

251 Front Street Rezoning

Revised Environmental Assessment Statement¹

May 5, 2017

CEQR Number: 16DCP002K

¹This revised EAS supersedes the Original EAS, dated December 9, 2016, that was prepared for the original ULURP application certified on December 12, 2016, which sought a rezoning from R6B to R7A. Since Certification of the proposal on December 12, 2016, the Applicant has revised the proposed rezoning action to R6A. This revised EAS is reflective of the proposed revision, as described in Appendix 4 to the EAS.



City Environmental Quality Review

ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM

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

Part I: GENERAL INFORMATION

PROJECT NAME 251 Front Street Rezoning

This revised EAS supersedes the Original EAS dated December 9, 2016, prepared in connection with the original ULURP application certified on December 12, 2016.

1. Reference Numbers

 CEQR REFERENCE NUMBER (to be assigned by lead agency)
16DCP002K

BSA REFERENCE NUMBER (if applicable)

 ULURP REFERENCE NUMBER (if applicable)
150235ZMK, 150234ZRK

 OTHER REFERENCE NUMBER(S) (if applicable)
(e.g., legislative intro, CAPA)

2a. Lead Agency Information

NAME OF LEAD AGENCY

NYC Department of City Planning

NAME OF LEAD AGENCY CONTACT PERSON

Robert Dobruskin, Director, EARD

 ADDRESS 120 Broadway, 31st floor

CITY New York

STATE NY

ZIP 10271

TELEPHONE 212-720-3423

EMAIL

dobrus@planning.nyc.gov

2b. Applicant Information

NAME OF APPLICANT

251 Front Street Realty, Inc.

NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON

Hiram A. Rothkrug, EPDSO

ADDRESS 55 Water Mill Road

CITY Great Neck

STATE NY

ZIP 11021

TELEPHONE 718-343-0026

EMAIL

hrothkrug@epdsco.com

3. Action Classification and Type
SEQRA Classification
 UNLISTED TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): 617.4(b)(9)

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 Applicant, 251 Front Street Realty, Inc., seeks a zoning map amendment from R6B to R6A, affecting a property at 251 Front Street (Block 42, Lot 24) in the Vinegar Hill neighborhood of Brooklyn CD 2. The Applicant also seeks a zoning text amendment to modify ZR Section 23-933, Appendix F, Map 4, to designate the proposed R7A district a Mandatory Inclusionary Housing Area (MIHA) subject to the requirements of Option 1. These actions would facilitate the construction by the Applicant of an 8-story, 87,121 gsf residential building with 72 dwelling units, of which 18 would be affordable to households with incomes averaging 60% of AMI, and 27 accessory parking spaces on a lot that is now occupied by a parking lot. See attached Project Description.

Project Location

BOROUGH Brooklyn

COMMUNITY DISTRICT(S) 2

STREET ADDRESS 251-259 Front St., 68-86 Gold St., 270-278 Water St.

TAX BLOCK(S) AND LOT(S) Block 42, Lot 24

ZIP CODE 11001

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS West side of Gold Street between Front and Water Streets

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6B

ZONING SECTIONAL MAP NUMBER 12d

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 ZR 23-933

Board of Standards and Appeals: YES

 NO

 VARIANCE (use)

<input type="checkbox"/> VARIANCE (bulk) <input type="checkbox"/> SPECIAL PERMIT (if appropriate, specify type: <input type="checkbox"/> modification; <input type="checkbox"/> renewal; <input type="checkbox"/> other); EXPIRATION DATE: SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION	
Department of Environmental Protection: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "yes," specify:	
Other City Approvals Subject to CEQR (check all that apply)	
<input type="checkbox"/> LEGISLATION <input type="checkbox"/> RULEMAKING <input type="checkbox"/> CONSTRUCTION OF PUBLIC FACILITIES <input type="checkbox"/> 384(b)(4) APPROVAL <input type="checkbox"/> OTHER, explain:	<input type="checkbox"/> FUNDING OF CONSTRUCTION, specify: <input type="checkbox"/> POLICY OR PLAN, specify: <input type="checkbox"/> FUNDING OF PROGRAMS, specify: <input type="checkbox"/> PERMITS, specify:
Other City Approvals Not Subject to CEQR (check all that apply)	
<input type="checkbox"/> PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)	<input type="checkbox"/> LANDMARKS PRESERVATION COMMISSION APPROVAL <input checked="" type="checkbox"/> OTHER, explain: NYC Dept. of Buildings buildings permit
State or Federal Actions/Approvals/Funding: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "yes," specify:	
6. Site Description: <i>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.</i> Graphics: <i>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.</i>	
<input checked="" type="checkbox"/> SITE LOCATION MAP <input checked="" type="checkbox"/> TAX MAP <input checked="" type="checkbox"/> PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP	<input checked="" type="checkbox"/> ZONING MAP <input type="checkbox"/> FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
<input checked="" type="checkbox"/> SANBORN OR OTHER LAND USE MAP	
Physical Setting (both developed and undeveloped areas)	
Total directly affected area (sq. ft.): 19,991	Waterbody area (sq. ft.) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 19,991	Other, describe (sq. ft.): 0
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): 87,121	
NUMBER OF BUILDINGS: 1	GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 87,121
HEIGHT OF EACH BUILDING (ft.): 85	NUMBER OF STORIES OF EACH BUILDING: 8
Does the proposed project involve changes in zoning on one or more sites? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If "yes," specify: The total square feet owned or controlled by the applicant: 19,991 The total square feet not owned or controlled by the applicant: 0	
Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known): AREA OF TEMPORARY DISTURBANCE: 12,994 sq. ft. (width x length) VOLUME OF DISTURBANCE: 129,940 cubic ft. (width x length x depth) AREA OF PERMANENT DISTURBANCE: 12,994 sq. ft. (width x length)	
8. Analysis Year CEQR Technical Manual Chapter 2	
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2019	
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18	
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? <input checked="" type="checkbox"/> YES <input type="checkbox"/> 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)	
<input checked="" type="checkbox"/> RESIDENTIAL <input checked="" type="checkbox"/> MANUFACTURING <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK/FOREST/OPEN SPACE <input type="checkbox"/> 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.

	EXISTING CONDITION		NO-ACTION CONDITION		WITH-ACTION CONDITION		INCREMENT
LAND USE							
Residential	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," specify the following:							
Describe type of residential structures			1 apartment building		1 apartment building		
No. of dwelling units			41		72		+31
No. of low- to moderate-income units			0		18		+18
Gross floor area (sq. ft.)			41,219		74,127		+32,908
Commercial	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
Describe type (retail, office, other)							
Gross floor area (sq. ft.)							
Manufacturing/Industrial	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
Type of use							
Gross floor area (sq. ft.)							
Open storage area (sq. ft.)							
If any unenclosed activities, specify:							
Community Facility	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
Type							
Gross floor area (sq. ft.)							
Vacant Land	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," describe:							
Publicly Accessible Open Space	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):							
Other Land Uses	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," describe:	Commercial parking lot (no floor area)		Accessory parking garage (8,244 sf)		Accessory parking garage (12,994 sf)		-commercial parking; +4,750 sf of accessory parking
PARKING							
Garages	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," specify the following:							
No. of public spaces	0		0		0		0
No. of accessory spaces	0		21		27		+6
Operating hours			24 hours		24 hours		
Attended or non-attended			Non-attended		Non-attended		
Lots	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
No. of public spaces	60		0		0		0
No. of accessory spaces	0		0		0		0
Operating hours	Daytime only						
Other (includes street parking)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," describe:	+/- 25 curbside spaces		+/- 25 curbside spaces		+/- 25 curbside spaces		0
POPULATION							
Residents	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," specify number:			88		154		+66

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Briefly explain how the number of residents was calculated:	Number of housing units times 2.14, the average household size per the 2010 census in Brooklyn tract 21, which includes the project area.			
Businesses	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If "yes," specify the following:				
No. and type	1 parking lot			0
No. and type of workers by business	4 parking lot workers			0
No. and type of non-residents who are not workers	20 daily visitors			0
Briefly explain how the number of businesses was calculated:	Observation			
Other (students, visitors, concert-goers, etc.)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	R6B	R6B	R6A	
Maximum amount of floor area that can be developed	39,982 zsf (19,991 x 2.00)	39,982 zsf (19,991 x 2.00)	71,968 zsf (19,991 x 3.60)	+31,986
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	residential, light industrial, transportation and facilities; MX(M1-4/R7A), M1-2, R6B, R6A	No change	MX(M1-4/R7A), M1-2, R6B, R6A	
Attach any additional information that may be needed to describe the project.				
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, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a “yes” answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Full EAS Form. For example, if a question is answered “no,” an agency may request a short explanation for this response.

	YES	NO
1. LAND USE, ZONING, AND PUBLIC POLICY: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Is there the potential to affect an applicable public policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) If “yes,” to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If “yes,” complete the Consistency Assessment Form . Attached		
2. SOCIOECONOMIC CONDITIONS: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of more than 200 residential units or 200,000 square feet of commercial space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ If “yes,” answer both questions 2(b)(ii) and 2(b)(iv) below.		
o Directly displace 500 or more residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ If “yes,” answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
o Directly displace more than 100 employees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ If “yes,” answer questions under 2(b)(iii) and 2(b)(iv) below.		
o Affect conditions in a specific industry?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ 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		
o If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>
ii. Indirect Residential Displacement		
o Would expected average incomes of the new population exceed the average incomes of study area populations?	<input type="checkbox"/>	<input type="checkbox"/>
o If “yes:”		
▪ Would the population of the primary study area increase by more than 10 percent?	<input type="checkbox"/>	<input type="checkbox"/>
▪ 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?	<input type="checkbox"/>	<input type="checkbox"/>
o If “yes” to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	<input type="checkbox"/>	<input type="checkbox"/>
iii. Direct Business Displacement		
o Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	<input type="checkbox"/>	<input type="checkbox"/>
o Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve,	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
enhance, or otherwise protect it?		
iv. Indirect Business Displacement		
o Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	<input type="checkbox"/>	<input type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
v. Effects on Industry		
o Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	<input type="checkbox"/>	<input type="checkbox"/>
o Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	<input type="checkbox"/>	<input type="checkbox"/>
3. COMMUNITY FACILITIES: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Indirect Effects		
i. Child Care Centers		
o Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	<input type="checkbox"/>	<input type="checkbox"/>
ii. Libraries		
o Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the additional population impair the delivery of library services in the study area?	<input type="checkbox"/>	<input type="checkbox"/>
iii. Public Schools		
o Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?	<input type="checkbox"/>	<input type="checkbox"/>
iv. Health Care Facilities		
o Would the project result in the introduction of a sizeable new neighborhood?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the project affect the operation of health care facilities in the area?	<input type="checkbox"/>	<input type="checkbox"/>
v. Fire and Police Protection		
o Would the project result in the introduction of a sizeable new neighborhood?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the project affect the operation of fire or police protection in the area?	<input type="checkbox"/>	<input type="checkbox"/>
4. OPEN SPACE: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Is the project located within an under-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes," would the project generate more than 50 additional residents or 125 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(d) Is the project located within a well-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If "yes," would the project generate more than 350 additional residents or 750 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>
o 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	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
percent?		
<ul style="list-style-type: none"> o If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year. Attached		
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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. Attached		
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to either of the above, please provide the information requested in Chapter 10 . Attached		
8. NATURAL RESOURCES: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," complete the Jamaica Bay Watershed Form and submit according to its instructions .		
9. HAZARDOUS MATERIALS: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Has a Phase I Environmental Site Assessment been performed for the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Based on the Phase I Assessment, is a Phase II Investigation needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
(c) If the proposed project located in a separately sewerred area , would it result in the same or greater development than that listed in Table 13-1 in Chapter 13 ?	<input type="checkbox"/>	<input type="checkbox"/>
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas , including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Would the proposed project be located in an area that is partially sewerred or currently unsewerred?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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 week): 2,952		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>
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): 11,038,231,000		
(b) Would the proposed project affect the transmission or generation of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. TRANSPORTATION: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? <i>**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.</i>	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
14. AIR QUALITY: CEQR Technical Manual Chapter 17		
(a) <i>Mobile Sources:</i> Would the proposed project result in the conditions outlined in Section 210 in Chapter 17 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) <i>Stationary Sources:</i> Would the proposed project result in the conditions outlined in Section 220 in Chapter 17 ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17 ? (Attach graph as needed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Does the proposed project involve multiple buildings on the project site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. Attached		
15. GREENHOUSE GAS EMISSIONS: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project fundamentally change the City's solid waste management system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Would the proposed project result in the development of 350,000 square feet or more?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18 ?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008 ; § 24-	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
803 of the Administrative Code of the City of New York). Please attach supporting documentation.		
16. NOISE: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. Attached		
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20 , "Public Health." Attach a preliminary analysis, if necessary.		
18. NEIGHBORHOOD CHARACTER: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21 , "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. CONSTRUCTION: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o The operation of several pieces of diesel equipment in a single location at peak construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closure of a community facility or disruption in its services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Activities within 400 feet of a historic or cultural resource?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o Disturbance of a site containing or adjacent to a site containing natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22 , "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. See attached narrative report.		
20. APPLICANT'S CERTIFICATION		
I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.		
Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.		
APPLICANT/REPRESENTATIVE NAME Brian Kintish	SIGNATURE <i>Brian Kintish</i>	DATE May 5, 2017

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

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

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

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

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

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials?

YES NO

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


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

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

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

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

4. LEAD AGENCY'S CERTIFICATION

TITLE Deputy Director, Environmental Assessment & Review Division	LEAD AGENCY New York City Department of City Planning
NAME Olga Abinader	DATE May 5, 2017
SIGNATURE 	

251 FRONT STREET REZONING

Note

The original 251 Front Street Rezoning EAS, dated December 9, 2016, and prepared in connection with the original ULURP application certified on December 12, 2016, described and analyzed a proposal to rezone the project site from R6B to R7A and to designate it as a Mandatory Inclusionary Housing (MIH) area. The proposed actions would have facilitated the redevelopment of the site, now a parking lot, with a residential apartment building complying with the bulk regulations applicable to an R7A district within an MIH area.

The proposal has since been revised, and the Applicant is now seeking a rezoning from R6B to R6A and the designation of the project site as an MIH area. This revised proposal is addressed in the preceding EAS form, dated May 5, 2017.

The December 9, 2016, EAS (the form, graphics, a supplemental report, and three appendices) follows this page. These documents have not been revised, except for the addition of an explanatory note on the first page of the supplemental report.

A new Appendix 4 follows these documents. It describes the current proposed actions and the project that those actions would facilitate and analyzes the environmental implications of the revised actions. The appendix addresses all of the technical areas analyzed in the 2016 EAS and determines whether the conclusions reached in that EAS remain valid for the current proposed actions.



City Environmental Quality Review

ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM

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

Part I: GENERAL INFORMATION

PROJECT NAME 251 Front Street Rezoning

1. Reference Numbers

CEQR REFERENCE NUMBER (to be assigned by lead agency)
16DCP002K

BSA REFERENCE NUMBER (if applicable)

ULURP REFERENCE NUMBER (if applicable)
150235ZMK, 150234ZRK

OTHER REFERENCE NUMBER(S) (if applicable)
(e.g., legislative intro, CAPA)

2a. Lead Agency Information

NAME OF LEAD AGENCY
NYC Department of City Planning

NAME OF LEAD AGENCY CONTACT PERSON
Robert Dobruskin, Director, EARD

ADDRESS 120 Broadway, 31st floor

CITY New York

STATE NY

ZIP 10271

TELEPHONE 212-720-3423

EMAIL
dobrus@planning.nyc.gov

2b. Applicant Information

NAME OF APPLICANT
251 Front Street Realty, Inc.

NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON
Hiram A. Rothkrug, EPDSCO

ADDRESS 55 Water Mill Road

CITY Great Neck

STATE NY

ZIP 11021

TELEPHONE 718-343-0026

EMAIL
hrothkrug@epdsco.com

3. Action Classification and Type

SEQRA Classification

UNLISTED TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): 617.4(b)(9)

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 Applicant, 251 Front Street Realty, Inc., seeks a zoning map amendment from R6B to R7A, affecting a property at 251 Front Street (Block 42, Lot 24) in the Vinegar Hill neighborhood of Brooklyn CD 2. The Applicant also seeks a zoning text amendment to modify ZR Section 23-933, Appendix F, Map 4, to designate the proposed R7A district a Mandatory Inclusionary Housing Area (MIHA) subject to the requirements of Option 1. These actions would facilitate the construction by the Applicant of a 9-story, 110,795 gsf residential building with 92 dwelling units, of which 23 would be affordable to households with incomes averaging 60% of AMI, and 35 accessory parking spaces on a lot that is now occupied by a parking lot. See attached Project Description.

Project Location

BOROUGH Brooklyn

COMMUNITY DISTRICT(S) 2

STREET ADDRESS 251-259 Front St., 68-86 Gold St., 270-278 Water St.

TAX BLOCK(S) AND LOT(S) Block 42, Lot 24

ZIP CODE 11001

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS West side of Gold Street between Front and Water Streets

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6B

ZONING SECTIONAL MAP NUMBER 12d

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 ZR 23-933

Board of Standards and Appeals: YES NO

VARIANCE (use)

VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION	
Department of Environmental Protection: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "yes," specify:	
Other City Approvals Subject to CEQR (check all that apply)	
<input type="checkbox"/> LEGISLATION	<input type="checkbox"/> FUNDING OF CONSTRUCTION, specify:
<input type="checkbox"/> RULEMAKING	<input type="checkbox"/> POLICY OR PLAN, specify:
<input type="checkbox"/> CONSTRUCTION OF PUBLIC FACILITIES	<input type="checkbox"/> FUNDING OF PROGRAMS, specify:
<input type="checkbox"/> 384(b)(4) APPROVAL	<input type="checkbox"/> PERMITS, specify:
<input type="checkbox"/> OTHER, explain:	
Other City Approvals Not Subject to CEQR (check all that apply)	
<input type="checkbox"/> PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)	<input type="checkbox"/> LANDMARKS PRESERVATION COMMISSION APPROVAL
	<input checked="" type="checkbox"/> OTHER, explain: NYC Dept. of Buildings buildings permit
State or Federal Actions/Approvals/Funding: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "yes," specify:	
6. Site Description: <i>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.</i>	
Graphics: <i>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.</i>	
<input checked="" type="checkbox"/> SITE LOCATION MAP	<input checked="" type="checkbox"/> ZONING MAP
<input checked="" type="checkbox"/> TAX MAP	<input checked="" type="checkbox"/> SANBORN OR OTHER LAND USE MAP
<input checked="" type="checkbox"/> PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP	<input type="checkbox"/> FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
Physical Setting (both developed and undeveloped areas)	
Total directly affected area (sq. ft.): 19,991	Waterbody area (sq. ft.) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 19,991	Other, describe (sq. ft.): 0
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): 110,795	
NUMBER OF BUILDINGS: 1	GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 110,795
HEIGHT OF EACH BUILDING (ft.): 95	NUMBER OF STORIES OF EACH BUILDING: 9
Does the proposed project involve changes in zoning on one or more sites? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
If "yes," specify: The total square feet owned or controlled by the applicant: 19,991	
The total square feet not owned or controlled by the applicant: 0	
Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):	
AREA OF TEMPORARY DISTURBANCE: 15,993 sq. ft. (width x length)	VOLUME OF DISTURBANCE: 159,930 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 15,993 sq. ft. (width x length)	
8. Analysis Year CEQR Technical Manual Chapter 2	
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2019	
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18	
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? <input checked="" type="checkbox"/> YES <input type="checkbox"/> 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)	
<input checked="" type="checkbox"/> RESIDENTIAL	<input checked="" type="checkbox"/> MANUFACTURING
<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> PARK/FOREST/OPEN SPACE
<input type="checkbox"/> 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.

	EXISTING CONDITION		NO-ACTION CONDITION		WITH-ACTION CONDITION		INCREMENT
LAND USE							
Residential	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," specify the following:							
Describe type of residential structures			1 apartment building		1 apartment building		
No. of dwelling units			41		92		+51
No. of low- to moderate-income units			0		23		+23
Gross floor area (sq. ft.)			41,219		94,802		+53,583
Commercial	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
Describe type (retail, office, other)							
Gross floor area (sq. ft.)							
Manufacturing/Industrial	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
Type of use							
Gross floor area (sq. ft.)							
Open storage area (sq. ft.)							
If any unenclosed activities, specify:							
Community Facility	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
Type							
Gross floor area (sq. ft.)							
Vacant Land	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," describe:							
Publicly Accessible Open Space	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):							
Other Land Uses	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," describe:	Commercial parking lot (no floor area)		Accessory parking garage (8,244 sf)		Accessory parking garage (15,993 sf)		-commercial parking; +7,749 sf of accessory parking
PARKING							
Garages	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," specify the following:							
No. of public spaces	0		0		0		0
No. of accessory spaces	0		21		35		+14
Operating hours			24 hours		24 hours		
Attended or non-attended			Non-attended		Non-attended		
Lots	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
If "yes," specify the following:							
No. of public spaces	60		0		0		0
No. of accessory spaces	0		0		0		0
Operating hours	Daytime only						
Other (includes street parking)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," describe:	+/- 25 curbside spaces		+/- 25 curbside spaces		+/- 22 curbside spaces		0
POPULATION							
Residents	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
If "yes," specify number:			88		197		+109

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Briefly explain how the number of residents was calculated:	Number of housing units times 2.14, the average household size per the 2010 census in Brooklyn tract 21, which includes the project area.			
Businesses	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If "yes," specify the following:				
No. and type	1 parking lot			0
No. and type of workers by business	4 parking lot workers			0
No. and type of non-residents who are not workers	20 daily visitors			0
Briefly explain how the number of businesses was calculated:	Observation			
Other (students, visitors, concert-goers, etc.)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	R6B	R6B	R7A	
Maximum amount of floor area that can be developed	39,982 zsf (19,991 x 2.00)	39,982 zsf (19,991 x 2.00)	91,958 zsf (19,991 x 4.60)	+51,976
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	residential, light industrial, transportation and facilities; MX(M1-4/R7A), M1-2, R6B, R6A	No change	MX(M1-4/R7A), M1-2, R6B, R6A, R7A	+R7A
Attach any additional information that may be needed to describe the project.				
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, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a “yes” answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Full EAS Form. For example, if a question is answered “no,” an agency may request a short explanation for this response.

	YES	NO
1. LAND USE, ZONING, AND PUBLIC POLICY: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Is there the potential to affect an applicable public policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) If “yes,” to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If “yes,” complete the Consistency Assessment Form . Attached		
2. SOCIOECONOMIC CONDITIONS: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of more than 200 residential units or 200,000 square feet of commercial space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ If “yes,” answer both questions 2(b)(ii) and 2(b)(iv) below.		
o Directly displace 500 or more residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ If “yes,” answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
o Directly displace more than 100 employees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ If “yes,” answer questions under 2(b)(iii) and 2(b)(iv) below.		
o Affect conditions in a specific industry?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ 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		
o If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>
ii. Indirect Residential Displacement		
o Would expected average incomes of the new population exceed the average incomes of study area populations?	<input type="checkbox"/>	<input type="checkbox"/>
o If “yes:”		
▪ Would the population of the primary study area increase by more than 10 percent?		
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?		
o If “yes” to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	<input type="checkbox"/>	<input type="checkbox"/>
iii. Direct Business Displacement		
o Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	<input type="checkbox"/>	<input type="checkbox"/>
o Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve,	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
enhance, or otherwise protect it?		
iv. Indirect Business Displacement		
o Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	<input type="checkbox"/>	<input type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
v. Effects on Industry		
o Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	<input type="checkbox"/>	<input type="checkbox"/>
o Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	<input type="checkbox"/>	<input type="checkbox"/>
3. COMMUNITY FACILITIES: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Indirect Effects		
i. Child Care Centers		
o Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	<input type="checkbox"/>	<input type="checkbox"/>
ii. Libraries		
o Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the additional population impair the delivery of library services in the study area?	<input type="checkbox"/>	<input type="checkbox"/>
iii. Public Schools		
o Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?	<input type="checkbox"/>	<input type="checkbox"/>
iv. Health Care Facilities		
o Would the project result in the introduction of a sizeable new neighborhood?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the project affect the operation of health care facilities in the area?	<input type="checkbox"/>	<input type="checkbox"/>
v. Fire and Police Protection		
o Would the project result in the introduction of a sizeable new neighborhood?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the project affect the operation of fire or police protection in the area?	<input type="checkbox"/>	<input type="checkbox"/>
4. OPEN SPACE: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Is the project located within an under-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes," would the project generate more than 50 additional residents or 125 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(d) Is the project located within a well-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If "yes," would the project generate more than 350 additional residents or 750 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>
o 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	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
percent?		
<ul style="list-style-type: none"> o If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year. Attached		
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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. Attached		
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to either of the above, please provide the information requested in Chapter 10 . Attached		
8. NATURAL RESOURCES: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," complete the Jamaica Bay Watershed Form and submit according to its instructions .		
9. HAZARDOUS MATERIALS: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Has a Phase I Environmental Site Assessment been performed for the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Based on the Phase I Assessment, is a Phase II Investigation needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>


	YES	NO
(c) If the proposed project located in a separately sewerred area , would it result in the same or greater development than that listed in Table 13-1 in Chapter 13 ?	<input type="checkbox"/>	<input type="checkbox"/>
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas , including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Would the proposed project be located in an area that is partially sewerred or currently unsewerred?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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 week): 2,214		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>
12. ENERGY: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15 , the project's projected energy use is estimated to be (annual BTUs): 6,788,966,000		
(b) Would the proposed project affect the transmission or generation of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. TRANSPORTATION: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? <i>**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.</i>	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
o 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?	<input type="checkbox"/>	<input type="checkbox"/>
14. AIR QUALITY: CEQR Technical Manual Chapter 17		
(a) <i>Mobile Sources:</i> Would the proposed project result in the conditions outlined in Section 210 in Chapter 17 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) <i>Stationary Sources:</i> Would the proposed project result in the conditions outlined in Section 220 in Chapter 17 ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17 ? (Attach graph as needed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Does the proposed project involve multiple buildings on the project site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. Attached		
15. GREENHOUSE GAS EMISSIONS: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project fundamentally change the City's solid waste management system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Would the proposed project result in the development of 350,000 square feet or more?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18 ?	<input type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008 ; § 24-	<input type="checkbox"/>	<input type="checkbox"/>

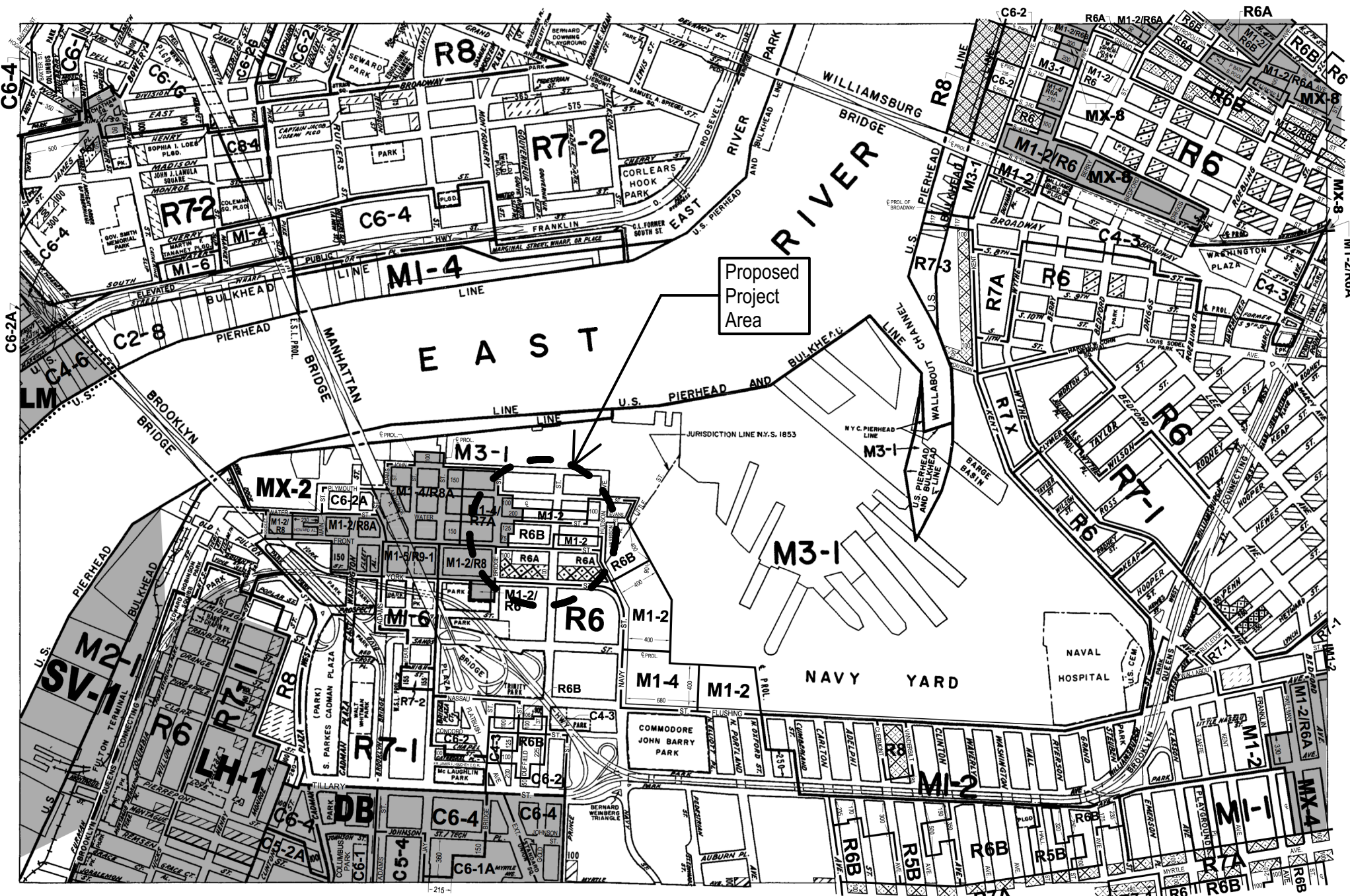
	YES	NO
803 of the Administrative Code of the City of New York). Please attach supporting documentation.		
16. NOISE: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. Attached		
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20 , "Public Health." Attach a preliminary analysis, if necessary.		
18. NEIGHBORHOOD CHARACTER: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21 , "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. CONSTRUCTION: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o The operation of several pieces of diesel equipment in a single location at peak construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closure of a community facility or disruption in its services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Activities within 400 feet of a historic or cultural resource?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o Disturbance of a site containing or adjacent to a site containing natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22 , "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. See attached narrative report.		
20. APPLICANT'S CERTIFICATION		
I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.		
Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.		
APPLICANT/REPRESENTATIVE NAME Brian Kintish	SIGNATURE <i>Brian Kintish</i>	DATE December 9, 2016

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

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

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

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.		Potentially Significant Adverse Impact	
		YES	NO
IMPACT CATEGORY			
Land Use, Zoning, and Public Policy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Socioeconomic Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Community Facilities and Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Open Space	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Shadows	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Historic and Cultural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Urban Design/Visual Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Natural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hazardous Materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Water and Sewer Infrastructure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Solid Waste and Sanitation Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Greenhouse Gas Emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Public Health	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Neighborhood Character	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Check determination to be issued by the lead agency:			
<input type="checkbox"/> Positive Declaration: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a <i>Positive Declaration</i> and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).			
<input type="checkbox"/> Conditional Negative Declaration: A <i>Conditional Negative Declaration</i> (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.			
<input checked="" type="checkbox"/> 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 template) or using the embedded Negative Declaration on the next page.			
4. LEAD AGENCY'S CERTIFICATION			
TITLE Deputy Director, Environmental Assessment & Review Division	LEAD AGENCY New York City Department of City Planning		
NAME Olga Abinader	DATE December 9, 2016		
SIGNATURE 			



ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

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

- R – RESIDENTIAL DISTRICT
- C – COMMERCIAL DISTRICT
- M – MANUFACTURING DISTRICT

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

AREA(S) REZONED

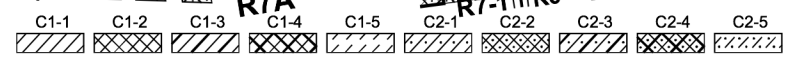
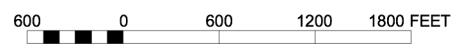
Effective Date(s) of Rezoning:
 03-20-2013 C 130052 ZMM

Special Requirements:
 For a list of lots subject to CEQR environmental requirements, see APPENDIX C.
 For a list of lots subject to "D" restrictive declarations, see APPENDIX D.
 For Inclusionary Housing designated areas on this map, see APPENDIX F.

MAP KEY

12a	12c	13a
12b	12d	13b
16a	16c	17a

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NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

ZONING MAP 12d

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



NYC Digital Tax Map

Effective Date : 12-02-2008 16:13:58

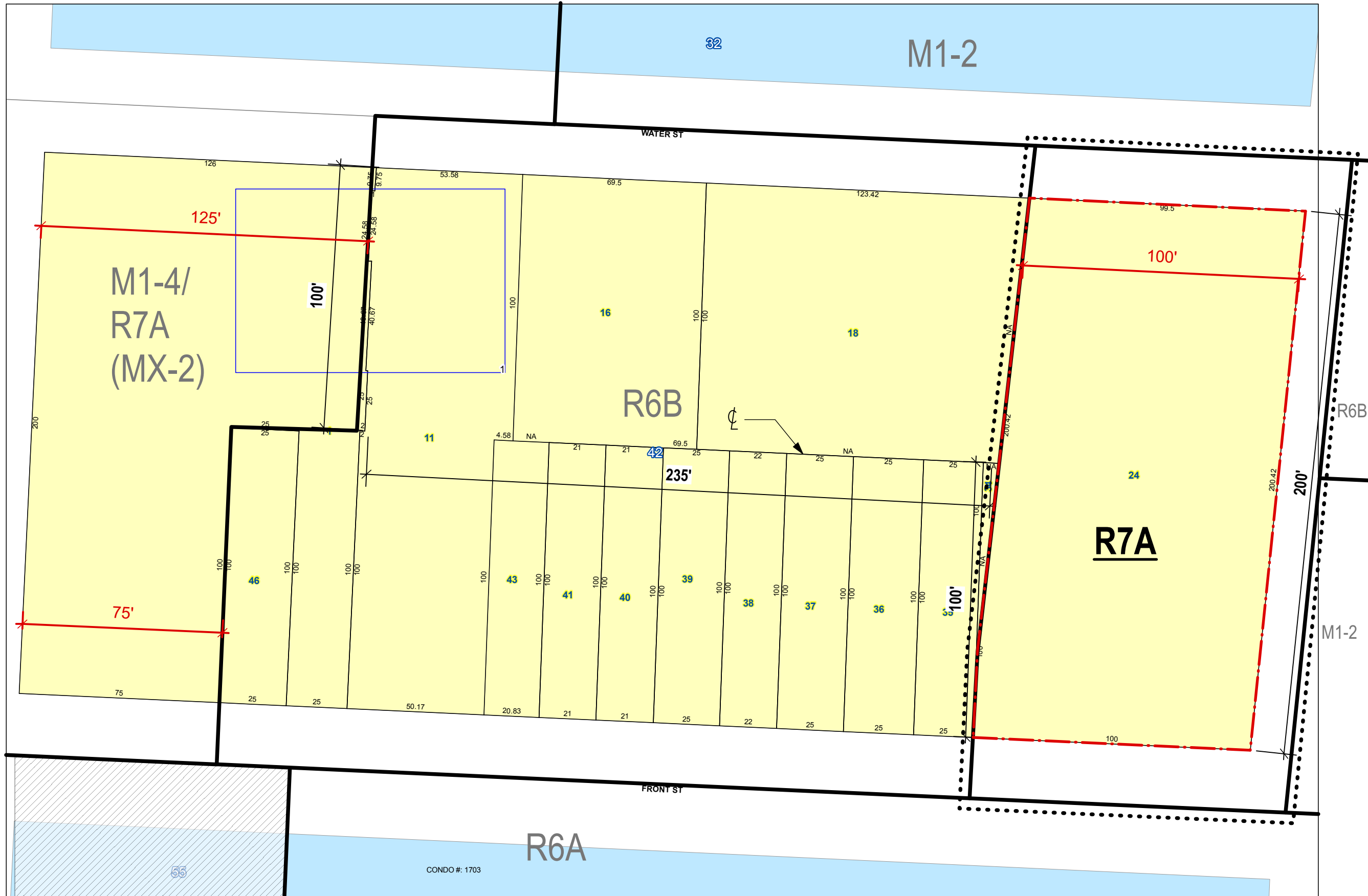
End Date : Current

Brooklyn Block: 42

Legend

- Streets
- Miscellaneous Text
- ↓ Possession Hooks
- - - Boundary Lines
- ↓ Lot Face Possession Hooks
- Regular
- Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon

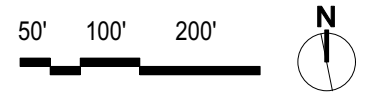
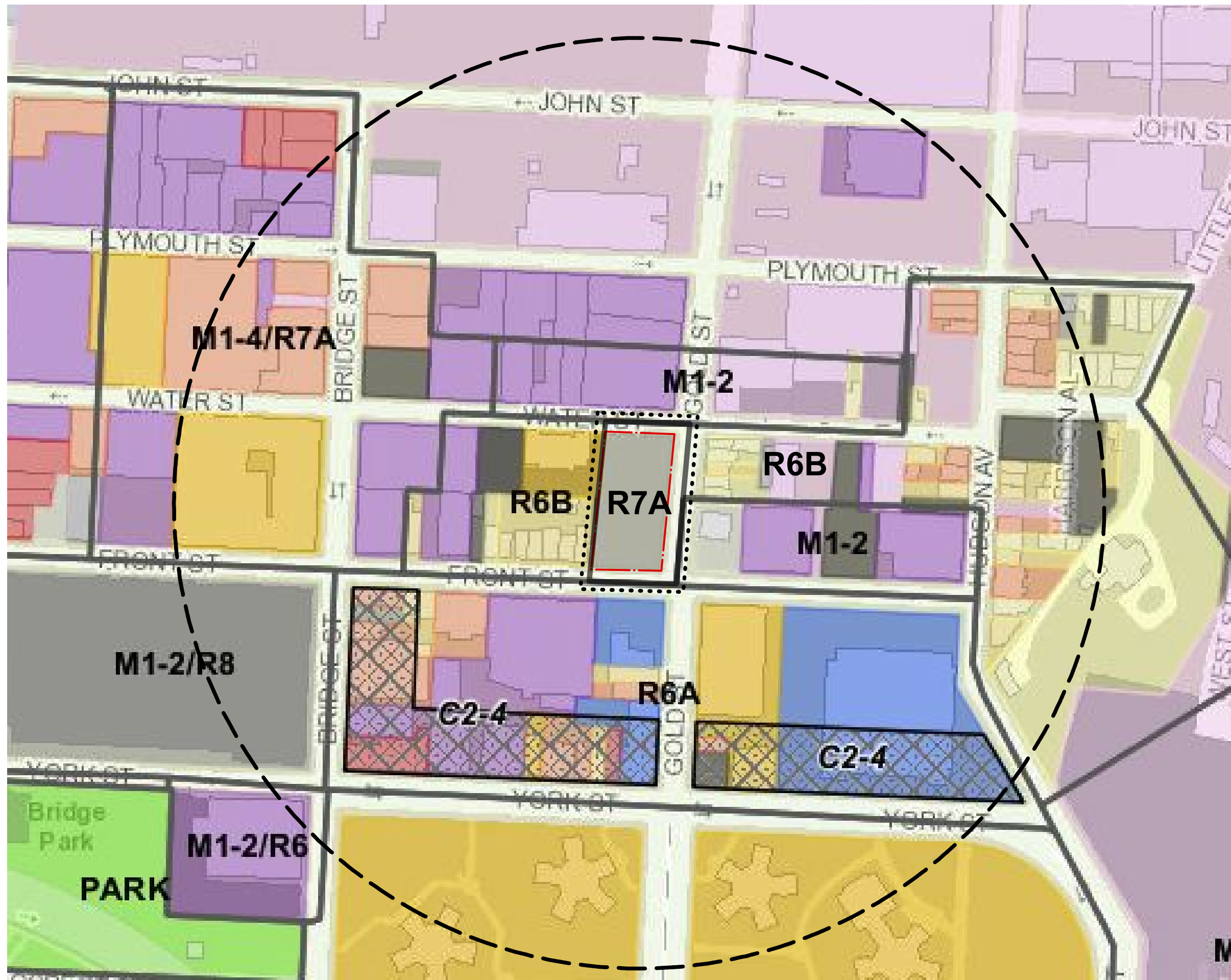
- Zoning District Line
- - - Development Site
- Area of Rezoning
- ▨ Existing C2-4 District
- R7A** Proposed Zoning District
- R6B Existing Zoning District



251 FRONT STREET

BROOKLYN, NY

AREA MAP



Project

Project Area

Development Site

600-foot radius

Land Use

- One & Two Family Residence
- Multi-Family Residence (Walkup)
- Multi-Family Residence (Elevator)
- Mixed Residential & Commercial
- Commercial Use
- Industrial/Manufacturing
- Transportation / Utility
- Public Facilities and Institutions
- Open Space & Recreation
- Parking
- Vacant Land

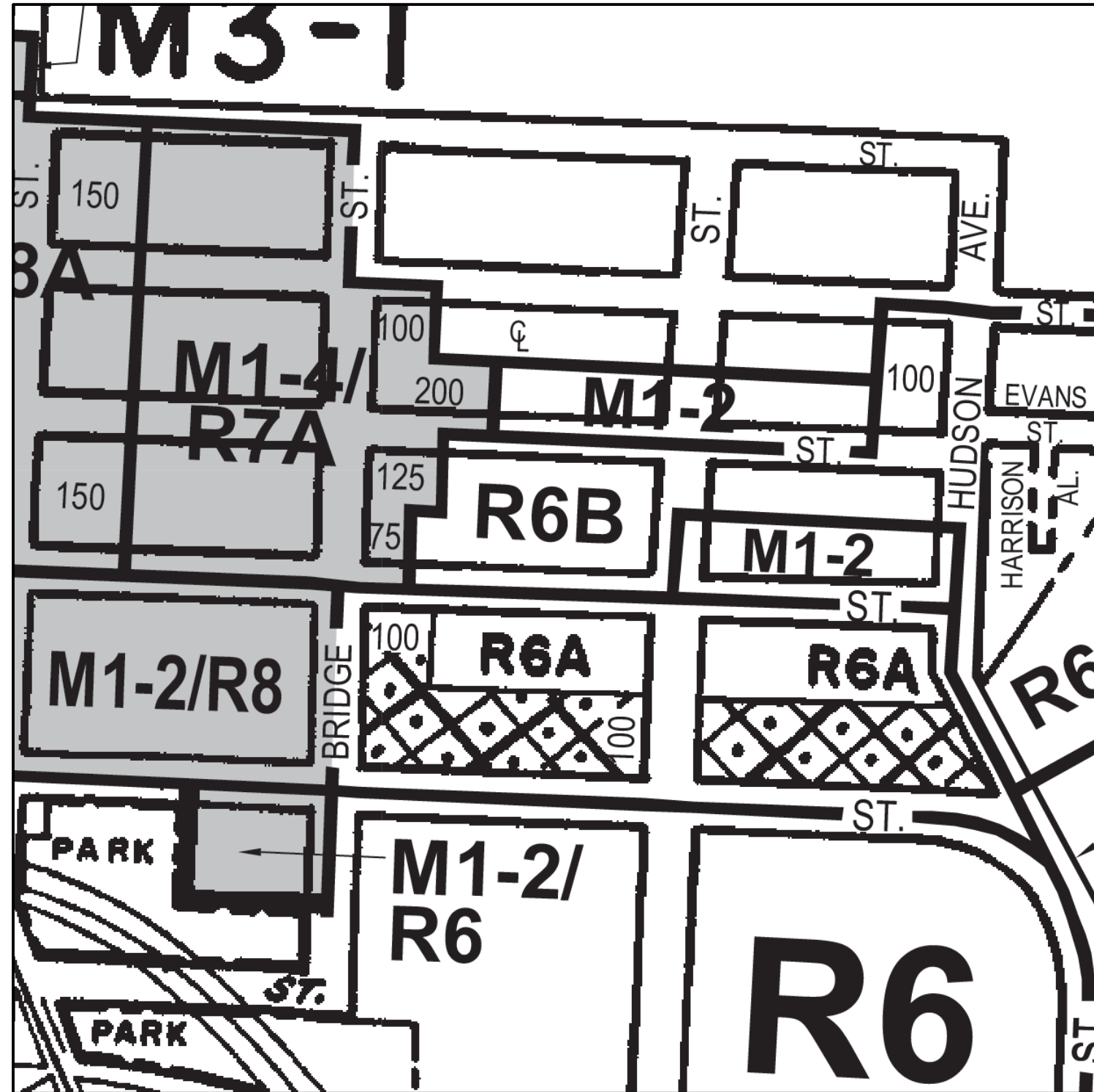
Zoning

One & Two Family Residence

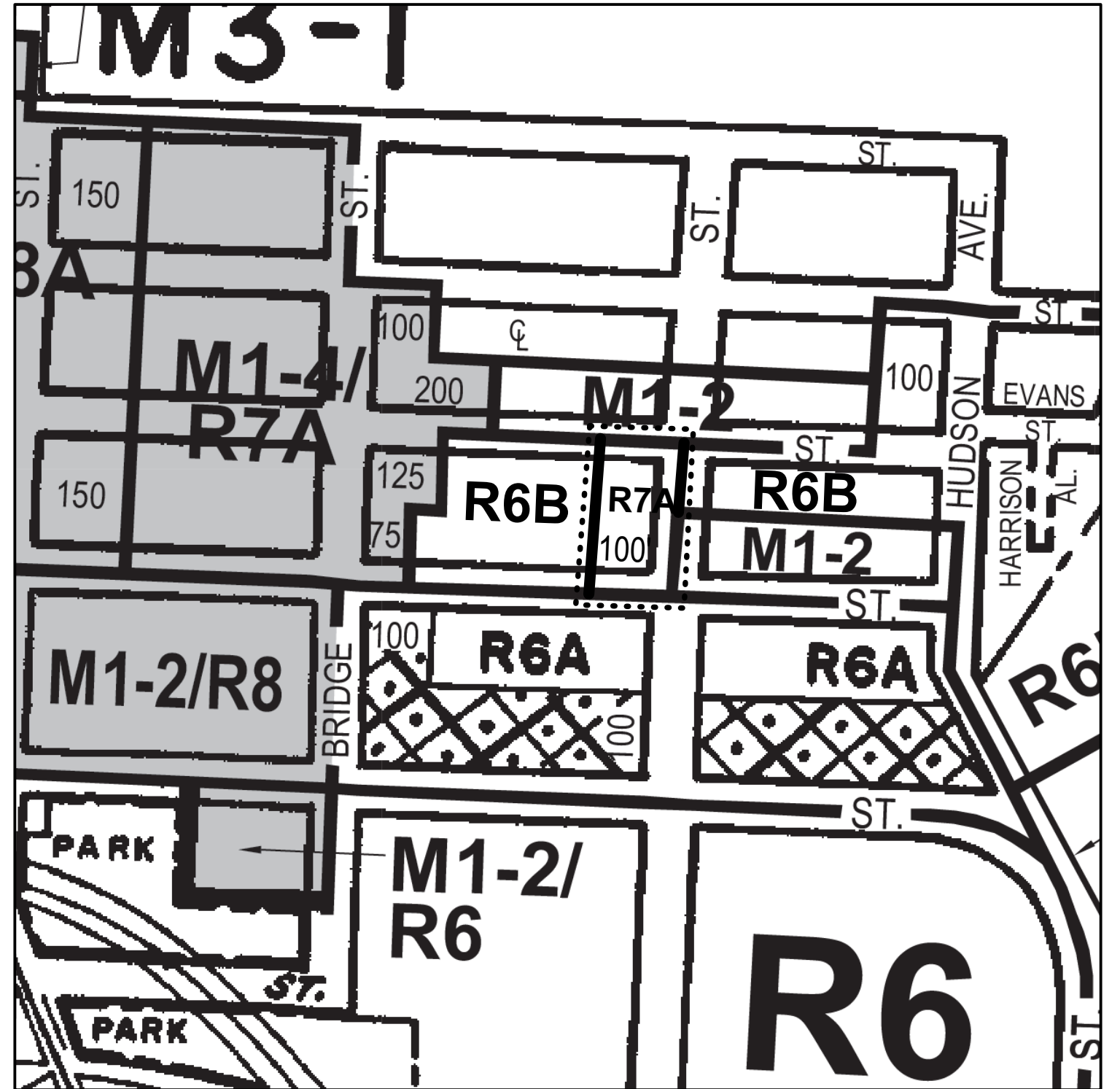
251 FRONT STREET

BROOKLYN, NY

ZONING CHANGE MAP



CURRENT ZONING MAP



PROPOSED ZONING MAP

 Area of Rezoning

 C2-4

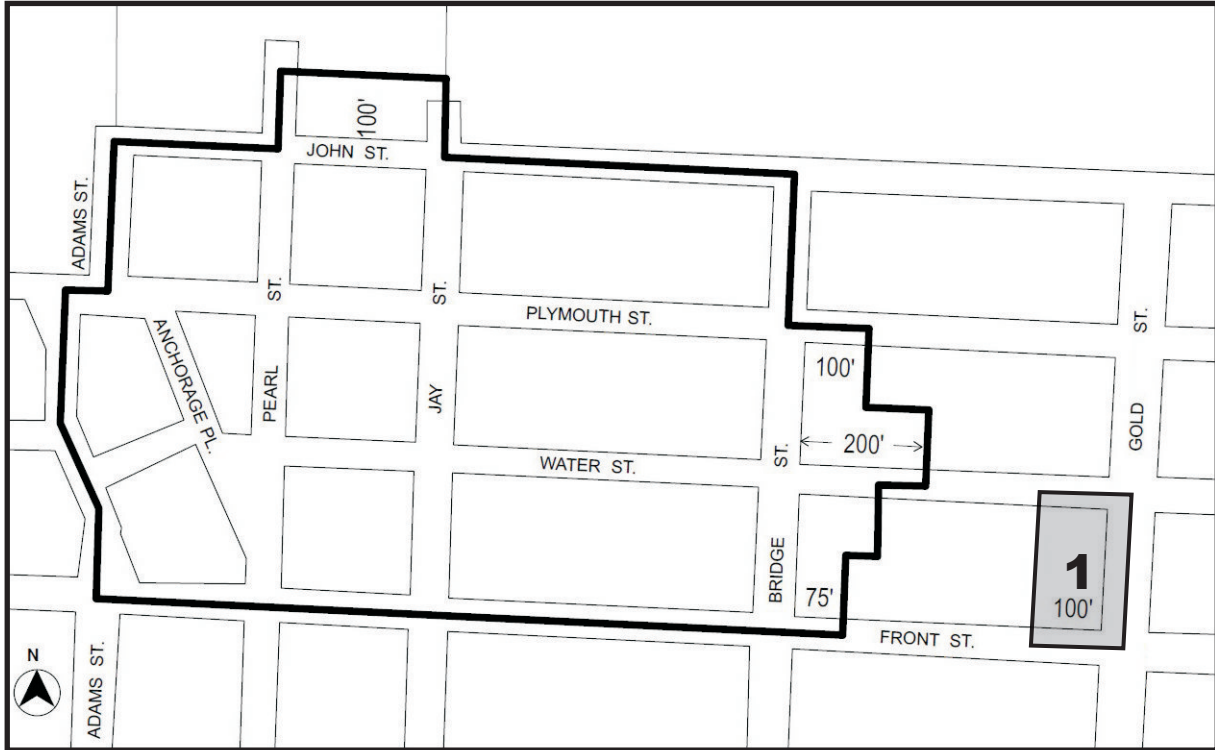
Changing an R6B district to an R7A district





Borough Community District 2

In the R7A Districts within the area shown on the following Map 4:

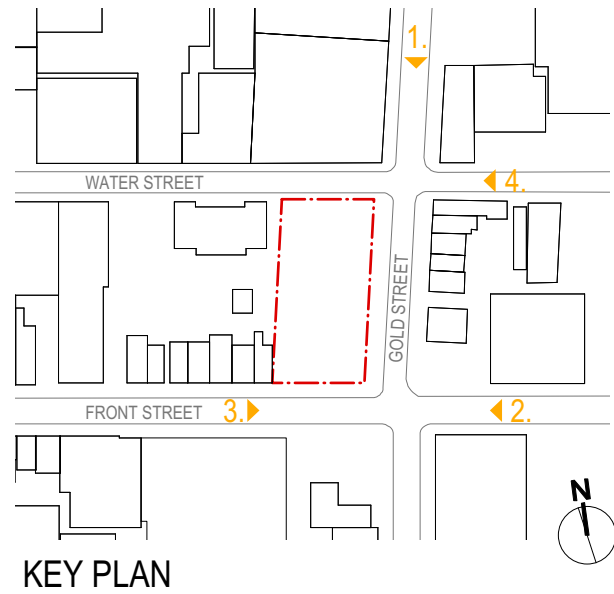
Map 4 - (11/11/15)



-  Inclusionary Housing Designated Area (IHDA)
-  Mandatory Inclusionary Housing Area (MIHA)
- 1** MIH Program Option 1 [Section 23-154(d) (3)]

Portion of Community District 2, Brooklyn

251 FRONT STREET
BROOKLYN, NY
PROJECT AREA PHOTOGRAPHS
taken May 12, 2013



1. LOOKING SOUTH FROM GOLD STREET



2. LOOKING WEST FROM FRONT STREET



3. LOOKING EAST FROM FRONT STREET



4. LOOKING WEST FROM WATER STREET

251 FRONT STREET REZONING

Note: This report, including both Part I and Part II, is from the original 251 Front Street Rezoning EAS, dated December 9, 2016, and prepared in connection with the original ULURP application certified on December 12, 2016, which described and analyzed a proposal to rezone the project site from R6B to R7A and to designate it as a Mandatory Inclusionary Housing (MIH) area. Although the proposal has since been revised, and the Applicant is now seeking a rezoning from R6B to R6A and the designation of the project site as an MIH area, this report has not been revised. A new Appendix 4 describes the current proposed actions and the project that those actions would facilitate and analyzes the environmental implications of the revised actions.

