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

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

Part I: GENERAL INFORMATION

1. *Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)?* ☐ YES ☒ NO

If "yes," **STOP** and **complete the FULL EAS FORM**.

2. *Project Name* 130 St. Felix

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP083K	
ULURP REFERENCE NUMBER (if applicable)	**OTHER REFERENCE NUMBER(S) (if applicable)** (*e.g.*, legislative intro, CAPA)
210278ZMK, 210279ZRK, 210278ZMK, 210280ZSK, 210281ZSK	

4a. *Lead Agency Information*

NAME OF LEAD AGENCY		
Department of City Planning		
NAME OF LEAD AGENCY CONTACT PERSON		
Olga Abinader, Director, EARD		
ADDRESS 120 Broadway, 31st Floor		
CITY New York	STATE NY	ZIP 10271
TELEPHONE 212-720-3493	EMAIL OABINAD@planning.nyc.gov	

4b. *Applicant Information*

NAME OF APPLICANT		
130 St. Felix Street LLC		
NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Bryan Kelly		
ADDRESS 432 Park Avenue South, 2nd Floor		
CITY New York	STATE NY	ZIP 10016
TELEPHONE 212-716-2502	EMAIL bkelly@gotham.org	

5. *Project Description*

The Applicant, 130 St. Felix Street LLC, is seeking several discretionary approvals from the City Planning Commission (CPC), including a zoning map amendment, special permits, and zoning text amendments, to facilitate an approximately 166,402-gross-square-foot (gsf) mixed-use development on Lot 40 on Brooklyn Block 2111 in Downtown Brooklyn. The proposed mixed-use building would include approximately 20,120 gsf of community facility, approximately 130,032 gsf of marketable residential space, including up to 130 residential units on the upper floors, of which approximately 26 would be affordable units (assuming 20 percent of the total units for analysis purposes), and approximately 16,250 gsf of non-marketable residential space (service/mechanical space and residential space on the cellar level). The community facility space would accommodate an expansion of the neighboring Brooklyn Music School, which is in need of new and upgraded space for programming.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 2	STREET ADDRESS 130 St. Felix Street
TAX BLOCK(S) AND LOT(S) Block 2111, Lots 37, 40, 45, and 7501		ZIP CODE 11217

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Rezoning area bounded by St. Felix Street to the east, Hanson Place to the south, Ashland Place to the west, and the northern portion of Block 2111 to the north.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY C6-1	ZONING SECTIONAL MAP NUMBER 16c

6. *Required Actions or Approvals* (check all that apply)

***City Planning Commission*:** ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☒ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE
☐ HOUSING PLAN & PROJECT	☐ OTHER, explain:	

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION ZR 101-82, ZR 74-533, Appendix F, ZR 101-21

***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:

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

7. *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.): 56,124 (Development Site and Project Area
Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.): 56,124 (Development Site and Project Area)
Other, describe (sq. ft.):

8. *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): 166,402
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 166,402
HEIGHT OF EACH BUILDING (ft.): 270
NUMBER OF STORIES OF EACH BUILDING: 23

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: 12,548
The total square feet not owned or controlled by the applicant: 43,576 (One Hanson Place, Hanson Place Methodist Church, and Brooklyn Music School)

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 permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 12,548 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 200,768 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 12,548 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	130,032 marketable (146,282 total)		20,120	
Type (*e.g.,* retail, office, school)	130 units		Brooklyn Music School (BMS) Expansion	

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify:
NUMBER OF ADDITIONAL RESIDENTS: 295
NUMBER OF ADDITIONAL WORKERS: 22
Provide a brief explanation of how these numbers were determined: Residential Population calculated by multiplying the number of units by the average household size of the Brooklyn Fort Greene Neighborhood of 2.27 persons per household. Source:

2014-2018 ACS via Population Factfinder. The BMS, a community facility, will be expanding into space in the new development. BMS estimates 17 faculty (daily average on site) with the additional instructional space. 1 employee per 25 dwelling units is assumed.

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.

Has a No-Action scenario been defined for this project that differs from the existing condition? ☐ YES ☒ NO

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2024

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 27 months

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO | IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☐	☒
(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		
(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 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
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, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **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)	☐	☒
○ **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)	☐	☒
○ **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)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed 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?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐

	YES	NO
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
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		
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?	☒	☐
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 proposed 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: Potential historic auto repair services including potential USTs; historic manufacturing uses of surrounding properties	☐	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the 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	☐	☐

	YES	NO
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 generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
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): 5,330 pounds/week for residents, 1,300 pounds/week for BMS (assuming commercial office generation numbers)- total 6,630 pounds/week		
○ 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?	☐	☒
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): 57,511,891 mbtu		
(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 screening analyses, attach appropriate 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 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	☐	☐
(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?	☐	☒
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) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
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?	☐	☒

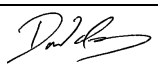
	YES	NO
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, 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. see attached		
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		

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	DATE
David Quart	May 3, 2021

SIGNATURE 

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).

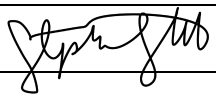
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. 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
Deputy Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission
NAME	DATE
Stephanie Shellooe	April 30, 2021

SIGNATURE



NEGATIVE DECLARATION

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 actions. Based on a review of information about the project contained in this environmental assessment statement (EAS) and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed actions would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would not have a significant adverse impact on the environment. Reasons supporting this determination are noted below.

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions include a zoning map amendment, special permits, and zoning text amendments, to facilitate an approximately 166,402-gross-square-foot (gsf) mixed-use development at 130 St. Felix Street (Block 2111, Lot 40) in the Downtown Brooklyn neighborhood or Brooklyn, Community District 1. The proposed mixed-use building would include approximately 20,120 gsf of community facility, approximately 130,032 gsf of marketable residential space, including up to 130 residential units on the upper floors, of which approximately 26 would be affordable units, and approximately 16,250 gsf of non-marketable residential space (service/mechanical space and residential space on the cellar level). The community facility space would accommodate an expansion of the neighboring Brooklyn Music School, which is in need of new and upgraded space for programming. The proposed actions would not affect the existing character of the area, nor affect public policy, which represent the thresholds of impact significance in the 2020 CEQR Technical Manual. The analysis concludes that no significant adverse impacts related to Land Use, Zoning, and Public Policy would result from the proposed action.

Shadows

A detailed analysis related to Shadows is included in this EAS. The detailed analysis showed that there would be incremental shadow cast on four sunlight-sensitive identified in the analysis: the Polonsky Shakespeare Center Plaza, BAM South POPS, 620 Fulton Street POPS, and Betty Carter Park. Incremental shadows on the identified resources would range from 20 minutes to 1 hour and 36 minutes. All would be cast on the December 21 analysis day, with the exception of the BAM South POPS that would also receive incremental shadow on the March/September 21st analysis day. These incremental shadows cast by the Proposed Project would be limited in extent and/or have little to no effect on amenities or vegetation in the spaces due to their location and the time of the year that incremental shadows would occur. Therefore, per the 2020 CEQR Technical Manual, there would be no significant adverse impact from the Proposed Project with respect to shadows.

Urban Design

A detailed analysis related to Urban Design is included in this EAS. According to the 2020 CEQR Technical Manual, if a project would result in physical changes to a site beyond those allowable by existing zoning and which could be observed by a pedestrian from street level, a preliminary assessment of urban design and visual resources should be prepared. Under current zoning, no building could be built as-of-right on the Development Site, and the Proposed Actions would facilitate the development of a maximum 270-foot-tall mixed-use building. The With-Action condition would be compatible with the urban design character of the study area and would be consistent with the surrounding building form and streetscape. The Proposed Project would provide infill development on an existing vacant lot, providing a more contiguous street wall such that the quality of urban design at the Project Site and along St. Felix Street and Ashland Place would improve over the No-Action condition. The proposed building design, which has been approved by the LPC in an August 2020 Certificate of Appropriateness, would respect and complement the existing character of the BAM Historic District. In addition, as demonstrated by the perspective renderings of the With-Action condition, the Proposed Project would not result in any significant adverse impacts on views to and from the prominent visual resources within the study area. Therefore, based on the 2020 CEQR Technical Manual, the Proposed Actions would not result in a significant adverse impact on urban design and visual resources.

Construction

A detailed analysis related to Construction is included in this EAS. Construction would occur over an approximately 27-month period, and would adhere to the applicable laws, regulations, and building codes that govern construction in New York City. As detailed in the construction assessment in the EAS, the Proposed Project would not result in significant adverse construction impacts in the key technical areas of historic and cultural resources, hazardous materials, transportation, air quality, and noise. The applicant will enter a Restrictive Declaration requiring the implementation of project components related to the environment that would preclude any potential impacts to air quality or noise related to construction activities, including acoustical barriers, the use of noise-reducing equipment, and the use of emission-reducing equipment. Therefore, the Proposed Project would not result in construction-period significant adverse impacts and no further analysis is warranted.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-616) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

Project Name: 130 St. Felix Street
CEQR # 21DCP083K
SEQRA Classification: Unlisted

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). Should you have any questions pertaining to this Negative Declaration, you may contact Katherine Glass at +1 212-720-3425.

TITLE Deputy Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME Stephanie Shellooe, AICP	April 30, 2021
SIGNATURE	

TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE May 3, 2021
SIGNATURE	

Project Name: 130 St. Felix Street
CEQR # 21DCP083K
SEQRA Classification: Unlisted

Determination of Significance Appendix

The Proposed Action(s) were determined to have the potential to result in changes to development on the following site(s):

Development Site	Borough	Block and Lot
Projected Development Site 1	Bk	2111/40

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-616**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1	X	X	X

Hazardous Materials

The (E) designation requirements applicable to **Projected Development Site 1** for hazardous materials would apply as follows:

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

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

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse

impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

Project Name: 130 St. Felix Street
CEQR # 21DCP083K
SEQRA Classification: Unlisted

Air Quality

The (E) designation requirements for air quality would apply as follows:

> ***Projected Development Site 1:*** *Any new residential development on the above-referenced property must exclusively use natural gas in any fossil fuel-fired heating, ventilating and air conditioning (HVAC) equipment, be fitted with low NOx (13 ppm) burners, and ensure that each boiler exhausts to a separate stack. The three (3) HVAC stacks must be located at least 269.5 feet above grade, be at least 30 feet apart from each other along the northern edge of the bulkhead and be no less than 41.5 feet away from the south façade of the proposed building facing the One Hanson Place building to avoid any significant adverse air quality impacts.*

Noise

The (E) designation requirements for noise would apply as follows:

> ***Projected Development Site 1:*** *In order to ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 35 dBA window/wall attenuation on the facades facing Ashland Place and 31 dBA of attenuation on the facades facing St. Felix Street and the facades facing Lafayette Avenue and the facades facing Hanson Place to maintain an interior noise level not greater than 45 dBA for residential and community facility 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, well-sealed air conditioners, package-terminal air conditioners, or central air conditioning.*

EAS Figures

Figure 1 Project Area Map

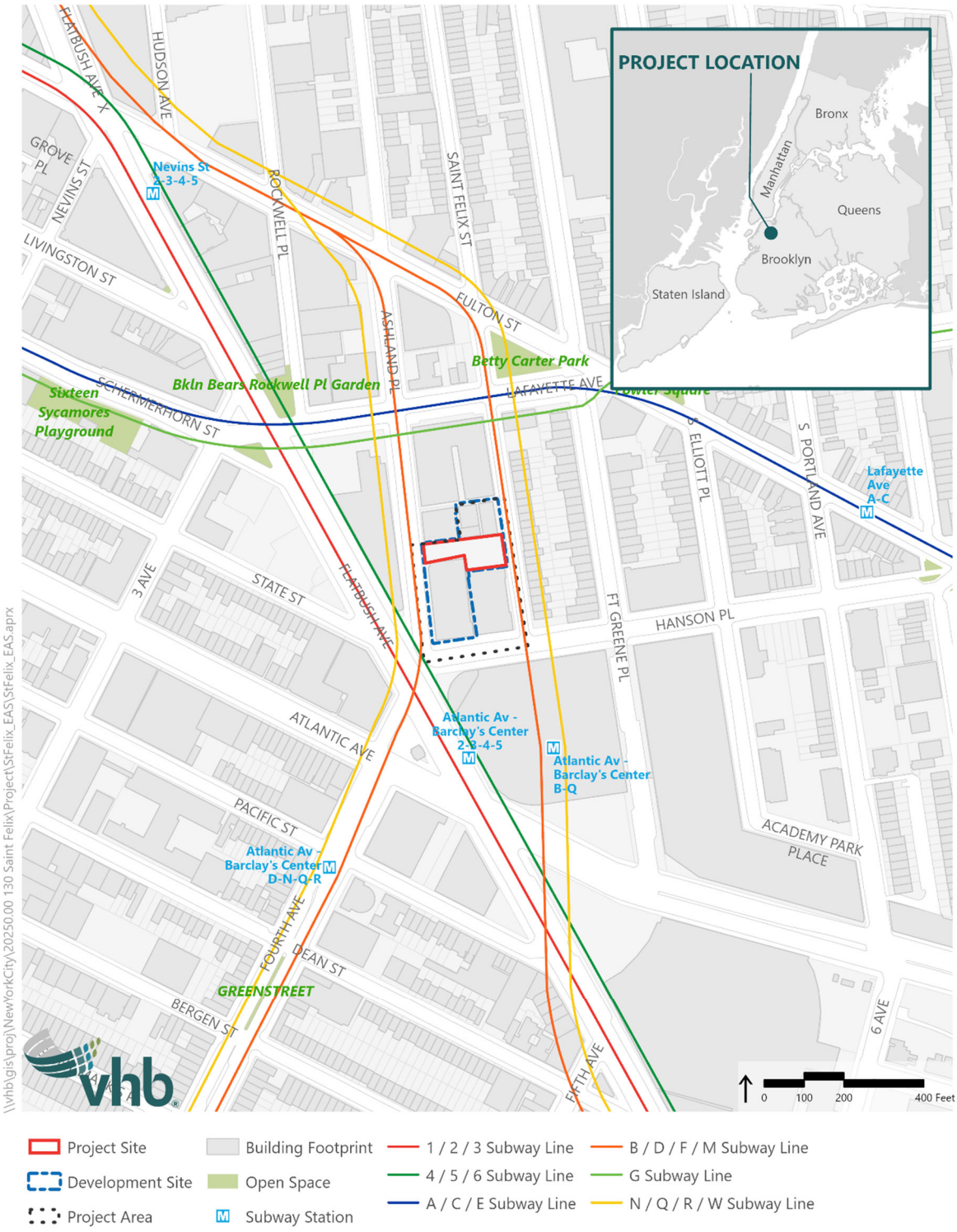


Figure 2 Tax Map



Figure 3 Existing Zoning Map

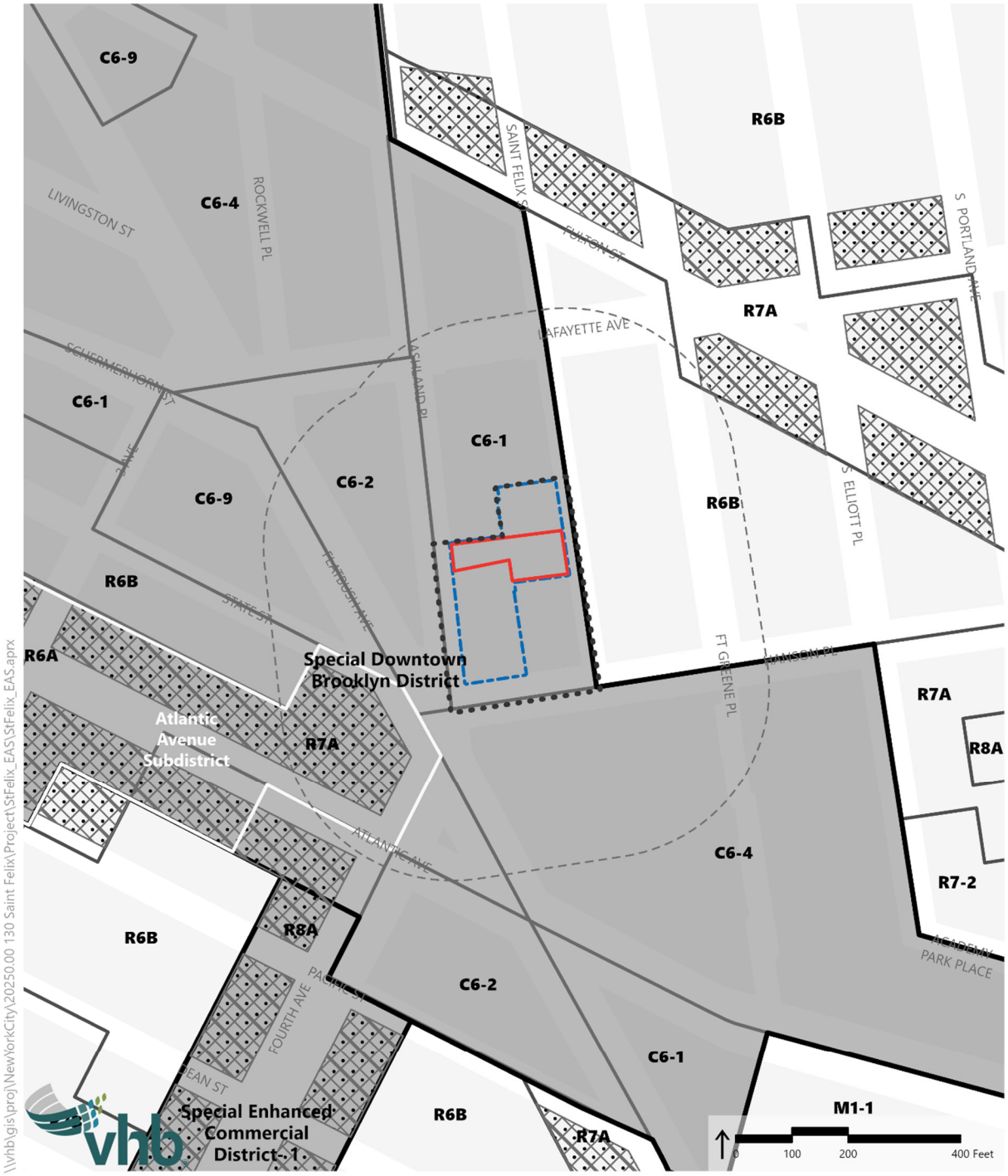


Figure 4 Proposed Zoning Map

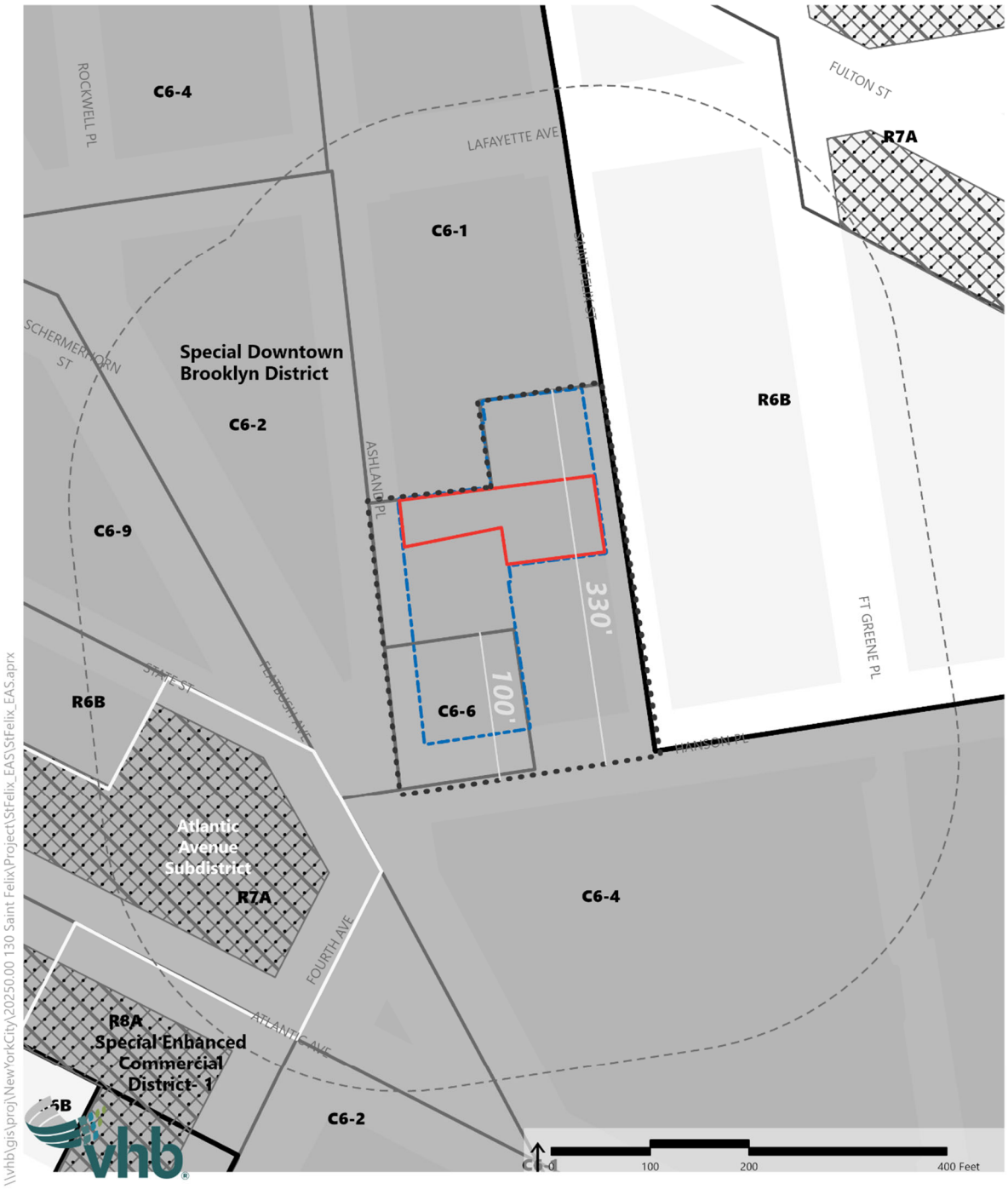


Figure 5 Land Use Map

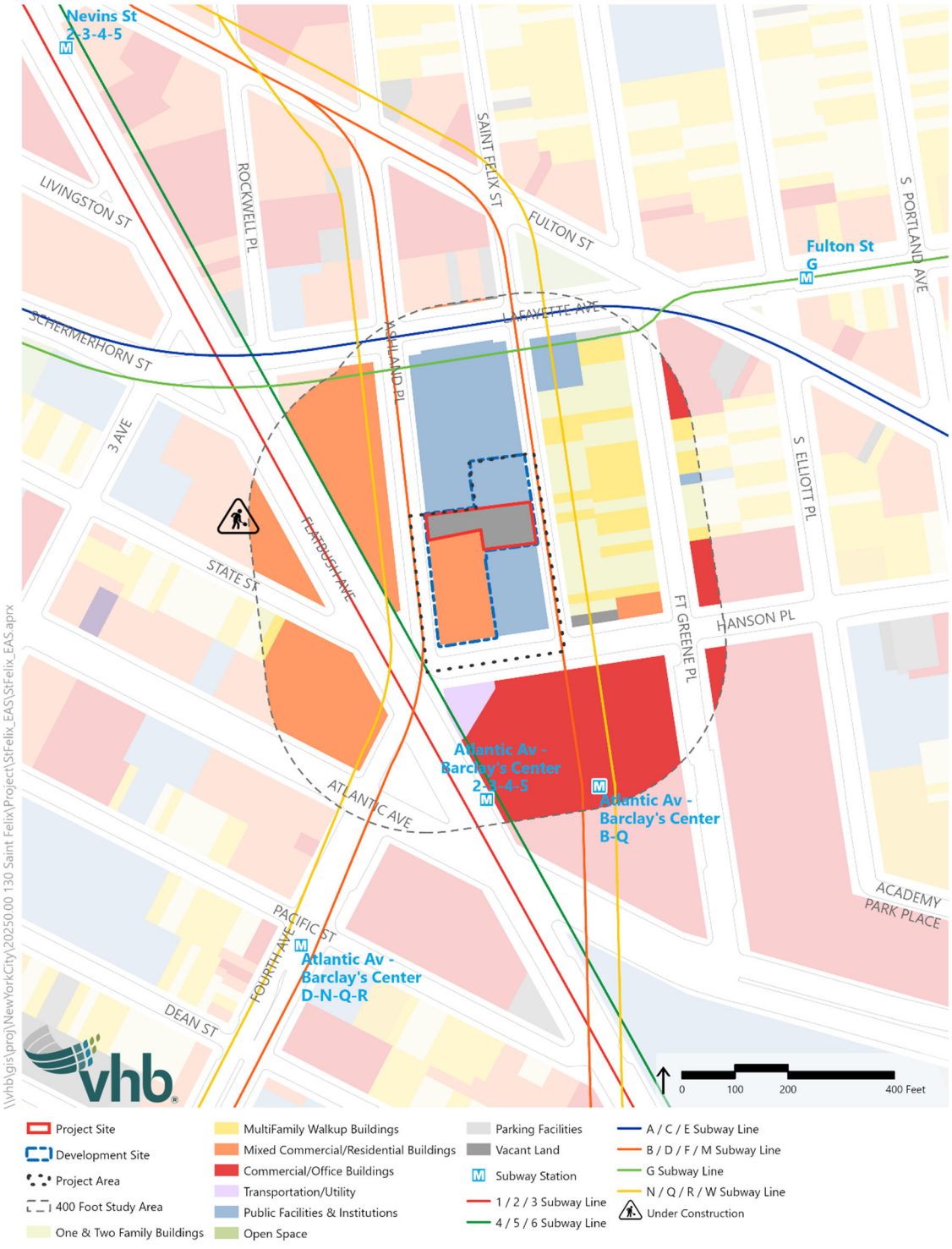


Figure 6 Photo Key Map

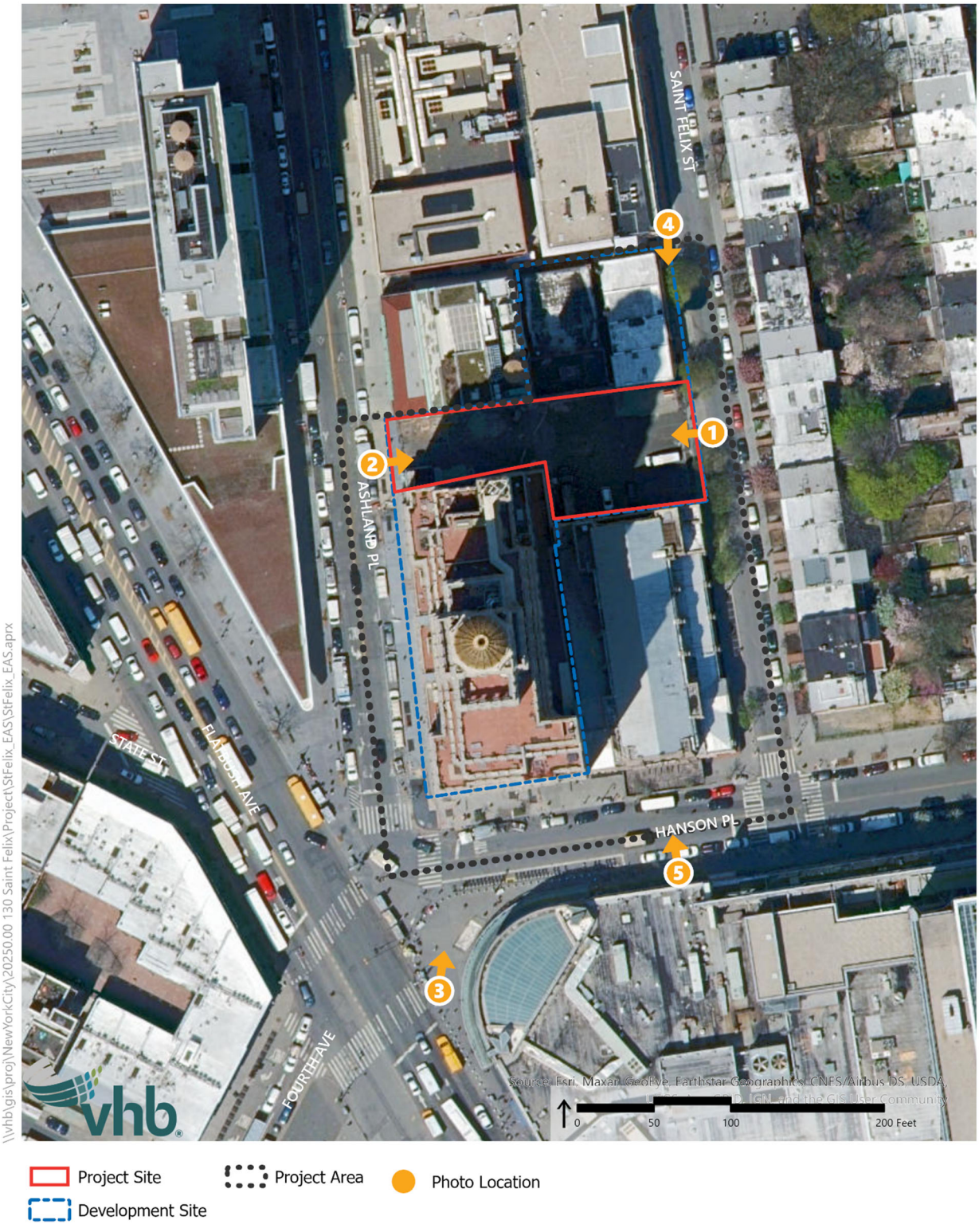


Photo 1 Development Site looking west from St. Felix Street

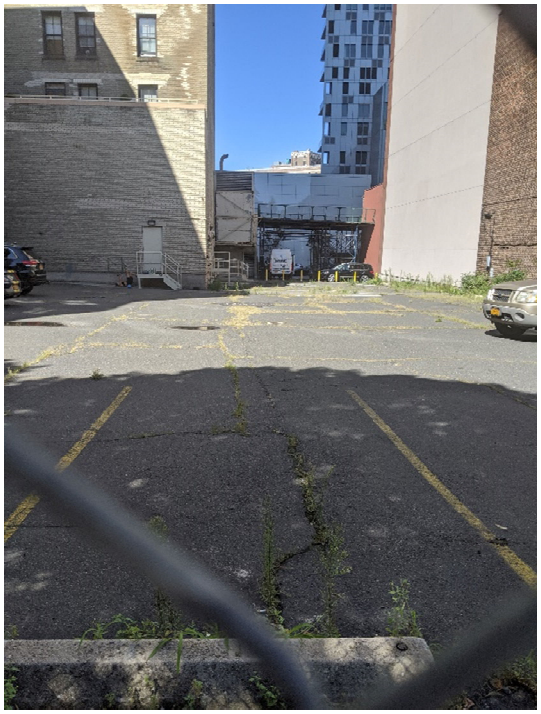


Photo captured 8/20/20

Photo 2 Development Site looking east from Ashland Place



Photo captured 8/20/20

Photo 3 One Hanson Place looking north from Flatbush Avenue



Photo captured 8/20/20

Photo 4 Brooklyn Music School looking south from St. Felix Street



Photo captured 8/20/20

Photo 5 Hanson Place Methodist Church looking north from Hanson Place



Photo captured 8/20/20

130 St. Felix

Environmental Assessment Statement

PREPARED FOR

130 St. Felix Street LLC
432 Park Avenue South, 2nd Floor
New York, NY 10016
212.716.2502

PREPARED BY

1 Penn Plaza
Suite 715
New York, NY 10119
212.857.7350

May 3, 2020

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Part I: Project Description

This section provides descriptive information about the requested discretionary land use action(s) and the development project that could be facilitated by the requested actions. The purpose of this section is to convey project information relevant to the environmental review.

Introduction

The Applicant, 130 St. Felix Street LLC, is seeking several discretionary approvals from the City Planning Commission (CPC), including a zoning map amendment, special permits, and zoning text amendments (the "Proposed Actions"), to facilitate an approximately 166,402-gross-square-foot (gsf) mixed-use development on Lot 40 on Brooklyn Block 2111 in Downtown Brooklyn (the "Project Site"). The proposed mixed-use building would include approximately 20,120 gsf of community facility space on the cellar level and first and second floors and approximately 146,282 gsf of residential space, including up to 130 residential units on the upper floors, of which approximately 26 would be affordable units (the "Proposed Project"). The community facility space would accommodate an expansion of the neighboring Brooklyn Music School (BMS), which is in need of new and upgraded space for programming.

Project Site and Project Area

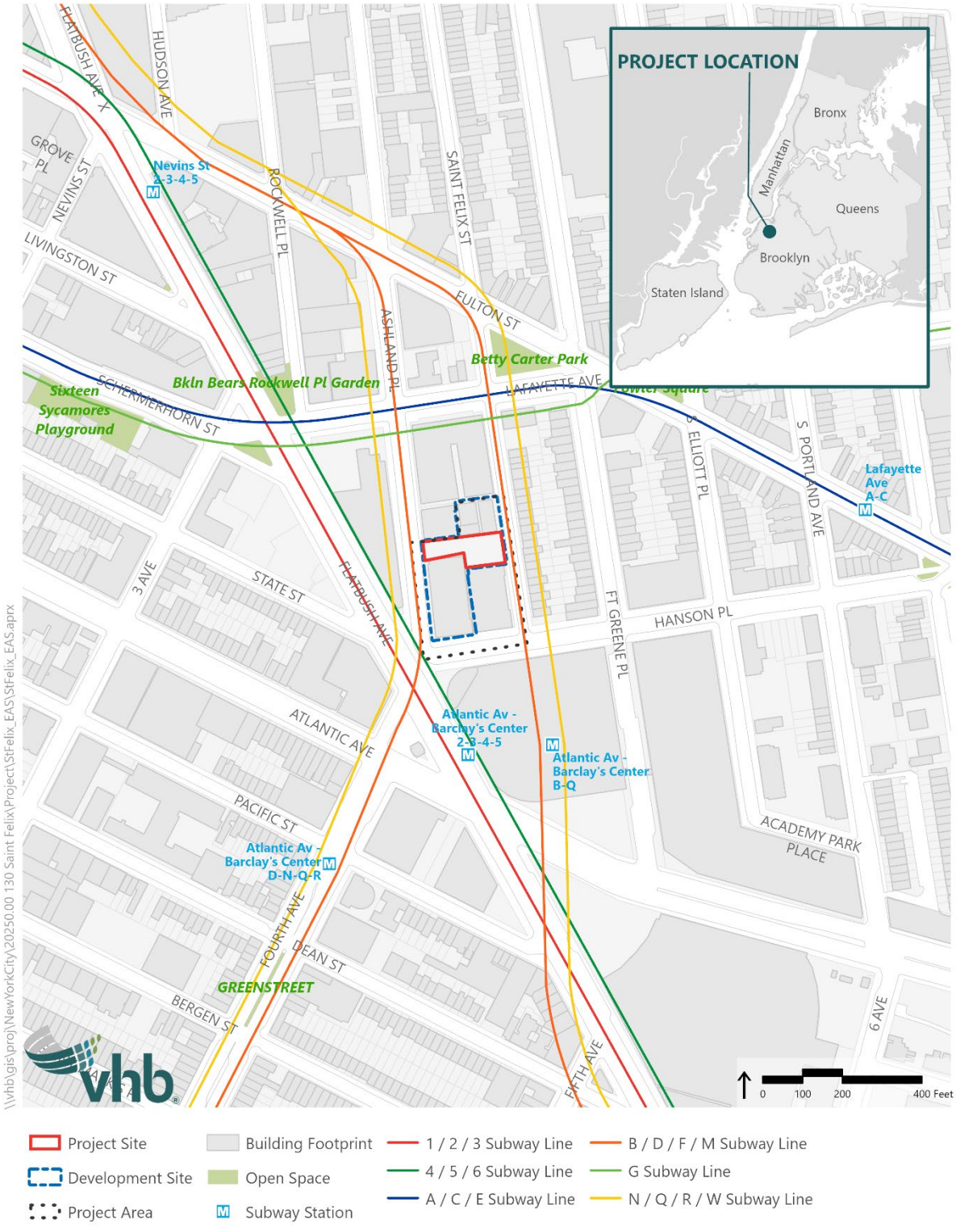
The Project Site, located at 130 St. Felix Street in Downtown Brooklyn, Community District 2, is an irregularly shaped through-lot with existing access from both St. Felix Street and Ashland Place. The Project Site has a lot area of approximately 12,548 square feet (sf) and is part of a single zoning lot together with One Hanson Place/Williamsburgh Savings Bank (Block 2111, Lot 7501). It is currently vacant. One Hanson Place, located at the corner of Hanson Place and Ashland Place, is a mixed residential and commercial building with apartment units on the upper floors and commercial office space on the lower floors. The building is approximately 354,799 gsf and Lot 7501 is 19,363 sf. One Hanson Place was constructed in 1929, originally to house the Williamsburgh Savings Bank, and was designated as an individual landmark by the New York City Landmarks Preservation Commission (LPC) for both the building exterior and interior (LP-0971 and LP-1909); it is also listed on the State and National Registers of Historic Places.

The Proposed Project would involve the expansion of the existing zoning lot to incorporate BMS located on Lot 37. Overall, the proposed zoning lot would include Lots 37, 40, and 7501 on Block 2111 and would comprise the Development Site. BMS is located immediately north of the Project Site along St. Felix Street. The school was founded in 1909 and has been at its

current location since 1918. The existing building is four stories with approximately 12,150 gsf on a 7,853-sf lot. Together, the Development Site has a combined lot area of 39,764 sf, with an existing 366,949 gsf of floor area between One Hanson Place and BMS.

The Project Area is roughly coterminous with the boundaries of the proposed map amendment, which in addition to the Development Site includes Lot 45 on the project block. See **Figure 1** for the site location map and **EAS Figure 4** for the proposed zoning map. Together, the Project Area lots (Lots 37, 40, 45, and 7501 on Block 2111) compose the southern half of the project block bounded by Hanson Place to the south, Ashland Place to the west, Lafayette Avenue to the north, and St. Felix Street to the east. The Project Area is located in the LPC-designated Brooklyn Academy of Music Historic District (LP-01003) and the National Register-listed Fort Greene Historic District boundary increase (90NR01301). Lot 45 currently contains the Central United Methodist Church building (a.k.a. Central Methodist Episcopal Church), located at the corner of St. Felix Street and Hanson Place just south of the Project Site. Lot 45 has a lot area of 16,447 sf, and the church is approximately 65,500 gsf. The Neo-Romanesque church building is listed on the National Register as contributing to the Fort Greene Historic District boundary increase and is listed within the Brooklyn Academy of Music Historic District.

Figure 1 Site Location Map



Proposed Actions

The Applicant is requesting several actions including:

- A zoning map amendment to rezone the Project Area from a C1-6 zoning district in the Special Downtown Brooklyn (DB) District to a C6-4 district and C6-6 district within the DB District;
- A zoning text amendment to establish a Mandatory Inclusionary Housing (MIH) area, coterminous with the proposed rezoning area, pursuant to Zoning Resolution (ZR) Appendix F;
- A zoning text amendment to ZR Section 101-82 (Modification of Bulk Regulations for Certain Buildings on Irregular Sites) to make this special permit applicable in C6-4 and C6-6 districts in the DB District;
- A zoning text amendment to ZR Section 101-21(d) (Special Floor Area and Lot Coverage Regulations) to permit 12 FAR for residential uses within MIH areas in the C6-6 (DB) District;
- A special permit pursuant to ZR 101-82 to modify tower lot coverage, court, and rear yard regulations; and
- A special permit pursuant to ZR 74-533 (Reduction of Parking Spaces to facilitate Affordable Housing) to permit a waiver of all required accessory off-street parking spaces.

Proposed Project and With-Action Condition

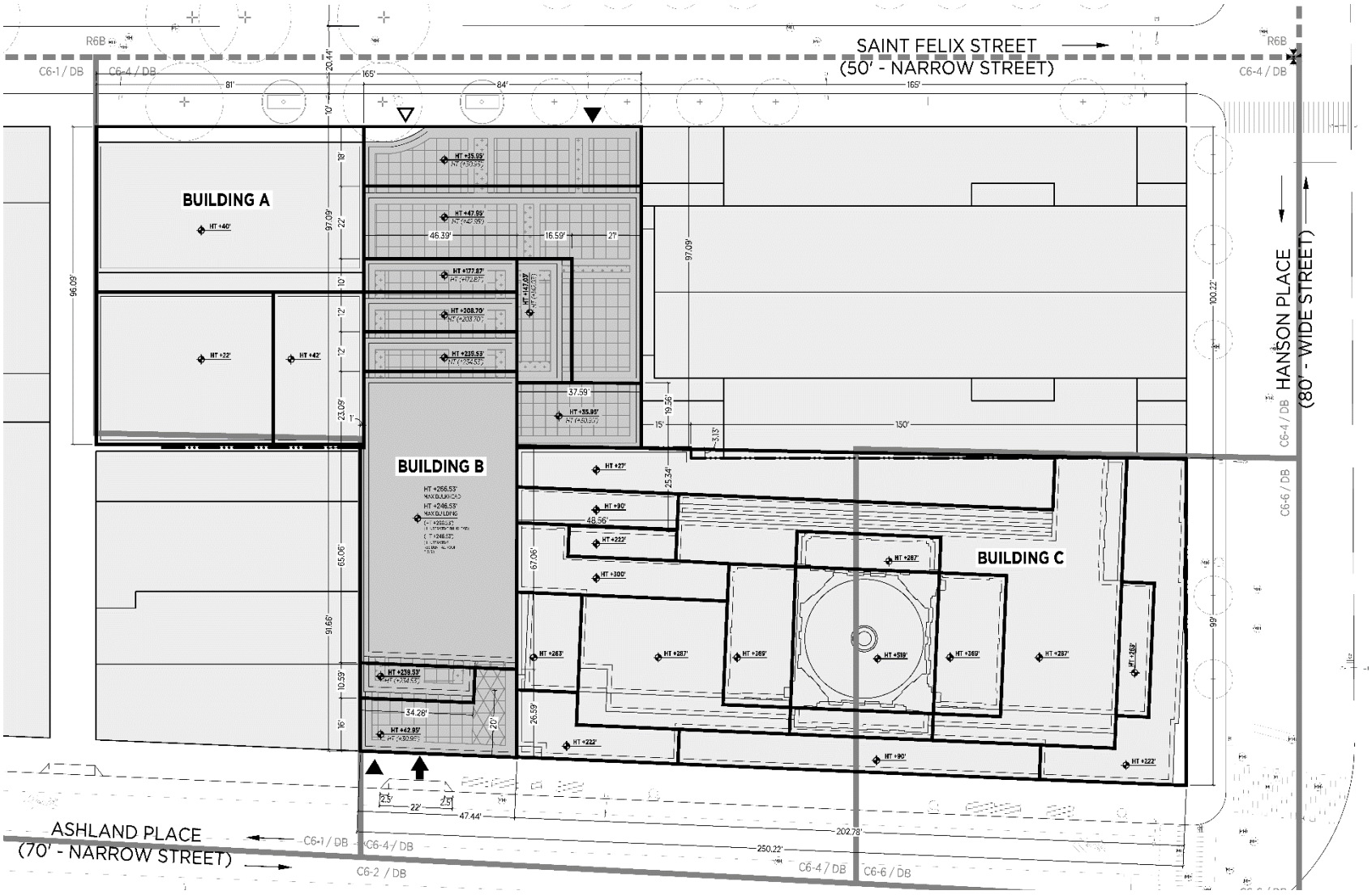
The Proposed Project would consist of a new 166,402-gsf mixed-use building containing approximately 20,120 gsf of community facility space on the cellar level and first and second floors and approximately 146,282 of residential space accommodating up to 130 residential units on the upper floors.[1] 26 of the proposed residential units would be affordable MIH units.[2] No parking spaces would be provided as part of the Proposed Project. The community facility space would accommodate an expansion of the neighboring BMS and would include primarily new classroom space.

A site plan and elevations for the With-Action condition are provided in **Figure 2**, **Figure 4**, and **Figure 6.** The Proposed Project would front on St. Felix Street and Ashland Place, and primary access to the residential portion of the building would be provided from St. Felix Street, with service and secondary access from Ashland Place. Along with the Proposed Actions, the Proposed Project would be facilitated by the proposed zoning lot merger with Lot 37, allowing the Applicant to acquire a portion of the excess development rights from BMS's existing facility and generating needed proceeds for the school to fit out its new facility in coordination with the Applicant.

[1] The development as proposed would incorporate 120 residential units. However, per City Environmental Quality Review (CEQR) guidelines in cases of a rezoning, for CEQR analysis purposes this EAS assumes an average of one dwelling unit per 1,000 gross square feet of residential floor area to determine the number of dwelling units. The proposed residential gross floor area (146,282 gsf) includes approximately 16,250 gsf of non-marketable space, including mechanical/service space, easement areas for One Hanson Place, and residential floor area located on the cellar level, leaving approximately 130,032 gsf of marketable residential floor area. Therefore, for CEQR analysis purposes, a total of 130 units is assumed for the Proposed Project.

[2] It is anticipated that 30 percent of units within the proposed project, or 36 of the proposed 120 units, would be affordable units within the MIH program, complying with the applicant's intended MIH Workforce Option to reserve 30 percent of the floor area for permanent affordable housing. However, per New York City Department of City Planning (DCP) guidance, for the purposes of CEQR analysis, unless otherwise noted, it is assumed that 20 percent of the residential floor area (26 units) would be affordable to residents earning not more than 80 percent of the Area Median Income (AMI).

Figure 2 With-Action Site Plan



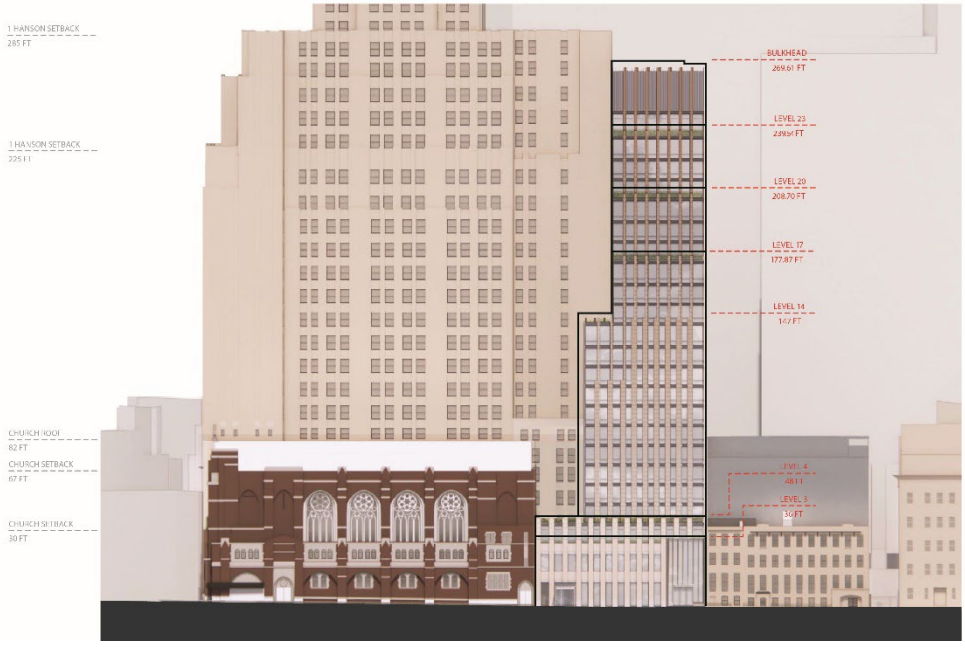
Source: FXCollaborative
For Illustrative Purposes Only

Figure 3 St. Felix Street Elevation, No-Action Condition



Source: FX Collaborative
For Illustrative Purposes Only

Figure 4 St. Felix Street Elevation, With-Action Condition



Source: FX Collaborative
For Illustrative Purposes Only

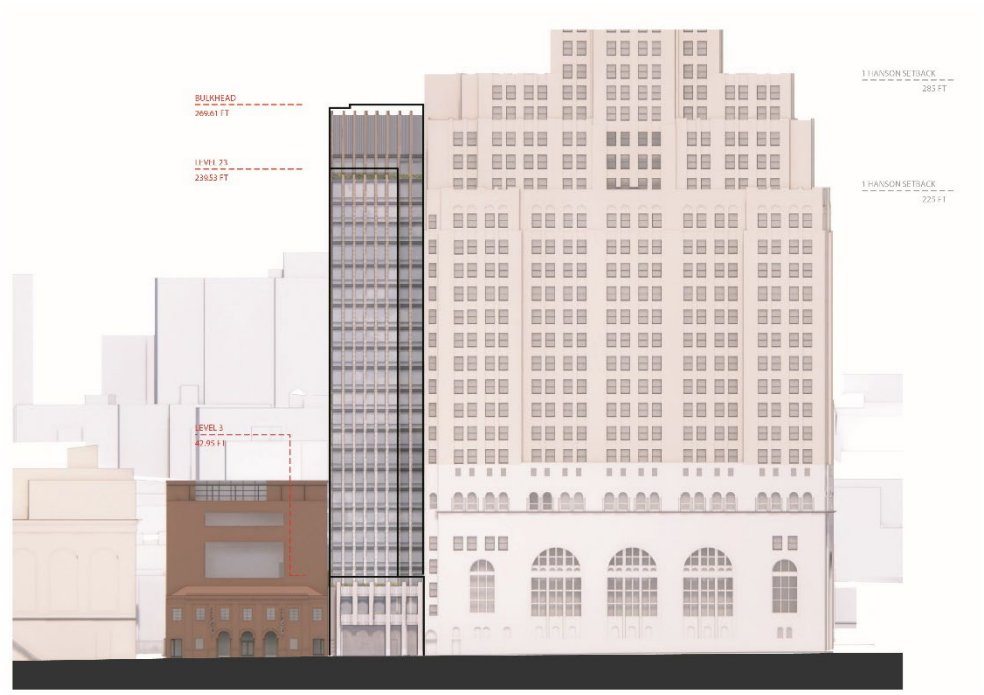
PROPOSED MAXIMUM BUILDING ENVELOPE

Figure 5 Ashland Place Elevation, No-Action Condition



Source: FX Collaborative
For Illustrative Purposes Only

Figure 6 Ashland Place Elevation, With-Action Condition



Source: FX Collaborative
For Illustrative Purposes Only

On August 4, 2020, the Landmarks Preservation Commission adopted a resolution approving the issuance of a Certificate of Appropriateness (CofA) for the Proposed Project at the Development Site (see **Appendix A** for the conditional approval letter from LPC dated August 10, 2020). A CofA will be issued upon review and approval of the final Department of Buildings filing drawings for the approved work. In accordance with the LPC approval, the Proposed Project would be constructed to a height of 23 stories and 266 feet. However, for conservative analysis purposes, this environmental assessment will analyze the Proposed Project's maximum building envelope, including a maximum height of 270 feet. This would be lower than the "shoulder" at One Hanson Place so as not to compete visually with the adjacent landmarked building. The base height of the Proposed Project along St. Felix Street would be set to establish a "townhouse" scale, and after an initial 18-foot setback, would be similar to the height of BMS, before setting back another 22 feet. These building setbacks at the base and additional setbacks as the building rises would establish an appropriate scale for the St. Felix Street street wall.

As part of the Proposed Actions, the Project Area would be rezoned from C6-1 (DB) to C6-6 (DB) on the southern and western portion of the project block to a depth of 100 feet from Hanson Place and to the block centerline, and from C6-1 (DB) to C6-4 (DB) on the remainder of the of the Project Area to a maximum depth of 330 feet from Hanson Place on St. Felix Street and a maximum depth of 250 feet from Hanson Place on Ashland Place. The Project Site would be zoned C6-4 (DB). The Central United Methodist Church building and BMS would be contained within the proposed C6-4 (DB) district.[3] One Hanson Place would be split between the proposed C6-4 (DB) and C6-6 (DB) districts. C6-4 and C6-6 districts are typically mapped within major business districts, in areas well-served by mass transit.

Project Purpose and Need

The Proposed Actions would facilitate the development of a mixed-use, mixed-income residential building on an existing vacant and underutilized site at a desirable location in Downtown Brooklyn. The existing building at One Hanson Place is overbuilt, preventing any future infill development on the Development Site under existing zoning regulations. The Proposed Actions would permit the development of the Proposed Project, providing new permanently affordable housing opportunities in an area rich with transit access and other amenities. Development of the Proposed Project would also provide space for a much-needed expansion of BMS, an important community institution that is currently operating at capacity, permitting the growth of the institution adjacent to its current location.

The proposed zoning map amendment would establish C6-4 (DB) and C6-6 (DB) zoning districts within the Project Area; these districts are appropriate for a highly transit-accessible location and are consistent with other surrounding high-density zoning districts. The proposed zoning text amendments are required to establish the permitted residential floor area ratio in MIH areas in C6-6 (DB) districts consistent with standard C6-6 zoning; make an existing special permit for bulk modifications applicable in C6-4 and C6-6 districts in the DB District; and establish an MIH area. In accordance with the MIH program, the Proposed

[3] Due to the irregular shape of the block, the block centerline, which represents the zoning district boundary between the proposed C6-4 / DB boundary and existing C6-1 / DB, leaves a 265-sf portion of Lot 37 within the existing C6-1 / DB district. The C6-1 / DB portion of lot 37 occupies an irregular shape along the rear lot line with a depth of 3.33' at the west of the lot and a 2.76' at the east and is 81' wide. This portion of the lot will be treated as a C6-4 district pursuant to ZR 77-211 Conditions for application of bulk regulations to entire zoning lot.

Project would dedicate a percentage of the residential floor area to affordable housing, contributing to the Mayor's Housing New York Plan goal of building 300,000 affordable housing units by 2026. The Applicant believes the proposed zoning districts would permit new development that is consistent with the surrounding area and respectful of its location within two historic districts.

The special permit to modify bulk regulations is also necessary for the development of the Proposed Project due to the difficulties posed by the irregularly shaped zoning lot and Project Site and the presence of existing historic buildings, particularly One Hanson, on the Development Site. In the absence of this special permit, it would not be feasible to develop a building of more than 150 feet tall on the Development Site, as One Hanson Place occupies almost all of the Development Site's permitted lot coverage at and above a height of 150 feet, and the building's floor plate configuration would not be viable. This is because a disproportionate amount of space would be dedicated to core and circulation space, and not enough space would be available for marketable square footage to make the project economically viable. Finally, the parking special permit would waive a requirement for parking spaces, which is necessary to accommodate at-grade and below-grade BMS space and facilitate the construction of affordable housing. This requested waiver is also appropriate for the highly transit-accessible location of the Project Site.

Analysis Framework and Reasonable Worst-Case Development Scenario

For the purpose of the environmental analyses, the No-Action condition represents the future absent the Proposed Actions and serves as the baseline by which the Proposed Actions (or With-Action condition) are compared to determine the potential for significant environmental impacts. The difference between the No-Action and With-Action conditions represents the increment to be analyzed in the CEQR process.

Future No-Action Condition

In the No-Action condition, the Development Site would continue to operate under the existing conditions detailed above. One Hanson Place is currently overbuilt beyond the maximum allowable floor area, leaving no developable floor area in the existing zoning lot shared with the Project Site. Therefore, no development could occur in the No-Action condition. BMS would continue to operate at capacity and would not benefit from an expanded facility on the Development Site, and no affordable housing would be created. No-Action condition elevations are provided in **Figure 3** and **Figure 5**.

Future With-Action Condition

As stated previously, in the future With-Action condition, the Proposed Actions would facilitate the development of an approximately 166,402-gsf mixed-use development including approximately 20,120 gsf of community facility space on the cellar level and first and second floors and approximately 146,282 gsf of residential space accommodating 130 units, of which approximately 26 would be affordable under the MIH program. The community facility space would be occupied by BMS and would include expanded

instructional space. The Proposed Project would be constructed to a height of 23 stories and a maximum of 270 feet.

Increment for Analysis

In total, the future With-Action condition would result in a net increase of 166,402 gsf over the future No-Action condition, with an increase of 146,282 gsf of residential space and 20,120 gsf of community facility (see **Table 2**).

Future development would be in accordance with the requested special permits and CofA. Therefore, the Proposed Project would be limited to the program and massing described above and represents the reasonable worst-case development scenario.

Table 2 Future No-Action and With-Action Comparison

	No-Action Condition	With-Action Condition	Increment
Residential (GSF)	-	**146,282**	**+146,282**
Marketable Residential (GSF)	-	130,032	+130,032
*Non-Marketable Residential (GSF)**	-	16,250	+16,250
Dwelling Units	-	130	+130
Affordable Units	-	26	+26
Community Facility (GSF)	-	**20,120**	**+20,120**
Total (GSF)	-	166,402	+166,402
Total (ZSF)	-	146,794	+146,794
Height (Stories)	-	23	+23
Height (Feet)	-	270	+270

**Non-Marketable residential floor area includes mechanical/service space, easement areas for One Hanson Place, and residential floor area located on the cellar level.*

Analysis (Build Year)

The build year for the Proposed Project is 2024.

Part II: Supplemental Analyses

Additional Technical Information for EAS Full Form

An analysis framework has been established to assess the potential for the Proposed Actions to result in significant adverse environmental impacts.

The EAS examines the potential for significant adverse impacts to result from the Proposed Actions. As detailed in **Part I: Project Description**, the Proposed Actions, including a zoning map amendment, special permits, and zoning text amendments (the "Proposed Actions"), would facilitate an approximately 166,402-gross-square-foot (gsf) mixed-use development on Lot 40 on Brooklyn Block 2111 in Downtown Brooklyn (the "Development Site"). The "Project Area" is roughly coterminous with the boundaries of the proposed zoning map amendment, and includes Lots 37, 40, 45, and 7501 on the project block.

Provided below are preliminary screening analyses, conducted based on guidelines presented in the *2020 CEQR Technical Manual* in order to determine whether further analysis of a given technical area is necessary to determine the potential for significant adverse impacts to the environment in that area.

Land Use, Zoning, and Public Policy

According to the *CEQR Technical Manual,* a land use analysis is warranted for projects that would affect land use or change zoning on a site. Because the Proposed Actions would result in a zoning map amendment and zoning text amendment, a preliminary analysis of land use, zoning, and public policy is warranted (see **Section 2, Land Use, Zoning, and Public Policy**).

Open Space

The *CEQR Technical Manual* recommends performing an open space assessment if a project would result in either a direct or indirect effect on open space.

A proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or results in increased noise or air pollutant emissions, odor, or shadows that would affect the usefulness of a public open space, whether on a permanent or temporary basis. A proposed project can also directly affect an open space by enhancing its design or increasing its accessibility to the public. The Proposed Project would not cause displacement or changes to existing open space resources, therefore an open space analysis for direct effects is not warranted.

Indirect effects may occur when the population generated by a proposed project overtaxes the capacity of existing open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished. The *CEQR Technical Manual* provides different thresholds for the assessment of indirect effects based on whether the

area is considered underserved or well-served in terms of open space. Based on open space maps provided in the manual, the Project Area is considered neither underserved nor well-served, and as such, the threshold for an analysis of potential indirect effects is whether the Proposed Project would introduce more than 200 residents or 500 employees. The Proposed Project would generate an anticipated 295 residents and 22 faculty (average daily on-site), therefore an open space analysis pertaining to residents is warranted (see **Section 3, Open Space**).

Shadows

The *CEQR Technical Manual* requires a shadows assessment for proposed actions that would result in new structures (or additions to existing structures) greater than 50 feet in height or located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include publicly accessible open spaces, sunlight-sensitive natural features, or historic resources with sunlight-sensitive features.

The Proposed Actions would result in a building with a maximum height of 270 feet including the bulkhead. Therefore, a shadows analysis is warranted (see **Section 4, Shadows**).

Historic and Cultural Resources

According to the *CEQR Technical Manual,* a historic and cultural resources assessment is warranted if there is the potential to affect either archaeological or architectural resources; the manual further recommends that a historic resources assessment be prepared if a proposed action would result in any of the following actions: in-ground disturbance; new construction, demolition, or significant physical alteration of any building, structure, or object; the change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature; or the screening or elimination of publicly accessible views, even if no known historic resources are located nearby.

Archaeological resources are physical remains, usually subsurface, of the prehistoric, Native American, and historic periods—such as burials, foundations, artifacts, wells, and privies. Archaeological resources are considered only in those areas where new in-ground disturbance is likely to occur. New in-ground disturbance is anticipated as a consequence of the Proposed Actions, and according to City and State historic resources databases, the Development Site is located within an area of archaeological sensitivity. Therefore, an assessment of archaeological resources is warranted (see **Section 5, Historic and Cultural Resources**).

Architectural resources generally include historically important buildings, structures, objects, sites, and districts. Historic and cultural resources include designated New York City Landmarks (NYCLs) and Historic Districts; properties calendared for consideration as NYCLs by the New York City Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation (NYCL-eligible); properties listed on the State and National Register of Historic Places (S/NR) or formally determined eligible for S/NR listing (S/NR-eligible), or properties contained within a S/NR listed or eligible district; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHLs); and potential historic resources (i.e., properties not identified by one of the programs listed

above, but that appear to meet their eligibility requirements). The Development Site is located within the New York City Landmark Brooklyn Academy of Music Historic District (LP-1003), as well as the New York State/National Fort Greene Historic District (Boundary Increase) (90NR01301). The buildings on the project block surrounding the Development Site are all within these two historic districts. In addition, One Hanson Place, the former Williamsburgh Savings Bank Building (located adjacent to the Development Site), is an individual and interior New York City Landmark (LP-0971 and LP-1909) and the Brooklyn Academy of Music (located 100 feet north of the Development Site) is individually listed in the National Register of Historic Places (05NR05534). Based on this preliminary review of existing conditions, an assessment of architectural resources within a 400-foot radius is warranted (see **Section 5, Historic and Cultural Resources**).

On August 4, 2020, the Landmarks Preservation Commission adopted a resolution approving the issuance of a Certificate of Appropriateness for the Proposed Project at the Development Site (see **Appendix A** for the conditional approval letter from LPC dated August 10, 2020). A Certificate of Appropriateness will be issued upon review and approval of the final Department of Buildings filing drawings for the approved work.

Urban Design and Visual Resources

According to the methodologies of the *CEQR Technical Manual,* if a project requires actions that would result in physical changes to a project site beyond those allowable by existing zoning and which could be observed by a pedestrian from street level, a preliminary assessment of urban design and visual resources should be prepared. Under current zoning, no building could be built as-of-right on the Development Site, and the Proposed Actions would facilitate the development of a maximum 270-foot-tall mixed-use building. Therefore, an assessment of urban design and visual resources is warranted (see **Section 6, Urban Design and Visual Resources**).

Hazardous Materials

According to the *CEQR Technical Manual,* a hazardous materials assessment is conducted when elevated levels of hazardous materials exist on a site, when an action would increase pathways to their exposure, either human or environmental, or when an action would introduce new activities or processes using hazardous materials, thereby increasing the risk of human or environmental exposure.

Based on the Phase 1 Environmental Site Assessment prepared for the Proposed Project by Langan in May 2015, the Brownfield Cleanup Program Application submitted in February 2020, and the admission to the New York State Department of Environmental Conservation Brownfield Cleanup Program dated July 7, 2020, the Development Site has been determined to have the potential for elevated levels of hazardous materials. Therefore, an assessment of hazardous materials is warranted (see **Section 7, Hazardous Materials**).

Transportation

According to the *CEQR Technical Manual,* detailed transportation analyses may be warranted if a proposed project results in 50 or more vehicle trips and/or 200 or more

transit/pedestrian trips during a given peak hour. The Proposed Project is not expected to result in 50 or more vehicle trips per hour or 200 transit trips per hour. However, the Proposed Project is expected to result in more than 200 pedestrian trips per project peak hour, and therefore a transportation analysis limited to pedestrian conditions is warranted (see **Section 8 Transportation**).

Air Quality

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under CEQR, an air quality assessment determines both a proposed project's effects on ambient air quality as well as the effects of ambient air quality on the project. As discussed in the *CEQR Technical Manual*, a proposed project may potentially result in the following types of air quality impacts:

- Potential impacts from mobile sources introduced by a project.
- Potential impacts from potential air pollutant sources introduced by a project, such as:
  - Emissions from a project's heating, ventilation, and air conditioning (HVAC) system
  - Emissions from a project's enclosed parking garage.
- Potential impacts on the proposed project from either manufacturing/processing facilities or large/major sources that are located near the project site.

A mobile source analysis may be warranted if a proposed project would result in 50 or more peak hour vehicle trips. Since the Proposed Project would not exceed this threshold, there is no potential for a carbon monoxide impact from the Proposed Project. In addition, the Proposed Project would not introduce any diesel vehicles and the particulate matter (PM) emission equivalent from fewer than 50 vehicle trips introduced by the Proposed Project overall does not warrant a PM mobile source analysis. The Proposed Project would not introduce any parking facilities; therefore, no parking garage analysis is needed.

The Proposed Project would introduce an HVAC systems exhaust location adjacent to an existing taller building that has residential uses on the upper floors and operable windows facing the Development Site. Furthermore, industrial sources in the area may include Atlantic Avenue- Barclay's Center. Therefore an analysis of stationary sources, from HVAC systems on surrounding land uses and from industrial, large/major sources on the Proposed Project, is warranted. See **Section 9, Air Quality**.

Noise

As discussed in the 2014 *CEQR Technical Manual*, a noise analysis is appropriate if a proposed action would generate mobile or stationary sources of noise or would introduce noise-sensitive receptors in an area with high ambient noise levels. Mobile sources include vehicular traffic; stationary sources include rooftop equipment such as emergency generators, cooling towers, and other mechanical equipment.

Because the Proposed Project would not exceed the 50 peak hour vehicle trips threshold, there is no potential for significant adverse noise impacts due to mobile sources. However, under the With-Action condition, the Proposed Project would introduce noise-sensitive

receptors in an area with high ambient noise levels. Therefore, a noise assessment is warranted (see **Section 10, Noise**).

Neighborhood Character

As discussed in the *CEQR Technical Manual*, an analysis of neighborhood character is warranted when a project has the potential to result in significant adverse impacts in any of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; or noise. In addition, an assessment may be warranted when there is a combination of moderate effects in these technical areas that, when considered together, may affect the defining elements of neighborhood character. Because the Proposed Actions have the potential to result in moderate effects in some of these technical areas, a neighborhood character analysis is warranted. See **Section 11, Neighborhood Character**.

Construction

Construction impacts, although temporary, can include disruptive and noticeable effects resulting from an action. