward the center and north end of the site and used for NYCTA's paratransit program. The remainder of the site is paved asphalt and used for outdoor vehicle storage and parking. The City anticipates relocating the paratransit uses to an off-site location prior to 2016 and is actively searching for an additional off-site location for the emergency response facilities. As the existing uses are relocated off-site, the related buildings will be demolished to facilitate construction of the park, although it is possible that the 2-story building currently use by the emergency response program will remain and be used by the Department of Parks in the future.

#### Waterfront Access Plan Parcels

The project area includes two tax lots: the applicant's development site (Block 2472, Lot 410) and the City-owned property located adjacent and west of the development site (Block 2472, Lot 425). As



Source: City of New York, 2013, ZoLa Zoning & Land Use

#### Legend

Development Site (Lot 410; applicant-owned)

Future Public Park (Lot 425; City-owned property)

Privately-owned parcel (Lot 400)

77 Commercial Street EAS Figure A-2

shown below in Table A-1, both the development site and the City-owned property are identified in the WAP as Parcels 3 and 4, respectively. The WAP, which was established as part of the 2005 *Greenpoint-Williamsburg Rezoning Final Environmental Impact Statement (FEIS)*, governs the provision of the waterfront public open space required for developments in this area.

Table A-1 Project Area Lots

	Block & Lot Address		WAP Parcel <sup>1</sup>	Area (sf)	Present Owner		
Development Site	B 2472, L 410	77 Commercial St.	3	110,519 sf	Waterview at Greenpoint LLC (the applicant)		
City-owned Property	B 2472, L 425	65 Commercial St.	4	125,063 sf	City of New York		

Parcels identified in the Waterfront Access Plan (WAP) BK-1.

#### Points of Agreement

In connection with the 2005 Greenpoint-Williamsburg Rezoning, the City executed the POA, in which the City stated its intention to:

- Relocate the existing NYCTA facilities from the City-owned property to off-site locations;
- Designate the City-owned property for improvement as a public park (Box Street Park);
- Allow the sale of development rights from the City-owned property to an adjacent property owner; and
- Require that the purchaser of the development rights provide 200 affordable housing units as part of the future development on its property.

The City has already begun implementing some of the POA provisions. The City is currently in the process of relocating the majority of the NYCTA facilities from the City-owned property and has selected a consultant to provide design services for the public park.

In addition, the applicant and the City have executed a contract of sale pursuant to which the applicant would obtain up to approximately 368,000 gsf (343,923 zsf) of development rights from the City-owned property for use in the proposed development on the development site.<sup>3</sup> The City would use the proceeds from the sale of the development rights as partial funding for construction of Box Street Park and the applicant would use a portion of the transferred development rights to provide 200 affordable units as part of the proposed development. The transfer of the development rights would be effectuated pursuant to ZR Section 62-353 (Special Floor Area, Lot Coverage and Residential Density Distribution Regulations), which permits, on an as-of-right basis, adjoining parcels identified in the WAP to be treated as a single development parcel on which the total permitted floor area, lot coverage and residential density may be located without regard to zoning lot lines or district boundaries. Likewise, the disposition of the City-owned development rights would not require approval under ULURP, since development rights do not constitute real property interests. Because the potential impacts of the transfer of development rights were not analyzed in the 2005 FEIS for the Greenpoint-Williamsburg Rezoning,

A-5

Pursuant to the agreement, the applicant would purchase up to 303,903 sf of base floor area and would be permitted to include the lot area of the City-owned property in calculating the maximum permitted bonus floor area under the Inclusionary Housing program, which would yield up to an additional 40,020 sf of floor area. Assuming Quality Housing and mechanical deductions, the floor area would translate into approximately 368,000 gsf.

however, the potential impacts of the transfer will be included as part of the environmental analysis of the proposed actions under CEQR.

#### Surrounding Uses

Greenpoint is located at the northern tip of Brooklyn, directly south of Long Island City, Queens. The East River and Newtown Creek form the neighborhood's western, northern, and eastern boundaries. Greenpoint is served by the G subway line, connecting to Carroll Gardens in Brooklyn and points in Queens, and the East River Ferry, which provides service to midtown and downtown Manhattan, Long Island City, and other neighborhoods along the East River in Brooklyn.

The blocks in the immediate vicinity of the project site and along the waterfront were historically developed with industrial uses in the nineteenth century. These industries included ship building, metal and glass production, and oil and sugar refining. Industry in this area declined steadily throughout the twentieth century. Most of this area was rezoned to permit residential uses in the 2005 Greenpoint-Williamsburg Rezoning. Many of these rezoned properties continue to be used for low-intensity non-residential uses or are vacant.

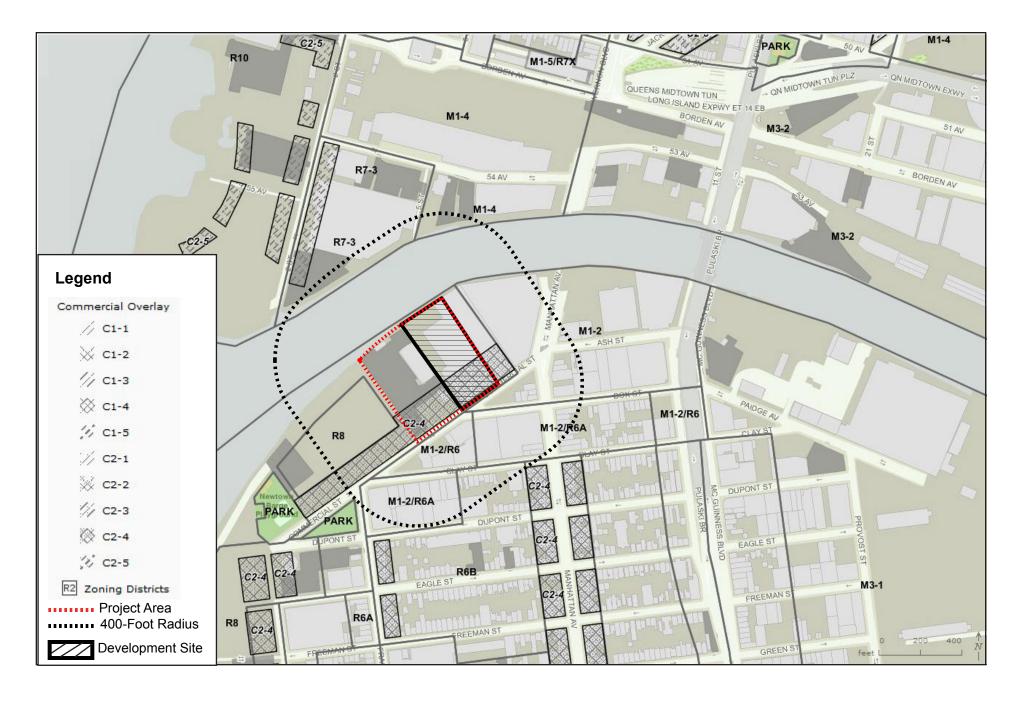
The inland blocks east of West Street and south of Clay Street were originally developed in the nineteenth and early twentieth centuries as residential neighborhoods to house workers attached to the vibrant industries located along the East River and Newtown Creek. This inland area has seen considerable growth during the last decade as a residential neighborhood. Today, most of these blocks consist of 2- to 4-story wood-frame attached houses and apartment buildings, while some buildings rise to five or six stories. These buildings often include ground floor commercial uses when located along the commercial corridors such as Manhattan Avenue and Franklin Street. The blocks between Franklin Street and West Street and between Clay Street and Box Street are transitional areas with a patchwork of residential and residual industrial properties.

#### **Zoning**

#### Project Area

Both the development site and the City-owned property are located in an R6 residential district with a C2-4 commercial overlay mapped within 150 feet of Commercial Street (refer to Figure A-3). Likewise, both sites are mapped as Inclusionary Housing Designated Areas (BK-1). Both the development site and the City-owned property are also identified in the WAP as Parcels 3 and 4, respectively. The WAP, which was established as part of the 2005 Greenpoint-Williamsburg Rezoning, governs the provision of the waterfront public open space required for developments in this area.

Under the 2005 Greenpoint-Williamsburg Rezoning, special bulk regulations apply to waterfront parcels. In R6 and R6/C2-4 districts, the maximum base floor area ratio (FAR) for residential uses is 2.43, which may be increased to 2.75 by providing affordable housing in compliance with special provisions for the Inclusionary Housing program under ZR Section 62-352. Under these provisions, the Inclusionary Housing bonus may be obtained either by reserving at least 7.5 percent of the total floor area of the project (exclusive of ground-floor non-residential floor area) for low-income households or by reserving at least 5 percent of the total floor area for low-income households and an additional 5 percent for moderate-income households. The maximum FAR for commercial uses in the R6/C2-4 district is 2.0. In addition, up to 2 percent of the total permitted floor area on the zoning lot may be used for commercial waterfront-enhancing uses in the R6 portion. The maximum permitted FAR for community facility uses is 4.8; however, the maximum community facility FAR is reduced to 2.43 for zoning lots containing residential uses.



77 Commercial Street EAS Figure A-3

Likewise, portions of buildings within an initial setback distance of 15 feet a narrow street (such as Commercial Street) or an upland connection and within 30 feet of a shore public walkway may not exceed a base height of 65 feet ABP or 6 stories, whichever is less, except that for zoning lots with more than 100 feet of frontage on a street in an R6 district, at least 20 percent of the frontage may not exceed a maximum height of 55 feet or 5 stories. The maximum building height is set at 110 feet (plus a 40 foot complying penthouse), except for portions of buildings within 100 feet of Commercial Street, for which the maximum building height is 65 feet or 6 stories.

#### Surrounding Area

R8 and R6 residential districts are generally mapped along Newtown Creek, along with C2-4 commercial overlays fronting West and Commercial Streets, except for an M1-2 manufacturing district to the east of the development site. In the R8 waterfront district, the maximum base FAR is 4.88 for residential uses (bonusable to 6.5 under the Inclusionary Housing program), and 6.02 for community facility uses. For portions mapped with the C2-4 overlay, the maximum commercial FAR is 2.0. Maximum base heights are 70 feet and maximum building heights (including bonuses for inclusionary housing and penthouses) is 400 feet ABP. In the M1-2 district, the maximum base FAR is 4.8 for community facility uses and 2.0 for commercial and manufacturing uses. Base heights are limited to the lesser of 60 feet or 4 stories and maximum building heights are established by a sky exposure plane.

For the upland portions of the surrounding area, the M1-2 district transitions to a series of M1-2/R6 and M1-2/R6A (MX-8) special mixed districts along the south side of Box Street and the east side of Commercial Street. R6B districts are mapped to the south of the MX districts along with an R7A/C2-4 district along Manhattan Avenue. All of the residential districts, except the R6B districts are mapped within the IHDA. In the M1-2/R6 districts, the maximum base FAR is 2.2 for residential uses (bonusable to 2.42 under the Inclusionary Housing program), 2.0 for commercial and manufacturing uses and 4.8 for community facility uses, the maximum base height is 60 feet and the maximum building height is 110 feet. In the M1-2/R6A districts, the maximum base FAR is 2.7 for residential uses (bonusable to 3.6 under the Inclusionary Housing program), 2.0 for commercial and manufacturing uses and 4.8 for community facility uses, base heights must be between 40 and 65 feet and the maximum building height is 70 feet. In the R6B district, the maximum base FAR for residential and community facility uses is 2.0, base height must be between 30 and 40 feet and the maximum building height is 50 feet. In the R7A/C2-4 district, the maximum base FAR is 3.45 for residential uses (bonusable to 4.6 FAR under the Inclusionary Housing program), 2.0 for commercial uses and 4.0 for community facility uses, base heights must be between 40 and 65 feet and the maximum building height is 80 feet.

#### IV. PROJECT PURPOSE AND NEED

The grant of the proposed actions would facilitate the development of up to 720 dwelling units (including 200 affordable housing units), up to 25,750 gsf of local retail and service uses, up to approximately 6,200 gsf of community facility uses, approximately 25,450 sf of waterfront public access areas and approximately 9,400 sf of additional on-site publicly accessible open space on the development site. In addition, the City would use the proceeds from the sale of the development rights to fund construction of Box Street Park on the City-owned property.

#### **Special Permit**

Pursuant to ZR Section 36-652, the maximum permitted floor area ratio (FAR) is 2.75 for R6 districts and 6.5 for R8 districts. The transfer of development rights from the City-owned property to the

development site would increase the total proposed development to a maximum of approximately 760,650 gsf (647,851 zsf). Although the total maximum FAR on the development site and the Cityowned property considered as a single development parcel would average to 2.75, the effective FAR of the proposed development would increase to approximately 5.86 when only the lot area of the development site is considered, which is close to the maximum FAR permitted in an R8 district. Accordingly, the Special Permit would grant waivers with respect to maximum base and building heights and minimum setback requirements to provide building envelopes for the development site similar to envelopes permitted in R8 districts to allow the transferred floor area to be accommodated in a commercially reasonable manner. The waivers would also allow the affordable units to have the same floor to ceiling heights as the market-rate units and would provide greater variation and articulation of the base building by allowing portions of the base building to exceed the maximum base height of 65 feet.

#### **Location Authorization**

The regulations in the Zoning Resolution governing the development of waterfront zoning lots generally require a 30-foot wide upland connection (for pedestrian access) and a 50-foot wide visual corridor (for unobstructed views) to be provided at regular intervals along upland streets through waterfront zoning lots to the shoreline. The regulations, as modified by the WAP, provide for a variety of scenarios for satisfying upland connection and visual corridor requirements on the development site and the Cityowned property, depending on which parcel is developed first and whether the Cityowned property is developed predominantly as a public park. The Location Authorization would allow the upland connection, and 30 feet of the 50-foot wide visual corridor, to be provided on the development site regardless of the timing and type of development. The Location Authorization would also allow the levels of the visual corridor and the waterfront yard to be raised above the levels permitted in the Zoning Resolution to facilitate a design for the proposed project that addresses flooding concerns and newly mandated flood elevation regulations.

#### **Design Authorization**

Visual corridors and waterfront public access areas are required to be unobstructed from their lowest level to the sky, except for certain permitted obstructions. The lowest permitted level of waterfront public access areas is determined in reference to the elevation of the adjoining public sidewalk and of the bulkhead. The elevation of the sidewalk along the Commercial Street frontage of the development site ranges from 9.10 feet to 9.81 feet above Brooklyn Highway Datum (BHD), while the elevation of the existing portions of the bulkhead ranges from 7.90 feet to 8.90 feet above BHD. The ground floor of the proposed development would be occupied by a small residential lobby and local retail uses along Commercial Street, accessory off-street parking in the center of the development site and residential amenity space or possibly a café, restaurant or other waterfront-enhancing commercial or community facility uses along the shore public walkway. Dwelling units would be located beginning at the 2<sup>nd</sup> story of the proposed development, as would the primary residential entrances to the buildings which would be accessed from a courtyard in the center of the development site, above the parking facility and at an elevation of approximately 20.5 feet above BHD. The upland connection would provide the principal means of pedestrian access from Commercial Street to the residential entrances. Accordingly, the grade of the upland connection would rise from approximately 9.1 feet above BHD at Commercial Street to approximately 19.0 feet above BHD near the building entrances and then would fall to approximately 13.0 feet above BHD at the shore public walkway. Likewise, the grade of the shore public walkway would range from approximately 7.9 feet above BHD to approximately 13 feet above BHD. The Design Authorization would provide waivers to allow for this configuration as well as other minor variations in the design of the waterfront public access areas, including the amount of planting in the shore public walkway, the amount of paving in the entry area to the upland connection, the height of fences, retaining walls and planted areas providing the transition along the common lot line between the development site and the City-owned property, the amount of seating directly facing the water, the dimensions of trash receptacles and the angle of the guard rail along the shore public walkway.

#### **Text Amendment**

Pursuant to ZR Section 11-13, district designations indicated on zoning maps do not apply to public parks, which means that public parks do not generate floor area. If the City-owned property were developed as a public park prior to the issuance of a certificate of occupancy for the proposed development, the development rights obtained by the applicant from the City would no longer be available for transfer from the City-owned property. The Text Amendment will provide that the City-owned property will continue to generate floor area even after it is developed as a public park.

#### V. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION SCENARIO)

#### **Project Area**

#### Development Site (Lot 410)

In the 2016 future without the proposed actions (No-Action Scenario), the applicant would demolish the existing improvements on the development site and replace them with an as-of-right, 14-story mixed-use market-rate residential development with ground floor commercial and community facility uses and accessory parking complying with the requirements set forth under the R6 and R6/C2-4 zoning.

As shown in Table A-2, the No-Action development would include a total of up to approximately 318,760 gsf (2.43 FAR), which would be comprised of approximately 265,690 gsf of residential area (276 dwelling units), 25,750 gsf of ground-floor local retail and service uses, and 6,200 gsf of community facility uses. All of the proposed 276 dwelling units would be market-rate. The No-Action development would add up to approximately 720 residents and up to 110 employees to the development site. In addition, 138 off-street parking spaces accessory to the residential uses would be provided in a ground floor parking area with a size of approximately 32,200 gsf.

In compliance with the applicable regulations governing maximum building heights and permitted penthouses set forth in ZR Section 62-354(b), the No-Action development would be up to ten stories tall (110 feet ABP, which is the maximum building height permitted as-of-right in the R6 and R6/C2-4 districts) plus a 4-story penthouse (150 feet ABP) and a 25-foot mechanical bulkhead (175 feet ABP) which are also permitted under zoning. Under the No-Action condition, approximately 16,025 sf of waterfront public access areas would be provided on the development site, comprised of a 9,515 sf shore public walkway along Newtown Creek and, pursuant to ZR Sections 62-931(d)(2) and 62-931(e)(2), a

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The No-Action Scenario assumes that no development rights would be transferred from the City-owned property and therefore there would be no obligation to provide the 200 affordable units on the development site under the POA. Prior to entering into the agreement with the City to acquire the development rights, the applicant planned on constructing an all-market-rate, as-of-right development on the development site. Absent the obligation to provide the 200 affordable units under the POA, the modest increase in market-rate floor area generated by the inclusionary housing program (10,510 sf) for the development site would not be sufficient to entice the applicant to construct an affordable component.

<sup>&</sup>lt;sup>5</sup> Source: 2.61 people per household; NYC DCP Community District Demographic Profiles (Census 2010).

Assumptions: 1 building employee per 25 DUs, 3 local retail employees per 1,000 gsf of retail space, 3 community facility employees per 1,000 gsf of community facility space and 1 parking employee per 50 attended parking spaces.

Based on 0.5 accessory parking spaces per market-rate DU pursuant to ZR Section 25-23 (276 DUs, 138 parking spaces). The required parking spaces accessory to commercial use (1 space per 1,000 zsf) would be waived pursuant to ZR Sections 36-21 and 36-232.

15-foot wide alternate public way (comprising 6,695 sf) along the eastern lot line of the development site, complying with the provisions of ZR Section 62-64 applicable for Type 2 upland connections. A site plan, section, and axonometric of the as-of-right development are provided in Figures A-4, A-5, and A-6, respectively.

#### City-Owned Property (Lot 425)

In the 2016 future without the proposed actions, the City would demolish the existing improvements on the City-owned property (except, perhaps, for the 2-story office building which could be converted to accessory park uses) and redevelop the parcel as a public park (Box Street Park) which would have a total area of up to approximately 125,063 sf.

It is assumed that the design for Box Street Park under the No-Action scenario would be consistent with the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan<sup>9</sup>, which contemplates that Box Street Park will combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that will overlook the shore public walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access points for kayaks. The plan, however, is subject to change based on community input that will be gathered during the design development phase for the park.

Table A-2 Proposed 2016 No-Action Scenario

	Zoning Lot Size	GSF above Grade	GSF below Grade	Total GSF <sup>1</sup>	C GSF	CF GSF	R GSF	# of DUs	# of Access. Parking Spaces	Accessory Parking GSF	Building Height (in feet)	Public Open Space (SF)
Lot 410	110,519	318,760	0	318,760	25,750	6,200	265,690	276	138	32,200	175'1	16,025
Lot 425	125,063	0	0	0	0	0	0	0	0	0	0	125,063
TOTAL	235,582	318,760	0	318,760	25,750	6,200	265,690	276	138	32,200	175'	141,088

<sup>&</sup>lt;sup>1</sup> The No-Action building would include up to 14 stories (150 feet ABP) plus a complying 25-foot mechanical penthouse (175 feet ABP) Note: C = Commercial, CF = Community Facility, R = Residential

#### VI. DESCRIPTION OF THE FUTURE WITH THE PROPOSED ACTIONS

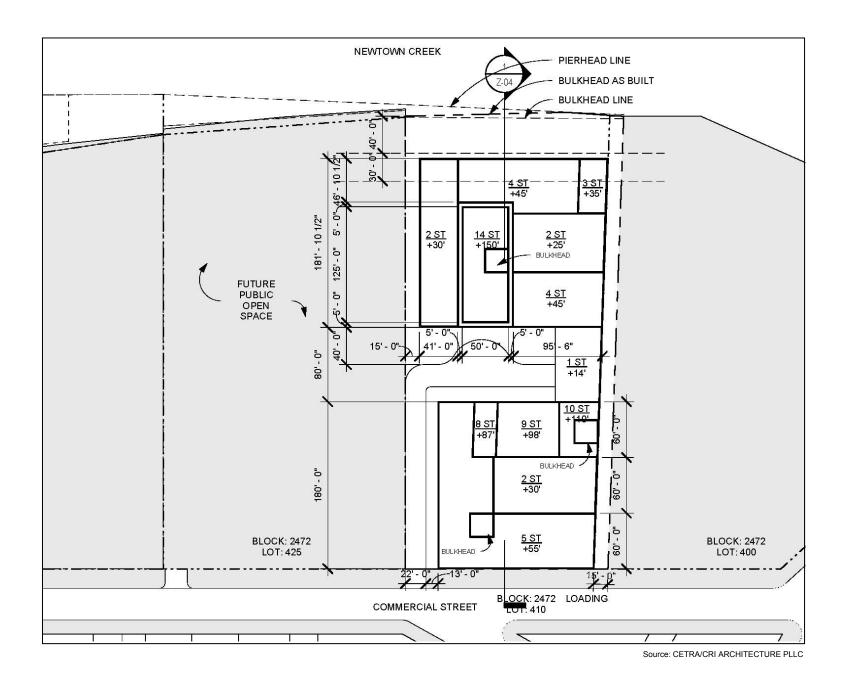
#### **Project Area**

#### Development Site (Lot 410)

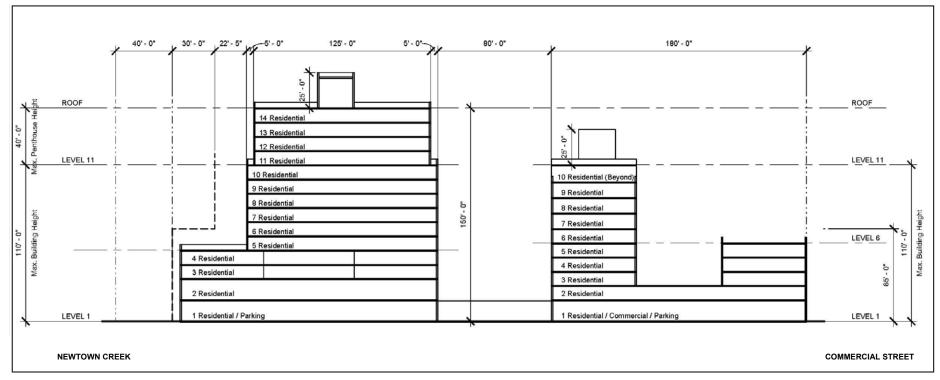
In the 2016 With-Action condition, the applicant would demolish the existing improvements on the development site and replace them with a total of up to approximately 760,650 gsf of floor area, including 720 dwelling units (up to approximately 693,320 gsf of residential space), up to approximately 25,750 gsf of ground floor local retail and service uses, up to approximately 6,200 gsf of

The No-Action development would require a certification from the Chair of the CPC that the proposed waterfront public access areas comply with the applicable location and design requirements set forth in ZR Sections 62-50, 62-60 and 62-931. The grant of the certification is a ministerial action that is not subject to CEQR or ULURP.

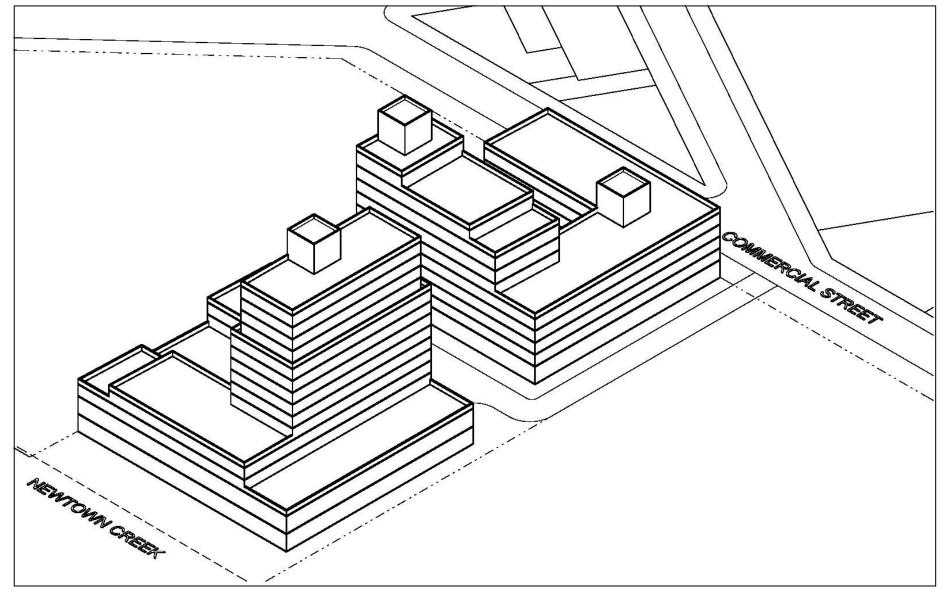
Source: http://www.nycgovparks.org/park-features/future-parks/greenpoint-williamsburg-waterfront



77 Commercial Street EAS Figure A-4



Source: CETRA/CRI ARCHITECTURE PLLC



Source: CETRA/CRI ARCHITECTURE PLLC

community facility uses, and 320 accessory off-street parking spaces (46,730 gsf). See Table A-3. The proposed 720 dwelling units in the With-Action condition would include 200 affordable housing units and 520 market-rate dwelling units.

Of the proposed 720 dwelling units, 200 units would be affordable to low-, moderate-, or middleincome households. The proposed development would comply with (1) the Inclusionary Housing provisions set forth in ZR Section 62-352(b)(2)(ii), which require at least 5 percent of the total floor area of the project (exclusive of ground-floor non-residential floor area) to be reserved for low-income households and an additional 5 percent to be reserved for moderate-income households, to and (2) the programmatic requirements of Section 421-a(6)(b) of the Real Property Tax Law, which would require that at least 10 percent of the dwelling units be reserved for low-income households and 15 percent of the dwelling units be reserved for moderate-income households. Accordingly, the applicant has committed to a program that would provide 72 low-income units (household income below 80 percent of the Area Median Income (AMI)), 108 moderate-income units (household income below 125 percent of the AMI) and 20 middle-income units (household income below 175 percent of the AMI). The applicant is seeking state and federal funding mechanisms such as Section 8 and income housing tax credits, which would allow a reduction in the maximum AMIs and/or an increase in the number of lowincome units. However, at this time, it is uncertain whether any such funding would be made available for the project. Accordingly, the committed program numbers will be used for analysis purposes throughout this EAS.

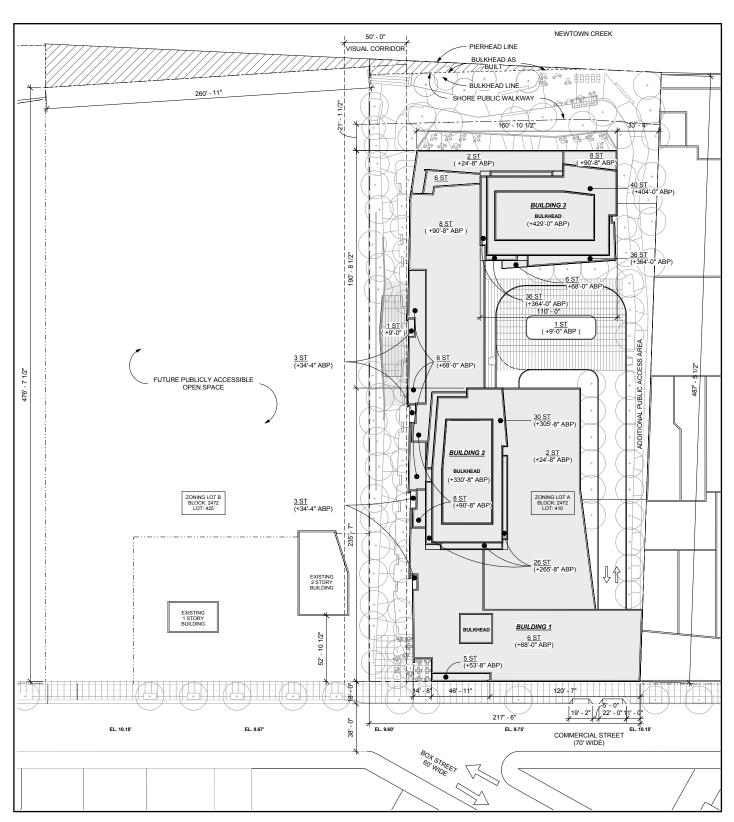
The proposed development would add approximately 1,879 new residents. In addition, the proposed development would add approximately 132 employees.

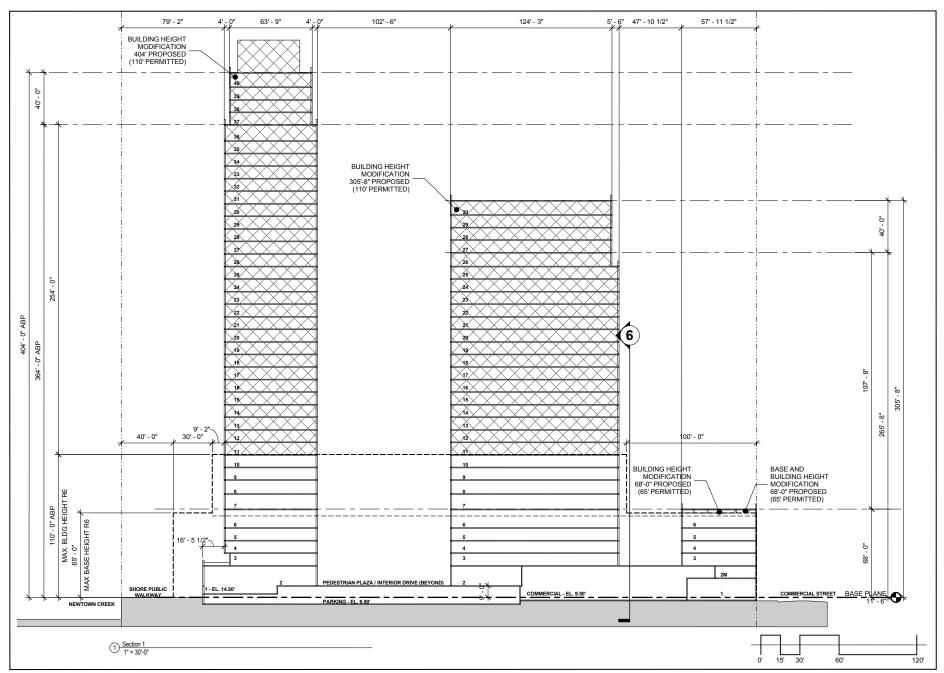
The proposed development would include three individual buildings: Building 1, which would be 6-stories tall and rise to an elevation of 68 feet ABP, Building 2, which would be 30 stories tall and rise to an elevation of 305.7 feet ABP (with a mechanical penthouse rising to 330.7 feet ABP), and Building 3, which would be 40 stories tall and rise to an elevation of 404 feet ABP (with a mechanical penthouse rising to 429 feet ABP. In addition, approximately 34,850 sf of publicly accessible open space would be provided on the development site, consisting of a 9,515 sf shore public walkway, a 15,935 sf upland connection and a 9,400 sf secondary landscaped pedestrian walkway. A bulkhead inspection for the project area was completed in July of 2013, and determined that the bulkhead in the project area is not practically repairable and will have to be replaced in its entirety to satisfy the shore public walkway requirements. Potential bulkhead remediation would be a mix of rip rap and new steel pile bulkheads, with the possibility of gabions, to be determined in consultation with NYSDEC. In addition, approximately 14,500 gsf of private accessory open space would be provided on building terraces for use by building residents. A site plan, section, ground and second floor plan, as well as a rendering of the proposed development are provided in Figures A-7, A-8, A-9, and A-10, respectively.

## City-Owned Property (Lot 425)

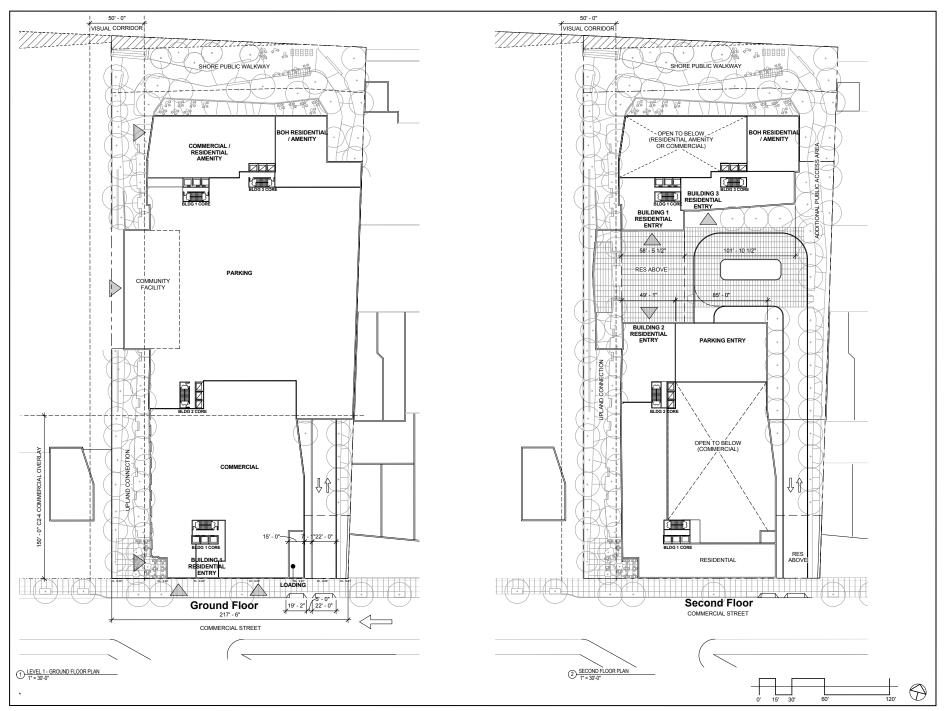
In the 2016 future with the proposed actions, the City-owned property would be occupied by the new Box Street Park, which would have the same lot area as under the No-Action condition (up to approximately 125,063 sf). The City would use proceeds from the sale of the development rights to the applicant to supplement construction and development of Box Street Park. As a result, Box Street Park

Based on 0.5 accessory parking spaces per market-rate DU pursuant to ZR Section 25-23 (520 DUs, 260 parking spaces) and 0.35 accessory parking spaces per affordable housing unit pursuant to ZR Section 25-25 (200 DUs, 70 parking spaces). The required parking spaces accessory to commercial use (1 space per 1,000 zsf) would be waived pursuant to ZR Sections 36-21 and 36-232 in the Future with the proposed action.





Source: CETRA/CRI ARCHITECTURE PLLC



Source: CETRA/CRI ARCHITECTURE PLLC



Source: CETRA/CRI ARCHITECTURE PLLC

in the With-Action condition would be expected to include features beyond those provided under the No-Action Scenario.

Table A-3 Proposed 2016 With-Action Scenario

	Zoning Lot Size	GSF above Grade	GSF below Grade	Total GSF <sup>1</sup>	C GSF	CF GSF	R GSF	# of DUs	# of Access. Parking Spaces	Accessory Parking GSF	Building Height (in feet)	Public Open Space (SF)
Lot 410	110,519	760,650	0	760,650	25,750	6,200	693,320	$720^{2}$	320 <sup>3</sup>	46,730	429 <sup>4</sup>	34,850
Lot 425	125,063	0	0	0	0	0	0	0	0	0	0	125,063
TOTAL	235,582	760,650	0	760,650	25,750	6,200	693,320	720	320	46,730	429	159,913

Includes parking area.

Note: C = Commercial, CF = Community Facility, R = Residential

## **Incremental Development**

Based on the RWCDS for the No-Action and With-Action scenario conditions identified above, the net incremental change in development that would occur as a result of the proposed actions is shown in Table A-4. The increment between the as-of-right development in the No-Action scenario and the proposed development in the With-Action scenario would be an increase of 441,890 gsf of residential floor area (444 dwelling units), 14,540 gsf of accessory parking area (182 accessory parking spaces) and 18,828 sf of publicly accessible open space. There would be no change in the amount of ground floor local retail or community facility area. The increment identified in Table A-4 would be analyzed for density-related and site-specific impacts in the EAS.

Table A-4 Comparison of No-Action and With-Action Development Programs

	Zoning Lot Size	GSF above Grade <sup>1</sup>	GSF below Grade	Total GSF	C GSF	CF GSF	R GSF	# of DUs	# of Access. Parking Spaces	Accessory Parking GSF	Building Height (in feet) <sup>2</sup>	Public Open Space (SF)
No-Action	235,582	318,760	0	318,760	25,750	6,200	265,690	276	138	32,200	175'	141,085
With-Action	235,582	760,650	0	760,650	25,750	6,200	693,320	720 <sup>3</sup>	320	46,730 <sup>4</sup>	429'	159,913
Increment	0	441,890	0	441,890	0	0	427,630	444 <sup>5</sup>	182	14,530	254'	18,828

Includes parking area.

Note: C = Commercial, CF = Community Facility, R = Residential

The 720 DUs in the With-Action condition would include 72 low-income, 108 moderate-income, 20 middle-income, and 520 market rate units.

In the With-Action condition, stackers would be provided in the ground floor parking area.

<sup>&</sup>lt;sup>4</sup> In the With-Action condition, the maximum building height would be 40 stories (404 feet ABP), topped by a 25-foot mechanical bulkhead (429 feet ABP).

Building heights include 25-foot mechanical bulkheads.

The 720 DUs in the With-Action condition would include 72 low-income, 108 moderate-income, 20 middle-income, and 520 market rate units

In the With-Action condition, stackers would be provided in the ground floor parking area.

<sup>&</sup>lt;sup>6</sup> The net increment of 444 DUs would include 72 low-income, 108 moderate-income, 20 middle-income, and 244 market rate units.

# Projected Residents and Employee Ratios

It is projected that the average number of residents per development-generated unit would be 2.61, which is the 2010 Census average household size for Brooklyn Community District 1, in which the development site is located. Employee estimates for the No-Action and With-Action scenarios are based on the assumptions of one building employee per 25 dwelling units, three employees per 1,000 gsf of local retail space, three employees per 1,000 gsf of community facility space, and one employee per 50 parking spaces.

Based on these projected residents and employee ratios, Table A-5 provides a comparison of the number of residents and employees in the No-Action Scenario and With-Action scenario conditions.

As noted above in Table A-5, the net incremental change in the number of residents and the number of employees that would occur as a result of the proposed actions is 1,159 residents and 22 employees.

Table A-5
Comparison of No-Action and With-Action Residential and Daytime Population

Users On-Site	No-Action Scenario	With-Action Scenario	Net Difference
Residential	720	1,879	1,159
Building Employees	11	29	18
Local Retail	77	77	0
Community Facility	19	19	0
Parking	3	7	4
Total	720 Residents 110 Employees	1,879 Residents 132 Employees	1,159 Residents 22 Employees

# ATTACHMENT B SUPPLEMENTAL SCREENING

## I. INTRODUCTION

This Environmental Assessment Statement (EAS) has been prepared in accordance with the guidelines and methodologies presented in the 2012 City Environmental Quality Review (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 analyses were conducted for all aspects of the proposed action to determine whether detailed analysis of any technical area would be appropriate. Part II of the EAS Full Form identified those technical areas that warrant additional assessment. For those technical areas that warranted a "yes" answer in Part II of the EAS Full Form, supplemental screening is provided in this attachment. The technical areas discussed are: Land Use, Zoning and Public Policy, Socioeconomic Conditions, Community Facilities, Open Space, Shadows, Urban Design and Visual Resources, Natural Resources, Hazardous Materials, Transportation, Air Quality, Noise, Neighborhood Character, and Construction. The remaining technical areas detailed in the 2012 CEOR Technical Manual were not deemed to require supplemental screening because they do not trigger CEQR thresholds and/or are unlikely to result in significant impacts (see Part II of the EAS Full Form). Based on the findings of the supplemental screening analyses, the technical areas that warranted a detailed analysis were Land Use, Zoning, and Public Policy (Attachment C), Socioeconomic Conditions (Attachment D), Community Facilities (Attachment E), Open Space (Attachment F), Shadows (Attachment G), Urban Design and Visual Resources (Attachment H), and Air Quality (Attachment I).

As detailed in Attachment A, "Project Description", this proposal involves an application by Waterview at Greenpoint, LLC ('the applicant'), for several discretionary actions, including the following:

- A special permit (the "Special Permit") pursuant to Section 62-836 (Bulk modifications on waterfront blocks) of the New York City Zoning Resolution (the "Zoning Resolution" or "ZR") to waive requirements regarding maximum base and building heights and minimum setbacks;
- An authorization (the "Location Authorization") pursuant to ZR Section 62-822(a) (Authorization to modify requirements for location, area and minimum dimensions of waterfront public access areas and visual corridors) to waive requirements regarding the location of visual corridors and upland connections and to permit the levels of visual corridors and waterfront yards to be raised;
- An authorization (the "Design Authorization" and, collectively, with the Location Authorization, the "Authorizations") pursuant to ZR Section 62-822(b) (Authorization to modify requirements within waterfront public access areas) to allow modifications to permitted obstruction requirements for visual corridors and waterfront public access areas and to permit minor variations in the design of waterfront public access areas;
- With the Department of City Planning as co-applicant, an amendment (the "Text Amendment") to the text of ZR Section 11-13 (Public Parks) and ZR Section 62-351 (Special floor area regulations) to provide that the City-owned property will continue to generate floor area even after it is developed as a "public park" as defined in ZR Section 12-10; and
- A certification (the "Certification") pursuant to ZR Section 62-811 (Waterfront public access areas and visual corridors) that except with respect to the waivers granted pursuant to the Authorizations, the design of the proposed waterfront public access areas would comply with the applicable requirements set forth in ZR Sections 62-50, 62-60 and 62-931

The proposed actions would enable the construction of a mixed-use development with ground floor commercial and community facility space on the development site (Lot 410, Block 2472), which is located in the Greenpoint neighborhood of Brooklyn Community District 1. The development site, which is comprised of an area of approximately 110,519 sf (2.54 acres) (plus approximately 1,200 sf of additional land under water), would be included in the project area (refer to Figure A-1 in Attachment A, "Project Description"), which also includes an approximately 125,063 sf (2.87 acres) (plus approximately 6,400 sf of additional land under water) City-owned lot. The block that includes the development site and City-owned lot is bounded by Manhattan Avenue to the east, Commercial Street to the southeast, the prolongation of Eagle Street to the south and the Newtown Creek to the northwest.

The proposed actions would facilitate the construction of an approximately 760,650 gross square foot (gsf)<sup>1</sup> mixed-use residential, local retail, and community facility development, which would be located on the development site. A 6-story building, a 30-story building and a 40-story building would be constructed, including local retail and community facility uses on the ground floor. Up to approximately 643,320 gsf of residential uses (720) units), up to approximately 25,750 gsf of ground floor commercial uses, up to approximately 6,200 gsf of community facility uses, and approximately 46,730 gsf of attached off-street accessory parking (330 spaces) would be developed. Of the residential units 200 units would be affordable and 520 units would be market rate. The proposed development would replace an existing 2-story warehouse building, which would be demolished prior to construction of the proposed development

Under future conditions without the proposed actions it is anticipated that 265,960 gsf of residential space (276 units), 25,750 gsf of commercial space, 6,200 gsf of community facility space, 32,200 gsf of accessory parking space (138 accessory parking spaces), and 141,085 gsf of open space would be developed, for a total of 318,760 gsf of new development.

The incremental (net) change that would result from the proposed development at the development site compared to the No-Action condition is 444 residential units (427,360 gsf). The proposed development would add approximately 1,159 new residents<sup>2</sup> to the development site and is expected to generate approximately 18 building employees, and 4 parking employees.

The applicant's proposed development is the only development expected to result from the proposed actions. Since no other potential development sites were identified, the With-Action condition would be identical to the RWCDS of the proposed development. The proposed reasonable worst case development scenario (RWCDS) would be analyzed for density-related and site-specific impacts in the EAS. The analysis year for the RWDCS is 2016.

## II. LAND USE, ZONING, AND PUBLIC POLICY

Following 2012 CEQR Technical Manual guidelines, a preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. CEQR also requires a detailed assessment of land use conditions if a detailed assessment has been deemed appropriate for other technical areas. Since this EAS provides a detailed assessment of socioeconomic conditions, a detailed analysis of land use, zoning, and public policy is provided in

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<sup>&</sup>lt;sup>1</sup> The proposed 760,650 gsf are above grade and do not include mechanical bulkhead area.

<sup>&</sup>lt;sup>2</sup> Based on 2.61 persons per household (Source: Demographic Profile - New York City Community Districts, Brooklyn Community District 1, 2010, U.S. Census 2010).

Attachment C, "Land Use, Zoning and Public Policy". As discussed therein, the proposed action would not result in any significant adverse land use, zoning, or public policy impacts.

## Waterfront Revitalization Program

In accordance with the guidelines of the 2012 CEQR Technical Manual, a preliminary evaluation of the proposed actions' potential for inconsistency with the New York City Waterfront Revitalization Program (WRP) policies was undertaken and is included as Appendix 1. This preliminary evaluation requires completion of the Consistency Assessment Form (CAF), which was developed by the New York City Department of City Planning (DCP) to help applicants identify which WRP policies apply to a specific action. The questions in the CAF are designed to screen out those policies that would have no bearing on a consistency determination for a proposed action. For any questions that warrant a "yes" answer or for which an answer is ambiguous, an explanation should be prepared to assess the consistency of the proposed actions with the noted policy or policies.

The CAF was prepared for the proposed actions, and is provided in Appendix 1. As indicated in the form, the proposed actions were deemed to require further assessment of ten specific policies. As discussed in Appendix 1, an assessment of these ten WRP policies found that the proposed actions would be consistent with all applicable policies. Therefore, the proposed actions would not result in any significant adverse impacts related to the WRP.

## III. SOCIOECONOMIC CONDITIONS

The 2012 CEQR Technical Manual states that a socioeconomic assessment should be conducted if a project may be reasonably expected to create socioeconomic changes within the area affected by the project that would not be expected to occur without the project. In accordance with 2012 CEQR Technical Manual guidelines, socioeconomic analysis considers five specific elements that can result in significant adverse socioeconomic impacts: (1) direct displacement of residential population on a project site; (2) direct displacement of existing businesses or institutions on a project site; (3) indirect displacement of residential population in a study area; (4) indirect displacement of businesses or institutions in a study area; and (5) adverse effects on specific industries.

Based on 2012 CEQR Technical Manual guidelines, residential development of 200 units or less, or commercial and/or community facility development of 200,000 sf or less would not typically result in significant socioeconomic impacts. The proposed development would introduce approximately 720 dwelling units, 25,750 gsf of commercial space, and 6,200 gsf of community facility space. As the proposed action would include more than 200 residential units, a preliminary socioeconomics condition assessment is provided in Attachment D, "Socioeconomic Conditions." As discussed therein, the proposed action would not result in any significant adverse socioeconomic impacts.

## IV. COMMUNITY FACILITIES AND SERVICES

The 2012 CEQR Technical Manual defines community facilities as public or publicly funded facilities, including schools, health care, day care, libraries, and fire and police protection services. A community facilities analysis is needed if there would be potential direct or indirect effects on a subject facility. As there are no direct effects to existing community facilities resulting from the proposed action, this analysis concentrates on the potential for indirect effects. The 2012 CEQR Technical Manual provides guidelines or thresholds that can be used to make an initial determination of whether a detailed study is necessary to determine potential impacts. The projected development by 2016 under the proposed action

exceeds the 2012 *CEQR Technical Manual* threshold for public elementary and intermediate schools and publicly funded day care centers, and, therefore, detailed analyses of these services are provided in Attachment E, "Community Facilities and Services" and summarized herein.

Based on the analysis, no significant adverse impacts for elementary or intermediate schools were identified as a result of the proposed project. Intermediate schools would operate with an estimated utilization rate of 108.3 percent and a shortage of approximately 111 seats in the future With-Action condition. The analysis found that elementary school capacity would exceed demand in both the No-Action and With-Action conditions. However, as the proposed project would result in an increase in the elementary and intermediate school utilization rate below the CEQR threshold of 5 percent (4.5 percent for elementary schools and 4.0 percent for intermediate schools), no significant adverse impacts for elementary or intermediate schools are expected as a result of the proposed project.

As detailed in Attachment E, "Community Facilities and Services," the applicant has committed to a program that would provide 72 new low-income units, which would not exceed the threshold for a detailed analysis of child care services. However, as the applicant is seeking state and federal funding mechanisms which would allow a reduction in the maximum AMI's and/or an increase in the number of low-income units, a sensitivity analysis was provided. Based on a detailed analysis of child care services showing the potential impacts on child care assuming various increases in the number of low-income units that could be provided in the future with the proposed actions, no significant adverse impacts on child care services were identified. The analysis found that child care capacity would exceed demand in both the No-Action and With-Action conditions. However, with the creation of up to 11 additional child care slots based on how many child care slots would be required as a result of the proposed actions, increases in children who are eligible for publicly-funded child care would not rise above the CEQR threshold of 5 percent in the future with the proposed actions, and no significant adverse impacts for child care services would be expected.

## V. OPEN SPACE

Based on the 2012 *CEQR Technical Manual*, an open space assessment is typically warranted if an action would directly affect an open space or if it would increase the population by more than:

- 350 residents or 750 workers in areas classified as "well-served areas;"
- 25 residents or 125 workers in areas classified as "underserved areas;"
- 200 residents or 500 workers in areas that are not within well-served or "underserved areas."

Maps in the Open Space appendix of the 2012 CEQR Technical Manual do not identify the project area as either underserved or well-served. The proposed development would introduce approximately 1,879 new residents and approximately 132 new employees. As the proposed action would introduce more than 200 residential units, a detailed open space condition assessment focusing exclusively on the open space needs of the residential population is provided in Attachment F, "Open Space." As discussed therein, the proposed action would not result in any significant adverse socioeconomic impacts.

As described in Attachment F, the proposed project would not result in any direct displacement or alteration of existing public spaces in the study area. As compared to No-Action conditions, the proposed actions would decrease the open space ratio from 0.555 to 0.543 acres per 1,000 residents, which translates to a 2.16 percent decrease compared to 2016 No-Action conditions, which is below the 5 percent 2012 *CEQR Technical Manual* threshold. The 2.16 percent reduction of the total open space ratio resulting from the proposed actions is not expected to noticeably diminish the ability of the study

area's open spaces to serve its residential population in the future with the proposed actions. As discussed in Attachment F, this is because the City is expected to create an approximately 2.87-acre public park by 2016 on 65 Commercial Street (Block 2472, Lot 425), adjacent to the development site. Under the With-Action conditions the City would use proceeds from the sale of the development rights to the applicant to partially fund construction and development of Box Street Park.

## VI. 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). According to the 2012 *CEQR Technical Manual*, some open spaces contain facilities that are not sunlight sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation.

As the proposed project would result in a 429-foot-tall building, a screening assessment per the 2012 *CEQR Technical Manual* guidelines is necessary to determine if detailed shadows analysis is warranted. Attachment G, "Shadows," provides a detailed shadow assessment. The shadows assessment concludes that the proposed action would not have significant adverse shadows impacts on sunlight sensitive resources in the surrounding area.

#### VII. URBAN DESIGN AND VISUAL RESOURCES

An analysis of urban design and visual resources is appropriate if a proposed project would result in buildings that substantially differ in height, bulk, form, setbacks, size, scale, use or arrangement than exists in an area, and change block form, demap an active street or map a new street, or affect the street hierarchy, street wall, curb cuts, pedestrian activity or streetscape elements, or would result in above ground development in an area that includes significant visual resources.

As the proposed actions would modify existing zoning and bulk regulations, it does have the potential to affect urban design and visual resources and therefore, an assessment is provided in Attachment H, "Urban Design and Visual Resources". As discussed in Attachment H, the proposed actions would facilitate a development that is consistent with anticipated future development in the surrounding neighborhood. Therefore, no significant adverse impacts on urban design and visual resources are expected to occur as a result of the proposed actions.

## VIII. NATURAL RESOURCES

The 2012 CEQR Technical Manual defines natural resources as (1) the City's biodiversity (plants, wildlife and other organisms); (2) any aquatic or terrestrial areas capable of providing suitable habitat to sustain the life processes of plants, wildlife, and other organisms; and (3) any areas capable of functioning in support of the ecological systems that maintain the City's environmental stability. Two possibilities determine whether a significant adverse impact on a natural resource might occur, and therefore, whether an assessment may be appropriate: (1) the presence of a natural resource on or near the site of the project; and (2) disturbance of that resource caused by the project.

# **Greenpoint-Williamsburg Rezoning FEIS**

The 2005 *FEIS* provided a detailed natural resources analysis. The *FEIS* stated that the effects of the rezoning on upland sites would not be considered significant due to the minimal natural vegetative coverage and low habitat value.

For the waterfront sites, assuming a reasonable worst case development scenario for the projected and potential development sites, the *FEIS* concluded that the rezoning would not be expected to result in significant adverse natural resources impacts. The reasons for this conclusion included: (1) no high quality wetlands would be impacted; (2) any impacts to wetlands and water quality would be temporary and confined, as there would be no fill placed in the river or building over the river and the projected and potential developments would provide repair and replacement of existing shoreline protection structures and piers if warranted; (3) any impacts to existing aquatic resources would be limited due to the generally degraded quality of the existing habitats and in addition, the types of species that would be impacted are likely to quickly recolonize the area; (4) fish species of the East River would not be significantly impacted.

#### Assessment

As the development site consists of land that is used for low-intensity storage which is covered by impervious surfaces, it does not contain any natural resources. There are no wetlands or other natural resources features on the development site.

The development site is located adjacent to the Newtown Creek, which is a degraded natural resource. The United States Environmental Protection Agency (US EPA) states that "Newtown Creek is one of the nation's most polluted waterways." According to the *FEIS*, there is no reported presence of submerged aquatic vegetation (SAV) along the rezoning study area. Contaminants are present in these waters and these water bodies provide limited opacity. Any wildlife present in the area is tolerant of urban conditions and low-quality habitat.

In addition, as noted in Attachment G, "Shadows," the Newtown Creek adjacent to the development site is not considered a natural feature sensitive to the effects of shadowing cast from structures given its degraded condition.

The assumptions in the *FEIS* regarding the development of waterfront sites are applicable to the proposed actions. The proposed actions would result in no major filling or dredging in the water, no structures over the water, and any construction along waterfront would be limited to repair and replacement of bulkhead. A bulkhead inspection for the project area was completed in July of 2013, and determined that the bulkhead in the project area is not practically repairable and will have to be replaced in its entirety to satisfy the shore public walkway requirements. Potential bulkhead construction would be a mix of rip rap and new steel pile bulkheads, with the possibility of gabions, to be determined in consultation with NYCDEC. As noted in the *FEIS*, any work along the waterfront would be required to comply with all applicable permitting procedures, which are ministerial actions not part of the proposed action (refer to the "Hazardous Materials" section of this attachment for more details). Otherwise, the proposed actions would not involve any construction beyond the bulkhead.

In summary, the *FEIS* provided a detailed analysis which found that the rezoning would not result in significant adverse natural resources impacts. The proposed actions would result in a new development

<sup>&</sup>lt;sup>3</sup> http://www.epa.gov/region2/superfund/npl/newtowncreek/ <accessed May 2013>

<sup>&</sup>lt;sup>4</sup> If present, SAV can provide nursery and refuge habitat for fish.

on the development site identified in the *FEIS* as a potential development site, with generally similar densities and characteristics. The site is bereft of natural resources and any effects on existing aquatic resources adjacent to the waterfront sites would be limited because: (1) the proposed actions will be required to comply with all applicable environmental regulations and permitting processes designed to protect the natural environment; and (2) the degraded quality of the adjoining aquatic habitats. Accordingly, the proposed actions would not have the potential to result in significant adverse natural resources impacts and no further assessment is warranted.

## IX. HAZARDOUS MATERIALS

As defined in the 2012 CEQR Technical Manual, 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 2012 CEQR Technical Manual, the potential for significant adverse 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.

## Greenpoint Williamsburg Rezoning FEIS

The 2005 Greenpoint-Williamsburg Rezoning FEIS includes a detailed review of environmental database listings for the Greenpoint area. All the projected and potential development sites identified in the FEIS were cross-referenced with federal databases maintained by the US EPA and state databases maintained by the New York State Department of Environmental Conservation (NYSDEC). Both the development site and the City-owned property were discussed as potential development sites in the FEIS. The records search conducted as part of the FEIS revealed that the potential development site affected by the proposed actions (Lot 410 on Block 2472) has the potential for hazardous materials contamination due to historic on-site uses and reported releases from existing or historic uses on or in the vicinity of the site. The same conclusion was drawn for the City-owned property (Lot 425 on Block 2472). The (E) designations were placed on these sites in connection with the City's 2005 Greenpoint-Williamsburg Rezoning. According to the 2005 Greenpoint-Williamsburg Rezoning FEIS Table 11-3, the basis for placing (E) designations on the proposed development site at 77 Commercial Street (Block 2472, Lot 410) included on-site "SQG [Small Quantity Generator database listing], tank in service, closed tank, closed spills" and for the proposed open space site at 65 Commercial Street (Block 2472, Lot 425) included on-site "LQG [Large Quantity Generator database listing] with violations, tank and leaking tank." As a result, an (E) designation for hazardous materials was put in place for both Lot 410 and 425 on Block 2472.

# (E) Designations

(E) Designations for hazardous materials provide notice of the presence of an environmental requirement pertaining to potential hazardous materials contamination on a particular tax lot. They are established in connection with a change in zoning or an action pursuant to a provision of the Zoning Resolution that would allow additional development to occur on property, or would permit uses not currently allowed. For new developments, enlargements of existing buildings, or changes in use, the New York City Department of Buildings (NYCDOB) will not issue a building permit for grading, excavation, foundation, alteration, building, or any other permit for the site which permits soil disruption, or issue a temporary or permanent Certificate of Occupancy that reflects a change in Use Group until the environmental requirements of the (E) designation are satisfied. For hazardous materials

(E) designations, the environmental requirements are that a testing and sampling protocol be conducted, and a remediation plan be developed and implemented where appropriate, to the satisfaction of the New York City Mayor's Office of Environmental Remediation (OER). OER administers the (E) Designation Environmental Review Program, which was formerly administered by the NYC Department of Environmental Protection (DEP), including at the time of the 2005 FEIS. Per the city rules regulating (E) designations, related to these activities, Phase I Environmental Site Assessments, Remedial Investigation Work Plans (aka, Phase II Work Plans), Remedial Investigation Reports, mandatory health and safety plans (HASPs), Remedial Action Plans (RAPs), and Remedial Closure Reports consistent with the applicable standards of the American Society for Testing and Materials (ASTM) must be prepared, reviewed, and approved by OER, and implemented to OER's satisfaction during investigation and remediation of (E)-designated sites in order to assure protection of public health and the environment. As noted above, DOB may not issue building permits until OER determines that the requirements of the (E) designation have been satisfied; however, a DOB permit may be issued if OER determines that such permit is necessary to further the implementation of a OER-approved Remediation Plan.

The (E) designations for Lots 410 and 425 on Block 2472 are included in the official list maintained in the New York City *Zoning Resolution*, "Appendix C: City Environmental Quality Review Environmental Requirements." They are listed under (E) Designation Number 138, which contains the following standard description for hazardous materials: "Underground Gasoline Storage Tanks\* Testing Protocol. (\*Underground gasoline storage tanks included in category of hazardous materials contamination as of 6/16/94.)"

## Geographic Scope of Work for the Proposed Actions

The applicant will be responsible for any repairs to the portion of the bulkhead located on the development site. This could include repairs required or necessary to maintain the integrity of the bulkhead or allow for the applicant to fulfill his waterfront obligations under the Zoning Resolution. A bulkhead inspection for the project area was completed in July of 2013, and determined that the bulkhead in the project area is not practically repairable and will have to be replaced in its entirety to satisfy the shore public walkway requirements. Potential bulkhead construction would be a mix of rip rap and new steel pile bulkheads, with the possibility of gabions, to be determined in consultation with NYCDEC. The proposed actions are not expected to involve in-water disturbance, excavation, filling, or any other activities beyond the existing bulkhead or shoreline.

## Assessment

As discussed in the "Noise" section of this attachment and in Attachment I, "Air Quality," the proposed actions require measures to preclude the potential for significant adverse impacts related to air quality and noise. Therefore, a new (E) designation (expected to (E) designation E-318) would be recorded against the property. This new (E) designation would supersede the existing (E) designation, E-138, which requires hazardous materials testing, sampling and, if necessary, remediation. The new (E) designation would retain the existing hazardous materials requirements, with updates to the language to be consistent with current (E) designation rules and procedures, thereby ensuring that significant adverse hazardous materials impacts would be avoided.

The updated (E) designation text related to Block 2472, Lot 410 and Lot 425 for hazardous materials is as follows:

#### Task 1

The applicant must submit to the NYC Office of Environmental Remediation (OER), for review and approval, a Phase I Environmental Site Assessment, any other previous environmental studies, and 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.

No sampling should begin until written approval of a protocol is received from OER. The number and location of sample sites should be selected to adequately characterize site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination) and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

#### Task 2

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

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

An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This Plan would be submitted to OER for review and approval prior to implementation.

With the abovementioned institutional controls in place, any development or change in use on the project area will require OER-approved site investigation and remediation to ensure protection of public health and the environment during project construction and site occupancy. Accordingly, no significant adverse impacts related to hazardous materials would result from the proposed actions.

# X. WATER AND SEWER INFRASTRUCTURE

New York City's water and sewer network is fundamental to the operation, health, safety, and quality of life of the City and its surrounding environment, and it must be sized to fit the users and the surface conditions in order to function adequately. Therefore, a preliminary assessment pursuant the 2012 *CEQR Technical Manual* identifies whether a proposed project may adversely affect the City's water distribution or sewer system, and if so, assesses the effects of such projects in a detailed assessment in order to determine whether their impact is significant.

Per the EAS Form, further analysis of water and sewer infrastructure has been screened out in accordance with 2012 *CEQR Technical Manual* assessment screening thresholds. The project area is located in an area served by combined sewers. However, given the project area's location along the waterfront and generally flat topography which has a gentle slope upland, it is likely that a portion of the

stormwater runoff from the site is discharged directly to the Newtown Creek by overland flow and is not treated.

Stormwater runoff is generated by rainwater that collects on the surfaces of land or built structures. The volume of runoff generated by these surfaces varies depending on the type of land cover, which can be pervious (soil or landscaped surfaces that allow more percolation to the ground below, generating less runoff) or impervious (surfaces such as roads and building rooftops, that impede percolation and generate greater runoff).

According to the 2012 CEQR Technical Manual, combined sewer systems collect both "dry-weather" wastewater (primarily sanitary sewage as well as wastewater from industries) and stormwater. During dry weather, combined sewers function as sanitary sewers, conveying all flows to the waste water treatment plants for treatment. During wet weather, however, large volumes of rainfall runoff can enter the system from building connections and through catch basins along the City's streets. If all of this water were conveyed to the treatment plants, it could exceed their design capacity as the plants are designed to handle only twice their average design dry-weather flow. To avoid flooding the plants during storms, the excess is directed to outfalls into the nearest waterway, i.e., Newtown Creek for the project area. During such overflow periods, a portion of the sanitary sewage entering, or already in, the combined sewers discharges untreated into the waterway along with stormwater and debris washed from streets. This untreated overflow is known as a combined sewer overflow (CSO).

The proposed actions would provide for the management and treatment of stormwater entering Newtown Creek from the project area. As the proposed actions would not result in development of a waterfront site larger than one acre, it would not be required to develop and implement a stormwater pollution prevention plan (SWPP) subject to NYCDEP oversight. However, in order to be conservative, the applicant would implement a SWPPP in accordance with NYCDEP policy to ensure that there would be no net increase in stormwater flow from the site. The SWPPP provides best management practices and green infrastructure measures that would minimize potential impacts to NYSDEC littoral zone tidal wetlands and aquatic resources from stormwater discharges. Stormwater management measures implemented within the project area would regulate the rate at which runoff is discharged to the NYCDEP storm sewer and then to the East River and Newtown Creek after treatment at the Newtown Creek Wastewater Treatment Plant or through outfalls. Stormwater from the project area would either go into the existing combined sewer system or into a separate storm sewer. If it does go into a separate storm sewer, the sewer would have to be approved by NYCDEP and any outfalls would have to be permitted by NYCDEC. In addition, as part of the SWPPP best management practices, engineering controls would be implemented to mitigate potential erosion and sedimentation impacts during and post construction. The proposed actions would result in a net increase in pervious surface coverage in the project area, thereby reducing runoff and potentially improving water quality along the shoreline. Accordingly, no significant adverse impacts related to water and sewer infrastructure would result from the proposed actions.

## XI. TRANSPORTATION

The objective of a transportation analysis is to determine whether a proposed action may have a potentially significant adverse impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists, and vehicles), on- and off-street parking or goods movement.