PART I: PROJECT DESCRIPTION

PROPOSED ACTIONS

The Applicant, 251 Front Street Realty, Inc., is seeking a zoning map amendment to sectional map 12d to rezone Brooklyn Block 42, Lot 24 (“the project site”) from R6B to R7A and a zoning text amendment to designate the proposed rezoning area a Mandatory Inclusionary Housing (MIH) area in connection with a proposal to construct a residential building with up to 110,795 gross square feet (gsf) and 92 dwelling units, of which 23 would be affordable to households with incomes averaging 60 percent of the Area Median Income (AMI). The affected area is a portion of a block located within the Vinegar Hill neighborhood of Brooklyn’s Community District 2. The block is bounded by Water Street on the north, Gold Street on the east, Front Street on the south, and Bridge Street on the west.

The proposed zoning map amendment would rezone the project site, the easternmost portion of Block 42 fronting Water, Gold and Front Streets, from R6B to R7A. Under the existing R6B contextual district, the project site can be developed to a maximum permitted residential floor area ratio (FAR) of 2.00. The proposed R7A contextual district coterminous with an MIH area would increase the maximum permitted residential FAR to 4.60. Zoning comparisons between the two districts are further discussed below.

As part of the city’s MIH program, land actions involving the creation of new housing in medium- and high-density districts would be required to provide a percentage of their total number of dwelling units as income-restricted. Since the Applicant is proposing a new zoning district that would permit greater residential FAR, the proposed rezoning area is subject to the requirements of MIH. The Applicant is therefore also proposing a zoning text amendment to Appendix F of the Zoning Resolution of the City of New York, to designate the project site as an MIH area, subject to the requirement of Option 1 of the MIH program. Subsequently, the applicant would be required to build at least 25 percent of the residential floor area for residents with incomes averaging 60 percent AMI, with no unit targeted at a level exceeding 130 percent AMI. As inclusionary housing would be developed on the project site, the development is granted a permitted residential FAR of 4.60.

SURROUNDING AREA

The project site is located within the Vinegar Hill neighborhood of Brooklyn Community District 2. The area is within the coastal zone boundary, and has historically been occupied with industrial, manufacturing and transportation uses. The area continues to be predominantly industrial and manufacturing, with multifamily residential development and mixed residential and commercial uses.

The surrounding area contains two historic districts: the Vinegar Hill Historic District and the DUMBO Historic District, which the New York City Landmarks Preservation Commission (LPC) adopted in 1997 and 2007 respectively. In 1998, shortly after the Vinegar Hill Historic District was established, the New York City City Planning Commission adopted the Vinegar Hill rezoning, which included the subject block. The action rezoned several industrial M1-2 and M3-1 districts to R6A and R6B residential districts. This rezoning brought the large residential land use presence in the area into conformity with the zoning, promoted future contextual residential development on the numerous vacant parcels and reinforced the historical character of the neighborhood. Where the manufacturing zones actually covered industrial uses, the zones were retained in order to preserve such uses.

In 2009 the New York City Department of City Planning proposed zoning map and text amendments to rezone the nearby DUMBO Historic District from M1-2 and M3-1 to M1-4/R7A and M1-4/R8A, and expand the boundaries of the Special Mixed-Use District (MX-2, Fulton Ferry). The purposes were to preserve the mixed use character of the neighborhood, to allow for residential conversion of existing underutilized loft buildings, and to promote new construction at densities consistent with the built character of the area. Although the area covered by the 2009 DUMBO Rezoning extended west beyond the DUMBO Historic District boundaries and onto the subject block, the project site remained outside of both boundaries. Details of the surrounding land use, zoning and historic districts are discussed in the following chapters.

REZONING AREA AND PROJECT SITE

The proposed rezoning area is coterminous with the project site, a 100 foot by 200 foot rectangular parcel located on the eastern end of Block 42 along Gold Street, between Water and Front Streets. The project site, currently within an R6B zoning district, is approximately 19,991 square feet in land area, and is occupied by a surface parking lot. The project site is directly adjacent to Area I and across the street from Area II of the Vinegar Hill Historic District.

PURPOSE AND NEED

Approval of the proposed action would result in the redevelopment of the project site at a greater residential density than would be permitted under either the existing R6B zoning or the nearby R6A zoning. It would also mandate the inclusion of a permanently affordable housing component through the Zoning Resolution's MIH provisions. It would thus facilitate the development of an increased number of both market rate and affordable housing units, both of which are recognized citywide needs. Specifically, it would facilitate the proposed project.

ZONING COMPARISON

The existing R6B district and the proposed R7A district have identical use and accessory off-street parking regulations. Both permit only residential and community facility uses listed in Use Groups 1, 2, 3, and 4. Both require that the number of accessory off-street parking spaces provided for residential development equal 50 percent of the number of residential units (or 50 percent of the market rate units in the case of an inclusionary housing development in a Transit Zone).

The two districts differ, however, in terms of bulk regulations. The R7A district is a higher density district than R6B, allowing greater floor area and building height. The maximum permitted FAR under R6B is 2.00 for either residential or community facility development (except in an Inclusionary Housing designated area or an MIH area, in which the project site is not now located). Under R7A the maximum permitted community facility FAR is 4.00, and the maximum permitted residential FAR is ordinarily also 4.00. In MIH areas, however, the

maximum is 4.60, and a percentage of the residential floor area must be occupied by affordable housing, in satisfaction of one of the MIH program options. Since the rezoning area would be within an MIH area subject to Option 1 of the MIH program, the maximum permitted residential FAR would be 4.60, and at least 25 percent of the residential floor area would be in affordable units reserved for households with incomes averaging 60 percent of AMI.

Because the proposed project is residential, the bulk and parking regulations for residential development are pertinent, and these are shown in Table 1. Since both R6B and R7A are contextual districts, the regulations establish both maximum base (street wall) heights, at which a setback from the front lot line is required, and maximum building heights. The maximum street wall height is 40 feet under R6B and 75 feet under R7A, and the maximum building height is 50 feet under R6B and 95 feet under R7A. The R6B district can thus accommodate buildings of up to five stories, and the R7A district can accommodate buildings of up to nine stories. Lot coverage and yard regulations are the same for the two districts.

Table 1
Zoning Comparison Chart for Residential Development

	Permitted/Required			
	Existing R6B		Proposed R7A in an MIH Area	
Zoning Requirements	Zoning Section(s)	Maximum or Minimum	Zoning Section(s)	Maximum or Minimum
FAR				
Residential FAR	23-145	2.00	23-154	4.60
Inclusionary Housing	N/A	N/A	23-154	25% of floor area
YARDS				
Front Yard	23-45	None	23-45	None Required
Side Yard	23-46	None or 8'	23-46	None or 8'
Rear Yard	23-47	30'	23-47	30'
HEIGHT AND SETBACKS				
Maximum Height of Front Wall	23-633	40'	23-664	75'
Maximum Building Height	23-633	50'	23-664	95'
Sky Exp Plane	N/A	N/A	N/A	N/A
Setbacks from Narrow Streets	23-633	15'	23-633	15'
Setbacks from Wide Streets	23-633	10'	23-633	10'
Open Space	N/A	N/A	N/A	N/A
Lot Coverage	23-145	65%/80%*	23-145	65%/80%*
DENSITY REGULATIONS	23-22	680 DU	23-22	680 DU
PARKING	25-20	50% of DU	25-20	50% of market rate DU

ANALYSIS FRAMEWORK

Existing Conditions

As stated above, the project site, Lot 24, is now a parking lot. It is an almost rectangular lot with approximately 100 feet of frontage along Front and Water Streets and approximately 200 feet of frontage along Gold Street, and with a lot area of 19,991 square feet. (It is not exactly rectangular because at this location the intersecting streets are not precisely perpendicular.)

The Future without the Proposed Actions

Absent the proposed actions, a new building would be constructed in accordance with the R6B bulk regulations. It would have an FAR of 2.00, which for the 19,991 square foot site translates to 39,982 square feet of zoning floor area, and a height of five stories. Assuming that the zoning floor area would equal 97 percent of total above grade floor area, with a 3 percent allowance for mechanical space, the building would contain 41,219 gsf of above grade space. Assuming an average of approximately 1,000 gross square feet per apartment, the building would contain 41 dwelling units, and 21 parking spaces would be provided in the garage. The building would also contain a cellar with the same area as the above grade floors, or approximately 8,244 square feet, most of which would be occupied by an accessory parking garage. The building would contain a total of 49,463 gsf.

The Future with the Proposed Actions

In the future with the proposed actions, it is assumed that the project site would be redeveloped with a residential apartment building in accordance with the R7A bulk regulations applicable to an MIH area. With an FAR of 4.60, the building would contain 91,958 square feet of zoning floor area, or 94,802 gsf of above grade floor area. Assuming an average of approximately 1,000 gsf per apartment, the building would contain 92 dwelling units, of which 75 percent (69) would be market rate and 25 percent (23) would be affordable to households with annual incomes averaging 60 percent of AMI and in no case exceeding 130 percent of AMI. The building would contain a 35-space unattended accessory parking garage. The building would be built to the front lot lines, with street walls rising seven stories, or 75 feet. The building would have two additional stories, rising to a height of 95 feet, but the upper two stories would set back 15 feet from the front lot lines. The building would have a mechanical penthouse that would occupy a small portion of the roof, rising approximately ten feet above the roof height, and smaller, lower rooftop stair and elevator bulkheads. The building would occupy no more than 80 percent of the lot, or 15,993 square feet, with the open area in an interior courtyard that would not be visible from the street. Including a 15,993 square foot cellar containing the accessory parking garage, the building would contain a total of 110,795 gsf.

Basis for Technical Analyses

The environmental assessments in this EAS are based on the difference between the future no-action and with-action scenarios under the RWCDS. Although the project site would be redeveloped under either scenario, a larger building would be constructed under the with-action scenario. Table 2 presents the existing and assumed future no-action and with-action conditions for the proposed rezoning area, as well as the increments between the no-action and with-action scenarios. As the table shows, the proposed action would result in the development of an additional 51 dwelling units and an additional 61,632 sf of gross floor area (53,583 gsf of residential space and 7,749 gsf of garage space).

REQUIRED APPROVALS

The proposed project would require an amendment to zoning sectional map 12d, to map an R7A district and to reduce an R6B district. It would also require a zoning text amendment to change Map 4 in Appendix F to designate a new MIH area. These actions would be subject to the Uniform Land Use Review Procedure (ULURP).

BUILD YEAR

Considering the time required for the environmental review and land use approval process, and assuming a construction period of approximately 18 months, it is estimated that the project would be completed in 2019. This is the assumed "build year," which is used throughout this EAS for all future conditions, and which is the analysis year for the purpose of all assessments.

Table 2
Existing, No-Action, and With-Action Conditions and Action-Induced Increment

	EXISTING CONDITION	NO-ACTION CONDITION	WITH- ACTION CONDITION	INCREMENT
LAND USE				
Residential	NO	YES	YES	
If "yes," specify the following:				
Describe type of residential structures		apartment building	apartment building	
No. of dwelling units		41	92	+51
No. of low- to moderate-income units		0	23	+23
Gross floor area (sq. ft.)		41,219	94,802	+53,583
Commercial	NO	NO	NO	
If "yes," specify the following:				
Describe type (retail, office, other)				
Gross floor area (sq. ft.)				
Manufacturing/Industrial	NO	NO	NO	
If "yes," specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify:				
Community Facility	NO	NO	NO	
If "yes," specify the following:				
Type				
Gross floor area (sq. ft.)				
Vacant Land	NO	NO	NO	
If "yes," describe:				
Other Land Uses	YES	YES	YES	
If "yes," describe:	Commercial parking (no floor area)	Accessory parking (8,244 sf)	Accessory parking (15,993 sf)	+7,749 sf of accessory parking
PARKING				
Garages	NO	YES	YES	
If "yes," specify the following:				
No. of public spaces	0	0	0	
No. of accessory spaces	0	21	35	+14
Lots	YES	NO	NO	
If "yes," specify the following:				
No. of public spaces	60			-60
No. of accessory spaces	0			

PART II: TECHNICAL ANALYSES

INTRODUCTION

Based on the criteria in Part II of the Environmental Assessment Statement Full Form, the following technical areas require further analysis: land use, zoning, and public policy; shadows; historic and cultural resources; urban design and visual resources; hazardous materials; air quality; noise; and construction. These analyses, which follow the guidance in the *CEQR Technical Manual*, are presented below. The heading numbers correlate with the relevant chapters of the *CEQR Technical Manual*.

4. LAND USE, ZONING, AND PUBLIC POLICY

Introduction

A land use analysis characterizes the uses and development trends in the area that may be affected by an action and determines whether a proposed project is compatible with those conditions or whether it may adversely affect them. The analysis also considers the proposed project's compliance with, and effect on, the area's zoning and other applicable public policies.

According to the *CEQR Technical Manual*, a preliminary assessment that includes a basic description of existing and future land uses, as well as basic zoning information, is provided for most projects, regardless of their anticipated effects. Regarding public policy, the *CEQR Technical Manual* states, "Large, publicly-sponsored projects are assessed for their consistency with PlaNYC, the City's sustainability plan." An assessment of an action's consistency with the Waterfront Revitalization Program is required if an action would occur within the designated Coastal Zone. Public policy assessments are also appropriate if an action would occur within an area covered by an Urban Renewal Plan or a 197-A Plan.

A land use and zoning assessment is appropriate for the proposed actions, which are zoning text and map amendments that would result in the development of additional floor area and residential units on the project site. The proposed project is neither large nor publicly sponsored. No portion of the proposed rezoning area is within an urban renewal area or an area covered by a 197-a Plan, but the proposed rezoning area is within the Coastal Zone. The preliminary assessment therefore focuses on land use, zoning, and consistency with the Waterfront Revitalization Program.

Study Area

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

Because of the modest size of the proposed project, the land use, zoning, and public policy assessment for the proposed action considers a study area extending 400 feet around the proposed rezoning area. The study area boundaries are approximately coincident with John Street to the north, Hudson Street to the east, York Street to the south, and Bridge Street to the west.

Land Use

Existing Conditions

The 400-foot radius study area includes all or portions of eight tax blocks, as shown in the land use map and further described below.

The proposed rezoning area consists of a single lot at the eastern end of Brooklyn Block 42, which is bounded by Water, Gold, Front, and Bridge Streets. That lot is the project site, Lot 24, with frontage on Water, Gold, and Front Streets. It is now used as a commercial parking lot, and there are no permanent structures on the lot.

Regarding the remainder of Block 42, starting with the properties fronting on Water Street, Lot 18, which is adjacent to the project site, is occupied by a five-story, 26-unit apartment building that was completed in 2004. The next lot to the west, Lot 16, is currently vacant. To its west is Lot 11, a through lot extending from Water Street to Front Street. Two attached six-story early twentieth century industrial buildings occupy the lot; the one facing Water Street is a warehouse, and the one facing Front Street is a vacant former paint factory. The lot fronting on Bridge Street at the western end of the block (Lot 1) is occupied by a 12-story early twentieth century industrial building. In 2008 the owner applied to the Department of Buildings to convert the building to office use, but a permit was not issued, and a stop-work order was issued, which remains in effect. The building is now apparently vacant. With the exception of the former paint factory and one vacant lot, the midblock along Front Street (Lots 35 through 41, 43, and 46) is entirely residential, with seven buildings that date to the mid nineteenth century. Six of the buildings are row houses with three full stories and a basement, and the seventh is a three-story former fire house that has been converted to residential use.

The block to the immediate north of the proposed rezoning area (Block 32, bounded by Plymouth, Gold, Water, and Bridge Streets) is entirely light industrial except at its western end along Bridge Street, as is described below. Directly across Water Street from the project site is a two-story bakery, and the other industrial buildings range from one to five stories. There is a vacant lot at the northeast corner of Water and Bridge Streets, and a seven-story residential building with ground floor commercial space occupies the southeast corner of Bridge and Plymouth Streets.

A Con Edison facility, the Farragut Substation, occupies three contiguous blocks in the northeastern part of the study area: Blocks 21 and 22, bounded by John, Hudson, Plymouth, and Bridge Streets, and Block 33, bounded by Plymouth, Hudson, Water, and Bridge Streets. The only other uses on these blocks are an auto repair shop at the northeast corner of Bridge and Plymouth Streets and a ten-story self storage facility on John Street midway between Gold and Hudson Streets.

Land uses are more mixed in the rest of the study area. On Block 43, bounded by Water, Hudson, Front, and Gold Streets, a row of low-rise nineteenth century residential buildings occupies most of the Gold Street frontage, directly across the street from the project site. Another cluster of low-rise nineteenth century residential buildings is located near the corner of Water and Hudson Streets. The midblock along Water Street contains a one-story parking garage and an auto repair shop, which flank a vacant lot owned by Con Edison that extends

through the middle of the block to Front Street. The remainder of the Front Street side of the block contains a one-story light industrial building, an adjacent lot at the corner of Gold Street used for surface parking and open storage, and a seven-story industrial building that extends to the Hudson Street frontage.

Continuing clockwise through the study area, Block 56, bounded by Front, Hudson, York, and Gold Street, contains only four properties. Two seven-story residential buildings and a two-story building with dwelling units over commercial space occupy the Gold Street frontage, and an elementary school occupies the remainder of the block.

A small Buddhist center is located across Front Street from the project site, at the southwest corner of Front and Gold Streets on Block 55, which is bounded by Front, Gold, York, and Bridge Streets. To its west along Front Street, extending to Bridge Street, are a one-story light industrial building, then a seven-story industrial building, then four two- and three-story buildings that are all either residential or residential above commercial space. A one-story industrial building occupies the Gold Street midblock, and a three-story halfway house occupies the corner of Gold and York Streets. A mix of one-story commercial buildings, one-story industrial buildings, and two- and six-story buildings with dwelling units above commercial space occupies the remainder of the York Street frontage. Two- and six-story buildings with dwellings above commercial space and a one-story industrial building occupy the Bridge Street midblock.

Future Conditions without the Proposed Actions

Whether or not the proposed actions are taken, the Applicant intends to redevelop the project site with a residential apartment building containing an accessory parking garage. In the absence of the proposed actions, the new building would be constructed in accordance with the R6B bulk regulations. It would have an FAR of 2.00, which for the 19,991 square foot site translates to 39,982 square feet of zoning floor area, and a height of five stories. Assuming that the zoning floor area would equal 97 percent of total above grade floor area, with a 3 percent allowance for mechanical space, the building would contain 41,219 gsf of above grade space. Assuming an average of approximately 1,000 gross square feet per apartment, the building would contain 41 dwelling units, and 21 parking spaces would be provided in the garage. The building would also contain a cellar with the same area as the above grade floors, or approximately 8,244 square feet, most of which would be occupied by an accessory parking garage. The building would contain a total of 49,463 gsf.

Elsewhere on Block 42, the warehouse occupying the northern part of Lot 11 will be converted to office use. Permits are already in place, according to Department of Buildings records.

Within the rest of the study area, a seven-story residential building with 27 dwelling units will be built on the vacant lot at the northeast corner of Bridge and Water Streets (Block 32, Lot 1), according to information found on the Department of Buildings website. There is also a proposal to rezone the northeast corner of Gold and Front Streets, now occupied by surface parking and open storage, to facilitate construction of a six-story mixed-use building with nine residential units above ground floor commercial space.

Future Conditions with the Proposed Actions

In the future with the proposed actions, the project site would be redeveloped with a residential apartment building in accordance with the R7A bulk regulations applicable within a Mandatory Inclusionary Housing (MIH) area. With an FAR of 4.60, the building would contain 91,958 square feet of zoning floor area, or 94,802 gsf of above grade floor area. Assuming an average of approximately 1,000 gsf per apartment, the building would contain 92 dwelling units, of which 75 percent (69) would be market rate and 25 percent (23) would be affordable to households with annual incomes averaging 60 percent of the Area Median Income (AMI) and in no case exceeding 130 percent of AMI. The building would contain a 35-space accessory parking garage. The building would be built to the front lot lines, with street walls rising seven stories, or 75 feet. The building would have two additional stories, rising to a height of 95 feet, but the upper two stories would set back 15 feet from the front lot lines. The building would have a mechanical penthouse that would occupy a small portion of the roof, rising approximately ten feet above the roof height, and smaller, lower rooftop stair and elevator bulkheads. The building would occupy no more than 80 percent of the lot, or 15,993 square feet, with the open area in an interior courtyard that would not be visible from the street. Including a 15,993 square foot cellar containing the accessory parking garage, the building would contain a total of 110,795 gsf.

The increment between future no-action and with-action conditions is summarized in Table 4-1. As the table shows, the proposed action would result in the development of an additional 54 dwelling units and an additional 61,632 sf of gross floor area (53,583 gsf of residential space and 7,749 gsf of garage space).

**Table 4-1
Increment between the With-Action and No-Action Conditions**

New Development	No-Action Scenario	With-Action Scenario	Increment
Residential floor area (gsf)	41,219	94,802	53,583
Cellar floor area (accessory parking)	8,244	15,993	7,749
Total floor area (gsf)	49,463	110,795	61,332
Market rate housing units	41	69	28
Affordable housing units	0	23	23
Total housing units	41	92	51
Accessory parking spaces	21	35	14

Residential development on the site would be consistent with existing land use patterns. The site abuts a residential apartment building on Water Street that was constructed in 2004 and a much older residential building on Front Street. Considering the large number of residential units within the study area, the increment of an additional 51 dwelling units would not be large enough to have a substantial effect on land use patterns. The development is consistent with recent trends in the surrounding area, including the conversion of large industrial buildings to residential use, and nearby new residential development of similar height will be constructed at the northeast corner of Water and Bridge Streets whether or not the proposed action is taken. The proposed action would therefore not have a significant adverse impact on land use.

Zoning

Existing Conditions

The proposed rezoning area is currently zoned R6B, a medium density residential district that permits residential and community facility uses. The maximum permitted floor area ratio (FAR) under R6B is 2.00 for either residential or community facility development. Since R6B is a contextual district, the regulations establish both a maximum base (street wall) height, at which a setback from the front lot line is required, and a maximum building height. The maximum street wall height is 45 feet, and the maximum building height is 55 feet. (Without a qualifying ground floor, the maximums are 40 feet and 50 feet.) The R6B district can accommodate buildings of up to five stories in height. A 30-foot-deep rear yard is required, and front and side yards are not required. The zoning district covers all of Block 42 except for the western end along Bridge Street, which is zoned MX(M1-4/R7A), and the district extends eastward to cover the south side of Water Street between Gold and Hudson Streets, as well as the east side of Hudson Street between Water and Plymouth Streets.

The MX-2 DUMBO Special Mixed Use District, designated in 2009, abuts the R6B district on the west, covering the Bridge Street frontage of Block 42 as well as that of Block 32 to the north, and extends westward beyond the study area's western boundary. It was intended to protect existing industrial uses while allowing residential conversions and new development. Because the special district was designated as an Inclusionary Housing area, it was also intended to encourage the creation of affordable housing.

The portion of the special district within the study area is an MX(M1-4/R7A) district. The district permits residential and community facility uses, a range of commercial uses, and light industrial uses. Under R7A the maximum permitted community facility FAR is 4.00, and the maximum permitted residential FAR is ordinarily also 4.00. In Inclusionary Housing designated areas, however, the base residential FAR is 3.45, if no affordable housing is included, and the maximum is 4.60, if 20 percent of the residential floor area is occupied by affordable housing, as defined in the Inclusionary Housing Program provisions. Since the MX-2 district is an Inclusionary Housing designated area, the latter bulk regulations apply. Under M1-4 the maximum permitted commercial and manufacturing FAR is 2.00. For community facility development, the maximum permitted base (street wall) height is 65 feet, and the maximum permitted building height is 80 feet. For a residential building or a mixed use building that combines residential use with either community facility or commercial use, the maximums are also 65 feet and 80 feet if it does not include affordable housing or qualifying ground floor, 75 feet and 90 feet if it satisfies the provisions of the Inclusionary Housing program but does not include a qualifying ground floor, 75 feet and 85 feet if it includes a qualifying ground floor but not affordable housing, or 75 feet and 95 feet if it satisfies the provisions of the Inclusionary Housing program and includes a qualifying ground floor. For commercial or manufacturing development, the maximum street wall height is 60 feet, and a sky exposure plane sloping upwards and rearwards from a height of 60 feet above the street line controls additional building height. As in the case of the R6B district, a rear yard is required, but front and side yards are not.

An M1-2 light industrial district covers the north side of Water Street between the MX district along Bridge Street and the R6B district along Hudson Street. It permits commercial, light

industrial, and some community facility uses but not residential use. The bulk regulations are the same as for the M1-4 district.

East of Bridge Street and extending beyond Hudson Street, an M3-1 heavy manufacturing district is mapped to the north of the MX(M1-4/R7A), M1-2, and R6B districts. It differs from M1 districts in that it permits heavy manufacturing uses listed in Use Group 18, permits open storage and other activities, and does not permit community facility uses. The bulk regulations are the same as for M1-2 and M1-4 districts.

Finally, the blocks bounded by Front, Hudson, York, and Bridge Streets are zoned R6A. This is a contextual residential district that permits up to 3.00 FAR for both residential and community facility uses. Commercial overlays are mapped along the Bridge Street and York Street frontages of these blocks, permitting ground floor commercial uses in otherwise residential or community facility buildings, as well as freestanding commercial buildings of up to two stories.

Future Conditions without the Proposed Actions

In the future without the proposed actions, the project site would continue to be zoned R6B. Although a private applicant has proposed to rezone the northeast corner of Gold and Front Streets from M1-2 to R6A/C2-4 by expanding the existing R6A district to the south of Front Street and mapping a C2-4 commercial overlay on the new portion of the R6A district, that proposal has not been approved, and no other zoning map changes are anticipated in the study area in the future without the proposed action.

Future Conditions with the Proposed Actions

The proposed actions would rezone the project site by amending the zoning map to establish an R7A district at the eastern end of Block 42, from Water Street to Front Street, to a depth of 100 feet from the Gold Street frontage. The proposed actions would also include a zoning text amendment to change Appendix F to designate a Mandatory Inclusionary Housing area in which Option 1 would apply, which would be coterminous with the new R7A district. At least one-quarter of the zoning floor area in a new residential development would have to be in housing units designated as affordable (that is, reserved for sale or rental to households with incomes averaging no greater than 60 percent of AMI and in no case greater than 130 percent of AMI). Residential development would have an FAR of up to 4.60 and a height of up to nine stories (95 feet). The differences between the R6B and R7A bulk and accessory off-street parking regulations are summarized in Table 4-2.

The proposed actions would not introduce new zoning classifications but would instead map at an additional location a residential district present on the subject block and elsewhere in the study area. As is explained under Land Use above, the greater bulk permitted by the revised zoning would not be inappropriate at this location. The change would not cause any existing uses or structures to be nonconforming or noncomplying. The proposed action would not have a significant adverse impact related to zoning.

**Table 4-2
Zoning Comparison Chart for Residential Development**

Zoning Requirements	Permitted/Required			
	Existing R6B		Proposed R7A in an MIH Area	
	Zoning Section(s)	Maximum or Minimum	Zoning Section(s)	Maximum or Minimum
FAR				
Residential FAR	23-145	2.00	23-154	4.60
Inclusionary Housing	N/A	N/A	23-154	25% of floor area
YARDS				
Front Yard	23-45	None	23-45	None Required
Side Yard	23-46	None or 8'	23-46	None or 8'
Rear Yard	23-47	30'	23-47	30'
HEIGHT AND SETBACKS				
Maximum Height of Front Wall	23-633	40'	23-664	75'
Maximum Building Height	23-633	50'	23-664	95'
Sky Exp Plane	N/A	N/A	N/A	N/A
Setbacks from Narrow Streets	23-633	15'	23-633	15'
Setbacks from Wide Streets	23-633	10'	23-633	10'
Open Space	N/A	N/A	N/A	N/A
Lot Coverage	23-145	65%/80%*	23-145	65%/80%*
DENSITY REGULATIONS	23-22	680 DU	23-22	680 DU
PARKING	25-20	50% of DU	25-20	50% of market rate DU

* Maximum lot coverage is 80% for the corner lot portion and 65% for the interior or through lot portion.

Public Policy

Mandatory Inclusionary Housing

As part of the proposed actions, the project site would be designated a Mandatory Inclusionary Housing (MIH) area. City policy is that any new residential development within such an area should include units that will be permanently affordable to lower income households, as part of an effort to ensure an adequate citywide inventory of housing that is affordable to a range of income levels and to ensure socioeconomic diversity within particular neighborhoods.

Specifically, the requirement within this newly designated MIH area would be that at least 25 percent of residential floor area in any development must be in units that will be sold or rented exclusively to households with incomes averaging no greater than 60 percent of AMI, and in no case greater than 130 percent of AMI, at prices or rents that have been determined by the New

York City Department of Housing Preservation and Development to be affordable to such households.

The proposed actions would legally mandate that the proposed project comply with the pertinent MIH program requirements. The development would contain 92 dwelling units, of which 75 percent (69) would be market rate and 25 percent (23) would be affordable to households with annual incomes averaging 60 percent of AMI. The proposed actions would be consistent with MIH policy.

Waterfront Revitalization Program

As is noted above in the introduction to this section, a public policy consideration pertinent to the proposed action is its consistency with the Waterfront Revitalization Program (WRP) policies. The proposed rezoning area is within the Coastal Zone, but it is actually several blocks inland, without waterfront access or even waterfront views, so only two of the ten WRP policies are relevant to the proposed action.

Is the project site appropriate for residential or commercial redevelopment? (Policy 1.1)

The proposed rezoning area is not within a Special Natural Waterfront Area or Significant Maritime and Industrial Area, and it is in a well developed area devoid of natural features. The project site is currently underutilized. The rezoning area is proximate to numerous residential and commercial uses and in an area where public facilities and infrastructure are adequate. The proposed action is therefore consistent with Policy 1.1.

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? (Policy 10)

The LPC staff has determined that the project site is archaeologically sensitive (that is, there is a reasonable likelihood, based on the sites' location and characteristics, that it contains subsurface archaeological resources). The Applicant has therefore entered into a Restrictive Declaration, which requires that prescribed archaeological work be conducted in accordance with the *CEQR Technical Manual* and LPC Guidelines for Archaeological Work in New York City. The Restrictive Declaration is binding upon the property's successors and assigns. The declaration serves as a mechanism to assure the archaeological testing be conducted and that any necessary mitigation measures be undertaken prior to any site disturbance (i.e., site grading, excavation, demolition, or building construction). The Restrictive Declaration was prepared in a form acceptable to the LPC, and it is expected to be submitted for future recordation with the Office of the Kings County Clerk. Consequently, no significant adverse impacts related to archaeological resources are expected.

The proposed rezoning area itself does not contain any architectural resources. It is, however, adjacent to part of the Vinegar Hill Historic District. The Vinegar Hill Historic District consists of small clusters of intact mid nineteenth century low-rise buildings set amidst later, more divergent, and often larger scale development, rather than a single, larger collection of historic buildings that define the scale and other urban design characteristics of a neighborhood. The immediate visual context of Area I already includes buildings as tall as 12 stories. Neighbors of the district's three areas include factory buildings, warehouses, and an auto repair shop. The

new development resulting from the proposed action would not have a significant adverse impact on the integrity and visual setting of the historic buildings.

In summary, the proposed action would be consistent with all applicable WRP policies, and a significant adverse impact regarding public policy is not anticipated.

For Internal Use Only:

WRP

Date Received: _____

no. _____ 13-094 _____

_ 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 New York City Waterfront Revitalization Program (WRP). 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.

A. APPLICANT

1. Name: _____
2. Address: _____
3. Telephone: _____ Fax: _____ E-mail: _____
4. Project site owner: _____

B. PROPOSED ACTIVITY

1. Brief description of activity:
2. Purpose of activity:
3. Location of activity: (street address/borough or site description):

Proposed Activity Cont'd

- 4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:

- 5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).

- 6. Will the proposed project require the preparation of an environmental impact statement?
 Yes _____ No _____ If yes, identify Lead Agency:

- 7. Identify **city** discretionary actions, such as a zoning amendment or adoption of an urban renewal plan, required for the proposed project.

C. COASTAL ASSESSMENT

Location Questions:

Yes No

- 1. Is the project site on the waterfront or at the water's edge? _____
- 2. Does the proposed project require a waterfront site? _____
- 3. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters? _____

Policy Questions

Yes No

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each question indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

- 4. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used waterfront 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) _____
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) _____
9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2) _____
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) _____
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) _____
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) _____
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) _____
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) _____
16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2) _____
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) _____
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) _____
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) _____
21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2) _____
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) _____
23. Would the action have any effects on commercial or recreational use of fish resources? (4.4) _____
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) _____
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) _____
27. Will any activity associated with the project generate nonpoint source pollution? (5.2) _____
28. Would the action cause violations of the National or State air quality standards? (5.2) _____

Policy Questions cont'd

Yes No

29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)

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)

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)

34. Would the action involve construction or reconstruction of a flood or erosion control structure? (6.1)

35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)

36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)

37. Would the proposed project affect a non-renewable source of sand ? (6.3)

38. Would the action result in shipping, handling, or storing of solid wastes, hazardous materials, or other pollutants? (7)

39. Would the action affect any sites that have been used as landfills? (7.1)

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)

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)

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)

46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)

47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)

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 Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent Name: _____

Address: _____

_____ Telephone _____

Applicant/Agent Signature: Brian Kintish Date: December 5, 2016

Attachment to Consistency Assessment Form for the 251 Front Street Rezoning

5. Is the project site appropriate for residential or commercial redevelopment? (1.1)

The proposed rezoning area is not within a Special Natural Waterfront Area or Significant Maritime and Industrial Area, and it is in a well developed area devoid of natural features. The project site is currently underutilized. The rezoning area is proximate to numerous residential and commercial uses and in an area where public facilities and infrastructure are adequate. The proposed action is therefore consistent with Policy 1.1.

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)

The New York City Landmarks Preservation Commission (LPC) staff has determined that the project site is archaeologically sensitive (that is, there is a reasonable likelihood, based on the sites' location and characteristics, that it contains subsurface archaeological resources). The Applicant has therefore entered into a Restrictive Declaration, which requires that prescribed archaeological work be conducted in accordance with the *CEQR Technical Manual* and LPC Guidelines for Archaeological Work in New York City. The Restrictive Declaration is binding upon the property's successors and assigns. The declaration serves as a mechanism to assure the archaeological testing be conducted and that any necessary mitigation measures be undertaken prior to any site disturbance (i.e., site grading, excavation, demolition, or building construction). The Restrictive Declaration was prepared in a form acceptable to the LPC, and it is expected to be submitted for future recordation with the Office of the Kings County Clerk. Consequently, no significant adverse impacts related to archaeological resources are expected. This course of action ensures that a significant adverse archaeological impact would not occur.

The proposed rezoning area itself does not contain any architectural resources. It is, however, adjacent to part of the Vinegar Hill Historic District. The Vinegar Hill Historic District consists of small clusters of intact mid nineteenth century low-rise buildings set amidst later, more divergent, and often larger scale development, rather than a single, larger collection of historic buildings that define the scale and other urban design characteristics of a neighborhood. The immediate visual context of Area I already includes buildings as tall as 12 stories. Neighbors of the district's three areas include factory buildings, warehouses, and an auto repair shop. The new development resulting from the proposed action would not have a significant adverse impact on the integrity and visual setting of the historic buildings.

8. SHADOWS

Introduction

A detailed shadow analysis is generally required only if a proposed action would result in one or more buildings that would be over 50 feet in height and close enough to a sunlight-sensitive resource of concern to cast a shadow on it. Such resources of concern are public open spaces, greenstreets, natural resources if the introduction of shadows might alter their condition or microclimate, and historic resources that depend on direct sunlight for their appreciation by the public. The *CEQR Technical Manual* explains which historic resources are sun-sensitive as follows:

- “Buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements (*e.g.* deep recesses or voids such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication).
- “Buildings distinguished by elaborate, highly carved ornamentation.
- “Buildings with stained glass windows.
- “Exterior materials and color that depend on direct sunlight for visual character (*e.g.* the polychromy (multicolored) features found on Victorian Gothic Revival or Art Deco facades).
- “Historic landscapes, such as scenic landmarks including vegetation recognized as an historic feature of the landscape (*e.g.* weeping beeches or pansy beds).
- “Features in structures where the effect of direct sunlight is described as playing a significant role in the structure’s significance as an historic landmark. Examples include the William Lescaze House and Office, 211 E. 48 St. in Manhattan, significant as the first modern (1933) row-house in New York, noted for its early use of glass block, glass bricks, and ribbon windows (LPC and S/NR listed), and LPC designated housing projects such as the Williamsburg Houses in Brooklyn and the Cherokee Apartments in Manhattan, both of which were planned to maximize light by use of site planning and architectural features, such as open stair towers and balconies.”

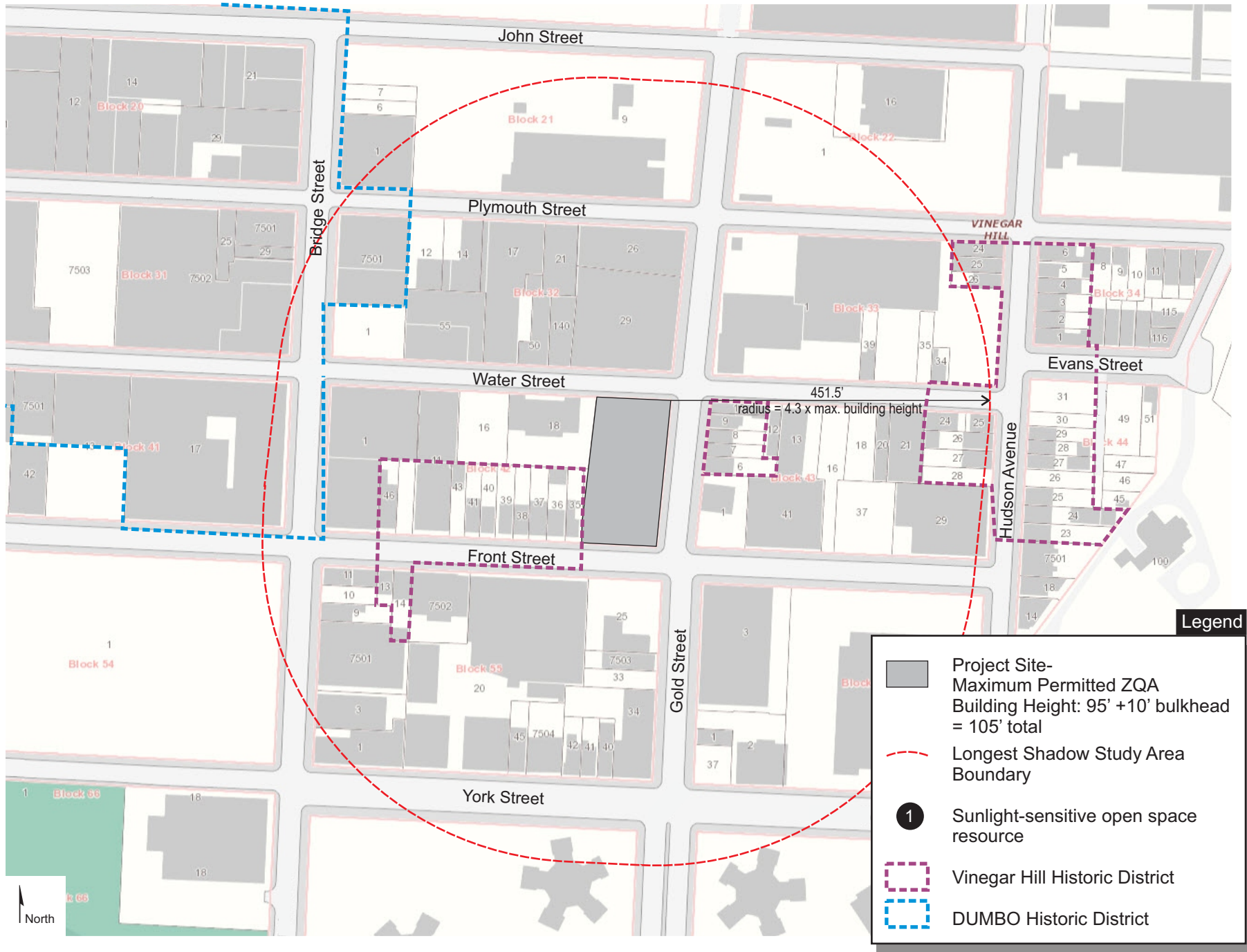
Tier 1 Assessment

Shadow lengths vary by time of day, being longest in the early morning and late afternoon and shortest at noon, and by time of year, being longest at the winter solstice and shortest at the summer solstice. According to the *CEQR Technical Manual*, the longest shadow cast by a building is 4.3 times the building’s height. The proposed development would have a rooftop height of 95 feet, with small rooftop penthouses rising to 105 feet. The longest shadow cast by the proposed project would therefore be 451.5 feet in length.

The Tier 1 Screening Assessment diagram shows the area within a 451.5-foot radius of the project site. The area does not contain any public open spaces or natural resources. It does contain historic buildings within Areas I, II, and III of the Vinegar Hill Historic District (Greek Revival row houses from the 1840s and 1850s) and buildings at the eastern edge of the larger DUMBO Historic District (industrial loft buildings that have been converted to residential use),

but these buildings (discussed more extensively under Historic and Cultural Resources) do not satisfy the criteria listed above and are therefore not considered sunlight sensitive.

The proposed action would therefore not result in any new buildings that would be close enough to a sunlight-sensitive resource of concern to cast a shadow on it. The proposed action would not result in a significant adverse shadow impact.



9. HISTORIC AND CULTURAL RESOURCES

Introduction

This section considers the proposed action's potential impact on archaeological and architectural resources. Archaeological resources are artifacts or other remains, from either the prehistoric (Native American) or the historic (colonial or post-colonial) period that might provide information about the period from which they date or the society that produced them. Architectural resources include designated New York City landmarks and buildings within a designated New York City historic district, properties calendared for consideration by the New York City Landmarks Preservation Commission (LPC), properties listed on or determined to be eligible for listing on the State or National Register of Historic Places, National Historic Landmarks, and other properties that meet the eligibility criteria for such designations.

According to the *CEQR Technical Manual*, archaeological resources generally need to be assessed for any project that would result in any in-ground disturbance. In-ground disturbance is any disturbance to an area not previously excavated, including new excavation that is deeper and/or wider than previous excavation on the same site. Examples of projects that typically require assessment are:

- Above-ground construction resulting in-ground disturbance, including construction of temporary roads and access facilities, grading, or landscaping.
- Below-ground construction, such as installation of utilities or excavation, including that for footings or piles.

For any projects that would result in new ground disturbance (as described above), assessment of both prehistoric and historic archaeological resources is appropriate.

The proposed project would include excavation for the new building's foundations. An archaeological assessment therefore may be required for the proposed action.

According to the *Manual*, generally, architectural resources should be surveyed and assessed if the proposed project would result in any of the following, whether or not any known historic resources are located near the site of the project:

- New construction, demolition, or significant physical alteration to any building, structure, or object.
- A change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed. For example, a building may be part of an open setting, a tower within a plaza, or conforming or not conforming with the street wall in terms of its height, footprint, and/or setback. Visual context is the character of the surrounding built or natural environment. This may include the following: the architectural components of an area's buildings (*e.g.*, height, scale, proportion, massing, fenestration, ground-floor configuration, style), streetscapes, skyline, landforms, vegetation, and openness to the sky.
- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects.

- Additions to or significant removal, grading, or replanting of significant historic landscape features.
- Screening or elimination of publicly accessible views.
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or on an historic structure if the features that make the structure significant depend on sunlight. For example, stained glass windows that cannot be seen without sunlight, or buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements, such as deep window reveals and prominent rustication.

The proposed action would result in an increase in the height and bulk of a building that would be constructed whether or not the proposed action is taken. An architectural assessment therefore may be required for the proposed action.

Archaeological Resources

The LPC staff has determined that the project site is archaeologically sensitive (that is, there is a reasonable likelihood, based on the sites' location and characteristics, that it contains subsurface archaeological resources). The Applicant has therefore entered into a Restrictive Declaration, which requires that prescribed archaeological work be conducted in accordance with the *CEQR Technical Manual* and LPC Guidelines for Archaeological Work in New York City.

The Restrictive Declaration is binding upon the property's successors and assigns. The declaration serves as a mechanism to assure the archaeological testing be conducted and that any necessary mitigation measures be undertaken prior to any site disturbance (i.e., site grading, excavation, demolition, or building construction). The Restrictive Declaration was prepared in a form acceptable to the LPC, and it will be submitted for future recordation with the Office of the Kings County Clerk. (A commitment letter from the Applicant is appended to this EAS, as is the Restrictive Declaration.) Consequently, no significant adverse impacts related to archaeological resources are expected.

Architectural Resources

The project site is now a surface parking lot and so does not contain architectural resources. It is nevertheless an architecturally sensitive location because it abuts a building within Area I of the Vinegar Hill Historic District and is located directly across Gold Street from Area II of the Historic District. (See the attached Vinegar Hill Historic District map and photos.) Area I includes the buildings from 225 to 249 Front Street, located on the north side of the street on part of the block between Gold and Bridge Streets, as well as two buildings on the opposite side of Front Street. Area II includes a cluster of buildings on the east side of Gold Street between Water and Front Streets, extending from 69 to 77 Gold Street.

According to the designation report prepared for the Historic District, "The Vinegar Hill Historic District, which is comprised of three separate small groups of brick, Greek-Revival row houses, is a residential remnant of the early nineteenth-century neighborhood that occupied the blocks between the Brooklyn Bridge and the Brooklyn Navy Yard. By the late nineteenth century, the large number of Irish residents had given the neighborhood the popular name 'Irishtown,' although other ethnic groups also lived in the area. Industrial expansion and

transportation improvements in the early twentieth century resulted in the demolition of many of the original structures. The groups of houses that survive within the Vinegar Hill Historic District retain their historic architectural character and create a distinct sense of place, recalling a significant era in Brooklyn's history."

Nine buildings on the north side of Front Street are within Area I of the Historic District. The westernmost is a three-story Italianate firehouse at 225-227 Front Street, constructed c. 1855-1856, that was converted to residential use in 1976. Next is 231-233 Front Street, a six-story factory building developed by the Benjamin Moore paint company in 1908. It interrupts the row of low-scale mid nineteenth century buildings, but it was designed by the noted Brooklyn architect William B. Tubby. Next are 237 and 239 Front Street, two Greek Revival row houses built by the same developer between 1845 and 1852. The other five buildings - 241, 243, 245, 247, and 249 Water Street - are all also Greek Revival row houses with three stories and a basement. The first two were built sometime between 1834 and 1852, the third between 1852 and 1855, and the last two c. 1846-1847.

Area II of the Historic District includes five buildings on the east side of Gold Street, all built sometime between 1841 and 1852. The northernmost, 69 Gold Street, is a four-story Greek Revival row house, with a later rear addition on Water Street. The next three - 71, 73, and 75 Gold Street - are identical Greek Revival row houses with three stories and a basement. The southernmost building, 77 Gold Street, is a four-story Greek Revival/Italianate row house with a ground floor store.

According to the *CEQR Technical Manual*, an action could cause a significant adverse impact to an architectural resource if it would result in any of the following:

- "Physical destruction, demolition, damage, alteration, or neglect of all or part of an historic property. For example, alterations that would add a new wing to an historic building or replacement of the resource's entrance may result in adverse impacts, depending on the design.
- Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features. An example would be recladding an architectural resource with new brickwork.
- Isolation of the property from, or alteration of, its setting or visual relationships with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. For example, if all the buildings on a block, including an architectural resource, are four stories high, and a proposed project would replace most of those with a 15-story structure, the four-story architectural resource would no longer conform to the streetscape. Another example would be a proposed project that would result in a new building at the end of a street so that views of an historic park beyond were blocked.
- Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting. An example would be construction of a noisy highway or factory near a resource noted for its quiet, such as a park.

- Replication of aspects of the resource so as to create a false historical appearance. If a house was built during the Revolutionary War but later underwent extensive alteration, re-creation of its 18th-century appearance may have an adverse impact on that resource.
- Elimination or screening of publicly accessible views of the resource. For example, if a resource is located along the waterfront and is visible across the water, tall new buildings proposed between the architectural resource and the water that would block views of the resource may result in an adverse impact.
- Construction-related impacts, such as falling objects, vibration (particularly from blasting or pile-driving), dewatering, flooding, subsidence, or collapse. Such impacts may occur to an architectural resource adjacent to a construction site if adequate precautions are not taken.
- Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over an historic landscape or on an historic structure (if the features that make the resource significant depend on sunlight) to the extent that the architectural details that distinguish that resource as significant are obscured. For example, if a resource is noted for its stained glass windows, and those windows are only visible in the sunlight, significant blocking of that sunlight may result in a significant adverse impact.”

The proposed action would not have any of these results. The proposed project would not include any physical changes to the buildings within the Historic District. With regard to physical setting, the Vinegar Hill Historic District consists of small clusters of intact mid nineteenth century low-rise buildings set amidst later, more divergent, and often larger scale development, rather than a single, larger collection of historic buildings that define the scale and other urban design characteristics of a neighborhood. The immediate visual context of Area I already includes buildings as tall as 12 stories. Neighbors of the district’s three areas include factory buildings, warehouses, and an auto repair shop. The new development resulting from the proposed action would therefore not have a significant adverse impact on the integrity and visual setting of the historic buildings. The new development would be contemporary in its design and would not have a false historical appearance. The development would fit within the existing street grid and would not block any view corridor leading to the historic buildings. Damage to adjacent historic structures would be avoided through the formulation and implementation of a construction protection plan. Furthermore, if a construction project is located within 90 feet of any structure within a historic district designated by the LPC, the New York City Department of Buildings (DOB) requires that the project comply with DOB Technical Policy and Procedure Notice 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction When Subject to Controlled Inspection by Section 27-724 and for Any Existing Structure Designated by the Commissioner, which specifies procedures (discussed in the final section of this report, Construction) to prevent any construction-related damage to the nearby historic resources. Finally, the Historic District’s noteworthy features do not depend on direct sunlight, so shadows cast by the new development would not obscure sunlight-sensitive features. For these reasons, the proposed action would not have a significant adverse impact on the Vinegar Hill Historic District.

