Environmental Assessment Statement
and
Supplemental Report

for

50 Old Fulton Street
50 Old Fulton Street
Brooklyn, NY

Prepared by:

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October 2019

EAS FORM

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 50 Old Fulton Street

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
19DCP009K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
190011 ZMK	P2017K0383

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			Alwest Old Fulton, LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Olga Abinader			John J. Strauss, Compliance Solutions Services, LLC		
ADDRESS 120 Broadway, 31st floor			ADDRESS 348 West 57th Street, #214		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10019
TELEPHONE 212-720-3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE 212-741-3432	EMAIL jstrauss.css@gmail.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, Alwest Old Fulton, LLC, is seeking a Zoning Map Amendment to change the zoning of the Affected Area, comprised of Block 202, part of (p/o) Lot 14, Lot 18, and p/o Lot 12 in the Fulton Ferry neighborhood of Brooklyn, from M2-1 to M1-5. This will increase the permitted FAR from 2.0 to 5.0 for commercial and manufacturing uses (and from 0.0 to 6.5 FAR for Use Group 4 community facility uses). The increase in developable floor area will allow the Applicant to develop an approximately 39,600 gross square foot (5.0 FAR), five-story and cellar commercial building on the Development Site (Block 202, Lot 14) with retail on the cellar, ground, and second floors and offices above (the "New Building"). The Proposed Action would also allow for development of an approximately 28,230 gross square foot (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial retail and office building on the Adjacent Lot (Block 202, Lot 18). No parking would be required for retail or offices uses in the proposed M1-5 district. The existing conditions on Block 202, p/o Lot 12 included within the Project Area would remain. See attached Project Description.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 2	STREET ADDRESS 50 Old Fulton Street
TAX BLOCK(S) AND LOT(S) Block 202, p/o Lot 14		ZIP CODE 11201

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Property bounded by Old Fulton Street to the north and Doughty Street to the south west of Hicks Street

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M2-1	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

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*:** ☐ YES ☒ NO If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION
☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☐ OTHER, explain:
☐ FUNDING OF CONSTRUCTION, specify:
☐ POLICY OR PLAN, specify:
☐ FUNDING OF PROGRAMS, specify:
☐ PERMITS, specify:

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)
☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
☒ OTHER, explain: NYC Department of Buildings building permit

***State or Federal Actions/Approvals/Funding*:** ☐ YES ☒ NO If "yes," specify:

6. *Site Description:* *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.*

***Graphics*:** *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 11,810 (11,690 to be rezoned)
Waterbody area (sq. ft.) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 11,810 (11,690 to be rezoned)
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): 39,600
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 39,600
HEIGHT OF EACH BUILDING (ft.): 85
NUMBER OF STORIES OF EACH BUILDING: 5

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 6,593
The total square feet not owned or controlled by the applicant: 5,217

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: sq. ft. (width x length)
VOLUME OF DISTURBANCE: 65,930 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 6,593 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2022
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO | IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

9. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: parking, vacant land

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	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Describe type of residential structures				
No. of dwelling units				
No. of low- to moderate-income units				
Gross floor area (sq. ft.)				
Commercial	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)		1 retail bldg	2 retail/office bldgs	-1 retail bldg, +2 retail/office bldgs
Gross floor area (sq. ft.)		26,380 (includes 13,190 gsf accessory parking)	67,830	+41,450
Manufacturing/Industrial	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Type of use	2 auto body shops, warehouse (sliver)	1 auto body shop, warehouse (sliver)	warehouse (sliver)	-1 auto body shop
Gross floor area (sq. ft.)	10,293 + sliver of warehouse (gsf unknown)	3,700 + sliver of warehouse (gsf unknown)	sliver of warehouse (gsf unknown)	- 3,700
Open storage area (sq. ft.)				
If any unenclosed activities, specify:	vehicle storage	vehicle storage		-vehicle storage
Community Facility	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type				
Gross floor area (sq. ft.)				
Vacant Land	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
Publicly Accessible Open Space	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):				
Other Land Uses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
PARKING				
Garages	☐ YES ☒ NO	☒ YES ☐ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces		0		
No. of accessory spaces		44		-44
Operating hours		24/7		
Attended or non-attended		non-attended		
Lots	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				
Other (includes street parking)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
POPULATION				
Residents	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify number:				
Briefly explain how the number of residents was calculated:				
Businesses	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. and type	2 auto body shops, warehouse (sliver)	1 retail bldg, 1 auto body shop, warehouse (sliver)	2 retail/office bldgs, warehouse (sliver)	-1 retail bldg, -1 auto body shop, +2 retail/office bldgs
No. and type of workers by business	30 auto body workers	15 auto body workers, 53 retail workers	88 retail workers, 154 office workers	-15 auto body workers, +35 retail workers, +154 office workers
No. and type of non-residents who are not workers	40 daily auto body customers	100 daily retail customers, 20 daily auto body customers	120 daily retail customers, 40 daily business clients	+20 daily retail customers, +40 daily business clients, -20 auto body customers
Briefly explain how the number of businesses was calculated:	auto body shops are existing; Development Site is anticipated to have 1-2 Use Group (UG) 6A/6C retail & office uses and Adjacent Lot is anticipated to have UG 6A/6C retail & office uses.			
Other (students, visitors, concert-goers, *etc.*)	☒ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	M2-1	M2-1	M1-5	-M2-1, +M1-5
Maximum amount of floor area that can be developed	2.0 FAR	2.0 FAR	5.0 FAR	+3.0 FAR
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	C, R, M, pkg, vacant, open space; R6, R7-1, R8, M1-2/R8, and M2-1	C, R, M, pkg, vacant, open space; R6, R7-1, R8, M1-2/R8, and M2-1	C, R, M, pkg, vacant, open space; R6, R7-1, R8, M1-2/R8, M2-1, and M1-5	+M1-5
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?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. See attached report.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ 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?	☒	☐
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of more than 200 residential units *or* 200,000 square feet of commercial space?	☐	☒
▪ If "yes," answer *both* questions 2(b)(ii) and 2(b)(iv) below.		
○ Directly displace 500 or more residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
○ Directly displace more than 100 employees?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
○ Affect conditions in a specific industry?	☐	☒
▪ 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		
○ If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	☐	☐
○ If "yes," is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?	☐	☐
ii. Indirect Residential Displacement		
○ Would expected average incomes of the new population exceed the average incomes of study area populations?	☐	☐
○ If "yes:"		
▪ Would the population of the primary study area increase by more than 10 percent?	☐	☐
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?	☐	☐
○ If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	☐	☐
iii. Direct Business Displacement		
○ Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☐
○ Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve,	☐	☐

	YES	NO
enhance, or otherwise protect it?		
iv. Indirect Business Displacement		
○ Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	☐	☐
○ Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?	☐	☐
v. Effects on Industry		
○ Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	☐	☐
○ Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	☐	☐
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
i. Child Care Centers		
○ Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ 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?	☐	☐
○ If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
ii. Libraries		
○ Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	☐	☐
○ If "yes," would the additional population impair the delivery of library services in the study area?	☐	☐
iii. Public Schools		
○ 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)	☐	☒
○ 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?	☐	☐
○ If "yes," would the project increase this collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
iv. Health Care Facilities		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of health care facilities in the area?	☐	☐
v. Fire and Police Protection		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of fire or police protection in the area?	☐	☐
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
(c) If "yes," would the project generate more than 50 additional residents or 125 additional employees?	☐	☐
(d) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
(e) If "yes," would the project generate more than 350 additional residents or 750 additional employees?	☐	☐
(f) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒
(g) If "yes" to questions (c), (e), or (f) above, attach supporting information to answer the following:		
○ If in an under-served area, would the project result in a decrease in the open space ratio by more than 1 percent?	☐	☐
○ 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	☐	☐

	YES	NO
percent?		
○ If "yes," are there qualitative considerations, such as the quality of open space, that need to be considered? Please specify:	☐	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year. See attached report.		
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)	☒	☐
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See attached report.		
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?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☐
(c) If "yes" to either of the above, please provide the information requested in Chapter 10. See attached report.		
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?	☐	☒
○ 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?	☐	☒
○ 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?	☒	☐
(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?	☐	☒
(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)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See attached report.	☒	☐
(i) Based on the Phase I Assessment, is a Phase II Investigation needed?	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒

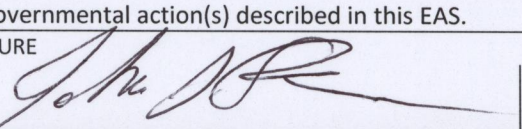
	YES	NO
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than that listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the 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?	☐	☐
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or contribute contaminated stormwater to a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation.		
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 8,954		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
○ If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☐
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 14,671,629		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway/rail trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See attached report.	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation.		
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) Would the proposed project result in the development of 350,000 square feet or more?	☐	☒
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☐
○ If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-	☐	☐

	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?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. See attached report.		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in 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?	☐	☒
(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:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☒	☐
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☒	☐
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the 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 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	SIGNATURE	DATE
John J. Strauss, Compliance Solutions Services, LLC		October 25, 2019

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

Part III: DETERMINATION OF SIGNIFICANCE (To Be 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	☐	☒
Socioeconomic Conditions	☐	☒
Community Facilities and Services	☐	☒
Open Space	☐	☒
Shadows	☐	☒
Historic and Cultural Resources	☐	☒
Urban Design/Visual Resources	☐	☒
Natural Resources	☐	☒
Hazardous Materials	☐	☒
Water and Sewer Infrastructure	☐	☒
Solid Waste and Sanitation Services	☐	☒
Energy	☐	☒
Transportation	☐	☒
Air Quality	☐	☒
Greenhouse Gas Emissions	☐	☒
Noise	☐	☒
Public Health	☐	☒
Neighborhood Character	☐	☒
Construction	☐	☒

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	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	**DATE**
Olga Abinader	10/25/2019

SIGNATURE

NEGATIVE DECLARATION (Use of this form is optional)

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

1. **Hazardous Materials, Air Quality, Noise**- A detailed analysis of the potential for the Proposed Action to result in significant adverse impacts related to hazardous materials, air quality, and noise was included in this EAS. To ensure that the Proposed Action would not result in significant adverse impacts, and (E) Designation (E-519) would be established on the development sites as part of the approval of the Proposed Action. Refer to "Determination of Significance Appendix: (E) Designation" for the applicable requirements. The analyses concludes that with the (E) Designation requirements in place, the Proposed Action would not result in significant adverse impacts.

2. **Land Use, Zoning, and Public Policy**- A preliminary Land Use, Zoning, and Public Policy analysis was included in this EAS. The CEQR Technical Manual indicates a significant adverse impact could occur if a project would generate a land use incompatible with surrounding uses. This analysis concludes that the Proposed Action would facilitate development complementary to the existing land uses in the area. With respect to public policy, the Proposed Action is consistent with the policies and intent of the NYC Waterfront Revitalization Program. In conclusion, the Proposed Action would not result in significant adverse impacts related to Land Use, Zoning, and Public Policy.

3. **Shadows**- A detailed Shadows analysis was included in this EAS. The Shadows analysis focuses on the potential for significant new shadows on three NYC Greenstreets adjacent to the Brooklyn Bridge on Old Fulton Street between Front Street and Cadman Plaza West. The CEQR Technical Manual states that a significant adverse shadow impact could occur on sunlight sensitive vegetative resources if those resources would receive less than four to six hours per day of direct sunlight during the growing season. The detailed analysis shows that the Greenstreets would still receive direct sunlight within the upper range of the minimum requirement of four-to-six hours per day during the growing season. In conclusion, the Proposed Action would not result in significant adverse impacts related to Shadows.

4. **Historic and Cultural Resources**- A detailed Historic and Cultural Resources analysis was included in this EAS. The CEQR Technical Manual indicates that a significant adverse impact related to architectural resources could occur by the introduction of new shadows on sunlight-sensitive architectural resources. In a memorandum dated 9/17/18, LPC determined there are no sunlight-sensitive architectural resources in the study area. Regarding archaeological resources, the CEQR Technical Manual indicates that a significant adverse impact would occur if potentially significant archaeological resources are identified on the site of the proposed project, and the proposed project may disturb or destroy those resources in any way, such as through construction resulting in in-ground disturbance. In a memorandum dated 11/9/18, LPC noted of the potential for archaeological significance on Block 202, Lot 18. This particular lot is identified in the EAS as Projected Development Site 2, not under control of the applicant. The fee owner of the property has signed a Restrictive Declaration compelling necessary archaeological investigation, analysis, and recovery of resources, if necessary, before redevelopment of the property. With this measure in place, a significant adverse impact would not occur. In conclusion, the Proposed Action would not result in significant adverse impacts related to Historic and Cultural Resources.

5. **Urban Design and Visual Resources**- A preliminary Urban Design and Visual Resources analysis was included in this EAS. The CEQR Technical Manual indicates that a significant adverse impact related to Urban Design and Visual Resources could occur if a project resulting in a change to the built environment's arrangement, appearance, or functionality would negatively affect a pedestrian's experience of the area. The preliminary Urban Design and Visual Resources analysis indicates that the proposed action would introduce development consistent with the existing building heights and uses within the study area. Further, the Proposed Action would not result in the obstruction of publicly accessible views to visual resources. In conclusion, the Proposed Action would not result in significant adverse impacts related to Urban Design and Visual Resources.

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME Olga Abinader	DATE 10/25/2019
SIGNATURE	

TITLE	
Chair, Department of City Planning	
NAME Marisa Lago	DATE 10/28/2019
SIGNATURE	

Determination of Significance Appendix: (E) Designation

To ensure that the Proposed Action would not result in significant adverse impacts, an (E) Designation (E-519) will be placed on Projected Development Sites 1 and 2 (Block 202, Lots 14 and 18) as described below.

Air Quality

The following (E) Designation (E-519) air quality text will apply to Block 202, Lots 14 and 18:

Block 202, Lot 14 (Projected Development Site 1): Any new commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest tier and at a minimum of 88 feet above the grade, and at least 40 feet from the southern lot line facing Doughty Street to avoid any potential significant adverse air quality impacts.

Block 202, Lot 18 (Projected Development Site 2): Any new commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level, and at a minimum of 88 feet above the grade to avoid any potential significant adverse air quality impacts.

Noise

The following (E) Designation (E-519) noise text will apply to Block 202, Lots 14 and 18:

Block 202, Lot 14 (Projected Development Site 1): To ensure an acceptable interior noise environment, future commercial uses must provide a closed-window condition with a minimum 26 dBA window/wall attenuation on all façades for floors up to 25 feet from the ground and 35 dBA of attenuation on all façades for floors above 25 feet from the ground to ensure an interior noise level not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 202, Lot 18 (Projected Development Site 2): To ensure an acceptable interior noise environment, future commercial office uses, future commercial office uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on eastern façade facing Hicks Street or façades within 50 feet from Hick Street facing Old Fulton Street or Doughty Street for floors up to 25 feet from the ground and 26 dBA of attenuation on all other façades for floors up to 25 feet from the ground and 35 dBA of attenuation on all façades for floor above 25 feet from the ground, to ensure an interior noise level not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Hazardous Materials

The following (E) Designation (E-519) hazardous materials text will apply to Block 202, Lots 14 and 18:

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 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.

PROJECT DESCRIPTION

50 Old Fulton Street Project Description

Introduction

The Applicant, Alwest Old Fulton, LLC, is seeking a Zoning Map Amendment to change the zoning of the Affected Area, comprised of Block 202, part of (p/o) Lot 14, Lot 18, and p/o Lot 12 in the Fulton Ferry neighborhood of Brooklyn, Community District 2, from M2-1 to M1-5. This will increase the permitted FAR from 2.0 to 5.0 for commercial and manufacturing uses (and from 0.0 to 6.5 FAR for Use Group 4 community facility uses). The Applicant's Proposed Development Site (Block 202, Lot 14) is identified as Projected Development Site 1 while the Adjacent Lot (Block 202, Lot 18) is identified as Projected Development Site 2. The included p/o Lot 12 is identified as Other Site 1.

Projected Development Site 1 consists of 6,593 square feet of land area and currently houses a one-story auto body repair shop that covers the full lot (0.97 FAR). (Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning). Projected Development Site 2 contains an approximately 3,700 gross square foot (gsf) two-story auto body shop on a 4,705 square foot lot (0.79 FAR). Other Site 1 consists of a 512 square foot portion of the 4,687 square foot lot which is developed with a four-story approximately 16,000 gsf warehouse building. The Affected Area's current M2-1 zoning allows 2.0 FAR of commercial or manufacturing floor area on a zoning lot. In M2-1 districts, one accessory off-street parking space is required for every 300 sf of zoning floor area for new retail and office uses. It is assumed that the No-Action development on Projected Development Site 1 would consist of a new two-story plus cellar and sub-cellar (2.0 FAR) retail building totaling approximately 26,380 gsf of floor area with 44 accessory off-street parking spaces in the cellar and sub-cellar levels. It is assumed that, without the Proposed Action, the existing conditions on Projected Development Site 2 and Other Site 1 would remain.

Under the Proposed Action, the increase in developable floor area will allow the Applicant to develop an approximately 39,600 gsf (5.0 FAR), five-story commercial building on Projected Development Site 1 with retail on the cellar, ground and second floors and offices above (the "New Building"). The Proposed Action would also allow for development of an approximately 28,230 gsf (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2. In M1-5 districts, no accessory off-street parking is required for new office or retail uses. No additional development would occur on Other Site 1.

The proposed project is expected to be completed by 2022.

Existing Conditions

Applicant Controlled Proposed Development Site (Projected Development Site 1)

The Applicant controlled Proposed Development Site (Projected Development Site 1), Block 202, Lot 14, is zoned M2-1 and has a lot area of approximately 6,593 square feet. The lot has frontages on both Old Fulton Street to the north and Doughty Street to the south on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. The Development Site currently contains a one-story, 6,593 gsf auto body repair shop that covers the full lot (0.97 FAR). This use has occupied the Site since at least 1965. The Applicant acquired control of this property in November 2016.

Non-Applicant Controlled Site (Projected Development Site 2)

Projected Development Site 2, Block 202, Lot 18, is zoned M2-1 and has a lot area of approximately 4,705 square feet. The lot has frontages on Old Fulton Street to the north, Doughty Street to the south, and Hicks Street to the east on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. The Site contains an approximately 3,700 gsf one- to two-story auto body shop that covers most of the lot (0.79 FAR) with the remainder of the lot used for accessory parking of vehicles being serviced. This use has occupied the Site since at least 1965 and the Site has been under the same ownership for at least 10 years.

Non-Applicant Controlled Site (Other Site 1)

Other Site 1, Block 202, p/o Lot 12 is zoned M2-1. The entirety of Lot 12 consists of 4,687 square feet of land area. The lot has frontages on Old Fulton Street to the north and Doughty Street to the south on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. The lot contains an approximately 16,000 gsf four-story warehouse building that covers most of the lot. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Affected Area to be drawn parallel to Elizabeth Place.

Description of the Proposed Development

The Proposed Action is a zoning map amendment to change the zoning of the Affected Area from M2-1 to M1-5. This will increase the permitted FAR from 2.0 to 5.0 for commercial and manufacturing uses (and from 0.0 to 6.5 FAR for Use Group 4 community facility uses). The increase in developable floor area will allow the Applicant to develop an approximately 39,600 gsf (5.0 FAR), five-story commercial building on Projected Development Site 1 with retail on the cellar, ground and second floors and offices above (the "New Building"). The Proposed Action would also allow for development of an approximately 28,230 gsf (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2. No parking would be required for retail or office uses in the proposed M1-5 district. No additional development would occur on Other Site 1.

Build Year

The Project Build Year is 2022. The build year is based on a 2020 approval of this zoning map amendment application followed by an 18-24 month construction period.

Purpose and Need of the Proposed Action

The density and use constraints of the Affected Area's current zoning discourage redevelopment consistent with the evolution of the surrounding area. M2 zoning districts were created to bridge the gap between light M1 industrial areas and heavy M3 industrial areas. They do not allow Use Group 5 transient hotels or many Use Group 6C retail establishments, both of which uses have become increasingly common in Brooklyn Community District 2. The Affected Area's neighborhood is no longer an industrial area – Brooklyn Bridge park runs along the waterfront and surrounding areas are largely commercial and residential.

The increased density of the Proposed Action would promote redevelopment of the Affected Area to blend with surrounding density and height. Projected Development Sites 1 and 2 share a block with a four-story building that covers its full zoning lot (which includes Other Site 1)

and a nine-story loft-style building that covers its full zoning lot. The block south of the Affected Area is improved with a thirteen-story commercial building that covers the majority of its zoning lot. Additionally, the Affected Area sits across Old Fulton Street from the Brooklyn Bridge overpass and across Hicks Street/Vine Street from the I-278 elevated ramp. Increasing the density and height permitted in the Affected Area will allow for cohesive development with larger neighboring buildings and elevated infrastructure. The Proposed Action will also allow the proposed redevelopment of the Proposed Development Site, which will provide retail and office uses that will activate the eastern portion of the Affected Area's block.

The Proposed Action would facilitate the development of the New Building, containing approximately 39,600 gsf (5.0 FAR) of commercial use, on Projected Development Site 1. The New Building would consist of five stories, plus a cellar, with Use Group 6A/6C retail on the cellar, ground and second floors and Use Group 6B offices on the third through fifth floors. The Proposed Action is necessary to allow additional development on Projected Development Site 1. The Affected Area's current M2-1 zoning only allows 2.0 FAR of commercial or manufacturing floor area on a zoning lot. The proposed M1-5 zoning would allow 5.0 FAR of commercial or manufacturing floor area (or 6.5 FAR of community facility floor area).

Future No-Action Scenario

In the future without the action, the Reasonable Worst Case Development Scenario (RWCDS) would reflect the following assumptions:

Without the Proposed Action, it is assumed that the Affected Area's existing M2-1 zoning would remain. It is assumed that the No-Action development on Projected Development Site 1 would consist of a new two-story plus cellar and sub-cellar (2.0 FAR) retail building totaling approximately 26,380 gsf of floor area with 44 accessory off-street parking spaces in the cellar and sub-cellar levels. The Applicant acquired control of this property in November 2016 and plans to build this two-story building if the Proposed Action is not approved. Although light manufacturing uses are also permitted at a maximum 2.0 FAR in the M2-1 zoning district, the Applicant would not construct a manufacturing use on this property because the surrounding area has become increasingly commercial. Based on area market trends, the Applicant believes a two-story commercial building housing Use Group 6A/6C retail is the highest and best return for the Development Site under the No-Action Scenario that would attract tenants while generating the greatest rents possible in this location.

It is assumed that, without the Proposed Action, the existing conditions on Projected Development Site 2 would remain. This Site is not a projected development site under the no-action scenario because it is a small lot (less than 5,000 square feet), there are currently no plans for any development on the lot, and there is currently no potential for a merger of Projected Development Sites 1 and 2. Projected Development Site 2 has been under the same ownership for at least 10 years.

It is assumed that, without the Proposed Action, the existing conditions on Other Site 1 would remain. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Area to be drawn parallel to Elizabeth Place.

Future With-Action Scenario

The Proposed Action would change the zoning of the Affected Area from M2-1 to M1-5, increasing the maximum FAR from 2.0 to 5.0 for manufacturing and commercial development (and from 0.0 to 6.5 FAR for community facility development). In the future with the action, the RWCDS would reflect the following assumptions:

1. On the Applicant-controlled site, the With-Action Scenario would permit development of a five-story plus cellar approximately 39,600 gsf commercial building (5.0 FAR) on Projected Development Site 1 with retail on its cellar through second floors and offices on its third through fifth floors[1]. The With-Action RWCDS for Projected Development Site 1 would be the same as the proposed development described above.

2. The Proposed Action would also permit the development of an approximately 28,230 gsf (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2.

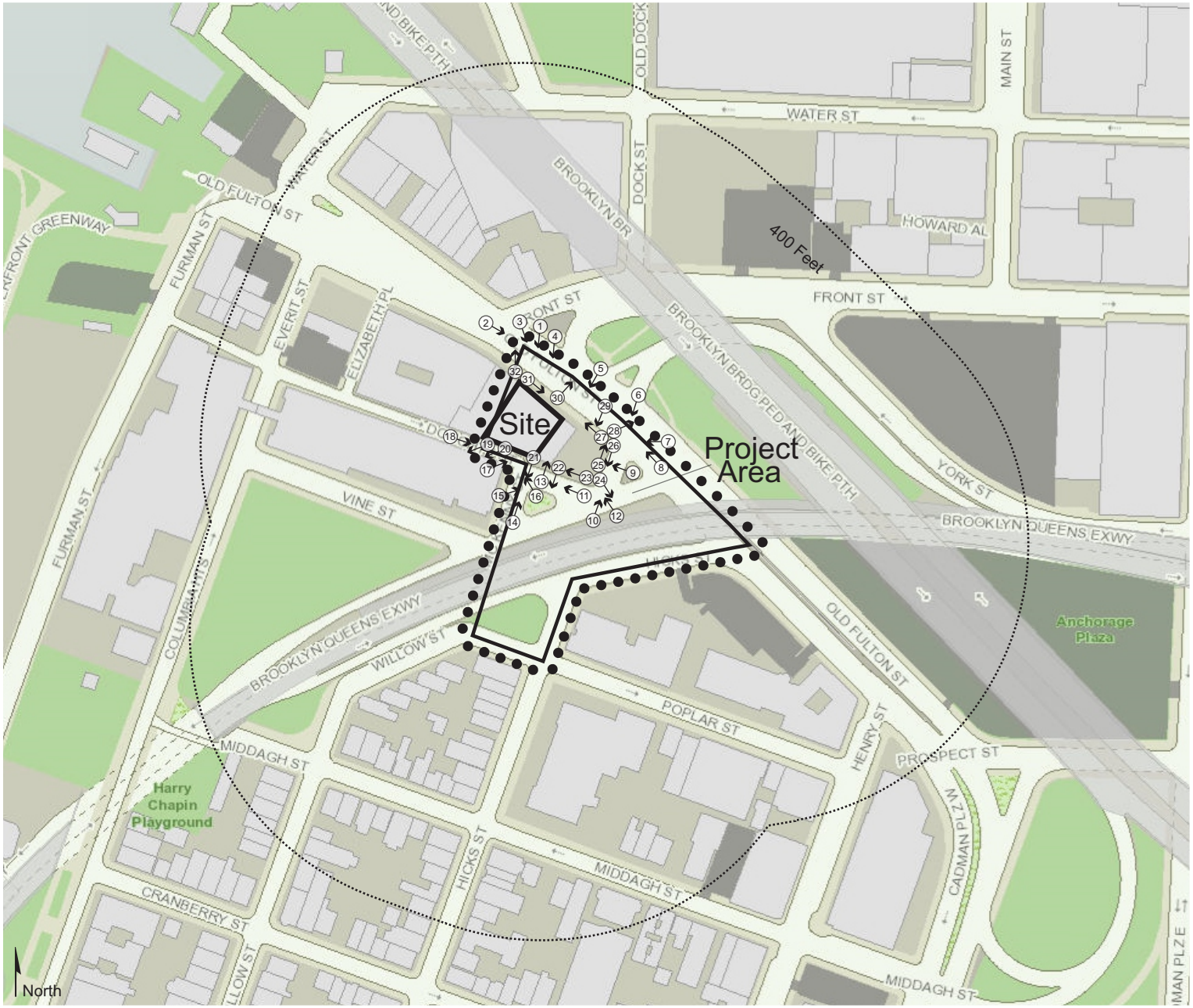
3. Under the Proposed Action, no new development would occur on Other Site 1. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Area to be drawn parallel to Elizabeth Place.

Increment Between No-Action and With-Action Scenarios

Under the No-Action Scenario for the project build year of 2022, the two Projected Development Sites would be developed with approximately 30,080 gsf of floor area including 26,380 gsf of retail space, a 3,700 gsf autobody shop, and 44 accessory parking spaces. Under the With-Action Scenario for the project build year of 2022, the two Projected Development Sites would be developed with approximately 67,800 gsf of floor area including 29,200 gsf of retail space and 38,600 gsf of office space. The increment between the No-Action and With-Action Scenarios for the project build year of 2022 on the two Projected Development Sites would be a net increase of 37,720 gsf of floor area including 38,600 gsf of new office space, an increase of 2,820 gsf of retail space, a loss of 3,700 gsf of automotive related floor area, and a loss of 44 accessory parking spaces.

[1] Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning. Although the slightly smaller M1-5 zoned area would technically accommodate a building slightly smaller than 39,600 gsf, the provisions governing pre-existing split zoning lots will allow the new district boundary line to be moved so that the entire development site is deemed to be within the new M1-5 zoning district.

FIGURES & PHOTOGRAPHS



→ Photo Viewpoint



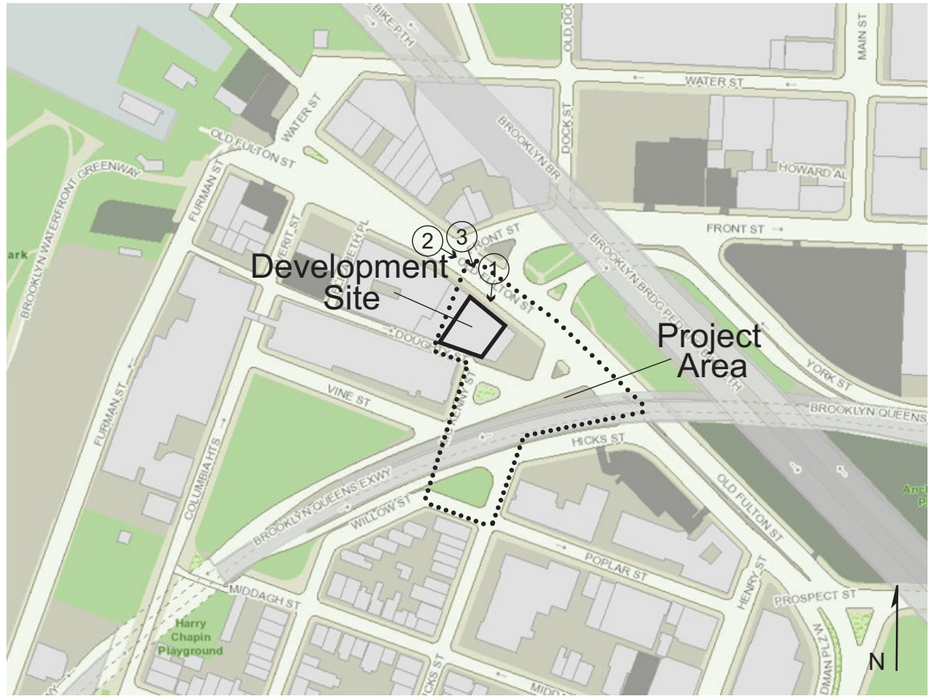
1. View of the Development Site facing south from Old Fulton Street.



2. View of Old Fulton Street facing southeast from Front Street (Development Site at right).



3. View of the Development Site facing southeast from the intersection of Old Fulton Street and Front Street.





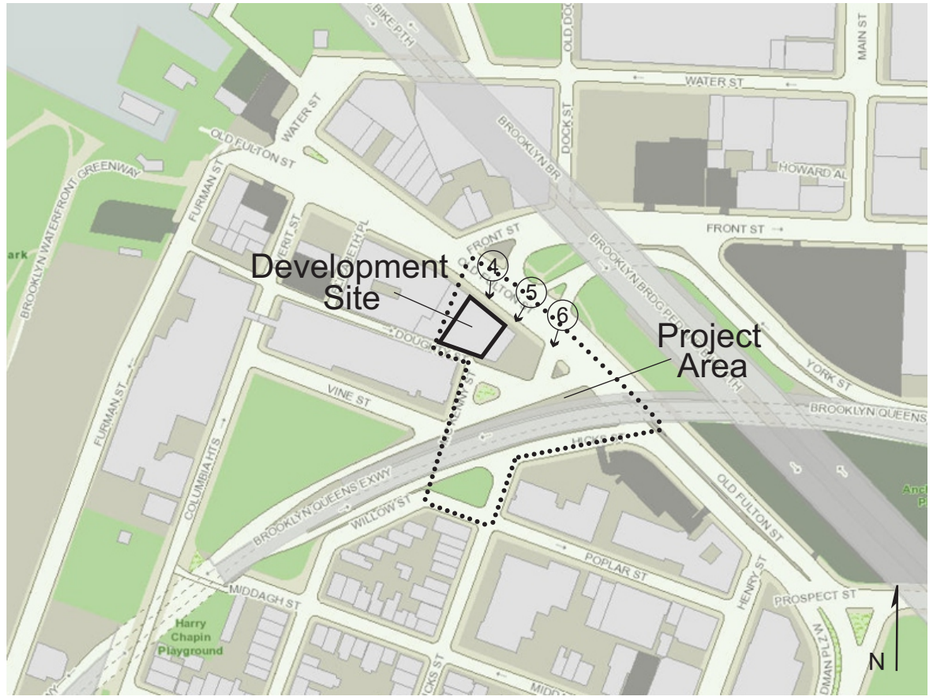
4. View of the Development Site facing south from the intersection of Old Fulton Street and Front Street.



5. View of the Development Site and Project Area facing southwest from Old Fulton Street.



6. View of Hicks Street facing south from Old Fulton Street (Project Area ahead).





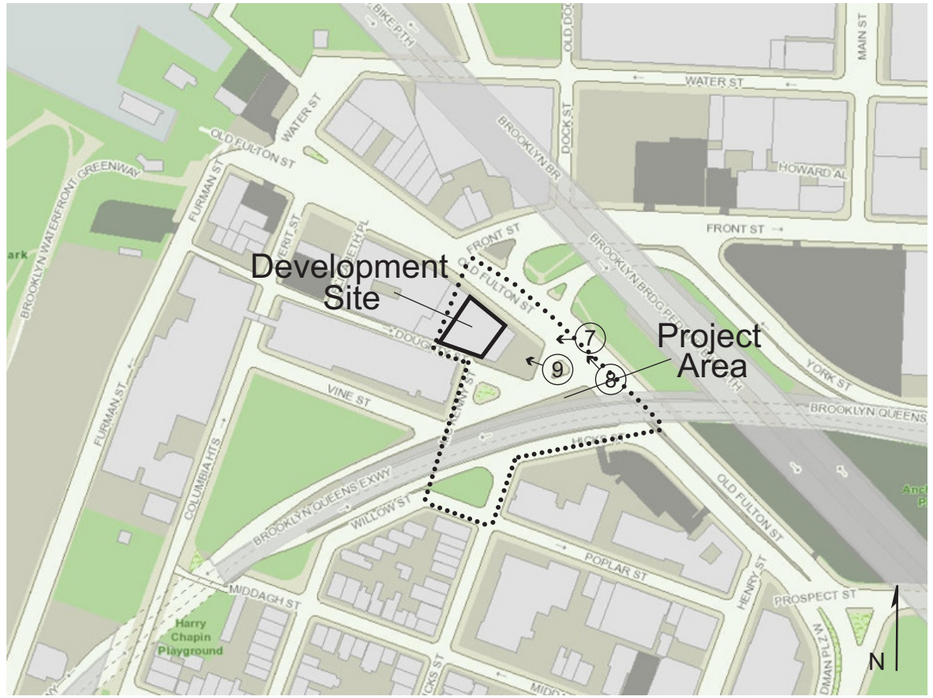
7. View of the Project Area facing west from the intersection of Old Fulton Street and Hicks Street.



8. View of Old Fulton Street facing northwest from Hicks Street (Project Area at left).



9. View of the side of Hicks Street facing west between Old Fulton Street and Doughty Street.





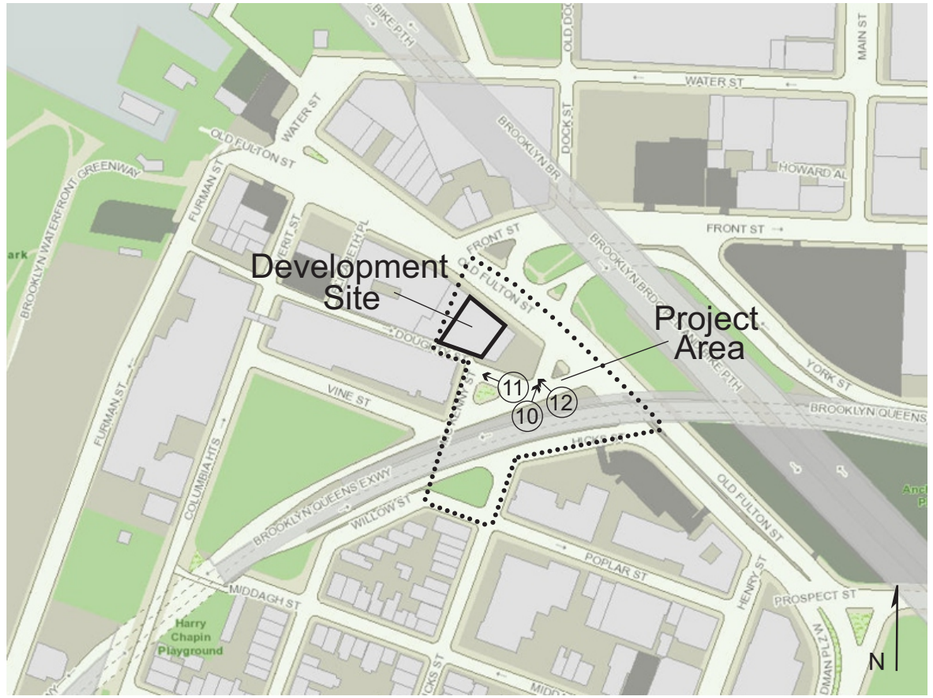
10. View of Hicks Street facing north from Vine Street.



11. View of Doughty Street facing west from Vine Street.



12. View of the intersection of Hicks Street and Doughty Street facing northwest.





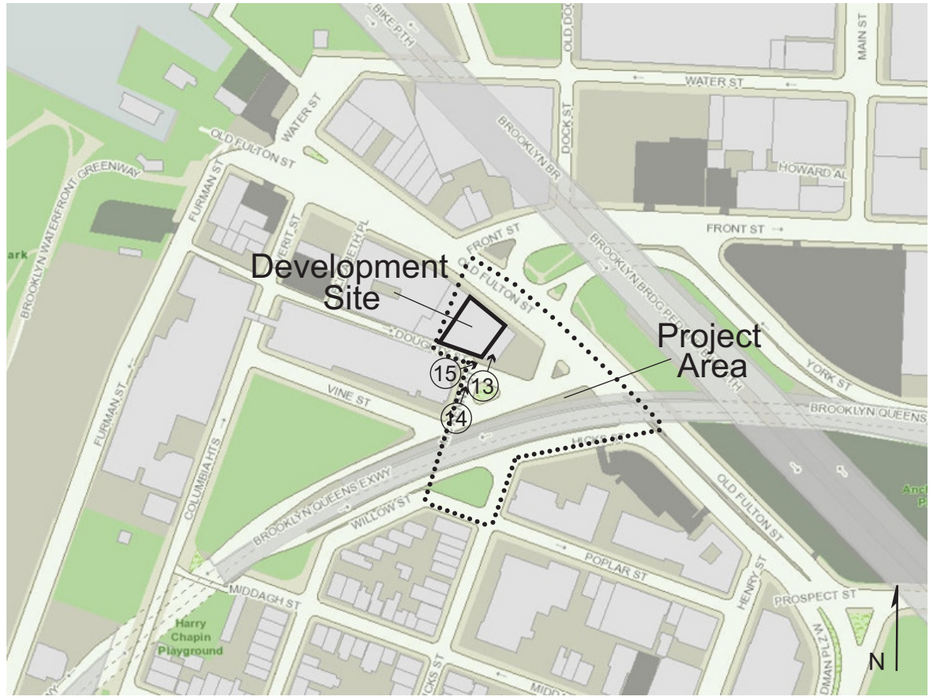
13. View of the side of Doughty Street facing north between Hicks Street and Everit Street.



14. View of the side of Doughty Street facing north from McKenny Street.



15. View of the side of Doughty Street facing northeast between McKenny Street and Everit Street





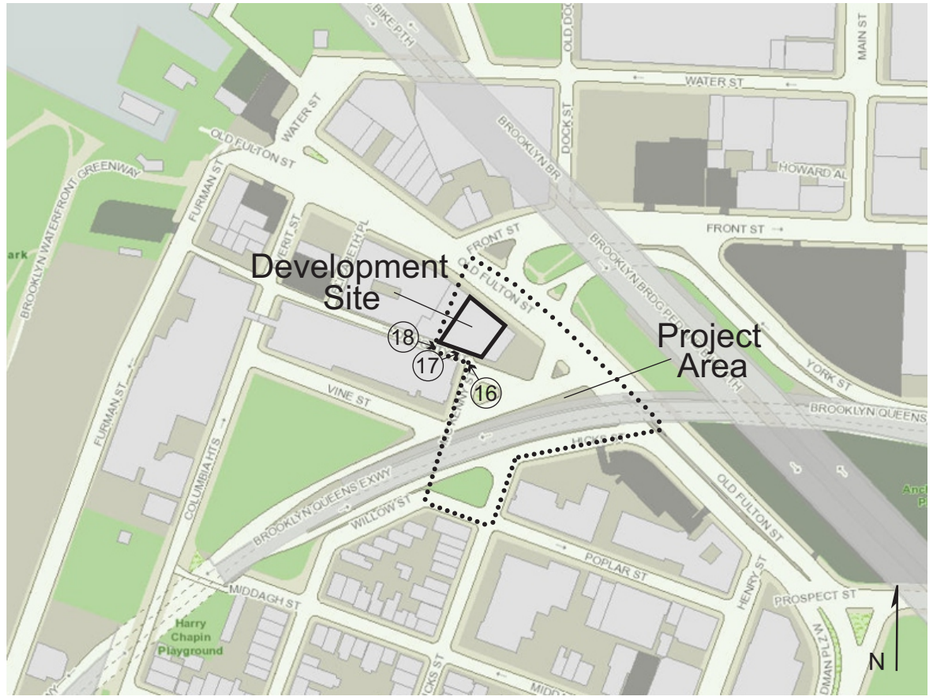
16. View of the Development Site facing northwest from the intersection of Doughty Street and McKenny Street.



17. View of the Development Site facing northeast from Doughty Street.



18. View of Doughty Street facing east (Development Site at left).





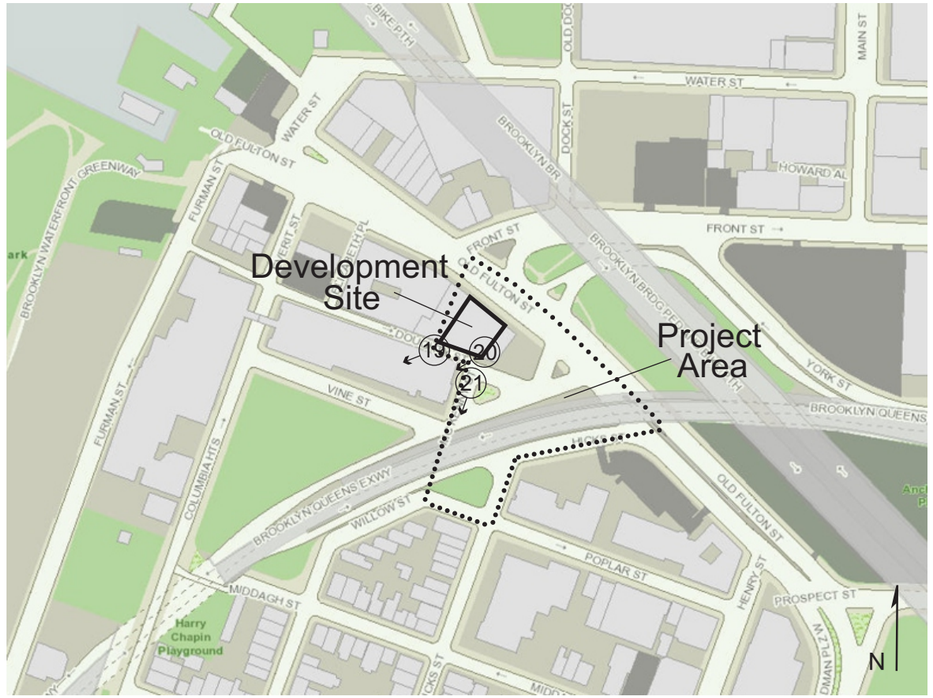
19. View of the side of Doughty Street facing southwest from the Development Site.



20. View of the intersection of Doughty Street and McKenny Street facing southwest from the Development Site.

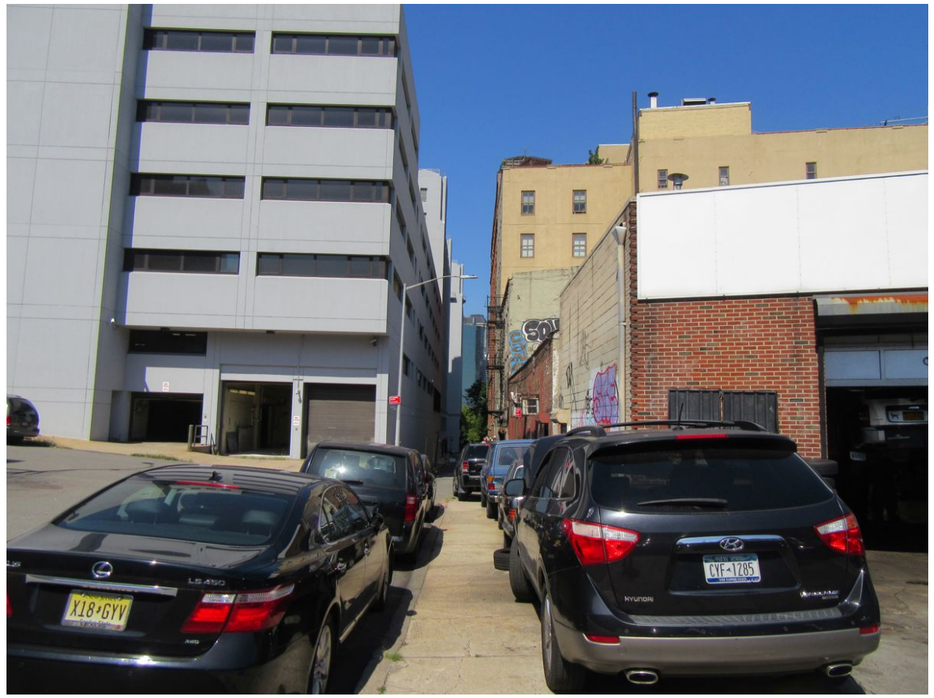


21. View of McKenny Street facing south from the Development SIte.





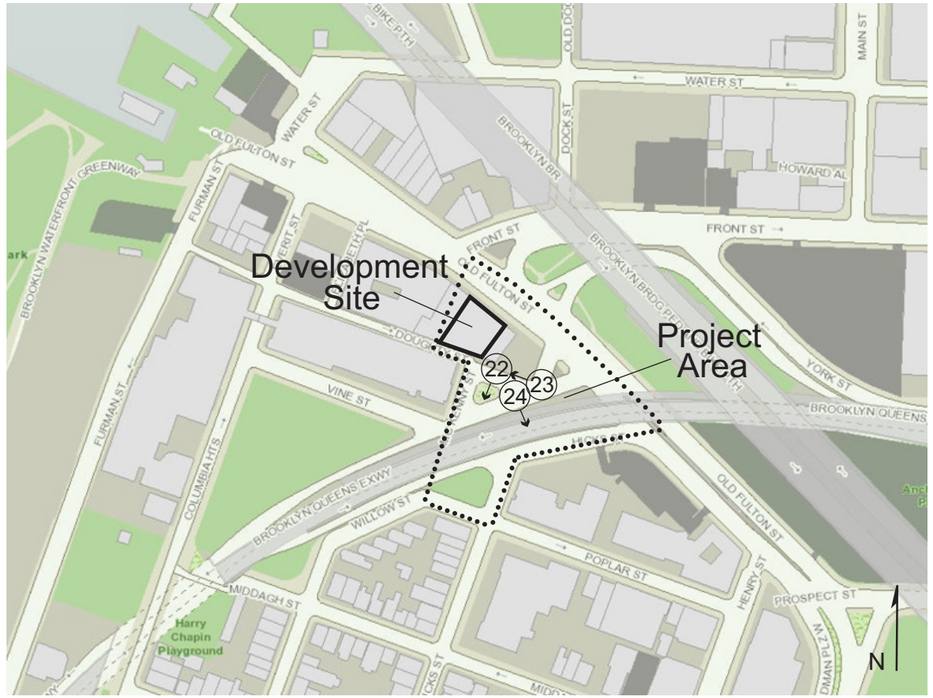
22. View of the side of Doughty Street facing south between McKenny Street and Hicks Street.



23. View of the sidewalk along the north side of Doughty Street facing west from Hicks Street.



24. View of the south side of Vine Street facing southeast from the intersection of Hicks Street and Doughty Street.





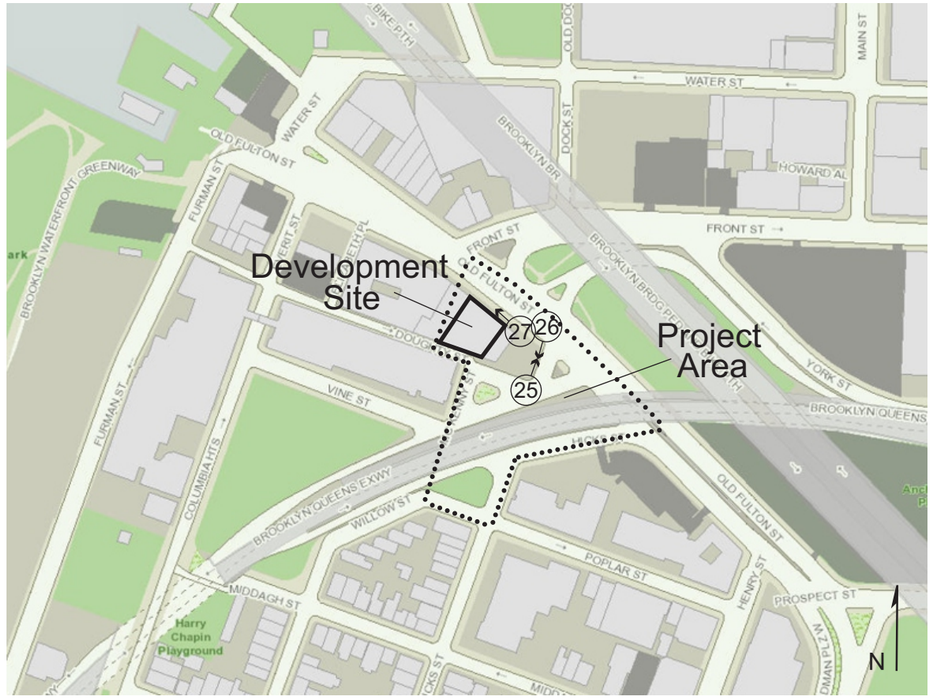
25. View of the sidewalk along the west side of Hicks Street facing north from Doughty Street.



26. View of the sidewalk along the west side of Hicks Street facing south from Old Fulton Street.



27. View of the sidewalk along the south side of Old Fulton Street facing northwest from Hicks Street.





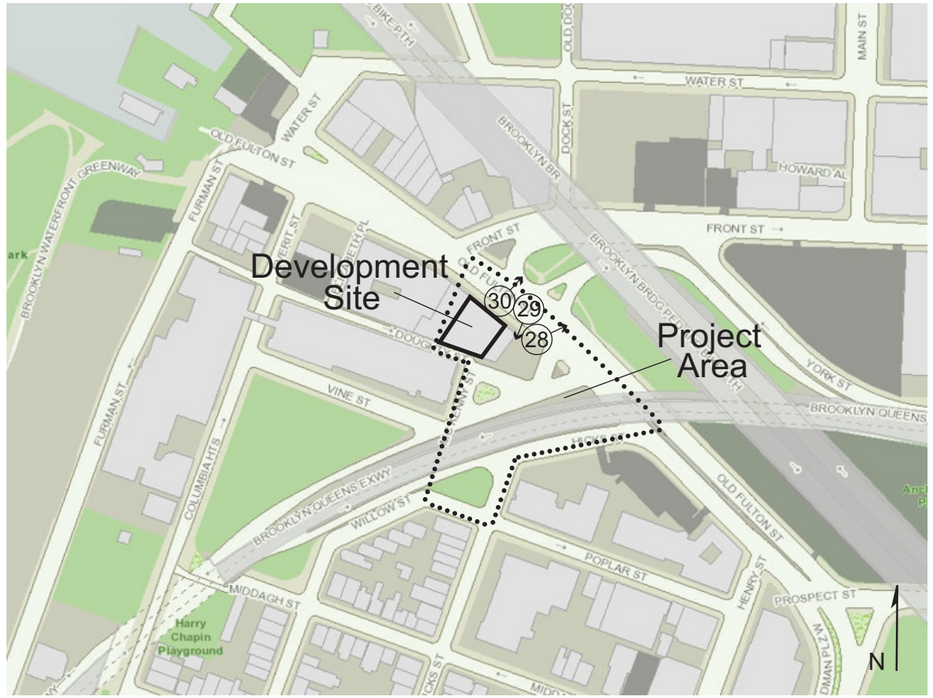
28. View of the intersection of Old Fulton Street and Front Street facing northeast from the Project Area.



29. View of the Project Area facing southwest from Old Fulton Street (Development Site at right).



30. View of the side of Old Fulton Street facing north from the Development Site.

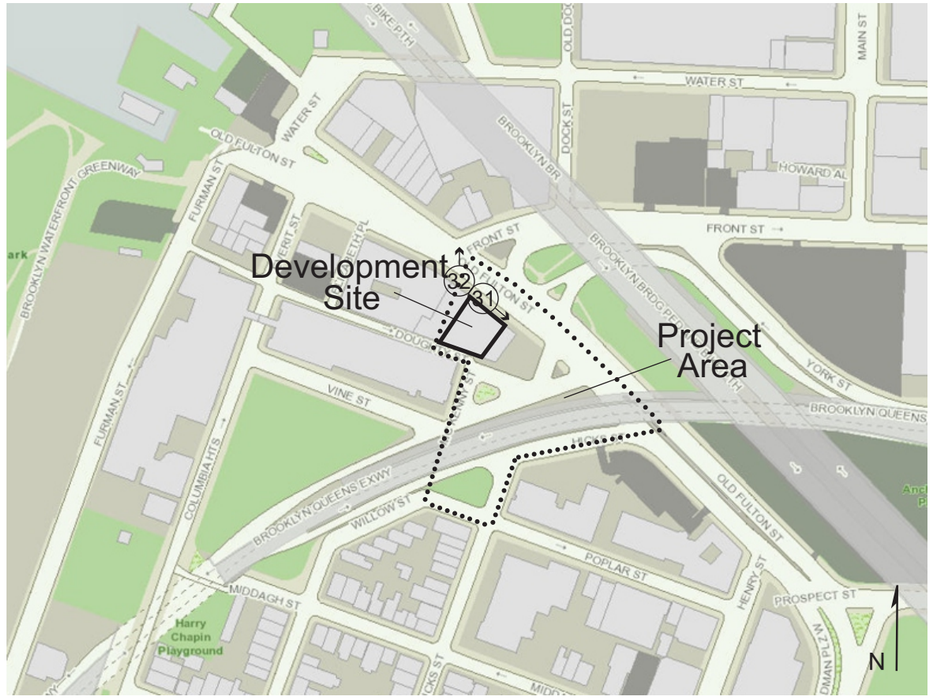




31. View of the sidewalk along the south side of Old Fulton Street facing southeast (Development Site at right).



32. View of the intersection of Old Fulton Street and Front Street facing north from the Development Site.



Site Information

Block 202, Lot 14

Zoning Map: 12d

Zoning District: M2-1

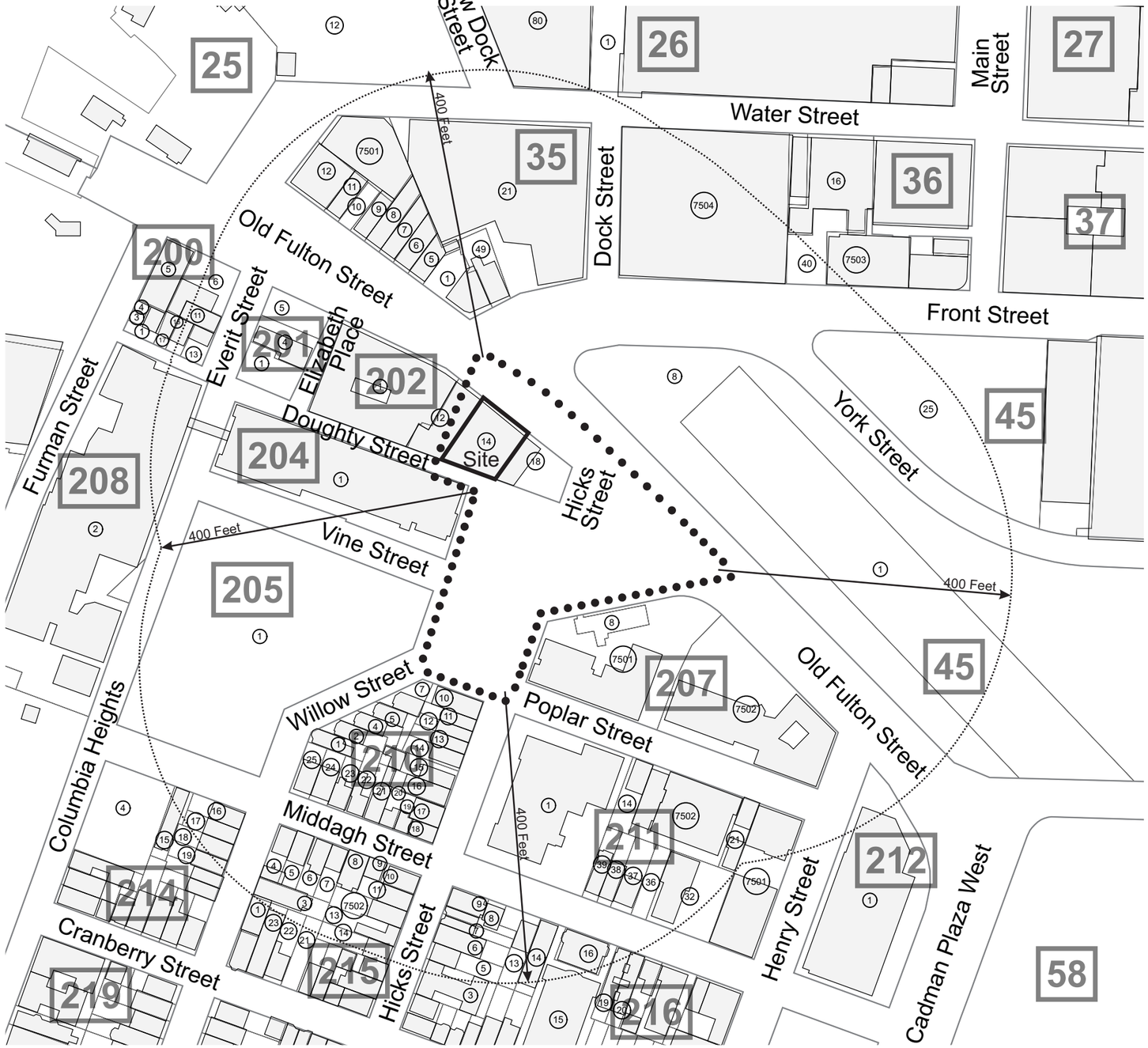
Special District: n/a

Lot and Building Information

(#) - Lot Numbers (within radius)

- Block Numbers

- Project Area



North

Scale: .55” = 100’

0 50 100

Site Information

Block 202, Lot 14

Zoning Map: 12d

Zoning District: M2-1

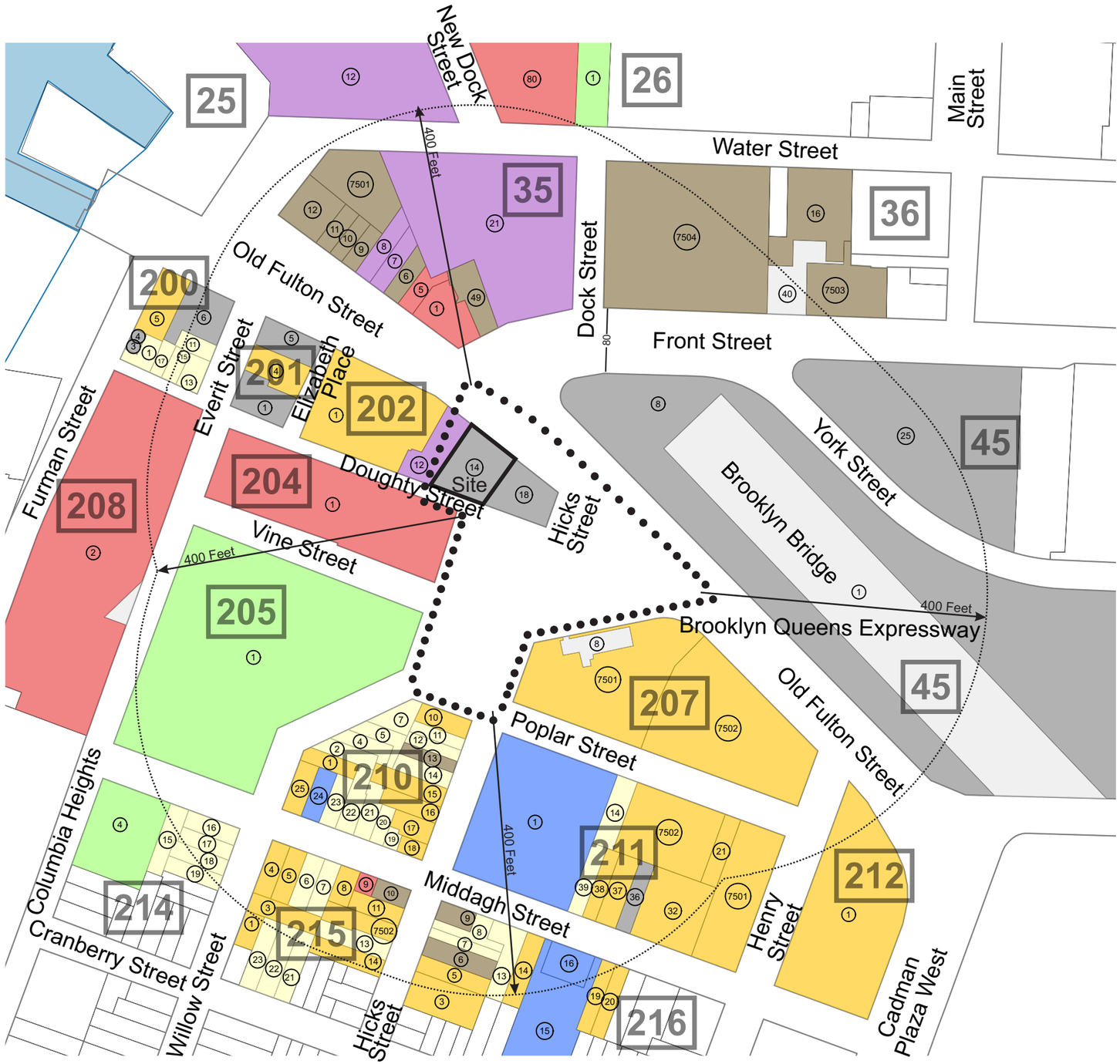
Special District: n/a

Lot and Project Information

(#) - Lot Numbers (within radius)

- Block Numbers

- Project Area



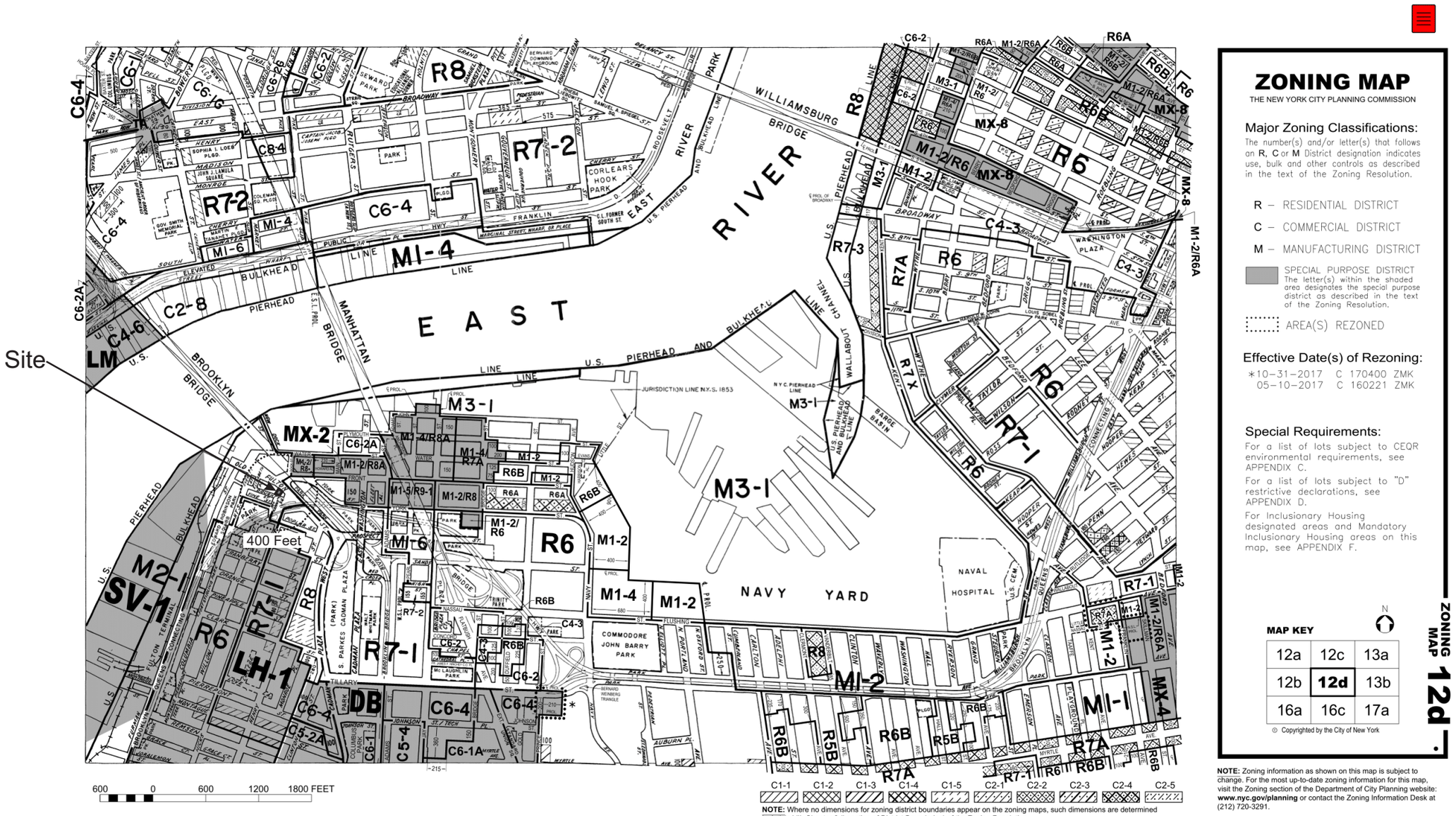
North

Scale: .55” = 100’

0 50 100

Land Uses

- One and Two-Family Homes
- Multiple Dwelling
- Commercial
- Mixed Use (Residential/Commercial)
- Manufacturing
- Open Space / Park Land
- Institutional / Community Facility
- Parking / Automotive
- Vacant



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:

∗10–31–2017 C 170400 ZMK
05–10–2017 C 160221 ZMK

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 and Mandatory Inclusionary Housing areas on this map, see APPENDIX F.

MAP KEY

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

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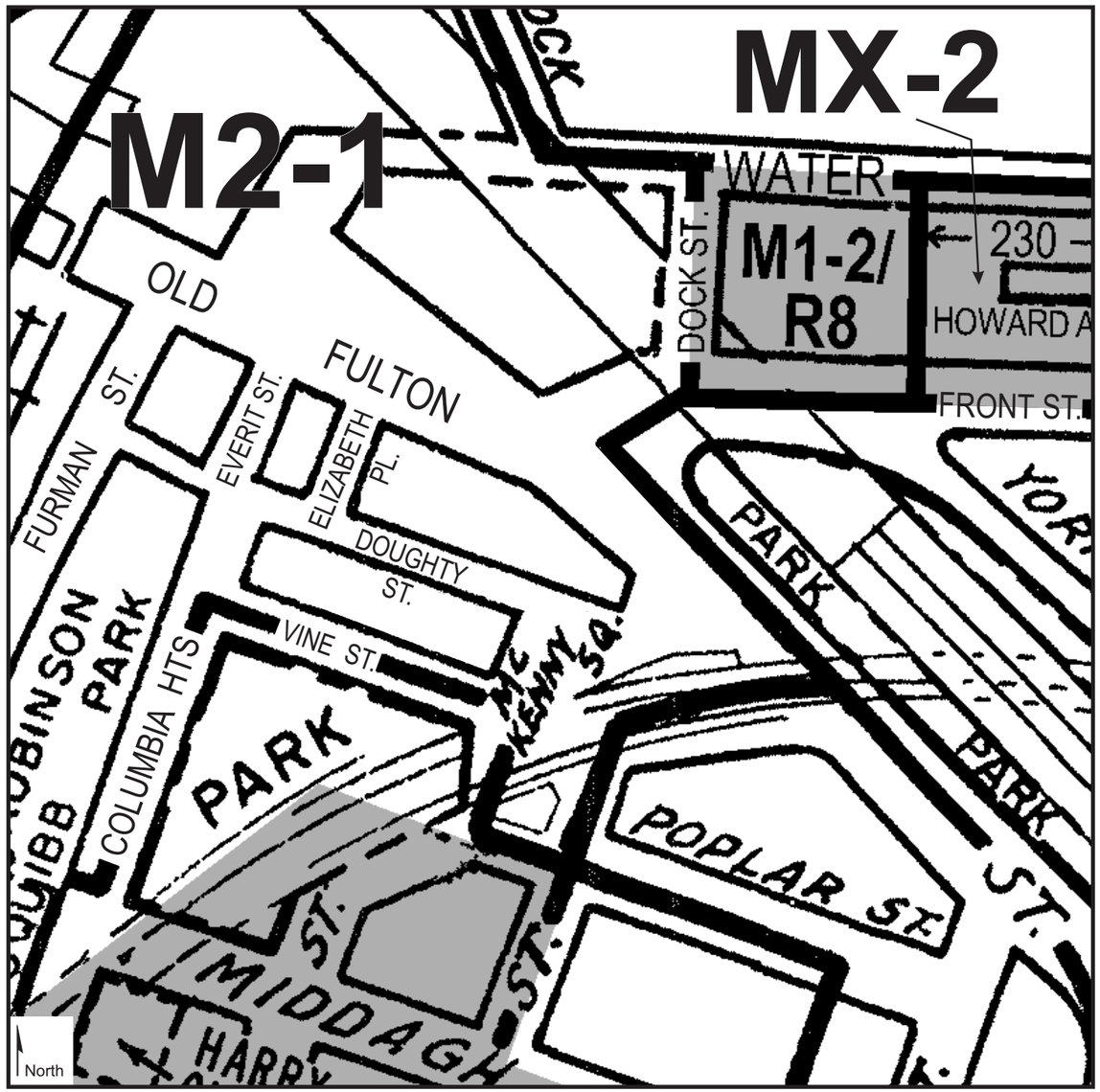
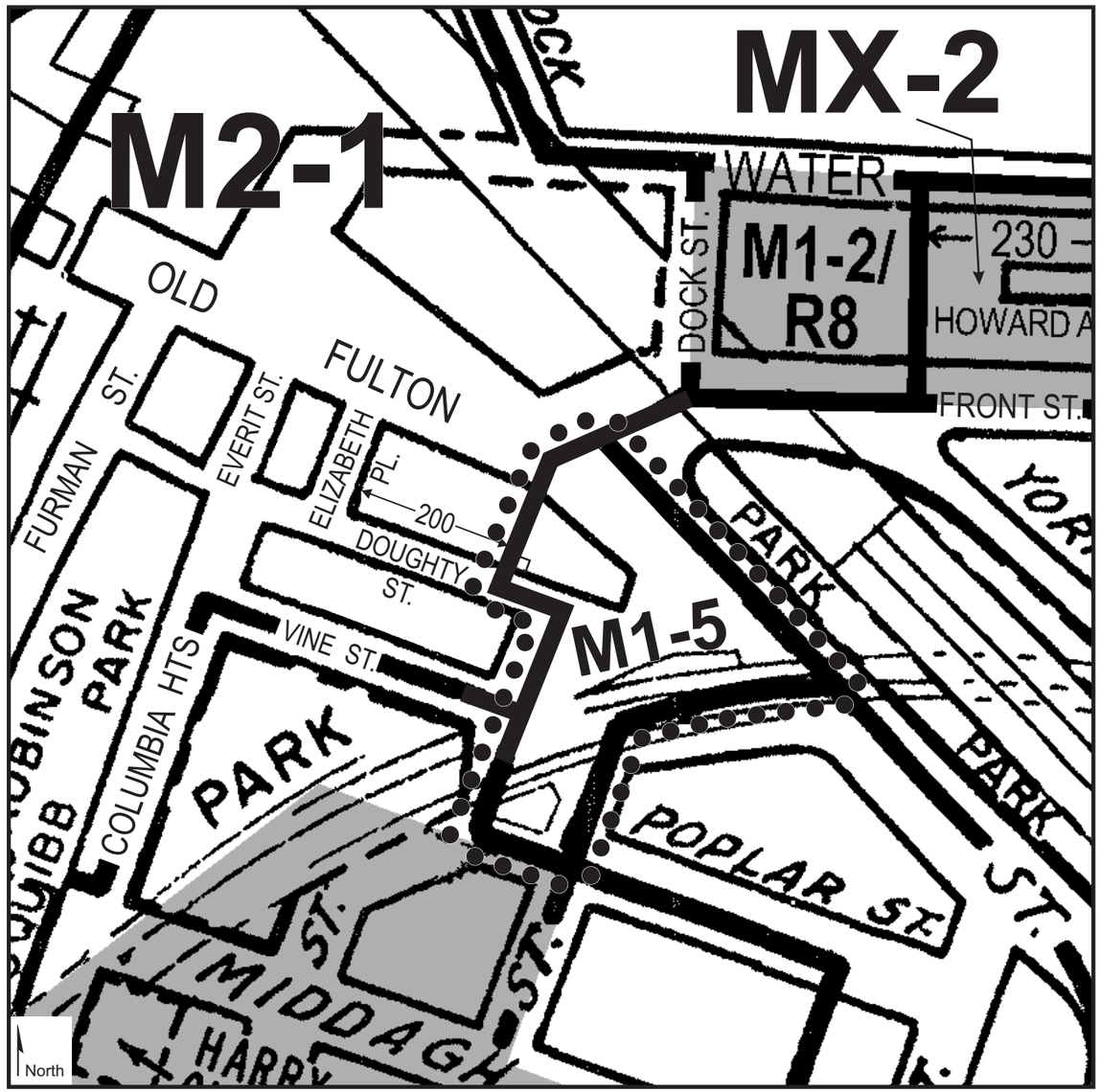
ZONING MAP **12d**

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.

Zoning Change Map

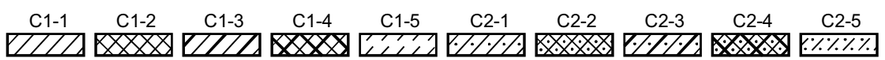


Current Zoning Map (12d)



Proposed Zoning Map (12d) - Area being rezoned is outlined with dotted lines

Rezoning from M2-1 to M1-5



SUPPLEMENTAL REPORT

EAS NARRATIVE ATTACHMENT

50 OLD FULTON STREET

ENVIRONMENTAL ASSESSMENT STATEMENT

INTRODUCTION

Based on the analysis and the screens contained in the Environmental Assessment Statement Form, the analysis areas that require further explanation include land use, zoning, and public policy; shadows; historic and cultural resources; urban design and visual resources; hazardous materials; air quality; noise; and construction as further detailed below. Transportation is also addressed below to provide information about the potential of the project to affect this area of concern. The section numbers below correspond to the relevant chapters of the 2014 *CEQR Technical Manual.*

4. LAND USE, ZONING, AND PUBLIC POLICY

EXISTING CONDITIONS

Land Use

Affected Area

The Affected Area (the area subject to the proposed Zoning Map Amendment) is located on Tax Block 202, part of (p/o) Lot 14, Lot 18, and p/o Lot 12 in the Fulton Ferry neighborhood of Brooklyn, Community District 2.