The 2012 CEQR Technical Manual identifies minimum development densities that potentially require a transportation analysis. Development at less than the development densities shown in Table 16-1 of the

2012 CEQR Technical Manual generally result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, and 200 peak-hour pedestrian trips, where significant adverse impacts are considered unlikely. In Zone 2 (which includes the project area) the development thresholds for residential is 200 DUs, which the proposed project exceeds.

According to the 2012 CEQR Technical Manual, if an action would result in development greater than one of the minimum development density thresholds in Table 16-1, a Level 1 (Project Trip Generation) Screening Assessment should be prepared. In most areas of the city, including the project area, if the proposed actions are projected to result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, or 200 peak-hour pedestrian trips, it is unlikely that further analysis would be necessary. If these trip-generation screening thresholds are exceeded, a Level 2 (Project-generated Trip Assignment) Screening Assessment should be prepared to determine if the proposed action would generate or divert 50 peak-hour vehicle trips through any intersection, 200 peak-hour subway trips through a single station, 50 peak-hour bus trips on a single bus route in the peak direction, or 200 peak-hour pedestrian trips through a single pedestrian element. If any of these Level 2 screening thresholds are met or exceeded, detailed analysis for the respective mode is required.

As discussed in the *Introduction* to this attachment and as shown in Table A-6 of Attachment A, the incremental development associated with the Proposed Action would result in a net increase over No-Action conditions of approximately 19,925-gsf of open space, approximately 427,360-gsf of residential space with approximately 444 units within two residential towers, and approximately 192 accessory parking spaces. As the proposed commercial and community facility space would be the same in both the No-Action and With-Action conditions, there is no associated incremental development.

A travel demand forecast was prepared for this net incremental development program to determine if the proposed project would result in 50 or more action-generated vehicle trips, 200 or more action-generated transit trips, or 200 or more pedestrian action-generated trips. Table B-1 shows the transportation planning factors used to forecast the travel demand generated by the proposed project in the weekday AM, midday and PM peak hours including trip generation rates, temporal and directional distributions, mode choice factors, and vehicle occupancies for the proposed 444 DUs. The residential factors are based on data from the 2012 CEQR Technical Manual, the US Census Bureau's American Community Survey 5-year (2007-2011) data for the census tract containing the project site and adjoining census tracts (for mode split and auto occupancy rates), and the Greenpoint-Williamsburg Rezoning FEIS (2005). Table B-2 shows the resulting travel demand forecast for the proposed project.

## Traffic and Parking

As shown in Table B-2, the proposed project would generate less than 50 vehicle trips in the weekday AM., midday, and PM., and Saturday midday peak hours.

As the Proposed Project would result in incremental site-generated vehicle trips below the Level 1 screening threshold, significant adverse traffic and parking impacts would not occur and no further assessment is warranted.

#### **Transit**

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the 2012 *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus line (in one direction),

or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted.

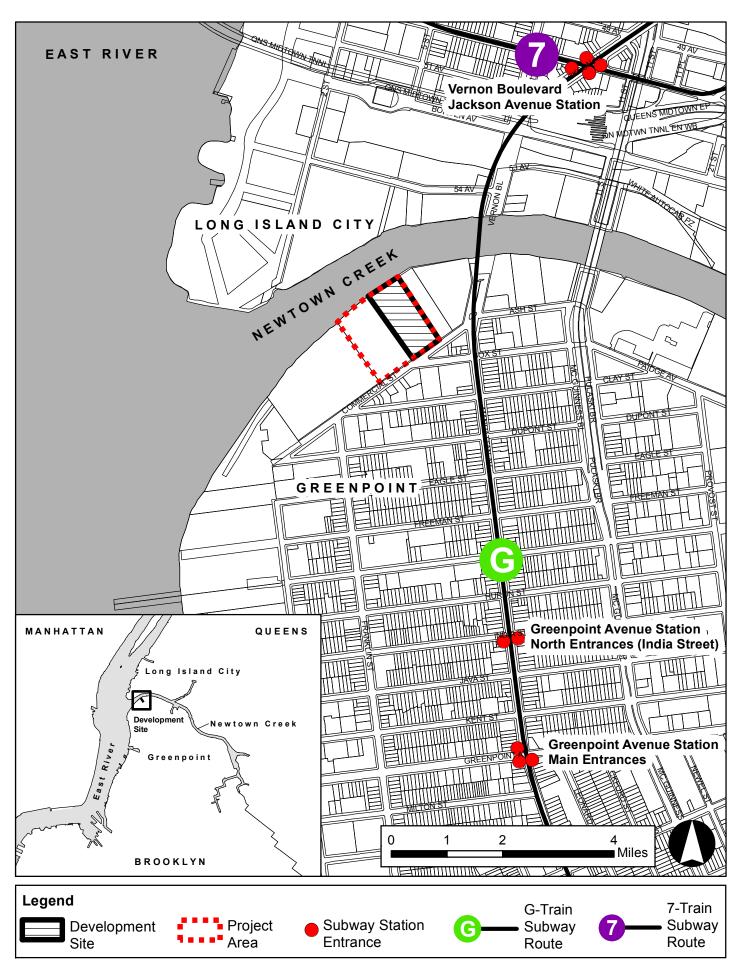
## Subway

As shown in Table B-2, the proposed actions would generate a net total of 240, 120, and 263 subway trips during the weekday AM, midday, and PM peak hours, respectively. Since the proposed actions would generate more than 200 peak hour subway trips during the AM and PM peak hours, a Level 2 screening analysis was conducted for these peak hours to determine whether a detailed subway transit analysis is warranted.

Based on the location of the proposed development between the Vernon Boulevard-Jackson Avenue (7) subway station and the Greenpoint Avenue (G) subway station (see Figure B-1), it is anticipated that both of these subway stations would be used. The majority of these new peak hour subway trips are expected to use the Greenpoint Avenue (G) subway station on the Crosstown Line, while approximately 10 percent are assumed to walk to and from the Vernon Boulevard-Jackson Avenue (7) subway station on the Flushing Line in Queens. For the purposes of this analysis, it was also assumed that approximately one-third of project-generated subway demand en route to and from the north would utilize buses for access to the subway service in Long Island City.

Project-generated trips at Vernon Boulevard-Jackson Avenue and other subway stations in Long Island City are expected to total less than 50 trips per station in either peak hour. Overall, the Greenpoint Avenue (G) subway station is expected to experience a net increase of 182 new trips in the weekday AM peak hour and 211 new trips in the PM peak hour as a result of the proposed project. As the Greenpoint Avenue subway station would experience more than 200 new peak hour trips during the PM peak hour as a result of the development of the proposed project, this station has been selected for detailed analysis.

**Location Map** 



**Table B-1: Travel Demand Forecast Assumptions** 

Lable B-1: Travel Demand	Forecast Ass	sumption
Land Use:	<u>Residen</u>	<u>tial</u>
Size/Units:	444 Г	υU
Trip Generation:	(1)	
Weekday	(1) 8.075	
w cerday	per DI	
	per Di	S
Temporal Distribution:	(1)	
AM (8-9)	10.0%	
MD ( 12-1)	5.0%	
PM (5-6)	11.0%	, ,
1	(2)	/D) (
Modal Splits:	AM/MD	
Auto Taxi	12.8%	
	0.4%	
Subway Bus	66.8% 3.5%	
School Bus	0.0%	
Walk/Other	16.5%	
waik offici	100.0%	
	100.07	o
	(3)	
In/Out Splits:	In	Out
AM (8-9)	15%	85%
MD (12-1)	50%	50%
PM (5-6)	70%	30%
Vehicle Occupancy:	( 2,3)	
Auto	1.20	
Taxi	1.40	
School Bus		
Truck Trip Generation:	(1)	
	Weekday	Saturday
	0.06	0.02
	per DI	U
AM (8.0)	( 1) 12.0%	
AM (8-9) MD ( 12-1)	9.0%	
PM (5-6)	2.0%	
F IVI ( 3-0)	2.0%	
	In	Out
All Peak Hours	50.0%	50.0%

#### Notes:

- (1) 2012 CEQR Technical Manual.
- (2) 2007-2011 American Community Survey (ACS) Data for Brooklyn tracts  $563,\,565,\,575$  and 579.
- $(3) \ Green point-Williams burg \ Rezoning \ FEIS, \ March \ 2005.$

**Table B-2: Travel Demand Forecast** 

	Table B-2:	Traver	Demai	uı	ULC	ası	
Land Us	e:	Resid	dential			Total	
Size/Uni	its:	444	DU				
Peak Ho	our Person Trips:						
	AM (8-9)	3	59			359	
	MD (12-1)	1	79			179	
	PM (5-6)	3	94			394	
Person '	Trine ·			-			
1 CI SOII	mps.	In	Out		In	Out	Total
AM	Auto	7	39		7	39	46
	Taxi	0	1		0	1	1
	Subway	36	204		36	204	240
	Bus	2	11		2	11	13
	School Bus	0	0		0	0	0
	Walk/Other	9	<u>50</u>		9	<u>50</u>	<u>59</u>
	Total	54	305		54	305	359
		In	Out		In	Out	Total
MD	Auto	11	11		11	11	22
	Taxi	0	0		0	0	0
	Subway	60	60		60	60	120
	Bus	3	3		3	3	6
	School Bus	0	0		0	0	0
	Walk/Other	<u>15</u>	<u>15</u>		<u>15</u>	<u>15</u>	<u>30</u>
	Total	89	89		89	89	178
D. 7		In	Out		In	Out	Total
PM	Auto	35	15		35 1	15	50
	Taxi	1 184	0 79		184	0 79	1 263
	Subway Bus	10	4		10	4	263 14
	School Bus	0	0		0	0	0
	Walk/Other	46	<u>20</u>		<u>46</u>	<u>20</u>	<u>66</u>
	Total	276	118		276	118	394
Vehicle	Trips:						
	A 4 (T) 4 1)	In	Out		In	Out	Total
AM	Auto (Total) Taxi	6	33 1		6	33	39
	Taxi Balanced	1	1		1	1	2
	Truck/School Bus	2	2		2	2	<u>4</u>
	Total	9	36		9	36	<u>≠</u> 45
			50		-	50	.5
		In	Out		In	Out	Total
MD	Auto (Total)	9	9		9	9	18
	Taxi	0	0				
	Taxi Balanced	0	0		0	0	0
	Truck/School Bus	<u>1</u>	<u>1</u>		<u>1</u>	<u>1</u>	<u>2</u>
	Total	10	10		10	10	20
		In	Out		In	Out	Total
PM	Auto (Total)	m 29	13		m 29	13	42
	Taxi	1	0		_/	1.5	72
	Taxi Balanced	1	1		1	1	2
	Truck/School Bus	<u>0</u>	Ω		<u>0</u>	<u>0</u>	<u>0</u>
	Total	30	14		30	14	44
	Total Vehicle Trips						
		<u>In</u>	Out				
	AM (8-9)	9	36				
	MD ( 12-1)	10	10				
	PM (5-6)	30	14				

## Analysis Methodology

The methodology for assessing subway station pedestrian circulation elements such as stairs and fare control elements (regular turnstiles, HEETs, and high exit turnstiles) compares existing and projected pedestrian volumes with the element's design capacity to yield a volume-to-capacity (v/c) ratio. All analyses reflect pedestrian flow volumes over a 15-minute interval during the PM peak hour. Based on existing pedestrian volumes at the Greenpoint Avenue subway station, the peak period selected for the analysis of subway station conditions are from 5-6 PM.

Under 2012 CEQR Technical Manual guidelines, the capacity of a stairway is determined based on four factors: the New York City Transit (NYCT) guideline capacity, the effective width, and surging and counter-flow factors, if applicable. NYCT guideline capacity for a stair is 10 passengers per minute per foot-width (pmf), and the effective width of a stair is the actual width adjusted to reflect pedestrian avoidance of sidewalls and for center handrails, if present. A surging factor is applied to existing pedestrian volumes to reflect conditions where pedestrian flows tend to be concentrated (or surged) during shorter periods within the 15-minute analysis interval. This factor, which is based on the size of the station and the proximity of the pedestrian element to the station platforms, can reduce the calculated capacity by up to 25 percent. Lastly, a friction (or counter-flow) factor reducing calculated capacity by 10 percent is applied where opposing pedestrian flows use the same stair. (No friction factor is applied if the flow is all or predominantly in one direction.)

By contrast with stairways, under 2012 CEQR Technical Manual guidelines the capacity of a turnstile is determined based on only two factors: the NYCT guideline capacity for a 15-minute interval and a surging factor of up to 25 percent. Table B-3 shows the 2012 CEQR Technical Manual level of service criteria for all subway station elements. As shown in Table H-9, six levels of service are defined with letters A through F. LOS A is representative of free flow conditions without pedestrian conflicts and LOS F depicts severe congestion and queuing.

Table B-3 Subway Station Level of Service (LOS) Criteria

LOS	Description	V/C Ratio
A	Free Flow	0.00 to 0.45
В	Fluid Flow	0.45 to 0.70
С	Fluid, somewhat restricted	0.70 to 1.00
D	Crowded, walking speed restricted	1.00 to 1.33
E	Congested, some shuffling and queuing	1.33 to 1.67
F	Severely congested, queued	> 1.67

Source: 2012 CEQR Technical Manual

# **Existing Conditions**

As shown in Figure B-1, in addition to the main Greenpoint Avenue (G) subway station entrances located at the intersection of Greenpoint and Manhattan Avenues, the station also has two entrances that are located further north, on the southeast and southwest corners of the intersection of India Street and Manhattan Avenue. Since the project area is located approximately seven blocks to the north of these two northern entrances, it was conservatively assumed that all subway trips assigned to the Greenpoint Avenue station would enter and exit through the Greenpoint Avenue station's northern entrances. The eastern entrance (stair S4), located on the east side of Manhattan Avenue, leads to the northbound platform only, while the western entrance (stair S5), located on the west side of Manhattan Avenue,

leads to the southbound platform only. Access to and from the northbound platform at India Street is controlled by fare array H-1 consisting of one high entry/exit turnstile (HEET) and one high exit turnstile. Access to and from the southbound platform at India Street is controlled by fare array H-2 consisting of two HEETs and two high exit turnstiles.

Tables B-4 and B-5 show the results of the capacity analysis at analyzed stairs and fare arrays at the Greenpoint Avenue subway station under existing conditions. The analysis is based on count data collected at the station during the PM peak period in April 2013. As shown in Tables B-4 and B-5, existing peak 15-minute volumes on stair S4 and adjacent fare array H-1 total approximately 149 in the PM, while peak 15-minute volumes using stair S5 and adjacent fare array H-2 total approximately 103 in the PM. With these levels of demand, all analyzed stairs and fare arrays currently operate at an uncongested LOS A in the PM peak hour.

Table B-4
Existing Subway Stair Analysis at Greenpoint Avenue (G) Station

Peak Period		Stairway		Effective Width (ft.)	15-M Pedestrian Down	inute n Volumes Up	Surging Factor	Friction Factor	V/C Ratio	LOS
DM	S4	Southeast Corner at Manhattan Avenue & India Street	5.0	4.0	8	95	0.8	0.9	0.23	A
PM	S5	Southwest Corner at Manhattan Avenue & India Street	5.0	4.0	107	42	0.8	0.9	0.30	A

Notes:

Methodology based on 2012 CEQR Technical Manual guidelines

Surging factors applied only to exiting volumes

Table B-5
Existing Control Area Analysis at Greenpoint Avenue (G) Station

Peak Period	Fare Array	Location	Control Element	Quantity		15-Minute Pedestrian Volumes		Friction Factor	V/C Ratio	LOS
renou					In	Out	Factor	ractor	Katio	
	H-1	Northbound Fare Array	High Entry/Exit Turnstile	1	- 8	95	0.75	0.90	0.16	A
PM	11-1	Manhattan Avenue & India Street	High Exit Turnstile	1	Ü	,,,	0.75	0.50	0.10	71
	Н-2	Southbound Fare Array	High Entry/Exit Turnstile	2	107	42	0.75	0.90	0.26	A
27		Manhattan Avenue & India Street	High Exit Turnstile	2						

Notes:

Methodology based on 2012 CEQR Technical Manual guidelines

Surging factors applied only to exiting volumes

#### No-Action

To determine demand at the Greenpoint Avenue subway station in the No-Action condition, demand from the development on the proposed project site was considered, as was demand from other projects expected to occur in the vicinity by 2016. Table B-6 shows the No-Action sites located in the study area and identifies whether or not the site was included in the quantitative subway stair and fare array analyses. In addition, an annual background growth rate of 0.5 percent per year was applied to existing conditions for the years from 2013 through 2016, consistent with 2012 CEQR Technical Manual criteria.

Table B-6 **No-Action Developments in Study Area** 

Study Area		
No-Action Sites Inclu	ded in the Quantitative Analysis <sup>1</sup>	
Location	Program	Year
Block 2482, Lot 26	210 dwelling units; 8,000 gsf of retail space; 132 accessory parking spaces	2014
Block 2472, Lot 100	457 dwelling units; 19,290 sf of open space; 192 accessory parking spaces	2016
Block 2472, Lot 410	276 dwelling units; 25,750 gsf of retail space; 6,200 gsf of community facilities; 138 accessory parking spaces	2016
Block 2530, Lots 1, 55, 60	640 dwelling units; 19,000 of retail space; 3,800 gsf of community facility; 22,000 sf of open space; 256 accessory parking spaces	2016
No-Action Sites Not Inc	cluded in the Quantitative Analysis <sup>2</sup>	
Location	Program	Year
Block 2567, Lot 1	50 dwelling units; 250,000 gsf retail space	2016
Block 2557, Lot 7	30,000 gsf of office space	2015
Block 2557, Lot 13	20 dwelling units	2015
Block 2472, Lot 425	133, 575 sf of open space	2016
West Street between Eagle and Quay Streets	2,370 linear feet (0.54 acres) two-way, Class 1 physically separated bike path along the west side of the street	2015
Block 2576, Lots 20, 23	140 dwelling units; 23,000 gsf of retail space; 91 accessory parking spaces	2015
Block 2575, Lot 5	6 dwelling units	2014
	No-Action Sites Inclu Location  Block 2482, Lot 26  Block 2472, Lot 100  Block 2472, Lot 410  Block 2530, Lots 1, 55, 60  No-Action Sites Not Inc Location  Block 2567, Lot 1  Block 2557, Lot 7  Block 2557, Lot 13  Block 2472, Lot 425  West Street between Eagle and Quay Streets  Block 2576, Lots 20, 23	No-Action Sites Included in the Quantitative Analysis¹  Location Program  210 dwelling units; 8,000 gsf of retail space; 132 accessory parking spaces  Block 2472, Lot 100 457 dwelling units; 19,290 sf of open space; 192 accessory parking spaces  Block 2472, Lot 410 276 dwelling units; 25,750 gsf of retail space; 6,200 gsf of community facilities; 138 accessory parking spaces  Block 2530, Lots 1, 55, 60 540 dwelling units; 19,000 of retail space; 3,800 gsf of community facility; 22,000 sf of open space; 256 accessory parking spaces  No-Action Sites Not Included in the Quantitative Analysis²  Location Program  Block 2567, Lot 1 50 dwelling units; 250,000 gsf retail space  Block 2557, Lot 7 30,000 gsf of office space  Block 2576, Lot 425 133, 575 sf of open space  West Street between Eagle and Quay Streets  Block 2576, Lots 20, 23 140 dwelling units; 23,000 gsf of retail space; 91 accessory parking spaces

<sup>&</sup>lt;sup>1</sup>The No-Action sites that are included in the quantitative analysis were included because it was assumed that subway trips generated by each of these projects would use the India Street entrances to the Greenpoint Avenue subway station.

As shown in Tables B-7 and B-8, based on this projected level of demand, stairs S4 and S5 would both operate at LOS B, while fare array H-1 would operate at LOS A and fare array H-2 would operate at LOS B under No-Action conditions.

Table B-7 2016 No-Action Subway Stair Analysis at Greenpoint Avenue (G) Station

Peak Period		Stairway	Width (ft.)	Effective Width (ft.)	15-M Pedestrian Down	inute n Volumes Up	Surging Factor	Friction Factor	V/C Ratio	LOS
DM.	S4	Southeast Corner at Manhattan Avenue & India Street	5.0	4.0	28	218	0.8	0.9	0.56	В
PM	S5	Southwest Corner at Manhattan Avenue & India Street	5.0	4.0	175	108	0.8	0.9	0.57	В

Methodology based on 2012 CEQR Technical Manual guidelines

Surging factors applied only to exiting volumes

<sup>&</sup>lt;sup>2</sup>The No-Action sites not included in the quantitative analysis were not included because of their location with respect to the Greenpoint Avenue subway station. It is expected that subway trips generated by these No-Action sites will utilize the Greenpoint Avenue entrances at the Greenpoint Avenue subway station.

Table B-8
2016 No-Action Control Area Analysis at Greenpoint Avenue (G) Station

Peak Period	Fare Array	Location	Control Element	Quantity	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
renou			Liement		In	Out	ractor	ractor	Kauo	
	H-1	Northbound Fare Array	High Entry/Exit Turnstile	1	28	218	0.75	0.90	0.42	A
PM	H-1	Manhattan Avenue & India Street	High Exit Turnstile	1	26	218	0.73	0.90	0.42	A
	H-2	Southbound Fare Array	High Entry/Exit Turnstile	2	175	108	0.75	0.90	0.45	В
		Manhattan Avenue & India Street	High Exit Turnstile	2						

Notes:

Methodology based on 2012 CEQR Technical Manual guidelines

Surging factors applied only to exiting volumes

#### With-Action

As discussed above, the Greenpoint Avenue (G) subway station would experience 211 trips in the PM peak hour; of the 211 trips, it is expected that 116 trips would use the southeast stairs (105 trips exiting the station and 11 trips entering the station) while the remaining 95 trips would be assigned to the southwest stairs (40 trips exiting the station and 55 trips entering the station). These incremental hourly trips were assigned to analyzed stairs and fare arrays, translated into peak 15 minute volumes, and added to the 2016 No-Action demand to determine future conditions with the proposed project. As shown in Table B-9, both stair S4 and stair S5 would continue to operate at LOS B during the PM peak hour. Table B-10 shows that both fare array H-1 and fare array H-2 would also operate at LOS B.

Table B-9
2016 With-Action Subway Stair Analysis at Greenpoint Avenue (G) Station

Peak Period	Stairway		Width (ft.)	Effective Width (ft.)	15-M Pedestriar Down	inute n Volumes Up	Surging Factor	Friction Factor	V/C Ratio	LOS
DM	S4	Southeast Corner at Manhattan Avenue & India Street	5.0	4.0	31	251	0.8	0.9	0.64	В
PM	S5	Southwest Corner at Manhattan Avenue & India Street	5.0	4.0	192	121	0.8	0.9	0.64	В

Notes:

Methodology based on 2012 CEQR Technical Manual guidelines

Surging factors applied only to exiting volumes

Table B-10 2016 With-Action Control Area Analysis at Greenpoint Avenue (G) Station

Peak Period	Fare Array	Location	Control Element	Quantity	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
1 criou					In	Out	Factor	ractor	Katio	
	H-I	Northbound Fare Array	High Entry/Exit Turnstile	1	31	251	0.75	0.90	0.47	В
PM		Manhattan Avenue & India Street	High Exit Turnstile	1						В
	H-2	Southbound Fare Array	High Entry/Exit Turnstile	2	192	121	0.75	0.90	0.50	В
		Manhattan Avenue & India Street	High Exit Turnstile	2						

Notes

Methodology based on 2012 CEQR Technical Manual guidelines

Surging factors applied only to exiting volumes

Based upon this analysis, the proposed project is not expected to result in any significant adverse impacts at the Greenpoint Avenue (G) subway station.

## Bus

The proposed actions would increase bus rider trips by 13, 6, and 14 in the weekday AM, midday, and PM peak hours, respectively. The proposed project would also generate bus to subway trips. As discussed above, for the purposes of this analysis, it was assumed that approximately one-third of project-generated subway demand en route to and from the north would utilize buses for access to the subway service in Long Island City. These trips would total approximately 24, 12, and 26 during the AM, midday and PM peak hours, respectively. Additionally, it was assumed that approximately 25 percent of project generated subway trips traveling to and from the Greenpoint Avenue (G) subway station would use the bus. These trips would total approximately 46, 27 and 53 during the AM, midday and PM peak hours, respectively. Combined, the proposed project would generate a total of approximately 83, 45 and 93 bus trips during the AM, midday and PM peak hours, respectively. These volumes are well below the 200 rider per peak hour CEQR threshold required for detailed analysis.

In addition, the project area is currently served by three NYC Transit bus routes, the B24, B43 and B62. In addition to these routes, starting in autumn 2013 NYC Transit will begin operating a new service, the B32, which will provide service between Williamsburg and Long Island City via Greenpoint. Therefore, the project generated bus rider trips would be distributed among four bus routes, the B24, B32, B43 and B62, that are located in the vicinity of the development site. Therefore, a detailed bus transit analysis is not required as the proposed project is considered unlikely to create a significant bus transit impact.

#### **Pedestrians**

An analysis of pedestrian flow conditions typically focuses on those pedestrian elements, i.e., sidewalks, corner areas, and crosswalks, which would be utilized by concentrations of pedestrians generated as a result of a proposed action. According to the 2012 CEQR Technical Manual, detailed pedestrian analyses are generally not required when projected increases in pedestrian volumes would total less than 200 persons per hour at any pedestrian element. Increases of less than 200 persons per hour are generally not noticeable and would be unlikely to result in significant adverse impacts based on 2012 CEQR Technical Manual criteria.

The proposed actions would generate approximately 59, 30, and 66 walk-only trips during the weekday AM, midday, and PM peak hours, respectively (as noted above, while the walk-only trip volumes do not include the walk trips generated by trips from the development site to/from the subway station and bus stops; these trips are included in the pedestrian analyses). The total number of walk-trips (including subway, bus and walk-only) assigned to the pedestrian elements immediately adjacent to the development site would be approximately 312, 156, and 343 trips during the weekday AM, midday, and PM peak hours, respectively. Since the total number of pedestrian trips generated during the AM and PM peak hours exceeds the *CEQR* threshold of 200 or more trips per peak hour, a Level 2 Screening Analysis was conducted to determine what pedestrian elements would require further analysis. Subway and bus walk trips were assigned to the most direct path between their origin and destination (development site and respective bus stop/subway station).

As discussed in the transit section above, the closest subway station is the G-train Greenpoint Avenue station. The development site is located approximately seven blocks to the north of that station's northern entrances, which are on the southeast and southwest corners of the intersection of India Street and Manhattan Avenue. The closest bus stop (B43) is located approximately one block to the south of the development site, midblock between Clay and Box Streets. Therefore, while more than 200 pedestrian trips would be generated during the AM and PM peak periods, pedestrian trips related to bus and subway travel would be distributed between incoming and outgoing trips on the eastern and western sidewalks along Manhattan Avenue, while walk-only trips would be widely distributed throughout the area.

Additionally, it should be noted that the proposed project has multiple pedestrian entrances to the site, including pedestrian corridors located on the eastern and western sides of the site as well as an entrance on Commercial Street. As there are multiple entrances to the project site, it is not expected that pedestrian trips would total more than 200 trips on a single pedestrian element; therefore a detailed pedestrian analysis is not warranted.

# XII. AIR QUALITY

According to the guidelines provided in the 2012 CEQR Technical Manual (as updated through revisions effective June 18, 2012), air quality analyses are conducted in order to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the 2012 CEQR Technical Manual, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts. Per the EAS Form, further analysis of air quality mobile sources has been screened out in accordance with 2012 CEQR Technical Manual assessment screening thresholds. However, per the EAS Form, further screening of air quality stationary sources is warranted and is provided in Attachment I, "Air Quality."

## XIII. NOISE

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) and construction noise.

The 2005 *Greenpoint-Williamsburg Rezoning FEIS* included a detailed noise analysis which identified required window/wall attenuation values to achieve acceptable indoor noise levels for all of the rezoning area's projected and potential development sites, including the tax lot affected by the proposed actions. This analysis accounted for noise generated by existing stationary source noise sources and the potential for increased noise levels due to mobile sources (traffic) generated by the rezoning's projected development. The 2005 *FEIS* found that a noise attenuation of 30 dBA, with alternate means of ventilation, is required to achieve an acceptable interior noise level (45 dBA) for residential/commercial buildings on Block 2472, Lot 410, which is the location for 77 Commercial Street.

Because the anticipated No-Action and With-Action Conditions have changed since the *Greenpoint-Williamsburg Rezoning FEIS*, an updated analysis is required for 77 Commercial Street. During preparation of the *Greenpoint Landing Disposition EAS*, noise monitoring was carried out to establish existing noise levels at the intersection of West Street Extended / Dupont Street/ Commercial Street. Due to the proximity of the two developments, the data gathered for the *Greenpoint Landing Disposition EAS* is suitable for use in the 77 Commercial Street analysis. Table B-11 shows the results. Sources of background noise included helicopter flyovers, noisy pedestrians (especially children), and cars honking.

Table B-11 Monitored Noise Levels (dBA)

ID	Site	Time of Day	$L_{eq}$	$L_{10}$	$\mathcal{L}_{\mathrm{Min}}$	$L_{Max}$	$L_{01}$	$L_{50}$	$L_{90}$
2	Commercial and Dupont Streets	AM MID PM	64.8 59.9 72.5	62.6 60.6 <b>75.4</b>	54.1 53.5 59.1	85.8 80.4 92.8	77.0 70.0 81.6	57.1 56.4 67.9	55.0 54.5 61.7

Note: Numbers in bold type show the highest results for that site.

Source: Philip Habib & Associates

The FHWA's TNM model was run with traffic for Existing Conditions for Site 2 during the AM peak period. The result was an Leq of 50.0 dBA for traffic noise only. TNM does not calculate an  $L_{10}$ .

The modeled noise level of 50 dBA is lower than the monitored value shown in Table B-11 because TNM does not account for background noise levels. To adjust for this, the modeled noise level of 50.0 dBA was logarithmically subtracted from the total monitored noise levels for the peak AM, Midday and PM periods. Table B-12 shows the resulting background and traffic noise levels for Existing Conditions. In this table the incremental noise increases for the AM peak hour have also been applied to the Midday and PM peak hours since traffic volumes for all peak periods are comparable.

Table B-12
Existing Traffic and Background Noise Legs (dBA)

Time Period	Background	Modeled Traffic Noise Total Existing		Traffic PCEs	
AM	64.7	50.0	64.8	121	
Midday	59.4	50.0	59.9	110	
PM	72.5	50.0	72.5	130	

Source: Sandstone Environmental Associates, Inc.

Based on traffic projected for the No-Action Conditions, the traffic noise levels were increased using the proportionality equation. Next, the resulting noise levels for traffic only were added to the background noise levels. Although the traffic noise increased by 1.8 to 3.2 dBA, the increases in total noise levels ranged from 0.0 to 0.4 dBA because traffic noise levels are still substantially lower than the background noise levels. Table B-13 shows the results.

Table B-13 No-Action Traffic and Background Noise Leqs (dBA)

Time Period	Background	round Traffic Noise Increment		No-Action Traffic Noise	Total No- Action	Difference (Existing to No- Action)
AM	64.7	184	1.8	51.8	64.8	0.1
Midday	59.4	228	3.2	53.2	60.3	0.4
PM	72.5	207	2.0	52.0	72.5	0.0

Source: Sandstone Environmental Associates, Inc.

The same approach was used to project noise levels under With-Action Conditions. The incremental increases in traffic noise ranged from 0.1 to 1.0 dBA, but the resulting increases in total noise levels ranged from 0.0 to 0.1 dBA. Table B-13 shows the results. Based on Table B-14, no significant noise level impacts would occur due to the relative increases in noise level because the projected noise level increments are lower than the threshold criterion of 3 dBA.

Table B-14
With-Action Traffic and Background Noise Legs (dBA)

Time Period	Background	Traffic PCEs	Traffic Noise Increment	With- Action Traffic Noise	Total With- Action	Difference (No Action to With-Action)
AM	64.7	229	1.0	52.8	64.9	0.1
Midday	59.4	248	0.4	53.6	60.4	0.1
PM	75.5	251	0.8	52.8	72.5	0.0

Source: Sandstone Environmental Associates, Inc.

Table B-15 compares the L<sub>10</sub> values from the 2005 *Greenpoint-Williamsburg Rezoning FEIS* with the updated results provided in this document. Based on the table, the E designation established in the *Greenpoint-Williamsburg Rezoning FEIS* should be increased to 31 dBA for the proposed development at 77 Commercial Street.

Table B-15 Comparison of Noise L<sub>10</sub>s (dBA)

PHA Noise	Greenp	oint-Williamsb	urg Rezoning FEIS	77 Comme EAS		Required Attenuation	
Monitoring Site ID	Site ID	With- Action L <sub>10</sub>	E Designation	With- Action L <sub>eq</sub>	With- Action L <sub>10</sub>	(2012 CEQR Technical Manual)	
2	1	67.3	30	72.5	75.4	31	

The text for the (E) Designation for Block 2472, Lot 410 would be as follows:

"In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 31 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA. 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 or air conditioning sleeves containing air conditioners."

#### XIV. NEIGHBORHOOD CHARACTER

As the proposed project requires detailed analyses of land use, zoning, and public policy (Attachment C); socioeconomic conditions (Attachment D); community facilities and services (Attachment E); open space (Attachment F); shadows (Attachment G); urban design and visual resources (Attachment H); and Air Quality (Attachment I) a supplemental screening analysis is necessary to determine if a detailed neighborhood character analysis is warranted.

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct "personality." According to the 2012 *CEQR Technical Manual*, a preliminary assessment may be appropriate if a project has the potential to result in any significant adverse impacts on any of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; or noise. Per the analyses provided in this EAS, although the proposed project required supplemental screening or detailed analyses of several of these technical areas, there would be no project-generated significant adverse impacts.

The 2012 CEQR Technical Manual also states that for projects not resulting in significant adverse impacts to any technical areas related to neighborhood character, additional analyses may be required to determine if the proposed project would result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. However, the 2012 CEQR Technical Manual indicates that neighborhood character impacts are rare and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects in the neighborhood would result in any significant adverse impact to neighborhood character.

As the proposed project would not be considered to have moderate effects on any of the technical areas relating to neighborhood character, a neighborhood character assessment can be screened out, and no significant adverse neighborhood characters impacts would occur.

## XV. CONSTRUCTION

Construction impacts, although temporary, can include disruptive and noticeable effects of a project. Determination of their significance 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. In addition, because soils are disturbed during construction, any action proposed for a site that has been found to have the potential to contain hazardous materials should also consider the possible construction impacts that could result from contamination.

Construction staging would primarily occur on the project site, and construction is not expected to adversely affect surrounding land uses. As required by City regulations, sidewalk protection bridges, 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 businesses, residences, and other uses would be maintained according to the regulations established by the DOB.

#### Natural Resources

The development site does not contain any natural resources. The project area is a waterfront site located adjacent to Newtown Creek, which is a degraded natural resource.

The proposed actions would not include any in-water disturbance, excavation, filling, or any other activities beyond the existing bulkhead or shoreline except for any repairs required or necessary to maintain the integrity of the bulkhead or allow for the applicant to fulfill its waterfront obligations under the Zoning Resolution. A bulkhead inspection for the project area was completed in July of 2013, and determined that the bulkhead in the project area is not practically repairable and will have to be replaced in its entirety to satisfy the shore public walkway requirements. Potential bulkhead construction would be a mix of rip rap and new steel pile bulkheads, with the possibility of gabions, to be determined in consultation with NYCDEC. Such work would be required to comply with all applicable permitting procedures, which are ministerial actions not part of the proposed actions. Impact-avoidance techniques would be examined during the permitting process for any such work.

Waterfront development projects resulting in any potential discharges to water bodies generally require a General Permit for Stormwater Discharges for Construction Activity from NYS DEC, which in part requires a SWPPP for sites of 1 acre or larger. A SWPPP identifies potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges. In addition, the SWPPP describes and ensures the implementation of practices which would be used to reduce the pollutants in stormwater discharges and to assure compliance with the terms and conditions of a SPDES permit. All SWPPPs must include erosion and sediment controls. SWPPPs must present fully designed and engineered stormwater management practices with all necessary maps, plans and construction drawings. With these procedures, no construction period impacts from stormwater discharges would be anticipated.

Accordingly, as project construction is required to comply with environmental regulations that provide protection for natural resources, the proposed project would not result in any significant adverse natural resources impacts during project construction and no further assessment is warranted.

## Summary of Project Construction Effects

Overall, construction-related activities for the proposed project would be short-term and are not expected to have significant adverse impacts given the size of the project and the limited construction period. All construction activities will be carried out in accordance with applicable building codes and regulations, and all required NYC Building Department permits will be obtained. The proposed construction may result in temporary disruptions, including noise, dust and traffic associated with the delivery of materials and arrival of workers on the site. However, these effects would be temporary and are not considered significant and adverse, and therefore, no further analysis is warranted.

## **No-Action Conditions**

Under No-Action conditions, construction activities generally similar to With-Action conditions would occur with the construction of a new as-of-right residential development on the development Site. Construction for this No-Action development would be developed at a smaller scale, but the duration, phases, and effects, while of a lesser magnitude, would be comparable to the conditions expected with the proposed actions.

## ATTACHMENT C LAND USE, ZONING, AND PUBLIC POLICY

#### I. INTRODUCTION

Under the 2012 CEQR Technical Manual guidelines, 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 project's compliance with, and effect on, the area's zoning and other applicable public policies.

Waterview at Greenpoint, LLC ("the applicant"), is seeking approval of the following actions (collectively "the proposed actions") by the New York City Planning Commission (CPC) to facilitate the proposed redevelopment of the property located at 77 Commercial Street (Block 2472, Lot 410) in the Greenpoint neighborhood of Brooklyn Community District 1: (1) a Special Permit pursuant to Section 62-836 of the New York City Zoning Resolution ("ZR") to waive maximum base and building heights and minimum setbacks; (2) an Authorization pursuant to ZR Section 62-822(a) to waive requirements regarding the location of visual corridors and upland connections and to permit the level of visual corridors and waterfront yards to be raised; (3) an authorization pursuant to ZR Section 62-822(b) to allow modifications to permitted obstruction requirements for visual corridors and waterfront public access areas and to permit minor variations in the design of the waterfront public access areas; (4) a Certification pursuant to ZR Section 62-811 that except with respect to the waivers granted pursuant to the Authorizations, the design of the proposed waterfront public access areas would comply with the applicable requirements set forth in ZR Sections 62-50, 62-60 and 62-931; and, (5) with the Department of City Planning as co-applicant, a Text Amendment to ZR Sections 11-13 and ZR Section 62-351 to provide that the City-owned property (described below) will continue to generate floor area even after if it is developed as a "public park" as defined in ZR Section 12-10.

As discussed in Attachment A, "Project Description", the development site is located in an R6 residential district, which is mapped with a C2-4 commercial overlay within 150 feet of Commercial Street. The development site lies within the waterfront area and is waterfront zoning lot identified as "Parcel 3" in Waterfront Access Plan BK-1 (the "WAP"). The proposed development would consist of a 6-story building, a 30-story building and a 40-story building, which would contain an aggregate of up to approximately 693,320 gross square feet ("gsf") of residential uses (720 units), up to approximately 25,750 gsf of ground floor commercial uses, up to 6,200 gsf of community facility uses and approximately 46,730 gsf of attended, off-street accessory parking (320 spaces), for a total new development of up to approximately 760,650 gsf. The proposed development would also include the development of approximately 25,450 square feet ("sf") of waterfront public access areas consisting of a shore public walkway along Newtown Creek and an upland connection linking the shore public walkway to Commercial Street along the western lot line of the development site, plus a secondary, approximately 9,400 sf landscaped pedestrian walkway linking Commercial Street and the shore public walkway adjacent to a driveway providing vehicular access to the development site along the eastern lot line.

The applicant and the City have executed a contract of sale pursuant to which the applicant would obtain up to approximately 368,000 gsf (343,923 zsf) of development rights, from the adjacent City-

owned property (Block 2472, Lot 425) for use in the proposed development on the development site<sup>1</sup>. The City would use the proceeds from the sale of the development rights to fund the construction of Box Street Park and the applicant would use a portion of the transferred development rights to provide up to 200 affordable units as part of the proposed development. The transfer of the development rights would be effectuated pursuant to ZR Section 62-353, which permits, on an as-of-right basis, adjoining parcels identified in the WAP to be treated as a single development parcel on which the total permitted floor area, lot coverage and residential density may be located without regard to zoning lot lines or district boundaries.

In the 2016 future without the proposed actions, the applicant would develop an as-of-right, 14-story mixed-use market-rate residential, commercial and community facility development ("No-Action development") with accessory parking on the development site complying with the requirements set forth under the R6 and R6/C2-4 zoning. The No-Action development would include a total of up to approximately 318,760 gsf (2.43 FAR), which would be comprised of 265,690 gsf of residential area (276 market-rate units), 25,750 gsf of ground-floor local retail and service uses and 6,200 gsf of community facility uses. The No-Action development would add up to approximately 720 residents<sup>2</sup> and up to 110 employees<sup>3</sup> to the development site. In addition, 138 off-street parking spaces accessory to the residential uses would be provided in a ground floor parking area with a size of approximately 32,200 gsf.

In compliance with the applicable regulations governing maximum building heights and permitted penthouses set forth in ZR Section 62-354(b), the No-Action building would be up to ten stories tall (110 feet above base plane ("ABP"), which is the maximum building height permitted as-of-right in the R6 and R6/C2-4 districts) plus a 4-story penthouse (150 feet ABP) and a 25 foot mechanical bulkhead (175 feet ABP) which are also permitted as-of-right. Under the No-Action condition, approximately 16,025 sf of waterfront public access areas would be provided on the development site, comprised of a shore public walkway along Newtown Creek and a 15-foot wide alternate public way along the eastern lot line of the development site.

#### II. PRINCIPAL CONCLUSION

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidelines for determining impact significance set forth in the 2012 CEOR Technical Manual, are anticipated in the 2016 future with the proposed actions in the primary and secondary study areas. The proposed actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would they generate land uses that would be incompatible with land uses, zoning, or public policy in the secondary study area. The proposed actions would not create land uses or structures that would be incompatible with the underlying zoning, nor would they cause a substantial number of existing structures to become non-conforming. The proposed actions would not result in land uses that conflict with public policies applicable to the primary or secondary study areas.

Pursuant to the agreement, the applicant would purchase up to 303,903 sf of base floor area and would be permitted to include the lot area of the City-owned property in calculating the maximum permitted bonus floor area under the Inclusionary Housing program, which would yield up to an additional 40,020 sf of floor area. Assuming Quality Housing and mechanical deductions, the floor area would translate into approximately 368,000 gsf.

Source: 2.61 people per household; NYC DCP Community District Demographic Profiles (Census 2010).

Assumptions: 1 building employee per 25 DUs, 3 local retail employees per 1,000 gsf of retail space, 3 employees per 1,000 gsf of community facility space, and 1 parking employee per 50 attended parking spaces.

## III. BACKGROUND: THE GREENPOINT-WILLIAMSBURG REZONING FINAL ENVIRONMENTAL IMPACT STATEMENT

The Greenpoint-Williamsburg Rezoning Final Environmental Impact Statement ("FEIS") (CEQR No. 04DCP003K and ULURP No. N050110 ZRK et al.) analyzed the land use, zoning, and public policy effects of the City's 2005 rezoning proposal including the Revised Affordable Housing Bonus and Incentives (AHBI) Alternative which reflects the rezoning as adopted. The FEIS concluded that there would be no significant adverse impacts for land use, zoning, or public policy as a result of the proposed rezoning. In addition, the FEIS stated that the rezoning would provide a framework that would accommodate existing land use trends by facilitating the expansion of residential and local commercial land use and addressing continuing demand for light industrial and mixed-use areas. Of particular relevance to the proposed project analyzed in this EAS, the FEIS noted that "new residential uses anticipated under the proposed action would replace underutilized uses and would dramatically improve public access to the waterfront. On waterfront blocks, R6 and R8 districts and zoning text changes would require developments to provide a transition from the scale of the adjoining upland neighborhood to areas closer to the shoreline, where taller buildings could be located."

In addition, the FEIS found that the rezoning would be generally consistent with all local Waterfront Revitalization Program ("WRP") policies and therefore would not result in any significant adverse impacts related to the WRP<sup>4</sup>.

#### IV. METHODOLOGY

The analysis methodology is based on the guidelines of the 2012 CEQR Technical Manual and examines the proposed actions' consistency with land use patterns and development trends, zoning regulations, and other applicable public policies. According to the 2012 CEQR Technical Manual, a detailed assessment of land use, zoning and public policy may be appropriate when needed to sufficiently inform other technical reviews and determine whether changes in land use could affect conditions analyzed in those technical areas. Therefore, this attachment includes a detailed analysis of existing land uses within the directly affected area and a broader study area. Following the guidelines of the 2012 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 such as the *Greenpoint-Williamsburg Rezoning FEIS (CEQR No. 04DCP003K and ULURP No. N050110 ZRK et al.), Greenpoint-Williamsburg Contextual Rezoning EAS (ULURP No. C090334 ZMK)*, as well as the New York City Primary Land Use Tax Lot Output (PLUTO<sup>TM</sup>) data files for 2012. Websites such as NYC Zoning and Land Use (ZoLa), 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 policy 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 primary and secondary study areas.

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Coastal zone assessments required under the City's Waterfront Revitalization Program (WRP) are analyzed as part of the Land Use, Zoning, and Public Policy under 2012 CEQR Technical Manual guidelines. However, for the 2005 FEIS the WRP analysis was a separate section pursuant to the guidelines of the 2001 CEQR Technical Manual in effect at the time.

## **Analysis Year**

The proposed development is anticipated to be completed by 2016. Therefore, the future No-Action condition accounts for land use and development projects, initiatives, and proposals that are expected to be completed by 2016.

## **Study Area Definition**

According to the 2012 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 by the project. Study area radii vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a large project. In accordance with the 2012 CEQR Technical Manual guidelines, land use, zoning, and public policy are addressed and analyzed for two geographical areas: (1) the project area, also referred to as the primary study area, and (2) a secondary study area. The primary study area (project area) includes the development site (Block 2472, Lot 410) and the City-owned property (Block 2472, Lot 425). The secondary study area extends an approximate half-mile from the boundary of the project area, but is extended to include entire blocks and encompasses areas that have the potential to experience indirect impacts as a result of the proposed actions. For the proposed actions, the secondary study area is bounded on the north by Newtown Creek, which separates Brooklyn from Queens, on the south by Java, Green, and Kent Streets and Greenpoint Avenue, on the east by McGuiness Boulevard, Provost Street, and the Whale Creek Canal, and on the west by the East River. The primary and secondary study areas are shown in Figure C-1.

## V. PRELIMINARY ASSESSMENT

## **Land Use and Zoning**

A preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. In addition, under 2012 *CEQR* guidelines, 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. This EAS provides a detailed assessment of socioeconomic conditions, and therefore a detailed assessment of land use and zoning is warranted. As a detailed assessment is warranted for the proposed actions, the information that would typically be included in a preliminary assessment (e.g., physical setting, present land use, zoning information, etc.) has been incorporated into the detailed assessment below. As discussed in the detailed assessment, the proposed actions are not expected to adversely affect land use, zoning, or public policy.

#### **Public Policy**

According to the 2012 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 primary and secondary study areas. If the proposed actions could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

Figure C-1

## **Land Use Study Area**





Besides zoning, other public policies applicable to portions of the primary and secondary study areas include the Greenpoint 197-a Plan, the New York City Waterfront Revitalization Program (WRP), the Eberhard Faber Pencil Company and Greenpoint Historic Districts, the Freeman Street Urban Renewal Area (URA), and the North Brooklyn Industrial Business Zone (IBZ). An overview of these public policies is provided below.

#### Primary Study Area (Project Area)

Greenpoint 197-a Plan<sup>5</sup>

Section 197-a of the New York City Charter grants community boards and other entities the power to sponsor plans for the "development, growth, and improvement" of their communities. Pursuant to the power given to them by the City Charter, the Greenpoint community prepared and issued a 197-a Plan (applicable to the neighborhood of Greenpoint), which was adopted in January 2002 by the New York City Council.

The Greenpoint 197-a Plan is the result of over a decade of effort by residents, community organizations, business leaders, and Brooklyn Community Board 1 to create a blueprint for future development in Greenpoint, to facilitate quality of life improvements in the community and to maximize Greenpoint's potential. The guiding principles of this 197-a Plan are to establish zoning districts that would foster market rate housing, affordable housing, and commercial redevelopment. The plan's recommendations for improving access to the waterfront and redeveloping industrial land into mixed-use residential, manufacturing, and parks have largely been addressed in the 2005 Greenpoint-Williamsburg Rezoning project. In addition to waterfront recommendations, the 197-a Plan also calls for expanded availability of affordable housing, as well as neighborhood-scale retail development along community corridors to serve the local population. The 2005 Greenpoint-Williamsburg Rezoning and the 2009 Greenpoint-Williamsburg Contextual Rezoning adopted many of these suggestions.

#### Local Waterfront Revitalization Program

Proposed projects that are located within the designated boundaries of New York City's Coastal Zone must be assessed for their consistency with the City's Waterfront Revitalization Program (WRP). The Federal Coastal Zone Management Act (CZMA) of 1972 was enacted to support and protect the distinctive character of the waterfront and to set forth standard policies for reviewing proposed development projects along coastlines. The program responded to City, State, and federal concerns about the deterioration and inappropriate use of the waterfront. In accordance with the CZMA, New York State adopted its own Coastal Management Program (CMP), which provides for local implementation when a municipality adopts a local waterfront revitalization program, as is the case in New York City. The New York City Waterfront Revitalization Program (WRP) is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the New York State CMP. The WRP encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. NYSDOS administers the program at the State level, and DCP administers it in the City. The WRP was revised and approved by the City Council in October 1999. In August 2002, NYSDOS and Federal authorities (i.e., the U.S. Army Corps of Engineers (USACE) and the U.S. Fish and Wildlife Service (USFWS)) adopted the City's 10 WRP policies for most of the properties located within its boundaries.

<sup>&</sup>lt;sup>5</sup> Source: http://www.nyc.gov/html/dcp/pdf/community\_planning/bk1\_greenpoint\_197a.pdf

As illustrated in Figure C-2, the project area falls within the City's designated coastal zone, and accordingly the proposed actions must be assessed for their consistency with the policies of the WRP. An assessment is provided in Appendix 1 and summarized below under "Future With the Proposed Actions".

#### Secondary Study Area

Eberhard Faber Pencil Company and Greenpoint Historic Districts

The Eberhard Faber Pencil Company Historic District, located on portions of two blocks (Blocks 2549 and 2557) in Greenpoint (refer to Figure C-3), is comprised of eight buildings and one freestanding wall which incorporate the remaining portions of three facades of three largely-demolished nineteenth-century buildings. The historic district was designated by the New York City Landmarks Preservation Commission (LPC) in 2007. The district compliments the adjacent Greenpoint Historic District on its east. Designated by LPC in 1991, the Greenpoint Historic District, roughly bounded by Kent, Calyer, Noble, and Franklin Streets (refer to Figure C-3), protects residential and commercial buildings built between the years of 1850 and 1900.

As the Eberhard Faber Pencil Company and Greenpoint Historic Districts fall outside the primary study area, they would not be directly affected by the proposed actions. As the proposed actions would not alter or conflict with the policies for the historic districts, no further analysis is warranted.

#### Freeman Street Urban Renewal Area

Urban renewal is the legal authority granted to municipalities to redevelop entire neighborhoods through planned and coordinated actions, provided by Section 504 of Article 15 ("Urban Renewal Law") of the General Municipal Law of the State of New York. Currently, there are approximately 150 Urban Renewal Areas (URAs) in New York City, which are planned and administered by the New York City Department of Housing Preservation and Development (HPD), the agency designated to carry out the provisions of Urban Renewal Law pursuant to Section 502(5) of the Urban Renewal Law and Section 1802(6)(e) of the City Charter. Urban renewal plans designate URAs, areas in which HPD can undertake various actions, including: development of residential, commercial, or industrial land use, condemnation for property acquisition, property sales for redevelopment, and relocation of residents and businesses. HPD coordinates urban renewal plans with approvals from Community Boards, Borough Presidents, the CPC, the City Council, and the Mayor. Each plan lasts 40 years from its date of issuance and can also provide specific guidelines for involved parties, such as developers, for demolition, relocation, and parking provision. Urban design elements, such as signage and roof enclosures, can also be regulated in these plans in order to maintain a uniform look and feel to the designated areas.

URAs are generally established in blighted areas to re-create them into areas more suited to residential use. The planning document for each URA sets forth those goals that legitimize its development, such as: the removal of structurally substandard and/or unsanitary buildings, negative environmental conditions, impediments to land redevelopment, and inefficient street size and organization. In addition, URA plans generally aim to provide low- and moderate- income housing units in new and converted structures, locally-accessible retail commercial areas, sufficient off-street parking, community facilities, and increased local employment through the retention of structurally sound non-residential buildings.

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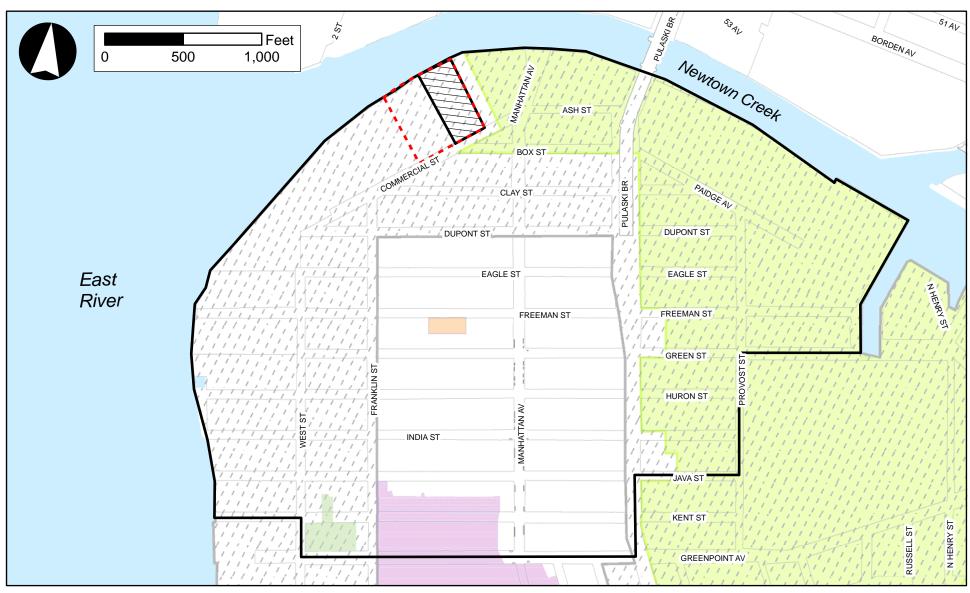
<sup>&</sup>lt;sup>6</sup> "Neighborhood-Wide Redevelopment (Urban Renewal)", NYC Department of Housing, Preservation, and Development http://home2.nyc.gov/html/hpd/html/developers/urban-renewal.shtml

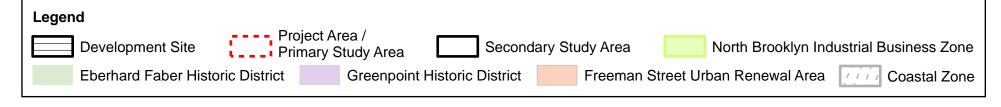




77 Commercial Street EAS Figure C-3

## **Urban Renewal Areas & Historic Districts**





One URA currently exists within the secondary study area, the Freeman Street URA, whose location is shown in Figure C-3. The Freeman Street URA was established in 1987 and comprises part of the block bounded by Freeman Street to the north, Manhattan Avenue to the east, Greene Street to the south, and Franklin Street to the west. Permitted land uses in this URA include new residential and community facility uses as permitted in the ZR for an R6 residential district.

#### North Brooklyn Industrial Business Zone

The secondary study area includes a portion of the North Brooklyn Industrial Business Zone (IBZ). In 2006, the Mayor's Office for Industrial and Manufacturing Businesses ratified the establishment of 18 IBZs in the City. IBZs are areas in which the City provides expanded assistance services to industrial firms in partnership with local development groups. Usually built upon a pre-existing In-Place Industrial Park, they offer various incentives to prevent industrial uses from relocating outside of the City and represent a commitment by the City not to rezone the area for residential use. In addition, some IBZs include adjacent Industrial Ombudsman Areas, which include a greater mix of uses. Business assistance services are provided in both types of areas. However, Ombudsman Areas do not receive the tax credits nor are they subject to the same commitments on rezoning<sup>7</sup>.

Within an IBZ, Industrial Business Solutions Provider offer industrial firms guidance accessing appropriate financial and business assistance programs, navigating and complying with regulatory requirements, developing workforces and ensuring the neighborhood is well maintained. Additionally, planning studies are performed to determine changes that can be made to improve business efficiency within the City's 18 IBZs. These changes can include traffic and parking monitoring, clustering of similar businesses, and IBZ specific marketing. Higher regulation and steeper penalties for illegal conversions as well as a guarantee not to rezone to residential districts help to alleviate real estate uncertainty and tax incentives encourage new industrial uses to move to these areas of the city.

As discussed above, while business assistance services are offered in Ombudsman areas, tax credits are not provided nor are these areas subject to the same commitments on zoning. As shown in Figure C-3, the North Brooklyn IBZ is located in the northeastern portion of the secondary study area, and encompasses the area formerly designated as the East Williamsburg In-Place Industrial Park. This IBZ occupies much of the area along Newtown Creek, which forms its northern and eastern boundaries, and extends to Flushing Avenue to the south. The Industrial Business Solutions Provider for the North Brooklyn IBZs is the East Williamsburg Valley Industrial Development Corporation (EWVIDCO).

As the North Brooklyn IBZ falls outside the primary study area, it would not be directly affected by the proposed actions. As the proposed actions would be consistent and not alter or conflict with the policies for the IBZ, no further analysis is warranted.

#### Conclusion

The proposed actions would not result in any significant adverse public policy impacts. The proposed actions would result in the creation of an incremental increase of 200 additional affordable housing units pursuant to a Points of Agreement (POA) memorandum that the City executed in connection with the 2005 Greenpoint-Williamsburg Rezoning, and 520 market-rate dwelling units (DUs). The proposed actions would also introduce new local retail space, and would result in the creation of up to 35,950 sf of public open space. Therefore, the land use changes anticipated as a result of the proposed actions are

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The Mayor's Office for Industrial & Manufacturing Business – IBZ website: http://www.nyc.gov/html/imb/html/ibz/ibz/shtml.

expected to be consistent with the known public policies in the study area, as described above, and no further analysis of public policy is necessary.

#### VI. EXISTING CONDITIONS

#### **Land Use**

## Primary Study Area

The primary study area is located in the Greenpoint neighborhood of Brooklyn, which historically was dominated by industrial uses in the nineteenth century, along the waterfront and north of Box Street, due to active waterfront piers. Today there are very few residences west of Commercial and West Streets, and east of McGuinness Boulevard, while most blocks located east of West Street and west of McGuinness Boulevard are predominantly residential with ground floor retail uses, especially along Manhattan and Greenpoint Avenues, as well as Franklin Street. Commercial uses are spread sporadically throughout the study area, but some clusters of commercial uses are located along McGuiness Boulevard south of Greenpoint Avenue. There are also several institutional uses serving the local community. Figure C-4 shows the existing land uses in the primary and secondary study areas, and the surrounding neighborhood.

Attachment A, "Project Description", provides a detailed description of existing land uses in the project area, which consists of the development site, and the adjacent City-owned property. The primary study area includes a 2-story warehouse building on the development site, and four 1- to 2-story buildings on the City-owned property, consisting of a small 2-story office building and a small storage shed located toward the south end of the parcel and used for NYCTA's emergency response program and a larger 1-to 2-story vehicle maintenance building and smaller 1-story out building located toward the center and north end of the site and used for NYCTA's paratransit program. The remainder of the site is paved asphalt and used for outdoor vehicle storage and parking. Table C-1 shows the respective lot areas and existing land uses (refer to Attachment A for details).

Table C-1 Existing Uses in the Primary Study Area

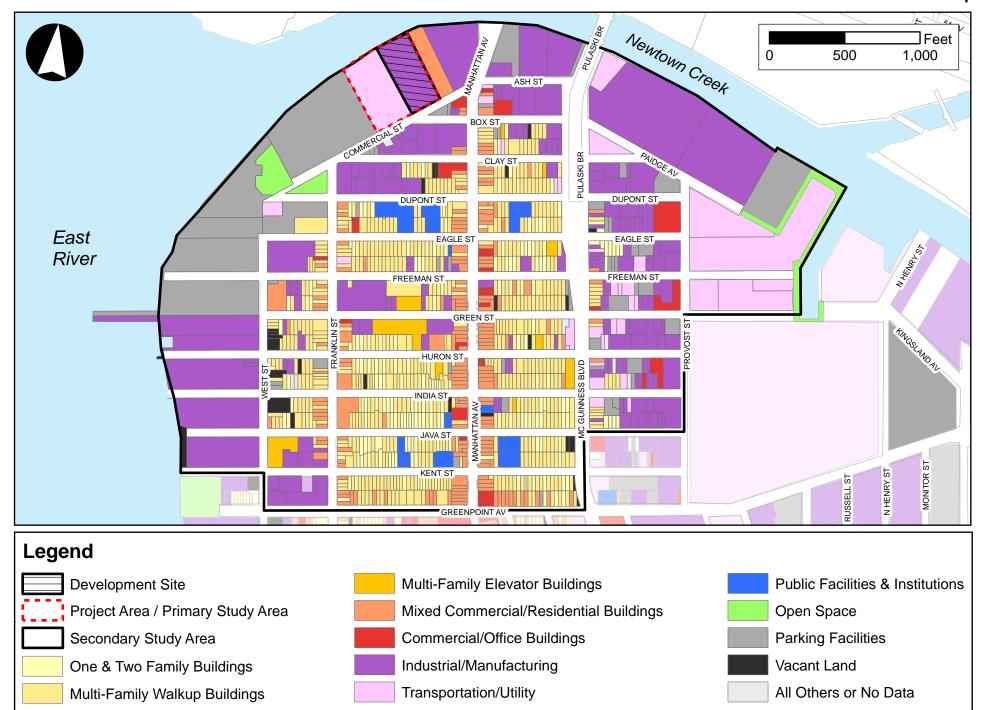
Project Area	Block/Lot	Lot Area (sf)	Land Use
Development Site	2742/410	110,519	CitiBike Storage (Short-term)
City-Owned Property	2472/425	125,063	NYCT Emergency Response, Paratransit Program, and Parking

#### Secondary Study Area

Table C-2 summarizes the existing generalized land uses within the secondary study area by tax lots and land area. Overall, as reflected in Table C-2 and Figure C-4, the secondary study area contains a mix of uses, with the predominant land uses being residential and light manufacturing. Residential and mixed-use properties (residential buildings with commercial and/or community facility uses on the lower floors) collectively occupy approximately 34 percent of the total land area. Of the lots with residential use only, approximately 14.6 percent are developed as one and two family buildings; and 45.2 percent are multi-family walkup buildings. Mixed commercial/residential buildings occupy approximately 14.5 percent of the lots. The most prevalent non-residential uses include low-intensity industrial/manufacturing, approximately 12 percent of the tax lots but over 30 percent of the land area;

77 Commercial Street EAS Figure C-4

## **Land Use Map**



Parking Facilities, approximately 4 percent of the tax lots but 19.8 percent of the land area; and transportation and utility, approximately 2.6 percent of the tax lots and 9.3 percent of the land area. The remainder consists of other uses, including (in descending order) vacant land, commercial, public facilities and institutions, and open space.

A 3- to 4-story building built in the 1930's and containing commercial uses (including the Brooklyn Ice Cream Factory) occupies the lot directly to the east of the development site. The next parcel to the east is improved with a 6-story loft building built around 1906 and managed by the Greenpoint Manufacturing Design Center (GMDC). The building houses several dozen small-scale, niche manufacturing uses, such as wood and metal forging for museum exhibits, construction props and modes for advertising spreads and stained glass restoration. The parcel to the west of the City-owned property is used for open vehicle storage and parking.

The secondary study area's waterfront blocks north of DuPont Street contain industrial and parking facility uses, predominantly open space lots used for vehicle and equipment storage. The 1.20-acre Newtown Barge Playground is located south of the development site. It currently features active recreational facilities, including a paved baseball and basketball field and handball courts. The secondary study area's waterfront blocks south of DuPont Street include predominantly industrial and vacant uses. Located on Block 2486, is the 0.50-acre Greenpoint Playground which features two playgrounds, a swing set, and a spray shower.

The secondary study area's northeastern blocks located east of McGuinness Boulevard include a range of uses, including industrial, transportation/utility, commercial, and parking facilities, with multi-family walkup buildings and mixed commercial/residential uses spread out along McGuinness Boulevard. The 53-acre Newtown Creek Wastewater Treatment Plant is a major land use located just beyond of the secondary study area boundary. The Newtown Creek plant is the largest of New York City's 14 wastewater treatment plants. The plant serves approximately 1 million residents in a drainage area of more than 15,000 acres (25 square miles)<sup>8</sup>.

Table C-2 Land Use within the Secondary Study Areas

Land Use	No. of Lots	% of total Lots	Area SF	% of total Land Area
Residential	965	75.0%	2,970,788 sf	32.4%
One and Two Family	187	14.6%	428,196 sf	4.7%
Multi-Family Walk-up	582	45.3%	1,903,008 sf	20.8%
Multi-Family Elevator	10	0.8%	96,349 sf	1.1%
Mixed-Use Residential and Commercial	186	14.5%	543,235 sf	5.9%
Commercial and Office	27	2.1%	153,236 sf	1.7%
Industrial and Manufacturing	154	12.0%	2,933,966 sf	32.0%
Transportation and Utility	33	2.6%	814,720 sf	8.9%
Public Facilities and Institutions	17	1.3%	152,158 sf	1.7%
Open Space	2	0.2%	73,419 sf	0.8%
Parking Facilities	51	4.0%	1,725,608	18.8%
Vacant Land	28	2.2%	321,447 sf	3.5%
Other (unknown)	8	0.6%	17,779 sf	0.2%
TOTAL	1,285	100.0%	9,163,121	100.0%

Source: MapPLUTO 2012.