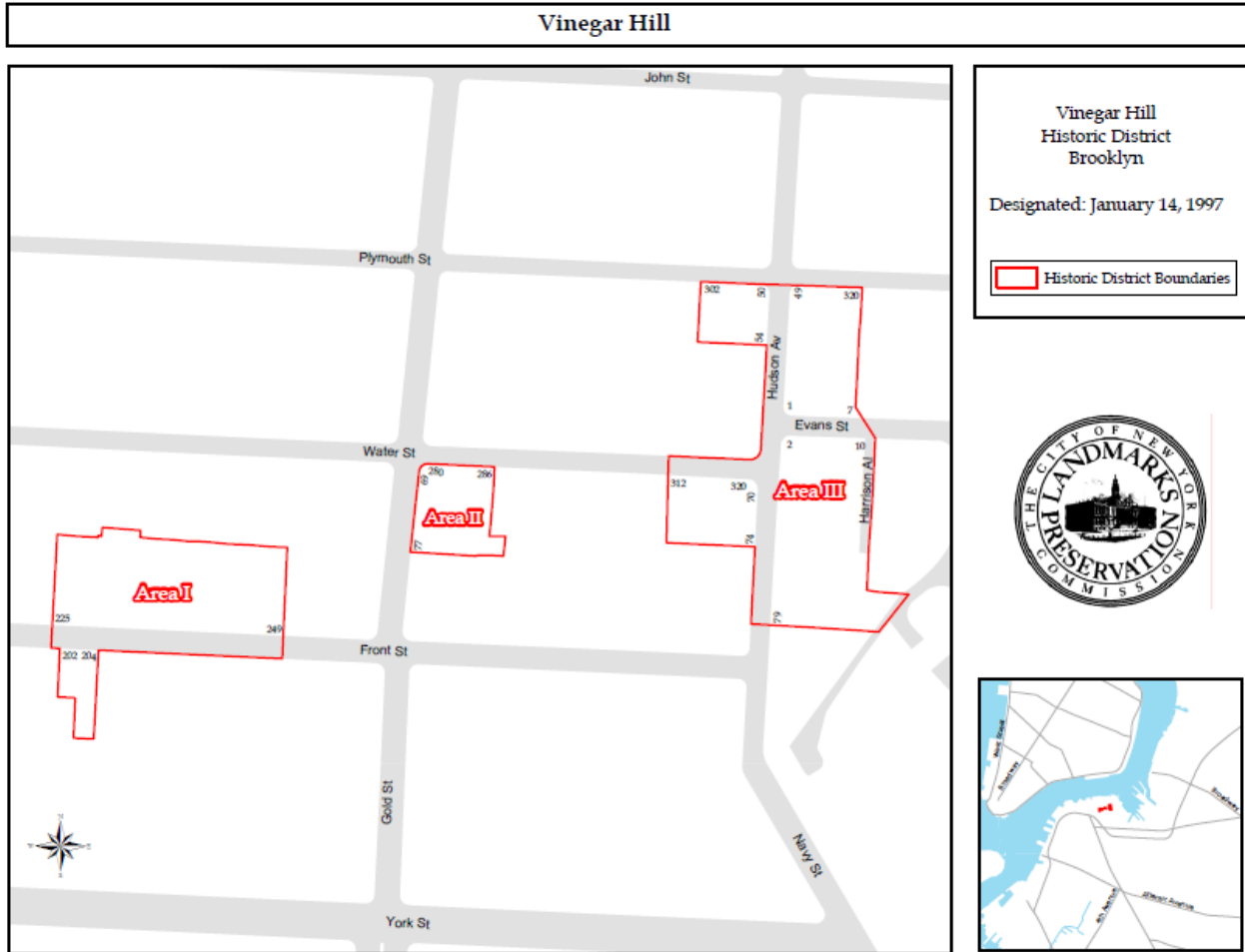
On the west side of Bridge Street to the north and south of Plymouth Street, the easternmost edge of the DUMBO Historic District also falls within 400 feet of the project site. (See the attached district map and photos.) The LPC's designation report includes the following summary description of the district:

"The DUMBO Historic District, located along the East River waterfront in Brooklyn, is one of New York City's most significant extant industrial waterfront neighborhoods. During much of the nineteenth and twentieth centuries, the area was home to some of the largest and most important manufacturing businesses in Brooklyn or New York City, including Arbuckle Brothers, refiner and packager of sugar and coffee; Robert Gair, manufacturer of paper boxes; the Hanan & Son shoe company; the Kirkman & Son soap company; the John W. Masury & Son paint works; the Jones Brothers/Grand Union grocery business; the E. W. Bliss machine works; and the Brillo steel wool firm. These firms employed thousands of local workers, many of them immigrants who flooded into Brooklyn's working-class neighborhoods in the second half of the nineteenth century and early decades of the twentieth century. By the early twentieth century, Brooklyn was the fourth largest manufacturing center in the entire country and a significant portion of this industrial output occurred in DUMBO. Among the manufacturing businesses that were especially prominent in Brooklyn were those producing machinery, paint, sugar, coffee, packaged groceries, paper boxes and shoes, all of which are represented in the buildings in DUMBO.

"The approximately 91 buildings in the historic district reflect important trends in the development of industrial architecture in the United States during the nineteenth and twentieth centuries, and embody an important era of Brooklyn and New York City history."

The proposed project would not include any physical changes to the buildings within the Historic District, and the project site is too far from the Historic District to cause any construction-related impacts. Because of the greater distance and intervening buildings and streets between the Historic District and the project site, the proposed project would not alter the Historic District's physical setting, obscure views of the historic buildings, or cast shadows long enough to reach those buildings. The proposed action would not have a significant adverse impact on the DUMBO Historic District.

Vinegar Hill Historic District Map



Front Street, Area I, Vinegar Hill Historic District



Front Street, Area I, Vinegar Hill Historic District



231-233 Front Street, Area I, Vinegar Hill Historic District



227 Front Street, Area I, Vinegar Hill Historic District



Southeast Corner of Gold and Water Streets, Area II, Vinegar Hill Historic District



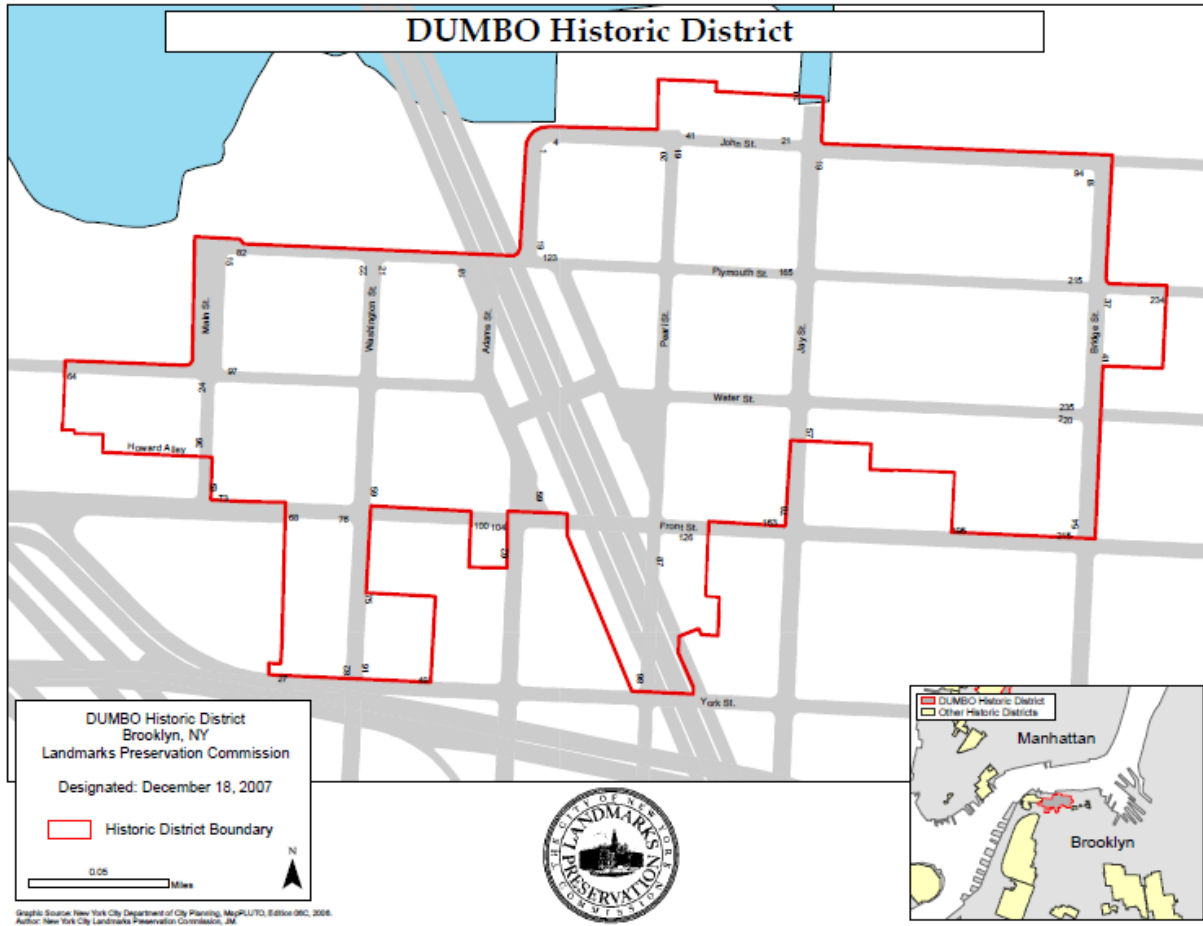
75-77 Gold Street, Area II, Vinegar Hill Historic District



Hudson Avenue and Evans Street, Area III, Vinegar Hill Historic District



DUMBO Historic District Map



DUMBO Historic District



DUMBO Historic District



37 Bridge Street, DUMBO Historic District



200 Water Street, DUMBO Historic District



10. URBAN DESIGN AND VISUAL RESOURCES

Introduction

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

1. Projects that permit the modification of yard, height, and setback requirements;
2. Projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed project.

A preliminary urban design and visual resources assessment is required because the proposed actions would include a zoning map change that would alter the rules regulating development within the proposed rezoning area, allowing the construction of buildings that are different in scale both from those that would be allowed under existing zoning regulations. The map amendment would establish a new R7A district within an existing R6B district. Within the rezoning area, the permitted FAR would increase from 2.00 to 4.60; the permitted street wall height would increase from 40 feet to 75 feet; and the permitted building height would increase from 50 feet (five stories) to 95 feet (nine stories). Whether or not the proposed actions are taken, the Applicant intends to redevelop the project site with a residential apartment building, which under current zoning would be five stories (50 feet) tall and would contain 41,219 square feet of above grade floor area. If the proposed actions are taken, the Applicant would instead construct a nine-story building with a roof height of 95 feet, containing up to 94,802 square feet of above grade floor area.

Pedestrian Wind Conditions

The *CEQR Technical Manual* calls for a separate preliminary assessment to determine whether an analysis of pedestrian wind conditions is appropriate, since the construction of large buildings at locations that experience high wind conditions may result in channelization or downwash effects that could affect pedestrian safety.

The proposed rezoning area is not subject to unusual wind conditions. It is not in an exposed area fronting on the waterfront, and it is not on high ground or on the upper portion of an exposed slope. It is within a fully developed area with a relatively flat topography that is more than two blocks and more than 500 feet inland.

The proposed development would consist of a nine-story building with the high lot coverage characteristic of contextual zoning districts. The building would be oriented to the existing streets, would be built to the street line, and would span the widths of the zoning lot. There would therefore not be a freestanding tower that could cause pedestrian level vortex effects.

For these reasons, the proposed actions would not have a significant adverse impact on pedestrian wind conditions, and a detailed wind conditions assessment is not required.

Existing Conditions

Urban Design

The area surrounding the proposed rezoning area, within the western Vinegar Hill and eastern DUMBO neighborhoods, is a densely developed urban area. There are no maintained open spaces with either landscaping or natural vegetation, and there are no significant natural features.

There are also no significant topographic features. The topography is fairly flat, with a slight downward slope towards the East River to the north.

Streets are narrow and laid out in a regular grid pattern. Block dimensions are 200 feet north to south and 500 feet east to west.

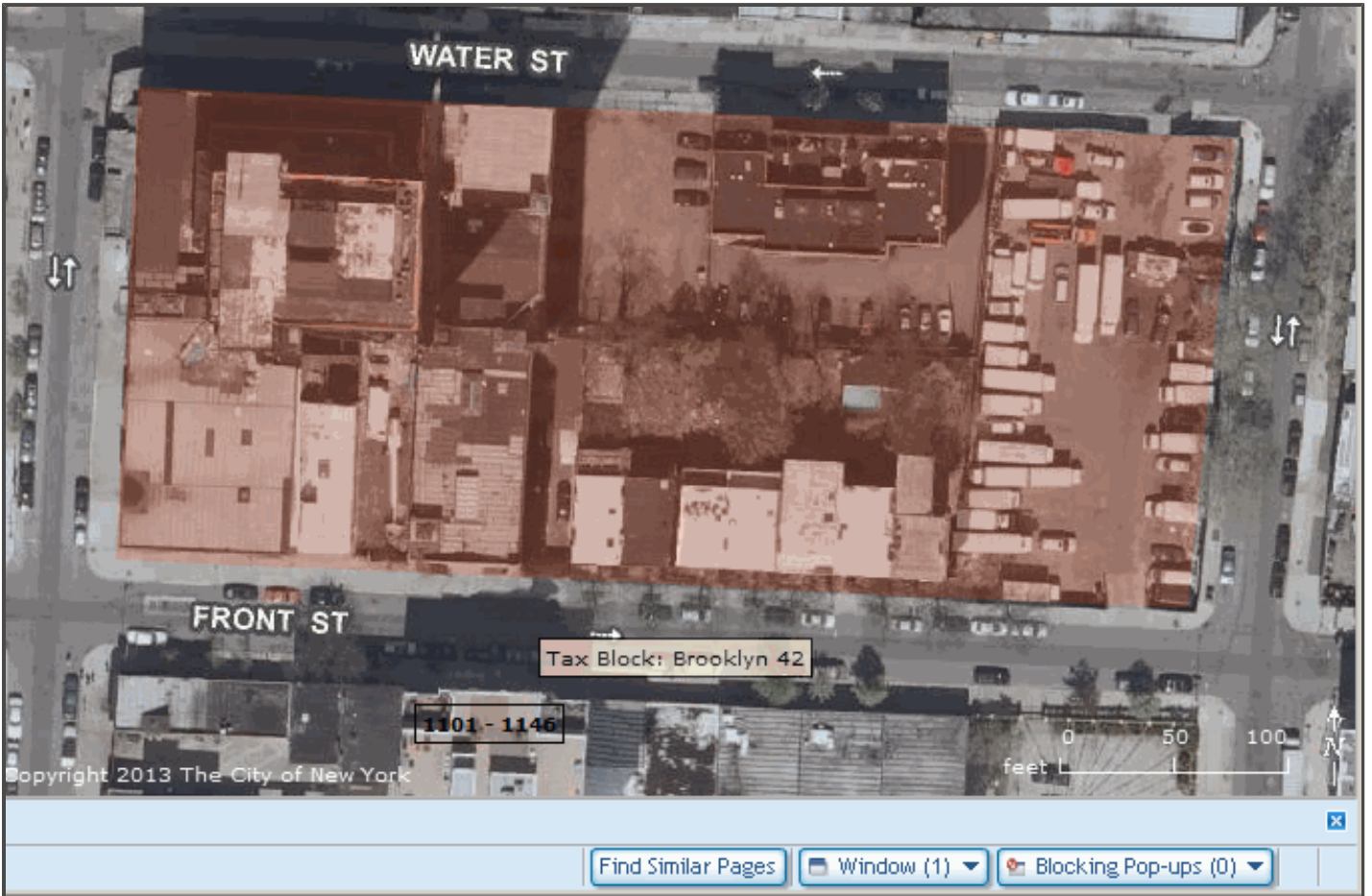
The project site is on a block that fits within this pattern, with approximately 470 feet of frontage along Water Street to the north and Front Street to the south, and approximately 200 feet of frontage along Gold Street to the east and Bridge Street to the west. It consists of the eastern end of the block, with 100 feet of frontage along Water Street, 200 feet of frontage along Gold Street, and 100 feet of frontage along Front Street. (See the aerial photograph.)









Buildings are arranged linearly along blockfronts. In general, they form continuous street walls with few setbacks or side yards (as can be seen from the photographs). On the block on which the project site is located, an exception is a 2004 apartment building adjacent to the project site. It has an uncharacteristically low lot coverage, with side yards and accessory parking on the open area of the lot. (See the aerial photograph.) Also, the project site, which is a surface parking lot, a vacant lot located on the other side of the apartment building, and another vacant lot elsewhere on the block form holes in the urban fabric. (See Photo 1.)

Otherwise, there is little overall consistency to the development pattern on the blocks including and surrounding the proposed rezoning area. Building types and uses, building footprint dimensions, and building heights all vary substantially. Large-scale current or former manufacturing and warehouse buildings (a number of which have been converted to residential or commercial use) are interspersed with foundries, garages, and other small, nondescript industrial buildings; nineteenth century row houses; and more recent apartment buildings. Building heights vary from one to twelve stories. The block on which the project site is located contains a 12-story vacant industrial building, a six-story former paint factory, a six-story warehouse, a three-story former fire house that has been converted to residences, a group of 3½-story row houses, and a five-story apartment building, as well as the parking lot and two vacant lots. (See Photos 2, 4, and 5.)

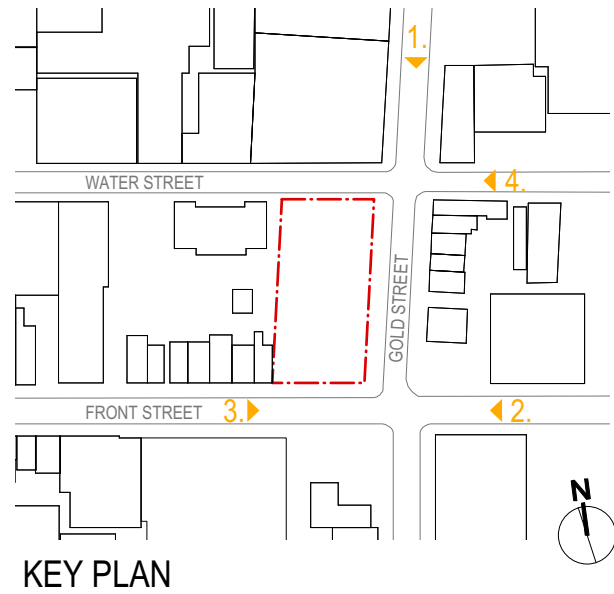
On blocks that are predominantly industrial in nature, the flat industrial facades do not contribute to an engaging streetscape. Streetscapes are livelier where there are residential buildings or where ground floor retail or restaurant spaces have been created.

Also nearby, to the north and northeast of the proposed rezoning area, Con Edison's Farragut Substation occupies several blocks, with acres of exposed transformers, separating Vinegar Hill from the East River waterfront.



 Borough Boundary	C50 Condo Flag/Condo Number
 Tax Block Boundary	A50 Air Right Flag/Lot Number
50 Tax Block Number	S50 Subterranean Right Flag/Lot Number
 Tax Lot Boundary	R REUC Flag
50 Tax Lot Number	- - - - - Under Water Tax Lot Boundary
-50- Condo FKA Tax Lot Number	- - - - - Other Boundary
50.5 Tax Lot Dimension	 Possession Hook
+/-5.5 Approximate Tax Lot Dimension	Misc Miscelaneous Text
 Condo Units Range Label	 Small Tax Lot Dimension
 Building Footprint	 Surface Water

251 FRONT STREET
BROOKLYN, NY
PROJECT AREA PHOTOGRAPHS
taken May 12, 2013



1. LOOKING SOUTH FROM GOLD STREET



2. LOOKING WEST FROM FRONT STREET



3. LOOKING EAST FROM FRONT STREET



4. LOOKING WEST FROM WATER STREET

Visual Resources

The most important visual resources in the immediate vicinity of the proposed rezoning area are the historic buildings within the Vinegar Hill Historic District. The Vinegar Hill Historic District contains low-rise row houses from the mid-nineteenth century. The district consists of three separate areas: Area I, which is adjacent to the project site on the Front Street midblock portion of the block; Area II, which is located directly across the street from the project site on the east side of Gold Street south of Water Street; and Area III, which is located a block away at the southeast corner of Water and Hudson Streets.

DUMBO's East River waterfront and the Manhattan Bridge are important visual resources in the general vicinity of the proposed rezoning area, but they are too far (at least about 1,000 feet) away from the rezoning area to be appreciably visible or for views of them or their setting to be affected by the proposed action.

There are no significant view corridors in the vicinity of the proposed rezoning area.

Future Conditions without the Proposed Actions

Whether or not the proposed actions are taken, the Applicant intends to redevelop the project site with a residential apartment building containing an accessory parking garage. In the absence of the proposed action, the new building would be built in accordance with the bulk regulations of the existing R6B zoning district and would contain 41,219 square feet of above grade floor area (49,463 square feet including cellar space) and have a height of five stories (50 feet), with a setback after the fourth story (at a height of 40 feet). (The Urban Design Diagram shows the streetscapes along Front, Gold, and Water Streets with the no-action building's massing superimposed.)

Nearby, a seven-story residential building will be built on the vacant lot at the northeast corner of Bridge and Water Streets. Also if a proposed zoning map amendment is approved, a six-story mixed-use building with residential units above ground floor retail space will be built across the street from the project site at the northeast corner of Gold and Front Streets, on a lot that is now used for surface parking and open storage and also contains a small, vacant building.

No other changes that would affect urban design and visual resources are anticipated.

Future Conditions with the Proposed Actions

Development Scenario

The proposed actions would include a zoning map change that would allow taller, bulkier buildings within the proposed rezoning area. The permitted FAR would increase from 2.00 to 4.60; the permitted street wall height would increase from 40 feet to 75 feet; and the permitted building height would increase from 50 feet (five stories) to 95 feet (nine stories). The existing and proposed zones are both contextual zones that do not permit the taller, lower coverage buildings that result from use of height factor regulations, and neither permit tower configurations. Lot coverage and yard requirements are the same for the two districts.

In the future with the proposed actions, the project site would be redeveloped with a residential apartment building containing the maximum permissible floor area allowed by the proposed zoning. The building would contain 94,802 square feet of above grade floor area (110,795 square feet including the cellar) and would be nine stories (95 feet) tall, with 15-foot-deep front wall

setbacks above the seventh floor. (The Urban Design Diagram shows the streetscapes along Front, Gold, and Water Streets with the with-action building’s massing superimposed.)

Table 10-1 compares the project site development characteristics under existing, future no-action, and future with-action conditions.

**Table 10-1
Comparison of Existing, No-Action, and With-Action Conditions**

Item	Existing Conditions	No-Action Conditions	With-Action Conditions
Development Scenario	Surface parking lot	One residential building with 41 DUs (41,219 gsf) and a 21-space accessory parking garage	One residential building with 95 DUs (94,802 gsf) and a 36-space accessory parking garage
Gross/(Net) Bldg. Floor Area	No building area	49,463 gsf/(39,982 zsf, 2.00 FAR)	110,795 gsf/(91,958 zsf, 4.60 FAR)
Lot Coverage	N/A	8,244 sf (41%)	15,993 sf (80%)
Building Height	N/A	5 stories (50 feet)	9 stories (95 feet)

Urban Design

The proposed actions would not affect the topography, street system, block forms, or building arrangements within the area including and surrounding the proposed rezoning area. Although the new building on the project site would be four stories taller than it would be under future no-action conditions, and taller than currently allowed, the building would fit within the range of building heights in the vicinity of the proposed rezoning area and would be shorter than the tallest existing building on the block (12 stories). As is discussed under Existing Conditions, the area’s urban design context is marked by contrasts in building heights, types, and footprint dimensions, and the new building would therefore not disturb a consistent neighborhood scale. In summary, the proposed actions would not result in a significant adverse urban design impact.

Visual Resources

The Vinegar Hill Historic District consists of small clusters of intact mid-nineteenth century low-rise buildings set amidst later, more divergent, and often larger scale development, rather than a single, larger collection of historic buildings that define the scale and other urban design characteristics of a neighborhood. The immediate visual context of Area I already includes buildings as tall as 12 stories. Neighbors of the district’s three areas include factory buildings, warehouses, and an auto repair shop. The new development resulting from the proposed actions would not significantly damage the integrity and visual setting of the historic buildings.

Because no significant view corridors have been identified, the new development would not block any such view corridors.

In summary, the proposed actions would not result in a significant adverse impact to visual resources.

Water Street facing west (Site at left)



No-Action Scenario

Water Street facing west (Site at left)



With-Action Scenario

Front Street facing west (Site at right)



No-Action Scenario

Front Street facing west (Site at right)



With-Action Scenario

Gold Street facing south (Site at right)



No-Action Scenario

Gold Street facing south (Site at right)



With-Action Scenario

12. HAZARDOUS MATERIALS

Phase I Report

Introduction

Environmental Project Data Statements Company (EPDSCO, Inc.) has performed a Phase I Environmental Site Assessment (ESA) for the project site. The ESA, dated August 2013, was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-05).

The purpose of the ESA is to identify, to the extent feasible in accordance with ASTM E 1527-05, recognized environmental conditions in connection with the site with regard to hazardous materials as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. Additionally, several ASTM "Non-Scope" items including asbestos-containing materials, lead-based paints, and radon are also discussed. Recognized Environmental Conditions are identified through research into the history and uses of the site and surrounding area, an inspection of the subject property and a survey of adjoining and nearby uses, and a review of available regulatory agency records and environmental databases.

The following summarizes the findings, conclusions, and recommendations of the Phase I ESA.

Site Description

The site consists of an approximately 20,000 square foot rectangularly shaped undeveloped lot that is used for truck, car, and motorcycle parking. The majority of the site is paved with asphalt.

Site History

Research into the history of the property indicates that the site was occupied by the St. Anne's Church, the church rectory, and the St. Anne's School as early as 1887. The school building was demolished sometime between 1950 and 1969, and the church and rectory were demolished c. 1995. Since 1996 the site has been a surface lot used for truck parking.

Site Inspection

No stormwater drains, drywells, trench drains, or other drainage structures were observed on the property. It should be noted that at the time of the visit numerous cars and trucks were parked on the site, possibly obscuring drainage structures from view. According to the owner, there are no drainage structures on the property.

No aboveground storage tanks (ASTs) were observed on the property during the site visit. There were also no visible indications of the presence of underground storage tanks (USTs), such as tank fillports, tank vent lines, or associated mechanical equipment.

No suspected asbestos-containing materials, lead-based paints, or electrical equipment that might contain PCBs were observed at the property.

Regulatory Agency Database Findings

The project site does not appear in any of the federal or state databases that were reviewed, including the federal Environmental Protection Agency's (EPA's) Superfund, CERCLIS, or

ERNS databases, the RCRA hazardous waste generators list or hazardous materials Treatment/Storage/Disposal Facilities list, or the New York State Department of Environmental Conservation's (DEC's) Spill Logs database, Solid Waste Facilities database, Petroleum Bulk Storage database, or Registry of Inactive Hazardous Waste Disposal Sites.

Off-Site Findings

The regulatory agency databases did not identify any potential off-site sources of contamination that are considered likely to have significantly affected the environmental condition of the project site.

A review of historical Sanborn maps shows that the area surrounding the project site has historically contained numerous industrial uses, including paint, ink, dye, and colorant manufacturing, shoe factories, machine shops, and large utility gas storage facilities. It is therefore possible that groundwater has been contaminated by past industrial uses or leaking underground storage tanks.

Conclusions

The Phase I report concludes that the ESA has revealed no evidence of Recognized Environmental Conditions in connection with the property, although, as previously stated, the report does note the possibility that groundwater has been contaminated by past industrial uses or leaking underground storage tanks in the vicinity of the site.

(E) Designation

After reviewing the Phase I report, the New York City Department of Environmental Protection (DEP) determined that additional site investigation must be done. An (E) designation will therefore be placed on the project site, requiring that the following actions be taken before construction activities take place.

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

17. AIR QUALITY

Introduction

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources;" or by fixed facilities, usually referenced as "stationary sources," or by a combination of both. This section assesses the potential for the proposed action to result in significant mobile source air quality impacts by increasing traffic on nearby streets, and it assesses the action's potential to result in significant adverse stationary source air quality impacts because of exhaust vented from the new buildings' heating, ventilation, and air conditioning (HVAC) systems.

Mobile Source Emissions

The anticipated action-induced development would consist of a 92-unit residential building at a location in CEQR Traffic Zone 2. Table 16-1 of the *CEQR Technical Manual*, which provides development thresholds that would generally be necessary to result in 50 or more peak hour vehicle trips, identifies the Zone 2 residential development threshold as 200 dwelling units. In this part of the city, according to the guidance in Section 17.210 of the Manual, a mobile source air emissions assessment should be undertaken for projects that would generate 170 or more peak hour vehicle trips. The proposed actions would not cause a significant adverse mobile source air quality impact.

Project-Generated Stationary Source Emissions

The *CEQR Technical Manual* states that the potential for stationary source emissions from heat and hot water systems to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used, the height of the stack venting the emissions, the distance to the nearest building whose height is at least as great as the venting stack height, and the square footage of the development that would be served by the system. The *CEQR Technical Manual* provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the proposed building's system.

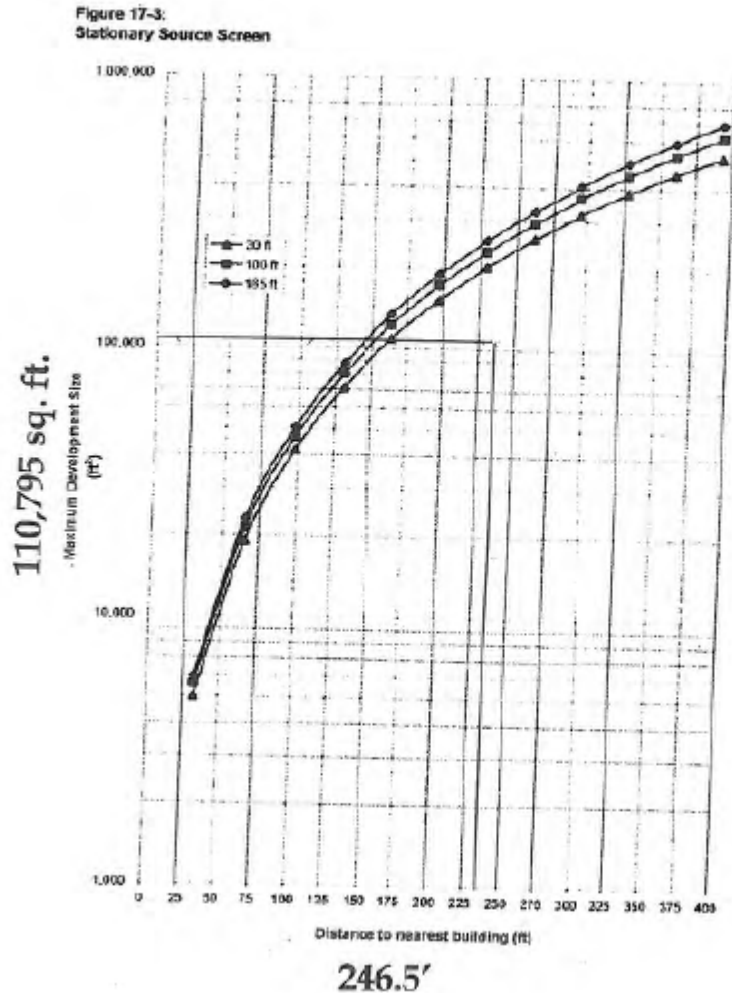
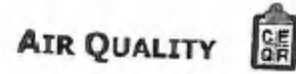
The proposed project on the project site (Block 42, Lot 24) would contain 110,795 square feet of floor area. It would have a rooftop height of 95 feet, and small bulkheads would rise ten feet above that height. The exhaust stack would vent at least three feet above one of the bulkheads on the building's roof. The top of the stack would thus be at a height of about 108 feet. The nearest building of equal or greater height would be the currently vacant 12-story building at the Bridge Street end of the block (53 Bridge Street, on Block 42, Lot 1), 246.5 feet from the project site.

The proposed project was plotted on the stationary source screen that appears as Figure 17-3 in the *CEQR Technical Manual*. The graph appears below. The building's square footage is plotted against the distance between its exhaust stack location and the edge of the other building. The graph includes three curves, representing different heights (30 feet, 100 feet, and 165 feet). The appropriate curve is the one for the height that would be closest to but not greater than the height at which the building's exhaust stack would vent. In this case, the appropriate curve is the one for 100 feet. If the lines drawn from the appropriate points along the two axes meet at a point below the appropriate curve, then no further analysis is need to demonstrate that the building's exhaust would not have a significant adverse impact on residents of the other building.

As the resulting graph shows, exhaust from a building with 110,795 square feet of floor area would not have a significant stationary source air quality impact relative to inhabitants of a building 246 feet from the exhaust stack location.

A significant adverse air quality impact is not anticipated.

Stationary Source Screen



Stationary Source Emissions from the Red Hook Wastewater Treatment Plant

Wastewater treatment plants may cause emissions or odors that could affect sensitive receptors. The nearest treatment plant to the project site is the Red Hook Wastewater Treatment Plant, approximately 2,250 feet southeast of the project site. This is well outside of the 1,000 foot radius that the *CEQR Technical Manual* recommends for a stationary source analysis of a water pollution control plant.

Stationary Source Emissions from the Con Edison Transformer Station

With regard to the Con Edison transformer station, located approximately 300 feet north of the project site, and other active industrial uses in the project area, the 2009 DUMBO EAS (CEQR No. 09DCP053K), which addressed a rezoning area extending closer to the Con Edison site than the project site, determined that there were no industrial source air quality concerns within 400 feet and 1,000 feet of that rezoning area. Further, no E designations relating to industrial source emissions are located on properties within 1,000 feet of the project site. Nevertheless, a stationary source air quality analysis related to the Con Edison transformer station was prepared in August 2016 and is included below.

I. INTRODUCTION

The proposed project is the development of a 95-foot tall residential building at 251 Front Street (Block 42 Lot 24) in Brooklyn, which is located on the west side of Gold Street between Front and Water Streets in the Vinegar Hill neighborhood.

Air quality, which is a general term used to describe pollutant levels in the atmosphere, would be affected by the proposed development. The potential air quality impacts associated with the proposed project were estimated following the procedures and methodologies prescribed in the *New York City Environmental Quality Review Technical Manual (2014 CEQR TM)*.

A preliminary review of existing land uses within 1,000 feet of the project site via the New York City OASIS Land Use interactive mapping application, the United States Environmental Protection Agency (EPA) Envirofact database, and the New York State Facilities and Title V Permits shows that there are no existing (or future planned) buildings within 400 feet that are taller than the proposed building. Therefore, no project-on-project analysis or project-on-existing heating, ventilation and air conditioning (HVAC) analysis is warranted. Also, as the project site already allows for residential uses, there is no need to conduct an analysis of the potential impacts of the emissions of existing industrial facilities on the proposed development.

However, there is an existing nearby “major” emission source -- Consolidated Edison’s [Con Ed] Hudson Avenue plant at 1 Hudson Avenue -- that could impact the proposed building. Therefore, an analysis was conducted to estimate the potential impacts of the emissions from this plant on the proposed development. Below are a photograph of the Con Ed plant and a map showing the relative location of the proposed development site and the Con Ed plant.

Con Edison - Hudson Ave Station Stacks



Con Edison's Hudson Ave Plant Relative to the Proposed Building



II. STATIONARY SOURCE ANALYSIS

Relevant Air Pollutants for Analysis

The EPA has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As the existing combustion source with the potential to significantly impact the proposed development uses distillate fuel oil, the four criteria pollutants associated with fuel oil combustion – nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulate matter smaller than 2.5 microns (PM_{2.5}) and 10 microns (PM₁₀) – were considered for the analysis.

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 the 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_{2.5} criteria (based on concentration increments) developed by the New York City Department of Environmental Protection (NYCDEP) to determine whether the maximum estimated potential adverse PM_{2.5} impacts were 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 1-hour and annual NO₂, the 1-hour SO₂, and the 24-hour and annual PM_{2.5} and PM₁₀ NAAQS. The current standards that were applied to this analysis, together with their health-related averaging periods and CEQR significant thresholds, are presented in Table 17-1. New York has adopted the NAAQS as the State ambient air quality standards.

**TABLE 17-1
APPLICABLE NATIONAL AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Period	National and State Standards	CEQR Significant Impact Criteria
NO ₂	1 Hour	0.10 ppm (188 µg/m ³)	
	Annual	.053 ppm (100 µg/m ³)	
SO ₂	1 Hour	196 µg/m ³	
PM _{2.5}	24 Hour	35 µg/m ³	6.0 µg/m ³
	Annual	12 µg/m ³	0.3 µg/m ³
PM ₁₀	24 Hour	150 µg/m ³	

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 (<http://www.dec.ny.gov/chemical/8542.html>).

Notes: ppm = parts per million
µg/m³ = micrograms per cubic meter

NO₂ NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO₂, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The recently promulgated 1-hour NO₂ NAAQS standard of 0.100 ppm (188 ug/m³) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining

compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO₂ concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO₂; Tier 2 applies a conservative ambient NO_x/NO₂ ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO₂ within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO₂ concentrations or total 1-hour NO₂ concentrations if hourly NO₂ background concentrations are added within the model.

With background concentrations included, the model internally adds up the 8th highest daily maximum NO₂ concentrations and the hourly NO₂ background concentrations, and averages these values over the numbers of the years modeled. Total estimated concentrations are then generated in the statistical form of the 1-hour NO₂ NAAQS format and can be directly compared with the 1-hour NO₂ NAAQS standard. This approach that is recognized as being conservative by EPA and NYCDEP and is referenced in EPA modeling guidance was used in the analysis.

EPA has retained annual NO₂ standard of 0.053 ppm (100 ug/m³). For conservatively estimating annual NO₂ impacts, a NO₂ to NO_x ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO₂ analysis, was applied.

SO₂ NAAQS

The recently promulgated 1-hour SO₂ standard is 75 parts per billion (ppb) calculated as the three-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations. Following EPA guidance, 1-hour SO₂ total concentrations are estimated by adding the fourth highest modeled SO₂ concentration to the 3-year average SO₂ background concentration. These values were compared to the 1-hour SO₂ NAAQS of 196 ug/m³.

For the 1-hour SO₂, the background concentration (99th percentile of daily maximum 1-hour concentration averaged over the recent 3 years) was added to the estimated concentration and the total estimated fourth highest concentration was compared to the 1-hour SO₂ NAAQS.

Significant PM_{2.5} Incremental Impacts Criteria

CEQR guidance includes the following criteria for the determination of significant adverse PM_{2.5} incremental impacts for projects subject to CEQR:

Predicted 24-hour maximum PM_{2.5} concentration increase of more than half the difference between the 24-hour PM_{2.5} background concentration and the 24-hour standard.

The 24-hour PM_{2.5} background concentration compiled by the NYSDEC at the Brooklyn JHS 126 monitoring station is 23 ug/m³, which is the average of the 98th percentile for the latest 3 years of monitoring data collected by the NYSDEC (2013-2015). As the applicable background value is 23 ug/m³, half the difference between the NAAQS of 35 ug/m³ and this background value is 6.0 ug/m³. As such, an incremental concentration increase of 6.0 ug/m³ was used for determining whether the potential 24-hour PM_{2.5} impacts of the proposed project are considered to be significant.

For annual average PM_{2.5} concentration increments, according to CEQR guidance:

Predicted annual average PM_{2.5} concentration increments greater than 0.3 ug/m³ at any receptor location for stationary sources (elevated or ground level).

The above 24-hour and annual incremental increase criteria were used to evaluate the significance of the predicted PM_{2.5} impacts of the proposed development residential uses.

III. CON EDISON FACILITY

Plant Information

The Con Ed facility is a Major Title V Facility with Permit Number 2-6101-00042/00011 that is valid through 10/3/2018. The facility operates three (3) simple cycle combustion turbines (Figure 1) to generate electricity. Each of these combustion turbines is rated at 235 million Btus per hour. The three combustion turbines burn distillate fuel oil. The emissions from the turbines exhaust through each turbine's separate stack, identified in the permit as emission points GT003, GT004 and GT005, respectively. The sulfur content in the oil is restricted to 15 ppm (0.0015%).

The facility also operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2(c). These include three (3) emergency power generators and three (3) distillate and residual fuel oil storage tanks. The potential air quality impacts from the emergency generators would not be significant since they are only used for short periods of time -- in case of an actual emergency.

While these are also four (4) very large low pressure Combustion Engineering boilers at this facility, these units were permanently shut down and ceased operation on February 7, 2011, and were not included in this analysis.

The Title V permit enforces the facility to implement Reasonably Available Control Technology (RACT) to limit NO_x and VOCs emissions for the purpose of attaining the air quality standard for ozone. RACT establishes an emission limit for NO_x for three combustion turbines at a level of 0.618 pounds per million Btu and includes a restriction to operate 764 hours per year per turbine that corresponds to a potential to emit of 435.69 pounds per hour.

The Google Earth 3-dimensional view of the Con Ed layout shows three stacks and three buildings associated with these emission points that are listed in the permit as GT003, GT004 and GT005 and the buildings as GTFAC (252 x 120 inches). Coordinates of all stacks listed in Permit are in Universal Transverse Mercator system (UTM) for projection zone 18. However, these values are provided in kilometers and the coordinates of these stacks were more precisely re-calculated using Google Earth mapping software in meters with as follows: Stack No. 1 = 585,976E/4,506,507N; Stack No. 2 = 586,985E/4,506,506.5N; and Stack No. 3 = 585,995E/4,506,506N.

Based on these coordinates and the proposed building's location at 251 Front Street, the distance from the stacks to the project site lot line (see Figure 2) is estimated to be 782 feet (238 meters).

The Title V permit lists stack heights for each of three emission points as 47 feet. However, no data on stack diameter, exit velocity, or temperature are available from the permit, and these values, therefore, were obtained from the operations of similar combustion turbines.

Emission Rates

The following Con Ed emission values were used in this analysis:

- Short-term emission rates of SO₂, PM₁₀, and PM_{2.5} were calculated based on the EPA AP-42 emission factors for distillate oil-fired combustion turbines and a heat input of 235 million Btus (MMBtu) per hour per turbine. Annual emission rates were adjusted to account for the fact that facility's turbines operate a maximum of 764 days a year.
- The AP-42 PM_{2.5} emission factor for distillate fuel used for stationary combustion turbines is 0.012 lb/MMBtu, which includes filterable and condensable particles (e.g., 4.3E-03 lb/MMBtu filterable and 7.2E-03 lb/MMBtu condensable). These values are provided in AQ-42's "Stationary Distillate Oil-fired Turbines," Table 3.1-2a).
- The AP-42 emission factor for SO₂ (in lb/MMBtu) was calculated using equation 1.01(S), where S is the sulfur content of fuel oil (e.g., 0.0015%);

- The AP-42 emission factor for PM₁₀ of 4.3E-03 lb/MMBtu, which include only filterable particles, was used (Table 3.1-2a), and
- The NO_x emission factor of 0.618 lb/MMBtu was obtained directly from the permit.

Data obtained from AP-42 tables and equations that were used to calculate emission rates are provided in Table 17-2.

Table 17-2: Estimated Pollutant Emission Rates for Con Edison Plant ⁽¹⁾

Pollutants Emission Factors	Turbine Heat Input ⁽²⁾	Peak Short-term Emission Rate per Turbine		Annual Emission Rate per Turbine	
		lb/hr	g/sec	lb/year	g/sec
PM_{2.5} Emission Rates					
0.012 ⁽³⁾	235	2.82	0.355	2,154	0.031
NO₂ Emission Rates					
0.618 ⁽⁴⁾	235	145.2	18.3	110,956	1.596
SO₂ Emission Rates					
0.0015 ⁽⁵⁾	235	0.35	0.044	269	0.004
PM₁₀ Emission Rates					
0.0043 ⁽⁶⁾	235	1.01	0.127	772	0.011

Notes:

1. Title V Permit DC ID #2-6101-00042/00011.
2. Each turbine heat input is rated as 235 MMBtu per hour, as listed in the permit
3. AP-42 PM_{2.5} emission factor for distillate oil-fired combustion turbines is 0.012 lb/MMBtu which include filterable PM_{2.5} (4.3E-03 lb/MMBtu) and condensable PM_{2.5} (7.2E-03 lb/MMBtu) particulates (Table 3.1-2a).
4. NO_x emission factor of 0.618 MMBtu/hour, as listed in permit
5. AP-42 SO₂ emission factor of 1.01(S) for combustion distillate oil-fired turbines, where S is sulfur content in fuel oil #2 (0.0015%) is 1.01 x 0.0015 = 0.0015 lb/MMBtu (Table 3.1-2a).
6. AP-42 PM₁₀ emission factor is 4.3E-03 lb/MMBtu, which includes only filterable particles (Table 3.1-2a).

Con Ed Stack and Emission Parameters

A stack height of 47 feet was obtained directly from the permit. However, because stack diameter, exit velocities, and temperatures for the plant are not available from the permit, these values were assumed to be that same as those of a facility employing combustion turbines of similar capacity (i.e., the New York Power Authority’s North 1st Street power plant, which is located just north of the Williamsburg Bridge in Brooklyn). That plant has a stack diameter of 12 feet (3.66 m), an exit velocity of 77 feet/sec (23.5 m/sec), and an exit temperature of 719 °F. These parameters were applied to each stack associated with each turbine at the Con Ed plant. All three stacks were modeled in one modeling run.

It should be noted that a turbine temperature around 700 °F is typical for combustion turbines, and that exit velocity has a small effect on dispersion and resulting pollutant concentrations.

IV. DISPERSION ANALYSIS

A dispersion modeling analysis was conducted with the latest version of EPA’s AERMOD dispersion model 7.11 (EPA version 15181). In accordance with CEQR guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness length, and the elimination of calms. The building downwash algorithm was utilized to account for downwash effects on plume dispersion. Analyses were conducted with and without the downwash effect on plume dispersion. AERMOD’s Plume

Volume Molar Ratio Method (PVMMR) module was utilized for 1-hour NO₂ analysis -- to account for NO_x to NO₂ conversion in the atmosphere.

Meteorological Data

All analyses were conducted using the latest available five consecutive years of meteorological data (2010-2014). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. Data was processed by Trinity Consultants, Inc. using the current EPA AERMET and the EPA procedure. These meteorological data will provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Meteorological data were concatenated to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs.

Background Concentrations

The 24-hour PM_{2.5} background concentration was obtained for Brooklyn JHS 126 monitoring station as 23 ug/m³ which is the average of the 98th percentile for the latest 3 years of monitoring data (2013-2015). All other background concentrations were obtained from Queens College 2 monitoring stations over the recent 3 years (2013-2015), as follows:

The 1-hour NO₂ background concentration is 113 ug/m³ (60.2 ppb), which is the 98th percentile of daily maximum 1-hour concentration averaged over the recent 3 years;

The annual average NO₂ background concentration is 32 ug/m³ (17.1 ppb);

The 24-hour PM₁₀ background concentration is 40 ug/m³ (the highest second maximum value); and

The 1-hour SO₂, the background concentration is 28.7 ug/m³ (11 ppb), which is the 99th percentile of daily maximum 1-hour concentration averaged over the most recent 3 years (2013-2015).

The hourly ozone and 1-hour NO₂ background concentrations were developed from available monitoring data collected by the NYSDEC at Queens College monitoring station and compiled into AERMOD's required hourly concentration (ozone) data format.

Receptor Locations

Receptors, which would be the operable windows of the proposed residential building, were placed around all faces of the proposed building in 10 foot increments on all 9 floor levels starting at 10 feet above the ground and extending up to the upper windows level (90 feet). Ground-level receptors were also considered in the analysis to assure that maximum impacts are estimated. A total of 585 receptors were considered for the analysis to ensure that the maximum impacts are estimated.

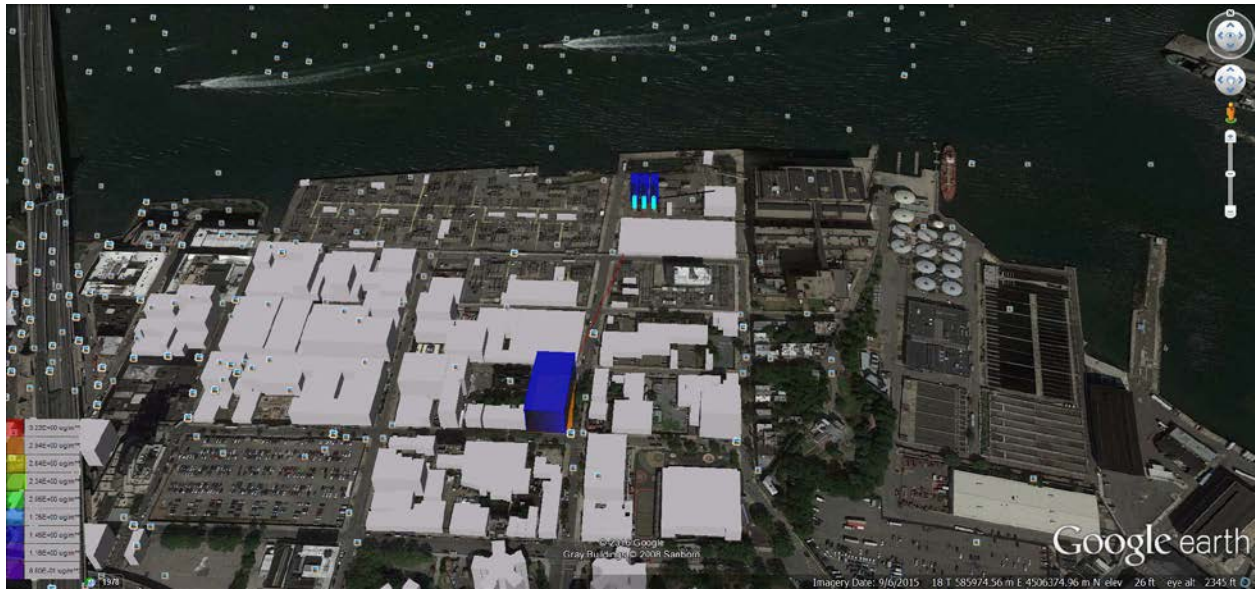
V. RESULTS

Potential impacts of the PM_{2.5}, NO₂, SO₂, and PM₁₀ emissions from Con Edison Hudson Avenue facility on the proposed 251 Front Street building residential uses were estimated and compared with the 24-hour/annual PM_{2.5} CEQR significant impact criteria, the 1-hour/annual NO₂, 1-hour SO₂, and 24-hour PM₁₀ NAAQS.

PM_{2.5} Analysis

The results of the PM_{2.5} analysis are that the maximum 24-hour impact is estimated to be 3.53 ug/m³ (see the 3-D Contour Map below) and the annual average impact is estimated to be 0.006 ug/m³. These values are less than the significant impact criteria of 6.0 ug/m³ and 0.3 ug/m³, respectively. Therefore, PM_{2.5} emissions from the Con Ed facility would not cause a significant air quality impact on residential uses of the proposed building.

24-hr PM_{2.5} Impact 3-D Contour Map



1-Hour NO₂ Analysis

The result of the 1-hour NO₂ emission impacts on the proposed building with the Tier 3 approach employing PVMRM AERMOD module is that the 1-hour NO₂ 8th highest daily 1-hour concentration (with added background hourly concentrations internally within the model) averaged over 5 years is 121.2 ug/m³. The maximum average annual NO₂ total concentration is estimated to be 32.2 ug/m³ (impact of 0.23 ug/m³ and background value of 32 ug/m³). Both the 1-hour and annual NO₂ concentrations are less than the 1-hour and annual NO₂ NAAQS of 188 ug/m³ and 100 ug/m³, respectively. Therefore, 1-hour and annual NO₂ emissions from the Con Ed plant would not cause a significant air quality impact on residential uses of the proposed building.

1-hour SO₂ Analysis Results

The results of the 1-hour SO₂ analysis is that the maximum 1-hour SO₂ impact is estimated to be 0.72 ug/m³ and the total 1-hour SO₂ 4th highest daily 1-hour averaged concentration, including background value of 28.7 ug/m³, is estimated to be 29.4 ug/m³, which is less than the 1-hour SO₂ NAAQS of 196 ug/m³. Therefore, 1-hour SO₂ emissions from the Con Ed plant would not cause a significant air quality impact on the proposed building.

24-hour PM₁₀ Analysis Results

The result of the 24-hour PM₁₀ analysis is that the maximum 24-hour PM₁₀ impact is 1.2 ug/m³. The total 24-hour PM₁₀ concentration, including background value of 40 ug/m³, is estimated to be 41.2 ug/m³, which is less than the 24-hour PM₁₀ NAAQS of 150 ug/m³. Therefore, the 24-hour PM₁₀ emissions from the Con Ed plant would not cause a significant air quality impact on the proposed building.

A summary of the results for all averaging time periods, with and without downwash effect, are presented in Table 17-3.

Table 17-3: Summary of Results (ug/m³)

Pollutant	Modeled Concentration ⁽¹⁾	Background Conc.	Total Conc.	Evaluation Criteria
	ug/m³	ug/m³	ug/m³	ug/m³
PM_{2.5}				
24-hr PM _{2.5}	3.53/1.15*	-	3.5	6.0 (CEQR Criteria)
Annual PM _{2.5}	0.006/0.004	-	0.006	0.3 (CEQR Criteria)
NO₂				
1-hr NO ₂ **	121.2/114.3		121.2	188 (NAQQS)
Annual NO ₂	0.23/0.17	32	32.2	100 (NAAQS)
SO₂				
1-hr SO ₂	0.72/0.39*	28.7	29.4	196 (NAQQS)
PM₁₀				
24-hr PM ₁₀	1.2/0.41*	40	41.2	150 (NAQQS)

Notes:

* Maximum of modeled concentrations with and without downwash effects.