The existing conditions on the Applicant controlled and the non-Applicant held sites in the Affected Area are described below.

Applicant Controlled Proposed Development Site (Projected Development Site 1)

The Applicant controlled Proposed Development Site (Projected Development Site 1), Block 202, Lot 14, has a lot area of approximately 6,593 square feet. (Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning). The lot has frontages on both Old Fulton Street to the north and Doughty Street to the south on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. The Development Site currently contains a one-story, 6,593 gross square foot (gsf) auto body repair shop that covers the full lot (0.97 FAR). This use has occupied the Site since at least 1965. The Applicant acquired control of this property in November 2016.

Non-Applicant Controlled Site (Projected Development Site 2)

Projected Development Site 2, Block 202, Lot 18, has a lot area of approximately 4,705 square feet. The lot has frontages on Old Fulton Street to the north, Doughty Street to the south, and Hicks Street to the east on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. Projected Development Site 2 adjoins Projected Development Site 1 to the west. The Site contains an approximately 3,700 gsf one- to two-story auto body shop that covers most of the lot (0.79 FAR) with the remainder of the lot used for accessory parking of vehicles being serviced. This use has

occupied the Site since at least 1965 and the Site has been under the same ownership for at least 10 years.

Non-Applicant Controlled Site (Other Site 1)

Other Site 1 is identified as Block 202, p/o Lot 12. The entirety of Lot 12 consists of 4,687 square feet of land area. The lot has frontages on Old Fulton Street to the north and Doughty Street to the south on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. The lot contains an approximately 16,000 gsf four-story warehouse building that covers most of the lot. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Affected Area to be drawn parallel to Elizabeth Place.

Study Area

The project study area extends approximately 400 feet in all directions from the boundaries of the Affected Area. The study area is roughly bounded by Water Street on the north, an area between Middagh and Cranberry Streets on the south, an area between Henry Street and Cadman Plaza West to the east, and an area between Event and Furman Streets to the west. Information was obtained from the NYC PLUTO database.

The area surrounding the Affected Area contains an eclectic mix of uses including one- and two-family residences, multi-family dwellings, many of which also contain ground floor commercial space, commercial uses, manufacturing uses, community facilities, parking and automotive uses, and open space areas. Much of the 400-foot radius project study area is occupied by streets and roadways providing access to and from the Brooklyn Bridge primarily to the north and east of the Affected Area.

As stated above, the Affected Area is bordered by Old Fulton Street to the north, Doughty Street to the south, and Hicks Street to the east. A four-story warehouse adjoins the Affected Area and Projected Development Site 1 to the west. The remaining use on Block 202 consists of a nine-story multiple dwelling at the western end of the block.

Block 204 to the south of the Affected Area across Doughty Street is entirely occupied by a 13-story commercial office building with ground floor commercial space. Block 208 further to the west contains an 8-story commercial office building with ground floor commercial space.

Approximately 50% of Block 35 to the north of the Affected Area across Old Fulton Street is occupied by a two-story warehouse. The remainder of the block consists of two small 1- to 2-story commercial retail buildings, two 4-story industrial buildings, and seven mixed-use, 3- to 6-story residential/commercial buildings.

The remainder of the area to the north of the Affected Area consists of one 17-story and one 7-story mixed-use residential/commercial building on Block 36, small portions of a one-story commercial/retail building and an open space area occupying the bed of Old Dock Street on Block 26, and a small portion of a 2-story industrial building on Block 25.

Areas to the east of the Affected Area consist of roadways providing access to and from the Brooklyn Bridge and landscaped strips and parking areas below and adjacent to these roadways on Block 45. The elevated Brooklyn-Queens Expressway also extends over this area.

Areas to the west of the Affected Area consist of a small block, Block 201, developed with a 3-story multiple dwelling and adjoining parking areas. A portion of another small block, Block 200, contains several 1- and 2-story single- and two-family dwellings and adjacent parking lots.

The 1.37-acre Hillside Park is located south of the Affected Area between Columbia Heights, Middagh Street, Vine Street, and Hicks Street on Block 205. The 0.30-acre Harry Chapin Playground lies just south of Hillside Park at the corner of Columbia Heights and Middagh Street on Block 214.

The portions of Block 210, 214, 215, and 216 located within 400 feet south of the Affected Area are primarily developed with multiple 2- to 4-story single- and two-family dwellings and multiple 3- to 5-story multiple dwellings, several of which contain ground floor retail space. Two churches/synagogues are also located on Blocks 210 and 216.

The remaining areas within the 400-foot project study area to the south/southeast include portions of Blocks 207, 211, and 212 which are primarily developed with larger multiple dwellings ranging from 4- to 5-stories on Block 211, 4- to 6-stories on Block 207, and 27-stories on Block 212. A 4-story school also occupies much of the eastern half of Block 211.

Zoning

Affected Area

The Affected Area is zoned as an M2-1 manufacturing district. The Affected Area has been part of its current M2-1 zoning district since the enactment of the Zoning Resolution of the City of New York on December 15, 1961. The M2-1 district is primarily mapped in older manufacturing areas of the City. M2 districts occupy the middle ground between light and heavy industrial uses and are designed for manufacturing and related activities that can meet a medium level of performance standards. The district permits general industrial uses and most commercial uses with the exception of certain retail uses which are prohibited or limited to developments of 10,000 square feet or less. Residential and community facility uses are not permitted in this zone. The M2-1 district has an allowable commercial or manufacturing floor area ratio (FAR) of 2.0.

Study Area

Most of the area to the north and west within 400 feet of the Affected Area is similarly zoned M2-1 as is described above. Most of the 400-foot radius project study area to the northeast and east is zoned R7-1 and M1-2/R8 (Special Mixed-Use District MX-2). Areas to the south and southeast are zoned R6, R7-1, and R8. The Food Retail Expansion to Support Health (FRESH) program is mapped over the project study area (excluding the Affected Area) to the north and east. The major provisions of these districts are described below.

The R6 zoning district is appropriate for medium density housing with typical building heights ranging from three to twelve stories. The R6 district is common in built-up areas of all the boroughs except Staten Island. The district allows residential FARs ranging from 0.78 to 2.43 and a community facility FAR of up to 4.8. The higher residential FAR typically produces 12-story residential buildings with increased open space on the lot. Parking is required for 70 percent of the dwelling units in this district (for 50 percent of the dwelling units on zoning lots less than 10,000 square feet in area), and is waived if five or fewer spaces are required. The Quality Housing Program is optional in R6 districts and permits an FAR of up to 3.0 on wide

streets outside the Manhattan core. In addition, parking is required for only 50 percent of the dwelling units in a Quality Housing development.

R7 districts are medium density apartment house districts. The height factor regulations for R7 districts encourage low apartment buildings on smaller zoning lots, and taller buildings with low lot coverage on larger lots. The Quality Housing program is optional in R7 districts resulting in lower buildings with higher lot coverage. The R7-1 zoning district permits a residential FAR ranging between 0.87 and 3.44 and a community facility floor area ratio of up to 4.8. The R7-1 zoning district regulations also require that parking be provided for 60 percent of the dwelling units, which can be waived if five or fewer spaces are required. Quality Housing buildings in the R7-1 district can have up to 4.0 FAR on wide streets outside the Manhattan core.

The R8 zoning district permits medium to high density residential housing with a permitted residential FAR ranging between 0.94 and 6.02. It also permits community facility uses up to an FAR of 6.5. Apartment houses in R8 districts can range from mid-rise, eight- to ten-story buildings to much taller, narrower buildings set back from the street on large zoning lots. There are no absolute height limits; the building must be set within a sky exposure plane which, in R8 districts begins at a height of 85 feet above the street line and then slopes inward over the zoning lot. The R8 zoning district regulations require that parking be provided for 40 percent of the dwelling units. The R8 zoning district waives requirements for the provision of parking for zoning lots less than 10,000 square feet in size or if 15 or fewer parking spaces are required. The Quality Housing program, which uses height limits to produce lower, high lot coverage buildings set at or near the street line, is optional in R8 districts. Quality Housing buildings in the R8 district can have up to 7.2 FAR on wide streets outside the Manhattan core.

The Special Mixed-Use District (MX) was established in 1997 to encourage investment in, and enhance the vitality of, existing neighborhoods with mixed residential and industrial uses in close proximity and create expanded opportunities for new mixed-use communities. It allows new residential and non-residential uses (commercial, community facility and light industrial) to be developed as-of-right and be located side-by-side or within the same building. Residential uses are generally subject to the bulk controls of the governing residence district; commercial, industrial and community facility uses are subject to the M1 district bulk controls, except that community facilities are subject to residential FAR limits. Most light industrial uses are permitted in the MX district as-of-right; others are subject to restrictions and Use Group 18 uses are excluded, except small breweries.

The City has established the FRESH program in response to neighborhoods that are underserved by grocery stores. FRESH provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in underserved communities throughout the five boroughs. The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator. Stores that benefit from the FRESH program must provide a minimum of 6,000 square feet of retail space for a general line of food and nonfood grocery products intended for home preparation, consumption and utilization. The project study area to the north and east is eligible for various tax incentives related to grocery store development and operation.

Public Policy

Affected Area

The Affected Area is located within the City's Coastal Zone Boundary and is therefore subject to the provisions of the New York City Waterfront Revitalization Program. The Affected Area extends into the northern end of the Landmarks Preservation Commission (LPC) designated Brooklyn Heights Historic District and incorporates a landscaped island adjacent to the easterly side of the BQE that is part of the street. The Affected Area is not located within any other LPC designated Historic Districts and does not contain any individually LPC designated historic resources. It is separated from the Fulton Ferry Historic District by one building to the Development Site's west (Block 202, Lot 12). The Affected Area is therefore subject to New York City and New York State landmarks preservation regulations. The Affected Area is not covered by any 197-a or other community plans, and is not within an urban renewal area and is therefore not subject to the provisions of an urban renewal plan.

Study Area

Most of the 400-foot radius project study area, with the exception of lands underneath the Brooklyn Bridge access, is located within the City's Coastal Zone Boundary and is therefore subject to the provisions of the New York City Waterfront Revitalization Program.

The Affected Area extends into the northern end of the Brooklyn Heights Historic District and incorporates a landscaped island adjacent to the easterly side of the BQE that is part of the street. Much of the area within 400 feet of the Affected Area to the south is also located within the Brooklyn Heights Historic District. The Fulton Ferry Historic District is located within 400 feet of the Affected Area to the west and north. The Affected Area is separated from the Fulton Ferry Historic District by one building to the west of Projected Development Site 1 (Block 202, Lot 12). Ten individually designated historic resources are also located within 400 feet of the Affected Area: the Brooklyn Bridge, the Eagle Warehouse and Storage Company of Brooklyn building, the Brooklyn Fire Insurance Company building, the 5-7 Front Street House, Fulton Street Building Nos. 1-5, 7, 11, 13, 15, and 17. These Areas and buildings are therefore subject to New York City and New York State landmarks preservation regulations.

The DUMBO Business Improvement District (BID) lies within 400 feet of the Affected Area to the north and east of Old Fulton Street. The DUMBO BID covers an area of approximately 0.1 square miles between Old Fulton Street on the west, an irregular area between Jay and Gold Streets to the east, an irregular area between Prospect and High Streets to the south, and the Brooklyn waterfront to the north. The BID provides advocacy, street beautification, neighborhood marketing, and programming of public spaces within its boundaries.

The Study Area is not covered by any 197-a or other community plans, and is not within an urban renewal area and is therefore not subject to the provisions of an urban renewal plan.

THE FUTURE WITHOUT THE PROJECT

Land Use, Zoning and Public Policy

Affected Area

In the future without the action, the Reasonable Worst-Case Development Scenario (RWCDS) would reflect the following assumptions:

Without the Proposed Action, it is assumed the Affected Area's existing M2-1 zoning would remain. It is assumed that the No-Action development on Projected Development Site 1 would consist of a new two-story plus cellar and sub-cellar (2.0 FAR) retail building totaling approximately 26,380 gsf of floor area with 44 accessory off-street parking spaces in the cellar and sub-cellar levels. The Applicant acquired control of this property in November 2016 and plans to build this two-story building if the Proposed Action is not approved. Although light manufacturing uses are also permitted at a maximum 2.0 FAR in the M2-1 zoning district, the Applicant would not construct a manufacturing use on this property because the surrounding area has become increasingly commercial. Based on area market trends, the Applicant believes a two-story commercial building housing Use Group 6A/6C retail is the highest and best return for Projected Development Site 1 under the No-Action Scenario which would attract tenants while generating the greatest rents possible in this location.

It is assumed that, without the Proposed Action, the existing conditions on Projected Development Site 2 would remain. This site is not a projected development site under the no-action scenario because it is a small lot (less than 5,000 square feet), there are currently no plans for any development on the lot, and there is currently no potential for a merger of Projected Development Sites 1 and 2. Projected Development Site 2 has been under the same ownership for at least 10 years.

It is assumed that, without the Proposed Action, the existing conditions on Other Site 1 would remain. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Affected Area to be drawn parallel to Elizabeth Place.

Study Area

No development plans are known to exist for the 400-foot radius project study area by the project build year of 2022. No new development projects have been identified for the 400-foot radius project study area based on a review of the CEQR listings of the NYC Department of City Planning's (DCP) Land Use & CEQR Application Tracking System (LUCATS) back to 2010 for Brooklyn Community District 2.

Based on a review of the CEQR listings of the DCP's LUCATS list for Brooklyn Community District 2, no rezoning actions are proposed for the 400-foot radius project study area by the project build year of 2022. In addition, the DCP website does not indicate any proposed changes to the zoning districts and zoning regulations or to any public policy documents relating to the project site or the surrounding study area in the near future.

THE FUTURE WITH THE PROJECT

Land Use

In the future with the action, the RWCDS would reflect the following assumptions. The Proposed Action would change the zoning of the Affected Area from M2-1 to M1-5, increasing the maximum FAR from 2.0 to 5.0 for manufacturing and commercial development (and from 0.0 to 6.5 FAR for community facility development). The With-Action Scenario would permit development of a five-story plus cellar approximately 39,600 gsf commercial building (5.0 FAR) on Projected Development Site 1 with retail on its cellar through second floors and offices on its

third through fifth floors[1]. The With-Action RWCDS for Projected Development Site 1 would be the same as the proposed development.

The Proposed Action would also permit the development of an approximately 28,230 gsf (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2.

Under the Proposed Action, no new development would occur on Other Site 1. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Affected Area to be drawn parallel to Elizabeth Place.

The Project Build Year is 2022. The Build Year is based on a 2020 approval of the proposed zoning map amendment application followed by an 18-24 month construction period.

The proposed uses would be compatible with the eclectic mix of existing uses located in the surrounding area. No adverse impact to land use patterns in the area is expected to arise as a result of the proposed project, and further assessment of land use is not warranted.

ZONING

The Proposed Action is a Zoning Map Amendment to Sectional Map # 12d to rezone the Affected Area from its current M2-1 zoning to an M1-5 zoning district. The Proposed Action is being sought to facilitate the development of the new building, containing approximately 39,600 gsf (5.0 FAR) of commercial use, on Projected Development Site 1. The new building will be five stories, plus a cellar, with 19,800 gsf of Use Group 6A/6C retail on the cellar, ground and second floors and 19,800 gsf of Use Group 6B offices on the third through fifth floors.

The Proposed Action is necessary to allow additional development on Projected Development Site 1. The Affected Area's current M2-1 zoning only allows 2.0 FAR of commercial or manufacturing floor area on a zoning lot. The proposed M1-5 zoning would allow 5.0 FAR of commercial or manufacturing floor area (or 6.5 FAR of community facility floor area).

The Proposed Action would also allow for development of an approximately 28,230 gsf (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2.

Under the Proposed Action, approximately 512 square feet of Other Site 1 would be included in the Affected Area in order to allow the western boundary of the Affected Area to be drawn parallel to Elizabeth Place. No additional development would be facilitated on this Site.

No parking would be required for retail or offices uses in the proposed M1-5 district.

The Affected Area has been part of its current M2-1 zoning district since the enactment of the Zoning Resolution of the City of New York on December 15, 1961. The proposed M1-5 zoning

[1] Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning. Although the slightly smaller M1-5 zoned area would technically accommodate a building slightly smaller than 39,600 gsf, the provisions governing pre-existing split zoning lots will allow the new district boundary line to be moved so that the entire development site is deemed to be within the new M1-5 zoning district.

for the Affected Area would mirror other M1 districts mapped within the project study area, including the M1-2/R8 (Special Mixed-Use District MX-2) mapped to the northeast of the Area.

The increase in floor area that would be permitted by the proposed rezoning is appropriate in this location because it will reflect the existing higher density commercial character within the project study area. A four-story warehouse adjoins the Affected Area and Projected Development Site 1 to the west. Block 204 to the south of the Affected Area across Doughty Street is entirely occupied by a 13-story commercial office building with ground floor commercial space. Block 208 further to the west contains an 8-story commercial office building with ground floor commercial space.

As the Proposed Action would not displace or introduce a grocery store to the area, it would not be affected by or have a significant adverse impact on the FRESH program.

The Proposed Action would not result in significant adverse zoning impacts. The Proposed Action would not have a significant impact on the extent of conformity with the current zoning in the surrounding area, and it would not adversely affect the viability of conforming uses on nearby properties.

Potentially significant adverse impacts related to zoning are not expected to occur as a result of the Proposed Action, and further assessment of zoning is not warranted.

Public Policy

No adverse impacts to public policies would occur as a result of the Proposed Action.

Waterfront approval is required for the proposed development as the Affected Area is located within the City's Coastal Zone Boundary Area and the project must be assessed for its consistency with the City's Waterfront Revitalization Program. The Waterfront Consistency Assessment Form and a narrative explaining how the Proposed Action would be consistent with WRP policies are included in the Waterfront Appendix to this document. The narrative explains how the proposed development complies with the policies noted after each Consistency Assessment Form question that has been affirmatively responded to. The Proposed Action is consistent with WRP policies, and no potentially significant adverse impacts related to the WRP are anticipated as a result of the action. The proposed development would not have any impact on the Coastal Zone within a 400-foot radius of the Affected Area.

DCP's Waterfront Open Space Division reviewed the project for consistency with the policies and intent of the New York City Waterfront Revitalization Program (WRP). Based on the information submitted, the Waterfront Open Space Division, on behalf of the New York City Coastal Commission, having reviewed the waterfront aspect of this action, finds that the actions will not substantially hinder the achievement of any WRP policy and hereby determines the project consistent with the WRP policies. This project has been assigned WRP # 17-081.

As explained above, no other public policies pertain to the Affected Area. The Proposed Action would not have any significant adverse impacts on the LPC designated Historic Districts and individually designated resources within the project study area nor would it affect the DUMBO BID located to the east of the Affected Area.

No potentially significant adverse impacts related to public policy are anticipated to occur as a

result of the Proposed Action, and further assessment of public policy is not warranted.

8. SHADOWS

Introduction

Under CEQR, a shadow is defined as the circumstance in which a building or other built structure blocks the sun from the land. An adverse shadow impact is considered to occur when the shadow from a proposed project falls upon a publicly accessible open space, a historic landscape, or other historic resource if the features that make the resource significant depend on sunlight, or if the shadow falls on an important natural feature and adversely affects its uses or threatens the survival of important vegetation. An adverse impact would occur only if the shadow would fall on a location that would otherwise be in sunlight; the assessment therefore distinguishes between existing shadows and new shadows resulting from a proposed project. Finally, the determination of whether the impact of new shadows on an open space or a natural or historic resource would be significant is dependent on their extent and duration. In general, shadows on City streets and sidewalks or on other buildings are not considered significant under CEQR. In addition, shadows occurring within an hour and a half of sunrise or sunset generally are not considered significant under CEQR.

According to the *CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure or an addition to a structure at least 50 feet in height or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource. A shadows analysis is required for this project because the Proposed Action would facilitate the construction of a 5-story building on Projected Development Site 1 and on Projected Development Site 2 reaching a height of 94 feet to the top of their bulkheads. Under Future No-Action conditions the building on Projected Site 1 would be two-stories and a maximum of 36 feet in height resulting in a net increase of approximately 58 feet in height in the Future With Action condition. Under existing/Future No-Action conditions the building on Projected Site 2 would be one- to two-stories and a maximum of 24 feet in height resulting in a net increase of approximately 70 feet in height in the Future With Action condition.

Potential Shadow Sensitive Resources

The Proposed Action could potentially cast new shadows on the surrounding area. There are several open space resources within the maximum shadow radius of the buildings on Projected Development Sites 1 and 2 including several landscaped islands below the Brooklyn Bridge adjacent to Old Fulton Street east of the Affected Area and Hillside Park bounded by Columbia Heights and Hicks Street between Middagh and Vine Streets south of the Affected Area. In addition, there are a number of historic resources within the maximum shadows radius of the building on Projected Development Sites 1 and 2 including the Fulton Ferry and the Brooklyn Heights Historic Districts as well as multiple individually designated historic resources including the Eagle Warehouse and Storage Company of Brooklyn building at 28 Old Fulton Street; the Brooklyn Bridge; the Brooklyn Fire Insurance Company building at 27 Old Fulton Street; the 5-7 Front Street House; and Fulton Street Building Nos. 1-5, 7, 11, 13, 15, and 17.

The buildings on Projected Development Sites 1 and 2 that would be facilitated by the Proposed Action would be 5-stories and 85 feet with a height of 94 feet to the top of their bulkheads. Based on 2014 *CEQR Technical Manual* criteria, the longest shadow that any building or structure would cast during the year (except within an hour and a half of sunrise or sunset which is not deemed to be of concern) is 4.3 times its height. Applying the 4.3 factor to the

projected building bulkhead height of 94 feet on Projected Development Sites 1 and 2 results in a maximum shadow distance of approximately 404.2 feet.

A shadows assessment would be required for shadow sensitive open space areas and if the surrounding Historic Districts and/or the individually designated resources within the vicinity of the site contain architectural resources that are sunlight-sensitive and could be adversely affected by shadows cast by the projected development. There are no other potentially shadow sensitive resources within the vicinity of the project site that could be affected by shadows from the proposed development. Potentially sunlight-sensitive architectural resources include the following:

- Buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements.
- Buildings distinguished by elaborate, highly carved ornamentation.
- Buildings with stained glass windows.
- Exterior materials and color that depend on direct sunlight for visual character.
- Historic landscapes, such as scenic landmarks including vegetation recognized as an historic feature of the landscape.
- 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.

The individually designated historic resources noted above and other resources within the surrounding Historic Districts do not contain any of the characteristics noted in the bulleted list above. By memorandum dated 9/17/18, LPC has determined that there are no shadow sensitive historic resources in the study area (see Historic and Cultural Resources Appendix).

The shadows analysis will therefore focus on potential shadows impacts to the open space resources identified above. See the attached shadows drawings which are further discussed below.

Preliminary Screening Assessment

Tier 1 Screening Assessment

There are four shadow sensitive open space resources in the vicinity of the Affected Area including the following. Projected Development Site 1 is identified as Building A and Projected Development Site 2 is identified as Building B on the graphic.

- Open Space Resource 1: Four landscaped islands known as Anchorage Plaza below the Brooklyn Bridge adjacent to Old Fulton Street between Front Street and Cadman Plaza West east of the Affected Area. The islands are planted with trees and shrubs. These islands are labeled "1" on the attached Tier 1 Screening Assessment diagram.
- Open Space Resource 2: The 1.37-acre Hillside Park bounded by Columbia Heights and Hicks Street between Middagh and Vine Streets south of the Affected Area. The bulk of the park primarily functions as a dog run, is planted with trees and shrubs, and contains

several benches and seating areas. There is also a separate portion of the park on the opposite side of the BQE which is a landscaped island. The park and landscaped islands are labeled "2" on the attached Tier 1 Screening Assessment diagram.

- Open Space Resource 3: A small landscaped island along Old Fulton Street near its intersection with Everit Street. The island is labeled "3" on the attached Tier 1 Screening Assessment diagram.

- Open Space Resource 4: A small Greenstreet located between McKenny and Hicks Street. The Greenstreet is labeled "4" on the attached Tier 1 Screening Assessment diagram.

The longest shadow of 404.2 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum proposed building height of 94 feet, the height of the bulkheads on Projected Development Sites 1 and 2.

Due to the proximity of the Affected Area to the open space resources described above, potential shadow impacts could occur from the projected development.

Tier 2 Screening Assessment

Based on the Tier 1 assessment, which showed the potential for the longest shadow to reach sunlight sensitive open space resources and historic buildings and districts, a Tier 2 assessment was generated. A Tier 2 assessment locates the area south of a building that cannot be cast in shadow. This area in New York City lies between -108 and +108 degrees from true north.

The attached Tier 2 Screening Assessment diagram shows the area south of the Affected Area that cannot be shaded by the projected development. As illustrated on the figure, approximately 50% of the landscaped islands below the Brooklyn Bridge adjacent to Old Fulton Street (resource #1), approximately 50% of Hillside Park and the entirety of both landscaped islands on the opposite side of the BQE (resource #2), and nearly the entirety of resource #4 are located within the area that cannot be shaded by the projected development. However, the remainder of the open space resources identified above could still experience new shadows from the project and further assessment is required.

Tier 3 Screening Assessment

The Tier 3 screening assessment is used to determine if shadows resulting from a proposed project can reach a sunlight-sensitive resource. The screening assessment uses three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns.

A Tier 3 screening assessment was performed for the four representative days of the year set forth in the *CEQR Technical Manual*: December 21, the winter solstice and shortest day of the year; March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); and June 21, the summer solstice and the longest day of the year. The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset. In accordance with the *CEQR Technical Manual*, surrounding buildings are not included in the Tier 3 shadow assessment model.

As shown on the attached Tier 3 Screening Assessment diagram, shadows from the projected development could reach several open space resources on the following analysis days.

- December 21st – Open Space Resources 1 and 3
- March 21st - Open Space Resource 1
- May 6th - Open Space Resource 1
- June 21st - Open Space Resources 1, 2, and 4

The attached Tier 3 Incremental Impact Screening Assessment diagram is designed to show the times and durations of any new shadows that would be cast by the projected development on Open Space Resources 1, 2, and 3 on any of the analysis days. The incremental shadows are as follows.

- December 21st

  An incremental shadow would be cast by the building on Projected Development Site 1 on a small portion of Open Space Resource 1 between 1:09 PM and 2:53 PM, a period of 1 hour and 44 minutes. An incremental shadow would be cast by the building on Projected Development Site 2 on a small portion of Open Space Resource 1 between 11:20 AM and 2:53 PM, a period of 3 hours and 33 minutes. The areas affected would be the two small westernmost islands of the resource and a tiny sliver at the westernmost edge of the middle island further to the east.

- March 21st

  An incremental shadow would be cast by the building on Projected Development Site 1 on a portion of Open Space Resource 1 between 1:43 PM and 4:29 PM, a period of 2 hours and 46 minutes. An incremental shadow would be cast by the building on Projected Development Site 2 on a portion of Open Space Resource 1 between 1:25 PM and 4:29 PM, a period of 3 hours and 4 minutes. The areas affected would be approximately 40% of the westernmost island, all of the very small island to the east of the westernmost island, and approximately one-half of the middle island further to the east.

- May 6th

  An incremental shadow would be cast by the building on Projected Development Site 1 on Open Space Resource 1 between 3:47 PM and 5:18 PM, a period of 1 hour and 31 minutes. An incremental shadow would be cast by the building on Projected Development Site 2 on Open Space Resource 1 between 3:13 PM and 5:18 PM, a period of 2 hours and 5 minutes. The area affected would comprise about 60% of the second island from the east.

- June 21st

  - An incremental shadow would be cast by the building on Projected Development Site 1 on Open Space Resource 1 between 4:56 PM and 6:01 PM, a period of one hour and 5 minutes. An incremental shadow would be cast by the building on Projected Development Site 2 on Open Space Resource 1 between 4:34 PM and 6:01 PM, a period

of 1 hour and 27 minutes. The area affected would comprise about 40% of the second island from the east.

- An incremental shadow would be cast by the building on Projected Development Site 2 on Open Space Resource 4 between 5:57 AM and 6:07 AM, a period of 10 minutes. The area affected would comprise a tiny sliver at the northernmost edge of the resource.

Significance of Shadow Impacts

The incremental shadows cast by the anticipated developments on Projected Development Sites 1 and 2 would not be considered significant as itemized below.

- No incremental shadows would be cast on Open Space Resources 2 and 3.
- New shadows would only affect a very small sliver of Open Space Resource 4 for 10 minutes in the early morning hours on the June 21st analysis day which would not be considered significant.
- Incremental shadows would affect portions of Open Space Resource 1 for a up to 5 hours and 17 minutes on the December 21st analysis day; for a period of up to 5 hours and 50 minutes on the March 21st analysis day; for a period of up to 3 hours and 36 minutes on the May 6th analysis day; and for a period of up to 2 hours and 32 minutes on the June 21st analysis day. Open Space Resource 1 does not contain any publicly accessible features such as benches and recreational facilities, and consists of landscaped islands below the Brooklyn Bridge containing trees and shrubs. The only issue relative to shadows would therefore be vegetation survival. Shadows would not be a concern on the December 21st analysis day as that is not during the growing season. The longest shadow period during the prime growing season of April through September would be on the May 6th analysis day where the incremental shadow would be for a period of 3 hours and 36 minutes. Sunrise on May 6th is at 5:48 AM and sunset is at 7:57 PM. The May 6th analysis day would therefore have 14 hours and 9 minutes of sunlight not including the period within an hour and a half of sunrise or sunset. Subtracting the 3 hours and 36 minutes of new shadow from the sunlight period of 14 hours and 9 minutes would result in 10 hours and 33 minutes of sunlight remaining. The affected area would therefore receive sunlight well above the minimum requirement of four to six hours a day during the growing season.

Conclusion

The proposed project would only cast potentially significant new shadows on one open space resource within the study area, that being portions of three of the four landscaped islands below the Brooklyn Bridge adjacent to Old Fulton Street between Front Street and Cadman Plaza West (Open Space Resource 1). As this open space resource is not publicly accessible, the only concern relates to vegetation survival. The maximum duration of new shadows during the prime growing season would continue to provide sunlight to this resource well in excess of the minimum requirement of four to six hours a day. Therefore, incremental shadows on open space resources resulting from the Proposed Action would not be considered significant. As determined by LPC, the surrounding Historic Districts and individually designated historic resources noted above do not contain any shadows sensitive features. Therefore, any new shadows cast by the project on these resources would not be of concern. Therefore, the

Proposed Action would not result in any significant shadows impacts to open space or historic resources, and no further assessment is needed for the project.

Figure 8-1: Tier 1 Screening Assessment

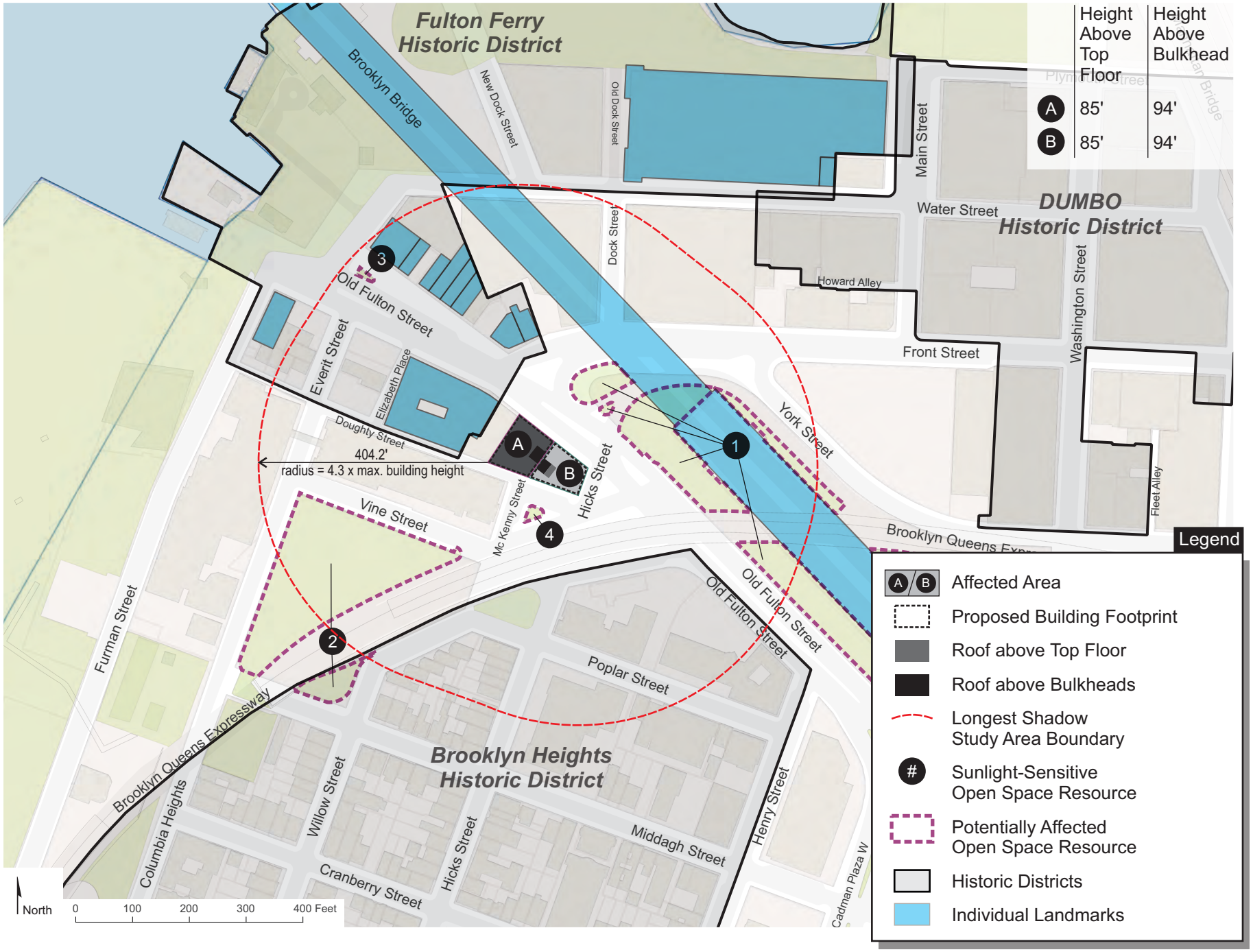


Figure 8-2: Tier 2 Screening Assessment

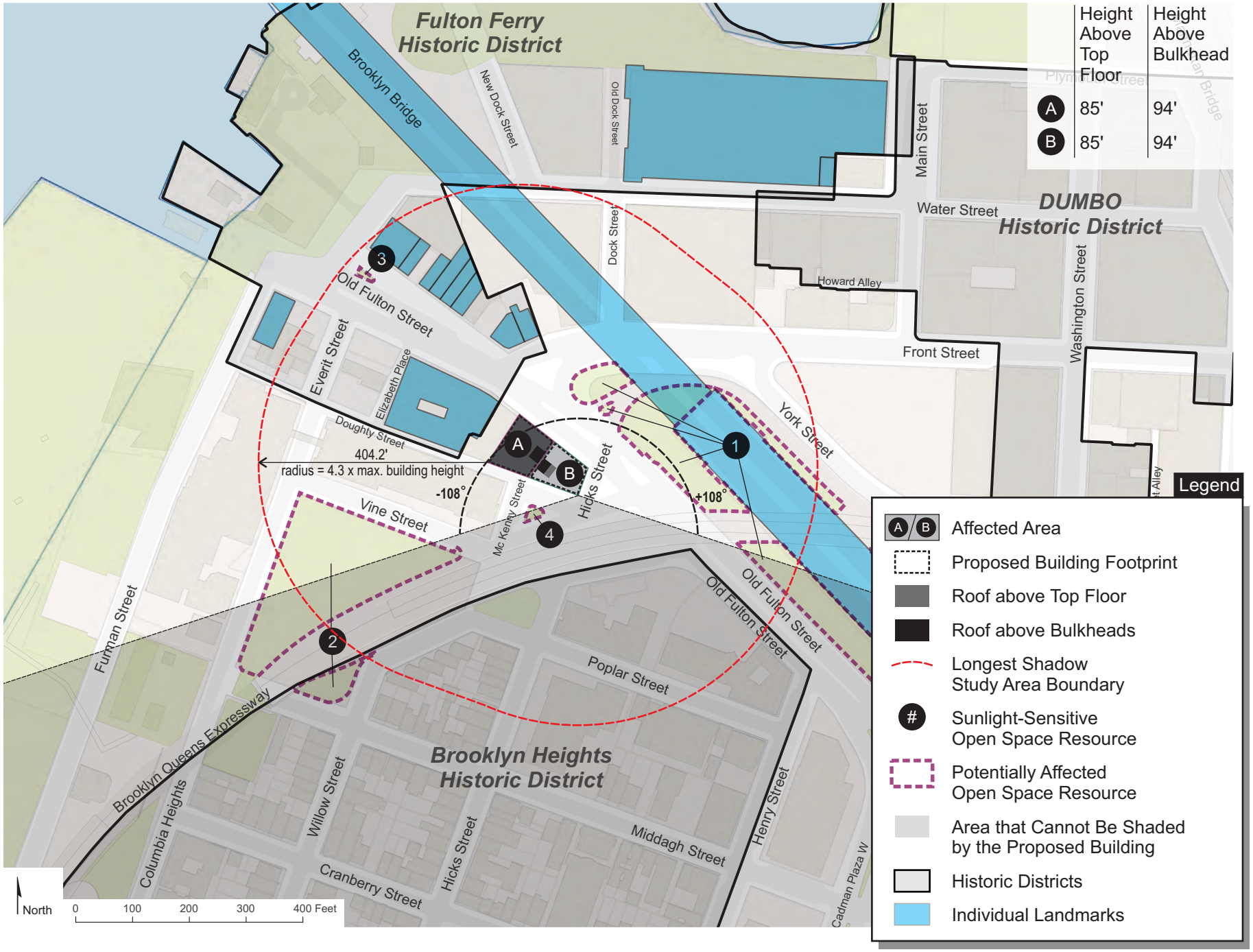


Figure 8-3: Tier 3 Screening Assessment for the December 21 Analysis Day

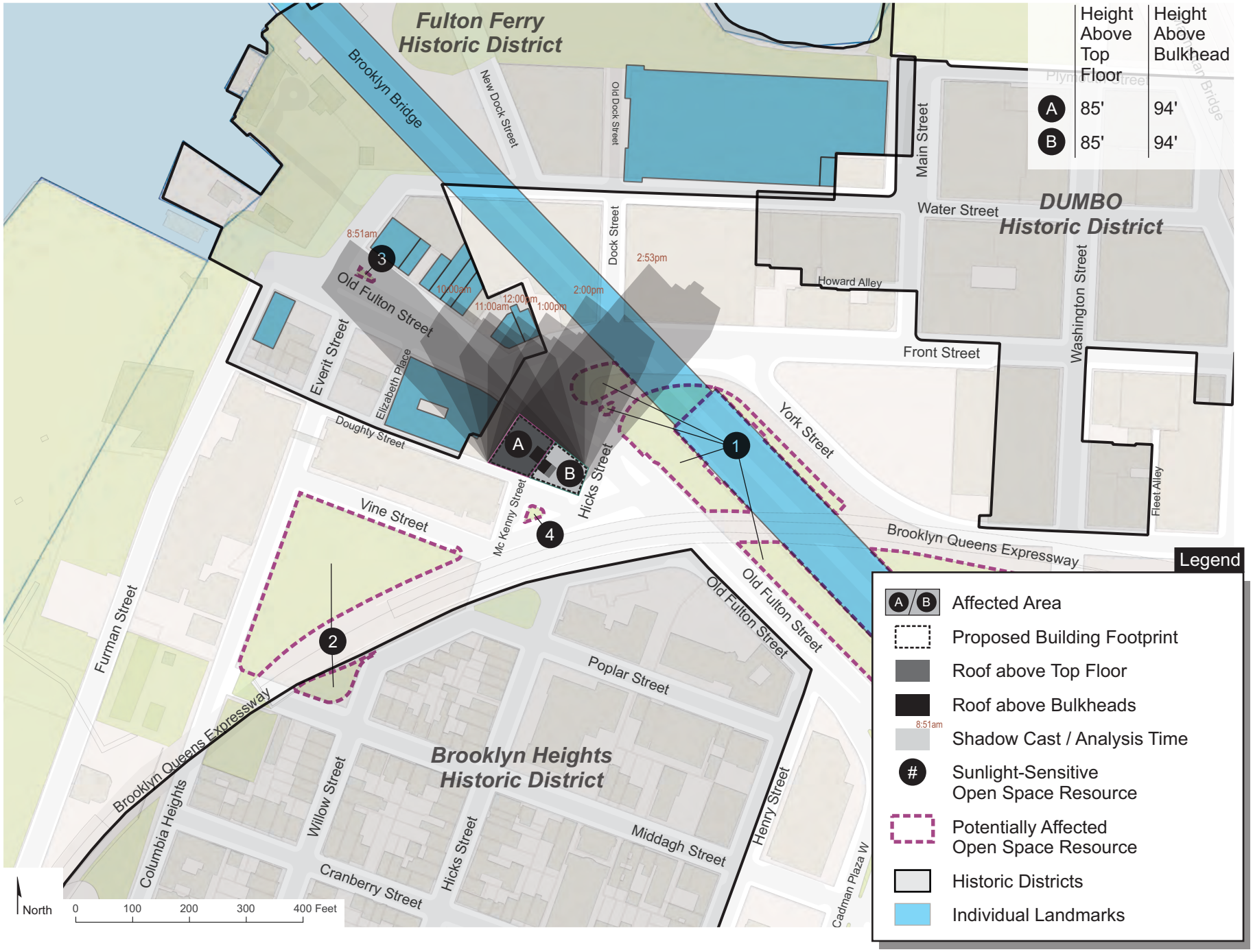


Figure 8-4: Tier 3 Screening Assessment for the March 21 Analysis Day

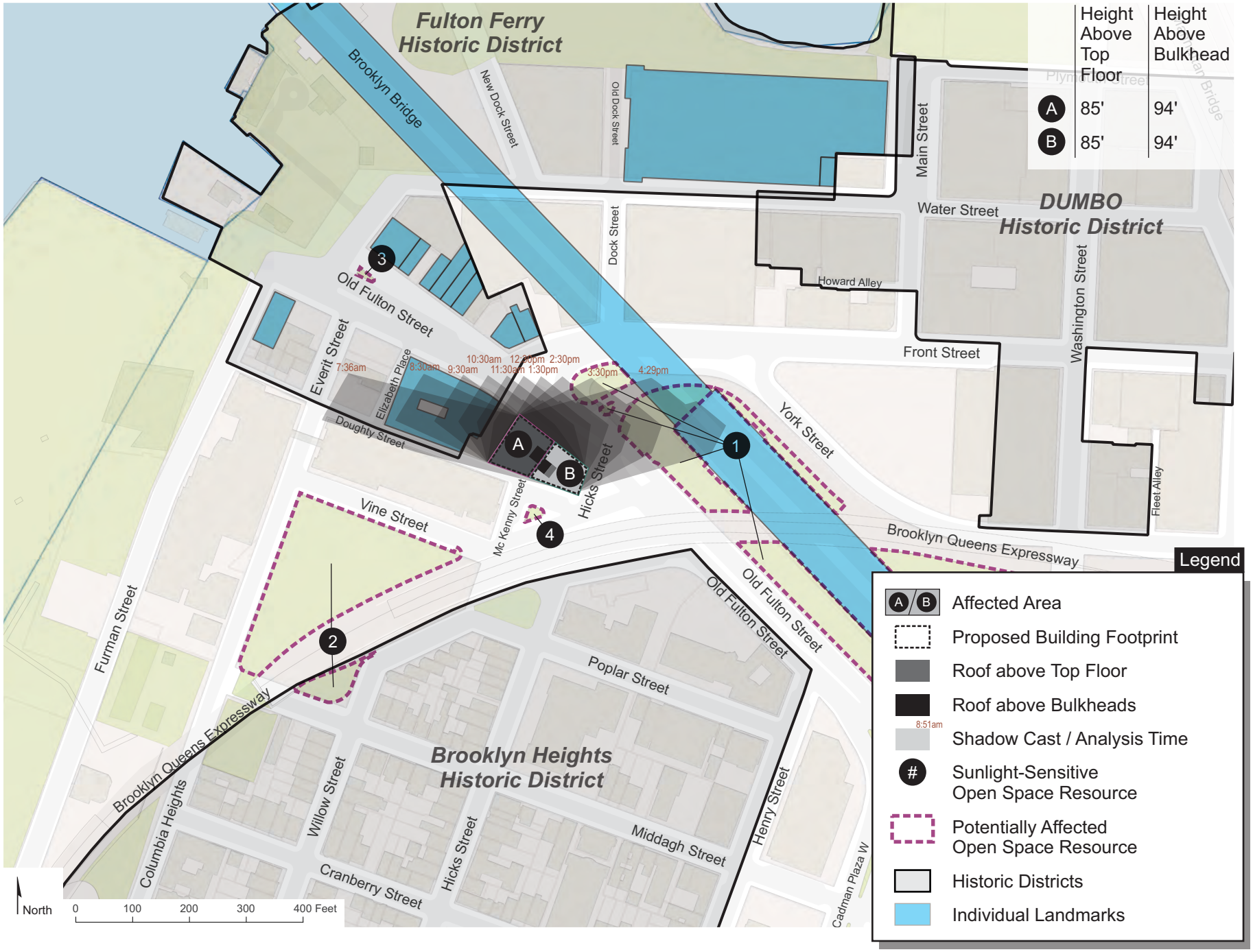


Figure 8-5: Tier 3 Screening Assessment for the May 6 Analysis Day

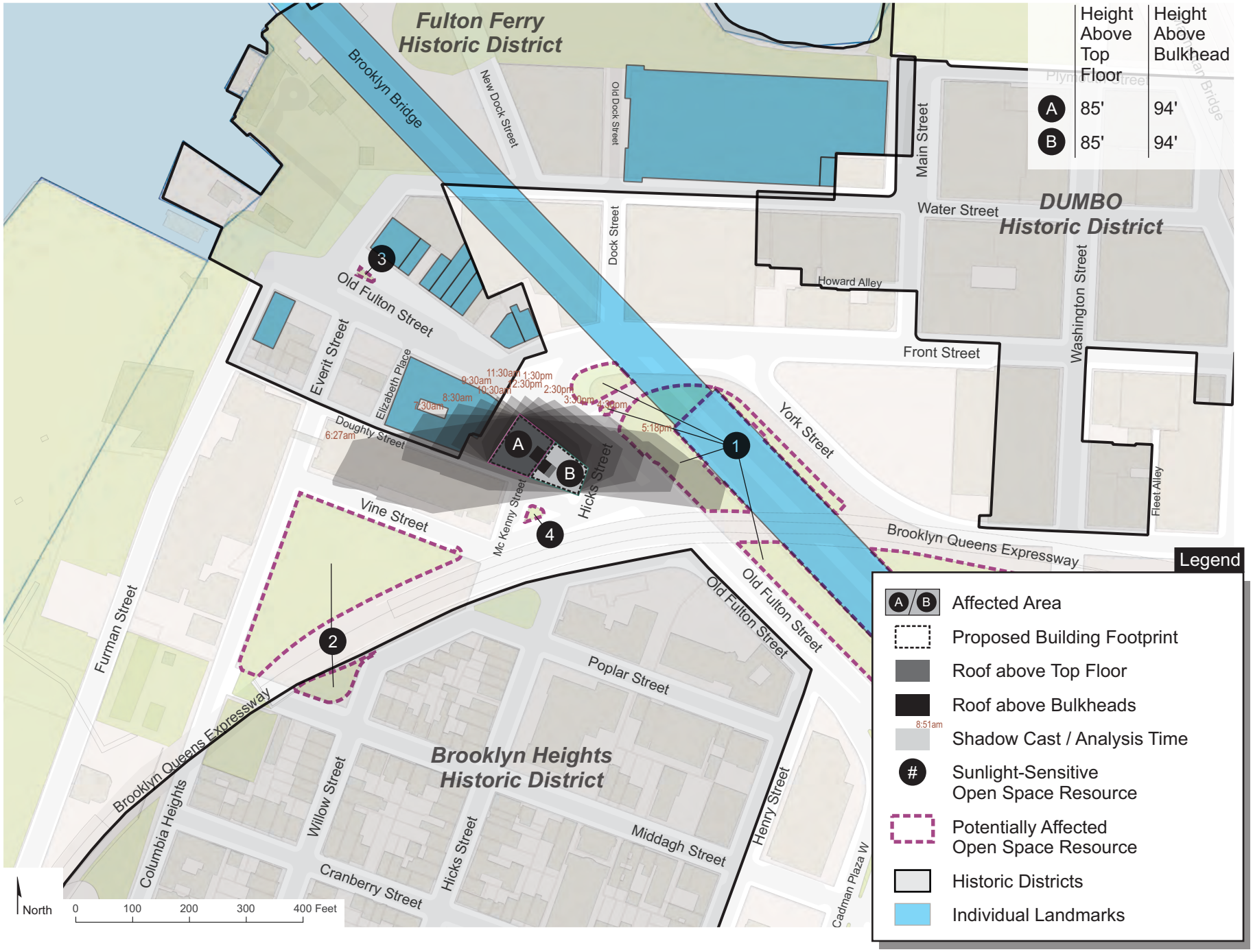


Figure 8-6: Tier 3 Screening Assessment for the June 21 Analysis Day

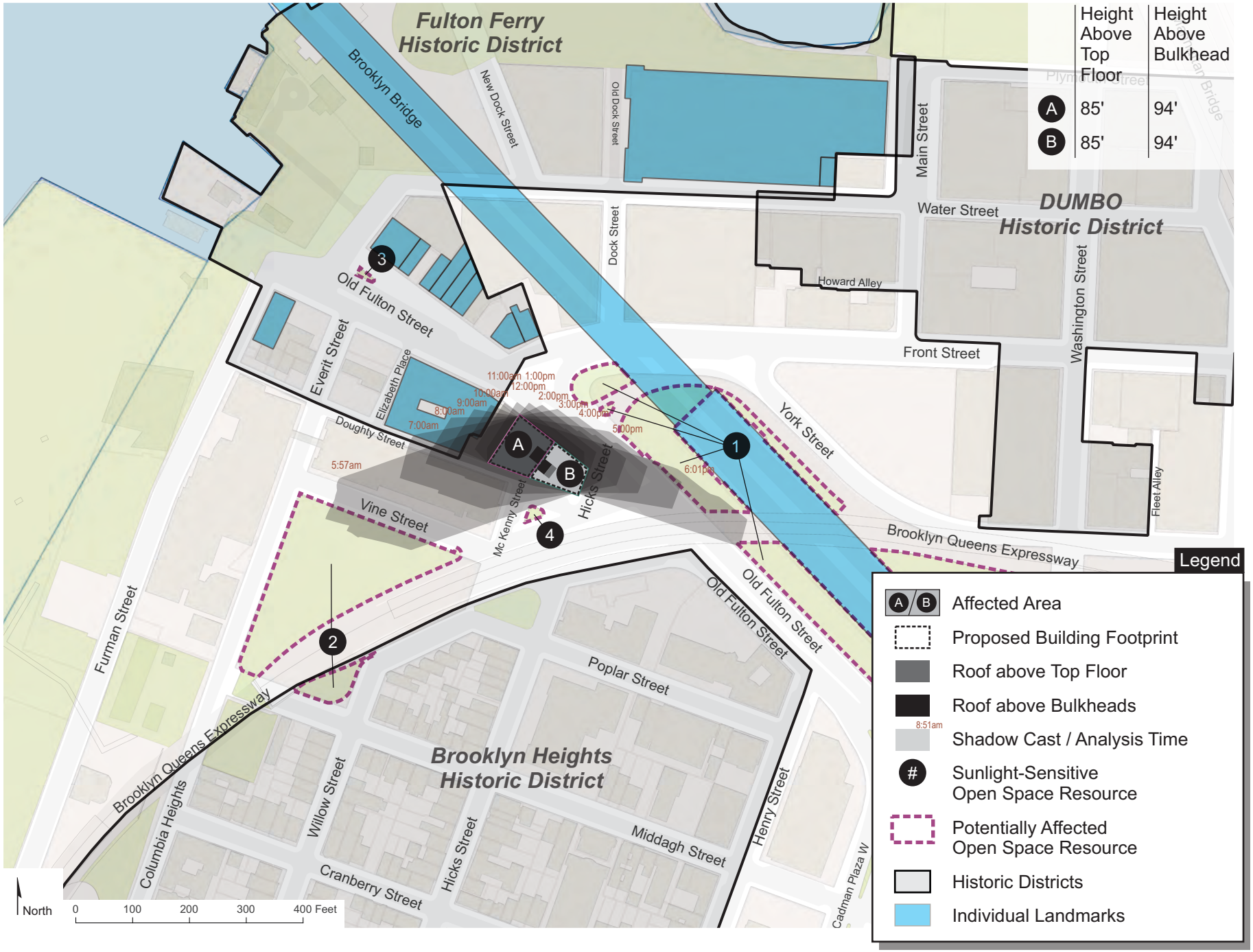


Figure 8-7: Tier 3 Incremental Impact for the December 21 Analysis Day

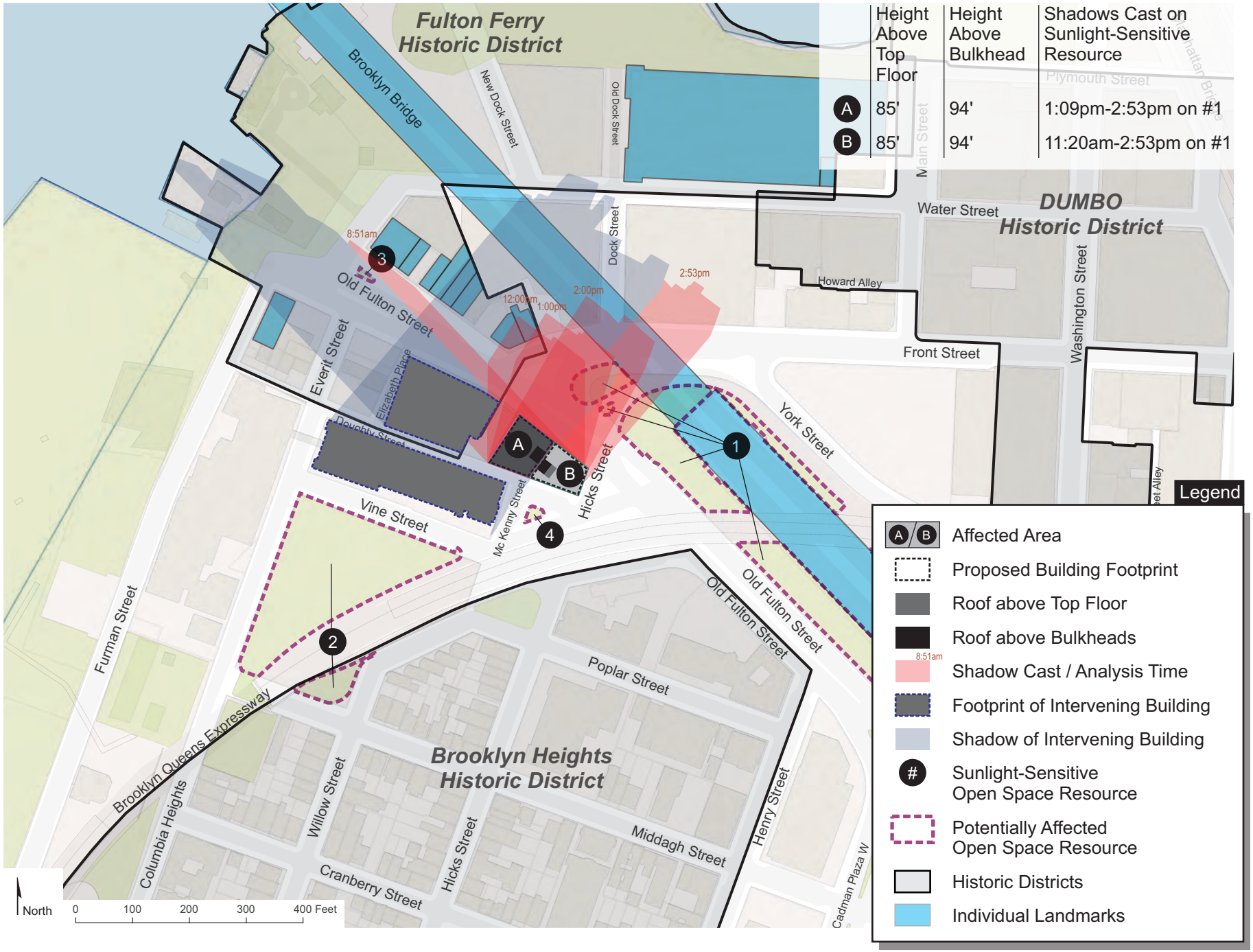


Figure 8-8: Tier 3 Incremental Impact for the March 21 Analysis Day

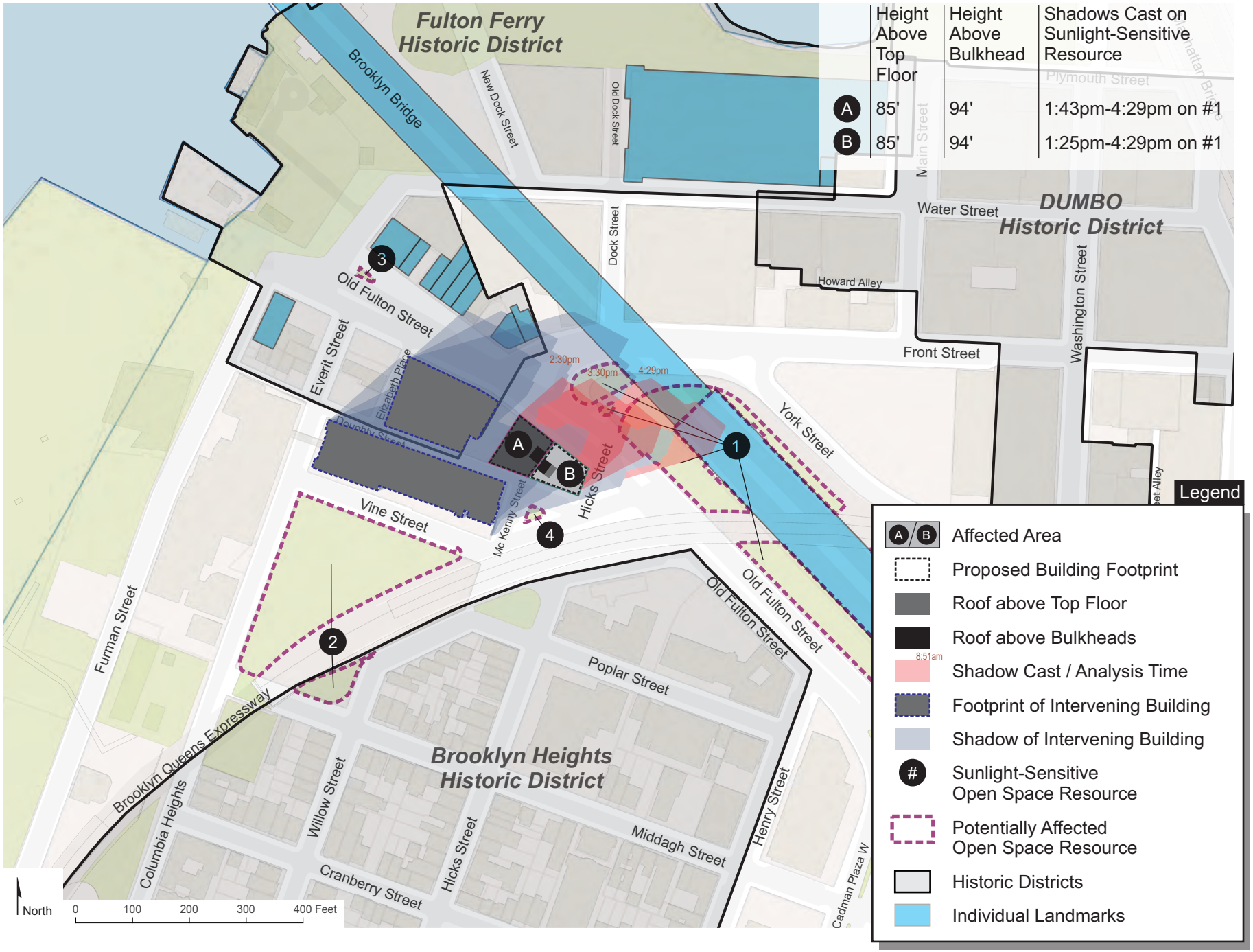


Figure 8-9: Tier 3 Incremental Impact for the May 6 Analysis Day

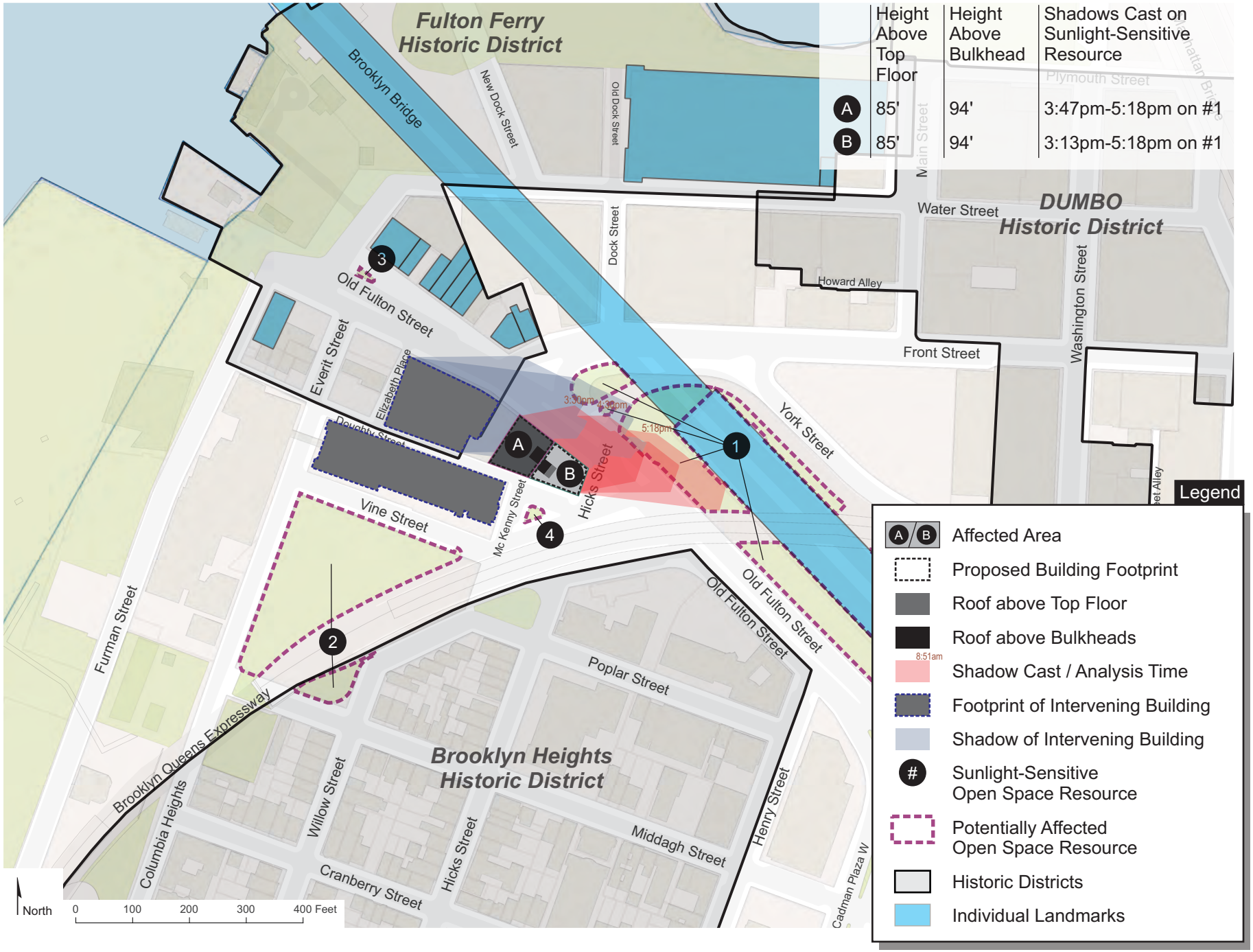
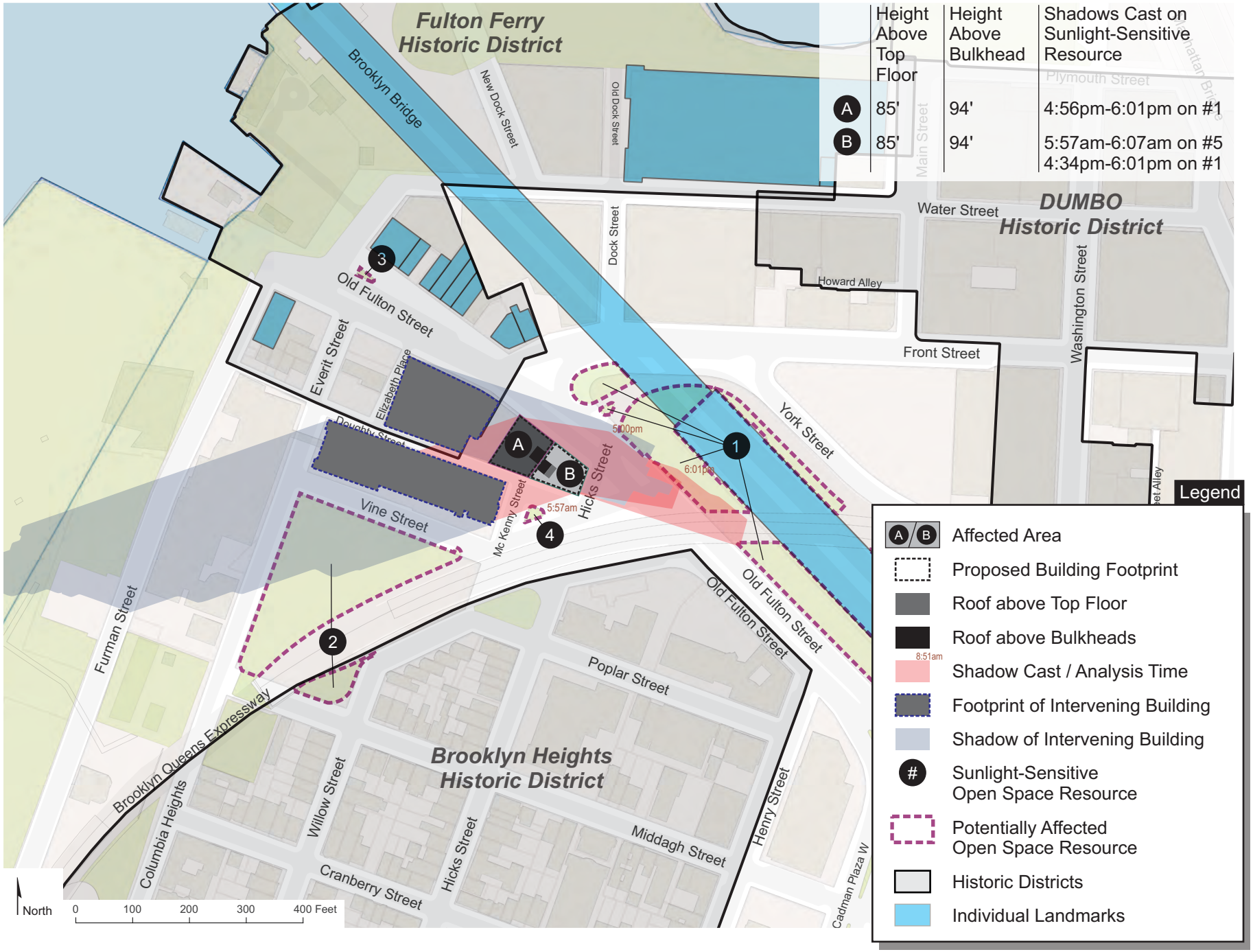


Figure 8-10: Tier 3 Incremental Impact for the June 21 Analysis Day



9. HISTORIC AND CULTURAL RESOURCES

INTRODUCTION

Projected Development Sites 1 and 2 are not NYC Landmarks Preservation Commission (LPC) individually designated historic resources and they are not located within an LPC designated Historic District. Projected Development Site 1 is separated from the Fulton Ferry Historic District to the west by Other Site 1. The Fulton Ferry Historic District is subject to the provisions of the New York City Landmarks Law and also to New York State and Federal landmarks legislation as the District is listed on the New York State and National Registers.

EXISTING CONDITIONS

Affected Area

Projected Development Site 1 (Block 202, Lot 14) has a lot area of approximately 6,593 square feet. (Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning). The lot has frontages on both Old Fulton Street to the north and Doughty Street to the south on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. The Development Site currently contains a one-story, 6,593 gsf auto body repair shop that covers the full lot. This use has occupied the Site since at least 1965.

Projected Development Site 2 (Block 202, Lot 18) has a lot area of approximately 4,705 square feet. The lot has frontages on Old Fulton Street to the north, Doughty Street to the south, and Hicks Street to the east on the block bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. Projected Development Site 2 adjoins Projected Development Site 1 to the west. The Site contains an approximately 3,700 gsf one- to two-story auto body shop that covers most of the lot with the remainder of the lot used for accessory parking of vehicles being serviced. This use has occupied the Site since at least 1965.

Projected Development Sites 1 and 2 are not designated NYC landmarks and they are not located within an LPC designated Historic District. Projected Development Site 1 is separated from the Fulton Ferry Historic District to the west by an intervening building. Note that approximately 512 square feet of this 4,687 square foot lot, identified as Other Site 1, is located adjacent to Projected Development Site 1 and is included in the Affected Area in order to allow the western boundary of the Area to be drawn parallel to Elizabeth Place.

Study Area

The Affected Area extends into the northern end of the Brooklyn Heights Historic District and is located near the southeastern corner of the Fulton Ferry Historic District. The Brooklyn Heights Historic District is bounded on the west by the bluff facing the East River, Atlantic Avenue on the south, and by Court Street and Fulton Street on the east and north. The Fulton Ferry Historic District is located on the East River in the shadow of the Brooklyn Bridge and roughly extends between Doughty Street on the south, Furman Street on the west, the East River on the north, and Main Street on the east.

The following LPC individually designated historic properties are located within 400 feet of the Affected Area.

- The Eagle Warehouse and Storage Company of Brooklyn building at 28 Old Fulton Street is located approximately 35 feet from the Affected Area to the west.

- The Brooklyn Bridge is located approximately 195 from the Affected Area to the east.

- The Brooklyn Fire Insurance Company building at 27 Old Fulton Street is located approximately 100 feet from the Affected Area to the north.

- The 5-7 Front Street House is located approximately 120 feet from the Affected Area to the north.

- The Fulton Street Building No. 17 is located approximately 195 feet from the Affected Area to the northwest.

- The Fulton Street Building No. 15 is located approximately 215 feet from the Affected Area to the northwest.

- The Fulton Street Building No. 13 is located approximately 240 feet from the Affected Area to the northwest.

- The Fulton Street Building No. 11 is located approximately 265 feet from the Affected Area to the northwest.

- The Fulton Street Building No. 7 is located approximately 305 feet from the Affected Area to the northwest.

- The Fulton Street Building No. 1-5 is located approximately 330 feet from the Affected Area to the northwest.

A brief discussion of the Historic District and the individually designated properties follows below. See attached Historic Districts and Landmarks Map.

Brooklyn Heights Historic District – The Affected Area incorporates a landscaped island adjacent to the easterly side of the BQE that is part of the street. The LPC Designation Report (November 23, 1965) contains the following statements about the District:

> The Brooklyn Heights Historic District is a homogenously composed residential neighborhood with a special character of its own retaining much of the atmosphere of a 19th century urban community. It has an unusual aesthetic quality due to the great variety of architectural styles manifested in its handsome residences and stately churches. Each style is representative of an era in the historical development of the Heights over a period of more than 100 years. Because of the generally uniform height and fine architectural quality of the houses, its superb and insular location and other distinguishing qualities, Brooklyn Heights is a neighborhood of rare charm and historic significance.

Fulton Ferry Historic District – The LPC Designation Report (June 28, 1977) contains the following statements about the District:

> The Fulton Ferry Historic District, located on the East River in the shadow of the Brooklyn Bridge, is an area of exceptional historical and architectural interest. First settled by the Dutch in the 17th century, a small but bustling community gradually grew up around the ferry. This was the place where Brooklyn began. During the Revolution, the ferry area played a crucial role in the evacuation of Washington's army to New York. The transformation of the ferry village into a thriving commercial and industrial center, from the 1830s on, is vividly illustrated by its architecture. The opening in 1883 of

> John Roebling's monumental bridge--the first of the city's great river spans--was decisive for the area, ultimately dooming the ferry service which had given life to this section of Brooklyn for well over two centuries.

The Eagle Warehouse and Storage Company of Brooklyn building (28 Old Fulton Street) – This building is included in the June 28, 1977 LPC Designation Report for the Fulton Ferry Historic District discussed above.

> The Eagle Warehouse & Storage Company building is a notable building designed by Brooklyn architect Frank Freeman and completed in 1894. It had a number of uses, including warehouse, before being converted into apartments in 1980. Described as a "masterpiece", it is a contributing building in the Fulton Ferry District, listed on the National Register of Historic Places in 1974. The site on which the Eagle Warehouse is located formerly belonged to the *Brooklyn Eagle*, a well-known local newspaper. From 1846 to 1848, the paper's editor was Walt Whitman.
>
> The building is divided vertically into three sections. The ground floor is dominated by the main entrance, a bold Roman arch emblazoned with the company name in large bronze lettering, which leads into a "magnificent" barrel vault. On either side of the entrance are several small windows "protected by handsome iron grilles." A simple belt course separates the ground floor from the next four floors, which are slightly recessed and divided into four rows of four rectangular windows with crowned arches. The top section of the building consists of a row of small attic windows, spaced between brick corbels supporting a crenellated parapet. Along the face of the parapet the name of the company again appears in bold lettering, with a large clock set in the center.

The Brooklyn Bridge – The bridge is included in the June 28, 1977 LPC Designation Report for the Fulton Ferry Historic District discussed above.

> The Brooklyn Bridge is a hybrid cable-stayed/suspension bridge and is one of the oldest roadway bridges in the United States. Started in 1869 and completed fourteen years later in 1883, it connects the boroughs of Manhattan and Brooklyn, spanning the East River. It has a main span of 1,595.5 feet (486.3 m) and was the first steel-wire suspension bridge constructed. Since opening, it has become an icon of New York City and was designated a National Historic Landmark in 1964 and a National Historic Civil Engineering Landmark in 1972. The bridge was conceived by German immigrant John Augustus Roebling, who had previously designed and constructed shorter suspension bridges. At the time it opened, and for several years, it was the longest suspension bridge in the world—50% longer than any previously built—and it has become a treasured landmark. Since the 1980s, it has been floodlit at night to highlight its architectural features. The architectural style is neo-Gothic, with characteristic pointed arches above the passageways through the stone towers.

The Brooklyn Fire Insurance Company building (27 Old Fulton Street) – This building is included in the June 28, 1977 LPC Designation Report for the Fulton Ferry Historic District discussed above.

The 5-7 Front Street House (5-7 Front Street) – This building is included in the June 28, 1977 LPC Designation Report for the Fulton Ferry Historic District discussed above. This small early Greek Revival structure was designed specifically for use as an office building, an architectural type now very common but one which was still quite unusual in the early part of the 19th century. It may be the earliest example of an office building which still survives in the entire city. It housed the offices of the Long Island Insurance Company founded in 1834.