New York City Department of Environmental Protection, http://www.nyc.gov/html/dep/html/press\_releases/08-14pr.shtml

The secondary study area's central blocks east of Commercial and West Streets and west of McGuinness Boulevard are predominantly residential, with institutional and industrial uses spread out sporadically. The residential uses include predominantly one and two family buildings and multi-family walkup buildings. Mostly retail commercial and mixed commercial-residential uses are clustered along Manhattan and Greenpoint Avenues as well as Franklin Street. The southwestern area south of Java Street between West and Franklin Streets has a high concentration of industrial uses, and vacant lots are spread among the blocks south of Green Street between West and Franklin Streets.

#### **Zoning**

The description of the study area zoning is provided in two parts. First, information on the location of study area districts is provided for both the primary and secondary study areas. Second, a description of key use, density, and bulk controls will follow in Table C-4. Existing zoning districts are shown in Figure C-5.

#### Primary Study Area

The primary study area is zoned R6 and R6/C2-4. It was rezoned from M3-1 to R6 and R6 with a C2-4 commercial overlay as part of the 2005 Greenpoint-Williamsburg Rezoning.

Waterfront Access Plan (WAP) BK1 (BK1 WAP): Greenpoint-Williamsburg

The project area is located within the boundaries of the Greenpoint-Williamsburg Waterfront Access Plan (WAP). As shown in Figure C-6, the development site is identified as WAP Parcel 3, and the Cityowned property as WAP Parcel 4. WAPs, which are part of the ZR, modify the general public access requirements of waterfront zoning within specified areas. The Greenpoint-Williamsburg WAP, also called WAP BK-1, identifies specific locations for required waterfront public access areas on private development parcels; establishes requirements for widened shore public walkways, parks, and plazas; allows flexibility for different shore treatments and quality landscape design, and establishes parameters for consistency of design along this waterfront. It also specifies the locations of upland connections and visual corridors to be established as waterfront sites are developed. Refer to Figures C-7 and C-8, showing the relationship of the project area to the WAP BK-1's required public access elements and visual corridors. As with most developments on waterfront blocks, properties in the WAP BK-1 require certifications from the Chair of the CPC to confirm new developments comply with applicable WAP BK-1 requirements. Modifications to these requirements may be permitted for projects by means of a zoning authorization from the CPC, provided the CPC can make certain findings specified in the ZR.

WAP BK-1 also includes special regulations for bulk and Inclusionary Housing. The inclusionary housing regulations permit FAR bonuses for developments that provide optional affordable housing units. Figure C-9 shows the waterfront and upland portions of the Greenpoint-Williamsburg Inclusionary Housing Program Area for the primary study area and surrounding blocks. The development site and City-owned property are within the designated waterfront Inclusionary Housing program area. These regulations are identified below in the description of density and bulk controls.

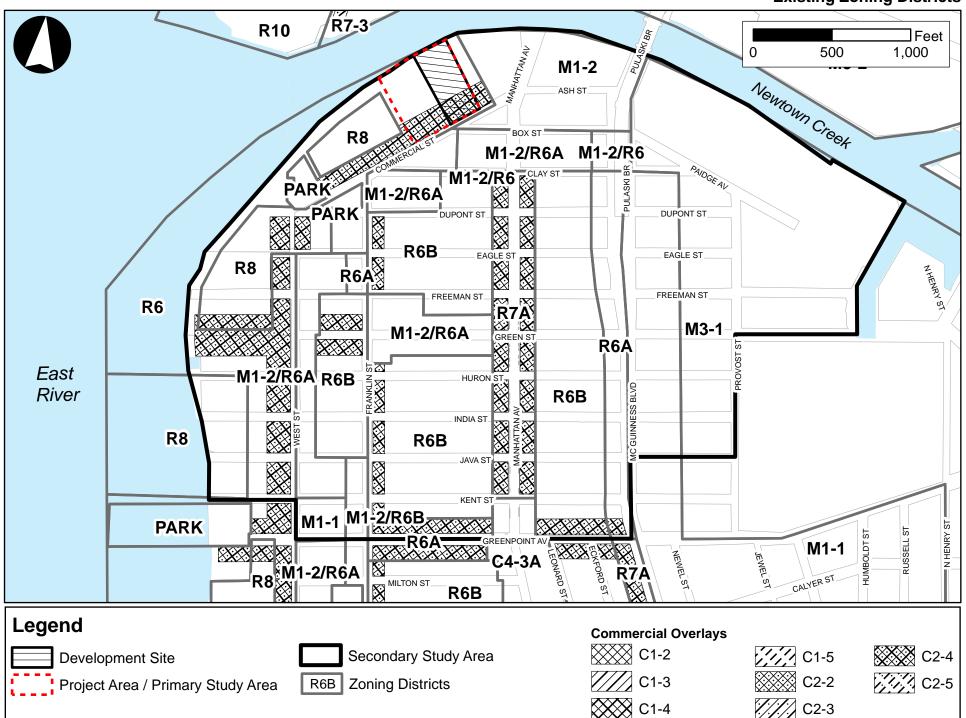
## Secondary Study Area

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In addition to being mapped in the primary study area, R6 zoning districts are also mapped in the secondary study area. R8 and R6 are mapped over parts of most of the blocks northeast and southwest

New York City Department of City Planning, the Greenpoint-Williamsburg Waterfront Access Plan, http://www.nyc.gov/html/dcp/html/greenpointwill/greenwateraccess2.shtml

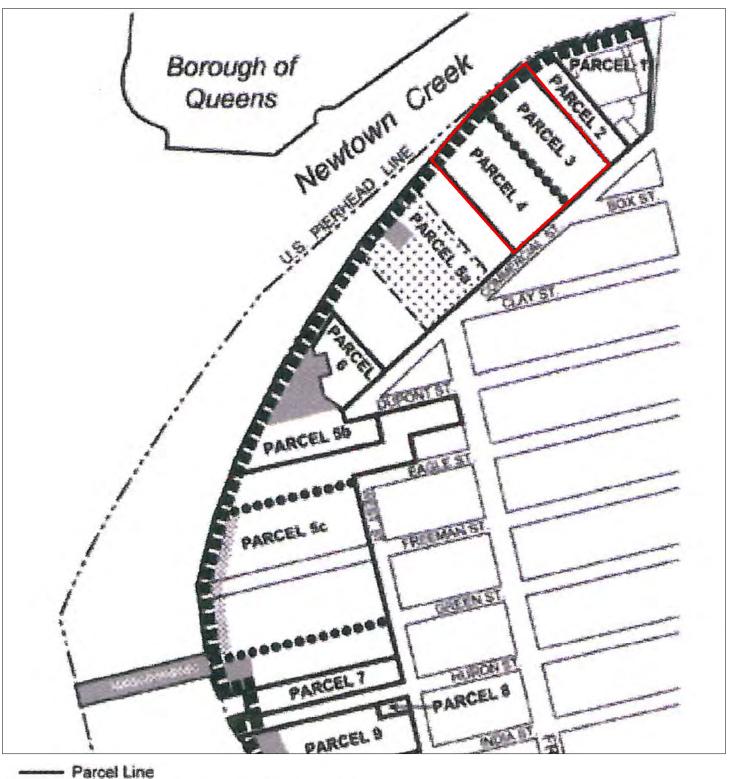
## **Existing Zoning Districts**

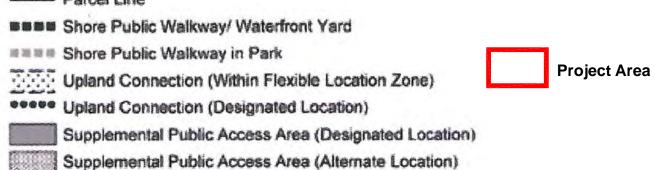


Project Area: Relationship to WAP BK-1



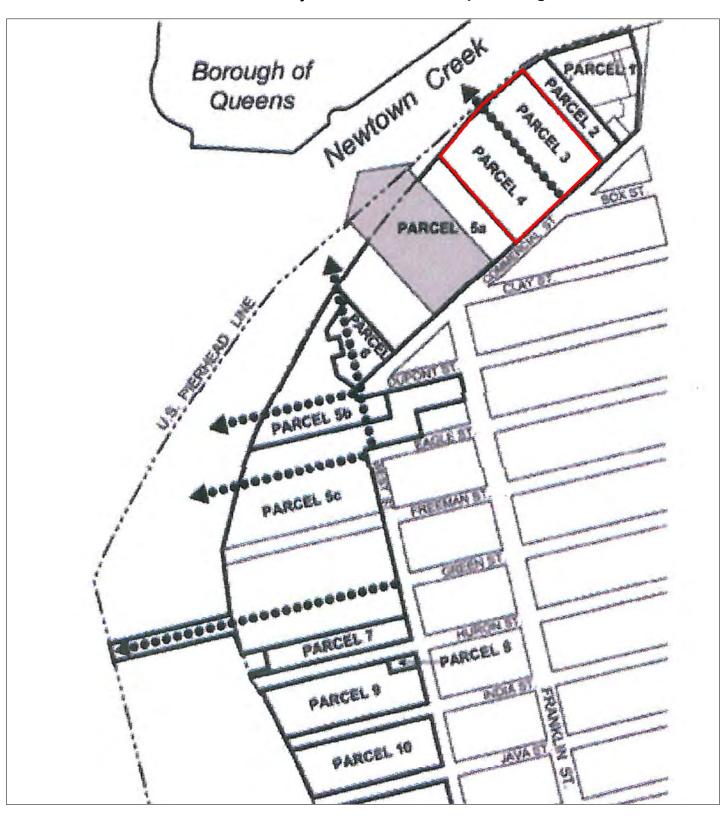
**Project Area: Relationship to Public Access Elements** 





**Project Area: Relationship to Designated Visual Corridors** 

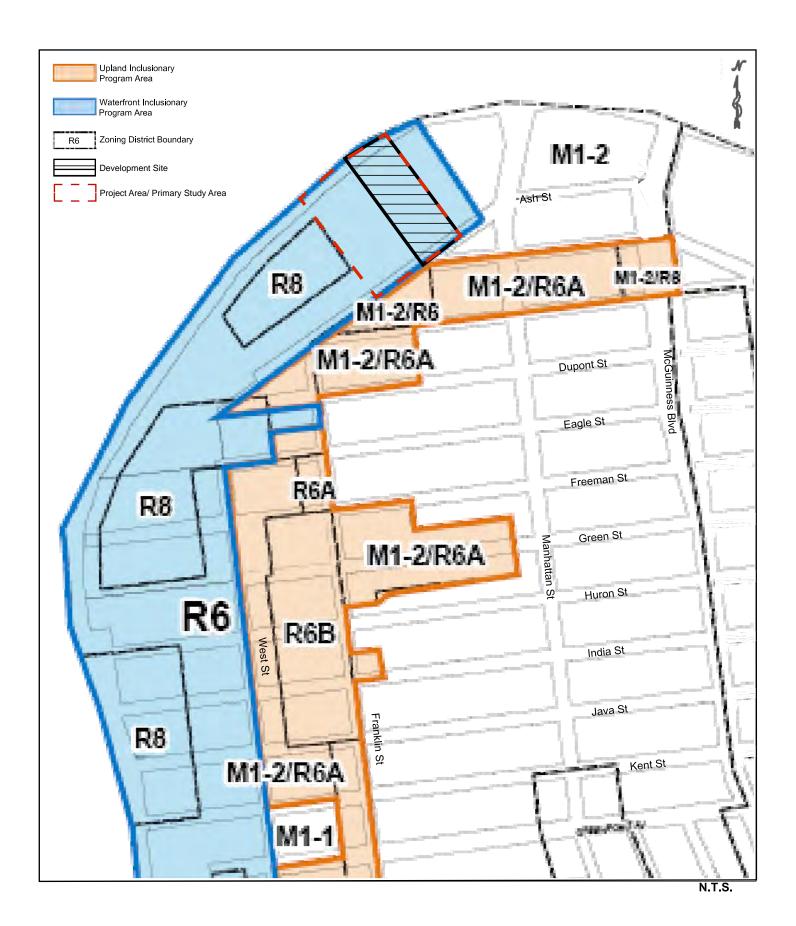
**Project Area** 



Parcel Line

**deese** Visual Corridor (Designated Location)

Visual Corridor (within Flexible Location Zone)



of the primary study area where vacant and industrial uses are prevalent. R6 and R8 with a C2-4 overlay are mapped on the western frontages of West and Commercial Streets on properties with vacant and industrial uses. C2-4 overlays are also mapped along Manhattan Avenue between Clay and Kent Streets, portions of Greenpoint Avenue between West Street and McGuinness Boulevard, on portions of the eastern frontage of Franklin Street between DuPont and Greenpoint Avenue, and on portions of two blocks along Green Street between Franklin and West Streets.

Other zoning districts in the study area include M1-1, M1-2, M3-1, R6A, R6B, R7A, C4-3A and Special Mixed Use District MX-8 which includes M1-2/R6, M1-2/R6A, M1-2/R6B. M1-1 covers the western portions of the blocks east of McGuinness Boulevard between Clay Street and Greenpoint Avenue, and the majority of Block 2557. M1-2 covers the three blocks north of Box Street and the northeastern end of Block 2472. M3-1 covers the eastern portions of the blocks east of McGuinness Boulevard and Block 2484. R6A and R6B are mapped over the majority of the central blocks of the study area. R7A covers Manhattan Avenue between Clay and Kent Streets, and C4-3A covers Manhattan Avenue south of Kent Street. Mixed use zoning districts M1-2/R6, M1-2/R6A, and M1-2/R6B are mapped on blocks along the eastern frontage of Franklin Street, and on blocks between Box, DuPont, and Commercial streets and McGuinness Boulevard.

Portions of the secondary study area are located within the WAP BK-1 and are designated Inclusionary Housing program areas, as shown in Figure C-10.

#### **Zoning District Characteristics**

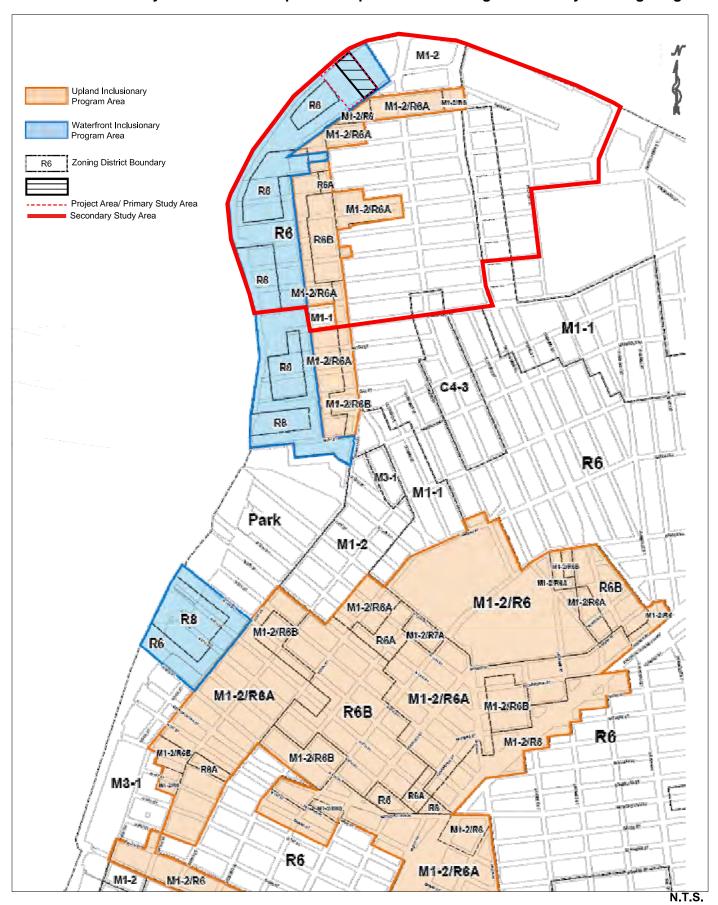
#### R6 and R8 Residential Districts

R6 districts are medium-density residential districts mapped in much of Brooklyn, Queens and the Bronx. In the secondary study area, R6 is mapped in portions of the waterfront and upland portions of the WAP BK-1. There is also a M1-2/R6 district in the secondary study area outside the WAP BK-1 (see discussion below of MX districts). Floor area ratios (FAR) in typical R6 districts ranges from 0.78 to 2.43 for residential uses. However, in the WAP BK-1's waterfront Inclusionary Housing program area, the maximum base FAR is 2.43 and the maximum FAR with Inclusionary Housing bonus is 2.75. In the WAP BK-1's upland Inclusionary Housing program area, the maximum base FAR is 2.7 (2.2 on narrow street lots) and the maximum FAR with Inclusionary Housing bonus is 3.6 (2.42 on narrow street lots). While bulk in typical R6 districts is regulated by sky exposure plane regulations, in the WAP BK-1's waterfront area R6 districts are allowed heights up to 150 feet and lots with blended R6/R8 zoning are allowed heights of up to 300 and 400 feet. The standard bulk regulations, or height factor regulations, for R6 districts encourage small apartment buildings on small zoning lots and, on larger lots, tall, narrow buildings that are set back from the street. Height factor buildings are often set back from the street and surrounded by open space and on-site parking. However, there are additional regulations regarding the heights of buildings within R6 and R8 districts; for example within 100 feet of Commercial Street, Franklin Street, DuPont Street, West Street and Kent Avenue the maximum building height in R6 districts is 65 feet. R6 districts in the WAP BK-1's upland Inclusionary Housing area are permitted maximum heights of 60 feet (45 feet for narrow street lots). Off-street parking is required for 70 percent of a building's dwelling units in a typical R6 district, but in the WAP BK-1 the off-street parking requirement is 50 percent for market rate housing and 35 percent for affordable housing units. The optional Quality Housing regulations in typical R6 districts produce lower, high lot coverage buildings set on or near the street line.

R8 zoning districts are high-density residential districts mapped in much of the Bronx and Brooklyn. Within the study areas, portions of the waterfront area in the WAP BK-1 are mapped with R8 districts. Floor area ratio (FAR) in typical R8 districts ranges from 0.94 to 6.02 for residential uses. However, in

Figure C-10

Land Use Study Area: Relationship to Greenpoint-Williamsburg Inclusionary Housing Program



the WAP BK-1's waterfront Inclusionary Housing program area, the maximum base FAR is 4.88 and the maximum FAR with Inclusionary Housing bonus is 6.5. While bulk in typical R8 districts is regulated by sky exposure plane regulations, in the WAP BK-1 R8 districts are allowed heights up to 400 feet. Off-street parking is required for 40 percent of a building's dwelling units in a typical R8 district, but in the WAP BK-1 the off-street parking requirement is 45 percent for market rate housing and 30 percent for low-moderate income affordable housing units.

#### R6A, R6B, and R7A Districts

R6A, R6B, and R7A are contextual medium-density residential zoning districts. Contextual districts are designed to maintain the scale and form of the city's traditional moderate- and higher-density neighborhoods. These districts, which have an A, B, D, or X letter suffix are mapped where buildings of similar size and shape form a strong neighborhood context, or where redevelopment would create a uniform context. The bulk regulations for these districts are known as Quality Housing regulations. The Quality Housing Program was established in the 1980s to provide an optional set of contextual bulk regulations for residential development in non-contextual moderate- and higher-density (R6-R10) districts. The bulk regulations (e.g., height and setback, floor area, lot coverage), existing or desired, promote building forms in keeping with specific neighborhood characteristics. The program also sets certain quality standards for building safety, landscaping, recreation space and other amenities. In contextual zoning districts the quality housing program is mandatory while it is optional in non-contextual districts.

Typically, for standard R6A and R6B districts the maximum permitted FAR is 3.0 and 2.0. However, for inclusionary housing designated areas, the maximum permitted base FAR is 3.6 for R6A districts and 2.2 for R6B districts.

R7A districts maximum allowable FAR is 4.0 for residential uses and the maximum building height is 80 feet. Under the quality housing regulations, parking is required for 50% of the dwelling units.

#### C2-4 and C4-3A Districts

C2-4 districts are commercial overlays mapped within residential districts along streets that serve local retail needs predominantly in lower and medium density areas. When C2-4 commercial overlays are mapped in R6 through R10 residential districts, the maximum commercial FAR is 2.0. C2-4 commercial overlays permits uses in Use Groups 1 through 9 and 14.

C4-3A districts are contextual commercial districts mapped in regional commercial centers that are located outside of the central business district. The commercial and residential FAR in the C4-3A district is 3.0, and has the residential district equivalent to R6A. Use Groups 5, 6, 8, 9, 10, and 12 are permitted in C4 districts.

#### *M1-1, M1-2, and M3-1 Districts*

M1 zoning districts are light manufacturing/industrial districts that have stringent performance standards, and may serve as industrial buffers to adjacent residential or commercial zoning districts. High performance industrial uses are allowed, as well as a range of commercial uses. Additionally, Use Group 4 community facilities are allowed in M1 zones by special permit. Residential development is generally not allowed in M1 districts. M1-1 districts allow a maximum floor area ratio (FAR) of 1.0, and M1-2 districts allow a maximum FAR of 2.0.

M3 zoning districts are heavy manufacturing/industrial districts that have minimum performance standards. Low performance industrial uses area allowed, as well as a range of commercial uses. Community facility and residential uses are not allowed in M3 districts. M3-1 districts allow a maximum commercial and manufacturing FAR of 2.0.

#### Mixed Use District MX-8

The Special Greenpoint-Williamsburg Mixed-Use District MX-8 was established in 2005 to help preserve and protect existing manufacturing facilities in the neighborhood while providing the framework and guidelines for meeting residential demand and rehabilitating underutilized or abandoned lots. 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.

Table C-3 identifies the zoning requirements applicable to the project area.

Table C-3 Project Area Zoning Summary

	Zoning Districts <sup>1</sup>	Floor Area Ratio (FAR) <sup>2</sup>	Use Groups	Bulk Regulations
Project Area	R6/C2-4	R6: 2.43 (base) 2.75 (IH bonus) C2-4: 2.0	R6: 1 to 4; C2-4: 5 to 9 & 14	Maximum height: 150'

Abbreviations: C = Commercial; M = Manufacturing; CF = Community Facility; R = Residential

Table C-4 provides a summary of zoning district information for the secondary study area.

<sup>1</sup> The project area is located in the Waterfront Inclusionary Housing Program Area portion of the WAP-BK1.

<sup>&</sup>lt;sup>2</sup> FARs shown are for zoning lots containing residential uses. Community facility maximum FARs apply to zoning lots entirely occupied by community facility uses; R6: 4.8

Table C-4 Secondary Study Area Existing Zoning Districts and Regulations

District	Definition/General Use	Maximum FAR	
Typical (N	on-waterfront blocks)		
R6	Medium density residential	R: 0.78 - 2.43, Inclusionary Housing Bonus 3.6 wide street and 2.42 narrow street; CF: 4.8; C: 2.0 as overlay	
R6A	Contextual medium density residential	R: 3.0, 3.6 with Inclusionary Housing Bonus; CF: 3.0; C: 2.0 as overlay	
R6B	Contextual medium density residential	R: 2.0, 2.2 with Inclusionary Housing Bonus; CF: 2.0; C: 2.0 as overlay	
R7A	Contextual medium density residential	R: 4.0; CF: 4.0; C: 2.0 as overlay	
R8	High density residential	R: 0.94-6.02, 7.2 with Inclusionary Housing Bonus; CF: 6.5; C: 2.0 as overlay	
C2-4	C2 is a commercial overlay mapped in residential districts. They permit local retail and service establishments. Regulations limit commercial use to one or two floors. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services.	R: Same as underlying R zone C: 1.0 in R1- R5 Districts 2.0 in R6 – R10 Districts CF: Same as underlying R zone M: Not permitted	
C4-3A	C4 is a commercial district mapped in regional commercial centers that are located outside of the central commercial districts. Contextual C4 commercial district's floor area may be increased with inclusionary housing program bonus.		
M1-1	Light manufacturing – high performance district. M1 districts are often buffers between M2 or M3 districts and adjacent residential or	R: Not permitted; C:1.0 CF: 2.4 (use group 4 only); M:1.0	
M1-2	commercial districts. Building heights are governed by sky exposure planes. Parking requirements vary with use.	R: Not permitted; C: 2.0 CF: 4.8 (use group 4 only); M: 2.0	
M3-1	Heavy manufacturing- low performance district. M3 districts are designed to accommodate the heavy industrial uses which involve more objectionable influences and hazards. Building heights are governed by sky exposure planes. Parking requirements vary with use.	C: 2.0	
M1-2/R6	These districts are paired in the Greenpoint-Williamsburg Special Mixed Use District MX-8, to allow a range of uses as-of-right. Mixed-use	R:2.2 on narrow street, 3.0 on wide street; M:2.0; C:2.0; CF:4.8	
M1-2/R6A	buildings in these districts shall have a maximum FAR not exceeding the maximum FAR for residential, commercial or manufacturing uses,		
M1-2/R6B	whichever is greatest.	R:2.0; M:2.0; C:2.0; CF:2.0	
WAP BK-	1 Zoning Districts		
R6, R6/C2-4	Medium density residential	R: 2.75* (max with IH bonus in waterfront area); R: 3.6 (max. with IH bonus in upland area: wide st.) R: 2.42 (max with IH bonus in upland area narrow st.) CF: 4.8 (only applies if zoning lot has no R); C: 2.0 (for C2-4 overlay)	

Notes: C = Commercial; M = Manufacturing; CF = Community Facility; R = Residential Source: New York City Zoning Resolution.
\* On R6 and R8 blended sites, the maximum residential FAR is 4.73.

#### VII. FUTURE WITHOUT THE PROPOSED ACTIONS

#### **Land Use**

#### Primary Study Area (Project Area)

#### Development Site

In the 2016 future without the proposed actions, the applicant would develop a, 14-story mixed-use market-rate residential, commercial and community facility development with accessory parking on the development site that would comply with the requirements set forth under the R6 and R6/C2-4 zoning ("the No-Action development").

The No-Action development would include a total of up to approximately 318,760 gsf (2.43 FAR), which would be comprised of approximately 265,690 gsf of residential area (276 market-rate DUs), 25,750 gsf of ground-floor local retail and service uses and 6,200 gsf of community facility uses. The No-Action development would add up to approximately 720 residents<sup>10</sup> and up to 110 employees<sup>11</sup> to the development site. In addition, 138 off-street parking spaces accessory to the residential uses would be provided in a ground floor parking area with a size of approximately 32,200 gsf.

In compliance with the applicable regulations governing maximum building heights and permitted penthouses set forth in ZR Section 62-354(b), the No-Action building would be up to ten stories tall (110 feet ABP, which is the maximum building height permitted as-of-right in the R6 and R6/C2-4 districts) plus a 4-story penthouse (150 feet ABP) and a 25-foot mechanical bulkhead (175 feet ABP) which are also permitted as-of-right. Under the No-Action condition, approximately 16,025 sf of waterfront public access areas would be provided on the development site, comprised of a shore public walkway along Newtown Creek and a 15-foot wide alternate public way along the eastern lot line of the development site.

#### City-owned Property

The City-owned property is currently leased to NYCTA and occupied by four 1- to 2-story buildings. The site is currently used as storage for paratransit and emergency response vehicles and some related office uses. The City is in the process of relocating the paratransit uses off-site and is also seeking another location for the emergency response facilities. As the existing uses are relocated off-site, the related buildings will be demolished (except, perhaps, for a 2-story office building) to facilitate construction of Box Street Park. The park would have a total area of approximately 125,063 sf.

It is assumed that the design for Box Street Park under the 2016 future without the proposed actions would be consistent with the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan, which contemplates that Box Street Park would combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that would overlook the shore public walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access point for kayaks. The plan, however, is subject to change based on community input that would be gathered during the design development phase for the park.

<sup>&</sup>lt;sup>10</sup> Source: 2.61 people per household; NYC DCP Community District Demographic Profiles (Census 2010).

Assumptions: 1 building employee per 25 DUs, 3 local retail employees per 1,000 gsf of retail space, 1 parking employee per 50 attended parking spaces (refer to Table 8 for details).

## Secondary Study Area

There are several changes anticipated within the secondary study area by the project build year of 2016.

As shown in Table C-5, and Figure C-11, there are seven new developments anticipated to be completed by 2016 within the secondary study area (No-Action Developments B through H). The seven developments and one street improvement project would introduce a combined total of approximately 1,846 additional DUs (including approximately 477 affordable units), approximately 87,900 gsf of retail space, approximately 3,800 gsf of community facility space, approximately 59,412 sf of open space, and approximately 814 accessory parking spaces.

More specifically, two mixed-use developments along the waterfront are anticipated to be developed within the secondary study area by 2016. 155 West Street (No-Action Development C) is located to the south of the project area on the western edge of the secondary study area and is expected to include 640 DUs (140 affordable), 19,000 gsf of retail space, and 3,800 gsf of community facility space, 256 accessory parking spaces, and 22,000 sf of publicly accessible open space by 2016. Building 1 of the Greenpoint Landing project, located at 37 Commercial Street (No-Action Development F), is located directly adjacent and west of the City-owned property. This development is expected to include 622 DUs (124 affordable), 1,500 gsf of retail, 265 accessory parking spaces, and 7,852 sf of waterfront open space. The Greenpoint Landing project would include another mixed-use development at 31 Eagle Street (No-Action Development G), which would be complete by 2016. The development would include 78 affordable units, 1,200 gsf of retail space, and 23 accessory parking spaces. At 1133 Manhattan Avenue, a development with 210 DUs (105 affordable), 8,000 gsf of retail space, and 132 accessory parking spaces, is anticipated to be complete by 2014 (No-Action Development B).

As also shown in Table C-5, there are also one residential and one commercial No-Action development in the secondary study area expected by 2016. A 20 DU residential building located at 74 Kent Street (No-Action Development E), and a 30,000 gsf retail development at 58 Kent Street (No-Action Development D) are both expected to be completed in 2015.

77 Commercial Street EAS Figure C-11

## No-Build Site Locations

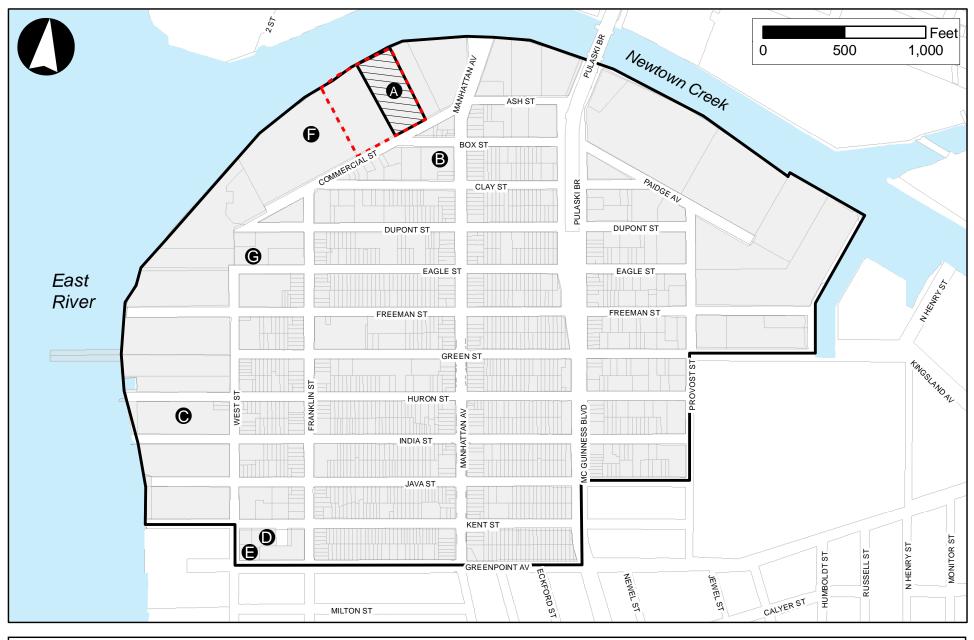




Table C-5: No-Build Developments within the Primary and Secondary Study Areas					
Map Key	Project Name	Location	Program	Year	
A	77 Commercial Street No-Build	Block 2472, Lot 410	276 dwelling units; 28,200 gsf of retail space; 138 accessory parking spaces; and 29,560 sf of public open space	2016	
В	1133 Manhattan Ave	Block 2482, Lot 26	210 dwelling units (105 affordable DUs); 8000 gsf of retail space; and 132 accessory parking spaces	2014	
С	155 West Street	Block 2530, Lots 1, 55, 60	640 dwelling units (140 affordable DUs); 19,000 gsf of retail space; 3,800 gsf of community facility; 22,000 sf of open space; and 256 accessory parking spaces.	2016	
D	Kickstarter (58 Kent Street)	Block 2557, Lot 7	30,000 gsf of retail space	2015	
Е	74 Kent Street	Block 2557, Lot 1	20 dwelling units	2015	
F	Greenpoint Landing as- of-right	37 Commercial Street Building 1	On 37 Commercial Street Building 1: 622 DUs (124 affordable); 1,500 gsf retail; 265 accessory parking spaces; andn 7,852 acres of open space	2016	
G	Greenpoint Landing Disposition	Site 3 on Block 2494, p/o Lot 1	78 affordable DUs, 1,200 gsf of retail, and 23 accessory parking spaces.	2016	
		TOTAL	1,846 dwelling units (447 affordable DUs); 87,900 g retail space; 814 accessory parking spaces; and 59,4 public open space.		

## **Zoning**

#### Primary Study Area

There are no anticipated zoning changes in the primary study area in the 2016 future without the proposed actions.

#### Secondary Study Area

Under 2016 No-Action conditions, the secondary study area will continue to experience an increase in residential and commercial development as a result of the City's 2005 Greenpoint-Williamsburg Rezoning and Contextual Rezoning.

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

This section describes the land use and zoning conditions that would result from the proposed actions by 2016, and assesses the potential for the proposed actions to result in significant adverse impacts.

As described in Attachment A, "Project Description", the applicant is seeking approval of a Special Permit pursuant to ZR Section 62-836 to waive maximum base and building heights and minimum setback requirements, an Authorization pursuant to ZR Section 62-822(a) to waive requirements regarding the location of visual corridors and upland connections and to raise the levels of visual corridors and waterfront yards, another Authorization pursuant to ZR Section 62-822(b) to allow modifications to permitted obstruction requirements for visual corridors and waterfront public access areas and to permit minor design variations, a Certification pursuant to ZR Section 62-811 confirming that the design of the proposed waterfront public access areas complies with applicable design

requirements (except as waived under the Authorizations) and a Text Amendment to ensure that the City-owned property continues to generate floor area even after it is developed as a public park.

The proposed actions would facilitate the construction of a development consisting of a 2 to 6-story building, a 30-story building and a 40-story building, which would contain an aggregate of up to approximately 693,320 gsf of residential uses (720 units), up to approximately 25,750 gsf of ground floor commercial uses, approximately 6,200 gsf of community facility uses and approximately 46,730 gsf of attended, off-street accessory parking (320 spaces), for a total new development of up to approximately 760,650 gsf. The proposed development would also include the development of approximately 25,450 sf of waterfront public access areas consisting of a shore public walkway along Newtown Creek and an upland connection linking the shore public walkway to Commercial Street along the western lot line of the development site, plus a secondary, approximately 9,400 sf landscaped pedestrian walkway linking Commercial Street and the shore public walkway adjacent to a driveway providing vehicular access to the development site along the eastern lot line.

#### Land Use

The 2012 CEQR Technical Manual states that although changes in land use could lead to impacts in other technical areas, significant adverse land use impacts are extraordinarily rare in the absence of an impact in another technical area. Also, according to the 2012 CEQR Technical Manual, many land use changes may be significant, but not adverse.

In the future with the proposed actions, a portion of the primary study area, the development site, is expected to be redeveloped with the proposed mixed-use development. The proposed residential, open space, and accessory parking areas under the 2016 With-Action conditions are greater than the ones included in the proposed No-Action development under 2016 No-Action conditions. The amount of local retail space and community facility space would be identical under the No-Action and With-Action conditions.

#### Primary Study Area (Project Area)

#### Development Site

Under 2016 With-Action conditions on the development site, there would be approximately 720 DUs (520 market-rate DUs and approximately 200 affordable housing units), up to approximately 25,750 gsf of local retail space, 6,200 gsf of community facility space, approximately 320 accessory parking spaces (46,730 gsf), and approximately 35,950 sf of publicly accessible open space. The two residential towers on the development site would be 305.7 and 404 feet tall (not including 25-foot mechanical penthouses). As compared to 2016 No-Action conditions on the development site, the 2016 With-Action conditions would represent incremental increases of 244 market-rate DUs and 200 affordable housing units for a total of approximately 444 DUs, approximately 182 accessory parking spaces (14,530 gsf), and approximately 18,828 sf of publicly accessible open space. As the maximum proposed commercial component would be 25,750 gsf and the community facility component would be 6,200 gsf, on both the No-Action and the With-Action condition, there would be no net increment for these uses.

#### City-owned Property

In the 2016 future with the proposed actions, the City-owned property would be occupied by the new Box Street Park, which would have a total area of up to approximately 125,063 sf. The City would use proceeds from the sale of the development rights to the applicant to supplement construction and

development of Box Street Park. As a result, Box Street Park would include features beyond those provided under the 2016 No-Action condition.

#### Assessment

The proposed actions' incremental land use changes would be consistent with development trends that are currently occurring and are expected to occur as-of-right under 2016 No-Action conditions pursuant to the City's 2005 Greenpoint-Williamsburg Rezoning. As compared to No-Action conditions in which the City-owned property would not be redeveloped and remain vacant, with the proposed actions the development site would be fully developed, thereby creating a more cohesive project area. The incremental residential units generated by the proposed actions in the With-Action conditions would provide a mix of affordable housing and market-rate DUs. As compared to No-Action conditions, the net increment of affordable units would be at least 200, which would advance the City's efforts to establish a vibrant mixed-income community on the Greenpoint waterfront. In addition, the City would fulfill the provisions made in the POA memorandum from 2005. Similarly, the proposed local retail in the future without and with the proposed actions would provide goods and services to residents of the area.

The open space provided in the primary study area (in the project area), would be complementary and an enhancement to the residential uses developed on the development site. The proposed new public open space, including Box Street Park, shore public walkway, upland connection, and secondary pedestrian walkway, would be a significant addition to the neighborhood, providing high quality facilities on the waterfront with views of the East River and Newtown Creek, and Manhattan and Queens skylines, and upland connections and visual corridors linking to the upland area and street network of the Greenpoint neighborhood.

#### Secondary Study Area

#### Assessment

The proposed actions are not expected to generate significant adverse land use impacts in the secondary study area. The new development generated by the proposed actions would be at a density and building scale compatible with other new development occurring along the waterfront pursuant to the City's 2005 Greenpoint-Williamsburg Rezoning. New development in the secondary study area is expected to occur in the time period until 2016, and is expected to continue substantially after 2016 with or without the proposed actions.

As noted in the discussion of the primary study area, the proposed actions would create a more cohesive development pattern on a changing waterfront block. Furthermore, without the proposed actions, the new public park (Box Street Park) would be created. It is assumed that the design for Box Street Park under the No-Action scenario would be consistent with the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan<sup>12</sup>, which contemplates that Box Street Park will combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that will overlook the shore public walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access points for kayaks. The plan, however, is subject to change based on community input that will be gathered during the design development phase for the park.

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<sup>&</sup>lt;sup>12</sup> Source: http://www.nycgovparks.org/park-features/future-parks/greenpoint-williamsburg-waterfront

As the proposed actions would result in residential and retail land uses with publicly accessible open space projected in the *FEIS*, the *FEIS* conclusions regarding land use effects remain valid.

Overall, the proposed actions would not adversely affect existing land use patterns and trends. Similar to other future study area development, the proposed actions are consistent with the framework for new land uses established by the City's 2005 Greenpoint-Williamsburg Rezoning. The uses generated by the proposed actions under 2016 With-Action conditions would not result in a substantial change to the study area as compared to 2016 No-Action conditions. Many of the changes associated with the proposed actions would be consistent with the goals and objectives of the 2005 FEIS. Accordingly, the proposed actions would not result in significant adverse land use impacts.

## **Zoning**

#### Primary Study Area

In the 2016 future with the proposed actions, the existing zoning districts mapped in the primary study area would not change. While the proposed actions would not include any zoning map amendments and the primary study area would continue to be located in the waterfront part of the WAP BK-1 Inclusionary Housing program area, a Special Permit to waive maximum base and building heights and minimum setback requirements would be warranted to accommodate the approximately 386,000 gsf (343,923 zsf) of development rights from the City-owned property to facilitate the proposed development on the development site.

#### Assessment

Collectively, the Special Permit, Authorizations, Certification and Text Amendment would facilitate the proposed project. Upon their approval, the proposed actions would be site specific and would therefore only affect the primary study area. Therefore, a conceptual analysis of these changes is not required as no other sites would be affected. As a result, a discussion of zoning in the secondary study area is not warranted.

#### Special Permit

Pursuant to ZR Section 36-652, the maximum permitted floor area ratio (FAR) in the project area is 2.75 for R6 districts and 6.5 for R8 districts. The transfer of development rights from the City-owned property to the development site would increase the total proposed development to a maximum of approximately 760,650 gsf (647,851 zsf). Although the total maximum FAR on the development site and the City-owned property considered as a single development parcel would average to 2.75, the effective FAR of the proposed development would increase to approximately 5.86 when only the lot area of the development site is considered, which is close to the maximum FAR permitted in an R8 district. Accordingly, the Special Permit would grant waivers with respect to maximum base and building heights and minimum setback requirements to provide building envelopes for the development site similar to envelopes permitted in R8 districts to allow the transferred floor area to be accommodated in a commercially reasonable manner. The waivers would also allow the affordable units to have the same floor to ceiling heights as the market-rate units and would provide greater variation and articulation of the base building by allowing portions of the base building to exceed the maximum base height of 65 feet.

As the Special Permit would allow height and setback changes that are common in R8 districts, which exist in the immediate vicinity of the project area along the Greenpoint waterfront, no significant

adverse zoning impacts are anticipated as a result of the site-specific changes related to the Special Permit.

#### **Authorizations**

The regulations in the Zoning Resolution governing the development of waterfront zoning lots generally require a 30-foot wide upland connection (for pedestrian access) and a 50-foot wide visual corridor (for unobstructed views) to be provided at regular intervals along upland streets through waterfront zoning lots to the shoreline. The regulations, as modified by the WAP, provide for a variety of scenarios for satisfying upland connection and visual corridor requirements on the development site and the City-owned property, depending on which parcel is developed first and whether the City-owned property is developed predominantly as a public park. The Authorization pursuant to ZR Section 62-822(a) would allow the upland connection, and 30 feet of the 50-foot wide visual corridor, to be provided on the development site regardless of the timing and type of development. The Authorization would also allow the levels of the visual corridor and the waterfront yard to be raised above the levels permitted in the Zoning Resolution to facilitate a design for the proposed project that addresses flooding concerns and newly mandated flood elevation regulations.

Visual corridors and waterfront public access areas are required to be unobstructed from their lowest level to the sky, except for certain permitted obstructions. The lowest permitted level of waterfront public access areas is determined in reference to the elevation of the adjoining public sidewalk and of the bulkhead. The elevation of the sidewalk along the Commercial Street frontage of the development site ranges from 9.10 feet to 9.81 feet above Brooklyn Highway Datum (BHD), while the elevation of the existing portions of the bulkhead ranges from 7.90 feet to 8.90 feet above BHD. The ground floor of the proposed development would be occupied by a small residential lobby and local retail uses along Commercial Street, accessory off-street parking in the center of the development site and residential amenity space or possibly a café, restaurant or other waterfront-enhancing commercial or community facility uses along the shore public walkway. Dwelling units would be located beginning at the 2<sup>nd</sup> story of the proposed development, as would the primary residential entrances to the buildings which would be accessed from a courtyard in the center of the development site, above the parking facility and at an elevation of approximately 20.5 feet above BHD. The upland connection would provide the principal means of pedestrian access from Commercial Street to the residential entrances. Accordingly, the grade of the upland connection would rise from approximately 9.1 feet above BHD at Commercial Street to approximately 19.0 feet above BHD near the building entrances and then would fall to approximately 13.0 feet above BHD at the shore public walkway. Likewise, the grade of the shore public walkway would range from approximately 7.9 feet above BHD to approximately 13 feet above BHD. The Authorization pursuant to ZR Section 62-822(b) would provide waivers to allow for this configuration as well as other minor variations in the design of the waterfront public access areas, including the amount of planting in the shore public walkway, the amount of paving in the entry area to the upland connection, the height of fences, retaining walls and planted areas providing the transition along the common lot line between the development site and the City-owned property, the amount of seating directly facing the water, the dimensions of trash receptacles and the angle of the guard rail along the shore public walkway.

As the proposed modifications are limited to measures that would improve the development site's ability to withstand flooding and problems related thereto, and would be designed to minimize any adverse effects on waterfront public access areas and visual corridors, or are otherwise minor in nature, the Authorizations would not result in any significant adverse zoning impacts.

#### Certification

The Certification pursuant to ZR Section 62-811 (Waterfront Public Access and Visual Corridors) would provide that, except with respect to the waivers granted pursuant to the Authorizations, the design of the proposed waterfront public access areas would comply with the applicable requirements set forth in ZR Sections 62-50 (General Requirements for Visual Corridors and Waterfront Public Access Areas), 62-60 (Design Requirements for Waterfront Public Access Areas) and 62-931 (Waterfront Access Plan BK-1: Greenpoint-Williamsburg).

#### Text Amendment

The Text Amendment would be required to ensure that the proposed project may be developed as contemplated. Pursuant to ZR Section 11-13, district designations indicated on zoning maps do not apply to public parks, meaning that public parks do not generate floor area. If the City-owned property were developed as a public park prior to the issuance of a certificate of occupancy for the proposed development, the development rights obtained by the applicant from the City would no longer be available for use in the proposed development. The Text Amendment would provide that the City-owned property would continue to generate floor area even after it is developed as a public park.

As the proposed modifications are limited to measures that would affect only parcels within the Project Area, and are designed to implement the proposed project, the Text Amendment would not result in any significant adverse zoning impacts.

#### **WRP** Assessment

A separate WRP consistency assessment has been completed for the proposed actions and is provided in Appendix 1. As concluded in Appendix 1, the proposed actions would comply with all applicable WRP policies and therefore the proposed actions would not result in any significant adverse WRP impacts.

# ATTACHMENT D SOCIOECONOMIC CONDITIONS

#### I. INTRODUCTION

This chapter assesses whether the proposed actions would result in significant adverse impacts to the socioeconomic character of the area surrounding the development site located on 77 Commercial Street in Greenpoint, Brooklyn. As described in the 2012 *CEQR Technical Manual*, the socioeconomic character of an area includes its population, housing, and economic activities. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although some socioeconomic changes may not result in environmental impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area.

In accordance with 2012 CEQR Technical Manual guidelines, this socioeconomic analysis considers five specific elements that can result in significant adverse socioeconomic impacts: (1) direct displacement of residential population on a project site; (2) direct displacement of existing businesses or institutions on a project site; (3) indirect displacement of residential population in a study area; (4) indirect displacement of businesses or institutions in a study area; and (5) adverse effects on specific industries.

#### II. PRINCIPAL CONCLUSIONS

For all five areas of socioeconomic concern - direct residential, displacement, direct business and institutional displacement, indirect residential displacement, indirect business and institutional displacement, and adverse effects on specific industries - a preliminary assessment was sufficient to conclude that the proposed actions would not result in any significant adverse socioeconomic impacts. The following summarizes the conclusions drawn from the analysis.

#### **Direct Residential Displacement**

The proposed actions would not result in significant adverse direct residential displacement impacts. The development site does not include any residential uses, and therefore, no direct residential displacement would occur as a result of the proposed actions.

#### **Direct Business and Institutional Displacement**

A preliminary assessment found that the proposed actions would not result in significant adverse impacts due to direct business and institutional displacement. The 2012 CEQR Technical Manual defines direct business and institutional displacement as the involuntary displacement of businesses or institutions from the site of (or a site directly affected by) a proposed action. There is a 2-story warehouse building on the development site which is currently occupied by a private company tenant, NYC Bike Share, LLC, for storage uses. According to the applicant, after expiration of their lease, NYC Bike Share, LLC entered a month-to-month lease agreement and will vacate the building prior to the end of 2013.

The existing 2-story warehouse building would be demolished to prepare the development site for construction. Therefore, in both the 2016 No-Action and With-Action conditions, the existing business on the development site would no longer be present. NYC Bike Share, LLC entered a month-to-month lease agreement knowing that they would vacate the building prior to the end of 2013. As a result, this would

not be considered a direct displacement under CEQR as it would not be involuntary or involve a public action such as eminent domain. Therefore, no direct business displacement would occur as a result of the proposed actions.

#### **Indirect Residential Displacement**

A preliminary assessment found that the proposed actions would not result in significant adverse impacts due to indirect residential displacement. According to the 2012 *CEQR Technical Manual*, a population increase of less than 5 percent of the total study area population would generally not be expected to change real estate market conditions in a study area. The RWCDS associated with the proposed actions would result in a maximum net increase of approximately 444 residential units, of which a minimum of 200 housing units are expected to be affordable units, compared to the No-Action condition. Assuming that the units would be fully occupied and would have the same average household size as the study area in 2010 (2.61 persons per household per the 2010 Census), this is expected to increase the residential population by 1,159 people over the No-Action condition. This equates to an approximately 6.5 percent increase as compared to the study area population in the future without the proposed actions. Therefore, the proposed actions would introduce a substantial new population that could potentially affect residential real estate market conditions in the study area.

As detailed below, the majority of the study area has recently experienced an observable trend toward increasing rents and new market rate development. The introduction of new market-rate housing would continue these existing socioeconomic trends, and the additional 200 affordable housing units would help to preserve affordable housing options in the area for lower income households. As such, in the future with the proposed actions, the expected average incomes of the new population would not exceed the average existing and No-Action incomes in the study area. Therefore, no indirect residential displacement is anticipated to occur as a result of the proposed actions.

#### **Indirect Business and Institutional Displacement**

The proposed actions would not result in significant adverse impacts due to indirect business and institutional displacement. The proposed actions would not introduce a new economic activity that would alter existing economic patterns in the study area. The study area already has a well-established residential market and a critical mass of non-residential uses, including local retail and community facility uses.

## **Adverse Effects on Specific Industries**

The proposed actions would not result in significant adverse impacts on specific industries within the study area or in the City more broadly. The business currently occupying the development site, NYC Bike Share, LLC, has an estimated 50 workers, a small fraction of the total employment and economic activity in the secondary study area. This business is not tied to the local economy or community. As discussed below, in both the No-Action and With-Action conditions, NYC Bike Share, LLC would not be present on the development site, and no direct business displacement would occur as a result of the proposed actions. NYC Bike Share, LLC is not essential to the survival of other industries outside of the study area, as it does not serve as the sole provider of goods and services to an entire industry or category of business in the City. Furthermore, while the proposed actions are not expected to cause indirect displacement, any indirect displacement that may occur would not be concentrated in a particular industry. Therefore, the

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The 2010 Census documented 12,981 residents in Census Tracts 563, 565, 575, and 579. Attachment C, "Land Use, Zoning, and Public Policy" identifies 1,846 No-Action dwelling units to be constructed in the study area by 2016 (including 276 DUs which will be constructed as-of-right on the development site), adding approximately 4,818 new residents to the study area. In total, the study area is estimated to have approximately 17,799 residents in the future without the proposed actions.

proposed actions would not result in an adverse impact on a particular industry or category of businesses within or outside the study area, and would not substantially reduce employment or impair the economic viability in an industry or category of business.

## III. METHODOLOGY

Pursuant to the 2012 CEQR Technical Manual, the socioeconomic character of an area is defined by its population, housing, and economic activities. The assessment of socioeconomic conditions usually distinguishes between the socioeconomic conditions of an area's residents and businesses. However, proposed actions can affect either or both of these segments in the same ways: they may directly displace residents or businesses, or they may alter one or more of the underlying forces that shape socioeconomic conditions in an area and thus may cause indirect displacement of residents or businesses.

Direct displacement is defined as the involuntary displacement of residents, businesses, or institutions from the actual site of (or sites directly affected by) a proposed project. Examples include proposed redevelopment of a currently occupied site for new uses or structures, or a proposed easement or right-of-way that would take a portion of a parcel and thus render it unfit for its current use. Since the occupants of a particular site are usually known, the disclosure of direct displacement focuses on specific businesses and employment, and an identifiable number of residents and workers.

Indirect or secondary displacement is defined as the involuntary displacement of residents, businesses, or employees in an area adjacent or close to a project site that results from changes in socioeconomic conditions created by a proposed project. Examples include rising rents in an area that result from a new concentration of higher-income housing introduced by a project, which ultimately could make existing housing unaffordable to lower income residents; a similar turnover of industrial to higher-rent commercial tenancies induced by the introduction of a successful office project in an area; or the flight from a neighborhood that can occur if a proposed project creates conditions that break down the community (such as a highway dividing the area).

Even if projects do not directly or indirectly displace businesses, they may affect the operation of a major industry or commercial operation in the city. In these cases, CEQR review may assess the economic impacts of the project on the industry in question.

#### **Analysis Format**

Following 2012 CEQR Technical Manual guidelines, the socioeconomic analysis begins with a preliminary assessment. The purpose of the preliminary assessment is to learn enough about the effects of the proposed actions to either rule out the possibility of significant adverse impacts, or determine that a more detailed analysis is required to resolve the issue. A detailed analysis, when required, is framed in the context of existing conditions and evaluations of the future without with the proposed project by the project build year. In conjunction with the land use task, specific development projects that occur in the area in the future without the proposed project are identified, and the possible changes in socioeconomic conditions that would result, such as potential increases in population, changes in the income characteristics of the study area, new residential developments, possible changes in rents or sales prices of residential units, new commercial or industrial uses, or changes in employment or retail sales. Those conditions are then compared with the future with the proposed project to determine the potential for significant adverse impacts. For all five areas of socioeconomic concern - direct residential displacement, direct business displacement, indirect residential displacement, indirect business and institutional displacement, and adverse effects on specific industries - a preliminary assessment was sufficient to conclude that the proposed actions would not result in any significant adverse socioeconomic impacts.

## **Study Area Definition**

In order to assess these issues, information was gathered regarding the surrounding area's demographic characteristics, housing inventory, housing market, and industrial, commercial, and retail activity. Typically, the socioeconomic study area boundaries are similar to those of the land use study area. The study area encompasses the area affected by the proposed action, and an adjacent area within 400 feet, a quarter-mile, or a half-mile, depending on project size and area characteristics. The socioeconomic assessment seeks to assess the potential to change socioeconomic character relative to the study area population. For projects that result in an increase in residential population, the scale of the relative change is typically represented as a percent increase in population (i.e., a project that would result in a relatively large increase in population may be expected to affect a larger study area).

As described in Attachment A, "Project Description", the proposed development includes three individual buildings, which would be constructed on the development site (Block 2472, Lot 410). The development increment resulting from the reasonable worst case development scenario (RWCDS) would add a maximum net increment of approximately 444 dwelling units (427,630 gsf of residential space) and approximately 182 parking spaces (14,530 gsf) to the development site. 444 dwelling units would generate an estimated 1,159 net new residents on the development site. This population increase represents an approximately 6.5 percent increase in population compared to the expected No-Action population of 17,799 residents in a half-mile radius from the proposed development site. Therefore, pursuant to 2012 CEQR Technical Manual, an approximate half-mile radius from the development site is the appropriate study area for this socioeconomic assessment (see Figure D-1).

Pursuant to the 2012 *CEQR Technical Manual*, the half-mile study area is usually identical to the one discussed in Attachment C, "Land Use, Zoning, and Public Policy." However, as shown in Figure D-1, the exact boundary of the study area was modified to match the four census tracts that most closely define a half-mile perimeter surrounding the development site (563, 565, 575, and 579). By conforming to census tract boundaries, the socioeconomic analysis more accurately applies Census data to depict the demographic characteristics of the surrounding area.

#### **Data Sources**

Information used in the socioeconomic analysis includes data from the U.S. Census Bureau's 2000 Census, 2010 Census, 2006-2009 American Community Survey, and the New York City Department of City Planning's Primary Land Use Tax Lot Output (PLUTO). The Census data have been supplemented, where appropriate, with information from local real estate agencies, including the Real Estate Board of New York's *New York Residential Reports* and MNS *Brooklyn Rental Market Reports*.

#### IV. PRELIMINARY ASSESSMENT

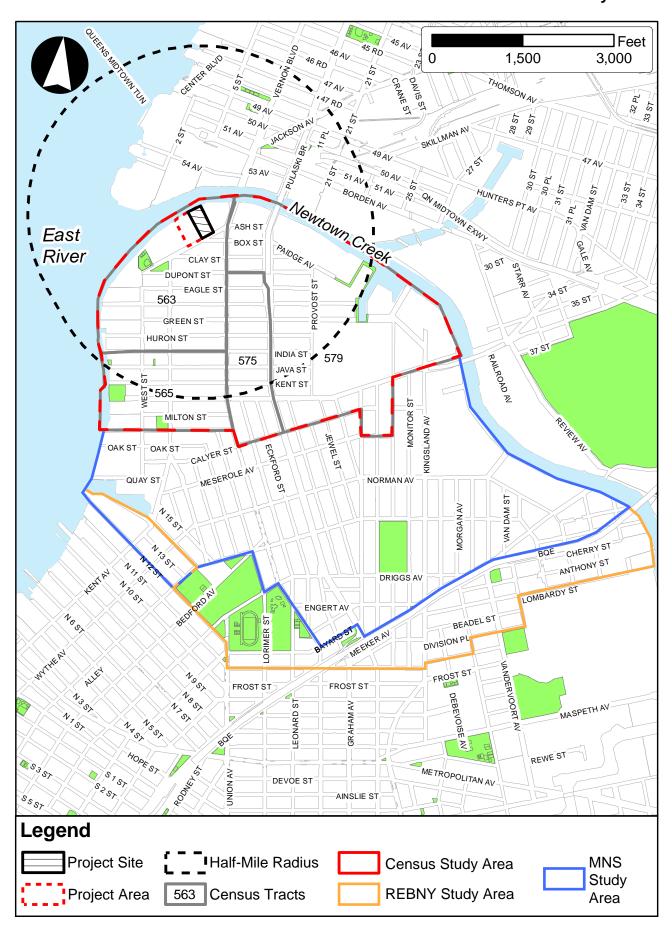
This section examines the five areas of socioeconomic concern in relation to the proposed actions. For all five issue areas - direct residential displacement; direct business and institutional displacement; indirect residential displacement; indirect business and institutional displacement; and adverse effects on specific industries - the preliminary assessment rules out the possibility that the proposed actions would have a significant adverse impact as defined in the 2012 *CEQR Technical Manual*.

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Source: 2.61 people per household; NYC DCP Community District Demographic Profiles (Census 2010).

For analysis purposes, only those census tracts with an area of approximately 50 percent or greater located within a half-mile radius of the development site were included within the socioeconomic conditions study area, including census tracts 563, 565, 575, and 579. Those census tracts with less than approximately 50 percent of their area within a half-mile radius of the development site were excluded.

## Socioeconomic Study Areas



## **Direct Residential Displacement**

Direct residential displacement is not by itself a significant socioeconomic impact under CEQR. Impacts from residential displacement may occur if the numbers and types of people being displaced would be enough to alter the socioeconomic character of a neighborhood and perhaps lead to indirect displacement of remaining residents. Under CEQR guidelines, a detailed assessment of direct residential displacement is only required if a preliminary assessment of the proposed action shows that:

- The proposed action would directly displace more than 500 residents;
- The displaced residents represent more than 5 percent of the study area population; and
- The average income of the directly displaced population is markedly lower than the average income of the rest of the study area population.

The proposed actions would not result in significant adverse direct residential displacement impacts. The existing land use on the development site does not include residential. More specifically, the majority of the development site is occupied by a 2-story warehouse building, which is currently leased as storage space by the company NYC Bike Share, LLC (the operator of CitiBike NYC). Therefore, no direct residential displacement would occur as a result of the proposed actions, and no further analysis of direct residential displacement is warranted.

## **Direct Business and Institutional Displacement**

The 2012 CEQR Technical Manual defines direct business and institutional displacement as the involuntary displacement of businesses or institutions from the site of (or a site directly affected by) a proposed action. As mentioned above, the existing 2-story warehouse building on the development site is currently occupied by a private company tenant, NYC Bike Share, LLC, for storage uses. According to the applicant, after expiration of their lease, NYC Bike Share, LLC entered a month-to-month lease agreement and will vacate the building prior to the end of 2013.

The existing 2-story warehouse building would be demolished to prepare the development site for construction. Therefore, in both the 2016 No-Action and With-Action conditions, the existing business on the development site would not be present any more. NYC Bike Share, LLC entered a month-to-month lease agreement knowing that they would vacate the building prior to the end of 2013. As a result, this would not be considered a direct displacement under CEQR as it would not be involuntary or involve a public action such as eminent domain. Therefore, no direct business displacement would occur as a result of the proposed actions, and no further analysis of direct business displacement is warranted.

## **Indirect Residential Displacement**

The objective of the indirect residential displacement preliminary assessment is to determine whether the proposed actions would introduce or accelerate a trend of changing real estate market conditions that might displace a vulnerable population to the extent that the socioeconomic character of a neighborhood would change. In most cases, indirect residential displacement is caused by increased property values generated by a project, which then results in higher rents in an area, making it difficult for some existing residents to continue to afford their homes.

The following preliminary assessment begins with a presentation of demographic conditions in the study area, followed by the step-by-step preliminary assessment described in the 2012 CEQR Technical Manual.

## Demographic Profile of the Study Area

This section describes the population and housing characteristics of the study area as it relates to potential indirect residential displacement. It outlines trend data since 1999, and compares the study area characteristics with the characteristics of Brooklyn and New York City as a whole. The study area comprises Census Tracts 563, 565, 575, and 579. It is bounded by the Newtown Creek to the north and east, Greenpoint Avenue, Clayer Street, and Noble Street to the south, and the East River to the west (refer to Figure D-1).

According to the 2010 Census, the residential population of the study area was approximately 12,981 in 2010. As shown in Table D-1, between 2000 and 2010, the study area's population decreased by approximately 8.6 percent. In contrast, the populations of Brooklyn and New York City as a whole increased by 1.6 and 2.1 percent, respectively, during this time period.

As shown in Table D-1, the 2006-2010 median household income in the study area was an estimated \$52,969 (in 2010 dollars), which is approximately 21 percent more than the median household income for Brooklyn (\$43,757), and nearly 3 percent more than the median household incomes for New York City (\$51,294). The median household income in the study area had increased by 37.7 percent between 1999 and the time period 2006-2010, while the median household income increased by 2.8 percent in Brooklyn, and 1.3 percent in New York City as a whole. In the time period between 2006 and 2010, approximately 14.8 percent of residents in the study area were living below the poverty level, compared to 21.8 percent in Brooklyn and 19.1 percent in New York City. The number of study area residents living below the poverty level decreased by 41.7 percent between 1999 and the 2006-2010 time period.

Table D-1
Population Income Characteristics in the Study Area, Brooklyn, and New York City

Total Population			Mediar	Median Household Income <sup>2</sup>			Poverty Status <sup>3</sup>		
	2000	2010	Percent Change	1999	2006 - 2010	Percent Change	1999 (%)	2006-2010 (%)	Percent Change
Study Area	14,205	12,981	-8.6%	\$38,467	\$52,969	37.7%	23.1%	14.8%	-41.7%
Brooklyn	2,465,326	2,504,700	1.6%	\$42,540	\$43,757	2.8%	24.8%	21.8%	-10.4%
New York City	8,008,278	8,175,133	2.1%	\$50,424	\$51,294	1.7%	20.8%	19.1%	- 6.3%

Sources: 2000 Census, 2010 Census, 2006-2010 American Community Survey (ACS).

#### Notes:

As shown in Table D-2, census data show an increase of 784 housing units (a 13.0 percent increase) in the study area between 2000 and 2010. The study area had a faster growth rate compared to Brooklyn (7.5 percent) and New York City (5.3 percent). In 2010, the vacancy rate in the study area was 11.7 percent, which is higher than the vacancy rate in Brooklyn (8.3 percent), and New York City as a whole (7.8 percent). In 2010, of the occupied housing units in the study area, 12.3 percent were owner-occupied. The percentage of owner occupied units in the study area was less than half of that of the borough (27.7 percent) and about a 2.5 times less than the citywide owner-occupancy rate (31.0 percent).

<sup>&</sup>lt;sup>2</sup> The American Community Survey (ACS) collects data throughout the period on an on-going, monthly basis and asks for a respondent's income over the "past 12 months." The 2006-2010 ACS data reflects incomes over 2006-2010. Census 2000 reflects income data over the prior calendar year (1999). The median household income is presented in 2010 dollars.

For poverty status, the percent change reflects the percentage change in the number of people with incomes below the poverty level between 1999 and 2006-2010.

Table D-2 Housing Unit Characteristics in the Study Area, Brooklyn, and New York City

	Total Housing Units			Percent	Vacant	Percent Owner Occupied		
	2000	2000 2010 Percent Change 2000-2010		2000	2010	2000	2010	
Study Area	6,029	6,813	13.0%	5.6%	11.7%	12.9%	12.3%	
Brooklyn	930,866	1,000,293	7.5%	5.4%	8.3%	27.1%	27.7%	
New York City	3,200,912	3,371,062	5.3%	5.6%	7.8%	30.2%	31.0%	

Sources: Census 2000, Census 2010.

As shown in Table D-3, the median home value in the study area was \$733,088 during the 2006-2010 time period, as compared to \$567,240 in Brooklyn and \$536,304 in New York City. The median contract rent for the study area was \$1,202 during the 2006-2010 time period, approximately \$123 more than Brooklyn (\$1,079) and \$70 more than New York City (\$1,132) as a whole.

Table D-3
Housing Cost Characteristics for the Study Area, Brooklyn, and New York City

	Median Gross Rent <sup>1, 2,</sup>			Median Housing Value <sup>1, 2</sup>			
	2000	2006-2010	Percent Change <sup>3</sup>	3 2000 2006-2010 Percent Cl			
Study Area	\$832	\$1,202	N.A.	\$336,404	\$733,088	117.9%	
Brooklyn	\$899	\$1,079	N.A.	\$301,774	\$567,240	88.0%	
New York City	\$943	\$1,132	N.A.	\$291,344	\$536,304	84.1%	

Sources: 2000 Census, 2010 Census, ACS 2006-2010.