**The 1-hour NO₂ background concentrations using the Tier 3 approach were added to estimated impacts on an hour-by-hour basis within the dispersion model.

VI. CONCLUSION

No significant impacts of 24-hour and annual PM_{2.5} emissions from Con Edison - Hudson Ave Station Power Plant or exceedances of the 1-hour and annual NO₂, 1-hour SO₂, and 24-hour PM₁₀ NAAQS on residential uses of the proposed building at 251 Front Street are predicted.

Air Toxic Analysis

An analysis was prepared in November 2015 to determine whether toxic air emissions from nearby industrial sources could adversely affect the health of proposed project residents. At the time the analysis was prepared, the proposed project was expected to be no taller than 90 feet. Because of the considerable discrepancy between the total concentrations predicted by the analysis and the threshold values for the critical pollutants of concern, it was determined that the results would be valid for sensitive receptors at heights between 90 and 95 feet.

Assessment Methodology

Toxic air pollutants can be grouped into two categories: carcinogenic air pollutants, and non-carcinogenic air pollutants. These include hundreds of pollutants, ranging from high to low toxicity. While no federal standards have been promulgated for toxic air pollutants, the U. S. Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC) in its "Guidelines for the Control of Toxic Ambient Air Contaminants" DAR-1 have issued guidelines that establish acceptable ambient levels for these pollutants based on human exposure criteria.

In order to evaluate short-term and annual impacts of the non-carcinogenic and carcinogenic toxic air pollutants, the NYSDEC has established short-term ambient guideline concentrations (SGCs) and ambient annual-average-based guideline concentrations (AGCs) for exposure limits. These are maximum allowable 1-hour and annual guideline concentrations, respectively, that are considered acceptable concentrations below which there should be no adverse effects on the health of the general public.

In accordance with established procedure to estimate impact of toxic pollutants using the DAR-1-based approach, ratios of 1-hour and annual concentrations of each pollutant to their respective SGCs or AGCs (e.g., concentration-to-guideline values) are calculated. These ratios are used to determine whether the concentration of each pollutant exceeds its applicable guideline value. If no exceedances are found (i.e., if all ratios are less than 1), no adverse health effects would occur. If the concentration of any pollutant exceeds its applicable guideline value (either SGC or AGC), more detailed analysis is required.

Permits and Pollutants

Among pollutants listed in permits from natural gas combustion are four criteria pollutants (i.e., pollutants for which the EPA has established air quality standards): nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon dioxide (CO₂), and particulate matter. In addition to criteria pollutants, all permits identify emissions of three non-criteria pollutants: total non-methane hydrocarbons (CAS # 519-00-0), which is a unique numerical identifier of chemical substances; total hydrocarbons as methane (CAS #74-82-8), which is representative of the group of "total hydrocarbons as methane"; and ethyl alcohol as a product of process emissions. The chemical with CAS #74-82-8 in the DAR-1 database is methane, so it is the actual representative of the group of "total hydrocarbons as methane." CAS # 519-00-0, however, is not listed in the DAR-1

database, so total non-methane hydrocarbons cannot be identified either individually or as a group.

EPA AP-42 identifies all toxic pollutants associated with natural gas combustion as a group of twenty-eight (28) individual compounds (Table 1.4-2), defined as Hazardous Air Pollutants (HAPs) by Section 112(b) of the Clean Air Act. Inside of this group, there are eighteen (18) pollutants that belong to the family of polycyclic aromatic hydrocarbons PHA(s), of which almost all members of the family are carcinogens. For this group under CAS 130498-29-2, DAR-1 has assigned an AGC of 0.02 ug/m³ per million (which define carcinogenic pollutants). Therefore, a group of eighteen (18) PAH(s) were considered separately; and for the rest of the HAPs, which include ten (10) pollutants, a representative compound was considered.

As shown in the permits, emission rates of non-methane hydrocarbons were estimated based on a total volatile organic compounds (VOC) emission factor of 5.3 pounds per million (lb/10⁶) cubic feet. The closest value to this number from the HAPs group is ethane, which has an emission factor of 3.1E+00 lb/10⁶ cubic feet (AP-42 Table 1.4-3). Therefore, ethane was selected as representative of the group of non-methane hydrocarbons.

As for the PAH group, emission factors for all 18 contaminants that comprise this group were added together to arrive at a total of 8.82E-05 lb/10⁶ cubic feet, and the ratio of this value to the total VOC emission factor of 5.3 lb/10⁶ cubic feet was then used to compute an emission factor for the whole group of PAHs. This ratio was applied to estimate annual PAH emission rates under each permit and then used to compare the results with the DAR-1 AGC value of 0.02 ug/m³ per million.

As described above, the four criteria pollutants together with 28 non-criteria pollutants, which have the potential to be released from natural gas combustion, were considered for analysis as the three groups – a group of total hydrocarbons, with methane being representative of the group; a group of non-methane hydrocarbons, with ethane being representative; and PAHs as the whole group. In addition, ethyl alcohol, as a product of process emissions, was also considered. DAR-1 SGC and AGC values were applied to all HAPs and PAH(s) pollutants as well as to the NO₂, SO₂, CO, particulate matter, and ethyl alcohol emitted from the baking operations.

Facility Number 1

The Damascus Bakery facility, under PA0069-93N, operates a 33-foot universal tunnel oven (No.1) for 18 hours a day and 300 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total hydrocarbons as methane (CAS # 74-82-8), and total non-methane hydrocarbons (CAS # 519-00-0); and ethyl alcohol as a product of process emissions. As mentioned above, for total hydrocarbons as a methane group (with methane being representative), the AGC for methane of 1,600 ug/m³ was used. For the group of total non-methane hydrocarbons, excluding the PAH(s) group, ethane, as representative, with an AGC of 2,900 ug/m³, was used. Methane and ethane have no assigned SGC values in DAR-1.

Facility Number 2

The Damascus Bakery facility, under PA0070-93M, operates a “Genau Engineering” 21-foot long tunnel oven (No. 2) for 18 hours a day and 55 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total hydrocarbons as methane (CAS # 74-82-8); and ethyl alcohol as a product of process emissions. The same representative compounds of non-methane hydrocarbons as ethane and total hydrocarbons as methane as for Facility No.1 were used.

Facility Number 3

The Damascus Bakery facility, under PA0071-93J, operates an 18-foot long universal tunnel oven (No. 3) for 6 hours a day and 200 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total hydrocarbons as methane (CAS # 74-82-8); and ethyl alcohol as a product of process emissions. The same representative compounds of non-methane hydrocarbons as ethane and total hydrocarbons as methane as for Facility No.1 were used.

Facility Number 4

The Damascus Bakery facility, under PA0072-93R, operates a Salva Sirocco Rack Oven (No. #4) for 6 hours a day and 150 days a year. The permit lists six pollutants as being emitted from its baking operations: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total hydrocarbons as methane (CAS # 74-82-8). The same representative compounds of non-methane hydrocarbons and total hydrocarbons as methane as for Facility No.1 were used.

Facility Number 5

The Damascus Bakery facility, under PA0073-93Y, operates a Salva Sirocco Rack Oven (No. #5) for 6 hours a day and 150 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total hydrocarbons as methane (CAS # 74-82-8); and ethyl alcohol as a product of process emissions. The same representative compounds of non-methane hydrocarbons as ethane and total hydrocarbons as methane as for Facility No.1 were used.

Emission Rates

Emission rates of all pollutants under all permits were directly obtained from the permit applications for these facilities (as shown above in Table 17-4).

Table 17-4: Existing Toxic Facilities Permit Information

Facility Name	Facility Type	Permit No.	Emission Point ID	Potential Emissions	Pollutant Name	CAS No.	Emissions	
							Hourly	Annual
							lb/hr	lb/year
Damascus Bakery, Inc 56 Gold Street Block 32 Lot 29	Baking of Pita Bread in Universal Tunnel Oven #1	PA0069-93N	1B	Combustion Emissions	Particulates	NY075-00-	0.005	12.2
					Sulfur Dioxide	7446-09-5	0.001	2.4
					Nitrogen Dioxide	10102-44-0	0.150	366.4
					Carbon Dioxide	630-08-0	0.030	73.3
					Total Non-Methane	NY519-00-	0.008	19.5
					Total Hydrocarbons as	74-82-8	0.004	9.80
	Process Emissions	Ethyl Alcohol	64-17-5	0.625	3054			
	Baking of Pita Bread in Genau Engineering Tunnel Oven #2	PA0070-93M	2	Combustion Emissions	Particulates	NY075-00-	0.003	1.6
					Sulfur Dioxide	7446-09-5	0.001	0.4
					Nitrogen Dioxide	10102-44-0	0.100	44.8
					Carbon Dioxide	630-08-0	0.020	9.0
					Total Non-Methane	NY519-00-	0.005	2.2
					Total Hydrocarbons as	74-82-8	0.003	1.3
	Process Emissions	Ethyl Alcohol	64-17-5	0.625	560			
	Baking of Pita Bread in Universal Tunnel Oven #3	PA0071-93J	3	Combustion Emissions	Particulates	NY075-00-	0.002	1.2
					Sulfur Dioxide	7446-09-5	0.001	0.6
					Nitrogen Dioxide	10102-44-0	0.080	48.0
					Carbon Dioxide	630-08-0	0.016	9.6
					Total Non-Methane	NY519-00-	0.004	2.4
					Total Hydrocarbons as	74-82-8	0.002	1.2
	Process Emissions	Ethyl Alcohol	64-17-5	0.075	90			
	Baking of Pita Bread in Sirocco Rack Oven #4	PA0072-93R	4A	Combustion Emissions	Particulates	NY075-00-	0.001	0.5
					Sulfur Dioxide	7446-09-5	0.001	0.9
					Nitrogen Dioxide	10102-44-0	0.040	18.0
					Carbon Dioxide	630-08-0	0.008	3.6
Total Non-Methane					NY519-00-	0.002	0.9	
Total Hydrocarbons as					74-82-8	0.001	0.50	
4B	Process Emissions	Ethyl Alcohol	64-17-5	0.023	20.7			
Baking of Pita Bread in Sirocco Rack Oven #5	PA0073-93Y	5	Combustion Emissions	Particulates	NY075-00-	0.001	0.2	
				Sulfur Dioxide	7446-09-5	0.001	0.3	
				Nitrogen Dioxide	10102-44-0	0.040	6.0	
				Carbon Dioxide	630-08-0	0.008	1.2	
				Total Non-Methane	NY519-00-	0.002	0.3	
				Total Hydrocarbons as	74-82-8	0.001	0.20	
5B	Process Emissions	Ethyl Alcohol	64-17-5	0.023	6.90			

CEQR Screening Analysis

For estimating potential impacts from industrial emission sources of toxic air pollutants, the *CEQR Technical Manual* recommends using a screening procedure as a first step in the analysis. This procedure uses pre-tabulated pollutant concentration values based on a generic emission rate of 1 gram per second from *CEQR Technical Manual* Table 17-3, "Industrial Source Screen," for the applicable averaging time periods. This approach, which can be used to estimate maximum short-term and annual average concentration values at various distances (from 30 to 400 feet) from an emission source, was utilized to assess the potential impacts of the emissions from the five existing permitted facilities.

The distances from the building at 56 Gold Street, where all five operations are located, to the project site was determined and used in the screening analysis. The estimated distance from the lot line of 56 Gold Street building to the lot line of the project site is 40 feet. At this distance, the maximum 1-hour and annual concentrations were estimated to be 98,203 and 4,791 ug/m³, respectively.

All values obtained from Table 17-3 of the *CEQR Technical Manual* for an emission rate of 1 gram per second were multiplied by the actual emission rate of each pollutant under each permit to estimate actual pollutant concentrations. These values are provided in Tables 17-5 through Table 17-24. Particulates were considered as total particulate matter with CAS # NY075-00-0 as listed in all permits.

Table 17-5: Estimated Emission Rates and Actual Concentrations under PA0069-93N for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.005	12.2	0.0006	0.0002	98,203	4,791	61.9	0.841
Sulfur Dioxide	7446-09-5	0.001	2.4	0.0001	0.0000			12.4	0.165
Nitrogen Dioxide	10102-44-0	0.150	366.4	0.0189	0.0053			1856	25.2
Carbon Dioxide	630-08-0	0.030	73.3	0.0038	0.0011			371	5.05
Ethane	74-84-0	0.008	19.5	0.0010	0.0003			99.0	1.344
Methane	74-82-8	0.004	9.80	0.0005	0.0001			49.5	0.675
Ethyl Alcohol	64-17-5	0.625	3054	0.0787	0.0439			7733	210

Table 17-6: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0069-93N for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour Ratios
		(µg/m ³)		
Particulates	NY075-00-0	61.9	380	1.63E-01
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	1856	188	9.87E+00*
Carbon Dioxide	630-08-0	371	14,000	2.65E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1 and were not included in the table

Table 17-7: Estimated Annual Concentration Ratios (C_a/AGC) under PA0069-93N for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual Ratios
		(µg/m ³)		
Particulates	NY075-00-0	0.841	45	1.87E-02
Sulfur Dioxide	7446-09-5	0.165	80	2.07E-03
Nitrogen Dioxide	10102-44-0	25.25	100	2.52E-01
Ethane	74-84-0	1.344	2,900	4.63E-04
Methane	74-82-8	0.675	1,600	4.22E-04
Ethyl Alcohol	64-17-5	210.5	45,000	4.68E-03

Carbon Dioxide has no assigned AGC value in DAR-1 and was not included in the table

Table 17-8: Estimated PHAs Cancer Risk under PA0069-93N for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec			
PAHs	4.67E-09	2.24E-05	0.02	1.12E-09

Table 17-9: Estimated Emission Rates and Actual Concentrations under PA0070-93M for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.003	1.6	0.0004	0.0000	98,203	4,791	37.1	0.110
Sulfur Dioxide	7446-09-5	0.001	0.4	0.0001	0.0000			12.4	0.028
Nitrogen Dioxide	10102-44-0	0.100	44.8	0.0126	0.0006			1237.2	3.087
Carbon Dioxide	630-08-0	0.020	9.0	0.0025	0.0001			247.4	0.620
Ethane	74-84-0	0.005	2.2	0.0006	0.00003			61.9	0.152
Methane	74-82-8	0.003	1.3	0.0004	0.0000			37.1	0.090
Ethyl Alcohol	64-17-5	0.625	560	0.0787	0.0081			7733	39

Table 17-10: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0070-93M for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	37.1	380	9.77E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	1237	188	6.58E+00*
Carbon Dioxide	630-08-0	247	14,000	1.77E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1and were not included in the table

Table 17-11: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0070-93M

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.110	45	2.45E-03
Sulfur Dioxide	7446-09-5	0.028	80	3.45E-04
Nitrogen Dioxide	10102-44-0	3.09	100	3.09E-02
Ethane	74-84-0	0.15	2,900	5.23E-05
Methane	74-82-8	0.090	1,600	5.60E-05
Ethyl Alcohol	64-17-5	38.6	45,000	8.57E-04

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-12: Estimated PHAs Cancer Risk under PA0070-93M for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec	µg/m ³		
PAHs	5.27E-10	2.52E-06	0.02	1.26E-10

Table 17-13: Estimated Emission Rates and Actual Concentrations under PA0071-93J for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.002	1.2	0.0003	0.00002	98,203	4,791	24.7	0.083
Sulfur Dioxide	7446-09-5	0.001	0.6	0.0001	0.00001			12.4	0.041
Nitrogen Dioxide	10102-44-0	0.080	48.0	0.0101	0.00069			989.9	3.308
Carbon Dioxide	630-08-0	0.016	9.6	0.0020	0.00014			198.0	0.662
Ethane	74-84-0	0.004	2.4	0.0005	0.00003			49.5	0.165
Methane	74-82-8	0.002	1.2	0.0003	0.00002			24.7	0.083
Ethyl Alcohol	64-17-5	0.075	90.0	0.0094	0.0013			928	6.2

Table 17-14: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0071-93J for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	24.7	380	6.51E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	990	188	5.27E+00*
Carbon Dioxide	630-08-0	198	14,000	1.41E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1and were not included in the table

Table 17-15: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0071-93J for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.083	45	1.84E-03
Sulfur Dioxide	7446-09-5	0.041	80	5.17E-04
Nitrogen Dioxide	10102-44-0	3.31	100	3.31E-02
Ethane	74-84-0	0.165	2,900	5.70E-05
Methane	74-82-8	0.083	1,600	5.17E-05
Ethyl Alcohol	64-17-5	6.202	45,000	1.38E-04

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-16: Estimated PHAs Cancer Risk under PA0071-93J for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec	µg/m ³		
PAHs	5.74E-10	2.75E-06	0.02	1.38E-10

Table 17-17: Estimated Emission Rates and Actual Concentrations under PA0072-93R for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.001	0.5	0.0001	0.00001	98,203	4,791	12.4	0.034
Sulfur Dioxide	7446-09-5	0.001	0.9	0.0001	0.00001			12.4	0.062
Nitrogen Dioxide	10102-44-0	0.040	18.0	0.0050	0.00026			494.9	1.240
Carbon Dioxide	630-08-0	0.008	3.6	0.0010	0.00005			99.0	0.248
Ethane	74-84-0	0.002	0.9	0.0003	0.00001			24.7	0.062
Methane	74-82-8	0.001	0.5	0.0001	0.00001			12.4	0.034
Ethyl Alcohol	64-17-5	0.023	20.7	0.0029	0.0003			284.6	1.426

Table 17-18: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0072-93R for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	12.4	380	3.26E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	495	188	2.63E+00*
Carbon Dioxide	630-08-0	99	14,000	7.07E-03

* Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1and were not included in the table

Table 17-19: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0072-93R for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.034	45	7.66E-04
Sulfur Dioxide	7446-09-5	0.062	80	7.75E-04
Nitrogen Dioxide	10102-44-0	1.24	100	1.24E-02
Ethane	74-84-0	0.062	2,900	2.14E-05
Methane	74-82-8	0.034	1,600	2.15E-05
Ethyl Alcohol	64-17-5	1.426	45,000	3.17E-05

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-20: Estimated PHAs Cancer Risk under PA0072-93R for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec			
PAHs	2.15E-10	1.03E-06	0.02	5.16E-11

Table 17-21: Estimated Emission Rates and Actual Concentrations under PA0073-93Y for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.001	0.2	0.0001	0.00000	98,203	4,791	12.4	0.014
Sulfur Dioxide	7446-09-5	0.001	0.3	0.0001	0.00000			12.4	0.021
Nitrogen Dioxide	10102-44-0	0.040	6.0	0.0050	0.00008			494.9	0.413
Carbon Dioxide	630-08-0	0.008	1.2	0.0010	0.00001			99.0	0.083
Ethane	74-84-0	0.002	0.3	0.0003	0.00000			24.7	0.021
Methane	74-82-8	0.001	0.2	0.0001	0.00000			12.4	0.014
Ethyl Alcohol	64-17-5	0.023	6.9	0.0029	0.0001			284.6	0.475

Table 17-22: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0073-93Y for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	12.4	380	3.26E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	495	188	2.63E+00*
Carbon Dioxide	630-08-0	99	14,000	7.07E-03

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1 and were not included in the table

Table 17-23: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0073-93Y for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.014	45	3.06E-04
Sulfur Dioxide	7446-09-5	0.021	80	2.58E-04
Nitrogen Dioxide	10102-44-0	0.41	100	4.13E-03
Ethane	74-84-0	0.021	2,900	7.13E-06
Methane	74-82-8	0.014	1,600	8.61E-06
Ethyl Alcohol	64-17-5	0.475	45,000	1.06E-05

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-24: Estimated PHAs Cancer Risk under PA0073-93Y for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec			
PAHs	7.18E-11	3.44E-07	0.02	1.72E-11

Results of the Screening Analysis

Because the same pollutants are emitted under each permit, maximum hourly and annual concentrations of the same pollutants were added together to estimate the cumulative concentrations of that pollutant. These combined values for all pollutants are provided in Tables 17-25 through 17-27.

The results of the screening analysis are as follows:

- The maximum cumulative 1-hour total particulate matter concentration from all five emissions sources combined is 148.5 ug/m³ at the project site, which is less than the corresponding SGC DAR-1 value of 380 ug/m³.
- The maximum cumulative annual total particulate matter concentration from all five emissions sources combined is 1.02 ug/m³ at the project site, which is less than the corresponding AGC DAR-1 value of 45 ug/m³.
- The maximum cumulative 1-hour SO₂ concentration from all five emission sources combined is 61.9 ug/m³ at the project site, which, with the added background value of 37.3 ug/m³, results in a total 1-hour SO₂ concentration that is less than the corresponding 1-hour National Ambient Air Quality Standards (NAAQS) for SO₂ of 196 ug/m³ (as well as the SGC DAR-1 value of 196 ug/m³).
- The maximum annual concentrations of ethane, methane, and ethyl alcohol are all less than the corresponding AGC DAR-1 values.
- The cumulative cancer risk from all sources combined for impact on the proposed building is estimated to be 1.45E-09, which is less than the cancer risk threshold of one per million. The maximum cumulative 1-hour NO₂ concentrations at the project site exceeds the 1-hour NO₂ NAAQS and SGC DAR-1 value of 188 ug/m³. The result of this analysis indicates that NO₂ emissions from all permits combined have the potential to have a significant adverse impact on the proposed developments. Therefore, a detailed analysis, using the AERMOD model, was conducted to more accurately estimate the potential 1-hour NO₂ impact.

In addition, DEP currently requires that particulate matter emitted into the atmosphere from toxic facilities be considered as PM_{2.5} emissions. Therefore, along with 1-hour particulate impacts (as per DAR-1 requirements), 24-hour and annual PM_{2.5} impacts were considered in comparison with the 24-hour and annual PM_{2.5} NAAQS.

Therefore, detailed modeling analyses (using AERMOD) were conducted for these two pollutants -- NO₂ and PM_{2.5} -- to estimate the cumulative effects of all sources combined.

Table 17-25: Estimated Cumulative 1-hour Concentration Ratios (C_a/SGC) under all permits for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	
Particulates	NY075-00-0	148.5	380	3.91E-01
Sulfur Dioxide	7446-09-5	61.9	197	3.14E-01
Nitrogen Dioxide	10102-44-0	5073	188	2.70E+01*
Carbon Dioxide	630-08-0	1015	14,000	7.25E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1and were not included in the table

Table 17-26: Estimated Cumulative Annual Concentration Ratios (C_a/AGC) under all permits for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	
Particulates	NY075-00-0	1.082	45	2.40E-02
Sulfur Dioxide	7446-09-5	0.317	80	3.96E-03
Nitrogen Dioxide	10102-44-0	33.30	100	3.33E-01
Ethane	74-84-0	1.743	2,900	6.01E-04
Methane	74-82-8	0.896	1,600	5.60E-04
Ethyl Alcohol	64-17-5	257.1	45,000	5.71E-03

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-27: Estimated PHAs Cancer Risk under all permits for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec	$\mu\text{g}/\text{m}^3$		
PAHs	6.06E-09	2.90E-05	0.02	1.45E-09

Detailed Dispersion Modeling Analysis: Methodology

A detailed dispersion analysis was conducted using the latest version of the EPA AERMOD dispersion model (EPA version 15181). AERMOD's PVMRM module was also utilized to account for the NO_x to NO₂ conversion, and the AERMOD Building Profile Input Parameters (BPIP) algorithm was utilized to estimate building profile input parameters for downwash effect calculation.

The latest five consecutive years of meteorological data (2010-2014) were used. Surface data were obtained from La Guardia Airport, and upper air data were obtained from Brookhaven station, New York. Data was processed by Trinity Consultants, Inc., using the current EPA AERMET. 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 to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs.

The 24-hour PM_{2.5} background concentration was developed from monitoring data collected by the NYSDEC at the Brooklyn JHS monitoring station as 21.9 $\mu\text{g}/\text{m}^3$, which

is the average of the 98th percentiles for the last three years (2012-2014), and annual concentration PM_{2.5} is 9.2 ug/m³, which is also the three-year average value.

Because JHS-25 does not monitor NO₂ background concentrations, the following values were obtained from the Queens College 2 monitoring station: 1-hour - 57.9 ppb or 109 ug/m³, annual - 17.25 ppb or 32 ug/m³, and 14.3 ppb or 37.3 ug/m³ for 1-hour SO₂.

According to all permits, toxic pollutants are vented to the outside through roof-top stacks. Based on the locations of these emission points under each permit, as shown on drawings and Google Earth Pro imaging software, the location of each emission point on the roof of the Damascus Bakery building was determined, and emissions were assigned to each stack.

There are three emission points identified under PA0069-93N for facility No. 1 but, according to the permit, all emissions are assumed to be released from emission point 1B. Permits PA0072-93R and PA0073-93Y have two emission points – 4A and 5A -- where all emissions are from the combustion of natural gas, and two emission points -- 4B and 5B -- which exhaust only process emissions (ethyl alcohol). Therefore, for the analysis of combustion emissions, only emission points 4A and 5A were considered. Source parameters were obtained from each permit as follows:

Permit No.	Emission Point No.	Stack Height, feet	Stack Diameter, feet	Temperature, deg-F	Exit Velocity, ft/sec	Exit Flow Rate, cfm	Gas Usage Rate, MMBtu/hr
PA0069-93N	1A,1B,1C	21	0.66	600	38.2	800	1.5
PA0070-93M	2	24	1.5	600	30.5	3,228	1.0
PA0071-93J	3	24	1.0	600	34	1,600	0.8
PA0072-93J	4A	22	0.83	350	4.2	138	0.4
PA0072-93Y	5A	24	0.66	350	6.6	138	0.4

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO₂, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO₂ NAAQS standard of 0.100 ppm (188 ug/m³) is the three-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO₂ concentrations that is comprised of three tiers. Tier 1, the most conservative approach, assumes a full (100 percent) conversion of NO_x to NO₂; Tier 2 applies a conservative ambient NO_x/NO₂ ratio of 80 percent to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO₂ within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO₂ concentrations or total 1-hour NO₂ concentrations if hourly NO₂ background concentrations are added

within the model, and averages these values over the numbers of the years modeled. Total estimated concentrations are generated in the statistical form of the 1-hour NO₂ NAAQS format and can be directly compared with the 1-hour NO₂ NAAQS standard.

In accordance with DCP guidance, Tier 1, as the most conservative approach, was initially applied as a preliminary screening tool to determine whether violations of the NAAQS are likely to occur. If exceedances of the 1-hour NO₂ NAAQS are estimated, the less conservative Tier 3 approach should be applied.

Analysis was conducted with downwash effects. In accordance with NYSDEC guidance, as described in the recently released NYSDEC AERSCREEN User's Guide (August 31, 2015 version), the option without downwash should only be used for stack heights greater than the Good Engineering Practice (GEP) stacks. (GEP stacks avoid downwash effect.) For shorter stacks, such as the Bakery building, the use of the downwash algorithm is required. In addition, as the building exists, wind flows around the building will create downwash effects that will affect dispersion and resulting concentrations. In addition, the in-stack NO₂/NO_x ratio should be 0.5 as EPA default value (same reference as above).

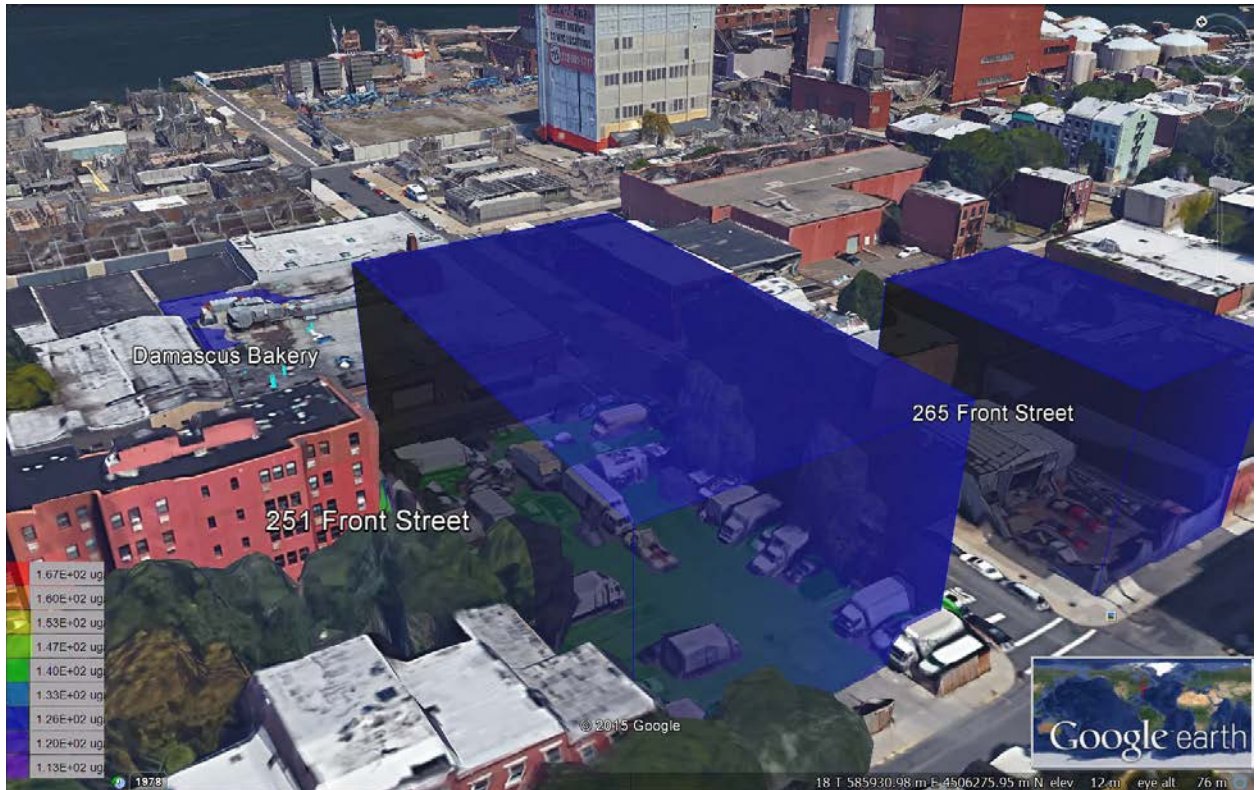
Particulate matter is emitted from natural gas combustion that provides heat for the baking process in the oven. There are also process emissions from baking operations, such as flour mixing and preparation. However, data show that particulates from the baking preparation process are larger than 10 or more microns in size, so PM_{2.5} emissions result only from the gas combustion process.

It was assumed that emission rates listed in the permits for total particulates would apply to PM_{2.5}. Particulate emissions from all five emission sources were modeled in one modeling run so that the AERMOD-estimated concentrations represent the cumulative impacts of all sources combined. Estimated impacts of PM_{2.5} emissions, with added background concentrations, were compared with the applicable 24-hour and annual PM_{2.5} NAAQS.

Detailed Dispersion Modeling Analysis: Results

The results of the NO₂ Tier 1 analysis with AERMOD shows that the total 8th highest daily 1-hour NO₂ concentration from two sources combined with added NO₂ background concentration of 109 ug/ m³ exceeds the 1-hour NAAQS of 188 ug/ m³. Therefore, a Tier 3 analysis was conducted. The result of the NO₂ Tier 3 analysis with AERMOD shows that the total cumulative 8th highest daily 1-hour NO₂ concentration with added NO₂ background concentration within the model is estimated to be 173.5 ug/ m³, which is less than the 1-hour NAAQS of 188 ug/ m³ and corresponding DAR-1 SGC value (see the 3-D Contour Map below).

NO₂ 3-D Contour Map



The maximum annual total NO₂ concentration, which is estimated to be 32.4 ug/m³ (i.e., a maximum estimated impact 0.4 ug/m³ plus a background value of 32 ug/m³), is also less than the annual NAAQS of 100 ug/m³ and corresponding DAR-1 AGC value.

Therefore, the NO₂ emissions from the Damascus Bakery would not have a significant adverse impact on the proposed development.

Results of the PM_{2.5} analysis are that the maximum estimated 24-hour PM_{2.5} impact is 0.97 ug/m³ and the maximum estimated annual average PM_{2.5} impact is 0.02 ug/m³. With added 24-hour and annual background concentrations of 21.9 ug/m³ and 9.2 ug/m³, both 24-hour and annual total concentrations are less than corresponding PM_{2.5} NAAQS of 35 ug/m³ and 12 ug/m³.

Therefore, the PM_{2.5} emissions from Damascus Bakery would not cause exceedances of the 24-hour and annual PM_{2.5} NAAQS at the project site and would not have a significant adverse impact on the proposed project.

18. NOISE

Introduction

The purpose of a noise assessment under CEQR is to determine whether an action would (1) raise noise levels significantly at existing or anticipated sensitive noise receptors (such as residences or schools) or (2) introduce new sensitive uses (such as residential buildings or schools) at locations subject to unacceptably high ambient noise levels.

The assessment is concerned with both mobile and stationary noise sources. Mobile sources are those that move in relation to a noise-sensitive receptor. They include automobiles, buses, trucks, aircraft, and trains. Stationary sources of noise do not move in relation to a noise-sensitive receptor. Typical stationary noise sources of concern include machinery or mechanical equipment associated with industrial and manufacturing operations; building heating, ventilating, and air conditioning (HVAC) systems; speakers for public address and concert systems; playground noise; and spectators at concerts or sporting events. An action could raise noise levels either by introducing new stationary noise sources (such as outdoor playgrounds or rooftop air conditioning compressors) or by increasing mobile source noise (generally by generating additional traffic). Similarly, an action could introduce new residences or other sensitive receptors that would be subject to noise from either stationary or mobile sources.

The proposed action would include a zoning map amendment to establish an R7A zoning district within an existing R6B district. The action would affect only the project site, which is now a surface parking lot that will be redeveloped with a residential apartment building whether or not the proposed action is taken, but the new building would be larger under the proposed zoning. The proposed action would thus result in additional development, which could potentially generate either stationary or mobile source noise, and additional noise-sensitive residences.

Noise Fundamentals

Noise is measured in sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the A-weighted scale are termed "dBA." The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB, and the threshold of pain is about 140. Table 18-1 shows the range of noise levels for a variety of indoor and outdoor noise levels.

**Table 18-1
Sound Pressure Level and Loudness of Typical Noises in Indoor and Outdoor Environments**

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

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

Because the scale is logarithmic, a relative increase of 10 decibels represents a sound pressure level that is 10 times higher. However, humans don't perceive a 10 dBA increase as 10 times or louder; they perceive it as twice as loud. The following is typical of human response to relative changes in noise level:

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

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

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

Although the SPL heard in the environment typically is composed of many different frequencies, it can be broken down into the numerous individual frequencies. These frequencies are grouped into octave bands. An octave band is a group of frequencies in the interval between a given frequency (such as 350 Hz) and twice that frequency (e.g., 710 Hz). The standard octave bands are each named by their center frequencies. Thus, each octave band will be represented by a single SPL. When the representative SPLs from the individual octave bands are added together, they are weighted so that the resulting total SPL will represent dBA. Octave bands are used in some noise models because the different components of a noise source will have different frequencies. For

example, a truck traveling downhill will have a different set of frequencies than a truck traveling uphill.

For mobile source noise from vehicular traffic, passenger car equivalents (PCEs) are the number of autos that would generate the same noise level as the observed vehicular mix of autos, medium trucks, and heavy trucks. PCEs are useful for comparing the effects of traffic noise on different roadways or for different future scenarios. The *CEQR Technical Manual* uses the following formulas for converting motor vehicles into PCEs:

- auto and light trucks = 1 passenger car;
- medium trucks = 13 passenger cars;
- heavy trucks = 47 passenger cars; and
- buses = 18 passenger cars.

Impact Determination and Noise Standards and Guidelines

In 1983 the New York City Department of Environmental Protection (DEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEQR) noise standards for exterior noise levels. These standards are the basis for classifying noise exposure into four categories based on the L_{10} : Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable, as shown in Table 18-2.

**Table 18-2
CEQR Noise Exposure Guidelines for use in City Environmental Impact Review¹**

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

Notes:

- (i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;
 - 1 Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
 - 2 Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.
 - 3 One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.
 - 4 External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

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

For sensitive receptors introduced by the proposed action, Action condition noise levels in dB(A) L₁₀₍₁₎ are compared with the values contained in the Noise Exposure Guidelines. If these noise levels would exceed the Marginally Acceptable levels, a significant impact would occur unless the building design provides a composite building attenuation that would be sufficient to reduce these levels to an acceptable interior noise level. These values are shown in Table 18-3.

**Table 18-3
Required Attenuation Values to Achieve Acceptable Interior Noise Levels**

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

Note: ^AThe above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dBA less in each category. All the above categories require a closed window situation and hence alternate means of ventilation.

^BRequired attenuation values increase by 1 dBA increments for L_{10} values greater than 80 dBA.

Source: New York City Department of Environmental Protection, 2012.

For noise increases caused by project-induced traffic, or for stationary noise sources introduced by the proposed action, if the No-Action levels are less than 60 dB(A) $L_{eq(1)}$ and the analysis period is not at nighttime, an increase of 5 dB(A) $L_{eq(1)}$ or more in the future with the project would be considered a significant impact. In order for the 5 dB(A) threshold to be valid, the resultant action condition noise level would have to be equal to or less than 65 dB(A). If the No-Action noise level is equal to or greater than 62 dB(A) $L_{eq(1)}$, or if the analysis period is a nighttime analysis period, the incremental significant impact threshold would be 3 dB(A) $L_{eq(1)}$. If the No-Action noise level is 61dB(A) $L_{eq(1)}$, the maximum incremental increase would be 4 dB(A), since an increase higher than this would result in a noise level higher than the 65 dB(A) $L_{eq(1)}$ threshold and be considered significant.

Potential for Additional Stationary Source Noise

The proposed action would result in additional residential development. Unlike playgrounds, truck loading docks, loudspeaker systems, car washes, stationary diesel engines, or similar uses, residential apartment buildings are not substantial stationary noise sources. All rooftop mechanical equipment, including air conditioner compressors, would be enclosed and would comply with New York City Noise Code requirements, which limit noise levels generated by such equipment to 65 dBA during the daytime (7AM to 10 PM) and 55 dBA during the nighttime. The proposed action would therefore not have the potential to cause a significant adverse stationary source noise impact.

Potential for Additional Mobile Source Noise

The anticipated action-induced development is below the CEQR threshold for a traffic impact assessment. It can therefore be assumed that the additional traffic volumes would be too low to cause a 3 dBA increase in $L_{eq(1)}$ noise levels, which would require a doubling of PCE traffic volumes along an adjacent street. The proposed action would therefore not have the potential to cause a significant adverse mobile source noise impact.

Potential for Existing Noise Levels to Adversely Affect New Residents

Directly across the intersection of Gold Street from the project site, at the northeast corner of the intersection of Gold and Front Streets, is another proposed rezoning site

(265 Front Street, or Block 43, Lot 1). As part of the environmental review for that proposed action, noise monitoring was conducted on Thursday, May 14, 2015.

Because the predominant noise source in the area of the proposed project is vehicular traffic, noise monitoring was conducted during peak vehicular travel periods, 8:00-9:00 am, 12:00 pm-1:00 pm, and 5:00-6:00 pm. The weather was dry, and wind speeds were moderate. Pursuant to *CEQR Technical Manual* methodology, readings were conducted for 20-minute periods during each peak hour. Noise monitoring was conducted using a Type 2 Larson-Davis LxT2 sound meter, with wind screen. The monitor was placed on a tripod at a height of approximately three feet above the ground, away from any other surfaces. The monitor was calibrated prior to and following each monitoring session. Because the site is a corner lot with two frontages, monitoring was conducted on the Front Street frontage as well as on the Gold Street frontage of the subject site.

The monitoring results are shown in Tables 18-4 and 18-5. As the tables show, the highest L₁₀ reading was 66.6 dB(A), obtained on the Front Street side of the property during the late afternoon period. That is within the Marginally Acceptable noise exposure category. The proposed action would not cause a significant adverse impact by exposing new sensitive receptors to high ambient noise levels.

**Table 18-4
Noise Levels along Front Street**

	Thursday, May 14, 2015		
	8:03 - 8:23 am	12:00 - 12:20 pm	5:00 - 5:20 pm
L _{max}	81.5	73.8	80.6
L ₅	69.1	66.2	70.1
L₁₀	65.3	63.0	66.6
L _{eq}	64.0	60.6	64.0
L ₅₀	56.9	57.7	59.6
L ₉₀	53.3	54.8	57.0
L _{min}	50.8	53.4	49.6

**Table 18-5
Noise Levels along Gold Street**

	Thursday, May 14, 2015		
	8:23 - 8:44 am	12:21 - 12:42 pm	5:21 - 5:41 pm
L _{max}	78.5	77.9	76.4
L ₅	67.3	62.6	62.4
L ₁₀	65.4	59.5	59.3
L _{eq}	61.6	58.7	58.8
L ₅₀	57.1	54.0	54.9
L ₉₀	53.5	51.2	51.5
L _{min}	51.1	49.3	50.1

22. CONSTRUCTION

Construction impacts, although temporary, can sometimes result in significant adverse impacts. Determination of significance is generally based on the duration and magnitude of the effects. Construction impacts are generally important when construction activity would affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, or air quality conditions.

Construction impact assessments are not necessarily required for all actions that would involve or induce construction, and different assessments may be appropriate for different projects. The *CEQR Technical Manual* provides criteria for determining whether construction impact analyses are required.

A transportation analysis is generally required if construction would (1) occur within a central business district or along an arterial or major roadway, (2) impede movement along a roadway or sidewalk, or (3) occur simultaneously at multiple sites within the same geographic area. The proposed project would not meet any of these criteria.

According to the *Manual*, air quality and noise analyses are generally not required if a transportation analysis is not needed.

A hazardous materials analysis is generally required if construction would occur at a site with soil or groundwater contamination. As discussed in Section 12, Hazardous Materials, a Phase I ESA prepared for the project site concluded that no Recognized Environmental Conditions are present.

A natural resources analysis is required if construction would occur on or near a site containing natural resources. The proposed rezoning area does not satisfy this criterion.

Open space, socioeconomic conditions, community facilities, land use and public policy, neighborhood character, and infrastructure analyses are needed only if construction activities would be long-term, lasting more than two years, or if construction would directly affect a technical area, such as by impeding access to a community facility. Neither is true in the case of the proposed action.

A cultural and historic resources analysis is required if in-ground disturbances or vibrations associated with project construction could undermine the foundation or structural integrity of nearby structures of cultural or historic significance. In the case of the proposed action, the project site is adjacent to a mid- nineteenth century row house within the Vinegar Hill Historic District.

Damage to adjacent historic structures can be avoided through the formulation and implementation of a construction protection plan, which would be done for construction at the project site. Furthermore, if a construction project is located within 90 feet of an individual landmark designated by the New York City Landmarks Preservation Commission (LPC), any structure within a historic district designated by the LPC, or any property listed on the National Register, the New York City Department of Buildings (DOB) requires that the project comply with DOB Technical Policy and Procedure Notice 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction When Subject to Controlled Inspection by Section 27-724 and for

Any Existing Structure Designated by the Commissioner, which supplements the standard building protections afforded by Building Code C26-112.4. The specified procedures include establishment of criteria for maximum drilling velocity and movement criteria for the historic building walls and foundations. They include a monitoring program for the effects of vibrations, excavation, and drawdown of the water table. A licensed surveyor must be retained to monitor (through measurements made at least twice a week) any movement or tilting of the historic buildings and of any temporary retaining walls or other building support system, as well as settlements of the street and selected points on the ground. Any existing cracks in the walls of the historic buildings must be monitored. Groundwater levels are to be monitored through observation wells. Vibration from pile driving is to be monitored through the use of a seismograph placed adjacent to the closest historic building. Monitoring records must be kept and incorporated into inspection reports submitted to DOB within 30 days of the completion of excavation. The specified procedures should prevent any construction-related damage to the nearby historic resources.

It is therefore not anticipated that the proposed project would result in any significant adverse construction impacts.

Appendix 1
Preliminary Architectural Scheme
(for illustrative purposes only)

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Z-01 ZONING INFORMATION & SITE PLAN

SITE INFORMATION

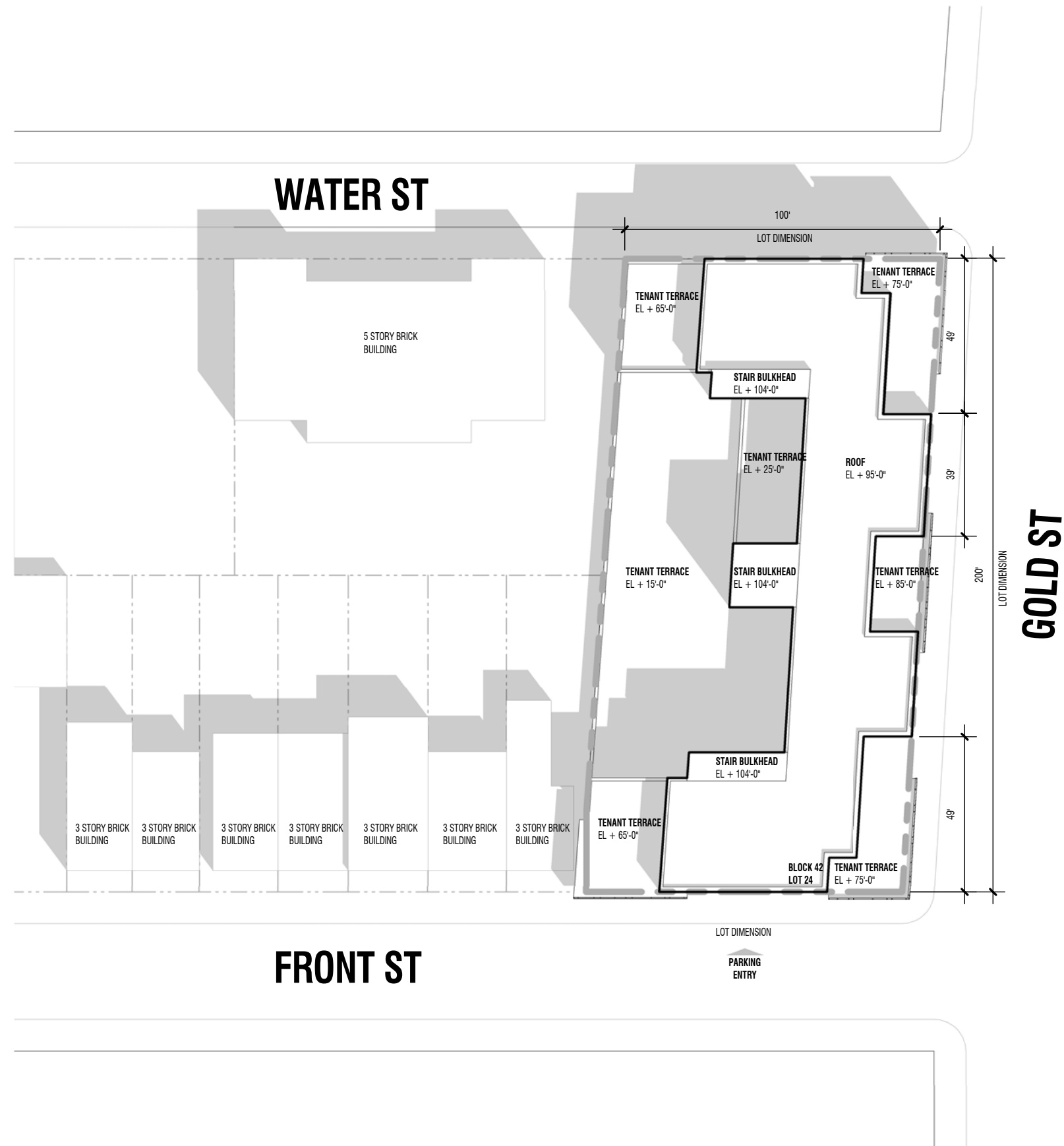
251 FRONT STREET / 68 GOLD STREET, BROOKLYN, NY 11201
 BLOCK - 42 LOT - 24 ZONING MAP - 12D ZONING DISTRICTS - R7A
 LOT AREA: 20,115 SF

MAXIMUM FAR: 4.0 ZR 21-153
 MAX. LOT COVERAGE: 65% ZR 21-153
 MAXIMUM FAR AIRS: 5.01 ZR 23-155
 MAXIMUM FAR MIH: 4.60 ZR23-154

RESIDENTIAL ZONING AREA: 20,115 SF X 4.6 [FAR] = 92,529 ZSF
 AIRS ZONING AREA: 20,115 SF X 1.01 [5.01FAR - 4.0 FAR] = 20,316 ZSF
 MIH ZONING AREA: 20,115 SF X .6 [4.6FAR-4.0FAR] = 12,069 ZSF
 RES. + AIRS: 92,529 ZSF + 20,316 ZSF = 112,845 ZSF
 RES. + MIH: 92,529 ZSF + 12,069 ZSF = 104,598 ZSF

REQUIRED REAR YARD: 30'-0" ZR23-47
 MAXIMUM BASE HEIGHT: 75'-0" W/ QUALIFYING GROUND FLOOR ZR23-622
 MAXIMUM BLDG. HEIGHT: 95'-0" W/ QUALIFYING GROUND FLOOR ZR23-622
 MAXIMUM NO. STORIES: 9 W/ QUALIFYING GROUND FLOOR ZR23-622
 MINIMUM SETBACK: 15'-0" [NARROW STREET]

PARKING: 50% NON-AFFORDABLE DWELLING UNITS [IN TRANSIT ZONE]



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SITE LEGEND

- | Color | Program Type |
|-------|----------------------|
| | SELECTED ZONING LOTS |
| | PROPERTY LINE |
| | NORTH |

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S1-02 AERIAL VIEW EXISTING



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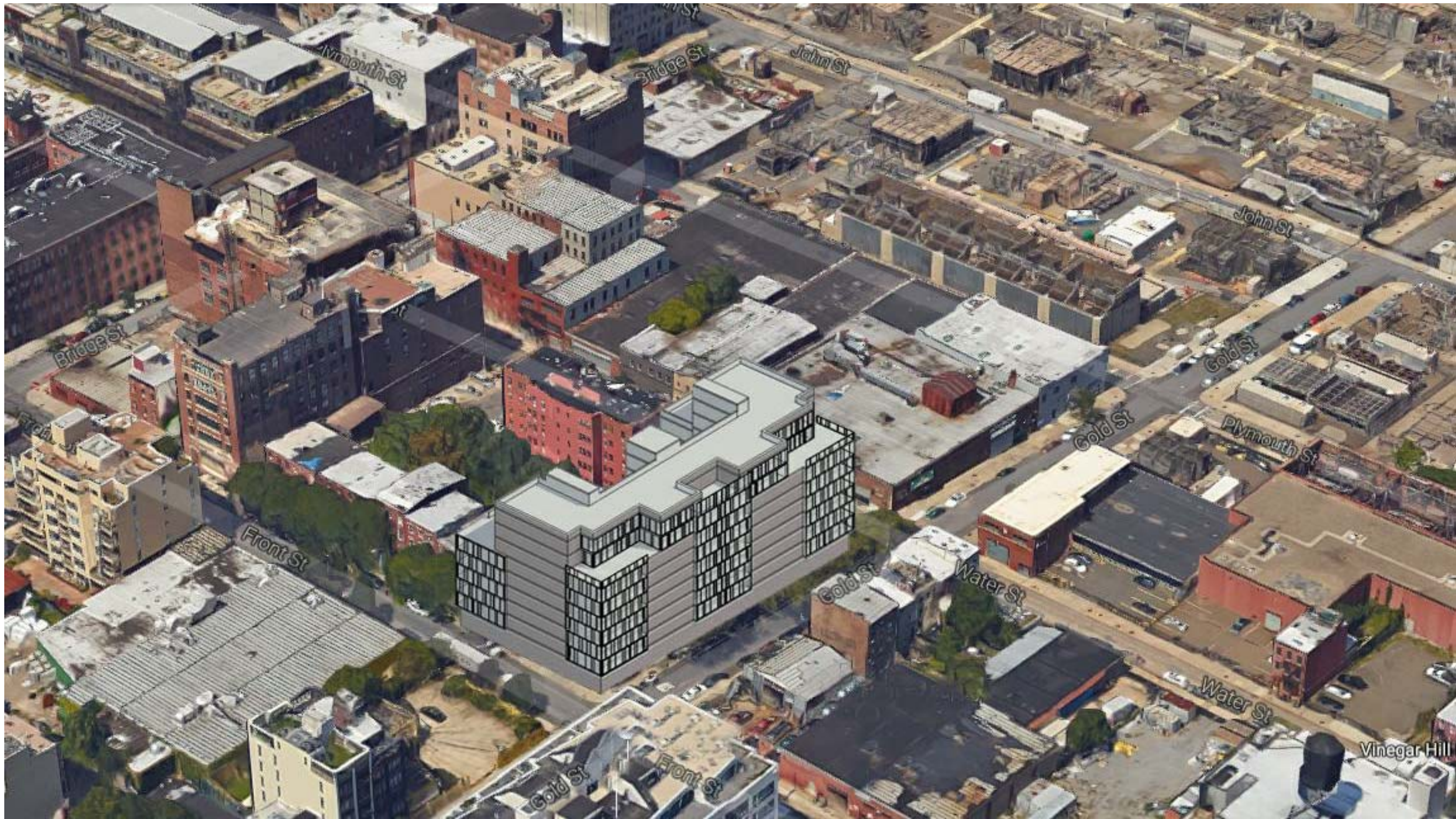
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S1-03 SCHEME 1 AERIAL VIEW PROPOSED



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S1-04 SCHEME 1 BIRDS EYE VIEW PROPOSED



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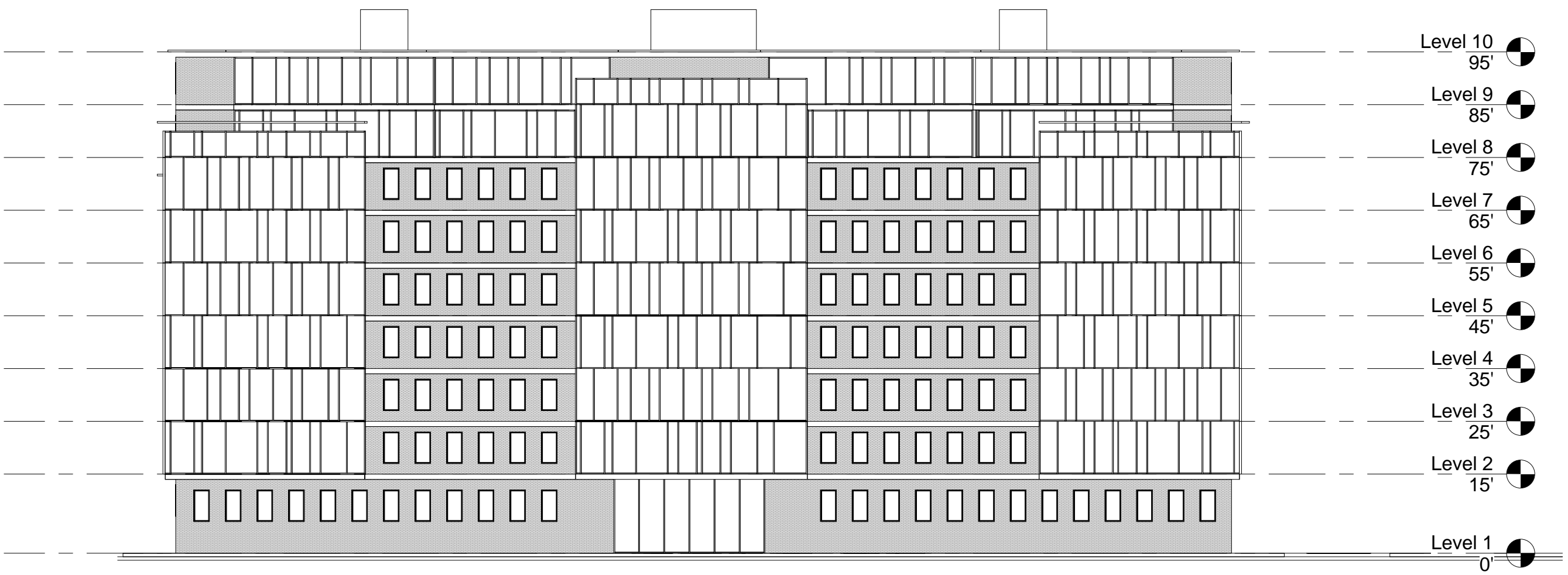
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S1-05 SCHEME 1 ELEVATION



① GOLD STREET
3/64" = 1'-0"

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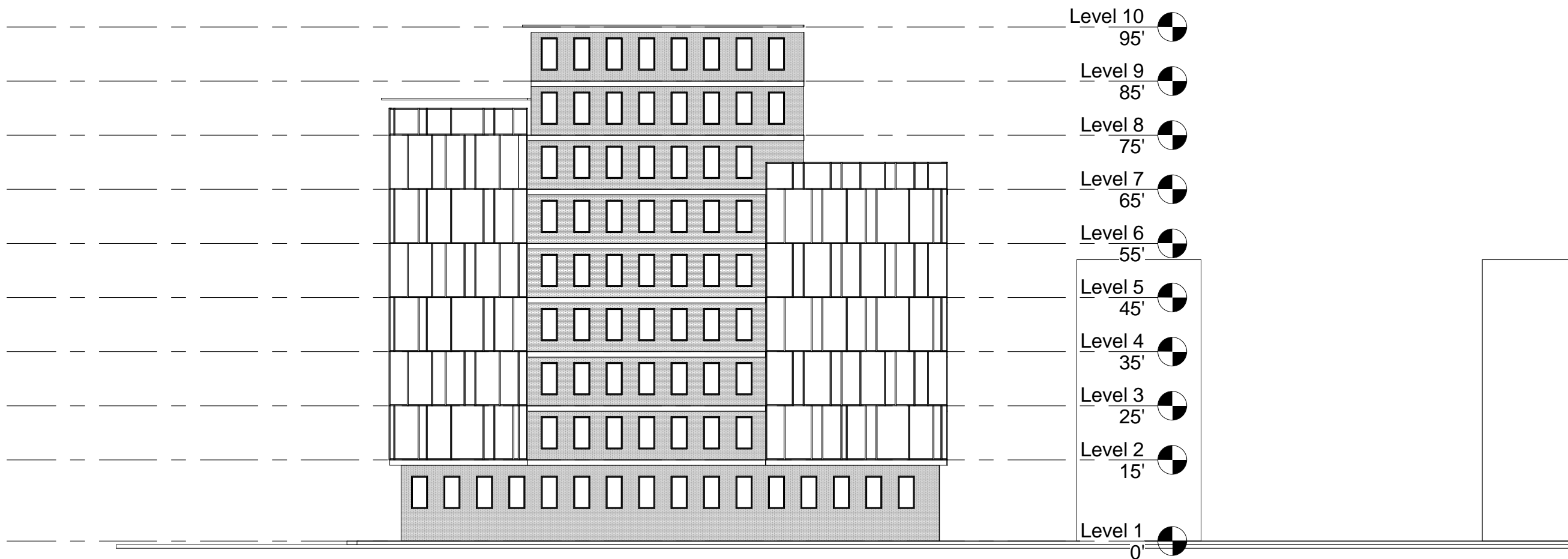
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S1-07 SCHEME 1 ELEVATION



① WATER STREET
3/64" = 1'-0"

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Appendix 2
Government Correspondence

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 16DCP002K

Project:

Address: 251 FRONT STREET, **BBL:** 3000420024

Date Received: 7/7/2015

No architectural significance

No archaeological significance

in radius Designated New York City Landmark or Within Designated Historic District

in radius Listed on National Register of Historic Places

Appears to be eligible for National Register Listing and/or New York City Landmark Designation

May be archaeologically significant; requesting additional materials

Comments:

The project site is directly adjacent to the LPC designated and S/NR eligible Vinegar Hill HD. Area II. A construction protection plan as per the CEQR Technical Manual: 2014 is required and should be submitted to LPC for review and comment.