1-5, 7, 11, 13, 15, and 17 Front Street – These buildings are included in the June 28, 1977 LPC Designation Report for the Fulton Ferry Historic District discussed above. From the mid-1820s, a number of commercial institutions, notably banks, fire insurance companies, and numerous law firms, were established in these buildings. The role and character of Front Street has been compared to New York's Wall Street of the period.

FUTURE NO-ACTION CONDITIONS

Affected Area

In the future without the action, the RWCDS would reflect the following assumptions:

Without the Proposed Action, it is assumed the Affected Area's existing M2-1 zoning would remain. It is assumed that the No-Action development on Projected Development Site 1 would consist of a new two-story plus cellar and sub-cellar retail building totaling approximately 26,380 gsf of floor area with 44 accessory off-street parking spaces in the cellar and sub-cellar levels. The Applicant acquired control of this property in November 2016 and plans to build this two-story building if the Proposed Action is not approved.

It is assumed that, without the Proposed Action, the existing conditions on Projected Development Site 2 and Other Site 1 would remain.

Study Area

No development plans that would have any relevance to the Proposed Action are known to exist for the 400-foot radius project study area by the project build year of 2022. No recent new development projects (filed in 2010 or later) that would have any impact upon the proposed project have been identified for the 400-foot radius project study area based on a review of the CEQR listings of the NYC Department of City Planning's (DCP) Land Use & CEQR Application Tracking System (LUCATS) for Brooklyn Community District 2.

FUTURE WITH-ACTION CONDITIONS

In the future with the action, the RWCDS would reflect the following assumptions. The Proposed Action would change the zoning of the Affected Area from M2-1 to M1-5, increasing the maximum FAR from 2.0 to 5.0 for manufacturing and commercial development.

The With-Action Scenario would permit development of a five-story plus cellar approximately 39,600 gsf commercial building on Projected Development Site 1 with retail on its cellar through second floors and offices on its third through fifth floors[2].

[2] Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning. Although the slightly smaller M1-5 zoned area would technically accommodate a building slightly smaller than 39,600 gsf, the provisions

The Proposed Action would also permit the development of an approximately 28,230 gsf, 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2.

Under the Proposed Action, no new development would occur on Other Site 1. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and is included in order to allow the western boundary of the Area to be drawn parallel to Elizabeth Place.

Archaeological Resources

As discussed above, in the future without the project, Projected Development Site 1 would be developed with a new two-story plus cellar and sub-cellar retail building totaling approximately 26,380 gsf of floor area with 44 accessory off-street parking spaces in the cellar and sub-cellar levels. No additional subsurface ground disturbance would occur to accommodate the Proposed Action. As this subsurface disturbance would occur as-of-right and in the absence of the proposed project analyzed in the With-Action Scenario, the Proposed Action would not result in any adverse archaeological impacts on Projected Development Site 1.

As also discussed above, in the future without the project, existing conditions would remain on the 4,705 square foot Projected Development Site 2. The Site contains an approximately 3,700 gsf one- to two-story auto body shop that covers most of the lot with the remainder of the lot used for accessory parking of vehicles being serviced. New subsurface disturbance would occur on this site in the future with the action as the projected 28,230 gsf, 5-story plus bulkhead commercial development would contain a cellar. Therefore, an assessment of potential archaeological impacts on Projected Development Site 2 would be required.

By memorandum dated 4/18/18, the NYC Landmarks Preservation Commission (LPC) has made the following determination relative to potential archaeological resources on Projected Development Sites 1 and 2 (see Historic and Cultural Resources Appendix).

> *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).*

LPC issued the following comments in their memorandum dated 9/17/18 (see Historic and Cultural Resources Appendix).

> *The LPC is in receipt of the EAS dated July 2018. Comments are as follows.*
>
> *There are no shadow sensitive historic resources in the study area. There are no additional comments regarding architectural resources.*
>
> *The EAS includes the, "Phase 1A Archaeological Documentary Study for 50 Old Fulton St, Block 202, Lots 14, 18, P/O 12, Kings County, New York," prepared by Greenhouse Consultants and dated June 2018." This study must be revised. It should provide a detailed analysis of the history of the lots in question (how were the lots used through time? By whom? What might have been left? etc).*

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governing pre-existing split zoning lots will allow the new district boundary line to be moved so that the entire development site is deemed to be within the new M1-5 zoning district.

In addition, the LPC notes that the EAS states that an archaeological restrictive declaration will be developed by the applicant. This should be submitted to LPC for review.

A Phase 1A Archaeological Documentary Study dated June 2018 has been performed by Greenhouse Consultants, Inc. for Block 202, Lots 14, 18, and 12. In October 2018 the Study was revised in response to LPC's comments above (see Historic and Cultural Resources Appendix). The conclusions, findings, and recommendations of the study are presented below.

> This study has evaluated the prehistoric and historic archaeological sensitivity of Block 202, Lots 14, 18, and p/o 12 for the 50 Old Fulton Street project site. It has also examined the documentary record of disturbance, excavation, and construction at the site since the early 19th century. While the potential for prehistoric archaeological resources is low, the project site has a high level of historic archaeological potential in Lot 18, where lack of building activity at the rear (i.e., Doughty Street side) would have preserved deposits dating to at least the late 18th to early 19th centuries. These potential remains are associated with two historical periods: (1) the Revolutionary War British/Hessian occupation of Brooklyn and (2) the mid-to-late 19th century era of industrialization, as working class Brooklyners were living along a mixed and changing commercial-industrial corridor connected to the ferry and the growing city.
>
> Potential Revolutionary War materials would have been deposited between the final decades of the 18th through the first quarter of the 19th centuries, when local hills hosting the British soldiers and sailors cemetery were razed and used to fill in Brooklyn Village and shoreline water lots immediately after the War. Archival evidence suggests that former owners of the project site were involved in "leveling off' the cemetery land and Solecki's find of a Hessian cap plate in sewer monitoring adjacent to the project site confirms the impact these activities had on the local archaeological record. Archaeological testing and construction monitoring during excavation may recover items such as military insignia, sewing notions, personal tools, and other bodily items. As recent studies elsewhere in New York City have shown (GRA 2016), historic fill can provide a valuable and rich picture of human-transported materials from a variety of periods and contexts.
>
> Archaeological materials associated with working class residential and commercial life at the project site would have been deposited in association with the rear yard and privy documented behind 60 Old Fulton in 19th and 20th century maps. While the first sewer on Fulton was installed in 1851, it was a storm water sewer unconnected to the local dwellings and many residents likely retained outhouses, like this one. Flush toilets took a particularly long time to replace outhouses in Brooklyn and this is a good example of that phenomenon. When abandoned and/or filled with refuse, such features can contain a wealth of information about historic consumption patterns from both domestic activity and commercial/industrial enterprises. At 60 Old Fulton, a privy would provide an opportunity to recover household assemblages (pottery and bottle remains, hygiene and medicinal items, children's objects, etc.), food waste, grocer's refuse, liquor merchants' bottles, and waste from the early 20th century restaurant. Side-by-side datasets of residential and commercial activities are particularly powerful in illustrating the changing lifeways that accompanied industrial development, demographic change, and shifts in domestic patterns in the 19th century. Historical accounts of this transition often emphasize

the bewildering rapidity of development, but glimpses of how these changes occurred on a more everyday scale are less plentiful.

The potential for prehistoric archaeological resource recovery is low, while the unbuilt rear of Lot 18 is sensitive for historic archaeological resources connected to the Revolutionary War and residential, commercial, and industrial life in 19th century Brooklyn. In this Lot, the proposed development's excavations are likely to exceed previous construction excavations in depth and footprint. Greenhouse Consultants Incorporated recommends Phase IB testing in Lot 18 prior to construction for evidence of materials associated with the late 18th century Revolutionary War and privy deposits relevant to the 19th century life of Brooklyn's working-class residents and businesses.

The Proposed Action would result in ground disturbance on Tax Block 202, Lots 14 and 18. Potentially sensitive archaeological resources could be located on Lot 18. Lot 14 (Projected Development Site 1) is under the Applicant's control and Lot 18 (Projected Development Site 2) is under the control of an adjacent property owner. A Testing Protocol to recover resources on the Non Applicant-controlled lot must be developed, reviewed and approved by the LPC.

A Phase 1B Work Plan dated November 2018 was prepared by Greenhouse Consultants, Inc. for Block 202, Lot 18 and submitted to the LPC. LPC issued the following comments on the Phase 1B Work Plan in their memorandum dated 12/04/18 (see Historic and Cultural Resources Appendix).

We note that the document states that the testing will occur once hazardous material remediation has occurred which may require the removal of soils. Such work may greatly impact the archaeological sensitivity of the site depending upon what is done. Details about this work must be submitted to LPC before the agency can review the archaeological work plan. As for the work plan, more information is needed about what sampling is proposed to be done from, "the floor of the trench," (page 6). In addition, a project plan is needed that shows the proposed test trench location.

The revised Phase 1B Work Plan dated December 2018 presents the testing protocol below (see Historic and Cultural Resources Appendix).

First, the removal of the current structure must occur. Second, a Phase 1 Environmental Assessment, including any required soil borings, must occur. A Phase 1 Environmental Assessment was completed for Block 202, Lot 14, but not Lot 18. Third, remediation of hazardous materials must be carried out, as required by and according to protocol determined appropriate by the NYC Office of Environmental Remediation, which remediation may require removal of soils and fill on all or portions of Lot 18. An RPA archaeologist will be available for monitoring for the above procedures. Commencement of Phase 1B archaeological fieldwork will proceed once the client has completed the first, second, and third steps. The anticipated duration of archaeological fieldwork is one to two days.

The property owner of Lot 18 will agree to record a Restrictive Declaration against the property that it controls, which would ensure that this protocol is followed before and/or during development of this lot (see Historic and Cultural Resources Appendix).

With the incorporation of the measures included in the Restrictive Declaration, significant adverse impacts to potential archaeological resources on Lot 18 would be avoided as part of the Proposed Action.

Historic Resources

The Proposed Action would result in the construction of a five-story plus cellar approximately 39,600 gsf commercial building on Projected Development Site 1 with retail on its cellar through second floors and offices on its third through fifth floors. The Proposed Action would also permit the development of an approximately 28,230 gsf, 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2. No new development would occur on Other Site 1. As the projected developments would constitute a change from the existing condition in the Affected Area and would be occurring within a designated Historic District and in the vicinity of another designated Historic District and several individually designated properties, potential impacts on historic resources would be of concern. The *CEQR Technical Manual* indicates that architectural resources should be surveyed and assessed if the proposed project would result in any of the conditions noted in italics below.

- *New construction, demolition, or significant physical alteration to any building, structure, or object.*

  The Proposed Action would result in the demolition of existing development on Projected Development Sites 1 and 2 and new construction on these sites. As stated above, the proposed project would result in the demolition of the existing one-story, 6,593 gsf auto body repair shop on Projected Development Site 1 and the construction of a five-story plus cellar approximately 39,600 gsf commercial building with retail on its cellar through second floors and offices on its third through fifth floors. It is also projected to result in the demolition of the existing 3,700 gsf one- to two-story auto body shop on Projected Development Site 2 and the development of an approximately 28,230 gsf, 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above.

  The existing auto body repair shops on Projected Development Sites 1 and 2 have no historic character.

  By memorandum dated 4/18/18, the LPC has determined that Projected Development Sites 1 and 2 have no architectural significance. However, LPC also states the following (see Historic and Cultural Resources Appendix).

  In the radius: Fulton Ferry HD, Brooklyn Heights HD, Dumbo HD, and Brooklyn Bridge, all LPC and S/NR listed. A shadow analysis and construction protection plan may be required as per the CEQR Technical Manual: 2014.

  By memorandum dated 9/17/18, LPC has determined that there are no shadow sensitive historic resources in the study area (see Historic and Cultural Resources Appendix).

  A shadows analysis is presented in the shadows chapter of the EAS above and no significant adverse shadows impacts to historic resources would occur as there are no

shadow sensitive architectural resources in the area that would be affected by the project. Construction procedures are detailed below and no significant adverse construction impacts to historic resources are expected.

Based on the above, it is concluded that the Proposed Action would have no significant adverse effect on the historic character of the property or the surrounding area.

- *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. 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.*

  As stated above, the Proposed Action would result in the demolition of existing development on Projected Development Sites 1 and 2 and new construction on these sites. The proposed project would result in the demolition of the existing one-story, 6,593 gsf auto body repair shop on Projected Development Site 1 and the construction of a five-story plus cellar approximately 39,600 gsf commercial building with retail on its cellar through second floors and offices on its third through fifth floors. It is also projected to result in the demolition of the existing 3,700 gsf one- to two-story auto body shop on Projected Development Site 2 and the development of an approximately 28,230 gsf, 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above.

  The project would result in a change in scale and visual prominence relative to the surrounding area. However, the 400-foot radius project study area contains an eclectic mix of building styles and heights ranging from 2-story warehouses to 13-story commercial buildings to 17-story residential structures. The remaining development on the block on which the Affected Area is located consists of a 4-story warehouse and a 9-story multiple dwelling to the west. A 13-story commercial building occupying an entire block lies across Doughty Street from the Affected Area to the south. The projected development in the Affected Area would be consistent with existing development in the surrounding 400-foot radius project study area.

  It is therefore concluded that the change in scale and visual prominence resulting from the Proposed Action would be appropriate to the surroundings. The projected developments in the Affected Area would be appropriate in the context of the surrounding neighborhood.

- *Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects.*

  LPC-approved construction procedures would be followed to protect other historic structures in the area from damage from vibration, subsidence, dewatering, or falling objects. Construction procedures would comply with the NYC Department of Buildings Memorandum Technical Policy and Procedure Notice # 10/88 (TPPN # 10/88) and with the site safety requirements of the 2008 NYC Building Code, as amended, which stipulate that certain procedures be followed for the avoidance of damage to historic and

other structures resulting from construction. TPPN # 10/88 pertains to any structure which is a designated NYC Landmark or located within a historic district, or listed on the National Register of Historic Places and is contiguous to or within a lateral distance of 90 feet from a lot under development or alteration.

- *Additions to or significant removal, grading, or replanting of significant historic landscape features.*

  Not applicable to the Proposed Action.

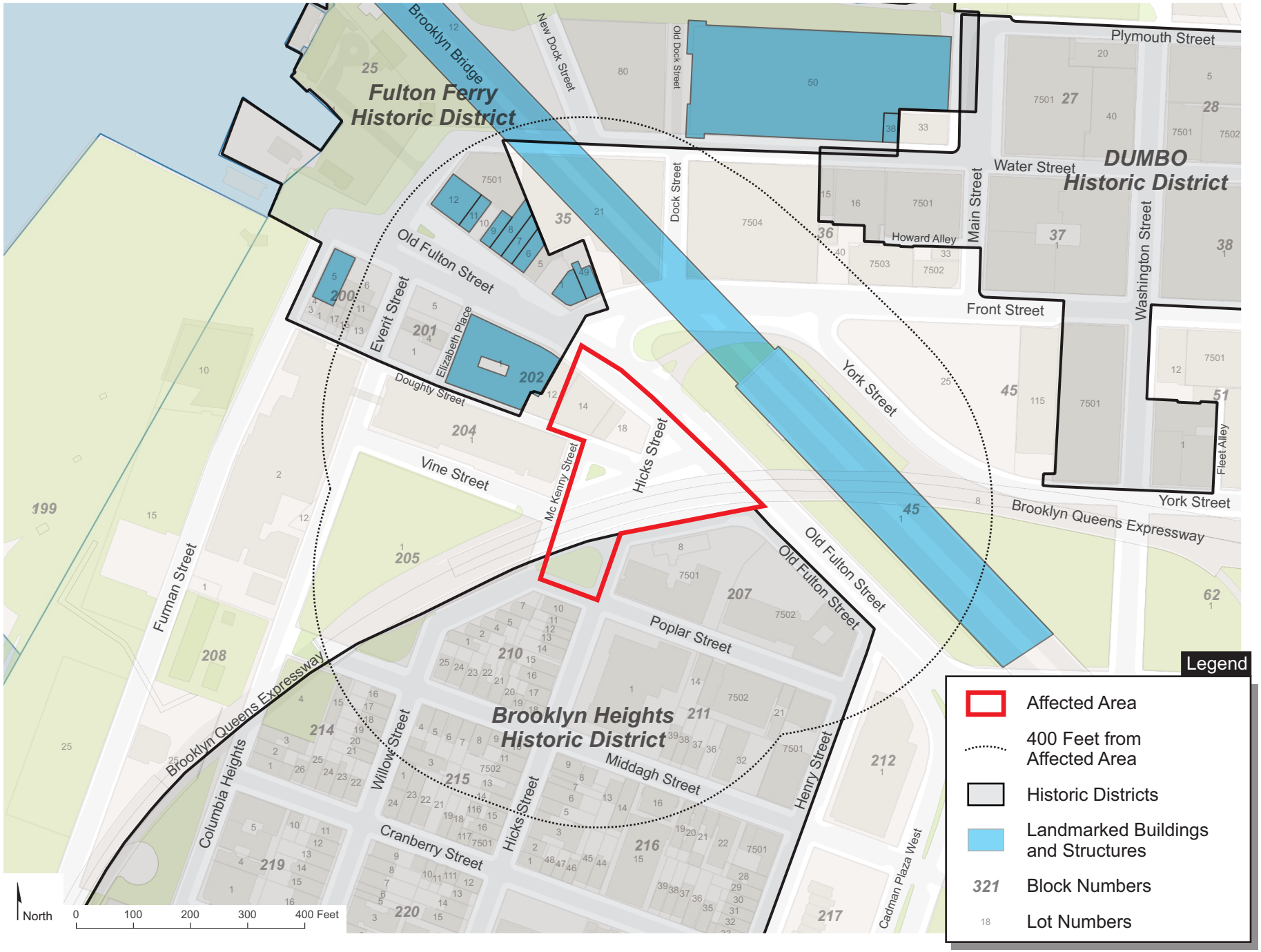
- *Screening or elimination of publicly accessible views.*

  Not applicable to the Proposed Action.

- *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.*

  No significant adverse shadows impacts to historic resources would occur as, based on LPC's 9/7/18 determination, there no shadow sensitive historic landscapes or historic structures in the area that would be affected by new shadows cast by the project.

Based on the above analysis, it is concluded that the development on Projected Development Sites 1 and 2 in the Affected Area would be compatible with the Brooklyn Heights and Fulton Ferry Historic Districts and the individually designated properties within 400 feet of the Area. No impact to the Historic Districts or individual historic properties would be expected as a result of the Proposed Action. The Proposed Action would not result in any impacts to historic or archaeological resources.


Fulton Ferry Historic District
DUMBO Historic District
Brooklyn Heights Historic District
Brooklyn Bridge
New Dock Street
Old Dock Street
Plymouth Street
Water Street
Dock Street
Main Street
Howard Alley
Washington Street
Front Street
Old Fulton Street
Everit Street
Elizabeth Place
Doughty Street
York Street
Fleet Alley
Hicks Street
Mc Kenny Street
Vine Street
Brooklyn Queens Expressway
Furman Street
Poplar Street
Middagh Street
Willow Street
Columbia Heights
Cranberry Street
Henry Street
Cadman Plaza West
North
0
100
200
300
400 Feet
Legend
Affected Area
400 Feet from Affected Area
Historic Districts
Landmarked Buildings and Structures
321 Block Numbers
18 Lot Numbers

10. URBAN DESIGN AND VISUAL RESOURCES

An assessment of urban design and visual resources 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.

1. Yard, Height, and Setback Requirements

The proposed rezoning of the Affected Area from M2-1 to M1-5 would not change yard requirements as yards are not required in either district. However, the front wall height requirements would change from a maximum of 60 feet before setback of 20 feet on a narrow street and 15 feet on a wide street in the existing M2-1 district to a maximum of 85 feet before setback of 20 feet on a narrow street and 15 feet on a wide street in the proposed M1-5 zone. The sky exposure plane governing the setback area is 2.7 to 1 on a narrow street and 5.6 to 1 on a wide street in both districts. In addition, the Zoning Resolution allows development in the M1-5 district under Tower Regulations pursuant to ZR Sections 43-45 and 43-451. Under the Tower Regulation provisions as applicable to the Projected Development Sites, both lots may be developed with towers that penetrate the sky exposure plane provided that the lot coverage of the tower not exceed more than 50% of the lot.

Without the Proposed Action, it is assumed that the Affected Area's existing M2-1 zoning would remain. It is assumed that the No-Action development on Projected Development Site 1 would consist of a new two-story retail building reaching a height of 36 feet and covering the entire surface of the site. It is assumed that, without the Proposed Action, the existing conditions on Projected Development Site 2 would remain, consisting of a one- to two-story auto body repair shop covering most of the surface of the lot.

Under the Proposed Action, a five-story commercial building reaching a height of 85 feet and covering the entire surface of the site is proposed to be developed on Projected Development Site 1. It is projected that an approximately 85-foot tall commercial building covering the entire surface of the site would be developed on Projected Development Site 2.

It is assumed that, both without and with the Proposed Action, the existing conditions on Other Site 1 would remain. Only approximately 512 square feet of Other Site 1 is included in the Affected Area in order to allow the western boundary of the Area to be drawn parallel to Elizabeth Place.

2. Floor Area

Without the Proposed Action, it is assumed that the Affected Area's existing M2-1 zoning would remain. It is assumed that the No-Action development on Projected Development Site 1 would consist of a new retail building totaling approximately 26,380 gsf of floor area. It is assumed that, without the Proposed Action, the existing conditions on Projected Development Site 2 would remain consisting of a 3,700 gsf auto body repair shop.

The Proposed Action would change the zoning of the Affected Area from M2-1 to M1-5, increasing the maximum FAR from 2.0 to 5.0 for manufacturing and commercial development. The With-Action Scenario would permit development of a 39,600 gsf commercial building (5.0 FAR) on Projected Development Site 1[3]. The Proposed Action would also permit the development of an approximately 28,230 gsf commercial building (5.0 FAR) on Projected Development Site 2.

It is assumed that, both without and with the Proposed Action, the existing conditions on Other Site 1 would remain. Only approximately 512 square feet of Other Site 1 is included in the Affected Area in order to allow the western boundary of the Area to be drawn parallel to Elizabeth Place.

3. Impacts of the Proposed Action on Urban Design and Visual Resources

Under the Proposed Action, there would be the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. The change would consist of an increase in height on Projected Development Site 1 from 2 stories and 36 feet to five stories and 85 feet and an increase in height on Projected Development Site 2 from 2 stories and 24 feet to 5 stories and 85 feet. The change would also consist of an increase in building floor area on Projected Development Site 1 from 26,380 gsf to 39,600 gsf and an increase in building floor area on Projected Development Site 2 from 3,700 gsf to 28,230 gsf.

However, as discussed in the Historic and Cultural Resources section above, the 400-foot radius project study area contains an eclectic mix of building heights and sizes ranging from a 2-story, 90,000 gsf warehouse to a 13-story, 304,650 gsf commercial building to a 17-story, 354,231 gsf residential structure. The remaining development on the block on which the Affected Area is located consists of a 4-story, 16,000 gsf warehouse and a 9-story, 171,000 gsf multiple dwelling to the west. A 13-story, 304,650 gsf commercial building occupying an entire block lies across Doughty Street from the Affected Area to the south. The projected development in the Affected Area would be consistent with existing development in the surrounding 400-foot radius project study area. See attached No-Action and With-Action Urban Design drawings.

The Proposed Action would not result in the obstruction of publicly accessible views to visual resources that are not allowed by the existing zoning of the property.

Based on the above, a detailed urban design assessment would not be required and the Proposed Action would not result in significant adverse impacts to urban design or visual resources.

[3] Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning. Although the slightly smaller M1-5 zoned area would technically accommodate a building slightly smaller than 39,600 gsf, the provisions governing pre-existing split zoning lots will allow the new district boundary line to be moved so that the entire development site is deemed to be within the new M1-5 zoning district.



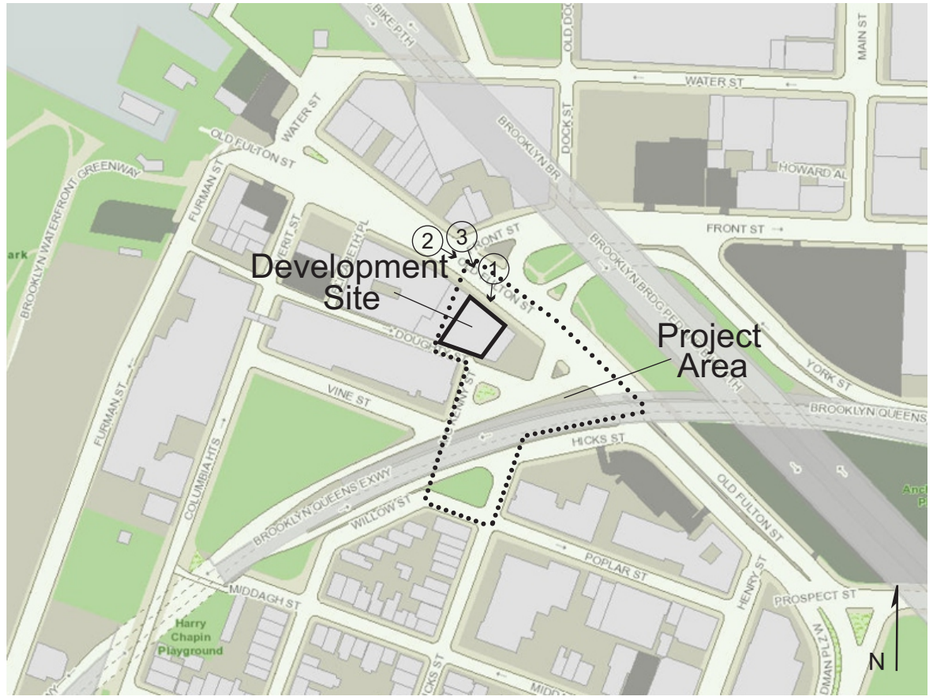
1. View of the Development Site facing south from Old Fulton Street.



2. View of Old Fulton Street facing southeast from Front Street (Development Site at right).



3. View of the Development Site facing southeast from the intersection of Old Fulton Street and Front Street.





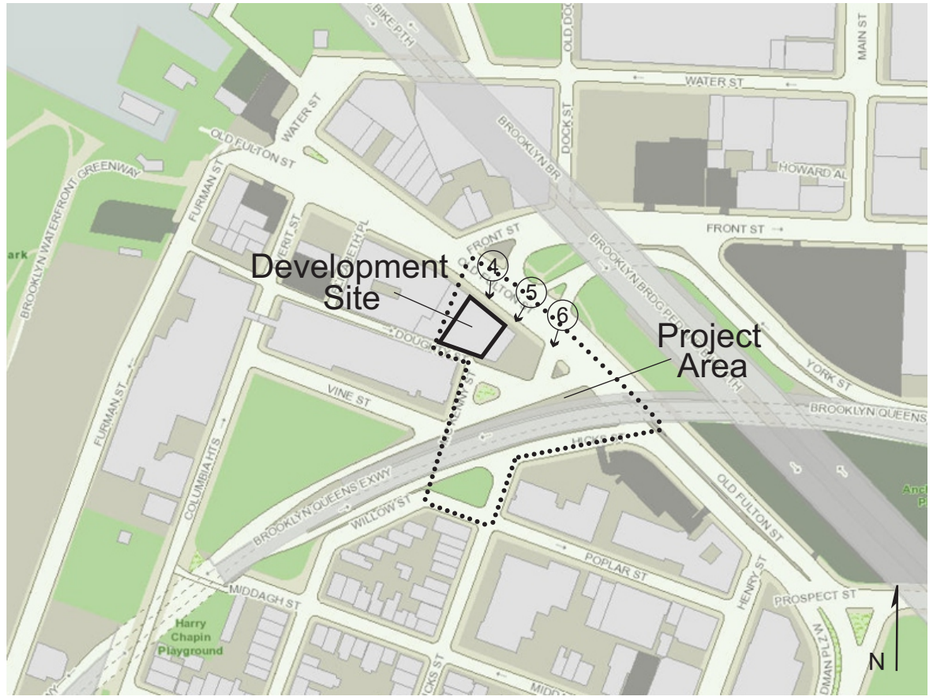
4. View of the Development Site facing south from the intersection of Old Fulton Street and Front Street.



5. View of the Development Site and Project Area facing southwest from Old Fulton Street.



6. View of Hicks Street facing south from Old Fulton Street (Project Area ahead).





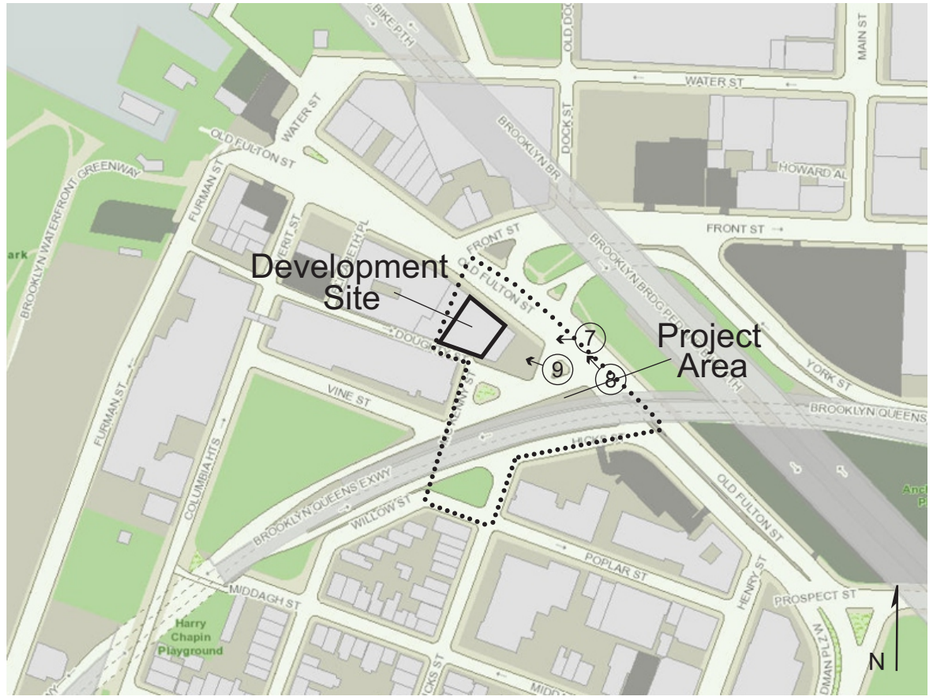
7. View of the Project Area facing west from the intersection of Old Fulton Street and Hicks Street.



8. View of Old Fulton Street facing northwest from Hicks Street (Project Area at left).



9. View of the side of Hicks Street facing west between Old Fulton Street and Doughty Street.





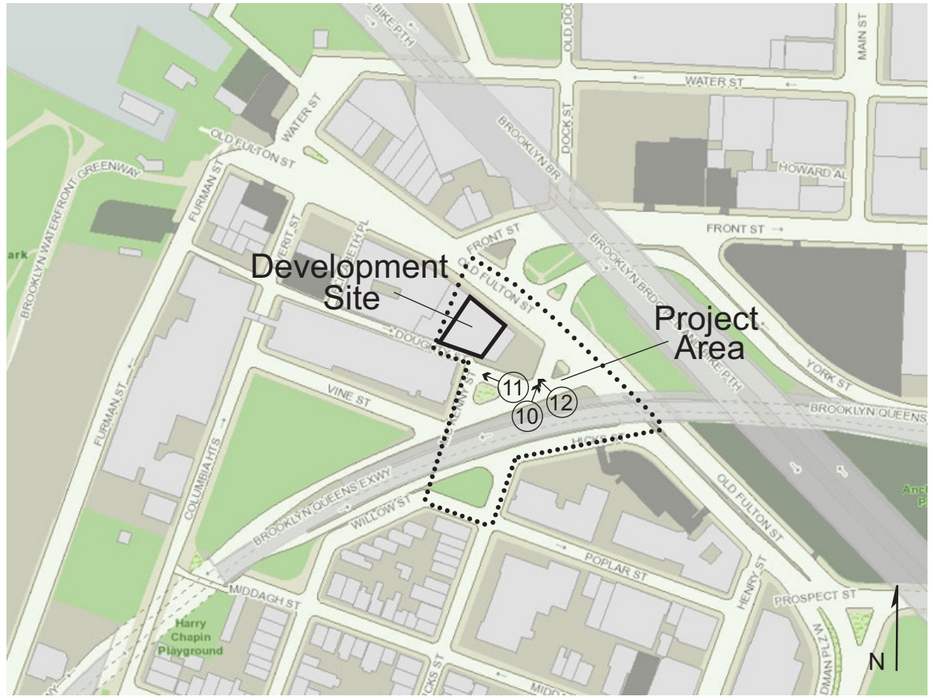
10. View of Hicks Street facing north from Vine Street.



11. View of Doughty Street facing west from Vine Street.



12. View of the intersection of Hicks Street and Doughty Street facing northwest.





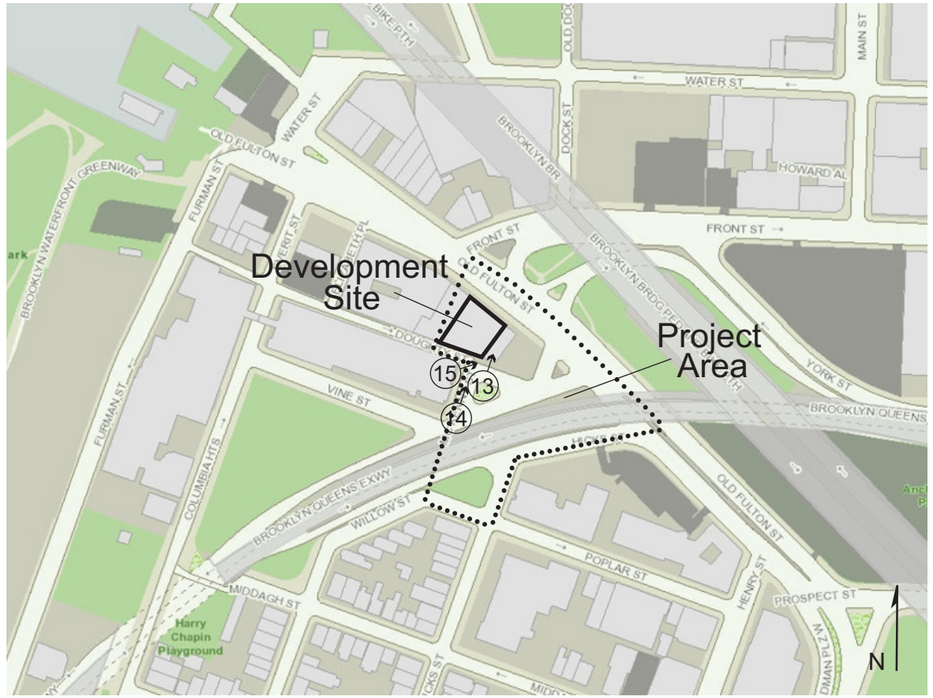
13. View of the side of Doughty Street facing north between Hicks Street and Everit Street.



14. View of the side of Doughty Street facing north from McKenny Street.



15. View of the side of Doughty Street facing northeast between McKenny Street and Everit Street





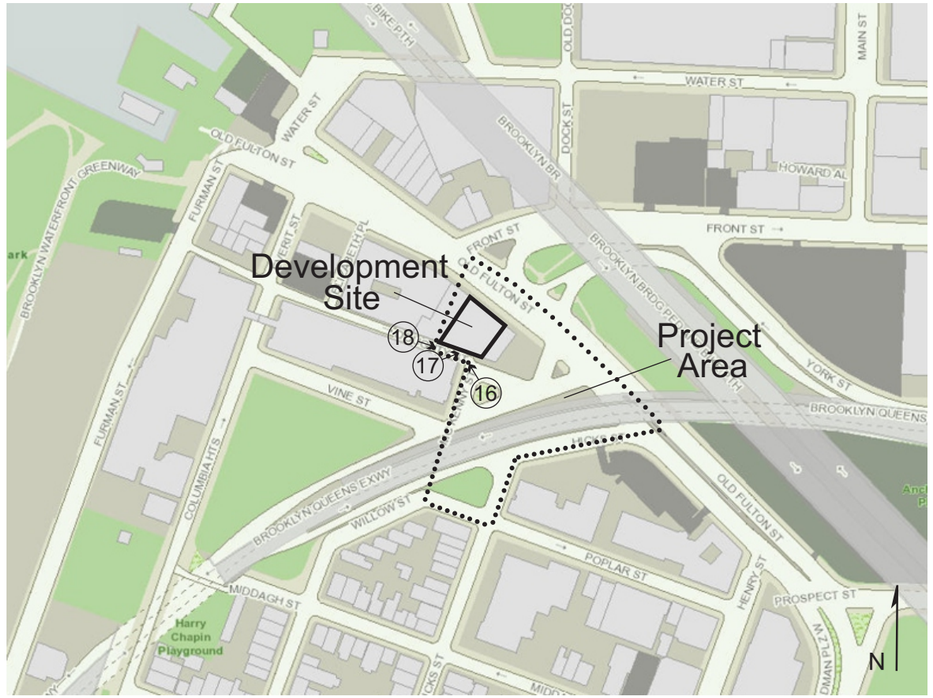
16. View of the Development Site facing northwest from the intersection of Doughty Street and McKenny Street.



17. View of the Development Site facing northeast from Doughty Street.



18. View of Doughty Street facing east (Development Site at left).





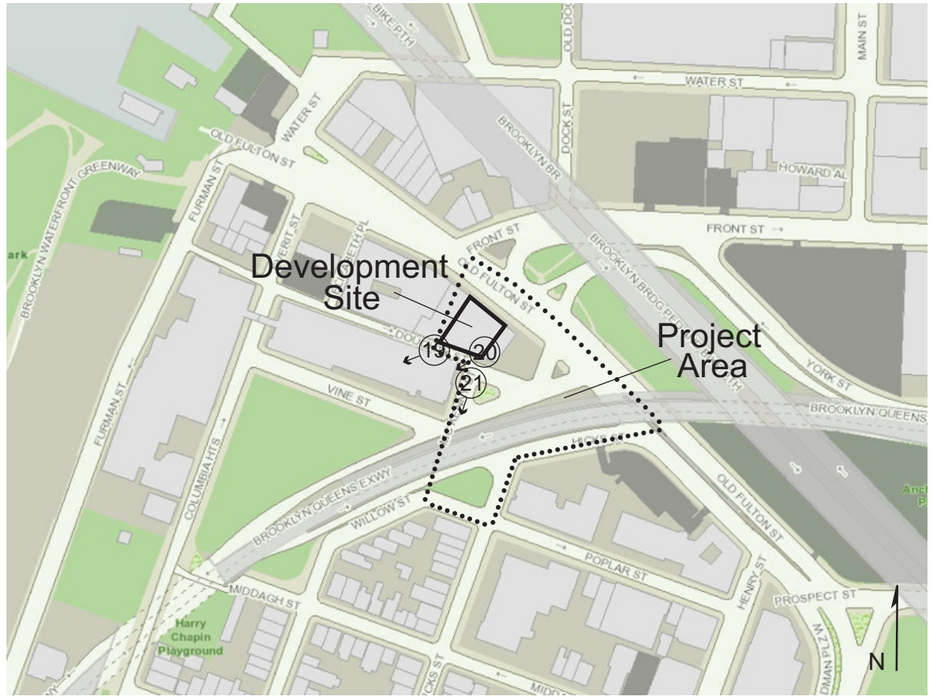
19. View of the side of Doughty Street facing southwest from the Development Site.



20. View of the intersection of Doughty Street and McKenny Street facing southwest from the Development Site.

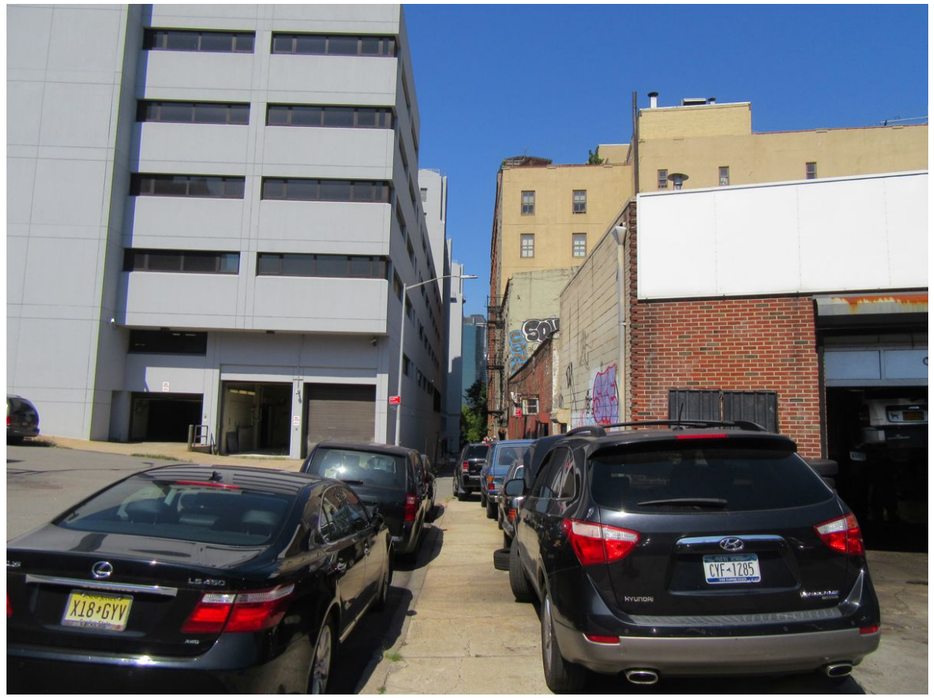


21. View of McKenny Street facing south from the Development SIte.





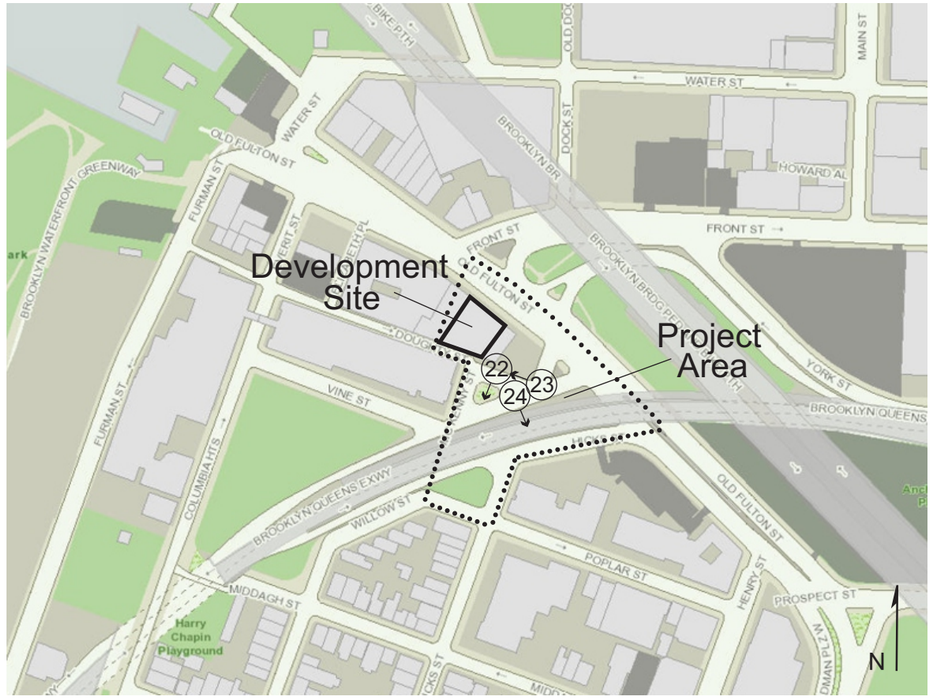
22. View of the side of Doughty Street facing south between McKenny Street and Hicks Street.



23. View of the sidewalk along the north side of Doughty Street facing west from Hicks Street.



24. View of the south side of Vine Street facing southeast from the intersection of Hicks Street and Doughty Street.





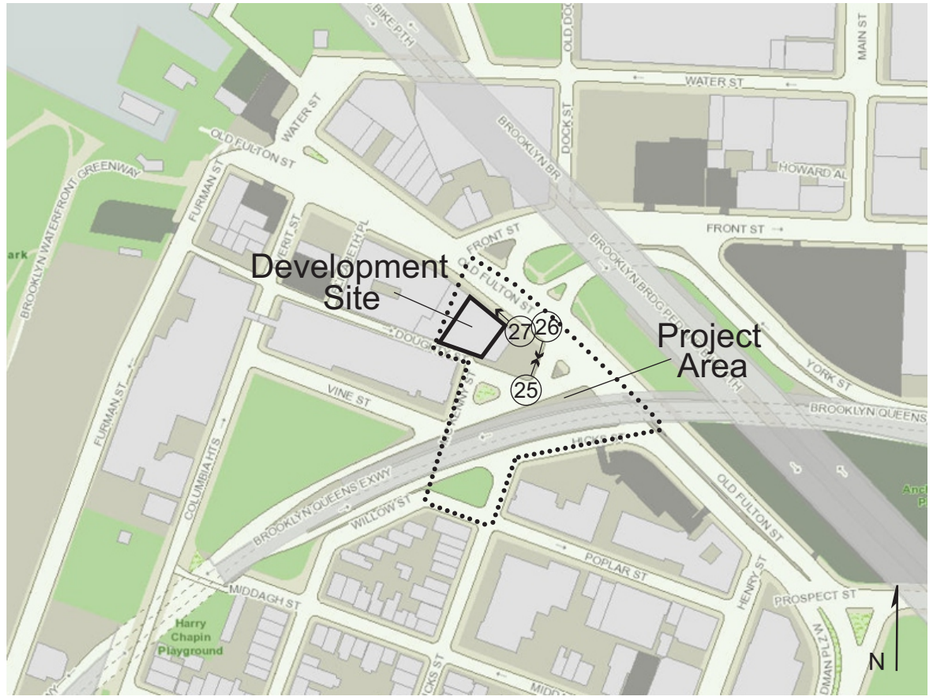
25. View of the sidewalk along the west side of Hicks Street facing north from Doughty Street.



26. View of the sidewalk along the west side of Hicks Street facing south from Old Fulton Street.



27. View of the sidewalk along the south side of Old Fulton Street facing northwest from Hicks Street.





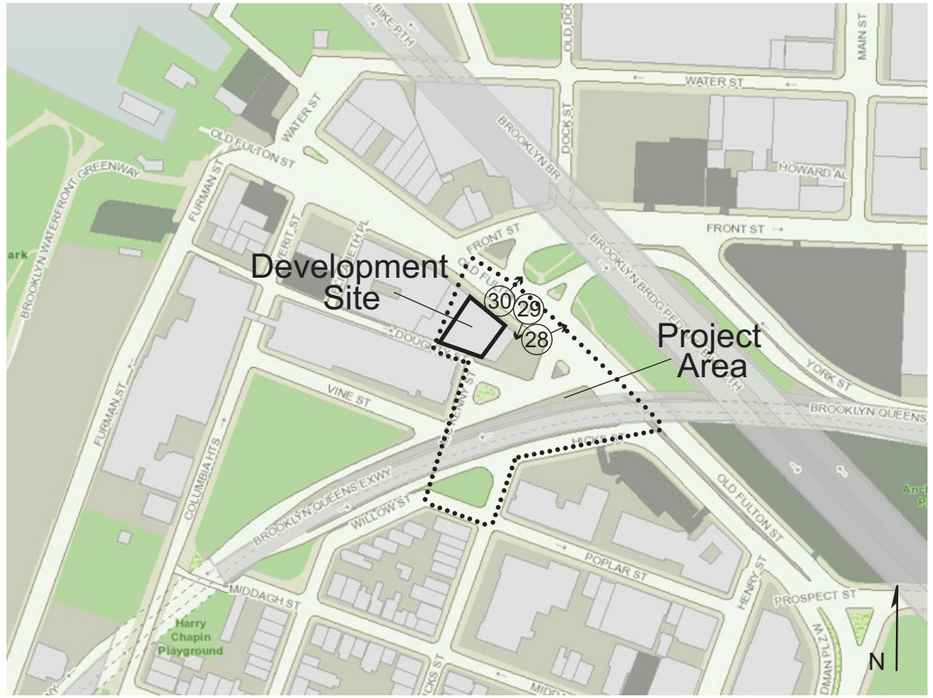
28. View of the intersection of Old Fulton Street and Front Street facing northeast from the Project Area.



29. View of the Project Area facing southwest from Old Fulton Street (Development Site at right).



30. View of the side of Old Fulton Street facing north from the Development Site.

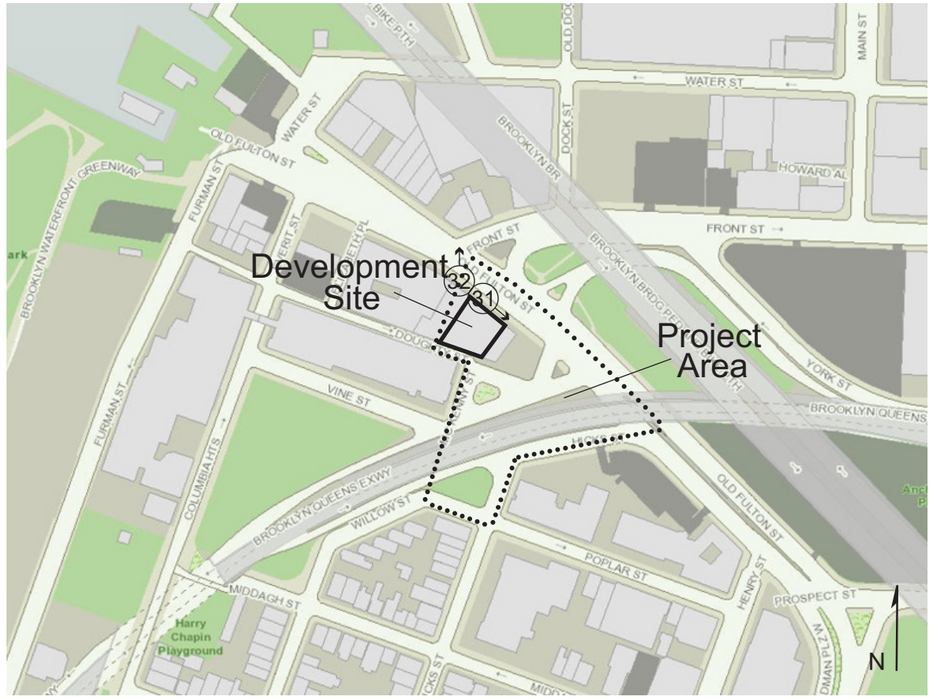




31. View of the sidewalk along the south side of Old Fulton Street facing southeast (Development Site at right).



32. View of the intersection of Old Fulton Street and Front Street facing north from the Development Site.

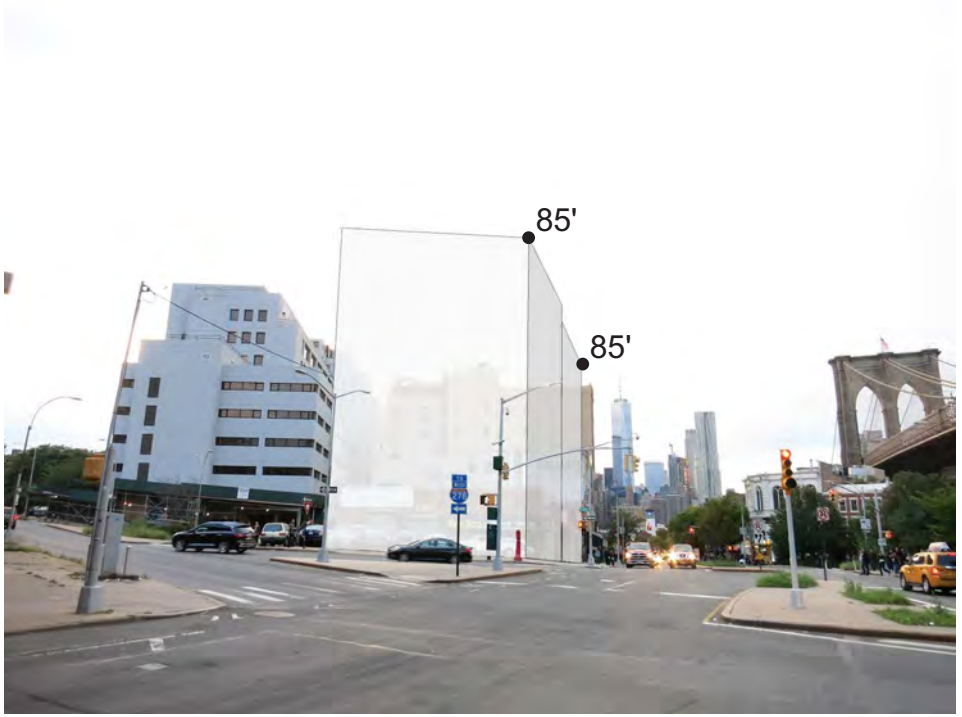


Old Fulton Street facing northwest (Site at left)



No-Action Scenario

Old Fulton Street facing northwest (Site at left)



With-Action Scenario

Front Street facing southwest (Site ahead)



No-Action Scenario

Front Street facing southwest (Site ahead)



With-Action Scenario

Old Fulton Street facing southeast (Site at right)



No-Action Scenario

Old Fulton Street facing southeast (Site at right)



With-Action Scenario

12. HAZARDOUS MATERIALS

Introduction

A hazardous materials assessment is required for the Proposed Action per the *CEQR Technical Manual* as follows:

- Rezoning allowing commercial uses in an area currently zoned for manufacturing uses.
- Construction requiring soil disturbance in a manufacturing zone.
- Development on an underutilized site if there is a reason to suspect contamination or historic/urban fill.
- Development where underground and/or aboveground storage tanks (USTs or ASTs) are (or were) located on or near the site.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) report dated August 31, 2016 was prepared for Projected Development Site 1 by Industrial Waste Management (IWM) for Kearny Bank. The Assessment was triggered as part of Kearny Bank's standard operating procedures in connection with the financing of the above noted property. The ESA is submitted under separate cover and the findings, conclusions, and recommendations of the ESA are summarized below.

IWM has completed a Phase I Environmental Assessment in conformance with the scope and limitations of ASTM practice El 527-13 on the property known as Block 202, Lot 14, 50 Old Fulton Street, Brooklyn, Kings County, New York. This assessment has revealed no evidence of recognized environmental conditions in connection with the property with the exception of those areas addressed in the opinions and conclusions section of the report summarized below.

Purpose

The purpose of the ESA is to identify recognized environmental conditions as defined under the American Society for Testing and Materials (ASTM), Standard E 1527-13. A recognized environmental condition means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

Scope of Work

The Phase I Environmental Assessment consisted of an on-site inspection to determine areas of recognized environmental conditions, including:

- the presence or potential presence of hazardous materials and wastes on-site and signs of contamination,
- the presence of above ground and/or underground storage tanks and waste disposal facilities,
- the use and presence of chemicals on-site including suspected asbestos containing materials, lead-based paint, or other materials,

- the presence of electrical and/or other equipment on-site that has the potential of being contaminated with polychlorinated biphenyls (PCBs).

In addition, the following information was reviewed:

- the identification of past and present uses and conditions of the property and adjoining properties,
- the review of records regarding previous environmental actions/litigations, spill incidents, violations, environmental permits, and compliance status of current environmental permits held by current owners/operators,
- the review of real estate use activities of all adjacent businesses, land owners or tenants to assess the potential for migration of contaminants to the subject property,
- radius review of sites which may have an environmental impact on the subject property.

On-Site Findings

Based on IWM's observations, an auto body shop is present on the subject property. The subject property is heated by natural gas and is connected to city supplied water and sewer.

Historical/Records Review Findings

Based on a historical review, the subject property has been used for commercial and residential purposes throughout the years. As of the date of the preparation of the ESA, no information has been provided by local and/or state agencies to IWM's request for information on the subject property.

Historical Data Gaps

No significant data gaps were encountered in the historical review of the subject property. The following historical resources were reviewed in order to identify the prior use of the subject property: Sanborn Fire Insurance Maps, aerial photographs, topographic maps, and city directories.

Regulatory Review Findings

Based on a review of the EDR database, the subject property was on a database as per ASTM Standard El 527-13. The subject property was identified on the Historic Auto database under the name of Capsule Motors Inc. with an address of 50 Cadman Plaza West. This company was identified on-site for the years 2001 through 2006. No additional information was provided in this database. The subject property was not listed as having any environmental violations on-site.

Opinions/Conclusions

Suspected Underground Storage Tanks:
Based on IWM's inspection, there appeared to be a fill pipe located in the front sidewalk. It is IWM's opinion that this fill pipe is associated with a gasoline underground storage tank. Therefore, it is recommended that a subsurface evaluation be performed to determine the presence or absence of a gasoline tank, and that the documentation be forwarded to the

appropriate parties. If a tank is present, then it is further recommended that it be properly closed according to all applicable state and local regulations.

IWM personnel reviewed the New York City Department of Buildings database with respect to the subject property. An oil burner application was taken out on February 24, 1941. However, this permit did not identify as to whether the heating oil was contained within an above ground or an underground storage tank. In addition, IWM personnel reviewed a Certificate of Occupancy dated March 26, 1969 which identified the subject property as having a gasoline tank installed on March 11, 1969. Furthermore, the Sanborn Fire Insurance Maps identified two gasoline USTs on the subject property.

Therefore, it is recommended that a subsurface evaluation be performed to determine the presence or absence of any tanks, and that the documentation be forwarded to the appropriate parties. If tanks are present, then it is further recommended that they be properly closed according to all applicable state and local regulations.

Presumed Asbestos Containing Materials:
The Presumed Asbestos Containing Material including but not limited to floor tiling/mastic and wallboard/joint compound should be put on an operations and maintenance (O&M) plan. The O & M Plan should be such that it will ensure that this material remains in a satisfactory condition. However, if there are any future renovations of the subject building which would impact this PACM, it is recommended that this material be sampled to determine whether asbestos fibers are present. If asbestos is present, then the material should be removed by a properly licensed asbestos abatement firm and disposed of properly according to applicable State regulations.

Closed Hydraulic Lifts:
The on-site inspection identified closed hydraulic lifts on-site. These lifts have tanks which contained hydraulic oil which have the potential of leaking this hydraulic oil into the surrounding soil. Therefore, it is recommended that soil sampling be completed at these hydraulic lift locations in an effort to determine if these lifts have impacted the surrounding soil.

Floor Drain:
Two floor drains were observed in the work area both of which had staining associated with them. It is unknown as to where these floor drains discharge to. Therefore, it is recommended that the discharge point of these floor drains be determined.

The staining around the drains was due to the petroleum products used on-site. In addition, the floor drain adjacent to the spray paint booth receives waste water generated from within the spray paint booth which may include solvents from the solvent based paints used on-site. Therefore, it is recommended that soil sampling be completed at these two floor drains and any other floor drains present on-site.

Spray Paint Mixing and Storage Room:
The spray paint mixing and storage room was noted as having heavy staining to the floor due to the mixing and storage of solvent based paints in this room. It is recommended that soil sampling beneath this floor be done in an effort to determine if the underlying soil has been impacted.

Potential for Off-Site Contamination:
With respect to the listed Leaking Underground Storage Tanks and/or Known Contaminated Sites located in the projected hydrogeologic up-gradient direction from the subject property, no additional information is currently available with respect to the potential impact of these sites on the subject property.

In the event that an off-site property contaminates an aquifer located on a subject site, the subject property should be protected from liability under the Section Ill - Liability Protection for Contiguous Landowners of the Brownfields Revitalization and Environmental Restoration Act of 2001.

It should be noted that the subject facility is supplied with its potable water through New York City's potable water distribution system. If ground water contamination is present at these sites, it may impact the subject property. However, it is not recommended that any additional investigation be completed with respect to these off-site facilities.

Conclusions

The Phase I ESA prepared by IWM identified several recognized environmental conditions (RECs) on the subject property. In order to address these RECs, the following measures are proposed. These measures have been agreed to by the NYC Department of Environmental Protection as further detailed below.

An "E" designation for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on the property. The Applicant will be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-519) will be assigned for hazardous materials on the following property:

Block 202, Lot 14

The text for the (E) designations related to hazardous materials is as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Action to result in significant adverse impacts related to hazardous materials on Projected Development Site 1.

Projected Development Site 2

Projected Development Site 2 is not under the control or ownership of the Applicant and is not included in the proposed development plans for this project. An "E" designation for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these properties. These applicant(s) should be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-519) will be assigned for hazardous materials on the following property:

Block 202, Lot 18

The text for the (E) designations related to hazardous materials is as follows:

Task 1-Sampling Protocol

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

review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol

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

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

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Action to result in significant adverse impacts related to hazardous materials on Projected Development Site 2.

NYC Department of Environmental Protection (NYCDEP) Review

The NYCDEP has review the July 2018 EAS and the August 31, 2016 Phase I ESA report prepared for Projected Development Site 1. By letter dated October 1, 2018 (see Hazardous Materials Appendix), NYCDEP provides the following conclusions and recommendations.

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

Projected Development Site 1: Block 202, Lot 14 (Site under the control or ownership of the applicant) and Projected Development Site 2: Block 202, Lot 18 (Site not under the control or ownership of the applicant)

Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The (E) designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

16. TRANSPORTATION

Pursuant to *CEQR Technical Manual* methodology, a transportation assessment may be necessary when a proposed action would alter the transportation network by closing, opening, or realigning an element of the transportation system such as a roadway, pedestrian way, or transit route, or if it would generate new trips on the transportation network. The objective of the transportation analyses is to determine whether a proposed project may have a potentially significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, the safety of all roadway users (pedestrians, bicyclists and vehicles), on- and off-street parking, or goods movement.

According to the *CEQR Technical Manual*, it is possible that detailed transportation analyses may not be needed for projects that would create low-or low-to-moderate-density development in particular sections of the City. Before undertaking any transportation analysis, reference should be made to Table 16-1 in conjunction with Map 16-1 (CEQR Traffic Zones) to determine whether numerical analysis is needed.

The development thresholds cited in Table 16-1 were determined by applying typical travel demand factors (i.e., daily person trip rates, temporal distribution, modal split, vehicle occupancy, etc.) for the land uses cited in the table for each of the zones, up to a development density at which vehicle, transit, and pedestrian trip generation would not likely cause significant adverse impacts, based on a review of prior Environmental Assessment Statements (EASs) and Environmental Impact Statements (EISs) conducted under the CEQR process. The development densities cited in Table 16-1 generally result in fewer than 50 peak hour vehicle trip-ends, 200 peak hour subway/rail or bus transit trip-ends, and 200 peak hour pedestrian trip-ends, where significant adverse impacts are generally considered unlikely.

Should the proposed project involve a mix of land uses, it is appropriate to conduct a preliminary trip generation assessment (see Levels 1 and 2 Screening Assessment in Section 300) for each land use or utilize the weighted average method to determine whether the total site generated trip-ends exceed the threshold for analysis. If the proposed project would result in development densities less than the levels shown in Table 16-1, further numerical analysis would not be needed for any of these technical areas. Conversely, if a proposed project surpasses these levels, a preliminary trip generation analysis, described below and in the *CEQR Technical Manual* Section 300, is needed.

Project Description

The Proposed Action would not result in development that would directly affect any element of the transportation system. The Affected Area is in Traffic Zone 1, due to its location within downtown Brooklyn. It is also noted that the Affected Area is within ¼ mile of the High Street/Brooklyn Bridge station of the IND A and C trains. According to Table 16-1 of the 2014 *CEQR Technical Manual*, a residential development of less than 240 dwelling units or local retail development of less than 15,000 gross square feet or office development of less than 115,000 gross square feet typically does not warrant further assessment of the potential for adverse effects on transportation.

Projected Development Site 1 would be developed with an approximately 39,600 gsf (5.0 FAR), five-story commercial building with 19,800 square feet of retail on the cellar, ground and second floors and 19,800 square feet of offices above. The site consists of 6,593 square feet of land area

and currently houses a one-story auto body repair shop that covers the full lot (0.97 FAR). (Approximately 6,473 square feet of Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning). In the no-action condition, the Site is expected to be developed with a new two-story plus cellar and sub-cellar (2.0 FAR) retail building totaling approximately 26,380 gsf of floor area with 44 accessory off-street parking spaces in the cellar and sub-cellar levels.

Projected Development Site 2 would be developed with an approximately 28,230 gsf (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial building with local retail on the cellar and ground floor and office space above. The site currently contains an approximately 3,700 gross square foot (gsf) two-story auto body shop on a 4,705 square foot lot (0.79 FAR). It is expected the existing use would remain under a no-action condition.

The total net induced development would consist of 38,600 gross square feet (gsf) of new office space, a net increase of 2,820 gross square feet of local retail space, a loss of 3,700 gsf of automotive related floor area, and a loss of 44 accessory parking spaces, compared to a no-action condition. The no-action use of Projected Site 2 for an auto body shop would generate a very small amount of vehicular and pedestrian traffic, and no credit is taken for the displacement of these trips.

Preliminary Transportation Screening

The following Transportation Study assesses the incremental difference between the existing, proposed, and no-action conditions to determine the potential effects of the Proposed Action on traffic conditions.

Weighted Average

The initial step in determining the need for further analysis is to calculate a weighted average to determine if the proposed development density exceeds the threshold for analysis. The net incremental development of 38,600 gross square feet of office space constitutes 0.336 of the threshold level identified in Table 16-1 of the *CEQR Technical Manual*. The net incremental development of 2,820 gross square feet of retail space constitutes 0.188 of the threshold level. The total net incremental development density for both the office and local retail space constitutes 0.524 of the threshold, which is less than one (1.0). Therefore, no further detailed transportation analysis is warranted.

Safety

According to Section 16-370 of the *CEQR Technical Manual*, in conjunction with a Weighted Average Screening Transportation Assessment, the Proposed Action does not trigger the need for a detailed traffic or pedestrian analysis. Based on the weighted average assessment and as the Affected Area is not located near sensitive uses, as described in Section 16-370, an assessment of safety is not warranted.

Parking

According to Section 16-300 of the *CEQR Technical Manual*, if the proposed project screens for traffic, it is likely that a parking assessment is also not needed. As noted above, the projected development would generate far fewer than 50 vehicular trip-ends in any hour and far fewer

than 200 new transit or pedestrian trip-ends in any hour. Therefore, an assessment of parking is not warranted.

Conclusion

This chapter presented an assessment of the effects of additional development density anticipated as a result of the Proposed Action on the transportation system, transit resources, road networks, and pedestrian elements within the vicinity of the Affected Area. The following conclusions are drawn from this weighted average assessment, as detailed above:

- The Proposed Action would not result in an increase of 50 or more hourly vehicular-trip ends during any analysis period. Therefore, the Proposed Action would not result in significant adverse impacts related to traffic, parking, or circulation.

- The Proposed Action would not result in an increase of 200 or more total hourly pedestrian trip-ends either cumulatively, or individually, during any analysis period. Therefore, no significant adverse pedestrian impacts are projected to occur at any of the crosswalks, street corners, or sidewalks.

- The Proposed Action would not lead to an increase of 200 or more subway or bus trip-ends to any one transit line, stop, station, or platform. Therefore, the Proposed Action would not lead to any significant adverse subway or bus impacts related to circulation or capacity.

- Based on the above, further assessment of safety and of parking is not warranted.

17. AIR QUALITY

INTRODUCTION

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis framework, as mandated by the State Environmental Review Act, follows the *New York City Environmental Quality Review 2014 Technical Manual*. The potential air quality impacts of the following emission sources are estimated following the procedures and methodologies prescribed in the *CEQR Technical Manual*:

- Vehicular emissions resulting from increased vehicular traffic and/or changes to traffic pattern.
- Vehicular emissions associated with the proposed project off-street parking facilities.
- Vehicular emissions generated at an atypical (*e.g.*, not at-grade) roadway.
- Emissions from the burning of fossil fuels in the heating, ventilation and air conditioning (HVAC) equipment of the proposed developments.
- Air toxics emissions released from industrial or manufacturing facilities.
- Stationary source emissions of facilities that require Prevention of Significant Deterioration permits (Title V), and facilities which require a state facility permit.
- Facilities' malodorous emissions to unreasonably interfere with the proposed project's occupant's comfortable enjoyment of life or their property.

Project Description

The Affected Area

The Applicant, Alwest Old Fulton, LLC, is seeking a Zoning Map Amendment to change the zoning of the Affected Area, comprised of Block 202, part of (p/o) Lot 14, Lot 18, and p/o Lot 12 in the Fulton Ferry neighborhood of Brooklyn, Community District 2, from M2-1 to M1-5. The Applicant's Proposed Development Site (Block 202, Lot 14) is identified as Projected Development Site 1 while the Adjacent Lot (Block 202, Lot 18) is identified as Projected Development Site 2. The included p/o Lot 12 is identified as Other Site 1. Block 202 is bounded by Old Fulton Street to the north, Hicks Street to the east, Doughty Street to the south, and Elizabeth Place to the west. The project Build Year is 2022.

Existing Conditions

The Projected Development Site 1, Block 202, Lot 14, currently contains a one-story, 6,593 gsf auto body repair shop that covers the full lot (0.97 FAR). The lot has frontages on both Old Fulton Street to the north and Doughty Street to the south.

Projected Development Site 2, Block 202, Lot 18, has frontages on Old Fulton Street to the north, Doughty Street to the south, and Hicks Street to the east. The Site contains an approximately 3,700 gsf one- to two-story auto body shop that covers most of the lot (0.79 FAR) with the remainder of the lot used for accessory parking of vehicles being serviced.

Other Site 1, Block 202, p/o Lot 12 is zoned M2-1. The entirety of Lot 12 consists of 4,687 square feet of land area. The lot has frontages on Old Fulton Street to the north and Doughty Street to the south. The lot contains an approximately 16,000 gsf four-story warehouse building that covers most of the lot. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Affected Area to be drawn parallel to Elizabeth Place.

Future No-Action and With-Action Conditions

Per the *CEQR Technical Manual*, a project's effects on air quality are determined by comparing predictions made for the future no-action and the future with-action conditions. The existing condition does not serve as a baseline for determining if a proposed project would have a significant impact but is typically included in the analysis for informational purposes.

Absent the Proposed Action, Projected Development Site 2 (Block 202, Lot 18) and Other Site 1 (Block 202, p/o Lot 12) would remain in their current conditions. It is assumed that the No-Action development on Projected Development Site 1 (Block 202, Lot 14) would consist of a new two-story plus cellar and sub-cellar (2.0 FAR) retail building totaling approximately 26,380 gsf of floor area with 44 accessory off-street parking spaces in the cellar and sub-cellar levels. Projected Development Site 2 (Block 202, Lot 18) would consist of a 3,700 gsf autobody shop with an unspecified number of accessory parking spaces.

The With-Action Scenario would permit development of a five-story plus cellar, 85-foot high building, approximately 39,600 gsf commercial building (5.0 FAR) on the Projected Development Site 1 with retail on its cellar through second floors and offices on its third through fifth floors. The With-Action RWCDS for Projected Development Site 1 would be the same as the proposed development.

The Proposed Action would also permit the development of a five-story plus cellar, 85-foot high building, approximately 28,230 gsf commercial building with retail on the cellar and ground floor and offices above on Projected Development Site 2. No accessory off-street parking would be required for the new office or retail uses.

The total net induced development would consist of 38,600 gsf of new office space, a net increase of 2,820 gsf of local retail space, a loss of 3,700 gsf of automotive related floor area, and a loss of 44 accessory parking spaces, compared to a no-action condition.

Under the Proposed Action, no new development would occur on Other Site 1. Only approximately 512 square feet of Other Site 1 is included in the Affected Area and has been included in order to allow the western boundary of the Area to be drawn parallel to Elizabeth Place. As the existing building Other Site 1 (Block 202, p/o Lot 12) would remain in the future with the Proposed Actions, it will not be included in this EAS section for analysis purposes.

Air Pollutants and Applicable Standards and Guidelines

National Air Quality Standards

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants which are being of concern nationwide, and established threshold concentrations based upon adverse effect on human health. As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The pollutants for which a detailed analysis was conducted, together with their health-related averaging periods, are presented in Table 17-1.

New York State Standards

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the New York State Department of Environmental Conservation (NYSDEC) has established guidelines for maximum allowable concentration of "noncriteria pollutants," which are potentially toxic or carcinogenic pollutants. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations and are published in the DAR-1 AGC/SGC Table, where AGC/SGC refers to Annual and Short-term Guideline Concentrations. The most recent DAR-1 guidelines were created on August 10, 2016. NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic or duration.

NYC Guidelines

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply a $PM_{2.5}$ and CO 8-hour averaging time significant impact criteria (based on concentration increments). These criteria are called *de minimis* and they are more stringent than the NAAQS and the state standards, as the criteria set a maximum increase of pollutant concentration that is below the national standard. If the estimated impacts of a proposed project are less than the *de minimis* criteria, the impacts are not considered to be significant. $PM_{2.5}$ significant impact concentrations are evaluated as follows:

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Per the *CEQR Technical Manual*, CO significant impact concentration is:

- An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average CO concentration at a location where the predicted No-Action 8-hour concentration is equal to 8 ppm or between 8 ppm and 9 ppm; or

- An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.

Background Concentrations

Determination of significant impact criteria is evaluated by adding the background concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the existing and planned land uses.

Background concentrations of the CRITERIA pollutants for which a detailed analysis was conducted were obtained from the NYSDEC's 2018 annual report at the nearest monitoring stations (or conservative approach if the distances to multiple stations are approximately equal). Table 17-1 shows the background concentrations and the NAAQS.

Table 17-1. The NAAQS and 2018 Background Concentrations at the Nearest NYSDEC Monitoring Stations

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO2	1-Hour	188 µg/m^3	108.7 µg/m^3	IS52
	Annual Arithmetic Average	100 µg/m^3	32.9 µg/m^3	
$PM_{2.5}$	24-Hour	35 µg/m^3	19.2 µg/m^3	Division Street
	Average of 3 consecutive annual means	12 µg/m^3	9.0 µg/m^3	
PM_{10}	24-hour	150 µg/m^3	40 µg/m^3	Division Street
CO	1-hour	35 ppm	2.91 ppm	Queens College 2
	8-hour	9 ppm	1.70 ppm	

The *de minimis* criteria for CO and $PM_{2.5}$ were evaluated per the NYC Guidelines. The concentrations increments are: 24-hour $PM_{2.5}$ 7.90 µg/m^3; annual $PM_{2.5}$ for stationary source 0.3 µg/m^3; and, CO 8-hour 3.65 ppm.

MOBILE SOURCE ANALYSIS

Introduction

Projects may result in significant mobile source impacts when they create mobile sources of pollutants, change traffic pattern, or add new uses near mobile sources of pollutants. Per CEQR guidelines, a detailed analysis is conducted to predict whether the Proposed Actions could potentially have a significant adverse air quality impact if certain threshold criteria are met or exceeded, while proposed projects that do not meet or exceed the threshold criteria (screen out) are not expected to have a mobile source impact. Projects that require a detailed analysis, model the ambient air CO and PM concentrations—the mobile source pollutants of concern—and compare the modeled concentrations with the applicable air quality standard.

Mobile source impacts are a function of vehicular related emissions and the pollutant's dispersion. Emissions of vehicular mechanical components are generated with the latest EPA's Mobile Vehicle Emission Simulator 2014a version (MOVES2014a). Emission of dust generated by vehicles travelling on paved roadways are added to the MOVES2014a emission to estimate total particulate matter emissions. The pollutants' concentrations at sensitive receptors are modeled with the EPA's CAL3QHC/R or AERMOD Gaussian dispersion models. Dispersion analysis of emissions generated in parking facilities may use the spreadsheet and formula referenced in the *CEQR Technical Manual* appendices.

Mobile Source Screen

Project-Generated Traffic

Per the *CEQR Technical Manual*, localized increases in CO and $PM_{2.5}$ levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed project. For this area of the City, the threshold volume for a detailed analysis of CO concentration, using MOVES2014 and CAL3QHC or AERMOD, is an increment of 170 vehicles. $PM_{2.5}$ threshold criterion is an increment of applied heavy-duty diesel vehicles (HDDVs) screen.