#### Notes:

All dollars presented in 2012 dollars.

The Real Estate Board of New York (REBNY) produces quarterly New York City residential market sales reports that provide the average and median sales prices of condominiums and cooperatives in New York City by Brooklyn neighborhood. Table D-4 provides a comparison of the median sale prices for condominiums and cooperatives in Greenpoint, Brooklyn, as well as the New York City market overall. As shown in Table D-4, the median home sale prices for all apartments in Greenpoint were higher than the median prices for both the Borough of Brooklyn and New York City for the 2<sup>nd</sup> Quarter of 2007 and the 1<sup>st</sup> Quarter of 2013. The median home sales price for Greenpoint in the 1<sup>st</sup> Quarter of 2013 was \$550,000, approximately 25 percent higher than Brooklyn (\$440,000), and approximately 4.8 percent higher than New York City as a whole (\$525,000). The median price per square foot in Greenpoint was \$760 in the 1<sup>st</sup> Quarter of 2013, approximately \$195 more per square foot than for the entire borough, and approximately \$20 more per square foot than New York City as a whole.

Median gross rent and median housing value presented for the study area are based on weighted average for the Census Tracts in the study area.

The median gross rent data in the 2000 Census and the 2006-2010 American Community Survey are not comparable since the universe in the ACS data is "renter occupied" whereas the universe in the 2000 Census was "specified renter-occupied housing units."

Table D-4
Median Sale Price for All Apartments (includes all Condominiums and Cooperatives)

	Me	Median Home Sale Price			Median Price Per Square Foot			
	2 <sup>nd</sup> Quarter '07	2 <sup>nd</sup> Quarter '07 1 <sup>st</sup> Quarter '13 % Change 2			1st Quarter '13	% Change		
Greenpoint1	\$550,000	\$588,000	6.9%	\$748	\$760	1.6%		
Brooklyn	\$440,000	\$434,000	-1.4%	\$523	\$563	7.5%		
New York City	\$525,000	\$520,000	-1.0%	\$746	\$743	-0.4%		

Source: REBNY's New York City Residential Sales Reports for the 4th Quarter 2011 and 4th Quarter 2008.

Table D-5 provides a comparison of average rent summaries for studio, one-, and two -bedroom apartments in Greenpoint and the borough as a whole for 2013. Average rental rates in Greenpoint are some of the highest in Brooklyn. As shown in the table, rental rates for studios and one-bedrooms in Greenpoint are approximately 31 and 10 percent higher than in the borough as a whole, respectively. In contrast, rental rates for two-bedroom apartments in Greenpoint are 5 percent lower than in Brooklyn as a whole. The 2012-2013 average rental rate for apartments in Greenpoint was \$2,688 for a studio, \$2,685 for a one-bedroom unit, and \$3,036 for a two-bedroom unit.

Table D-5
Average Rent Summary for Apartments in Greenpoint and Brooklyn (May 2012 to April 2013)

	Average Rent Summary						
	Studio	Studio 1-Bedroom Unit 2-Bedroom Unit					
Greenpoint <sup>1</sup>	\$2,688	\$2,685	\$3,036				
Brooklyn	\$1,863	\$2,406	\$3,190				

Source: MNS Real Impact Real Estate, New York City. Notes:

#### **Preliminary Analysis**

This preliminary assessment follows the step-by-step analysis described in Section 322.1, "Indirect Residential Displacement," of the 2012 CEQR Technical Manual.

Step 1: Determine if the proposed actions would add new population with higher average incomes compared to the average incomes of the existing populations and any new population expected to reside in the study area without the project.

The RWCDS associated with the proposed actions would result in a maximum net increase of 444 residential units as compared to the No-Action condition. At least 200 of these 444 residential units would be affordable pursuant to the Inclusionary Housing program. More specifically, of the 200 affordable units, is it anticipated that 72 would be for low-income households, 108 for moderate-income households, and 20 for middle-income households. However, because the applicant has not yet made a final decision regarding the proposed income mix of the units, this socioeconomic analysis conservatively assumes that

REBNY defines Greenpoint as the area bounded by the East River to the west, the Newtown Creek to the north and east, and Lombardy Street, Porter Avenue, Division Place, Morgan Avenue, Richardson Street, Union Avenue, North 12<sup>th</sup> Street, Berry Street, and North 14<sup>th</sup> Street to the south (refer to Figure D-1).

MNS Real Impact Real Estate defines Greenpoint as the area bounded by the East River to the west, the Newtown Creek to the north and east, and the Brooklyn Queens Expressway, McGuiness Boulevard, Bayard Street, Manhattan Avenue, Lorimer Street, Nassau Avenue, Berry Street, and North 12<sup>th</sup> Street to the south (refer to Figure D-1).

the proposed actions would include no low-income units, 100 moderate-income units, and 100 middle-income units. The remaining 244 residential units are assumed to be market-rate units.

The development site is located within an area that went through large socioeconomic changes during the past decade. As shown in Table D-1, while the median household income of the study area (\$38,467) was lower than the one in Brooklyn (\$42,540) and the one in New York City (\$50,424) in 1999, it was \$52,969 for the time period between 2006 and 2010, which is higher than the one for Brooklyn (\$43,757) and New York City as a whole (\$51,294). In addition, the poverty rate in the study area, which was 23.1 percent in 1999, decreased to 14.8 percent for the time period between 2006 and 2010, and is lower than the poverty rate for Brooklyn (21.8 percent) and New York City as a whole (19.1 percent).

Housing costs within the secondary study area are also generally higher than within the borough. In 2013, the median home sale price in Greenpoint was approximately 26 percent higher than Brooklyn. The average rental rate for a studio in Greenpoint (\$2,688) in 2012-2013 was approximately \$825 more than the average rental rate for Brooklyn (\$1,863), and a 1-bedroom in Greenpoint (\$2,685) in 2012-2013 was approximately \$279 more than the average rental rate for Brooklyn (\$2,406) as detailed in Table D-5.

In the No-Action condition, 276 market-rate units and no affordable units would be constructed on the development site. As detailed above, the RWCDS associated with the proposed actions would result in a maximum net increase of 444 residential units as compared to the No-Action condition, at least 45 percent of which would be affordable housing units. The remaining 244 dwelling units would all be market-rate, and it is assumed that the residents of these new market rate residences would have high average incomes, similar to the existing and No-Action study area households. The majority of the study area has already experienced a readily observable trend toward increasing rents and new market-rate development. The introduction of new market-rate housing would continue the existing socioeconomic trends of the area discussed above, and the additional 200 affordable housing units would help to preserve affordable housing options in the area for lower income households. As such, in the future with the proposed actions, the expected average incomes of the new population are not anticipated to exceed the average existing and No-Action incomes in the study area. In fact, as a result of the affordable housing that would be constructed in the future with the proposed actions, the expected average incomes of the new population would likely be less than the average incomes of existing and No-Action households in the study area. Therefore, while the proposed actions would result in an approximately 6.5 percent increase in population in the study area as compared to No-Action conditions, the new population would not have unusually high household incomes and, as such, the proposed actions would not result in indirect residential displacement. Therefore, further analysis is not warranted.

#### Greenpoint-Williamsburg Rezoning FEIS

The *Greenpoint-Williamsburg Rezoning FEIS* found that the rezoning had the potential to result in a significant adverse indirect residential displacement impact. The *FEIS* further stated that the Revised Affordable Housing Bonus and Incentives (Revised AHBI) alternative would reduce and partially mitigate this impact by generating approximately 1,398 affordable housing dwelling units among the 8,800 total dwelling units expected to be developed.

As discussed above, the proposed actions would result in 444 additional housing units over 2016 No-Action conditions, with a minimum of 200 affordable housing units for a range of qualifying income bands (representing a minimum of 45 percent of the total units created). As compared to 2016 No-Action conditions, the proposed actions would result in greater than five percent increase in the population of the surrounding area. However, with the substantial number of affordable housing units, the proposed actions is expected to reduce the potential for conditions that would result in an indirect residential displacement impact as disclosed in the *FEIS*, particularly as compared to the 2016 No-Action scenario. As discussed in

Attachment A, "Project Description," the proposed actions would also enable the City to develop affordable housing identified in the "Points of Agreement" that the City issued in 2005 in response to community concerns addressed during the public review of the rezoning. Absent the proposed actions, under 2016 No-Action conditions there would be 200 fewer affordable housing units created while the trends identified in the *FEIS* that could result in indirect residential displacement of vulnerable populations would still be present. As such, implementation of the proposed actions would represent the realization of a significant portion of the mitigation identified in the *FEIS*.

Since 2005, NYC DCP estimates that approximately 763 affordable housing dwelling units and approximately 4,000 market rate units have been created in the Greenpoint-Williamsburg rezoning area. The at least 200 affordable housing units that would be created by the proposed actions would contribute substantially toward meeting and exceeding the City's 1,398 dwelling unit goal identified in the *FEIS* for affordable housing in the rezoning area. As such, with the proposed actions adding a substantial amount of affordable housing, it is expected to have beneficial effects related to ongoing indirect residential displacement trends identified in the *FEIS*. Accordingly, the proposed actions would not result in any significant adverse indirect residential displacement impacts. Additionally, as discussed in Attachment C, "Land Use, Zoning, and Public Policy," other nearby development projects such as Greenpoint Landing, 131 West Street, and 155 West Street would also create affordable housing in the rezoning area in the coming years, further alleviating potential indirect residential displacement in the area.

#### Conclusion

Based on the preliminary assessment presented above, the proposed actions would not result in significant adverse impacts due to indirect residential displacement, and a detailed analysis is not warranted.

## **Indirect Business Displacement**

The objective of the indirect business and institutional displacement preliminary assessment is to determine whether the proposed actions would introduce trends that would make it more difficult for nearby existing businesses that provide products or services essential to the local economy or that are targeted to be preserved in their current locations under adopted public plans to remain in the area. A proposed action could introduce such a trend by causing a marked increase in rents and property values in the area (such as by stimulating the demand for more lucrative land uses and thus redevelopment, or by increasing the demand for new commercial or retail services with which the existing businesses cannot compete). Additionally, it could directly displace businesses or residents who serve as suppliers or the customer base for nearby businesses, affecting their viability or altering the desirability of their existing location. Finally, it could create enough new retail space to draw substantial sales from existing businesses (i.e., a market saturation impact).

In most cases, the issue for indirect displacement of businesses is that an action would markedly increase property values and rents throughout the study area, making it difficult for some categories of businesses to remain in the area.

# • Would the proposed action introduce enough of a new economic activity to alter existing economic patterns?

The proposed actions would not introduce enough of new economic activity to alter existing economic patterns in the study area. As described in Attachment C, "Land Use, Zoning, and Public Policy", the study area has a well-established residential market, and includes a healthy amount of non-residential and institutional uses. As discussed in Attachment C, the proposed mixed-use development on the development site would add additional residential, local retail, service, and/or community facility uses to

the Greenpoint neighborhood. These uses would be consistent with the existing mix of uses in the study area and would not represent new uses that would substantially alter existing economic patterns. Therefore, the proposed actions would not introduce new uses or economic activities to the study area.

• Would the proposed project add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns?

The uses introduced by the proposed actions would not represent new economic activities in the study area, and the proposed actions would not add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns. According to 2012 PLUTO data discussed in Attachment C, "Land Use, Zoning, and Public Policy, approximately 1.7 percent of the total land area in the quarter-mile study area surrounding the proposed development site accommodates commercial/office uses, approximately 5.9 percent accommodates mixed-use approximately 1.7 residential/commercial buildings. and percent accommodates facilities/institutions. Based on the list of planned projects that are anticipated in the future without the proposed actions (refer to Table C-5), approximately 87,900 gross square feet of retail and approximately 3,900 gross square feet of community facility space will be built in the quarter-mile study area by 2016. During this same time period, the proposed actions would not introduce any net increases of commercial or community facility space in comparison to the No-Action condition. In the No-Action condition, up to 25,750 gross square feet of commercial space and up to 6,200 gross square feet of community facility space would be constructed on the development site. However, this amount of development would not be enough to alter or accelerate existing economic trends.

In addition, the proposed actions would not add substantially to the concentration of residential uses in the study area. Greenpoint has become an established residential neighborhood. As described in Attachment C, "Land Use, Zoning, and Public Policy," approximately 26.6 percent of the total land area in the secondary study area consists of residential-only buildings (refer to Table C-2). The proposed actions would result in a maximum net increase of 444 residential units. As discussed above in the discussion of indirect residential displacement, the new housing introduced is not expected to alter residential market conditions. In the future without the proposed actions, the study area will continue to be developed with residential uses. As discussed in Attachment C, residential developments are anticipated to introduce approximately 1,846 dwelling units by 2016 independent of the proposed actions. Although the new housing units would increase the retail expenditure potential of the study area, this consumer spending would not constitute a new economic activity, given that the study area already contains a large residential population and street-level retail is common.

• Would the proposed actions directly displace uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses?

The proposed actions would not directly displace uses of any type that directly support businesses in the study area or that bring people to the area who form a customer base for local businesses. As discussed above, there is one business currently located on the proposed development site, NYC Bike Share LLC, which employs an estimated 50 workers and utilized the existing 2-story warehouse on the development site for storage. According to the applicant, after expiration of their lease, NYC Bike Share, LLC entered a month-to-month lease agreement and will vacate the building prior to the end of 2013. As such, in both the No-Action and With-Action conditions, the existing business on the development site would no longer be present, and the proposed actions would not result in direct displacement as defined by CEQR.

• Would the proposed project directly or indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the study area?

As discussed above, the proposed actions would not result in significant adverse impacts due to direct or indirect residential and business displacement. The proposed actions would not result in any direct residential displacement. One business is located on the development site and would be displaced as a result of the proposed actions. Such potential displacement, however, would be subject to lease terms and agreements between private firms and property owners existing at the time of redevelopment. This firm employs an estimated 50 workers. While these 50 employees may form a portion of the customer base of local neighborhood retail businesses (i.e., restaurants, delis, food service, dry cleaners etc.), they do not represent a significant number of employees in the study area, and would therefore not cause indirect displacement of businesses. In addition, the majority of the customer base for the retail businesses in the study area comes from a combination of the local residents, tourists, and other New York City residents visiting the Greenpoint neighborhood. The proposed actions would result in an influx of approximately 1,159 new residents and approximately 22 workers over existing and No-Action conditions that would add to the customer base of existing study area businesses.

#### Conclusion

Based on the preliminary assessment above, the proposed actions would not result in significant adverse impacts due to indirect business or institutional displacement, and a detailed analysis is not warranted.

## **Adverse Effect on a Specific Industry**

According to the 2012 CEQR Technical Manual, a significant adverse impact may occur if an action would measurably diminish the viability of a specific industry that has substantial economic value to the city's economy. An example as cited in the 2012 CEQR Technical Manual would be new regulations that prohibit or restrict the use of certain processes that are critical to certain industries. A preliminary assessment of the adverse effects on specific industries, using the CEQR Technical Manual threshold indicators (numbered in italics below), is provided to determine the potential for significant adverse impacts.

• Would the proposed project significantly affect business conditions in any industry or any category of business within or outside the study area?

The proposed actions would not significantly affect business conditions in any industry or any category of business within or outside the study area. As discussed above under the preliminary assessment for direct business and institutional displacement, the existing 2-story warehouse building on the development site is currently occupied by a private company tenant, which will vacate the building prior to the end of 2013. Therefore, in both the No-Action and With-Action conditions, the existing business on the development site would not be present any more, and no direct business displacement would occur as a result of the proposed actions. This company is not tied to the local economy or community, does not serve as the sole provider of goods and services to an entire industry or category of business in the City, and only accounts for a small fraction of the total employment and economic activities in the secondary study area. Furthermore, while the proposed actions are not expected to cause indirect displacement, any indirect displacement that may occur would not be concentrated in a particular industry.

The proposed actions would result in an increase in total employment in the study area, with a net increase of approximately 22 workers. These workers are expected to be employed by the newly constructed residential building and parking facility the development site. However, these 22 workers represent a small fraction of total employment and economic activity in the secondary study area.

Therefore, the proposed actions would not result in an adverse impact on a particular industry or category of businesses within or outside the study area.

• Would the proposed project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?

The proposed actions would not result in direct or indirect displacement that would substantially reduce employment or impair the economic viability in an industry or category of business. Development under the proposed actions is not expected to introduce new, competing businesses that would drive out or otherwise diminish the performance of any identifiable business sector. As described above, the proposed actions would not result in indirect business and institutional displacement. The business currently occupying the development site, NYC Bike Share, LLC, has an estimated 50 workers, a small fraction of the total employment and economic activity in the secondary study area. This business is not tied to the local economy or community. As discussed above, in both the No-Action and With-Action conditions, NYC Bike Share, LLC would not be present on the development site, and no direct business displacement would occur as a result of the proposed actions. Therefore, the proposed actions would not substantially reduce employment or impair the economic viability in any industry or category of business.

#### Conclusion

Overall, the proposed actions would not result in significant adverse socioeconomic impacts due to adverse effects on specific industries, and, therefore, a detailed analysis of this issue is not warranted.

# ATTACHMENT E COMMUNITY FACILITIES

## I. INTRODUCTION

The 2012 City Environmental Quality Review (CEQR) Technical Manual defines community facilities as public or publicly-funded facilities, including schools, health care, child care, libraries, and fire and police protection services. This attachment examines the potential effects of the proposed actions on the capacity and provision of services by those community facilities in the 2016 future. CEQR methodology focuses on direct impacts on community facilities and services and on increased demand for community facilities and services generated by increases in population. If a project would physically alter a community facility, whether by displacement of the facility or other physical change, this "direct" effect triggers the need to assess the service delivery of the facility and the potential effect that the physical change may have on that service delivery. New population added to an area as a result of a project would use existing services, which may result in potential "indirect" effects on service delivery. The CEQR analysis examines potential impacts on existing facilities and generally focuses in detail on those services that the City is obligated to provide to any member of the community. The CEQR analysis is not a needs assessment for new or additional services. Service providers like schools or libraries conduct their own needs assessments on a continuing basis.

Although the proposed actions would not have a direct effect on existing community facilities in the study area, the proposed actions would result in the construction of approximately 720 dwelling units (DUs), of which up to 200 would be reserved for low-, moderate-, and middle-income households. Assuming 2.61 residents per household, the proposed development would introduce an estimated 1,879 residents to the project area. Compared to the No-Action condition, this would represent an incremental increase in development of approximately 444 DU (of which approximately 200 would be reserved for low-, moderate-, and middle-income households units). In addition, approximately 25,750 gsf of local retail uses and 6,200 gsf of community facility uses would be developed on the project area in both the No-Action and With-Action conditions.

## II. PRINCIPAL CONCLUSIONS

The proposed actions were assessed for their potential effects on community facilities and services. A screening analysis found that the proposed development would exceed thresholds related to elementary and intermediate schools, thereby requiring a detailed analysis. As discussed below, the applicant has committed to a program that would provide a total of 200 affordable units, consisting of 72 units at or below 80 percent of the area median income (AMI), which would not exceed the threshold for a detailed analysis of child care services. However, as the applicant is currently seeking state and federal funding mechanisms which would allow a reduction in the proposed AMIs and/or an increase in the number of low-income units, a sensitivity analysis was provided for day care. Additionally, the proposed actions did not exceed the thresholds for detailed analyses of high schools, libraries, hospitals and health facilities, fire protection services, or police protection services.

As defined by the New York City Zoning Resolution (ZR), Section 23-90, low-income is equivalent to earning below 80 percent of the Area Median Income (AMI), moderate-income is equivalent to earning below 125 percent of the AMI, and middle-income is equivalent to earning below 175 percent of the AMI. The AMI is based on all New York City incomes, and is calculated annually.

Source: Demographic Profile - New York City Community Districts, Brooklyn Community District 1, U.S. Census 2010.

Based on a detailed analysis of public elementary and intermediate schools within the study area, no significant adverse impacts for elementary or intermediate schools were identified as a result of the proposed actions. The analysis found that elementary and intermediate school capacity would exceed demand in both the No-Action and With-Action conditions. However, as the proposed actions would result in an increase in the elementary and intermediate school utilization rate below the CEQR threshold of 5 percent (4.5 percent for elementary schools and 4.0 percent for intermediate schools), no significant adverse impacts for elementary or intermediate schools are expected as a result of the proposed actions.

An analysis of demand for publicly funded child care services was prepared and is presented below because the project may result in more than 110 units of 80 percent AMI or lower if funding is obtained. As described below, the analysis found that child care capacity would exceed demand in both the future No-Action and With-Action conditions. Based on the analysis of child care services provided below and the sensitivity analysis that shows the potential future demands on publicly funded child care assuming various increases in the number of low-income units at or below 80 percent of AMI that could be provided in the future with the proposed actions, it was determined that the addition of more than 127 units of 80 percent or lower AMI would result in more than a five percent increase in utilization, the threshold for a significant impact in the CEQR Technical Manual. However, the applicant would agree to fund up to 11 daycare voucher slots to offset the incremental demand of the project. As such, even if the Applicant were able to secure funding to increase the level of affordability for the 200 units of affordable housing, no significant adverse impacts for child care services would be expected to occur.

## III. SCREENING LEVEL ASSESSMENT

As per the 2012 CEQR Technical Manual, a community facilities analysis is needed if there would be potential direct or indirect effects on a subject facility. The proposed actions would not result in the direct displacement of any existing community facilities or services, nor would they affect the physical operations or access to and from any police or fire stations. As there are no direct effects to existing community facilities resulting from the proposed actions, this analysis concentrates on the potential for indirect effects. Analyses were conducted to identify the potential effect that the projected actions could have on community facilities and the provision of services to the surrounding community. In general, size, income characteristics, and the age distribution of a new population are factors that could affect the delivery of services. The 2012 CEQR Technical Manual provides guidelines or thresholds that can be used to make an initial determination of whether a detailed study is necessary to determine potential impacts.

#### **Public Schools**

Public schools analyses assess the potential effects of a proposed actions on public elementary, intermediate, and high schools serving area. The demand for community facilities and services is directly related to the type and size of the new population generated by the proposed development. In general, if a project would introduce 50 or more elementary and intermediate students, or 150 or more high school students, significant impacts on public schools may occur and further analysis of schools many be appropriate.

As stated above, the development associated with the proposed actions would result in an increment of approximately 444 DUs. Based on the multipliers presented in Table 6-1a of the 2012 CEQR Technical Manual, the proposed development would result in a net increase of approximately 182 new elementary and intermediate school students, as compared to the No-Action condition, which exceeds the CEQR threshold for detailed analysis. The proposed development would also add an estimated 62 new high

school students compared to the No-Action condition, however, this would not trigger the CEQR threshold for detailed analysis of high schools.

Therefore, a detailed public elementary and intermediate schools analysis is warranted and is included in Section IV below.

## **Child Care**

Publicly-funded child care centers, under the auspice of the New York City Administration for Children's Services (ACS), Division of Child Care and Head Start, provide care for the children of income-eligible household. While publicly-funded child care services are available for income-eligible children through the age of 12, per the 2012 *CEQR Technical Manual*, child care analyses focus on services for children under age 6. Pursuant to CEQR methodology, only the number of housing units expected to be subsidized and targeted for incomes of 80 percent AMI or below (defined as low-income pursuant to ZR Section 23-90) should be used as a proxy for subsidized child care eligibility. If projects would generate 20 or more children under age 6, a detailed child care analysis may be warranted. In Brooklyn, the minimum number of low-income DUs that would yield 20 children under age 6 is 110.<sup>3</sup>

As described in further detail in Attachment A, "Project Description," the proposed actions would result in an increment of approximately 444 DUs, of which at least 200 units would be reserved for low-, moderate-, and middle-income households. As defined by ZR Section 23-90, low-income is equivalent to earning below 80 percent of Area Median Income (AMI), moderate-income is equivalent to earning below 125 percent of the AMI, and middle-income is equivalent to earning below 175 percent of the AMI. Therefore, for CEQR analysis purposes, only the proposed DUs targeted for low-income households are evaluated in the screening assessment for child care.

Table E-1 provides a comparison of the eligible income brackets of the DUs developed under the No-Action and With-Action conditions. As shown in the table, while the With-Action condition would result in the development of a total of 200 affordable units over the No-Action condition, the applicant has committed to a program where 72 of the net dwelling units would be designated for the low-income bracket as defined by ZR Section 23-90. As such, the proposed actions would result in a net increase of 13 children eligible for publicly-funded child care services. As this is below the CEQR threshold of 20 eligible children under six years, a detailed analysis is not warranted.

Table E-1 Comparison of Project Area DU Counts in the No-Action and With-Action Conditions

Residential Units	No-Action Condition	With-Action Condition	Net Increment	Net Number of Eligible Children under 6 years
Affordable Units	0	200	200	13
Low-Income (<80% AMI) <sup>1</sup>	0	72	72	13
Moderate-Income Units (<125% AMI)	0	108	108	0
Middle-Income (<175% AMI)	0	20	20	0
Market Rate Units	276	520	244	0
Total	276	720	444	13

#### Notes:

<sup>1</sup> Income bracket used as a proxy for subsidized child care eligibility, pursuant to CEQR methodology.

<sup>&</sup>lt;sup>3</sup> Table 6-1b, "Multipliers for Estimating the Number of Children Eligible for Publicly Funded Child Care and Head Start," in the 2012 *CEQR Technical Manual*.

However, the applicant is seeking state and federal funding mechanisms such as Section 8 and low-income housing tax credits that would allow a reduction in the maximum AMIs and/or an increase in the number of low-income units. At this time, it is uncertain whether any such funding would be made available for the project. Accordingly, to be conservative, a sensitivity analysis was prepared showing the potential impacts on child care demand assuming various increases in the number of low-income units that could be provided. Additionally, the detailed child care analysis below discusses how the applicant would fund voucher daycare slots as part of the project in order to prevent a significant adverse impact as a result of the proposed actions in the event that the number of low-income DUs are increased.

#### Libraries, Police/Fire Services and Health Care Facilities

As shown in Table E-2, the proposed actions do not exceed the threshold for detailed analysis in the areas of libraries, police/fire services, and health care facilities. The proposed actions would not result in an increase in the ratio of residential units to library branches by more than 5 percent; nor would the proposed actions introduce a sizeable new neighborhood.

Table E-2 Screening Assessment for Libraries and Police/Fire Services and Health Care Facilities

Analysis Area	Proposed Development (Increment)	Threshold	Exceeds Threshold (Yes/No)
Libraries	444 DUs	734 DUs in Brooklyn (more than 5 percent increase in ratio of DUs to library branches)	No
Police/Fire Services and Health Care Facilities	Site-specific development on Block 2472, Lot 410	Introduction of sizeable new neighborhood (e.g. Hunters' Point South)	No

Source: Table 6-1, "Community Facility Thresholds for Detailed Analyses," from the 2012 CEQR Technical Manual

# IV. DETAILED ANALYSIS PUBLIC ELEMENTARY AND INTERMEDIATE SCHOOLS

## Methodology

Following methodologies in the 2012 CEQR Technical Manual, the study area for the analysis of elementary and intermediate schools is the school district's "sub-district" in which the project area is located. The project area is located within the boundaries of Sub-District 3 of Community School District (CSD) 14, which includes the Brooklyn neighborhoods of Greenpoint and Williamsburg, and is generally bounded by the Brooklyn-Queens Expressway (BQE) to the east, Division Avenue to the south, and the East River and Newtown Creek to the west and north, respectively. Children housed in the proposed development on the project area would most likely attend the elementary and intermediate schools in the defined study area (Sub-District 3 of CSD 14).

A public schools analysis presents the most recent capacity, enrollment, and utilization rates for public elementary and intermediate schools in the study area. According to the guidelines presented in the 2012 *CEQR Technical Manual*, analyses only focus on potential impacts on public schools operated by the

New York City Department of Education (DOE). Future conditions are then predicted based on enrollment projections and other proposed development projects in the study area. The future utilization rate for public school facilities is calculated by adding the estimated enrollment from proposed residential developments in the schools study area to DOE's projected enrollment, and that number is compared with the projected school capacity. DOE's enrollment projections for years 2012 through 2021, the most recent data currently available, were obtained from the New York City Department of City Planning's (DCP) Planning Coordination Division. These DOE enrollment projections are based on broad demographic trends and do not explicitly account for discrete new residential developments planned for the study area. To ensure a more conservative prediction of future enrollment and utilization and account for new residential development planned in the study area, the SCA's Projected New Housing Starts for Sub-District 3 of CSD 14 were added to the DOE enrollment projections. In addition, any new public school projects identified in the DOE Five-Year Capital Plan are included if construction has begun already.

The effect of the new students introduced by the proposed actions on the capacity of schools within the study area is then evaluated. According to the 2012 CEQR Technical Manual, a significant adverse impact may occur if the proposed actions would result in:

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

#### **Indirect Effects on Public Schools**

## **Existing Conditions**

As described above, elementary and intermediate schools in New York City are located in geographically defined school districts. Figure E-1 shows the project area and the study area boundaries (Sub-District 3 of CSD 14) in addition to the elementary and intermediate schools located within the study area. Elementary schools are defined as pre-kindergarten (pre-K) or kindergarten (K) through 5<sup>th</sup> grades; intermediate schools serve grades 6 through 8. Existing capacity and enrollment information for public elementary and intermediate schools in Sub-District 3 of CSD 14 are provided in Table E-3 and described below.

## Elementary Schools

As shown in Figure E-1, there are a total of five elementary schools in the study area. Combined, in the 2012-2013 school year the five elementary schools had a total enrollment of 2,340 (915 seats under the target capacity) for a total utilization of approximately 71.9 percent (refer to Table E-3).

#### Intermediate Schools

There are a total of three schools serving grades 6 through 8 within the study area. As shown in Table E-3, 1,086 students were enrolled in the three intermediate schools during the 2012-2013 school year, 442 seats below the target capacity, for a utilization rate of approximately 71.1 percent.

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Pursuant to CEQR guidelines the schools analysis does not consider charter schools.

DOE Enrollment Projections (Actual 2011, Projected 2012-2012)

Elementary and Intermediate Schools within CSD 14, Sub-district 3

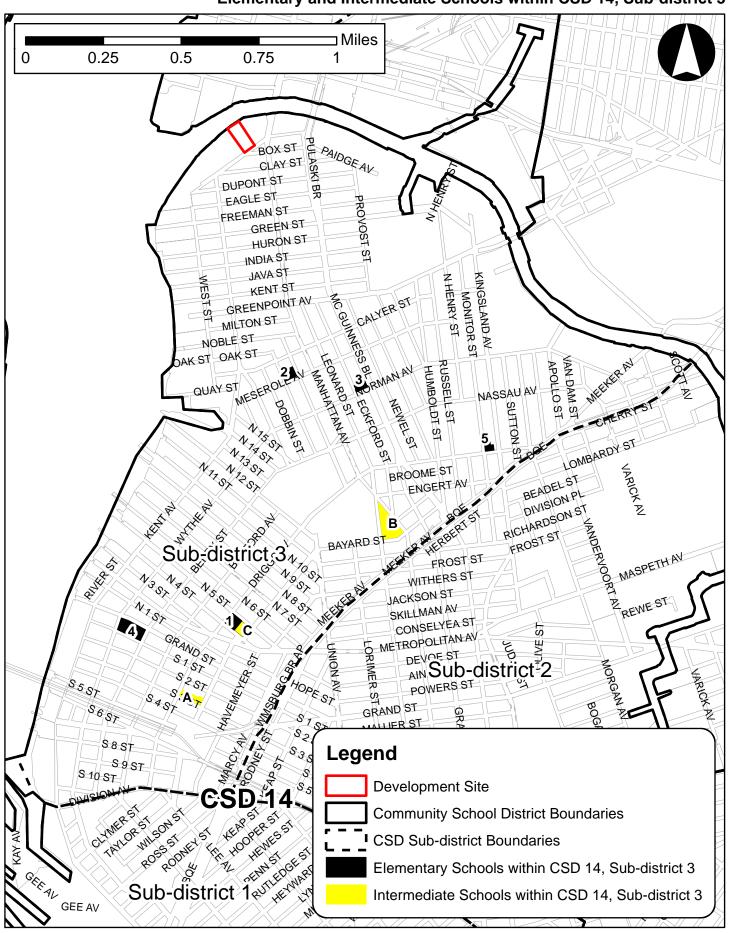


Table E-3 2012-2013 CSD 14, Sub-District 3:

**Elementary and Intermediate School Enrollment and Capacity** 

Map No. <sup>1</sup>	School Name and Address	Grades Served	Enrollment	Target Capacity <sup>2</sup>	Available Seats	Utilization (%)
1	P.S. 17–Henry D. Woodworth (208 North 5th Street)	PK-5	369	399	30	92.5
2	P.S. 31-Samuel F. Dupont (75 Meserole Avenue)	PK-5	584	698	114	83.7
3	P.S. 34-Oliver H. Perry (131 Norman Avenue	PK-5	543	416	-127	130.5
4	P.S. 84-Jose De Diego (250 Berry Street)	PK-5	498	1,049	551	47.5
5	P.S. 110-The Monitor (124 Monitor Street)	PK-5	346	693	347	49.9
Total	for Elementary Schools in CSD	14, Sub-district 3	2,340	3,255	915	71.9
A	J.H.S. 50-John D. Wells (183 South 3rd Street)	6-8	339	567	228	59.8
В	J.H.S. 126-John Ericsson Middle School (424 Leonard Street)	6-8	262	632	370	41.5
C	I.S. 577-Conselyea Preparatory School (208 North 5th Street)	6-8	485	329	-156	147.4
Total j	for Intermediate Schools in CSD	14, Sub-district 3	1,086	1,528	442	71.1

Source: New York City Department of Education (DOE), Enrollment—Capacity—Utilization Report, 2012-2013 School Year. Notes:

## Future Without the Proposed Actions (No-Action Condition)

Without the proposed actions, future utilization of public elementary and intermediate schools serving the project area and the surrounding study area would be affected by changes in enrollment mainly due to aging of the existing student body and new arrivals born in the area or moving to it. As described below, no changes in CSD 14, Sub-District 3 elementary and intermediate school capacity is anticipated in the future without the proposed actions.

## **Enrollment Changes**

Estimates of future enrollment are derived from the latest available DOE enrollment projection data for CSD 14, Sub-District 3 for 2016 (Actual 2011, Projected 2012-2021). According to recent Sub-District information from SCA, 26.37 percent of CSD 14's projected 2016 elementary school enrollment is estimated to be within Sub-District 3, while 28.96 percent of CSD 14's projected 2016 intermediate enrollment is estimated to be within Sub-District 3. As such, in the 2016 future without the proposed

<sup>&</sup>lt;sup>1</sup>Refer to Figure E-1.

<sup>&</sup>lt;sup>2</sup> Target capacity sets a goal of a reduced class-size of 20 for grades K-3 and 28 for grades 4-8 and is used by the NYCDOE for capital planning purposes.

actions, DOE projections show that demand for public elementary schools in CSD 14, Sub-District 3 is expected to increase by approximately 12.3 percent (from 2,314 to 2,598). Intermediate school enrollment is forecasted to decrease in the study area, by approximately 3.5 percent (from 1,215 to 1,172 by 2016).

However, a considerable amount of new residential development is planned in the study area by the analysis year of 2016. Using numbers derived from the SCA's Projected New Housing Starts for Sub-District 3 of CSD 14, approximately 1,380 new elementary school students and 220 new intermediate school students are expected to be added to the study area by the 2016 build year.<sup>7</sup>

Therefore, based on the DOE enrollment projections and SCA's Projected New Housing Starts, both elementary and intermediate school enrollment in Sub-District 3 of CSD 14 are expected to increase by 2016. CSD 14, Sub-District 3 elementary school enrollment is expected to increase by 71.9 percent (from 2,314 to 3,978); intermediate school enrollment is expected to increase by 14.6 percent (from 1,215 to 1,392) by the 2016 analysis year.

## Projected Capacity Changes

There are no new elementary or intermediate schools under construction in Sub-district 3 of CSD 14. However, based on approved "Proposals for Significant Changes in Utilization," there are expected to be changes in capacity at two of the intermediate schools in Sub-district 3 of CSD 14 by the 2016-2017 school year. With new charter schools to be co-located in JHS 50 John D. Wells and JHS 126 John Ericsson, according to their "Building Utilization Plans" the capacity of the schools would be reduced by 192 and 347 seats, respectively.

Additionally, DOE is expanding the existing PS 84 Jose de Diego, which currently serves pre-Kindergarten through grade 5, to serve students through grade 8 by the 2016-2017 school year. As a result, 387 elementary school seats would be eliminated and 345 intermediate school seats would be added to PS 84.

As a result, the overall intermediate school capacity in the sub-district would decrease from 1,528 seats to 1,334 seats, a reduction of 194 seats, and overall elementary school capacity in the sub-district would decrease from 3,255 seats to 2,868 seats, a reduction of 387 seats.

Analysis

**Elementary Schools** 

The utilization rate for public school facilities in the future without the proposed actions is calculated by adding SCA's estimated enrollment from known future proposed residential developments within Sub-District 3 to the projected enrollment from DOE, and then comparing that number to projected capacity. As shown in Table E-4, in the future No-Action condition, public elementary schools in CSD 14, Sub-District 3 will operate over capacity, with a school enrollment of 3,978 students, representing 138.7 percent utilization with a shortfall of 110 seats.

Grier enrollment projections were used for analysis purposes (Actual 2011, Projected 2012-2021). Projections include Special Education students who are integrated into regular classrooms.

The number of students generated by the No-Action Scenario for the Sub-district study area were obtained from DCP. These numbers are derived from SCA's Projected New Housing Generation Pipeline.

## **Intermediate Schools**

As shown in Table E-4, while CSD 14, Sub-District 3 intermediate school enrollment is expected to increase to 1,392 students in the 2016 No-Action condition, study area intermediate schools will operate overcapacity (104.3 percent utilization) with a shortage of 58 seats.

Table E-4
2016 Future Without the Proposed Actions:
Projected Enrollment in CSD 14, Sub-district 3 Public Schools

	2016 Projected Enrollment <sup>1</sup>	Students Generated from Development	Total Projected Enrollment	Capacity	Available Seats	Utilization (%)
Elementary Schools	2,598	1,380	3,978	2,868	-110	138.7
Intermediate Schools	1,172	220	1,392	1,334	-58	104.3

Sources: DOE enrollment projection data (Actual 2011, Projected 2012-2021); DOE 2010-2014 Five-Year Capital Plan, Proposed February 2013 Amendment

#### **Notes:**

#### Future With the Proposed Action (With-Action Condition)

## **Enrollment Changes**

The proposed actions would result in the construction of approximately 720 DU, representing a net incremental increase in development of approximately 444 DU over the No-Action condition. Based on the multipliers presented in Table 6-1a of the 2012 *CEQR Technical Manual*, the net 444 residential units facilitated by the proposed actions would introduce approximately 129 public elementary students and 53 public intermediate school students (see Table E-5).

Table E-5
2016 Future With the Proposed Actions: Estimated Number of Students Introduced

With-Action Incremental DUs on the Project Area	Elementary Students <sup>1</sup>	Intermediate Students <sup>1</sup>	Total Elementary and Intermediate Students
444	129	53	182

#### **Notes:**

#### Projected Capacity Changes

Similar to the No-Action condition, changes to public elementary and intermediate schools would occur in the With-Action condition. The capacity of intermediate schools JHS 50 John D. Wells and JHS 126 John Ericsson would be reduced by 192 and 347 seats, respectively and elementary school seats at PS 84 would be reduced by 387 while 345 intermediate seats would be introduced. In total, the overall intermediate school capacity in the sub-district would decrease from 1,528 seats to 1,334 seats, a reduction of 194 seats, and overall elementary school capacity in the sub-district would decrease from 3,255 seats to 2,868 seats, a reduction of 387 seats.

<sup>&</sup>lt;sup>1</sup> Projected 2016 Sub-district 3 school enrollment was calculated by applying Sub-district enrollment percentages obtained from DCP. Approximately 26.37 percent of CSD 14's projected 2016 elementary school enrollment and 28.96 percent of its intermediate school enrollment is estimated to be within Sub-district 3 (i.e., the study area).

<sup>&</sup>lt;sup>1</sup> Based on student generation rates from Table 6-1a of the 2012 CEOR Technical Manual.

Analysis

## **Elementary Schools**

In 2016, the proposed actions would introduce approximately 129 elementary students to the school study area. As shown in Table E-6, combined with the 2016 No-Action total projected enrollment, the new students would result in a total enrollment of 4,107 elementary students. Total utilization is expected to be approximately 126.2 percent, with a shortage of approximately 852 public elementary seats in the future with the proposed actions.

## **Intermediate Schools**

As shown in Table E-6, the proposed actions would introduce approximately 53 intermediate students to the study area, increasing enrollment in CSD 14, Sub-District 3 to 1,445. Public intermediate school utilization is expected to be approximately 137.5 percent, with a shortage of approximately 394 public intermediate seats in the future with the proposed actions.

Table E-6
2016 Future With the Proposed Actions: Projected Enrollment in CSD 14, Sub-District 3 Public Schools

	2016 No- Action Total Projected Enrollment	Incremental Students Generated by the Proposed Actions <sup>1</sup>	Total Projected With-Action Enrollment	Capacity	Available Seats	Utilization (%)	Increase in Utilization (%) from No-Action Condition
Elementary Schools	3,978	129	4,107	2,868	-1,239	143.2	4.5
Intermediate Schools	1,392	53	1,445	1.334	-111	108.3	4.0

**Notes:** 

<sup>1</sup> See Table E-5

## **Impact Significance**

As noted above, for the purposes of CEQR analysis, a utilization rate of 100 percent is the utilization threshold for overcrowding. Additionally, CEQR defines a significant adverse impact as an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions. In determining impact significance, elementary and intermediate schools are handled separately.

#### **Elementary Schools**

Study area elementary school enrollment is expected to increase substantially in both the No-Action and With-Action conditions, and would require additional elementary school capacity to serve the study area. In the future with the proposed actions, elementary schools would have an estimated utilization rate of approximately 143.2 percent, above the 100 percent utilization threshold. However, this increase in utilization represents a 4.5 percent increase from the No-Action condition, below the CEQR threshold of

impact significance. As such, pursuant to CEQR methodology, the proposed actions would not result in a significant adverse impact to study area public elementary schools.

Measures utilized by DOE to address increased elementary school enrollment could include: relocating administrative functions to other sites, thereby freeing up space for classrooms; making space within the study area available to DOE; restructuring or reprogramming existing school space within the district; or providing for new capacity by constructing a new school or an addition to an existing school.

#### **Intermediate Schools**

In the future with the proposed actions, intermediate schools would operate with an estimated utilization rate of 108.3 percent and a shortage of approximately 111 seats. This represents an increase in utilization of 4.0 percentage points compared to the No-Action condition, below the CEQR threshold of impact significance. As such, pursuant to CEQR methodology, the proposed actions would not result in a significant adverse impact on intermediate schools in the study area.

## V. CHILD CARE

This analysis assesses the potential effects of the proposed project on publicly-funded child care centers. The New York City Administration for Children's Services (ACS) provides subsidized child care in center-based group child care, including Head Start programs, family child care, and informal child care. Publicly-funded child care services are available for income-eligible children up to the age of 12. In order for a family to receive subsidized child care services, the family must meet specific financial and social eligibility criteria that are determined by federal, state, and local regulations. In general, children in families that have incomes at or below 200 percent Federal Poverty Level (FPL), depending on family size, are financially eligible, although in some cases eligibility can go up to 275 percent FPL (per ACS guidelines). The family must also have an approved "reason for care," such as involvement in a child welfare case or participation in a "welfare-to-work" program.

Publicly-funded child care centers, under the auspice of the ACS's Division of Child Care and Head Start, provide care for the children of income-eligible household. A space for one child in a child care center is called a "slot." Slots may also be in private homes licensed to provide child care services to small numbers of unrelated children. While publicly-funded child care services are available for income-eligible children through the age of 12, per the 2012 CEQR Technical Manual, this analysis focuses on services for children under age 6.

The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the proposed actions. Pursuant to CEQR methodology, only the number of housing units expected to be subsidized and targeted for incomes below 80 percent AMI should be used as a proxy for subsidized child care eligibility. The proposed actions would result in a net increment of approximately 444 residential units, of which 200 units would be affordable. As described in Attachment A, "Project Description," the affordable units developed with the proposed actions would be divided into three income bands, ranging from under 80 percent of Area Median Income (AMI) to under 175 percent of AMI. Of the 200 proposed affordable units, the applicant has committed to a program that would provide 72 DUs targeted for incomes below 80 percent AMI, 108 DUs targeted for incomes below 125 percent of AMI, and 20 DUs targeted for incomes below 175 percent of AMI. Additionally, the applicant is seeking state and federal funding mechanisms such as Section 8 and low-income housing tax credits that would allow a reduction in the maximum AMIs and/or an increase in the number of low-income units. However, at this time, it is uncertain whether any such

funding would be made available for this project. Accordingly, to be conservative, a sensitivity analysis was prepared showing the potential impacts on the demand for publicly-funded child care assuming various increases in the number of low-income units that could be provided as a result of the proposed actions. To prevent a significant adverse impact on child care services, the proposed actions also include an agreement between the applicant and the City relating to the provision of funding for child care, based on how many child care slots for children who are eligible for publicly-funded child care would be required as a result of the proposed actions.

#### **METHODOLOGY**

Since there are no locational requirements for enrollment in child care facilities, and some parents or guardians choose a child care center close to their employment rather than their residence, the service areas of these facilities can be quite large. Nevertheless, as stated in the 2012 CEQR Technical Manual, the centers closest to the project site are more likely to be subject to increased demand. CEQR methodology therefore recommends a study area of 1.5 miles or more, dependent upon a project site's location relative to transit, amongst other factors. The child care study area used for this analysis encompasses all portions of Brooklyn and Queens within a 1.5-mile radius of the projected development site. However, portions of Manhattan that lie within the 1.5-mile radius were not included in the study area given that the East River forms a significant natural boundary and, unlike Newtown Creek separating Brooklyn and Queens, there are no vehicular, pedestrian, or public transit connections across the river in this area.

A child care analysis presents the most recent capacity (slots) and utilization (enrollment) data for publicly-funded group child care facilities (including Head Start facilities) within the study area, obtained from ACS's Division of Child Care and Head Start. Future conditions are then predicted by multiplying the number of new low-income and low- to moderate-income family housing units expected in the study area by the applicable 2012 CEQR multiplier to estimate the number of children under age 6 eligible for publicly-funded child care services. For Brooklyn, the multiplier is 0.178. Since enrollment projections for child care facilities are not available, CEQR analysis assumes that the existing enrollment and capacity would stay the same for the build year. However, any changes planned for child care program or facilities in the area of the proposed actions, including closing or expanding existing facilities and establishing new facilities that would affect capacity by the build year are accounted for in the future conditions.

The effect of the new publicly-funded child care-eligible children introduced by the proposed actions on the capacity of child care centers within the study area is then evaluated. According to the 2012 CEQR Technical Manual, a significant adverse impact may occur if the proposed actions would result in:

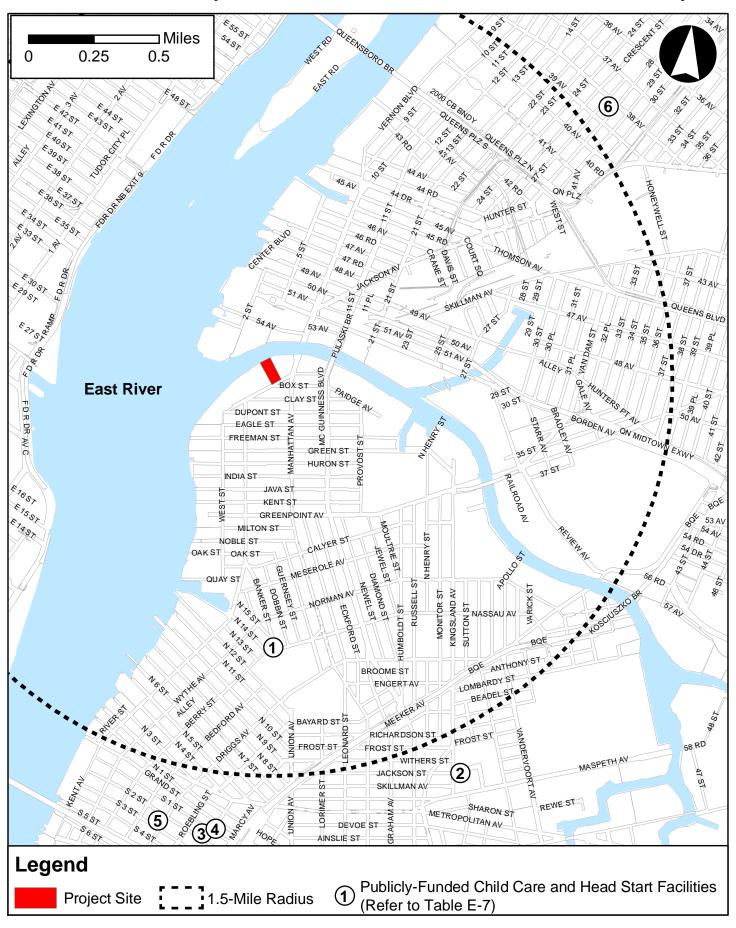
- 1. A collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent in the With-Action Scenario; and
- 2. An increase of five percent or more in the collective utilization rate of the child care/Head Start centers in the study area between the No-Action and With-Action Scenarios.

## INDIRECT EFFECTS ON CHILD CARE CENTERS

## **Existing Conditions**

There are six publicly-funded group child care facilities within the study area (see Figure E-2). The 451 group child care facility slots provided at these facilities are currently operating at 100 percent utilization

## Publicly-Funded Child Care and Head Start Facilities within the Study Area



with no available slots. Additional capacity likely could be provided by family and private child care centers, but these facilities are not included in this analysis per 2012 CEQR Technical Manual guidance.

Table E-7
Publicly-Funded Child Care Facilities within the Study Area (1.5-mile Radius)

Map No.1	Program Name <sup>2</sup>	Address <sup>3</sup>	Capacity	Enrollment	Available Slots	Utilization
1	John Oravecz ECDC	25 Nassau Av.	92	92	0	100.0%
2	Cooper Park Child Care Center	292 Frost St.	45	45	0	100.0%
3	Padre Kennedy ECDC	243 S. 2nd St.	55	55	0	100.0%
4	Nuestros Niños II	243 S. 2nd St.	70	70	0	100.0%
5	Nuestros Niños III	161 S. 3rd St.	35	35	0	100.0%
6	Queensbridge ECDC	38-11 27th St., Queens	154	154	0	100.0%
		TOTAL	451	451	0	100.0%

Source: ACS, June 2013.

Notes:

Refer to Figure E-2.

## **Future Without the Proposed Actions (No-Action)**

As described in Attachment A, "Project Description," in the absence of the proposed actions, it is expected that the applicant would demolish the existing improvements on the development site and replace them with an as-of-right, 14-story mixed-use market rate residential development with ground floor commercial and community facility uses and accessory parking complying with the requirements set forth under the R6 and R6/C2-4 zoning.

In the future without the proposed actions, planned or proposed development projects in the 1.5-mile study area will introduce approximately 405 units which are expected to be occupied by low- to moderate-income households eligible for publicly-funded child care. Based on Table 6-1b of the 2012 CEQR Technical Manual, this amount of development is anticipated to introduce 72 children under the age of 6 who would be eligible for publicly-funded child care programs (assuming 0.178 child care-eligible children under age 6 per unit in Brooklyn).

Based on these assumptions, if no new child care facilities open in the future without the proposed project, the number of children eligible for publicly-funded child care will exceed available slots in the future without the proposed actions. As described above, there are currently 451 slots operating at 100 percent utilization. As shown in Table E-8, with the addition of the estimated 72 eligible children introduced by planned development projects in the study area, there will be a shortage of 72 slots in publicly-funded child care programs in the study area (116 percent utilization) in 2016 under No-Action conditions.

E-12

<sup>&</sup>lt;sup>2</sup> Includes Head Start programs (all of which are center-based per ACS)

<sup>&</sup>lt;sup>3</sup> Addresses are in Brooklyn unless otherwise noted.

<sup>&</sup>lt;sup>8</sup> As per the 2012 *CEQR Technical Manual*, housing units expected to be subsidized and targeted for incomes of 80 percent AMI or below are used for a proxy of publicly-funded child care eligibility.

Table E-8
Projected Publicly-Funded Child Care Enrollment and Capacity in the 2016 Future Without the Proposed Project

Capacity <sup>1</sup>	Projected Enrollment <sup>2</sup>	Available Slots	Utilization
451	523	-72	116.0%

#### Notes:

<sup>1</sup> No capacity changes are anticipated in the No-Action Scenario.

#### **Future With the Proposed Action (With-Action)**

As described in Attachment A, "Project Description," the proposed project would result in a net increase of approximately 444 residential units of which 200 units would be affordable. The applicant has committed to an affordable program that would provide 72 new DUs targeted to incomes below 80 percent of AMI, 108 DUs targeted for incomes below 125 percent of AMI, and 20 DUs targeted for incomes below 175 percent of AMI. The applicant is seeking state and federal funding mechanisms such as Section 8 and low-income housing tax credits that would allow a reduction in the maximum AMIs for a greater number of low-income units and/or an increase in the number of low-income units. However, at this time, it is uncertain whether any such funding would be made available for this project. To be conservative, a sensitivity analysis was prepared showing the potential impacts on child care assuming various increases in the number of low-income units that could be provided as a result of the proposed actions (refer to Table E-9). Additionally, to be conservative, the child care analysis provided below assumes all 200 affordable DUs would be targeted to incomes below 80 percent of AMI, notwithstanding the income band breakdown provided above.

<sup>&</sup>lt;sup>2</sup> Projected enrollment is calculated by adding the projected new publicly-funded child care-eligible children to the existing enrollment from **Table E-7**.

Table E-9
Projected Publicly-Funded Child Care Enrollment and Capacity Changes in the 2016 Future With the Proposed Actions

Options						Increase in
# Units ≤ 80% AMI	Added Daycare Slots	Capacity	Projected Enrollment <sup>1</sup>	Available Slots	Utilization	Utilization from No-Action Condition
$109^{2}$	19	451	542	-91	120.2%	4.2%
110	20	451	543	-92	120.4%	4.4%
120	21	451	544	-93	120.6%	4.6%
126	22	451	545	-94	120.8%	4.8%
127	23	451	546	-95	121.1%	5.1%
130	23	451	546	-95	121.1%	5.1%
140	25	451	548	-97	121.5%	5.5%
150	27	451	550	-99	122.0%	6.0%
160	29	451	552	-101	122.4%	6.4%
170	30	451	553	-102	122.6%	6.6%
180	32	451	555	-104	123.1%	7.1%
190	34	451	557	-106	123.5%	7.5%
200	36	451	559	-108	123.9%	7.9%
Future Con	ditions with 20	0 Units ≤80% Al	MI and with11 New	Daycare Slots		
200	25 <sup>3</sup>	462 <sup>3</sup>	559	-97 <sup>3</sup>	121.0%	5.0%

#### Notes:

## IMPACT SIGNIFICANCE

As described above, this analysis is based on the assumption that the planned No-Action developments in the area would be completed by 2016. Based on this information, publicly-funded group child care would be above 100 percent capacity in both the No-Action and the With-Action conditions. The 2012 *CEQR Technical Manual* states that if a proposed project would cause an increase of five percent or more in utilization in the study area where the utilization rate is 100% or greater, a significant adverse impact may result warranting consideration of mitigation. As shown in Table E-9, if all 200 affordable units were targeted for incomes below 80 percent of AMI, funding for up to 11 additional child care slots for children who are eligible for publicly-funded child care would be required in order to prevent a significant adverse impact. As such, the proposed actions include an agreement between the applicant and the City relating to the provision of funding for up to 11 additional child care slots, based on how many child care slots would be required as a result of the proposed actions. With that agreement, the proposed actions would not result in a significant adverse impact on child care facilities.

Several additional factors may also limit the number of children in need of publicly-funded child care slots in ACS-contracted child care facilities. Families in the study area could make use of alternatives to publicly-funded child care facilities or elect to make use of home licensed family child care facilities instead of group child care. Furthermore, parents of eligible children are not restricted to enrolling their children in child care facilities in a specific geographical area. As such, they could make use of publicly-funded child care providers beyond the two mile study area, likely proximate to their place of employment.

<sup>&</sup>lt;sup>1</sup> Projected enrollment is calculated by adding the projected new publicly-funded child care-eligible children created by the proposed actions to the group child care in the No-Action condition (Table E-8).

<sup>&</sup>lt;sup>2</sup> A baseline of 109 units is shown for comparison purposes only as this is the maximum number of units 80% AMI or lower that could be developed without a child care analysis.

<sup>&</sup>lt;sup>3</sup> Number of daycare slots presuming funding of 11 voucher daycare slots provided by the applicant.

## ATTACHMENT F OPEN SPACE

#### A. INTRODUCTION

An open space assessment may be necessary if a proposed action could potentially have a direct or indirect effect on open space resources in the area. According to the 2012 CEQR Technical Manual, a direct effect would result in the physical loss of public open space, change the use of an open space so that it no longer serves the same user population, limit public access to an open space, or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether on a permanent or temporary basis. Because the Proposed Action would physically affect a planned open space that would be constructed under future conditions without the proposed actions, it would have a direct impact on an open space resource in the project area.

An indirect effect on open space may occur when a population generated by a proposed action would be sufficiently large to noticeably diminish the ability of an area's open spaces to serve the future population. According to the guidelines established in the 2012 *CEQR Technical Manual*, a project that would add more than 200 residents or 500 employees, or a similar substantial number of other users to an area, is typically assessed for any potential indirect effects on open space. As the Reasonable Worst Case Development Scenario (RWCDS) that could be constructed as a result of the Proposed Action would result in an incremental increase of approximately 444 dwelling units, approximately 25,750 square feet of commercial space, and 6,200 square feet of community facility space, and is anticipated to add approximately 1,159 residents<sup>2</sup>, it triggers the CEQR threshold for an analysis of open space.

Pursuant to the guidelines of the 2012 CEQR Technical Manual, a preliminary open space assessment was conducted which provided a comparison of the total open space ratios under existing conditions and under future conditions with the Proposed Action. The open space ratio would remain unchanged from existing conditions to With-Action conditions. Therefore, the proposed actions would not exceed the CEQR threshold of a 5 percent decrease for detailed analysis. However, as direct changes to an open space would occur as a result of the proposed actions, a detailed open space assessment is warranted and is provided below. Although the majority of the study area is located in an underserved area as defined in the open space map for the applicable Greenpoint neighborhood, which is provided in the 2012 CEQR Technical Manual, Appendix "Open Space Maps," the project site is neither well-served nor under-served by open space according to the map.

The proposed project would also add a shore public walkway along the shoreline, an upland connection along the western lot line linking Commercial Street and the shore public walkway, and an additional public access way along the eastern lot line of the site, for a total of 0.80 acres of publicly accessible open space. In addition, through the sale of development rights of the City-owned property located directly adjacent to and west of the development site (Block 2472, Lot 425), the City will construct a new high-quality, up to approximately 125,060 sf (2.87 acres) public park (Box Street Park), which will also include a shore public walkway along the waterfront. For the purpose of this analysis the development site and the City-owned property are discussed as "the project area."

A quantitative detailed assessment was conducted to determine whether the proposed actions would significantly reduce the amount of open space available for the area's population. The proposed project is also expected to introduce a net increment of 22 employees to the project area<sup>3</sup>. This is well below the

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<sup>&</sup>lt;sup>1</sup> As the Proposed Action is not located within an underserved or well-served area of the City and it would add more than 200 residents, an open space assessment should be conducted in accordance with the 2012 CEQR Technical Manual.

<sup>&</sup>lt;sup>2</sup> Based on an assumption of 2.61 residents per dwelling unit.

<sup>&</sup>lt;sup>3</sup> Assumptions: 1 building employee per 25 DUs, 3 local retail employees per 1,000 gsf of retail space, 3 employees per 1,000 gsf of community facility space and 1 parking employee per 50 attended parking spaces.

2012 CEQR Technical Manual threshold for analysis based on employee numbers and therefore, this open space analysis will focus exclusively on the open space needs of the residential population. In addition to the analysis provided in this attachment, Attachment G, "Shadows," provides an assessment of the shadow effects of the proposed project on open space resources.

Based on the analysis below, the proposed actions would not result in a significant adverse open space impact.

## **B.** PRINCIPAL CONCLUSIONS

According to the 2012 CEQR Technical Manual, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users; or (b) it would reduce the open space ratio and consequently overburden existing facilities or further exacerbate deficiency in open space. The 2012 CEQR Technical Manual also states that "if the area exhibits a low open space ratio indicating a shortfall of open space, even a small decrease in the ratio as a result of the action may cause an adverse effect." A 5 percent or greater decrease in the open space ratio is considered to be "substantial", and a decrease of less than 1 percent is generally considered to be insignificant unless open space resources are extremely limited.

The proposed actions would decrease the 2016 No-Action open space ratio from 0.555 to 0.543 acres per 1,000 residents, which translates to a 2.16 percent decrease, compared to 2016 No-Action conditions, which is below the 5 percent 2012 *CEQR Technical Manual* threshold. The 2.16 percent reduction of the total open space ratio resulting from the proposed actions is not expected to noticeably diminish the ability of the study area's open spaces to serve its residential population in the future with the proposed actions. As noted above, the proposed project would have a direct impact on an open space within the project area. As discussed in detail below, this is because the City would use proceeds from the sale of the development rights from the City-owned property to the applicant to partially fund construction and development of the new Box Street Park.

## C. BACKGROUND INFORMATION

#### Greenpoint-Williamsburg Rezoning Final Environmental Impact Statement

As described in Attachment B, "Supplemental Screening," there has been previous analysis of the project area in the 2005 *Greenpoint-Williamsburg Rezoning Final Environmental Impact Statement* (FEIS). The FEIS open space analysis accounted for several new public open spaces that were expected to be created after 2005. Within the open space study area analyzed in this EAS, these new public open spaces included the WNYC Transmitter Park, and Manhattan Avenue Street End Park. These two facilities were analyzed as part of the 2013 No-Action conditions in the FEIS and have subsequently opened (in 2012 and 2007, respectively).

In addition, the FEIS open space analysis included waterfront open spaces that would be created on potential and projected development sites identified in the FEIS, in compliance with the Greenpoint-Williamsburg Waterfront Access Plan (WAP). As discussed in Attachment C, "Land Use, Zoning, and Public Policy," the WAP was established as part of the rezoning, but within the open space study area analyzed in this EAS none of the WAP parcels has been developed as of 2013. Additionally, the FEIS open space analysis determined that there would be no significant adverse open space impacts as a result of the rezoning.

#### D. OPEN SPACE STUDY AREA AND METHODOLOGY

The analysis of open space resources has been conducted in accordance with the guidelines established in the 2012 CEQR Technical Manual. Using this methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio. This quantitative measure is then used to assess the changes in the adequacy of open space resources by the build year 2016, both without and with the proposed actions. In addition, qualitative factors are considered in making an assessment of the proposed actions' effects on open space resources.

In accordance with the guidelines established in the 2012 CEQR Technical Manual, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects and a quarter-mile radius for commercial projects with a worker population. Because the worker population generated by the proposed actions falls well below the threshold of 500 additional employees, a half-mile radius is the appropriate study area boundary for this analysis.

## **Open Space Study Area**

Pursuant to 2012 CEQR Technical Manual guidelines, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half-mile of the project area and all open spaces within it that are publicly accessible. As described above, residents typically walk up to half a mile to reach open space and recreational resources. While some portions of Queens are located within the half-mile radius of the project area, Queens was not included in the open space study area because none of its census tract areas were located at least 50 percent within half-mile radius. Further, residents would need to walk more than a half-mile via the Pulaski Bridge over Newtown Creek to reach the area of Queens located within the radius.

The project area consists of the development site and the City-owned parcel. The development site encompasses Block 2472, Lot 410, and the City-owned parcel encompasses Block 2472, Lot 425 in the Greenpoint neighborhood of Brooklyn Community District 1. As shown in Figure F-1, the open space study area includes Census Tracts 563, 565, and 575 in their entirety.

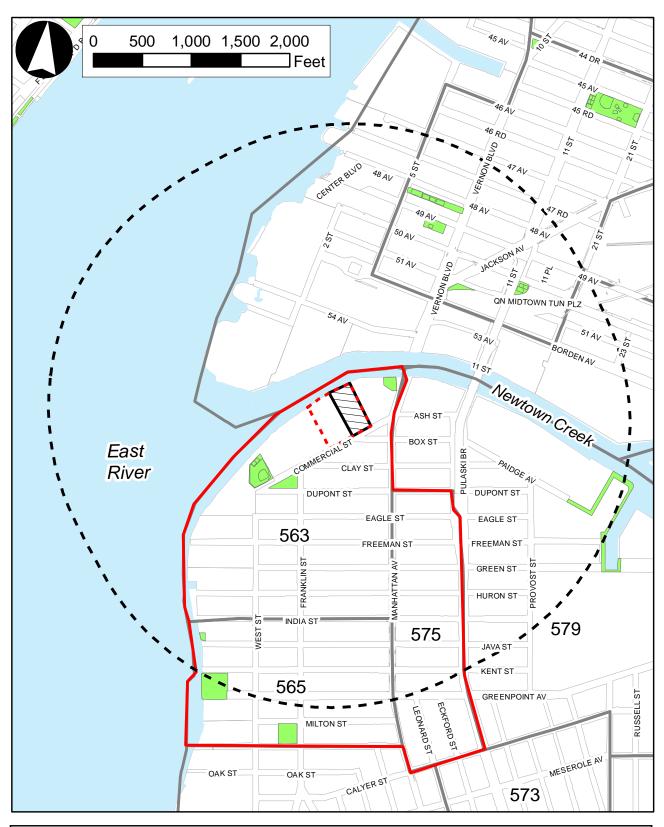
#### **Analysis Framework**

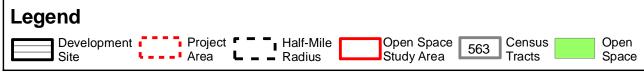
## Direct Effects Analysis

According to the 2012 CEQR Technical Manual, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis.

Under No-Action conditions, a planned New York City park (Box Street Park) will be developed on the City-owned portion of the project area. Under With-Action conditions, the City would use proceeds from the sale of the development rights from the City-owned property to the applicant to partially fund construction and development of the new park. It is anticipated that the changes contemplated would better serve the surrounding community.

# **Open Space Study Area**





As such, no further analysis is warranted. Attachment G, "Shadows," provides an assessment of the potential shadow effects of the proposed project on open space resources, which demonstrates that shadows would not affect the usefulness of any open space resources in the open space study area.

## Indirect Effects Analysis

Indirect effects occur to an area's open spaces when a proposed action would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future population. The 2012 CEQR Technical Manual methodology suggests conducting an initial quantitative assessment to determine whether more detailed analyses are appropriate, but also recognizes that for projects that introduce a large population in an area that is underserved by open space, it may be clear that a full, detailed analysis should be conducted. The project area is not located within an underserved or well-served area as determined by the 2012 CEQR guidelines.

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the existing open space users: residents. To determine the number of residents in the study area, 2010 census data have been compiled for census tracts comprising the open space study area, along with projections of large residential developments completed since 2010. In addition, a 0.5 percent per year (2010-2013) background growth rate was applied to the 2010 population to account for general increases in population and smaller developments not identified individually.
- An inventory of all publicly accessible passive and active open spaces in the study area, including existing, No-Action and With-Action scenarios.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with New York Department of City Planning (NYCDCP) guidelines. NYCDCP generally recommends a comparison to the median ratio for community districts in New York City, which is 1.5 acres of open space per 1,000 residents.
- An evaluation of qualitative factors affecting open space use.
- A final determination of the adequacy of open space in the study area.

## E. PRELIMINARY ASSESSMENT

Pursuant to the guidelines of the 2012 CEQR Technical Manual, a preliminary open space assessment of the proposed actions' indirect effects on open space was conducted to determine the need for a detailed analysis. The preliminary assessment provides a comparison of the total open space ratios for existing conditions and the future with the proposed actions, as shown in Table F-1. The open space ratio would remain the same comparing With-Action with existing conditions, which is below the CEQR threshold of a 5 percent decrease for detailed analysis. However, as direct effects to an open space may occur because of the proposed project, a detailed open space assessment is warranted and is provided below.

Table F-1 Preliminary Analysis Open Space Ratios

Residential Population		Open Space Acres			Open Space Ratios				
		Total	Active	Passive	Total	Active	Passive		
Existing	12,542	5.29	2.28	3.01	0.422	0.182	0.240		
With-Action	14,421	6.09	2.28	3.81	0.422	0.158	0.264		
	Percent Change in Open Space Ratio (Existing to With-Action)								
					Total	Active	Passive		
					0.00%	-13.19%	10.00%		

# F. DETAILED ASSESSMENT

# **Existing Conditions**

# Demographic Characteristics of the Study Area

To determine the residential population served by existing open space resources, 2010 Census data were compiled for the census tracts comprising the study area and updated to 2013 conditions, in addition, a 0.5 percent per year (2010-2013) background growth rate was applied to the 2010 population. With an inventory of available open space resources and the number of potential users, open space ratios were calculated and compared with existing citywide averages and planning goals set forth by NYCDCP. As mentioned above and shown in Figure F-1, the open space study area is comprised of three census tracts. Table F-2 shows the 2010 Census total population figures for each census tract in the study area, as well as for the study area as a whole.

Table F-2 2010 Study Area Population

	Number of Residents
Census Tract 563	4,360
Census Tract 565	3,255
Census Tract 575	4,249
Total Number of Residents in Study Area 2010 <sup>1</sup>	11,864
0.5% Annual Background Growth (2010-2013)	179
Residents generated by new developments (2010-2013)	499
Total Number of Residents in Study Area 2013	12,542

1 Source: Census 2010.

As shown in Table F-2, the 2010 Census data indicate that the study area has a total residential population of approximately 11,864 people. Factoring in a yearly background growth factor of approximately 0.5 percent (addition of 179 residents), and residents generated by three major developments between 2010 and 2013 (addition of 499 residents<sup>4</sup>), the residential population of the three census tracts totals approximately 12,542 people in 2013.

The four developments are: 200 Franklin Street (19 DUs), 59 Kent Street (36 DUs), 48 Box Street (6 DUs), and 110Green Street (130 DUs), for a total of 191 new DUs. 191 DUs will generate 499 new residents, assuming 2.61 people per household.

Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages five through nine typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages 10 through 14 use playground equipment, court spaces, little league fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports such as frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

Therefore the residential population of the study area was also broken down by age groups, as seen in Table F-3. As shown in Table F-3, there is an overwhelming majority of residents in the study area between the ages of 20 and 64 at 78.7 percent, which is significantly higher than the 62.0 percent for the same age group in Brooklyn as a whole. The study area also hosts a significantly lower rate of schoolaged children than Brooklyn as a whole, with a combined 11.5 percent of residents aged 19 and younger, compared to a combined 24.1 percent in Brooklyn as a whole. The percentage of elderly residents over the age of 65 is slightly lower in the study area (9.8 percent) compared to Brooklyn as a whole (11.5 percent).

Table F-3 2010 Study Area Age Groups

	Study Area	Age Groups	Brooklyn Age Groups			
Age Category	No. of People	% of Total Population	No. of People	% of Total Population		
4 and younger	367	3.1%	117,198	7.1%		
5-9	314	2.6%	159,391	6.4%		
10-14	319	2.7%	156,563	6.3%		
15-19	367	3.1%	170,684	6.8%		
20-64	9,336	78.7%	1,553,231	62.0%		
65 and older	1,161	9.8%	287,633	11.5%		
Subtotal	11,864	100.0%	2,504,700	100.0%		

Source: U.S. Census Bureau, 2010 Census

This data could reflect a proportionately lower demand for passive recreational space among study area residents, compared to Brooklyn as a whole. Also, the peak hours of open space demand would be expected to be concentrated during weekends, early morning and late afternoon to evening hours during the week, as it could be assumed that most residents aged 20 to 64 would work or attend school on weekdays.

Inventory of Publicly-Accessible Open Space

According to the 2012 CEQR Technical Manual, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the 2012 CEQR Technical Manual, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under 2012 CEQR guidelines, whereas private open space is not accessible to the general public

on a regular basis, and is therefore only considered qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

An open space is determined to be active or passive by the uses which the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns, and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas. However, some passive spaces can be used for both passive and active recreation; such as a green lawn or riverfront walkway, which can also be used for ball playing, jogging or rollerblading.

Within the defined study area, all publicly-accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition of available open space. The information used for this analysis was gathered through field inventories conducted from January through March 2013, from the New York City Department of Parks and Recreation (NYCDPR)'s website, and from the New York City Oasis database and other secondary sources of information.

The condition of each open space facility was categorized as "Excellent", "Good", or "Fair". A facility was considered in excellent condition if the area was clean, attractive, and all equipment was present and in good repair. A good facility had minor problems such as litter, or older but operative equipment. A fair facility was one that was poorly maintained, had broken or missing equipment, or other factors that would diminish the facility's attractiveness. Determinations were made subjectively, based on a visual assessment of the facilities.

Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday from 11:00 AM until 3:00 PM, which is considered the weekday peak utilization period according to the 2012 CEQR Technical Manual. If a facility seemed to be at or near capacity, i.e. the majority of benches or equipment was in use, utilization was considered heavy. If the facility or equipment was in use, but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. Table F-4 identifies the address, ownership, hours, acreage of active and passive open spaces in the study area, and their condition and utilization. Figure F-2 maps their location in the study area.

As shown in Figure F-2, seven publicly accessible open space and recreational resources within the half-mile study area are included in the quantitative analysis. These resources comprise a total of approximately 5.29 acres, with more passive open space (approximately 3.01 acres, or 57 percent of the total area) than active open space (approximately 2.28 acres, or 43 percent of the total area). The larger open space resources included in the quantitative analysis are described briefly below.

# **Open Space Resources**

Descriptions of existing study area open space resources are provided below. They include the larger resources and those located in close proximity to the project site.

# 1. Greenpoint Playground (map key #1 in Figure F-2 and Table F-4)

Greenpoint Playground, which includes 0.50 acres (0.20 acres active and 0.30 acres passive), is located at the northern tip of Greenpoint at the junction of Franklin, Commercial and DuPont Streets. The perimeter of the park is surrounded by shade trees, beneath which are benches. The park also features a playset with safety surfacing, toddler and child swings, and a spray shower at its center. A new comfort station opened at this park in autumn 2012.

# Existing Open Space Resources



2. <u>Newtown Barge Playground</u> (map key #2 in Figure F-2 and Table F-4)

Directly northwest of Greenpoint Playground is Newtown Barge Playground, a 0.98-acre (0.83 acres active, 0.15 acres passive) property along the north side of Commercial Avenue. Newtown Barge Playground currently features active recreational facilities, including a paved baseball field and handball courts.

3. American Playground (map key #3 in Figure F-2 and Table F-4)

The American Playground is located inland along the west side of Franklin Street between Noble and Milton Streets. The 0.90-acre (0.81 acre active and 0.09 acre passive) park is primarily an active recreation resource that contains basketball and handball courts, a comfort station, play equipment, swings, benches, and spray showers. Ample shade trees are scattered throughout the playground and a stately iron fence surrounds the facility.

4. <u>WNYC Transmitter Park</u> (map key #4 in Figure F-2 and Table F-4)

The WNYC Transmitter Park, located at the western terminus of Greenpoint Avenue at the East River, was opened to the public in September 2012. The approximately 2.20-acre (0.44 acre active and 1.76 acre passive) park was once the home of the WNYC radio transmission towers. The park includes an overlook to the south, seating, and a waterfront esplanade. The center of the park includes a large, open lawn with a separate children's play area featuring a nautical theme to reflect the site's context. It also includes a spray shower and nature gardens. A pedestrian bridge has been restored as a wetland accessible to visitors. At the end of Kent Street is a concrete recreational pier, which was opened to the public in April 2013, featuring opportunities for fishing. The park is situated directly across from the East Village neighborhood of Manhattan and provides visitors passive recreation space set against the backdrop of the Manhattan skyline.

5. <u>Manhattan Avenue Street End Park</u> (map key #5 in Figure F-2 and Table F-4)

The Manhattan Avenue Street End Park, located at the northern terminus of Manhattan Avenue at its intersection with Newtown Creek, was opened in 2007 as part of New York City Department of Transportation's (NYCDOT) pedestrian oriented reconstruction projects. The 0.29-acre passive open space was developed by NYCDOT with a passive recreation area containing sitting areas, pathways for pedestrians and a boat launch at the water's edge.

6. *India Street Pier* (map key #6 in Figure F-2 and Table F-4)

The passive 0.34-acre India Street Pier, located at the foot of India Street acts as the Greenpoint terminal waiting area for the NY Waterway's East River Ferry. The pier has benches, bike racks, and is handicap accessible.

7. Java Street-End Park (map key#7 in Figure F-2 and Table F-4)

The Java Street-End Park, is located northwest of the Java Street-End. The 0.08-acre passive open space contains benches and planters, with an undisrupted view of the East River and the Manhattan skyline.

Table F-4
Inventory of Existing Open Space and Recraetional Facilities in Study Area

Map Key	NAME	LOCATION	OWNER	AMENITIES	CONDITION	UTILIZATION	HOURS OF ACCESS	AREA (acres)			PERCENTAGE OF TOTAL AREA	
#								TOTAL	ACTIVE	PASSIVE	ACTIVE	PASSIVE
1	Greenpoint Playground	Commercial, Franklin, Dupont Sts.	NYCDPR	Playground, Seating Area, Trees	Excellent	Moderate	Dawn to Dusk	0.50	0.20	0.30	40%	60%
2	Newtown Barge Playground	Commercial, Dupont, & West Streets	NYCDPR	Baseball Field, Handball Court	Excellent	Low	Dawn to Dusk	0.98	0.83	0.15	85%	15%
3	American Playground	Franklin Street, btwn Noble and Milton Streets	NYCDPR	Playground, Seating Areas, Basketball Court, Handball Court, Comfort Station, Spray	Excellent	High	Dawn to Dusk	0.90	0.81	0.09	90%	10%
4	WNYC Transmitter Park	West St. btwn Kent St. and Greenpoint Ave.	NYCDPR	Spray Showers, Lawn, Playground, Fishing station, pier	Excellent	High	Dawn to Dusk	2.20	0.44	1.76	20%	80%
5	Manhattan Ave. Road End Park	Manhattan Ave. northern terminus	NYCDOT	Kayak Launch, Pedestrian Plaza	Excellent	Low	24/7	0.29	0.00	0.29	0%	100%
6	India Street Pier	India st. end (127-141 West St.)	Stiles Properties LLC	Pier, Ferry access barge, benches	Good	Moderate	24/7	0.34	0.00	0.34	0%	100%
7	Java Street-End Park	131 West St-Waterfront	Stiles Properties LLC	Benches, Planters	Fair	Low	24/7	0.08	0.00	0.08	0%	100%
					TOTAL		5.29	2.28	3.01	43%	57%	
RES	OURCES NOT I	NCLUDED FOR QUA	NTITATIV	E ANALYSIS								
A	Newtown Creek Nature Walk	Freeman ST. Deadend north of Provost St.	NYCDEP	Walking Paths, Seating Paths, Landscaping	Excellent	Low	Dawn to Dusk Weather Permitting	1.68	0.00	1.68	0%	100%
В	Java Street Garden Collaborative	59 Java Street	NYCHPD	Greenthumb, container gardening	Currently Under Renovation	Low	Membership Required	0.06	0.06	0	100%	0%
C	Andrews Grove	49 Ave bet 5 St and Vernon Blvd	NYCDPR	Playground, sitting area, ball court	Excellent	Moderate		0.52	0.20	0.32	38%	62%
D	Bridge and Tunnel Park	50 Ave bet 11 St and 11 Pl	NYCDPR	Handball and Basketball courts	Good	Low		0.32	0.32	0.00	100%	0%
E	Vernon Mall	51 Ave, Vernon Bl, 52 Ave	NYCDPR /DOT	Sitting Area, Plantings	Fair	Moderate		0.14	0	0.14	0%	100%
F	Hunter's Point Community Park	E River, 2 St Newton Creek and Canal	QWDC	Playground, basketball, handball, sitting area	Excellent	Moderate		1.38	0.69	0.69	50%	50%
G	Old Hickory Park	Jackson Av 51 Ave & Vernon Bl	NYCDPR	Greenstreet with Playground, sitting area, chess	Good	Low		0.23	0	0.23	0%	100%

NYCDCP-New York City Department of City Planning, NYCDOT-New York City Department of Transportation, NYCHPD-New York City Housing Preservation and Development,

NYCDEP-New York City Department of Environmental Protection, QWDC-Queens West Development Corporation

Field surveys were conducted January through April between the hours of 12-3:30pm

#### Sources:

New York City Department of Parks and Recreation website-www.nycgovparks.org

Greenpoint-Williamsburg Contextual Rezoning EAS, 2009

Eagle Street Rooftop Farm website-www.rooftopfarm.org

New York City Department of Transportation website for Pedestrian Network Development-http://www.nyc.gov/html/dot/html/sidewalks/pedestrian\_projects.shtml Hunters Point South Rezonig FEIS, 2008

# **Quantitative Analysis of Open Space Adequacy**

The following analysis of the adequacy of open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents. As 1.5 acres of total open space per 1,000 residents is the median community district ratio in New York City, it generally represents adequate open space conditions and is used as the *CEQR* standard for this project. As an optimal planning goal, the City tries to achieve an overall residential open space ratio (OSR) of 2.5 acres per 1,000 population (80 percent active and 20 percent passive) for large-scale plans and proposals. However, this goal is often not feasible for many areas of the city (especially higher density areas), but serves as a benchmark that represents an area that is well served by open spaces.

In calculating the open space ratio per 1,000 user population for the study area, resources #1 to #7 listed in Table F-4 were included. Table F-5 shows that with an existing 2013 study area residential population of approximately 12,542 people, the existing total open space ratio in the study area is approximately 0.422 acres of open space per 1,000 residents. The study area has 0.182 acres of active open space per 1,000 residents, and 0.240 acres of passive open space per 1,000 residents.

Table F-5
Analysis of Adequacy of Open Space Resources in the Study Area under Existing Conditions

	Total Population	Open Space Acreage		Open Space Ratios Per 1,000 People			NYCDCP Open Space Guidelines			
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	12,542	5.29	2.28	3.01	0.422	0.182	0.240	2.5	2.0	0.5

Based on the previously mentioned NYCDCP guidelines, although the project site is not located within an underserved nor a well-served area, the study area exhibits a low open space ratio, compared to the city-wide median ratio of 1.5 acres per 1,000 persons and the planning goal of 2.5 acres per 1,000 persons (0.5 acres of passive space and 2.0 acres of active space). The study area therefore requires a more detailed analysis of open spaces resources available to the residential community.

# **Qualitative Assessment of Open Space Adequacy**

The existing open space resources included in the quantitative analysis are deficient in meeting the community's open space needs according to NYCDCP's guidelines for the provision of open space. While the study area meets the community's passive open space needs per NYCDCP guidelines, open space ratios per 1,000 residents still fall well below NYCDCP's planning goal of 2.5 acres per 1,000 residents and the Citywide median of 1.5 acres per 1,000 residents. Although the project site is neither well- or under-served by open space, the majority of the study area is located in an underserved area as defined in the open space map for Greenpoint, which is provided in the 2012 CEQR Technical Manual, Appendix "Open Space Maps."

As shown in Table F-4, the majority of the study area open spaces are in excellent or good condition, and use levels range from low to high, with approximately 57 percent dedicated to passive use, and 43 percent dedicated to active use. The study area contains a good mix of recreational facilities to serve the area's sizeable adult population, given that the age distribution in the study area includes significantly more adults than Brooklyn as a whole. As noted above, approximately 79 percent of the study area's residents are between the ages of 20 and 64, and approximately 10 percent are seniors, indicating a need for court game facilities, individualized recreation, and passive space. The study area includes 3.01-acres of passive open space facilities, with a variety of passive open space options to serve this older population including a fishing station, a pier, and game courts.

Also located within the study area are the 0.08-acre Java Street Garden Collaborative (map key B in Figure F-2 and Table F-4), and the 0.14-acre Eagle Street Rooftop Farm (map key B in Figure F-2 and

Table F-4), which are private open spaces that were conservatively excluded from the quantitative analysis. The Java Street Garden Collaborative is available to the public on the condition that they become members, volunteer a certain amount of hours per month, and attend quarterly meetings. The garden was a vacant space until March 2012, when the community gained access to it and use it as an open green space to learn about urban gardening and sustainable ecology. Eagle Street Rooftop Farm was started in 2009. The for-profit farm is a joint venture of Brooklyn-based company Broadway Stages and the green roof design and installation firm Goode Green, and is installed on a building owned by Broadway Stages, a Greenpoint-based sound stage company with a longstanding history of community investment. Goode Green designed the green roof and installed the base system and growing medium. The farm is staffed by the farm manager, a market manager, a farm-to-chef liaison and the farm based education coordinator. In addition, the farm has a seasonal apprenticeship program and offers volunteer opportunities during the growing season.

The 1.68-acre Newtown Creek Nature Walk (map key A in Figure F-2 and Table F-4), which is located within a half-mile radius falls outside the study area boundaries (as it is located in Census Tract 579 and just less than 50 percent of the tract lies within the half-mile radius) and has therefore been excluded from the quantitative analysis. While this facility is conservatively excluded from the quantitative analysis, it is likely that it would be used by people who live and work in the study area, who would likely be drawn to its passive recreational resources. The Newtown Creek Nature Walk was opened to the public in September 2007. The nature walk offers stunning views of the City and of the nearby industrial landscape, as well as many unique architectural features, plantings and construction techniques that were designed to evoke the rich, continually evolving environmental, industrial and cultural histories of the local area. The Walk features a 515-foot pathway along Whale Creek that is richly planted with trees, shrubs and other flora native to the Newtown Creek area, including Swamp White Oak, Sweet Gum, Eastern Red Cedar, Sawtooth Oak and Pitch Pine. The long pathway also features several recessed seating areas that afford visitors intimate access to the surrounding waterways.

In addition, residents from the study area would most likely utilize the open space resources located within the Queens portion of the half-mile radius. Residents accessing these open space resources in Queens would need to walk over the Pulaski Bridge. There are five open space resources located in Queens within the half-mile radius (map key D, E, F, G, and H in Figure F-2 and Table F-4), of which 29 percent (1.27 acres) is active open space, and 71 percent (3.06 acres) is passive open space.

It should also be noted that McCarren Park, a 35.71-acre northwest Brooklyn regional park, is located approximately one mile south from the project area. The park consists of baseball and football fields, basketball, tennis, and bocce courts, playgrounds, and running tracks. The park is also home to a recently renovated Olympic-sized pool, a center for year-round recreation for residents of northern Brooklyn. It is highly likely that the park is used by people who live in the study area, who would be drawn to its active and passive recreational space.

# G. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION)

### **Project Area**

In the absence of the proposed actions in 2016, it is expected that the applicant, Waterview at Greenpoint, LLC, would develop a, 14-story mixed-use market rate residential and commercial development with accessory parking on the development site. The No-Action development would be comprised of up to approximately 265,690 gsf of residential area (276 DUs), up to 25,750 gsf of ground-floor local retail and service uses, and up to approximately 6,200 gsf of community facility uses.

In addition, 138 off-street parking spaces accessory to the residential uses would be provided in a ground floor parking area with a size of approximately 32,200 gsf<sup>5</sup>.

# **Study Area Population**

Several new residential and commercial developments are currently planned and expected to be completed within the study area in the future without the proposed actions by 2016. These new developments would increase the residential population within the study area. These include developments expected to be completed in the land use study area identified in Attachment C, "Land Use, Zoning, and Public Policy" (Table C-5).

The residential components of these No-Action developments have been added to the existing conditions residential population. In addition, a 0.5 percent per year background growth rate is applied to the existing 2013 population to account for general increases in population and smaller developments not identified individually. Table F-6 shows that these No-Action developments (including a total of 1,846 DUs) and the background growth combined are expected to increase the study area population by approximately 5,058 residents by 2016 to a total of 17,600 residents.

Table F-6 2016 Study Area Population Without the Proposed Actions

<b>Total 2013 Residents in Study Area</b>	12,542						
	Additional	Additional Residents <sup>2</sup>					
	Market Rate	Affordable Units					
77 Commercial Street No-Action Development	276	0	720				
Greenpoint Landing Site 3	0	98	256				
1133 Manhattan Avenue	105	105	548				
155 West Street	500	140	1,670				
37 Commercial Street	498	124	1,623				
74 Kent Street	20	0	52				
0.5% Annual Background Growth (2013-	189						
Total New Residents in Study Area	5,058						
<b>Total Number of Residents in Study Area</b>	17,600						

Source: PHA research of print, online media, and consultation with the NYCDCP Brooklyn Borough Office.

Residents were calculated by assuming 2.61 people per household.

Based on 0.5 accessory parking spaces per market-rate DU pursuant to ZR Section 25-23 (276 DUs, 138 parking spaces). The required parking spaces accessory to commercial use (1 space per 1,000 zsf) would be waived pursuant to ZR Sections 36-21 and 36-232.

# **Open Space Resources**

### **Proposed Project Area**

# Development Site

In the 2016 future without the proposed project, the applicant would develop a waterfront open space including a waterfront esplanade with one new upland connection to a public street<sup>6</sup>. The waterfront open space would have a combined total area of approximately 16,025 sf (0.37 acres). For analysis purposes, it was assumed that this proposed open space would be for passive recreational use (refer to Table F-7).

# City-Owned Property

In addition, the City is expected to create a new approximately 2.87-acre Box Street Park by 2016. Box Street Park would be located on 65 Commercial Street (Block 2472 Lot 425), adjacent to the development site. Absent the proceeds from the sale of the development rights, however, funding for the park may be constrained. Under the 2016 No-Action condition, it is assumed that Box Street Park would be designed as a 70 percent active and 30 percent passive open space<sup>7</sup> (refer to Table F-6). Box Street Park in the No-Action condition would include a shore public walkway and a portion of the upland connection between the City-owned property and the development site.

### Study Area

As shown in Table F-7, there are five additional open space resources anticipated to be developed within the study area by the 2016 analysis year without the proposed actions (refer to Figure F-3).

The City is expected to create an additional public open space on a City-owned property by 2016. The City anticipates reconstructing West Street (D in Figure F-3), between Eagle and Quay Streets, to accommodate an approximately 3,150 linear foot (0.72 acres) two-way, Class 1 physically separated bike path along the west side of the street, approximately 2,370 linear feet (0.54 acres) of which will be within the study area by 2015<sup>8</sup>. It would also include a planted buffer, speed tables, improved pavement markings at intersections, and the underground relocation of existing above-ground utilities. This would be a segment of the Brooklyn Waterfront Greenway.

<sup>&</sup>lt;sup>6</sup> It should be noted that in the future without the proposed actions, the development on the project site would include private, roof-top open space areas accessory to the residential use of the development. The total private open space provided would be approximately 10,000 sf (approximately 0.23 acres). The private open space amenities would improve open space conditions on the development site and help alleviate future open space shortfalls. However, as this open space would not be public space, it was not included in the quantitative analysis.

<sup>&</sup>lt;sup>7</sup> Assumptions for Box Street Park are based on the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan, which contemplates that Box Street Park will combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that will overlook the shore public walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access point for kayaks. The plan, however, is subject to change based on community input that will be gathered during the design development phase for the park.

<sup>&</sup>lt;sup>8</sup> Source: Construction project FMS ID HWK1048A.



Table F-7
Open Space Changes within the Study Area in the 2016 Future without the Proposed Actions

Map	Open Space Resource	Location	Acres		Year			
Letter			Passive Active Total					
	PROJECT AREA							
A	77 Commercial Street As- of-Right Development <sup>1</sup>	B 2472, L 410	0.37	0	0.37	2016		
В	Box Street Park <sup>2</sup>	B 2472, L 425	0.86	2.01	2.87	2016		
		REMAINDER OF THE STUDY ARE	EA					
С	155 West Street	B 2530, L 1, 55, 60	0.51	0.00	0.51	2016		
D	West Street Greenway	West side of West Street, between. Eagle and Quay Streets	0	0.54	0.54	2015		
F	37 Commercial Street As-of-Right Development	B 2472, p/o L 100	0.18	0.00	0.18	2016		
		1.92	2.55	4.47				

Source: PHA research of print and online media, and consultation with the NYCDCP.

In addition, there are two mixed-use No-Action developments along the waterfront anticipated to be developed within the study area by 2016. 155 West Street is located to the south of the project area on the western edge of the study area (C in Figure F-3). The site is required by waterfront zoning regulations to provide public open space. It is expected to include a total of 0.51-acres of publicly accessible open space. 37 Commercial Street (Building 1) is part of the Greenpoint Landing Development and will occur as-of-right (F in Figure F-3). It is located directly adjacent and west of the City-owned parcel. The site is also is required by waterfront zoning regulations to provide public open space. It is expected to include a total of 0.18-acres of publicly accessible open space.

Including the above mentioned No-Action developments, in the future without the proposed actions, the total amount of open space within the study area would increase by approximately 4.47 acres, from 5.29 to a total of 9.76 acres. Active open space would increase by 2.55 acres from 2.28 to 4.83 acres and passive open space would increase by 1.92 acres from 3.01 to 4.93 acres (see Table F-7).

# Quantitative Analysis of Open Space Adequacy

New developments and general background growth in the study area are expected to introduce 5,007 new residents to the area in the future without the proposed actions, along with 4.47 new acres of open space resources currently being developed, and also planned in the future without the proposed actions. Although the new developments would also introduce new employees to the area, as previously mentioned, this analysis focuses exclusively on the potential impacts of the proposed actions on the residential population of the study area. As shown in Table F-8, in the 2016 future without the proposed actions, the total open space ratio for the study area would slightly increase from 0.422 to 0.555 acres per 1,000 residents, which is below the recommended City-wide community district median of 1.5 acres per 1,000 residents.

Assumption: 100% passive recreational use.

<sup>&</sup>lt;sup>2</sup> Assumption: 70% active, 30% passive recreational use based on the Greenpont-Williamsburg Open Space Master Plan.

Table F-8
2016 Analysis of Adequacy of Open Space Resources in the Study Area under No-Action Conditions

Study Area Residential Population		Ope	n Space Acrea	ge	Open Space Ratio per 1,000 People			
		Total	Active	Passive	Total	Active	Passive	
No-Action	17,600	9.76	4.83	4.93	0.555	0.274	0.280	
Existing	12,542	5.29	2.28	3.01	0.422	0.182	0.240	

In addition, the active open space ratio would slightly increase from the existing conditions of 0.182 acres per 1,000 residents to 0.274 acres, which is well below the recommended ratio of 2.0 acres per 1,000 residents, and the study area would continue to be underserved by active open space. The passive open space ratio for the study area's residents would increase from 0.240 acres per 1,000 residents under existing conditions to 0.280 acres per 1,000 residents under the No-Action condition, which is also below the recommended ratio of 0.5 acres per 1,000 residents, and the study area would continue to be under-served by passive open space.

Qualitative Assessment of Open Space Adequacy

The shore public walkway of the No-Action condition and Box Street Park would add 3.24 acres of open space to the study area, and the upland connection would contribute to creating waterfront access for residents of the study area. Along the waterfront, a few blocks south of the project site, the mixed-use development on 155 West Street would also add a shore public walkway.

The West Street multi-use pathway which includes bike lanes, upgraded sidewalks, and other amenities would provide a considerable amount of active recreation open space. This project is to be completed by 2015 and will be part of the Brooklyn Waterfront Greenway. It would provide connections to other open spaces outside the study area including the Bushwick Inlet Park and the East River State Park in Long Island City, Queens.

In addition, the City is expected to construct a Newtown Creek Nature Walk expansion (Map ID A in Figure F-3), which would include approximately 56,062 sf (1.29 acres) of public open space by 2015. However, as the Newtown Creek Nature Walk is located within a half-mile radius but falls outside of the study area boundaries, this open space resource is not included in the quantitative assessment.

# H. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION)

This section describes the open space conditions that would result from the RWCDS associated with the proposed actions by the 2016 build year. It evaluates the potential for the proposed actions to result in significant adverse direct and/or indirect impacts to open space resources based on a comparison of the No-Action condition to the With-Action condition.

The proposed actions would facilitate three mixed-use buildings which would share an integrated first floor, fourth through sixth floors, and cellar base. There would be a total of approximately 720 dwelling units; this would result in an incremental increase of 444 dwelling units over the 276 dwelling units located on the project site under 2016 No-Action conditions. Using the same planning assumptions as the existing conditions and No-Action conditions of 2.61 residents per DU, the proposed actions are expected to introduce a net increase of approximately 1,159 residents and would therefore increase the study area's population to a total of 18,759 residents under 2016 With-Action conditions.

# **Direct Effects Analysis**

As described above, under No-Action conditions, a planned New York City park (Box Street Park) will be developed on the City-owned portion of the project area. Under With-Action conditions, the City would use proceeds from the sale of the development rights from the City-owned property to the applicant to partially fund construction and development of the new park. It is anticipated that the changes contemplated would better serve the surrounding community. As such, no further analysis is warranted. Attachment G, "Shadows," provides an assessment of the potential shadow effects of the proposed project on open space resources, which demonstrates that shadows would not affect the usefulness of any open space resources in the open space study area.

# **Indirect Effects Analysis**

# **Open Space Resources**

The proposed actions include the development of a waterfront open space including a waterfront esplanade with two new connections to Commercial Street<sup>9</sup>. The waterfront open space would have a combined total area of approximately 34,850 sf (0.80 acres), resulting in a net increase of approximately 18,825 sf (0.43 acres) of new open space as compared to the 2016 No-Action conditions. For analysis purposes, it was assumed that the proposed open space would be passive open space.

In addition, as described above, the City is expected to create an approximately 2.87-acre public park by 2016 on 65 Commercial Street (Block 2472, Lot 425), adjacent to the development site. Under the With-Action conditions the City would use proceeds from the sale of the development rights to the applicant to partially fund construction and development of Box Street Park. The Greenpoint-Williamsburg Open Space Master Plan depicts Box Street Park as a mainly active recreational space. The concept design plan shows a large tree-lined multi-purpose field, a comfort station at Commercial Street, and a viewing plaza with a shadow structure bordering the shore public walkway on the Newtown Creek waterfront.

Pursuant to the Greenpoint-Williamsburg Open Space Master Plan, it was assumed that the Box Street Park would be 70 percent active and 30 percent passive open space. Therefore, the total acreage of open space resources in the open space study area would increase by 0.43 acres from 9.76 to 10.19 acres in the future With-Action scenario, with 4.83 acres of active open space and 5.36 acres of passive open space.

# **Assessment of Open Space Adequacy**

#### Quantitative Assessment

As discussed above, the projected open space study area population by 2016 in the future with the proposed action would be approximately 18,759 residents. As a result, the total open space ratio in the future with the proposed actions would be .543 acres per 1,000 residents, a decrease of 0.012 acres from 0.555 (2.16 percent) compared to the future No-Action ratio (see Table F-9). The active open space ratio with the proposed actions would be 0.257 acres per 1,000 residents, and the passive open space ratio with the proposed actions would be 0.286 acres per 1,000 residents, which represent an active open

The proposed development would also include approximately 14,500-sf (0.33-acres) of rooftop open space accessory to residential uses on the development site. This private open space would help to partially offset the increased residential population's additional demand on the study area's open space resources. However, as this open space would not be public space, it was not included in the quantitative analysis.

space change of 0.017 acres (6.20 percent decrease) and a passive open space increase of 0.006 acres (2.14 percent), respectively, compared to No-Action conditions (see to Table F-9).

# **Impact Assessment**

Impact determinations are based in part on how a project would change the open space ratios in the study area. According to the 2012 *CEQR Technical Manual*, if a proposed project would result in a decrease in open space ratios compared with those in the future without the project, the decrease is generally considered to be a substantial change if it would approach or exceed 5 percent. Or, if a study area exhibits a low open space ratio (e.g., below 1.5 acres per 1,000 residents or 0.15 acres of passive space per 1,000 nonresidential users), indicating a shortfall of open space, smaller decreases in that ratio as a result of the action may constitute significant adverse impacts.

Table F-9
2016 Future with the Proposed Actions: Open Space Ratio Summary

	Existing	No-Action	With Action
Study Area Population (number	of people)		
Residential	12,542	17,600	18,759
Open Space Acreage (acres)			
Active	2.28	4.83	4.83
Passive	3.01	4.93	5.36
Total	5.29	9.76	10.19
Open Space Ratio			
Active	0.182	0.274	0.257
Passive	0.240	0.280	0.286
Total	0.422	0.555	0.543
% Change in Open Space Ratio			
		From Existing to No-Action	From No-Action to With- Action
Active	-	50.55%	-6.20%
Passive	-	16.67%	2.14%
Total	-	31.52%	-2.16%

In addition to the quantitative factors cited above, the 2012 CEQR Technical Manual also recommends consideration of qualitative factors in assessing the potential for open space impacts. These include the availability of nearby destination resources, the beneficial effects of new open space resources provided by a project, and the comparison of projected open space ratios with established city guidelines. It is recognized that the open space ratios of the city guidelines described above are not feasible for many areas of the city, and they are not considered impact thresholds on their own. Rather, these are benchmarks that indicate how well an area is served by open space.

As noted above, the development site is not located in an area underserved by open space. Based on the analysis above, the proposed actions would result in a 2.16 percent decrease in the open space ratio in the future with the proposed actions, which is below the 5 percent decrease of open space CEQR threshold and therefore is not considered a substantial decrease. As a result, no significant adverse impacts on open space would result from the proposed actions.

# Qualitative Assessment

In the future with the proposed actions, ratios of open spaces to residents would continue to be lower than both the 1.5 acres per 1,000 residents measure of open space adequacy and the optimal planning goals furnished by NYCDCP. The population to be generated by the proposed actions is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific groups.

As discussed above, the proposed actions would provide 0.43 more acres of publicly accessible open space in the With-Action condition than in the No-Action condition on a waterfront site that is currently completely inaccessible to the public. Greenpoint has both a limited amount of existing open space and a limited amount of available land near existing residential development on which to create new open space. The new shore public walkway, with connections to existing open spaces, would be an amenity for the proposed project and for the Greenpoint waterfront, consistent with the area's Waterfront Access Plan. Together with adjoining waterfront areas to be developed by the City, and by other private property owners, a continuous waterfront greenway would be provided. As discussed in Attachment C, Land Use, Zoning, and Public Policy, the waterfront open space would be subject to the Zoning Resolution's Article VI, Chapter 2, Special Regulations Applying in the Waterfront Area (the "Waterfront Regulations"), including the specific requirements of ZR Section 62-60 and 62-831 Design Standards for Waterfront Areas, the BK-1 Waterfront Access Plan for Greenpoint-Williamsburg.

### Conclusion

Overall, the proposed actions would not have any significant adverse impacts on open space in the study area<sup>10</sup>. The publicly accessible open space provided by the applicant would total approximately 34,850 sf (approximately 0.80 acres)<sup>11</sup>. These open spaces, meeting the requirements for shore public walkway, upland connections, and amenities, providing public waterfront access in an area where there is only limited access at present. In addition, as described above, the City's Box Street Park will be directly adjacent to the development site and will include 2.87 acres of public open space in the 2016 future, with 70 percent active and 30 percent passive open space.

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<sup>&</sup>lt;sup>10</sup> It should be noted that this analysis does not include the private open space that would be developed on the development site as a result of the proposed project, or the open spaces that are located just beyond the study area boundaries, such as McCarren Park, the 35.71-acre regional open space located approximately one mile south of the development site. The private open space provided on the development site and open space resources beyond the study area boundary would continue to be a factor in relieving the active open space deficiency of the study area.

<sup>&</sup>lt;sup>11</sup> Moreover, the proposed project would include indoor and outdoor amenity open space areas accessory to residential uses of the development. Although these facilities would not be publicly accessible, they would offset the open space demand generated by building residents, particularly the demand for active open space, and would help to alleviate a potential shortfall of active open space in the study area. However, as this open space would not be public, it would not improve the study area's open space ratios and the shortfalls in the open space ratios in the quantitative analysis described above would remain.

# ATTACHMENT G SHADOWS

### I. INTRODUCTION

According to the 2012 CEQR Technical Manual, a shadow is defined as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space, or feature. A significant adverse shadow impact is considered to occur when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource of concern 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. Sunlight-sensitive resources include publicly accessible open spaces (such as parks, playgrounds, school yards etc.), historic architectural resources if the features that make the resource significant depend on sunlight, natural resources, and greenstreets. Pursuant to the 2012 CEQR Technical Manual, shadows on city streets and sidewalks or on other buildings are not considered significant. Private open spaces, such as front and back yards, stoops, and vacant lots, are considered non sunlight-sensitive resources under CEQR, and therefore, their assessment for shadow impacts is not required. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are also not considered significant under CEQR.

In accordance with 2012 CEQR Technical Manual guidelines, this attachment provides a shadows assessment to determine whether the proposed development would result in new shadows long enough to reach any sunlight-sensitive resources (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).

As detailed in Attachment A, "Project Description", the proposed actions involve a special permit that would waive maximum base and building heights at the development site to allow for the construction of three buildings that would include a 429 foot tall residential tower. As the proposed development would be greater than 50 feet in height and would be located adjacent to several sunlight-sensitive resources, a shadow assessment is required by CEQR guidelines in order to determine whether the proposed development would result in new shadows long enough to reach any of the resources at any time of year. As discussed below, compared to the No-Action condition, the shadows generated as a result of the proposed development would not result in any significant adverse shadow impacts on any of the identified sunlight-sensitive resources.

# II. METHODOLOGY

First, a preliminary screening assessment must be conducted to ascertain whether the shadows resulting from the proposed development could reach any sunlight-sensitive resource at any time of year. The preliminary screening assessment consists of three tiers of analysis. The first tier identifies the longest shadow study area based on the height of the proposed development. If there are sunlight-sensitive resources within this 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 looking at specific representative

days of the year and determining the maximum extent of shadows over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadows analysis is required to determine the extent and duration of the incremental shadow resulting from the proposed development. 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.

### III. PRELIMINARY SCREENING ASSESSMENT

# **Tier 1 Screening Assessment**

A base map was developed (see Figure G-1) showing the location of the proposed development site, the surrounding street layout, and all potentially sunlight-sensitive resources (publicly accessible open spaces, architectural resources, natural resources, and greenstreets). According to the 2012 *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. The height of the proposed development (429 feet) was used to determine the maximum shadow radius of 1,845 feet (Tier 1 Assessment).

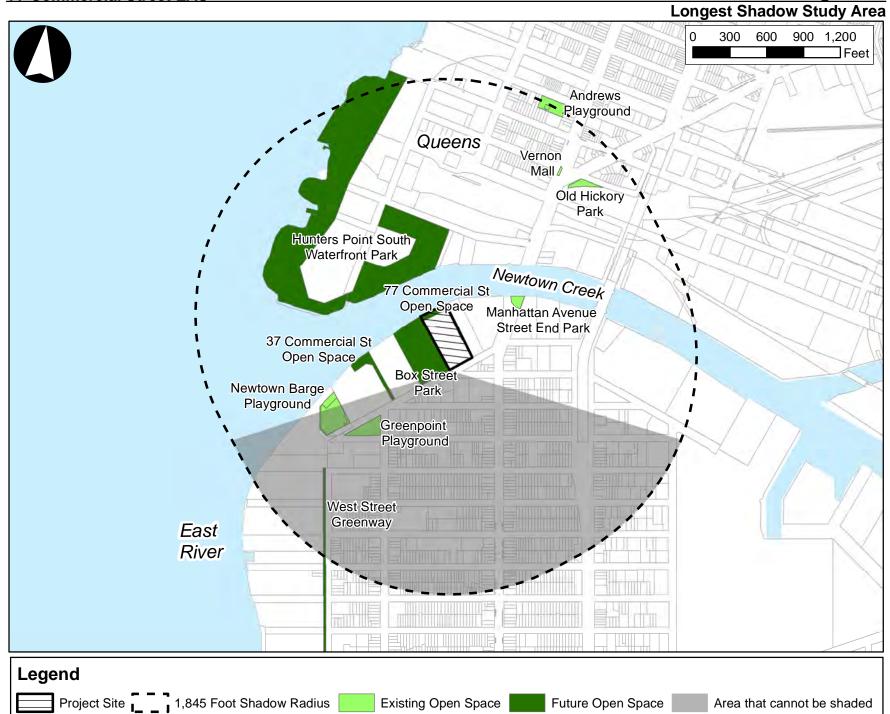
Within this longest shadow area, there are several sunlight-sensitive resources including existing public open spaces as well as planned open spaces expected under 2016 No-Action conditions. Therefore, further screening is warranted in order to determine whether they would be affected by any project-generated incremental shadows.

The proposed development would result in incremental shadows cast on the East River and Newtown Creek. As discussed in Attachment B, these bodies of water are degraded natural resources. There are contaminants present in these waters, these water bodies provide limited opacity, are affected by strong hydrodynamic features, and any wildlife present in the area is tolerant of urban conditions and low-quality habitat. Shadows cast on them would not have the potential to result in significant adverse impacts and no further assessment is warranted.

# **Tier 2 Screening Assessment**

For the Tier 2 screening assessment, according to the 2012 CEQR Technical Manual, shadows cast by proposed developments fall to the north, east, and west. In New York City, the shadow area is between -108 degrees from true north and +108 degrees from true north. Conversely, any area lying to the south of a site in the triangular area beyond these angles cannot be shaded by a proposed development. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening lie within the portion of the longest shadow study area that potentially can be shaded by the projected development. It should be noted that if a sunlight-sensitive feature on an architectural resource is located on a facade that faces directly away from the project area (i.e. when an architectural resource is west of the project area and the sunlight-sensitive feature is on the west facade of that structure), no further shadows assessment is needed for that particular resource because no shadows from the proposed development could fall on that sunlight-sensitive face.

Figure G-1 presents the results of the Tiers 1 and 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 projected development sites. As illustrated in Figure G-1,



there are a number of sunlight-sensitive resources that fall within the maximum shadow radius including existing open space resources as well as planned open spaces expected under 2016 No-Action conditions. These include Greenpoint Playground, Newtown Barge Playground, Andrews Playground, Vernon Mall, Old Hickory Park, Manhattan Avenue Street End Park, the planned Hunters Point South Waterfront Park, the planned waterfront access area at 37 Commercial Street, the planned waterfront public open space at 77 Commercial Street, the planned Box Street Park, and the planned West Street Greenway (refer to Attachment F, "Open Space").

As the closest historic resource to the proposed development site is the Astral Apartments, located approximately 1,000 feet to the south on Franklin Street between India Street and Java Street, there are no sunlight-sensitive historic resources within the Tier 2 screening area and therefore the potential for adverse shadow impacts on historic resources can be screened out.

# **Tier 3 Screening Assessment**

Based on the results of the Tier 2 screening assessment, a Tier 3 screening assessment was performed to determine if shadows resulting from the proposed development can reach any of the sunlight-sensitive resources at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis days. As the proposed development represents the worst-case scenario for environmental analysis it was used for all three-dimensional computer modeling of shadows. As shadows from the proposed development would reach five of the sunlight-sensitive open space resources identified in the Tier 2 screening assessment on one or more of the four representative analysis days, a detailed shadow analysis is required.

# IV. ASSESSMENT OF SHADOW IMPACTS

#### **Resources Affected by Project-Generated Incremental Shadows**

Per the shadow assessment provided below, the proposed development would increase the incremental shadow coverage on the planned Box Street Park and the planned 77 Commercial Street open space on all four analysis dates. In addition, the proposed development would increase incremental shadow coverage at the planned Hunters Point South Waterfront Park on March 21 and December 21, at the planned 37 Commercial Street open space on May 6 and June 21, and at the Manhattan Avenue Street End Park on May 6.

# Planned Hunters Point South Waterfront Park

The Hunter's Point South waterfront park is currently under construction and was analyzed as "Site A" parkland in the 2008 *Hunter's Point South Rezoning and Related Actions FEIS*. The 2008 FEIS described the waterfront park as an approximately 10.65-acre open space stretching along the site's East River and Newtown Creek waterfronts from approximately 50<sup>th</sup> Avenue in the north to the terminus of Second Street in the south. The southern portion of the waterfront park, the area closest to the proposed development site, juts into the East River at the mouth of Newtown Creek. With dramatic views and sloping topography, the 2008 FEIS expected that this area would most likely be developed as a lawn area with vegetated slopes along the water's edge. Based on the information provided in the 2008 FEIS, it is estimated that the majority of the southern portion of this open space would be used for passive recreation.

The area to the east of Second Street was identified as "Site B" open space in the 2008 FEIS and was expected to include a shore public walkway and access area along the Newtown Creek waterfront, a

supplemental open space required by zoning adjacent to the shore public walkway, and a new 55<sup>th</sup> Avenue open space. In total, approximately 2.42 acres of new public open space were expected, including 0.37 acres of active space and 2.05 acres of passive space.

# Planned 37 Commercial Street Open Space

37 Commercial Street is a two building as-of-right development that will occur as part of the Greenpoint Landing Development. It is located to the west of the proposed development site and Building 1 is expected to be constructed by 2016. Building 1 is required to provide a waterfront public access area per the Greenpoint-Williamsburg Waterfront Access Plan ("WAP BK-1"). An upland open space area will be provided when the second building is constructed. These publicly accessible open spaces are expected to total approximately 0.82-acres and would be divided evenly between passive and active uses.

# Planned Box Street Park at 65 Commercial Street

Box Street Park at 65 Commercial Street is expected to be an approximately 2.87-acre (125,060 sf) City-owned public park located immediately west of the project area. Designs for Box Street Park were not complete at the time this EAS was prepared. In 2013 the City issued a Request for Proposals (RFP) for design services at the park. According to the RFP, it is intended that the park should be designed to be continuous with and openly accessible from adjoining waterfront public access areas built by private entities. As such, both of these open spaces would include continuous waterfront esplanades with typical amenities including seating. It is anticipated that Box Street Park would be comprised of 70 percent active open space and 30 percent passive open space.<sup>1</sup>

# Planned 77 Commercial Street Open Space

In the 2016 future without the proposed development, the applicant would develop a waterfront open space including a waterfront esplanade with one new upland connection to a public street. The waterfront open space would have a combined total area of approximately 34,965 sf (0.80 acres). For analysis purposes, it is assumed that this proposed open space would be for passive recreational use.

# Manhattan Avenue Street End Park

The Manhattan Avenue Street End Park is an approximately 0.29-acre park located at the northern terminus of Manhattan Avenue at its intersection with Newtown Creek. The park was opened in 2007 as part of NYCDOT's pedestrian oriented reconstruction projects. The space was developed as a passive recreation area and contains trees, a small lawn, benches, pedestrian pathways, and a boat launch at the water's edge.

<sup>&</sup>lt;sup>1</sup> Assumptions for Box Street Park are based on the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan, which contemplates that Box Street Park will combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that will overlook the shore public walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access point for kayaks. The plan, however, is subject to change based on community input that will be gathered during the design development phase for the park.

# **Shadows Analysis**

Per 2012 CEQR Technical Manual guidelines, shadow analyses were performed for the five open space resources 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. As discussed above, CEQR guidelines define 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 results of the shadow analysis show the incremental difference in shadow impact between the With-Action and No-Action conditions (see Table G-1).

Table G-1 Duration of Incremental Shadows on Open Space Resources

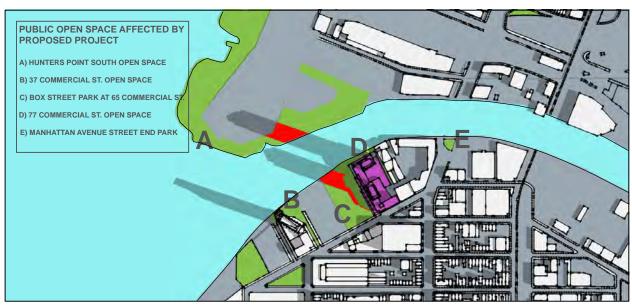
	I			
Dagannaa			<b>Analysis Date</b>	
Resource	March 21	May 6	June 21	December 21
<b>Hunters Point South</b>				
Waterfront Park	7:36 – 11:56			8:51 – 12:33
Beginning – Ending Time				
Duration (hours:minutes)	4:20			3:42
37 Commercial St.				
Open Space		6:27 - 7:30	5:57 - 7:29	
Beginning – Ending Time				
Duration (hours:minutes)		1:03	1:32	1
Box Street Park at				
65 Commercial St.	7:36 - 10:26	6:27 - 10:34	5:57 - 10:46	8:51 – 9:38
Beginning – Ending Time				
Duration (hours: minutes)	2:50	4:07	4:49	0:47
77 Commercial St.				
Open Space	11:35 - 13:26	11:30 - 14:25	9:42 - 15:00	10:09 - 11:52
Beginning – Ending Time				
Duration (hours:minutes)	1:51	2:55	5:18	1:43
Manhattan Avenue		-	_	
Street End Park		15:28 - 16:16		
Beginning – Ending Time				
Duration (hours:minutes)		0:48		

Note: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per 2012 CEQR Technical Manual guidelines.

As shown in Table G-1, the proposed development would increase the incremental shadow coverage on the planned Box Street Park and the planned 77 Commercial Street open space on all four analysis dates. In addition, the proposed development would increase incremental shadow coverage on the planned Hunters Point South Waterfront Park on the March 21 analysis date, at the planned 37 Commercial Street open space on May 6 and June 21, and at the Manhattan Avenue Street End Park on May 6. Figures G2, G3, G4, and G5 show representative shadow views for the four analysis dates on the open space resources of concern.

It should be noted that, per the 2012 *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight saving time that is in effect from mid-March to early November. As such, the times reported in this attachment for March 21, May 6, and June 21 need to have one hour added to reflect the Eastern Daylight Saving Time.

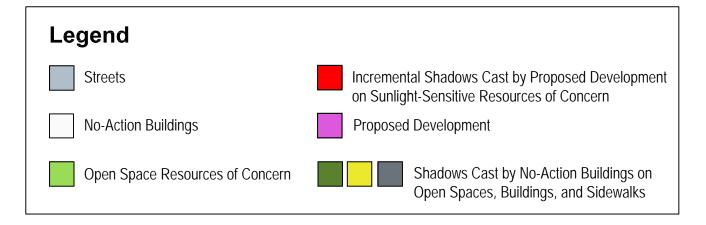
**Project Incremental Shadows: March 21** 



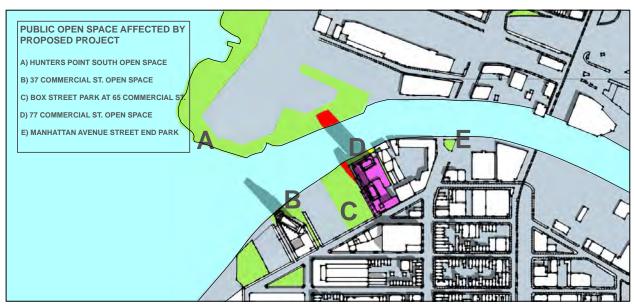
March 21, 08:00 (EST)



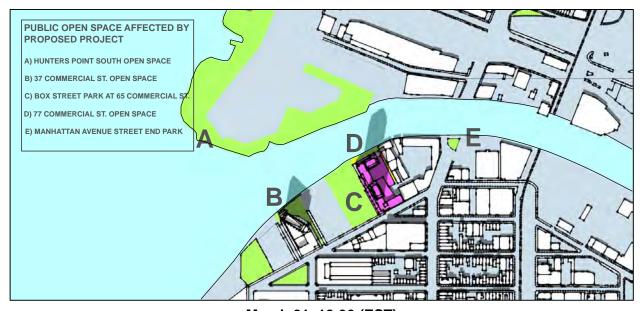
March 21, 09:00 (EST)



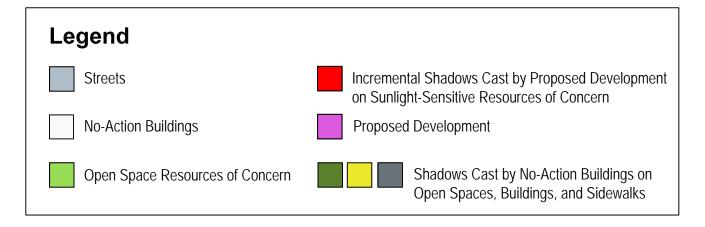
**Project Incremental Shadows: March 21** 

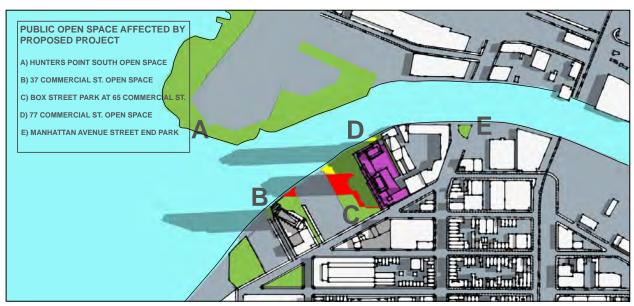


March 21, 10:00 (EST)

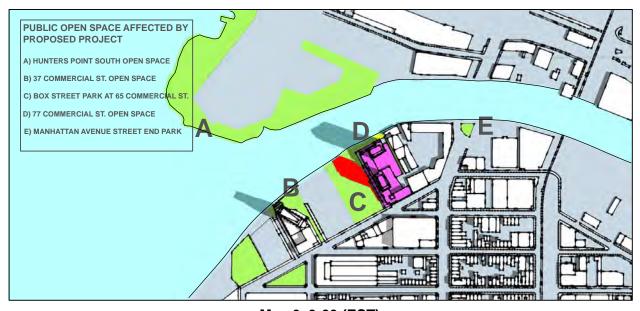


March 21, 12:30 (EST)

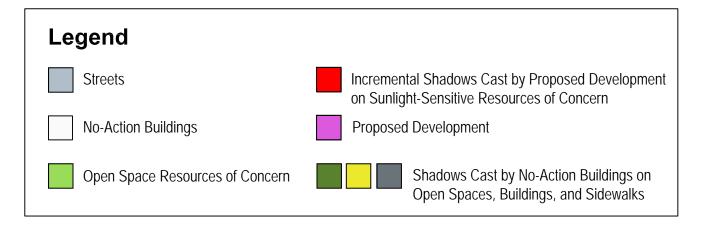


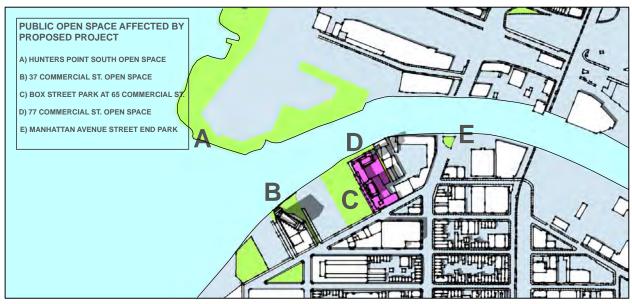


May 6, 7:00 (EST)

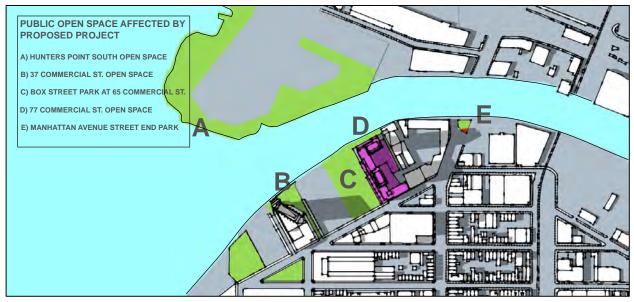


May 6, 9:00 (EST)

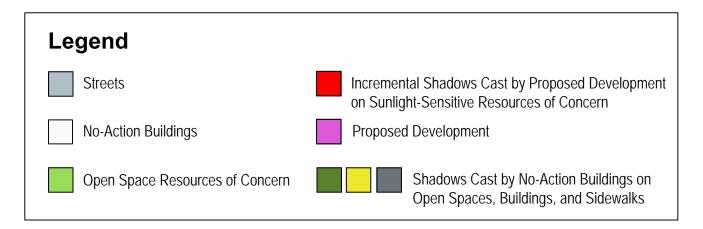


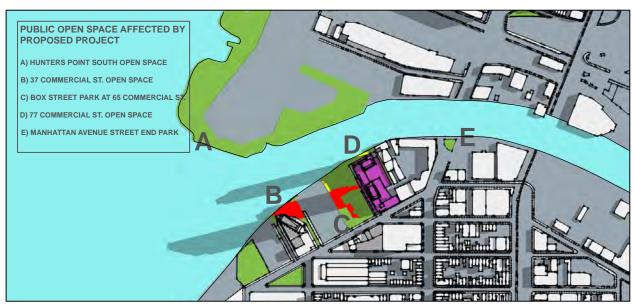


May 6, 14:00 (EST)

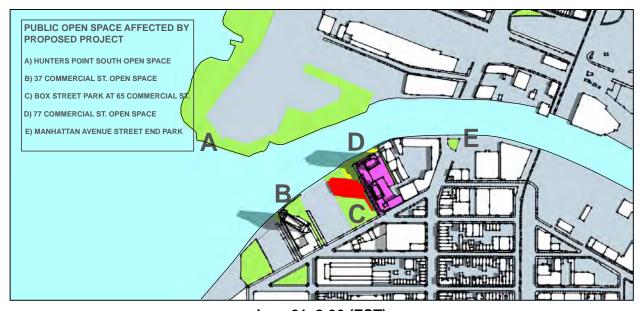


May 6, 16:00 (EST)

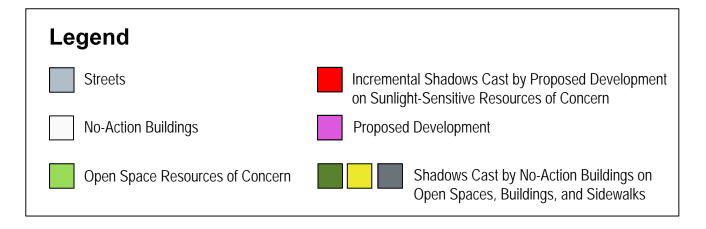


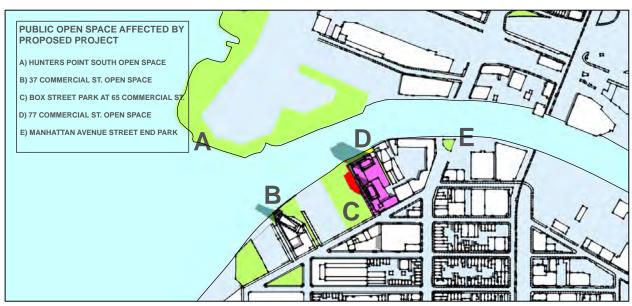


June 21, 6:30 (EST)

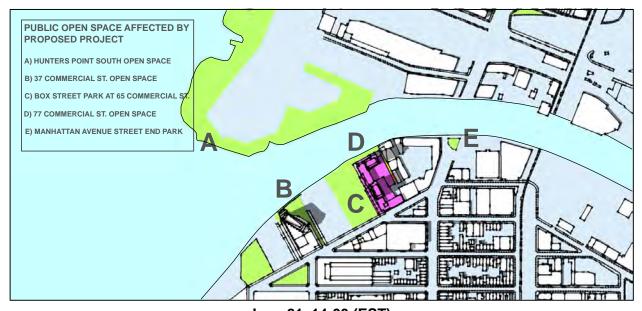


June 21, 8:30 (EST)

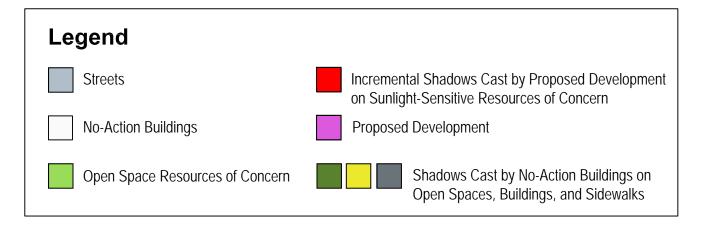


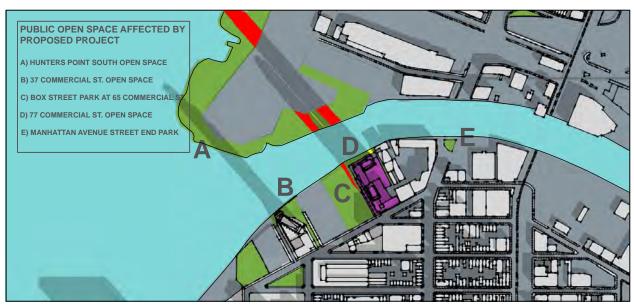


June 21, 10:00 (EST)



June 21, 14:00 (EST)

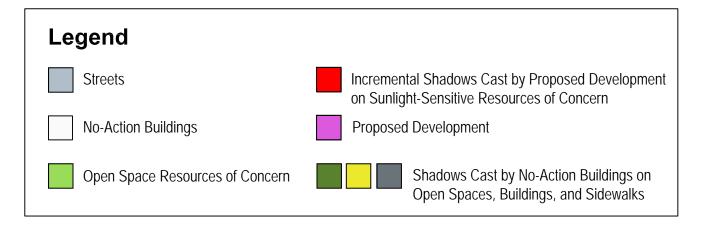




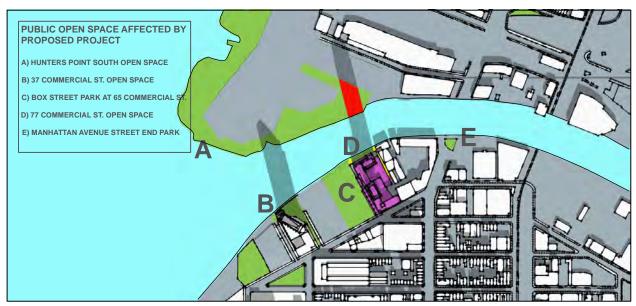
**December 21, 9:00 (EST)** 



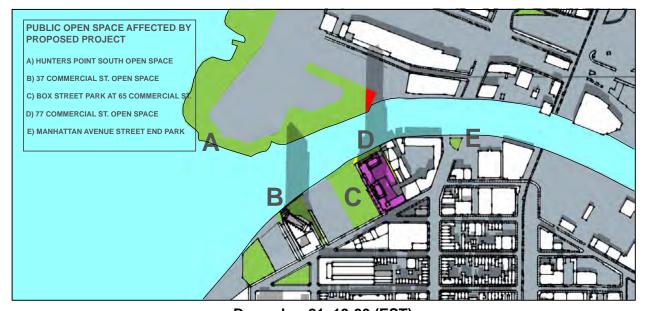
December 21, 10:00 (EST)



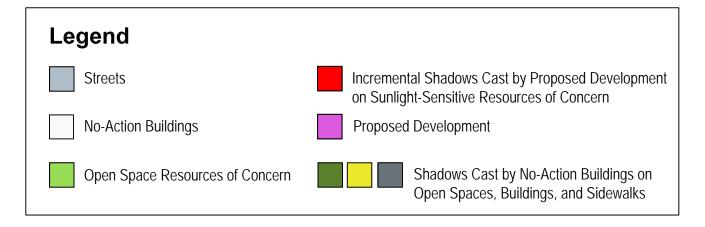
**Project Incremental Shadows: December 21** 



December 21, 11:00 (EST)



December 21, 12:00 (EST)



# March 21 (September 21)

On March 21 the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. On the equinoxes, the proposed development would not cast any incremental shadows on the planned 37 Commercial Street open space or the Manhattan Avenue Street End Park.

# Planned Hunters Point South Waterfront Park

The proposed development would cast incremental shadows on the planned Hunters Point South Waterfront Park beginning at 7:36 AM and continuing until 11:56 AM, for a duration of 4 hours and 20 minutes. As indicated in Figures G-2a and G-2b, the extent of shadow coverage would be limited to a relatively small area along the eastern edge of the park and all incremental shadow coverage would terminate shortly before noon.

# Planned Box Street Park at 65 Commercial Street

The proposed development would cast incremental shadows on the planned Box Street Park at 65 Commercial Street beginning at 7:36 AM and continuing until 10:26 AM, for a duration of 2 hours and 50 minutes. As indicated by Figures G-2a and G-2b, incremental shadows would move across this public open space from west to east and the proportion of the park covered in shadow would decrease in the late-morning period. The majority of the open space would not be shaded by 9:00 AM.

# Planned 77 Commercial Street Open Space

The proposed development would cast incremental shadows on the planned 77 Commercial Street open space beginning at 11:35 AM and continuing until 1:26 PM, for a duration of 1 hour and 51 minutes. As indicated by Figure G-2b, the extent of shadow coverage would be limited to a small area along the proposed development's eastern edge.

# May 6 (August 6)

On May 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, the proposed development would not cast any incremental shadows on the planned Hunters Point South Waterfront Park.

Planned 37 Commercial Street Open Space

The proposed development would cast incremental shadows on the planned 37 Commercial Street open space beginning at 6:27 AM and continuing until 7:30 AM, for a duration of 1 hour and 3 minutes. As shown in Figure G-3a, the majority of the open space would not be shaded and only a small portion in the northeastern corner of the park would be cast in shade. Shadow coverage would decrease throughout the morning, with shadows exiting at 7:30 AM.

#### Planned Box Street Park at 65 Commercial Street

The proposed development would cast incremental shadows on the planned Box Street Park at 65 Commercial Street beginning at 6:27 AM and continuing until 10:34 AM, for a duration of 4 hours and 7 minutes. As indicated in Figure G-3a, the proportion of the park covered in shadow would decrease in the late-morning period and the majority of the open space would not be shaded by 9:00 AM.

# Planned 77 Commercial Street Open Space

The proposed development would cast incremental shadows on the planned 77 Commercial Street open space beginning at 11:30 AM and continuing until 2:25 PM, for a duration of 2 hours and 55 minutes. As seen in Figure G-3b, the extent of shadow coverage would be limited to a small area along the proposed development's eastern edge.

### Manhattan Avenue Street End Park

The proposed development would cast incremental shadows on the proposed Manhattan Avenue Street End Park beginning at 3:28 PM and continuing until 4:16 PM, for a duration of 48 minutes. As indicated in Figure G-3b, project-generated shadows would be limited to the southeastern corner of the park.

# 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 not cast any incremental shadows on the planned Hunters Point South Waterfront Park or Manhattan Avenue Street End Park.

# Planned 37 Commercial Street Open Space

The proposed development would cast incremental shadows on the planned 37 Commercial Street open space beginning at 5:57 AM and continuing until 7:29 AM, for a duration of 1 hour and 32 minutes. As shown in Figure G-4a, the open space would receive shade in the early morning with all project-generated shadows exiting by 7:29 AM.

# Planned Box Street Park at 65 Commercial Street

The proposed development would cast incremental shadows on the planned Box Street Park at 65 Commercial Street beginning at 5:57 AM and continuing until 10:46 AM, for a duration of 4 hours and 49 minutes. As indicated in Figures G-4a and G-4b, shadows would generally be limited to the western portion of the park during the early morning before moving northward throughout the day. The majority of the open space would not be shaded by 8:30 AM.

# Planned 77 Commercial Street Open Space

The proposed development would cast incremental shadows on the planned 77 Commercial Street open space beginning at 9:42 AM and continuing until 3:00 PM, for a duration of 5 hours and 18 minutes. As seen in Figure G-4b, the extent of shadow coverage would be limited to a small area along the proposed development's northern and eastern edges.

# December 21

On the winter solstice, December 21, the day of the year with the shortest period of daylight, the sun is low in the sky and shadows are at their longest but move rapidly. The proposed development would not cast incremental shadows on the planned 37 Commercial Street open space or Manhattan Avenue Street End Park.

# Planned Hunters Point South Waterfront Park

The proposed development would cast incremental shadows on the planned Hunters Point South Waterfront Park beginning at 8:51 AM and continuing until 12:33 PM, for a duration of 3 hours and 42 minutes. As indicated in Figures G-5a and G-5b, project-generated incremental shadows would move quickly from the northwestern portion of the waterfront park to the southeastern. The majority of the park would not be cast in shadow as a result of the proposed development.

### Planned Box Street Park at 65 Commercial Street

The proposed development would cast incremental shadows on the planned Box Street Park at 65 Commercial Street beginning at 8:51 AM and continuing until 9:38 AM, for a duration of 47 minutes. As indicated by Figure G-5a, incremental shadows would generally be limited to the northeastern corner of the park and the majority of the park would not be cast in shadows as a result of the proposed development.

### Planned 77 Commercial Street

The proposed development would cast incremental shadows on the planned 77 Commercial Street open space beginning at 10:09 AM and continuing until 11:52 PM, for a duration of 1 hour and 43 minutes. As indicated in Figure G-5b, project-generated incremental shadows would be limited to a small area along the proposed development's eastern edge.

#### Assessment

# Planned Hunters Point South Waterfront Park Analysis

The proposed development would cast incremental shadows on the planned Hunters Point South Waterfront Park for approximately four and a half hours on March 21 and three and a half hours on December 21. This would include small increases in shadow coverage during the morning and early afternoon on the park's planned passive recreation areas (Site A) as well as shore public walkway and access area along the Newtown Creek waterfront (Site B). There would be no incremental shadows cast on this open space during the other three analysis dates.

Project-generated incremental shadows would only occur on the March 21 and December 21 analysis days and are not expected to be of large enough extent or duration to result in significant adverse shadow impacts. On March 21, only a small area along the eastern edge of the park would be cast in incremental shadows and the open space would still obtain adequate sunlight for its vegetation (at least the 4 to 6 hour minimum specified in the 2012 CEQR Technical Manual). On December 21, according to the 2012 CEQR Technical Manual, vegetation is generally not sensitive to shadows and the proposed development's incremental shadows would have no impact on plant growth. Furthermore, the incremental shadows created as a result of the proposed development are not expected to substantially reduce the usability of this open space, as the affected sections of the open space are not expected to contain any playgrounds or other active recreation areas that require sunlight. Therefore, the new incremental shadows cast as a result of the proposed development would not adversely affect the utilization or enjoyment of the planned Hunters Point South Waterfront Park.

# Planned 37 Commercial Street Open Space Analysis

Incremental shadows cast by the proposed development on the planned 37 Commercial Street open space would be very minimal, both spatially and temporally. The incremental shadows would cover

small areas of the planned 0.82-acre open space and would occur for only approximately one hour on May 6 and one and a half hours on June 21. On both May 6 and June 21, project-generated incremental shadows would exit the open space by 7:30 AM, long before the primary hours of utilization, and would not substantially reduce the usability or enjoyment of the open space. Furthermore, as the open space would still obtain adequate sunlight for vegetation during the plant growing season, any grass, trees, or plantings included in the planned open space would not be adversely affected. As such, the effects of shadow coverage on both park users and vegetation would be essentially the same with or without the proposed development and no significant adverse shadow impacts would result.

# Planned Box Street Park at 65 Commercial Street Analysis

The proposed development would cast incremental shadows on the planned Box Street Park at 65 Commercial Street on all four analysis dates. Incremental shadow durations would range from approximately 47 minutes on December 21 to 4 hours and 49 minutes on June 21. While designs for the park are not expected to be finalized until after this EAS has been completed, it was noted in the 2008 Masterplan for Greenpoint and Williamsburg (which is subject to change in response to community feedback) that a multi-purpose playing field using synthetic turf is a possibility for this open space.

On all analysis days, project-generated incremental shadows would exit the open space by approximately 10:45 AM, long before the primary hours of utilization, and would not substantially reduce the usability or enjoyment of the open space. Furthermore, as the open space would still obtain adequate sunlight for vegetation during the plant growing season (or could be designed to include synthetic turf), any grass, trees, or plantings included in the planned open space would not be adversely affected. Therefore, the new incremental shadows cast as a result of the proposed development would not adversely affect the utilization or enjoyment of the planned 37 Commercial Street open space.

# Planned 77 Commercial Street Open Space Analysis

The shadows analysis determined that while the duration of incremental shadows on the planned 77 Commercial Street open space would range up to approximately five and a half hours on June 21, coverage of incremental shadows would be extremely limited. With or without the proposed development, the shadow conditions on this open space resource would not be significantly different. Further, this type of open space's overall sensitivity to shadows is limited given that it is being developed adjacent to a high-rise development. This waterfront open space will be created as required under the WAP BK-1. As with all waterfront open spaces required under City's waterfront zoning regulations, such spaces are built in connection with new buildings on waterfront lots. Given the proximity between waterfront buildings and the open spaces on their sites, there is an inherent interconnection between the two that should be accounted for in design of park elements, including accounting for the affects of shadows from waterfront buildings.

Accordingly, given both the relatively limited coverage of action-generated shadows and the characteristics of this waterfront open space, the proposed development would not result in significant adverse shadows impacts.

### Manhattan Avenue Street End Park Analysis

The shadows analysis determined that the duration and coverage of incremental shadows on the Manhattan Avenue Street End Park would be limited. On May 6, project-generated incremental shadows would last for only approximately 48 minutes in the late afternoon. As these shadows would be limited to the southeastern corner of the park, which consists of a paved walking path and some planted vegetation space, it is expected that the open space would still obtain adequate sunlight for plant

growing and utilization would not be affected. As such, with or without the proposed development, the shadow conditions on this open space resource would not significantly differ and no significant adverse shadow impacts would result.

# ATTACHMENT H URBAN DESIGN AND VISUAL RESOURCES

#### I. INTRODUCTION

The 2012 CEQR Technical Manual states that the urban design components and visual resources determine the "look" of a neighborhood - its physical appearance, including the street pattern, the size and shape of buildings, their arrangement on blocks, streetscape features, natural resources, and noteworthy views that may give an area a distinctive character. Pursuant to CEQR methodology, projects that would allow a project to potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings may warrant a detailed urban design and visual resources analysis. Since use of the development rights from the adjacent City-owned property would necessitate certain height and setback waivers (see Attachment A, "Project Description,"), a detailed urban design and visual resources analysis is warranted. However, it should be noted that, apart from the requested height and setback waivers, the proposed actions would fully comply with waterfront zoning (see Appendix 1, "Urban Waterfront Revitalization Program"). In addition, the proposed actions would be consistent with development anticipated in the surrounding area in the No-Action condition.

This attachment considers the potential for the proposed actions to affect the urban design characteristics and visual resources of the project area and the study area. As described in Attachment A, "Project Description," the project area is comprised of the development site which is located at 77 Commercial Street (Block 2472, Lot 410) and the adjacent City-owned parcel located at 65 Commercial Street (Block 2472, Lot 425, the "City-owned property" and, collectively with the development site, the "project area"), in the Greenpoint neighborhood of Brooklyn Community District 1. The analysis presented below follows the guidelines of the 2012 *CEQR Technical Manual* and addresses each of the above-listed characteristics for existing conditions, the future without the proposed actions (the No-Action condition), and the future with the proposed actions (With-Action condition) for a 2016 build year.

# II. PRINCIPAL CONCLUSIONS

#### **URBAN DESIGN**

The proposed development facilitated by the proposed actions would not result in significant adverse urban design impacts. Similar to the No-Action condition, the proposed actions would result in a building that reflects the trends of new development that has occurred in the area since the area was rezoned in 2005. The building envelope under With-Action conditions would be consistent with the varied building heights of the buildings in the surrounding area. In addition, the proposed waterfront open space would facilitate 0.43 more acres of publicly accessible open space.

#### VISUAL RESOURCES

The proposed actions would not result in significant adverse impacts to visual resources. The proposed actions would open up new view corridors to significant visual resources that are currently obstructed by fencing and inaccessible to the public. In addition, the proposed actions would result in the creation of new visual resources in the form of waterfront open space. While the proposed actions would partially obstruct select views of certain visual resources, these views are not unique and the new views resulting from the proposed development (which would be along the Brooklyn WAP-designated view corridors and along the proposed waterfront open space) would create new enhanced views.

# III. METHODOLOGY

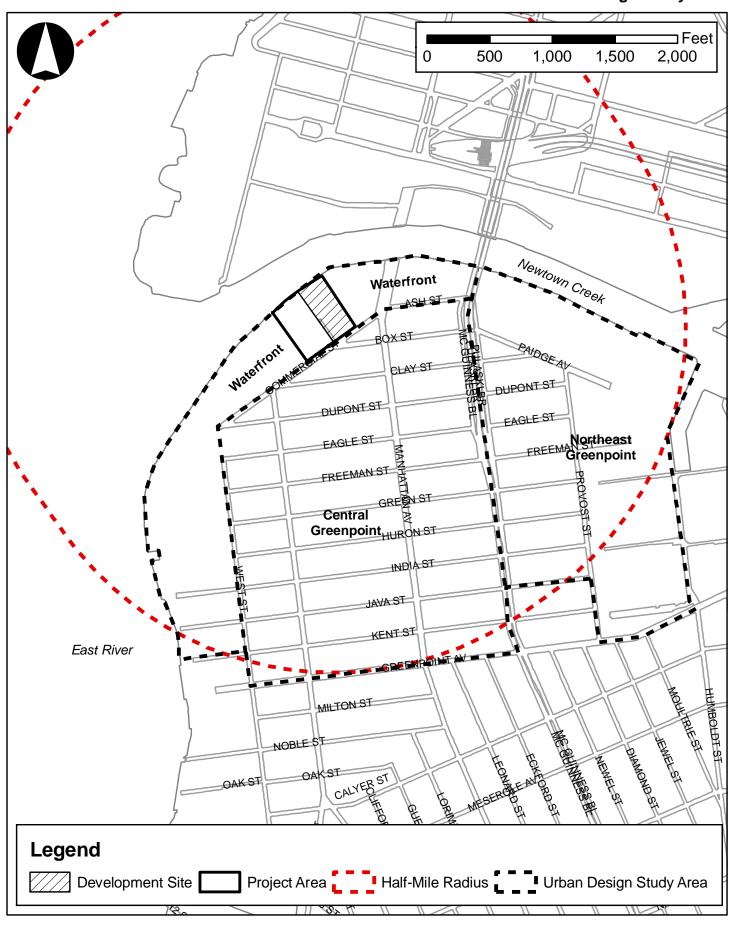
In accordance with the 2012 CEQR Technical Manual, this analysis considers the effects of the proposed actions on the following elements that collectively form an area's urban design:

- Street Pattern and Streetscape—the arrangement and orientation of streets define location, flow of activity, 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*—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.

Pursuant to CEQR methodology, this analysis evaluates the potential for impacts on two areas - the project area and a study area where the project may influence land use patterns and the built environment (see Figure H-1). As described in Attachment A, "Project Description," the project area is comprised of the development site (approximately 2.54 acres) at 77 Commercial Street and the Cityowned property (approximately 2.87 acres) at 65 Commercial Street in Greenpoint, Brooklyn. The project area has frontages along Commercial Street and Newtown Creek.

The urban design study area encompasses the half-mile area around the project area. A half-mile study area was deemed appropriate for the project given the project's scale, waterfront location, and surrounding urban fabric. Boundaries of the study area are as follows: Kent and Java Streets and Greenpoint Avenue to the south, the northerly prolongation of Humboldt Street to the east, Newtown Creek to the north, and the East River to the west. Pursuant to CEQR methodology, the urban design study area is also consistent with the land use study area. As shown in Figure H-1, for analysis purposes, the study area is divided into three subareas within each the buildings and urban form share common characteristics.

# **Urban Design Study Area**



In addition, this analysis considers the effects of the proposed actions on views from Manhattan and Queens.<sup>1</sup> Views of the project area and study area existing conditions are presented in Figures H-4 through H-8 and H-10, while renderings of the With-Action and the No-Action conditions are presented in Figures H-11 through H-14.

#### IV. EXISTING CONDITIONS

#### **PROJECT AREA**

#### **Urban Design**

# **Development Site**

As shown in Figures H-2 and H-3, the majority of the development site is currently occupied by an existing two-story manufacturing building that was constructed around 1960. The structure is built to the street line, maintaining the street wall of the adjacent building directly northeast of the development site. As evident in Figure H-4, the building's Commercial Street façade is characterized by alternating vertical bands of white and light colored bricks. The regular pattern of small square windows creates two horizontal lines, emphasizing the low horizontal form of the structure. The first floor windows are covered by metal screens, adding to the buildings generally closed-off character.

The building's primary entrance is located in the center of the Commercial Street façade. The entrance is comprised of two small windowless metal doors, unadorned apart from graffiti. A narrow unembellished overhang projecting over the building entrance is the only interruption in the building's flat façade. Surrounding the entrance is a grid pattern of large grey and turquoise rectangular metal panels. The two linear bands of windows above the entrance maintain the horizontal fenestration pattern of the façade.

In general, the building's austere fenestration and state of disrepair give the development site a desolate uninviting appearance. A few bricks are missing and weeds are prevalent along the base of the structure. The adjacent sidewalk is in a similar condition; weeds intersperse an irregular patchwork of pavings and repair attempts. As evident in Figure H-4, this state of repair is in marked contrast with the immediately adjacent lots.

A one-lane driveway occupies the southwestern boundary of the development site. The entrance is surrounded by a flimsy metal frame with a sliding chain-link fence. Two narrow bollards flank the driveway as well.

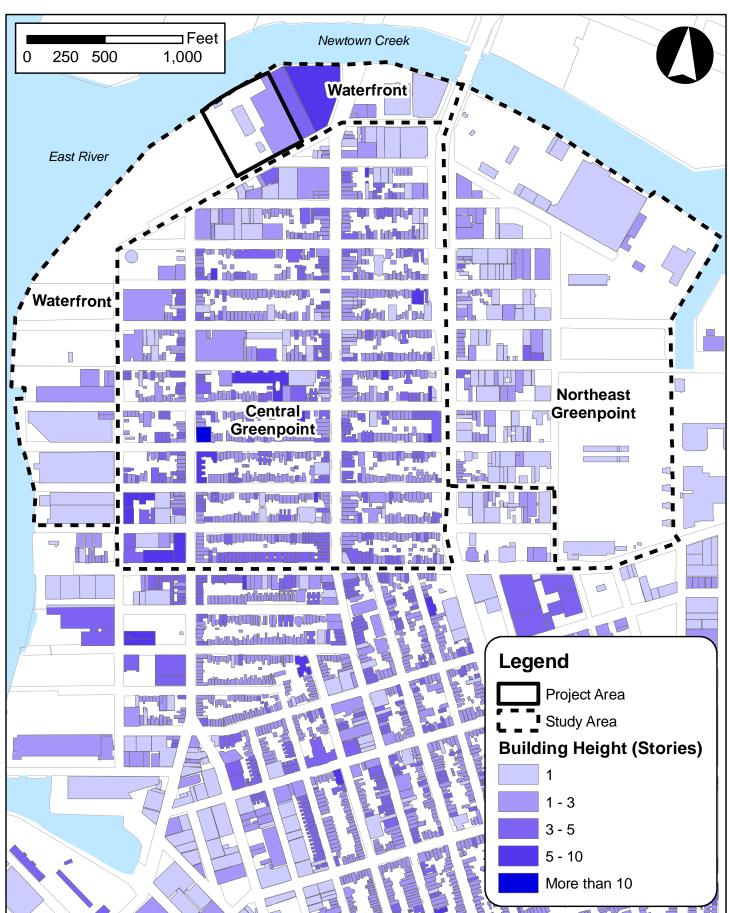
Visible to the pedestrian beyond the driveway entry is a portion of the southwestern façade. The bare façade is intermittently punctuated by window and doors, and weeds line the base of the structure. As further evidence of the development site's general state of disrepair, trees have grown along portions of the driveway, overhanging into the adjacent property.

# City-owned Property

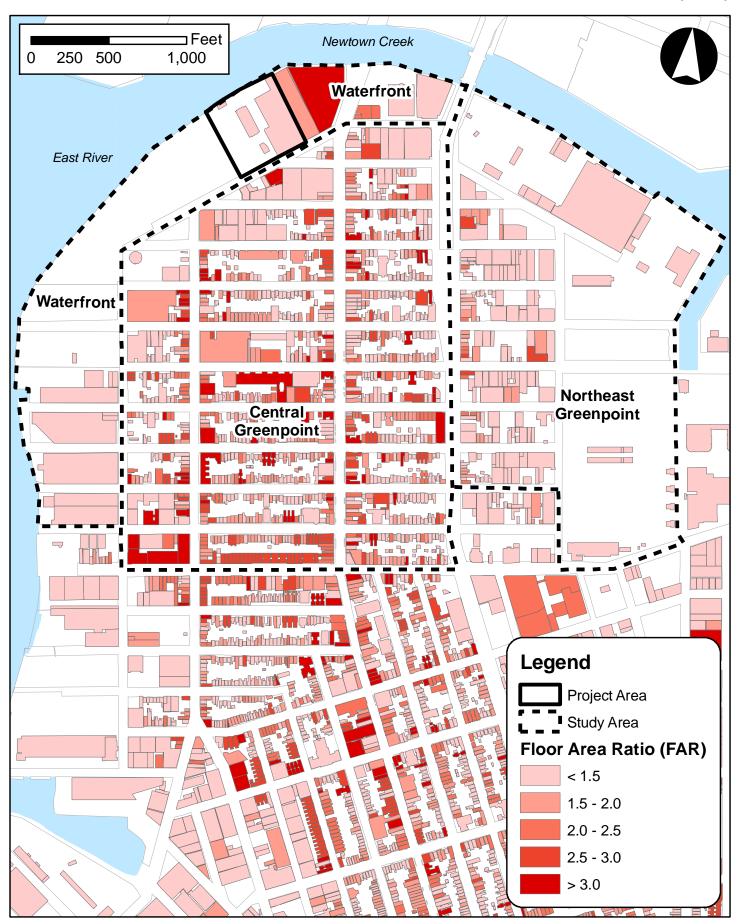
As described in Attachment A, "Project Description," the City-owned property is currently leased to the New York City Transit Authority (NYCTA). As shown in Figure H-5, the property has four small 1- to

While portions of Hunters Point neighborhood of Queens fall within a ½-mile radius of the development site, given the division created by Newtown Creek and resulting limited pedestrian accessibility from Greenpoint, this urban design and visual resources analysis focuses only on views from the Greenpoint neighborhood.

# **Building Height**



# **Built Floor Area Ratios (FARs)**





1. Entrance to the existing development site building on Commercial Street.



3. View of the southwestern border of the development site from Commercial Street.



2. View northeast of the development site from Commercial Street.



4. View southwest from Manhattan Avenue and Commercial Streets with the development site visible in the background.



1. View north through the City-owned property with the Manhattan skyline visible in the background.



3. View southwest of the sidewalks adjacent to the Cityowned property.



2. View northwest of the temporary metal structure along Commercial Street.



4. View north of the existing NYCTA office building on the City-owned property.

2-story buildings set back from the street wall and the remainder of the lot is paved asphalt and used for outdoor vehicle storage and parking. In total the four existing buildings have a total FAR of 0.2 (see Figure H-3), and the property's Commercial Street frontage is lined with chain link fencing partially lined with green tarp, further obstructing views of the site from the adjacent street.

Most proximate to the property's Commercial Street frontage are a small 2-story brick office building and a small metal-clad storage shed used for the emergency response program. Apart from a large sign above the office building's entrance, the structure has minimal articulation and a flagpole is located directly in front of it. A larger 1- to 2-story brick vehicle maintenance building as well as a smaller 1-story out building are located toward the center and north end of the lot, respectively, and are used for the paratransit program. These structures are less visible from Commercial Street; large metal doors for vehicle entry are the most prominent features. In addition, a small temporary metal structure is located along Commercial Street (see Figure H-5).

The sidewalk adjacent to the City-owned property is in a better state of repair than that of the adjacent development site. New sidewalks have recently been laid out, and bollards line the site's three driveways as well as a small sidewalk grate. As evident in Figure H-5, no other streetscape elements are located along the City-owned property.

#### **View Corridors and Visual Resources**

Visible from the project area are a number of visual resources, including the East River and Newtown Creek as well as the Manhattan and Queens skylines. Important Manhattan located buildings that can be seen include the Empire State Building, the Chrysler Building, the Citicorp Building, the United Nations Headquarters, and One World Trade Center. The Queensboro Bridge is also visible from the project area. However, no publicly-accessible unobstructed views of these visual resources are currently available.

# STUDY AREA

As discussed above, the study area has been defined as the surrounding area within approximately half mile of the project area (identical with the land use study area). Street pattern and streetscape, buildings, and natural features and open space are discussed separately and in more detail for three subareas: the Central Greenpoint subarea, which occupies the area generally bounded by West, Commercial, and Ash Streets, McGuinness Boulevard, and Greenpoint Avenue; the Waterfront subarea, which is comprised of the blocks immediately adjacent to the East River and Newtown Creek; and the Northeast Greenpoint subarea, which is generally bounded by McGuinness Boulevard, Greenpoint Avenue, Java Street and the northerly prolongation of Humboldt Street, and Newtown Creek (see Figure H-1, Urban Design Study Area).

### **Urban Design**

#### Central Greenpoint Subarea

#### Street Pattern and Streetscape

As evident in Figure H-1, the Central Greenpoint subarea is generally laid out with wider avenues running roughly parallel to the curve of the East River shoreline (north-south) and narrower streets running east-west, which, combined, create mostly regular rectangular-shaped blocks. Within this grid pattern, blocks are oriented east-west, with the longest east-west span (855 feet) between Franklin Street and Manhattan Avenue; north-south block spans are generally 200 feet throughout the Central

Greenpoint subarea. The general grid pattern is truncated to the north by Commercial Street to form triangular blocks.

Four major arterials traverse the Central Greenpoint subarea. Franklin Street, and Manhattan and Greenpoint Avenues cater to two-way local traffic and are also designated as local truck routes. McGuinness Boulevard, which borders the eastern edge of the subarea, is the largest road located within the study area. This arterial serves two lanes of traffic in each direction, separated by a central median. North of Freeman Street McGuinness Boulevard rises above grade as it connects to the Pulaski Bridge, creating a physical barrier between the blocks located to the east and west of the thoroughfare. Pedestrian access to the Pulaski Bridge is provided along the western side, either via the abovementioned ramp or stairs that descend just south of the intersection of McGuinness Boulevard and Ash Street.

Street trees generally line the east-west residential streets, with few street trees distributed along Greenpoint and Manhattan Avenues. Street trees along the predominantly residential east-west streets are generally found curbside and are often accompanied by shrubs and smaller vegetation planted by residents within or at their property lines (see Figure H-6). A few NYCTA bus shelters are found along Manhattan Avenue, along with decorative trash receptacles. "Bishop's crook" lampposts are also found along Manhattan Avenue, commemorating the Greenpoint Historic District, while standard street lights serve the rest of the area.

#### **Buildings**

Residential buildings in the Central Greenpoint subarea are arranged linearly along block fronts, creating continuous rows of three- and four-story buildings along the east-west streets. As shown in Figure H-6, residences in this area often feature small front setbacks for stoops, steps to below-grade levels, or small planting areas, rear setbacks for yards, and often brightly-colored façades. Exceptions to this trend are a few remaining low coverage, single-story structures and vacant lots as well as some residential infill development completed since the rezoning. Recent residential construction generally maintains the street wall of Greenpoint's older residential buildings, while departing in both design and height. Two notable recent residential developments in the Central Greenpoint subarea that exemplify these recent building trends are 200 Franklin Street and 110 Green Street (see Figure H-6). Several recent residential buildings are also present along the western side of McGuinness Boulevard; these developments are characterized by larger building lots and taller building heights than those characteristic of Central Greenpoint's east-west residential block.

Continuous street-level retail is found along the entirety of Manhattan Avenue as well as along portions of Greenpoint Avenue and Franklin Street. Buildings along these corridors range from two to four stories and are host to locally-owned retail shops. Structures are built to the lot line and are uninterrupted apart from the occasional vacant lot, rare along these commercial corridors. Commercial uses along McGuinness Boulevard are more varied, with single-story gas stations set back from the street interspersed with one-story industrial buildings, vacant lots, and the aforementioned recent residential developments.

The blocks bordered by Franklin and West Streets visibly exemplify the transition from industrial/manufacturing to mixed-use and residential apartments and low-rise loft buildings eastward to Franklin Street. Industrial/manufacturing and mixed-use buildings on these blocks have varied lot coverage but create a nearly continuous street wall of up to six stories along the east side of West Street. Five- to six-story industrial loft buildings present along Greenpoint Avenue between West and Franklin Streets are generally occupied by commercial and light industrial uses with some residential uses. Several recent residential constructions and conversions are also located in this transition area.



1. Residential buildings and street plantings along Kent Street between Manhattan Avenue and Franklin Street.



2. View east of 110 Green Street (the Viridian).



3. Fenced off vacant lot at the southwest corner of DuPont and Franklin Streets.

# Natural Features and Open Space

Throughout most of the Greenpoint, the topography is relatively flat; streets throughout the subarea slope gently down from the intersection of Manhattan and Greenpoint Avenues toward the waterfront.

As discussed in further detail in Attachment F, "Open Space," one open space resource (Greenpoint Playground) is located within the Central Greenpoint subarea on the small triangular lot bordered by DuPont, Clay, Commercial and Franklin Streets. No additional significant natural features are located within the Central Greenpoint subarea.

Apart from these open space resources, there are few accessible open lots in the Central Greenpoint subarea. Along the western edge of McGuinness Boulevard between Freeman and Green Streets, a small vacant lot is used as parking for an adjacent restaurant. On Java Street between Franklin and West Streets is a small community garden (the Java Street Garden Collaborative). All other vacant lots are surrounded by plywood, preventing both visual and physical access to these sites (see Figure H-6).

# Waterfront Subarea

# Street Pattern and Streetscape

The Waterfront subarea features a rectilinear street pattern, where the block forms maintain a rectilinear edge along West Street while the East River variegates their western boundaries (refer to Figure H-1). West Street runs generally parallel to the waterfront edge and perpendicular to the east-west streets, which are mapped as extending from West Street to the waterfront. Few of the east-west streets in this region reach the water's edge as built publicly-accessible streets. As shown in Figure H-7, those streets that physically reach the waterfront typically meet dead ends fenced off at the bulkhead line and are sometimes blocked by buildings or run through industrial lots gated from public access. Two exceptions to this trend are Greenpoint Avenue and India Street, which culminate at the entrance to WNYC Transmitter Park and a waterfront pier, respectively.

With few exceptions, the general streetscape of the Waterfront area is austere, featuring few attractive features. The waterfront lots currently create a continuous barrier between the upland neighborhoods and the water's edge. Vacant lots that punctuate the industrial waterfront are often overrun by wild grasses and trash, providing makeshift open spaces and informal vantage points for waterfront views. Additional greenery is sporadically encountered on public sidewalks, and street lighting is provided by standard cobra-head lampposts, commonly found throughout the City. Sidewalks and streets near the waterfront parcels are in varying states of repair and often littered with trash (refer to Figure H-7). Worn paving along West Street also reveals the underlying Belgian block paving; Belgian block paving lines the entirety of Java Street as well. Business names are found painted on the façades of older industrial structures, though these businesses are usually not present; newer, active establishments tend to have physical signage attached to their façade.

Two exceptions to this streetscape typology occur along Greenpoint Avenue and India Street. The pedestrian environment along these Greenpoint Avenue is enhanced by the presence of WNYC Transmitter Park at its western terminus. In addition, the shops lining the north side of the street serve to reactivate the street and stand in marked contrast with the large industrial building directly opposite on the south side of Greenpoint Avenue. With a pier located at the end of India Street, the streetscape along this street segment slightly differs from the rest of the Waterfront subarea as well; bollards line the north side of the street, providing a separated pedestrian path to the pier. "Welcome to Greenpoint" murals line the walkway and add character to this street segment (see Figure H-7).



1. View southwest of the intersection of Green and West Streets.



3. Mural along the northern side of India Street.



2. View northeast along Commercial Street of poor sidewalk quality in the Waterfront Subarea.



4. View north along Manhattan Avenue of the Greenpoint Manufacturing and Design Center.

In addition, at the northern terminus of Manhattan Avenue is the Manhattan Avenue Road-End Park, constructed by the New York City Department of Transportation (NYCDOT) in 2007. The project carved away a part of the existing parking lot to provide a waterfront park with views of the Manhattan skyline and a kayak launch.

## **Buildings**

As shown in Figure H-3, the majority of the buildings in the Waterfront subarea have floor area ratios (FARs) of less than 1.5. Exceptions to this pattern generally consist of buildings built before the establishment of the New York City Zoning Resolution in 1916. The waterfront lots vary with regard to building arrangement and lot coverage. Lots that contain equipment, containers, vehicles, and other materials tend to have small accessory buildings; older loft building tend to be taller with high lot coverage, and warehouses tend to be one to two stories in height with moderate lot coverage. In general however, buildings in the Waterfront subarea are built to the street wall with minimal façade elaboration.

Directly northeast of the project area are a series of higher lot coverage industrial lofts including the Greenpoint Manufacturing and Design Center as 1155-1205 Manhattan Avenue (see Figure H-7). The 366,000 sf building was constructed in 1868 and is home to 76 small business and artisan tenants today.

# Natural Features and Open Space

Within the Waterfront subarea, the topography is relatively flat, with streets sloping gently towards the East River and Newtown Creek from the inland area. In addition to these two prominent natural features, several open space resources are located within the Waterfront subarea: WNYC Transmitter Park (located on the East River waterfront at the western terminus of Greenpoint Avenue), the Manhattan Avenue Road End Park (located at the northern terminus of Manhattan Avenue), the Java Street End Park (located at the western terminus of Java Street), the India Street Pier (located at the western terminus of India Street), and Newtown Barge Playground (located on the East River waterfront at the western terminus of Commercial Street). These open space resources are described in greater detail in Attachment F, "Open Space."

In addition, there are several open vacant lots in the Waterfront subarea, the most prominent located at 37 Commercial Street (Block 2472, Lot 100), southwest of the project area. Similar to the Central Greenpoint subarea, vacant lots are typically surrounded by fencing and inaccessible to the public. Most of the vacant lots (including 37 Commercial Street) are lots that have been cleared in anticipation of future development.

### Northeast Greenpoint Subarea

### Street Pattern and Streetscape

As shown in Figure H-1, within the Northeast Greenpoint subarea the streets west of Provost Street continue the block pattern of the Central Greenpoint subarea, with mostly regular rectangular-shaped blocks measuring approximately 200 feet by 550 feet. This block pattern is truncated to the north by Paidge Avenue forming triangular and trapezoidal blocks north of DuPont Street. East of Provost Street, the Newtown Creek Wastewater Treatment Facility exists on a superblock spanning from McGuinness Boulevard to North Henry Street (beyond the study area boundaries).

Two major arterials form portions of the subarea boundaries. McGuinness Boulevard lies on the western edge of the subarea, physically dividing the Northeast Greenpoint and Central Greenpoint subareas.

McGuinness Boulevard connects to the Pulaski Bridge, connecting to Queens; no pedestrian access points are located on the east side of the bridge. Greenpoint Avenue defines the southern boundary of the subarea and provides a connection to Queens to the east via the J.J. Byrne Memorial Bridge (located outside of the secondary study area). The remaining streets in the subarea are significantly smaller and less used. North of Greenpoint Avenue, North Henry Street, which forms the eastern boundary of the Northeast Greenpoint subarea, is a private partially-paved road.

Few streetscaping elements are found in this area, augmenting its bare, industrial character, and sidewalks are often occupied with loading and unloading activities of industrial businesses. Around the Newtown Creek Wastewater Treatment Facility, however, street trees are found, creating visual barriers between the industrial uses inside and the public streetscape (refer to Figure H-8). Underneath the McGuinness Boulevard/Pulaski Bridge approach, litter is scattered along sidewalks that are in generally poor condition. Curb cuts and bollards are commonly visible at large industrial frontages and leading into lots for vehicles and equipment.

#### **Buildings**

Northeast Greenpoint is dominated by industrial and manufacturing activity. The Newtown Creek Wastewater Treatment Facility, occupying the eastern portion of the study area, is the most prominent industrial tenant of the area, occupying the superblock bordered by Provost and North Henry Streets, Greenpoint Avenue, and Newtown Creek. The plant, shown in Figure H-8, is the largest of New York City's wastewater treatment plant. The plant's eight stainless steel-clad digester eggs (located just east of North Henry Street) are visible from vantage points in Brooklyn, Queens, and Manhattan and are among the facility's most dramatic features.

With the exception of some residential and commercial uses along the east side of McGuinness Boulevard, this area is host to industrial buildings and warehouses of low height and high lot coverage, interspersed with smaller loft buildings, vacant lots, and parking lots (refer to Figure H-8). In recent years, although little changes have been made to the exterior of the structures, several of the former industrial buildings in the subarea have been used as film studios.

# Natural Features and Open Space

The Northeast Greenpoint subarea is relatively flat with no significant natural features. As described in Attachment F, "Open Space," the only open space resources in the subarea is the Newtown Creek Nature Walk, which is accessible via Provost Street. In addition, as shown in Figure H-8, there are several vacant/open lots in the subarea, most of which are used for parking and vehicle storage. Combined, these vacant/open lots add to the uninviting desolate pedestrian environment of the Northeast Greenpoint subarea.

## **View Corridors and Visual Resources**

As shown in Figure H-9, there are a number of visual resources in the study area, including the landmark Astral Apartments, the Eberhard Faber Pencil Company Historic District and portions of the Greenpoint Historic District, the East River and Manhattan skyline, as well as the public parks described above.

The Astral Apartments (shown in Figure H-10), located on the east side of Franklin Street between India and Java Street, is an LPC-designated and S/NR-registered historic landmark. The structure, erected by Charles Pratt in 1885-1886 is a significant example of "model tenement" design. The building was designed in the Queen Anne style, with patterned brickwork, rock-face brownstone arches and lintels,



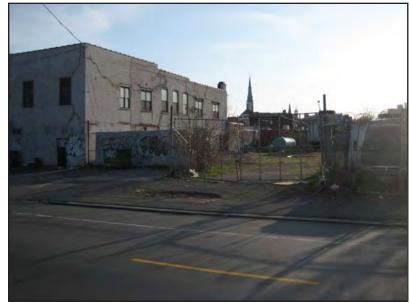
1. Plantings along the northwest border of the Newtown Creek WPCP near the entrance to the Newtown Creek Nature Trail.



3. Typical industrial buildings in the Northeast Greenpoint Subarea (view south on Provost Street from DuPont Street).

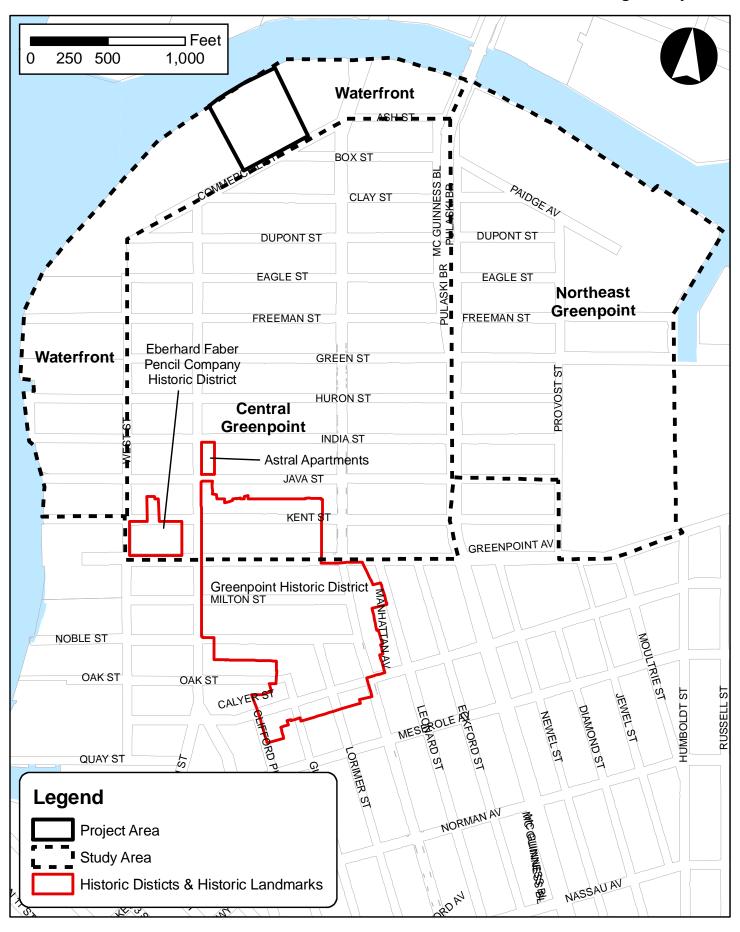


2. View east along India Street with the Newtown Creek WPCP digester eggs visible in the background.



4. Vacant lot in the Northeast Greenpoint Subarea.

# Historic Resources within the Urban Design Study Area



# Visual Resources in the Urban Design Study Area



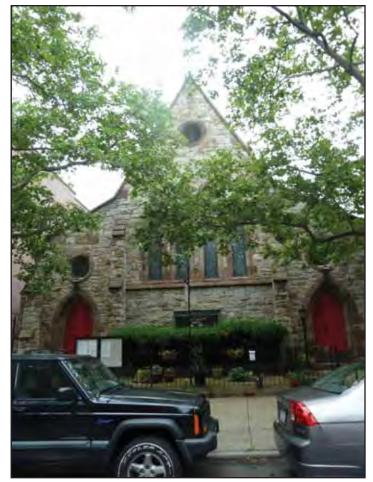
1. The Astral Apartments (view southeast from the intersection of Franklin and India Streets).



2. The Eberhard Faber Pencil Company Historic District (view north along Greenpoint Avenue).



3. 114-124 Kent Street in the Greenpoint Historic District (view west along Kent Street).



4. Church of the Acension at 127 Kent Street in the Greenpoint Historic District (view north on Kent Street).

and structural steel storefronts with rivets serving as decoration. This architecturally distinguished building adds visual interest to the streetscape. However, due to the surrounding fully developed lots, the structure is only visible from the immediately surrounding streets.

The Eberhard Faber Pencil Company Historic District (designated by LPC in 2007) is located along the southern boundary of the study area. The district comprises the majority of the block bounded by Greenpoint Avenue and West, Kent, and Franklin Streets, as well as the adjacent property located at 59-63 Kent Street (refer to Figure H-10). The district comprises eight buildings which served as the location of the Eberhart Faber Pencil Company from 1872 to 1956. Most of buildings in the district date from the mid-1880s to the 1910s and display elements of the German Renaissance Revival style, such as segmental lintels, carefully detailed brickwork, and corbels, as well as pedimented parapets that display Faber's star and diamond motif. The complex's signature building (constructed in 1923-1924) is the largest structure at six stories tall, and is embellished with glazed star and pencil terra cotta reliefs advertising the company's main product (see Figure H-10).

As shown in Figure H-9, the Greenpoint Historic District is generally bounded by Kent Street to the north, Manhattan Avenue to the east, Calyer Street to the south, and Franklin Street to the west. Houses within the district range from early examples of flats to modest frame dwellings to impressive masonry houses. Construction in Greenpoint boomed in the 1860s and early 1870s, and it was during these decades that some of the district's finest houses were erected. Among them are a large number of Italianate brick row houses; the houses at 114-124 Kent Street, dating from 1867-1868, are particularly notable (see Figure H-10). Also within the district are some of the most impressive ecclesiastical buildings in northern Brooklyn, including the Gothic Revival Church of the Ascension built in 1866 on Kent Street (refer to Figure H-10).

The East River is primarily visible from WNYC Transmitter Park, the India Street Pier, and the Java Street End Park. The East River is also visible from Newtown Barge Playground, although the view is partially obstructed by chain link fencing surrounding this public open space; additional views of this visual resource are available from the western terminus of some of the east-west streets in the secondary study area. Views across the river are wide and expansive and include the Manhattan, Brooklyn, and Queens skylines. The Williamsburg and Queensboro Bridges are also visible from some vantage points and completely obstructed from many public street locations.

Important buildings that can be seen from the waterfront and in views west along the east-west streets include the Empire State Building, the Chrysler Building, the Citicorp Building, the United Nations Headquarters, and those that make up the Lower Manhattan skyline. From locations farther from the waterfront, such as along Franklin Street and Manhattan Avenue, these resources are only faintly visible in the distance.

As described above and in further detail in Attachment F, "Open Space," several open space resources are located within the urban design secondary study area. Greenpoint Playground, American Playground, and the Java Street Garden Collaborative are in the Central Greenpoint subarea; WNYC Transmitter Park, Newtown Barge Playground, Manhattan Avenue Road End Park, the India Street Pier, and the Java Street End Park are in the Waterfront subarea; a portion of the Newtown Creek Nature Walk is located in the Northeast Greenpoint subarea.

# V. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION)

#### PROJECT AREA

As described in Attachment A, "Project Description," in the 2016 No-Action condition, it is expected that the applicant will develop a 14-story as-of-right, mixed-use market-rate residential development with ground-floor commercial and community facility uses and accessory parking on the development site. The as-of-right development will comply with the requirements set forth under R6 and R6/C2-4 zoning. In addition, the City is expected to create a new approximately 2.87-acre public park ("Box Street Park") by 2016 on the City-owned lot.

# **Urban Design**

# Street Pattern and Streetscape

In the No-Action condition, new sidewalks and street trees will serve to improve the pedestrian realm. Ground floor retail spaces along Commercial Street and along the new waterfront connection are expected to increase pedestrian activity around the development site and draw people to the waterfront.

# **Buildings**

In the 2016 No-Action condition, it is expected that the applicant will develop a 14-story as-of-right mixed-use development on the development site. In compliance with the applicable regulations governing maximum building heights and permitted penthouses, the No-Action building will be up to ten stories tall (110 feet), with a 4-story penthouse (maximum height of 150 feet). Consistent with the underlying zoning, the maximum base height of the No-Action building would be 65 feet. While significantly taller than the existing adjacent building, the No-Action development site building will be consistent with known and expected development in the surrounding area and with the waterfront zoning regulations which encourage maintaining the street wall and setting back towers closer to the water.

Building uses will incorporate a mix of residential, commercial and community facility, with residential uses occupying the upper stories, and ground floor retail and community facility uses along the building's base. The ground floor uses are intended to allow for additional transparency at the street level, activating the public realm and drawing people to the waterfront.

# Natural Features and Open Space

In the No-Action condition, 16,025 sf (0.37 acres) of open space would be developed in conjunction with construction on the development site, as required under the existing waterfront zoning regulations. A waterfront esplanade (shore public walkway) will run along the development site's Newtown Creek frontage and an alternate public way will run the length of the development site's eastern boundary, allowing pedestrian access to waterfront open space. In addition, the City is expected to create a new approximately 2.87-acre Box Street Park on the City-owned property under the 2016 No-Action condition. It is assumed that the design for Box Street Park under the No-Action scenario would be consistent with the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan, which contemplates that Box Street Park will combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that will overlook the shore public walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access points for kayaks. The plan, however, is

subject to change based on community input that will be gathered during the design development phase for the park.

#### **View Corridors and Visual Resources**

While the as-of-right development on the development site in the 2016 No-Action condition would block some views of visual resources in the study area, including the East River and the Manhattan skyline, it would also create new and expansive views of these resources from various public vantage points. The new public open space would create new viewing opportunities for these two resources which are currently not available from the development site.

In addition, the as-of-right development would introduce new open space visual resources on the development site in the form of the waterfront esplanade and upland connection along the development site's Newtown Creek frontage and southwest border, respectively.

#### STUDY AREA

Table C-5 in Attachment C, "Land Use, Zoning, and Public Policy," identified the developments that are projected to occur in the study area by 2016 absent the proposed actions (the No-Action condition). As outlined in the table, there are eight anticipated No-Action developments involving new construction or changes in use to existing structures; anticipated No-Action development includes large mixed-use infill developments on underdeveloped former industrial sites, one residential conversion, as well as a commercial rehabilitation. In addition, several open space and streetscape improvements are anticipated in the study area.

# **Urban Design**

# Central Greenpoint Subarea

#### Street Pattern and Streetscape

While no changes to street pattern are expected in the Central Greenpoint subarea by 2016, streetscape improvements associated with anticipated developments will occur. As required under the New York City Zoning Resolution's Street Trees Text Amendment (adopted in 2008), all new buildings and all enlargements exceeding 20 percent of the floor area must plant one new tree for every 25 feet of building road frontage. As such, it is anticipated that new trees will be planted in the Central Greenpoint subarea, thereby enhancing the pedestrian realm. In addition, the renovation of currently vacant or underutilized buildings and lots will further enliven the streetscape.

#### **Buildings**

To the southeast of the development site at 1133 Manhattan Avenue, a seven-story residential building with ground floor retail is under development on the site of a former industrial building (see Figure H-11). The building's brick construction will be reminiscent of the nearby Greenpoint Manufacturing and Design Center, an industrial loft building located one block to the north, and will be built to the lot line, maintaining the uninterrupted street wall typical along Manhattan Avenue.

Directly southwest of the project area, two Greenpoint Landing buildings will be completed in the 2016 No-Action condition, one of which is located in the Central Greenpoint subarea: at the southwest corner of the block bordered by DuPont, Eagle, and Franklin Streets, a 75-foot tall 91,315 gsf mixed-use



1. 1133 Manhattan Avenue No-Action development



3. 155 West Street No-Action development



2. West Street No-Action improvements



4. Greenpoint Landing No-Action development

77 Commercial Street EAS Figure H-11

residential and commercial building is planned. The building will be built to the lot line, consistent with adjacent buildings along West and Eagle Streets.

In addition, two conversion projects in the Eberhard Faber Pencil Company Historic District are anticipated to be completed by 2016. 58 Kent Street is being renovated and converted to commercial uses. To the east, the residential conversion of 74 Kent Street is also expected to be completed in the 2016 No-Action conditions. As these buildings are contributing structure in a designated Historic District, major changes will be primarily interior work, and exterior work will be comprised of historically-compatible and LPC-approved improvements to the façades; at 74 Kent Street a partial fourth floor addition is also planned.

# Natural Features and Open Space

No changes to the Central Greenpoint subarea's natural features and open space are anticipated in the 2016 No-Action condition.

#### Waterfront Subarea

# Street Pattern and Streetscape

As described in Attachment F, "Open Space," in the 2016 No-Action condition, the City anticipates reconstructing West Street between Eagle and Quay Streets to accommodate a separated bike path along the west site of the street, as well as a planted buffer, speed tables, improved pavement markings at intersections, and the underground relocation of existing above-ground utilities (see Figure H-11).

New developments planned for the Waterfront subarea will introduce streetscape improvements including upland connections to Commercial Street, and street trees, as required under the New York City Zoning Resolution's Street Trees text amendment. The introduction of ground floor retail will also serve to enliven the public realm.

# **Buildings**

Two residential developments in the Waterfront subarea are expected to be completed by 2016. The building planned for 155 West Street will be located on the entire waterfront block fronting West Street between India and Huron Streets. As shown in Figure H-11, the building will meet the scale of the Central Greenpoint neighborhood on the eastern side, with two 65-foot tall mid-rise buildings with ground floor retail. A 393-foot tall residential tower will occupy the waterfront portion of the block.

Directly south of the project area, two Greenpoint Landing buildings will be completed in the 2016 No-Action condition, one of which is located in the Waterfront subarea. At 37 Commercial Street, a mixed-use residential/commercial building is expected to be completed while adjacent lots will still be under development. As shown in Figure H-11, the building will be built to the street wall up to a height of 5 to 6 stories, with a tower set back from the street reaching its maximum height along the waterfront.

# Natural Features and Open Space

As discussed in Attachment F, "Open Space," several new open space resources associated with planned development are expected to be complete by the 2016 No-Action condition. Waterfront esplanades are planned adjacent to the 155 and Greenpoint Landing developments. The 155 West Street project is expected to include an approximately 21,925 sf public park with a play area, lawn, seating and plantings. In addition, a shore public walkway will be located adjacent to Greenpoint Landing's 37

Commercial Street tower. As previously mentioned, the City-owned property would be developed as a publicly accessible open space, which would have a total area of up to approximately 125,060 sf (2.87 acres). It is assumed that the design for Box Street Park under the No-Action scenario would be consistent with the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan², which contemplates that Box Street Park will combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that will overlook the shore public walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access points for kayaks. The plan, however, is subject to change based on community input that will be gathered during the design development phase for the park.

# Northeast Greenpoint Subarea

Street Pattern and Streetscape

Minor improvements to the streetscape will likely occur in the Northeast Greenpoint subarea by 2016. Additional street tree plantings and minor sidewalk repairs are anticipated, as well as improvements to the pedestrian environment along McGuinness Boulevard.

**Buildings** 

There are no known or anticipated developments in the Northeast Greenpoint subarea that are expected to be completed by 2016.

Natural Features and Open Space

No changes to Northeast Greenpoint subarea natural features and open space are anticipated in the No-Action condition.

#### **View Corridors and Visual Resources**

Known and anticipated development in the secondary study area by 2016 is expected to obstruct views of the East River and the Manhattan skyline from certain vantage points. However, through the development of new waterfront open space, new view corridors will be established in areas that are currently inaccessible to the public, thereby enhancing the viewing opportunities of these visual resources. Secondary study area development will not alter the existing views of nearby historic resources, and the rehabilitation and conversion work anticipated in the Eberhard Faber Pencil Company will enhance these study area visual resources.

Planned open space in the secondary study area will also serve as new visual resources. These planned amenities will be publicly-accessible, allowing the public to visit and enjoy these secondary study area resources.

<sup>&</sup>lt;sup>2</sup> Source: http://www.nycgovparks.org/park-features/future-parks/greenpoint-williamsburg-waterfront

# VI. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION)

#### PROJECT AREA

As described in Attachment A, "Project Description," the proposed actions would result in an incremental increase of approximately 441,890 gsf of development area. The requested Special Permit would grant waivers with respect to maximum base and building heights and minimum setback requirements similar to allow the transferred development rights to be accommodated on the development site (refer to Figure H-12 for illustrative images of the proposed development).

#### **Urban Design**

# Street Pattern and Streetscape

No changes are anticipated to the street pattern by the 2016 build year. However, the project area's street pattern and streetscape would improve in the project area in the With-Action condition as a result of new landscaping and sidewalk improvements as well as the reactivation of the pedestrian realm along these corridors through continuous ground floor retail.

# **Buildings**

The proposed actions would facilitate the construction of a total of three buildings on the development site: The proposed 2 to 6-story base building would rise to an elevation of 68 feet above base plane ("ABP"). The north tower would be 40 stories tall and rise to an elevation of 404.0 feet ABP (with a mechanical penthouse rising to 429 feet ABP), while the south tower would be 30 stories tall and rise to an elevation of 305.7 feet ABP (with a mechanical penthouse rising to 330.7 feet ABP). The 7<sup>th</sup> floor of the development would include residential amenities and a pool deck on the roof area between the two towers, as well as a terrace in the portion of the 7<sup>th</sup> floor roof to the south of the south tower.

The requested Special Permit would allow for greater variation and articulation of the base building by allowing portions of the base building to exceed the maximum permitted base height of 65 feet (see Figure H-13). The proposed building envelope would add visual character to the building's Commercial Street façade and would be more consistent with the varied building heights of the existing buildings in the surrounding area.

# Natural Features and Open Space

As described in Attachment F, "Open Space," the proposed actions includes the development of 0.80 acres of publicly-accessible open space in the form of a 9,510 sf shore public walkway and a 15,940 sf upland connection to Commercial Street, as well as a 9,400 sf secondary landscaped pedestrian

In waterfront areas, building heights are measured from base plane, which can be calculated a number of different ways. In response to Tropical Storm Sandy, the Mayor issued Executive Order No. 233 allowing the base plane for development sites in flood zones to be calculated by adding the amount of clearance or freeboard required under the Building Code (Appendix G) for particular construction types to the applicable Advisory Base Flood Elevation shown on FEMA's recently issued advisory flood maps. Under this formulation, the base plane for the development site would equal 11.54 feet above Brooklyn Highway Datum (BHD). Although the original Executive Order has expired, the Mayor has continuously renewed it through a series of subsequent Executive Orders (27 times to date) and the Commission has certified an application (N130331 ZRY) for a proposed text amendment to the Zoning Resolution that would formally incorporate the provisions of the Executive Order into the Zoning Resolution. It is assumed that the Mayor will continue to renew the Executive Order until the Text Amendment has been acted upon. Accordingly, heights for the proposed actions (for both the future without action and future with action scenarios) are measured from a base plane of 11.54 feet above BHD.

1. View of the proposed development from Commercial Street.



2. Upland connection entry area from Commercial Street.



3. View of the proposed development looking east.



77 Commercial Street EAS Figure H-12a

4. View from the upland connection.



5. View looking west along shore public walkway.



6. View looking east along shore public walkway.



77 Commercial Street EAS Figure H-12b

# Comparison of Existing, No-Action, and With-Action Conditions - Commercial Street & Manhattan Avenue



1. Existing Conditions



2. No-Action Condition



3. With-Action Condition

walkway. This With-Action open space would connect with and enhance the open space expected to be developed on the City-owned property parcels in the With-Action condition.

Overall, the proposed actions would improve the urban design character of the development site. Compared to the No-Action condition, the proposed actions would introduce an additional 18,828 sf of publicly-accessible open space on the development which would connect the development site to the adjacent waterfront properties to the southwest. The proposed actions are intended to open up the waterfront to the surrounding community by creating new public open spaces and by activating the streetscape with new retail spaces.

In addition, as described above, the City is expected to create an approximately 2.87-acre public park by 2016 on 65 Commercial Street (Block 2472, Lot 425), adjacent to the development site. Under the With-Action conditions the City would use proceeds from the sale of the development rights to the applicant to partially fund construction and development of Box Street Park. As a result, Box Street Park in the With-Action condition would be expected to include features beyond those provided under the No-Action Scenario. More specifically, the additional funding that will be available to the City from the sale of development rights to comply with more than rudimentary requirements as set forth in the Greenpoint-Williamsburg Open Space Master Plan<sup>4</sup>. This Open Space Master Plan depicts Box Street Park as a mainly active recreational space. The concept design plan shows a large tree-lined multipurpose field, a comfort station at Commercial Street, and a viewing plaza with a shadow structure bordering the shore public walkway on the Newtown Creek waterfront.

#### **Visual Resources and View Corridors**

As with the No-Action condition, the proposed actions would result in the construction of large-scale structures on a currently underutilized lot. The development facilitated by the proposed actions would be constructed so as to establish the view corridors established in the Brooklyn WAP, opening up two new view corridors from Commercial Street. These view corridors are currently obstructed by fencing. As such, the proposed actions would open up views of visual resources in the surrounding area, including Newtown Creek, the Manhattan and Queens skylines, and the Queensboro Bridge.

As such, the proposed actions would not result in a significant adverse impact to visual resources and view corridors from the development site.

#### STUDY AREA

# **Urban Design**

# Street Pattern and Streetscape

The With-Action development on the development site would be consistent with the street pattern and streetscape found throughout the study area. Streetscape improvements and ground-floor retail along the public corridors would enhance the pedestrian realm, making the surrounding area more active and inviting.

#### **Buildings**

While differing in bulk and form from many of the buildings found throughout the study area today, the proposed With-Action development would be consistent with planned residential development within

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<sup>&</sup>lt;sup>4</sup> Source: http://www.nycgovparks.org/park-features/future-parks/greenpoint-williamsburg-waterfront

the Waterfront subarea and the adjacent Central Greenpoint subarea. The requested Special Permits would facilitate development with an envelope typical of the R8 districts mapped along the waterfront to the southwest of the project area, and would therefore be consistent with future development in the surrounding area. In addition, through the planned tiered development set back from the street wall, the structures would transition to the East River waterfront while conforming to the existing context of the area's historic industrial loft buildings.

# Natural Features and Open Space

Through the revitalization of currently vacant or underutilized and inaccessible lots, development in the With-Action condition would introduce additional waterfront open space. The proposed open space would represent a key component of the continuous waterfront esplanade outlined in the Brooklyn WAP, connecting to the adjacent properties within the Waterfront Subarea.

Overall, the proposed actions would result in an improved streetscape more consistent with the surrounding secondary study area, the construction of buildings consistent with planned development in the Waterfront subarea, and the continuation of existing and planned open space in the surrounding area. As such, the proposed actions would not result in a significant adverse impact to urban design in the study area.

#### **Visual Resources and View Corridors**

While the proposed actions would result in the construction of buildings that would obstruct certain views of the East River and the Manhattan skyline, With-Action development would facilitate the establishment of the Brooklyn WAP-designated view corridor at 65 Commercial Street. As a result, uninterrupted northwesterly views would be established from Commercial Street of Newtown Creek and the Manhattan and Queens skyline. As previously stated, this designated view corridor will not be established in the 2016 No-Action condition, and, as such, the proposed actions would be a marked improvement over the No-Action condition.

In addition, as in the No-Action condition, the proposed actions would create a new waterfront esplanade that would provide new, unobstructed, publicly-accessible views of Newtown Creek and the Manhattan and Queens skylines.

Therefore, while the proposed actions would block some existing views, it would also provide new and expansive views of these resources. As such the proposed actions would not have a significant adverse impact on these visual resources as visible from the secondary study area.

As shown in Figure H-14, the project area buildings and open spaces would also be visible from Queens, blocking certain views of the East River and Manhattan and Brooklyn skylines. However, as-of-right development on the development site would similarly obstruct this view. As such, the net resultant obstruction of these visual resources as visible from Queens as a result of the proposed actions as compared to the No-Action condition would be minimal. Further, the open spaces and greenery in the project area would be an attractive visual amenity.

Overall, the proposed actions would not have any significant adverse impacts on visual resources in the study area.

# Comparison of Existing, No-Action, and With-Action Conditions - Pulaski Bridge Pedestrian Walkway



1. Existing Conditions



2. No-Action Condition with Greenpoint Landing and Hunters Point South No-Action development visible in the background.



3. With-Action Condition with Greenpoint Landing and Hunters Point South No-Action development visible in the background.

# ATTACHMENT I AIR QUALITY

#### I. INTRODUCTION

The Proposed Action will include the redevelopment of the property located at 77 Commercial Street (Block 2472, Lot 410) in the Greenpoint neighborhood of Brooklyn Community District 1. The proposed development would consist of three separate buildings - a 6-story Building 1 (Building 1), a 30-story building (Building 2), and a 40-story building (Building 3). These buildings would contain an aggregate of up to approximately 693,320 gross square feet ("gsf") of residential uses (720 units), up to approximately 24,999 gsf of ground floor commercial uses, up to approximately 6,000 gsf of community facility uses, and approximately 46,730 gsf of attended, off-street accessory parking (320 spaces), for a total new development of up to approximately 760,650 gsf.

Air quality, which is a general term used to describe pollutant levels in the atmosphere, would be affected by these buildings. The following analyses were considered, in accordance with the procedures and methodologies prescribed in the *New York City Environmental Quality Review Technical Manual (CEQR TM)*, to determine the potential air quality impacts of the proposed developments as follows:

# Mobile Source Analysis

Changes in vehicular travel associated with the proposed development to result in significant mobile source (vehicular related) air quality impacts. The potential impacts of the vehicular emissions associated with project-related vehicular trips were considered.

# Garage Analysis

The potential impacts of the exhaust of the vehicular emissions generated within the 320-space parking garage were estimated. Pollutant concentrations were estimated near one assumed garage vent at both ground-level and elevated (window) locations.

# Project-on-Project Analysis

At the present time, the applicant intends to use individual electrically-driven packaged terminal air conditioning (PTAC) units in each room of these buildings for heat and air conditioning. If implemented, there would be no local emissions from these units and therefore no local air quality impacts. However, in order for the applicant to have more flexibility in determining the type of heating, ventilation, and air conditioning (HVAC) system that would best suit this development, an analysis was conducted that assumed that each of proposed buildings would have its own central HVAC system that would burn natural gas only. This analysis was conducted to estimate the potential of the HVAC emissions of each building to significantly impact the other proposed buildings (project-on-project impacts).

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<sup>&</sup>lt;sup>1</sup> For the purposes of clarity, Attachment I, "Air Quality" refers to the three buildings on the development site as "Building 1," "Building 2," and "Building 3" (see Figure A-7, "Proposed Site Plan" in Attachment A, "Project Description").

# **Project-on-Existing Analysis**

No existing buildings taller than the proposed buildings are located within the 400 feet of the development site. However, four (4) buildings are proposed to be built in this area in 2016 as a part of the Greenpoint Landing Development at 45 Commercial Street and as part of an as-of-right development at 37 Commercial Street. Therefore, in accordance with *CEQR* guidance, an analysis of the potential impacts of HVAC emissions of the proposed buildings on these future No-Build developments (project-on-existing) was conducted.

# Existing-on-Project Analysis

Each of four future Greenpoint Landing buildings will have a heat input of less than 20 million Btu (MBtu) per hour and, as such, they do not meet the CEQR definition of a significant emission sources. However, Building 2a screening-level analysis, using procedures provided in the CEQR TM, was conducted to estimate whether the HVAC emissions of these future No Build buildings would have the potential to significantly impact the proposed development.

# **Industrial Toxic Emission Sources Analysis**

An analysis of the potential impacts from air toxic emissions was conducted that included obtaining permits from the New York City Department of Environmental Protection (NYCDEP) for facilities located within 400 feet area of the development site, reviewing these permits, reviewing the Greenpoint Landing EAS for the existence of additional industrial sources near the project area, and conducting a field survey to validate the current existence of these industrial sources and determine the existence, if any, of non-permitted industrial sources.

The result of this analysis is that there are no currently operating facilities that release air toxic pollutants within 400 feet of the proposed buildings. Therefore, a dispersion analysis of toxic emissions was not conducted.

# II. POLLUTANTS OF CONCERN

# Relevant Air Pollutants for Analysis of HVAC Emissions

The United States Environmental Protection Agency (EPA) has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As the proposed developments would use natural gas in their HVAC systems, the three criteria pollutants associated with natural gas combustion – nitrogen dioxide (NO<sub>2</sub>), particulate matter smaller than 2.5 microns (PM<sub>2.5</sub>), and particulate matter smaller than 10 microns (PM<sub>10</sub>) – were considered for the HVAC analysis. Also, the pollutant most associated with motor vehicle emissions – carbon monoxide (CO) – was considered for the mobile source and garage analyses.

# Applicable Air Quality Standards and Significant Threshold Values

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for "criteria" pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants in order to protect public health and the nation's welfare. In addition to the NAAQS, the CEQR Technical Manual requires that projects subject to CEQR apply a PM<sub>2.5</sub> interim guidance criteria (based on concentration increments) developed by NYCDEP to determine whether potential adverse

PM<sub>2.5</sub> impacts would be significant. If the estimated impacts of a proposed project are less than these increments, the impacts are not considered to be significant.

This analysis addresses compliance of the potential impacts of the proposed project with the 8-hour CO, annual NO<sub>2</sub>, and 24-hour PM<sub>10</sub> NAAQS; and the 24-hour and annual PM<sub>2.5</sub> significant impact thresholds specified in the *CEQR TM*. The standards that were applied to this analysis, together with their health-related averaging periods, are presented in Table I-1. New York has adopted the NAAQS as the State's ambient air quality standards.

Table I-1
Applicable National Ambient Air Quality Standards

Pollutant	Averaging Period	National and State Standards	
СО	8-hour	9 ppm	
NO <sub>2</sub>	Annual	.053 ppm (100 μg/m <sup>3</sup> )	
$PM_{10}$	24-hour	150 μg/m <sup>3</sup>	
PM <sub>2.5</sub>	24 Hour	35 μg/m <sup>3</sup>	
	Annual	12 μg/m <sup>3</sup>	

Source: US Environmental Protection Agency, "National Primary and Secondary Ambient Air Quality Standards." (49 CFR 50) (www.epa.gov/air/criteria.html) and New York State Department of Environmental Conservation (NYSDEC) (http://www.dec.ny.gov/chemical/8542.html.

Notes: ppm = parts per million

 $\mu g/m^3 = micrograms per cubic meter$ 

#### PM<sub>2.5</sub> Significant Threshold Values

CEQR TM guidance has been recently revised by NYCDEP to include the following criteria for evaluating potential 24-hour PM<sub>2.5</sub> impacts:

The 24-hour significant threshold value for  $PM_{2.5}$  is defined as the half of the difference between the 24-hour  $PM_{2.5}$  NAAQS of 35 ug/m<sup>3</sup> and the 3-year average of applicable  $PM_{2.5}$  background concentrations, and should be based on the maximum value estimated for any year of the five analysis years.

The 24-hour PM<sub>2.5</sub> background concentration applicable for this study area was developed using New York State Department of Environmental Conservation's (NYSDEC) and EPA available monitoring data for the 2010-2012 from EPA's AirData database data for Queens College monitoring station (which is considered the applicable background monitor for this project) (Table I-2).

Table I-2 Monitored PM<sub>2.5</sub> Values

Withittoff cu 1 Wi2.5 v andes						
Year	First Max	Second Max	Third Max	Fourth Max	98 <sup>th</sup>	
					Percentile	
2010	39.0	36.9	29.2	28.4	26	
2011	34.9	32.3	26.4	26.0	25	
2012	29.8	28.4	25.7	23.7	21	
	24					

As the most recent three-year average  $PM_{2.5}$  background concentration is 24 ug/m³, half of the difference between the NAAQS (35 ug/m³) and this background value is 5.5 ug/m³. As such, an estimated concentration increment of 5.5 ug/m³ was used for determining whether potential  $PM_{2.5}$  impacts are considered to be significant.

For annual average PM<sub>2.5</sub> concentration increments, according to CEQR TM guidance:

An annual increment that is predicted to be greater than 0.3 ug/m³ at a discrete receptor location (elevated or ground level) is considered to be significant. This value has not been revised.

The above criteria were used to evaluate the significance of the predicted PM<sub>2.5</sub> impacts of the proposed development.

#### III. MOBILE SOURCE ANALYSIS

Localized increases in CO levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed development. According to the *CEQR TM* screening threshold criteria for this area of the City, if 170 or more project-generated vehicles pass through a signalized intersection in any given peak period, there is a proposed for mobile air quality impacts and a detailed analysis is required.

The trip generation conducted for the proposed residential development site indicates that the number of project-generated vehicles would be below CEQR screening threshold values during both the AM and PM peak periods at any affected intersection. Therefore, no detailed air quality analysis is required and no significant mobile source air quality impacts are expected as a result of the proposed development.

# IV. GARAGE ANALYSIS

The proposed project will include a 320-space parking garage comprising approximately 46,730 square foot of parking area. An air quality analysis was conducted, following the guidance provided in the *CEQR TM* (Page 17-30) for a mechanically ventilated enclosed garage, to estimate the potential impacts of the garage exhaust utilizing computational procedures presented in EPA's Workbook of Atmospheric Dispersion Estimates (AP-26). This methodology was used to estimates CO concentrations at various distances from the exhaust vent of the garage assuming that the concentration within garage is equal to the concentration in the vent exhaust, and using the appropriate initial horizontal and vertical dispersion coefficients at the vent faces. Because the garage will be used almost exclusively by gasoline-powered automobiles and not diesel-fueled trucks, CO was the only pollutant considered for this analysis.

One exhaust vent was assumed for this analysis. CO concentrations were estimated near this vent at elevated, near sidewalk and far sidewalk receptors. Contributions from emissions generated by street traffic were added to project-generated impacts and appropriate background levels to estimate the total concentrations.

Maximum hourly CO emission rates within the garage were calculated for the time period with the maximum number of departing autos in an hour, since departing autos are assumed to be "cold" and arriving cars are assumed to be "hot" and cold autos emit CO at considerably higher rates than hot autos. Maximum hourly CO emission rates over a consecutive 8-hour period were computed for the 8-hour time

period that averages the largest number of departing autos per hour. Hourly parking demand for the garage is shown in Table I-3. The maximum number of arriving and departing cars in 1 hour (51 in/54 out) and 8 hours (18 in/23 out), respectively, were used in the analysis.

Table I-3 Hourly Garage Parking Demand

Hourly Garage Parking Demand  Volume							
Time Period	Vol	Total Vehicles					
Time Period	In	Out	Within Garage				
12-1 AM	1	1	230				
1-2	1	1	230				
2-3	1	1	230				
3-4	1	1	230				
4-5	1	1	230				
5-6	2	6	226				
6-7	5	19	212				
7-8	6	19	199				
8-9	11	54	156				
9-10	14	19	151				
10-11	14	21	144				
11-12	15	18	141				
12-1 PM	22	22	141				
1-2	19	19	141				
2-3	19	18	142				
3-4	26	16	152				
4-5	39	22	169				
5-6	51	25	195				
6-7	33	17	211				
7-8	29	16	224				
8-9	20	12	232				
9-10	6	7	231				
10-11	4	5	230				
11-12	3	3	230				

Source: Philip Habib and Associates

The analysis assumed that all departing autos were idle for one minute before traveling to the exits of the garage, and all arriving and departing autos traveled at 5 miles per hour (mph) within the garage. The mean traveling distance within the garage was estimated based on the garage floor area. The maximum estimated total 8-hour CO concentration, together with CO background value, was compared to the 8-hour CO NAAQS of 9 ppm.

A 12-foot high exhaust vent for the garage, which is proposed to be located off Commercial Street on the side of the building that fronts a 22-foot wide on-site driveway, was evaluated. Three receptor places were analyzed near this vent – a residential window receptor at the stack height but 10 feet from it; a pedestrian receptor on the sidewalk near the garage that is 6 feet above the ground, and a pedestrian receptor on far sidewalk (across the Commercial Street) that is approximately 389 feet from the vent and 6 feet above the

ground. Contributions from the off-street vehicular traffic on Commercial Street were calculated using methodology described above. Results of this analysis are presented in Table I-4 and I-5.

Table I-4
Garage Analysis for Elevated Receptors

	Receptor at Residential Window				
Height, 12 feet	12				
Vent Height, feet		12			
Distance to Vent, feet	10				
Averaging Period	1-hour 8-hour				
Garage Impact, ppm	0.46	0.32			
Background value, ppm	3.4	2.8			
Total CO Concentration, ppm	3.9	3.1			
NAAQS, CO ppm	35	9			

Table I-5
Garage Analysis for Sidewalk Receptors

	Near	Sidewalk	Far Sidewalk		
Height, feet	6 6			6	
Distance to Vent, feet		5	3	89	
Vent Height, feet	12		12		
Averaging Period	1-hour	8-hour	1-hour	8-hour	
Garage Impact, ppm	0.42	0.33	0.02	0.05	
Street Contributions, ppm			0.05	0.05	
Background value, ppm	3.4	2.8	3.4	2.8	
Total CO Concentration, ppm	3.8 3.1		3.5	2.9	
NAAQS, CO ppm	35	9	35	9	

The result of the analysis is that the garage will contribute a maximum of approximately 0.3 ppm to 8-hour CO concentrations at the window and pedestrian receptors located near the exhaust vent and less than 0.1 ppm at the receptor located on the far side of Commercial Street. These values are less than the NYC *de minimis* criterion provided in the *CEQR TM*. In addition, the maximum total 8-hour CO concentration, including a background of 2.8 ppm, is estimated to be 3.1 ppm, which is less than 8-hour CO NAAQS. Therefore, no significant adverse impacts of garage emissions are predicted.

#### V. BUILDING-ON BUILDING SCREENING ANALYSIS

A screening-level analysis was conducted using *CEQR TM* Figures to determine whether the NOx emissions of each development building would have the potential to significantly impact each of the other development buildings (i.e., project-on-project impacts). This screening analysis is applicable to the Building 2 as it could potentially impact the taller Building 3 building. It is not applicable, however, to estimate the potential impacts of the Building 1 on the Building 2 because the distance between these two buildings is less than the minimum distance of 30 feet required for the CEQR screening procedure.

The following two-step screening analysis was conducted to estimate the potential impacts of the Building 2 emissions on the Building 3:

- 1. Figure 17-3 of CEQR TM was used for the preliminary screening analysis, and
- 2. Figure 17-7 of the CEQR Air Quality Appendix was used for a more refined screening analysis.

The estimated threshold distance for the Building 2, using Figure 17-3, is approximately 200 feet. As this distance is greater than the actual distance between these towers (which will be approximately 100 feet), the Building 2 failed the preliminary NO<sub>2</sub> screening analysis.

The estimated threshold distance for the Building 2, using Figure 17-7, is approximately 95 feet. As this distance is almost the same as the actual distance between these buildings (approximately 100 feet), the potential for a significant impact still exists. Therefore, a detailed dispersion analysis of the Building 2 emissions is warranted.

Because the CEQR screening analysis is not applicable for estimating the potential impacts of the 6-story Building 1, a detailed dispersion analysis of these emissions is warranted as well.

#### VI. BUILDING-ON-BUILDING DETAILED ANALYSIS

# **Dispersion Analysis**

A dispersion modeling analysis was conducted to estimate impacts from stack emissions (assuming a central HVAC system in each building) using the latest version of EPA's AERMOD dispersion model (EPA version 12345). AERMOD is a steady-state plume model that is applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). It can be used to calculate pollutant concentrations from one or more points (e.g., exhaust stacks) based on hourly meteorological data, and has the capability of calculating pollutant concentrations in a cavity region and at locations when the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures.

The AERMOD Building Profile Input Parameters (BPIP) algorithm was employed in this analysis to estimate building profile input parameters for downwash effect calculation. In accordance with CEQR guidance, the analysis was conducted with and without building downwash, urban dispersion surface roughness length, and the elimination of calms.

Regulatory default options of the AERMOD model were used for the 24-hour and annual  $PM_{2.5}$ , 24-hour  $PM_{10}$  and annual  $NO_2$  analysis.

# **Emission Rates**

Twenty-four hour PM<sub>2.5</sub> and PM<sub>10</sub> emission rates for the analysis were developed using natural gas fuel usage factors from the *CEQR Air Quality Appendix*, fuel consumption rates for each building size, and PM<sub>2.5</sub>/PM10 and NO<sub>2</sub> emission factors from EPA's "Compilation of Air Pollutant Emission Factors" (AP-42,), as follows:

- Natural gas fuel usage factor: 58.5 cubic foot per square foot per year (*CEQR Air Quality Technical Appendix*, Table C25, Natural Gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2006) based on building floor square footage;
- PM<sub>2.5</sub> and PM<sub>10</sub> emission factors from natural gas combustion: 7.6 pounds per million standard

cubic feet of fuel (0.0076 MMBtu per hour of heat input) which includes filterable (1.9 pounds per million standard cubic feet) and condensable (5.7 pounds per million standard cubic feet) particles (AP-42, Table 1.4-2);

- NOx emission factor for natural gas combustion: developed assuming use of low NOx burners in the HVAC systems that should provide a maximum 30 ppm NOx concentration in exhaust gases: 36.34 pounds per million standard cubic feet (0.036 pounds per million Btus);
- 24-hour PM<sub>2.5</sub> and PM<sub>10</sub> emission rates: estimated based on assumption that all fuel will be consumed in a 100 days (3 coldest months of the year or 2,400 hours) of winter heating season, with no emissions for the rest of the year. As such, seasonal variable emission factors were used; and
- Annual PM<sub>2.5</sub> and NO<sub>2</sub> emission rates: estimated by adjusting short-term average emission rates to account for seasonal variation in heat and hot water demand, and
- Annual NO<sub>2</sub> concentrations: estimated using a NO<sub>2</sub> to NOx ratio of 0.75 percent, which is recommended by the NYCDEP for conducting an annual NO<sub>2</sub> impact analysis.

# Building Parameters Considered in the HVAC Analysis

The impacts of HVAC emissions from the proposed development buildings would be a function of fuel type, stack height, building size (gross floor area), and the location of each emission source relative to a nearby sensitive receptor site. The following data was used to conduct this analysis:

The gross floor areas and heights of each development building are as follows:

- Building 1: 291,535 gsf, 6 stories (maximum), 68 feet above base plane;
- Building 3: 281,000 gsf, 40 stories (maximum), 404 feet above base plane plus 25 feet mechanical bulkheads; and
- Building 2: 188,115 gsf, 30 stories (maximum), 305.7 feet above base plane plus 25 feet mechanical bulkheads.

The size and location of each existing building were determined using the New York City Open Accessible Space Information System Cooperative (OASIS) data base. The size and locations of the nearby proposed future No Build buildings were obtained from the Greenpoint Landing Disposition EAS.

# **Stack Parameters and Boiler Capacity**

Boiler sizes were estimated based on a fuel consumption rate of 1,020 Btu/cubic feet and the assumption that all fuel would be consumed during the 100 day (or 2,400 hour) heating season. Stack diameters and exit velocities were estimated based on values obtained from NYCDEP "CA Permit" database for the corresponding boiler size (i.e., rated heat input or million Btus per hour). All stack exit temperatures were assumed to be 300°F (423° K). Stack parameters, boiler capacities, and estimated pollutant emission rates for each building are presented in Table I-6.

#### Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2008-2012). Surface data were obtained from La Guardia Airport and upper air data were obtained from Brookhaven station, New York. Data were processed using the current EPA AERMET version 12345 and the EPA procedure. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Meteorological data were combined together to develop a 5-year set of meteorological conditions, which was used for all AERMOD modeling runs.

# **Background Concentrations**

Pollutant background concentrations for 2008-2012 were developed from monitoring data collected by the NYSDEC at the Queens College monitoring station. The 3-year average of 24-hour  $PM_{2.5}$  (24  $ug/m^3$ ), 24-hour  $PM_{10}$  (52  $ug/m^3$ ), and annual  $NO_2$  (20.86 ppb or 39.3  $ug/m^3$ ) background concentrations were used in the analysis.

# Stacks and Receptor Locations

Receptor locations that were considered in the building-on-building analysis were placed around the perimeter of each building on floor levels likely to experience the highest impacts from stack emissions. These receptors were located on the taller towers that would be affected by HVAC emissions released from the stacks of the 68-foot Building 1 and the 331-foor Building 2. The stack for the Building 2 was located on the top of the building's mechanical bulkhead (Figure I-1) and the location of the stack for the 6-story Building 1 is shown on Figure I-2.

Table I-6 Stack Parameters and Pollutant Emission Rates Used in the Analysis

Building	Total Floor Area	Building Height	Estimated Boiler Capacity	PM <sub>2.5</sub> Emissio	PM <sub>10</sub> on Rates		O <sub>2</sub> on Rates	Stack Parameters		
ID	Aita		Сараспу	24-hour	Annual	1-hour	Annual	Diameter	Exit Velocity	Temperature
	gsf	feet	MMBtu/hr	g/sec	g/sec	g/sec	g/sec	feet	ft/sec	deg K
40-story North Tower	281,000	429	7.0	6.56E-03	1.80E-03	3.20E-02	8.75E-03	1.5	23.6	423
30-story South Tower	188,115	331	4.7	4.39E-03	1.20E-03	2.14E-02	5.86E-03	1.0	25.6	423
6-story Base Building	291,535	68	7.2	6.80E-03	1.86E-03	3.31E-02	9.08E-03	1.5	23.6	423

Stack for Building 2 with Receptors on Building 3

Stack for Building 2 with Receptors on Building 3

Stack for Building 2 with Receptors on Building 3

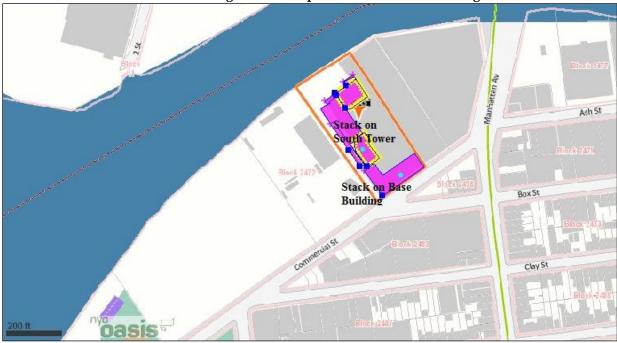
Block 2472

Block 2472

Block 2482

Figure I-1
Stack for Building 2 with Receptors on Building 3

Figure I-2 Stack on Building 1 with Receptors on South and Building 3s



# Maximum Estimated Building-on-Building HVAC System Impacts

The results of the building-on-building dispersion analysis are discussed below. Maximum estimated values are compared to the 24-hour/annual  $PM_{2.5}$  significant threshold values, the 24-hour  $PM_{10}$ , and annual  $NO_2$  NAAQS.

PM<sub>2.5</sub> Analysis Results

Building 2 PM<sub>2.5</sub> Emission Impacts on Building 3 Residential Uses

The analysis was conducted to estimate impact of emissions from Building 2 stack on the Building 3 residential uses. The results of this analysis, which are presented in Table I-7 and shown on Figure I-3, are that impacts from emissions from this stack would not cause an exceedance of the PM<sub>2.5</sub> significant threshold limits. The maximum 24-hour PM<sub>2.5</sub> impact is estimated to be 2.69 ug/m<sup>3</sup> and the annual average PM<sub>2.5</sub> impact is estimated to be 0.02 ug/m<sup>3</sup>. Therefore, PM<sub>2.5</sub> emissions would not cause a significant air quality impact on the residential uses of Building 3.

An additional analysis was conducted to determine whether there would be a potential for a significant  $PM_{2.5}$  impact at any roof-top location (i.e., cause an impact greater than the significant threshold values). For this analysis, a stack was located 10 feet from the edge of the roof facing the Building 3. The 24-hour and annual  $PM_{2.5}$  impacts at this location were estimated to be 4.9  $ug/m^3$  and 0.02  $ug/m^3$ . As these values are less than the corresponding significant threshold values of 5.5 and 0.3  $ug/m^3$ , respectively, there would not be a potential for a significant impact at any roof-top stack location.

 $\label{eq:Table I-7} Table \ I-7 \\ Building \ 2\ PM_{2.5} \ Emission \ Impacts \ on \ Building \ 3\ Residential \ Uses$ 

Dunuing 2 1 1412.5 1	Dunuing 2 1 W <sub>2.5</sub> Emission impacts on Dunuing 3 Residential Oses						
Analysis Year	Estimated Maximum 24-hour PM <sub>2.5</sub> Impact, ug/m <sup>3</sup>						
2008	1.63						
2009	2.63						
2010	0.88						
2011	2.69*						
2012	2.00						

Maximum estimated value

PM<sub>10</sub> Analysis Results

Building 2 PM<sub>10</sub> Emission Impacts on Building 3 Residential Uses

The analysis was conducted to estimate the potential impact of  $PM_{10}$  emissions from Building 2 stack on the Building 3 residential uses. The result of this analysis, which is presented in Table I-8, is that the maximum total estimated 24-hour  $PM_{10}$  concentration (impacts plus background value) is less than the 24-hour  $PM_{10}$  NAAQS of 150 ug/m3. Therefore,  $PM_{10}$  emissions would not cause a significant air quality impact on the residential uses of Building 3.

Ta	ıble I-8
Building 2 PM <sub>10</sub> Emission Impa	acts on Building 3 Residential Uses

2 414 10 2 114 10 2 114 2						
Analysis Year	Estimated Maximum 24-hour PM <sub>10</sub> Concentrations, ug/m <sup>3</sup> *					
2008	53.6					
2009	54.6					
2010	52.9					
2011	54.7					
2012	54.0					

<sup>\*</sup> Includes a background value of 52 ug/m<sup>3</sup>

 $Figure \ I-3 \\ Building \ 2 \ on \ Building \ 3 \ PM_{2.5} \ Contour$ 



Building 1 PM<sub>2.5</sub> Emission Impacts on Building 2 Residential Uses

This analysis was conducted to estimate impact of emissions from 6-story Building 1 stack on the nearby Building 2 residential uses. The result of the analysis, as shown in Table I-9 and Figure I-5, is that the maximum  $PM_{2.5}$  impacts of the emissions from this stack on Building 2 residential uses would not exceed the significant threshold limits. The maximum 24-hour  $PM_{2.5}$  impact is estimated to be 4.68 ug/m<sup>3</sup> and the annual average impact is 0.1 ug/m<sup>3</sup>. These values are less than the corresponding significant threshold values of 5.5 and 0.3 ug/m<sup>3</sup>, respectively. Therefore,  $PM_{25}$  emissions would not cause a significant air quality impact on the residential uses of Building 2.

Analysis Year	Estimated Maximum 24-hour Impact, ug/m <sup>3</sup>
2008	4.37
2009	2.38
2010	4.19
2011	4.68*
2012	3.32

<sup>\*</sup>Maximum estimated value

Figure I-5
Building 1 on Building 2 PM<sub>2.5</sub> Contour



PM<sub>10</sub> Analysis Results

# Building 1 PM<sub>10</sub> Emission Impacts on Building 2 Residential Uses

An analysis was conducted to estimate impact of  $PM_{10}$  emissions from 6-story Building 1 stack on the Building 2 residential uses. The result of this analysis, which is presented in Table I-10, is that the maximum total estimated 24-hour  $PM_{10}$  concentration is less than the 24-hour  $PM_{10}$  NAAQS of 150 ug/m<sup>3</sup>. Therefore,  $PM_{10}$  emissions would not cause a significant air quality impact on the residential uses of Building 2.

 $\begin{tabular}{ll} Table I-10\\ Building 2\ PM_{10}\ Emission\ Impacts\ on\ Building\ 2\ Residential\ Uses \end{tabular}$ 

Analysis Year	Estimated Maximum 24-hour PM <sub>10</sub> Concentration, ug/m <sup>3</sup> *
2008	56.3
2009	54.4
2010	56.2
2011	56.7
2012	55.3

5-year average

**55.8** 

#### NO<sub>2</sub> Analysis Results

#### Building 2 NO<sub>2</sub> Emission Impacts on Building 3 Residential Uses

The result of the annual  $NO_2$  analysis is that the maximum total annual average  $NO_2$  concentration, including a background value of  $39.3~\text{ug/m}^3$ , is estimated to be  $39.6~\text{ug/m}^3$ , which is less than the annual NAAQS of  $100~\text{ug/m}^3$ . Therefore, HVAC  $NO_2$  annual emissions from the Building 2 would not cause a significant air quality impact on the Building 3 residential uses.

#### Building 1 NO<sub>2</sub> Emission Impacts on Building 2 Residential Uses

The result of the NO<sub>2</sub> analysis is that the maximum total annual average NO<sub>2</sub> concentration, including background value of 39.3 ug/m<sup>3</sup>, is estimated to be 39.7 ug/m<sup>3</sup>, which is less than the annual NO<sub>2</sub> NAAQS of 100 ug/m<sup>3</sup>. Therefore, HVAC NO<sub>2</sub> annual emissions from the Building 1 would not cause a significant air quality impact on the Building 2 residential uses.

#### Conclusion

No significant building-on-building HVAC PM<sub>2.5</sub> emission impacts or exceedances of the 24-hour PM<sub>10</sub> and annual NO<sub>2</sub> NAAQS are predicted. As such, estimated project-on-project impacts of the HVAC emissions are not significant.

# VII. PROJECT-ON-EXISTING ANALYSIS

Based on review of existing land uses, no existing buildings taller than the proposed buildings were found within the 400 feet of the development site. However, there are two tall buildings that are proposed to be built by year 2016 as a part of Green Point Landing EAS No-Build Action on Block 2472 Lot 100 at 45 Commercial Street. These buildings will be 178 feet tall building on Site 4a (297,174 gsf) and 300 feet tall building on Site 4b (131,406 gsf). In addition, there are two other buildings proposed as-of-right at 37 Commercial Street (Block 2472, p/o Lot 100) -- to be located on the portion of the lot that immediately adjacent to the 4a and 4b Sites. One tower will be 300 feet tall (451,370 gsf) and the other will be 400 feet tall (593,416 gsf). Therefore, in accordance with CEQR guidance, an analysis of the potential impacts of the HVACs emissions from the proposed development buildings on the future No Action and as-of-right land uses was conducted (project-on-existing impacts) to determine whether potentially significant impacts could occur.

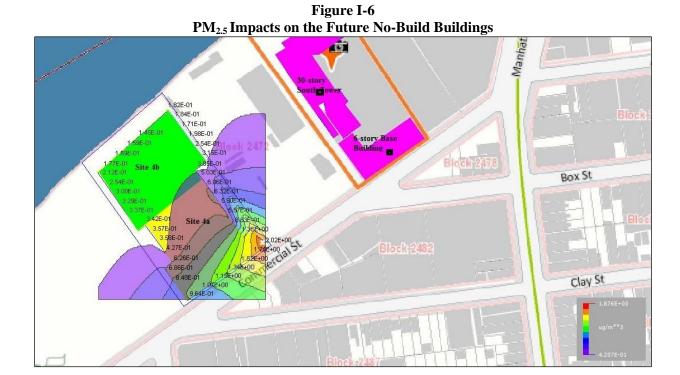
The emissions from two of the project stacks –the 6-story Building 1 and the 30-story Building 2 -- were considered in the evaluation (Figure I-6). The stack on the Building 3 is taller than both No-Build and as-

<sup>\*</sup>Includes a background value of 52 ug/m3

<sup>\*</sup>Maximum estimated value

of-right developments, and would therefore not significantly impact these buildings. Receptors were placed around perimeter of the whole lot to encompass all buildings proposed to be built on Lot 100 including the as-of-right buildings, at heights where impacts from the 68 feet Building 1 and 331 feet Building 2 stacks at 77 Commercial Street are likely to occur, in 10 feet increments.

The result of this analysis is that maximum estimated 24-hour  $PM_{2.5}$  impact of 2.1  $ug/m^3$  (Figure I-6) and the maximum annual  $PM_{2.5}$  impact of 0.05  $ug/m^3$  are less than the significant 24-hour and annual  $PM_{2.5}$  threshold limits of 5  $ug/m^3$  and 0.3  $ug/m^3$ , respectively. Therefore, no significant impact of the  $PM_{2.5}$  emissions on the proposed future No Action and as-of-right developments will occur. In addition, the estimated maximum annual  $NO_2$  impact (0.23  $ug/m^3$ ) plus background value is 39.3  $ug/m^3$ , which is less than the annual  $NO_2$  NAAQS.



# VIII. EXISTING-ON-PROJECT ANALYSIS

No existing buildings within the 400 feet of the development site would have the potential to significantly impact the proposed development. However, four (4) buildings are proposed to be built in this area in 2016 as a part of the Greenpoint Landing Development at 45 Commercial Street and as part of an as-of-right development at 37 Commercial Street.

A screening-level analysis was conducted using *CEQR TM* procedures (Air Quality Appendix Figure 17-7 – NO<sub>2</sub> Boiler Screen for Residential Developments using Natural Gas) to estimate whether the impacts of the HVAC emissions from the future No Action and As-of-Right buildings would have the potential to significantly impact the proposed developments.

It was conservatively assumed that the total HVAC emissions from all four buildings combined (with a total floor area of 1,473,366 square feet) would be released from a single roof-top stack on one of the buildings. The curve on Figure 17-7 in the CEQR Appendix for a 165-foot tall stack was used for this analysis, and the threshold distance was estimated to be 275 feet.

This threshold value was compared to the actual distance between the future No-Action developments and the proposed buildings at 77 Commercial Street, which is approximately 300 feet. Because the actual distance is greater than the threshold distance, no significant air quality impacts from No-Action and As-of-Right development on the proposed buildings are predicted to occur.

#### IX. CLUSTER ANALYSIS

Because the proposed buildings would be of different heights, they do not meet the CEQR definition of a cluster. Therefore, no cluster analysis is warranted.

#### X. EXISTING LARGE COMBUSTION EMISSION SOURCES

No existing large combustion sources, such as power plant, cogeneration facilities, etc., which may contribute to the pollutant concentration at the identified receptors, were found within 1,000 feet of the development site. As such, no analysis is warranted.

#### XI. ANALYSIS OF TOXIC AIR EMISSIONS FROM EXISTING INDUSTRIAL SOURCES

Emissions of toxic pollutants from the operation of nearby existing industrial emission sources could affect the sensitive land uses of the proposed development. An analysis was therefore conducted to determine whether the potential impacts of these emissions would be significant.

Data necessary to perform this analysis, which include facility types, source identification and location, pollutant emission rates, and exhaust stack parameters, were obtained from regulatory agencies (e.g., from existing air permits). Emissions from existing industrial facilities located within 400 feet of the development sites that are permitted to exhaust toxic pollutants were considered in this analysis.

# **Data Sources**

Information regarding emissions of toxic air pollutants from existing industrial sources was developed using the following procedure:

- A study area was developed that includes all air toxic emission sources located within 400 feet of all of the affected development sites;
- A search was performed to identify NYSDEC Title V permits and permits listed in the EPA Envirofacts database in this study area;
- The OASIS mapping and data analysis application was used to identify industrial uses within the study area and develop buildings parameters for the existing emission sources;
- Air permits for active permitted industrial facilities within 400 feet of the proposed development that are included in the NYCDEP Clean Air Tracking System database or

permit applications were acquired and reviewed to obtain the information necessary to conduct the toxic air analysis. The data on these permits or permit applications, which include facility source type and locations, stack parameters, pollutant type and its emission rates, etc., are considered the most current and served as the primary basis of data for this analysis; and

• Field observations were conducted to identify and validate the existence of the permitted facilities and determine if there are any non-permitted facilities currently operating within the study area.

# Health Risk Assessment Methodology

Toxic air pollutants can be grouped into two categories: carcinogenic air pollutants, and non-carcinogenic air pollutants. The EPA developed cancer risk inhalation guideline values based on compound-specific inhalation unit risk factors (URFs) for carcinogenic pollutants and chronic non-cancer (annual) and short-term acute (1-hour) inhalation guideline values for toxic pollutants that are defined as *RfCs* (reference dose concentrations) and AIECs (acute inhalation exposure concentrations), respectively. These data are contained in the EPA IRIS (Integrated Risk Information System) database and/or EPA Prioritized Chronic Dose-Response Values and Acute Dose-Response Values for Screening Risk Assessment.

Because no carcinogenic toxic pollutants were identified to be released from the currently active operating facilities, methodology to estimate carcinogenic cancer risk is not provided here.

In order to evaluate short-term and annual impacts of non-carcinogenic pollutants, the NYSDEC, following EPA guidelines, has also established short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs) for exposure limits (DAR-1). These are allowable guideline concentrations that are considered acceptable concentrations below which there should be no adverse effects on the health of the public.

Once the chronic non-cancer hazard quotient (HQ) of each compound is established, they are summed together to arrive at the total hazard index (HI). If the HI is less than or equal to one, then the non-carcinogenic risk is considered to be insignificant. Similar to this, once the acute hazard quotient (AHQ) of each compound is established, they are summed together to arrive at the total acute hazard index (AHI). If the AHI is less than or equal to one, then the acute non-carcinogenic risk is considered to be insignificant.

The procedures to estimate chronic non-cancer and acute hazard indexes of toxic pollutants are outlined in the EPA Human Health Risk Assessment Protocol (HHRAP). The HHRAP is a guideline that can be used to perform health risk assessment for individual compounds with known health effects to determine the level of health risk posed by an increased ambient concentration of that compound at a potentially sensitive receptor. The derived health risk values from the HHRAP are used in this analysis to determine the total risk posed by the release of multiple air toxic contaminants.

# Non-Carcinogens

Chronic non-cancer hazard quotients (HQ) through inhalation are estimated using the following equation (HHRAP, Table B-5-1 and C-2-2):

 $HQ = EC \times 0.001/RfC$  and  $EC = C_a \times EF \times ED/AT \times 365$  days/year

#### Where:

EC = exposure concentrations of compound,  $\mu g/m^3$ 

 $C_a$  = total ambient air concentration of specific pollutant (estimated by the dispersion model),  $\mu g/m^3$ 

RfC = reference dose concentration, established by the EPA mg/m<sup>3</sup> or annual guideline concentration established by NYSDEC, ug/m<sup>3</sup>

EF = exposure frequency, days/year ED = exposure duration, year AT = averaging time, year 0.001 = units conversion factor, mg/µg

Acute hazard quotients through inhalation (AHQ) are estimated using the following equation (HHRAP, Table C-2-3):

 $AHQ = C_{acute} \times 0.001/AIEC$ 

#### Where:

 $C_{acute} = 1$ -hour air concentration, (estimated by the dispersion model),  $\mu g/m^3$  AIEC (SGC) = 1-hour acute inhalation exposure or short-term guideline concentration,  $mg/m^3$  or  $ug/m^3$  0.001 = units conversion factor,  $mg/\mu g$ 

Once the chronic non-cancer (HQ) or acute hazard quotients (AHQ) of each compound are established, they are summed together to arrive at the total chronic non-cancer (HI) or acute hazard index (AHI). If the total chronic non-cancer or acute hazard indexes are less than or equal to one, then the non-cancer or acute risk is not considered to be significant.

# **Dispersion Analyses**

A dispersion analysis of toxic pollutants was conducted using *CEQR TM* screening procedures for industrial emission sources with toxic air pollutants. These procedures were utilized to conservatively estimate the potential for significant impacts using the pre-tabulated pollutant concentrations provided in Table 17-3, "Industrial Source Screen" of the *CEQR TM* for the applicable averaging time periods. This approach estimated the maximum short-term and annual average values at various distances from an emission source (from 30 to 400 feet) based on generic emission rate of 1 gram per second.

The values obtained using Table 17-3 (12,051 ug/m³ for the 1-hour averaging period and 598 ug/m³ for annual averaging period) that corresponds to the distance between the emission source and the proposed development (approximately 100 feet) were then multiplied by the permitted emission rate of each pollutant to estimate actual hourly and annual pollutant concentrations. This procedure was repeated for each pollutant, and the estimated concentrations were then compared with the short-term and annual guideline values of each pollutant.

#### **Emission Data**

Emission data for the facilities included in the analysis were obtained directly from the permit for each facility. Field observations were also conducted to identify and validate the existence of the permitted facilities and determine if there are any non-permitted facilities currently operating within the study area.

Thirteen (13) permits were identified from the NYCDEP Clean Air Tracking System database as being from facilities located within 400 feet of the proposed developments. Based on a review of these permits, the following facilities were eliminated from further consideration because they do not emit toxic air pollutants or are no longer in operation:

- Permit CB027706N (at 1155 Manhattan Avenue) for Greenpoint Manufacturing Center is for a boiler (and not a permit for toxic pollutants) that is no longer in operation;
- Permits PB019403H, PA042297H, and PA028994M (also at 1155 Manhattan Avenue) for Greenpoint Manufacturing Center are for three (3) businesses (Tom Hall Woodworking Inc, Andrew Watel, Inc, and A. Pensato Industries, respectively), which no longer exist at this address and the permits expired more than 5 years ago;
- Permits PB040105K (at a facility at 2-10 54th Avenue) and PB051207H (at a facility at 2-55th Avenue) are for emergency generators, which would operate only for short periods of time and are not considered for an air toxics analysis.

Of the remaining active permits, which were considered for analysis, all are for facilities located at the 1155 Manhattan Avenue. Three (3) permits (PA051195L for Maro Interiors Inc., PA054295M for Heritage Workshop, and PA008390N for S&G Inc.) are for spray booth operations, and four (PB011405K for Kenset Corp., PB016507J, PB016707X, and PB016807Y for Heritage Woodshop Inc.) are for woodworking facilities.

# Pollutants and Emission Rates

The identified operating facilities include spray booth and woodworking facilities. Eleven (11) pollutants are released from the operation of these facilities, none of which are carcinogens. Pollutants and emission rates for this analysis were obtained from the permits.

# Results of the Cancer Risk and Hazard Index Evaluation

Table I-11 provides permit information for the existing permitted industrial sources considered in the analysis, including type and location of each facility, permit number, contaminant name, CAS registry number, and hourly and annual emission rates for each pollutant.

Table I-12 provides the screening distance and unitary concentration value use to calculate the potential impact concentrations of the contaminants identified in table I-11. Additionally, it compares the results to NYSDEC's DAR-1 SGC/AGC concentrations standards as per the NYCDEP *CEQR TM* guidelines.

Table I-13 provides estimated annual (long-term) exposure concentrations and chronic non-cancer quotients for each pollutant and total non-cancer hazard index (HI). As shown, the total chronic non-cancer quotients (HQ) and total hazard index (HI) caused by non-carcinogenic pollutants emitted from all of sources combined is estimated to be 0.81. This value is below the level (of 1) that is considered by the EPA to be significant.

Table I-14 provides estimated 1-hour (short-term) exposure concentrations and acute hazard quotients (AHQ) for each pollutant and the total acute hazard index (AHI). As shown, the total acute hazard index caused by all the pollutants emitted from all of sources combined is estimated to be 0.94. This value is below the level (of 1) that is considered by the EPA to be significant.

# **Summary of Air Toxics Results**

The result of this analysis is that no exceedances of EPA/NYSDEC/NYCDEP guideline thresholds values for non-carcinogenic toxic pollutants are predicted under the Proposed Action.

**Table I-11: Existing Active Industrial Source Permit Information** 

	Fa	cility L	ocation	G		Permit Inform	ation																	
Facility Name	Block	Lot	Address	Permit #	Facility Type	Pollutant	CAS No.	Hourly Rate	Annual Rate															
								g/sec	g/sec															
						Particulate	NY075-00-0	0.00189	0.00220															
						MEK	00078-93-3	0.0479	0.01197															
					Toluene	00108-88-3	0.0706	0.03528																
Maro Interior,				PA051195L	Spray Booth	IsoA	0067-63-0	0.0416	0.02087															
Inc				PAUSITIPSL	эргау боош	MIK	00108-10-1	0.0731	0.07370															
						IsoB	00078-83-1	0.08441	0.04252															
						Xylene	01330-20-7	0.0340	0.01701															
						2-	00111-76-2	0.0315	0.00756															
	1					Particulate	NY075-00-0	0.0002	0.00252															
						MEK	00078-93-3	0.1487	0.07433															
					IsoA	0067-63-0	0.0466	0.02268																
			1155	PA054295M		MIK	00108-10-1	0.1625	0.08063															
The Heritage	2472	350	Manhattan			Xylene	01330-20-7	0.0554	0.01386															
Workshop			Avenue		PA054295M	PA054295M	PA054295M Spray Booth	2-	00111-76-2	0.0227	0.01134													
								Butyl	00123-86-4	0.0693	0.03402													
																					Acetone	00067-64-1	0.1146	0.05669
									Methanol	00067-56-1	0.0076	0.00189												
								Dioctylphth	00117-81-7	0.0340	0.01638													
	1					Particulate	NY075-00-0	0.0004	0.00756															
						IsoA	0067-63-0	0.0567	0.05039															
S & G Inc.				PA008390N	Spray Booth	Methyl	00108-10-1	0.2268	0.20157															
						Xylene	01330-20-7	0.0335	0.01701															
Kenset Corp	1			PB011405K	Woodworking	Particulate	NY075-00-0	0.0001	0.00004															
Heritage	1			PB016507J	8		-	0.0001	0.00001															
Woodshop				PB016707X	Woodworking	Particulate	NY075-00-0	0.0001	0.00001															
Inc.				PB016807Y				0.0001	0.00001															

MEK = Methyl Ethyl Ketone MIK= Methyl Isobutyl Ketone IsoA = Isopropyl Alcohol IsoB = Isobutyl Alcohol

TABLE I-12
Potential Impact Concentrations and Comparison to DAR-1 SGC/AGC Standards for Toxic Pollutants

Pollutant Name	CAS No.	Distance to nearest Building (feet)	Short- Term Screen (ug/m3)	Potential Hourly Impact (ug/m3)	DAR-1 SGC (ug/m3)	Long- Term Screen (ug/m3)	Potential Annual Impact (ug/m3)	DAR-1 AGC (ug/m3)				
Particulate	NY075-00-0			11	88		7.3	15				
Methyl Ethyl Ketone	00078-93-3			2368	13000		51.6	5000				
Toluene	00108-88-3			850	37000		21.1	5000				
Isopropyl Alcohol	0067-63-0	100 12051		1746	98000		42.6	7000				
Methyl Isobutyl Ketone	00108-10-1		100	100	100 12051	12051	12051	5572	31000	598	164.6	3000
Isobutyl Alcohol	00078-83-1			NA		25.4	360					
Xylene	01330-20-7			1488	4300		19.4	100				
2-butoxethanol	00111-76-2			653	14000		11.3	1600				
Butyl Acetate	00123-86-4			835	95000		20.3	17000				
Acetone	00067-64-1			1382	180000		33.9	30000				
Methanol	00067-56-1			91	33000		1.1	4000				

TABLE I-13 Chronic Non-Cancer Quotients (HQ) and Total Hazard Index (HI) of the Toxic Pollutants

		Max Estimated Concentration	AGC (RfC)	_	Hazard Quotients			
Chemical Name	CAS No,	$(\mu g/m^3)$	$(ug/m^3)^{(2)}$	Source	(HQ)			
Particulate	NY075-00-0	7.3	15	DAR-1 (2)	4.70E-01			
Methyl Ethyl Ketone	00078-93-3	51.6	5,000	DAR-1 (2)	9.90E-03			
Toluene	00108-88-3	21.1	5,000	DAR-1 (2)	4.05E-03			
Isopropyl Alcohol	0067-63-0	42.6	7,000	DAR-1 (2)	5.84E-03			
Methyl Isobutyl	00108-10-1	164.6	3,000	DAR-1 (2)	5.26E-02			
Isobutyl Alcohol	00078-83-1	25.4	360	DAR-1 (2)	6.77E-02			
Xylene	01330-20-7	19.4	100	DAR-1 (2)	1.86E-01			
2-butoxethanol	00111-76-2	11.3	1,600	DAR-1 (2)	6.77E-03			
Butyl Acetate	00123-86-4	20.3	17,000	DAR-1 (2)	1.15E-03			
Acetone	00067-64-1	33.9	30,000	DAR-1 (2)	1.08E-03			
Methanol	00067-56-1	1.1	4,000	DAR-1 (2)	2.71E-04			
Total Esti	Total Estimated Chronic Non-Cancer Hazard Index (AHI)							
Chi	ronic Non-Cand	er Hazard Index Th	nreshold		1			

#### Notes:

Chemical abbreviation as above

- 1. AGC (RfC) = annual guideline or reference dose concentration, established by the NYSDEC or EPA, ug/m<sup>3</sup>
- 2. DAR-1 = NYSDEC Policy DAR-1 "Guidelines for the Control of Toxic Ambient Air Contaminants"

 $TABLE\ I-14 \\ Acute\ Quotients\ (AHQ)\ and\ Total\ Acute\ Hazard\ Index\ (AHI)\ of\ the\ Toxic\ Pollutants$ 

Chemical Name	CAS No.	Max Estimated Concentration (μg/m³)	SGC (AIEC) (ug/m³) (1)	Source	Acute Hazard Quotients (AHI)
Toluene	108-88-3	11	88	DAR <sup>-(2)</sup> DAR-1 <sup>(2)</sup>	1.21E-01
Xylenes	1330-20-7	2,368	13,000	DAR <sup>-(2</sup>	1.82E-01
IsoA	00067-63-0	850	37,000	DAR <sup>-(2</sup>	2.30E-02
MIK	00108-10-1	1,746	98,000	DAR <sup>-(2</sup>	1.78E-02
MEK	00078-93-3	5,572	31,000	DAR <sup>-(2</sup>	1.80E-01
Particulate	75-00-0	1,488	4,300	DAR <sup>-(2</sup>	3.46E-01
2-Butoxethanol	00111-76-2	653	14,000	DAR <sup>-(2</sup>	4.66E-02
Butyl Acetate	00123-86-4	835	95,000	DAR <sup>-(2</sup>	8.79E-03
Acetone	00067-64-1	1,382	180,000	DAR <sup>-(2</sup>	7.68E-03
Methanol	00067-56-1	91	33,000	DAR <sup>-(2</sup>	2.76E-03
<b>Total Estimated Acute Ha</b>	zard Index (AHI)				0.94
Total Acute Hazard Index Threshold					1

#### Notes

- 1. SGC (AIEC) = Short-term or Acute Inhalation Exposure Concentrations established by NYSDEC, ug/m<sup>3</sup>
- 2. DAR-1 = NYSDEC Policy DAR-1 "Guidelines for the Control of Toxic Ambient Air Contaminants"

# XII. CONCLUSIONS AND RECOMMENDATIONS

#### **Mobile Sources**

The proposed project would not generate air quality impacts for CO or fine particulates because project-generated traffic would fall below the threshold of 170 vehicles through in intersection during a peak traffic hour for this area of the City. In addition, as most of the project-generated vehicles would be automobiles, there is also would be no potential for significant  $PM_{10}$  or  $PM_{2.5}$  impacts.

# Parking Facilities

No potential impacts are predicted from parking facility either within garage or vent exhaust on both ground level receptors on sidewalk or across the street and elevated receptors near vent(s). It is estimated that the garage will contribute a maximum of approximately 0.3 ppm to 8-hour CO concentrations at the window and pedestrian receptors located near the exhaust vent and less than 0.1 ppm at the receptor located on the far side of Commercial Street. These values are less than the NYC *de minimis* criterion provided in the *CEQR TM*. In addition, the maximum total 8-hour CO concentration, including a background of 2.8 ppm, is estimated to be 3.1 ppm, which is less than 8-hour CO NAAQS. Therefore, no significant adverse impacts of garage emissions are predicted.

# **Air Toxics**

Toxic air emissions from industrial uses within 400 feet of the development sites would not cause significant adverse impacts on the proposed development.

# **HVAC** Analysis

Potential impacts from the HVAC emissions of the proposed development buildings would not significantly impact the other proposed buildings (project-on-project), existing buildings (project-on-existing), or the future No-Build developments. In addition, the HVAC emissions of the existing and future No-Build buildings would not significant impact the proposed development. In addition, no large combustion emission sources are located within 1,000 feet of the proposed development. Therefore, no adverse air quality impacts are predicted.

# XIII. (E) DESIGNATION LANGUAGE

Three (E) designations would be required for the development buildings' HVAC systems as per the results of the air quality analyses:

The 68-foot tall Building 1 would require an (E) designation for its central heating system that would specify the type of fuel to be used, the height of the stack(s) above the roof, and stack location.

An additional analysis was conducted for the HVAC emissions from Building 2 to determine whether any restrictions on the stack location would be required. The result of this analysis is that the stack could be located anywhere on the roof of Building 2 without significantly impacting Building 3. As such, the (E) designation for Building 2 would require a restriction to the type of fuel to be utilize, and the height of the stack(s) above the roof, as noted below.

Similarly, as Building 3 is taller than nearby buildings, the stack could be located anywhere on the roof (with a restriction on the height of the stack(s) above the roof), but no restriction on the use of fuel would be necessary.

The (E) designation text for these three buildings related to air quality would be as follows:

# Building 1 (6-Story) (Block 2472, p/o Lot 410)

Any new development on the above-referenced property must ensure that the fossil fuel-fired heating and hot water equipment will utilize only natural gas, and must be fitted with low  $NO_x$  burners with a maximum emission concentration of 30 ppm, and that heating and hot water equipment exhaust stack(s) are located at least 68 feet above grade, and at least 120 feet from lot #425 of Block 2472, and at least 100 feet from Building 2, to avoid any potential significant air quality impacts.

# Building 2 (30-Story) (Block 2472, p/o Lot 410)

Any new development on the above-referenced property ensure that the fossil fuel-fired heating and hot water equipment will utilize only natural gas, and must be fitted with low  $NO_x$  burners with a maximum emission concentration of 30 ppm, and that heating and hot water equipment exhaust stack(s) are located at least 331 feet above grade to avoid any potential significant air quality impacts.

#### Building 3 (40-Story) (Block 2472, p/o Lot 410)

Any new development on the above-referenced property must ensure that the fossil fuel-fired heating and hot water equipment exhaust stack(s) are located at least 429 feet above grade, to avoid any potential significant air quality impacts.

With the above mentioned controls in place, no significant adverse impacts related to air quality would result from the proposed development.

The (E) designations for the applicant's development sites are based on the applicant's illustrative building design for these sites. Any changes to the heights or configurations of the buildings or tiers may necessitate revisions to the (E) designations.

# APPENDIX 1 WATERFRONT REVITALIZATION PROGRAM

For Internal Use Only:	WRP no
Date Received:	DOS no

# NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's designated coastal zone, must be reviewed and assessed for their consistency with the <u>New York City Waterfront Revitalization Program (WRP)</u>. The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and subsequently approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

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

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1.	Name: Waterview at Greenpoint	, LLC ("Waterview"), David Bistricer	
2.	Address: c/o Clipper Equity LLC, 46	611 12th Street, Suite 11, Brooklyn, NY 11219	
3.	Telephone: 718-438-2804	Fax: E-mail: david@clipperequity.com	
4.	Project site owner: Waterview at Gre	eenpoint, LLC (Waterview); City of New York	

#### **B. PROPOSED ACTIVITY**

1. Brief description of activity:

This application would facilitate the redevelopment of underutilized waterfront property (Block 2472, Lot 410) in Greenpoint, Brooklyn, with a mixed-use residential and commercial development. The project increment would include an aggregate of up to approximately 444 dwelling units (427,360 gsf), 182 accessory parking spaces (14,530 gsf), and 159,910 gsf of public open space.

2. Purpose of activity:

The applicant and the City have negotiated an agreement pursuant to which the applicant would obtain up to approximately 368,000 gsf (343,923 zsf) of floor area, or "development rights", from the City-owned property (Block 2472, Lot 425) for use in the proposed development on the development site. The City would use the proceeds from the sale of the development rights to fund the construction of Box Street Park and the applicant would use a portion of the transferred development rights to provide a minimum of 200 affordable units as part of the proposed development.

3. Location of activity: (street address/borough or site description):

77 Commercial Street (Block 2472, Lot 410)

Pro	posed Activity Cont'd				
4.	If a federal or state permit or license was issued or is required for the proposed activity, identify the type(s), the authorizing agency and provide the application or permit number(s), if known:	e permit			
	New York State Department of Environmental Conservation (DEC) permits and U.S. Army Corps of Engineer permits will be required (permit numbers to be determined).				
5.	Is federal or state funding being used to finance the project? If so, please identify the funding sour No.	rce(s).			
6.	Will the proposed project require the preparation of an environmental impact statement?  Yes No ✓ If yes, identify Lead Agency:				
7.	Identify <b>city</b> discretionary actions, such as a zoning amendment or adoption of an urban renewal proposed project.	olan, req	uired		
	(1) A Special Permit pursuant to ZR Section 62-836 to waive maximum base and building heights, minimum setback and other bulk requirements applicable to R6 districts in CD 1 set forth in ZR Section 62-354; (2) an Authorization pursuant to ZR Section 62-822; and (3) a Certification pursuant to ZR Section 62-811.				
C.	COASTAL ASSESSMENT				
Lo	cation Questions:	Yes	No		
1.	Is the project site on the waterfront or at the water's edge?	<b>√</b>			
2.	Does the proposed project require a waterfront site?		<b>✓</b>		
	Would the action result in a physical alteration to a waterfront site, including land along the oreline, land underwater, or coastal waters?	✓			
Ро	licy Questions	Yes	No		
pa Wa	e following questions represent, in a broad sense, the policies of the WRP. Numbers in rentheses after each question indicate the policy or policies addressed by the question. The new aterfront Revitalization Program offers detailed explanations of the policies, including criteria for insistency determinations.				
att	eck either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an achment assessing the effects of the proposed activity on the relevant policies or standards. plain how the action would be consistent with the goals of those policies and standards.				
	Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used terfront site? (1)	✓			
5.	Is the project site appropriate for residential or commercial redevelopment? (1.1)	✓			
6.	Will the action result in a change in scale or character of a neighborhood? (1.2)	✓			

Policy Questions cont'd	Yes	No
7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)		<b>✓</b>
8. Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)		<b>√</b>
9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)		<b>✓</b>
10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		<b>✓</b>
11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		✓
12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		<b>✓</b>
13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		<b>✓</b>
14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)		<b>✓</b>
15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		<b>✓</b>
16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		<b>✓</b>
17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		<b>√</b>
18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound- East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		✓
19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)		<b>√</b>
20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1and 9.2)		<b>√</b>
21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)	<b>√</b>	
22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		<b>√</b>
23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)		<b>√</b>
24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		<b>√</b>
25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)		
26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)	<b>√</b>	
27. Will any activity associated with the project generate nonpoint source pollution? (5.2)		$\checkmark$
28. Would the action cause violations of the National or State air quality standards? (5.2)		<b>√</b>

Policy Questions cont'd	Yes	No
29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		<b>√</b>
30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)		<b>✓</b>
31. Would the proposed action have any effects on surface or ground water supplies? (5.4)		✓
32. Would the action result in any activities within a federally designated flood hazard area or state-designated erosion hazards area? (6)	✓	
33. Would the action result in any construction activities that would lead to erosion? (6)		$\checkmark$
34. Would the action involve construction or reconstruction of a flood or erosion control structure? (6.1)	<b>√</b>	
35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)		$\checkmark$
36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)		<b>√</b>
37. Would the proposed project affect a non-renewable source of sand? (6.3)		<b>✓</b>
38. Would the action result in shipping, handling, or storing of solid wastes, hazardous materials, or other pollutants? (7)		<b>√</b>
39. Would the action affect any sites that have been used as landfills? (7.1)		<b>√</b>
40. Would the action result in development of a site that may contain contamination or that has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)	<b>√</b>	
41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)		✓
42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		<b>✓</b>
43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)	✓	
44. Would the action result in the provision of open space without provision for its maintenance? (8.1)		✓
45. Would the action result in any development along the shoreline but NOT include new water-enhanced or water-dependent recreational space? (8.2)		<b>√</b>
46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		$\checkmark$
47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)	<b>√</b>	
48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)		✓
49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)		✓
50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)	✓	

Policy Questions cont'd	Yes	No
51. Would the proposed action have a significant adverse impact on historic, archeological, or cultural resources? (10)	· · · · · · · · · · · · · · · · · · ·	_
52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)		_
D. CERTIFICATION		
The applicant or agent must certify that the proposed activity is consistent with New York City's Water Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification can be made, complete this see	ation can	not be
"The proposed activity complies with New York State's Coastal Management Program as expressed in City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Manag Program, and will be conducted in a manner consistent with such program."	New Yo	rk
Applicant/Agent Name: Waterview at Greenpoint, LLC / Philip Habib, P.E. (Agent)		
Address: c/o Clipper Equity LLC, 4611 12th Street, Suite 11, Brooklyn, NY 11219		
Telephone 718-438-2804		
Applicant/Agent Signature: Date: 11/6/2013		- 1

#### A. INTRODUCTION

As indicated in **Figure C-2** in Attachment C, "Land Use, Zoning, and Public Policy," the project area for the proposed actions is located within the New York City Coastal Zone and, as such, is subject to review for its consistency with the New York City Waterfront Revitalization Program (WRP).

The Federal Coastal Zone Management Act of 1972, established to support and protect the nation's coastal areas, set forth standard policies for the review of proposed projects along the coastlines. As part of the Federal Coastline Management Program, New York State adopted a state Coastal Management Program, designed to achieve a balance between economic development and preservation to promote waterfront revitalization and waterfront dependent uses; protect fish, wildlife, open space, scenic areas, public access to the shoreline; and farmland. The program was also designed to minimize adverse changes to the ecological systems, erosion, and flood hazards.

The City's WRP is the city's principal coastal zone management tool, and is included as part of New York State's Coastal Zone Management Program (the "Program"). It establishes the City's Coastal Zone, and includes policies that address the waterfront's economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. Originally adopted in 1982 and revised in 1999, the Program establishes the City's policies for development and use of the waterfront and provides the framework for evaluating the consistency of all discretionary actions in the coastal zone with those policies. A "New Waterfront Revitalization Program" was approved by the Council of the City of New York in October 1999, and was approved by the New York State Department of State and the U.S. Secretary of Commerce in the summer of 2002. It includes ten policies dealing with: (1) residential and commercial redevelopment; (2) water-dependent and industrial uses; (3) commercial and recreational boating; (4) coastal ecological systems; (5) water quality; (6) flooding and erosion; (7) solid waste and hazardous substances; (8) public access; (9) scenic resources; and (10) historic and cultural resources.

In accordance with the guidelines of the 2012 CEQR Technical Manual, a preliminary evaluation of the proposed actions' potential for inconsistency with the new WRP policies was undertaken. This preliminary evaluation requires completion of the Consistency Assessment Form (CAF), which was developed by the New York City Department of City Planning (DCP) to help applicants identify which WRP policies apply to a specific action. The questions in the CAF are designed to screen out those policies that would have no bearing on a consistency determination for a proposed action. For any questions that warrant a "yes" answer or for which an answer is ambiguous, an explanation should be prepared to assess the consistency of the proposed actions with the noted policy or policies.

The CAF was prepared for the proposed actions, and is provided below. As indicated in the form, the proposed actions were deemed to require further assessment of certain policies listed below. The remaining policies are not applicable to the proposed actions and are not included in this assessment.

# Greenpoint-Williamsburg Rezoning Final Environmental Impact Statement

As discussed in Attachment C, "Land Use, Zoning, and Public Policy," the City's 2005 Greenpoint-Williamsburg Rezoning FEIS included a WRP assessment. The 2005 FEIS found that the rezoning would be consistent with all applicable WRP policies and that there would be no significant adverse impacts

related to the WRP. The two lots that comprise the project area analyzed in this EAS were identified and analyzed as potential development sites 1 and 2 in the 2005 FEIS.

Given the relationship between the proposed actions and the 2005 rezoning, the CAF and further assessment of policies provided in the 2005 FEIS were consulted in the preparation of this WRP assessment.

#### B. CONSISTENCY WITH APPLICABLE LOCAL WRP POLICIES

Per the CAF provided below, the following policies warranted further assessment: 1, 1.1, 1.2, 4.2, 5.1, 6, 7.2, 8, 8.4, and 9.1. Therefore, these policies are addressed below.

# <u>POLICY 1</u>: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

# 1.1 Encourage commercial and residential redevelopment in appropriate coastal zone areas.

The project area was rezoned from a manufacturing district to a residential district as part of the City's 2005 Greenpoint-Williamsburg Rezoning. The 2005 FEIS's WRP assessment stated that the rezoning "would create opportunities for new housing development on underutilized and vacant land formerly used for manufacturing, particularly along the waterfront, where there is no longer a concentration of industrial activity and where strong demand for housing exists." Based on the findings of the 2005 WRP assessment, the 2005 FEIS concluded, "The section of the coastal zone falling within the proposed action area does not contain any natural or topographic features that would hinder redevelopment, and the street grid provides excellent access to the upland areas. Therefore, this area is appropriate for the residential and commercial redevelopment that would be facilitated by the proposed action. As the proposed action would encourage and facilitate residential and commercial redevelopment in an area currently characterized by underutilized waterfront properties, it is therefore consistent with this policy."

The proposed actions analyzed in this EAS are consistent with the 2005 rezoning in facilitating residential development with local retail on waterfront sites. The two lots that comprise the project area in this EAS were analyzed as potential development sites 1 and 2 in the 2005 FEIS. Accordingly, the conclusions of the FEIS remain applicable and the proposed actions are consistent with Policy 1.1.

# 1.2 Encourage non-industrial development that enlivens the waterfront and attracts the public.

The 2005 FEIS stated that the rezoning "would significantly revitalize and enliven the area's waterfront, by bringing a 24-hour population to this underutilized swath of land along the Brooklyn waterfront." It also noted the new parks and public open space that would be created consistent with the Greenpoint-Williamsburg Waterfront Access Plan (WAP BK-1). The 2005 FEIS concluded that the rezoning would be consistent with Policy 1.2.

The proposed actions would facilitate new development pursuant to the rezoning. As noted in Attachment A, "Project Description," the proposed actions would allow the development of residential space, local retail and service uses, community facility space, waterfront public access areas, and additional on-site publicly accessible open space which would serve the local community. While the proposed actions include a waterfront zoning authorization, that action would consist of technical adjustments in site elevations (see discussion of Policy 6) and would not change the proposed project's use or density, or compliance with other required elements specified in the WAP, including the required number and location of waterfront public access areas, upland connections, and visual corridors. Accordingly, the proposed actions would be consistent with Policy 1.2.

# <u>POLICY 4</u>: Protect and restore the quality and function of ecological systems within the New York City coastal area.

# 4.2 Protect and restore tidal and freshwater wetlands.

As shown in **Figures A1-1** and **A1-2**, the project area is located adjacent to designated tidal wetlands. As shown in **Figure A1-1**, adjoining areas of Newtown Creek are designated "littoral zone" by the NY State Department of Environmental Conservation (NYSDEC). NYSDEC defines littoral zones as "the tidal wetland zone that includes all lands under tidal waters which are not included in any other category. There shall be no LZ under waters deeper than six feet at mean low water." Similarly, as shown in **Figure A1-2**, the National Wetlands Inventory designates the adjoining waters as "estuarine and marine deepwater", which is described as "open water estuary, bay, sound, open ocean."

The proposed actions' direct effects on any areas that meet these wetlands definitions would be limited as the project would not affect any areas beyond the bulkhead. As discussed in the "National Resources" section of Attachment B, construction activities for the proposed actions that may occur along the waterfront - adjacent to areas regulated as NYSDEC tidal wetlands or NYSDEC tidal wetland adjacent areas (defined as landward areas between the mean high water line and the beginning of man-made structures or asphalt surfaces) - potentially could include bulkhead repairs and construction of the waterfront esplanade (shore public walkway). A bulkhead inspection for the project area was completed in July of 2013, and determined that the bulkhead in the project area is not practically repairable and would have to be replaced in its entirety to satisfy the shore public walkway requirements. Potential bulkhead remediation would be a mix of rip rap and new steel pile bulkheads, with the possibility of gabions, to be determined in consultation with NYSDEC. Any such activities, which are subject to permitting processes, would not result in a net increase in fill below mean high water (MHW) and spring high water (SHW) or a change in the shoreline configuration that would result in loss of NYSDEC littoral zone tidal wetlands. Any re-suspension of bottom sediment resulting from the bulkhead repair would be minimal and temporary, and would be confined to the immediate vicinity of the work and would not result in significant or long-term adverse impacts to littoral zone tidal wetlands, water quality, or aquatic biota. The proposed waterfront esplanade would not extend within NYSDEC littoral zone tidal wetlands.

The proposed actions would provide for the management and treatment of stormwater entering Newtown Creek from the project area. As the proposed actions would result in disturbance larger than one acre, it would be required to develop and implement a stormwater pollution prevention plan (SWPPP) during construction, subject to a NYSDEC general permit and oversight. Further, in order to maximize the protection of the environment, the applicant would implement a SWPPP in accordance with NYCDEP and NYSDEC policies to ensure that there would be no net increase in stormwater flow from the site postconstruction. The SWPPP provides best management practices and green infrastructure measures that would minimize potential impacts to the NYSDEC-regulated littoral zone tidal wetlands and aquatic resources from stormwater discharges. Stormwater management measures implemented within the project area would regulate the rate at which runoff is discharged to the NYCDEP sewer system and then to the East River and Newtown Creek after treatment at the Newtown Creek Wastewater Treatment Plant or through outfalls. Stormwater from the project area would either go into the existing combined sewer system or into a separate storm sewer. If it does go into a separate storm sewer, the sewer would have to be approved by NYCDEP and any outfalls would have to be permitted by NYSDEC. In addition, as part of the SWPPP best management practices, engineering controls would be implemented to mitigate potential erosion and sedimentation impacts during and post construction. The proposed actions would

<sup>&</sup>lt;sup>1</sup> NYSDEC website, accessed June 2013 < http://www.dec.ny.gov/lands/5120.html >

<sup>&</sup>lt;sup>2</sup> National Wetlands Inventory website, accessed June 2013, < http://www.fws.gov/wetlands/Data/Mapper-Wetlands-Legend.html>

# Figure A1-1 NYSDEC 1974 Wetlands Maps



result in a net increase in pervious surface coverage in the project area, thereby reducing runoff and potentially improving water quality along the shoreline.

Once construction is completed, operation of the proposed actions would not result in significant adverse impacts to NYSDEC-designated littoral zone wetlands within Newtown Creek. Implementation of the SWPPP developed for the project area would minimize potential impacts to existing NYSDEC-designated littoral zone tidal wetlands, water quality, and aquatic biota. Therefore, the proposed actions would be consistent with this policy.

# **POLICY 5**: Protect and improve water quality in the New York City coastal area.

# 5.1 Manage direct or indirect discharges to waterbodies.

The proposed actions would provide for the management and treatment of stormwater entering Newtown Creek from the project area. As the proposed actions would result in disturbance larger than one acre, it would be required to develop and implement a SWPPP subject to a NYSDEC general permit and oversight. The applicant would also implement a SWPPP in accordance with NYCDEP and NYSDEC policies to ensure that there would be no net increase in stormwater flow from the site post-construction. The SWPPP provides best management practices and green infrastructure measures that would minimize potential impacts to NYSDEC littoral zone tidal wetlands and aquatic resources from stormwater discharges. Stormwater management measures implemented within the project area would regulate the rate at which runoff is discharged to the NYCDEP sewer system and then to the East River and Newtown Creek after treatment at the Newtown Creek Wastewater Treatment Plant or through outfalls. Stormwater from the project area would either go into the existing combined sewer system or into a separate storm sewer. If it does go into a separate storm sewer, the sewer would have to be approved by NYCDEP and any outfalls would have to be permitted by NYSDEC. In addition, as part of the SWPPP best management practices, engineering controls would be implemented to mitigate potential erosion and sedimentation impacts during and post construction. The proposed actions would result in a net increase in pervious surface coverage in the project area, thereby reducing runoff and potentially improving water quality along the shoreline. Therefore, the proposed actions would be consistent with this policy.

# POLICY 6: Minimize loss of life, structures and natural resources caused by flooding and erosion.

# 6.1 Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.

The 2005 FEIS noted that the majority of the rezoning area along the shoreline is in the 100-year floodplain (also referred to as Special Flood Hazard Areas subject to inundation by the one percent annual chance flood). The 2005 FEIS discussed the NYC Building Code's flood prevention measures which adhere to Federal Emergency Management Agency (FEMA) floodplain regulations. It also noted that the rezoning area is not subject to critical erosion and does not contain any regulated floodways. The 2005 FEIS concluded that because all development in the rezoning area must be compliant with the NYC Building Code and its flood related provisions, the rezoning would be consistent with Policy 6.1.

In the aftermath of Superstorm Sandy, FEMA created Advisory Base Flood Elevations (ABFEs) to show a more current picture of flood risk for certain New York and New Jersey communities affected by the storm. In most cases, ABFEs reflect a higher flood elevation than the regulatory Flood Insurance Rate Maps (FIRMs), which were developed more than 25 years ago. Since the ABFEs for New York were released on January 28, 2013, the City has made immediate accommodations to zoning regulations and upgrades to the New York City Building Code so that new construction can be built to these higher

standards. As outlined by the New York City Department of Buildings (DOB), any building classified as substantially damaged or as a substantial improvement must be elevated to fully comply with the flood zone regulations for new buildings in Appendix G of the 2008 New York City Building Code.

In June 2013, FEMA issued Preliminary Work Maps for New York City. FEMA created these maps to show coastal flood hazard data and they are an interim product created in the process of developing new preliminary Flood Insurance Rate Maps. The Preliminary Work Maps, which are considered the best available flood hazard data, replace the Advisory Base Flood Elevation (ABFE) maps issued earlier in 2013 and in turn will be replaced by the preliminary Flood Insurance Rate Maps for New York City expected to be issued during summer 2013. In some cases, the flood elevations shown in the Preliminary Work Maps are higher than the base flood elevation shown on the current Flood Insurance Rate Maps. Refer to **Figure A1-3** which shows the Preliminary Work Map for the project area and vicinity.

As shown in **Figure A1-3**, most of the project area falls within the FEMA Preliminary Work Map Floodplain Area AE. As defined by FEMA, an AE zone is comprised of the area subject to storm surge flooding from the one percent annual chance coastal flood. AE zones are not subject to high velocity wave action but are still considered high risk flooding areas. The advisory base (one percent annual chance/100-year) flood elevations for the project area are 11 feet NAVD88 (or 9.553 Brooklyn Borough Highway Datum) and 12 feet NAVD88 (or 10.553 Brooklyn Borough Highway Datum).

The buildings constructed as a result of the proposed actions would be built pursuant to the applicable flood and erosion prevention measures and requirements, including New York City Administrative Code Section 10. In addition to constructing the proposed buildings to withstand flooding in conformance with FEMA's best available data and EO 230, the proposed actions would also include other site flood protection measures such as planted retaining walls and buildings constructed at higher elevations than permitted. The proposed waterfront zoning authorization would permit modifications to otherwise applicable requirements of the ZR in order to address flooding concerns, newly mandated flood elevation regulations, and to respond to the unique geography of the project area. As such, the proposed actions would be consistent with Policy 6.1.

Additionally, the 2005 FEIS stated that Policies 6.2 and 6.3 were not applicable as the rezoning would not involve direct public funding for flood prevention or erosion control measures and the project area is not known to contain any non-renewable sources of sand that could be used for beach nourishment. This is also the case for the project area analyzed in this EAS, and accordingly, Policies 6.2 and 6.3 are not applicable to the proposed actions.

# **POLICY 7**: Minimize environmental degradation from solid waste and hazardous substances.

# 7.2 Prevent and remediate discharge of petroleum products.

All of the potential development sites identified in the 2005 FEIS were mapped with (E) designations for hazardous materials due to past or present uses on or adjacent to the sites. The (E) designation requires that the fee owner of a site conduct a testing and sampling protocol and remediation of environmental conditions where appropriate, before the issuance of a building permit. The (E) designation also includes a mandatory construction-related health and safety plan. Refer to the "Hazardous Materials" section of Attachment B, "Supplemental Screening" for further information. The 2005 FEIS concluded that the rezoning would be consistent with Policy 7.2.

As the two lots located in the project area analyzed in this EAS were potential development sites 1 and 2 in the 2005 FEIS, (E) designations for hazardous materials were placed on both lots. With the measures required by the (E) designation, the proposed actions would be consistent with Policy 7.2.

FE A reliminary Wor

Figure A1-

## **POLICY 8:** Provide public access to, from, and along New York City's coastal waters.

## 8.2 Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

The proposed actions would include provision of approximately 34,850 sf of publicly-accessible open space on the development site, consisting of a 9,510 sf shore public walkway, a 15,940 sf upland connection, and a 9,400 sf secondary landscaped pedestrian walkway. Additionally, the City-owned property would be occupied by the new approximately 125,060 sf Box Street Park. In total, this would include an incremental increase of approximately 18,828 sf of public open space in the project area over No-Action conditions. The design of the proposed waterfront public access areas would comply with the applicable requirements set forth in ZR Sections 62-50 (General Requirements for Visual Corridors and Waterfront Public Access Areas), 62-60 (Design Requirements for Waterfront Public Access Areas) and 62-931 (Waterfront Access Plan BK-1: Greenpoint-Williamsburg). The public open space would be publicly accessible via upland connection and visual corridors provided per the WAP. Accordingly, the proposed actions would be consistent with Policy 8.2.

## 8.3 Provide visual access to coastal lands, waters and open space where physically practical.

The proposed actions would include visual corridors provided per the WAP. These would extend from the shoreline to upland public streets and in addition these visual corridors would be publicly accessible areas providing access to the shore public walkway offering direct views of the water. While the proposed zoning authorizations would permit modifications to the site elevations, such changes are necessary to provide flood protection and would not significantly affect visual access given the provision of the shore public walkway and supplemental public access areas. In addition, the adjoining publicly-accessible open space of Box Street Park and nearby Newtown Barge Playground would also provide visual access to and from the open spaces created as part of the proposed actions. The effect on the public visual access to coastal lands, waters, and open space, due to any obstructions to visual corridors that might be created by increased grades allowed by the proposed waterfront certification should be minimized by the extensive views provided by a range of locations that would be available on the extensive public open space network in this area (refer to **Figure H-13** in Attachment H, "Urban Design and Visual Resources" for illustrative renderings of upland connections in the With-Action condition). Accordingly, the proposed actions would be consistent with Policy 8.3.

## <u>POLICY 9</u>: Protect scenic resources that contribute to the visual quality of the New York City coastal area.

## 9.1 Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.

The 2005 FEIS stated that the rezoning would protect and improve visual quality of the urban context and the waterfront in the Greenpoint-Williamsburg study area. It cited the WAP as a means of providing visual, physical, and recreational public access to the waterfront replacing the vacant, underutilized, and generally inaccessible formerly industrial properties along the shoreline. The WAP requires the establishment of waterfront public access areas including shore public walkways and upland connections, as well as visual corridors. The 2005 FEIS further noted that special waterfront bulk regulations for new buildings on waterfront sites require bulk regulations to achieve contextual-style development on the portions of waterfront blocks that interface with the neighborhood while allowing additional flexibility for taller buildings at a greater distance from the existing low-rise upland neighborhood. The 2005 FEIS concluded that the rezoning would be consistent with Policy 9.1.

The proposed actions are in general conformance with the rezoning and the WAP. The only modification to building envelope would be a Special Permit for the development site, to waive maximum base and building heights and minimum setback requirements. As discussed in Attachment H, "Urban Design and Visual Resources," this change would not result in significant adverse urban design and visual resources impacts. This modification would not affect visual, physical, or recreational access to the waterfront as it would not encroach upon designated visual corridors or upland connections. As such, the Special Permit to allow a taller development would not adversely affect the waterfront's visual quality. The other element of the proposed actions that would not comply with the existing zoning would be modifications to waterfront zoning regulations permitted by the proposed waterfront zoning authorizations. These authorizations would permit modifications to site elevations intended to address concerns associated with flooding, but would not modify requirements for the provisions of shore public walkways, upland connections, visual corridors, and the required amount of waterfront public access areas. The modifications permitted by the authorizations have been designed to permit the minimum modifications necessary to address flooding-related concerns and respond to the unique geography of the site. These modifications would not adversely affect the visual quality of the waterfront as they would still result in physical, visual, and recreational public access to the waterfront consistent with the WAP. Accordingly, the proposed actions are consistent with Policy 9.1.

## C. ASSESSMENT

The 2005 FEIS concluded that the rezoning would not result in any significant adverse impacts related to the WRP. Based on the CAF completed for the proposed actions, which is provided on the following pages, several policies required further assessment. The assessment provided herein found that the proposed actions would be consistent with all applicable policies. Therefore, the proposed actions would not result in any significant adverse impacts related to the WRP.

## APPENDIX 2 AGENCY CORRESPONDENCE



Project: Address:

Project number: NO LEAD AGENCY / NL-CEQR-K

**File Name:** 28682\_FSO\_ALS\_07182013.doc

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

## **ENVIRONMENTAL REVIEW**

Address: Date Received:	77 COMMERCIAL STREET, 7/17/2013	BBL: 3024720410
[X] No archited	tural significance	
[X] No archaeo	logical significance	
[] Designated	New York City Landmark o	or Within Designated Historic District
[] Listed on Na	ational Register of Historic	Places
[ ] Appears to be Landmark Design		gister Listing and/or New York City
[ ] May be arch	aeologically significant; re	equesting additional materials
Comments:		
archaeological r "Archaeological prepared by Cel	esources, the LPC notes the Assessment Report- Phase	or B 2472 L 410. Pertaining to nat this lot was included in the, e 1A Greenpoint-Williamsburg Rezoning," will 2004. The LPC continues to concur that itivity.
Cinia San	Tucci	7/18/2013
SIGNATURE Gina Santucci, E	Environmental Review Coo	DATE rdinator

Subject: FW: 77 Commercial Street EAS - Open Space and Shadows Signoff - DPR

From: OLGA ABINADER <OAbinad@planning.nyc.gov>

Date: 8/2/2013 9:20 AM

To: "David Velez" <dvelez@phaeng.com>

From: OLGA ABINADER

Sent: Thursday, August 01, 2013 1:17 PM

To: David Velez

Subject: 77 Commercial Street EAS - Open Space and Shadows Signoff - DPR

From: Salig, Mary (Parks) [mailto:Mary.Salig@parks.nyc.gov]

Sent: Thursday, August 01, 2013 1:15 PM

To: OLGA ABINADER Cc: Alderson, Colleen

Subject: 77 Commercial Street EAS

The NYC Department of Parks and Recreation (DPR) has reviewed the Shadows and Open Space Chapters prepared for the 77 Commercial Street Environmental Assessment Statement (EAS). DPR agrees with the conclusions of no significant adverse impacts related to Shadows and Open Space.

As always, call or email with any questions.

**Mary Salig** 

### **Mary Salig**

Planning Project Manager

T 212.360.3489 F 917.849.6480

E mary.salig@parks.nyc.gov

#### NYC Parks

The Arsenal, Central Park 830 Fifth Avenue, Room 3 New York, NY 10065

Save a tree. Please do not print this e-mail unless necessary.

1 of 1 8/2/2013 9:26 AM

Subject: FW: 77 Commercial Ave - WRP Signoff

From: OLGA ABINADER <OAbinad@planning.nyc.gov>

**Date:** 8/2/2013 9:18 AM

To: "David Velez" <dvelez@phaeng.com>

From: JESSICA FAIN

Sent: Thursday, August 01, 2013 2:56 PM To: OLGA ABINADER; ALEX SOMMER Cc: MICHAEL MARRELLA; STEVEN LENARD Subject: 77 Commercial Ave/WRP 13-038

We have completed the review of the project as described below for consistency with the policies and intent of the New York City Waterfront Revitalization Program (WRP).

77 Commercial Avenue: This application would facilitate the redevelopment of underutilized waterfront property (Block 2472, Lot 410) in Greenpoint, Brooklyn, with a mixed-use residential and commercial development. The project increment would include an aggregate of up to approximately 444 dwelling units (427,360 gsf), 192 accessory parking spaces (14,530 gsf), and 129,118 gsf of public open space.

Based on the information submitted, the Waterfront Open Space Division, on behalf of the New York City Coastal Commission, having reviewed the waterfront aspect of this action, finds that the actions will not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy and hereby finds the project consistent with the WRP policies.

This consistency determination is only applicable to the information received and the current proposal. Any additional information or project modifications would require an independent consistency review.

For your records, this project has been assigned WRP # 13-038. If there are any questions regarding this review, please contact me.

Sincerely,

#### **JESSICA FAIN**

PLANNER, WATERFRONT AND OPEN SPACE DIVISION

#### NYC DEPT OF CITY PLANNING

22 READE STREET, 6th FLOOR • NEW YORK, NY 10007 t 212.720.3525 • f 212.720.3490 JFAIN@PLANNING.NYC.GOV

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## APPENDIX 3 RWCDS MEMO

## **MEMORANDUM**

To: New York City Department of City Planning, Environmental Review Team

From: David Velez, Philip Habib & Associates

On behalf of David Bistricer, Waterview at Greenpoint, LLC

Date: July 31, 2013

Re: Proposed Reasonable Worst Case Development Scenario

for the 77 Commercial Street Application

The following outlines the proposed Reasonable Worst Case Development Scenario proposed for the 77 Commercial Street Application.

#### I. PROJECT DESCRIPTION

### A. Actions Necessary to Facilitate the Proposal

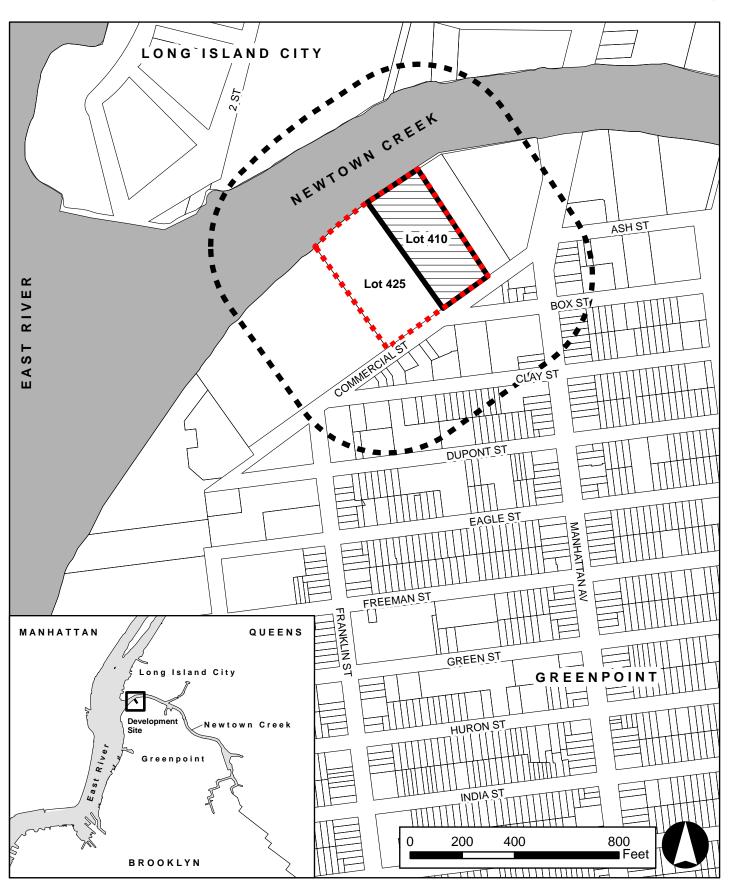
### **Proposed Actions**

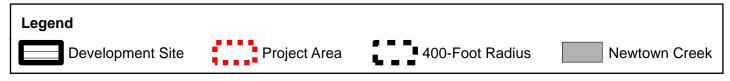
Waterview at Greenpoint, LLC (the "applicant") is seeking approval of the actions listed below (the "proposed actions") by the New York City Planning Commission (CPC) to facilitate the proposed redevelopment of the property located at 77 Commercial Street (Block 2472, Lot 410, the "development site") in the Greenpoint neighborhood of Brooklyn Community District 1. The development site is adjacent to a parcel owned by the City of New York located at 65 Commercial Street (Lot 425, the "City-owned property" and, collectively with the development site, the "project area"). The project area, also referred to as Parcels 3 and 4 within the Greenpoint-Williamsburg Waterfront Access Plan ("WAP") BK-1, is located on an irregular-shaped block bounded by Manhattan Avenue to the east, Commercial Street to the southeast, the prolongation of Eagle Street to the south, and Newtown Creek to the northwest (refer to Figure 1, "Location Map").

#### The proposed actions are:

- A special permit (the "Special Permit") pursuant to Section 62-836 (Bulk modifications on waterfront blocks) of the New York City Zoning Resolution (the "Zoning Resolution" or "ZR") to waive requirements regarding maximum base and building heights and minimum setbacks;
- An authorization (the "Location Authorization") pursuant to ZR Section 62-822(a) (Authorization to
  modify requirements for location, area and minimum dimensions of waterfront public access areas
  and visual corridors) to waive requirements regarding the location of visual corridors and upland
  connections and to permit the levels of visual corridors and waterfront yards to be raised;

**Location Map** 





- An authorization (the "Design Authorization" and, collectively, with the Location Authorization, the
  "Authorizations") pursuant to ZR Section 62-822(b) (Authorization to modify requirements within
  waterfront public access areas) to allow modifications to permitted obstruction requirements for
  visual corridors and waterfront public access areas and to permit minor variations in the design of
  waterfront public access areas;
- With the Department of City Planning as co-applicant, an amendment (the "Text Amendment") to the text of ZR Section 11-13 (Public Parks) and ZR Section 62-351 (Special floor area regulations) to provide that the City-owned property will continue to generate floor area even after it is developed as a "public park" as defined in ZR Section 12-10; and
- A certification (the "Certification") pursuant to ZR Section 62-811 (Waterfront public access areas and visual corridors) that except with respect to the waivers granted pursuant to the Authorizations, the design of the proposed waterfront public access areas would comply with the applicable requirements set forth in ZR Sections 62-50, 62-60 and 62-931.

The grant of the Special Permit, the Authorizations and the Text Amendment are discretionary land-use actions subject to City Environmental Quality Review (CEQR), while the grant of the Certification is a ministerial action not subject to environmental review. The grant of the Special Permit is also subject to the Uniform Land Use Review Procedure (ULURP) and the Text Amendment is subject to a similar land use review process.

The proposed actions would facilitate the redevelopment of the development site by the applicant with a mixed-used development comprised of up to approximately 693,320 gross square feet ("gsf") of residential uses (720 units), up to approximately 25,750 gsf of ground floor commercial uses, up to approximately 6,200 gsf of community facility uses, and approximately 46,730 gsf of attended, off-street accessory parking (320 spaces), for a total new development of up to approximately 760,650 gsf. The proposed development would be housed in three separate buildings: a 2- to 6-story base building containing the commercial, community facility and affordable housing components ("Building 1") wrapping a 30-story market rate residential tower ("Building 2") and a 40-story market-rate residential tower ("Building 3"). The proposed development would also include the development of approximately 25,450 square feet ("sf") of waterfront public access areas consisting of a shore public walkway along Newtown Creek and an upland connection linking the shore public walkway to Commercial Street along the western lot line of the development site, plus an approximately 9,400 gsf of additional public access area providing a landscaped pedestrian walkway linking Commercial Street and the shore public walkway along the eastern lot line.

#### Related Actions

The development site is located adjacent and to the east of the City-owned property, which is currently leased to the New York City Transit Authority ("NYCTA"). The City-owned property is also located in the R6 and R6/C2-4 districts and is a waterfront zoning lot identified as "Parcel 4" in the WAP.

In connection with the 2005 Greenpoint-Williamsburg Rezoning, the City executed a memorandum of Points of Agreement<sup>1</sup> ("POA") in which the City stated its intention to:

- Relocate the existing NYCTA facilities from the City-owned property to off-site locations;
- Designate the City-owned property for improvement as a public park;
- Allow the sale of development rights from the City-owned property to an adjacent property owner; and

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Source: Points of Agreement, Greenpoint-Williamsburg Rezoning, City of New York, Office of the Mayor, May 2, 2005.

• Require that the purchaser of the development rights provide 200 affordable housing units as part of the future development on its property.

The City has already begun implementing some of the POA provisions. The City is currently in the process of relocating the majority of the NYCTA facilities from the City-owned property and has selected a consultant to provide design services for the public park.

In addition, the applicant and the City have executed a contract of sale pursuant to which the applicant would obtain up to approximately 368,000 gsf (343,923 zsf) of development rights from the City-owned property for use in the proposed development on the development site.<sup>2</sup> The City would use the proceeds from the sale of the development rights as partial funding for construction of Box Street Park and the applicant would use a portion of the transferred development rights to provide 200 affordable units as part of the proposed development. The transfer of the development rights would be effectuated pursuant to ZR Section 62-353 (Special Floor Area, Lot Coverage and Residential Density Distribution Regulations), which permits, on an as-of-right basis, adjoining parcels identified in the WAP to be treated as a single development parcel on which the total permitted floor area, lot coverage and residential density may be located without regard to zoning lot lines or district boundaries. Likewise, the disposition of the City-owned development rights would not require approval under ULURP, since development rights do not constitute real property interests. Because the potential impacts of the transfer of development rights were not analyzed in the 2005 Final Environmental Impact Statement (FEIS) for the Greenpoint-Williamsburg Rezoning, however, the potential impacts of the transfer will be included as part of the environmental analysis of the proposed actions under CEQR.

### B. Description of the Development Site

#### Description of the Surrounding Area

Greenpoint is located at the northern tip of Brooklyn, directly south of Long Island City, Queens. The East River and Newtown Creek form the neighborhood's western, northern and eastern boundaries. Greenpoint is served by the G subway line, connecting to Carroll Gardens in Brooklyn and points in Queens, and the East River Ferry, which provides service to midtown and downtown Manhattan, Long Island City and other neighborhoods along the East River in Brooklyn. The Vernon Boulevard station for the Number 7 subway line is located in Long Island City, about a 15-minute walk from the project area. The Number 43 bus, which terminates at Box Street near the development site, provides service to East Williamsburg, Bedford Stuyvesant and Prospect Park. The Number 62 bus provides service to Queens Plaza in Long Island City to the north to Williamsburg, the Brooklyn Navy Yard, Clinton Hill, Fort Greene and Downtown Brooklyn to the south, although the closest stop located is approximately 6 blocks away from the development site on McGuiness Boulevard.

The blocks in the immediate vicinity of the project area and along the waterfront historically were developed with industrial uses in the nineteenth century. These industries included ship building, metal and glass production and oil and sugar refining. Industry in this area declined steadily throughout the twentieth century. Most of this area was rezoned to permit residential uses in 2005 as part of the Greenpoint-Williamsburg Rezoning, although many of these properties continue to be used for low-intensity non-residential uses or are vacant.

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Pursuant to the agreement, the applicant would purchase up to 303,903 sf of base floor area and would be permitted to include the lot area of the City-owned property in calculating the maximum permitted bonus floor area under the Inclusionary Housing program, which would yield up to an additional 40,020 sf of floor area. Assuming Quality Housing and mechanical deductions, the floor area would translate into approximately 368,000 gsf.

The inland blocks east of West Street and south of Clay Street were originally developed in the nineteenth and early twentieth centuries as residential neighborhoods to house workers attached to the vibrant industries located along the East River and Newtown Creek. The area has seen considerable growth during the last decade as a residential neighborhood. Today, most of these blocks consist of 2- to 4-story wood-frame attached houses and apartment buildings, while some buildings rise to five or six stories. These buildings often include ground floor commercial uses when located along the commercial corridors including on Manhattan Avenue and Franklin Street. The blocks between Franklin Street and West Street and between Clay Street and Box Street are mixed neighborhoods with a patchwork of residential and residual industrial properties.

## Description of the Development Site and City-Owned Property

The development site is located on an irregularly shaped block bounded by Manhattan Avenue to the east, Commercial Street to the southeast, the prolongation of Eagle Street to the south and the Newtown Creek to the northwest. The lot area of the development site is approximately 110,519.1 sf (2.54 acres) (plus approximately 1,200 sf of additional land under water). The development site has approximately 217.5 of frontage along Commercial Street (a 70' "narrow street" as defined in ZR Section 12-10) and approximately 232.3 feet of frontage along Newtown Creek (refer to Figure 2, "Aerial Photo of the Development Site and Surrounding Area"). The majority of the development site is currently occupied by an existing 2-story warehouse building, which would be demolished prior to construction of the proposed development. The existing two-story warehouse building on the development site (built around 1960) is currently utilized on a short term, temporary basis as storage space by NYC Bike Share, LLC (the operator of CitiBike NYC, New York City's bikeshare program). NYC Bike Share, LLC is expected to vacate the existing building by the end of 2013.

The City-owned property has a lot area of approximately 125,063 sf (2.87 acres) (plus approximately 6,400 sf of additional land under water), approximately 260 feet of frontage along Commercial Street and approximately 260 feet of frontage along Newtown Creek. This parcel is currently leased to the NYCTA and is improved with four 1- to 2-story buildings (refer to Figure 2), consisting of a small 2-story office building and a small storage shed located toward the south end of the parcel and used for the NYCTA's Office of Emergency Management (OEM) and a larger 1- to 2-story vehicle maintenance building and smaller 1-story out building located toward the center and north end of the site and used for NYCTA's paratransit program. The remainder of the site is paved asphalt and used for outdoor vehicle storage and parking. The City anticipates relocating the paratransit uses to an off-site location prior to 2016 and is actively searching for an additional off-site location for the emergency response facilities. As the existing uses are relocated off-site, the related buildings will be demolished (except, perhaps, for the 2-story office building currently used by OER) to facilitate construction of Box Street Park.

Both the development site and the City-owned property are located in an R6 residential district with a C2-4 commercial overlay mapped within 150 feet of Commercial Street (refer to Figure 3, "Zoning Map"). Likewise, both sites are mapped as Inclusionary Housing Designated Areas (BK-1). Both the development site and the City-owned property are also identified in the WAP as Parcels 3 and 4, respectively. The WAP, which was established as part of the Greenpoint-Williamsburg Rezoning in 2005, governs the provision of the waterfront public open space required for developments in this area.

## C. Description of the Proposed Development

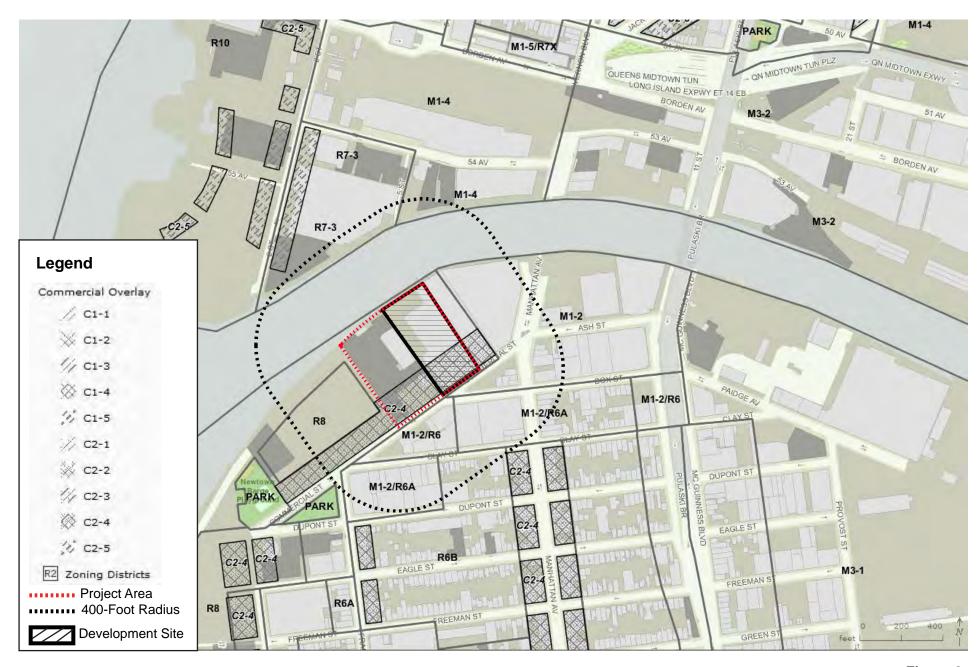
The proposed mixed-use development on the development site would be comprised of three separate buildings: a 2- to 6-story mixed-use base building, containing affordable housing, ground floor commercial (e.g., local retail and service) and community facility uses and accessory off-street parking and loading facilities, and two residential towers (30 stories and 40 stories tall) containing market-rate housing and



Source: City of New York, 2013, ZoLa Zoning & Land Use

## Legend

- Development Site (Block 2472, Lot 410; applicant-owned)
- City-Owned Property (Block 2472, Lot 425; future public park)
- Project Area



related amenity spaces. The proposed mixed-use development would include a total of up to 720 dwelling units (up to approximately 693,320 gsf of residential area), up to 25,750 gsf of local retail and service uses, up to approximately 6,200 gsf of community facility uses, and 320<sup>3</sup> attended, off-street parking spaces accessory to the residential uses (approximately 46,730 gsf), for a total new development of up to approximately 760,650 gsf (refer to Figure 4, "Proposed Site Plan").

As shown in Figure 5, "Proposed Development Section", the north tower would include 40 residential floors and the south tower would include 30 residential floors. All three buildings would have individual entrances (refer to ground floor and 2<sup>nd</sup> floor plans in Figure 6, "Proposed Ground and Second Floor Plans". Table 1 (Proposed Development Project) in Exhibit I summarizes the proposed development.

Of the proposed 720 DUs, up to 200 units would be affordable to low-, moderate-, or middle-income households. Assuming the proposed actions are granted, the applicant intends to comply with (1) the Inclusionary Housing provisions set forth in ZR Section 62-352(b)(2)(ii), which require at least 5% of the total floor area of the project (exclusive of ground-floor non-residential floor area) to be reserved for low-income households and an additional 5% to be reserved for moderate-income households, to and (2) the programmatic requirements of Section 421-a(6)(b) of the Real Property Tax Law, which would require that at least 10% of the DUs be reserved for low-income households and 15% of the DUs be reserved for moderate-income households. Under these assumptions, the breakdown of the 200 affordable housing units would be as follows: 72 low-income units (household income below 80 percent of the Area Median Income (AMI)), 108 moderate-income units (household income below 125 percent of the AMI) and 20 middle-income units (household income below 175 percent of the AMI).

All affordable housing units would be located on the 2<sup>nd</sup> through 6<sup>th</sup> floors of the proposed 6-story base building. The 520 market rate DUs would be located in the two residential towers. The proposed 6-story base building would rise to an elevation of 67 feet above base plane ("ABP").<sup>4</sup> The north tower would be 40 stories tall and rise to an elevation of 400.0 feet ABP (with a mechanical penthouse rising to 429 feet ABP), while the south tower would be 30 stories tall and rise to an elevation of 305.7 feet ABP (with a mechanical penthouse rising to 330.7 feet ABP). The 7<sup>th</sup> floor of the development would include residential amenities and a pool deck on the roof area between the two towers, as well as a terrace in the portion of the 7<sup>th</sup> floor roof to the south of the south tower. Figure 7, "3D Model of the Proposed Development: View of the Development Site from the Shore Public Walkway", shows a 3D model of the proposed development, looking east along the Newtown Creek, along the Shore Public Walkway, to the development site.

The proposed development would also include approximately 25,450 gsf of waterfront public access areas consisting of a 40-foot deep, approximately 9,515 gsf shore public walkway with landscaping, seating and

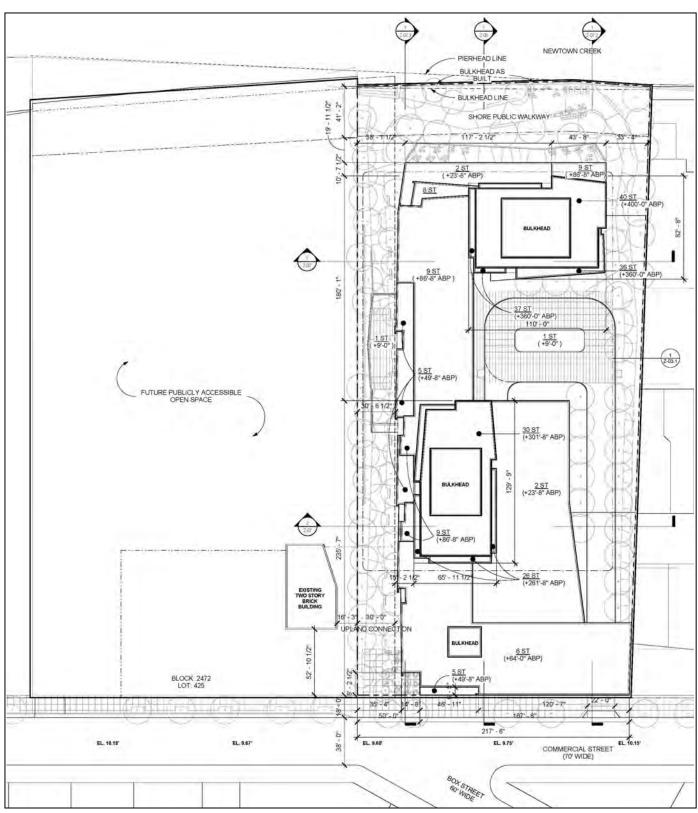
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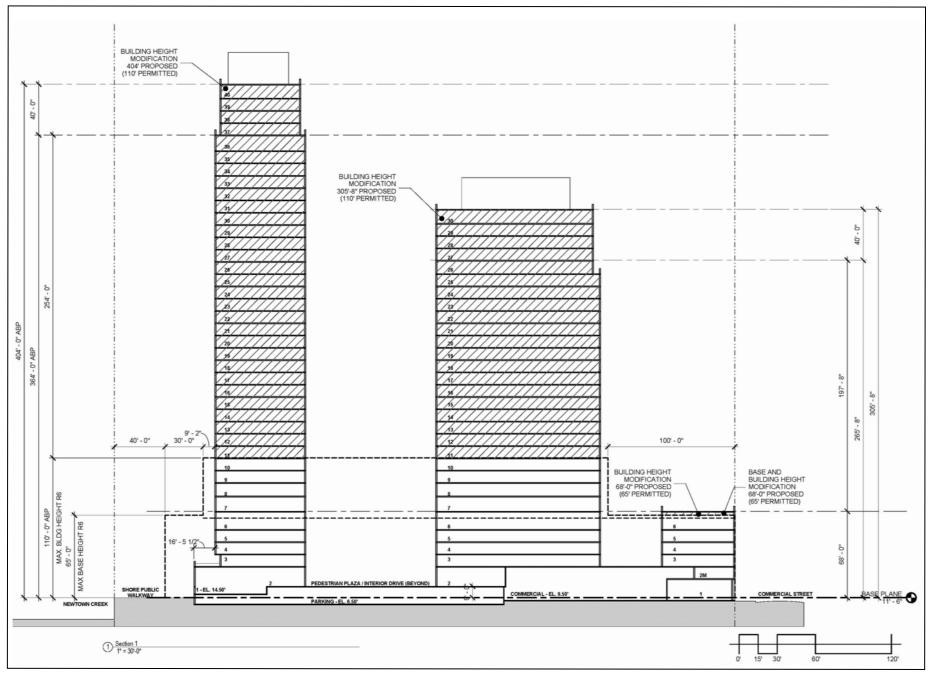
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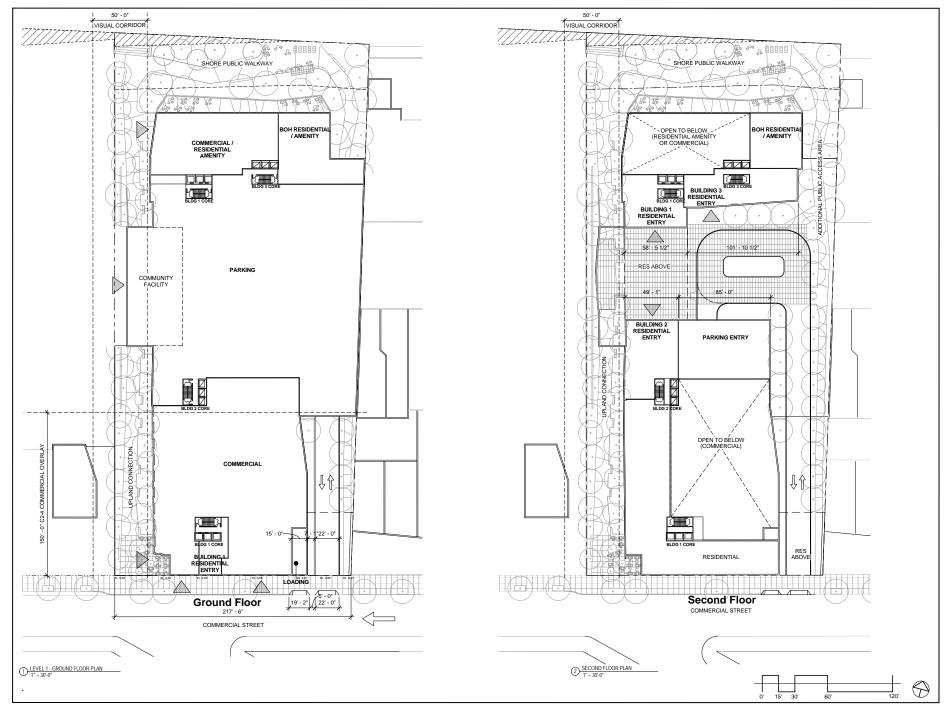
Based on 0.35 accessory parking spaces for units receiving governmental assistance per ZR Section 25-25 (180 of the affordable and 86 of the market-rate DUs would receive governmental assistance under the Inclusion Housing program or 421-a program, resulting in 93 parking spaces) and 0.50 parking spaces for units developed pursuant to the Quality Housing program (454 DU's, 227 spaces). The required parking spaces accessory to commercial use (1 space per 1,000 zsf) would be waived pursuant to ZR Sections 36-21 and 36-232 in the Future with the proposed action.

In waterfront areas, building heights are measured from base plane, which can be calculated a number of different ways. In response to Tropical Storm Sandy, the Mayor issued Executive Order No. 233 allowing the base plane for development sites in flood zones to be calculated by adding the amount of clearance or freeboard required under the Building Code (Appendix G) for particular construction types to the applicable Advisory Base Flood Elevation on updated maps prepared by FEMA. Under this formulation, the base plane for the development site would equal 11.54 feet above Brooklyn Highway Datum (BHD). The Mayor has continuously renewed the orginal Executive Order through a series of subsequent orders (27 times to date) and the Commission has certified an application (N130331 ZRY) for a proposed text amendment to the Zoning Resolution that would formally incorporate the provisions of the Executive Order into the Zoning Resolution. It is assumed that the Mayor will continue to renew the Executive Order until the Text Amendment has been acted upon. Accordingly, heights for the proposed project (for both the future without action and future with action scenarios) are measured from a base plane of 11.54 feet above BHD.

## **Proposed Site Plan**









Source: CETRA/CRI ARCHITECTURE PLLC

other amenities along the Newtown Creek frontage of the development site, as required under ZR Section 62-53, and a 30- to 50- foot wide, approximately 15,935 gsf upland connection linking Commercial Street to the shore public walkway, as required under ZR Section 62-931(d)(2) along the common lot line with the Cityowned property. An approximately 9,400 gsf of additional public access area would be provided between the shore public walkway and the base building and along the eastern lot line of the development site. The additional access area would provide a secondary, landscaped pedestrian walkway linking Commercial Street and the shore public walkway adjacent to a driveway providing vehicular access to the development site.

#### II. BUILD YEAR

The proposed build year is 2016, which is based on an estimated approval of the proposed actions by the end of 2013, followed by an 18- to 24-month construction period.

#### III. PURPOSE AND NEED FOR THE PROPOSED ACTION

The grant of the proposed actions would facilitate the development of up to 720 dwelling units (including 200 affordable housing units), up to 25,750 gsf of local retail and service uses, up to approximately 6,200 gsf of community facility uses, approximately 25,450 gsf of waterfront public access areas and approximately 9,400 gsf of additional public access area on the development site. In addition, the City would use the proceeds from the sale of the development rights as partial funding for construction of Box Street Park on the City-owned property.

#### **Special Permit**

Pursuant to ZR Section 36-652, the maximum permitted floor area ratio (FAR) is 2.75 for R6 districts and 6.5 for R8 districts. The transfer of development rights from the City-owned property to the development site would increase the total proposed development to a maximum of approximately 760,650 gsf (647,851 zsf). Although the total maximum FAR on the development site and the City-owned property considered as a single development parcel would average to 2.75, the effective FAR of the proposed development would increase to approximately 5.86 when only the lot area of the development site is considered, which is close to the maximum FAR permitted in an R8 district. Accordingly, the Special Permit would grant waivers with respect to maximum base and building heights and minimum setback requirements to provide building envelopes for the development site similar to envelopes permitted in R8 districts to allow the transferred floor area to be accommodated in a commercially reasonable manner. The waivers would also allow the affordable units to have the same floor to ceiling heights as the market-rate units and would provide greater variation and articulation of the base building by allowing portions of the base building to exceed the maximum base height of 65 feet.

#### **Location Authorization**

The regulations in the Zoning Resolution governing the development of waterfront zoning lots generally require a 30-foot wide upland connection (for pedestrian access) and a 50-foot wide visual corridor (for unobstructed views) to be provided at regular intervals along upland streets through waterfront zoning lots to the shoreline. The regulations, as modified by the WAP, provide for a variety of scenarios for satisfying upland connection and visual corridor requirements on the development site and the City-owned property,

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<sup>&</sup>lt;sup>5</sup> The maximum FAR includes a bonus of 0.32 FAR under the Inclusionary Housing program. In addition to reserving a portion of the total floor area on the zoning lot for affordable housing, an affordable housing plan would have to be submitted to and approved by the NYC Department of Housing Preservation and Development to obtain the bonus.

depending on which parcel is developed first and whether the City-owned property is developed predominantly as a public park. The Location Authorization would allow the upland connection, and 30 feet of the 50-foot wide visual corridor, to be provided on the development site regardless of the timing and type of development. The Location Authorization would also allow the levels of the visual corridor and the waterfront yard to be raised above the levels permitted in the Zoning Resolution to facilitate a design for the proposed project that addresses flooding concerns and newly mandated flood elevation regulations.

#### **Design Authorization**

Visual corridors and waterfront public access areas are required to be unobstructed from their lowest level to the sky, except for certain permitted obstructions. The lowest permitted level of waterfront public access areas is determined in reference to the elevation of the adjoining public sidewalk and of the bulkhead. The elevation of the sidewalk along the Commercial Street frontage of the development site ranges from 9.10 feet to 9.81 feet above Brooklyn Highway Datum (BHD), while the elevation of the existing portions of the bulkhead ranges from 7.90 feet to 8.90 feet above BHD. The ground floor of the proposed development would be occupied by a small residential lobby and local retail uses along Commercial Street, accessory offstreet parking in the center of the development site and residential amenity space or possibly a café, restaurant or other waterfront-enhancing commercial or community facility uses along the shore public walkway. Dwelling units would be located beginning at the 2<sup>nd</sup> story of the proposed development, as would the primary residential entrances to the buildings which would be accessed from a courtyard in the center of the development site, above the parking facility and at an elevation of approximately 20.5 feet above BHD. The upland connection would provide the principal means of pedestrian access from Commercial Street to the residential entrances. Accordingly, the grade of the upland connection would rise from approximately 9.1 feet above BHD at Commercial Street to approximately 19.0 feet above BHD near the building entrances and then would fall to approximately 13.0 feet above BHD at the shore public walkway. Likewise, the grade of the shore public walkway would range from approximately 7.9 feet above BHD to approximately 13 feet above BHD. The Design Authorization would provide waivers to allow for this configuration as well as other minor variations in the design of the waterfront public access areas, including the amount of planting in the shore public walkway, the amount of paying in the entry area to the upland connection, the height of fences, retaining walls and planted areas providing the transition along the common lot line between the development site and the City-owned property, the amount of seating directly facing the water, the dimensions of trash receptacles and the angle of the guard rail along the shore public walkway.

#### **Text Amendment**

Pursuant to ZR Section 11-13, district designations indicated on zoning maps do not apply to public parks, which means that public parks do not generate floor area. If the City-owned property were developed as a public park prior to the issuance of a certificate of occupancy for the proposed development, the development rights obtained by the applicant from the City would no longer be available for transfer from the City-owned property. The Text Amendment will provide that the City-owned property will continue to generate floor area even after it is developed as a public park.

## IV. PROPOSED REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDS)

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

Project Area

Development Site (Lot 410)

In the 2016 future without the proposed actions, the applicant would demolish the existing improvements on the development site and replace them with an as-of-right, 14-story mixed-use market-rate residential development with ground floor commercial and community facility uses and accessory parking complying with the requirements set forth under the R6 and R6/C2-4 zoning (refer to Figure 8, "Proposed No Action Development Site Plan", Figure 9, "Proposed No Action Development Section", and Figure 10, "Proposed No Action Development Axonometric").

The no action development would include a total of up to approximately 318,760 gsf (2.43 FAR), which would be comprised of up to approximately 265,690 gsf of residential area (276 DUs), up to 25,750 gsf of ground-floor local retail and service uses, and up to approximately 6,200 gsf of community facility uses. All of the proposed 276 DUs would be market-rate. The no action development would add up to approximately 720 residents and up to 110 employees to the development site. In addition, 138 off-street parking spaces accessory to the residential uses would be provided in a ground floor parking area with a size of approximately 32,200 gsf. Table 2 (Proposed No-Action Scenario) in Exhibit I summarizes the future without action scenario.

In compliance with the applicable regulations governing maximum building heights and permitted penthouses set forth in ZR Section 62-354(b), the no action development would be up to ten stories tall (110 feet ABP, which is the maximum building height permitted under zoning in the R6 and R6/C2-4 districts) plus a 4-story penthouse (150 feet ABP) and a 25-foot mechanical bulkhead (175 feet ABP) which are also permitted under zoning. Under the No-Action condition, approximately 16,025 gsf of waterfront public access areas would be provided on the development site, comprised of a 9,510 gsf shore public walkway along Newtown Creek and, pursuant to ZR Sections 62-931(d)(2) and 62-931(e)(2), a 15-foot wide alternate public way (comprising 6,695 gsf) along the eastern lot line of the development site, complying with the provisions of ZR Section 62-64 applicable for Type 2 upland connections.<sup>10</sup>

## City-Owned Property (Lot 425)

In the 2016 future without the proposed actions, the City would demolish the existing improvements on the City-owned property (except, perhaps, for the 2-story office building currently used by OER) and redevelop the parcel as a public park (Box Street Park) which would have a total area of up to approximately 125,060 sf.

It is assumed that the design for Box Street Park under the No-Action scenario would be consistent with the New York City Department of Parks and Recreation's Greenpoint-Williamsburg Waterfront Open Space Master Plan<sup>11</sup> which contemplates that Box Street Park will combine active and passive recreation facilities, including a multi-purpose field in addition to a shaded picnic terrace that will overlook the shore public

The No-Action Scenario assumes that no development rights would be transferred from the City-owned property and therefore there would be no obligation to provide the 200 affordable units on the development site under the POA. Prior to entering into the agreement with the City to acquire the development rights, the applicant planned on constructing an all-market-rate, as-of-right development on the development site. Absent the obligation to provide 200 affordable units under the POA, the modest increase in market-rate floor area generated by the inclusionary housing program (10,510 sf) would not be sufficient to entice the applicant to construct an affordable component.

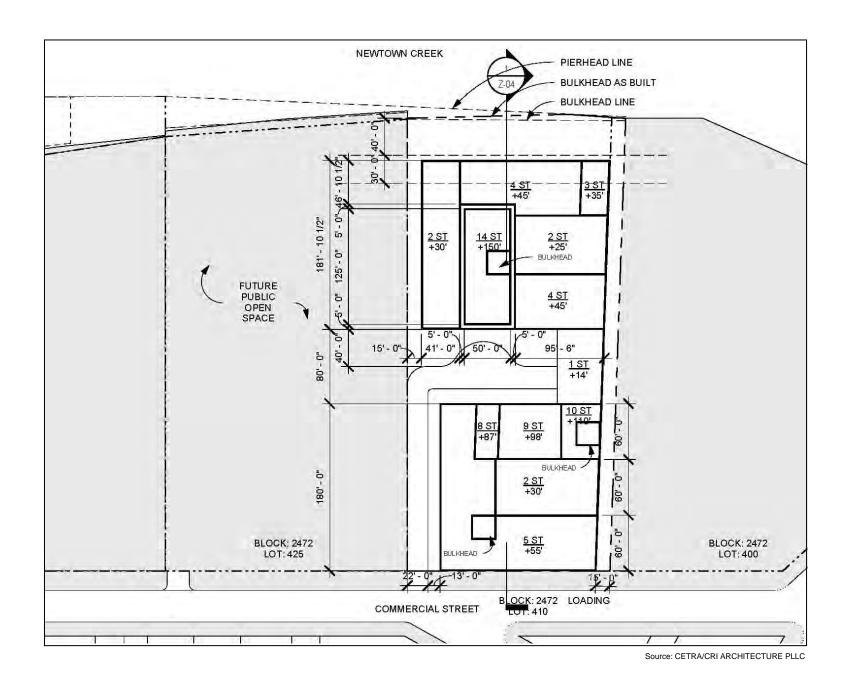
<sup>&</sup>lt;sup>7</sup> Source: 2.61 people per household; NYC DCP Community District Demographic Profiles (Census 2010).

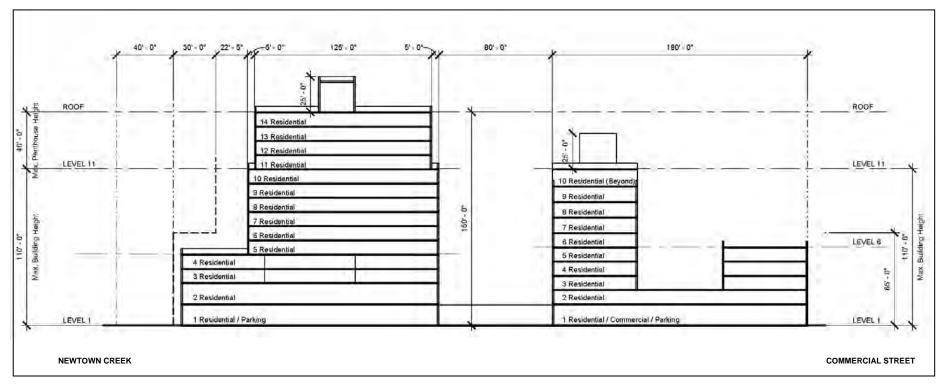
Assumptions: 1 building employee per 25 DUs, 3 local retail employees per 1,000 gsf of retail space, 3 employees per 1,000 gsf of community facility space, 1 parking employee per 50 attended parking spaces (refer to Table 8 for details).

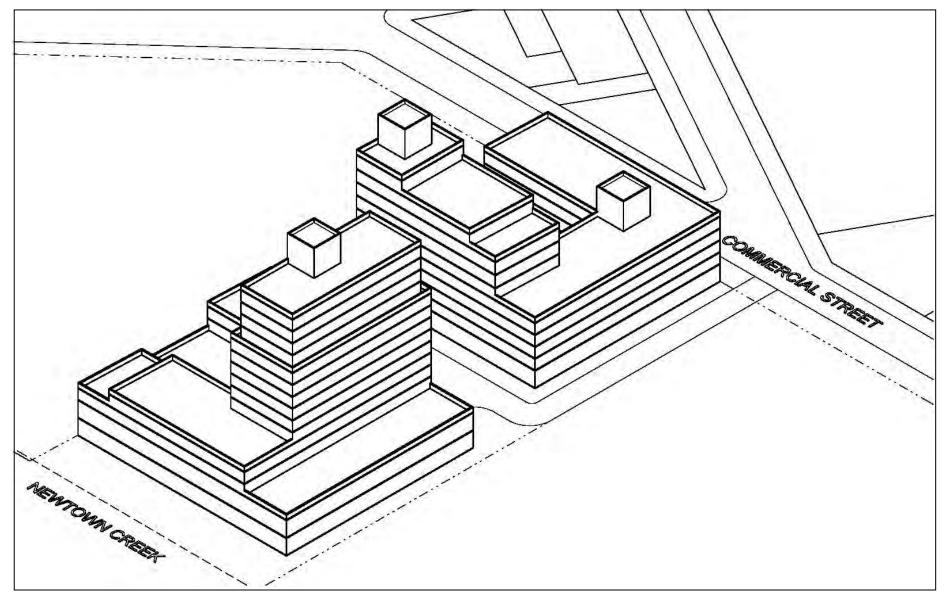
<sup>&</sup>lt;sup>9</sup> Based on 0.5 accessory parking spaces per market-rate DU pursuant to ZR Section 25-23 (276 DUs, 138 parking spaces). The required parking spaces accessory to commercial use (1 space per 1,000 zsf) would be waived pursuant to ZR Sections 36-21 and 36-232.

The No-Action development would require a certification from the Chair of the CPC that the proposed waterfront public access areas comply with the applicable location and design requirements set forth in ZR Sections 62-50, 62-60 and 62-931. The grant of the certification is a ministerial action that is not subject to CEQR or ULURP.

Source: http://www.nycgovparks.org/park-features/future-parks/greenpoint-williamsburg-waterfront







walkway and the East River. The plan also notes that the site's location at the mouth of Newtown Creek makes it an appropriate access points for kayaks. The plan, however, is subject to change based on community input that will be gathered during the design development phase for the park.

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

#### Project Area

#### Development Site

In the 2016 With-Action condition, the applicant would demolish the existing improvements on the development site and replace them with a total of up to approximately 760,650 gsf of floor area, including 720 dwelling units (up to approximately 693,320 gsf of residential space), up to approximately 25,750 gsf of ground floor local retail and service uses, up to approximately 6,200 gsf of community facility uses, and 320 accessory off-street parking spaces (46,730 gsf). See Table A-4. The proposed 720 dwelling units in the With-Action condition would include 200 affordable housing units and 520 market-rate dwelling units.

Of the proposed 720 dwelling units, 200 units would be affordable to low-, moderate-, or middle-income households. The proposed development would comply with (1) the Inclusionary Housing provisions set forth in ZR Section 62-352(b)(2)(ii), which require at least 5 percent of the total floor area of the project (exclusive of ground-floor non-residential floor area) to be reserved for low-income households and an additional 5 percent to be reserved for moderate-income households, to and (2) the programmatic requirements of Section 421-a(6)(b) of the Real Property Tax Law, which would require that at least 10 percent of the dwelling units be reserved for low-income households and 15 percent of the dwelling units be reserved for moderate-income households. Accordingly, the proposed breakdown of the 200 affordable housing units would be as follows: 72 low-income units (household income below 80 percent of the Amil) and 20 middle-income units (household income below 125 percent of the Amil) and 20 middle-income units (household income below 175 percent of the Amil).

The proposed development would add approximately 1,879 new residents. In addition, the proposed development would add approximately 132 employees.

The proposed development would include three individual buildings: Building 1, which would be 6-stories tall and rise to an elevation of 68 feet ABP, Building 2, which would be 30 stories tall and rise to an elevation of 305.7 feet ABP (with a mechanical penthouse rising to 330.7 feet ABP), and Building 3, which would be 40 stories tall and rise to an elevation of 404 feet ABP (with a mechanical penthouse rising to 429 feet ABP. In addition, approximately 34,850 gsf of publicly accessible open space would be provided on the development site, consisting of a 9,515 gsf shore public walkway along the shore line, a 15,935 gsf upland connection along the western lot line of the site and a 9,400 gsf additional public access area, consisting of landscaped pedestrian walkway, along the eastern lot line of the site. In addition, approximately 14,500 gsf of private accessory open space would be provided on building terraces for use by building residents.

#### City-Owned Property (Lot 425)

In the 2016 future with the proposed actions, the City-owned property would be occupied by the new Box Street Park, which would have the same lot area as under the No-Action condition (up to approximately

Based on 0.35 accessory parking spaces for units receiving governmental assistance per ZR Section 25-25 (180 of the affordable and 86 of the market-rate DUs would receive governmental assistance under the Inclusion Housing program or 421-a program, resulting in 93 parking spaces) and 0.50 parking spaces for units developed pursuant to the Quality Housing program (454 DU's, 227 spaces). The required parking spaces accessory to commercial use (1 space per 1,000 zsf) would be waived pursuant to ZR Sections 36-21 and 36-232 in the Future with the proposed action.

125,060 sf). The City would use proceeds from the sale of the development rights to the applicant to supplement construction and development of Box Street Park. As a result, Box Street Park in the With-Action condition would be expected to include features beyond those provided under the No-Action Scenario.

#### **Incremental Development**

Based on the RWCDS for the No-Action and With-Action scenario conditions identified above, the net incremental change in development that would occur as a result of the proposed actions is shown in Table 6 (Comparison of No-Action and With-Action Development Programs) in Exhibit I. The increment between the as-of-right development in the No-Action scenario and the proposed development in the With-Action scenario would be an increase of up to 441,890 gsf of residential floor area (444 DUs) and 14,540 gsf of accessory parking area (182 accessory parking spaces). The increment identified in Table 6 would be analyzed for density-related and site-specific impacts in the EAS. As shown in Table 7 (Comparison of No-Action and With-Action Dwelling Unit Mix) in Exhibit I, the 444 incremental DU's would include 244 market-rate DUs and 200 affordable DUs. Of the 200 incremental affordable units, 72 DUs would be for low-income households (earning a maximum of 80 percent of AMI), 108 for moderate-income households (earning a maximum of 125 percent of AMI) and 20 for middle-income households (earning a maximum of 175 percent of AMI).

## Projected Residents and Employee Ratios

It is projected that the average number of residents per development-generated unit would be 2.61, which is the 2010 Census average household size for Brooklyn Community District 1, in which the development site is located. Employee estimates for the No-Action and With-Action scenarios are based on the assumption of one building employee per 25 DUs, three employees per 1,000 gsf of local retail space, three employees per 1,000 gsf of community facility space, and one employee per 50 attended parking spaces. As shown in Table 8 (Comparison of No-Action and With-Action Residential and Daytime Population) in Exhibit I, the net incremental change in the number of residents and the number of on-site employees that would occur as a result of the proposed actions is 1,159 residents and 22 employees.

# EXHIBIT I TABLES

**Table 1: Proposed Development Project** 

			- 0										
Dev.	Zoning Lot	GSF Above	<b>GSF Below</b>	Total GSF	Ground	Ground	Residential	Manu-	# of	# of	Accessory	Building	Public
Site	Size (SF)	Grade	Grade		Floor	Floor	GSF	facturing	Residential	Accessory	Parking	Height (in	Open Space
					Commercial	Community		GSF	Units	Parking	GSF	feet)	(SF)
					GSF	Facility				Spaces			
						GSF							
Lot 410	110,519	760,650	0	760,650	25,750	6,200	693,320	0	720	320	46,730	429	34,850
Total	110,519	760,650	0	760,650	25,750	6,200	693,320	0	720	320	46,730		34,850

**Table 2: Proposed No-Action Scenario** 

Dev. Site	Zoning Lot Size (SF)	GSF Above Grade	GSF Below Grade	Total GSF	Ground Floor Commercial GSF	Ground Floor Community Facility GSF	Residential GSF	Manu- facturing GSF	# of Residential Units	# of Accessory Parking Spaces	Accessory Parking GSF	Building Height (in feet)	Public Open Space (SF)
Lot 410	110,519	318,760	0	318,760	25,750	6,200	265,690	0	276	138	32,200	175	16,025
Lot 425	125,063	0	0	0	0	0	0	0	0	0	0	0	125,063
Total	235,582	318,760	0	318,760	25,750	6,200	265,690	0	276	138	32,200		141,088

 Table 3: Proposed With-Action Scenario (if different from Table 1: Proposed Development Project)

Dev. Site	Zoning Lot Size (SF)	GSF Above Grade	GSF Below Grade	Total GSF	Ground Floor	Ground Floor	Residential GSF	Manu- facturing	# of Residential	# of Accessory	Accessory Parking	Building Height (in	Public Open Space
Site	Size (SF)	Grade	Grade		Commercial	Community	GSF	GSF	Units	Parking	GSF	feet)	(SF)
					GSF	Facility GSF				Spaces			
Lot 410	110,519	760,650	0	760,650	25,750	6,200	693,320	0	720	320	46,730	429	34,850
Lot 425	125,063	0	0	0	0	0	0	0	0	0	0	0	125,063
Total	235,582	760,650	0	760,650	25,750	6,200	693,320	0	720	320	46,730		159,913

Table 4: Maximum GSF of Other Uses Allowed Under the No-Action Scenario

Development Site	Maximum GSF for Commercial <sup>1</sup>	Maximum GSF for Community Facility <sup>2</sup>	Maximum GSF for Residential <sup>3</sup>	Maximum GSF for Manufacturing
Lot 410	98,125	636,590	379,825	0
Lot 425	116,285	716,125	427,275	0
Total	214,410	1,352,715	807,100	0

Assumes 2.0 FAR of commercial floor area for R6/C2-4 portions plus additional commercial floor area on the R6 portion equal to 2% of the total maximum floor area permitted on the zoning lot pursuant to ZR Section 62-29, 3% increase for mechanical equipment, 1 unattended accessory off –street parking space (at 340 gsf/space) per 1,000 zsf and approximately 800 gsf per required loading berth.

Table 5: Maximum GSF of Other Uses Allowed Under the With-Action Scenario

Development Site	<b>Maximum GSF for</b> <b>Commercial</b> <sup>1</sup>	Maximum GSF for Community Facility <sup>2</sup>	Maximum GSF for Residential <sup>3</sup>	Maximum GSF for Manufacturing
Lot 410	214,410	1,352,715	807,100	0
Lot 425	0	0	0	0
Total	214,410	1,352,715	807,100	0

Assumes 2.0 FAR of commercial floor area for R6/C2-4 portions plus additional commercial floor area on the R6 portion equal to 2% of the total maximum floor area permitted on the zoning lot pursuant to ZR Section 62-29, 3% increase for mechanical equipment, 1 unattended accessory off -street parking space (at 340 gsf/space) per 1,000 zsf and approximately 800 gsf per required loading berth.

Table 6: Comparison of No-Action and With-Action Development Programs

Table 0.	Comparison o	n no-Action	and With-Act	ion Developi	nent i rogram	is .							
Dev.	<b>Zoning Lot</b>	<b>GSF Above</b>	<b>GSF Below</b>	Total GSF	Ground	Ground	Residential	Manu-	# of	# of	Accessory	Building	Public
Site	Size (SF)	Grade	Grade		Floor	Floor	GSF	facturing	Residential	Accessory	Parking	Height (in	Open
					Commercial	Community		GSF	Units	Parking	GSF	feet)	Space (SF)
					GSF	Facility				Spaces			
						GSF							
No-Action	235,582	318,760	0	318,760	25,750	6,200	265,690	0	276	138	32,200	175	141,085
With-Action	235,582	760,650	0	760,650	25,750	6,200	693,320	0	720	320	46,730	429	159,913
Incremental	0	441,890	0	441,890	0	0	427,630	0	444	182	14,530	254	18,828
Development													

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Assumes 3% increase for mechanical equipment and 1 unattended parking space (at 340 gsf/space) per 2,000 zsf.
Assumes 3% increase for mechanical equipment, 4% increase for quality housing and 0.5 space (at 340 gsf/space) per unit.

Assumes 3% increase for mechanical equipment and 1 unattended parking space (at 340 gsf/space) per 2,000 zsf.

Assumes 3% increase for mechanical equipment, 4% increase for quality housing and 0.5 space (at 340 gsf/space) per unit.

Table 7: Comparison of No-Action and With-Action Dwelling Unit Mix

Dwelling Unit Type	No-Action Scenario	With-Action Scenario	Net Difference
Low-Income <sup>1</sup>	0	72	72
Moderate-Income <sup>2</sup>	0	108	108
Middle-Income <sup>3</sup>	0	20	20
Total Affordable	0	200	200
Market-Rate	276	520	244
Total	276	720	444

Household income below 80 percent of the Area Median Income (AMI). Household income below 125 percent of AMI. Household income below 175 percent of AMI.

Table 8

Comparison of No-Action and With-Action Residential and Daytime Population

Users On-Site	No-Action Scenario	With-Action Scenario	Net Difference
Residential <sup>1</sup>	720	1,879	1,159
<b>Building Employees<sup>2</sup></b>	11	29	18
Local Retail <sup>3</sup>	77	77	0
Community Facility <sup>4</sup>	19	19	0
Parking <sup>5</sup>	3	7	4
Total	720 Residents 110 Employees	1,879 Residents 132 Employees	1,159 Residents 22 Employees

Source: 2.61 people per household; NYC DCP Community District Demographic Profiles (Census 2010).

Assumption: 1 employee per 25 DUs

Assumption: 3 local retail employees per 1,000 gsf of retail space.

Assumption: 3 community facility employees per 1,000 gsf of community facility space.

Assumption: 1 parking employee per 50 attended parking spaces.

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