The LPC and S/NR DUMBO HD is within the radius. No adverse impacts to DUMBO are anticipated as a result of this project.

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2014).

Gina Santucci

7/9/2015

SIGNATURE

Gina Santucci, Environmental Review Coordinator

DATE

File Name: 30634_FSO_DNP_07092015.doc



**Environmental
Protection**

*Carter H. Strickland, Jr.
Commissioner*

Angela Licata
Deputy Commissioner
of Sustainability
alicata@dep.nyc.gov

59-17 Junction Boulevard
Flushing, NY 11373
T: (718) 595-4398
F: (718) 595-4479

March 7th, 2014

Mr. Robert Dobruskin
Director, Environmental Assessment and Review Division
New York City Department of City Planning
22 Reade Street, Room 4E
New York, New York 10007-1216

**Re: 251 Front Street
Block 42 Lot 24
CEQR # 77DCP136K
Brooklyn New York, 11201**

Dear Mr. Dobruskin:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (DEP) has reviewed the August 2013 Phase I Environmental Site Assessment (Phase I) prepared by Environmental Project Data Statements Company on behalf of The Constellation Group (applicant), for the above referenced project. It is our understanding that the applicant is proposing a zoning map amendment from a R6B district to a R7A district, as well as a zoning text amendment to make the Inclusionary Housing Program applicable in the proposed R7A district. The proposed action would facilitate a proposal to redevelop four lots into a residential development containing approximately 70 dwelling units and 35 accessory parking spaces. The development site, Block 42 Lot 24, is located at 251 Front Street between Gold Street and Bridge Street in the Vinegar Hill neighborhood of Brooklyn, Community District 2. It should be noted that the project site is undeveloped and is being used for general storage and vehicle parking.

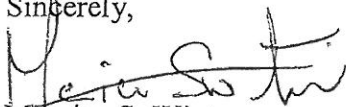
The August 2013 Phase I report revealed that historical on-site and surrounding area land uses consists of a mix of residential, commercial and industrial uses including, St. Ann's Church, a church rectory, St. Ann's School, residential buildings, a bakery, a Buddhist center, a solid waste facility, as well as a Consolidated Edison (Con Ed) facility. Regulatory databases such as the New York State Department of Environmental Conservation (NYSDEC) SPILLS, Leaking Underground Storage Tank (LUST), Leaking Storage Tanks (LTANKS), Resource Conservation and Recovery Act, and Generator and Petroleum Bulk Storage identified several sites in close proximity to the project site. The NYSDEC LTANKS database reported 14 incidents within a 1/2-mile radius, as well as 101 closed SPILL incidents and three open SPILL incidents within a 1/8-mile radius of the project site. It should be noted that two of the three open spill incidents involved approximately 5009 gallons of dielectric fluid from the Con Ed facility.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

- DCP should inform the applicant that based on the historical on-site land uses, a Phase II Environmental Site Assessment (Phase II) is necessary to adequately identify/characterize the surface and subsurface soils of the subject parcels. A Phase II Investigative Protocol/Work Plan summarizing the proposed drilling, soil, groundwater, and soil vapor sampling activities should be submitted to DEP for review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting the proposed soil boring locations and soil vapor sampling locations. Soil and groundwater samples should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for the presence of volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds by EPA Method 8270, pesticides by EPA Method 8081, PCBs by EPA Method 8082, Target Analyte List metals (filtered and unfiltered for groundwater samples) and soil vapor samples by EPA Method TO-15. The soil vapor sampling should be conducted in accordance with NYSDOH's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The soil vapor samples should be collected and analyzed by a NYSDOH ELAP certified laboratory for the presence of VOCs by EPA Method TO-15. An Investigative Health and Safety Plan (HASP) should also be submitted to DEP for review and approval.
- DCP should also instruct the applicant that the Phase II Work Plan and HASP should be submitted to DEP for review and approval prior to the start of any fieldwork.

Future correspondence related to this project should include the following CEQR number **77DCP136K**. If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,



Maurice S. Winter

Deputy Director, Site Assessment

cc: T. Estes
E. Mahoney
M. Wimbish
M. Winter
I. Young (DCP)
W. Yu
File

Appendix 3
Restrictive Declaration

251 Front Street Realty, Inc.
P.O. Box 26606
Brooklyn, N.Y. 11202

December 8, 2016

NYC Department of City Planning
120 Broadway
31st Floor
New York, N.Y. 10271

**Re: 251 Front Street Rezoning
CEQR No. 16DCP002K
ULURP Nos. 150235ZMK and 150234ZRK
Brooklyn, Community District 2**

Dear Ms. Laremont and Mr. Dobruskin:

I, Paul Tocci, am President of 251 Front Street Realty, Inc., the “Applicant” for land use actions affecting a property located at 251 Front Street (Block 42, Lot 24) in Brooklyn, Community District 2 (the “Subject Property”). The proposed actions are: a zoning map amendment from R6B to R7A (150235ZMK) affecting the Subject Property (the “Rezoning Area”) and a zoning text amendment to Zoning Resolution Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas, to establish a Mandatory Inclusionary Housing Area (Option 1) coterminous with the Rezoning Area (150234ZRK) (collectively, the “ULURP Application”).

I understand that in connection with the environmental review for the ULURP Application (CEQR No. 16DCP002K, the “CEQR Application”), the Landmarks Preservation Commission (“LPC”), on behalf of the City, has identified the need to have an archeological study through a restrictive declaration. The attached restrictive declaration has been prepared but cannot be executed until January 20, 2017. An updated Cert. of Parties-In-Interest is require.

I understand that I or a member authorized to act on behalf of the 251 Front Street Realty, Inc. as a fee owner of the Subject Property will execute a restrictive declaration in the form of the attached. I understand further that I will cause the restrictive declaration to be recorded against the Subject Property, with proof of recording submitted to both LPC and the Department of City Planning (DCP), no less than eight (8) business days prior to the date of the scheduled public hearing on the ULURP Application by the City Planning Commission. I agree that if DCP and LPC have not received such proof of recording by the eighth business day prior to the scheduled public hearing, the Applicant will withdraw the ULURP and CEQR Applications, or DCP will

DCP will withdraw and/or terminate the ULURP and CEQR Applications on the Applicant's behalf at that time.

Within three business days of receipt of such proof of recording, DCP and LPC will jointly review the submitted materials for completeness, identify any problems with the proof of recording that warrant correction, and communicate said problems to the Applicant to correct prior to the public hearing.

Respectfully,

Paul Tomi

DECLARATION

This DECLARATION made as of the ____ day of _____, 2017 by 251 Front Street Realty Inc., with an address at P.O. Box 26606, Brooklyn, New York 11202 (hereinafter referred to as “Declarant”);

WITNESSETH

WHEREAS, Declarant is the fee owner of certain real property located in Kings County, City and State of New York, designated for real property tax purposes as Tax Block 42, Lot 24, and commonly known as 251 Front Street, Brooklyn, New York, (the “Project Site”) on the Tax Map of the City of New York and are more particularly described in Exhibit A, annexed hereto and made part hereof; and

WHEREAS, Royal Abstract of New York, LLC (“Title Company”), has issued a Certification of Parties In Interest, annexed hereto as Exhibit B and made a part hereof, that as of December ____, 2016, Declarant and BCB Community Bank are the only Parties-in-Interest (as defined in subdivision (c) of the definition of “zoning lot” set forth in Section 12-10 of the New York City Zoning Resolution) in the Project Site (the “Certification”); and

WHEREAS, all Parties-in-Interest to the Project Site have either executed this Declaration or waived their rights to execute this Declaration by written instruments annexed hereto as Exhibits C and made a part hereof, which instrument is intended to be recorded simultaneously with this Declaration; and

WHEREAS, as of the date hereof, the Title Company has determined that there has been no change in the facts set forth in the Certification, and the Declarants represent and warrant that the Parties-in-Interest listed in the Certification are the only known parties-in-interest in the Project Site as of the date hereof; and

WHEREAS, an application designated ULURP No. N 150234ZRK and 150235ZMK was submitted by Declarants to the Department of City Planning (“DCP”), for approval by City Planning Commission (“CPC”), pursuant to 197-c of the New York City Charter (the Uniform Land Use Review Procedure or “ULRUP”) seeking a zoning map amendment and a zoning text amendment of the New York City Zoning Resolution (the “Application”) and

WHEREAS, the Application would facilitate the development of the Project Site; and

WHEREAS, an environmental assessment statement concerning the Project Site prepared pursuant to the City Environmental Quality Review (the “CEQR”) is under review in connection with the Application (CEQR No. 16DCP002K) and, pursuant to CEQR, the Landmarks Preservation Commission (the “LPC”), among others, has

reviewed the environmental assessment, including the historic land use of the Project Site; and

WHEREAS, the results of such a review, as documented in LPC's July 7, 2015 notice, attached hereto as Exhibit D and made a part hereof, indicate the potential presence of significant archaeological resources on the Project Site; and

WHEREAS, Declarant desires to identify the existence of any potential archaeological resources and mitigate any potential damage to any such archaeological resources found in connection with the development or redevelopment of the Subject Property and have agreed to follow and adhere to all requirements for archaeological identification, investigation and mitigation set forth in the CEQR Technical Manual and LPC's Guidelines for Archaeological Work in NYC, including without limitation, the completion of an archaeological documentary study (the "Archaeological Documentary Study") and archaeological field testing, excavation, mitigation and curation of archaeological resources if such need is identified in the Archaeological Documentary Study and required by the LPC (collectively, the "Archaeological Work"); and

WHEREAS, Declarants agree to restrict the manner in which the Project Site may be developed or redeveloped by having implementation of the Archaeological Work, performed to the satisfaction of the LPC, as evidenced by writings described and set forth herein, be a condition precedent to any soil disturbance for any such development or redevelopment (other than soil disturbance necessitated by Declarants' performance of the Archaeological Work); and

WHEREAS, Declarants intend this Declaration to be binding upon all successors and assigns; and

WHEREAS, the Declarants intend this Declaration to benefit all land owners and tenants including the City of New York ("the City") and consents to the enforcement of this Declaration by the City.

NOW, THEREFORE, Declarants do hereby declare and agree that the Subject Project shall be held, sold, transferred, and conveyed, subject to the restrictions and obligations which are for the purpose of protecting the value and desirability of the Project Site and which shall run with the land, binding the successors and assigns of Declarant so long as they have any right, title or interest in the Project Site or any part thereof:

1. Declarants covenant and agree that no application for grading, excavation, foundation, alteration building or other permit respecting the Subject Property which permits soil disturbance shall be submitted to or accepted from the Department of Buildings (the "DOB") by the Declarant until LPC has issued to DOB, as applicable, either a Notice of No Objection, as set forth in Paragraphs 2(a) and 2(c), a Notice to Proceed, as set forth in Paragraph 2(b), a Notice of Satisfaction, as set forth in Paragraph 2(d), or a Final Notice of Satisfaction, as set forth in Paragraph 2(e). Declarants shall submit a copy of the Notice of No Objection, Notice to Proceed, Notice of Satisfaction or

Final Notice of Satisfaction, as the case may be, to the DOB at the time of filing of any application set forth in this Paragraph 1.

2. (a) Notice of No Objection – LPC shall issue a Notice of No Objection after the Declarants have completed the work set forth in the LPC-approved Archaeological Documentary Study and LPC has determined that the results of such assessment demonstrate that the site does not contain potentially significant archaeological resources. Declarant shall have the right to record the Notice of No Objection in the Office of the County or City Register, indexing it against the Project Site.

(b) Notice to Proceed with LPC-Approved Field Testing and/or Mitigation – LPC shall issue a Notice to Proceed after it approves a Field Testing Plan and, if necessary, a Mitigation Plan. Issuance of a Notice to Proceed shall enable the Declarants to obtain a building permit solely to perform excavation or other work necessary to implement the Field Testing and/or Mitigation Plan. The LPC shall review and approve the scope of work in all permits prior to field testing or mitigation work commencing on the Project Site.

(c) Notice of No Objection After Field Work – LPC shall issue a Notice of No Objection After Field Work if Declarants have performed required LPC-approved field testing and, as a result of such testing, the LPC determines that the Project Site does not contain potentially significant archaeological resources. The notices described in subparagraphs (a) and (c) of this paragraph shall each hereafter be referred to as a “Notice of No Objection.” Issuance of a Notice of No Objection shall be sufficient to enable Declarants to obtain a full building permit for the performance of excavation or construction on the Project Site.

(d) Notice of Satisfaction – LPC shall issue a Notice of Satisfaction after the Mitigation Plan has been prepared and accepted by LPC and LPC has determined in writing that all significant identified and archaeological resources have been documented and removed from the Project Site. Issuance of a Notice of Satisfaction shall enable Declarants to obtain a building permit for excavation and construction on the Project Site.

(e) Final Notice of Satisfaction – LPC shall issue a Final Notice of Satisfaction after the mitigation has been completed and the LPC has set forth in writing that the Mitigation Plan, including but not limited to the Final Archaeological Report and a curation plan for any archaeological resources found on the Project Site, has been completed to the satisfaction of LPC.

3. No temporary certificate of occupancy (“TCO”) or permanent certificate of occupancy (“PCO”) shall be issued by the Buildings Department or accepted by Declarants until the Chairperson of the LPC shall have issued a Final Notice of Satisfaction or a Notice of No Objection.

4. The Director of Archaeology of the LPC shall issue all notices required to be issued hereunder reasonably promptly after Declarant has made written request to the

LPC and has provided documentation to support each such request, and the Director of Archaeology of the LPC shall in all events endeavor to issue such written notice to the DOB, or inform Declarant in writing of the reason for not issuing said notice, within thirty (30) calendar days after Declarant has requested such written notice.

5. Declarant represents and warrants with respect to the Project Site that no restrictions of record, nor any present or presently existing estate or interest in the Project Site nor any lien, encumbrance, obligation, covenant of any kind preclude, presently or potentially, the imposition of the obligations and agreements of this Declaration.

6. Declarant acknowledges that the City is an interest party to this Declaration and consents to the enforcement of this Declaration solely by the City, administratively or at law or at equity, of the obligations, restrictions and agreements pursuant to this Declaration.

7. The provisions of this Declaration shall inure to the benefit of and be binding upon the respective successors and assigns of the Declarant, and references to the Declarant shall be deemed to include such successors and assigns as well as successors to their interest in the Project Site. References in this Declaration to agencies or instrumentalities of the City shall be deemed to include agencies or instrumentalities succeeding to the jurisdiction thereof.

8. Declarant shall be liable in the performance of any term, provision, or covenant in this Declaration, except that the City and any other party relying on this Declaration will look solely to the fee estate interest of the Declarant in the Project Site for the collection of any money judgment recovered against Declarant, and no other property of the Declarant shall be subject to levy, execution, or other enforcement procedure for the satisfaction of the remedies of the City or any other person or entity with respect to this Declaration. The Declarant shall have no personal liability under this Declaration.

9. The obligations, restrictions and agreements herein shall be binding on the Declarant or other parties in interest only for the period during which the Declarant and any such Party-in-Interest holds and interest in the Project Site; provided; however, that the obligations, restrictions and agreements contained in this Declaration may not be enforced against the holder of any mortgage unless and until such holder succeeds to the fee interest of the Declarant by way of foreclosure or deed in lieu of foreclosure.

10. Declarant shall indemnify the City, its respective officers, employees and agents from all claims, actions or judgments for loss, damage or injury, including death or property damage of whatsoever kind or nature, arising from Declarants' performance of its obligations under this Declaration, including without limitation, the negligence or carelessness of the Declarant, their agents, servants or employees in undertaking such performance; provided, however, that should such a claim be made or action brought, Declarant shall have the right to defend such claim or action with attorneys reasonably acceptable to the City and no such claim or action against the City shall be settled without the written consent of the City.

11. If Declarant is found by a court of competent jurisdiction to have been in default in the performance of its obligations under this Declaration, and such finding is upheld on a final appeal by a court of competent jurisdiction or by other proceeding or the time for further review of such finding or appeal has lapsed, Declarant shall indemnify and hold harmless the City from and against all reasonable legal and administrative expenses arising out of or in connection with the enforcement of Declarants' obligations under this Declaration as well as any reasonable legal and administrative expenses arising out of or in connection with the enforcement of any judgment obtained against the Declarant, including but not limited to the cost of undertaking the Mitigation Plan, if any.

12. Declarant shall cause every individual or entity that between the date hereof and the date of recordation of this Declaration, becomes a Party-in-Interest (as defined in subdivision (c) of the definition of "zoning lot" set forth in Section 12-10 of the Zoning Resolution of the City of New York) to all or a portion of the Subject Property to waive its right to execute this Declaration and subordinate its interest in the Subject Property to this Declaration. Any mortgage or other lien encumbering the Subject Property in effect after the recording date of this Declaration shall be subject and subordinate hereto as provided herein. Such waivers and subordination shall be attached to this Declaration as Exhibits and recorded in the Office of the County or City Register.

13. This Declaration and the provisions hereof shall become effective as of the date of this Declaration. Declarant shall record or shall cause this Declaration to be recorded in the Office of the County or City Register, indexing it against the Project Site within five (5) business days of the date hereof and shall promptly deliver to the LPC and the CPC proof of recording in the form of an affidavit of recording attaching a copy of the filing receipt and a copy of the Declaration as submitted for recording. Declarant shall also provide a certified copy of this Declaration as recorded to LPC and CPC as soon as a certified copy is available.

14. This Declaration may be amended or modified by Declarant only with the approval of LPC or the agency succeeding to its jurisdiction and no other approval or consent shall be required from any other public body, private person or legal entity of any kind. A statement signed by the Chair of the LPC, or such person as authorized by the Chair, certifying approval of an amendment or modification of this Declaration shall be annexed to any instrument embodying such amendment or modification.

15. Any submittals necessary under this Declaration from Declarant to LPC shall be addressed to the Director of Archaeology of LPC, or such other person as may from time to time be authorized by the Chair of the LPC to receive such submittals. As of the date of this Declaration, LPC's address is:

Landmarks Preservation Commission

1 Centre Street, 9N
New York, New York 10007

Any notices sent to Declarant shall be sent by personal delivery, delivery by reputable overnight carrier or by certified mail to the attention of:

Chris Wright, Esq.
Simons & Wright LLC
60 East 42nd Street, Ste 1420
New York, New York 10165

16. Declarant expressly acknowledges that this Declaration is an essential element of the environmental review conducted in connection with the Applications and, as such, the filing and recordation of this Declaration may be a precondition to the determination of significance pursuant to CEQR, which implements the State Environmental Quality Review Act ("SEQRA") and the SEQRA Regulations, Title 6 New York Code of Rules and Regulations ("NYCRR") Part 617.7 within the City of New York.

17. Declarant acknowledges that the satisfaction of the obligations set forth in this Declaration does not relieve Declarant of any additional requirements imposed by Federal, State or Locals laws.

18. This Declaration shall be governed by and construed in accordance with the laws of the State of New York.

19. Wherever in this Declaration, the certification, consent, approval, notice or other action of Declarant, LPC or the City is required or permitted, such certification, consent, approval, notice or other action shall not be unreasonably withheld or delayed.

20. In the event that any provision of this Declaration is deemed, decreed, adjudged or determined to be invalid or unlawful by a court of competent jurisdiction, such provision shall be severable and the remainder of this Declaration shall continue to be in full force and effect.

21. This Declaration and its obligations and agreements are in contemplation of Declarant receiving approvals or modified approvals of the Application. In the event that the Declarant withdraws the Application before a final determination or the Application are not approved, the obligations and agreements pursuant to this Declaration shall have no force and effect and Declarant may request that LPC issue a Notice of Cancellation upon the occurrence of the following events: (i) Declarant has withdrawn the Application in writing before a final determination on the Application; or (ii) the Application was not approved by the CPC, and/or the City Council, as the case may be in accordance with Charter Section 197-c (ULURP); or (iii) LPC has issued a Notice of No Objection or Final Notice of Satisfaction. Upon such request, LPC shall issue a Notice of Cancellation after it has determined, to LPC's reasonable satisfaction, that one of the above has occurred. Upon receipt of a Notice of Cancellation from LPC, Declarant shall cause such Notice to be recorded in the same manner as the Declaration herein, thus rendering this Restrictive Declaration null and void. Declarants shall promptly deliver to LPC and the CPC a certified copy of such Notice of Cancellation as recorded.

EXHIBIT A

Metes and Bounds

Block 42, Lot 24, Brooklyn

EXHIBIT B

Certification of "Parties in Interest" to Follow

EXHIBIT C

Parties in Interest waiver

EXHIBIT D

LPC Letter Dated July 7, 2015

EXHIBIT A

Metes and Bounds
Block 42, Lot 24, Brooklyn

EXHIBIT B

Certification of "Parties in Interest"

EXHIBIT C

Parties in Interest waiver

EXHIBIT D

LPC Letter Dated July 7, 2015

Schedule A Description

SECTION 1 BLOCK 42 LOT 24 ON THE TAX MAP OF KINGS COUNTY

ALL that certain plot, piece or parcel of land with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at a point on the Northwesterly corner of Gold and Front Streets;

RUNNING THENCE Northwesterly along Gold Street, 200 feet to Water Street;

THENCE Westwardly along Water Street, 100 feet;

THENCE Southwardly along a line drawn parallel to Gold Street, 200 feet to Front Street; and

THENCE Easterly along Front Street, 100 feet to the point or place of **BEGINNING**.

N.B. # _____
or
ALT. # _____

EXHIBIT "T"

CERTIFICATION PURSUANT TO ZONING LOT
SUBDIVISION C OF SECTION 12-10
OF THE ZONING RESOLUTION OF DECEMBER 15, 1961
OF THE CITY OF NEW YORK AS AMENDED
EFFECTIVE AUGUST 18, 1977

ROYAL ABSTRACT OF NEW YORK LLC, an abstract company licensed to do business in the State of New York and having its principal office at 500 Fifth Avenue, New York, New York, hereby certifies that as to the land hereafter described being a tract of land, either unsubdivided or consisting of two or more lots of record contiguous for a minimum of ten linear feet located within a single block in the single ownership of **Block 42 Lot 24**, and that the parties of interest constituting a "party of interest" as defined in Section 12-10, subdivision (c) of the Zoning Resolution of the City of New York, effective December 15, 1961, as amended, are the following:

NAME AND ADDRESS

NATURE OF INTEREST

1) 251 Front Street Realty, Inc.
251 Front Street
Brooklyn, NY 11201

Fee Owner

2) BCB Community Bank
104-110 Avenue C
Bayonne, NJ 07002

Mortgagee

The subject tract of land with respect to which the foregoing parties are the parties in interest as aforesaid, is known as Block 42 Lot 24 on the Tax Map of the City of New York, Kings County, and more particularly described as follows:

ALL that certain plot piece or parcel of land, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at a point on the Northwesterly corner of Gold and Front Streets;

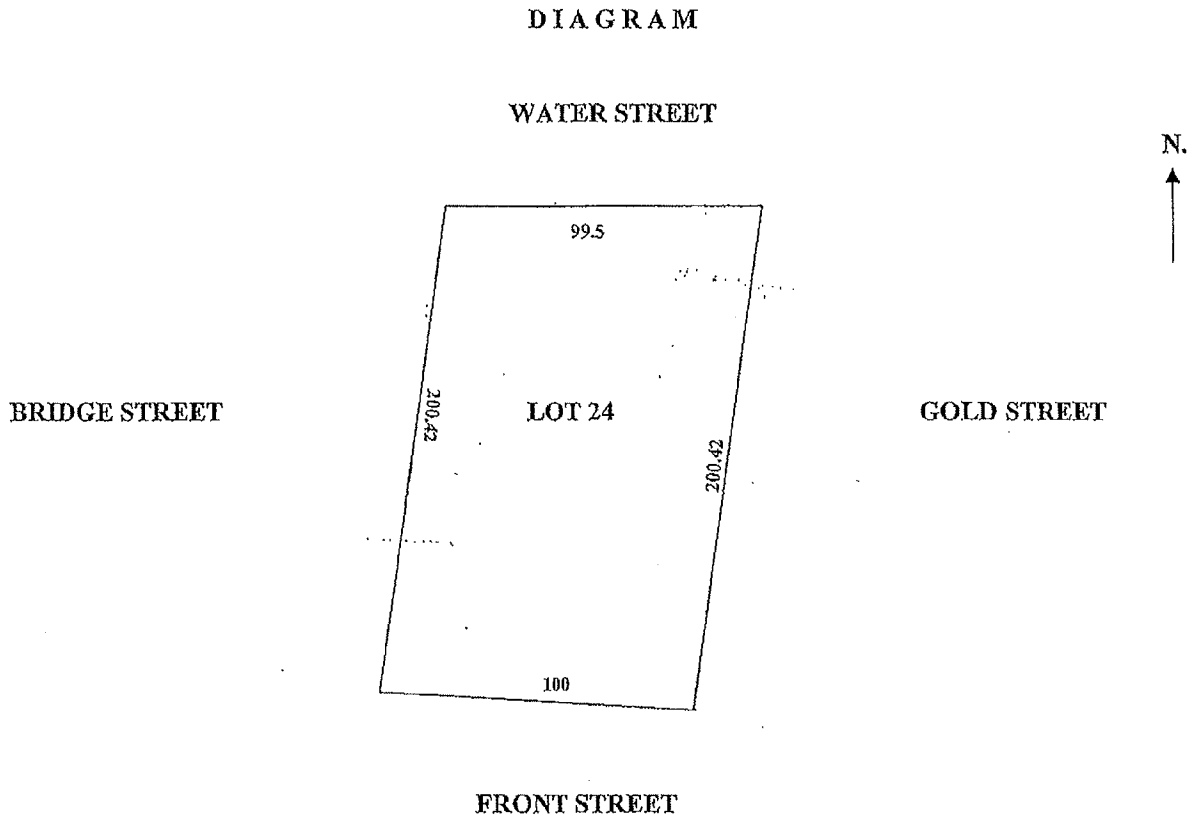
RUNNING THENCE Northwesterly along Gold Street, 200 feet to Water Street;

THENCE Westwardly along Water Street, 100 feet;

THENCE Southwardly along a line drawn parallel to Gold Street, 200 feet to Front Street; and

THENCE Easterly along Front Street, 100 feet to the point or place of BEGINNING.

That the said premises are known as and by the street address 68 Gold Street, Brooklyn, NY; Block 42 Lot 24, as shown by the following:



NOTE: A Zoning Lot may or may not coincide with a lot shown of the Official Tax Map of the City of New York, or on any recorded subdivision plot or deed. A Zoning Lot may be subdivided into two or more zoning lots, provided all the resulting Zoning Lots and all the buildings thereon shall comply with the applicable provisions of the Zoning Lot Resolution.

THIS CERTIFICATE IS MADE FOR AND ACCEPTED BY THE APPLICANT UPON THE EXPRESS UNDERSTANDING THAT LIABILITY HEREBUNDER IS LIMITED TO ONE THOUSAND (\$1,000.00) DOLLARS.

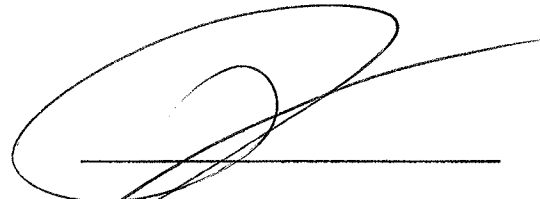
Certified 10/7/15

ROYAL ABSTRACT OF NEW YORK LLC

Exhibit C

BCB Community Bank, being a "Party In Interest" as defined in Section 12-10 ("Zoning Lot" subdivision (c)) of the Zoning Resolution of the City of New York, effective December 15, 1961, as amended, with respect to the land known as Tax Lot 24 in Block 42 on the Tax Map of the City of New York, Kings County and more particularly described in Schedule A attached hereto, hereby waives its right to execute a declaration dated _____, 20____ made by 251 Front Street Realty, Inc., regarding archaeological testing and remediation on such land.

IN WITNESS WHEREOF, the undersigned has executed this waiver this 16th day of November 2015

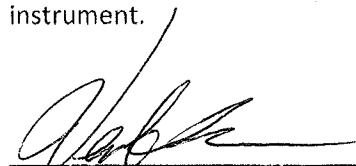


John J. Brogan - General Counsel
BCB Community Bank

ACKNOWLEDGMENT

State of New ~~York~~ Jersey
County of Hudson

On the 16th day of November in the year 2015 before me, the undersigned, a notary public in and for said state, personally appeared John J. Brogan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.



Notary Public

VENITA HERBERT
NOTARY PUBLIC OF NEW JERSEY
Commission Expires 12/18/2018



ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 16DCP002K

Project:

Address: 251 FRONT STREET, **BBL:** 3000420024

Date Received: 7/7/2015

No architectural significance

No archaeological significance

in radius Designated New York City Landmark or Within Designated Historic District

in radius Listed on National Register of Historic Places

Appears to be eligible for National Register Listing and/or New York City Landmark Designation

May be archaeologically significant; requesting additional materials

Comments:

The project site is directly adjacent to the LPC designated and S/NR eligible Vinegar Hill HD. Area II. A construction protection plan as per the CEQR Technical Manual:2014 is required and should be submitted to LPC for review and comment.

The LPC and S/NR DUMBO HD is within the radius. No adverse impacts to DUMBO are anticipated as a result of this project.

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2014).

Gina Santucci

7/9/2015

SIGNATURE

Gina Santucci, Environmental Review Coordinator

DATE

File Name: 30634_FSO_DNP_07092015.doc

Appendix 4

REVISED PROJECT DESCRIPTION AND TECHNICAL ANALYSES

REVISED PROJECT DESCRIPTION AND TECHNICAL ANALYSES

INTRODUCTION

The original 251 Front Street Rezoning EAS, dated December 9, 2016, and prepared in connection with the original ULURP application certified on December 12, 2016, described and analyzed a proposal to rezone the project site from R6B to R7A and to designate it as a Mandatory Inclusionary Housing (MIH) area. The proposed actions would have facilitated the redevelopment of the site, now a parking lot, with a residential apartment building complying with the bulk regulations applicable to an R7A district within an MIH area.

The proposal has since been revised, and the Applicant is now seeking a rezoning from R6B to R6A and the designation of the project site as an MIH area. This appendix describes the current proposed actions and the project that those actions would facilitate and analyzes the environmental implications of the revised actions. The appendix addresses all of the technical areas analyzed in the 2016 EAS and determines whether the conclusions reached in that EAS remain valid for the current proposed actions.

PART I: REVISED PROJECT DESCRIPTION

PROPOSED ACTIONS

The Applicant, 251 Front Street Realty, Inc., is seeking a zoning map amendment to sectional map 12d to rezone Brooklyn Block 42, Lot 24 (“the project site”) from R6B to R6A and a zoning text amendment to designate the proposed rezoning area a Mandatory Inclusionary Housing (MIH) area in connection with a proposal to construct a residential building with up to 87,121 gross square feet (gsf) and 72 dwelling units, of which 18 would be affordable to households with incomes averaging 60 percent of the Area Median Income (AMI). The affected area is a portion of a block located within the Vinegar Hill neighborhood of Brooklyn’s Community District 2. The block is bounded by Water Street on the north, Gold Street on the east, Front Street on the south, and Bridge Street on the west.

The proposed zoning map amendment would rezone the project site, the easternmost portion of Block 42 fronting Water, Gold and Front Streets, from R6B to R6A. It would extend an existing R6A district northward across Front Street to include the project site. Under the existing R6B contextual district, the project site can be developed to a maximum permitted residential floor area ratio (FAR) of 2.00. The proposed R6A contextual district coterminous with an MIH area would increase the maximum permitted residential FAR to 3.60. Zoning comparisons between the two districts are further discussed below.

As part of the city’s MIH program, land actions involving the creation of new housing in medium- and high-density districts are required to provide a percentage of their total number of dwelling units as income-restricted. Since the Applicant is proposing a zoning map amendment that would permit greater residential FAR on the project site, the proposed rezoning area is subject to the requirements of MIH. The Applicant is therefore also proposing a zoning text amendment to Appendix F of the Zoning Resolution of the City of New York, to designate the project site as an MIH area, subject to the requirement of Option 1 of the MIH program. Consequently, the applicant would be required to build at least 25 percent of the residential floor area for residents with incomes averaging 60 percent AMI, with no unit targeted at a level exceeding 130 percent AMI. As inclusionary housing would be developed on the project site, the development is granted a permitted residential FAR of 3.60.

SURROUNDING AREA

The project site is located within the Vinegar Hill neighborhood of Brooklyn Community District 2. The area is within the coastal zone boundary, and has historically been occupied with industrial, manufacturing and transportation uses. The area continues to be predominantly industrial and manufacturing, with multifamily residential development and mixed residential and commercial uses.

The surrounding area contains two historic districts: the Vinegar Hill Historic District and the DUMBO Historic District, which the New York City Landmarks Preservation Commission (LPC) adopted in 1997 and 2007 respectively. In 1998, shortly after the Vinegar Hill Historic District was established, the New York City City Planning Commission adopted the Vinegar Hill rezoning, which included the subject block. The action rezoned several industrial M1-2 and M3-1 districts to R6A and R6B residential districts. This rezoning brought the large residential land use presence in the area into conformity with the zoning, promoted future contextual residential development

on the numerous vacant parcels and reinforced the historical character of the neighborhood. Where the manufacturing zones actually covered industrial uses, the zones were retained in order to preserve such uses.

In 2009 the New York City Department of City Planning proposed zoning map and text amendments to rezone the nearby DUMBO Historic District from M1-2 and M3-1 to M1-4/R7A and M1-4/R8A, and expand the boundaries of the Special Mixed-Use District (MX-2, Fulton Ferry). The purposes were to preserve the mixed use character of the neighborhood, to allow for residential conversion of existing underutilized loft buildings, and to promote new construction at densities consistent with the built character of the area. Although the area covered by the 2009 DUMBO Rezoning extended west beyond the DUMBO Historic District boundaries and onto the subject block, the project site remained outside of both boundaries. Details of the surrounding land use, zoning and historic districts are discussed in the following chapters.

REZONING AREA AND PROJECT SITE

The proposed rezoning area is coterminous with the project site, a 100 foot by 200 foot rectangular parcel located on the eastern end of Block 42 along Gold Street, between Water and Front Streets. The project site, currently within an R6B zoning district, is approximately 19,991 square feet in land area, and is occupied by a surface parking lot. The project site is directly adjacent to Area I and across the street from Area II of the Vinegar Hill Historic District.

PURPOSE AND NEED

Approval of the proposed action would result in the redevelopment of the project site at a greater residential density than would be permitted under the existing R6B zoning. It would also mandate the inclusion of a permanently affordable housing component through the Zoning Resolution's MIH provisions. It would thus facilitate the development of an increased number of both market rate and affordable housing units, both of which are recognized citywide needs. Specifically, it would facilitate the proposed project.

ZONING COMPARISON

The existing R6B district and the proposed R6A district have identical use and accessory off-street parking regulations. Both permit only residential and community facility uses listed in Use Groups 1, 2, 3, and 4. Both require that the number of accessory off-street parking spaces provided for residential development equal 50 percent of the number of residential units (or 50 percent of the market rate units in the case of an inclusionary housing development in a Transit Zone).

The two districts differ, however, in terms of bulk regulations. The R6A district is a higher density district than R6B, allowing greater floor area and building height. The maximum permitted FAR under R6B is 2.00 for either residential or community facility development (except in an Inclusionary Housing designated area or an MIH area, in which the project site is not now located). Under R6A the maximum permitted community facility FAR is 3.00, and the maximum permitted residential FAR is ordinarily also 3.00. In MIH areas, however, the maximum is 3.60, and a percentage of the residential floor area must be occupied by affordable housing, in satisfaction of one of the MIH program options. Since the rezoning area would be within an MIH area subject to Option 1 of the MIH program, the maximum permitted residential FAR would be 3.60, and at least 25 percent of the residential floor area would be in affordable units reserved for households with incomes averaging 60 percent of AMI.

Because the proposed project is residential, the bulk and parking regulations for residential development are pertinent, and these are shown in Table 1. Since both R6B and R6A are contextual districts, the regulations establish both maximum base (street wall) heights, at which a setback from the front lot line is required, and maximum building heights. The maximum street wall height is 40 feet under R6B and 65 feet under R6A, and the maximum building height is 50 feet under R6B and 85 feet under R6A. The R6B district can thus accommodate buildings of up to five stories, and the R6A district can accommodate buildings of up to eight stories. Lot coverage and yard regulations are the same for the two districts.

Table 1
Zoning Comparison Chart for Residential Development

Zoning Requirements	Permitted/Required			
	Existing R6B		Proposed R6A in an MIH Area	
	Zoning Section(s)	Maximum or Minimum	Zoning Section(s)	Maximum or Minimum
FAR				
Residential FAR	23-145	2.00	23-154	3.60
Inclusionary Housing	N/A	N/A	23-154	25% of floor area
YARDS				
Front Yard	23-45	None	23-45	None Required
Side Yard	23-46	None or 8'	23-46	None or 8'
Rear Yard	23-47	30'	23-47	30'
HEIGHT AND SETBACKS				
Maximum Height of Front Wall	23-633	40'	23-664	65'
Maximum Building Height	23-633	50'	23-664	85'
Sky Exp Plane	N/A	N/A	N/A	N/A
Setbacks from Narrow Streets	23-633	15'	23-633	15'
Setbacks from Wide Streets	23-633	10'	23-633	10'
Open Space	N/A	N/A	N/A	N/A
Lot Coverage	23-145	65%/80%	23-145	65%/80%
DENSITY REGULATIONS	23-22	680 DU	23-22	680 DU
PARKING	25-20	50% of DUs	25-20	50% of market rate DUs

ANALYSIS FRAMEWORK

Existing Conditions

As stated above, the project site, Lot 24, is now a parking lot. It is an almost rectangular lot with approximately 100 feet of frontage along Front and Water Streets and approximately 200 feet of frontage along Gold Street, and with a lot area of 19,991 square feet. (It is not exactly rectangular because at this location the intersecting streets are not precisely perpendicular.)

The Future without the Proposed Actions

Absent the proposed actions, a new building would be constructed in accordance with the R6B bulk regulations. It would have an FAR of 2.00, which for the 19,991 square foot site translates to 39,982 square feet of zoning floor area, and a height of five stories. Assuming that the zoning floor area would equal 97 percent of total above grade floor area, with a 3 percent allowance for mechanical space, the building would contain 41,219 gsf of above grade space. Assuming an average of approximately 1,000 gross square feet per apartment, the building would contain 41 dwelling units, and 21 parking spaces would be provided in the garage. The building would also contain a cellar with the same area as the above grade floors, or approximately 8,244 square feet, most of which would be occupied by an accessory parking garage. The building would contain a total of 49,463 gsf.

The Future with the Proposed Actions

In the future with the proposed actions, the project site would be redeveloped with a residential apartment building in accordance with the R6A bulk regulations applicable to an MIH area. With an FAR of 3.60, the building would contain 71,968 square feet of zoning floor area, or 74,127 gsf of above grade floor area.¹ Assuming an average of approximately 1,000 gsf per apartment, the building would contain 72 dwelling units, of which 75 percent (54) would be market rate and 25 percent (18) would be affordable to households with annual incomes averaging 60 percent of AMI and in no case exceeding 130 percent of AMI. The building would contain a 27-space unattended accessory parking garage. The building would be built to the front lot lines, with street walls rising six stories, or 65 feet. The building would have two additional stories, rising to a height of 85 feet, but the upper two stories would set back 15 feet from the front lot lines. The building would have a mechanical penthouse that would occupy a small portion of the roof, rising approximately ten feet above the roof height, and smaller, lower rooftop stair and elevator bulkheads. The building would occupy 65 percent of the lot, or 12,994 square feet, with the open area in an interior courtyard that would not be visible from the street. Including a 12,994 square foot cellar containing the accessory parking garage, the building would contain a total of 87,121 gsf.

Basis for Technical Analyses

The environmental assessments in Part II of this appendix are based on the difference between the future no-action scenario and the future with-action scenario under the revised rezoning proposal. Although the project site would be redeveloped whether or not the project site is rezoned, a larger building would be constructed under the with-action scenario. Table 2 presents the existing and assumed future no-action and with-action conditions for the proposed rezoning area, as well as the increments between the two scenarios. As the table shows, the proposed

¹ The Land Use Application rounds the zoning floor area to 72,000 square feet.

actions would result in the development of an additional 31 dwelling units and an additional 37,658 sf of gross floor area (32,908 gsf of residential space and 4,750 gsf of garage space).

REQUIRED APPROVALS

The proposed project would require an amendment to zoning sectional map 12d, to map an R6A district and to reduce an R6B district. It would also require a zoning text amendment to change Map 4 in Appendix F to designate a new MIH area. These actions would be subject to the Uniform Land Use Review Procedure (ULURP).

BUILD YEAR

Considering the time required for the environmental review and land use approval process, and assuming a construction period of approximately 18 months, it is estimated that the project would be completed in 2019. This is the assumed "build year," which is used throughout this EAS for all future conditions, and which is the analysis year for the purpose of all assessments.

Table 2
Existing, No-Action, and With-Action Conditions and Action-Induced Increment
(Under the Current Proposal)

	EXISTING CONDITION	NO-ACTION CONDITION	WITH- ACTION CONDITION	INCREMENT
LAND USE				
Residential	NO	YES	YES	
If “yes,” specify the following:				
Describe type of residential structures		apartment building	apartment building	
No. of dwelling units		41	72	+31
No. of low- to moderate-income units		0	18	+18
Gross floor area (sq. ft.)		41,219	74,127	+32,908
Commercial	NO	NO	NO	
If “yes,” specify the following:				
Describe type (retail, office, other)				
Gross floor area (sq. ft.)				
Manufacturing/Industrial	NO	NO	NO	
If “yes,” specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify:				
Community Facility	NO	NO	NO	
If “yes,” specify the following:				
Type				
Gross floor area (sq. ft.)				
Vacant Land	NO	NO	NO	
If “yes,” describe:				
Other Land Uses	YES	YES	YES	
If “yes,” describe:	Commercial parking (no floor area)	Accessory parking (8,244 sf)	Accessory parking (12,994 sf)	+4,750 sf of accessory parking
PARKING				
Garages	NO	YES	YES	
If “yes,” specify the following:				
No. of public spaces	0	0	0	
No. of accessory spaces	0	21	27	+6
Lots	YES	NO	NO	
If “yes,” specify the following:				
No. of public spaces	60			
No. of accessory spaces	0			

PART II: TECHNICAL ANALYSES

4. LAND USE, ZONING, AND PUBLIC POLICY

Study Area

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

Because of the modest size of the proposed project, the land use, zoning, and public policy assessment for the proposed action considers a study area extending 400 feet around the proposed rezoning area. The study area boundaries are approximately coincident with John Street to the north, Hudson Street to the east, York Street to the south, and Bridge Street to the west.

Land Use

Existing Conditions

The 400-foot radius study area includes all or portions of eight tax blocks, as shown in the land use map and further described below.

The proposed rezoning area consists of a single lot at the eastern end of Brooklyn Block 42, which is bounded by Water, Gold, Front, and Bridge Streets. That lot is the project site, Lot 24, with frontage on Water, Gold, and Front Streets. It is now used as a commercial parking lot, and there are no permanent structures on the lot.

Regarding the remainder of Block 42, starting with the properties fronting on Water Street, Lot 18, which is adjacent to the project site, is occupied by a five-story, 26-unit apartment building that was completed in 2004. The next lot to the west, Lot 16, is currently vacant. To its west is Lot 11, a through lot extending from Water Street to Front Street. Two attached six-story early twentieth century industrial buildings occupy the lot; both have recently been converted to office use. The lot fronting on Bridge Street at the western end of the block (Lot 1) is occupied by a 12-story early twentieth century industrial building. In 2008 the owner applied to the Department of Buildings to convert the building to office use, but a permit was not issued, and a stop-work order was issued, which remains in effect. The building is now apparently vacant. With the exception of the former paint factory and one vacant lot, the midblock along Front Street (Lots 35 through 41, 43, and 46) is entirely residential, with seven buildings that date to the mid nineteenth century. Six of the buildings are row houses with three full stories and a basement, and the seventh is a three-story former fire house that has been converted to residential use.

The block to the immediate north of the proposed rezoning area (Block 32, bounded by Plymouth, Gold, Water, and Bridge Streets) is entirely light industrial except at its western end along Bridge Street, as is described below. Directly across Water Street from the project site is a two-story bakery, and the other industrial buildings range from one to five stories. A seven-story residential building with 25 dwelling units was completed at the northeast corner of Water and Bridge

Streets in 2016, on what had previously been a vacant lot. A seven-story residential building with ground floor commercial space occupies the southeast corner of Bridge and Plymouth Streets.

A Con Edison facility, the Farragut Substation, occupies three contiguous blocks in the northeastern part of the study area: Blocks 21 and 22, bounded by John, Hudson, Plymouth, and Bridge Streets, and Block 33, bounded by Plymouth, Hudson, Water, and Bridge Streets. The only other uses on these blocks are an auto repair shop at the northeast corner of Bridge and Plymouth Streets and a ten-story self storage facility on John Street midway between Gold and Hudson Streets.

Land uses are more mixed in the rest of the study area. On Block 43, bounded by Water, Hudson, Front, and Gold Streets, a row of low-rise nineteenth century residential buildings occupies most of the Gold Street frontage, directly across the street from the project site. Another cluster of low-rise nineteenth century residential buildings is located near the corner of Water and Hudson Streets. The midblock along Water Street contains a one-story parking garage and an auto repair shop, which flank a vacant lot owned by Con Edison that extends through the middle of the block to Front Street. The remainder of the Front Street side of the block contains a one-story light industrial building, an adjacent lot at the corner of Gold Street used for surface parking and open storage, and a seven-story industrial building that extends to the Hudson Street frontage.