As provided by the transportation analysis for this project, a Level I traffic screening analysis was not required for the proposed developments. As such, the increment between the Future With-Action and the Future No-Action does not exceed the threshold of 170 vehicular trip generation, and the project-generate peak hour HDDVs traffic or its equivalent in vehicular emission would not exceed the threshold criterion. Therefore, the Proposed Action is not expected to have significant adverse air quality impacts from the project generated mobile sources, and no intersection detailed air quality analysis was required.

Parking Garage

Based on CEQR guidelines, the maximum capacity of a parking garage is evaluated against a threshold criterion to predict whether the potential impacts associated with mobile source emissions are significant. The threshold criteria level, per CEQR guidelines, is 85 new off-street parking spaces. If the threshold is met or exceeded, a detailed analysis is warranted.

The proposed project would result in a net decrease of 44 new off-street parking spaces. Therefore, no detailed air quality analysis is required, and no significant mobile source air quality impacts are expected from vehicular emission generated at the proposed project's off-street parking spaces.

Atypical Roadway

According to *CEQR Technical Manual*, projects that would result in new sensitive uses within 200 feet of an atypical roadways may result in significant adverse mobile source air quality impacts. These impacts are estimated at sensitive receptors located at air intakes, operable windows, and terraces of the receiving building.

The Projected Development Sites 1 and 2 are located within 200 feet of the Brooklyn Bridge elevated traveling lanes and the Brooklyn Queens Expressway (BQE). Therefore, a detailed analysis, using MOVES2014a and AERMOD (or CAL3QHC/R), was required.

Atypical Roadway - Detailed Analysis

Methodology and Databases

The Projected Development Sites are located approximately 185 feet from the elevated vehicular travel lanes of the Brooklyn Bridge. Projected Development Site 2 is located 75 feet from the elevated vehicular travel lanes of the Brooklyn Queens Expressway (BQE). Because of this proximity, vehicular emissions from the Brooklyn Bridge and BQE traffic have the potential to significantly impact the air quality at receptors (e.g., operable windows, terraces) of the proposed developments. Three pollutants, with their corresponding averaging time periods, were considered for this analysis: 1-hour and 8-hour CO, 24-hour and annual $PM_{2.5}$, and 24-hour PM_{10}. The 24-hour $PM_{2.5}$ utilized a Tier 2 approach.

Brooklyn Bridge: The Brooklyn Bridge is a 3-lane in each direction elevated restricted roadway, and commercial vehicles are not permitted on the Brooklyn Bridge. At Prospect Street the Brooklyn Bridge roadway runs 27.4 feet above grade (grade elevation on Prospect Street is 46 feet and the Brooklyn Bridge roadway at this location is 73.4 feet above grade). The Brooklyn Bridge roadway west of the water line is 125.3 feet above grade[4].

Hourly traffic counts for the Brooklyn Bridge were obtained from the *2016 NYC Bridge Traffic Volumes Report*. The traffic count report included the eastbound and westbound volumes by vehicle type. The *CEQR Technical Manual,* Table 16-4: *Annual Background Growth Rates*, of 0.125% was used to account for the general background traffic growth in the area. Vehicle speeds for the month of September 2018 for the following links were obtained from City of New York Department of Transportation (NYCDOT) and MTA bridges and tunnels[5].

- 4616339 BQE northbound from Atlantic Avenue to Brooklyn Bridge Manhattan side.
- 4616341 FDR southbound Catherine Slip to Brooklyn Bridge Manhattan Site.
- 4616342 Brooklyn Bridge Manhattan Site to FDR northbound Catherine Slip.

Worst-case peak hour traffic and slowest weekday speeds at all hours throughout the day, throughout the year were initially assumed for all pollutants averaging times. Hourly traffic and emission corresponding to slowest speed were used to compile the hourly Tier 2 24-hour PM2.5 emissions rates.

BQE: The BQE is an elevated restricted roadway. West of Washington Street the BQE 3-lanes in each direction are at the same height above grade. East of Washington Street the southbound lanes are approximately 17 feet below the northbound lanes. The BQE has two southbound lanes between the Brooklyn Bridge elevated traveling lanes and Columbia Heights and 3-lanes everywhere else. Just north of Columbia Heights the BQE is at grade.

Hourly traffic counts were obtained from the New York State Department of Transportation (NYSDOT) for station 020017 for the BQE road segment between Atlantic Avenue and the Brooklyn Bridge for July 2011. The traffic count report included the northbound and southbound volumes by vehicle classification. The *CEQR Technical Manual,* Table 16-4: *Annual Background Growth Rates*, of 0.125% was used to account for the general background traffic growth in the area. Vehicle speeds for the following links for all of 2016 between Atlantic

[4] https://data.cityofnewyork.us/Transportation/Elevation-points/szwg-xci6
[5] http://data.beta.nyc/dataset/nyc-real-time-traffic-speed-data-feed-archived

Avenue and Leonard Street were obtained from City of New York Department of Transportation (NYCDOT) and MTA bridges and tunnels.

- 4616257 BQE northbound from Atlantic Avenue to Leonard Street.
- 4616271 BQE southbound from Leonard Street to Atlantic Avenue.

Examination of the speed data shows that May 2016 traffic speeds on the northbound lane is much slower than all the other months, and therefore, not a representative condition on the roadway. As such, the northbound May traffic was excluded. The analysis assumed the slowest speed (excluding the northbound May traffic speed) for each link. For the 24-hour $PM_{2.5}$ Tier 2 analysis, the slowest speed for each period of the day and hourly traffic were assumed.

Emission Rates

The EPA's MOVES2014a emission factor algorithm was used to estimate CO, PM_{10}, and $PM_{2.5}$ emission rates. MOVES can be used to calculate emission rates of criteria air pollutants, greenhouse gas emissions, and some hazardous air pollutants for both on-road motor vehicles and non-road equipment. MOVES models calculate emissions at the national, county, and project level by use of databases and by specifying the characteristics (Run Specification) of the scenario that is modeled.

For project level analyses, MOVES require the use of site-specific input data of traffic volume, vehicle type, fuel parameters, age distribution, and other inputs rather than the use of national default data. When conducting a project-scale analysis, MOVES also requires the analysis to be performed with no pre-aggregation (i.e., averaging) of input data. The software outputs either total emissions per hour per link in inventory mode or as an activity rate (emissions per vehicle per mile traveled) in emission rate mode. As such, the MOVES2014a models were run for the primary total CO, $PM_{2.5}$, and PM_{10} and primary $PM_{2.5}$ species running and crankcase exhaust, with primary $PM_{2.5}$ and PM_{10} brake and tire wear emissions, and in inventory mode.

Vehicle source types considered were motorcycles, passenger cars/trucks, light commercial trucks, transit buses, single unit short-haul trucks, and combination long haul trucks. Gasoline was specified for motorcycles. Diesel fuel was specified for transit buses, single unit short-haul truck, and combination long haul trucks. All other vehicles applied county data to account for the fuel type distribution.

To account for seasonal and daily variations of meteorology conditions and NYS fuels, MOVES2014a was run at the AM and PM hours for January, April, July, and October. The maximum emission was used in the Tier 1 analysis. The MOVES $PM_{2.5}$ output show no variations in the diesel fueled vehicles. However, gasoline fueled vehicles have the maximum output at January AM and second highest at January PM. Therefore, MOVES was run for January for the Tier 2 analysis.

MOVES inputs of inspection/maintenance, fuel data, age distribution, meteorology, etc., were all obtained from the NYSDEC for the borough of Kings. Links (roadway segments) in MOVES representing the Brooklyn Bridge specified length of 2,000 feet and 0.0292 gradient. This gradient is the absolute elevation difference over 2,000 feet length. The BQE specified links' lengths of 2,000 feet and gradient of 0.00905. Each link specified 100 vehicles and one unique

source type. The actual emission rates were then calculated from the generic (100 vehicle and 2,000 feet in length links) emission rate for each source type.

In addition to exhaust running $PM_{2.5}$ emissions, vehicle-related $PM_{2.5}$ emissions of dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emission factors for the short-term analysis (per DEP, annual fugitive dust emission is negligible). Per the *CEQR Technical Manual*, a slit loading factor of 0.015 g/m^2 (for expressways) and an average vehicle weight of 6,000 pounds were applied. These factors with the equation from Section 13.2.1-3 of EPA's AP-42 were used to calculate each link emission rate. In addition, based on DEP guidance, the conservative assumptions of "dry" road condition was used for the short-term calculation (precipitation reduced silt loading).

Gaussian Dispersion

The dispersion analysis of the traffic emissions impact on the planned developments was conducted using the USEPA's AERMOD dispersion model version 18081, AERMET version 18081. The flat terrain option was specified in the AERMOD models. All dispersion analyses used the calculated emission factors, elimination of calms, urban roughness coefficient, and a population of 2,000,000 were specified.

Vehicle activity on the Brooklyn Bridge was simulated as area sources, each 9.60 meter in width. Each line source is the actual width of the northbound and/or southbound travelling lanes. As the Brooklyn Bridge roadway segment from Prospect Street towards Manhattan is not flat, the northbound and southbound lanes were each divided into 10 equal length 200 feet links. The gradient was calculated assuming flat terrain, so that at Prospect Street the road is 27.4 feet above grade and above the water the road is 125.3 feet above grade. The average gradient was used to calculate the height above grade of each 200 feet link.

Vehicle activity on the BQE was simulated as area sources with each lane 10 feet wide (30 feet total for three lanes and 20 feet total for two lanes). Each line source is the actual width of the northbound and/or southbound travelling lanes. The BQE segment from Old Fulton Road to Columbia Heights change elevation above grade. Therefore, the northbound and southbound lanes at this segment were each divided into 4 equal lengths of 110 feet. The gradient was used to calculate the height above grade of each 110 feet link.

The EPA Transportation Conformity Guidance for Quantitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas[6] fleet volume-weighted average procedure was used to calculate the source release height and its initial vertical dimension. Heights of 1.53-meter and 4.0-meter for light-duty and heavy-duty vehicles were obtained from the guidance manual, respectively. The methodology outlined in the manual was used to calculate the dispersion parameters. These factors accounted for vehicle-induced turbulence. To account for the road elevation above grade, each source height was calculated at the middle of each link (average between adjacent links).

The emission rates in gram per hour produced with MOVES (100 vehicles and links 2,000 feet in length) were adjusted to the sources' lengths specified in the AERMOD models.

[6] https://www.epa.gov/state-and-local-transportation/project-level-conformity-and-hot-spot-analyses#pmguidance

Buildings' base elevations were set at 0. Receptors were placed in horizontal increments of 10 feet around the buildings' envelopes, 6 feet above grade and every 9 feet in vertical increment above the 6 feet high receptors.

All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from LaGuardia Airport; upper air data from Brookhaven station, New York. 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. Anemometer height of 9.4 meters was specified per Lakes Environmental Software Inc.

Atypical Roadway Analysis Results

The predicted concentrations of the 24-hour $PM_{2.5}$ and CO 8-hour were compared with the NYC Guideline; the 24-hour PM_{10}, annual $PM_{2.5}$ and CO 1-hour predicted concentrations were added to the background concentrations, and results compared with the NAAQS. Table 17-2 shows the dispersion analysis results.

Table 17-2. Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration	Background Concentration	Evaluated Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour Tier 1	9.13 μg/m³	N.A.	**9.13 μg/m³**	**7.90μg/m³**	*de minimis*
$PM_{2.5}$ 24-hour Tier 2	5.36 μg/m³	N.A.	**5.36 μg/m³**	**7.90μg/m³**	*de minimis*
$PM_{2.5}$ Annual	1.82 μg/m³	9.3	**11.1 μg/m³**	**12 μg/m³**	NAAQS
PM_{10} 24-hour	30 μg/m³	35	**65 μg/m³**	**150 μg/m³**	NAAQS
CO 1-hour	1.26 ppm	1.78	**3.04 ppm**	**35 ppm**	*de minimis*
CO 8-hour	0.70 ppm	N.A.	**0.70 ppm**	**3.65 ppm**	*de minimis*

As seen in Table 17-2, the $PM_{2.5}$ 24-hour averaging time and CO 8-hour averaging time concentrations do not exceed the *de minimis,* and the PM_{10}, annual $PM_{2.5}$, and CO 1-hour concentrations are within the NAAQS. Therefore, no significant adverse air quality impacts are expected to the proposed project from the emissions associated with the vehicular traffic on the Brooklyn Bridge and BQE.

PROJECT HVAC SYSTEMS ANALYSIS

Introduction

Per the *CEQR Technical Manual*, the HVAC analysis considers the potential for emissions from the HVAC systems of the proposed project to significantly impact existing land uses (project-on-existing), and the potential of the proposed project to significantly impact each other (project-on-project).

Buildings' HVAC systems are defined as stationary sources in the *CEQR Technical Manual*. Based on CEQR guidelines, a preliminary screening analysis is to be conducted as a first step to predict whether the heat and hot water system boiler emissions would result in a significant impact. This CEQR screening procedure is applicable to buildings that are not less than 30 feet

from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

Screening Analysis

As outlined in the *CEQR Technical Manual,* 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 building's residential or non-residential use, the square footage of the development that would be served by the system, the height of the building served by the HVAC system, and the distance to the nearest building whose height is at least as great as the building served by the HVAC 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 projected building's HVAC system(s).

If the actual distance between a stack and the affected building is greater than the threshold distance for a building size, then that building passes the screening analysis (and no adverse significant impact is predicted). However, if the actual distance is less than the threshold distance for a building, then there is a potential for an adverse significant impact and a detailed analysis would be required.

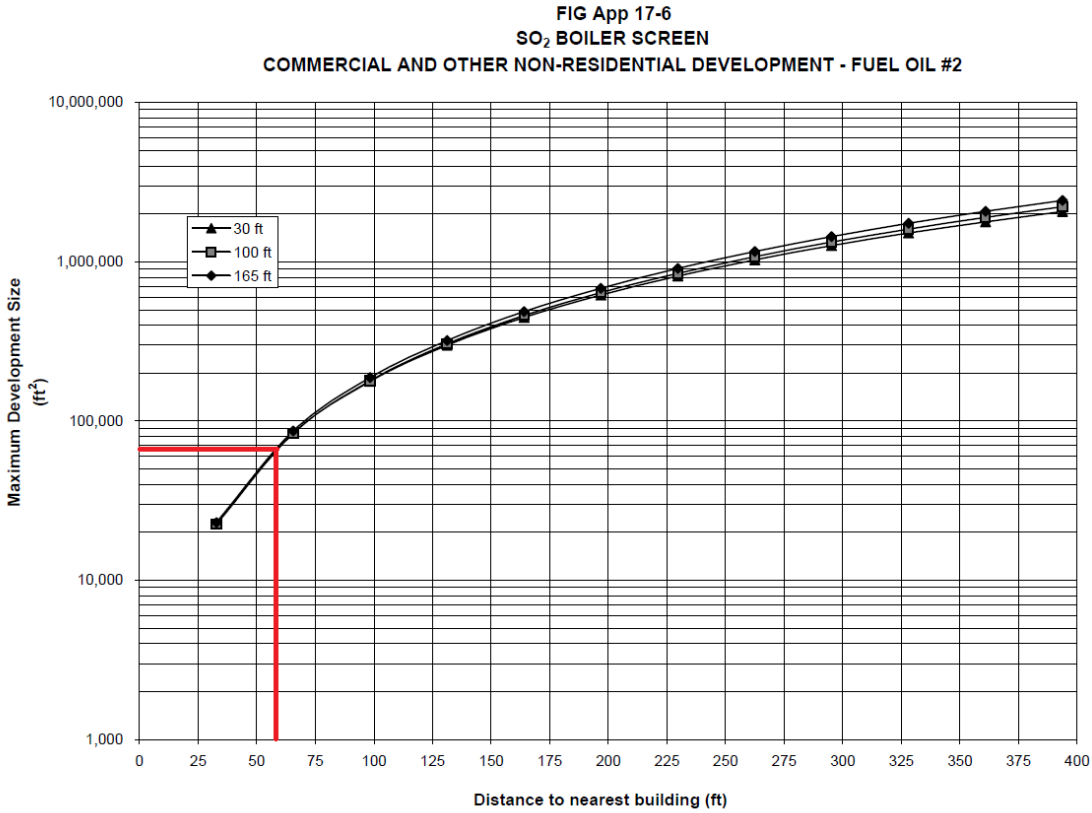
The Projected Development Sites are adjacent. As such, the screening analysis is not applicable, and a detailed analysis was required for the project-on-project scenario.

Screening analysis is only applicable to a single smokestack. However, for purpose of a cumulative analysis, emissions from multiple stacks could be combined in a single stack situated as close as possible to a receiving building. As such, the following screening analysis was conducted:

> The Projected Development Site 1 and 2 RWCDS: A single commercial building, 85 feet high, containing 67,830 gsf of floor area. Fuel Oil No. 2 would be the type of fuel used in the building's HVAC system. The bulkhead on top of each building was not considered for the screening analysis.

The CEQR nomographs depicted on Figure 17-6 of the *CEQR Technical Manual Appendices* was used for the screening analysis. This stationary source screen is a generic screen that considers the type of fuel used and the residential or nonresidential use of the building. According to 15 RCNY 2-15, no new boiler or burner installations may use No. 6 or No. 4 fuel oils. Therefore, the highest-emitting fuel that could be used in is No. 2 fuel oil. This nomograph depict the size of the development versus distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. Figures 17-1 (using Figure 17-6 of the *CEQR Technical Manual Appendices*) shows the screening analysis nomograph.

Figure 17-1. Cumulative Project-on-Existing - HVAC Screen Nomograph



The screening analysis Figure 17-1 (using Figure 17-6 of the *CEQR Technical Manual Appendices*) nomograph shows that a detailed analysis would be required for any existing building that is 85 feet or taller and at a distance less than 60 feet from the Projected Development Site 1 or 2. The 143-foot tall building located at 29 Columbia Heights (Block 2014, Lot 1), and the 119-foot tall building located at 28 Old Fulton Street (Block 202, lot 1) are within 60 feet of the Projected Development Sites. Therefore, the screening analysis failed for these buildings and a detailed analysis was required.

Detailed Analysis

Methodology

Four scenarios of dispersion modeling analyses were conducted to estimate the potential for significant impacts from the Projected Development Sites' HVAC stacks emissions: (i) The potential for impact of the Projected Development Site 1 on the Projected Development Site 2; (ii) The potential for impact of the Projected Development Site 2 on the Projected Development Site 1; (iii) The potential for impact of the Projected Development Site 1 and 2 combined on the 13-story high building located at 29 Columbia Heights (Block 204, Lot 1); and, (iv) The potential for impact of the Projected Development Site 1 and 2 combined on the residential building located at 28 Old Fulton Street (Block 202, lot 1).

These analyses were conducted using the latest version of EPA's AERMOD dispersion model. In accordance with CEQR guidance, these analyses were conducted assuming stack tip downwash, urban dispersion surface roughness, elimination of calms, and with and without downwash effect on plume dispersion. All analyses specified flat terrain. All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. 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 and Anemometer height of 9.4 meters was specified per Lakes Environmental Software Inc.

Per the *CEQR Technical Manual*, the pollutants of concern for natural gas fueled boilers are NO_2, $PM_{2.5}$, and SO_2. The boilers' energy intensities were calculated from the annual fuel usage, the developments' gross floor area, and the assumption that the developments' fuel use would resemble that of commercial buildings. Pertinent values were obtained from the *CEQR Technical Manual Appendices* for commercial buildings, and the assumption that all fuel would be consumed during the 100-day (or 2,400 hour) heating season. Table 17-3 shows the calculated emission rates, both short-term and annual.

Table 17-3. The Projected Development Sites Estimated Short-term and Annual Emission Rates

Site ID	Fuel	Pollutant	Averaging Time	Emission Rate (g/s)
Projected Development Site 1	Oil No. 2	NO_2	1-hour	8.73E-03
			Annual	2.39E-03
		$PM_{2.5}$	24-hour	9.30E-04
			Annual	2.55E-04
		SO_2	1-hour	9.30E-05
			Annual	2.55E-05
Projected Development Site 2	Oil No. 2	NO_2	1-hour	6.22E-03
			Annual	1.71E-03
		$PM_{2.5}$	24-hour	6.63E-04
			Annual	1.82E-04
		SO_2	1-hour	6.63E-05
			Annual	1.82E-05

The diameters of the stacks and the exhausts' exit velocities were assumed to be 0.0 feet and 0.001 meter per second, respectively, based on values obtained from the *CEQR Technical Manual*. The stacks exit temperatures were assumed to be 300°F (423°K), which is appropriate for boilers. The New York City Building Code (Building Code) requires that a rooftop stack should be at least 10 feet away from the edge of the roof and at least 3 feet higher than the roofline. These parameters were initially specified in the AERMOD models, where the stack of the source building was situated as close as possible to the receiving building. A stack set back distance from the receiving building was applied if an impact was predicted. In addition, Projected Development Site 1 assumed two stack's location for the cumulative impact concentrations on

the 29 Columbia Heights (Block 204, Lot 1) building; one as close as possible to the receiving building, the other as close as possible to the Projected Development Site 2 stack.

Projected Development Site 1, Projected Development Site 2, and the 13-story building located on 29 Columbia Heights (Block 204, Lot 1) were modeled as buildings that cover all their lot areas and rise to their maximum height. The building on 28 Old Fulton Road (Block 202, Lot 1) was modeled with three different tier heights of 85, 105, and 119 feet.

Receptors on the receiving building were placed all around the receiving building envelope, at 10 feet increments and at all floor levels. Ground floor receptors were placed at a height of 6 feet above grade. Receptors on the 29 Columbia Heights (Block 204, Lot 1) building were placed at heights of 6, 26, 46, 66, and in 10 feet increments up to 126 feet height above grade. Receptors on Projected Development Sites were placed at heights of 6, 21 feet and every 10 feet up to 81 feet above grade. Receptors on 28 Old Fulton Road (Block 202, Lot 1) were placed at heights of 6, 21, 32.5, 44, 55.5, 67, 78.5, 91, 101 feet above grade. The 91-foot high receptors were placed around the building envelope and on the western roof terraces; the 101-foot high receptors were placed around the building envelope and on the southern roof terrace.

Most AERMOD models specified generic emissions of 1 gram per second and maximum predicted concentrations. Other models were run with the calculated emission rates and the required output concentration, such as the 1-hour NO_2 with 8th highest concentration. In addition, the 1-hour NO_2 of the project-on-existing buildings utilized a Tier 3 approach. Table 17-4 shows the setting of each model.

Table 17-4. AERMOD Setting for Each Receiving Building Models

Receiving Building	Pollutant	Averaging Time	Emission (calculated/ generic)	Output
Projected Development Site 1	NO_2	1-hour	Generic	1st Highest
		Annual	Generic	Maximum
	$PM_{2.5}$	24-hour	Generic	1st Highest
		Annual	Generic	Maximum
	SO_2	1-hour	Generic	1st Highest
		Annual	Generic	Maximum
Projected Development Site 2	NO_2	1-hour	Calculated	8th Highest – Tier 1
		Annual	Generic	Maximum
	$PM_{2.5}$	24-hour	Generic	1st Highest
		Annual	Generic	Maximum
	SO_2	Annual	Generic	1st Highest

		1-hour	Generic	Maximum
28 Old Fulton Road (Block 202, Lot 1)	NO_2	1-hour	Calculated	8th Highest – Tier 3
		Annual	Generic	Maximum
	$PM_{2.5}$	24-hour	Generic	1st Highest
		Annual	Generic	Maximum
	SO_2	1-hour	Generic	1st Highest
		Annual	Generic	Maximum
29 Columbia Heights (Block 204, Lot 1)	NO_2	1-hour	Calculated	8th Highest – Tier 3
		Annual	Generic	Maximum
	$PM_{2.5}$	24-hour	Calculated	1st Highest
		Annual	Generic	Maximum
	SO_2	1-hour	Generic	1st Highest
		Annual	Generic	Maximum

NO_2 1-Hour NAAQS

Nitrogen oxide (NOx) emissions from combustion equipment consist predominantly of nitric oxide (NO) at the source. The NOx in these emissions are then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source). For determining compliance with the 1-hour standard, the EPA has developed a three-tiered modeling approach: Tier 1, the most conservative approach, assumes a full (100%) conversion of NOx to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NOx estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's PVMRM module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model. Per the CEQR Technical Manual, a Tier 1 approach is initially applied, followed by a Tier 2 application. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO_2 NAAQS were predicted.

For the Tier 3 approach 2014-2018 ozone hourly background concentrations were obtained from the NYSDEC Queens College, and the worst-case (highest concentration) CCNY and Botanical Gardens monitoring stations[7]. The maximum ozone hourly concentration was filled for missing values. 2015-2018 NO_2 hourly background concentrations were obtained from the NYSDEC for Queens College and IS52 monitoring stations. The 3-years of data were compiled, and a 5-year

[7] http://www.nyaqinow.net/

hourly background concentrations files were created following the EPA March 2011 Memorandum[8].

As previously mentioned, the Affected Area is located at approximately equal distances from the IS52 and Queens College monitoring Stations. As such, both stations NO_2 hourly background concentrations were considered for the Tier 3 approach. Ozone concentration is usually greater at a distance from a source. As such, the worst-case (highest concentration) ozone of the CCNY and Botanical Gardens monitoring stations was used with the IS52 NO_2 hourly background concentration.

Results of Dispersion Analyses

As previously mentioned, each pollutant averaging time was modeled twice—with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The Tier 1 NO_2 1-hour and annual averaging times modeled concentrations were added to the background concentrations. The Tier 3 NO_2 1-hour concentration includes the background concentration. The $PM_{2.5}$ 24-hour and annual averaging times modeled concentrations were compared with the NYC Guidelines threshold criterions. The SO_2 1-hour impact concentrations were evaluated with the NAAQS. Annual SO_2 impact concentrations were evaluated with the NYS threshold standard. Result of the HVAC project-on-project dispersion analyses are shown in Table 17-5.

Table 17-5. The Project-on-Project HVAC Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Projected Development Site 1 – on - Projected Development Site 2					
1-hour NO_2	59.26	108.7	**168**	**188**	NAAQS
Annual NO_2	0.67	32.9	**33.6**	**100**	NAAQS
24-hour $PM_{2.5}$	1.67	N.A.	**1.67**	**7.90**	*de minimis*
Annual $PM_{2.5}$	0.07	N.A.	**0.07**	**0.3**	*de minimis*
1-hour SO_2	1.50	16.3	**17.8**	**196**	NAAQS
Annual SO_2	0.01	1.5	**1.53**	**80**	NAAQS
Projected Development Site 2 – on - Projected Development Site 1					
1-hour NO_2	68.48	108.7	177	**188**	NAAQS
Annual NO_2	0.44	32.9	33.4	**100**	NAAQS
24-hour $PM_{2.5}$	1.19	N.A.	1.19	**7.90**	*de minimis*
Annual $PM_{2.5}$	0.05	N.A.	0.05	**0.3**	*de minimis*
1-hour SO_2	0.73	16.3	17.0	**196**	NAAQS
Annual SO_2	0.005	1.5	1.52	**80**	NAAQS

As seen in Table 17-5, no significant adverse air quality impacts were predicted for the project-on-project scenario; the NO_2 and SO_2 predicted concentrations are within the NAAQS and the $PM_{2.5}$ predicted concentrations do not exceed the *de minimis*. These results were predicted with no stacks set back distances.

[8] https://www.epa.gov/sites/production/files/2015-07/documents/appwno2_2.pdf

The Projected Development Site 1 and 2 cumulative impact (project-on-existing) on the 29 Columbia Heights (Block 204, Lot 1) building required the Projected Development Site 1 stack set back distance. This stack set back distance were specified in the E-Designation below. Result of the HVAC project-on-existing dispersion analyses are shown in Table 17-6.

Table 17-6. The Project-on-Existing HVAC Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Projected Development Site 1 & 2 – on - 28 Old Fulton Road (Block 202, Lot 1)					
1-hour NO_2	179.3		**179**	**188**	NAAQS
Annual NO_2	0.97	32.4	33.9	**100**	NAAQS
24-hour $PM_{2.5}$	4.70	N.A.	4.70	**7.90**	*de minimis*
Annual $PM_{2.5}$	0.10	N.A.	0.103	**0.3**	*de minimis*
1-hour SO_2	1.94	16.3	18.2	**196**	NAAQS
Annual SO_2	0.01	1.5	1.53	**80**	NAAQS
Projected Development Site 1 & 2 – on - 29 Columbia Heights (Block 204, Lot 1)					
1-hour NO_2	164.2		**164**	**188**	NAAQS
Annual NO_2	2.63	32.4	**35.6**	**100**	NAAQS
24-hour $PM_{2.5}$	5.48	N.A.	**5.48**	**7.90**	*de minimis*
Annual $PM_{2.5}$	0.28	N.A.	**0.28**	**0.3**	*de minimis*
1-hour SO_2	3.51	16.3	**19.8**	**196**	NAAQS
Annual SO_2	0.03	1.5	**1.55**	**80**	NAAQS

As seen in Table 17-6, the NO_2 and SO_2 predicted concentrations are less than the NAAQS and the $PM_{2.5}$ concentrations do not exceed the *de minimis*. Therefore, with (E) Designations in place, the emissions of the Projected Development Site 1 and 2 HVAC systems would not pose a significant adverse impact to other buildings in the area.

(E) Designation

Block 202, Lot 14 (Projected Development Site 1): Any new commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest tier and at a minimum of 88 feet above the grade, and at least 40 feet from the southern lot line facing Doughty Street to avoid any potential significant adverse air quality impacts.

Block 202, Lot 18 (Projected Development Site 2): Any new commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level, and at a minimum of 88 feet above the grade to avoid any potential significant adverse air quality impacts.

INDUSTRIAL SOURCE

As outlined in the *CEQR Technical Manual*, projects that would introduce new uses near industrial sources may result in potentially significant adverse air quality impacts. The study

area considers industrial sources within 400 feet of the Development Site. Industrial sources are identified as commercial, industrial, or processing facilities that are likely to have New York City Department of Environmental Protection (DEP) processing type permits. However, some facilities operate with no DEP permit.

No facility in the study area has a processing type permit. In addition, the land survey study identified no likely processing facility, such as an auto body facility or woodworking facility (except the Projected Development Sites), in the study area. Therefore, the proposed project would not be affected by industrial source emissions and no further analysis for air toxics is warranted.

MAJOR/LARGE SOURCE

Major emission sources are identified as those sources located at Title V facilities that require Prevention of Significant Deterioration permits. Large emission sources are identified as sources located at facilities which require a State facility permit, such as solid waste or medical waste incinerators, asphalt and concrete plants, or large printing facilities. Odor producing facilities are considered major sources for the purpose of the air quality analysis. Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

No major or large source was identified within 1,000 feet of the proposed project. Therefore, no analysis was required, and no significant adverse air quality impacts are expected from these types of sources.

CONCLUSION

The air quality analysis addressed mobile sources, stationary HVAC system(s), and existing industrial and major/large sources. The results of the analyses are summarized below.

- No significant adverse air quality impacts are expected to the proposed project from the emissions of vehicles travelling on the Brooklyn Bridge and the Brooklyn Queens Expressway.
- Emissions from project-related vehicle trips would not cause significant air quality impacts to receptors at the local or neighborhood scale.
- Emissions from project-related heating, ventilation, and air conditioning systems (HVACs) would not cause significant air quality impacts to receptors at the local scale with (E) - Designations in place.
- No significant adverse air quality impacts are anticipated from industrial sources to the proposed project.
- No significant adverse air quality impacts are anticipated from existing large or major sources to the proposed project.

19. NOISE

Introduction

Two types of potential noise impacts are considered under CEQR. These are potential mobile source and stationary source noise impacts. Mobile source impacts are those which could result from a proposed project adding a substantial amount of traffic to an area. Potential stationary source noise impacts are considered when a Proposed Action would cause a stationary noise source to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor, if the project would include unenclosed mechanical equipment for building ventilation purposes, or if the project would introduce receptors into an area with high ambient noise levels.

Mobile Source

Relative to mobile source impacts, a noise analysis would only be required if a proposed project would at least double existing passenger car equivalent (PCE) traffic volumes along a street on which a sensitive noise receptor (such as a residence, a park, a school, etc.) was located. Residential uses are located along Old Fulton and Doughty Streets, which would provide vehicular access to the Affected Area. Traffic generated by the Proposed Action along Old Fulton and Doughty Streets would therefore be of concern relative to mobile source noise impacts.

A detailed mobile source analysis is typically conducted when PCE values are at least doubled between the existing and the with-action conditions during the peak hour at receptors most likely to be affected by the Proposed Action. The action isn't expected to double PCEs compared to the no action scenario. As explained in the Transportation section above, the Proposed Action would generate less than 50 peak hour vehicle trips. Old Fulton and Doughty Streets are lined with several mid-size and large multiple dwellings, commercial buildings, and parking lots generating substantial traffic volumes from their residents, patrons, and employees. Therefore, PCE values along Old Fulton and Doughty Streets would not be doubled by the increase in peak hour vehicle trips generated by the Proposed Action, and a detailed mobile source analysis is not warranted.

No significant adverse mobile source noise impacts would be generated by the Proposed Action.

Stationary Source

Potential Impacts of Proposed Action on Surrounding Development

The Proposed Action includes the development of a five-story plus cellar approximately 39,600 gsf commercial building on Projected Development Site 1 with retail on its cellar through second floors and offices on its third through fifth floors. It also includes the development of an approximately 28,230 gsf (5.0 FAR) 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices on Projected Development Site 2. It would not cause a substantial stationary source, such as unenclosed mechanical equipment for building ventilation purposes or a playground, to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor. The projected developments would not include any unenclosed heating or ventilation equipment that could adversely impact other sensitive uses in

the surrounding area. In addition, the developments would not include any active outdoor recreational space that could result in stationary source noise impacts to the surrounding area.

Potential Impacts of Surrounding Development on the Proposed Project

The Proposed Action would not introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses. No such uses are located within 400 feet of the project site. However, DCP has requested an assessment of ambient noise in the immediately surrounding area to determine whether occupants of the commercial building on Projected Development Sites 1 and 2 would be subjected to unacceptable noise levels. The results of the noise analysis report dated April 4, 2018 are summarized below.

Noise Study

Project Area

Equity Environmental conducted noise monitoring to support an Environmental Assessment for a rezoning of the Affected Area on March 29, 2018. This noise assessment was conducted on Block 202, Lot 18 at 61 Doughty Street which is situated between Old Fulton Street and Doughty Street in Brooklyn. Old Fulton Street is a two-way two-lane road with its intersections controlled by traffic lights. Doughty Street is a one-way single lane road with its intersections controlled by stop signs.

This noise assessment is provided for 60 Old Fulton Street, known as Projected Development Site 2. The site is projected to be developed under the Reasonable Worst-Case Development Scenario as a 28,230 gsf, 5-story plus bulkhead commercial building with retail on the cell and ground floor and offices above. The projected development warrants an assessment of the potential for adverse effects from ambient noise. The noise assessment would also apply to Projected Development Site 1 at 50 Old Fulton Street which is proposed to be developed with a five-story plus cellar approximately 39,600 gsf commercial building with retail on its cellar through second floors and offices on its third through fifth floors. The projected development warrants an assessment of the potential for adverse effects from ambient noise. The development on Projected Development Sites 1 and 2 would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. Therefore, this noise assessment is limited to an assessment of ambient noise that could adversely affect occupants the development on Projected Development Sites 1 and 2.

Framework of Noise Analysis

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

Because the human ear can detect such a wide range of sound pressures, sound pressure is converted to sound pressure level (SPL), which is measured in units called decibels (dB). The decibel is a relative measure of the sound pressure with respect to a standardized reference quantity. Because the dB scale is logarithmic, a relative increase of 10 dB represents a sound

pressure that is 10 times higher. However, humans do not perceive a 10-dB increase as 10 times louder. Instead, they perceive it as twice as loud.

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and C-weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high frequency bands are significantly affected by C-weighting.

Table Noise-1: Noise Levels of Common Sources

Table 19-1 Noise Levels of Common Sources	
Sound Source	**SPL (dB(A))**
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A) Is perceived as a doubling or halving in SPL.	
Source: 2014 CEQR Technical Manual	

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 change is perceived as a doubling or halving of the noise level.

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

- Leq is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity, level. High noise levels during a measurement period will have a greater effect on the Leq than low noise levels. Leq has an advantage over other descriptors because Leq values from various noise sources can be added and subtracted to determine cumulative noise levels.
  - Leq(24) is the continuous equivalent sound level over a 24-hour time period.

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (LX). Examples include L10, L50, and L90. L10 is the A-weighted sound level that is exceeded 10% of the measurement period.

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law (i.e., the SPL changes in inverse proportion to the square of the distance from the sound source). In a large open area with no obstructive or reflective surfaces, it is a general rule that at distances greater than 50 feet, the SPL from a point source of noise drops off at a rate of 6 dB with each doubling of distance away from the source. For "line" sources, such as vehicles on a street, the SPL drops off at a rate of 3 dBA with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate also will vary with both terrain conditions and the presence of obstructions in the sound propagation path.

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEPO-CEQR) noise standards at the exterior façade to achieve interior noise levels of 45 dB(A) or below. CEPO-CEQR Noise Standards classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable. As noted in the *CEQR Technical Manual*, these standards are the basis for classifying noise exposure into the following categories based on the L10 measured directly outside the projected development site:

Table Noise-2: Attenuation Values to Achieve Acceptable Interior Noise Levels[9]

	Marginally Unacceptable				Clearly Unacceptable
Noise Level with Proposed Project	70 < L10 ≤ 73	73 < L10 ≤ 76	76 < L10 ≤ 78	78 < L10 ≤ 80	80 < L10
Attenuation[10]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	36 + (L10 – 80)^2 dB(A)

Source: *CEQR Technical Manual*

Measurement Location and Equipment

Because the predominant noise sources in the area of the proposed project consist of vehicular movements, noise monitoring was conducted during peak vehicular travel periods (AM, Midday, PM). Pursuant to *CEQR Technical Manual* methodology, measurement periods during the AM, Midday, and PM peak hours were conducted along the Block 202, Lot 18 frontage with Old Fulton St and Hicks Street, and Doughty Street. Due to the Subject Property's proximity to the Brooklyn Bridge and BQE, Old Fulton Street and Hicks Street locations were monitored for periods of 1-hour each during the AM, Midday, and PM peak hours. As Figure 1 shows, Location One (1) placed the noise monitoring equipment at the center of Block 202, Lot 18 on Old Fulton Street facing the Brooklyn Bridge for 1-hour, Location Two (2) placed the noise monitoring equipment on the sidewalk at the center of Block 202, Lot 18 on Hicks Street facing the BQE for 1-hour, and Location Three (3) placed the noise monitoring equipment on the sidewalk at the center of Block 202, Lot 18 on the sidewalk facing Doughty Street For 20-minutes.

Noise monitoring was conducted using a Type 1 Casella CEL-633 sound meter with wind screen. The monitors were placed on a tripod at a height of approximately three feet above the ground, away from any other noise-reflective surfaces. The monitors were calibrated prior to and following each monitoring session. Periods of peak vehicular traffic around the subject site constitute a worst-case condition for noise at the project site.

[9] The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.

[10] Required attenuation values increase by 1 dB(A) increments for L10 values greater than 80 dBA.

Figure 1: Noise Monitoring Locations

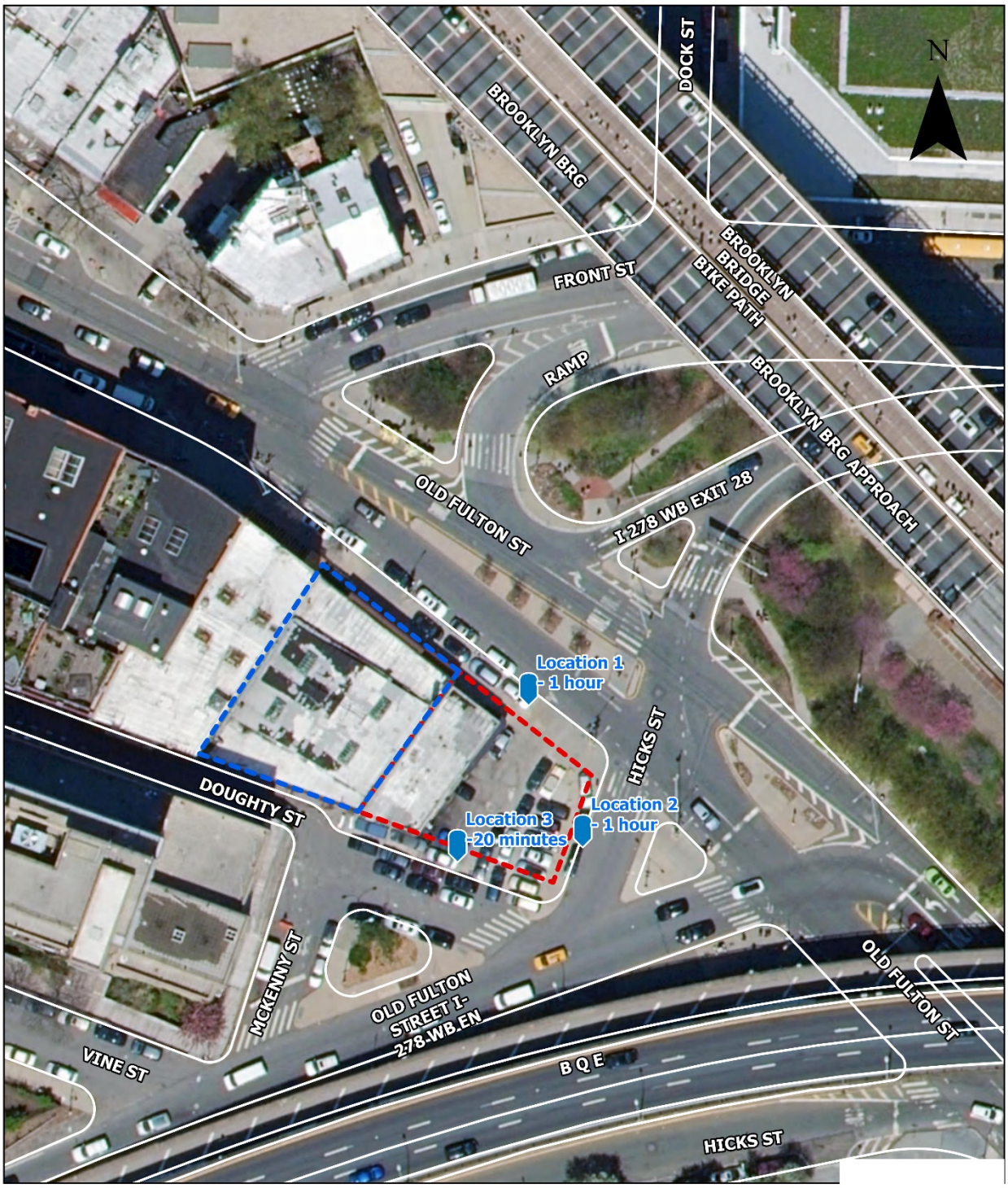


Photo 1: *Noise Monitoring Location One (1) on Old Fulton Street Facing the Brooklyn Bridge*



Photo 2: *Noise Monitoring Location Two (2) on Hicks Street Facing the BQE*



Photo 3: ***Noise Monitoring Location Three (3) on Doughty Street***



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Thursday March 29th, 2018. Although it was intermittently raining during the day, the weather was dry and wind speeds were moderate during all monitoring periods. The sound meters were calibrated before and after each monitoring session.

Existing Conditions

Based on the noise measurements taken around the Project Area, the predominant source of noise is vehicular traffic. The level of noise is marginally unacceptable at Locations One (1), Two (2), and Three (3).

Table Noise-3,4,5 *below contain the results for the measurements taken at the Project Site:*

Note: **Bold** denotes L_{10} noise level exceedances, according to Table 19-2 of the *CEQR Technical Manual*

Table Noise-3 (1 of 3): Noise Levels (dB)

Location 1: *Noise Levels on the lot frontage of Old Fulton Street*

Thursday March 29, 2018			
Time	7:30 am – 8:30 am	12:00 pm – 1:00 pm	4:30 pm – 5:30 pm
L_{max}	89.0	106.8	106.6
L_{10}	**73.0**	**73.5**	**74.5**
L_{eq}	70.9	73.4	74.2
L_{50}	69.5	69.0	67.5
L_{90}	68.0	66.5	64.0
L_{min}	64.9	64.0	60.9

Table Noise-4 (2 of 3): Noise Levels (dB)

Location 2: *Noise Levels on the lot frontage on Hicks Street*

Thursday, March 29, 2018			
Time	7:30 am – 8:30 am	12:00 pm – 1:00 pm	4:30 pm – 5:30 pm
L_{max}	96.8	100.7	97.3
L_{10}	**76.5**	**76.0**	**74.0**
L_{eq}	74.3	74.8	72.0
L_{50}	72.5	73.0	69.5
L_{90}	70.5	71.0	66.0
L_{min}	67.3	68.2	61.0

Table Noise-5 (3 of 3): Noise Levels (dB)

Location 3: *Noise Levels on the lot frontage on Doughty Street*

Thursday March 29, 2018			
Time	8:30 pm - 9:00 pm	1:00 pm – 1:30 pm	4:30 pm - 5:00pm
L_{max}	83.4	88.2	81.3
L_{10}	**74.5**	**73.5**	**70.0**
L_{eq}	71.9	71.9	66.9
L_{50}	70.5	70.5	65.0
L_{90}	68.0	68.0	61.5
L_{min}	63.4	65.3	58.6

Table Noise-6 contains noise monitoring data referenced from a separate project, the Industry City EIS. The following 24-hour noise monitoring was conducted by AKRF on November 21st, 2017.

Table Noise-6 (4 of 4): Noise Levels (dB)

Start Date & Time	Leq	L1	L10	L50	L90
12:00 AM	81.7	86.2	83.4	80.7	77.1
1:00 AM	79.5	85.1	82.3	78.7	74.2
2:00 AM	79.3	85.5	82.4	78.1	73.2
3:00 AM	79.4	86	82.5	78.1	73.2
4:00 AM	80.9	86.6	83.3	80	76.5
5:00 AM	81.7	87	84	81	77.9
6:00 AM	81.9	85.8	83.9	81.6	78.4
7:00 AM	82.1	86.3	83.7	81.6	79.4
8:00 AM	81.8	86.5	83.4	81.4	79.3
9:00 AM	91.3	85.5	83.1	80.9	78.1
10:00 AM	81.3	85.3	82.8	80.3	77.5
11:00 AM	80.9	85.9	82.8	80.3	77.8
12:00 PM	80.5	84.9	82.2	80.1	77.6
1:00 PM	80.8	84.4	82.4	80.5	78.8
2:00 PM	81	85.4	52.1	80.6	79.1
3:00 PM	80.7	85.1	82.5	80.3	78.1
4:00 PM	80.2	84.8	81.5	79.7	77.9
5:00 PM	77.2	83.6	79	76.4	73.1
6:00 PM	77.3	82.6	79.2	76.5	72.9
7:00 PM	78.2	83.2	80.4	77.7	73.5
8:00 PM	80.7	83.7	82	80.5	79.1
9:00 PM	80.7	83.9	82.2	80.5	78.8
10:00 PM	81.4	84.9	82.8	81.2	79.5
11:00 PM	81.7	85	83.3	81.5	79.4

Conclusions

The 2014 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a commercial such as would occur under the proposed action, an L_{10} of between 65 and 70 dB(A) is identified as a marginally acceptable general external exposure. The highest recorded L_{10} at Location One (1) of the subject property was 74.5 dB during the evening monitoring period. The highest recorded L_{10} at Location Two (2) of the subject property was 76.5 dB during the morning period. The highest recorded L_{10} at Location Three (3) of the subject property was 74.5 dB during the morning period. The highest recorded L_{10} value as shown in Table 6 above was 84 dBA at 5 AM.

Based on the above readings, an (E) designation requirement would be applied to avoid any potential impacts associated with noise, the Proposed Action will place an (E) designation for noise on the following properties:

The following (E) designation (E-519) noise text would apply to Block 202, Lots 18 and 14:

Block 202, Lot 14 (Projected Development Site 1): To ensure an acceptable interior noise environment, future commercial office uses must provide a closed-window condition with a minimum of 26 dBA window/wall attenuation on all facades for floors up to 25 feet from the ground and 35 dBA of attenuation on all facades for floors above 25 feet from the ground to ensure an interior noise level not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Block 202, Lot 18 (Projected Development Site 2): To ensure an acceptable interior noise environment, future commercial office uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on eastern facade facing Hicks Street or facades within 50 feet from Hicks street facing Old Fulton Street or Doughty Street for floors up to 25 feet from the ground and 26 dBA of attenuation on all other facades for floors up to 25 feet from the ground and 35 dBA of attenuation on all facades for floors above 25 feet from the ground to ensure an interior noise level not greater than 50 dBA for commercial office uses. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

The Department of City Planning will record the above-referenced (E) designation related to noise with the Mayor's Office of Environmental Remediation (OER) prior to the City Planning Commission's approval of the Proposed Action."

With the implementation of the (E) designation, no significant adverse impacts related to noise would occur. Therefore, the action would not result in any potentially significant adverse stationary or mobile source noise impacts, and further assessment is not warranted.

22. CONSTRUCTION

Based on *CEQR Technical Manual* guidelines, where the duration of construction is expected to be short-term (less than two years), any impacts resulting from construction generally do not require detailed assessment. Construction of the proposed project is expected to be completed within 18-24 months. However, a preliminary screening of construction impacts resulting from the project is potentially required because the Proposed Action involves construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out and construction activities on the site would be occurring within 400 feet of historic and cultural resources, as identified in the Historic and Cultural Resources section above.

Air Quality and Noise

According to the *CEQR Technical Manual*, an assessment of air quality and noise for construction activities is likely not warranted if the project's construction activities:

- *Are considered short-term (less than two years);*
- *Are not located near sensitive receptors; and*
- *Do not involve construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final built-out.*

Construction of development on Projected Developments Sites 1 and 2 is expected to be completed within 18-24 months and would therefore be considered to be short term. Both sites are separated from the nearest sensitive receptors, that being the 9-story multiple dwelling on the western end of the block (Block 202, Lot 1), by the intervening 4-story warehouse building on Block 202, Lot 12. Construction of the projected developments would therefore have minimal impacts on nearby sensitive receptors.

The Proposed Action includes development on two adjacent sites, Projected Development Sites 1 and 2. It is anticipated that development on Projected Development Site 1 would be completed and occupied before construction on Projected Development Site 2 is completed. Therefore, occupants of the proposed retail and office building on Projected Development Site 1 could experience noise and air quality impacts from construction on Projected Development Site 2. However, as construction of Projected Development Site 2 would take approximately 9-12 months, these impacts would be considered short term. In addition, commercial office and retail uses are not considered to be sensitive uses. Therefore, air quality and noise impacts on Projected Development Site 1 resulting from construction of Projected Development Site 2 would not be considered to be significant.

Historic and Cultural Resources

The *CEQR Technical Manual* indicates that construction impacts may occur to historic and cultural resources if in-ground disturbances or vibrations associated with project construction could undermine the foundation or structural integrity of nearby resources. In the future with the project, cellar and sub-cellar excavation would occur on Projected Development Site 1. Minimal subsurface ground disturbance would occur on Projected Development Site 2 as the projected development on this site is not anticipated to contain a cellar or sub-cellar. Therefore,

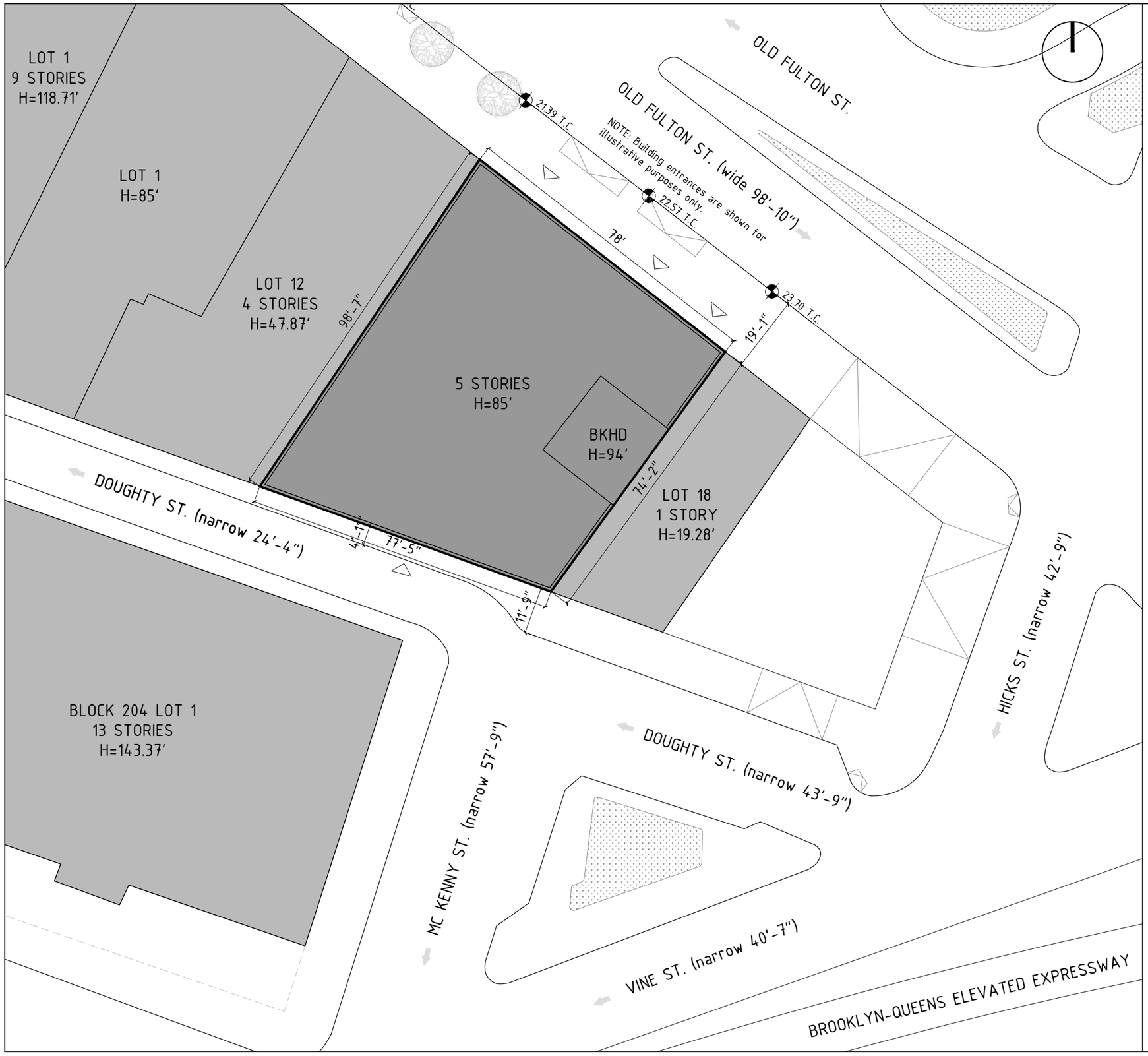
the Proposed Action would involve some in-ground disturbance and associated vibration as part of project construction.

A construction assessment may be needed for historic and cultural resources if the project involves construction activities within 400 feet of a historic resource. LPC-approved construction procedures would be followed to protect historic structures in the area from damage from vibration, subsidence, dewatering, or falling objects. Construction procedures would comply with the NYC Department of Buildings memorandum Technical Policy and Procedure Notice # 10/88 (TPPN # 10/88) and with the site safety requirements of the 2008 NYC Building Code, as amended, which stipulate that certain procedures be followed for the avoidance of damage to historic and other structures resulting from construction. TPPN # 10/88 pertains to any structure which is a designated NYC Landmark or located within a historic district, or listed on the National Register of Historic Places and is contiguous to or within a lateral distance of 90 feet from a lot under development or alteration. No adverse construction impacts would occur to any historic resources within 400 feet of the project site.

On the basis of the above analysis, the Proposed Action would not have any potentially significant adverse construction impacts, and further analysis would not be warranted.

APPENDIX

Architectural Plans



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50 OLD FULTON STREET

BOROUGH: KINGS
CITY: BROOKLYN
BLOCK: 202
LOT: 14

SITE PLAN (illustrative)

DATE PREPARED: January 22, 2018
LAST REVISED:

SHEET No 01

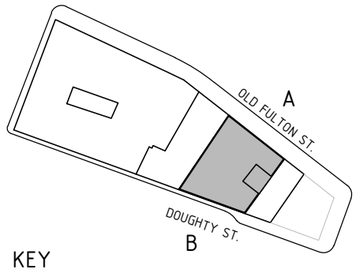
NOTES:

LEGEND:
- zoning lot
- development lot
- proposed max. building envelope
- curb cut
- tree
- building entrance

1"=25'

GRAPHIC SCALE: 0 25 50 75

NOTE:
Applicant's stamp and seal corresponds to the information regarding the development site, zoning lot, and related curb cuts. Information regarding the surronding properties is for illustrative purposes only.



KEY

A NORTH ELEVATION



B SOUTH ELEVATION

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50 OLD FULTON STREET

BOROUGH: KINGS
CITY: BROOKLYN
BLOCK: 202
LOT: 14

ELEVATIONS (illustrative)

DATE PREPARED: January 22, 2018
LAST REVISED:

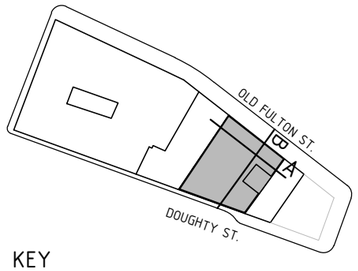
SHEET No 02

NOTES:

LEGEND:
zoning lot
curb level
base plane

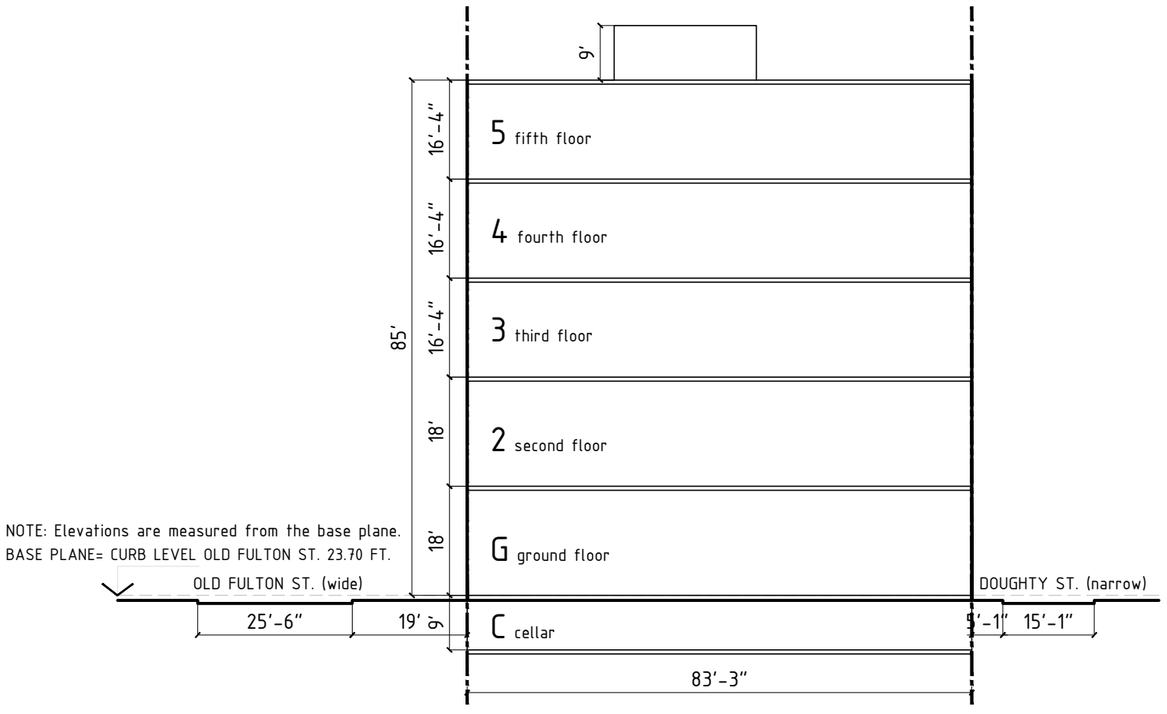
GRAPHIC SCALE: 0 25 50 75

NOTE:
Applicant's stamp and seal corresponds to the information regarding the development site, zoning lot, and related curb cuts. Information regarding the surronding properties is for illustrative purposes only.



KEY

SECTION A



SECTION B

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50 OLD FULTON STREET

BOROUGH: KINGS
CITY: BROOKLYN
BLOCK: 202
LOT: 14

SECTIONS (illustrative)

DATE PREPARED: January 22, 2018
LAST REVISED:

SHEET No 03

NOTES:

LEGEND:
zoning lot
base line
curb level

GRAPHIC SCALE: 0 25 50 75

NOTE:
Applicant's stamp and seal corresponds to the information regarding the development site, zoning lot, and related curb cuts. Information regarding the surronding properties is for illustrative purposes only.

ZR	ITEM/DESCRIPTION	PERMITTED/REQUIRED	PROPOSED	COMPLIANCE/LACK OF COMPLIANCE AND NOTES
	USES			
42-10 et seq.	Permitted used groups	U.G. 4,5,6,7,8,9,10 11,12,13.14,16,17	U.G. 6A (retail) 6C (offices)	Complies
	FLOOR AREA RATIO (FAR)			
43-10	Maximun commercial FAR	5.0	5.0	Complies
	Maximum manufacturing FAR	5.0	0	Complies
	Maximum community facility FAR	6.5	0	Complies
	FLOOR AREA			
43-10	Maximum commercial Floor Area (sf)	32,965	32,965	Complies
	Maximum manufacturing Floor Area (sf)	32,965	0	Complies
	Maximum community facility Floor Area (sf)	42,854.5	0	Complies
	LOT COVERAGE			
43-00	Maximum Lot Coverage	n/a	100%	Complies
	YARDS			
43-25	Required Side Yards	None required	None proposed	Complies
43-28	Required Rear Yard/Rear Yard Equivalent	None required on a through lot less than 110' deep	None proposed	Complies
	HEIGHT AND SETBACK			
43-43	Maximum Base Height	85' or 6 stories, whichever is less	85'	Complies
	Required Setback	20' from a narrow street, 15' from a wide street	n/a	Complies
	Maximum Building Height	Sky exposure plane beggining above maximum base height	85'	Complies
	PARKING AND LOADING			
44-21	Required Parking Spaces	Non required for general retail or services uses or low traffic-generating uses	None proposed	Complies
44-52	Required Loading Berths	Non required for the first 100,000 sf of offices; None required for the first 25,000 sf of retail	None proposed	Complies

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50 OLD FULTON STREET

BOROUGH: KINGS
COMMUNITY DISTRICT: BROOKLYN COMMUNITY DISTRICT 2
CITY COUNCIL DISTRICT: COUNCIL DISTRICT 33
BLOCK: 202
LOT: 14
ZONING DISTRICT: M1-5 (proposed)
ZONING MAP: 12D
ZONING LOT AREA: 6593 SF.

ZONING ANALYSIS (illustrative)

REQUESTED ACTION: Zoning map amendment (M2-1 to M1-5)

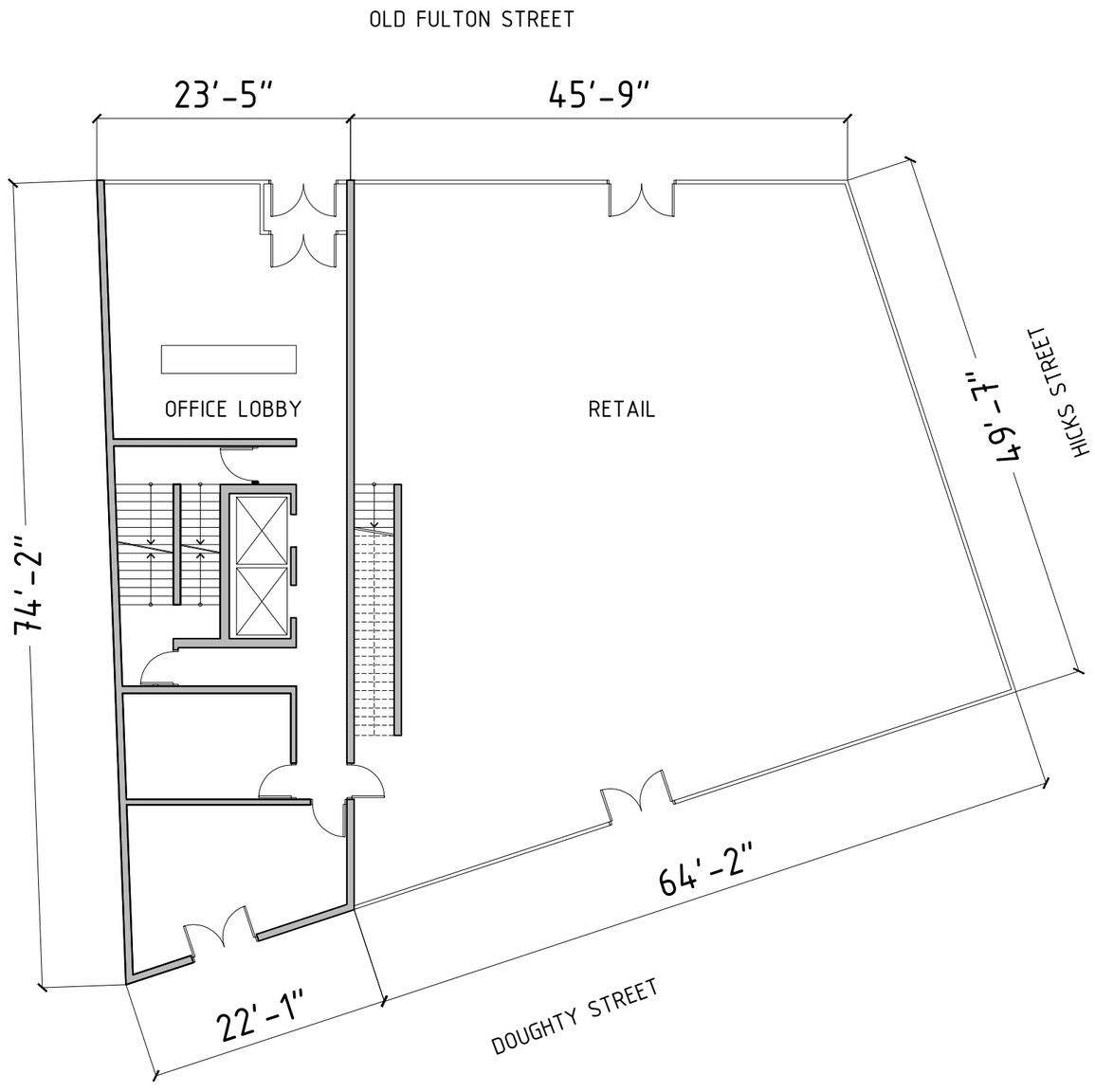
DATE PREPARED: January 22, 2018
LAST REVISED:

SHEET No 04

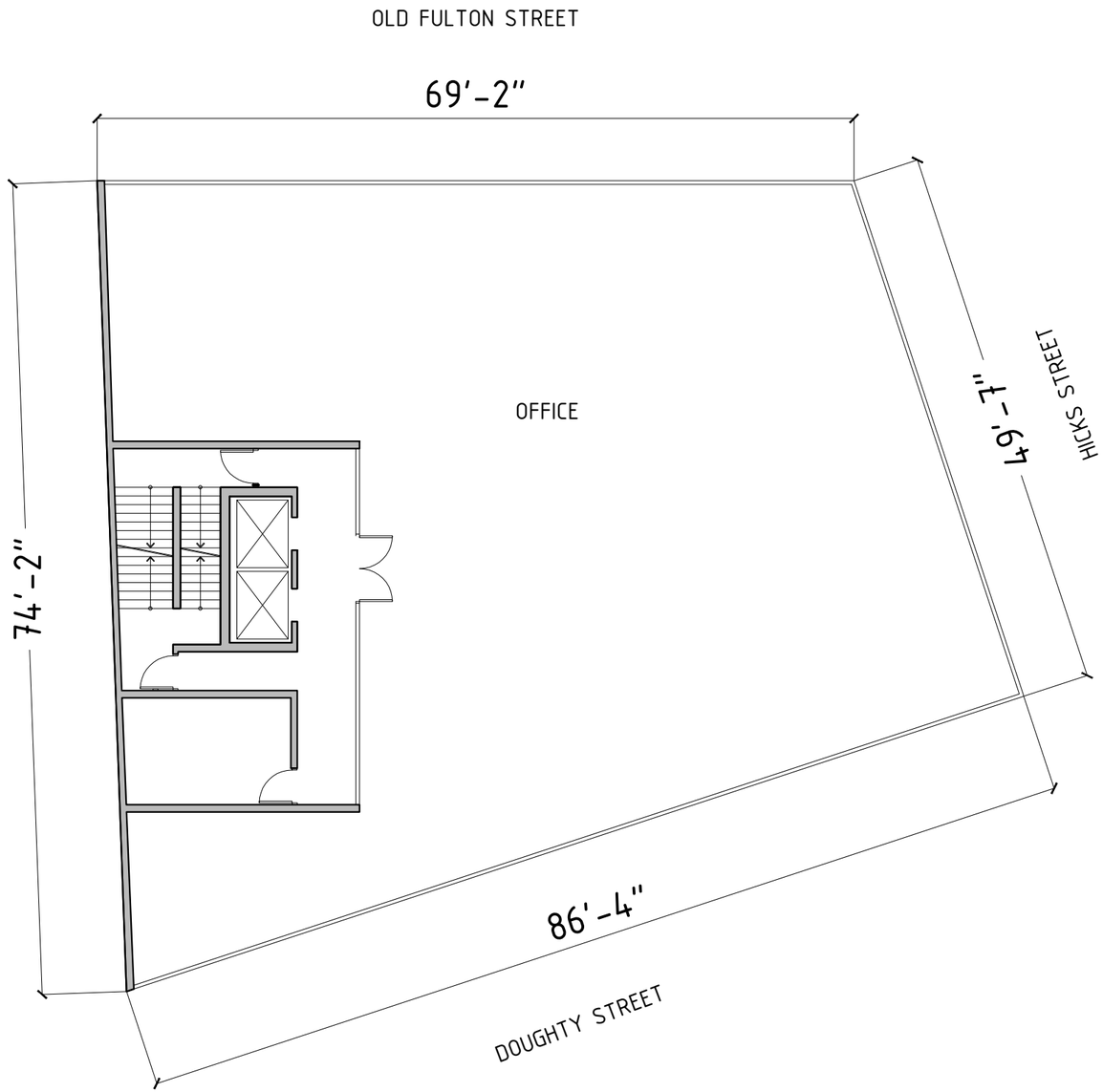
NOTES:


LOT 1
9 STORIES
H=118.71'
LOT 1
H=85'
LOT 12
4 STORIES
H=47.87'
LOT 14
5 STORIES
H=85'
BKHD
H=94'
74'-2"
BKHD
H=94'
LOT 18
5 STORIES
H=85'
69'-1"
49'-7"
86'-4"
OLD FULTON ST.
OLD FULTON ST. (wide 98'-10")
21.39 T.C.
22.51 T.C.
23.70 T.C.
NOTE: Building entrances are shown for illustrative purposes only.
DOUGHTY ST. (narrow 24'-4")
BLOCK 204 LOT 1
13 STORIES
H=143.37'
MC KENNY ST. (narrow 57'-9")
DOUGHTY ST. (narrow 43'-9")
HICKS ST. (narrow 42'-9")
VINE ST. (narrow 40'-7")
BROOKLYN-QUEENS ELEVATED EXPRESSWAY

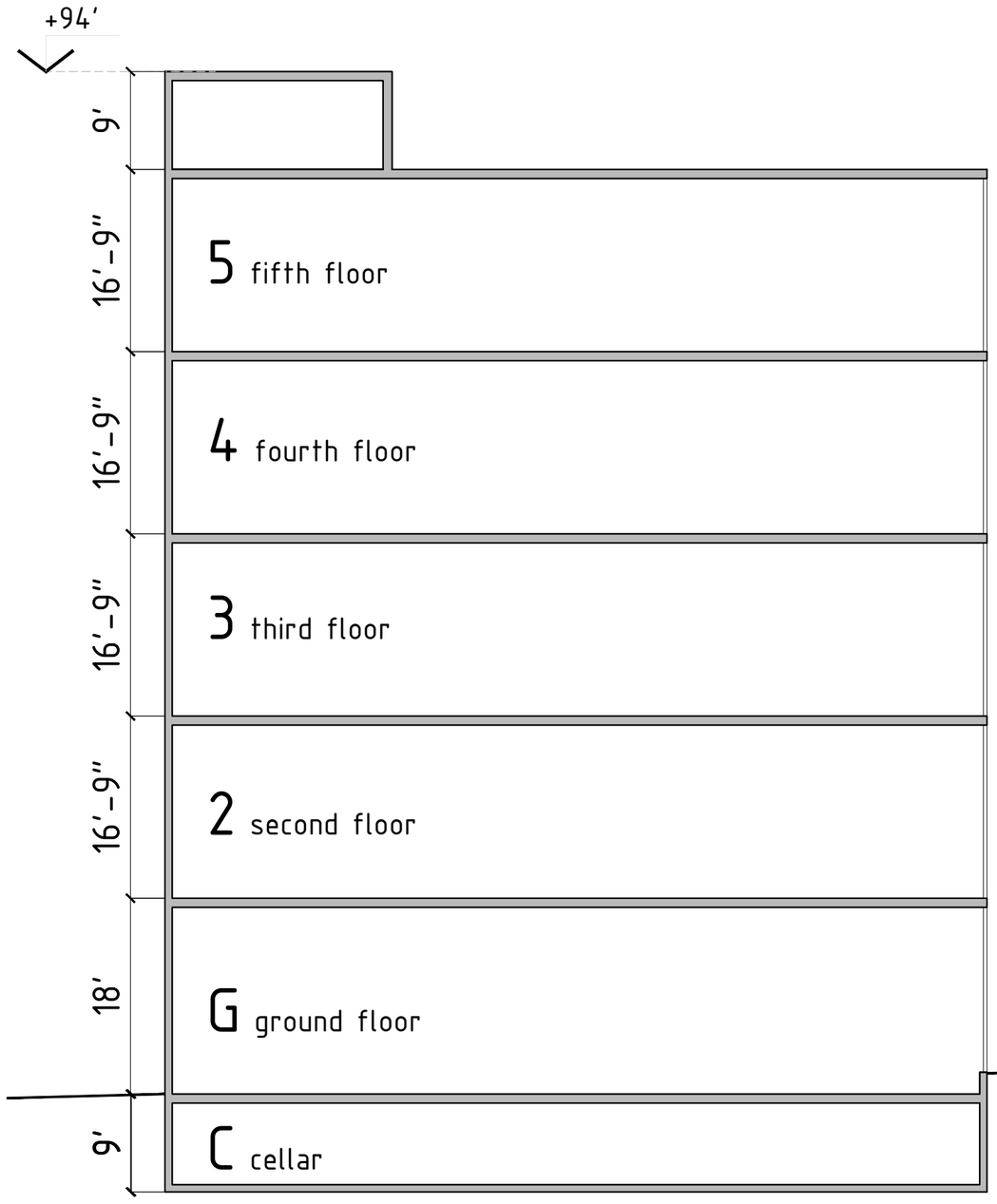
SITE PLAN

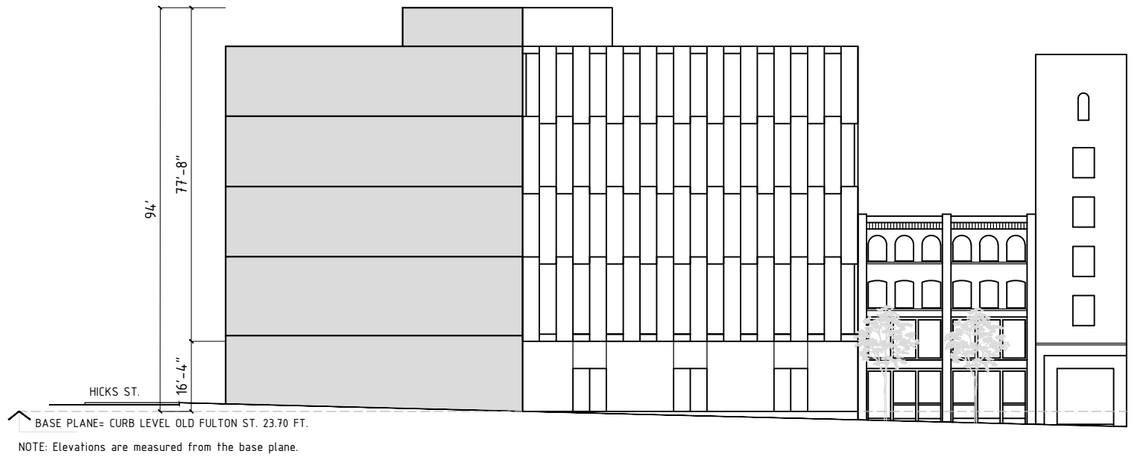


1ST FLOOR PLAN
FLOOR HEIGHT 18'
4705 SQ. FT.

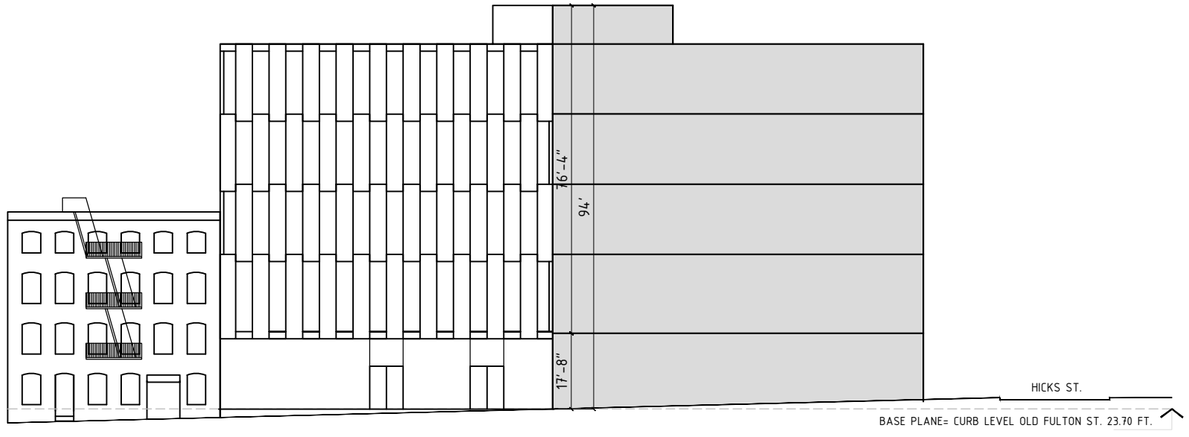


2RD-5TH FLOOR PLAN
FLOOR HEIGHT 16'9''
4705 SQ. FT.

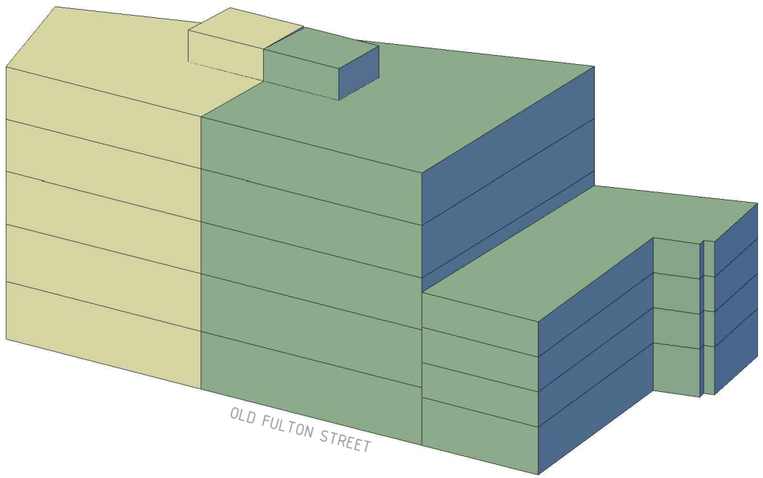




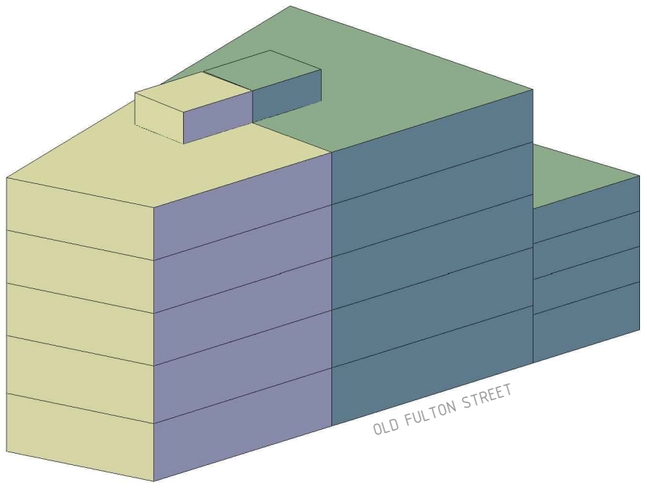
NOTE: Elevations are measured from the base plane.



NOTE: Elevations are measured from the base plane.



AREA CHART				
FLOOR	FLOOR HEIGHT	ELEVATION	FLOOR PLATE	ZFA*
1	18'	18'	4705	4563.85
2	18'	36'	4705	4563.85
3	16' - 4''	52' - 4''	4705	4563.85
4	16' - 4''	68' - 8''	4705	4563.85
5	16' - 4''	85'	4705	4563.85
TOTAL	84' - 8''		23525	22819.25
				*ASSUMES 3% MECHANICAL DEDUCTION
Lot Area				4705
MAX ZFA Permited (5.0 FAR)				23525



OLD FULTON STREET AXONOMETRIC VIEWS

WATERFRONT APPENDIX

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

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, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Alwest Old Fulton, LLC

Name of Applicant Representative: John Strauss, Compliance Solutions Services, LLC

Address: 348 West 57th Street, #214, New York, NY 10019

Telephone: 212-741-3432 Email: jstrauss.css@gmail.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The Project Site, Block 202, part of Lot 14 in Brooklyn, would be rezoned from M2-1 to M1-5 in order to allow the development of an approximately 39,600 gross square foot (gsf) five-story and cellar commercial building on the site with retail on the cellar, ground and second floors and offices above. (Approximately 6,473 square feet of the 6,593 square foot Projected Development Site 1 would be rezoned to M1-5 while the remaining 120 square feet would maintain its existing M2-1 zoning. Although the slightly smaller M1-5 zoned area would technically accommodate a building slightly smaller than 39,600 gsf, the provisions governing pre-existing split zoning lots will allow the new district boundary line to be moved so that the entire development site is deemed to be within the new M1-5 zoning district.)

2. Purpose of activity

The proposed action would enable the Applicant to develop an approximately 39,600 gsf commercial retail and office building in the Fulton Ferry neighborhood of Brooklyn on currently underutilized land. The proposed rezoning is needed to allow the proposed new building on the site.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 202, Lot 14

Street Address: 50 Old Fulton Street

Name of water body (if located on the waterfront): N/A

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☐ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: HPD
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☑ Permits, specify: Dept. of Buildings building permit

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1. Does the project require a waterfront site? ☐ Yes ☑ No
2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters? ☐ Yes ☑ No
3. Is the project located on publicly owned land or receiving public assistance? ☐ Yes ☑ No
4. Is the project located within a FEMA 1% annual chance floodplain? *(6.2)* ☐ Yes ☑ No
5. Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)* ☐ Yes ☑ No
6. Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).* ☐ Yes ☑ No

   ☐ Significant Maritime and Industrial Area (SMIA) *(2.1)*
   ☐ Special Natural Waterfront Area (SNWA) *(4.1)*
   ☐ Priority Martine Activity Zone (PMAZ) *(3.5)*
   ☐ Recognized Ecological Complex (REC) *(4.4)*
   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) *(2.2, 4.2)*

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☑
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

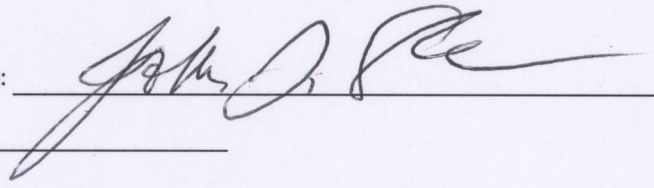
The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved 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's Name: John J. Strauss, Compliance Solutions Services, LLC

Address: 348 West 57th Street, #214, New York, NY 10019

Telephone: 212-741-3432 Email: jstrauss.css@gmail.com

Applicant/Agent's Signature: 

Date: 7/3/2018

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3525
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
(518) 474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☑ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☑ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.

50 Old Fulton Street Rezoning

Explanation of Consistency with Waterfront Policies

1. **Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**

Policy 1 relates to the development of new residential, commercial, and community facility uses on the waterfront in order to revitalize derelict waterfront areas. The Affected Area is not located directly on the waterfront but is approximately 600 feet away and separated from the East River waterfront by several blocks of developed urban land. Nevertheless, the development that would be facilitated by the proposed zoning map amendment would bring new office, hotel, and retail workers; hotel guests; and shoppers and other visitors to the area resulting in new activity in the nearby waterfront areas.

2. **Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.**

The project site is an appropriate location for the proposed development and meets the criteria of Policy 1.1 as described below.

A. Criteria that should be considered to determine areas appropriate for reuse through public and private actions include: compatibility with the continued functioning of the designated Special Natural Waterfront Areas, the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or Significant Maritime and Industrial Areas, where applicable; the absence of unique or significant natural features or, if present, the potential for compatible development; the presence of substantial vacant or underused land; proximity to existing residential or commercial uses; the potential for strengthening upland residential or commercial areas and for opening up the waterfront to the public; transportation access; the maritime and industrial jobs potentially displaced or created; and the new opportunities created by redevelopment.

Public actions—such as property disposition, urban renewal plans, and infrastructure provision—should facilitate redevelopment of underused property to promote housing and economic development and enhance the city's tax base, subject to consideration of Policy 2, where applicable.

Relative to Policy 1.1 A., the project site is not designated as a Special Natural Waterfront Area (SNWA), as the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or as a Significant Maritime and Industrial Area (SMIA) nor is it in close proximity to any areas so designated. The Affected Area does not border the shoreline and is separated from it by a distance of approximately 600 feet of developed urban land. The Affected Area does not contain any unique and significant natural features. The Applicant's 6,593 square foot property is developed with an approximately 6,593 gross square foot (gsf) auto body shop. The adjacent property within the Affected Area to the east consists of a 4,705 square foot lot developed with a 3,700 gsf auto body shop. The remainder of the Affected Area consists of approximately 512 square feet of a lot to the west of the Applicant's property that is developed with a four-story warehouse building.

Under the With-Action Scenario, the Applicant proposes to develop his property with a new

approximately 39,600 gsf, five-story commercial building with retail on the cellar, ground and second floors and offices above. The adjacent property to the east is anticipated to be developed with an approximately 28,230 gsf 85-foot (5-story plus bulkhead) tall commercial building with retail on the cellar and ground floor and offices above. The existing structures and uses on these sites would be demolished and removed.

The area surrounding the Affected Area contains an eclectic mix of uses including one- and two-family residences, multi-family dwellings, many of which also contain ground floor commercial space, commercial uses, manufacturing uses, community facilities, parking and automotive uses, and open space areas. Much of the 400-foot radius project study area is occupied by streets and roadways providing access to and from the Brooklyn Bridge which connects the boroughs of Brooklyn and Manhattan.

The projected development on the two Projected Development Sites would add to and strengthen the surrounding mixed-use community. The development would have no impact upon public access to the waterfront as the Affected Area is not located along the waterfront. The development would result in the loss of 94 jobs in an existing auto body repair shop and the future no-action retail development on one of the projected development sites. However, it would generate approximately 242 new office, retail, and hotel jobs for a net increase of 148 new jobs.

The Proposed Action would not involve any public actions, such as property disposition, Urban Renewal Plans, and infrastructure provision. However, the action would facilitate redevelopment of underused property to promote economic development and would thereby enhance the city's tax base.

3. **Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.**

A. Encourage development at a density compatible with the capacity of surrounding roadways, mass transit, and essential community services such as public schools. Lack of adequate local infrastructure need not preclude development, but it may suggest the need to upgrade or expand inadequate or deteriorated local infrastructure.

The proposed development site is located in an area with fully developed infrastructure with adequate capacity to serve the proposed project.

The Affected Area is bounded by Old Fulton, Doughty, and Hicks Streets which provide roadway access in all directions to and from the Area. The Area lies in close proximity to the Brooklyn Bridge which connects the boroughs of Brooklyn and Manhattan.

The Affected Area is approximately 0.2 miles from the High Street subway station (A and C trains) at Cadman Plaza. The Area is also served by the B25 bus line, which connects to downtown Brooklyn.

The nearest public elementary school, P. S. 8 at 37 Hicks Street serving grades K through 8, is located approximately 0.06 miles from the Affected Area. The most recent enrollment and

capacity data from the NYC Department of Education indicates that in the 2016-2017 school year, the target capacity of P. S. 8 was 549 seats while 690 students were enrolled, representing a utilization rate of 126%.

4. Policy 1.5: Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.

A. Projects should consider potential risks related to coastal flooding to features specific to each project, including, but not limited to, critical electrical and mechanical systems, residential living areas, and public access areas.

See discussion under Policy 6.2 below.

5. **Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**

See discussion under Policy 6.1 below.

6. **Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.**

The 2015 Preliminary Flood Insurance Rate Map (PFIRMS) 3604970203G dated December 5, 2013 shows that the Affected Area and the entire block on which the Affected Area is located is outside of the A and V zones (1% annual chance or 100-year flood) and the X zone (minimal chance or 500-year flood). Therefore, the Affected Area is not located in a regulatory floodplain.

7. **Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published by the NPCC, or any successor thereof) into the planning and design of projects in the city's Coastal Zone.**

The proposed building would not contain a publicly accessible waterfront and is located upland from any shore. The Affected Area is located approximately 600 feet from the nearest existing shoreline and is separated from the East River by several blocks of developed urban land.

The project architect, Dieguez Fridman Architects and Associates, has provided the following responses regarding the design of the building relative to protecting the structure and its workers and visitors.

The Affected Area is located outside of a floodplain. Therefore, there is no base flood elevation or design flood elevation. The base plane elevation of the closest area adjacent to the Affected Area is 11 feet and height measurements would be made from this base plane.

The materials to be used for the construction of the building include concrete slabs, concrete exterior walls, gypsum board interior walls, an aluminum window-wall system and insulated glass. The expected lifespan of the project is the year 2100.

The cellar of the proposed building, which would be constructed at an elevation of 14.7 feet, would contain retail space and building facilities including critical utilities for heating, cooling, and hot water systems. Therefore, the building's cellar would be located above the base plane elevation of 11.0 feet. As shown on tab 3 of the flood evaluation worksheet, all floors of the building would be located well above the base plane elevation. As shown on tab 4 of the worksheet, all floors of the building will be located above the base plane elevation through the expected lifespan of the project in year 2100. The entire building will be above the 1% flood elevation between now and the year 2100 under all sea level rise projections.

Coastal storms could bring high winds in addition to the flood hazards described above. The site is not within a Coastal A or V zone. The project would not make flooding on adjacent sites worse, nor would it conflict with other plans for flood protection on adjacent sites.

Although not anticipated to be necessary, adaptive measures to protect the project site from future flooding could include elevation of the site or the construction of a floodwall to protect the site from higher water levels. Although elevation of the site may not be feasible, construction of a floodwall or installation of water barriers will be given ongoing consideration as water levels continue to rise. The building will comply with all applicable current and future flood zone building code requirements.

The proposed project is consistent with Policy 6.2. The proposed building is designed to minimize the effects of flooding under present conditions, and potential losses resulting from higher high water levels in the future can feasibly be managed by adaptive measures such as floodwalls.

HISTORIC AND CULTURAL RESOURCES APPENDIX

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
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http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project:
Date received: 4/4/2018

Properties with no Architectural significance:
1) ADDRESS: 58 OLD FULTON STREET, BBL: 3002020018
2) ADDRESS: 50 OLD FULTON STREET, BBL: 3002020014

Properties with Archaeological significance:
1) ADDRESS: 58 OLD FULTON STREET, BBL: 3002020018
2) ADDRESS: 50 OLD FULTON STREET, BBL: 3002020014

Comments:

In the radius: Fulton Ferry HD, Brooklyn Heights HD, Dumbo HD, and Brooklyn Bridge, all LPC and S/NR listed. A shadow analysis and construction protection plan may be required as per the CEQR Technical Manual: 2014.

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

4/18/2018

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 33260_FSO_DNP_04132018.doc

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
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http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING /19DCP009K
Project: **50 Old Fulton St**
Date received: 9/7/2018

Comments:

The LPC is in receipt of the EAS dated July 2018. Comments are as follows.

There are no shadow sensitive historic resources in the study area. There are no additional comments regarding architectural resources.

The EAS includes the, "Phase 1A Archaeological Documentary Study for 50 Old Fulton St, Block 202, Lots 14, 18, P/O 12, Kings County, New York," prepared by Greenhouse Consultants and dated June 2018." This study must be revised. It should provide a detailed analysis of the history of the lots in question (how were the lots used through time? By whom? What might have been left? etc). In addition, the LPC notes that the EAS states that an archaeological restrictive declaration will be developed by the applicant. This should be submitted to LPC for review.

Gina Santucci 9/17/2018

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 33260_FSO_ALS_09172018.doc

PHASE IA ARCHAEOLOGICAL DOCUMENTARY STUDY
50 OLD FULTON STREET
BLOCK 202, LOTS 14, 18, P/O 12
KINGS COUNTY, NEW YORK
19DCP009K

Prepared by:
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386 Broadway, Ground Floor
Bayonne, NJ 07002

Prepared for:
Alwest Old Fulton, LLC

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June 2018 (Revised October 2018)

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ABSTRACT
This Phase IA Documentary Study and Archaeological Assessment for Block 202, Lots 14, 18, and part of (p/o) 12, Brooklyn addresses the historical background and archaeological potential of the subject parcels, where zoning changes to facilitate construction of commercial and hotel buildings are planned. PaleoWest Archaeology LLC (PaleoWest) conducted the assessment as a sub-consultant to Greenhouse Consultants Incorporated (GCI) on behalf of Alwest Fulton LLC. Research determined that these lots in Block 202, in one of Brooklyn's earliest neighborhoods, hosted farm structures during Brooklyn's existence as a Dutch and English colonial village, multi-story residences and commercial establishments by the early 19th century era of urban development, and light-to-medium industry and manufacturing in the late 19th and early 20th centuries before the neighborhood became largely commercial again in the modern era. The construction of a single-story trucking garage on Lot 14 in 1930 with cellar has undoubtedly adversely affected the archaeological potential of the APE. However, Lot Histories show that the rear portion of Lot 18 has seen little disturbance since before the first multi-story, mixed residential-commercial buildings were constructed on the property in the early 19th century. In addition, documentary research indicates that residents used fill from a nearby British soldiers and sailors cemetery to level the neighborhood between 1780 and 1840, and that a Hessian guardhouse and prison was located at the western edge of the block. The recovery of a Revolutionary War-era Hessian cap plate (insignia) during sewer installation in front of the project site in the late 1970s affirms that the British and Hessian occupation of Brooklyn had an enduring impact on the local archaeological record. Subsurface testing is recommended in Lot 18 to investigate potential archaeological remains pertaining to 19th century working-class residential and commercial life, as well as late 18th century Revolutionary War materials present in the local 18th and 19th century fill.

INTRODUCTION

This Phase IA documentary study of the 50 Old Fulton Street development project in Brooklyn, Kings County, New York has been requested by the New York City Landmarks Preservation Commission (LPC), Project Review Number 19DCP009K, to satisfy the requirements of the City Environmental Quality Review (CEQR) and to comply with the archaeological guidelines of the LPC (LPC 2018; CEQR 2014). The project proponents intend to erect both a hotel and a commercial building in place of two existing auto-body shops and a parking lot.

The project site lies on Block 202, Lots 14, 18, and part of (p/o) 12, in the Fulton Ferry neighborhood of Brooklyn, Community District 2, along the eastern side of the block. It is bounded by Old Fulton Street on the north, Hicks Street on the east, Doughty Street on the south, and Elizabeth Place on the west. See Figure 1 for the location of the project site on the United States Geological Survey, Brooklyn NY 7.5 minute quadrangle.

This report has been prepared by Greenhouse Consultants Incorporated of Bayonne, New Jersey for Alwest Old Fulton, LLC of Brooklyn, New York. The associated research was conducted by PaleoWest Archaeology, LLC of Brooklyn, New York and the study outlines the documentary record regarding known and potential archaeological resources at the project site and nearby area (i.e., on the present-day tax lot or within the boundaries of the nearest adjacent mapped streets)(CEQR 2014).

As an analysis of archaeological sensitivity and potential at the subject parcel, this document includes: (1) an overview of the study's methodological approach and the specific sources and archives consulted; (2) a presentation of the geography and physical setting of the project site; (3) a description of the current conditions on site; (4) a review of documented prior archaeological and historic properties proximate to the area of potential effect (APE); (5) a discussion of the prehistoric and historic background of the area surrounding the project site; (6) Lot Histories for the three subject parcels; (7) a review of archaeological sensitivity and disturbance; and (8) conclusion, findings, and recommendations. While the potential for historic archaeological remains has been significantly impacted by prior construction in Lots 12 and 14, Lot 18 retains a high level of archaeological sensitivity due to the preservation of a rear yard area throughout the 19th and 20th centuries.

METHODS

A systematic review of the following resources was performed to document the known and potential archaeology in the immediate vicinity of the project site:

> Primary and secondary sources concerning the history of Brooklyn, Fulton Ferry and Brooklyn Heights neighborhoods, and specific events associated with the project site and vicinity, were reviewed at the New York Public Library, the Brooklyn Public Library, the Brooklyn Historical Society, and various online resources.

17th-20th century land conveyance records were collected for Block 202 using abstracts at the Brooklyn Historical Society and Library, historic libers at the Brooklyn City Register Office, and online resources from the New York City Register.

Census records and Brooklyn newspaper accounts from sources such as the *Brooklyn Daily Eagle* were reviewed.

Historic maps and photographs were identified at the New York Public Library, the Brooklyn Public Library, and the Brooklyn Historical Society. These maps and photographs provided an overview of the topography and a chronology of land usage for the project site. A selection of these maps and photographs has been reproduced for this report.

Selected city directories were reviewed.

A visit to the Department of Buildings was conducted, and all available Certificates of Occupancy (COO) for the property consulted.

Information about previously recorded archaeological sites and surveys in the area was compiled from data available at the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and the LPC.

Soil borings were examined from prior archaeological studies in the immediate vicinity (Solecki 1981).

The Phase I Environmental study of the property at Block 202, Lot 14 (Industrial Waste Management, Inc. 2016) was provided by the developer and examined.

A visit to the project site was conducted by Alan Greene of PaleoWest to collect current photographs and understand the condition of the ground surface at the subject parcels (See Figures 5 and 6).

GEOGRAPHY AND PHYSICAL SETTING

HYDROLOGY AND TOPOGRAPHY

The western edge of the project site is located 1000 feet east of the East River in the Atlantic Coastal Lowland Physiographic Province. It is located more than 10,000 feet from Wallabout Creek, which ran into Wallabout Bay as a perennial fresh water drainage until the 19th century.The Geologic Map of New York, Lower Hudson Bedrock Sheet (1979) labels the area as glacial and alluvial deposits, with underlying bedrock geology unknown.

The earliest available elevation data for the project site is from an 1859 City map and shows the elevation of Fulton Street, just west of the APE, as 8 feet above sea level (f.a.s.l.) (Solecki1981). This generally matches the later 19th-20th century Sanborn maps showing an 8-foot elevation on the western end of the block, at 20 Fulton Street (Sanborn 1887). The 1886 Sanborn map shows the elevation as 28 f.a.s.l. at the project site, which matches today's digital GPS based mapping data of approximately 26.7 f.a.s.l.

Early maps of Brooklyn show that the original shoreline of the East River was further east than present (Figure 8), running along the current orientation of Everit Street, approximately 375 feet west of the project site. The land there was altered through fill throughout the 17th, 18th, and 19thcenturies to improve dock facilities and support the development of the expanding settlement, although major changes to the shoreline did not take place until the second half of the 17th, 18th and 19th centuries (Solecki 1981:11). According to work by Solecki (1981), as well as historic maps, these activities utilized fill from destroyed buildings and from hills in Brooklyn Heights and further inland, including the territory of Brooklyn's (British) Revolutionary War cemetery. (See the below Soils section for more detail on historic fill.)

SOILS AND HISTORIC FILL

The NRCS Web Soil Survey shows one mapped soil type for the project site (Figure 2). The Urban land, Till Substratum (UtB), 3-8 percent slopes has four minor components (Table 1). The Urban Land soil type has a parent material of asphalt over human-transported material. The landform is summit position, and talf.

Table 1. Project Site Soils

Soil Type	Horizon Depths	Texture/Inclusions	Slope	Drainage	Landform
Urban land, Till Substratum (UtB)	M: 0-15" 2C: 15-79"	cemented material Gravelly sandy loam	3-8%	very high runoff	Summit, Talf
Minor Components Greenbelt, Ebbets, Laguardia, Centralpark					

Soil borings directly in front of the project site in Old Fulton Street were conducted in 1978 during a previous, unrelated study and provide insight into the geological and soils record in the current project vicinity (Solecki 1981; Figure 4, Borings 42A, 43C, and 44). Solecki and his team identified six primary strata, the first of which (Layer A) represented historic fill, underlain by the Contact-era beach surface (Layer B) and then four additional strata of varying sandy and gravelly composition reaching down to the Pleistocene basal horizon (Layer F).

Borings encountered historic archaeological materials at a depth of 5 to 15 feet below the modern ground surface (b.m.g.s) and established that the fill is deepest on the shore side where it measures approximately 30 feet. It diminishes to about five feet at the western edge of the project site and deepens to 15 feet at Lots 14 and 18 (Solecki 1981:9—10). Solecki's boring and trench monitoring

recovered pottery and bottle glass from the fill attributable to a broad range of dates from the mid-17th to mid-19th centuries (Solecki 1981:178). The Figure 3 soil profile shows the variation in fill depth from across the project site, as well as the location of the former shoreline and beach at Everit Street.

According to Solecki's archival research, and confirmed in his subsequent fieldwork, land filling activities in support of various improvements began in the late 17th century, with the first occurring in direct proximity to the ferry landing (Solecki 1981:45). He identified six primary episodes: (1) an initial artificial platform in the vicinity of the ferry at some point before 1700; (2) an early 18th century filling episode between the ferry and Front Street; (3) an extension of the land beyond Everit Street into the river between 1780 and 1790; (4) the establishment of Furman Street on further water lots in the first decade of the 19th century; (5) a broader filling episode across the village that brought elevations close to their current levels, followed by the addition of gravel sidewalks and curb stones in 1818; and (6) a final episode of village filling that coincided with the demolition and realignment of the structures along the northern side of 8 Fulton Street. Fill Episode No. 3 in particular would have relied heavily on landfill from the British soldiers and sailors cemetery area directly south of the project area.

WATER AND SEWER INSTALLATION

Water pipes are first depicted on Fulton Street in the 1880 Sanborn map as 8-inch underground lines with hydrants (Figure 15). A 6-foot sewer was installed under Fulton Street in 1850, but it was a storm sewer and not connected to the houses. Solecki reminds that backyard cesspools would have been the primary recipients of wastewater and that flush toilets were particularly slow to replace outhouses in Brooklyn (Solecki 1981:378). Sanborn maps in the late 1880s and early 20th century show yards and one privy in the rear of Lot 18, on the Doughty Street side (Sanborn 1886 and 1887). This yard area has been a parking lot since the mid-20th century. A modern sewer was installed in Old Fulton Street in the late 1970s (Solecki 1981).

CURRENT CONDITIONS

The project site is located approximately two blocks east of the East River and the Brooklyn Bridge Park Greenway, and adjacent to the Brooklyn Bridge overpass and across Hicks Street from the elevated ramp of the Brooklyn Queens Expressway (I-278). Lot 14 stretches 78 feet along Old Fulton Street to the north, and 77.5 feet along Doughty Street to the south. It has a 98.7-foot boundary with Lot 12 to the west, and a 74.2-foot boundary with Lot 18 to the east. Lot 14 consists of 6,593 square feet of land area and the street addresses are currently 50-56 Old Fulton Street.

Lot 18 is the easternmost parcel of Block 202. It stretches 69.2 feet along Old Fulton to the north, 86.4 feet along Doughty Street to the south, 74.2 feet along Lot 14, and 49.4 feet on Hicks Street to the east. The entire lot measures 4,705 square feet and includes addresses 58-64 Old Fulton Street.

The overall dimensions of Lot 12 consist of 41.5 feet along Old Fulton Street to the north, 49.6 feet along Doughty Street to the south, 98.7 feet of a shared boundary with Lot 14, and a jogging 118.3 boundary with Lot 9 to the west. The total lot measures 4,687 square feet, and the partial area associated with the current project consists of 512 square feet on the eastern edge.

The project site is currently the location of multiple commercial businesses. Lot 14 contains a single-story brick building 16 feet tall and housing an auto body shop across the full lot. This is the former U.S. Trucking Corporation building constructed in 1930 and occupied by an autobody shop since 1984. It includes a single cellar story. The adjacent Lot 18 is occupied at its western edge by a 3,700 gross square foot auto body shop with the remainder of the lot paved for use as parking. Lot 12 is occupied by a 16,000 gross square foot four-story brick structure with a stone front that is currently used as a warehouse (46 Old Fulton Street). The Sanborn maps and Certificate of Occupancy on file indicate that this building dates to first half of the 19th century and contains a single basement story. Metal hatches for direct basement access are visible in the Old Fulton Street sidewalks in front of Lots 12 and 14, but not Lot 18.

DOCUMENTARY RESEARCH

A records review within the CEQR-defined radii conducted through the New York Cultural Resource Information System (CRIS) identified two previous archaeological surveys (Chrysalis 2012; HPI 2005) and one historic archaeological site (Solecki 1981), depicted in Figure 5, as well as ninety-nine historic properties. The historic properties are sited within two nearby historic districts, located partially within CEQR's 400-foot architectural radius (Figure 7). The search found no prehistoric archaeological sites within a half-mile of the project site.

Many documentary, monitoring, and Phase 1B testing studies have occurred to the west and south of the project site in the Fulton Ferry and Brooklyn Heights Historic Districts. Two surveys lie immediately adjacent to the current project site. Survey 05SR55876 is entitled "Phase IA Archeological Assessment, Brooklyn Bridge Park Project, Blocks 1, 7, 16, 25, 45, 199, 208, 245, 258 & Portions of Pearl, Washington, New Dock, Fulton, and Joralemon Streets and Atlantic Avenue." The survey is bounded roughly by Atlantic Avenue, Jay Street, and the East River and it overlaps the project site slightly along the Old Fulton Street edge. Conducted by Historical Perspectives Inc. in 2005, the survey covered a 70-acre area for a proposed park and recommended further archaeological investigation of historic archaeological resources along Old Fulton Street, pending decisions for development excavations.

Survey 12SR61591 is entitled "Phase IB Archaeological Monitoring, Downtown Brooklyn Water Main Replacement Project, Brooklyn, Kings County, New York." It touches the current project site just in the northwestern corner at Old Fulton Street. Monitoring was conducted by Chrysalis Archaeological Consultants Inc. in 2012 and indications of mid-to-late 19th century landfilling were uncovered, along with evidence of utilities installed during the same period.

The historic archeological site Corporation House Foundation (USN 04701.000102), was uncovered during Solecki's 1978-79 study and is situated within the mapped boundaries of Old Fulton Street, adjacent to the project site. The Phase II survey report is entitled "The Archaeology and History of Lower Fulton and Joralemon Streets." The Corporation House Foundation site comprises the likely remains of a building that served as a ferry house and tavern from 1750-1812 (Solecki 1981). The two-story stone structure stood at the north side of Old Fulton Street across from what is now called Elizabeth Street until it burned down in 1812. Remains were first discovered in a boring sample which brought up tile fragments, brick, and plaster from a depth of 9 feet b.m.g.s. at the approximate level of the 18th century street surface (Solecki 1981:52). Subsequent trenching revealed a layer of burned (red) bricks, lime mortar, and ashes that Solecki referred to as the "base of an early building" (1981:67), as well as high frequencies of pottery, bottle glass, window glass, window lead, and charcoal in the northern trench profile of the sewer excavations. The sewer trench sliced through this feature at a depth of 8 feet below grade. Analysis of the artifacts from Solecki's overall study revealed material from the 17th through 19th centuries, but was dominated by 18th-century objects (Solecki 1981, Appendix 5).

Solecki's study also identified a second historic archaeological site further to the northwest called the Dock Remnant (Figure 6), which is not within the project site. It was found in Fulton Street opposite Everit Street and dates to the 17th century before the shoreline of the East River was altered by land fill (Figure 8).

The Fulton Ferry Historic District is located to the north and northwest of the project site and includes the western portion of Block 202. The district received its designation by the LPC in 1977. The neighborhood is significant for its role in the early development of Brooklyn. First settled by the Dutch, the area grew and developed around the ferry operation, supporting a commercial and industrial center throughout the 18th and 19th centuries.

The Brooklyn Heights Historic District encompasses a much larger area to the south of the project site. The neighborhood received its designation in 1965. Brooklyn Heights developed as a residential area in the early 19th century as transportation technology (steam-powered ferry service, followed by the construction of the Brooklyn Bridge) improved access to and from Manhattan. The district is characterized by brick and brownstone residences dating to the 1800s.

PREHISTORIC BACKGROUND

According to Armbruster, when the village of Breuckelen was founded in 1645, it was built upon land referred to by Native Americans as *Maerckkaakwick* (Armbruster 1918:7). The paucity of pre-Contact archaeological evidence in this potion of northwestern Brooklyn has precluded substantial investigation of this claim. Dutch West India Company Director-General William Kieft purchased the land along the East River from the Lenape inhabitants and plots were granted to settler farmers for cultivation. These early Dutch settlers used the same river crossing that indigenous people had employed in prehistory, the ultimate location of the Fulton Ferry (Bolton 1922:131; Furman

1875:135). A cove recorded in the Contact era provided an ideal launching point for boats to Manhattan and a trail used by Lenape inhabitants to travel between Long Island and the East River shoreline was developed over time to become the "Ferry Road" and eventually Fulton Street.

HISTORIC BACKGROUND

Not long before the Village of Brooklyn's formal founding, a ferry was established there by Cornelius Dirks in 1642, and it was subsequently run by a sequence of Dutch colonists until the British took control of New Amsterdam in 1664 (Stiles 1884, Vol. I:85, 92; 1869, Vol. II:508-9). At that point in time, the village name was changed from Breuckelen to Brookland. This also marks the earliest available records for land conveyances in the immediate area of the project site, with the earliest transactions recording a mix of Dutch and English families who lived and farmed in the vicinity (Appendix B).

The ferry operation drew commercial activity to the Old Fulton Street corridor and the road name changed in concert with development of the area over time. It was referred to as The Highway in 1646, The Main Road from 1704, Ferry Road in some parts of Brookland village, Old Ferry Road from 1795, Fulton Street in 1817, Cadman Plaza West with the mid-20th century construction of the Cadman Plaza Park complex, and finally Old Fulton Street in the 1970s (Arbruster 1919:10; Solecki 1981:8-9). "Fulton" is itself a ferry reference of course, as inventor Robert Fulton assumed the lease on the old ferry operations with his partner William Cutting in 1813 and the village residents voted to change the road name in his honor four years later (Armbruster 1919:10).

Following a settlement-wide fire in 1748, the City Corporation commissioned a land survey that resulted in a new division of lots, the first to approximate the current shape and boundaries of Block 202. A new line of brick buildings was constructed along the ferry road, consisting of stores, dwellings, taverns, and stables (Stiles 1869, Vol. II:48-9). In Ratzer's Plan of the Town of Brooklyn map from 1767, the road leading to the Brookland Ferry is lined with structures (Figure 10), for which land documents indicate stores, taverns, stables, stockyards, and a particularly thriving community of butchers. For a time in the 17th and 18th centuries, Brooklyn was a major center for the meat provisioning of New York City, with the space for (unwanted) stockyards and slaughterhouses, and the proximity for quick access to Manhattan (Solecki 1981:9). The southern line of the street, where the project site sits, appears to have followed the path of Old Fulton Street in its current configuration (Figures 14-22).

During the Revolutionary War, the river crossing played an important role when General George Washington used it to retreat early on the morning of August 29, 1776 to Manhattan with his army (Furman 1875:340). The significance of this crossing is depicted in Johnston's map of the Battle of Long Island (Figure 9). For the remainder of the war, Brooklyn and its ferry were occupied by the British and their Hessian partners. In fact, a Hessian guardhouse and prison was established on the western edge of Block 202, fronting on Elizabeth (Stiles 1869:309). The farm and orchard land just the south of the block, owned by the Middagh family, was used as a burial ground for British soldiers

and sailors. Shortly after the war however, the area was leveled and used to fill in the neighborhood and expand the shoreline (Stiles 1869:54-55). The recovery of an embossed Hessian cap plate during the 1978-79 Old Fulton Street sewer excavations (Solecki and Demeritt 1980) suggests that these military events had an impact on the local archaeological record, not simply from the domestic refuse of British occupation, but from this major filling project that razed the cemetery for development and fill not long after the war concluded (Solecki's Fill Episode No. 3).

Several family names are preserved in the street names surrounding the project site. Middagh, Hicks, Everit, Doughty, and Fulton are all pulled from historical personages.

The original Middagh moved to Brooklyn from Utrecht in 1661. He married Brekje Hansen Bergen and the family became owners of considerable property. The Middaghs begin to appear in the land records in the late 18th century (Appendix B). John and Hannah Middagh grant land to Gerrit Middagh in 1764. In a map dating to 1855, Perris includes an overlay of former landowners in the Fulton Ferry neighborhood. The Middaghs are depicted as having owned a large parcel to the east of what is now Hicks Street, edged by Cadman Plaza West (Figure 11).

The Middagh house and barn stood at about where Henry St. runs into Fulton. According to Stiles, this whole section was used as a burial ground for British Revolutionary War soldiers and sailors and was thickly covered with graves that were "leveled off" when the Hickses took possession of the land at the close of the war (Brooklyn Daily Eagle 1930). Multiple generations of Middaghs were hatters, and John Middagh kept a hat store in the vicinity in the 18th century. Later, Aert Middagh followed in the same line of business (Brooklyn Daily Eagle 1930). The 1796 Brooklyn Directory of families lists John Middagh as a hatter on Main Road (BPL 1796).

The Hicks name first appears as a grantor of land in 1795, providing evidence that Jacob, John, and Elizabeth Hicks had been landowners in the immediate vicinity of the project site. The 1796 Brooklyn Directory lists a Jacob Hicks who lived on Main Road and worked as a tavern keeper at the Old Ferry Dock. A John Hicks also lived on Main Road and is listed as one of the proprietors of the Old Ferry along with George Hicks. The same George A. Hicks appears in land records in 1827 and, according to Stiles (1867, Vol. I:450), served as a ferry master in the early part of the 19th century.

Armbruster (1919:24) reports that the Hicks family homestead was located at the early 20th century corner of Fulton and Hicks Streets, the northeast corner of the project site. The old stone house of Jacob M. Hicks was torn down circa 1825, "it having occupied a portion of the outlet of Hicks street into Fulton street" (Brooklyn Daily Eagle, 1882). One Brooklyn Heights neighbor remembered "John and Jacob Hicks lived in a house on the upper corner of Hicks and Fulton streets, and you just opened the gate and there you were on their farm, all among the grass and the potatoes" (Brooklyn Daily Eagle 1878). This is corroborated by Perris's 1855 map wherein the former landholdings are depicted as covering the area between just east of Hicks Street west to Furman Street, fronting on Old Fulton Street (Figure 11). The Hicks property completely encompassed the current project site. George Hicks's heirs granted a portion of his land to the Daves family in 1833, but continued to hold

a large tract of land to the south of Old Fulton Street in what is now the Brooklyn Heights neighborhood. A Sanborn map from 1880 shows the former Hicks property subdivided between "Hicks & Smith" on the west below Doughty, and "Jacob & John Hicks" on the east under what is currently the Brooklyn Queens Expressway (Figure 15).

The first Brooklyn fire company was started in 1785 and its records provide a perspective on publicly active residents. The company was composed of six freeholders including a John Doughty. In 1787 John Doughty Jr. followed in his father's footsteps. In 1795, as the institution grew larger, John Hicks was voted as clerk and treasurer to the Fire Department (Brooklyn Daily Eagle 1881). John Doughty appears in the 1796 Brooklyn Directory as a butcher. John and his wife Sarah are also recorded in land conveyances dating to 1807 dealing with property from the area that is now Lot 18. A Brooklyn Directory published by Spooner Printers in 1823 (BPL) lists John Doughty (possibly Jr.) as a lawyer at 54 Fulton Street, the middle of the project site.

In 1807, Brookland was renamed Brooklyn and incorporated as a village in 1816. The trustees of the new village were granted the capacity to improve roads and drain, level, and fill the land (Solecki 1981:30). The street grid near the project site was laid out in 1819, and the Brooklyn Heights neighborhood grid directly to the south was laid out in 1820. The 1820s also saw the paving and lighting (with lamps) of the Village streets; sidewalks and gutters were also added (Furman 1822).

At this time, a more extensive portion of the East River shoreline was altered through the addition of fill (Solecki's Fill Episode No. Four). The area of Furman Street is referenced in the 1820s, so it is evident that by then the shoreline has been extended further and the water lots 13 occupied (Furman 1822:122). This extended footprint is also evident in the 1855 Perris map (Figure 11).

Brooklyn was made a city in 1834 and the ferry area continued to serve as a significant center of trade. In 1835, Fulton Street in front of the project site was widened to accommodate increased commercial activity and altered by significant fill for essentially the final time (Solecki's Fill Episode No. Six). By the late-1830s, Fulton Street was lined on both sides with predominately four-story wood or brick buildings that contained commercial spaces on the ground floor with residential spaces above (LPC 1977:5). As the majority of these dwellings were constructed prior to the implementation of indoor plumbing, privies and outbuildings would have been a necessity. An 1860 Sanborn Map of the subject parcels shows open yards behind the structures fronting Fulton Street in Lots 14 and 18 and Mather's map from 1842 demonstrates the increasing density of the built environment in what would become the Fulton Ferry and Brooklyn Heights neighborhoods (Figure 12).

Livery stables, small-scale manufacturing, stores, and taverns filled the area. According to the Spooner Directory of the Village of Brooklyn published in 1823, several businesses occupied the properties on Lots 14 and 18, including a bookbinder, bookseller, printer, physician, and butcher. Members of the Hicks family living in the area worked as a tailor on Middagh, a ropemaker on Fulton, a merchant on Hicks, a wood dealer on Front, and a storehouse manager on Furman. Several ads posted in the Brooklyn Daily Eagle mention specific business in Lot 14. In 1823 John Doughty

worked as a lawyer at 54 Fulton Street; in 1842 MacKay's Exchange Office worked from 56 Fulton Street; and in 1854 Chappel & Co. manufacturers of tinware operated at 52 Fulton Street.

By the mid-19th century, banks, insurance companies, and newspaper offices occupied the buildings along Fulton Street, which had become a dominantly commercial thoroughfare (Stiles 1867/9, Vol. 3). Industry was becoming increasingly important as well, however, as the waterfront districts grew dedicated to ship building and other manufacturing. Brooklyn was to become the fourth largest manufacturing center in the entire country by the early 20th century (LPC, 2007:4). While the project site had a long-recorded history of residential and commercial life, manufacturing emerged as a key economic focus in the latter 1800s.

The mid-century was marked by widespread improvements in this part of Brooklyn as the young city began to grapple with the implications of urban development on a larger scale. Gas lines were laid beginning in 1848 and underground water supply by 1851 (Solecki 1981:36-38; Stiles 1869:295—296). Water pipes are first depicted on Fulton Street in the 1880 Sanborn map as 8- inch underground lines with hydrants (Figure 15). A 6-foot sewer was installed under Fulton Street in 1850, but it was a storm sewer and not connected to the houses (Solecki 1981:378). Within the subject parcels, backyards that would have hosted waste water pools, cisterns, wells, and privies are visible in late 19th century maps at the eastern end of Block 202, Lot 18 (Sanborn 1880). Versions from the late 1880s and early 1900s depict a yard area with one privy in the rear of Lot 18, on the side of Doughty Street (Sanborn 1886, 1887, 1903, 1904). This yard area was eventually enclosed by other structures, but never built upon until the Lot's remaining 19th century buildings were torn down in the 1950s or 60s and replaced with a parking lot.

A brass foundry operated out of 46 Fulton Street on Lot 12 in 1882; in 1887 the space became a lead pipe and plumbers supplies factory. The Brooklyn Daily Eagle was operated out of a building further west in Block 202 from the 1880s, preceding the construction of the Brooklyn Eagle Warehouse building (USN 04701.000040). None of the structures in Lots 12, 14, or 18 fronting Fulton Street are shown on Sanborn maps with basements during the late 19th century, although it was common practice to include one for this type of construction. A 1945 COO for the structure 46-48 Fulton on Lot 12 does mention a basement. This structure still stands across the entire lot and site visitation revealed sidewalk access to a subterranean basement. Likewise, a 1938 COO for the structure at 60-64 Fulton notes a cellar, although this structure only covered the northeastern portion of the lot.

As commercial and industrial development proceeded at a rapid pace, the 19th century was also marked by a significant rise in European immigration to New York City. From 1840-45 the population of Brooklyn doubled to nearly 80,000. By 1855, nearly half of Brooklyn's 205,000 residents were foreign-born (NYS 1845, 1855). The largest population groups included Irish, German, and Britons. Throughout the 1880s and into the early 20th century, the structures at 50- 56 Fulton Street on Lot 14 contained stores on the ground floor with "Cheap Lodgings" offered on the floors above. Such low-rent dwellings with proximity to manufacturing work (a cigar factory and sheet metal works were just downstairs) were not an unusual configuration within increasingly industrial Brooklyn.

The 1887 Sanborn map indicates the variety of manufacturing occurring around Block 202 including a Cracker Bakery, Cigar Box Factory, foundry, Pharmaceutical Factory, Brooklyn Eagle book bindery, Electrical Appliance Factory, Lead Pipe Factory, Plumbers Supplies Factories, and others. The Brooklyn Daily Eagle lists a Hinchman & George lamp and oil shop at 62 Fulton Street in 1857 and in 1870 Ingram & Son merchant tailors advertise at 60 Fulton Street.

Just to the north, the Brooklyn Bridge underwent construction beginning in 1869, continuing through 1883. In the Beers Farm Line Maps of the City of Brooklyn published in 1874, the future bridge access is indicated on the map just north of Fulton Street (Figure 13). The Kings County Elevated Railway would open the Fulton Street line in 1888, and this too is indicated on the 1874 map. In 1898, Brooklyn was officially incorporated into New York City.

By the 1930s, as underground subway construction was nearing completion, the Downtown Brooklyn Association called for the removal of the elevated rail line (or "L") from the Brooklyn Bridge up to Flatbush Ave and the installation of street lighting. The population of Brooklyn at this point had risen to 2,600,000 (Brooklyn Daily Eagle 1935). The L ran until 1940 and was torn down in 1941. The completion of the Brooklyn Bridge ultimately led to a decline in commercial activity along the Old Fulton corridor. The bridge access ramp guided traffic to the east of the area essentially bypassing the district. Ferry service was discontinued in the 1920s.

The 19th century buildings on Lots 14 and 18 remained into the early part of the 20th century as mixed commercial-residential constructions. The brick building at 60-64 Old Fulton, located at the eastern edge of Lot 18, can be seen in a 1931 photograph, looking north up Hicks Street towards Fulton (Figure 26). In less than a decade its first floor was converted into a restaurant space.

The Brooklyn Queens Expressway (BQE), whose elevated ramp overlaps with the southeastern corner of the project site, was a massive transportation infrastructure project built over multiple episodes from 1937 to 1964 (NYC Parks 2001). Several structures in its path were demolished in the early 20th century, interrupting the historic logic of the Fulton Ferry neighborhood. When the elevated section was constructed in Brooklyn Heights in the 1950s, the expressway severed Hicks Street just south of its intersection with Old Fulton Street on the eastern edge of the project site.

Following the arrival of the BQE, the extant, four-story brick building on Lot 12 underwent updates, intended for manufacturing uses, according to a building department COO. The four story brick building on Lot 18 (at addresses 62-64) was also updated in 1938. The COO lists a full cellar, with a restaurant and store on the ground floor and three additional residential floors above. This structure has since been demolished, most likely in the 1960s, and its former location on Lot 18 is now a parking lot.

According to Liber 5086:166, the 19th century brick buildings on Lot 14 were demolished by the United States Trucking Corp in 1930 and replaced with a single-story garage. The new structure is shown in the 1939 Sanborn map (Figure 25). This is the same single-story structure that occupies

Lots 14 today (addresses 50-56), used as an auto-body shop. A concrete block addition was constructed circa 1968 in Lot 18 (address 58), also for auto-body usage.

LOT HISTORY OF BLOCK 202, LOT 12

Addresses: 46-48 Old Fulton. Only 48 Old Fulton falls within project area.

Dimensions: 41.5 feet along Old Fulton Street to the north, 49.6 feet along Doughty Street to the south, 98.7 feet of a shared boundary with Lot 14, and a jogging 118.3 boundary with Lot 9 to the west. The total lot measures 4,687 square feet, and the partial area associated with the current project consists of 512 square feet on the eastern edge.

Current Use: 16,000 gross square foot structure with a stone front used as a warehouse (46 Old Fulton Street). The Sanborn maps indicate that this four-story building was erected in 1945, with one additional basement story.

Historic Uses: Farmland, dwellings, commercial, light-to-medium manufacturing.

1692-94 Libers 1:120 & 2:15: Describes area as containing "tenements, houses, barns, stables, orchards, gardens, [and] meadows." A "cottage lot" is specifically described within an area 152 x 124 (units unspecified).

1704: Fulton Street officially laid out as the King's Highway.

1717: Liber 4:144: Describes area as fenced and bounded by roads on the west, east, and north.

Circa 1748 Post-fire land survey sets out current lotting arrangement for what will become Block 202.

1767 Ratzer Map: unspecified structures along Old Fulton (stores, taverns, stables according to Stiles).

Circa 1820: Official city grid laid out in neighborhood.

1846: Joseph Hegeman auctioneer real estate and furniture sales room at 48 Fulton Street (Brooklyn Daily Eagle [BDE] 1846).

1860: Sanborn Map: Lot Occupied by four-story brick and stone structure fronting Fulton; marked as "third class." Four-story wooden structure fronts Doughty, with boiler indicated in building rear. Third class" occupancy refers to "workshops, flour mills, omnibus stables, and manufacturing.

1874: Beers Map: Indicates Block 202 as former farm land of Jacob and John Hicks.

1880: Sanborn Map: Lot occupied by brick structure; open spaces not indicated.

1882: No. 46 Fulton Street occupied by a brass foundry (BDE 1882).
1886: Sanborn: Lot occupied by brick structure; open spaces not indicated.

1887: Sanborn: Four-story structure includes a Plumbers Supplies Factory fronting Fulton and lead pipe factory fronting Doughty.

1903: Sanborn: Lot occupied by four-story brick structure.

1904: Sanborn: Four-story structure at 46-48 Fulton listed as National Biscuit Company.

1911: Sanborn: Lot occupied by four-story brick structure.

1915: Sanborn: 46-48 Fulton labeled as Factory (Medium Manufacturing).

1920: Sanborn: Lot occupied by four-story brick structure.

1929: See Sanborn 1920.

1939: Sanborn: Four-story structure with internal stairs and elevator shaft marked on eastern wall.

1945: Certificate of Occupancy: Alterations made to building at 46-48 Fulton. Floors one-four described as Light Manufacturing; Basement floor contains boiler room.

1950: Liber 7770:312: F&S Realty sells Lot 12 to Garry Ketcham. Property subsequently changes hands several times, remaining commercial in use.

2014: American International Corporation sells Lot 12 to Old Fulton LLC.

Discussion: Lot 12 has been built over throughout the 19th and 20th centuries including the entire lot footprint with basement.
Conclusion: This site is not considered sensitive for archaeological remains.

LOT HISTORY OF BLOCK 202, LOT 14

Addresses: 50-56 Old Fulton.
Dimensions: Lot 14 stretches 78 feet along Old Fulton Street to the north, and 77.5 feet along Doughty Street to the south. It has a 98.7-foot boundary with Lot 12 to the west, and a 74.2-foot boundary with Lot 18 to the east. Lot 14 consists of 6,593 square feet of land area.
Current Use: Current structure houses an auto body shop, built as single-story brick building that covers the entire lot, with a full cellar.
Historic Uses: Farmland, dwellings, commercial, light-to-medium manufacturing.

1692-94: Libers 1:120 & 2:15: Describes area as containing "tenements, houses, barns, stables, orchards, gardens, [and] meadows." A "cottage lot" is specifically described within an area 152 x 124 (units unspecified).

1704: Fulton Street officially laid out as the King's Highway

1717: Liber 4:144: Describes area as fenced and bounded by roads on the west, east, and north.

Circa 1748: Post-fire land survey sets out current lotting arrangement for what will become Block 202.

1767: Ratzer: Unspecified structures along Old Fulton (stores, taverns, stables according to Stiles), old farm land of Jacob and John Hicks.

1793: Area mentioned in Brooklyn Daily Eagle as part of the 75 buildings constituting the main area of Brooklyn between Henry Street and the ferry along Old Fulton. (BDE 1881).

Circa 1820: Official city grid laid out in neighborhood.

1823: Spooner Directory: John Doughty a lawyer at 54 Fulton (middle of lot).

1842: MacKay's Exchange Office at 56 Fulton Street (BDE 1842; 1843).

1843: Martin K. Bridges surgeon dentist at 56 Fulton Street "corner of Hicks street" (BDE 1843).

1854: Chappel & Co. manufacturers of tinware and wholesale dealers in lanterns at 52 Fulton (BDE 1854).

1855: Piano Fortes sold by Bunce & Chesnut at 54 Fulton (BDE 1855).

1848: Augustus H. Sidell attorney, commissioner of deeds at 50 Fulton Street (BDE 1848).

1860: Sanborn: Lot occupied by seven structures. Western three are brick with four story fronts on Fulton and three-story fronts on Doughty Street with open yards at center. Eastern structure is four-story wooden building and extends fully between Fulton and Doughty. All buildings are marked as "first class." "First class" occupancy refers to "manufacturing, brewers/bakers, and private stables."

1874: Beers: Indicates Block 202 as former farm land of Jacob and John Hicks.

1880: Sanborn: Lot occupied by four structures, all brick. Open spaces not indicated.

1886: Sanborn: Four brick structures shown covering the entire lot.

1887: Sanborn: 50-54 Fulton listed each as "Store" on ground floor. 50 Fulton has Shoe Factory on 3rd and 4th floor. 52 Fulton has Lodgings on 3rd and 4th floor. 54 Fulton has Lodgings on 2nd, 3rd, and 4th floor. 56 Fulton is a Cigar Factory.

1887: Lodging house at 54 Fulton Street in the paper for an unruly resident (BDE 1887).

1898: Sanborn: Four brick structures shown covering the entire lot.

1900: Liber 42:457: Alfredo del Genovise of the French Church du Saint Esprit purchases the properties on Lot 14.

1903: Sanborn: Four four-story brick structures shown covering the entire lot.

1904: Sanborn: Four four-story brick structures shown covering the entire lot. 50-54 Fulton are connected and listed as "Cheap Lodgings." 56 Fulton is a Cigar Factory with drying rooms on the 2nd and 3rd floors.

1911: Sanborn: Four four-story brick structures shown covering the entire lot.

1915: Sanborn: 50-54 Fulton interconnected, "Cheap Lodgings" on upper floors. 50 Fulton has Sheet Metal Works on 1st floor. 54 Fulton indicates Store on 1st floor. 56 Fulton is labeled Rex Extract Company.

1920: Sanborn: Four four-story brick structures shown covering the entire lot.

1929: See Sanborn 1920.

1929: Liber 5086:166: Alfredo del Genovise dies and French Church du Saint Esprit leases Lot 14 to United States Trucking Corp. The lease states that after one year United States Trucking Corp. may demolish the existing structures at 50-56 Fulton "and erect upon the said premises in lieu thereof, a single one or more story garage."

1930: 19th century structures are demolished and replaced with a single-story garage.

1939: Sanborn: 50-56 Fulton shown as one structure labeled "US Trucking Corp. Garage" over entire lot.

1967: Irving Kerner, president of the Shannon-Hicks Corporation (on behalf of the Church du Saint Esprit), leases 50-56 Fulton Street to The American Oil Company.

1969: Certificate of Occupancy: Alterations to 50-62 Fulton public garage and automotive service station installing a gasoline tank. The structure is a single story brick building with a full cellar, built circa 1930.

1969: An update to the 1967 lease refers to the geometry of an "existing garage," presumably the concrete block structure currently at 58 Fulton, built circa 1968.

1984: Irving Kerner, president of the Shannon-Hicks Corporation, leases 50-56 Fulton Street to Capsule Motors Inc.

2016: The Church du Saint Esprit sells Lot 14 to Alwest Old Fulton LLC.

Discussion: Lot 14 has been built over throughout the 19th and 20th centuries including the entire lot footprint with cellar.

Conclusion: This site is not considered sensitive for archaeological remains.

LOT HISTORY OF BLOCK 202, LOT 18

Addresses: 58-64 Old Fulton.

Dimensions: Lot 18 is the easternmost parcel of Block 202. It stretches 69.2 feet along Old Fulton to the north, 86.4 feet along Doughty Street to the south, 74.2 feet along Lot 14, and 49.4 feet on Hicks Street to the east. The entire lot measures 4,705 square feet.

Current Use: 3,700 gross square foot auto body shop with the remainder of the lot paved for use as parking. Address of body shop is 60 Cadman Plaza West.

Historic Uses: Farmland, dwellings, commercial.

1692-94: Libers 1:120 & 2:15: Describes area as containing "tenements, houses, barns, stables, orchards, gardens, [and] meadows." A "cottage lot" is specifically described within an area 152 x 124 (units unspecified).

1704: Fulton Street officially laid out as the King's Highway.

1717: Liber 4:144: Describes area as fenced and bounded by roads on the west, east, and north.

Circa 1748: Post-fire land survey sets out current lotting arrangement for what will become Blck 202.

1767: Ratzer: Unspecified structures shown along Old Fulton (stores, taverns, stables according to Stiles).

1807: Liber 23:182: John Doughty purchases area of Lot 18.

Circa 1820: Official city grid laid out in neighborhood.

1827: Liber 23:212: George A. Hicks acquires parcel fronting Fulton (bound by Hicks and Doughty) in the eastern half of Lot 18 for $8,000 paid to John and Sarah Doughty and David and Abigail Seaman.

1857: Hinchman & George lamp and oil shop at 62 Fulton Street (BDE 1857).

1860 Sanborn: Lot occupied on the west by three-story wooden building ("third class") fronting Fulton with rear unbuilt. Eastern half is occupied by wider four-story brick structure ("first class") with western rear unbuilt.

1867: Auctioneer Archibald Johnston advertises a wagon sale with entries to be made at the office G. W. Mumby's Flour Store at 59 Fulton Street (BDE 1867).

1870: J. A. Ingram & Son merchant tailors at 60 Fulton Street (BDE 1870).

1874: Beers: Indicates Block 202 as former farm land of Jacob and John Hicks.

1880: Sanborn: Lot occupied by two structures. Western is wood. Eastern is brick.

1886: Sanborn: 58 Fulton is wooden structure fronting Fulton, brick structure fronting Doughty. 60 Fulton is a wooden structure, unbuilt on Doughty. 62-64 Fulton is a wider brick structure.

1887: Sanborn: 58 Fulton listed as Store with three stories fronting Fulton and one story fronting Doughty. 60 Fulton is four-stories, also listed as Store. A small, irregular, one-story structure, possibly an outhouse, is indicated behind No. 60 in a wedge-shaped open area. 62—64 Fulton is four stories fronting Fulton and Hicks, with a one-story wing on Doughty.

1898: See Sanborn 1887.

Circa 1900: 60-62 Fulton housed Heinbockel & Schneider wholesale liquor merchants which became John F. Heinbockel & Son and later William H. Meyer (BDE Dec 1, 1930). Corner of Fulton and Hicks (No. 64) is wholesale grocery of Alsgood & Doscher, later Alsgood, Asch & Co.

1903: Sanborn: See 1887 Sanborn.

1904: See Sanborn 1887.

1911: See Sanborn 1887.

1915: See Sanborn 1887.

1920: See Sanborn 1887.

1929: See Sanborn 1887.

1938: Certificate of Occupancy: Alterations are made to the building at 60-64 Fulton to convert the first floor to a store and restaurant space. The COO lists the second, third, and fourth floors as residential and notes a cellar 1939: Sanborn: 58 Fulton is empty. 60-64 Fulton is a four-story building fronting Fulton and Hicks with a one-story wing on the eastern Doughty frontage. The entire building is labeled as Store with unbuilt area west center.

1951-1967: 19th century structures are demolished and the lot is paved. Concrete block structure built at 58.

1967: Shannon-Hicks Corporation leases the entire lot to The American Oil Company. No existing structures are listed. At the same time, Lot 14 directly to the west is also leased to the American Oil Company, creating the arrangements leading to current auto-body shops.

1982: Irving Kerner (Shannon Hicks Corporation) sells Lot 18 to Goh and Chan York of Irvokay Realty Corp.

1987: Goh and Chan York sell Lot 18 to J. and H. Han.

Discussion: Lot 18 has been built over throughout the 19th and 20th centuries. However, a rear portion of the lot was never disturbed by construction. That space hosted a small, irregular one story building, possibly an outhouse, in the late 19th to early 20th centuries and provided ventilation and light to surrounding structures. It was unbuilt from the late 18th or early 19th centuries, prior to the installation of water and sewer lines.

Conclusion: Lot 18 is considered archaeologically sensitive in part for historic remains.

PREHISTORIC ARCHAEOLOGICAL SENSITIVITY

The project site is situated approximately 400 feet south of the East River cove that provided a natural crossing site between Manhattan and Long Island during prehistory. It is also located along the route utilized by indigenous inhabitants to reach the crossing point, the same route which later became the ferry road. On the other hand, the project site is more than 2,000 feet in any direction from perennial fresh water drainages that flowed in the past. Multiple studies articulating with the project site (Chrysalis 2012; HPI 2005; Solecki 1981) have produced no pre-Contact or Contact era archaeological materials. While the proximity to the river crossing and its access route suggest a high level of pre-Contact activity, the distance to a natural water source combined with the degree to which the project site and its surroundings have been altered by urban development since the early-to-mid-eighteenth century indicate there is only a low level of pre-Contact archaeological sensitivity.

HISTORIC ARCHAEOLOGICAL SENSITIVITY

Block 202, Lots 14, 18, and p/o 12 have been built upon since at least the 18th century, including dwellings, commercial establishments, and light-to-moderate industrial facilities. Previously excavated basements and cellars have likely eliminated the archaeological potential of Lots 12 and 14. However, unbuilt areas at the rear of Lot 18 retain archaeological sensitivity for both 18th and 19th century remains.

Several Revolutionary War era structures and finds proximate to the project site indicate archaeological potential for late 18th century, War-era materials (military insignia, sewing notions, tools, etc.) in the thick historic fill documented in the immediate vicinity by Solecki. In the period between the end of the war and the late 1830s, at least four major land filling episodes razed the British soldiers and sailors cemetery south of Fulton Street and distributed its deposits across the streets, lots, and waterfront of the growing village. Nearby finds and historically attested structures include: (1) the Hessian guard house and prison at the western edge of Block 202; (2) the aforementioned British burial ground located just to the south; and (3) Solecki's find of an embossed Hessian metal cap plate during his Old Fulton Street sewer study in the late 1970s.

By the early 19th century, multi-story buildings with commercial spaces on the ground floors and dwellings above had been constructed in concert with initial urbanization. As City water and se \wer service was introduced in the 1850s, yard space behind lots 12 and 14 was eliminated, but it was preserved behind Lot 18, where a privy and open space are depicted in 19th and 20th century maps. According to both Sanborn maps and the Department of Buildings, no cellars or basements have ever been excavated in the rear of Lot 18. The lot retains a high level of sensitivity for historic archaeology.

CONCLUSION AND FINDINGS

This study has evaluated the prehistoric and historic archaeological sensitivity of Block 202, Lots 14, 18, and p/o 12 for the 50 Old Fulton Street project site. It has also examined the documentary record of disturbance, excavation, and construction at the site since the early 19th century. While the potential for prehistoric archaeological resources is low, the project site has a high level of historic archaeological potential in Lot 18, where lack of building activity at the rear (i.e., Doughty Street side) would have preserved deposits dating to at least the late 18th to early 19th centuries. These potential remains are associated with two historical periods: (1) the Revolutionary War British/Hessian occupation of Brooklyn and (2) the mid-to-late 19th century era of industrialization, as working class Brooklyners were living along a mixed and changing commercial-industrial corridor connected to the ferry and the growing city.

Potential Revolutionary War materials would have been deposited between the final decades of the 18th through the first quarter of the 19th centuries, when local hills hosting the British soldiers and sailors cemetery were razed and used to fill in Brooklyn Village and shoreline water lots immediately after the War. Archival evidence suggests that former owners of the project site were involved in "leveling off" the cemetery land and Solecki's find of a Hessian cap plate in sewer monitoring adjacent to the project site confirms the impact these activities had on the local archaeological record. Archaeological testing and construction monitoring during excavation may recover items such as military insignia, sewing notions, personal tools, and other bodily items. As recent studies elsewhere in New York City have shown (GRA 2016), historic fill can provide a valuable and rich picture of human-transported materials from a variety of periods and contexts.

Archaeological materials associated with working class residential and commercial life at the project site would have been deposited in association with the rear yard and privy documented behind 60 Old Fulton in 19th and 20th century maps. While the first sewer on Fulton was installed in 1851, it was a storm water sewer unconnected to the local dwellings and many residents likely retained outhouses, like this one. Flush toilets took a particularly long time to replace outhouses in Brooklyn and this is a good example of that phenomenon. When abandoned and/or filled with refuse, such features can contain a wealth of information about historic consumption patterns from both domestic activity and commercial/industrial enterprises. At 60 Old Fulton, a privy would provide an opportunity to recover household assemblages (pottery and bottle remains, hygiene and medicinal items, children's objects, etc.), food waste, grocer's refuse, liquor merchants' bottles, and waste from the early 20th century restaurant. Side-by-side datasets of residential and commercial activities are particularly powerful in illustrating the changing lifeways that accompanied industrial development, demographic change, and shifts in domestic patterns in the 19th century. Historical accounts of this transition often emphasize the bewildering rapidity of development, but glimpses of how these changes occurred on a more everyday scale are less plentiful.

The potential for prehistoric archaeological resource recovery is low, while the unbuilt rear of Lot 18 is sensitive for historic archaeological resources connected to the Revolutionary War and residential, commercial, and industrial life in 19th century Brooklyn. In this Lot, the proposed

development's excavations are likely to exceed previous construction excavations in depth and footprint. Greenhouse Consultants Incorporated recommends Phase IB testing in Lot 18 prior to construction for evidence of materials associated with the late 18th century Revolutionary War and privy deposits relevant to the 19th century life of Brooklyn's working-class residents and businesses.

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1870, Oct. 3
1878, July 22
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1881, Dec. 3
1882, July 7
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APPENDIX A: PHOTOGRAPHS AND FIGURES



Photograph 1. Northern elevation of Lots 18, 14, and p/o 12, facing south.



Photograph 2. Eastern elevation of Lot 18, with Lots 14 and 18 visible in the background, facing northwest.

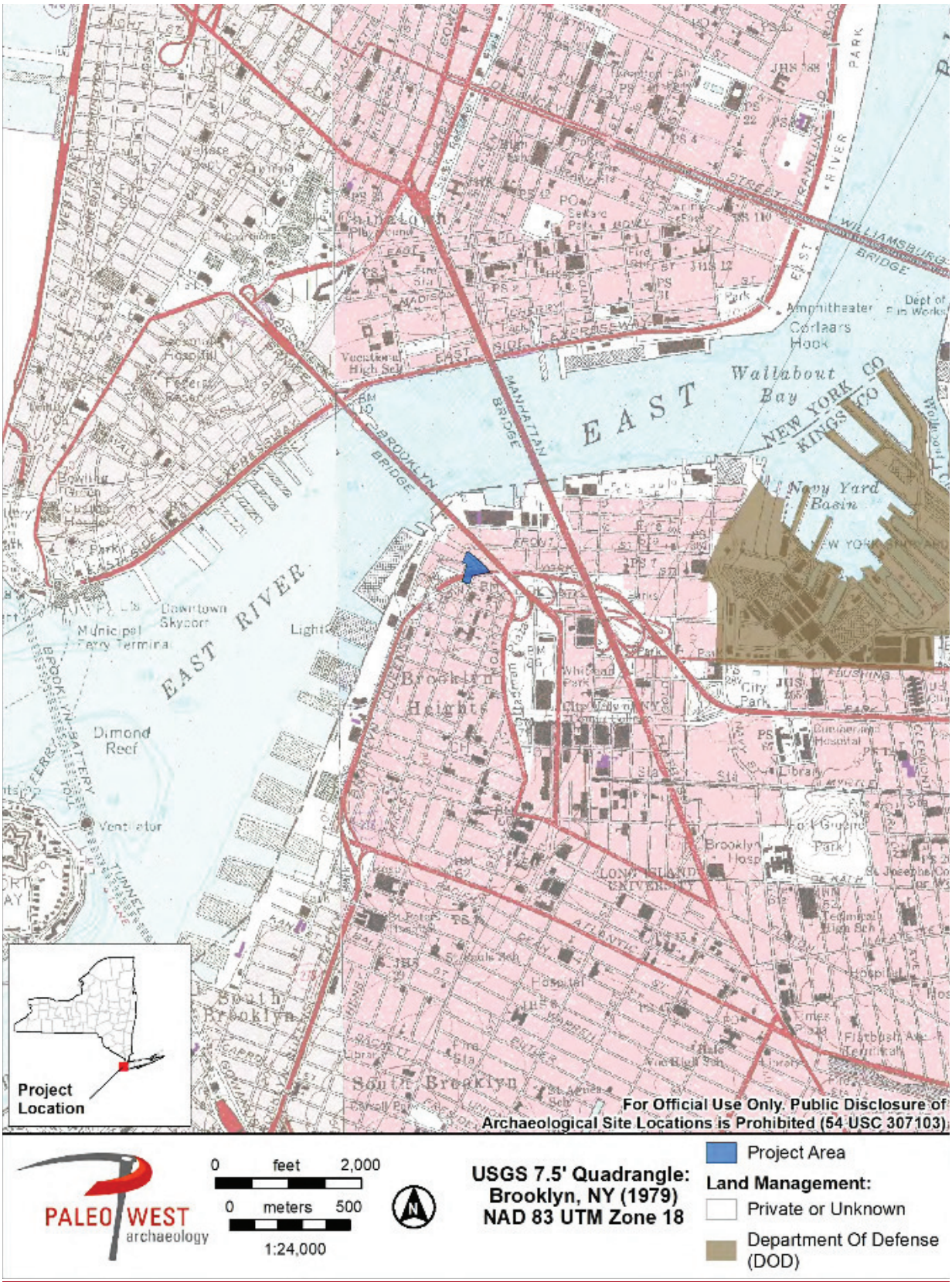


Figure 1. Project site location within Brooklyn, Kings County, NY.



Figure 2. NRCS Web Soil Survey results for the project site and vicinity.

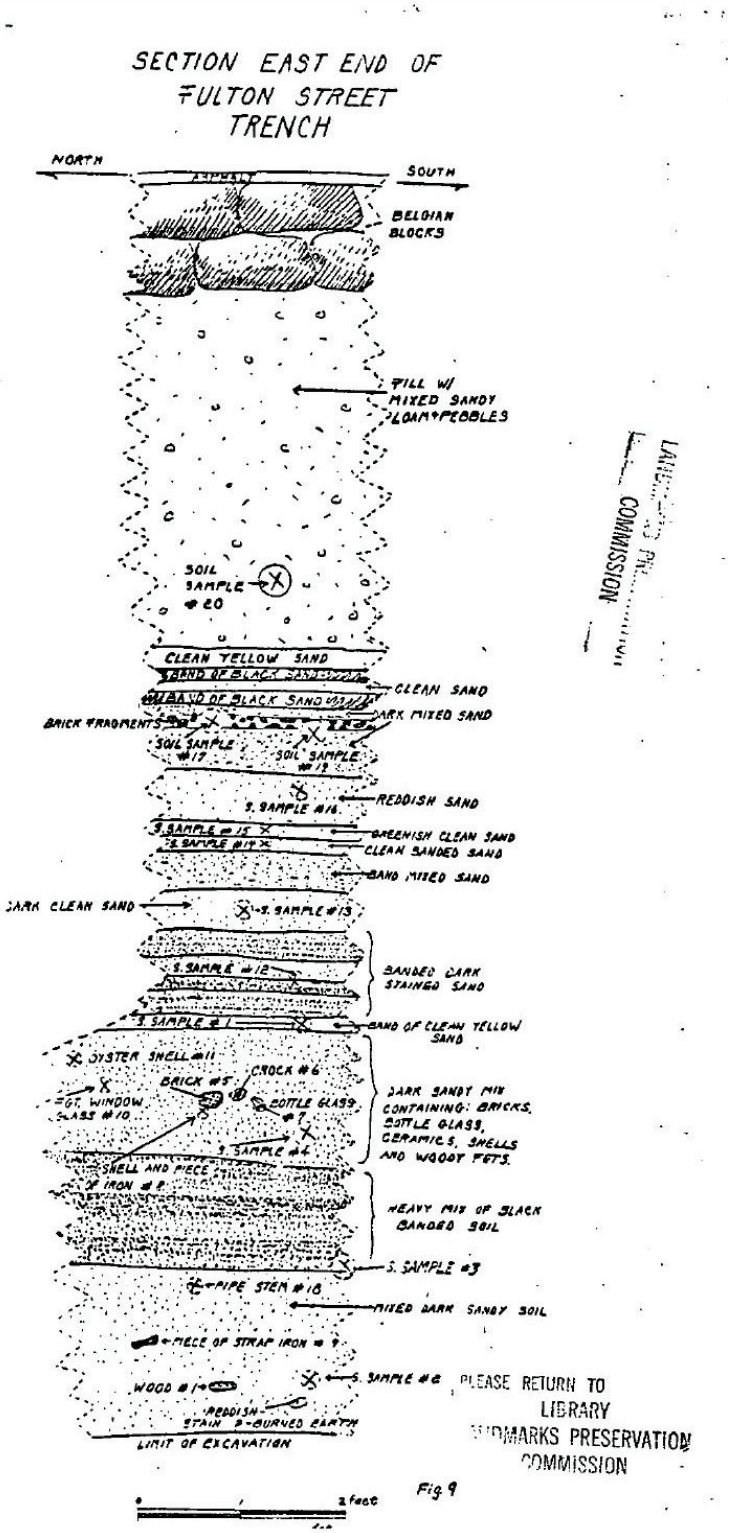


Figure 3. East section of excavated trench along Old Fulton Street (Solecki 1981, Figure 9 on page 301).