Continuing clockwise through the study area, Block 56, bounded by Front, Hudson, York, and Gold Street, contains only four properties. Two seven-story residential buildings and a two-story building with dwelling units over commercial space occupy the Gold Street frontage, and an elementary school occupies the remainder of the block.

A small Buddhist center is located across Front Street from the project site, at the southwest corner of Front and Gold Streets on Block 55, which is bounded by Front, Gold, York, and Bridge Streets. To its west along Front Street, extending to Bridge Street, are a one-story light industrial building, then a seven-story industrial building, then four two- and three-story buildings that are all either residential or residential above commercial space. A one-story industrial building occupies the Gold Street midblock, and a three-story halfway house occupies the corner of Gold and York Streets. A mix of one-story commercial buildings, one-story industrial buildings, and two- and six-story buildings with dwelling units above commercial space occupies the remainder of the York Street frontage. Two- and six-story buildings with dwellings above commercial space and a one-story industrial building occupy the Bridge Street midblock.

Future Conditions without the Proposed Actions

Whether or not the proposed actions are taken, the Applicant intends to redevelop the project site with a residential apartment building containing an accessory parking garage. In the absence of the proposed actions, the new building would be constructed in accordance with the R6B bulk regulations. It would have an FAR of 2.00, which for the 19,991 square foot site translates to 39,982 square feet of zoning floor area, and a height of five stories. Assuming that the zoning floor area would equal 97 percent of total above grade floor area, with a 3 percent allowance for mechanical space, the building would contain 41,219 gsf of above grade space. Assuming an average of approximately 1,000 gross square feet per apartment, the building would contain 41 dwelling units, and 21 parking spaces would be provided in the garage. The building would also contain a cellar with the same area as the above grade floors, or approximately 8,244 square feet, most of

which would be occupied by an accessory parking garage. The building would contain a total of 49,463 gsf.

Within the rest of the study area, there is a proposal to rezone the northeast corner of Gold and Front Streets, now occupied by surface parking and open storage, to facilitate construction of a six-story mixed-use building with nine residential units above ground floor commercial space.

Future Conditions with the Proposed Actions

In the future with the proposed actions, the project site would be redeveloped with a residential apartment building in accordance with the R6A bulk regulations applicable to an MIH area. With an FAR of 3.60, the building would contain 71,968 square feet of zoning floor area, or 74,127 gsf of above grade floor area.² Assuming an average of approximately 1,000 gsf per apartment, the building would contain 72 dwelling units, of which 75 percent (54) would be market rate and 25 percent (18) would be affordable to households with annual incomes averaging 60 percent of AMI and in no case exceeding 130 percent of AMI. The building would contain a 27-space unattended accessory parking garage. The building would be built to the front lot lines, with street walls rising six stories, or 65 feet. The building would have two additional stories, rising to a height of 85 feet, but the upper two stories would set back 15 feet from the front lot lines. The building would have a mechanical penthouse that would occupy a small portion of the roof, rising approximately ten feet above the roof height, and smaller, lower rooftop stair and elevator bulkheads. The building would occupy 65 percent of the lot, or 12,994 square feet, with the open area in an interior courtyard that would not be visible from the street. Including a 12,994 square foot cellar containing the accessory parking garage, the building would contain a total of 87,121 gsf.

The increment between future no-action and with-action conditions is summarized in Table 4-1. As the table shows, the proposed action would result in the development of an additional 31 dwelling units and an additional 37,658 sf of gross floor area (32,908 gsf of residential space and 4,750 gsf of garage space).

**Table 4-1
Increment between the With-Action and No-Action Conditions**

New Development	No-Action Scenario	With-Action Scenario	Increment
Residential floor area (gsf)	41,219	74,127	32,908
Cellar floor area (accessory parking)	8,244	12,994	4,750
Total floor area (gsf)	49,463	87,121	37,658
Market rate housing units	41	54	13
Affordable housing units	0	18	18
Total housing units	41	72	31
Accessory parking spaces	21	27	6

Residential development on the site would be consistent with existing land use patterns. The site abuts a residential apartment building on Water Street that was constructed in 2004 and a much

² The Land Use Application rounds the zoning floor area to 72,000 square feet.

older residential building on Front Street. Considering the large number of residential units within the study area, the increment of an additional 31 dwelling units would not be large enough to have a substantial effect on land use patterns. The development is consistent with recent trends in the surrounding area, including the conversion of large industrial buildings to residential use, and nearby a new residential development of similar height was recently constructed at the northeast corner of Water and Bridge Streets. The proposed action would therefore not have a significant adverse impact on land use.

Zoning

Existing Conditions

The proposed rezoning area is currently zoned R6B, a medium density residential district that permits residential and community facility uses. The maximum permitted floor area ratio (FAR) under R6B is 2.00 for either residential or community facility development. Since R6B is a contextual district, the regulations establish both a maximum base (street wall) height, at which a setback from the front lot line is required, and a maximum building height. The maximum street wall height is 45 feet, and the maximum building height is 55 feet. (Without a qualifying ground floor, the maximums are 40 feet and 50 feet.) The R6B district can accommodate buildings of up to five stories in height. A 30-foot-deep rear yard is required, and front and side yards are not required. The zoning district covers all of Block 42 except for the western end along Bridge Street, which is zoned MX(M1-4/R7A), and the district extends eastward to cover the south side of Water Street between Gold and Hudson Streets, as well as the east side of Hudson Street between Water and Plymouth Streets.

The MX-2 DUMBO Special Mixed Use District, designated in 2009, abuts the R6B district on the west, covering the Bridge Street frontage of Block 42 as well as that of Block 32 to the north, and extends westward beyond the study area's western boundary. It was intended to protect existing industrial uses while allowing residential conversions and new development. Because the special district was designated as an Inclusionary Housing area, it was also intended to encourage the creation of affordable housing.

The portion of the special district within the study area is an MX(M1-4/R7A) district. The district permits residential and community facility uses, a range of commercial uses, and light industrial uses. Under R7A the maximum permitted community facility FAR is 4.00, and the maximum permitted residential FAR is ordinarily also 4.00. In Inclusionary Housing designated areas, however, the base residential FAR is 3.45, if no affordable housing is included, and the maximum is 4.60, if 20 percent of the residential floor area is occupied by affordable housing, as defined in the Inclusionary Housing Program provisions. Since the MX-2 district is an Inclusionary Housing designated area, the latter bulk regulations apply. Under M1-4 the maximum permitted commercial and manufacturing FAR is 2.00. For community facility development, the maximum permitted base (street wall) height is 65 feet, and the maximum permitted building height is 80 feet. For a residential building or a mixed use building that combines residential use with either community facility or commercial use, the maximums are also 65 feet and 80 feet if it does not include affordable housing or qualifying ground floor, 75 feet and 90 feet if it satisfies the provisions of the Inclusionary Housing program but does not include a qualifying ground floor, 75 feet and 85 feet if it includes a qualifying ground floor but not affordable housing, or 75 feet and 95 feet if it satisfies the provisions of the Inclusionary Housing program and includes a qualifying ground floor. For commercial or manufacturing development, the maximum street

wall height is 60 feet, and a sky exposure plane sloping upwards and rearwards from a height of 60 feet above the street line controls additional building height. As in the case of the R6B district, a rear yard is required, but front and side yards are not.

An M1-2 light industrial district covers the north side of Water Street between the MX district along Bridge Street and the R6B district along Hudson Street. It permits commercial, light industrial, and some community facility uses but not residential use. The bulk regulations are the same as for the M1-4 district.

East of Bridge Street and extending beyond Hudson Street, an M3-1 heavy manufacturing district is mapped to the north of the MX(M1-4/R7A), M1-2, and R6B districts. It differs from M1 districts in that it permits heavy manufacturing uses listed in Use Group 18, permits open storage and other activities, and does not permit community facility uses. The bulk regulations are the same as for M1-2 and M1-4 districts.

Finally, the blocks bounded by Front, Hudson, York, and Bridge Streets are zoned R6A. This is a contextual residential district that permits up to 3.00 FAR for both residential and community facility uses. Commercial overlays are mapped along the Bridge Street and York Street frontages of these blocks, permitting ground floor commercial uses in otherwise residential or community facility buildings, as well as freestanding commercial buildings of up to two stories.

Future Conditions without the Proposed Actions

In the future without the proposed actions, the project site would continue to be zoned R6B. Although a private applicant has proposed to rezone the northeast corner of Gold and Front Streets from M1-2 to R6A/C2-4 by expanding the existing R6A district to the south of Front Street and mapping a C2-4 commercial overlay on the new portion of the R6A district, that proposal has not been approved, and no other zoning map changes are anticipated in the study area in the future without the proposed action.

Future Conditions with the Proposed Actions

The proposed actions would rezone the project site by amending the zoning map to extend the existing R6A district to the south of Front Street northward to Water Street to cover the eastern end of Block 42, to a depth of 100 feet from the Gold Street frontage. The proposed actions would also include a zoning text amendment to change Appendix F to designate a Mandatory Inclusionary Housing area in which Option 1 would apply, which would be coterminous with the new portion of the R6A district. At least one-quarter of the zoning floor area in a new residential development would have to be associated with housing units designated as affordable (that is, reserved for sale or rental to households with incomes averaging no greater than 60 percent of AMI and in no case greater than 130 percent of AMI). Residential development would have an FAR of up to 3.60 and a height of up to eight stories (85 feet). The differences between the R6B and R6A bulk and accessory off-street parking regulations are summarized in Table 4-2.

The proposed actions would not introduce new zoning classifications but would instead extend a contiguous R6A district to include the project site. As is explained under Land Use above, the greater bulk permitted by the revised zoning would not be inappropriate at this location. The change would not cause any existing uses or structures to be nonconforming or noncomplying. The proposed actions would not have a significant adverse impact related to zoning.

**Table 4-2
Zoning Comparison Chart for Residential Development**

	Permitted/Required			
	Existing R6B		Proposed R6A in an MIH Area	
Zoning Requirements	Zoning Section(s)	Maximum or Minimum	Zoning Section(s)	Maximum or Minimum
FAR				
Residential FAR	23-145	2.00	23-154	3.60
Inclusionary Housing	N/A	N/A	23-154	25% of floor area
YARDS				
Front Yard	23-45	None	23-45	None Required
Side Yard	23-46	None or 8'	23-46	None or 8'
Rear Yard	23-47	30'	23-47	30'
HEIGHT AND SETBACKS				
Maximum Height of Front Wall	23-633	40'	23-664	65'
Maximum Building Height	23-633	50'	23-664	85'
Sky Exp Plane	N/A	N/A	N/A	N/A
Setbacks from Narrow Streets	23-633	15'	23-633	15'
Setbacks from Wide Streets	23-633	10'	23-633	10'
Open Space	N/A	N/A	N/A	N/A
Lot Coverage	23-145	65%/80%*	23-145	65%/80%*
DENSITY REGULATIONS	23-22	680 DU	23-22	680 DU
PARKING	25-20	50% of DU	25-20	50% of market rate DU

* Maximum lot coverage is 80% for the corner lot portion and 65% for the interior or through lot portion.

Public Policy

Mandatory Inclusionary Housing

As part of the proposed actions, the project site would be designated a Mandatory Inclusionary Housing (MIH) area. City policy is that any new residential development within such an area should include units that will be permanently affordable to lower income households, as part of an effort to ensure an adequate citywide inventory of housing that is affordable to a range of income levels and to ensure socioeconomic diversity within particular neighborhoods. Specifically, the requirement within this newly designated MIH area would be that at least 25 percent of residential floor area in any development must be associated with units that will be sold or rented exclusively to households with incomes averaging no greater than 60 percent of AMI, and in no case greater than 130 percent of AMI, at prices or rents that have been determined

by the New York City Department of Housing Preservation and Development to be affordable to such households.

The proposed actions would legally mandate that the proposed project comply with the pertinent MIH program requirements. The development would contain 72 dwelling units, of which 75 percent (54) would be market rate and 25 percent (18) would be affordable to households with annual incomes averaging 60 percent of AMI. The proposed actions would be consistent with MIH policy.

Waterfront Revitalization Program

A public policy consideration pertinent to the proposed actions is their consistency with the Waterfront Revitalization Program (WRP) policies. The proposed rezoning area is within the Coastal Zone, but it is actually several blocks inland, without waterfront access or even waterfront views, so only two of the ten WRP policies are relevant to the proposed action.

Is the project site appropriate for residential or commercial redevelopment? (Policy 1.1)

The proposed rezoning area is not within a Special Natural Waterfront Area or Significant Maritime and Industrial Area, and it is in a well developed area devoid of natural features. The project site is currently underutilized. The rezoning area is proximate to numerous residential and commercial uses and in an area where public facilities and infrastructure are adequate. The proposed action is therefore consistent with Policy 1.1.

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? (Policy 10)

The LPC staff has determined that the project site is archaeologically sensitive (that is, there is a reasonable likelihood, based on the sites' location and characteristics, that it contains subsurface archaeological resources). The Applicant has therefore entered into a Restrictive Declaration, which requires that prescribed archaeological work be conducted in accordance with the *CEQR Technical Manual* and LPC Guidelines for Archaeological Work in New York City. The Restrictive Declaration is binding upon the property's successors and assigns. The declaration serves as a mechanism to assure the archaeological testing be conducted and that any necessary mitigation measures be undertaken prior to any site disturbance (i.e., site grading, excavation, demolition, or building construction). The Restrictive Declaration was prepared in a form acceptable to the LPC, and it was executed on March 7, 2017, and recorded with the New York City Department of Finance, Office of the City Register, on March 8, 2017. Consequently, no significant adverse impacts related to archaeological resources are expected.

The proposed rezoning area itself does not contain any architectural resources. It is, however, adjacent to part of the Vinegar Hill Historic District. The Vinegar Hill Historic District consists of small clusters of intact mid nineteenth century low-rise buildings set amidst later, more divergent, and often larger scale development, rather than a single, larger collection of historic buildings that define the scale and other urban design characteristics of a neighborhood. The immediate visual context of Area I already includes buildings as tall as 12 stories. Neighbors of the district's three areas include factory buildings, warehouses, and an auto repair shop. The new

development resulting from the proposed action would not have a significant adverse impact on the integrity and visual setting of the historic buildings.

In summary, the proposed actions would be consistent with all applicable WRP policies, and a significant adverse impact regarding public policy is not anticipated.

8. SHADOWS

Tier 1 Assessment

Shadow lengths vary by time of day, being longest in the early morning and late afternoon and shortest at noon, and by time of year, being longest at the winter solstice and shortest at the summer solstice. According to the *CEQR Technical Manual*, the longest shadow cast by a building is 4.3 times the building's height. The proposed development would have a rooftop height of 85 feet, with small rooftop penthouses rising to 95 feet. The longest shadow cast by the proposed project would therefore be 408.5 feet in length.

The Tier 1 Screening Assessment diagram shows the area within a 408.5-foot radius of the project site. The area does not contain any public open spaces or natural resources. It does contain historic buildings within Areas I, II, and III of the Vinegar Hill Historic District (Greek Revival row houses from the 1840s and 1850s) and buildings at the eastern edge of the larger DUMBO Historic District (industrial loft buildings that have been converted to residential use), but these buildings (discussed more extensively under Historic and Cultural Resources) do not satisfy the criteria listed above and are therefore not considered sunlight sensitive.

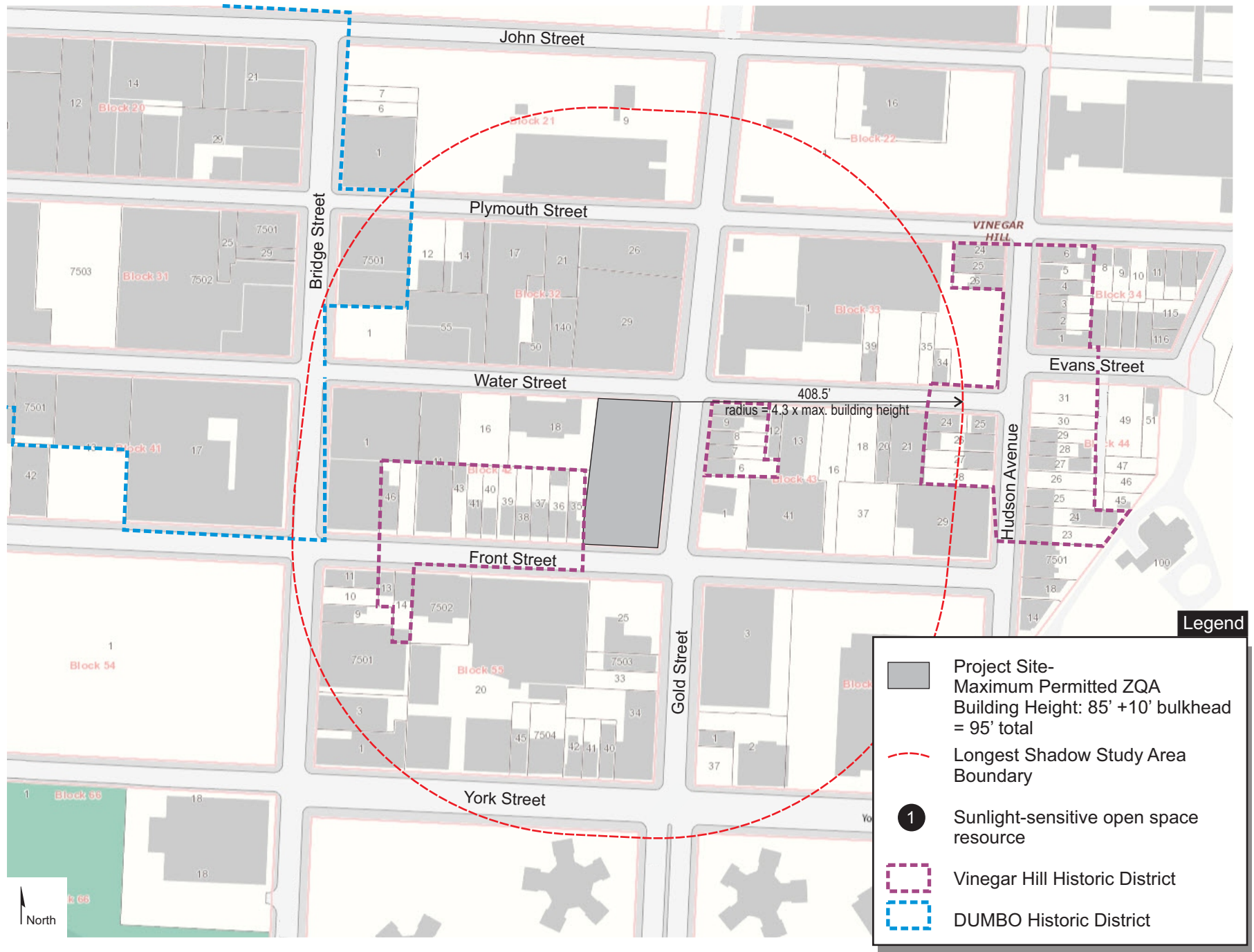
The proposed action would therefore not result in any new buildings that would be close enough to a sunlight-sensitive resource of concern to cast a shadow on it. The proposed actions would not result in a significant adverse shadow impact.

9. HISTORIC AND CULTURAL RESOURCES

Archaeological Resources

The LPC staff has determined that the project site is archaeologically sensitive (that is, there is a reasonable likelihood, based on the sites' location and characteristics, that it contains subsurface archaeological resources). Correspondence from LPC staff dated July 7, 2015, stated, "LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see *CEQR Technical Manual* 2014)."

The Applicant has therefore entered into a Restrictive Declaration, which requires that prescribed archaeological work be conducted in accordance with the *CEQR Technical Manual* and LPC Guidelines for Archaeological Work in New York City. The Restrictive Declaration is binding upon the property's successors and assigns. The declaration serves as a mechanism to assure the archaeological testing be conducted and that any necessary mitigation measures be undertaken prior to any site disturbance (i.e., site grading, excavation, demolition, or building construction). The Restrictive Declaration was prepared in a form acceptable to the LPC, and it was executed on March 7, 2017, and recorded with the New York City Department of Finance, Office of the City



Register, on March 8, 2017. Consequently, no significant adverse impacts related to archaeological resources are expected.

Architectural Resources

The project site is now a surface parking lot and so does not contain architectural resources. It is nevertheless an architecturally sensitive location because it abuts a building within Area I of the Vinegar Hill Historic District and is located directly across Gold Street from Area II of the Historic District. (See the attached Vinegar Hill Historic District map and photos.) Area I includes the buildings from 225 to 249 Front Street, located on the north side of the street on part of the block between Gold and Bridge Streets, as well as two buildings on the opposite side of Front Street. Area II includes a cluster of buildings on the east side of Gold Street between Water and Front Streets, extending from 69 to 77 Gold Street.

According to the designation report prepared for the Historic District, “The Vinegar Hill Historic District, which is comprised of three separate small groups of brick, Greek-Revival row houses, is a residential remnant of the early nineteenth-century neighborhood that occupied the blocks between the Brooklyn Bridge and the Brooklyn Navy Yard. By the late nineteenth century, the large number of Irish residents had given the neighborhood the popular name ‘Irishtown,’ although other ethnic groups also lived in the area. Industrial expansion and transportation improvements in the early twentieth century resulted in the demolition of many of the original structures. The groups of houses that survive within the Vinegar Hill Historic District retain their historic architectural character and create a distinct sense of place, recalling a significant era in Brooklyn's history.”

Nine buildings on the north side of Front Street are within Area I of the Historic District. The westernmost is a three-story Italianate firehouse at 225-227 Front Street, constructed c. 1855-1856, that was converted to residential use in 1976. Next is 231-233 Front Street, a six-story factory building developed by the Benjamin Moore paint company in 1908. It interrupts the row of low-scale mid nineteenth century buildings, but it was designed by the noted Brooklyn architect William B. Tubby. Next are 237 and 239 Front Street, two Greek Revival row houses built by the same developer between 1845 and 1852. The other five buildings - 241, 243, 245, 247, and 249 Water Street - are all also Greek Revival row houses with three stories and a basement. The first two were built sometime between 1834 and 1852, the third between 1852 and 1855, and the last two c. 1846-1847.

Area II of the Historic District includes five buildings on the east side of Gold Street, all built sometime between 1841 and 1852. The northernmost, 69 Gold Street, is a four-story Greek Revival row house, with a later rear addition on Water Street. The next three - 71, 73, and 75 Gold Street - are identical Greek Revival row houses with three stories and a basement. The southernmost building, 77 Gold Street, is a four-story Greek Revival/Italianate row house with a ground floor store.

According to the *CEQR Technical Manual*, an action could cause a significant adverse impact to an architectural resource if it would result in any of the following:

- “Physical destruction, demolition, damage, alteration, or neglect of all or part of an historic property. For example, alterations that would add a new wing to an historic

building or replacement of the resource's entrance may result in adverse impacts, depending on the design.

- Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features. An example would be recladding an architectural resource with new brickwork.
- Isolation of the property from, or alteration of, its setting or visual relationships with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. For example, if all the buildings on a block, including an architectural resource, are four stories high, and a proposed project would replace most of those with a 15-story structure, the four-story architectural resource would no longer conform to the streetscape. Another example would be a proposed project that would result in a new building at the end of a street so that views of an historic park beyond were blocked.
- Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting. An example would be construction of a noisy highway or factory near a resource noted for its quiet, such as a park.
- Replication of aspects of the resource so as to create a false historical appearance. If a house was built during the Revolutionary War but later underwent extensive alteration, re-creation of its 18th-century appearance may have an adverse impact on that resource.
- Elimination or screening of publicly accessible views of the resource. For example, if a resource is located along the waterfront and is visible across the water, tall new buildings proposed between the architectural resource and the water that would block views of the resource may result in an adverse impact.
- Construction-related impacts, such as falling objects, vibration (particularly from blasting or pile-driving), dewatering, flooding, subsidence, or collapse. Such impacts may occur to an architectural resource adjacent to a construction site if adequate precautions are not taken.
- Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over an historic landscape or on an historic structure (if the features that make the resource significant depend on sunlight) to the extent that the architectural details that distinguish that resource as significant are obscured. For example, if a resource is noted for its stained glass windows, and those windows are only visible in the sunlight, significant blocking of that sunlight may result in a significant adverse impact."

The proposed actions would not have any of these results. The proposed project would not include any physical changes to the buildings within the Historic District. With regard to physical setting, the Vinegar Hill Historic District consists of small clusters of intact mid nineteenth century low-rise buildings set amidst later, more divergent, and often larger scale development, rather than a single, larger collection of historic buildings that define the scale and other urban design characteristics of a neighborhood. The immediate visual context of Area I already includes buildings as tall as 12 stories. Neighbors of the district's three areas include factory buildings,

warehouses, and an auto repair shop. The new development resulting from the proposed actions would therefore not have a significant adverse impact on the integrity and visual setting of the historic buildings. The new development would be contemporary in its design and would not have a false historical appearance. The development would fit within the existing street grid and would not block any view corridor leading to the historic buildings. Damage to adjacent historic structures would be avoided through the formulation and implementation of a construction protection plan. Furthermore, if a construction project is located within 90 feet of any structure within a historic district designated by the LPC, the New York City Department of Buildings (DOB) requires that the project comply with DOB Technical Policy and Procedure Notice 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction When Subject to Controlled Inspection by Section 27-724 and for Any Existing Structure Designated by the Commissioner, which specifies procedures (discussed in the final section of this report, Construction) to prevent any construction-related damage to the nearby historic resources. Finally, the Historic District's noteworthy features do not depend on direct sunlight, so shadows cast by the new development would not obscure sunlight-sensitive features. For these reasons, the proposed action would not have a significant adverse impact on the Vinegar Hill Historic District.

On the west side of Bridge Street to the north and south of Plymouth Street, the easternmost edge of the DUMBO Historic District also falls within 400 feet of the project site. (See the attached district map and photos.) The LPC's designation report includes the following summary description of the district:

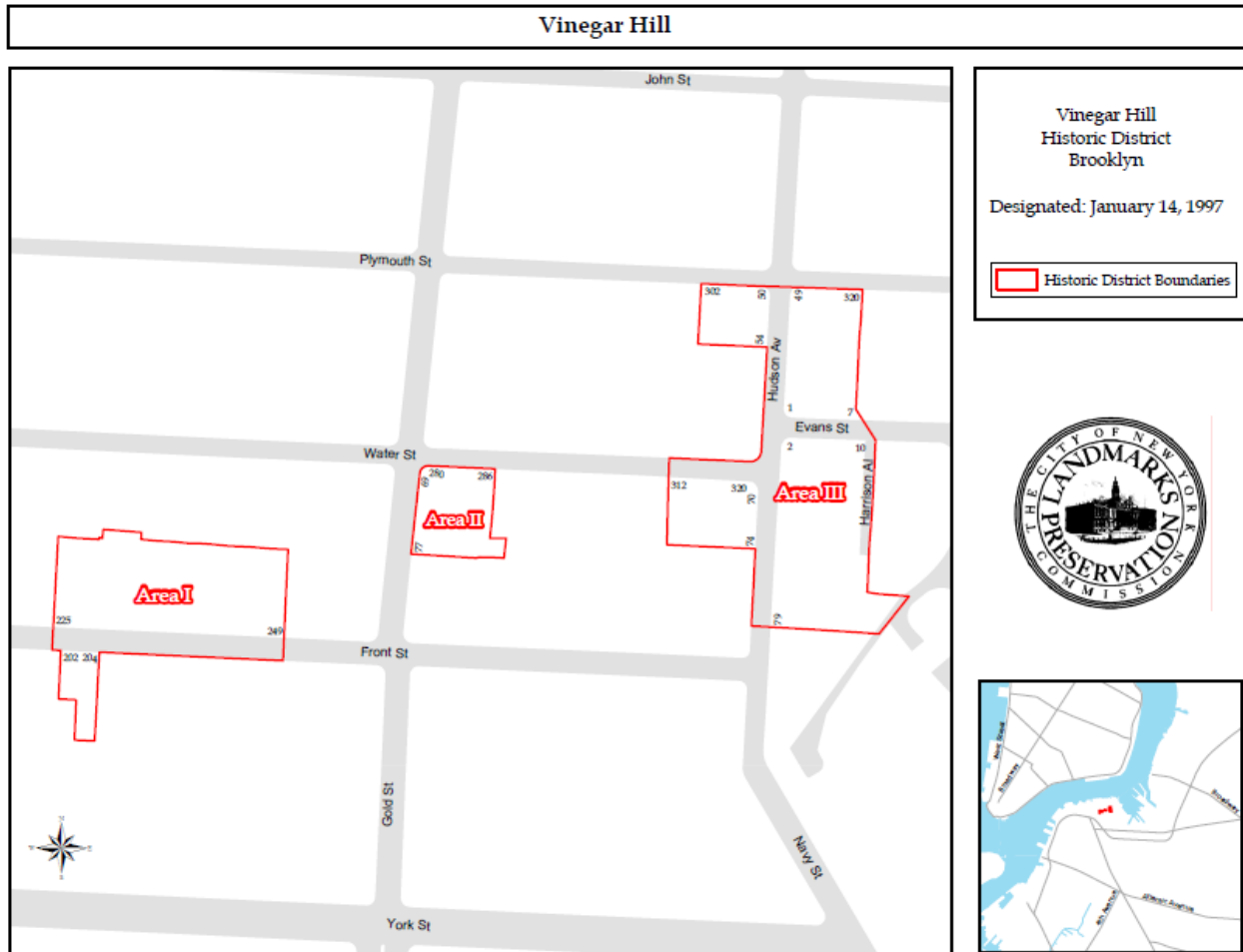
"The DUMBO Historic District, located along the East River waterfront in Brooklyn, is one of New York City's most significant extant industrial waterfront neighborhoods. During much of the nineteenth and twentieth centuries, the area was home to some of the largest and most important manufacturing businesses in Brooklyn or New York City, including Arbuckle Brothers, refiner and packager of sugar and coffee; Robert Gair, manufacturer of paper boxes; the Hanan & Son shoe company; the Kirkman & Son soap company; the John W. Masury & Son paint works; the Jones Brothers/Grand Union grocery business; the E. W. Bliss machine works; and the Brillo steel wool firm. These firms employed thousands of local workers, many of them immigrants who flooded into Brooklyn's working-class neighborhoods in the second half of the nineteenth century and early decades of the twentieth century. By the early twentieth century, Brooklyn was the fourth largest manufacturing center in the entire country and a significant portion of this industrial output occurred in DUMBO. Among the manufacturing businesses that were especially prominent in Brooklyn were those producing machinery, paint, sugar, coffee, packaged groceries, paper boxes and shoes, all of which are represented in the buildings in DUMBO.

"The approximately 91 buildings in the historic district reflect important trends in the development of industrial architecture in the United States during the nineteenth and twentieth centuries, and embody an important era of Brooklyn and New York City history."

The proposed project would not include any physical changes to the buildings within the Historic District, and the project site is too far from the Historic District to cause any construction-related impacts. Because of the greater distance and intervening buildings and streets between the

Historic District and the project site, the proposed project would not alter the Historic District's physical setting, obscure views of the historic buildings, or cast shadows long enough to reach those buildings. The proposed action would not have a significant adverse impact on the DUMBO Historic District.

Vinegar Hill Historic District Map



Front Street, Area I, Vinegar Hill Historic District



Front Street, Area I, Vinegar Hill Historic District



231-233 Front Street, Area I, Vinegar Hill Historic District



227 Front Street, Area I, Vinegar Hill Historic District



Southeast Corner of Gold and Water Streets, Area II, Vinegar Hill Historic District



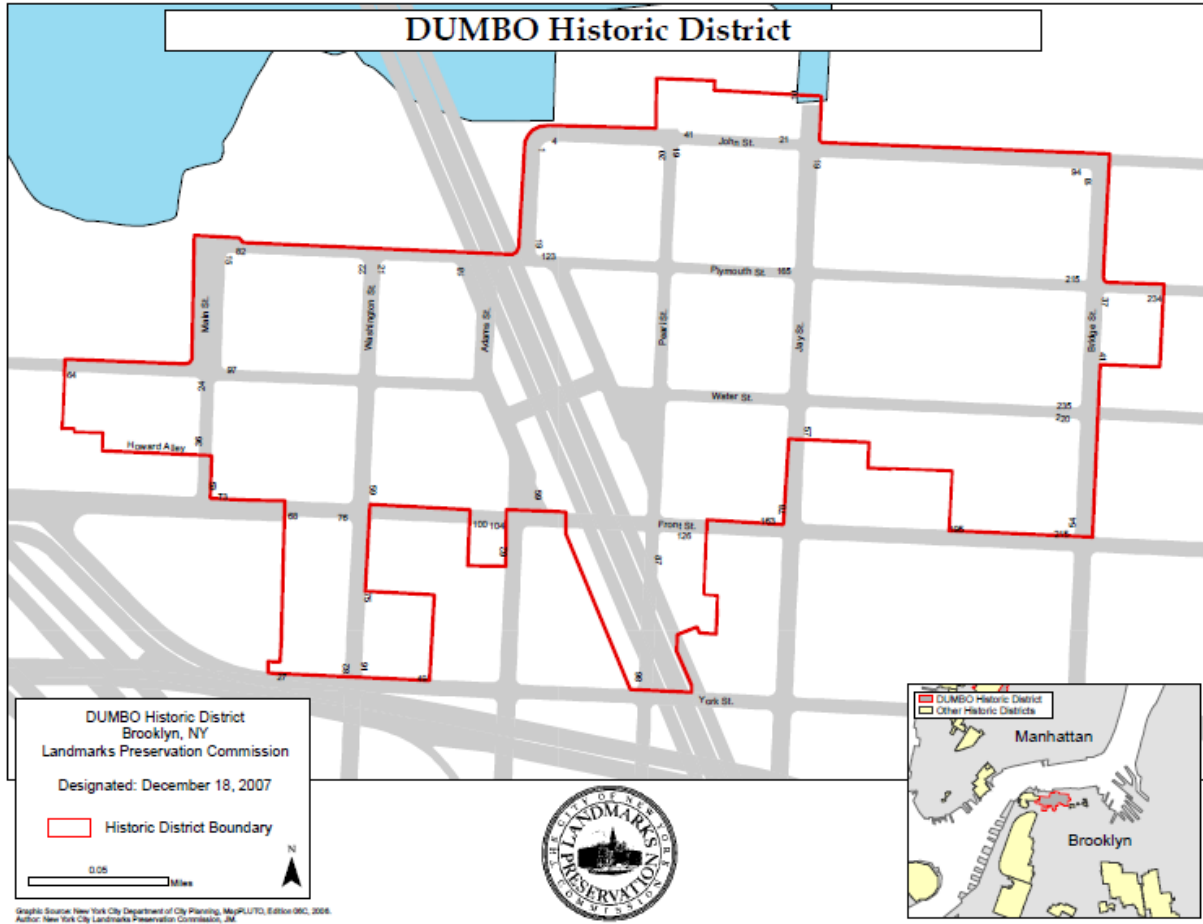
75-77 Gold Street, Area II, Vinegar Hill Historic District



Hudson Avenue and Evans Street, Area III, Vinegar Hill Historic District



DUMBO Historic District Map



DUMBO Historic District



DUMBO Historic District



37 Bridge Street, DUMBO Historic District



200 Water Street, DUMBO Historic District



10. URBAN DESIGN AND VISUAL RESOURCES

Introduction

A preliminary urban design and visual resources assessment is required because the proposed actions would include a zoning map change that would alter the rules regulating development within the proposed rezoning area, allowing the construction of buildings that are different in scale both from those that would be allowed under existing zoning regulations. The map amendment would extend an R6A district onto part of an adjacent R6B district. Within the rezoning area, the permitted FAR would increase from 2.00 to 3.60; the permitted street wall height would increase from 40 feet to 65 feet; and the permitted building height would increase from 50 feet (five stories) to 85 feet (eight stories). Whether or not the proposed actions are taken, the Applicant intends to redevelop the project site with a residential apartment building, which under current zoning would be five stories (50 feet) tall and would contain 41,219 square feet of above grade floor area. If the proposed actions are taken, the Applicant would instead construct an eight-story building with a roof height of 85 feet, containing 74,127 square feet of above grade floor area.

Pedestrian Wind Conditions

The *CEQR Technical Manual* calls for a separate preliminary assessment to determine whether an analysis of pedestrian wind conditions is appropriate, since the construction of large buildings at locations that experience high wind conditions may result in channelization or downwash effects that could affect pedestrian safety.

The proposed rezoning area is not subject to unusual wind conditions. It is not in an exposed area fronting on the waterfront, and it is not on high ground or on the upper portion of an exposed slope. It is within a fully developed area with a relatively flat topography that is more than two blocks and more than 500 feet inland.

The proposed development would consist of an eight-story building with the high lot coverage characteristic of contextual zoning districts. The building would be oriented to the existing streets, would be built to the street line, and would span the widths of the zoning lot. There would therefore not be a freestanding tower that could cause pedestrian level vortex effects.

For these reasons, the proposed actions would not have a significant adverse impact on pedestrian wind conditions, and a detailed wind conditions assessment is not required.

Existing Conditions

Urban Design

The area surrounding the proposed rezoning area, within the western Vinegar Hill and eastern DUMBO neighborhoods, is a densely developed urban area. There are no maintained open spaces with either landscaping or natural vegetation, and there are no significant natural features.

There are also no significant topographic features. The topography is fairly flat, with a slight downward slope towards the East River to the north.

Streets are narrow and laid out in a regular grid pattern. Block dimensions are 200 feet north to south and 500 feet east to west.

The project site is on a block that fits within this pattern, with approximately 470 feet of frontage along Water Street to the north and Front Street to the south, and approximately 200 feet of frontage along Gold Street to the east and Bridge Street to the west. It consists of the eastern end of the block, with 100 feet of frontage along Water Street, 200 feet of frontage along Gold Street, and 100 feet of frontage along Front Street. (See the aerial photograph.)

Buildings are arranged linearly along blockfronts. In general, they form continuous street walls with few setbacks or side yards (as can be seen from the photographs). On the block on which the project site is located, an exception is a 2004 apartment building adjacent to the project site. It has an uncharacteristically low lot coverage, with side yards and accessory parking on the open area of the lot. (See the aerial photograph.) Also, the project site, which is a surface parking lot, a vacant lot located on the other side of the apartment building, and another vacant lot elsewhere on the block form holes in the urban fabric. (See Photo 1.)

Otherwise, there is little overall consistency to the development pattern on the blocks including and surrounding the proposed rezoning area. Building types and uses, building footprint dimensions, and building heights all vary substantially. Large-scale current or former manufacturing and warehouse buildings (a number of which have been converted to residential or commercial use) are interspersed with foundries, garages, and other small, nondescript industrial buildings; nineteenth century row houses; and more recent apartment buildings. Building heights vary from one to twelve stories. The block on which the project site is located contains a 12-story vacant industrial building, a six-story former paint factory now containing offices, a six-story former warehouse now containing offices, a three-story former fire house that has been converted to residences, a group of 3½-story row houses, and a five-story apartment building, as well as the parking lot and two vacant lots. (See Photos 2, 4, and 5.)

On blocks that are predominantly industrial in nature, the flat industrial facades do not contribute to an engaging streetscape. Streetscapes are livelier where there are residential buildings or where ground floor retail or restaurant spaces have been created.












Also nearby, to the north and northeast of the proposed rezoning area, Con Edison's Farragut Substation occupies several blocks, with acres of exposed transformers, separating Vinegar Hill from the East River waterfront.

Visual Resources

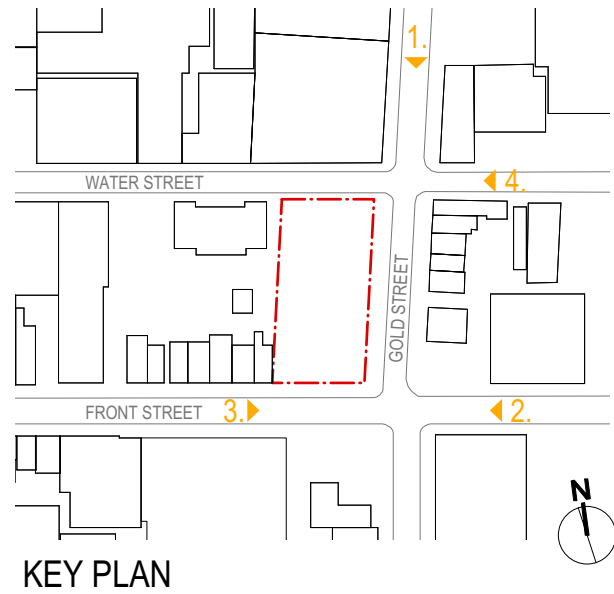
The most important visual resources in the immediate vicinity of the proposed rezoning area are the historic buildings within the Vinegar Hill Historic District. The Vinegar Hill Historic District contains low-rise row houses from the mid-nineteenth century. The district consists of three separate areas: Area I, which is adjacent to the project site on the Front Street midblock portion of the block; Area II, which is located directly across the street from the project site on the east side of Gold Street south of Water Street; and Area III, which is located a block away at the southeast corner of Water and Hudson Streets.

DUMBO's East River waterfront and the Manhattan Bridge are important visual resources in the general vicinity of the proposed rezoning area, but they are too far (at least about 1,000 feet) away from the rezoning area to be appreciably visible or for views of them or their setting to be affected by the proposed action.



 Borough Boundary	C50 Condo Flag/Condo Number
 Tax Block Boundary	A50 Air Right Flag/Lot Number
50 Tax Block Number	S50 Subterranean Right Flag/Lot Number
 Tax Lot Boundary	R REUC Flag
50 Tax Lot Number	 Under Water Tax Lot Boundary
 Condo FKA Tax Lot Number	 Other Boundary
50.5 Tax Lot Dimension	 Possession Hook
+/-5.5 Approximate Tax Lot Dimension	Misc Miscelaneous Text
 Condo Units Range Label	 Small Tax Lot Dimension
 Building Footprint	 Surface Water

251 FRONT STREET
BROOKLYN, NY
PROJECT AREA PHOTOGRAPHS
taken May 12, 2013



1. LOOKING SOUTH FROM GOLD STREET



2. LOOKING WEST FROM FRONT STREET



3. LOOKING EAST FROM FRONT STREET



4. LOOKING WEST FROM WATER STREET

There are no significant view corridors in the vicinity of the proposed rezoning area.

Future Conditions without the Proposed Actions

Whether or not the proposed actions are taken, the Applicant intends to redevelop the project site with a residential apartment building containing an accessory parking garage. In the absence of the proposed action, the new building would be built in accordance with the bulk regulations of the existing R6B zoning district and would contain 41,219 square feet of above grade floor area (49,463 square feet including cellar space) and have a height of five stories (50 feet), with a setback after the fourth story (at a height of 40 feet).

If a proposed zoning map amendment is approved, a six-story mixed-use building with residential units above ground floor retail space will be built across the street from the project site at the northeast corner of Gold and Front Streets, on a lot that is now used for surface parking and open storage and also contains a small, vacant building.

No other changes that would affect urban design and visual resources are anticipated.

Future Conditions with the Proposed Actions

Development Scenario

The proposed actions would include a zoning map change that would allow taller, bulkier buildings within the proposed rezoning area. The permitted FAR would increase from 2.00 to 3.60; the permitted street wall height would increase from 40 feet to 65 feet; and the permitted building height would increase from 50 feet (five stories) to 85 feet (eight stories). The existing and proposed zones are both contextual zones that do not permit the taller, lower coverage buildings that result from use of height factor regulations, and neither permit tower configurations. Lot coverage and yard requirements are the same for the two districts.

In the future with the proposed actions, the project site would be redeveloped with a residential apartment building containing the maximum permissible floor area allowed by the proposed zoning. The building would contain 74,127 square feet of above grade floor area (110,795 square feet including the cellar) and would be eight stories (85 feet) tall, with 15-foot-deep front wall setbacks above the seventh floor. (The Urban Design Diagram shows the streetscapes along Front, Gold, and Water Streets with the with-action building’s massing superimposed, contrasted with the same streetscapes with the no-action building’s massing superimposed.) Table 10-1 compares the project site development characteristics under existing, future no-action, and future with-action conditions.

**Table 10-1
Comparison of Existing, No-Action, and With-Action Conditions**

Item	Existing Conditions	No-Action Conditions	With-Action Conditions
Development Scenario	Surface parking lot	One residential building with 41 DUs (41,219 gsf) and a 21-space accessory parking garage	One residential building with 72 DUs (74,127 gsf) and a 27-space accessory parking garage
Gross/(Net) Bldg. Floor Area	No building area	49,463 gsf/(39,982 zsf, 2.00 FAR)	87,121 gsf/(71,968 zsf, 3.60 FAR)
Lot Coverage	N/A	8,244 sf (41%)	12,994 sf (65%)
Building Height	N/A	5 stories (50 feet)	8 stories (85 feet)

Water Street facing west (Site at left)



No-Action Scenario

Water Street facing west (Site at left)



With-Action Scenario

Front Street facing west (Site at right)



No-Action Scenario

Front Street facing west (Site at right)



With-Action Scenario

Gold Street facing south (Site at right)



No-Action Scenario

Gold Street facing south (Site at right)



With-Action Scenario

Urban Design

The proposed actions would not affect the topography, street system, block forms, or building arrangements within the area including and surrounding the proposed rezoning area. Although the new building on the project site would be three stories taller than it would be under future no-action conditions, and taller than currently allowed, the building would fit within the range of building heights in the vicinity of the proposed rezoning area. As is discussed under Existing Conditions, the area's urban design context is marked by contrasts in building heights, types, and footprint dimensions, and the new building would therefore not disturb a consistent neighborhood scale.

The existing R6B zoning is consistent with the low building heights of the nineteenth century row houses along Front Street on the interior of the project site block (Block 42), but it is not consistent with the range of building heights in the immediate vicinity and even within the R6B portion of the block. Block 42, Lot 11, a through lot within the R6B district extending from Water Street to Front Street, is developed with two attached six-story early twentieth century industrial buildings; both have recently been converted to office use. With the high floor-to-floor heights characteristic of industrial buildings from that era, the building at 233 Front Street is 72 feet tall without any setbacks, and the building at 248 Water Street rises 67 feet without any setbacks. These buildings are more characteristic of R6A massing (65-foot-tall street walls and 80-foot building heights) than they are of R6B massing (40-foot-tall street walls and 50-foot building heights). Similarly, 99 Gold Street, a building catcorner to the project site at the southeast corner of Front and Gold Streets that was converted from industrial to residential use in 2007, has a street wall height of 70 feet and recessed residential penthouses that rise to 87 feet.³ At the western end of Block 42 is a vacant industrial building at 53 Bridge Street that is 161 feet tall, according to Department of Buildings records. The newest building in the vicinity of the project site is 47 Bridge Street, a residential building on a formerly vacant lot at the northeast corner of Bridge and Water Streets, which received its certificate of occupancy (C of O) in 2016. It is seven stories and, according to the C of O, 77 feet tall. The proposed project would not be out of place within this context.

In summary, the proposed actions would not result in a significant adverse urban design impact.

Visual Resources

The Vinegar Hill Historic District consists of small clusters of intact mid-nineteenth century low-rise buildings set amidst later, more divergent, and often larger scale development, rather than a single, larger collection of historic buildings that define the scale and other urban design characteristics of a neighborhood. The immediate visual context of Area I already includes buildings as tall as 12 stories. Neighbors of the district's three areas include factory buildings, warehouses, and an auto repair shop. The new development resulting from the proposed actions would not significantly damage the integrity and visual setting of the historic buildings.

Because no significant view corridors have been identified, the new development would not block any such view corridors.

³ The rooftop heights for 99 Gold Street, 233 Front Street, and 248 Water Street are taken from their C of Os, and total building height for 99 Gold Street is based on GIS data and pictometry measurement.

In summary, the proposed actions would not result in a significant adverse impact to visual resources.

12. HAZARDOUS MATERIALS

Phase I Report

Introduction

Environmental Project Data Statements Company (EPDSCO, Inc.) has performed a Phase I Environmental Site Assessment (ESA) for the project site. The ESA, dated August 2013, was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-05).

The purpose of the ESA is to identify, to the extent feasible in accordance with ASTM E 1527-05, recognized environmental conditions in connection with the site with regard to hazardous materials as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. Additionally, several ASTM “Non-Scope” items including asbestos-containing materials, lead-based paints, and radon are also discussed. Recognized Environmental Conditions are identified through research into the history and uses of the site and surrounding area, an inspection of the subject property and a survey of adjoining and nearby uses, and a review of available regulatory agency records and environmental databases.

The following summarizes the findings, conclusions, and recommendations of the Phase I ESA.

Site Description

The site consists of an approximately 20,000 square foot rectangularly shaped undeveloped lot that is used for truck, car, and motorcycle parking. The majority of the site is paved with asphalt.

Site History

Research into the history of the property indicates that the site was occupied by the St. Anne’s Church, the church rectory, and the St. Anne’s School as early as 1887. The school building was demolished sometime between 1950 and 1969, and the church and rectory were demolished c. 1995. Since 1996 the site has been a surface lot used for truck parking.

Site Inspection

No stormwater drains, drywells, trench drains, or other drainage structures were observed on the property. It should be noted that at the time of the visit numerous cars and trucks were parked on the site, possibly obscuring drainage structures from view. According to the owner, there are no drainage structures on the property.

No aboveground storage tanks (ASTs) were observed on the property during the site visit. There were also no visible indications of the presence of underground storage tanks (USTs), such as tank fillports, tank vent lines, or associated mechanical equipment.

No suspected asbestos-containing materials, lead-based paints, or electrical equipment that might contain PCBs were observed at the property.

Regulatory Agency Database Findings

The project site does not appear in any of the federal or state databases that were reviewed, including the federal Environmental Protection Agency's (EPA's) Superfund, CERCLIS, or ERNS databases, the RCRA hazardous waste generators list or hazardous materials Treatment/Storage/Disposal Facilities list, or the New York State Department of Environmental Conservation's (DEC's) Spill Logs database, Solid Waste Facilities database, Petroleum Bulk Storage database, or Registry of Inactive Hazardous Waste Disposal Sites.

Off-Site Findings

The regulatory agency databases did not identify any potential off-site sources of contamination that are considered likely to have significantly affected the environmental condition of the project site.

A review of historical Sanborn maps shows that the area surrounding the project site has historically contained numerous industrial uses, including paint, ink, dye, and colorant manufacturing, shoe factories, machine shops, and large utility gas storage facilities. It is therefore possible that groundwater has been contaminated by past industrial uses or leaking underground storage tanks.

Conclusions

The Phase I report concludes that the ESA has revealed no evidence of Recognized Environmental Conditions in connection with the property, although, as previously stated, the report does note the possibility that groundwater has been contaminated by past industrial uses or leaking underground storage tanks in the vicinity of the site.

(E) Designation

After reviewing the Phase I report, the New York City Department of Environmental Protection (DEP) determined that additional site investigation must be done. An (E) designation (E-404) will therefore be placed on the project site, requiring that the following actions be taken before construction activities take place.

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After

receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

17. AIR QUALITY

Mobile Source Emissions

The anticipated action-induced development would consist of a 72-unit residential building at a location in CEQR Traffic Zone 2. Table 16-1 of the *CEQR Technical Manual*, which provides development thresholds that would generally be necessary to result in 50 or more peak hour vehicle trips, identifies the Zone 2 residential development threshold as 200 dwelling units. In this part of the city, according to the guidance in Section 17.210 of the Manual, a mobile source air emissions assessment should be undertaken for projects that would generate 170 or more peak hour vehicle trips. The proposed actions would not cause a significant adverse mobile source air quality impact.

Project-Generated Stationary Source Emissions

The *CEQR Technical Manual* states that the potential for stationary source emissions from heat and hot water systems to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used, the height of the stack venting the emissions, the distance to the nearest building whose height is at least as great as the venting stack height, and the square footage of the development that would be served by the system. The *CEQR Technical Manual* provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the proposed building's system.

The proposed project on the project site (Block 42, Lot 24) would contain 87,121 square feet of floor area. It would have a rooftop height of 85 feet, and small bulkheads would rise ten feet above that height. The exhaust stack would vent at least three feet above one of the bulkheads on the building's roof. The top of the stack would thus be at a height of about 98 feet. The nearest building of equal or greater height would be the currently vacant 12-story building at the Bridge Street end of the block (53 Bridge Street, on Block 42, Lot 1), 246.5 feet from the project site.¹

¹ This is the same sensitive receptor that was assessed in the 2016 EAS. Because the revised proposal would result in a building with a lower stack height than that assumed in the 2016 EAS (98 feet rather than 108 feet), nearby

The proposed project was plotted on the stationary source screen that appears as Figure 17-3 in the *CEQR Technical Manual*. The graph appears on the following page. The building's square footage is plotted against the distance between its exhaust stack location and the edge of the other building. The graph includes three curves, representing different heights (30 feet, 100 feet, and 165 feet). The appropriate curve is the one for the height that would be closest to but not greater than the height at which the building's exhaust stack would vent. In this case, the appropriate curve is the one for 30 feet. If the lines drawn from the appropriate points along the two axes meet at a point below the appropriate curve, then no further analysis is need to demonstrate that the building's exhaust would not have a significant adverse impact on residents of the other building.

As the resulting graph shows, exhaust from a building with 87,121 square feet of floor area would not have a significant stationary source air quality impact relative to inhabitants of a building 246 feet from the exhaust stack location.

This assessment is premised on a building height of 85 feet and a stack location at the building's highest level (that is, atop one of the rooftop bulkheads). If the development on the project site did not maximize the height permitted by the zoning or if the exhaust stack vented on top of the roof rather than a bulkhead, the closest existing building of similar or greater height would be the residential building at 99 Gold Street, located at the southeast corner of Front and Gold Street, just 55 feet from the project site. To ensure that the project will not have an adverse stationary source air quality impact on the residents of 99 Gold Street, an (E) designation (E-404) will be placed on the project site. With regard to air quality, E-404 will provide the following:

Block 42, Lot 24

Any new residential development located on the above-referenced property must ensure that the HVAC stack is located at the highest tier, or at a minimum of 98 feet above grade, to avoid any potential significant adverse air quality impacts.

Stationary Source Emissions from the Red Hook Wastewater Treatment Plant

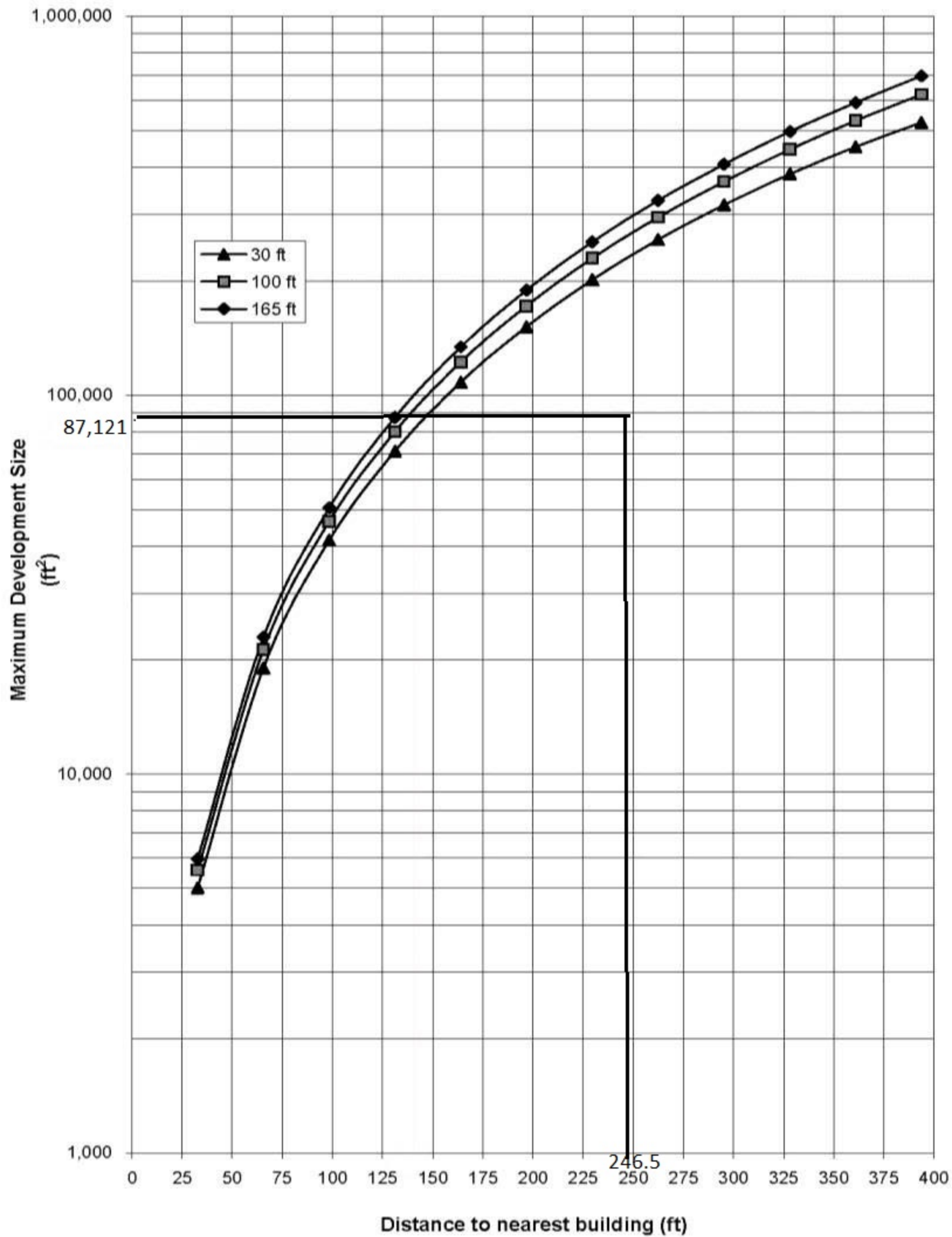
Wastewater treatment plants may cause emissions or odors that could affect sensitive receptors. The nearest treatment plant to the project site is the Red Hook Wastewater Treatment Plant, approximately 2,250 feet southeast of the project site. This is well outside of the 1,000 foot radius that the *CEQR Technical Manual* recommends for a stationary source analysis of a water pollution control plant.

Stationary Source Emissions from the Con Edison Transformer Station

With regard to the Con Edison transformer station, located approximately 300 feet north of the project site, and other active industrial uses in the project area, the 2009 DUMBO EAS (CEQR No. 09DCP053K), which addressed a rezoning area extending closer to the Con Edison site than the project site, determined that there were no industrial source air quality concerns within 400 feet and 1,000 feet of that rezoning area. Further, no E designations relating to industrial source emissions are located on properties within 1,000 feet of the project site. Nevertheless, a

buildings were surveyed to determine whether a building closer to the project site has a height similar to or greater than 98 feet. The residential building at the southeast corner of Gold and Front Streets (99 Gold Street) is 70 feet tall at its roof line, and residential penthouses rise to a height of 87 feet, as determined by GIS data and pictometry measurement. According to their certificates of occupancy, two office buildings on the project site block between the site and 53 Bridge Street (233 Front Street and 248 Water Street) are 72 and 67 feet tall. The building at 53 Bridge Street remains the closest receptor for effects from the project's exhaust.

**Figure 17-3:
Stationary Source Screen**



stationary source air quality analysis related to the Con Edison transformer station was prepared in August 2016 and is included below.

I. INTRODUCTION

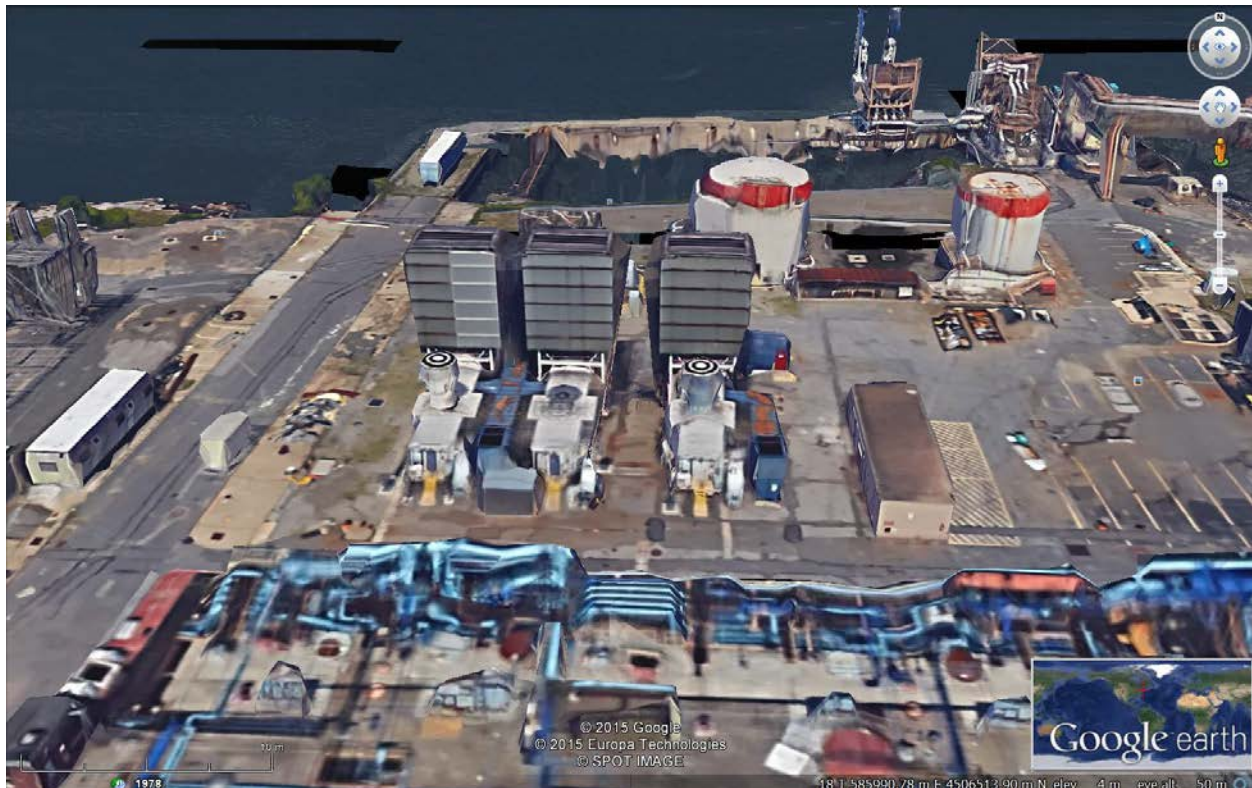
The proposed project is the development of an 80-foot tall residential building at 251 Front Street (Block 42 Lot 24) in Brooklyn, which is located on the west side of Gold Street between Front and Water Streets in the Vinegar Hill neighborhood.

Air quality, which is a general term used to describe pollutant levels in the atmosphere, would be affected by the proposed development. The potential air quality impacts associated with the proposed project were estimated following the procedures and methodologies prescribed in the *New York City Environmental Quality Review Technical Manual (2014 CEQR TM)*.

A preliminary review of existing land uses within 1,000 feet of the project site via the New York City OASIS Land Use interactive mapping application, the United States Environmental Protection Agency (EPA) Envirofact database, and the New York State Facilities and Title V Permits shows that there are no existing (or future planned) buildings within 400 feet that are taller than the proposed building. Therefore, no project-on-project analysis or project-on-existing heating, ventilation and air conditioning (HVAC) analysis is warranted. Also, as the project site already allows for residential uses, there is no need to conduct an analysis of the potential impacts of the emissions of existing industrial facilities on the proposed development.

However, there is an existing nearby “major” emission source -- Consolidated Edison’s [Con Ed] Hudson Avenue plant at 1 Hudson Avenue -- that could impact the proposed building. Therefore, an analysis was conducted to estimate the potential impacts of the emissions from this plant on the proposed development. Below are a photograph of the Con Ed plant and a map showing the relative location of the proposed development site and the Con Ed plant.

Con Edison - Hudson Ave Station Stacks



Con Edison's Hudson Ave Plant Relative to the Proposed Building



I. STATIONARY SOURCE ANALYSIS

Relevant Air Pollutants for Analysis

The EPA has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As the existing combustion source with the potential to significantly impact the proposed development uses distillate fuel oil, the four criteria pollutants associated with fuel oil combustion – nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulate matter smaller than 2.5 microns (PM_{2.5}) and 10 microns (PM₁₀) – were considered for the analysis.

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 the 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_{2.5} criteria (based on concentration increments) developed by the New York City Department of Environmental Protection (NYCDEP) to determine whether the maximum estimated potential adverse PM_{2.5} impacts were 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 1-hour and annual NO₂, the 1-hour SO₂, and the 24-hour and annual PM_{2.5} and PM₁₀ NAAQS. The current standards that were applied to this analysis, together with their health-related averaging periods and CEQR significant thresholds, are presented in Table 17-1. New York has adopted the NAAQS as the State ambient air quality standards.

**TABLE 17-1
APPLICABLE NATIONAL AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Period	National and State Standards	CEQR Significant Impact Criteria
NO ₂	1 Hour	0.10 ppm (188 µg/m ³)	
	Annual	.053 ppm (100 µg/m ³)	
SO ₂	1 Hour	196 µg/m ³	
PM _{2.5}	24 Hour	35 µg/m ³	6.0 µg/m ³
	Annual	12 µg/m ³	0.3 µg/m ³
PM ₁₀	24 Hour	150 µg/m ³	

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 (<http://www.dec.ny.gov/chemical/8542.html>).

Notes: ppm = parts per million
µg/m³ = micrograms per cubic meter

NO₂ NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO₂, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The recently promulgated 1-hour NO₂ NAAQS standard of 0.100 ppm (188 µg/m³) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO₂ concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO₂; Tier 2 applies a conservative ambient NO_x/NO₂ ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO₂ within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO₂ concentrations or total 1-hour NO₂ concentrations if hourly NO₂ background concentrations are added within the model.

With background concentrations included, the model internally adds up the 8th highest daily maximum NO₂ concentrations and the hourly NO₂ background concentrations, and averages these values over the numbers of the years modeled. Total estimated concentrations are then generated in the statistical form of the 1-hour NO₂ NAAQS format and can be directly compared with the 1-hour NO₂ NAAQS standard. This approach that is recognized as being conservative by EPA and NYCDEP and is referenced in EPA modeling guidance was used in the analysis.

EPA has retained annual NO₂ standard of 0.053 ppm (100 µg/m³). For conservatively estimating annual NO₂ impacts, a NO₂ to NO_x ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO₂ analysis, was applied.

SO₂ NAAQS

The recently promulgated 1-hour SO₂ standard is 75 parts per billion (ppb) calculated as the three-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations. Following EPA guidance, 1-hour SO₂ total concentrations are estimated by adding the fourth highest modeled SO₂ concentration to the 3-year average SO₂ background concentration. These values were compared to the 1-hour SO₂ NAAQS of 196 µg/m³.

For the 1-hour SO₂, the background concentration (99th percentile of daily maximum 1-hour concentration averaged over the recent 3 years) was added to the estimated concentration and the total estimated fourth highest concentration was compared to the 1-hour SO₂ NAAQS.

Significant PM_{2.5} Incremental Impacts Criteria

CEQR guidance includes the following criteria for the determination of significant adverse PM_{2.5} incremental impacts for projects subject to CEQR:

Predicted 24-hour maximum PM_{2.5} concentration increase of more than half the difference between the 24-hour PM_{2.5} background concentration and the 24-hour standard.

The 24-hour PM_{2.5} background concentration compiled by the NYSDEC at the Brooklyn JHS 126 monitoring station is 23 ug/m³, which is the average of the 98th percentile for the latest 3 years of monitoring data collected by the NYSDEC (2013-2015). As the applicable background value is 23 ug/m³, half the difference between the NAAQS of 35 ug/m³ and this background value is 6.0 ug/m³. As such, an incremental concentration increase of 6.0 ug/m³ was used for determining whether the potential 24-hour PM_{2.5} impacts of the proposed project are considered to be significant.

For annual average PM_{2.5} concentration increments, according to CEQR guidance:

Predicted annual average PM_{2.5} concentration increments greater than 0.3 ug/m³ at any receptor location for stationary sources (elevated or ground level).

The above 24-hour and annual incremental increase criteria were used to evaluate the significance of the predicted PM_{2.5} impacts of the proposed development residential uses.

II. CON EDISON FACILITY

Plant Information

The Con Ed facility is a Major Title V Facility with Permit Number 2-6101-00042/00011 that is valid through 10/3/2018. The facility operates three (3) simple cycle combustion turbines (Figure 1) to generate electricity. Each of these combustion turbines is rated at 235 million Btus per hour. The three combustion turbines burn distillate fuel oil. The emissions from the turbines exhaust through each turbine's separate stack, identified in the permit as emission points GT003, GT004 and GT005, respectively. The sulfur content in the oil is restricted to 15 ppm (0.0015%).

The facility also operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2(c). These include three (3) emergency power generators and three (3) distillate and residual fuel oil storage tanks. The potential air quality impacts from the emergency generators would not be significant since they are only used for short periods of time -- in case of an actual emergency.

While these are also four (4) very large low pressure Combustion Engineering boilers at this facility, these units were permanently shut down and ceased operation on February 7, 2011, and were not included in this analysis.

The Title V permit enforces the facility to implement Reasonably Available Control Technology (RACT) to limit NO_x and VOCs emissions for the purpose of attaining the air quality standard for ozone. RACT establishes an emission limit for NO_x for three combustion turbines at a level of 0.618 pounds per million Btu and includes a restriction to operate 764 hours per year per turbine that corresponds to a potential to emit of 435.69 pounds per hour.

The Google Earth 3-dimensional view of the Con Ed layout shows three stacks and three buildings associated with these emission points that are listed in the permit as GT003, GT004 and GT005 and the buildings as GTFAC (252 x 120 inches). Coordinates of all stacks listed in Permit are in Universal Transverse Mercator system (UTM) for projection zone 18. However, these values are provided in

kilometers and the coordinates of these stacks were more precisely re-calculated using Google Earth mapping software in meters with as follows: Stack No. 1 = 585,976E/4,506,507N; Stack No. 2 = 586,985E/4,506,506.5N; and Stack No. 3 = 585,995E/4,506,506N.

Based on these coordinates and the proposed building's location at 251 Front Street, the distance from the stacks to the project site lot line (see Figure 2) is estimated to be 782 feet (238 meters).

The Title V permit lists stack heights for each of three emission points as 47 feet. However, no data on stack diameter, exit velocity, or temperature are available from the permit, and these values, therefore, were obtained from the operations of similar combustion turbines.

Emission Rates

The following Con Ed emission values were used in this analysis:

- Short-term emission rates of SO₂, PM₁₀, and PM_{2.5} were calculated based on the EPA AP-42 emission factors for distillate oil-fired combustion turbines and a heat input of 235 million Btus (MMBtu) per hour per turbine. Annual emission rates were adjusted to account for the fact that facility's turbines operate a maximum of 764 days a year.
- The AP-42 PM_{2.5} emission factor for distillate fuel used for stationary combustion turbines is 0.012 lb/MMBtu, which includes filterable and condensable particles (e.g., 4.3E-03 lb/MMBtu filterable and 7.2E-03 lb/MMBtu condensable). These values are provided in AQ-42's "Stationary Distillate Oil-fired Turbines," Table 3.1-2a).
- The AP-42 emission factor for SO₂ (in lb/MMBtu) was calculated using equation 1.01(S), where S is the sulfur content of fuel oil (e.g., 0.0015%);
- The AP-42 emission factor for PM₁₀ of 4.3E-03 lb/MMBtu, which include only filterable particles, was used (Table 3.1-2a), and
- The NO_x emission factor of 0.618 lb/MMbtu was obtained directly from the permit.

Data obtained from AP-42 tables and equations that were used to calculate emission rates are provided in Table 17-2.

Table 17-2: Estimated Pollutant Emission Rates for Con Edison Plant ⁽¹⁾

Pollutants Emission Factors	Turbine Heat Input ⁽²⁾	Peak Short-term Emission Rate per Turbine		Annual Emission Rate per Turbine	
		lb/hr	g/sec	lb/year	g/sec
PM_{2.5} Emission Rates					
0.012 ⁽³⁾	235	2.82	0.355	2,154	0.031
NO₂ Emission Rates					
0.618 ⁽⁴⁾	235	145.2	18.3	110,956	1.596
SO₂ Emission Rates					
0.0015 ⁽⁵⁾	235	0.35	0.044	269	0.004
PM₁₀ Emission Rates					
0.0043 ⁽⁶⁾	235	1.01	0.127	772	0.011

Notes:

- Title V Permit DC ID #2-6101-00042/00011.
- Each turbine heat input is rated as 235 MMBtu per hour, as listed in the permit
- AP-42 PM_{2.5} emission factor for distillate oil-fired combustion turbines is 0.012 lb/MMBtu which include filterable PM_{2.5} (4.3E-03 lb/MMBtu) and condensable PM_{2.5} (7.2E-03 lb/MMBtu) particulates (Table 3.1-2a).
- NOx emission factor of 0.618 MMBtu/hour, as listed in permit
- AP-42 SO₂ emission factor of 1.01(S) for combustion distillate oil-fired turbines, where S is sulfur content in fuel oil #2 (0.0015%) is 1.01 x 0.0015 = 0.0015 lb/MMBtu (Table 3.1-2a).
- AP-42 PM₁₀ emission factor is 4.3E-03 lb/MMBtu, which includes only filterable particles (Table 3.1-2a).

Con Ed Stack and Emission Parameters

A stack height of 47 feet was obtained directly from the permit. However, because stack diameter, exit velocities, and temperatures for the plant are not available from the permit, these values were assumed to be that same as those of a facility employing combustion turbines of similar capacity (i.e., the New York Power Authority’s North 1st Street power plant, which is located just north of the Williamsburg Bridge in Brooklyn). That plant has a stack diameter of 12 feet (3.66 m), an exit velocity of 77 feet/sec (23.5 m/sec), and an exit temperature of 719 °F. These parameters were applied to each stack associated with each turbine at the Con Ed plant. All three stacks were modeled in one modeling run.

It should be noted that a turbine temperature around 700 °F is typical for combustion turbines, and that exit velocity has a small effect on dispersion and resulting pollutant concentrations.

III. DISPERSION ANALYSIS

A dispersion modeling analysis was conducted with the latest version of EPA’s AERMOD dispersion model 7.11 (EPA version 15181). In accordance with CEQR guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness length, and the elimination of calms. The building downwash algorithm was utilized to account for downwash effects on plume dispersion. Analyses were conducted with and without the downwash effect on plume dispersion. AERMOD’s Plume Volume Molar Ratio Method (PVMRM) module was utilized for 1-hour NO₂ analysis -- to account for NOx to NO₂ conversion in the atmosphere.

Meteorological Data

All analyses were conducted using the latest available five consecutive years of meteorological data (2010-2014). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. Data was processed by Trinity Consultants, Inc. using the current EPA

AERMET and the EPA procedure. These meteorological data will provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Meteorological data were concatenated to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs.

Background Concentrations

The 24-hour PM_{2.5} background concentration was obtained for Brooklyn JHS 126 monitoring station as 23 ug/m³ which is the average of the 98th percentile for the latest 3 years of monitoring data (2013-2015). All other background concentrations were obtained from Queens College 2 monitoring stations over the recent 3 years (2013-2015), as follows:

The 1-hour NO₂ background concentration is 113 ug/m³ (60.2 ppb), which is the 98th percentile of daily maximum 1-hour concentration averaged over the recent 3 years;

The annual average NO₂ background concentration is 32 ug/m³ (17.1 ppb);

The 24-hour PM₁₀ background concentration is 40 ug/m³ (the highest second maximum value); and

The 1-hour SO₂, the background concentration is 28.7 ug/m³ (11 ppb), which is the 99th percentile of daily maximum 1-hour concentration averaged over the most recent 3 years (2013-2015).

The hourly ozone and 1-hour NO₂ background concentrations were developed from available monitoring data collected by the NYSDEC at Queens College monitoring station and compiled into AERMOD's required hourly concentration (ozone) data format.

Receptor Locations

Receptors, which would be the operable windows of the proposed residential building, were placed around all faces of the proposed building in 10 foot increments on all 9 floor levels starting at 10 feet above the ground and extending up to the upper windows level (90 feet). Ground-level receptors were also considered in the analysis to assure that maximum impacts are estimated. A total of 585 receptors were considered for the analysis to ensure that the maximum impacts are estimated.

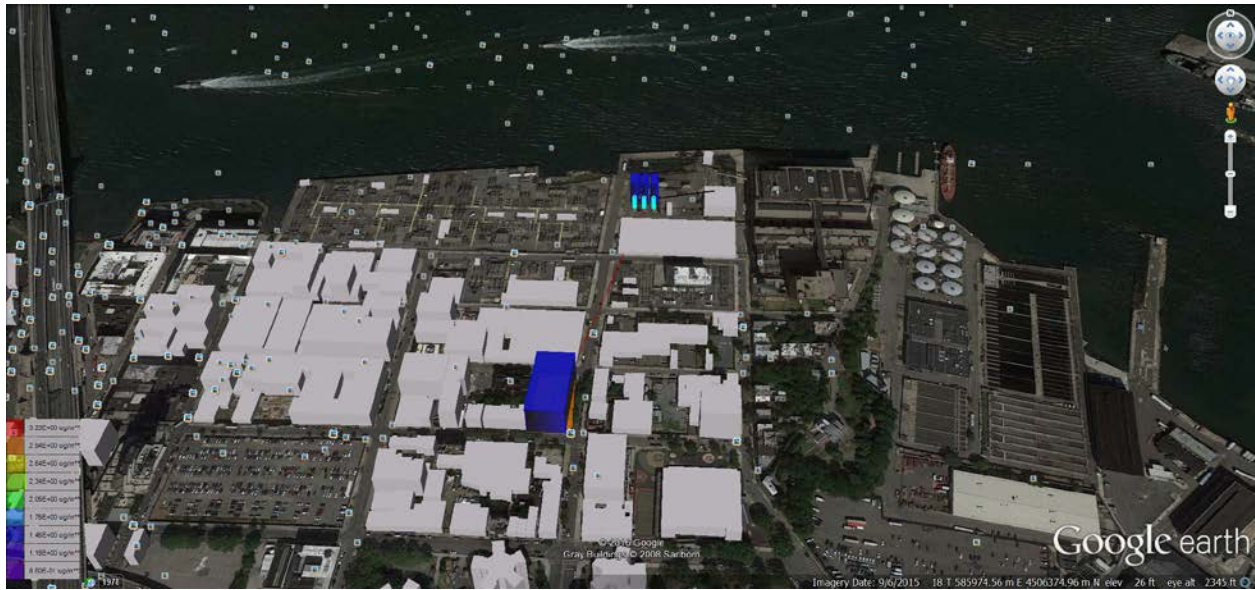
IV. RESULTS

Potential impacts of the PM_{2.5}, NO₂, SO₂, and PM₁₀ emissions from Con Edison Hudson Avenue facility on the proposed 251 Front Street building residential uses were estimated and compared with the 24-hour/annual PM_{2.5} CEQR significant impact criteria, the 1-hour/annual NO₂, 1-hour SO₂, and 24-hour PM₁₀ NAAQS.

PM_{2.5} Analysis

The results of the PM_{2.5} analysis are that the maximum 24-hour impact is estimated to be 3.53 ug/m³ (see the 3-D Contour Map below) and the annual average impact is estimated to be 0.006 ug/m³. These values are less than the significant impact criteria of 6.0 ug/m³ and 0.3 ug/m³, respectively. Therefore, PM_{2.5} emissions from the Con Ed facility would not cause a significant air quality impact on residential uses of the proposed building.

24-hr PM_{2.5} Impact 3-D Contour Map



1-Hour NO₂ Analysis

The result of the 1-hour NO₂ emission impacts on the proposed building with the Tier 3 approach employing PVMRM AERMOD module is that the 1-hour NO₂ 8th highest daily 1-hour concentration (with added background hourly concentrations internally within the model) averaged over 5 years is 121.2 ug/m³. The maximum average annual NO₂ total concentration is estimated to be 32.2 ug/m³ (impact of 0.23 ug/m³ and background value of 32 ug/m³). Both the 1-hour and annual NO₂ concentrations are less than the 1-hour and annual NO₂ NAAQS of 188 ug/m³ and 100 ug/m³, respectively. Therefore, 1-hour and annual NO₂ emissions from the Con Ed plant would not cause a significant air quality impact on residential uses of the proposed building.

1-hour SO₂ Analysis Results

The results of the 1-hour SO₂ analysis is that the maximum 1-hour SO₂ impact is estimated to be 0.72 ug/m³ and the total 1-hour SO₂ 4th highest daily 1-hour averaged concentration, including background value of 28.7 ug/m³, is estimated to be 29.4 ug/m³, which is less than the 1-hour SO₂ NAAQS of 196 ug/m³. Therefore, 1-hour SO₂ emissions from the Con Ed plant would not cause a significant air quality impact on the proposed building.

24-hour PM₁₀ Analysis Results

The result of the 24-hour PM₁₀ analysis is that the maximum 24-hour PM₁₀ impact is 1.2 ug/m³. The total 24-hour PM₁₀ concentration, including background value of 40 ug/m³, is estimated to be 41.2 ug/m³, which is less than the 24-hour PM₁₀ NAAQS of 150 ug/m³. Therefore, the 24-hour PM₁₀ emissions from the Con Ed plant would not cause a significant air quality impact on the proposed building.

A summary of the results for all averaging time periods, with and without downwash effect, are presented in Table 17-3.

Table 17-3: Summary of Results (ug/m³)

Pollutant	Modeled Concentration ⁽¹⁾	Background Conc.	Total Conc.	Evaluation Criteria
	ug/m³	ug/m³	ug/m³	ug/m³
PM_{2.5}				
24-hr PM _{2.5}	3.53/1.15*	-	3.5	6.0 (CEQR Criteria)
Annual PM _{2.5}	0.006/0.004	-	0.006	0.3 (CEQR Criteria)
NO₂				
1-hr NO ₂ **	121.2/114.3		121.2	188 (NAQQS)
Annual NO ₂	0.23/0.17	32	32.2	100 (NAAQS)
SO₂				
1-hr SO ₂	0.72/0.39*	28.7	29.4	196 (NAQQS)
PM₁₀				
24-hr PM ₁₀	1.2/0.41*	40	41.2	150 (NAQQS)

Notes:

* Maximum of modeled concentrations with and without downwash effects.

**The 1-hour NO₂ background concentrations using the Tier 3 approach were added to estimated impacts on an hour-by-hour basis within the dispersion model.

V. CONCLUSION

No significant impacts of 24-hour and annual PM_{2.5} emissions from Con Edison - Hudson Ave Station Power Plant or exceedances of the 1-hour and annual NO₂, 1-hour SO₂, and 24-hour PM₁₀ NAAQS on residential uses of the proposed building at 251 Front Street are predicted.

Air Toxic Analysis

An analysis was prepared in November 2015 to determine whether toxic air emissions from nearby industrial sources could adversely affect the health of proposed project residents. At the time the analysis was prepared, the proposed project was expected to be up to 90 feet tall. Because concentrations were predicted for all windows and air intakes up to a height of 90 feet, the analysis is valid for the revised 85-foot-tall project.

Assessment Methodology

Toxic air pollutants can be grouped into two categories: carcinogenic air pollutants, and non-carcinogenic air pollutants. These include hundreds of pollutants, ranging from high to low toxicity. While no federal standards have been promulgated for toxic air pollutants, the U. S. Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC) in its "Guidelines for the Control of Toxic Ambient Air Contaminants" DAR-1 have issued guidelines that establish acceptable ambient levels for these pollutants based on human exposure criteria.

In order to evaluate short-term and annual impacts of the non-carcinogenic and carcinogenic toxic air pollutants, the NYSDEC has established short-term ambient guideline concentrations (SGCs) and ambient annual-average-based guideline concentrations (AGCs) for exposure limits.

These are maximum allowable 1-hour and annual guideline concentrations, respectively, that are considered acceptable concentrations below which there should be no adverse effects on the health of the general public.

In accordance with established procedure to estimate impact of toxic pollutants using the DAR-1-based approach, ratios of 1-hour and annual concentrations of each pollutant to their respective SGCs or AGCs (e.g., concentration-to-guideline values) are calculated. These ratios are used to determine whether the concentration of each pollutant exceeds its applicable guideline value. If no exceedances are found (i.e., if all ratios are less than 1), no adverse health effects would occur. If the concentration of any pollutant exceeds its applicable guideline value (either SGC or AGC), more detailed analysis is required.

Permits and Pollutants

Among pollutants listed in permits from natural gas combustion are four criteria pollutants (i.e., pollutants for which the EPA has established air quality standards): nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon dioxide (CO₂), and particulate matter. In addition to criteria pollutants, all permits identify emissions of three non-criteria pollutants: total non-methane hydrocarbons (CAS # 519-00-0), which is a unique numerical identifier of chemical substances; total hydrocarbons as methane (CAS #74-82-8), which is representative of the group of "total hydrocarbons as methane"; and ethyl alcohol as a product of process emissions. The chemical with CAS #74-82-8 in the DAR-1 database is methane, so it is the actual representative of the group of "total hydrocarbons as methane." CAS # 519-00-0, however, is not listed in the DAR-1 database, so total non-methane hydrocarbons cannot be identified either individually or as a group.

EPA AP-42 identifies all toxic pollutants associated with natural gas combustion as a group of twenty-eight (28) individual compounds (Table 1.4-2), defined as Hazardous Air Pollutants (HAPs) by Section 112(b) of the Clean Air Act. Inside of this group, there are eighteen (18) pollutants that belong to the family of polycyclic aromatic hydrocarbons PHA(s), of which almost all members of the family are carcinogens. For this group under CAS 130498-29-2, DAR-1 has assigned an AGC of 0.02 ug/m³ per million (which define carcinogenic pollutants). Therefore, a group of eighteen (18) PAH(s) were considered separately; and for the rest of the HAPs, which include ten (10) pollutants, a representative compound was considered.

As shown in the permits, emission rates of non-methane hydrocarbons were estimated based on a total volatile organic compounds (VOC) emission factor of 5.3 pounds per million (lb/10⁶) cubic feet. The closest value to this number from the HAPs group is ethane, which has an emission factor of 3.1E+00 lb/10⁶ cubic feet (AP-42 Table 1.4-3). Therefore, ethane was selected as representative of the group of non-methane hydrocarbons.

As for the PAH group, emission factors for all 18 contaminants that comprise this group were added together to arrive at a total of 8.82E-05 lb/10⁶ cubic feet, and the ratio of this value to the total VOC emission factor of 5.3 lb/10⁶ cubic feet was then used to compute an emission factor for the whole group of PAHs. This ratio was applied to estimate annual PAH emission rates under each permit and then used to compare the results with the DAR-1 AGC value of 0.02 ug/m³ per million.

As described above, the four criteria pollutants together with 28 non-criteria pollutants, which have the potential to be released from natural gas combustion, were considered for analysis as the three groups – a group of total hydrocarbons, with methane being representative of the group; a group of non-methane hydrocarbons, with ethane being representative; and PAHs as the whole group. In addition, ethyl alcohol, as a product of process emissions, was also considered. DAR-1 SGC and AGC values were applied to all HAPs and PAH(s) pollutants as well as to the NO₂, SO₂, CO, particulate matter, and ethyl alcohol emitted from the baking operations.

Facility Number 1

The Damascus Bakery facility, under PA0069-93N, operates a 33-foot universal tunnel oven (No.1) for 18 hours a day and 300 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total hydrocarbons as methane (CAS # 74-82-8), and total non-methane hydrocarbons (CAS # 519-00-0); and ethyl alcohol as a product of process emissions. As mentioned above, for total hydrocarbons as a methane group (with methane being representative), the AGC for methane of 1,600 ug/m³ was used. For the group of total non-methane hydrocarbons, excluding the PAH(s) group, ethane, as representative, with an AGC of 2,900 ug/m³, was used. Methane and ethane have no assigned SGC values in DAR-1.

Facility Number 2

The Damascus Bakery facility, under PA0070-93M, operates a “Genau Engineering” 21-foot long tunnel oven (No. 2) for 18 hours a day and 55 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total hydrocarbons as methane (CAS # 74-82-8); and ethyl alcohol as a product of process emissions. The same representative compounds of non-methane hydrocarbons as ethane and total hydrocarbons as methane as for Facility No.1 were used.

Facility Number 3

The Damascus Bakery facility, under PA0071-93J, operates an 18-foot long universal tunnel oven (No. 3) for 6 hours a day and 200 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total hydrocarbons as methane (CAS # 74-82-8); and ethyl alcohol as a product of process emissions. The same representative compounds of non-methane hydrocarbons as ethane and total hydrocarbons as methane as for Facility No.1 were used.

Facility Number 4

The Damascus Bakery facility, under PA0072-93R, operates a Salva Sirocco Rack Oven (No. #4) for 6 hours a day and 150 days a year. The permit lists six pollutants as being emitted from its baking operations: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total

hydrocarbons as methane (CAS # 74-82-8). The same representative compounds of non-methane hydrocarbons and total hydrocarbons as methane as for Facility No.1 were used.

Facility Number 5

The Damascus Bakery facility, under PA0073-93Y, operates a Salva Sirocco Rack Oven (No. #5) for 6 hours a day and 150 days a year. The permit lists six pollutants as being emitted from its baking operations as products of combustion of natural gas: particulates (CAS # NY075-00-0), SO₂ (CAS # 7446-09-5), NO₂ (CAS # 10102-44-0), CO (CAS # 630-08-0), total non-methane hydrocarbons (CAS # 519-00-0), and total hydrocarbons as methane (CAS # 74-82-8); and ethyl alcohol as a product of process emissions. The same representative compounds of non-methane hydrocarbons as ethane and total hydrocarbons as methane as for Facility No.1 were used.

Emission Rates

Emission rates of all pollutants under all permits were directly obtained from the permit applications for these facilities (as shown above in Table 17-4).

Table 17-4: Existing Toxic Facilities Permit Information

Facility Name	Facility Type	Permit No.	Emission Point ID	Potential Emissions	Pollutant Name	CAS No.	Emissions	
							Hourly lb/hr	Annual lb/year
Damascus Bakery, Inc 56 Gold Street Block 32 Lot 29	Baking of Pita Bread in Universal Tunnel Oven #1	PA0069-93N	1B	Combustion Emissions	Particulates	NY075-00-	0.005	12.2
					Sulfur Dioxide	7446-09-5	0.001	2.4
					Nitrogen Dioxide	10102-44-0	0.150	366.4
					Carbon Dioxide	630-08-0	0.030	73.3
					Total Non-Methane	NY519-00-	0.008	19.5
					Total Hydrocarbons as	74-82-8	0.004	9.80
	Baking of Pita Bread in Genau Engineering Tunnel Oven #2	PA0070-93M	2	Combustion Emissions	Ethyl Alcohol	64-17-5	0.625	3054
					Particulates	NY075-00-	0.003	1.6
					Sulfur Dioxide	7446-09-5	0.001	0.4
					Nitrogen Dioxide	10102-44-0	0.100	44.8
					Carbon Dioxide	630-08-0	0.020	9.0
					Total Non-Methane	NY519-00-	0.005	2.2
	Baking of Pita Bread in Universal Tunnel Oven #3	PA0071-93J	3	Combustion Emissions	Total Hydrocarbons as	74-82-8	0.003	1.3
					Ethyl Alcohol	64-17-5	0.625	560
					Particulates	NY075-00-	0.002	1.2
					Sulfur Dioxide	7446-09-5	0.001	0.6
					Nitrogen Dioxide	10102-44-0	0.080	48.0
					Carbon Dioxide	630-08-0	0.016	9.6
	Baking of Pita Bread in Sirocco Rack Oven #4	PA0072-93R	4A	Combustion Emissions	Total Non-Methane	NY519-00-	0.004	2.4
					Total Hydrocarbons as	74-82-8	0.002	1.2
					Ethyl Alcohol	64-17-5	0.075	90
					Particulates	NY075-00-	0.001	0.5
					Sulfur Dioxide	7446-09-5	0.001	0.9
					Nitrogen Dioxide	10102-44-0	0.040	18.0
Baking of Pita Bread in Sirocco Rack Oven #5	PA0073-93Y	5	Combustion Emissions	Carbon Dioxide	630-08-0	0.008	3.6	
				Total Non-Methane	NY519-00-	0.002	0.9	
				Total Hydrocarbons as	74-82-8	0.001	0.50	
				Ethyl Alcohol	64-17-5	0.023	20.7	
				Particulates	NY075-00-	0.001	0.2	
				Sulfur Dioxide	7446-09-5	0.001	0.3	
Baking of Pita Bread in Sirocco Rack Oven #5	PA0073-93Y	5	Combustion Emissions	Nitrogen Dioxide	10102-44-0	0.040	6.0	
				Carbon Dioxide	630-08-0	0.008	1.2	
Baking of Pita Bread in Sirocco Rack Oven #5	PA0073-93Y	5B	Process Emissions	Total Non-Methane	NY519-00-	0.002	0.3	
				Total Hydrocarbons as	74-82-8	0.001	0.20	
Baking of Pita Bread in Sirocco Rack Oven #5	PA0073-93Y	5B	Process Emissions	Ethyl Alcohol	64-17-5	0.023	6.90	

CEQR Screening Analysis

For estimating potential impacts from industrial emission sources of toxic air pollutants, the *CEQR Technical Manual* recommends using a screening procedure as a first step in the analysis. This procedure uses pre-tabulated pollutant concentration values based on a generic emission rate of 1 gram per second from *CEQR Technical Manual* Table 17-3, "Industrial Source Screen," for the applicable averaging time periods. This approach, which can be used to estimate maximum short-term and annual average concentration values at various distances (from 30 to 400 feet) from an emission source, was utilized to assess the potential impacts of the emissions from the five existing permitted facilities.

The distances from the building at 56 Gold Street, where all five operations are located, to the project site was determined and used in the screening analysis. The estimated distance from the lot line of 56 Gold Street building to the lot line of the project site is 40 feet. At this distance, the maximum 1-hour and annual concentrations were estimated to be 98,203 and 4,791 ug/m³, respectively.

All values obtained from Table 17-3 of the *CEQR Technical Manual* for an emission rate of 1 gram per second were multiplied by the actual emission rate of each pollutant under each permit to estimate actual pollutant concentrations. These values are provided in Tables 17-5 through Table 17-24. Particulates were considered as total particulate matter with CAS # NY075-00-0 as listed in all permits.

Table 17-5: Estimated Emission Rates and Actual Concentrations under PA0069-93N for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.005	12.2	0.0006	0.0002	98,203	4,791	61.9	0.841
Sulfur Dioxide	7446-09-5	0.001	2.4	0.0001	0.0000			12.4	0.165
Nitrogen Dioxide	10102-44-0	0.150	366.4	0.0189	0.0053			1856	25.2
Carbon Dioxide	630-08-0	0.030	73.3	0.0038	0.0011			371	5.05
Ethane	74-84-0	0.008	19.5	0.0010	0.0003			99.0	1.344
Methane	74-82-8	0.004	9.80	0.0005	0.0001			49.5	0.675
Ethyl Alcohol	64-17-5	0.625	3054	0.0787	0.0439			7733	210

Table 17-6: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0069-93N for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour Ratios
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	61.9	380	1.63E-01
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	1856	188	9.87E+00*
Carbon Dioxide	630-08-0	371	14,000	2.65E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1 and were not included in the table

Table 17-7: Estimated Annual Concentration Ratios (C_a/AGC) under PA0069-93N for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual Ratios
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.841	45	1.87E-02
Sulfur Dioxide	7446-09-5	0.165	80	2.07E-03
Nitrogen Dioxide	10102-44-0	25.25	100	2.52E-01
Ethane	74-84-0	1.344	2,900	4.63E-04
Methane	74-82-8	0.675	1,600	4.22E-04
Ethyl Alcohol	64-17-5	210.5	45,000	4.68E-03

Carbon Dioxide has no assigned AGC value in DAR-1 and was not included in the table

Table 17-8: Estimated PHAs Cancer Risk under PA0069-93N for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec		µg/m ³	
PAHs	4.67E-09	2.24E-05	0.02	1.12E-09

Table 17-9: Estimated Emission Rates and Actual Concentrations under PA0070-93M for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³

Particulates	NY075-00-0	0.003	1.6	0.0004	0.0000	98,203	4,791	37.1	0.110
Sulfur Dioxide	7446-09-5	0.001	0.4	0.0001	0.0000			12.4	0.028
Nitrogen Dioxide	10102-44-0	0.100	44.8	0.0126	0.0006			1237.2	3.087
Carbon Dioxide	630-08-0	0.020	9.0	0.0025	0.0001			247.4	0.620
Ethane	74-84-0	0.005	2.2	0.0006	0.00003			61.9	0.152
Methane	74-82-8	0.003	1.3	0.0004	0.0000			37.1	0.090
Ethyl Alcohol	64-17-5	0.625	560	0.0787	0.0081			7733	39

Table 17-10: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0070-93M for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	
Particulates	NY075-00-0	37.1	380	9.77E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	1237	188	6.58E+00*
Carbon Dioxide	630-08-0	247	14,000	1.77E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1 and were not included in the table

Table 17-11: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0070-93M

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	
Particulates	NY075-00-0	0.110	45	2.45E-03
Sulfur Dioxide	7446-09-5	0.028	80	3.45E-04
Nitrogen Dioxide	10102-44-0	3.09	100	3.09E-02
Ethane	74-84-0	0.15	2,900	5.23E-05
Methane	74-82-8	0.090	1,600	5.60E-05
Ethyl Alcohol	64-17-5	38.6	45,000	8.57E-04

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-12: Estimated PHAs Cancer Risk under PA0070-93M for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec		$\mu\text{g}/\text{m}^3$	
PAHs	5.27E-10	2.52E-06	0.02	1.26E-10

Table 17-13: Estimated Emission Rates and Actual Concentrations under PA0071-93J for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.002	1.2	0.0003	0.00002	98,203	4,791	24.7	0.083
Sulfur Dioxide	7446-09-5	0.001	0.6	0.0001	0.00001			12.4	0.041
Nitrogen Dioxide	10102-44-0	0.080	48.0	0.0101	0.00069			989.9	3.308
Carbon Dioxide	630-08-0	0.016	9.6	0.0020	0.00014			198.0	0.662
Ethane	74-84-0	0.004	2.4	0.0005	0.00003			49.5	0.165
Methane	74-82-8	0.002	1.2	0.0003	0.00002			24.7	0.083
Ethyl Alcohol	64-17-5	0.075	90.0	0.0094	0.0013			928	6.2

Table 17-14: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0071-93J for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	24.7	380	6.51E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	990	188	5.27E+00*
Carbon Dioxide	630-08-0	198	14,000	1.41E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1and were not included in the table

Table 17-15: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0071-93J for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.083	45	1.84E-03
Sulfur Dioxide	7446-09-5	0.041	80	5.17E-04
Nitrogen Dioxide	10102-44-0	3.31	100	3.31E-02
Ethane	74-84-0	0.165	2,900	5.70E-05
Methane	74-82-8	0.083	1,600	5.17E-05
Ethyl Alcohol	64-17-5	6.202	45,000	1.38E-04

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-16: Estimated PHAs Cancer Risk under PA0071-93J for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec	µg/m ³		
PAHs	5.74E-10	2.75E-06	0.02	1.38E-10

Table 17-17: Estimated Emission Rates and Actual Concentrations under PA0072-93R for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.001	0.5	0.0001	0.00001	98,203	4,791	12.4	0.034
Sulfur Dioxide	7446-09-5	0.001	0.9	0.0001	0.00001			12.4	0.062
Nitrogen Dioxide	10102-44-0	0.040	18.0	0.0050	0.00026			494.9	1.240
Carbon Dioxide	630-08-0	0.008	3.6	0.0010	0.00005			99.0	0.248
Ethane	74-84-0	0.002	0.9	0.0003	0.00001			24.7	0.062
Methane	74-82-8	0.001	0.5	0.0001	0.00001			12.4	0.034
Ethyl Alcohol	64-17-5	0.023	20.7	0.0029	0.0003			284.6	1.426

Table 17-18: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0072-93R for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	12.4	380	3.26E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	495	188	2.63E+00*
Carbon Dioxide	630-08-0	99	14,000	7.07E-03

* Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1and were not included in the table

Table 17-19: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0072-93R for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.034	45	7.66E-04
Sulfur Dioxide	7446-09-5	0.062	80	7.75E-04
Nitrogen Dioxide	10102-44-0	1.24	100	1.24E-02
Ethane	74-84-0	0.062	2,900	2.14E-05
Methane	74-82-8	0.034	1,600	2.15E-05
Ethyl Alcohol	64-17-5	1.426	45,000	3.17E-05

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-20: Estimated PHAs Cancer Risk under PA0072-93R for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec			
PAHs	2.15E-10	1.03E-06	0.02	5.16E-11

Table 17-21: Estimated Emission Rates and Actual Concentrations under PA0073-93Y for Impact on 251 Front Street Building

Pollutant Name	CAS No.	Pollutant Emission Rates				Conc. for 1 g/sec		Actual Conc.	
		Hourly	Annual	Hourly	Annual	1-hour	Annual	Hourly	Annual
		lb/hr	lb/year	g/sec	g/sec	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Particulates	NY075-00-0	0.001	0.2	0.0001	0.00000	98,203	4,791	12.4	0.014
Sulfur Dioxide	7446-09-5	0.001	0.3	0.0001	0.00000			12.4	0.021
Nitrogen Dioxide	10102-44-0	0.040	6.0	0.0050	0.00008			494.9	0.413
Carbon Dioxide	630-08-0	0.008	1.2	0.0010	0.00001			99.0	0.083
Ethane	74-84-0	0.002	0.3	0.0003	0.00000			24.7	0.021
Methane	74-82-8	0.001	0.2	0.0001	0.00000			12.4	0.014
Ethyl Alcohol	64-17-5	0.023	6.9	0.0029	0.0001			284.6	0.475

Table 17-22: Estimated 1-hour Concentration Ratios (C_a/SGC) under PA0073-93Y for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	12.4	380	3.26E-02
Sulfur Dioxide	7446-09-5	12.4	197	6.28E-02
Nitrogen Dioxide	10102-44-0	495	188	2.63E+00*
Carbon Dioxide	630-08-0	99	14,000	7.07E-03

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1and were not included in the table

Table 17-23: Estimated Annual Concentration Ratios (C_a/AGC) under Permit PA0073-93Y for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		(µg/m ³)	(µg/m ³)	
Particulates	NY075-00-0	0.014	45	3.06E-04
Sulfur Dioxide	7446-09-5	0.021	80	2.58E-04
Nitrogen Dioxide	10102-44-0	0.41	100	4.13E-03
Ethane	74-84-0	0.021	2,900	7.13E-06
Methane	74-82-8	0.014	1,600	8.61E-06
Ethyl Alcohol	64-17-5	0.475	45,000	1.06E-05

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-24: Estimated PHAs Cancer Risk under PA0073-93Y for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec			
PAHs	7.18E-11	3.44E-07	0.02	1.72E-11

Results of the Screening Analysis

Because the same pollutants are emitted under each permit, maximum hourly and annual concentrations of the same pollutants were added together to estimate the cumulative concentrations of that pollutant. These combined values for all pollutants are provided in Tables 17-25 through 17-27.

The results of the screening analysis are as follows:

- The maximum cumulative 1-hour total particulate matter concentration from all five emissions sources combined is 148.5 ug/m³ at the project site, which is less than the corresponding SGC DAR-1 value of 380 ug/m³.
- The maximum cumulative annual total particulate matter concentration from all five emissions sources combined is 1.02 ug/m³ at the project site, which is less than the corresponding AGC DAR-1 value of 45 ug/m³.
- The maximum cumulative 1-hour SO₂ concentration from all five emission sources combined is 61.9 ug/m³ at the project site, which, with the added background value of 37.3 ug/m³, results in a total 1-hour SO₂ concentration that is less than the corresponding 1-hour National Ambient Air Quality Standards (NAAQS) for SO₂ of 196 ug/m³ (as well as the SGC DAR-1 value of 196 ug/m³).
- The maximum annual concentrations of ethane, methane, and ethyl alcohol are all less than the corresponding AGC DAR-1 values.
- The cumulative cancer risk from all sources combined for impact on the proposed building is estimated to be 1.45E-09, which is less than the cancer risk threshold of one per million. The maximum cumulative 1-hour NO₂ concentrations at the project site exceeds the 1-hour NO₂ NAAQS and SGC DAR-1 value of 188 ug/m³. The result of this analysis indicates that NO₂ emissions from all permits combined have the potential to have a significant adverse impact on the proposed developments. Therefore, a detailed analysis, using the AERMOD model, was conducted to more accurately estimate the potential 1-hour NO₂ impact.

In addition, DEP currently requires that particulate matter emitted into the atmosphere from toxic facilities be considered as PM_{2.5} emissions. Therefore, along with 1-hour particulate impacts (as per DAR-1 requirements), 24-hour and annual PM_{2.5} impacts were considered in comparison with the 24-hour and annual PM_{2.5} NAAQS.

Therefore, detailed modeling analyses (using AERMOD) were conducted for these two pollutants -- NO₂ and PM_{2.5} -- to estimate the cumulative effects of all sources combined.

Table 17-25: Estimated Cumulative 1-hour Concentration Ratios (C_a /SGC) under all permits for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated 1-hour Conc.	SGC	1-hour
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	
Particulates	NY075-00-0	148.5	380	3.91E-01
Sulfur Dioxide	7446-09-5	61.9	197	3.14E-01
Nitrogen Dioxide	10102-44-0	5073	188	2.70E+01*
Carbon Dioxide	630-08-0	1015	14,000	7.25E-02

- Exceed SGC

Ethane, Methane, and Ethyl Alcohol have no assigned SGC values in DAR-1 and were not included in the table

Table 17-26: Estimated Cumulative Annual Concentration Ratios (C_a /AGC) under all permits for Impact on 251 Front Street Building

Chemical Name	CAS No.	Max Estimated Annual Conc.	AGC	Annual
		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)	
Particulates	NY075-00-0	1.082	45	2.40E-02
Sulfur Dioxide	7446-09-5	0.317	80	3.96E-03
Nitrogen Dioxide	10102-44-0	33.30	100	3.33E-01
Ethane	74-84-0	1.743	2,900	6.01E-04
Methane	74-82-8	0.896	1,600	5.60E-04
Ethyl Alcohol	64-17-5	257.1	45,000	5.71E-03

Carbon Dioxide has no AGC available from DAR-01 and was not included in the table

Table 17-27: Estimated PHAs Cancer Risk under all permits for Impact on 251 Front Street Building

Chemical Name	Annual Emission Rate	Max Estimated Annual Conc.	AGC per million	Ratio of Estimated Conc. to AGC
	g/sec	$\mu\text{g}/\text{m}^3$		
PAHs	6.06E-09	2.90E-05	0.02	1.45E-09

Detailed Dispersion Modeling Analysis: Methodology

A detailed dispersion analysis was conducted using the latest version of the EPA AERMOD dispersion model (EPA version 15181). AERMOD's PVMRM module was also utilized to account for the NO_x to NO₂ conversion, and the AERMOD Building Profile Input Parameters (BPIP) algorithm was utilized to estimate building profile input parameters for downwash effect calculation.

The latest five consecutive years of meteorological data (2010-2014) were used. Surface data were obtained from La Guardia Airport, and upper air data were obtained from Brookhaven station, New York. Data was processed by Trinity Consultants, Inc., using the current EPA AERMET. 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 to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs.

The 24-hour PM_{2.5} background concentration was developed from monitoring data collected by the NYSDEC at the Brooklyn JHS monitoring station as 21.9 $\mu\text{g}/\text{m}^3$, which is the average of the

98th percentiles for the last three years (2012-2014), and annual concentration PM_{2.5} is 9.2 ug/m³, which is also the three-year average value.

Because JHS-25 does not monitor NO₂ background concentrations, the following values were obtained from the Queens College 2 monitoring station: 1-hour - 57.9 ppb or 109 ug/m³, annual - 17.25 ppb or 32 ug/m³, and 14.3 ppb or 37.3 ug/m³ for 1-hour SO₂.

According to all permits, toxic pollutants are vented to the outside through roof-top stacks. Based on the locations of these emission points under each permit, as shown on drawings and Google Earth Pro imaging software, the location of each emission point on the roof of the Damascus Bakery building was determined, and emissions were assigned to each stack.

There are three emission points identified under PA0069-93N for facility No. 1 but, according to the permit, all emissions are assumed to be released from emission point 1B. Permits PA0072-93R and PA0073-93Y have two emission points - 4A and 5A -- where all emissions are from the combustion of natural gas, and two emission points -- 4B and 5B -- which exhaust only process emissions (ethyl alcohol). Therefore, for the analysis of combustion emissions, only emission points 4A and 5A were considered. Source parameters were obtained from each permit as follows:

Permit No.	Emission Point No.	Stack Height, feet	Stack Diameter, feet	Temperature, deg-F	Exit Velocity, ft/sec	Exit Flow Rate, cfm	Gas Usage Rate, MMBtu/hr
PA0069-93N	1A,1B,1C	21	0.66	600	38.2	800	1.5
PA0070-93M	2	24	1.5	600	30.5	3,228	1.0
PA0071-93J	3	24	1.0	600	34	1,600	0.8
PA0072-93J	4A	22	0.83	350	4.2	138	0.4
PA0072-93Y	5A	24	0.66	350	6.6	138	0.4

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO₂, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO₂ NAAQS standard of 0.100 ppm (188 ug/m³) is the three-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO₂ concentrations that is comprised of three tiers. Tier 1, the most conservative approach, assumes a full (100 percent) conversion of NO_x to NO₂; Tier 2 applies a conservative ambient NO_x/NO₂ ratio of 80 percent to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO₂ within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO₂ concentrations or total 1-hour NO₂ concentrations if hourly NO₂ background concentrations are added within the model, and averages these values over the numbers of the years modeled. Total estimated

concentrations are generated in the statistical form of the 1-hour NO₂ NAAQS format and can be directly compared with the 1-hour NO₂ NAAQS standard.

In accordance with DCP guidance, Tier 1, as the most conservative approach, was initially applied as a preliminary screening tool to determine whether violations of the NAAQS are likely to occur. If exceedances of the 1-hour NO₂ NAAQS are estimated, the less conservative Tier 3 approach should be applied.

Analysis was conducted with downwash effects. In accordance with NYSDEC guidance, as described in the recently released NYSDEC AERSCREEN User's Guide (August 31, 2015 version), the option without downwash should only be used for stack heights greater than the Good Engineering Practice (GEP) stacks. (GEP stacks avoid downwash effect.) For shorter stacks, such as the Bakery building, the use of the downwash algorithm is required. In addition, as the building exists, wind flows around the building will create downwash effects that will affect dispersion and resulting concentrations. In addition, the in-stack NO₂/NO_x ratio should be 0.5 as EPA default value (same reference as above).

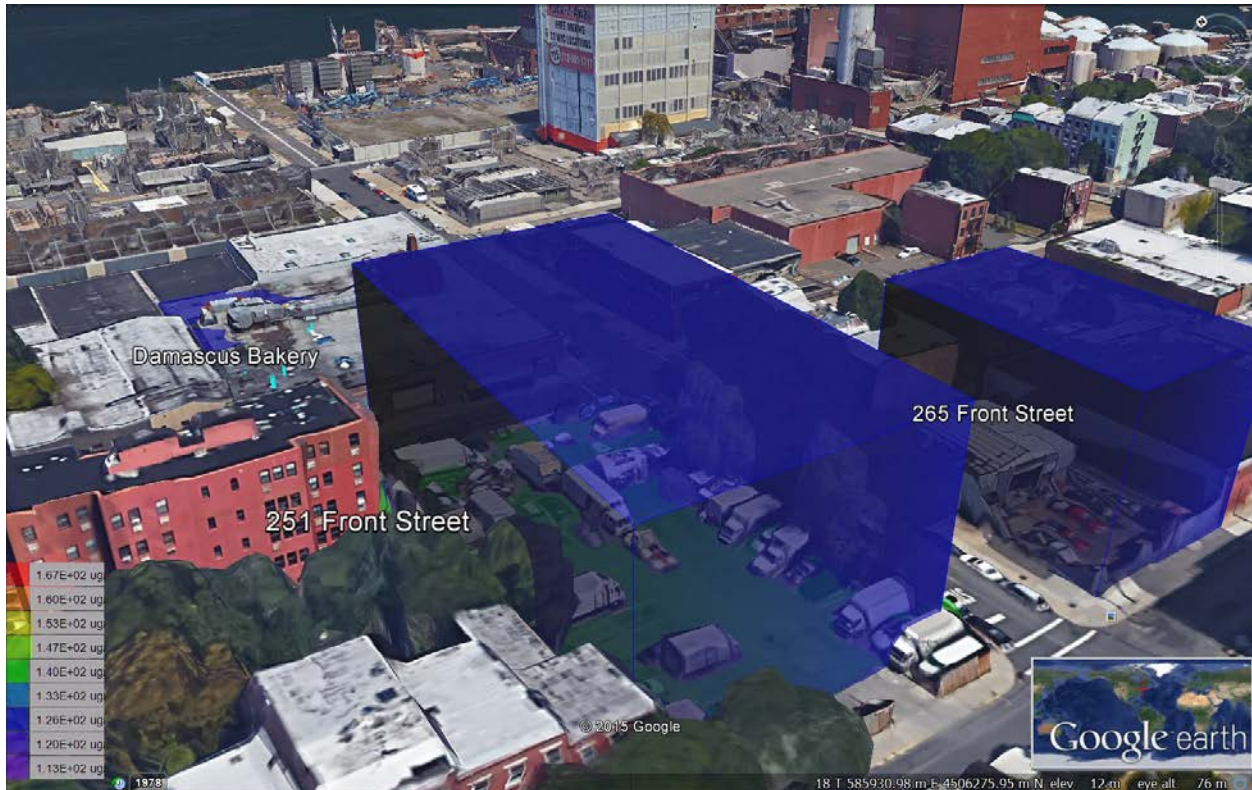
Particulate matter is emitted from natural gas combustion that provides heat for the baking process in the oven. There are also process emissions from baking operations, such as flour mixing and preparation. However, data show that particulates from the baking preparation process are larger than 10 or more microns in size, so PM_{2.5} emissions result only from the gas combustion process.

It was assumed that emission rates listed in the permits for total particulates would apply to PM_{2.5}. Particulate emissions from all five emission sources were modeled in one modeling run so that the AERMOD-estimated concentrations represent the cumulative impacts of all sources combined. Estimated impacts of PM_{2.5} emissions, with added background concentrations, were compared with the applicable 24-hour and annual PM_{2.5} NAAQS.

Detailed Dispersion Modeling Analysis: Results

The results of the NO₂ Tier 1 analysis with AERMOD shows that the total 8th highest daily 1-hour NO₂ concentration from two sources combined with added NO₂ background concentration of 109 ug/ m³ exceeds the 1-hour NAAQS of 188 ug/ m³. Therefore, a Tier 3 analysis was conducted. The result of the NO₂ Tier 3 analysis with AERMOD shows that the total cumulative 8th highest daily 1-hour NO₂ concentration with added NO₂ background concentration within the model is estimated to be 173.5 ug/ m³, which is less than the 1-hour NAAQS of 188 ug/ m³ and corresponding DAR-1 SGC value (see the 3-D Contour Map below).

NO₂ 3-D Contour Map



The maximum annual total NO₂ concentration, which is estimated to be 32.4 ug/m³ (i.e., a maximum estimated impact 0.4 ug/m³ plus a background value of 32 ug/m³), is also less than the annual NAAQS of 100 ug/m³ and corresponding DAR-1 AGC value.

Therefore, the NO₂ emissions from the Damascus Bakery would not have a significant adverse impact on the proposed development.

Results of the PM_{2.5} analysis are that the maximum estimated 24-hour PM_{2.5} impact is 0.97 ug/m³ and the maximum estimated annual average PM_{2.5} impact is 0.02 ug/m³. With added 24-hour and annual background concentrations of 21.9 ug/m³ and 9.2 ug/m³, both 24-hour and annual total concentrations are less than corresponding PM_{2.5} NAAQS of 35 ug/m³ and 12 ug/m³.

Therefore, the PM_{2.5} emissions from Damascus Bakery would not cause exceedances of the 24-hour and annual PM_{2.5} NAAQS at the project site and would not have a significant adverse impact on the proposed project.

18. NOISE

Impact Determination and Noise Standards and Guidelines

In 1983 the New York City Department of Environmental Protection (DEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEQR) noise standards for exterior noise levels. These standards are the basis for classifying noise exposure into four categories based on the L_{10} : Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable, as shown in Table 18-1.

**Table 18-1
CEQR Noise Exposure Guidelines for use in City Environmental Impact Review¹**

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

Notes:

- (i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;
- 1 Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
 - 2 Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.
 - 3 One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.
 - 4 External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

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

For sensitive receptors introduced by the proposed action, Action condition noise levels in dB(A) $L_{10(1)}$ are compared with the values contained in the Noise Exposure Guidelines. If these noise levels would exceed the Marginally Acceptable levels, a significant impact would occur unless the building design provides a composite building attenuation that would be sufficient to reduce these levels to an acceptable interior noise level. These values are shown in Table 18-2.

**Table 18-2
Required Attenuation Values to Achieve Acceptable Interior Noise Levels**

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

Note: ^AThe above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dBA less in each category. All the above categories require a closed window situation and hence alternate means of ventilation.

^BRequired attenuation values increase by 1 dBA increments for L_{10} values greater than 80 dBA.

Source: New York City Department of Environmental Protection, 2012.

For noise increases caused by project-induced traffic, or for stationary noise sources introduced by the proposed action, if the No-Action levels are less than 60 dB(A) $L_{eq(1)}$ and the analysis period is not at nighttime, an increase of 5 dB(A) $L_{eq(1)}$ or more in the future with the project would be considered a significant impact. In order for the 5 dB(A) threshold to be valid, the resultant action condition noise level would have to be equal to or less than 65 dB(A). If the No-Action noise level is equal to or greater than 62 dB(A) $L_{eq(1)}$, or if the analysis period is a nighttime analysis period, the incremental significant impact threshold would be 3 dB(A) $L_{eq(1)}$. If the No-Action noise level is 61dB(A) $L_{eq(1)}$, the maximum incremental increase would be 4 dB(A), since an increase higher than this would result in a noise level higher than the 65 dB(A) $L_{eq(1)}$ threshold and be considered significant.

Potential for Additional Stationary Source Noise

The proposed action would result in additional residential development. Unlike playgrounds, truck loading docks, loudspeaker systems, car washes, stationary diesel engines, or similar uses, residential apartment buildings are not substantial stationary noise sources. All rooftop mechanical equipment, including air conditioner compressors, would be enclosed and would comply with New York City Noise Code requirements, which limit noise levels generated by such equipment to 65 dBA during the daytime (7AM to 10 PM) and 55 dBA during the nighttime. The proposed action would therefore not have the potential to cause a significant adverse stationary source noise impact.

Potential for Additional Mobile Source Noise

The anticipated action-induced development is below the CEQR threshold for a traffic impact assessment. It can therefore be assumed that the additional traffic volumes would be too low to cause a 3 dBA increase in $L_{eq(1)}$ noise levels, which would require a doubling of PCE traffic

volumes along an adjacent street. The proposed action would therefore not have the potential to cause a significant adverse mobile source noise impact.

Potential for Existing Noise Levels to Adversely Affect New Residents

Directly across the intersection of Gold Street from the project site, at the northeast corner of the intersection of Gold and Front Streets, is another proposed rezoning site (265 Front Street, or Block 43, Lot 1). As part of the environmental review for that proposed action, noise monitoring was conducted on Thursday, May 14, 2015.

Because the predominant noise source in the area of the proposed project is vehicular traffic, noise monitoring was conducted during peak vehicular travel periods, 8:00-9:00 am, 12:00 pm-1:00 pm, and 5:00-6:00 pm. The weather was dry, and wind speeds were moderate. Pursuant to *CEQR Technical Manual* methodology, readings were conducted for 20-minute periods during each peak hour. Noise monitoring was conducted using a Type 2 Larson-Davis LxT2 sound meter, with wind screen. The monitor was placed on a tripod at a height of approximately three feet above the ground, away from any other surfaces. The monitor was calibrated prior to and following each monitoring session. Because the site is a corner lot with two frontages, monitoring was conducted on the Front Street frontage as well as on the Gold Street frontage of the subject site.

The monitoring results are shown in Tables 18-3 and 18-4. As the tables show, the highest L₁₀ reading was 66.6 dB(A), obtained on the Front Street side of the property during the late afternoon period. That is within the Marginally Acceptable noise exposure category. The proposed action would not cause a significant adverse impact by exposing new sensitive receptors to high ambient noise levels.

**Table 18-3
Noise Levels along Front Street**

	Thursday, May 14, 2015		
	8:03 - 8:23 am	12:00 - 12:20 pm	5:00 - 5:20 pm
L _{max}	81.5	73.8	80.6
L ₅	69.1	66.2	70.1
L₁₀	65.3	63.0	66.6
L _{eq}	64.0	60.6	64.0
L ₅₀	56.9	57.7	59.6
L ₉₀	53.3	54.8	57.0
L _{min}	50.8	53.4	49.6

**Table 18-4
Noise Levels along Gold Street**

	Thursday, May 14, 2015		
	8:23 – 8:44 am	12:21 - 12:42 pm	5:21 - 5:41 pm
L_{max}	78.5	77.9	76.4
L₅	67.3	62.6	62.4
L₁₀	65.4	59.5	59.3
L_{eq}	61.6	58.7	58.8
L₅₀	57.1	54.0	54.9
L₉₀	53.5	51.2	51.5
L_{min}	51.1	49.3	50.1

22. CONSTRUCTION

Construction impacts, although temporary, can sometimes result in significant adverse impacts. Determination of significance is generally based on the duration and magnitude of the effects. Construction impacts are generally important when construction activity would affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, or air quality conditions.

Construction impact assessments are not necessarily required for all actions that would involve or induce construction, and different assessments may be appropriate for different projects. The *CEQR Technical Manual* provides criteria for determining whether construction impact analyses are required.

A transportation analysis is generally required if construction would (1) occur within a central business district or along an arterial or major roadway, (2) impede movement along a roadway or sidewalk, or (3) occur simultaneously at multiple sites within the same geographic area. The proposed project would not meet any of these criteria.

According to the *Manual*, air quality and noise analyses are generally not required if a transportation analysis is not needed.

A hazardous materials analysis is generally required if construction would occur at a site with soil or groundwater contamination. As discussed in Section 12, Hazardous Materials, a Phase I ESA prepared for the project site concluded that no Recognized Environmental Conditions are present.

A natural resources analysis is required if construction would occur on or near a site containing natural resources. The proposed rezoning area does not satisfy this criterion.

Open space, socioeconomic conditions, community facilities, land use and public policy, neighborhood character, and infrastructure analyses are needed only if construction activities would be long-term, lasting more than two years, or if construction would directly affect a technical area, such as by impeding access to a community facility. Neither is true in the case of the proposed action.

A cultural and historic resources analysis is required if in-ground disturbances or vibrations associated with project construction could undermine the foundation or structural integrity of nearby structures of cultural or historic significance. In the case of the proposed action, the project site is adjacent to a mid- nineteenth century row house within the Vinegar Hill Historic District.

Damage to adjacent historic structures can be avoided through the formulation and implementation of a construction protection plan, which would be done for construction at the project site. Furthermore, if a construction project is located within 90 feet of an individual landmark designated by the New York City Landmarks Preservation Commission (LPC), any structure within a historic district designated by the LPC, or any property listed on the National Register, the New York City Department of Buildings (DOB) requires that the project comply with DOB Technical Policy and Procedure Notice 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction When Subject to Controlled Inspection by Section 27-724 and for Any Existing Structure Designated by the Commissioner, which supplements the standard building protections afforded by Building Code C26-112.4. The specified procedures include establishment of criteria for maximum drilling velocity and movement criteria for the historic building walls and foundations. They include a monitoring program for the effects of vibrations, excavation, and drawdown of the water table. A licensed surveyor must be retained to monitor (through measurements made at least twice a week) any movement or tilting of the historic buildings and of any temporary retaining walls or other building support system, as well as settlements of the street and selected points on the ground. Any existing cracks in the walls of the historic buildings must be monitored. Groundwater levels are to be monitored through observation wells. Vibration from pile driving is to be monitored through the use of a seismograph placed adjacent to the closest historic building. Monitoring records must be kept and incorporated into inspection reports submitted to DOB within 30 days of the completion of excavation. The specified procedures should prevent any construction-related damage to the nearby historic resources.

It is therefore not anticipated that the proposed project would result in any significant adverse construction impacts.

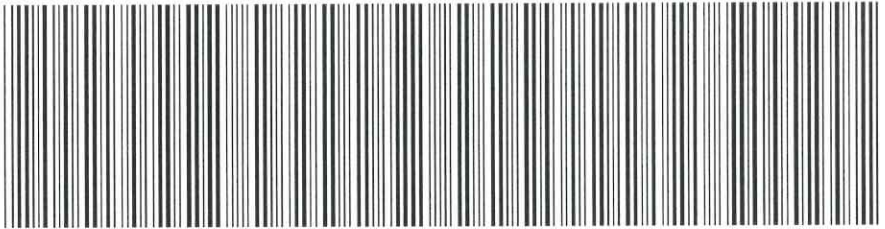
SUMMARY

The proposed actions, as revised, would not cause any significant adverse environmental impacts.

Attachment 1 to Appendix 4
Executed Restrictive Declaration

**NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER**

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RECORDING AND ENDORSEMENT COVER PAGE

PAGE 1 OF 16

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Document Page Count: 15

PRESENTER: RIDGE ABSTRACT CORP. (SA) PICK UP 1967 MCDONALD AVENUE BECK BROOKLYN, NY 11223 718-338-0065 RA11223@AOL.COM	RETURN TO: RIDGE ABSTRACT CORP. (SA) PICK UP 1967 MCDONALD AVENUE BECK BROOKLYN, NY 11223 718-338-0065 RA11223@AOL.COM
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PROPERTY DATA				
Borough	Block	Lot	Unit	Address
BROOKLYN	42	24	Entire Lot	251 FRONT STREET
Property Type: COMMERCIAL REAL ESTATE				

CROSS REFERENCE DATA
CRFN _____ or DocumentID _____ or _____ Year _____ Reel _____ Page _____ or File Number _____

PARTIES	
PARTY 1: 251 FRONT STREET REALTY INC. P.O. BOX 26606 BROOKLYN, NY 11202	

FEES AND TAXES			
Mortgage :		Filing Fee:	\$ 0.00
Mortgage Amount:	\$ 0.00	NYC Real Property Transfer Tax:	\$ 0.00
Taxable Mortgage Amount:	\$ 0.00	NYS Real Estate Transfer Tax:	\$ 0.00
Exemption:			
TAXES: County (Basic):	\$ 0.00		
City (Additional):	\$ 0.00		
Spec (Additional):	\$ 0.00		
TASF:	\$ 0.00		
MTA:	\$ 0.00		
NYCTA:	\$ 0.00		
Additional MRT:	\$ 0.00		
TOTAL:	\$ 0.00		
Recording Fee:	\$ 112.00		
Affidavit Fee:	\$ 0.00		

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Annette McMill
City Register Official Signature

DECLARATION

This DECLARATION made as of the 7 day of March, 2017 by 251 Front Street Realty Inc., with an address at P.O. Box 26606, Brooklyn, New York 11202 (hereinafter referred to as "Declarant");

WITNESSETH

WHEREAS, Declarant is the fee owner of certain real property located in Kings County, City and State of New York, designated for real property tax purposes as Tax Block 42, Lot 24, and commonly known as 251 Front Street, Brooklyn, New York, (the "Project Site") on the Tax Map of the City of New York and are more particularly described in Exhibit A, annexed hereto and made part hereof; and

 WHEREAS, Royal Abstract of New York, LLC ("Title Company"), has issued a Certification of Parties In Interest, annexed hereto as Exhibit B and made a part hereof, that as of 12/7, 2016, Declarant and BCB Community Bank are the only Parties-in-Interest (as defined in subdivision (c) of the definition of "zoning lot" set forth in Section 12-10 of the New York City Zoning Resolution) in the Project Site (the "Certification"); and

WHEREAS, all Parties-in-Interest to the Project Site have either executed this Declaration or waived their rights to execute this Declaration by written instruments annexed hereto as Exhibits C and made a part hereof, which instrument is intended to be recorded simultaneously with this Declaration; and

WHEREAS, as of the date hereof, the Title Company has determined that there has been no change in the facts set forth in the Certification, and the Declarants represent and warrant that the Parties-in-Interest listed in the Certification are the only known parties-in-interest in the Project Site as of the date hereof; and

WHEREAS, an application designated ULURP No. N 150234ZRK and 150235ZMK was submitted by Declarants to the Department of City Planning ("DCP"), for approval by City Planning Commission ("CPC"), pursuant to 197-c of the New York City Charter (the Uniform Land Use Review Procedure or "ULRUP") seeking a zoning map amendment and a zoning text amendment of the New York City Zoning Resolution (the "Application") and

WHEREAS, the Application would facilitate the development of the Project Site; and

WHEREAS, an environmental assessment statement concerning the Project Site prepared pursuant to the City Environmental Quality Review (the "CEQR") is under review in connection with the Application (CEQR No. 16DCP002K) and, pursuant to CEQR, the Landmarks Preservation Commission (the "LPC"), among others, has

reviewed the environmental assessment, including the historic land use of the Project Site; and

WHEREAS, the results of such a review, as documented in LPC's July 7, 2015 notice, attached hereto as Exhibit D and made a part hereof, indicate the potential presence of significant archaeological resources on the Project Site; and

WHEREAS, Declarant desires to identify the existence of any potential archaeological resources and mitigate any potential damage to any such archaeological resources found in connection with the development or redevelopment of the Subject Property and have agreed to follow and adhere to all requirements for archaeological identification, investigation and mitigation set forth in the CEQR Technical Manual and LPC's Guidelines for Archaeological Work in NYC, including without limitation, the completion of an archaeological documentary study (the "Archaeological Documentary Study") and archaeological field testing, excavation, mitigation and curation of archaeological resources if such need is identified in the Archaeological Documentary Study and required by the LPC (collectively, the "Archaeological Work"); and

WHEREAS, Declarants agree to restrict the manner in which the Project Site may be developed or redeveloped by having implementation of the Archaeological Work, performed to the satisfaction of the LPC, as evidenced by writings described and set forth herein, be a condition precedent to any soil disturbance for any such development or redevelopment (other than soil disturbance necessitated by Declarants' performance of the Archaeological Work); and

WHEREAS, Declarants intend this Declaration to be binding upon all successors and assigns; and

WHEREAS, the Declarants intend this Declaration to benefit all land owners and tenants including the City of New York ("the City") and consents to the enforcement of this Declaration by the City.

NOW, THEREFORE, Declarants do hereby declare and agree that the Subject Project shall be held, sold, transferred, and conveyed, subject to the restrictions and obligations which are for the purpose of protecting the value and desirability of the Project Site and which shall run with the land, binding the successors and assigns of Declarant so long as they have any right, title or interest in the Project Site or any part thereof:

1. Declarants covenant and agree that no application for grading, excavation, foundation, alteration building or other permit respecting the Subject Property which permits soil disturbance shall be submitted to or accepted from the Department of Buildings (the "DOB") by the Declarant until LPC has issued to DOB, as applicable, either a Notice of No Objection, as set forth in Paragraphs 2(a) and 2(c), a Notice to Proceed, as set forth in Paragraph 2(b), a Notice of Satisfaction, as set forth in Paragraph 2(d), or a Final Notice of Satisfaction, as set forth in Paragraph 2(e). Declarants shall submit a copy of the Notice of No Objection, Notice to Proceed, Notice of Satisfaction or

Final Notice of Satisfaction, as the case may be, to the DOB at the time of filing of any application set forth in this Paragraph 1.

2. (a) Notice of No Objection – LPC shall issue a Notice of No Objection after the Declarants have completed the work set forth in the LPC-approved Archaeological Documentary Study and LPC has determined that the results of such assessment demonstrate that the site does not contain potentially significant archaeological resources. Declarant shall have the right to record the Notice of No Objection in the Office of the County or City Register, indexing it against the Project Site.

(b) Notice to Proceed with LPC-Approved Field Testing and/or Mitigation – LPC shall issue a Notice to Proceed after it approves a Field Testing Plan and, if necessary, a Mitigation Plan. Issuance of a Notice to Proceed shall enable the Declarants to obtain a building permit solely to perform excavation or other work necessary to implement the Field Testing and/or Mitigation Plan. The LPC shall review and approve the scope of work in all permits prior to field testing or mitigation work commencing on the Project Site.

(c) Notice of No Objection After Field Work – LPC shall issue a Notice of No Objection After Field Work if Declarants have performed required LPC-approved field testing and, as a result of such testing, the LPC determines that the Project Site does not contain potentially significant archaeological resources. The notices described in subparagraphs (a) and (c) of this paragraph shall each hereafter be referred to as a “Notice of No Objection.” Issuance of a Notice of No Objection shall be sufficient to enable Declarants to obtain a full building permit for the performance of excavation or construction on the Project Site.

(d) Notice of Satisfaction – LPC shall issue a Notice of Satisfaction after the Mitigation Plan has been prepared and accepted by LPC and LPC has determined in writing that all significant identified and archaeological resources have been documented and removed from the Project Site. Issuance of a Notice of Satisfaction shall enable Declarants to obtain a building permit for excavation and construction on the Project Site.

(e) Final Notice of Satisfaction – LPC shall issue a Final Notice of Satisfaction after the mitigation has been completed and the LPC has set forth in writing that the Mitigation Plan, including but not limited to the Final Archaeological Report and a curation plan for any archaeological resources found on the Project Site, has been completed to the satisfaction of LPC.

3. No temporary certificate of occupancy (“TCO”) or permanent certificate of occupancy (“PCO”) shall be issued by the Buildings Department or accepted by Declarants until the Chairperson of the LPC shall have issued a Final Notice of Satisfaction or a Notice of No Objection.

4. The Director of Archaeology of the LPC shall issue all notices required to be issued hereunder reasonably promptly after Declarant has made written request to the

LPC and has provided documentation to support each such request, and the Director of Archaeology of the LPC shall in all events endeavor to issue such written notice to the DOB, or inform Declarant in writing of the reason for not issuing said notice, within thirty (30) calendar days after Declarant has requested such written notice.

5. Declarant represents and warrants with respect to the Project Site that no restrictions of record, nor any present or presently existing estate or interest in the Project Site nor any lien, encumbrance, obligation, covenant of any kind preclude, presently or potentially, the imposition of the obligations and agreements of this Declaration.

6. Declarant acknowledges that the City is an interest party to this Declaration and consents to the enforcement of this Declaration solely by the City, administratively or at law or at equity, of the obligations, restrictions and agreements pursuant to this Declaration.

7. The provisions of this Declaration shall inure to the benefit of and be binding upon the respective successors and assigns of the Declarant, and references to the Declarant shall be deemed to include such successors and assigns as well as successors to their interest in the Project Site. References in this Declaration to agencies or instrumentalities of the City shall be deemed to include agencies or instrumentalities succeeding to the jurisdiction thereof.

8. Declarant shall be liable in the performance of any term, provision, or covenant in this Declaration, except that the City and any other party relying on this Declaration will look solely to the fee estate interest of the Declarant in the Project Site for the collection of any money judgment recovered against Declarant, and no other property of the Declarant shall be subject to levy, execution, or other enforcement procedure for the satisfaction of the remedies of the City or any other person or entity with respect to this Declaration. The Declarant shall have no personal liability under this Declaration.

9. The obligations, restrictions and agreements herein shall be binding on the Declarant or other parties in interest only for the period during which the Declarant and any such Party-in-Interest holds and interest in the Project Site; provided; however, that the obligations, restrictions and agreements contained in this Declaration may not be enforced against the holder of any mortgage unless and until such holder succeeds to the fee interest of the Declarant by way of foreclosure or deed in lieu of foreclosure.

10. Declarant shall indemnify the City, its respective officers, employees and agents from all claims, actions or judgments for loss, damage or injury, including death or property damage of whatsoever kind or nature, arising from Declarants' performance of its obligations under this Declaration, including without limitation, the negligence or carelessness of the Declarant, their agents, servants or employees in undertaking such performance; provided, however, that should such a claim be made or action brought, Declarant shall have the right to defend such claim or action with attorneys reasonably acceptable to the City and no such claim or action against the City shall be settled without the written consent of the City.

11. If Declarant is found by a court of competent jurisdiction to have been in default in the performance of its obligations under this Declaration, and such finding is upheld on a final appeal by a court of competent jurisdiction or by other proceeding or the time for further review of such finding or appeal has lapsed, Declarant shall indemnify and hold harmless the City from and against all reasonable legal and administrative expenses arising out of or in connection with the enforcement of Declarants' obligations under this Declaration as well as any reasonable legal and administrative expenses arising out of or in connection with the enforcement of any judgment obtained against the Declarant, including but not limited to the cost of undertaking the Mitigation Plan, if any.

12. Declarant shall cause every individual or entity that between the date hereof and the date of recordation of this Declaration, becomes a Party-in-Interest (as defined in subdivision (c) of the definition of "zoning lot" set forth in Section 12-10 of the Zoning Resolution of the City of New York) to all or a portion of the Subject Property to waive its right to execute this Declaration and subordinate its interest in the Subject Property to this Declaration. Any mortgage or other lien encumbering the Subject Property in effect after the recording date of this Declaration shall be subject and subordinate hereto as provided herein. Such waivers and subordination shall be attached to this Declaration as Exhibits and recorded in the Office of the County or City Register.

13. This Declaration and the provisions hereof shall become effective as of the date of this Declaration. Declarant shall record or shall cause this Declaration to be recorded in the Office of the County or City Register, indexing it against the Project Site within five (5) business days of the date hereof and shall promptly deliver to the LPC and the CPC proof of recording in the form of an affidavit of recording attaching a copy of the filing receipt and a copy of the Declaration as submitted for recording. Declarant shall also provide a certified copy of this Declaration as recorded to LPC and CPC as soon as a certified copy is available.

14. This Declaration may be amended or modified by Declarant only with the approval of LPC or the agency succeeding to its jurisdiction and no other approval or consent shall be required from any other public body, private person or legal entity of any kind. A statement signed by the Chair of the LPC, or such person as authorized by the Chair, certifying approval of an amendment or modification of this Declaration shall be annexed to any instrument embodying such amendment or modification.

15. Any submittals necessary under this Declaration from Declarant to LPC shall be addressed to the Director of Archaeology of LPC, or such other person as may from time to time be authorized by the Chair of the LPC to receive such submittals. As of the date of this Declaration, LPC's address is:

Landmarks Preservation Commission
1 Centre Street, 9N
New York, New York 10007

Any notices sent to Declarant shall be sent by personal delivery, delivery by reputable overnight carrier or by certified mail to the attention of:

Chris Wright, Esq.
Simons & Wright LLC
60 East 42nd Street, Ste 1420
New York, New York 10165

16. Declarant expressly acknowledges that this Declaration is an essential element of the environmental review conducted in connection with the Applications and, as such, the filing and recordation of this Declaration may be a precondition to the determination of significance pursuant to CEQR, which implements the State Environmental Quality Review Act ("SEQRA") and the SEQRA Regulations, Title 6 New York Code of Rules and Regulations ("NYCRR") Part 617.7 within the City of New York.

17. Declarant acknowledges that the satisfaction of the obligations set forth in this Declaration does not relieve Declarant of any additional requirements imposed by Federal, State or Locals laws.

18. This Declaration shall be governed by and construed in accordance with the laws of the State of New York.

19. Wherever in this Declaration, the certification, consent, approval, notice or other action of Declarant, LPC or the City is required or permitted, such certification, consent, approval, notice or other action shall not be unreasonably withheld or delayed.

20. In the event that any provision of this Declaration is deemed, decreed, adjudged or determined to be invalid or unlawful by a court of competent jurisdiction, such provision shall be severable and the remainder of this Declaration shall continue to be in full force and effect.

21. This Declaration and its obligations and agreements are in contemplation of Declarant receiving approvals or modified approvals of the Application. In the event that the Declarant withdraws the Application before a final determination or the Application are not approved, the obligations and agreements pursuant to this Declaration shall have no force and effect and Declarant may request that LPC issue a Notice of Cancellation upon the occurrence of the following events: (i) Declarant has withdrawn the Application in writing before a final determination on the Application; or (ii) the Application was not approved by the CPC, and/or the City Council, as the case may be in accordance with Charter Section 197-c (ULURP); or (iii) LPC has issued a Notice of No Objection or Final Notice of Satisfaction. Upon such request, LPC shall issue a Notice of Cancellation after it has determined, to LPC's reasonable satisfaction, that one of the above has occurred. Upon receipt of a Notice of Cancellation from LPC, Declarant shall cause such Notice to be recorded in the same manner as the Declaration herein, thus rendering this Restrictive Declaration null and void. Declarants shall promptly deliver to LPC and the CPC a certified copy of such Notice of Cancellation as recorded.

EXHIBIT A

Metes and Bounds
Block 42, Lot 24, Brooklyn

EXHIBIT B

Certification of "Parties in Interest"

EXHIBIT C

Parties in Interest waiver

EXHIBIT D

LPC Letter Dated July 7, 2015

EXHIBIT A

Schedule A Description

Page 1

SECTION 1 BLOCK 42 LOT 24 ON THE TAX MAP OF KINGS COUNTY

ALL that certain plot, piece or parcel of land with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at a point on the Northwesterly corner of Gold and Front Streets;

RUNNING THENCE Northwesterly along Gold Street, 200 feet to Water Street;

THENCE Westwardly along Water Street, 100 feet;

THENCE Southwardly along a line drawn parallel to Gold Street, 200 feet to Front Street; and

THENCE Easterly along Front Street, 100 feet to the point or place of BEGINNING.

N.B. # _____
 or
 ALT. # _____

EXHIBIT "I"

CERTIFICATION PURSUANT TO ZONING LOT
 SUBDIVISION C OF SECTION 12-10
 OF THE ZONING RESOLUTION OF DECEMBER 15, 1961
 OF THE CITY OF NEW YORK AS AMENDED
 EFFECTIVE AUGUST 18, 1977

ROYAL ABSTRACT OF NEW YORK LLC, an abstract company licensed to do business in the State of New York and having its principal office at 125 Park Avenue, New York, New York, hereby certifies that as to the land hereafter described being a tract of land, either unsubdivided or consisting of two or more lots of record contiguous for a minimum of ten linear feet located within a single block in the single ownership of **Block 42 Lot 24**, and that the parties of interest constituting a "party of interest" as defined in Section 12-10, subdivision (c) of the Zoning Resolution of the City of New York, effective December 15, 1961, as amended, are the following:

NAME AND ADDRESSNATURE OF INTEREST

- 1) **251 Front Street Realty, Inc.**
251 Front Street
Brooklyn, NY 11201
- 2) **BCB Community Bank**
104-110 Avenue C
Bayonne, NJ 07002

Fee Owner

Mortgagee

The subject tract of land with respect to which the foregoing parties are the parties in interest as aforesaid, is known as Block 42 Lot 24 on the Tax Map of the City of New York, Kings County, and more particularly described as follows:

ALL that certain plot piece or parcel of land, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at a point on the Northwesterly corner of Gold and Front Streets;

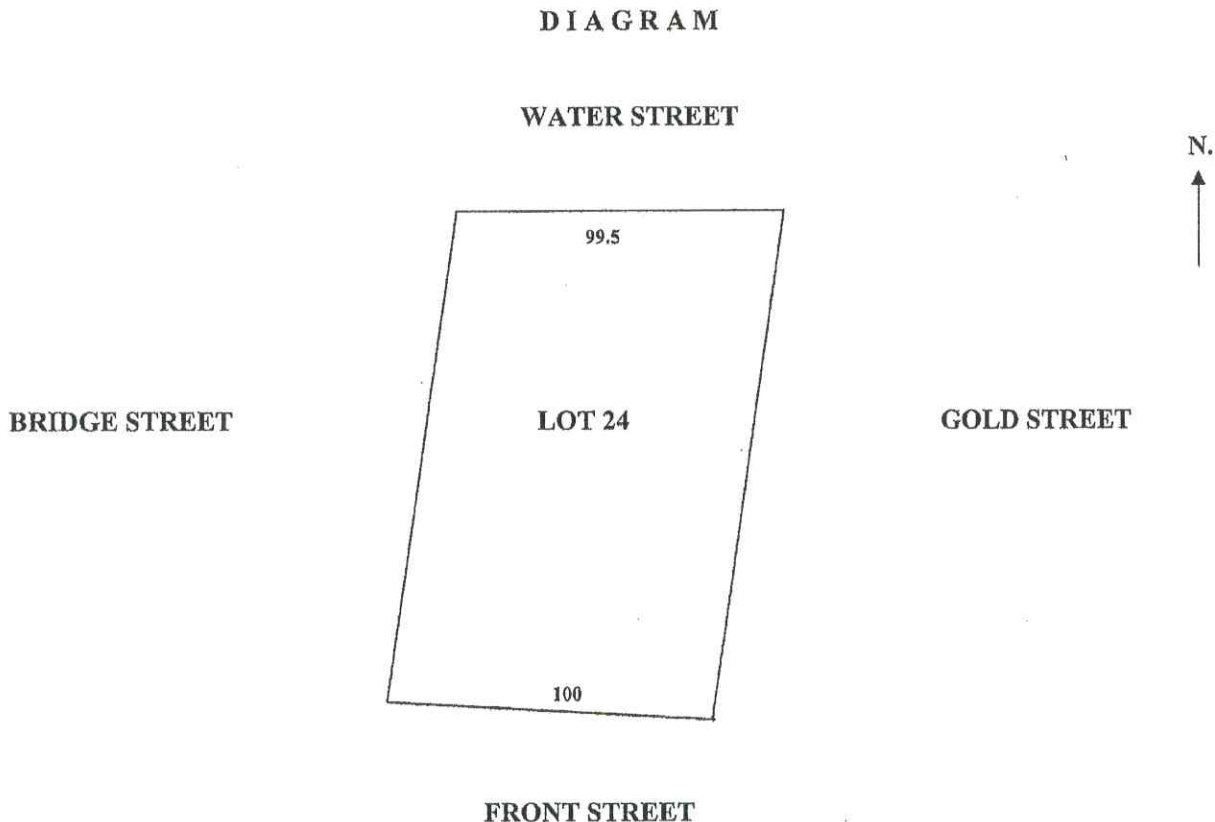
RUNNING THENCE Northwesterly along Gold Street, 200 feet to Water Street;

THENCE Westwardly along Water Street, 100 feet;

THENCE Southwardly along a line drawn parallel to Gold Street, 200 feet to Front Street; and

THENCE Easterly along Front Street, 100 feet to the point or place of BEGINNING.

That the said premises are known as and by the street address 68 Gold Street, Brooklyn, NY; Block 42 Lot 24, as shown by the following:



NOTE: A Zoning Lot may or may not coincide with a lot shown of the Official Tax Map of the City of New York, or on any recorded subdivision plot or deed. A Zoning Lot may be subdivided into two or more zoning lots, provided all the resulting Zoning Lots and all the buildings thereon shall comply with the applicable provisions of the Zoning Lot Resolution.

THIS CERTIFICATE IS MADE FOR AND ACCEPTED BY THE APPLICANT UPON THE EXPRESS UNDERSTANDING THAT LIABILITY HEREUNDER IS LIMITED TO ONE THOUSAND (\$1,000.00) DOLLARS.

Certified 12/07/2016

ROYAL ABSTRACT OF NEW YORK LLC


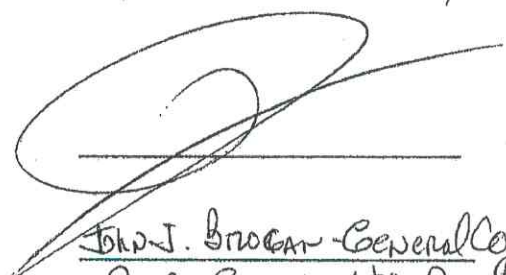

Michael Robert G.
V.P.

Exhibit C

BCB Community Bank, being a "Party In Interest" as defined in Section 12-10 ("Zoning Lot" subdivision (c)) of the Zoning Resolution of the City of New York, effective December 15, 1961, as amended, with respect to the land known as Tax Lot 24 in Block 42 on the Tax Map of the City of New York, Kings County and more particularly described in Schedule A attached hereto, hereby waives its right to execute a declaration dated 3/7, 2017 made by 251 Front Street Realty, Inc., regarding archaeological testing and remediation on such land.

IN WITNESS WHEREOF, the undersigned has executed this waiver this 16th day of November 2015

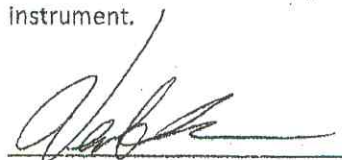


John J. Brogan - General Counsel
BCB Community Bank

ACKNOWLEDGMENT

State of New York Jersey
County of Hudson

On the 16th day of November in the year 2015 before me, the undersigned, a notary public in and for said state, personally appeared John J. Brogan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.



Notary Public



EXHIBIT D

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
<http://nyc.gov/landmarks>

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 16DCP002K
Project:
Address: 251 FRONT STREET, **BBL:** 3000420024
Date Received: 7/7/2015

No architectural significance

No archaeological significance

In radius Designated New York City Landmark or Within Designated Historic District

In radius Listed on National Register of Historic Places

Appears to be eligible for National Register Listing and/or New York City Landmark Designation

May be archaeologically significant; requesting additional materials

Comments:

The project site is directly adjacent to the LPC designated and S/NR eligible Vinegar Hill HD, Area II. A construction protection plan as per the CEQR Technical Manual:2014 is required and should be submitted to LPC for review and comment.

The LPC and S/NR DUMBO HD is within the radius. No adverse impacts to DUMBO are anticipated as a result of this project.

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2014).

Gina Santucci

7/9/2015

SIGNATURE
Gina Santucci, Environmental Review Coordinator

DATE

File Name: 30634_FSO_DNP_07092015.doc

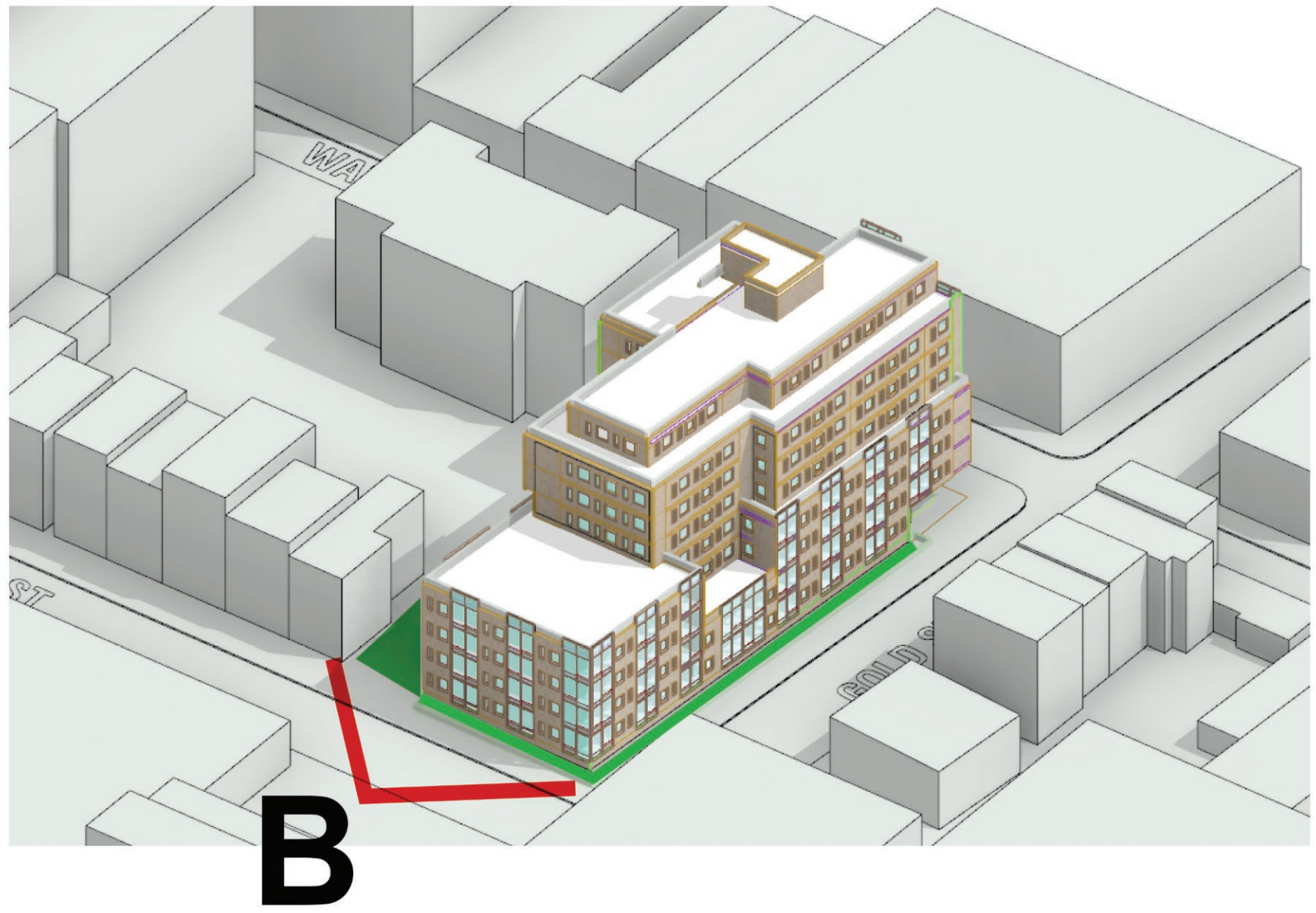
Attachment 2 to Appendix 4
Preliminary Architectural Renderings
Included for Illustrative Purposes Only



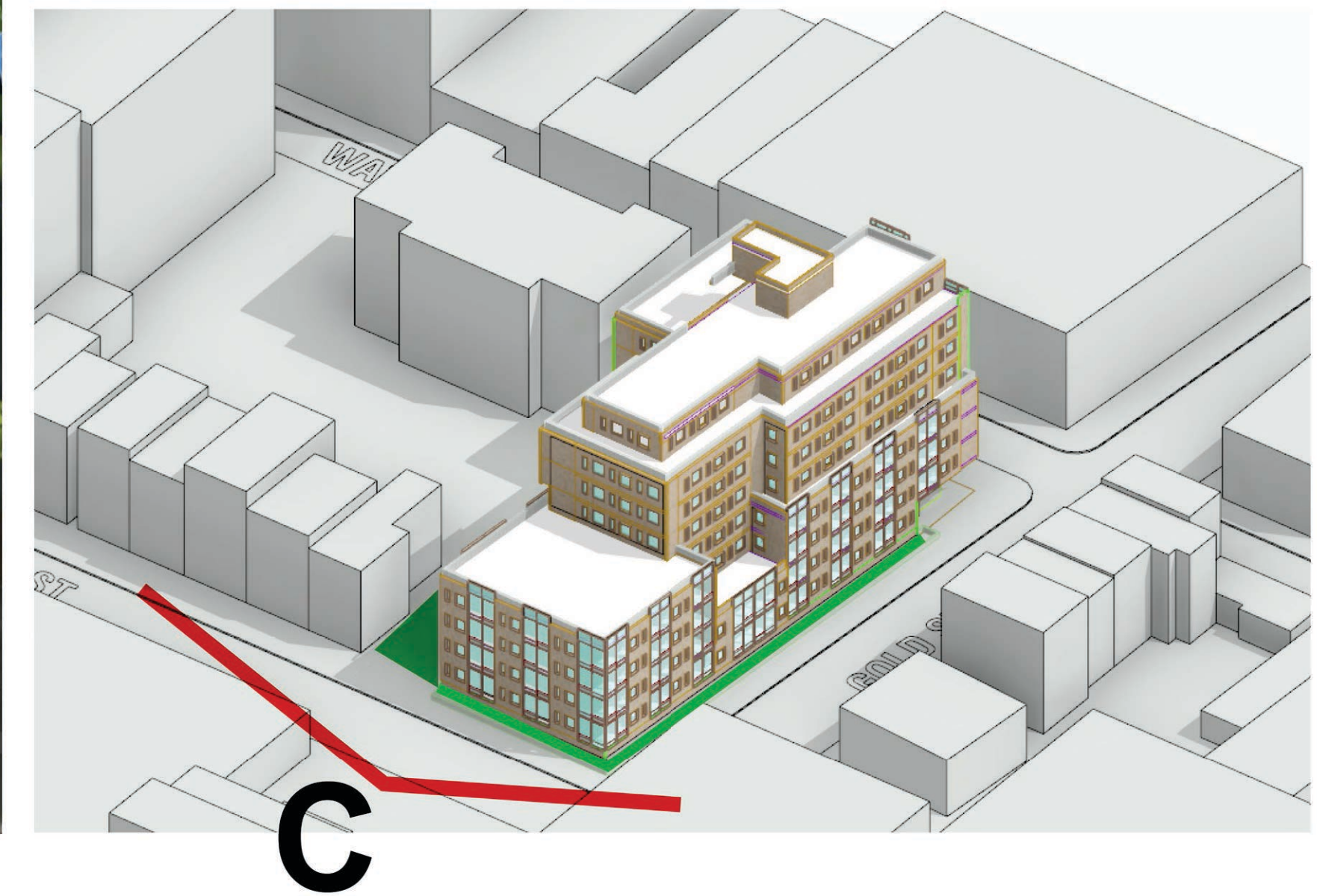
3D Perspective A: Corner of Front Street and Gold Street



A



Elevation B: Front Street (Detail View)



Elevation C: Front Street