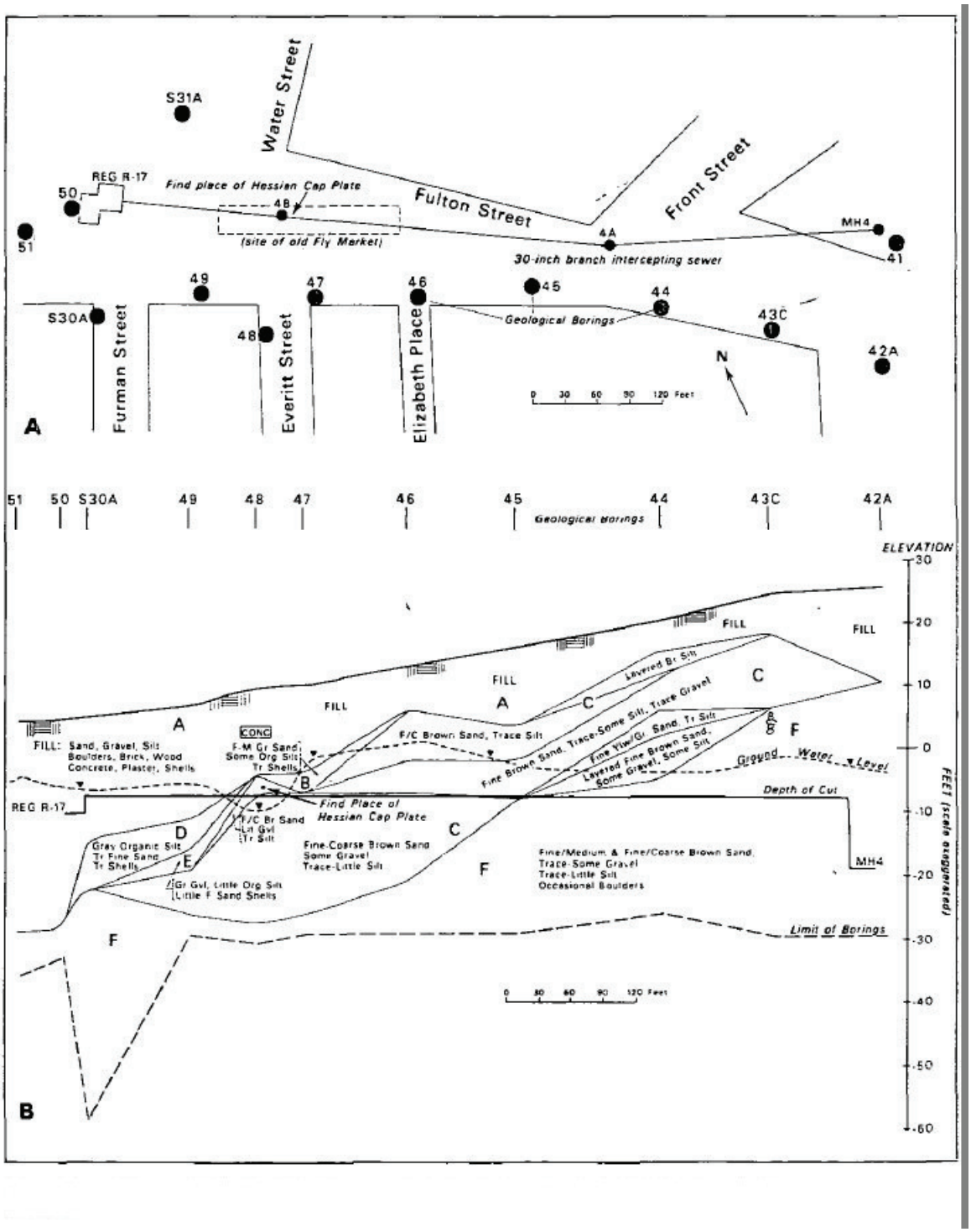


Figure 4. Plan (A) and cross-section (B) of excavated trench along Old Fulton Street (Solecki 1981, Figure 7 on page 299).

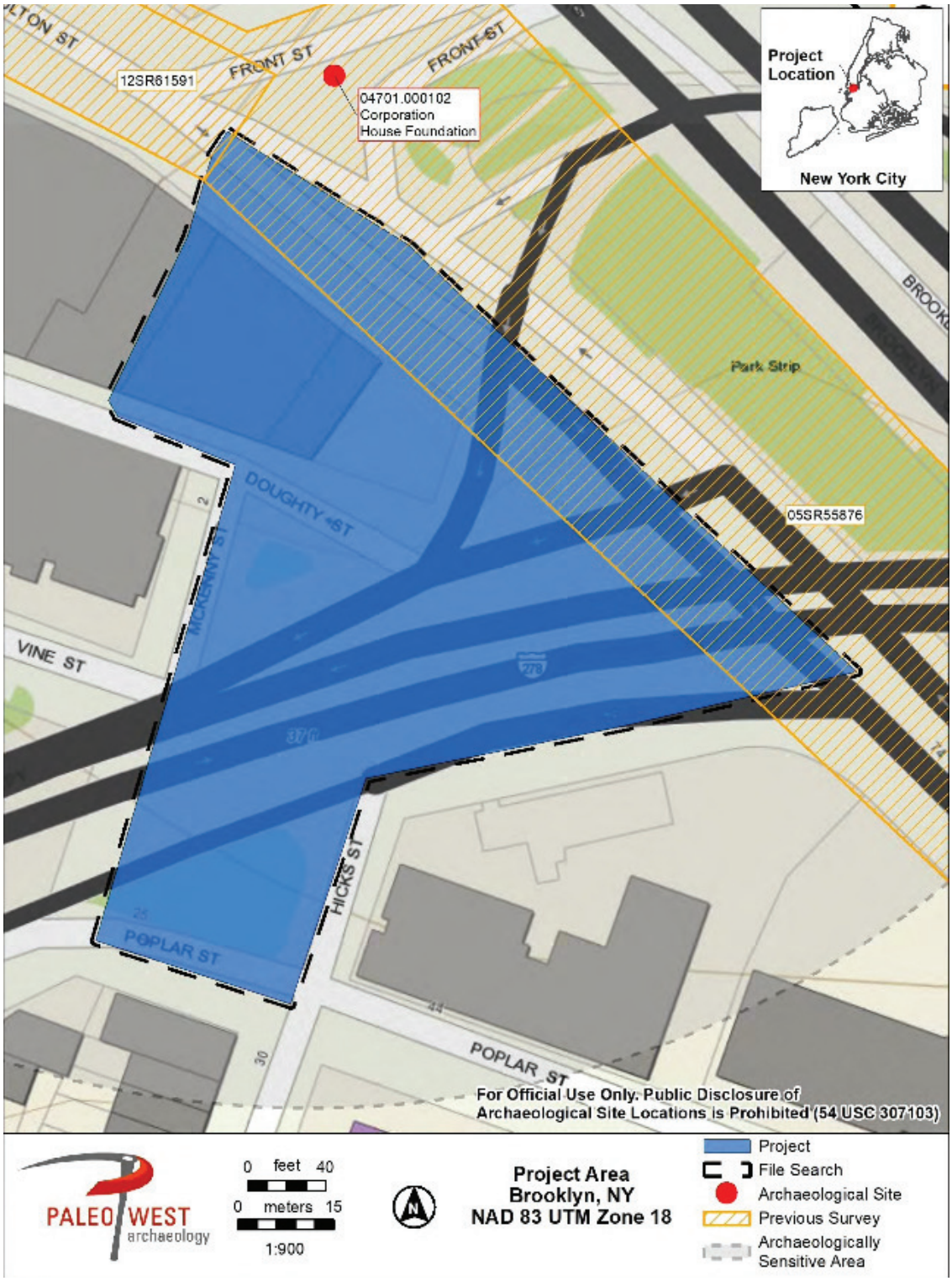


Figure 5. Site file search results for archaeological sites and surveys in direct proximity to the project site.

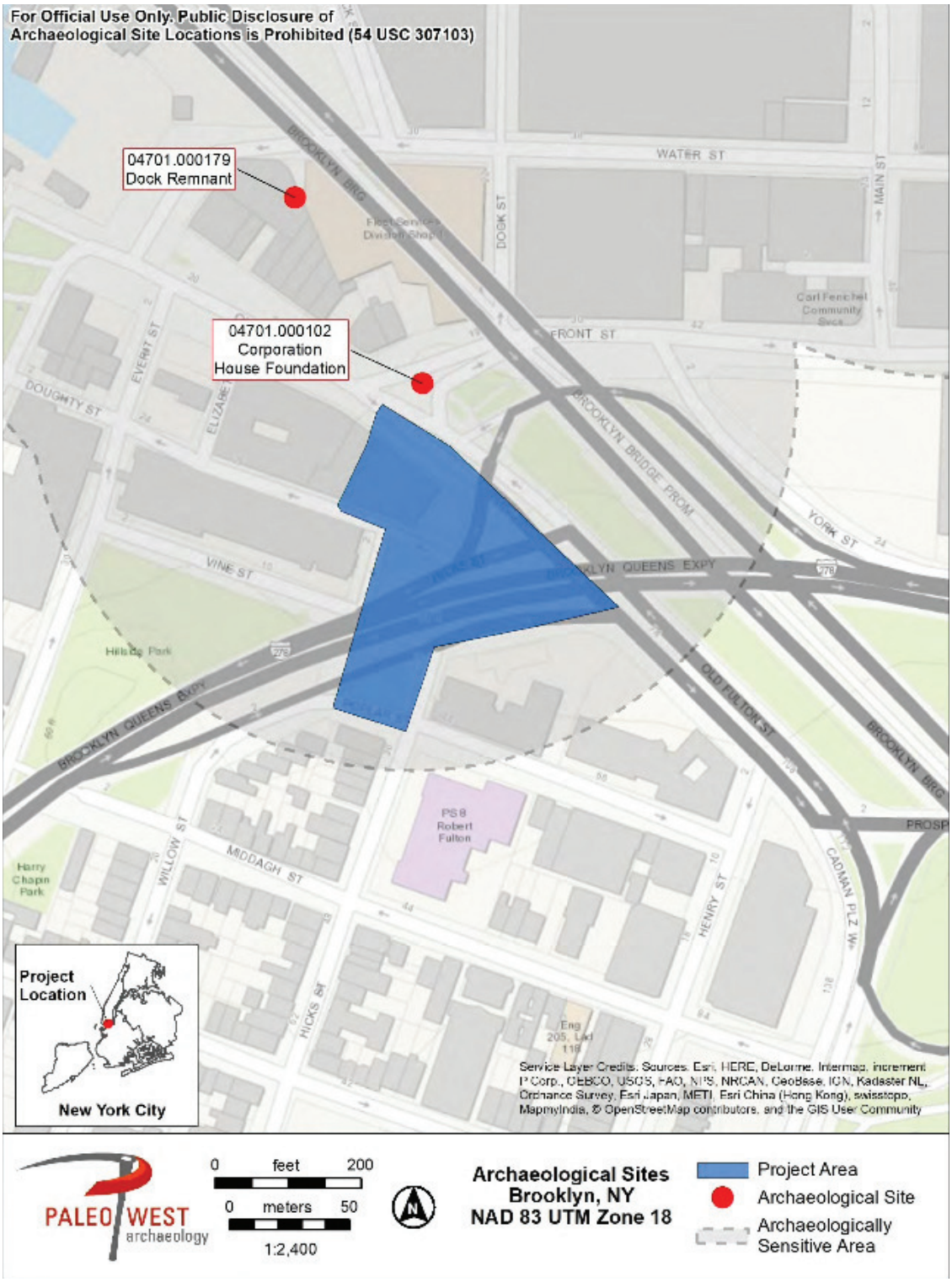


Figure 6. LPC archaeology sensitivity buffers within the project vicinity.

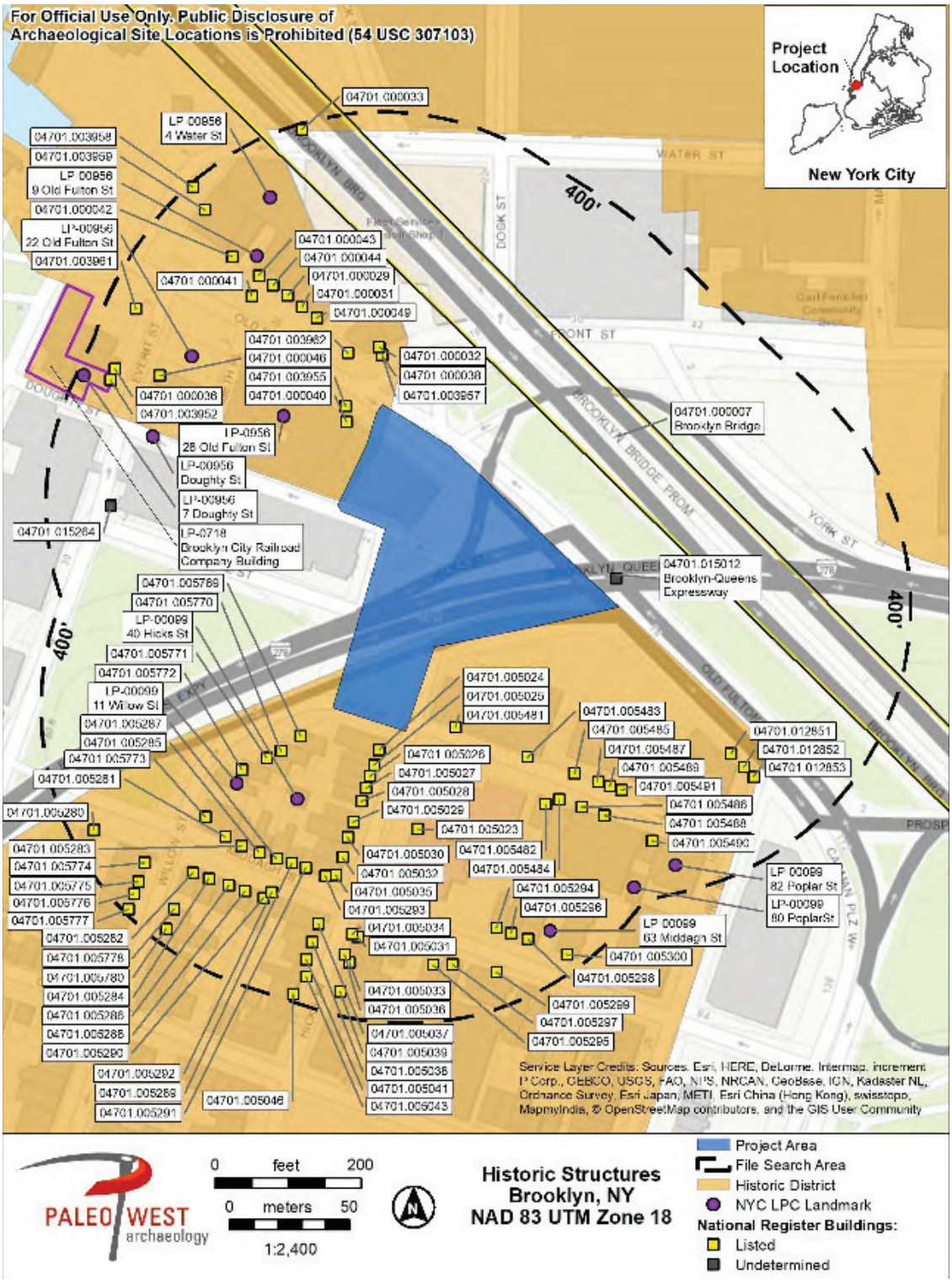


Figure 7. Historic Districts and architectural sites within the 400-foot CEQR search radius.

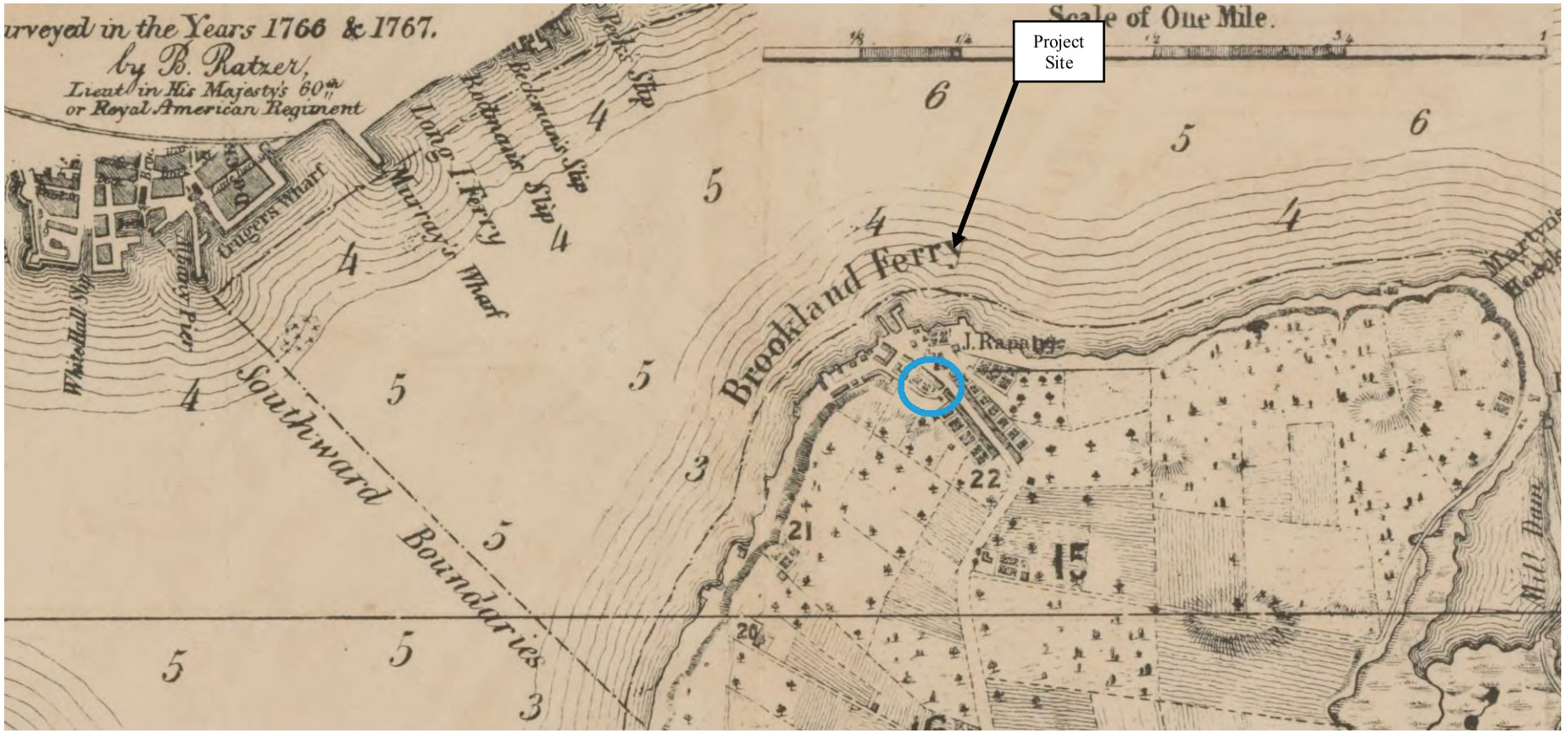


Figure 8. Detail taken from map produced for a Report of the Board of Health in 1875/6 showing the original shore lines in the City of Brooklyn from government surveys made in 1776/7 (NYPL) [note: no scale in original].



Figure 9. The ferry crossing is featured on a map of the Battle of Long Island, taken from Henry P. Johnston's 1878 Edition of *The Campaign of 1776 around New York and Brooklyn*.

Figure 10. Detail taken from Ratzer's Plan of the Town of Brooklyn map from 1767 (NYPL).



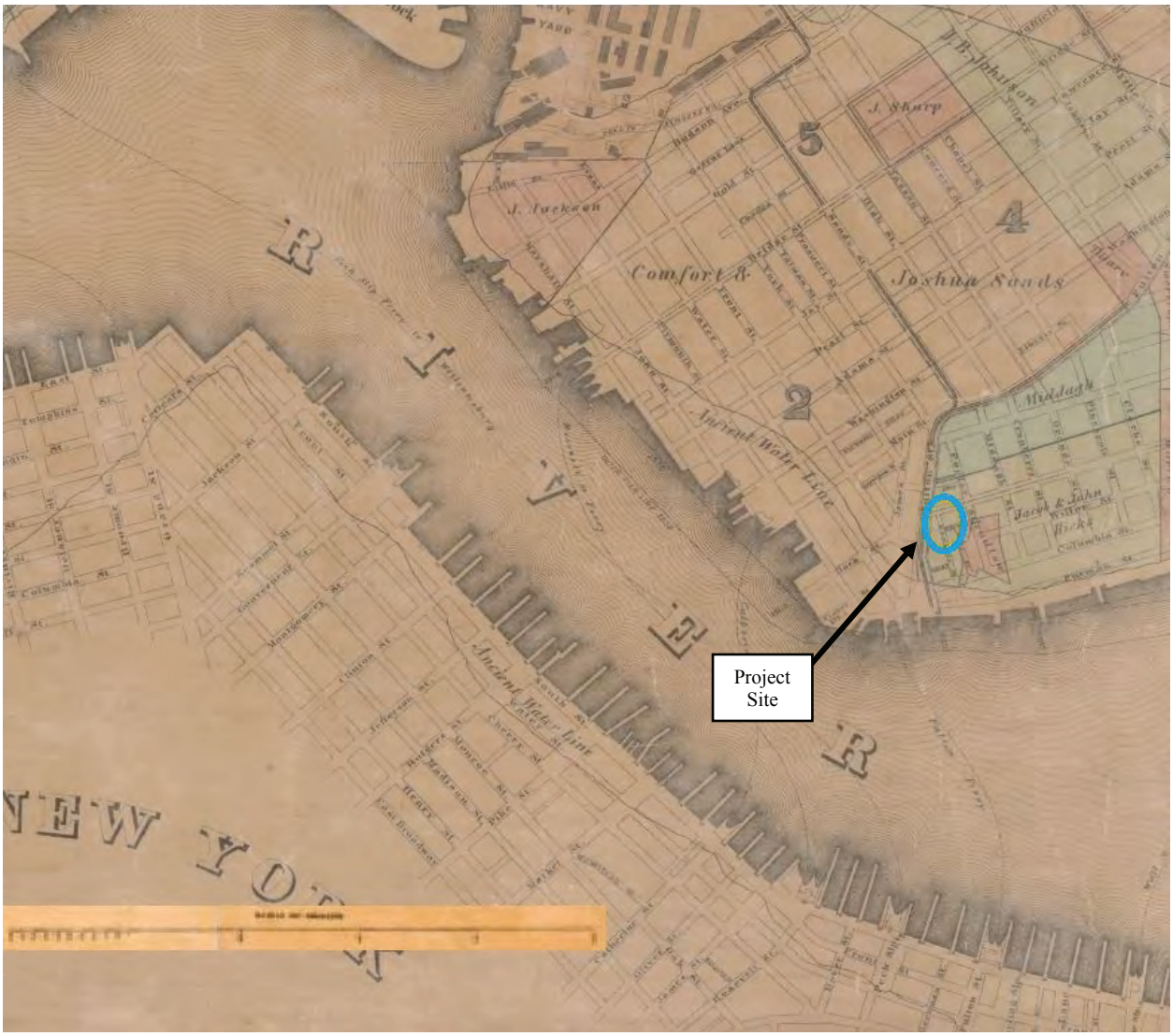


Figure 11. Detail taken from 1855 Perris map of the City of Brooklyn (NYPL).

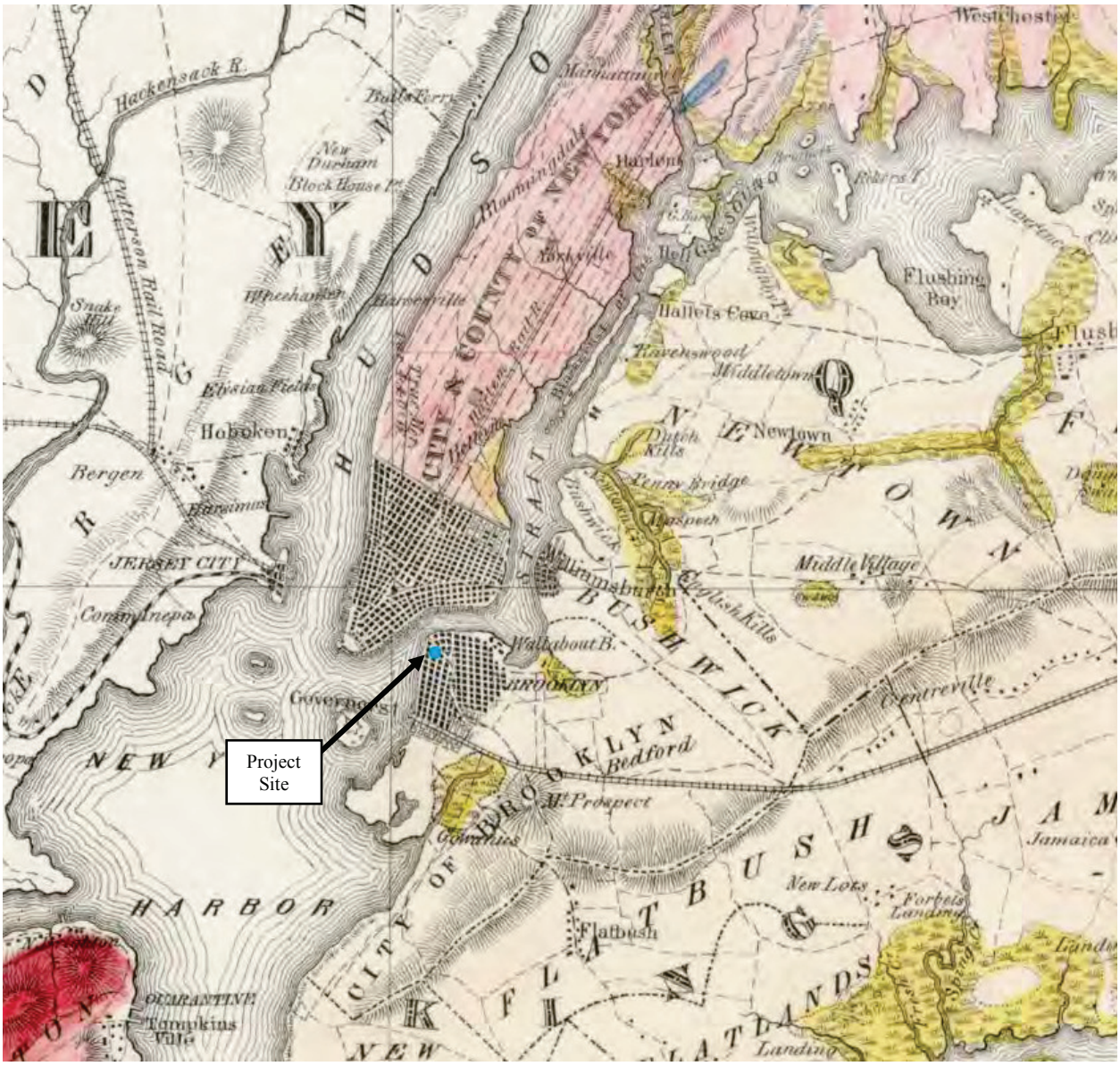


Figure 12. Detail taken from Mather's 1842 Geological Map of Long & Staten Islands with the Environs of New York from his work *Geology of New York* [note: no scale in original].



Figure 13. Detail taken from J.B. Beers & Co. Farm Line Maps of the City of Brooklyn from 1874.



Figure 14. Detail of the 1860 Sanborn map with Lots 14 and 18 outlined (BHS).

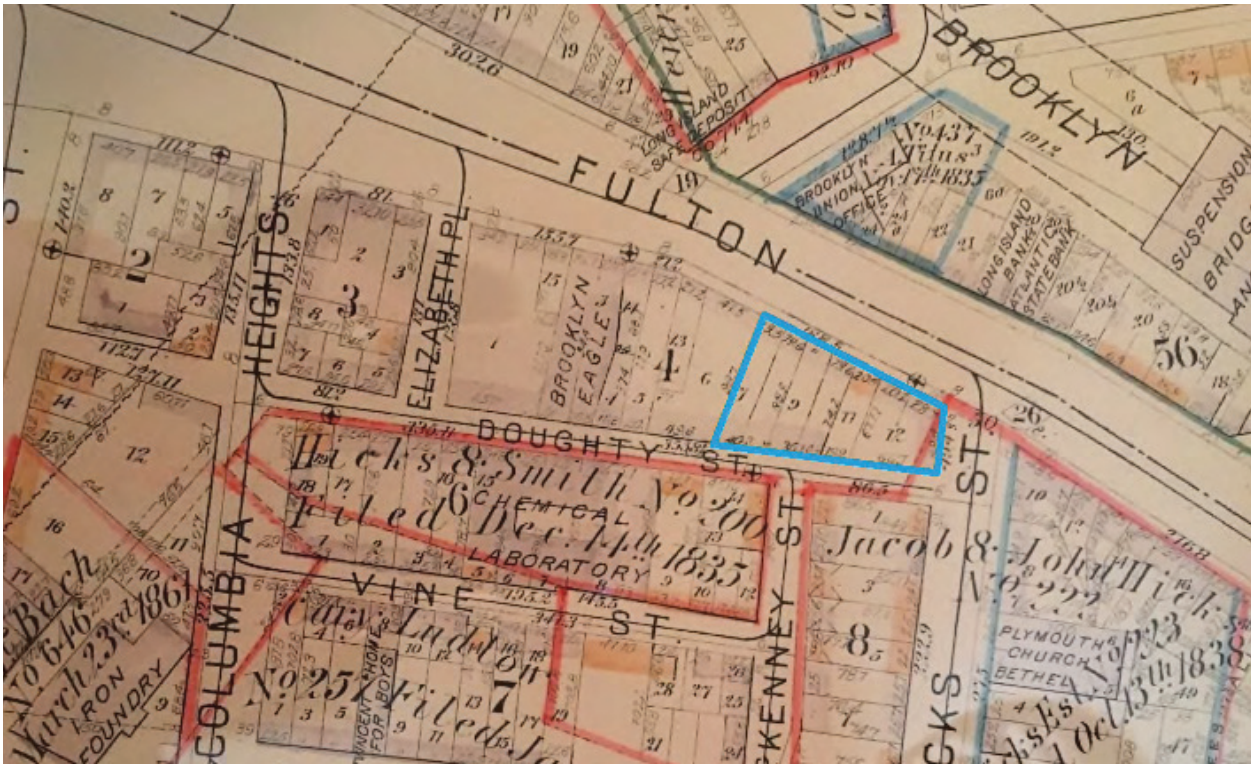


Figure 15. Detail of the 1880 Sanborn map with Lots 14 and 18 outlined (BHS).



Figure 16. Detail of the 1886 Sanborn map with Lots 14 and 18 outlined (BHS).

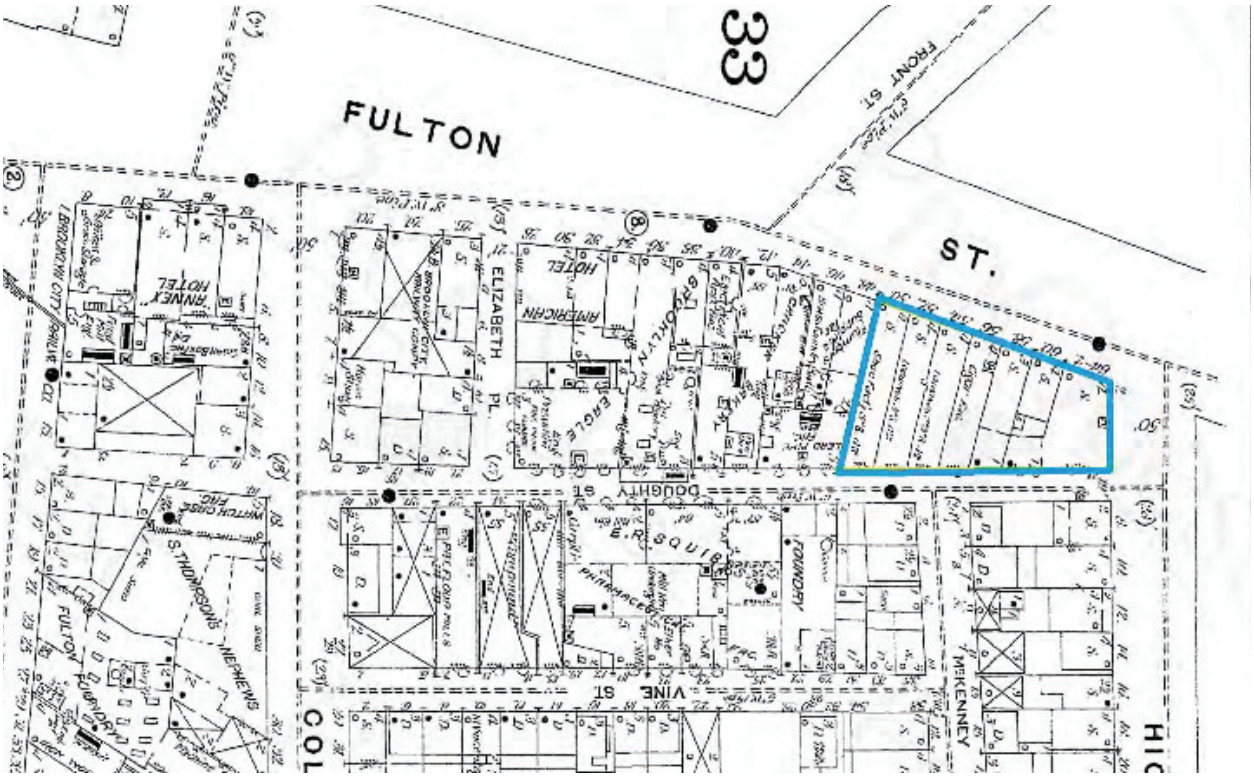


Figure 17. Detail of the 1887 Sanborn map with Lots 14 and 18 outlined (NYU).



Figure 18. Detail of the 1898 Sanborn map with Lots 14 and 18 outlined (BHS).

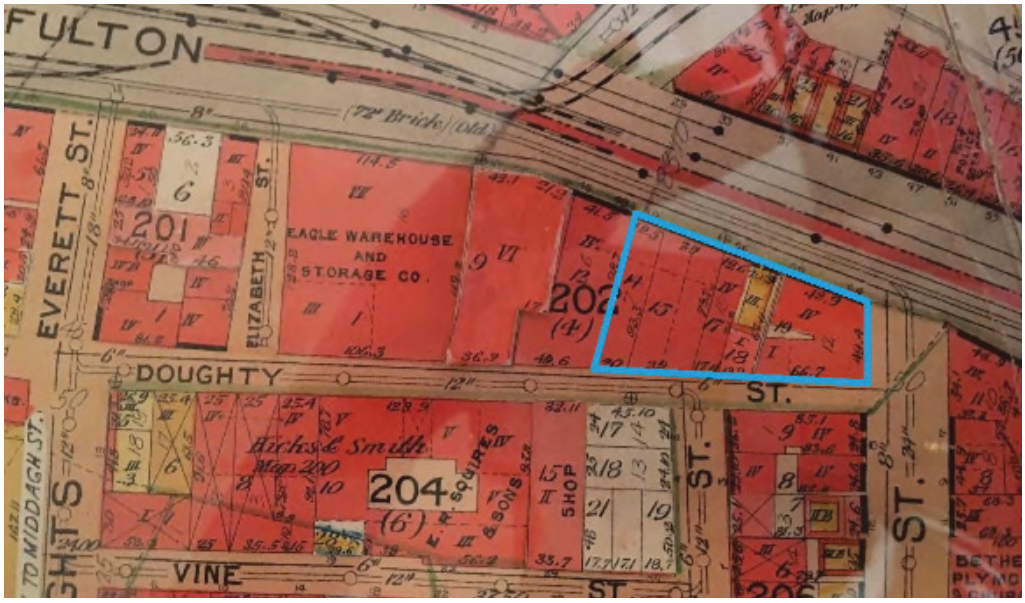


Figure 19. Detail of the 1903 Sanborn map with Lots 14 and 18 outlined (BHS).

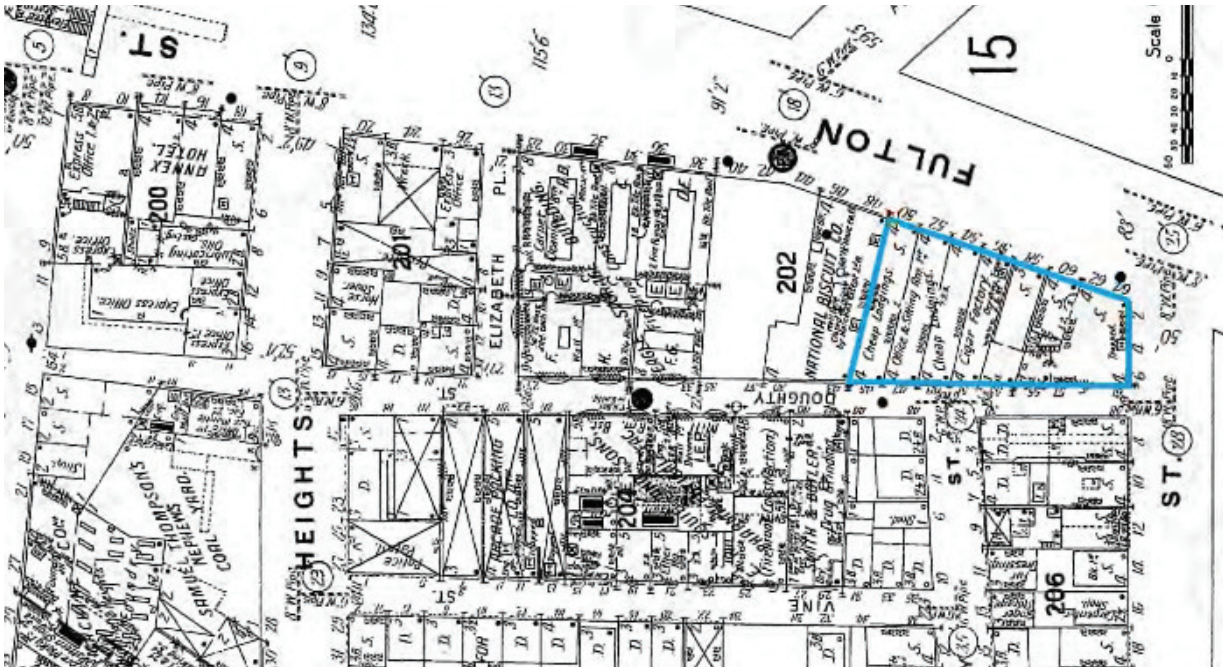


Figure 20. Detail of the 1904 Sanborn map with Lots 14 and 18 outlined (NYU).

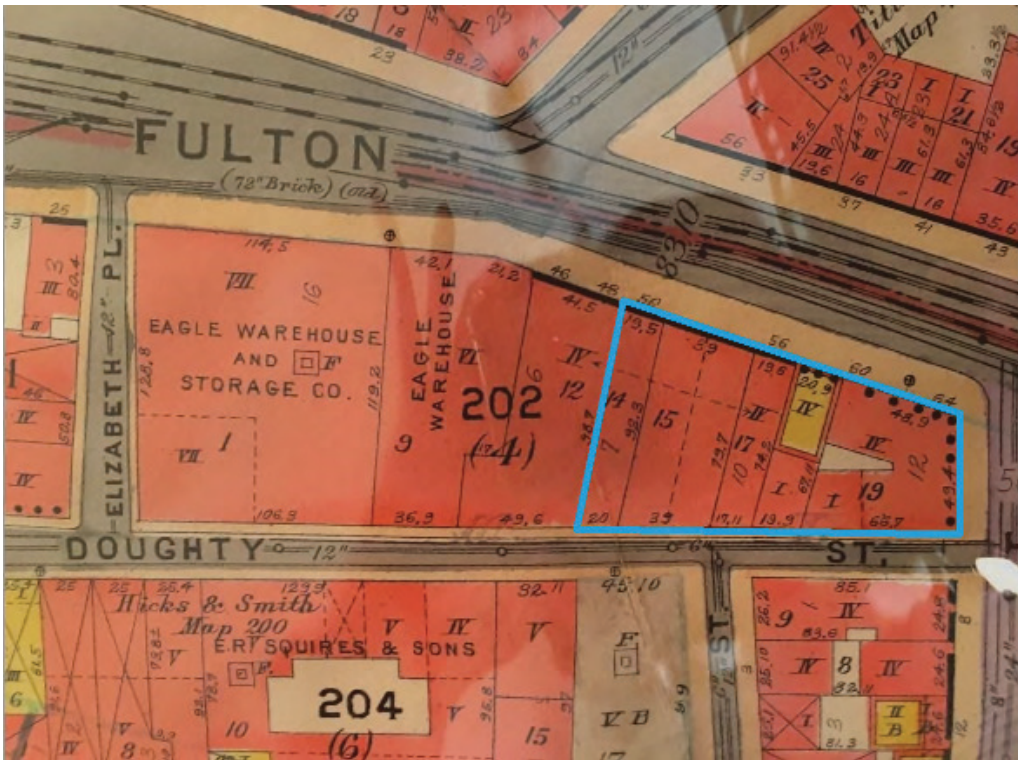


Figure 21. Detail of the 1911 Sanborn map with Lots 14 and 18 outlined (BHS).

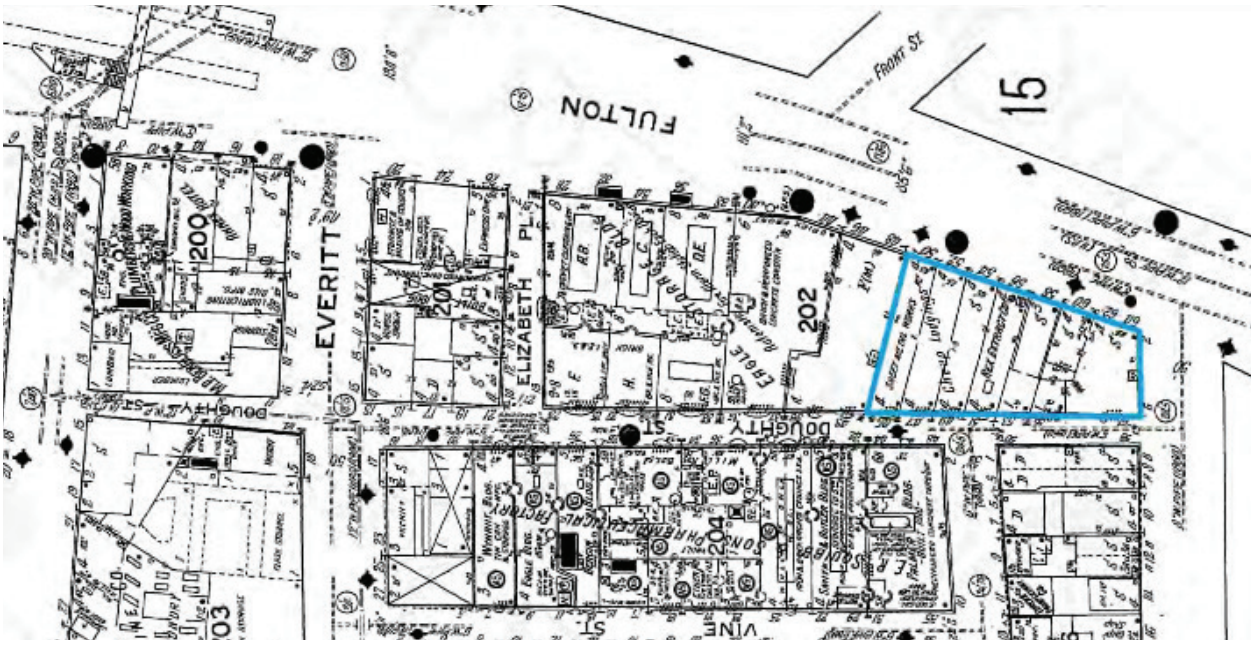


Figure 22. Detail of the 1915 Sanborn map with Lots 14 and 18 outlined (NYU).



Figure 23. Detail of the 1920 Sanborn map with Lots 14 and 18 outlined (BHS).



Figure 24. Detail of the 1929 Sanborn map with Lots 14 and 18 outlined (BHS).

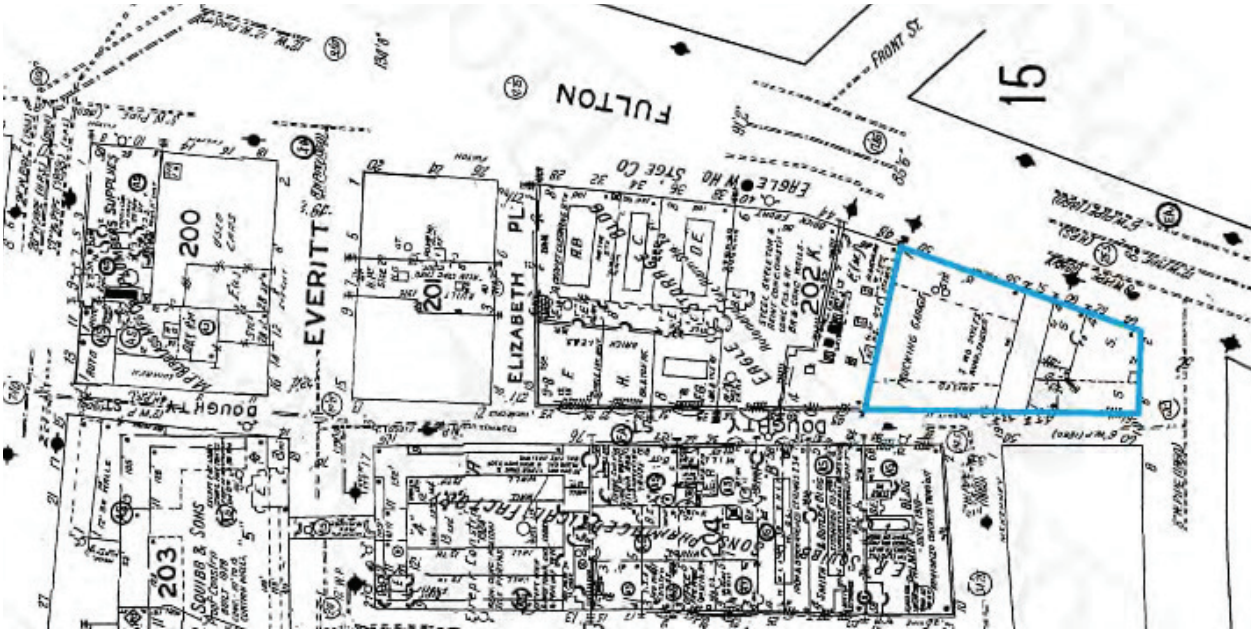


Figure 25. Detail of the 1939 Sanborn map with Lots 14 and 18 outlined (BPL).



Figure 26. 1931 Photograph of Hicks Street, 64 Old Fulton Street on left, looking north (NYPL Digital Collections).

APPENDIX B: LAND CONVEYANCE RECORDS

Land Conveyance Records for Block 202

Date	Grantor	Grantee	Liber: Page	Notes
1686	Governor Council (?)	Richard Gibbs	2:25	Part of a Large Tract
1688	Hooghlant Leornelis Driscke	Jooris Jacobe	1:81	
1688	Jacobe Jooris, Jooris Fryn	Jan Sproug (Sfroug?)	1:137	Diagram
1692	Jacobs George, Jacobs Trentye (wife)	Harman Joras	1:293,117	Part of a Large Tract
1692	Clere, Claysse Tunisse	Joniea Sprung	1:120a, 299	
1694	Clere Claes Tumisse, Clere Annike (wife, formerly widow of Sprong, John)	Jacob Rutgerty	2:15	Diagram
1694	Ruttgerty, Jacob	Henry Filkin	2:16	Diagram
1694	John White	John Bush	2:287	Part of a Large Tract
1695	Joras Harman	George Jacobs, Trentye Jacobs (wife)	1:118,295	
1695	Sprong Garrett, Sprong Annike (wife)	Henry Filkin	2:50	Part of a Large Tract
1695	Jacobs George	Henry Filkin	2:78	Part of a Large Tract
1696	Gibbs Richard, Gibbs Sarah (wife)	John Coa	2:77	Part of a Large Tract
1697	Henry Filkin	John Coa	2:143	Diagram
1699	Town of Breucklyn		2:191	Part of a Large Tract
1701	Brooklyn Freeholders	Minutes of Town Meeting	2:225	
1701	Freeholders of Brooklyn	Minutes of Town Meeting	2:226	Com. Lands
1702	Brooklyn Freeholders	Jooris Hanssen, Jacob Hanssen, Cornelius Van Duyn As L…tu.., Freeholders of Brooklyn	2:225	Part of a Large Tract
1704	Jacobs George, Jacobs Trentye (wife), Joras Harman, Joras Nettie (wife)	Garrett Middagh	2:280	Part of a Large Tract
1715	Nicoll William, Beekman Gerrard, Coa John, Coa Sarah	Thomas Palmiter	4:103, 105	Part of a Large Tract

Date	Grantor	Grantee	Liber: Page	Notes
1717	Thomas Palmiter, Margarit Palmiter (wife)	Hans Bergen	4:144	Those several dwelling houses and all that parcel of land lying and being at the Ferry in town of Brooklyn. Lately belonging to John and Sara Coa
1720	Bergen Hans, Bergen Rachel (wife)	William Baker	4:297	Part of a Large Tract
1720	Bergen Hans, Bergen Rachel (wife)	William Baker	4:298	Part of a Large Tract
1724	Baker William, Baker Hannah (wife)	Daniel Bontecou	5:35	Diagram
1730	Town of Brooklyn	Freeholders of Brooklyn	5:96	Common Lands
1744	Bergen Hans, heirs of	Samuel Hopson	5:129	Diagram
1758	Hopson Samuel	John Carpenter	6: 62, 63, 370	Diagram
1761	Hopson Samuel	Benjamin Everit	6:55, 56, 87, 89	Diagram
1761	Hopson Samuel, Hopson Alice (wife)	Benjamin Everit	6:55, 56, 87, 89	Diagram
1764	Benjamin Everit	Joshua Mills	6:87, 89	All that house and lot near the ferry in Brucklin
1764	John Middagh	Gerrit Middagh	6:132	Part of a Large Tract
1764	John Middagh, Hannah Middagh	Gerrit Middagh	6:133	Part of a Large Tract
1768	Van Brunt Rutgert (sherriff), Garrison John, Judgement Debbir (?)	Leffert Lefferts	6:183	Diagram
1770	Wickham William, Wickham Sarah (wife)	John Carpenter	6:272, 274, 4:154	Whereas William Wickham and John Carpenter did heretofore agree to purchase of the devices of Samuel Hopson the house and lot of ground
1770	Wickham William, Wickham Sarah (wife)	John Carpenter	6:274, 272, 7:186	One equal half part of a dwelling house and lot of ground at Brookland ferry.
1786	Vandervoost Peter (sheriff)	John Carpenter	6:370	Part of a Large Tract

Date	Grantor	Grantee	Liber: Page	Notes
1787	Carpenter John, Carpenter Sarah (wife)	John Van Nostrand	6:376	Block 202
1787	Horsfield Jane	John Van Nostrand	6:378	All that certain parcel of land near the place of ferriage between NY and Nassau Island.
1793	Carpenter George, Carpenter Ruth (wife)	Gerard Steddiford	8:51	Village of Brooklyn, Part of a Large Tract
1793	Steddiford Gerard, Steddiford Jane (wife)	Sarah Carpenter	8:53	Part of a Large Tract
1795	Hicks Jacob, Hicks John, Hicks Elizabeth (wife)	Burdet (?) Stryker	7:9	Part of a Large Tract
1795	Vanloott John, Van Nostrand Isaac, Van Nostrand Martha (wife)	Isaac Remsen	7:11	Part of a Large Tract
1803	Morris William, Morris Sarah (wife)	Sarah Carpenter	8:55	Part of a Large Tract
1807	Doughty John, Doughty Sarah (wife)	David Seaman	9:119	Looks like lot 18. Diagram
1807	Schoonmaker John (sheriff)	John Doughty	23:182,181	lot 18, Diagram. Brooklyn Inn of easterly in front by sheet ldg. From ferry in Brkn Churcle (?)
1807	Stryker Burdett, Stryker Susannah (wife)	John Doughty	23:181, 9:119, 23:182	lot 18, Diagram. Brooklyn Inn of easterly in front by sheet ldg. From ferry in Brkn Churcle (?)
1809	Brooklyn and Jamaica and Flatbush Turnpike Road	Inquisition Tapp…ment (?)	9:505	Part of a Large Tract
1811	Remsen Abraham, Remsen Elizabeth (wife)	Isaac Weeks	10:214, 8:363	Lot on the main street leading to the ferry stairs
1811	Garrison John, Garrison Mary (wife)	Selah Smith	14:365	Diagram
1813	Weeks Isaac, Weeks Pheobie (wife)	Samuel Watts, Cornelius Van Cleef	11:22, 12:529	Illegible text, Diagram

Date	Grantor	Grantee	Liber: Page	Notes
1819	Smith Benjamin, Smith Phebe (wife)	James W. Burtis	12:608, 30:250	Illegible text, Diagram
1820	Watts Samuel, Watts Maria (wife), Van Cleef Cornelius, Van Cleef Christiana (wife)	Everit Barkeloo	12:220, 21:11, 8:359	Illegible text, Diagram
1821	Smith Benjamin, heirs of	Valentine Smith	13:94	same block diff lot, digram.
1822	Doughty John, Doughty Sarah (wife), Seaman David, Seaman Abigail	Isaac Nostrand	13:336	Diagram
1824	Smith Valentine	Stephen Wood	14:280, 13: 94	Illegible text, Diagram, same block diff lot.
1825	Nostrand Isacc, Nostrand Mary Anna	Joseph Masen	16:196	Diagram
1825	Drake Jeremiah I. Master in Chancery	Allen Lippincott	21:400	Part of a Large Tract
1827	Wills Thomas, Master in Chancery	Allen Lippincott	22:235	Diagram
1827	Smith Ann	Allen Lippincott	22:237	Part of a Large Tract
1827	Seaman David, Seaman Abigail (wife), Doughty John, Doughty Sarah (wife)	George A. Hicks	23:121, 214, 9:119, 37:83	Diagram
1827	Garrison John	George A. HIcks	23:212, 214, 9:119, 37:83	Diagram
1828	City Banks of New York	John Wikaman (?)	23:422	Diagram
1828	Dean John (sheriff), Remsen Charles, Money Judgement	City Bank NY	24:88	Part of a Large Tract
1828	Lippincott Allen	William Jenkins	24:204	Part of a Large Tract
1828	Jenkins William	George Powers Sr.	24:208	Part of a Large Tract
1828	Masen Joseph, Masen Rachel	Daniel Wright	24:297	unhelpful diagram
1828	Jenkins William	John Dikeman	24:411	Part of a Large Tract
1828	Powers George Sr., Powers Mary (wife)	William Powers	25:8	Diagram

Date	Grantor	Grantee	Liber: Page	Notes
1829	Shotwell Samuel, Shotwell Gutharime (?) (wife)	William Jenkins	23:100, 7:11, 24:411	Mid block, Diagram
1829	Suydam Hendrick L., Suydam Peggy	John Hunter	26:259, 34:286, 8:359	illegible text, diagram
1829	Cole Peter, Cole Matilda (wife)	John Dikeman	26:368	Diagram
1829	Merceen (?) William, Merceen Maria	John Dikeman	26:378	Diagram
1829	Carpenter William, Sarah, Catherine, Charles, John, William, Elizabeth, Sarah Morris, Frances Stout, George Carpenter	John Garretson	32:229	Diagram
1830	Powers William	Henry Aldworth	28:126	Diagram
1831	Weekes James	Samuel Hicks, Gabriel Furman, as asergnecs (?) of James Weekes	30:245	Diagram
1831	Burtis James W., Burtis Rachel	Richard S. Williams	30:250	Diagram
1831	Williams Richard S., Williams Amy (wife)	Thomas Gerald	30:404, 250, 33:420	Diagram
1831	Aldworth Henry, Aldworth Anna Lartitia	Eliza Gardiner	31:95	Diagram
1831	Hicks George (?), Hicks Elizabeth	John G. Hicks, (?) Smith	31:233	Diagram
1832	Gerald Thomas	Charles Watrous	33:420, 30:404, 12:608	Diagram
1832	Hunter John, Hunter Mary (wife)	Miles Wood	34:286	Diagram
1833	Hunter John	Miles Wood	36:68, 69	Diagram
1833	Wright Daniel	Joseph Moser	36:127, 39:390, 24:297	Diagram
1833	Hood Miles, anabella (wife)	Nathaniel Gardiner	36:69,324,68, 39:38	Diagram
1833	Dikeman John, Dikeman Susan, Strycker Susan, Remsen	Joseph Moser, Lose Van Nostrand	38:352, 42:178, 38:368	Block 202

Date	Grantor	Grantee	Liber: Page	Notes
1833	Hicks George A., heirs of	Polyanna (?) W. Daves	379:83, 119, 23:212, 214	Diagram
1833	Morse Nathan, Master of Chancery	Seumus Barkeloe	36:324, 69, 39:38	Diagram
1833	Barkeloe Seumus	Joseph Moser, Lasee Van Nostrand	36:324, 39:38, 353	x3 Diagram
1834	Moser Joseph, Rachel (wife), Van Nostrand Losee, Elizabeth (wife)	Gabriel Leverich	39:353, 38, 36:324	Diagram
1834	Moser Joseph, Rachel (wife)	Nathaniel Gardiner	39:390	Diagram
1834	Gardiner, Nathaniel, Elizabeth (wife)	Gabriel Leverich, Joshua Tolford	41:473, 42:18, 36:69	Diagram
1834	Gardiner, Nathaniel, Elizabeth (wife)	James Halters, Joshua Toldford	41:469	Diagram
1834	Leverich Gabriel	Joshua Tolford	41:473, 42:18, 36:69	Diagram
1834	Moser, Joseph, rachel (wife), Van Nostrand Losee, Elizabeth (wife)	Nathaniel Gardiner	20:368, 36:352, 42:178	Diagram
1834	City of Brooklyn	Milles Wood	42:330	Diagram
1834	Gardiners Nathaniel, Eliza (wife)	William B. Bolles	43:276	Block 202
1835	Smith Valentine, Sarah (wife), Wood Sephen, Nancy (wife)	Miles Wood	45:368	Block 202
1835	Bolles William B., Leonora (wife)	Stephen A. Halsey	56:343, 100:26	Block 202
1836	Cornell Abigail, Miriam, White Harriet	Benjamin Davis	58:91	All that certain corner dwelling house and lot of ground on the NE corner of Doughty St and Elizabeth St.
1843	Wood Stephen	David B. Baylis as received by Stephen Wood	114:489	Block 202
1845	Carpenter John , Sarah (wife)	John Guest	137:471, 6:370	Block 202
1847	Hicks John G	Julia O. Hicks, Euphamia Hicks, Elizabeth Hicks	167:352	Block 202

Date	Grantor	Grantee	Liber: Page	Notes
1848	Gardiner Nathaniel	John B. Gardiner, William H. Gardiner	188:88	Lot 14
1849	Hicks George A.	Benjamin Davis	204:49	Block 202
1853	Hicks George A., Caroline (heir)	Benjamin Davis	312:349	Block 202
1857	Wood Miles	Isaac Van Ander	447:159	Lot 12
1859	Burtis Oliver, Wood Stephen, Carman F., Wood David, Carman A., Valentine Richard	Miles wood, Silas Wood, Samuel Wood, Miles Wood	451:116	Inheritance
1861	Gardiner William	John B. Gardiner	552:437	Lot 14
1862	Gardiner John B.	David K. Diecker	58:315	Lot 14
1867	Joylord Joshua	Isaac Van Ander	743:428	Block 202
1869	Van Ander Isaac	William Kingsley	933:84	Lot 12
1876	French Church of Saint Esprit	Montague Ward	1247:70	Lot 14
1880	Tolford Joshua	Harriet A. Noyes	1387:497	Block 202
1881	Noyes Harriet A.	Charles R. Tolford	1414:145	Block 202
1882	Tolford Charles R.	Miriam M. Seicker	1452:44	Mid Block 202, Lot 14
1882	Tolford Charles R.	Joseph Braun	1449:263	Lot 18
1892	Lyon Edward P., Smith Percival	William M. Ducker	2146:233	Lot 14
1895	Hallock Amy J.	Alfredo del Genovise	1:217, 539	Lot 14
1897	French Church of Saint Esprit	Alfredo del Genovise	6:71	Lot 14
1899	Ducker Maria	Alfredo del Genovise	10:132	Lot 14
1900	Ducker Maria	Alfredo del Genovise	42:457	Lot 14
1912	Leonard William	David Furgeson	3387:146	Lot 18
1914	Fergeson David	Floridine Manufacturing Co.	3455:505	Lot 18
1918	Floridine Manufacturing Co.	Lustrite Corp	3736:500	Lot 18
1919	Meyer William	Marie Srivers	3770:475	Doughty St 66 and Hicks St 49 and Fulton 48
1921	Hochstadt John	Harry Diamond	4022:473	58 Fulton
1922	Diamond Harry	Surrender of Lease	4175:116	58 Fulton
1924	Kaufrar Abyn	Mollie Rosenfeld	4454:60	58 Fulton, 48 Hicks

Date	Grantor	Grantee	Liber: Page	Notes
1927	Hecrbochel George	Anna Rohrs	4787:231	Lot 18
1927	Rohrs Anna	Osmonde E. Saunders	4785:398	Lot 18
1929	Del Genovise	United States Trucking Corp	5086:166	Lot 14
1931	Lustrite Corp	Ralph Kirkman	5198:405	Lot 18
1936	Kirkman Ralph	Dora Janovsky	5534:290	Lot 18
1941	United States Trucking Corp	Thomas Jordans and Son	5984:1	Lot 14
1944	Janovsky Dora	Morris Janovsky	6585:535, 61	Lot 18
1951	United States Trucking Corp	Alfred Giordano	7727:388	Lot 14
1952	F and S Realty Corp	Garry Ketchan	7770:312	Lot 18
1952	Ketchan Garry	Bassons Picture Framing Co	7967:19	Lot 18
1953	Bassons Picture Framing Co	Sulin St Corp	8665:530	Lot 18
1968	Shannon-Hicks Corp	American Oil Co. Lessee	671:136	Lot 14
1977	Winokur Doris	Don Lenti	967:1417	Lot 12
1982	Ivorkay Realty Corp	Irving Kerner	1338:1224	Lot 18
1982	Kerner Irving	Goh and Chan York	1338:1222	Lot 18
1984	Shannon-Hicks Corp	Capsule Motors Inc	1540:72	Lot 14
1987	York, Goh and Chan	J. Han and H. Han	2123:1477	Lot 18
1988	Han H.	Chinatown Federal Savings Bank	2309:2397	Lot 18
1991	Lenti Don	Grandbee Holdings Corp	2722:787	Lot 12
1994	Grandbee Holding Corp	Joseph Donald Barron	3403:1487	Lot 12
1999	Ahn J.	Chinatown Federal Savings Bank	4611:1031	Lot 18

APPENDIX C: PHASE I ENVIRONMENTAL ASSESSMENT

INDUSTRIAL WASTE MANAGEMENT, INC.

PHASE I ENVIRONMENTAL ASSESSMENT FOR:

Block 202, Lot 14
50 Old Fulton Street
Brooklyn, Kings County
New York

CONDUCTED FOR:

Kearny Bank
120 Passaic Avenue
Fairfield, New Jersey
07004

CONDUCTED BY:

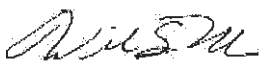
Industrial Waste Management
135 Lincoln Boulevard
Middlesex, New Jersey
08846

August 31, 2016

PHASE I ENVIRONMENTAL ASSESSMENT:

Facility Name/Operator:	Sam's Auto Body Shop
Owner:	French Church Du Saint Esprit
Address:	Block 202, Lot 14 50 Old Fulton Street Brooklyn, Kings County New York
Inspector:	William Nehls
Date of Inspection:	August 23, 2016
Weather:	Sun
Temperature:	70's F
Written By:	William Nehls

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



William F. Nehls. CHMM
Director of Operations

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1.0 SUMMARY

Industrial Waste Management Incorporated, at the request of Kearny Bank, completed a Phase I Environmental Assessment on the property located at Block 202, Lot 14, 50 Old Fulton Street, Brooklyn, Kings County, New York. The investigation was conducted in accordance with the standards established by the American Society for Testing and Materials (ASTM), Standard E1527-13, and the due diligence requirements of Kearny Bank.

Information on the site inspection, historical review, governmental record review, interviews with knowledgeable personnel and radius review is contained in the following report. Based on our review of this information and based on our professional judgment the following recognized environmental concerns were identified at the subject site:

1. Suspected underground storage tanks
2. Presumed asbestos containing material (PACM)
3. Closed hydraulic lifts
4. Floor drains
5. Spray paint mixing and storage room
6. Potential for off-site contamination

2.0 INTRODUCTION

2.1 Purpose

Industrial Waste Management Incorporated, at the request of Kearny Bank, completed a Phase I Environmental Assessment on the property located at Block 202, Lot 14, 50 Old Fulton Street, Brooklyn, Kings County, New York (See Appendix A). The Assessment was triggered as part of Kearny Bank's standard operating procedures in connection with the financing of the above noted property.

The purpose of this assessment is to identify recognized environmental conditions as defined under the American Society for Testing and Materials (ASTM), Standard E1527-13. A recognized environmental condition means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

2.2 Scope of Work

The Phase I Environmental Assessment consisted of an on-site inspection to determine areas of recognized environmental conditions, including:

1. the presence or potential presence of hazardous materials and wastes on-site and signs of contamination,
2. the presence of above ground and/or underground storage tanks and waste disposal facilities,
3. the use and presence of chemicals on-site including suspected asbestos containing materials, lead-based paint, or other materials,
4. the presence of electrical and/or other equipment on-site that has the potential of being contaminated with polychlorinated biphenyls (PCBs).

In addition, the following information was reviewed:

1. the identification of past and present uses and conditions of the property and adjoining properties,
2. the review of records regarding previous environmental actions/litigations, spill incidents, violations, environmental permits, and compliance status of current environmental permits held by current owners/operators,
3. the review of real estate use activities of all adjacent businesses, land owners or tenants to assess the potential for migration of contaminants to the subject property,
4. radius review of sites which may have an environmental impact on the subject property.

On August 23, 2016, IWM personnel conducted an on-site investigation to determine if any areas of environmental concern were associated with the property known as Block 202, Lot 14, 50 Old Fulton Street, Brooklyn, Kings County, New York. The investigation was conducted in accordance with the standards established by the ASTM, Standard E1527-13, and the due diligence requirements of Kearny Bank.

2.3 Significant Assumptions

A recognized environmental condition does not include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action.

This practice as outlined by ASTM Standard E1527-13 is site specific in that it relates to the assessment of environmental conditions on a specific parcel of commercial real estate. Consequently, this practice does not address other additional issues raised in transactions such as purchases of business entities, or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated or other off-site environmental liabilities.

2.4 Limitations and Exceptions

The scope of this report is limited to the matters expressly covered herein. The report reflects observations made solely on the date and time of the inspection and is not intended to cover any areas of environmental concern subsequent to the day and time of the inspection. Any reuse of this report without the written authorization of Industrial Waste Management, Incorporated for purposes other than the specific purpose for which it was requested will be at the owner's sole risk and without liability to Industrial Waste Management, Incorporated.

Non-scope issues, with the exception of asbestos and lead-based paint, are not addressed in this report. Specifically, these additional non-scope issues include, lead in drinking water, wetlands, radon, urea formaldehyde foam insulation, regulatory compliance, ecological resources, endangered species, indoor air quality (including but not limited to vapor intrusion), cultural and historic resources, industrial hygiene issues, mold and mildew, non-point source pollution, health and safety, controlled substances and high voltage power lines.

It should be noted, that no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with the subject property. Performance of this assessment is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the property.

No soil, water, ground water, air or any other sampling and/or subsurface evaluation was completed at the subject property during IWM's time on-site. Therefore, no absolute statement can be made as to the presence and/or absence of contamination, underground storage tanks, and/or any other environmental concern located on the subject property. The finding and conclusions presented in this report are based solely on professional judgment of visual observations, information reported by persons during our interview process, and materials obtained from governmental and other outside sources. No warranty is made, expressed, or implied concerning the presence and/or absence of contaminants, underground storage tanks, and/or any other environmental concern on the subject property based upon the results of this investigation.

It should be noted that this assessment complies with ASTM Standard E1527-13 and may not comply with any other Federal and/or State requirement.

All recommendations, findings and conclusions stated in this report are based upon observations made at the facility on the day and at the time of the inspection. No sampling and/or subsurface evaluation was done on the day of inspection. Our recommendations are also based on information provided by and/or record reviews with:

Environmental Protection Agency
New York Department of Environmental Conservation
New York City Municipal Departments
Environmental Data Resources

2.5 Special Terms and Conditions

As requested by Kearny Bank, several environmental issues were addressed which are outside the scope of ASTM Standard E1527-13. Those issues which were addressed during this assessment include suspected asbestos containing materials and lead-based paint.

No other special terms and/or conditions are associated with this assessment.

2.6 Reliance

IWM has relied upon the information provided by the owner, occupants and/or governmental agents and has not verified said information independently unless IWM has obtained actual knowledge that the information is incorrect or unless it is obvious that certain information is incorrect based on other information obtained during the environmental assessment.

This environmental site assessment was undertaken at the request of Kearny Bank and no party other than Kearny Bank can rely on this environmental site assessment for any reason without the written authorization of Industrial Waste Management.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

During the inspection, it was determined that the subject property is currently located at 50 Old Fulton Street, Brooklyn, Kings County, New York. The property consists of a 0.16 acre lot which is located between Hicks Street and Front Street.

According to tax records, the property is identified as Block 202, Lot 14 for tax purposes. The site is designated for commercial/auto body repair use.

3.2 Site and Vicinity General Characteristics

On the day of inspection it was determined that the general topography of the area sloped upward to the north and west and sloped downward to the south and east.

Currently, a single story commercial building is located on the subject property.

3.3 Current Uses of Property

The subject property houses a commercial building with one tenant.

3.4 Descriptions of Structures, Roads & Improvements and Utilities

According to historical information, the building located on the subject property was built prior to 1887. The building is currently being heated by natural gas which is supplied by ConEd. Electricity is supplied by ConEd.

Based on the on-site inspection it was determined that the area in which the site is located is supplied with potable water by the New York City potable water distribution system. During the on-site inspection, there were no visible indications of a potable well on-site.

Currently, the subject site is serviced by the New York City sanitary sewer system. During the on-site inspection, there was no visible evidence of a septic system on-site.

Based on the on-site inspection it was determined that the area is serviced by the New York City storm water sewer system. During the inspection, there was no visible storm water drainage problem associated with the site.

3.5 Current Uses of Adjoining Properties

All adjacent properties are commercial in nature. Manufacturing and/or industrial entities were not noted in the immediate area surrounding the subject property.

4.0 USER PROVIDED INFORMATION

4.1 Title Records
Title Records have not been provided by the user to IWM.

4.2 Environmental Liens or Activity and Use Limitations
To the best of the user's knowledge, there are no environmental liens or activity use limitations encumbering the subject property.

4.3 Specialized Knowledge
To the best of the user's knowledge, there is no information available regarding prior owners or the prior uses of the subject property that may be material to identifying recognized environmental conditions.

4.4 Commonly Known or Reasonably Ascertainable Information
No additional information has been provided to IWM by the user with respect to the subject property.

4.5 Value Reduction for Environmental Issues
The user has not provided IWM with any information regarding the valuation of the subject property and how it relates to environmental issues.

4.6 Owner, Property Manager, and Occupant Information
The current owner is French Church Du Saint Esprit. The subject property houses a commercial building with one tenant, Sam's Auto Body Shop.

4.7 Reason for Performing Phase I
The Phase I is being performed because the subject property is being financed, and it is the user's standard operating procedure to require Phase I Environmental Assessments on transactions such as these.

4.8 Other
No other environmental information regarding the subject property has been made available from the user.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources, Federal and State

A compliance check was made with the New York Department of Environmental Conservation (NYDEC) and the United States Environmental Protection Agency (USEPA). A USEPA database search did not reveal any permits for the subject property. As of this date, the NYDEC has not yet responded to this inquiry. Any applicable information from this department received subsequent to the submittal of this report will be supplied in an addendum report.

5.2 Standard Environmental Record Sources, Local

A compliance check for the subject property was undertaken with the New York City Municipal Departments. As of this date, these Departments have not responded to this inquiry. Any applicable information from these departments received subsequent to the submittal of this report will be supplied in an addendum report.

5.3 Environmental Database Record Search

A computer database search of Federal and State Environmental Records was completed by EDR on August 17, 2016 based on ASTM-specified minimum search distances. A copy of the report is provided in Appendix C.

The subject property was identified on the Historic Auto database under the name of Capsule Motors Inc. with an address of 50 Cadman Plaza West. This company was identified on-site for the years 2001 through 2006. No additional information was provided in this database (see Appendix C).

Database	Search Distance (mile)	# of Locations	Target Site?	Potential to Affect Site?
National Priority Listing	1.0	0	No	No
CERCLIS List	0.50	0	No	No
CERCLIS NFRAP	0.25	4	No	No
RCRA CORRACTS TSD	1.0	0	No	No
RCRA non-CORRACTS TSD	0.50	0	No	No
RCRA Generators	0.25	13	No	No
ERNS	TP	0	No	No
Landfill and/or solid waste disposal sites	0.50	3	No	No
LUST	0.50	19	No	Yes
UST	0.25	13	No	No
SHWS	1.0	9	No	Yes

VCP	0.5	0	No	No
INST & ENG Controls	0.5	2	No	No
Brownfields	1.0	1	No	No

KEY:
CERCLIS = Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS NFRAP = No Further Remedial Action Planned
RCRA CORRACTS-TSD = Environmental Protection Agency's list of treatment, storage, or disposal facilities subject to corrective action under the Resource Conservation and Recovery Act
RCRA non-CORRACTS TSD = those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by the Resource Conservation and Recovery Act
RCRA Generators = those persons or entities that generate hazardous waste as defined & regulated by the Resource Conservation & Recovery Act
ERNS = Environmental Protection Agency's emergency response notification system list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center
LUST = leaking underground storage tanks
UST = registered underground storage tanks
SHWS = State Hazardous Waste Site as recognized by the State
TP= Target Property

A summary and explanation of the database review follows:

5.3.1 National Priorities List

The National Priorities List is EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial action under the Superfund Program. To be included on the NPL, a site must either meet or surpass a predetermined hazard ranking systems score, be chosen as a state's top priority site, or meet all three of the following criteria:

1. The U.S. Department of Health and Human Services issues a health advisory recommending that people be removed from the site to avoid exposure.
2. The EPA determines that the site represents a significant threat.
3. The EPA determines that remedial action is more cost effective than removal action.

Based on the review of this listing, no Superfund sites were identified to be within a one mile radius of the site. The subject property is not listed on this database.

5.3.2 CERCLIS

The CERCLIS list is a compilation by the EPA of those sites that the EPA has investigated or is at present investigating for a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

Based on the review of this list, no CERCLA sites were identified to be within a one-half mile radius of the site. The subject property is not listed on this database.

5.3.3 CERCLIS NFRAP

NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. As per ASTM Standards, such a facility was not identified as being located on the subject property or on any adjoining properties.

5.3.4 Resource Conservation and Recovery Act (RCRA)

The EPA's Resource Conservation and Recovery Act program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA facilities database is a compilation by the EPA of reporting facilities that generate, transport, treat, store, or dispose of hazardous waste.

5.3.4.1 Treatment, Storage, and Disposal Facilities Subject to Corrective Action

This database contains information pertaining to hazardous waste treatment, storage, and disposal facilities (RCRA TSDs) which have conducted, or are currently conducting, a corrective action as regulated under the Resource Conservation and Recovery Act. Based on the review of this list, no sites were identified to be within a 1 mile radius of the site. The subject property is not listed on this database.

5.3.4.2 TSD's not Subject to Corrective Action

A one-half mile radial search was conducted to determine the presence of any treatment, storage, and/or disposal facilities located in the area. Based on a review of this database, no facilities were identified to be within this distance from the subject site. The subject site is not listed on this database.

5.3.4.3 RCRA Generators

RCRA large quantity generators are facilities which generate at least 1000 kg per month of non-acutely hazardous waste or 1 kg per month of acutely hazardous waste. As per ASTM Standards, such a facility was not identified as being located on the subject property or on any adjoining properties.

RCRA small quantity generators are facilities which generate less than 1000 kg per month of non-acutely hazardous waste. As per ASTM Standards, such a facility was not identified as being located on the subject property or on any adjoining properties.

5.3.5 Emergency Response Notification System (ERNS)

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center, and the Department of Transportation. As per ASTM Standards, such a facility was not identified as existing on the subject property.

5.3.6 Solid Waste Facilities

The Solid Waste database lists those solid waste landfills, incinerators, and transfer stations permitted to operate in the State. Based on the review of this list and the U.S.G.S. topographic map associated with the subject property, no solid waste facilities were identified to be in the projected hydrogeologic upgradient direction within a one-half mile radius of the site. The subject property is not listed on this database.

5.3.7 Leaking Underground Storage Tanks

The Leaking Underground Storage Tank (LUST) database lists those facilities known or suspected of having leaking underground storage tanks. Based on the review of this list and the U.S.G.S. topographic map associated with the subject property, one active known or suspected discharge was identified to be in the projected hydrogeologic upgradient direction within a one-half mile radius of the site. The subject property is not listed on this database.

1. Kingdom Support Service, 74 Adams Street, Brooklyn, NY

According to the database, the above noted site has known contamination present. However, no additional information is available with respect to its potential impact on the subject property. Therefore, this site is suspected to be an environmental concern in relation to the subject property.

5.3.8 Underground Storage Tanks

The Underground Storage Tanks database lists the underground storage tanks that are registered with the State. As per ASTM Standards, no registered underground storage tanks were located on the subject property or adjoining properties.

5.3.9 State Hazardous Waste Sites

A listing of sites was compiled within the State where contamination of soil and/or ground water has been confirmed. A review of this listing was also conducted for entities off-site which may have a potential of impacting the subject site. Based on the review of this list and the U.S.G.S. topographic map associated with the subject property, one active SHWS site was identified to be in the projected hydrogeologic upgradient direction within a one mile radius of the site. The subject property is not listed on this database.

1. Emmanuel Cellard Fed, 225 Cadman Plaza, Brooklyn, NY

According to the database, the above noted site has known contamination present. However, no additional information is available with respect to its potential impact on the subject property. Therefore, this site is suspected to be an environmental concern in relation to the subject property.

5.3.10 Voluntary Cleanup Program

The voluntary remedial program uses private monies to get contaminated sites remediated to levels allowing for the site's productive use. Based on the review of this list, no VCP sites were identified to be within one-half mile radius of the site. The subject property is not listed on this database.

5.3.11 Institutional & Engineering Controls

A one-half mile radial search was conducted to determine the presence of any sites with deed notices in place which restricts the use of a contaminated property. Based on a review of this database and the U.S.G.S. topographic map associated with the subject property, no sites were identified to be in the projected hydrogeologic upgradient direction within this distance from the subject site. The subject site is not listed on this database.

5.3.12 Brownfields

The Brownfields database is a list of sites compiled by the State that are currently underutilized or vacant and are suspected to have soil or groundwater contamination present on-site that is above the applicable cleanup criteria. Based on a review of this database and the U.S.G.S. topographic map associated with the subject property, no sites were identified to be in the projected hydrogeologic upgradient direction within one-quarter mile from the subject site. The subject site is not listed on this database.

5.3.13 Vapor Encroachment Screening

A vapor encroachment screening was completed for the subject property. The purpose of this screening was to determine if any chemicals of concern may potentially have the ability to migrate onto the subject property as vapors resulting from soil and or ground water contamination on or near the subject property. As defined under the ASTM Standard, Tier 1 screening does not include the evaluation of existing or newly acquired soil, ground water or soil gas data. An evaluation of that data would be conducted during a Tier 2 screening which would only be conducted if a Tier 1 screening could not rule out a vapor encroachment condition.

Based on information obtained through the radius search report regarding contaminated sites in the area of the subject property, the potential for a vapor encroachment condition to exist at the subject property is low due solely to these off-site facilities.

5.4 Additional Environmental Record Sources

To comply with ASTM Standard E1527-13, only the required environmental record sources have been requested or reviewed. At this time, additional sources have not been requested or received by IWM.

5.5 Physical Setting Sources

Based on review of the USGS-Current 7.5 Minute Topographic Map associated with the subject property, the subject property appears to be approximately 25 feet above sea level. The projected hydrogeologic downgradient direction is north and west.

5.6 Historical Use Information on the Subject Property and Adjoining Properties

Based on our historical review, the subject property has been used for commercial and residential purposes over the years. Copies of historical research documentation are provided in Appendix D.

To obtain additional information regarding the historical development of the subject site, IWM personnel reviewed a search for the available Sanborn Fire Insurance Maps from the year 1890 to the present. Sanborn Maps for the years 1887, 1904, 1915, 1938, 1950, 1969, 1977, 1979, 1980, 1981, 1982, 1986, 1987, 1988, 1989, 1991, 1992, 1993, 1995, 1996, 2001, 2002, 2003, 2004, 2005, 2006 and 2007 were available. Each of the maps will be discussed below.

Year	Subject Property	Adjoining Properties
1887	Lodgings, shoe factory and cigar factory	Commercial and residential entities
1904	Lodgings and cigar factory	Commercial and residential entities
1915	Lodgings, metal works and Rex Extraction Co.	Commercial and residential entities
1938	United States Trucking Corp. garage with two gas tanks	Commercial and residential entities
1950	Trucking garage with two gas tanks	Commercial entities
1969	Storage building with two gas tanks	Commercial entities
1977	Auto repair	Commercial entities
1979	Not depicted	Commercial entities
1980, 1981, 1982, 1986, 1988, 1987, 1989	Auto repair	Commercial entities
1991, 1992, 1993, 1995, 1996	Auto repair	Commercial entities
2001, 2002, 2003, 2004, 2005, 2006, 2007	Auto repair	Commercial entities

IWM personnel reviewed a search for the Aerial Photographs available for the subject property. Aerials for the years 1924, 1940, 1943, 1951, 1954, 1961, 1966, 1971, 1974, 1981, 1985, 1991, 1995, 2006, 2009 and 2011 were available. Each of the photos will be discussed below.

YEAR	USES
1924	The subject building is present on-site.
1940, 1943	The subject building is present on-site.
1951, 1954	The subject building is present on-site.
1961, 1966	The subject building is present on-site.

YEAR	USES
1971, 1974	The subject building is present on-site.
1981, 1985	The subject building is present on-site.
1991, 1995	The subject building is present on-site.
2006, 2009, 2011	The subject building is present on-site.

IWM personnel reviewed a search for the Historical Topographic Maps available for the subject property. Maps for the years 1897, 1898, 1900, 1947, 1955/1956, 1967, 1979/1981, 1995 and 2013/2014 were available. Each of the maps will be discussed below.

YEAR	USES
1897, 1898	A building is present on-site whose use could not be determined.
1900	A building is present on-site whose use could not be determined.
1947	A building is present on-site whose use could not be determined.
1955/1956	Due to the density of buildings only major structures are depicted.
1967	Due to the density of buildings only major structures are depicted.
1979/1981	Due to the density of buildings only major structures are depicted.
1995	Due to the density of buildings only major structures are depicted.
2013/2014	Due to the density of buildings only major structures are depicted.

IWM personnel reviewed a search for the City Directory available for the subject property. Information for the years 1928 through 2013 was found and will be discussed below. It should be noted that these years are not necessarily inclusive.

YEAR	USES
1976	Cadman Foreign Car Service
1980	Cadman Foreign Car Service
1985	Capsule Motors Inc., Cadman Motor Works
1992	Capsule Motors Inc.
2000	Capsule Motors Inc.
2013	Locksmith

6.0 INFORMATION FROM SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

Access to the following was not attained on the day of the site inspection: IWM personnel gained access to the subject building and property.

6.2 General Site Setting

On August 23, 2016, IWM personnel conducted an on-site investigation to determine if any areas of environmental concern were associated with the property known as Block 202, Lot 14, 50 Old Fulton Street, Brooklyn, Kings County, New York. The investigation was conducted in accordance with the standards established by the ASTM, Standard E1527-13, and the due diligence requirements of Kearny Bank.

6.3 Exterior and Interior Observations

The on-site inspection included visual observations for recognized environmental conditions within the building located on-site as well as the surrounding subject property. The following were our visual observations.

6.3.1 Hazardous Substances, Spills, Odors, Stressed Vegetation

During the inspection, small quantities of hazardous materials were observed within the building. These materials were primarily cleaners and maintenance supplies used on-site. However, as consumer commodities these quantities are not regulated under current Federal or State hazardous waste regulations. Therefore, these materials will not be discussed further in this report.

Based on our on-site inspection the following hazardous materials were identified on-site:

Solvent based paints
Corrosive liquids
Flammable liquids
Solvents
Mineral spirits
Petroleum products

Based on our on-site inspection, it was determined that the subject facility does generate hazardous waste. The following hazardous wastes were identified on-site:

Waste solvent paints
Waste oil
Waste mineral spirits
Spray paint booth filters

It should be noted that the auto repair shop has a solvent recycling system in place.

Our inspection of the subject facility and remaining property did not reveal any visible evidence of spills or the illegal disposal of hazardous materials and/or hazardous waste. In addition, there was no visible indication of distressed vegetation on-site. No noxious odors were noted on the day of inspection.

Closed hydraulic lifts with in-ground hydraulic oil tanks were observed on-site in the work area.

6.3.2 Stains and Corrosion

Our inspection of the subject facility and remaining property did reveal visible evidence of staining. Staining of the concrete floor was observed in the work area, spray paint booth and paint mixing and storage room.

6.3.3 Storage Tanks

During the initial on-site inspection, a visual survey was conducted so as to determine the likely presence of any Above Ground Storage Tanks (AGSTs) or Underground Storage Tanks (USTs) on the subject property. One AGST was observed on-site. In addition, there were obvious visible indications, specifically a fill pipe, indicating the presence of an UST on the property. It should be noted that no subsurface evaluation was done on the day of inspection so no definitive statement can be made as to the presence and/or absence of USTs on-site.

A 275 gallon AGST is present in the garage which contains waste oil.

A fill pipe was observed in the front sidewalk of the subject property. The plate covering the fill pipe is labeled Gasoline Permit #629-47-SM.

6.3.4 Indications of PCBs

No pole and/or pad mounted transformers were observed on the subject property.

6.3.5 Indications of Solid Waste Disposal

During the inspection, there was no visible indication of the illegal dumping or disposal of solid waste on-site. There was no visible indication of the potential of waste materials being buried on the subject site. Unusual odors were not detected during the site inspection.

Solid waste that is generated on-site is contained in dumpsters and which is disposed of off-site.

6.3.6 Suspected Asbestos Containing Materials

During the inspection, a visual survey was conducted so as to determine the likely presence of any suspected asbestos containing materials located on the subject property. Based on our visual inspection of heat transfer piping and associated heating equipment, there were no visible indications of any Thermal Systems Insulation (TSI), such as air-cell, boiler, and/or joint mudpacking.

During the inspection, interior floor tiles/mastic and wallboard/joint compound were observed in the building and found to be in satisfactory to poor condition. In the past, building materials such as these were manufactured with asbestos fibers incorporated into their matrix. Based on current legislation regarding asbestos, those building materials that were installed prior to 1981 are considered PACM. Based on our visual inspection, it was suspected that these materials were installed prior to this date. Therefore, they are suspected to contain asbestos fibers.

6.3.7 Lead-Based Paint

Based on our historical review, it was determined that the subject building was constructed prior to January 1, 1978. Additionally, based on our visual inspection, it was determined that the subject building is not utilized for residential occupancy. Therefore, it is our conclusion that the subject building would not be subject to the recently passed federal regulations governing disclosure and notification. However, based on the age of the building, there is a potential that lead based paint is present.

6.3.8 Sumps, Dry Wells, Drains, and Pits

Based on our visual inspection, no sumps, dry wells, or pits were identified on-site.

Floor drains were identified in the work area of the building. It is unknown as to the discharge point of these floor drains. During the inspection of the floor drains, there were visible stains noted. One drain receives waste water from the spray paint booth.

7.0 INTERVIEWS

7.1 Interview with Owner, Site Manager, and Occupants

A site questionnaire was forwarded to the owner and this questionnaire has been submitted to our offices and is provided in Appendix E.

Based on information provided by the owner's representative the subject property was identified as being an auto repair facility. In addition it was noted that an adjoining property was a former gas station. The remainder of the questions were answered as being unknown (see Appendix E).

7.2 Interviews with Local Government Officials

The New York City Municipal Departments were issued letters requesting information. Copies of these letters are provided in Appendix E.

IWM personnel reviewed the New York City Department of Buildings database with respect to the subject property. Permits were taken out for the subject property including a permit for the installation of an auto paint spray booth and paint storage and mixing room. In addition an oil burner application was taken out on February 24, 1941. However this permit did not identify as to whether the heating oil was contained within an above ground or an underground storage tank. In addition IWM personnel reviewed a Certificate of Occupancy dated March 26, 1969 which identified the subject property as having a gasoline tank installed on March 11, 1969 (see Appendix E).

7.3 Interviews with Others

No additional personnel were interviewed at this time.

8.0 FINDINGS, OPINIONS, AND RECOMMENDATIONS

8.0 Findings

IWM has completed a Phase I Environmental Assessment in conformance with the scope and limitations of ASTM practice E1527-13 on the property known as Block 202, Lot 14, 50 Old Fulton Street, Brooklyn, Kings County, New York. This assessment has revealed no evidence of recognized environmental conditions in connection with the property with the exception of those areas addressed in the opinions and recommendations section of this report.

8.1.1 On-Site Findings

Based on our observations, an auto body shop is present on the subject property. The subject property is heated by natural gas and is connected to city supplied water and sewer.

8.1.2 Historical/Records Review Findings

Based on a historical review, the subject property has been used for commercial and residential purposes throughout the years. As of this date, no information has been provided by local and/or state agencies to our request for information on the subject property.

8.1.3 Historical Data Gaps

No significant data gaps were encountered in the historical review of the subject property. The following historical resources were reviewed in order to identify the prior use of the subject property: Sanborn Fire Insurance Maps, aerial photographs, topographic maps, and city directories.

8.1.4 Regulatory Review Findings

Based on a review of the EDR database, the subject property was on a database as per ASTM Standard E1527-13. The subject property was identified on the Historic Auto database under the name of Capsule Motors Inc. with an address of 50 Cadman Plaza West. This company was identified on-site for the years 2001 through 2006. No additional information was provided in this database (see Appendix C).

The subject property was not listed as having any environmental violations on-site.

8.2 Opinions/Conclusions/Deviations/ and Additional Services

Suspected Underground Storage Tanks:

Based on our inspection, there appeared to be a fill pipe located in the front sidewalk. It is our opinion that this fill pipe is associated with a gasoline underground storage tank. Therefore, it is recommended that a subsurface evaluation be performed to determine the presence or absence of a gasoline tank, and that the documentation be forwarded to the appropriate parties. If a tank is present then it is further recommended that it be properly closed according to all applicable state and local regulations.

IWM personnel reviewed the New York City Department of Buildings database with respect to the subject property. An oil burner application was taken out on February 24, 1941. However this permit did not identify as to whether the heating oil was contained within an above ground or an underground storage tank. In addition IWM personnel reviewed a Certificate of Occupancy dated March 26, 1969 which identified the subject property as having a gasoline tank installed on March 11, 1969 (see Appendix E). Furthermore the Sanborn Fire Insurance Maps identified two gasoline USTs on the subject property.

Therefore, it is recommended that a subsurface evaluation be performed to determine the presence or absence of any tanks, and that the documentation be forwarded to the appropriate parties. If tanks are present then it is further recommended that they be properly closed according to all applicable state and local regulations.

Presumed Asbestos Containing Materials:
The Presumed Asbestos Containing Material including but not limited to floor tiling/mastic and wallboard/joint compound should be put on an operations and maintenance (O&M) plan. The O & M Plan should be such that it will ensure that this material remains in a satisfactory condition. However, if there are any future renovations of the subject building which would impact this PACM, it is recommended that this material be sampled to determine whether asbestos fibers are present. If asbestos is present, then the material should be removed by a properly licensed asbestos abatement firm and disposed of properly according to applicable State regulations.

Closed Hydraulic Lifts:
The on-site inspection identified closed hydraulic lifts on-site. These lifts have tanks which contained hydraulic oil which have the potential of leaking this hydraulic oil into the surrounding oil. Therefore it is recommended that soil sampling be completed at these hydraulic lift locations in an effort to determine if these lifts have impacted the surrounding soil.

Floor Drain:
Two floor drains were observed in the work area both of which had staining associated with them. It is unknown as to where these floor drains discharge to. Therefore it is recommended that the discharge point of these floor drains be determined.

The staining around the drains was due to the petroleum products used on-site. In addition the floor drain adjacent to the spray paint booth receives waste water generated from within the spray paint booth which may include solvents from the solvent based paints used on-site. Therefore it is recommended that soil sampling be completed at these two floor drains and any other floor drains present on-site.

Spray Paint Mixing and Storage Room:
The spray paint mixing and storage room was noted as having heavy staining to the floor due to the mixing and storage of solvent based paints in this room. It is recommended that soil sampling beneath this floor be done in an effort to determine if the underlying soil has been impacted.

Potential for Off Site Contamination:
With respect to the listed Leaking Underground Storage Tanks and/or Known Contaminated Sites located in the projected hydrogeologic up-gradient direction from the subject property, no additional information is currently available with respect to the potential impact of these sites on the subject property.

In the event that an off-site property contaminates an aquifer located on a subject site, the subject property should be protected from liability under the Section III - Liability Protection for Contiguous Landowners of the Brownfields Revitalization and Environmental Restoration Act of 2001.

It should be noted that the subject facility is supplied with its potable water through New York City's potable water distribution system. If ground water contamination is present at these sites, it may impact on the subject property. However it is not recommended that any additional investigation be completed with respect to these off-site facilities.

9.0 APPENDICES

APPENDIX A

Site Map/Site Plan

PHYSICAL SETTING SOURCE MAP - 4703443.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Brooklyn/Old Fulton Street	CLIENT: Industrial Waste Management
ADDRESS: 50 Old Fulton Street Brooklyn NY 11201	CONTACT: Bill Nehls
LAT/LONG: 40.70207 / 73.993145	INQUIRY #: 4703443.2s DATE: August 17, 2016 5:05 pm

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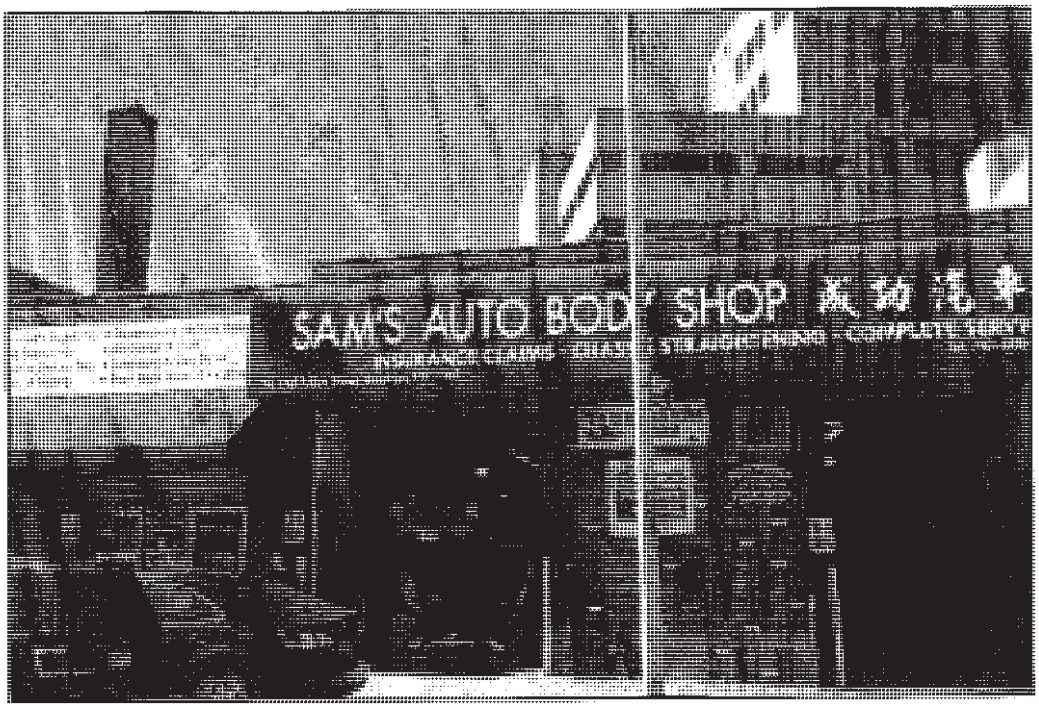
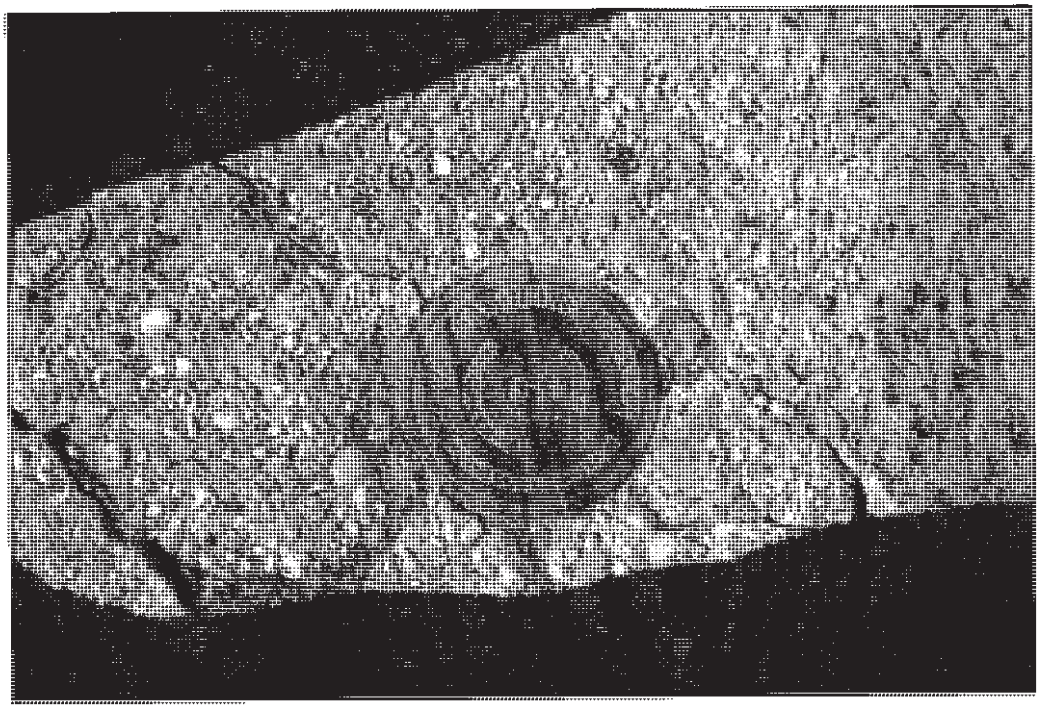
Appendix B:

Photographs

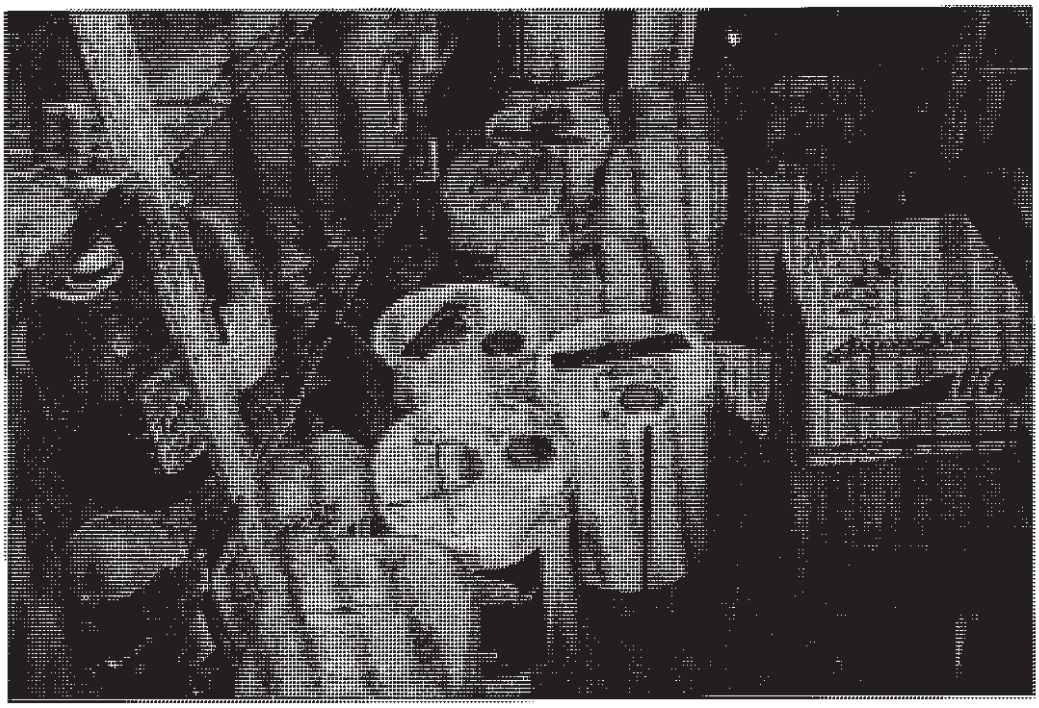


Subject Building

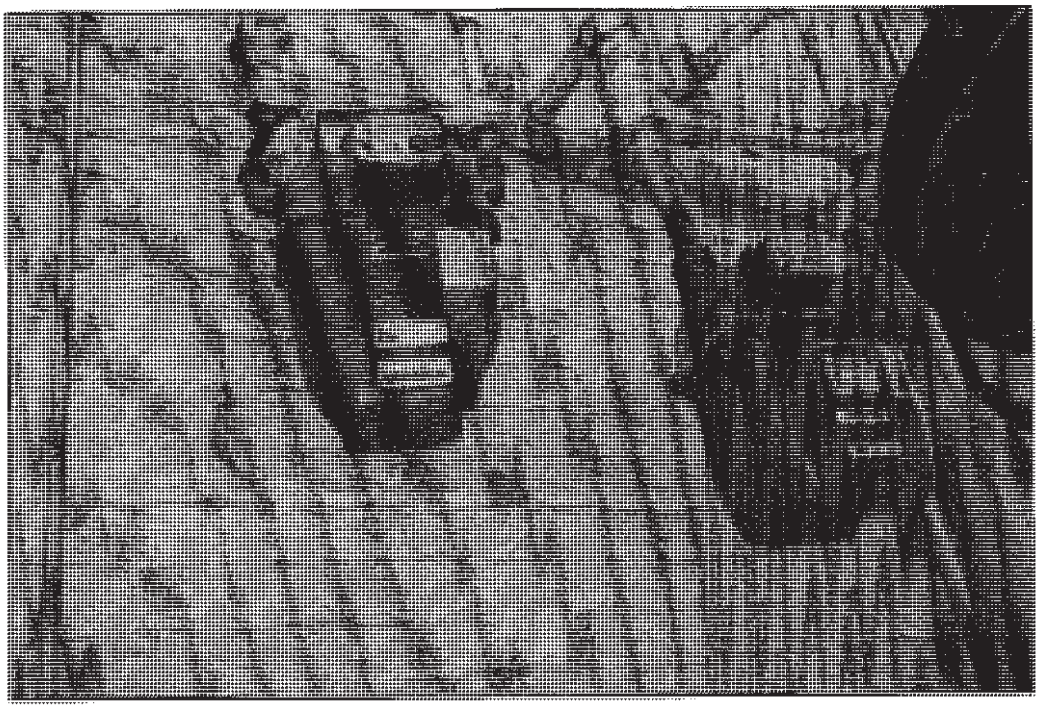


Gasoline UST Fill Pipe

Brooklyn/Old Fulton Street

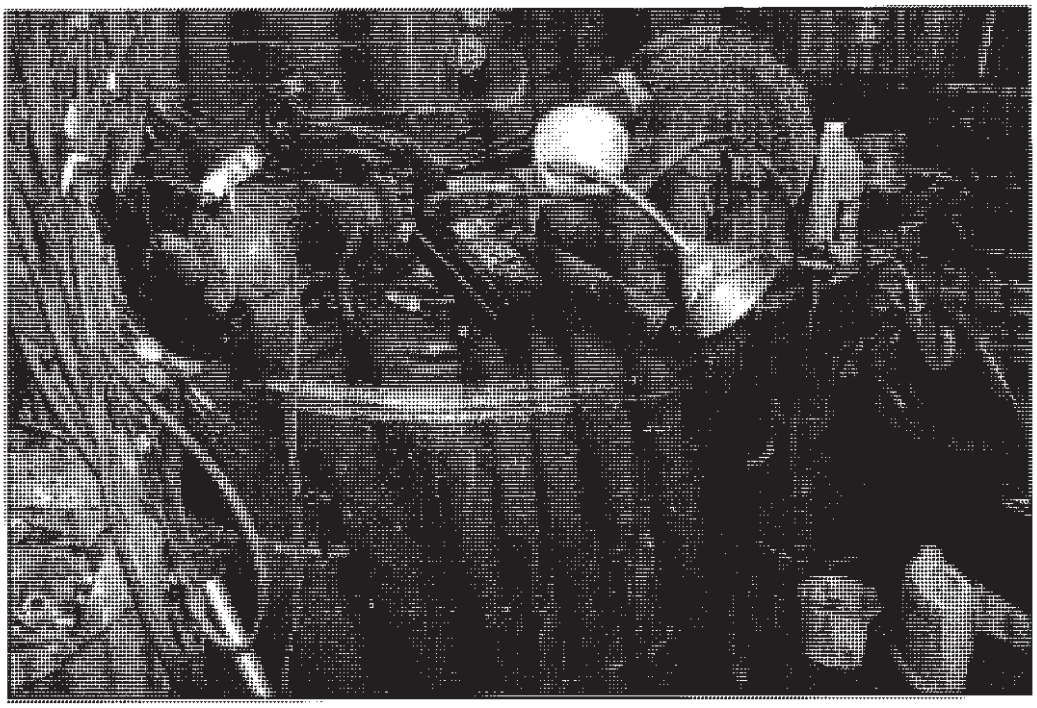


Hazardous Materials Storage Room



Gas Line

Brooklyn/Old Fulton Street

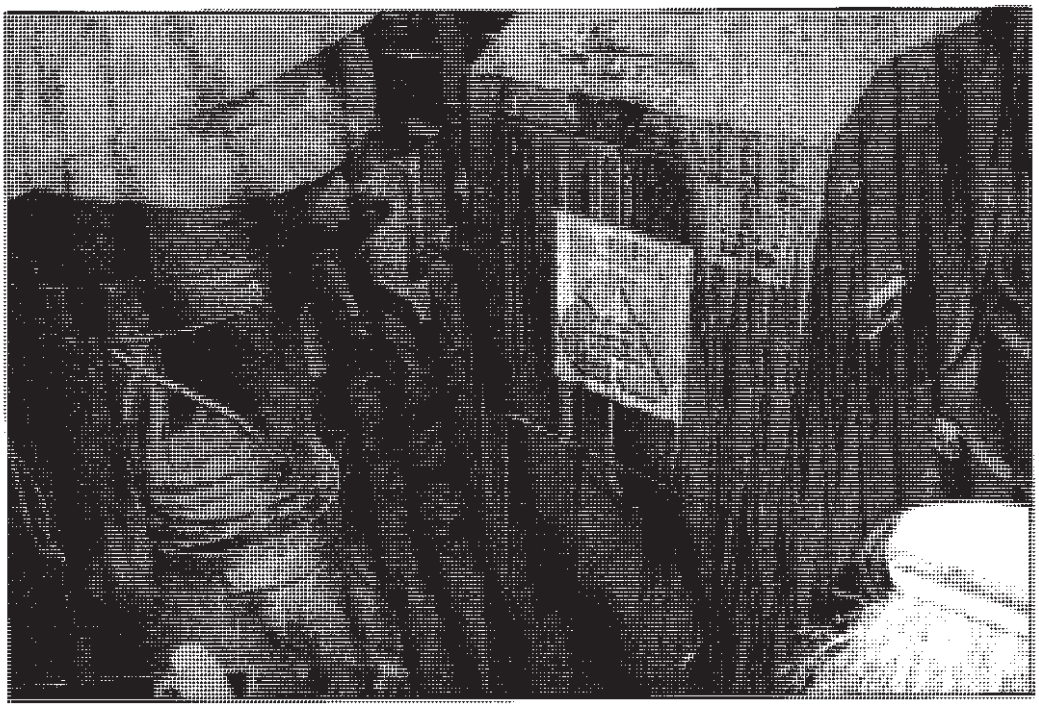


Waste Oil AGST

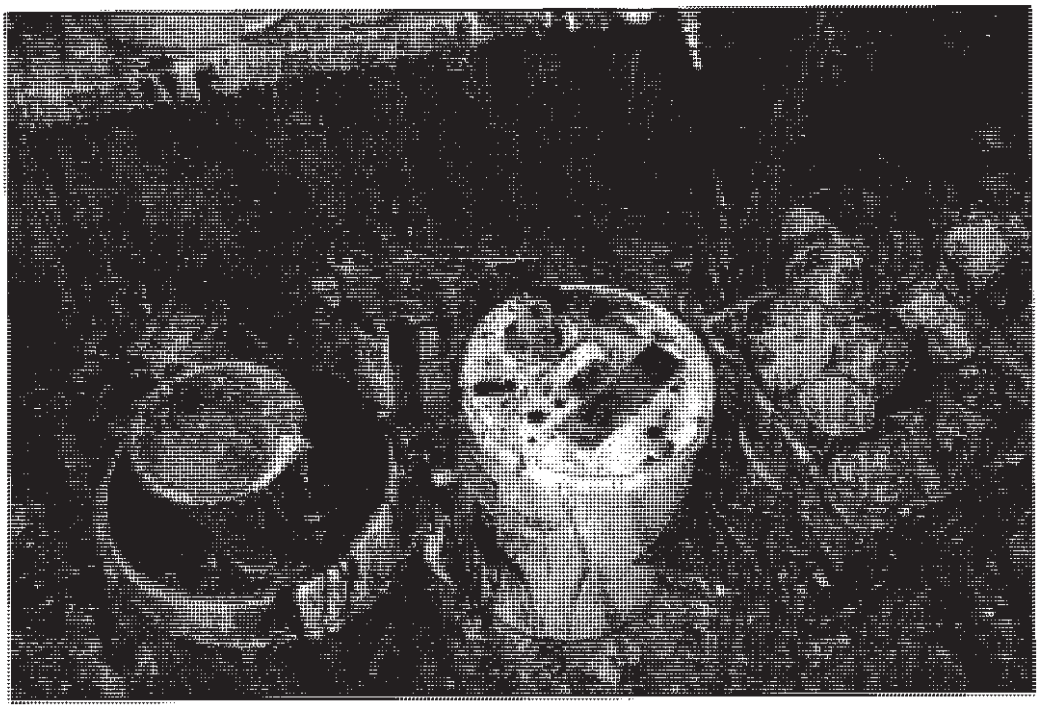


Mineral Spirits Parts Washer

Brooklyn/Old Fulton Street

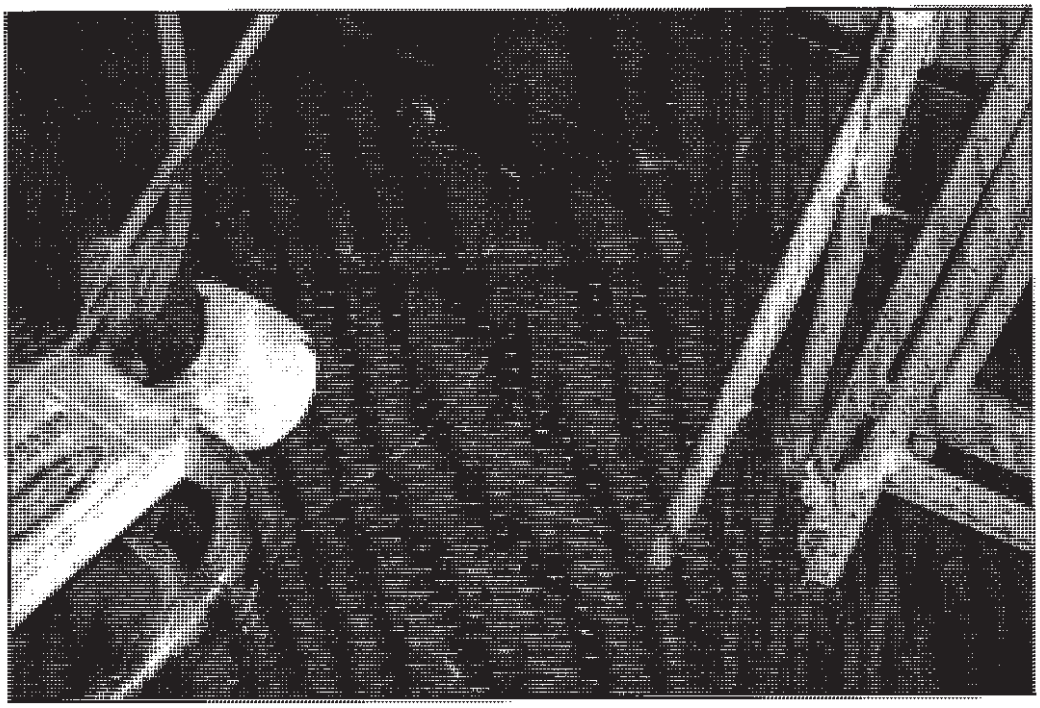


Solvent Recycler



Paint Mixing and Storage Room

Brooklyn/Old Fulton Street

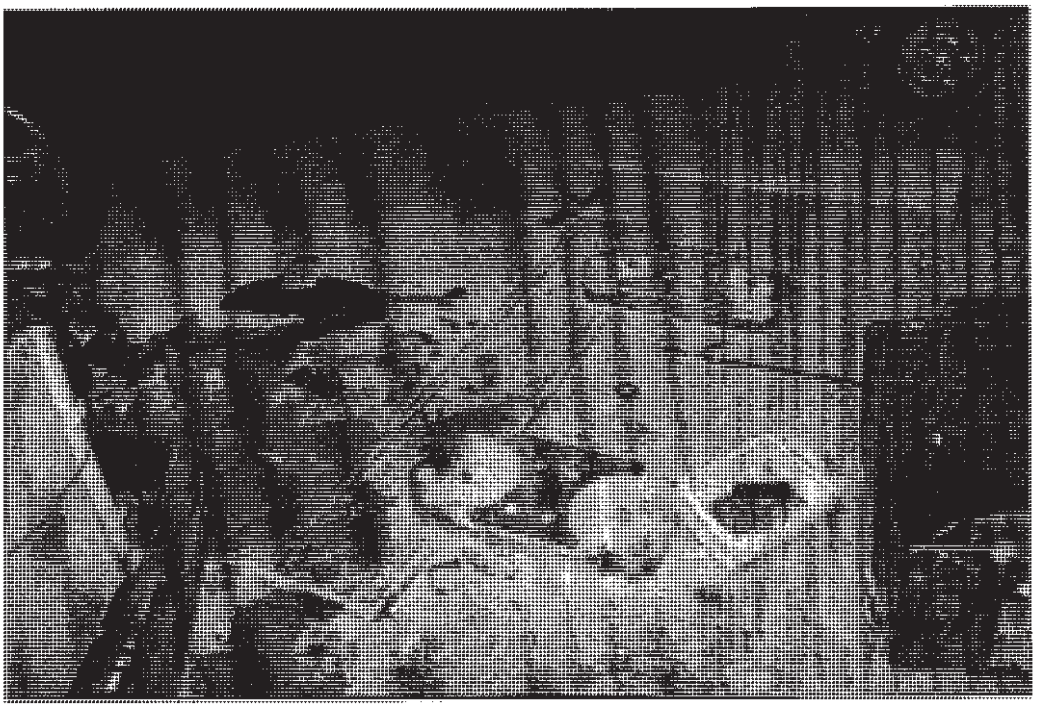


Floor Drain

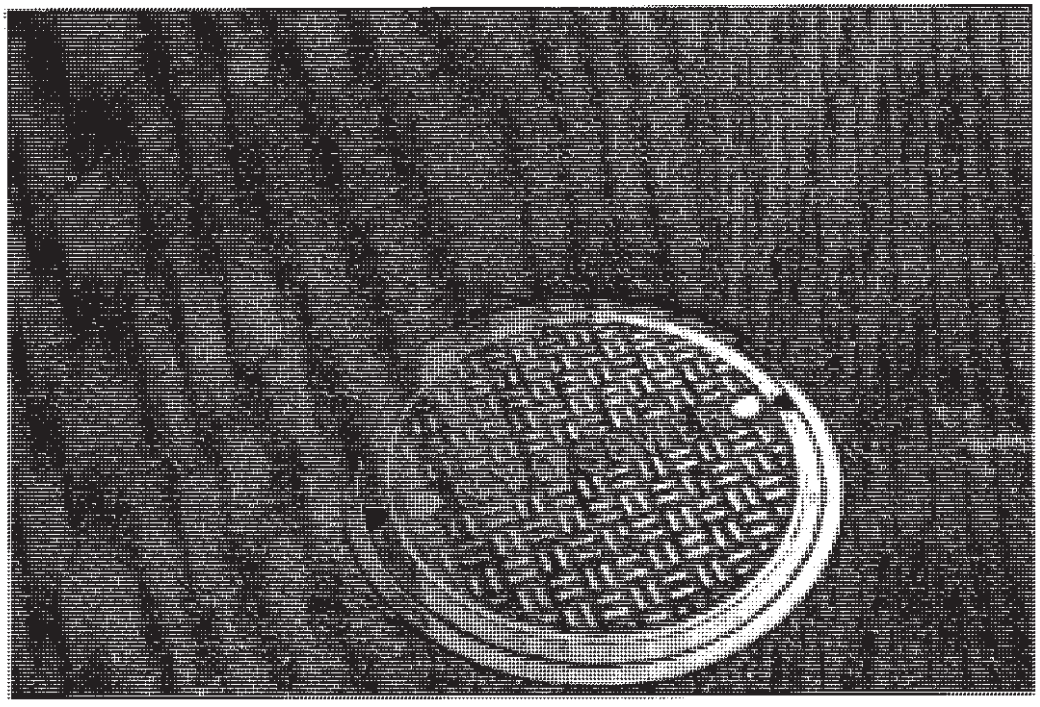


Work Area

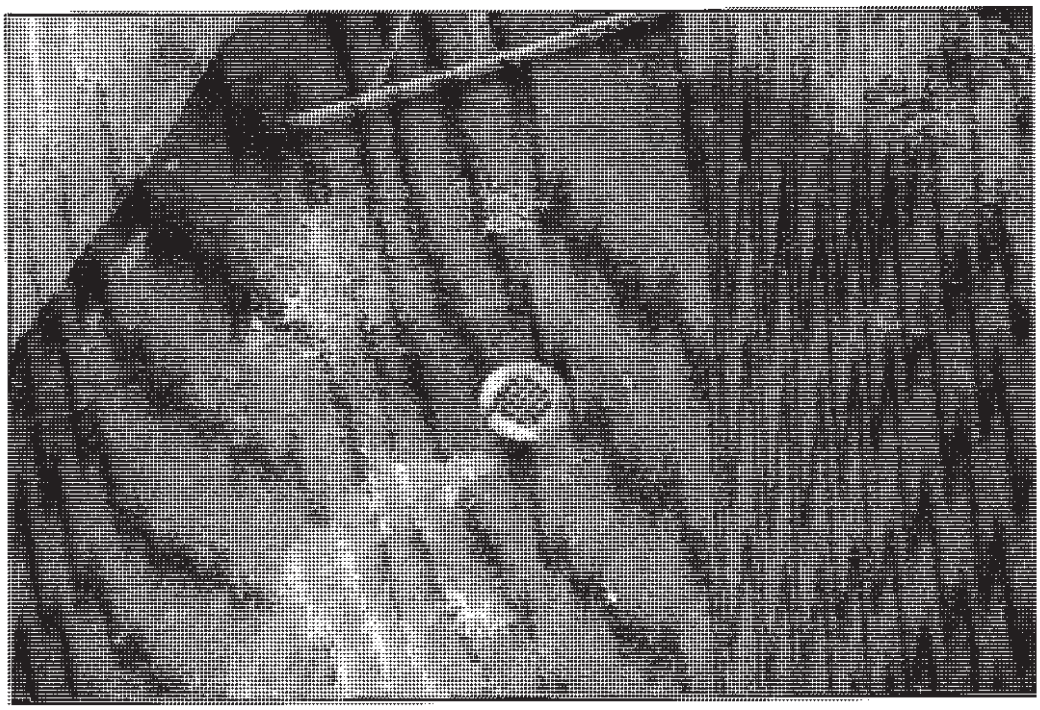
Brooklyn/Old Fulton Street



Closed Hydraulic Lift



Sewer Line



Floor Drain in Spray Paint Booth

Brooklyn/Old Fulton Street

Appendix C:

Regulatory Records

Brooklyn/Old Fulton Street
50 Old Fulton Street
Brooklyn, NY 11201

Inquiry Number: 4703443.2s
August 17, 2016

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

50 OLD FULTON STREET
BROOKLYN, NY 11201

COORDINATES

Latitude (North):	40.7020700 - 40° 42' 7.45"
Longitude (West):	73.9931450 - 73° 59' 35.32"
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	585061.1
UTM Y (Meters):	4505961.0
Elevation:	25 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey
Target Property:	W
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150729, 20150522
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
50 OLD FULTON STREET
BROOKLYN, NY 11201

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	SAM'S AUTO BODY SHOP	50 OLD FULTON ST	FINDS, ECHO		TP
A2		50 CADMAN PLZ W	EDR Hist Auto	Higher	1 ft.
A3	BROOKLYN BRIDGE HUBE	OLD FULTON & FRONT S	RCRA NonGen / NLR, NY MANIFEST	Lower	70, 0.013, NNW
A4	CON EDISON MANHOLE:	60 OLD FULTON ST	RCRA NonGen / NLR, NY MANIFEST	Higher	86, 0.016, ESE
A5		60 CADMAN PLZ W	EDR Hist Auto	Higher	86, 0.016, ESE
A6	MH M 58464 HAS EARTH	HICKS STREET & OLD F	NY Spills	Higher	92, 0.017, East
A7	CON EDISON MANHOLE:	5 FRONT ST	RCRA NonGen / NLR, NY MANIFEST	Lower	98, 0.019, North
A8	DGS BUREAU OF MOTOR	11 FRONT ST	RCRA-CESQG, NY Spills, FINDS, NY MANIFEST, ECHO	Lower	204, 0.039, NNE
A9	FSD SHOP 1	11 FRONT STREET	NY AST	Lower	204, 0.039, NNE
A10	FRONT STREET GARAGE	11 FRONT STREET	NY HIST UST, NY HIST AST	Lower	204, 0.039, NNE
A11	FSD SHOP 1	11 FRONT STREET	NY UST	Lower	204, 0.039, NNE
B12		28 CADMAN PLZ W	EDR Hist Auto	Lower	233, 0.044, NW
B13	CON EDISON - MANHOLE	S/S OLD FULTON	RCRA-LQG, NY MANIFEST	Lower	245, 0.046, NW
C14	LOT 53,TAXBLOCK 36	31 FRONT STREET	NY E DESIGNATION	Lower	263, 0.050, NE
B15	GARRISON BEACH	17 LANCONE COURT 7 E	NY Spills	Lower	273, 0.052, WNW
C16	LOT 52,TAXBLOCK 36	35 FRONT STREET	NY E DESIGNATION	Lower	280, 0.053, NE
D17	38-01 POPLAR ST	38-01 POPLAR ST	NY Spills	Higher	290, 0.055, South
C18	LOT 49,TAXBLOCK 36	39 FRONT STREET	NY E DESIGNATION	Lower	297, 0.056, NE
D19	BRIDGE HARBOR HEIGHT	55 POPLAR STREET	NY AST	Higher	308, 0.058, SSE
B20	CON EDISON	DOUGHTY ST & EVERIT	NY MANIFEST	Lower	320, 0.061, WNW
C21	CON EDISON MANHOLE:	45 FRONT ST	RCRA NonGen / NLR, NY MANIFEST	Lower	329, 0.062, ENE
B22	VACANT LOT	4-10 WATER ST	NY Spills	Lower	338, 0.064, NNW
E23	BROOKLYN/QUEENS EXPR	BROOKLYN QUEEN EXPRE	NY Spills	Higher	338, 0.064, ESE
F24	VAULT 4201 AND 4049	COLUMBIA HEIGHTS AND	NY Spills	Lower	345, 0.065, West
F25	VAULT 4201 AND 4049	COLUMBIA HEIGHTS AND	NY SPILLS 90	Lower	345, 0.065, West
B26	VACANT COMMERCIAL US	20 OLD FULTON ST	NY Spills	Lower	353, 0.067, NW
F27	VAULT 4008	32 COLUMBIA HTS	NY Spills	Lower	377, 0.071, West
B28	14-18 FULTON SERVICE	14 OLD FULTON STREET	NY UST, NY HIST UST	Lower	400, 0.076, WNW
B29		14 CADMAN PLZ W	EDR Hist Auto	Lower	406, 0.077, NW
D30	11 WILLOW ST/BKLYN	11 WILLOW STREET	NY Spills	Higher	413, 0.078, SSW
B31	SPILL NUMBER 0110573	OLD FULTON ST & WATE	NY Spills	Lower	414, 0.078, NW
B32	MANHOLE 327	OLD FULTON ST - WATE	NY Spills	Lower	422, 0.080, NW
D33		42 HICKS ST	EDR Hist Auto	Higher	433, 0.082, South
B34	1 WATER ST. BARGE HO	1 WATER ST	NY Spills	Lower	435, 0.082, NW
G35	INTELLIGENTS DIVISIO	72 POPLAR STREET	NY AST, NY HIST UST	Higher	436, 0.083, SSE
G36	INTELLIGENCE DIVISIO	72 POPLAR STREET	NY UST	Higher	436, 0.083, SSE
D37	NYC DEPT OF EDUCATIO	37 HICKS ST	RCRA-SQG, ICIS, FINDS, NY MANIFEST, ECHO	Higher	475, 0.090, South
D38	P.S. 8 BROOKLYN K008	37 HICKS STREET	NY AST	Higher	475, 0.090, South
E39	CON EDISON	106 OLD FULTON ST	NY MANIFEST	Higher	478, 0.091, SE

MAPPED SITES SUMMARY

Target Property Address:
50 OLD FULTON STREET
BROOKLYN, NY 11201

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
E40	BRIDGE HARBOR HEIGHT	75 POPLAR ST	RCRA-CESQG, NY MANIFEST	Higher	482, 0.091, SE
C41	METALCRAFT STEEL PRO	50 BRIDGE ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	487, 0.092, NNE
C42	HORIZON STEEL PRODUC	223 WATER STREET	RCRA NonGen / NLR, ICIS, FINDS, NY MANIFEST, ECHO	Lower	487, 0.092, NNE
F43	WATCHTOWER BIBLE & T	30 COLUMBIA HTS	RCRA NonGen / NLR, FINDS, NY MANIFEST, ECHO	Lower	494, 0.094, WSW
F44	ROADWAY	FERMAN ST/VINE ST	NY Spills	Lower	503, 0.095, West
H45	BROOKLYN BRIDGE PARK	FURMAN ROAD	NY Spills	Lower	505, 0.096, NW
C46	21-29 FRONT ST	21-29 FRONT ST	NY AST, NY HIST AST	Lower	519, 0.098, NE
C47	60 WATER ST	60 WATER ST	NY AST	Lower	519, 0.098, NE
C48	60 WATER ST	60 WATER ST	NY UST, NY HIST UST	Lower	519, 0.098, NE
I49		57 FRONT ST	EDR Hist Auto	Lower	519, 0.098, ENE
F50	55 FURMAN ST.	55 FURMAN ST	NY Spills	Lower	560, 0.106, WSW
E51	IN THE ROADWAY	CADMAN PLAZA/HENRY S	NY Spills	Higher	595, 0.113, SE
J52	NYC DGS - SALVAGE WA	2 NEW DOCK ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	614, 0.116, North
J53	SALVAGE WAREHOUSE	2 NEW DOCK ST	NY MANIFEST	Lower	614, 0.116, North
K54	NYC PARKS & RECREATI	COLUMBIA HTS & MIDDA	RCRA NonGen / NLR, NY MANIFEST	Higher	627, 0.119, SW
G55	65 MIDDAGH ST TENANT	65 MIDDAGH ST	NY UST, NY HIST UST	Higher	633, 0.120, SSE
L56	CON EDISON	58 HICKS ST	NY MANIFEST	Higher	635, 0.120, SSW
J57	CON EDISON	11 WATER ST	NY MANIFEST	Lower	642, 0.122, NNW
G58	CON EDISON SERVICE B	20 HENRY ST	RCRA NonGen / NLR, NY MANIFEST	Higher	650, 0.123, SSE
G59	20 HENRY STREET ASSO	20 HENRY STREET	NY AST	Higher	650, 0.123, SSE
H60	RED HOOK REGULATOR-R	END OF OLD FULTON ST	NY Spills	Lower	653, 0.124, NW
I61	US NAVY BASE	50 MAIN STREET	NY Spills	Lower	653, 0.124, ENE
L62	CON ED	58 MIDDAGH ST	NY MANIFEST	Higher	653, 0.124, South
K63	COLD STORAGE BLDG PO	66 FURMAN ST	RCRA NonGen / NLR, FINDS, NY MANIFEST, NJ...	Lower	669, 0.127, WSW
I64	JONES, JONES LARKIN	45 MAIN ST, SUITE 11	RCRA NonGen / NLR	Lower	671, 0.127, ENE
I65	EYE BEAM ADMINISTRAT	45 MAIN ST, 12TH FLO	RCRA NonGen / NLR	Lower	671, 0.127, ENE
66	CON EDISON	90 FURMAN ST	NY MANIFEST	Lower	714, 0.135, WSW
L67	CONSOLIDATED EDISON	37 WILLOW ST	NY MANIFEST	Higher	722, 0.137, SSW
M68	ENGINE COMPANY 205	74 MIDDAGH STREET	NY AST	Higher	745, 0.141, SSE
I69	PANDA WALLCOVERINGS	100 WATER ST	RCRA NonGen / NLR, FINDS, NY MANIFEST, ECHO	Lower	748, 0.142, ENE
I70	STUDIO TYPE & SCREEN	100 WATER ST	RCRA NonGen / NLR, NY MANIFEST	Lower	748, 0.142, ENE
I71	CON EDISON - MANHOLE	F/O 99 WATER STREET	RCRA-LQG, NY MANIFEST	Lower	752, 0.142, NE
L72	CON EDISON SERVICE B	53 CRANBERRY ST	RCRA NonGen / NLR, NY MANIFEST	Higher	758, 0.144, South
I73	CON EDISON	WATER ST & MAIN ST	NY MANIFEST	Lower	760, 0.144, ENE
I74	CONSOLIDATED EDISON	WATER ST & MAIN ST	NY MANIFEST	Lower	760, 0.144, ENE
I75	CON EDISON	MAIN ST & WATER ST	NY MANIFEST	Lower	760, 0.144, ENE
I76	NYCDEP	MAIN ST & WATER ST	NY MANIFEST	Lower	760, 0.144, ENE
N77	PETER BURGESS MGMT	140 CADMAN PLAZA WES	NY TANKS, NY HIST AST	Higher	778, 0.147, SE
M78	CON EDISON - MH 6049	HENRY AND MIDDAGH ST	RCRA NonGen / NLR, NY MANIFEST	Higher	779, 0.148, SSE

MAPPED SITES SUMMARY

Target Property Address:
50 OLD FULTON STREET
BROOKLYN, NY 11201

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
K79	CONSOLIDATED EDISON	67 FURMAN ST	NY MANIFEST	Lower	786, 0.149, WSW
L80	MERAJ INC	68 HICKS ST	RCRA-CESQG, FINDS, NY MANIFEST, NJ MANIFEST, ECHO	Higher	810, 0.153, SSW
O81	75 FRONT ST	75 FRONT STREET	NY AST	Lower	823, 0.156, ENE
O82	PRECISE CORPORATE PR	75 FRONT ST	RCRA NonGen / NLR, FINDS, NY MANIFEST, ECHO	Lower	823, 0.156, ENE
K83	CON EDISON MANHOLE:	CRANBERRY ST & COLUM	RCRA NonGen / NLR, NY MANIFEST	Higher	831, 0.157, SW
P84	WASHINGTON GROUP, LL	70 WASHINGTON STREET	NY AST	Higher	847, 0.160, East
K85	CON EDISON - MANHOLE	87 FURMAN ST	RCRA-LQG, NY MANIFEST	Lower	849, 0.161, WSW
K86	CON EDISON - MANHOLE	87 FURMAN ST	RCRA-LQG, NY MANIFEST	Lower	849, 0.161, WSW
O87	CON EDISON MANHOLE:	107 WATER ST	RCRA NonGen / NLR, NY MANIFEST	Lower	850, 0.161, ENE
Q88	81-87 OWNERS CORP	81 COLUMBIA HEIGHTS	NY AST, NY HIST AST	Higher	882, 0.167, SW
Q89	81-87 OWNERS CORP	87 COLUMBIA HEIGHTS	NY AST, NY HIST AST	Higher	898, 0.170, SW
90	CITY OF NY PARKS & R	BROOKLYN BRIDGE PARK	RCRA NonGen / NLR, NY MANIFEST	Lower	912, 0.173, NE
P91	FOLTS HOME INC.	104 N WASHINGTON ST	NY LTANKS	Higher	913, 0.173, ESE
P92	FOLTS HOMES	104 NORTH WASHINGTON	NY LTANKS	Higher	913, 0.173, ESE
O93	CLOCK TOWER CONDO	1 MAIN STREET AKA 15	NY UST, NY AST	Lower	914, 0.173, ENE
Q94	49 WILLOW ST	49 WILLOW ST	NY AST, NY HIST AST	Higher	921, 0.174, SSW
Q95	CON EDISON	49 WILLOW ST	NY MANIFEST	Higher	921, 0.174, SSW
Q96	CON EDISON	49 WILLOW ST	NY MANIFEST	Higher	921, 0.174, SSW
N97	CON EDISON MANHOLE:	150 CADMAN PLAZA W F	RCRA NonGen / NLR, NY MANIFEST	Higher	923, 0.175, SE
O98	PRESTONE PRESS LLC	50 WASHINGTON ST, 2N	RCRA NonGen / NLR	Lower	944, 0.179, ENE
O99	WASHINGTON GROUP	50 WASHINGTON STREET	NY AST	Lower	944, 0.179, ENE
O100	CON EDISON	50 WASHINGTON ST	NY MANIFEST	Lower	944, 0.179, ENE
R101	HELMSLEY-SPEAR INC	35 ORANGE ST	NY AST, NY HIST AST	Higher	948, 0.180, SSW
M102	THE CRANLYN	80 CRANBERRY STREET	NY AST	Higher	973, 0.184, South
R103	PLYMOUTH CHURCH OF T	75 HICKS STREET	NY UST	Higher	992, 0.188, South
R104	PLYMOUTH CHURCH OF T	75 HICKS STREET	RCRA NonGen / NLR, NY MANIFEST	Higher	992, 0.188, South
R105	PLYMOUTH CHURCH OF T	75 HICKS STREET	RCRA-CESQG, FINDS, NY MANIFEST, ECHO	Higher	992, 0.188, South
R106	PLYMOUTH CHURCH OF T	75 HICKS STREET	NY AST	Higher	992, 0.188, South
O107	BROOKLAKE ASSOCIATES	30 WASHINGTON STREET	NY AST	Lower	1008, 0.191, ENE
O108	GAIR 1	30 WASHINGTON ST	RCRA NonGen / NLR, NY MANIFEST	Lower	1008, 0.191, ENE
O109	CON EDISON	WATER ST & WASHINGTO	NY MANIFEST	Lower	1013, 0.192, ENE
O110	45/55 WASHINGTON ST	45/55 WASHINGTON STR	NY AST	Lower	1020, 0.193, ENE
O111	WASHINGTON GROUP, LL	45-55 WASHINGTON STR	NY AST	Lower	1020, 0.193, ENE
O112	AVERSA & MARTIN INC	55 WASHINGTON ST	RCRA NonGen / NLR, FINDS, NY MANIFEST, ECHO	Lower	1020, 0.193, ENE
O113	BRIDGE STONE CLEANER	45-55 WASHINGTON/109	NY DRYCLEANERS	Lower	1020, 0.193, ENE
Q114	WATCHTOWER BIBLE & T	97 COLUMBIA HEIGHTS	NY AST	Higher	1043, 0.198, SW
P115	84 FRONT ST, LLC.	84 FRONT ST	NY AST	Lower	1052, 0.199, East
S116	66 ORANGE STREET	66 ORANGE STREET	NY AST, NY HIST AST	Higher	1068, 0.202, South
R117	40 ORANGE ST/TEMPLE	40 ORANGE ST/TEMPLE	NY LTANKS	Higher	1082, 0.205, SSW

MAPPED SITES SUMMARY

Target Property Address:
50 OLD FULTON STREET
BROOKLYN, NY 11201

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
R118	CON ED	79 HICKS ST	NY MANIFEST	Higher	1083, 0.205, South
T119	GARMENT SALON	64 HENRY ST	RCRA NonGen / NLR, NY MANIFEST	Higher	1090, 0.206, SSE
T120	PLAZA/NEW MODEL CLNR	64 HENRY STREET	NY DRYCLEANERS	Higher	1090, 0.206, SSE
R121	52/4 ORANGE ST - BKL	52/4 ORANGE ST	NY LTANKS	Higher	1096, 0.208, South
U122	31 WASHINGTON STREET	31 WASHINGTON STREET	NY AST, NY HIST AST	Lower	1096, 0.208, ENE
T123	WHITMAN OWNER CORP	75 HENRY ST	NY AST	Higher	1108, 0.210, SSE
S124	52 ORANGE ST OWNERS	54 ORANGE ST	NY AST	Higher	1122, 0.213, South
U125	GAIR 1-2, LLC	25 WASHINGTON STREET	NY AST	Lower	1156, 0.219, ENE
R126	WATCTOWER BIBLE & TR	89 HICKS STREET	NY AST, NY HIST AST	Higher	1161, 0.220, South
V127	WATCHTOWER BIBLE & T	55 PROSPECT ST	RCRA NonGen / NLR, NY MANIFEST	Higher	1162, 0.220, ESE
V128	55 PROSPECT STREET(B	55 PROSPECT ST - 7TH	NY DRYCLEANERS	Higher	1162, 0.220, ESE
V129	RELIGIOUS ORDER OF J	53-73 PROSPECT ST -	RCRA-LQG, NY MANIFEST, NJ MANIFEST	Higher	1162, 0.220, ESE
V130	WATCHTOWER BIBLE & T	55 PROSPECT ST	NJ MANIFEST	Higher	1162, 0.220, ESE
W131	WATCHTOWER BIBLE&TRA	107 COLUMBIA HEIGHTS	NY UST, NY AST	Higher	1164, 0.220, SW
W132	WATCHTOWER BIBLE & T	107 COLUMBIA HEIGHTS	NY LTANKS, NY HIST AST	Higher	1164, 0.220, SW
X133	WATCHTOWER BIBLE & T	74 ADAMS STREET	NY UST, NY AST	Higher	1177, 0.223, East
X134	KINGDOM SUPPORT SERV	74 ADAMS ST	RCRA-CESQG, NY LTANKS, FINDS, NY MANIFEST, NJ...	Higher	1177, 0.223, East
W135	WATCHTOWER BIBLE & T	124 COLUMBIA HEIGHTS	NY MANIFEST	Higher	1181, 0.224, SW
S136	72 ORANGE STREET TEN	72 ORANGE STREET	NY AST	Higher	1183, 0.224, South
S137	72 ORANGE STREET TEN	72 ORANGE STREET	NY HIST UST	Higher	1183, 0.224, South
S138	LAMS CLEANERS	74 HENRY ST	RCRA NonGen / NLR, FINDS, NY MANIFEST, ECHO	Higher	1193, 0.226, South
S139	LAM'S/LUNG'S DRY CLE	74 HENRY STREET	NY DRYCLEANERS	Higher	1193, 0.226, South
S140	LAMS DRY CLEANERS	74 HENRY ST	RCRA NonGen / NLR	Higher	1193, 0.226, South
W141	WATCHTOWER BIBLE & T	122-136 COLUMBIA HEI	NY UST	Higher	1200, 0.227, SW
X142	CON EDISON	ADAMS ST & YORK ST	NY MANIFEST	Higher	1211, 0.229, East
S143	LAM CLEANERS	76 HENRY ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	1212, 0.230, South
X144	CON EDISON SERVICE B	W 28TH ST E OF 11TH	RCRA NonGen / NLR, FINDS, NY MANIFEST, ECHO	Higher	1224, 0.232, East
S145	COLEMAN J & R CLEANE	97 HICKS ST	RCRA-SQG, US AIRS, FINDS, NY MANIFEST, ECHO	Higher	1229, 0.233, SSW
S146	COLEMAN J & R CLEANE	97 HICKS STREET	NY DRYCLEANERS	Higher	1229, 0.233, SSW
X147	LONG ISLAND MACHINE&	69 ADAMS ST	NY UST, NY AST, NY HIST UST, NY HIST AST	Lower	1231, 0.233, East
S148	RESIDENCE	45 PINEAPPLE ST	NY LTANKS	Higher	1245, 0.236, South
S149	59 PINEAPPLE ST	59 PINEAPPLE STREET	NY AST, NY HIST AST	Higher	1255, 0.238, South
X150	CON EDISON	85 ADAMS ST	NY E DESIGNATION, NY MANIFEST	Higher	1269, 0.240, East
151	MTA NYCT - HIGH STRE	RED CROSS LANE & CAD	RCRA NonGen / NLR, NY MANIFEST	Higher	1270, 0.241, SE
S152	MANMARK REALTY CORP	71 PINEAPPLE ST	NY UST, NY HIST UST	Higher	1294, 0.245, South
V153	WATCHTOWER BIBLE & T	117 ADAMS STREET	NY AST	Higher	1309, 0.248, ESE
V154	WATCHTOWER PRINT AND	117 ADAMS STREET	RCRA-SQG, US AIRS, FINDS, NY MANIFEST, ECHO	Higher	1309, 0.248, ESE
Y155	IRON WORKERS SHOP	59 ADAMS ST	NY LTANKS, NY UST, NY AST, NY HIST AST	Lower	1309, 0.248, ENE
Y156	NYSDOT ADAMS STREET	59 ADAMS ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	1309, 0.248, ENE

MAPPED SITES SUMMARY

Target Property Address:
50 OLD FULTON STREET
BROOKLYN, NY 11201

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
157	EMPIRE ASBESTOS CO	81 WILOBY ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	1309, 0.248, SSW
158	MANMARK REALTY CORP	75 PINEAPPLE ST	NY AST, NY HIST AST	Higher	1313, 0.249, South
Y159	LENOX SMELTING	U	NY HSWDS	Lower	1527, 0.289, East
160	LENOX SMELTING	68 JAY STREET	SEMS-ARCHIVE	Lower	1611, 0.305, East
161	CHAMBERS PAPER FIBER	139 PLYMOUTH STREET	NY SWRCY	Lower	1636, 0.310, ENE
162	ON STREET	115 HENRY STREET	NY LTANKS, NY Spills	Higher	1723, 0.326, South
Z163	FARRAGUT SUBSTATION	29 JOHN ST	NY LTANKS	Lower	1906, 0.361, ENE
164	186 JAY STREET	186 JAY STREET	NY LTANKS, NY Spills	Higher	1906, 0.361, SE
Z165	PRECISE CORPORATE PR	20 JAY ST - 5TH FLOO	RCRA-SQG, NY LTANKS, NY Spills, NY MANIFEST	Lower	1912, 0.362, ENE
166	ROUTE 9A - MANHATTAN	WEST SIDE HIGHWAY	NY HSWDS	Lower	1979, 0.375, WSW
AA167	EMMANUEL CELLARD FED	225 CADMAN PLAZA	NY LTANKS, NY HSWDS	Higher	2012, 0.381, SSE
AA168	EMANUEL CELLARD FEDE	225 CADMAN PLAZA	SEMS-ARCHIVE, RCRA NonGen / NLR, NJ MANIFEST, NY...	Higher	2061, 0.390, SSE
AB169	BRADLEY WHITE LEAD C	85 JAY ST.	NY HSWDS	Higher	2062, 0.391, East
AB170	BRADLEY WHITE LEAD C	85 JAY ST	SEMS-ARCHIVE, NY Spills, NY MANIFEST	Higher	2062, 0.391, East
171	220 WATER STREET	220 WATER STREET	NY ENG CONTROLS, NY INST CONTROL, NY BROWNFIELDS	Higher	2156, 0.408, East
AC172	APEX THERMOPLASTICS	100-110 BRIDGE ST	SEMS-ARCHIVE	Higher	2197, 0.416, East
AC173	APEX THERMOPLASTICS	100-110 BRIDGE ST	NY SHWS, NY HSWDS	Higher	2197, 0.416, East
174	FLORENCE COURT CORP	187 HICKS ST	NY LTANKS, NY AST, NY HIST AST	Higher	2208, 0.418, SSW
175	24-30 CLINTON ST TEN	24-30 CLINTON ST	NY LTANKS, NY UST, NY AST, NY HIST UST	Higher	2249, 0.426, South
AD176	14 PIERREPONT ST	14 PIERREPONT ST	NY LTANKS	Higher	2380, 0.451, SSW
AE177	86 PIERREPONT ST/BKL	86 PIERREPONT STREET	NY LTANKS	Higher	2389, 0.452, South
AE178	JOSEPH OWEN	102 PIERREPONT STREE	NY LTANKS, NY AST, NY HIST AST	Higher	2416, 0.458, South
AF179	JUMBO RECYCLING; INC	27 BRIDGE STREET	NY SWRCY	Lower	2460, 0.466, ENE
180	FRONT STREET STATION	BRIDGE ST, FRONT ST,	EDR MGP	Higher	2523, 0.478, East
AF181	ALLIED (REPUBLIC-USA	246-252 PLYMOUTH ST	NY SWF/LF	Higher	2622, 0.497, ENE
AD182	62 MONTAGUE ST	62 MONTAGUE ST	NY LTANKS, NY HIST AST	Higher	2631, 0.498, SSW
183	CON EDISON - 286 WAT	312 WATER STREET	EDR MGP	Lower	2910, 0.551, NNW
184	PLYMOUTH STATION	PLYMOUTH, HUDSON, WA	EDR MGP	Higher	3022, 0.572, East
185	K - BROOKLYN GAS LIG	MARSHALL ST. & HUDSO	NY SHWS, NY BROWNFIELDS	Lower	3459, 0.655, ENE
186	BROOKLYN GAS AND LIG	MARSHALL ST., ST. JO	EDR MGP	Lower	3657, 0.693, ENE
187	LUCIUS PITKIN	47 FULTON STREET	FUSRAP	Lower	3689, 0.699, NW
188	CON EDISON - ROOSEVE	PEARL ST. BETWEEN PA	EDR MGP	Lower	4034, 0.764, NNW
189	BROOKLYN NAVY YARD 1	KENT AVENUE	NY SHWS	Lower	4843, 0.917, ESE
AG190	AFRICAN METALS	41 BROAD STREET	FUSRAP	Lower	5125, 0.971, WNW
191	CON EDISON - CROSS/L	60 CENTRE ST	EDR MGP	Lower	5218, 0.988, NNW
192	BROOKLYN NAVAL YARD	FLUSHING AVENUE & CU	NY SHWS	Lower	5252, 0.995, ESE
AG193	FERRO METAL AND CHEM	50 BROAD STREET	FUSRAP	Lower	5252, 0.995, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
SAM'S AUTO BODY SHOP 50 OLD FULTON ST BROOKLYN, NY 11201	FINDS Registry ID:: 110055291321 ECHO	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 03/07/2016 has revealed that there are 4 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EMANUEL CELLARD FEDE	***225 CADMAN PLAZA***	***SSE 1/4 - 1/2 (0.390 mi.)***	***AA168***	***48***
BRADLEY WHITE LEAD C	***85 JAY ST***	***E 1/4 - 1/2 (0.391 mi.)***	***AB170***	***49***
APEX THERMOPLASTICS	100-110 BRIDGE ST	E 1/4 - 1/2 (0.416 mi.)	AC172	49
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
LENOX SMELTING	68 JAY STREET	E 1/4 - 1/2 (0.305 mi.)	160	46

Federal RCRA generators list

RCRA-LQG: A review of the RCRA-LQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 5 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RELIGIOUS ORDER OF J	*53-73 PROSPECT ST -*	*ESE 1/8 - 1/4 (0.220 mi.)*	*V129*	*38*
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
CON EDISON - MANHOLE	*S/S OLD FULTON*	*NW 0 - 1/8 (0.046 mi.)*	*B13*	*10*
CON EDISON - MANHOLE	*F/O 99 WATER STREET*	*NE 1/8 - 1/4 (0.142 mi.)*	*I71*	*24*
CON EDISON - MANHOLE	*87 FURMAN ST*	*WSW 1/8 - 1/4 (0.161 mi.)*	*K85*	*27*
CON EDISON - MANHOLE	*87 FURMAN ST*	*WSW 1/8 - 1/4 (0.161 mi.)*	*K86*	*27*

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NYC DEPT OF EDUCATIO	*37 HICKS ST*	*S 0 - 1/8 (0.090 mi.)*	*D37*	*15*
COLEMAN J & R CLEANE	*97 HICKS ST*	*SSW 1/8 - 1/4 (0.233 mi.)*	*S145*	*42*
WATCHTOWER PRINT AND	*117 ADAMS STREET*	*ESE 1/8 - 1/4 (0.248 mi.)*	*V154*	*44*

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 5 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRIDGE HARBOR HEIGHT	*75 POPLAR ST*	*SE 0 - 1/8 (0.091 mi.)*	*E40*	*16*
MERAJ INC	*68 HICKS ST*	*SSW 1/8 - 1/4 (0.153 mi.)*	*L80*	*26*
PLYMOUTH CHURCH OF T	*75 HICKS STREET*	*S 1/8 - 1/4 (0.168 mi.)*	*R105*	*32*
KINGDOM SUPPORT SERV	*74 ADAMS ST*	*E 1/8 - 1/4 (0.223 mi.)*	*X134*	*39*
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
DGS BUREAU OF MOTOR	*11 FRONT ST*	*NNE 0 - 1/8 (0.039 mi.)*	*A8*	*9*

State- and tribal - equivalent CERCLIS

NY SHWS: A review of the NY SHWS list, as provided by EDR, and dated 05/17/2016 has revealed that there are 4 NY SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
APEX THERMOPLASTICS Site Code: 58472	*100-110 BRIDGE ST*	*E 1/4 - 1/2 (0.416 mi.)*	*AC173*	*50*
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
K - BROOKLYN GAS LIG Site Code: 378986	*MARSHALL ST. & HUDSO*	*ENE 1/2 - 1 (0.655 mi.)*	*185*	*53*
BROOKLYN NAVY YARD 1	KENT AVENUE	ESE 1/2 - 1 (0.917 mi.)	189	53

Site Code: 57818
Class Code: Significant threat to the public health or environment - action required.

BROOKLYN NAVAL YARD Site Code: 338760	FLUSHING AVENUE & CU	ESE 1/2 - 1 (0.995 mi.)	192	54

State and tribal landfill and/or solid waste disposal site lists

NY SWF/LF: A review of the NY SWF/LF list, as provided by EDR, and dated 04/06/2016 has revealed that there is 1 NY SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALLIED (REPUBLIC-USA	246-252 PLYMOUTH ST	ENE 1/4 - 1/2 (0.497 mi.)	AF181	52

State and tribal leaking storage tank lists

NY LTANKS: A review of the NY LTANKS list, as provided by EDR, and dated 05/17/2016 has revealed that there are 19 NY LTANKS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOLTS HOME INC. Spill Number/Closed Date: 9108056 / 1995-10-10 Site ID: 85841 Program Number: 9108056	104 N WASHINGTON ST	ESE 1/8 - 1/4 (0.173 mi.)	P91	29
FOLTS HOMES Spill Number/Closed Date: 0400522 / 2004-04-16 Site ID: 97337 Program Number: 0400522	104 NORTH WASHINGTON	ESE 1/8 - 1/4 (0.173 mi.)	P92	29
40 ORANGE ST/TEMPLE Spill Number/Closed Date: 9102597 / 1994-11-16 Site ID: 114670 Program Number: 9102597	40 ORANGE ST/TEMPLE	SSW 1/8 - 1/4 (0.205 mi.)	R117	35
52/4 ORANGE ST - BKL Spill Number/Closed Date: 8908550 / 1993-11-05 Site ID: 192539 Program Number: 8908550	52/4 ORANGE ST	S 1/8 - 1/4 (0.208 mi.)	R121	36
WATCHTOWER BIBLE & T Spill Number/Closed Date: 8707680 / 2003-03-04 Site ID: 317048 Program Number: 8707680	***107 COLUMBIA HEIGHTS***	***SW 1/8 - 1/4 (0.220 mi.)***	***W132***	***38***
KINGDOM SUPPORT SERV	***74 ADAMS ST***	***E 1/8 - 1/4 (0.223 mi.)***	***X134***	***39***
RESIDENCE Spill Number/Closed Date: 1310521 / 2014-05-22 Site ID: 491373 Program Number: 1310521	45 PINEAPPLE ST	S 1/8 - 1/4 (0.236 mi.)	S148	43
ON STREET	***115 HENRY STREET***	***S 1/4 - 1/2 (0.326 mi.)***	***162***	***46***

Spill Number/Closed Date: 9903166 / 1999-06-18
Site ID: 99138
Program Number: 9903166

186 JAY STREET	***186 JAY STREET***	***SE 1/4 - 1/2 (0.361 mi.)***	***164***	***47***
Spill Number/Closed Date: 9210273 / 2003-03-06 Site ID: 266755 Program Number: 9210273				
EMMANUEL CELLARD FED	***225 CADMAN PLAZA***	***SSE 1/4 - 1/2 (0.381 mi.)***	***AA167***	***48***
Spill Number/Closed Date: 8808323 / 1989-01-20 Site ID: 197045 Program Number: 8808323				
FLORENCE COURT CORP	***187 HICKS ST***	***SSW 1/4 - 1/2 (0.418 mi.)***	***174***	***50***
Spill Number/Closed Date: 9415312 / 1995-02-22 Site ID: 322951 Program Number: 9415312				
24-30 CLINTON ST TEN	***24-30 CLINTON ST***	***S 1/4 - 1/2 (0.426 mi.)***	***175***	***50***
Spill Number/Closed Date: 0407013 / 2009-04-27 Site ID: 281139 Program Number: 0407013				
14 PIERREPONT ST	14 PIERREPONT ST	SSW 1/4 - 1/2 (0.451 mi.)	AD176	51
Spill Number/Closed Date: 9811909 / 2002-01-23 Site ID: 244072 Program Number: 9811909				
86 PIERREPONT ST/BKL	86 PIERREPONT STREET	S 1/4 - 1/2 (0.452 mi.)	AE177	51
Spill Number/Closed Date: 9101340 / 1991-05-02 Site ID: 111184 Program Number: 9101340				
JOSEPH OWEN	***102 PIERREPONT STREE***	***S 1/4 - 1/2 (0.458 mi.)***	***AE178***	***51***
Spill Number/Closed Date: 1205175 / 2012-10-19 Site ID: 468096 Program Number: 1205175				
62 MONTAGUE ST	***62 MONTAGUE ST***	***SSW 1/4 - 1/2 (0.498 mi.)***	***AD182***	***52***
Spill Number/Closed Date: 0905234 / 2010-04-02 Site ID: 417493 Program Number: 0905234				

Lower Elevation	Address	Direction / Distance	Map ID	Page
IRON WORKERS SHOP	***59 ADAMS ST***	***ENE 1/8 - 1/4 (0.248 mi.)***	***Y155***	***44***
Spill Number/Closed Date: 9510267 / 1996-07-18 Site ID: 65419 Program Number: 9510267				
FARRAGUT SUBSTATION	29 JOHN ST	ENE 1/4 - 1/2 (0.361 mi.)	Z163	47
Spill Number/Closed Date: 0311516 / 2004-03-10 Site ID: 184650 Program Number: 0311516				
PRECISE CORPORATE PR	***20 JAY ST - 5TH FLOO***	***ENE 1/4 - 1/2 (0.362 mi.)***	***Z165***	***47***
Spill Number/Closed Date: 9610348 / 1996-11-19 Site ID: 296280 Program Number: 9610348				

State and tribal registered storage tank lists

NY UST: A review of the NY UST list, as provided by EDR, has revealed that there are 13 NY UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
INTELLIGENCE DIVISIO Database: UST, Date of Government Version: 03/29/2016	72 POPLAR STREET	SSE 0 - 1/8 (0.083 mi.)	G36	15
65 MIDDAGH ST TENANT Database: UST, Date of Government Version: 03/29/2016	***65 MIDDAGH ST***	***SSE 0 - 1/8 (0.120 mi.)***	***G55***	***20***
PLYMOUTH CHURCH OF T Database: UST, Date of Government Version: 03/29/2016	75 HICKS STREET	S 1/8 - 1/4 (0.188 mi.)	R103	32
WATCHTOWER BIBLE&TRA Database: UST, Date of Government Version: 03/29/2016	***107 COLUMBIA HEIGHTS***	***SW 1/8 - 1/4 (0.220 mi.)***	***W131***	***38***
WATCHTOWER BIBLE & T Database: UST, Date of Government Version: 03/29/2016	***74 ADAMS STREET***	***E 1/8 - 1/4 (0.223 mi.)***	***X133***	***39***
WATCHTOWER BIBLE & T Database: UST, Date of Government Version: 03/29/2016	122-136 COLUMBIA HEI	SW 1/8 - 1/4 (0.227 mi.)	W141	41
MANMARK REALTY CORP Database: UST, Date of Government Version: 03/29/2016	***71 PINEAPPLE ST***	***S 1/8 - 1/4 (0.245 mi.)***	***S152***	***44***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FSD SHOP 1 Database: UST, Date of Government Version: 03/29/2016	11 FRONT STREET	NNE 0 - 1/8 (0.039 mi.)	A11	10
14-18 FULTON SERVICE Database: UST, Date of Government Version: 03/29/2016	***14 OLD FULTON STREET***	***WNW 0 - 1/8 (0.076 mi.)***	***B28***	***14***
60 WATER ST Database: UST, Date of Government Version: 03/29/2016	***60 WATER ST***	***NE 0 - 1/8 (0.098 mi.)***	***C48***	***18***
CLOCK TOWER CONDO Database: UST, Date of Government Version: 03/29/2016	***1 MAIN STREET AKA 15***	***ENE 1/8 - 1/4 (0.173 mi.)***	***O93***	***29***
LONG ISLAND MACHINE& Database: UST, Date of Government Version: 03/29/2016	***69 ADAMS ST***	***E 1/8 - 1/4 (0.233 mi.)***	***X147***	***42***
IRON WORKERS SHOP Database: UST, Date of Government Version: 03/29/2016	***59 ADAMS ST***	***ENE 1/8 - 1/4 (0.248 mi.)***	***Y155***	***44***

NY AST: A review of the NY AST list, as provided by EDR, has revealed that there are 37 NY AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRIDGE HARBOR HEIGHT Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-610362	55 POPLAR STREET	SSE 0 - 1/8 (0.058 mi.)	D19	12
INTELLIGENTS DIVISIO Database: AST, Date of Government Version: 03/29/2016	***72 POPLAR STREET***	***SSE 0 - 1/8 (0.083 mi.)***	***G35***	***15***

Facility Id: 2-343552				
P.S. 8 BROOKLYN K008 Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-601757	37 HICKS STREET	S 0 - 1/8 (0.090 mi.)	D38	16
20 HENRY STREET ASSO Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-269735	20 HENRY STREET	SSE 0 - 1/8 (0.123 mi.)	G59	21
ENGINE COMPANY 205 Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-357472	74 MIDDAGH STREET	SSE 1/8 - 1/4 (0.141 mi.)	M68	23
WASHINGTON GROUP, LL Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-604309 Facility Id: 2-601533	70 WASHINGTON STREET	E 1/8 - 1/4 (0.160 mi.)	P84	27
81-87 OWNERS CORP Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-201472	***81 COLUMBIA HEIGHTS***	***SW 1/8 - 1/4 (0.167 mi.)***	***Q88***	***28***
81-87 OWNERS CORP Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-201189	***87 COLUMBIA HEIGHTS***	***SW 1/8 - 1/4 (0.170 mi.)***	***Q89***	***28***
49 WILLOW ST Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-322768	***49 WILLOW ST***	***SSW 1/8 - 1/4 (0.174 mi.)***	***Q94***	***30***
HELMSLEY-SPEAR INC Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-278467	***35 ORANGE ST***	***SSW 1/8 - 1/4 (0.180 mi.)***	***R101***	***31***
THE CRANLYN Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-305065	80 CRANBERRY STREET	S 1/8 - 1/4 (0.184 mi.)	M102	31
PLYMOUTH CHURCH OF T Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-608454	75 HICKS STREET	S 1/8 - 1/4 (0.188 mi.)	R106	32
WATCHTOWER BIBLE & T Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-348112	97 COLUMBIA HEIGHTS	SW 1/8 - 1/4 (0.198 mi.)	Q114	34
66 ORANGE STREET Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-600835	***66 ORANGE STREET***	***S 1/8 - 1/4 (0.202 mi.)***	***S116***	***35***
WHITMAN OWNER CORP Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-245283	75 HENRY ST	SSE 1/8 - 1/4 (0.210 mi.)	T123	36
52 ORANGE ST OWNERS Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-316083	54 ORANGE ST	S 1/8 - 1/4 (0.213 mi.)	S124	36
WATCTOWER BIBLE & TR Database: AST, Date of Government Version: 03/29/2016 Facility Id: 2-477508	***89 HICKS STREET***	***S 1/8 - 1/4 (0.220 mi.)***	***R126***	***37***
WATCHTOWER BIBLE&TRA Database: AST, Date of Government Version: 03/29/2016	***107 COLUMBIA HEIGHTS***	***SW 1/8 - 1/4 (0.220 mi.)***	***W131***	***38***

Facility Id: 2-477494

WATCHTOWER BIBLE & T	***74 ADAMS STREET***	***E 1/8 - 1/4 (0.223 mi.)***	***X133***	***39***
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-211273				
72 ORANGE STREET TEN	72 ORANGE STREET	S 1/8 - 1/4 (0.224 mi.)	S136	40
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-600903				
59 PINEAPPLE ST	***59 PINEAPPLE STREET***	***S 1/8 - 1/4 (0.238 mi.)***	***S149***	***43***
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-044989				
WATCHTOWER BIBLE & T	117 ADAMS STREET	ESE 1/8 - 1/4 (0.248 mi.)	V153	44
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-480797				
MANMARK REALTY CORP	***75 PINEAPPLE ST***	***S 1/8 - 1/4 (0.249 mi.)***	***158***	***45***
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-288012				

Lower Elevation	Address	Direction / Distance	Map ID	Page
FSD SHOP 1	11 FRONT STREET	NNE 0 - 1/8 (0.039 mi.)	A9	10
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-217174				
21-29 FRONT ST	***21-29 FRONT ST***	***NE 0 - 1/8 (0.098 mi.)***	***C46***	***18***
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-256617				
60 WATER ST	60 WATER ST	NE 0 - 1/8 (0.098 mi.)	C47	18
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-338990				
75 FRONT ST	75 FRONT STREET	ENE 1/8 - 1/4 (0.156 mi.)	O81	26
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-479217				
CLOCK TOWER CONDO	***1 MAIN STREET AKA 15***	***ENE 1/8 - 1/4 (0.173 mi.)***	***O93***	***29***
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-195448				
WASHINGTON GROUP	50 WASHINGTON STREET	ENE 1/8 - 1/4 (0.179 mi.)	O99	31
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-604310				
BROOKLAKE ASSOCIATES	30 WASHINGTON STREET	ENE 1/8 - 1/4 (0.191 mi.)	O107	33
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-604306				
45/55 WASHINGTON ST	45/55 WASHINGTON STR	ENE 1/8 - 1/4 (0.193 mi.)	O110	33
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-479225				
WASHINGTON GROUP, LL	45-55 WASHINGTON STR	ENE 1/8 - 1/4 (0.193 mi.)	O111	33
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-604308				
84 FRONT ST, LLC.	84 FRONT ST	E 1/8 - 1/4 (0.199 mi.)	P115	34
Database: AST, Date of Government Version: 03/29/2016				
Facility Id: 2-609642				
31 WASHINGTON STREET	***31 WASHINGTON STREET***	***ENE 1/8 - 1/4 (0.208 mi.)***	***U122***	***36***
Database: AST, Date of Government Version: 03/29/2016				

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPARTMENT OF CITY PLANNING / 19DCP009K
Project: 50 OLD FULTON REZONING
Date received: 11/30/2018

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments: The LPC is in receipt of the, "Work Plan Phase IB 50 Old Fulton Street, Block 202, Lot 18, Kings County, New York," prepared by Greenhouse Consultants, Inc. and dated November 2018.

We note that the document states that the testing will occur once hazardous material remediation has occurred which may require the removal of soils. Such work may greatly impact the archaeological sensitivity of the site depending upon what is done. Details about this work must be submitted to LPC before the agency can review the archaeological work plan. As for the work plan, more information is needed about what sampling is proposed to be done from, "the floor of the trench," (page 6). In addition, a project plan is needed that shows the proposed test trench location.



12/4/2018

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 33260_FSO_ALS_12042018.doc

WORK PLAN PHASE 1B
58 OLD FULTON STREET
BLOCK 202, LOT 18
KINGS COUNTY, NEW YORK
19DCP009K

Prepared by:
Greenhouse Consultants Inc.
386 Broadway, Ground Floor
Bayonne, NJ 07002

Prepared for:
Alwest Old Fulton, LLC
236 Greenpoint Avenue, Suite 4
Brooklyn, New York 11122

December 2018

I. INTRODUCTION

Greenhouse Consultants Incorporated is submitting the following Phase 1B Work Plan for Alwest Old Fulton, LLC for the following project:

58 Old Fulton Street
Block 202, Lot 18
19DCP009K

Alwest Old Fulton, LLC
236 Greenpoint Avenue, Suite 4
Brooklyn, New York 11122
718-392-0008

Lead agency: New York City Landmarks Preservation Commission

Personnel: William Sandy, Paula Crowley, Principal Investigator, Field Director, Project Manager

Proposed schedule: First, the removal of the current structure must occur. Second, a Phase 1 Environmental Assessment, including any required soil borings, must occur. A Phase 1 Environmental Assessment was completed for Block 202, Lot 14, but not Lot 18. Third, remediation of hazardous materials must be carried out, as required by and according to protocol determined appropriate by the NYC Office of Environmental Remediation, which remediation may require removal of soils and fill on all or portions of Lot 18. An RPA archaeologist will be available for monitoring for the above procedures. Currently, there are no demolition or development plans available for Lot 18.

Commencement of Phase 1B archaeological fieldwork will proceed once the client has completed the first, second, and third steps. The anticipated duration of archaeological fieldwork is one to two days. The first, second and third steps will be coordinated with all appropriate City Agencies, including the Landmarks Preservation Commission. All relevant reports, including the Phase 1 Environmental Assessment and Remedial Action Plan, will be provided to LPC for review.

II. ENVIRONMENTAL AND HISTORICAL CONTEXT

This section summarizes site location, geology, environment, development history, history of archaeological studies of the site and of adjacent areas. Also included are: landform, distance to potable water sources on the earliest historic map, bedrock-based lithic resources on site or immediately adjacent. Historic context describes changes to the built environment on the site through time and how it effects the potential for deeply buried culture-bearing deposits. Also

included in this section are the registered Historic districts, NYC landmarks, NR or SR status or eligibility, all previous archaeological investigations conducted on or near the property. This area of Brooklyn is a special case in the potential to contain human remains due to fill.

The project site lies on Block 202, Lots 14, 18, and part of 12, in the Fulton Ferry neighborhood of Brooklyn, Community District 2, along the eastern side of the block. It is bounded by Old Fulton Street on the north, Hicks Street on the east, Doughty Street on the south, and Elizabeth Place on the west.

Lot 14 stretches 78 feet along Old Fulton Street to the north, and 77.5 feet along Doughty Street to the south. It has a 98.7-foot boundary with Lot 12 to the west, and a 74.2-foot boundary with Lot 18 to the east. Lot 14 consists of 6,593 square feet of land area and the street addresses are currently 50- 56 Old Fulton Street.

Lot 18 is the easternmost parcel of Block 202. It stretches 69.2 feet along Old Fulton to the north, 86.4 feet along Doughty Street to the south, 74.2 feet along Lot 14, and 49.4 feet on Hicks Street to the east. The entire lot measures 4,705 square feet and includes addresses 58-64 Old Fulton Street.

The overall dimensions of Lot 12 consist of 41.5 feet along Old Fulton Street to the north, 49.6 feet along Doughty Street to the south, 98.7 feet of a shared boundary with Lot 14, and a jogging 118.3 boundary with Lot 9 to the west. The total lot measures 4,687 square feet, and the partial area associated with the current project consists of 512 square feet on the eastern edge.

Block 202 is currently the location of multiple commercial businesses. Lot 14 contains a single story brick building 16 feet tall and housing an auto body shop across the full lot. This is the former U.S. Trucking Corporation building constructed in 1930 and occupied by an auto-body shop since 1984. It includes a single cellar story. The adjacent Lot 18 is occupied at its western edge by a 3,700 gross square foot auto body shop with the remainder of the lot paved for use as parking. Lot 12 is occupied by a 16,000 gross square foot four-story brick structure with a stone front that is currently used as a warehouse (46 Old Fulton Street). The Sanborn maps and Certificate of Occupancy on file indicate that this building dates to first half of the 19th century and contains a single basement story.

The western edge of the project site is located 1,000 feet east of the East River in the Atlantic Coastal Lowland Physiographic Province. The Geologic Map of New York, Lower Hudson Bedrock Sheet (1979) labels the area as glacial and alluvial deposits, with underlying bedrock geology unknown.

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Early maps of Brooklyn show that the original shoreline of the East River was further east than present, running along the current orientation of Everit Street, approximately 375 feet west of the

project site. The land there was consistently altered throughout the 17th, 18th, and 19th centuries for improving dock facilities and supporting the development of the local settlement, although major changes to the shoreline did not take place until the second half of the 18th century. The earliest available elevation data is from an 1859 City map and shows the elevation of 3 Fulton Street, northwest of the project site, as 8 feet above sea level (f.a.s.l.). This generally matches the later 19th- 20th century Sanborn maps showing an 8-foot elevation on the western end of the block, just west of the project site in the vicinity of 20 Fulton Street (Sanborn 1887). A Sanborn 1886 map shows the elevation as 28 f.a.s.l. at the project site, which is close to the digital GPS-based mapping data today of approximately 26.7 f.a.s.l.

Soil boring tests recorded in Solecki's 1981 study of Old Fulton Street established that the fill in the Fulton Ferry Neighborhood is deepest on the shore side, at approximately 30 feet, diminishes to about 5 feet at the western edge of the project site, and then deepens to 15 feet in the immediate vicinity. Bore 43C, at the doorstep of the project site at 62 Old Fulton, encountered historic fill deposits from 0 to15 feet below the modern ground surface (b.m.g.s.). Boring and trench monitoring activities recovered pottery and bottle glass from the fill attributable to a broad range of dates fromthe mid-17th to mid-19th centuries.

The NRCS Web Soil Survey shows one mapped soil type for the project site (Figure 2). The Urban land, Till Substratum (UtB), 0-8 percent slopes has four minor components. The Urban Land soil type has a parent material of asphalt over human-transported material. The landform is summit position and talf.

Soil borings along Old Fulton Street were conducted in 1978 during a previous study and provide insight into the geological and soils record in the current project vicinity. In general, Solecki and his team identified six primary strata, the first of which (Layer A) represented historic fill, underlain by the Contact-era beach surface (Layer B) and then four additional strata of varying sandy and gravelly composition reaching down to the Pleistocene basal horizon (Layer F).

From east to west, the soil borings along Old Fulton in the immediate vicinity of the project site were: 42A, 43C, and 44. These borings encountered historic archaeological materials at a depth of 5 to 15 feet b.m.g.s. In addition, the Figure 3 (Greenhouse Consultants 2018) soil profile shows the eastern edge of the sewer excavation trench that constituted Solecki's primary data source in his 1981 Phase II report, which generally cut as deep as Layer C. This trench section shows the variations in fill depth from across the project site, as well as the location of the former shoreline and slope down to the beach in the vicinity of Everit Street.

A records review within the CEQR-defined radii conducted through the New York Cultural Resource Information System (CRIS) found two previous archaeological surveys (Chrysalis 2012; HPI 2005) and one historic archaeological site (Solecki 1981), as well as ninety-nine historic properties. The historic properties are sited within two nearby historic districts, located partially

within CEQR's 400-foot architectural radius. The search found no prehistoric archaeological sites within a half-mile of the project site.

Many documentary, monitoring, and Phase 1B testing studies have occurred to the west and south of the project site in the Fulton Ferry and Brooklyn Heights Historic Districts. Two surveys lie immediately adjacent to the current project site. Survey 05SR55876 is entitled "Phase IA Archeological Assessment, Brooklyn Bridge Park Project, Blocks 1, 7, 16, 25, 45, 199, 208, 245, 258 & Portions of Pearl, Washington, New Dock, Fulton, and Joralemon Streets and Atlantic Avenue." The survey is bounded roughly by Atlantic Avenue, Jay Street, and the East River and it overlaps the project site slightly along the Old Fulton Street edge. Conducted by Historical Perspectives Inc. in 2005, the survey covered a 70-acre area for a proposed park and recommended further archaeological investigation of historic archaeological resources along Old Fulton Street, pending decisions for development excavations.

III. RESEARCH DESIGN

This section entails formation of a strategy to resolve a particular research question as determined by the identified potential archaeological resources that may be impacted by the proposed project. The research design includes collection and recording of evidence, the processing of these data, and publication of the research.

The findings of the Phase 1A report submitted by Greenhouse Consultants Incorporated, and approved by LPC on November 9, 2018, is that Lot 18, Block 202 may potentially contain significant archaeological resources.

The Phase 1A report documented that the project site has a high level of historic archaeological potential in Lot 18, where lack of building activity at the rear (i.e., Doughty Street side) would have preserved deposits dating to at least the late 18th to early 19th centuries. These potential remains are associated with two historical periods: (1) the Revolutionary War British/Hessian occupation of Brooklyn and (2) the mid-to-late 19th century era of industrialization, as working class Brooklyners were living along a mixed and changing commercial-industrial corridor connected to the ferry and the growing city.

Potential Revolutionary War materials would have been deposited between the final decades of the 18th through the first quarter of the 19th centuries, when local hills hosting the British soldiers and sailors' cemetery were razed and used to fill in Brooklyn Village and shoreline water lots immediately after the War. rchival evidence suggests that former owners of the project site were involved in "leveling off" the cemetery land and Solecki's find of a Hessian cap plate in sewer monitoring adjacent to the project site confirms the impact these activities had on the local

archaeological record. Archaeological testing and construction monitoring during excavation may recover items such as military insignia, sewing notions, personal tools, and other bodily items. As recent studies elsewhere in New York City have shown, historic fill can provide a valuable and rich picture of human-transported materials from a variety of periods and contexts.

Archaeological materials associated with working class residential and commercial life at the project site would have been deposited in association with the rear yard and shed documented behind 60 Old Fulton in 19th and 20th century maps. While the first sewer on Fulton was installed in 1851, it was a storm water sewer unconnected to the local dwellings and many residents likely retained outhouses, like this one. Flush toilets took a particularly long time to replace outhouses in Brooklyn and this is a good example of that phenomenon. When abandoned and/or filled with refuse, such features can contain a wealth of information about historic consumption patterns from both domestic activity and commercial/industrial enterprises. At 60 Old Fulton Street, a privy would provide an opportunity to recover household assemblages (pottery and bottle remains, hygiene and medicinal items, children's objects, etc.), food waste, grocer's refuse, liquor merchants' bottles, and waste from the early 20th century restaurant. Side-by-side datasets of residential and commercial activities are particularly powerful in illustrating the changing lifeways that accompanied industrial development, demographic change, and shifts in domestic patterns in the 19th century. Historical accounts of this transition often emphasize the bewildering rapidity of development, but glimpses of how these changes occurred on a more everyday scale are less plentiful. In Lot 18, the proposed development's excavations are likely to exceed previous construction excavations in depth and footprint. Phase IB testing in Lot 18 prior to construction may find evidence of materials associated with the late 18th century Revolutionary War and privy deposits relevant to the 19th century life of Brooklyn's working-class residents and businesses.

The Phase 1B archaeological field testing will consist of backhoe trenching in the area of former Lot 19 which was open during the 19th and 20th centuries. This portion of the project area is currently covered by a building housing New Xcell Auto Repair. This area is triangular in shape and is roughly 25 feet by 15 ft by 2 ft. The objective is to locate and identify any remaining features that may be representative of the late 18th to 19th centuries. The 1887 Sanborn map indicates a small shed near the back of the structure. Backhoe trenching will seek to locate a potential cistern since cisterns were usually located near the rear of a building facade. The trench will be a minimum of five feet wide and the triangular area borders the back of the historic structure on the 1887 map. See Figure A for the location of the trench on the 1887 Sanborn map.

Another issue that is associated with this area of Brooklyn, and identified in the report is the use of 18th century cemetery fill in the 19th century. The fill will be examined for the possibility of human or other cemetery remains. Steps will be taken as outlined in the 2018 *Guidelines For Archaeological Work In New York City* by the New York City Landmarks Preservation Commission.

IV. PROJECT METHODS

This section is a description of the field components, the field and laboratory methods and procedures that will be used.

The Phase 1B fieldwork is investigative in nature, attempting to answer the questions of (1) whether cultural remains are extant within the project area; (2) are the cultural deposits relevant to the 18th and 19th century development in this area of Brooklyn; (3) do these remains have integrity?

Backhoe trenching is an invasive method and a backhoe will be used to open the trench. The backhoe operation will be supervised by an R.P.A. archaeologist. Samples will be taken from the floor of the trench for screening through ¼ inch (0.63cm) mesh to assist with the recovery of artifacts. Soils will be recorded by natural stratigraphic deposits. The strata encountered will be measured, described and recorded in terms of texture, inclusions, Munsell colors and thickness. Artifacts will be bagged by provenance.

A permanent datum will be used based on the North American Datum 1983_NAV83 with a vertical datum of NAVD88 and the measurement system will be English. Photographs will be documented using menu boards.

The trench will be backfilled under the supervision of archaeologists.

All artifacts, field notes, photographs and other materials will be returned to Greenhouse Consultants Incorporated for processing and analysis. Procedures for artifact processing and basic stabilization will be established by, and carried out under direct supervision of the staff laboratory director. Principles of object conservation will be applied throughout processing, both in the field (if necessary), and at the laboratory.

V. PROJECT MANAGEMENT

In this section the management plan confirms that the landowner has granted permission to conduct field investigations and notes where archaeological artifacts will be curated during project duration. It also recommends where artifacts will be disposed upon completion of the project.

The owner of Lot 18 will enter into a Restrictive Declaration, to be recorded against Lot 18, that will incorporate this Work Plan Phase 1B and obligate the Lot 18 owner to carry out all requirements described herein. A copy of the Restrictive Declaration will be attached to this document.

During the project duration, any recovered artifacts will be curated at the Greenhouse Consultants Laboratory in Bayonne, New Jersey.

VI. PROJECT TIMELINE AND RESOURCE ESTIMATE

This part of the Work Plan describes the anticipated duration of work, and resources needed to complete the work.

Once the building currently standing on Lot 18 is demolished, a Phase 1 Environmental Assessment, including any required soil borings, must occur. Then, remediation of hazardous materials must be carried out, as required by and according to protocol determined appropriate by the NYC Office of Environmental Remediation, which remediation may require removal of soils and fill on all or a portion of Lot 18. Only after this remediation work is complete will Phase 1B archaeological fieldwork commence. One day is planned for the excavation of one trench in the triangular area (approximately 25 ft by 15 ft by 2 ft) that was formerly part of Lot 19. Subsequent to field testing, laboratory and report preparation will take one week.

Fieldwork	**ManDays**
Project Principal	1
Field Director/Principal Investigator	3
Field Technician (2)	6
Backhoe Operator	3
Laboratory and Report Preparation	
Project Principal	1
Field Director/Principal Investigator	8
Laboratory Director	10
Laboratory Technicians	8
Graphics/GIS	5
Communication and Coordination	
Principal Investigator	2

VII. PROJECT COMMUNICATION

The final section of this Work Plan is the communication plan, how and when the PI will communicate with LPC and other involved agencies about project status and preliminary findings.

Greenhouse Consultants Incorporated will submit an end of fieldwork letter for the Phase 1B field testing to the Landmarks Preservation Commission, detailing the findings of the Phase 1B fieldwork. If evidence is present that supports the research design and anticipated findings, a recommendation for Phase 2 fieldwork will be included and a Work Plan for Phase 2 fieldwork will be submitted for review. If no evidence is present from the Phase 1B fieldwork, then a final report will be submitted to the Landmarks Preservation Commission for the Phase 1B fieldwork.

DECLARATION

This DECLARATION made as of the [____] day of [_____], 2018 by [Success R.J., Inc.,] a New York corporation, having an address at 60 Old Fulton Street, Brooklyn, New York 11201 (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 202, Lot 18, and commonly known as 60 Old Fulton Street, Brooklyn, New York (the "Project Site"), on the Tax Map of the City of New York (the "Tax Map") and as 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 the date hereof, Declarant is the only "party-in-interest" (as defined in Section 12-10 (definition of "Zoning Lot" subdivision (d) of the Zoning Resolution) with respect to the zoning lot which includes the Project Site, except for those parties in interest that have at an earlier date or as of a date roughly contemporaneous herewith waived their respective rights to join herein;

WHEREAS, all parties-in-interest to the Project Site have either executed this Declaration or previously waived their rights to execute this Declaration by written instruments annexed hereto as Exhibit C and made a part hereof; 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 Declarant represents and warrants 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. 190011 ZMK was submitted by the fee owner (the "Applicant") of certain adjacent real property located in Kings County, City and State of New York, designated on the Tax Map as Tax Block 202, Lot 14, and commonly known as 50 Old Fulton Street, Brooklyn, New York, (the "Adjacent Site"), to the Department of City Planning, for approval by the City Planning Commission ("CPC"), pursuant to 197-c of the New York City Charter (the Uniform Land Use Review Procedure or "ULURP") seeking a zoning map text amendment to rezone the Project Site and the Adjacent Site from an M1-2 zoning district to an M1-5 zoning district (the "Application"); and

WHEREAS, the Application would allow the Project Site to be developed on an as-of-right basis with a commercial or manufacturing building having a "floor area ratio" (as defined under the Zoning Resolution of the City of New York (the "Zoning Resolution")) of 5.0 FAR; and

WHEREAS, an environmental assessment statement concerning the Project Site was prepared pursuant to the City Environmental Quality Review (the "CEQR") in connection with the Application (CEQR No. 19DCP009K) 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, a Phase 1A Archaeological Study, dated October 2018, was prepared in connection with the environmental assessment to determine the archaeological sensitivity and, if and as determined necessary, recommendations for field testing at the Project Site (the "Phase lA Study"); and

WHEREAS, the Phase lA Study determined that the apparent lack of development at the rear (i.e., Doughty Street side) of the Project Site may have preserved deposit of potential remains associated with the Revolutionary War British/Hessian occupation of Brooklyn and the mid-to-late 19th century era of industrialization in Brooklyn; and

WHEREAS, the Phase lA Study further determined that, based on the use of 18th century cemetery fill on the Project Site during the 19th century, human or cemetery remains may be present on the Project Site; and

WHEREAS, the Phase lA Study recommended archaeological monitoring of excavation at the Project Site to determine the absence or presence of 18th and 19th century historical artifacts and that a monitoring plan be developed in consultation with LPC for such purpose; and

WHEREAS, LPC has reviewed and concurred with the conclusions of the Phase lA Study, as set forth in LPC's November 8, 2018 comment letter (the "LPC November Letter"), attached hereto as Exhibit D and made a part hereof; and

WHEREAS, in accordance with the recommendations of the Phase lA Study, a Phase 1B Work Plan (the "Phase 1B Plan," attached hereto as Exhibit E and made a part hereof), dated November, 2018, was prepared to establish a program for archaeological monitoring in connection with excavation along the rear of the Project Site; and

WHEREAS, pursuant to LPC's [December], 2018 comment letter (the "LPC [December] Letter"), a copy of which is attached hereto as Exhibit F and made a part hereof, the LPC concurred with the Phase 1B Plan, including the proposed "Project Methods"; and

WHEREAS, pursuant to LPC [December] Letter, as of the date hereof excavation may proceed only as provided for and authorized under the Phase 1B Plan;

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 Project Site and has 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 and required by the LPC (collectively, the "Archaeological Work"); and

WHEREAS, the Project Site is subject to E-[___] (the "E-Designation") to ensure that testing and mitigation for potential hazardous materials will provided as necessary before any future development and/or soil disturbance occurs on the Project Site;

WHEREAS, pursuant to the E-Designation, Declarant will prepare and submit to the Mayor's Office of Environmental Remediation ("OER"), for review and approval, a Phase I Environmental Site Assessment of the Project 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 (the "Phase I ESA");

WHEREAS, following approval by OER of the Phase I ESA, Declarant will (x) implement the testing strategy set forth in the Phase I ESA (the "Phase I ESA Work"), (y) prepare and submit to OER, for review and approval, a written report with findings and a summary of data from the Phase I ESA Work (the "OER Report") and (z) if OER determines that remediation is necessary ("Remediation"), prepare and submit to OER, for review and approval, a remediation plan (the "Remediation Plan") and a construction health and safety plan to protect works and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor (the "CHASP");

WHEREAS, following the implementation of the Phase I ESA Work, any further excavation or ground disturbance on the Project Site, including any Archaeological Work, shall be subject to and undertaken in compliance with the OER-approved Remediation Plan and CHASP;

WHEREAS, Declarant agrees to restrict the manner in which the Project Site, following the completion of the Phase I ESA Work and subject to the Remediation Plan and CHASP, may be further excavated by having the Archaeological Work performed to the satisfaction of the LPC, evidenced by writings described and set forth herein, be a condition precedent to such further excavation at the Project Site; and

WHEREAS, Declarant intends this Declaration to be binding upon all successors and assigns; and

WHEREAS, Declarant intends 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, Declarant does hereby declare and agree that the Project Site 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. Limitation Upon Excavation at Project Site.

(a) Subject to Paragraph 1(b) below, Declarant covenants and agrees that it shall not (i) commence any work on the Project Site including grading, excavation, foundation, alteration or building which permits soil disturbance on the Project Site, or (ii) cause any permit

to be issued by, or accept any permit from the New York City Department of Buildings ("DOB") for any such work, which permits additional soil disturbance on the Project Site until LPC has issued to DOB, as applicable, 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). Declarant shall (i) submit a copy of this Declaration to the DOB at the time of filing of any application for any work as set forth in this Paragraph 1; and (ii) shall submit the LPC 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 Declarant seeks the issuance of a permit from DOB for any application set forth in this Paragraph 1(a).

(b) Nothing herein shall be deemed to prohibit or otherwise prevent Declarant from implementing the Phase I ESA Work, pursuant to the Phase I ESA, and any Remediation, pursuant to the Remediation Plan and CHASP, provided that Declarant shall deliver to LPC copies of the Phase I ESA Plan, the Remediation Plan and CHASP, simultaneously with the submission thereof to OER, and to the extent permitted by applicable law and the CHASP, shall make an RPA archaeologist available for monitoring the Phase I ESA Work as well as any Remediation that occurs prior to the issuance by LPC of, as applicable, a Notice of No Objection, as set forth in Paragraph 2(a) or Paragraph 2(c), or a Notice of Satisfaction, as set forth in Paragraph 2(d) or Paragraph 2(e).

2. LPC Letters of Notice

(a) Notice of No Objection — LPC shall issue a Notice of No Objection after the Declarant has 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 Project 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. Because the Project Site may contain human remains, the Mitigation Plan shall include appropriate removal, treatment and reinternment of the human remains. In addition to satisfying LPC's standards for this work, if human remains are uncovered the Declarant shall rebury or otherwise place the remains in a place and in a manner that is satisfactory to the descendent community or otherwise approved by the LPC. Issuance of a Notice to Proceed shall enable the Declarant 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 Declarant has 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 Declarant 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, if any, 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 Declarant 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, if any, has been completed and the LPC has set forth in writing that the Mitigation Plan, if any, including but not limited to the Final Archaeological Report and a curation plan for any archaeological resources found on the Project Site, if any, 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 DOB or accepted by Declarant until the Chairperson of the LPC shall have issued a Final Notice of Satisfaction or a Notice of No Objection, as applicable.

4. The Director of Archaeology of LPC (the "Director") shall issue all Letters of Notice required to be issued hereunder reasonably promptly after Declarant has made written request to the LPC and has satisfactorily provided documentation to support each such request. The Director shall in all events endeavor to issue such written notice to DOB or inform Declarant in writing of the reason for not issuing said notice, within twenty (20) 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 interested 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 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 with respect to this Declaration. Neither

Declarant nor any of its owners, principals, officers, directors or employees shall have any 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 an 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 Declarant's 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 Declarant's 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 Project Site to waive its right to execute this Declaration and subordinate its interest in the Project Site to this Declaration. Any mortgage or other lien encumbering the Project Site in effect after the recording date of this Declaration shall be subject and subordinate hereto as provided herein. Such waivers and subordination shall attach this Declaration as an exhibit and be record 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 ten (10) 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, 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:

[_____
_____
_____
_____
_____]

With a copy to:

[_____
_____
_____
_____
_____]

16. Declarant expressly acknowledges that this Declaration is an essential element of the environmental review conducted in connection with the Application and, as such, the filing and recordation of this Declaration is 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 local 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: (a) the applicant withdraws the Application before a final determination; or (b) the Application is disapproved, the obligations and agreements pursuant to this Declaration shall have no force and effect and Declarant or applicant may request that LPC issue a Notice of Cancellation upon the occurrence of the following events: (i) Applicant has withdrawn the Application in writing before a final determination on the Application; or (ii) the Application is not approved by the CPC, and/or the New York City Council, as the case may be in accordance with New York City Charter Sections 197-c and 197-d (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 enumerated events 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 Declaration null and void. Declarant shall promptly deliver to LPC and the CPC a certified copy of such Notice of Cancellation as recorded.

[Signature page follows.]

IN WITNESS WHEREOF, Declarant has executed this Declaration on the date written above.

[SUCCESS R.J., INC.]

By: _____
Name:
Title:

State of New York
County of _____

On the _____ day of _____, 20___ before me, the undersigned, a notary public in and for said state, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

Exhibit A

Description of Project Site

Exhibit B

Certification of Parties in Interest

[Attached behind.]

Exhibit C

Parties-in-Interest Waiver(s)

[Attached behind.]

Exhibit D

LPC November Letter

[Attached behind.]

Exhibit E

Phase 1B Plan

[Attached behind.]

Exhibit F

LPC [December] Letter

[Attached behind.]

DECLARATION

This DECLARATION made as of the __ day of _____, 20__ by SUCCESS R.J., INC., a New York corporation, having an address at 60 Old Fulton Street, Brooklyn, New York 11201 (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 202, Lot 18, and commonly known as 60 Old Fulton Street, Brooklyn, New York (the "Project Site"), on the Tax Map of the City of New York (the "Tax Map") and as 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 the date hereof, Declarant is the only "party-in-interest" (as defined in Section 12-10 (definition of "Zoning Lot" subdivision (d) of the Zoning Resolution) with respect to the zoning lot which includes the Project Site, except for those parties in interest that have at an earlier date or as of a date roughly contemporaneous herewith waived their respective rights to join herein;

WHEREAS, all parties-in-interest to the Project Site have either executed this Declaration or previously waived their rights to execute this Declaration by written instruments annexed hereto as Exhibit C and made a part hereof; 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 Declarant represents and warrants 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. 190011 ZMK was submitted by the fee owner (the "Applicant") of certain adjacent real property located in Kings County, City and State of New York, designated on the Tax Map as Tax Block 202, Lot 14, and commonly known as 50 Old Fulton Street, Brooklyn, New York, (the "Adjacent Site"), to the Department of City Planning, for approval by the City Planning Commission ("CPC"), pursuant to 197-c of the New York City Charter (the Uniform Land Use Review Procedure or "ULURP") seeking a zoning map text amendment to rezone the Project Site and the Adjacent Site from an M1-2 zoning district to an M1-5 zoning district (the "Application"); and

WHEREAS, the Application would allow the Project Site to be developed on an as-of-right basis with a commercial or manufacturing building having a "floor area ratio" (as defined under the Zoning Resolution of the City of New York (the "Zoning Resolution")) of 5.0 FAR; and

WHEREAS, an environmental assessment statement concerning the Project Site was prepared pursuant to the City Environmental Quality Review (the "CEQR") in connection with the Application (CEQR No. 19DCP009K) 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, a Phase 1A Archaeological Study, dated October 2018, was prepared in connection with the environmental assessment to determine the archaeological sensitivity and, if and as determined necessary, recommendations for field testing at the Project Site (the "Phase 1A Study"); and

WHEREAS, the Phase 1A Study determined that the apparent lack of development at the rear (i.e., Doughty Street side) of the Project Site may have preserved deposit of potential remains associated with the Revolutionary War British/Hessian occupation of Brooklyn and the mid-to-late 19th century era of industrialization in Brooklyn; and

WHEREAS, the Phase 1A Study further determined that, based on the use of 18th century cemetery fill on the Project Site during the 19th century, human or cemetery remains may be present on the Project Site; and

WHEREAS, the Phase 1A Study recommended archaeological testing-of excavation at the Project Site to determine the absence or presence of 18th and 19th century historical artifacts and that a testing plan be developed in consultation with LPC for such purpose; and

WHEREAS, LPC has reviewed and concurred with the conclusions of the Phase 1A Study, as set forth in LPC's November 8, 2018 comment letter (the "LPC November Letter"), attached hereto as Exhibit D and made a part hereof; and

WHEREAS, in accordance with the recommendations of the Phase 1A Study, a Phase 1B Work Plan (the "Phase 1B Plan," attached hereto as Exhibit E and made a part hereof), dated December 2018, was prepared to establish a program for archaeological testing at the Project Site; and

WHEREAS, pursuant to LPC's January 15, 2018 comment letter (the "LPC January Letter"), a copy of which is attached hereto as Exhibit F and made a part hereof, the LPC concurred with the Phase 1B Plan, including the proposed "Project Methods"; and

WHEREAS, pursuant to LPC January Letter, as of the date hereof excavation may proceed only as provided for and authorized under the Phase 1B Plan;

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 Project Site and has 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 and required by the LPC (collectively, the "Archaeological Work"); and

WHEREAS, the Project Site is subject to E-___ (the "E-Designation") to ensure that testing and mitigation for potential hazardous materials will provided as necessary before any future development and/or soil disturbance occurs on the Project Site;

WHEREAS, pursuant to the E-Designation, Declarant will prepare and submit to the Mayor's Office of Environmental Remediation ("OER"), for review and approval, a Phase I Environmental Site Assessment of the Project 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 (the "Phase I ESA");

WHEREAS Declarant shall consult with OER and LPC to develop an appropriate testing protocol and, if required, a remediation plan that is the most protective of any potential archaeological resources in the site while meeting OER standards;

WHEREAS, following approval by OER of the Phase I ESA, Declarant will (x) implement the testing strategy set forth in the Phase I ESA (the "Phase I ESA Work"), (y) prepare and submit to OER, for review and approval, a written report with findings and a summary of data from the Phase I ESA Work (the "OER Report") and (z) if OER determines that remediation is necessary ("Remediation"), prepare and submit to OER, for review and approval, a remediation plan (the "Remediation Plan") and a construction health and safety plan to protect works and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor (the "CHASP");

WHEREAS, following the implementation of the Phase I ESA Work, any further excavation or ground disturbance on the Project Site, including any Archaeological Work, shall be subject to and undertaken in compliance with the OER-approved Remediation Plan and CHASP;

WHEREAS, Declarant agrees to restrict the manner in which the Project Site, following the completion of the Phase I ESA Work and subject to the Remediation Plan and CHASP, may be further excavated by having the Archaeological Work performed to the satisfaction of the LPC, evidenced by writings described and set forth herein, be a condition precedent to such further excavation at the Project Site; and

WHEREAS, Declarant intends this Declaration to be binding upon all successors and assigns; and

WHEREAS, Declarant intends 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, Declarant does hereby declare and agree that the Project Site 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. Limitation Upon Excavation at Project Site.

(a) Subject to Paragraph 1(b) below, Declarant covenants and agrees that it shall not (i) commence any work on the Project Site including grading, excavation, foundation, alteration or building which permits soil disturbance on the Project Site, or (ii) cause any permit to be issued by, or accept any permit from the New York City Department of Buildings ("DOB") for any such work, which permits additional soil disturbance on the Project Site until LPC has issued to DOB, as applicable, 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). Declarant shall (i) submit a copy of this Declaration to the DOB at the time of filing of any application for any work as set forth in this Paragraph 1; and (ii) shall submit the LPC 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 Declarant seeks the issuance of a permit from DOB for any application set forth in this Paragraph 1(a).

(b) Nothing herein shall be deemed to prohibit or otherwise prevent Declarant from implementing the Phase I ESA Work, pursuant to the Phase I ESA, and any Remediation, pursuant to the Remediation Plan and CHASP, provided that Declarant shall deliver to LPC copies of the Phase I ESA Plan, the Remediation Plan and CHASP, simultaneously with the submission thereof to OER, and to the extent permitted by applicable law and the CHASP, shall make an RPA archaeologist available for monitoring the Phase I ESA Work as well as any Remediation that occurs prior to the issuance by LPC of, as applicable, a Notice of No Objection, as set forth in Paragraph 2(a) or Paragraph 2(c), or a Notice of Satisfaction, as set forth in Paragraph 2(d) or Paragraph 2(e).

2. LPC Letters of Notice

(a) Notice of No Objection — LPC shall issue a Notice of No Objection after the Declarant has 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 Project 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. Because the Project Site may contain human remains, the Mitigation Plan shall include appropriate removal, treatment and reinternment of the human remains. In addition to satisfying LPC's standards for this work, if human remains are uncovered the Declarant shall rebury or otherwise place the remains in a place and in a manner that is satisfactory to the descendent community or otherwise approved by the LPC. Issuance of a Notice to Proceed shall enable the Declarant 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 Declarant has 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 Declarant 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, if any, 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 Declarant 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, if any, has been completed and the LPC has set forth in writing that the Mitigation Plan, if any, including but not limited to the Final Archaeological Report and a curation plan for any archaeological resources found on the Project Site, if any, 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 DOB or accepted by Declarant until the Chairperson of the LPC shall have issued a Final Notice of Satisfaction or a Notice of No Objection, as applicable.

4. The Director of Archaeology of LPC (the "Director") shall issue all Letters of Notice required to be issued hereunder reasonably promptly after Declarant has made written request to the LPC and has satisfactorily provided documentation to support each such request. The Director shall in all events endeavor to issue such written notice to DOB or inform Declarant in writing of the reason for not issuing said notice, within twenty (20) 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 interested 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 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 with respect to this Declaration. Neither Declarant nor any of its owners, principals, officers, directors or employees shall have any 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 an 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 Declarant's 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 Declarant's 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 Project Site to waive its right to execute this Declaration and subordinate its interest in the Project Site to this Declaration. Any mortgage or other lien encumbering the Project Site in effect after the recording date of this Declaration shall be subject and subordinate hereto as provided herein. Such waivers and subordination shall attach this Declaration as an exhibit and be record 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 ten (10)

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, 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:

Success R.J., Inc.
60 Old Fulton Street
Brooklyn, NY 11201
Attn: Eric Han

With a copy to:
Rosenberg & Estis, P.C.
733 Third Avenue
New York, NY 10017
Attn: Michael T. Carr

16. Declarant expressly acknowledges that this Declaration is an essential element of the environmental review conducted in connection with the Application and, as such, the filing and recordation of this Declaration is 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 local 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: (a) the applicant withdraws the Application before a final determination; or (b) the Application is disapproved, the obligations and agreements pursuant to this Declaration shall have no force and effect and Declarant or applicant may request that LPC issue a Notice of Cancellation upon the occurrence of the following events: (i) Applicant has withdrawn the Application in writing before a final determination on the Application; or (ii) the Application is not approved by the CPC, and/or the New York City Council, as the case may be in accordance with New York City Charter Sections 197-c and 197-d (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 enumerated events 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 Declaration null and void. Declarant shall promptly deliver to LPC and the CPC a certified copy of such Notice of Cancellation as recorded.

[Signature page follows.]

IN WITNESS WHEREOF, Declarant has executed this Declaration on the date written above.

SUCCESS R.J., INC.

By: _____
Name: Eric Han
Title: Authorized Signatory

State of New York
County of Kings

On the 1 day of August, 2019 before me, the undersigned, a notary public in and for said state, personally appeared Eric Han, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

MICHAEL TIMOTHY CARR
Notary Public, State of New York
No. 02CA6239995
Qualified in Nassau County
Commission Expires April 25, 2023

Exhibit A

Description of Project Site

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 the corner formed by the intersection of the southerly side of Fulton Street and the westerly side of Hicks Street;

RUNNING THENCE Westerly along the southerly side of Fulton Street, 69 feet 2 inches more or less, to the land now or formerly of French Church Du-Saint-Esprit;

THENCE Southerly along the said land now or formerly of French Church Du-Saint-Esprit, 74 feet 2 inches more or less, to the northerly side of Doughty Street;

THENCE Easterly along the northerly side of Doughty Street, 86 feet 4 inches more or less, to the corner formed by the intersection of the northerly side of Doughty Street and the westerly side of Hicks Street;

THENCE Northerly along the westerly side of Hicks Street, 49 feet 4 inches to the corner at the point or place of BEGINNING.

Exhibit B

Certification of Parties in Interest

[Attached behind.]

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 **Success R.J., Inc.**, 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) **Success R.J., Inc.** **60 Old Fulton Street,** **Brooklyn, NY 11201**	**Fee Owner**
2) **Chinatown Federal Savings Bank** **109 Bowery,** **New York, NY 10002**	**Mortgagee**

The subject tract of land with respect to which the foregoing parties are the parties in interest as aforesaid, is known as Block 202 Lot 18 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 the corner formed by the intersection of the southerly side of Fulton Street and the westerly side of Hicks Street;

RUNNING THENCE Westerly along the southerly side of Fulton Street, 69 feet 2 inches more or less, to the land now or formerly of French Church Du-Saint-Esprit;

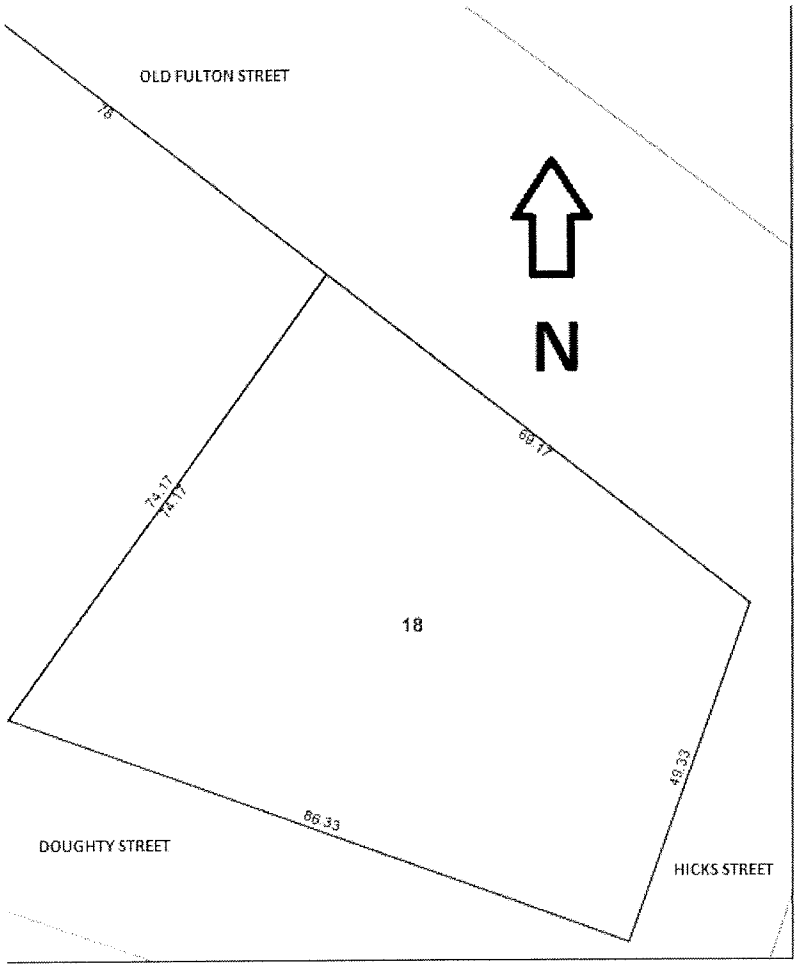
THENCE Southerly along the said land now or formerly of French Church Du-Saint-Esprit, 74 feet 2 inches more or less, to the northerly side of Doughty Street;

THENCE Easterly along the northerly side of Doughty Street, 86 feet 4 inches more or less, to the corner formed by the intersection of the northerly side of Doughty Street and the westerly side of Hicks Street;

THENCE Northerly along the westerly side of Hicks Street, 49 feet 4 inches to the corner at the point or place of BEGINNING.

That the said premises are known as and by the street address **58 Old Fulton Street, Brooklyn, NY** as shown by the following:

DIAGRAM



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 _____

ROYAL ABSTRACT OF NEW YORK LLC

_____

Harry Erreich,
Vice President

STATE OF NEW YORK)
ss.:
COUNTY OF NEW YORK)

On the _____ day of _____, 2018, before me, personally appeared **Harry Erreich,** personally known to me or proved to me on the basis of satisfactory evidence to 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 - State of New York

Exhibit C

Parties-in-Interest Waiver(s)

[Attached behind.]

WAIVER OF DECLARATION

CHINATOWN FEDERAL SAVINGS BANK, having an address at 109 Bowery, New York, New York 10002, being a "party in interest", as that phrase is defined in the definition of "zoning lot" set forth in Section 12-10 of the Zoning Resolution of the City of New York, effective December 15, 1961, as amended, with respect to the zoning lot consisting of the land described on Schedule A attached hereto, which land consists of Tax Lot 18 in Block 202 as shown on the Tax Map of the City of New York, County of Kings, and which land is also known by the street addresses of 60 Old Fulton Street, Brooklyn, New York hereby waives its right to execute that certain Declaration, dated as of _____, 20__, which is intended to be recorded in the Office of the New York City Register (Kings County) prior hereto or simultaneously herewith. This waiver shall run with the land and be binding upon the undersigned and its successors and assigns.

Dated as of: _____, 20__

IN WITNESS WHEREOF, the under has executed this waiver as of the date first written hereinabove.

CHINATOWN FEDERAL
SAVINGS BANK

By: _____
Name:
Title:

STATE OF NEW YORK)
).ss.:
COUNTY OF _____)

On the ____ day of _____ in the year 20__ before me, the undersigned, personally appeared _____, 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 on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

Schedule A to Waiver and Suboridnation
Metes and Bounds Description

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 the corner formed by the intersection of the southerly side of Fulton Street and the westerly side of Hicks Street;

RUNNING THENCE Westerly along the southerly side of Fulton Street, 69 feet 2 inches more or less, to the land now or formerly of French Church Du-Saint-Esprit;

THENCE Southerly along the said land now or formerly of French Church Du-Saint-Esprit, 74 feet 2 inches more or less, to the northerly side of Doughty Street;

THENCE Easterly along the northerly side of Doughty Street, 86 feet 4 inches more or less, to the corner formed by the intersection of the northerly side of Doughty Street and the westerly side of Hicks Street;

THENCE Northerly along the westerly side of Hicks Street, 49 feet 4 inches to the corner at the point or place of BEGINNING.

Exhibit D

LPC November Letter

[Attached behind.]

NYC Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPARTMENT OF CITY PLANNING / 19DCP009K
Project: 50 OLD FULTON REZONING
Date received: 11/7/2018

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments: The LPC is in receipt of the, "Phase IA Archaeological Documentary Study 50 Old Fulton Street, Block 202, Lots 14, 18, and P/O 12, Kings County, New York," prepared by Greenhouse Consultants and revised October 2018.

The LPC concurs that Block 202 Lot 18 may contain potentially significant archaeological resources and that, therefore, archaeological testing should occur and that there are no further archaeological concerns for Block 2020 lot 14 and P/O 12. Please submit a work plan for the testing as per the Guidelines for Archaeological Work in NYC 2018. In addition, please submit a hard copy of the Phase IA for LPC's archives.

Amanda Sutphin 11/9/2018

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 33260_FSO_ALS_11092018.doc

Exhibit E

Phase 1B Plan

[Attached behind.]

WORK PLAN PHASE 1B
58 OLD FULTON STREET
BLOCK 202, LOT 18
KINGS COUNTY, NEW YORK
19DCP009K

Prepared by:
Greenhouse Consultants Inc.
386 Broadway, Ground Floor
Bayonne, NJ 07002

Prepared for:
Alwest Old Fulton, LLC
236 Greenpoint Avenue, Suite 4
Brooklyn, New York 11122

December 2018

I. INTRODUCTION

Greenhouse Consultants Incorporated is submitting the following Phase 1B Work Plan for Alwest Old Fulton, LLC for the following project:

58 Old Fulton Street
Block 202, Lot 18
19DCP009K

Alwest Old Fulton, LLC
236 Greenpoint Avenue, Suite 4
Brooklyn, New York 11122
718-392-0008

Lead agency: New York City Landmarks Preservation Commission

Personnel: William Sandy, Paula Crowley, Principal Investigator, Field Director, Project Manager

Proposed schedule: First, the removal of the current structure must occur. Second, a Phase 1 Environmental Assessment, including any required soil borings, must occur. A Phase 1 Environmental Assessment was completed for Block 202, Lot 14, but not Lot 18. Third, remediation of hazardous materials must be carried out, as required by and according to protocol determined appropriate by the NYC Office of Environmental Remediation, which remediation may require removal of soils and fill on all or portions of Lot 18. An RPA archaeologist will be available for monitoring for the above procedures. Currently, there are no demolition or development plans available for Lot 18.

Commencement of Phase 1B archaeological fieldwork will proceed once the client has completed the first, second, and third steps. The anticipated duration of archaeological fieldwork is one to two days. The first, second and third steps will be coordinated with all appropriate City Agencies, including the Landmarks Preservation Commission. All relevant reports, including the Phase 1 Environmental Assessment and Remedial Action Plan, will be provided to LPC for review.

II. ENVIRONMENTAL AND HISTORICAL CONTEXT

This section summarizes site location, geology, environment, development history, history of archaeological studies of the site and of adjacent areas. Also included are: landform, distance to potable water sources on the earliest historic map, bedrock-based lithic resources on site or immediately adjacent. Historic context describes changes to the built environment on the site through time and how it effects the potential for deeply buried culture-bearing deposits. Also

included in this section are the registered Historic districts, NYC landmarks, NR or SR status or eligibility, all previous archaeological investigations conducted on or near the property. This area of Brooklyn is a special case in the potential to contain human remains due to fill.

The project site lies on Block 202, Lots 14, 18, and part of 12, in the Fulton Ferry neighborhood of Brooklyn, Community District 2, along the eastern side of the block. It is bounded by Old Fulton Street on the north, Hicks Street on the east, Doughty Street on the south, and Elizabeth Place on the west.

Lot 14 stretches 78 feet along Old Fulton Street to the north, and 77.5 feet along Doughty Street to the south. It has a 98.7-foot boundary with Lot 12 to the west, and a 74.2-foot boundary with Lot 18 to the east. Lot 14 consists of 6,593 square feet of land area and the street addresses are currently 50- 56 Old Fulton Street.

Lot 18 is the easternmost parcel of Block 202. It stretches 69.2 feet along Old Fulton to the north, 86.4 feet along Doughty Street to the south, 74.2 feet along Lot 14, and 49.4 feet on Hicks Street to the east. The entire lot measures 4,705 square feet and includes addresses 58-64 Old Fulton Street.

The overall dimensions of Lot 12 consist of 41.5 feet along Old Fulton Street to the north, 49.6 feet along Doughty Street to the south, 98.7 feet of a shared boundary with Lot 14, and a jogging 118.3 boundary with Lot 9 to the west. The total lot measures 4,687 square feet, and the partial area associated with the current project consists of 512 square feet on the eastern edge.

Block 202 is currently the location of multiple commercial businesses. Lot 14 contains a single story brick building 16 feet tall and housing an auto body shop across the full lot. This is the former U.S. Trucking Corporation building constructed in 1930 and occupied by an auto-body shop since 1984. It includes a single cellar story. The adjacent Lot 18 is occupied at its western edge by a 3,700 gross square foot auto body shop with the remainder of the lot paved for use as parking. Lot 12 is occupied by a 16,000 gross square foot four-story brick structure with a stone front that is currently used as a warehouse (46 Old Fulton Street). The Sanborn maps and Certificate of Occupancy on file indicate that this building dates to first half of the 19th century and contains a single basement story.

The western edge of the project site is located 1,000 feet east of the East River in the Atlantic Coastal Lowland Physiographic Province. The Geologic Map of New York, Lower Hudson Bedrock Sheet (1979) labels the area as glacial and alluvial deposits, with underlying bedrock geology unknown.

.

Early maps of Brooklyn show that the original shoreline of the East River was further east than present, running along the current orientation of Everit Street, approximately 375 feet west of the

project site. The land there was consistently altered throughout the 17th, 18th, and 19th centuries for improving dock facilities and supporting the development of the local settlement, although major changes to the shoreline did not take place until the second half of the 18th century. The earliest available elevation data is from an 1859 City map and shows the elevation of 3 Fulton Street, northwest of the project site, as 8 feet above sea level (f.a.s.l.). This generally matches the later 19th- 20th century Sanborn maps showing an 8-foot elevation on the western end of the block, just west of the project site in the vicinity of 20 Fulton Street (Sanborn 1887). A Sanborn 1886 map shows the elevation as 28 f.a.s.l. at the project site, which is close to the digital GPS-based mapping data today of approximately 26.7 f.a.s.l.

Soil boring tests recorded in Solecki's 1981 study of Old Fulton Street established that the fill in the Fulton Ferry Neighborhood is deepest on the shore side, at approximately 30 feet, diminishes to about 5 feet at the western edge of the project site, and then deepens to 15 feet in the immediate vicinity. Bore 43C, at the doorstep of the project site at 62 Old Fulton, encountered historic fill deposits from 0 to15 feet below the modern ground surface (b.m.g.s.). Boring and trench monitoring activities recovered pottery and bottle glass from the fill attributable to a broad range of dates fromthe mid-17th to mid-19th centuries.

The NRCS Web Soil Survey shows one mapped soil type for the project site (Figure 2). The Urban land, Till Substratum (UtB), 0-8 percent slopes has four minor components. The Urban Land soil type has a parent material of asphalt over human-transported material. The landform is summit position and talf.

Soil borings along Old Fulton Street were conducted in 1978 during a previous study and provide insight into the geological and soils record in the current project vicinity. In general, Solecki and his team identified six primary strata, the first of which (Layer A) represented historic fill, underlain by the Contact-era beach surface (Layer B) and then four additional strata of varying sandy and gravelly composition reaching down to the Pleistocene basal horizon (Layer F).

From east to west, the soil borings along Old Fulton in the immediate vicinity of the project site were: 42A, 43C, and 44. These borings encountered historic archaeological materials at a depth of 5 to 15 feet b.m.g.s. In addition, the Figure 3 (Greenhouse Consultants 2018) soil profile shows the eastern edge of the sewer excavation trench that constituted Solecki's primary data source in his 1981 Phase II report, which generally cut as deep as Layer C. This trench section shows the variations in fill depth from across the project site, as well as the location of the former shoreline and slope down to the beach in the vicinity of Everit Street.

A records review within the CEQR-defined radii conducted through the New York Cultural Resource Information System (CRIS) found two previous archaeological surveys (Chrysalis 2012; HPI 2005) and one historic archaeological site (Solecki 1981), as well as ninety-nine historic properties. The historic properties are sited within two nearby historic districts, located partially

within CEQR's 400-foot architectural radius. The search found no prehistoric archaeological sites within a half-mile of the project site.

Many documentary, monitoring, and Phase 1B testing studies have occurred to the west and south of the project site in the Fulton Ferry and Brooklyn Heights Historic Districts. Two surveys lie immediately adjacent to the current project site. Survey 05SR55876 is entitled "Phase IA Archeological Assessment, Brooklyn Bridge Park Project, Blocks 1, 7, 16, 25, 45, 199, 208, 245, 258 & Portions of Pearl, Washington, New Dock, Fulton, and Joralemon Streets and Atlantic Avenue." The survey is bounded roughly by Atlantic Avenue, Jay Street, and the East River and it overlaps the project site slightly along the Old Fulton Street edge. Conducted by Historical Perspectives Inc. in 2005, the survey covered a 70-acre area for a proposed park and recommended further archaeological investigation of historic archaeological resources along Old Fulton Street, pending decisions for development excavations.

III. RESEARCH DESIGN

This section entails formation of a strategy to resolve a particular research question as determined by the identified potential archaeological resources that may be impacted by the proposed project. The research design includes collection and recording of evidence, the processing of these data, and publication of the research.

The findings of the Phase 1A report submitted by Greenhouse Consultants Incorporated, and approved by LPC on November 9, 2018, is that Lot 18, Block 202 may potentially contain significant archaeological resources.

The Phase 1A report documented that the project site has a high level of historic archaeological potential in Lot 18, where lack of building activity at the rear (i.e., Doughty Street side) would have preserved deposits dating to at least the late 18th to early 19th centuries. These potential remains are associated with two historical periods: (1) the Revolutionary War British/Hessian occupation of Brooklyn and (2) the mid-to-late 19th century era of industrialization, as working class Brooklyners were living along a mixed and changing commercial-industrial corridor connected to the ferry and the growing city.

Potential Revolutionary War materials would have been deposited between the final decades of the 18th through the first quarter of the 19th centuries, when local hills hosting the British soldiers and sailors' cemetery were razed and used to fill in Brooklyn Village and shoreline water lots immediately after the War. rchival evidence suggests that former owners of the project site were involved in "leveling off" the cemetery land and Solecki's find of a Hessian cap plate in sewer monitoring adjacent to the project site confirms the impact these activities had on the local

archaeological record. Archaeological testing and construction monitoring during excavation may recover items such as military insignia, sewing notions, personal tools, and other bodily items. As recent studies elsewhere in New York City have shown, historic fill can provide a valuable and rich picture of human-transported materials from a variety of periods and contexts.

Archaeological materials associated with working class residential and commercial life at the project site would have been deposited in association with the rear yard and shed documented behind 60 Old Fulton in 19th and 20th century maps. While the first sewer on Fulton was installed in 1851, it was a storm water sewer unconnected to the local dwellings and many residents likely retained outhouses, like this one. Flush toilets took a particularly long time to replace outhouses in Brooklyn and this is a good example of that phenomenon. When abandoned and/or filled with refuse, such features can contain a wealth of information about historic consumption patterns from both domestic activity and commercial/industrial enterprises. At 60 Old Fulton Street, a privy would provide an opportunity to recover household assemblages (pottery and bottle remains, hygiene and medicinal items, children's objects, etc.), food waste, grocer's refuse, liquor merchants' bottles, and waste from the early 20th century restaurant. Side-by-side datasets of residential and commercial activities are particularly powerful in illustrating the changing lifeways that accompanied industrial development, demographic change, and shifts in domestic patterns in the 19th century. Historical accounts of this transition often emphasize the bewildering rapidity of development, but glimpses of how these changes occurred on a more everyday scale are less plentiful. In Lot 18, the proposed development's excavations are likely to exceed previous construction excavations in depth and footprint. Phase IB testing in Lot 18 prior to construction may find evidence of materials associated with the late 18th century Revolutionary War and privy deposits relevant to the 19th century life of Brooklyn's working-class residents and businesses.

The Phase 1B archaeological field testing will consist of backhoe trenching in the area of former Lot 19 which was open during the 19th and 20th centuries. This portion of the project area is currently covered by a building housing New Xcell Auto Repair. This area is triangular in shape and is roughly 25 feet by 15 ft by 2 ft. The objective is to locate and identify any remaining features that may be representative of the late 18th to 19th centuries. The 1887 Sanborn map indicates a small shed near the back of the structure. Backhoe trenching will seek to locate a potential cistern since cisterns were usually located near the rear of a building facade. The trench will be a minimum of five feet wide and the triangular area borders the back of the historic structure on the 1887 map. See Figure A for the location of the trench on the 1887 Sanborn map.

Another issue that is associated with this area of Brooklyn, and identified in the report is the use of 18th century cemetery fill in the 19th century. The fill will be examined for the possibility of human or other cemetery remains. Steps will be taken as outlined in the 2018 *Guidelines For Archaeological Work In New York City* by the New York City Landmarks Preservation Commission.

IV. PROJECT METHODS

This section is a description of the field components, the field and laboratory methods and procedures that will be used.

The Phase 1B fieldwork is investigative in nature, attempting to answer the questions of (1) whether cultural remains are extant within the project area; (2) are the cultural deposits relevant to the 18th and 19th century development in this area of Brooklyn; (3) do these remains have integrity?

Backhoe trenching is an invasive method and a backhoe will be used to open the trench. The backhoe operation will be supervised by an R.P.A. archaeologist. Samples will be taken from the floor of the trench for screening through ¼ inch (0.63cm) mesh to assist with the recovery of artifacts. Soils will be recorded by natural stratigraphic deposits. The strata encountered will be measured, described and recorded in terms of texture, inclusions, Munsell colors and thickness. Artifacts will be bagged by provenance.

A permanent datum will be used based on the North American Datum 1983_NAV83 with a vertical datum of NAVD88 and the measurement system will be English. Photographs will be documented using menu boards.

The trench will be backfilled under the supervision of archaeologists.

All artifacts, field notes, photographs and other materials will be returned to Greenhouse Consultants Incorporated for processing and analysis. Procedures for artifact processing and basic stabilization will be established by, and carried out under direct supervision of the staff laboratory director. Principles of object conservation will be applied throughout processing, both in the field (if necessary), and at the laboratory.

V. PROJECT MANAGEMENT

In this section the management plan confirms that the landowner has granted permission to conduct field investigations and notes where archaeological artifacts will be curated during project duration. It also recommends where artifacts will be disposed upon completion of the project.

The owner of Lot 18 will enter into a Restrictive Declaration, to be recorded against Lot 18, that will incorporate this Work Plan Phase 1B and obligate the Lot 18 owner to carry out all requirements described herein. A copy of the Restrictive Declaration will be attached to this document.

During the project duration, any recovered artifacts will be curated at the Greenhouse Consultants Laboratory in Bayonne, New Jersey.

VI. PROJECT TIMELINE AND RESOURCE ESTIMATE

This part of the Work Plan describes the anticipated duration of work, and resources needed to complete the work.

Once the building currently standing on Lot 18 is demolished, a Phase 1 Environmental Assessment, including any required soil borings, must occur. Then, remediation of hazardous materials must be carried out, as required by and according to protocol determined appropriate by the NYC Office of Environmental Remediation, which remediation may require removal of soils and fill on all or a portion of Lot 18. Only after this remediation work is complete will Phase 1B archaeological fieldwork commence. One day is planned for the excavation of one trench in the triangular area (approximately 25 ft by 15 ft by 2 ft) that was formerly part of Lot 19. Subsequent to field testing, laboratory and report preparation will take one week.

Fieldwork	**ManDays**
Project Principal	1
Field Director/Principal Investigator	3
Field Technician (2)	6
Backhoe Operator	3
Laboratory and Report Preparation	
Project Principal	1
Field Director/Principal Investigator	8
Laboratory Director	10
Laboratory Technicians	8
Graphics/GIS	5
Communication and Coordination	
Principal Investigator	2

VII. PROJECT COMMUNICATION

The final section of this Work Plan is the communication plan, how and when the PI will communicate with LPC and other involved agencies about project status and preliminary findings.

Greenhouse Consultants Incorporated will submit an end of fieldwork letter for the Phase 1B field testing to the Landmarks Preservation Commission, detailing the findings of the Phase 1B fieldwork. If evidence is present that supports the research design and anticipated findings, a recommendation for Phase 2 fieldwork will be included and a Work Plan for Phase 2 fieldwork will be submitted for review. If no evidence is present from the Phase 1B fieldwork, then a final report will be submitted to the Landmarks Preservation Commission for the Phase 1B fieldwork.

Exhibit F

LPC January Letter

[Attached behind.]

NYC Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPARTMENT OF CITY PLANNING / 19DCP009K
Project: 58 OLD FULTON REZONING
Date received: 1/2/2019

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

The LPC is in receipt of the, "Work Plan Phase IB 50 Old Fulton Street, Block 202, Lot 18, Kings County, New York," prepared by Greenhouse Consultants, Inc. and dated December 2018.

We concur with the plan but note that depending upon the environmental remediation that may be required by the New York City Office of Environmental Remediation, the plan may need to be revised in consultation with LPC.

The LPC is also in receipt of a draft restrictive declaration undated and provided the changes noted in the draft edited by LPC are incorporated, the LPC has no objections. Assuming DCP concurs, please send the agency a copy of the executed document.

1/15/2019

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 33260_FSO_ALS_01092019.doc

HAZARDOUS MATERIALS APPENDIX

NYC Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

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October 1, 2018

Anthony Howard
Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 50 Old Fulton Rezoning
Block 202, Lots 12, 14, and 18
CEQR # 19DCP009K

Dear Mr. Howard:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the July 2018 Environmental Assessment Statement (EAS) prepared by Compliance Solutions Services, LLC and the August 2016 Phase I Environmental Site Assessment (Phase I) prepared by Industrial Waste Management, Inc., on behalf of Alwest Old Fulton, LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) to change the zoning of the affected area, comprised of Block 202, part of (p/o) Lot 14, Lot 18, and p/o Lot 12 in the Fulton Ferry neighborhood of Brooklyn Community District 2 from M2-1 to M1-5 to allow the applicant to develop an approximately 39,600 gross square foot, five-story and cellar commercial building on Block 202, Lot 14 (Projected Development Site 1) with retail on the cellar, ground, and second floors and offices above. Projected Development Site 1 is currently improved with a one-story auto body repair shop. The proposed action would also allow for development of an approximately 28,230 gross square foot hotel, with ground floor retail, on Block 202, Lot 18 (Projected Development Site 2). Under the proposed action, no new development would occur on Block 202, p/o Lot 12.

Block 202, Lot 14

The August 2016 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including lodgings, a shoe factory, a cigar factory, metal works, a trucking garage, a storage building, auto repair shops, a school, a park, a water pollution control facility, a police station, food packing, a sugar refinery, an iron foundry, etc. Based on the age of the subject building, asbestos containing materials and lead based paints could be present in the on-site structure. Regulatory databases identified 19 spllls within 1/8 mile; 13 underground storage tank sites and 37 aboveground storage tank sites within 1/4 mile; 19 leaking storage tank sites and 1 brownfield site within 1/2 mile of the project site.

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

Projected Development Site 1: Block 202, Lot 14 (Site under the control or ownership of the applicant) and Projected Development Site 2: Block 202, Lot 18 (Site not under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The (E) designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Future correspondence and submittals related to this project should include the following CEQR # **19DCP009K**. If you have any questions, you may contact me at (718) 595-4358.

Sincerely,

Wei Yu

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
T. Estesen
M. Wimbish
R. Dobruskin – DCP
O. Abinader – DCP
M. Bertini – OER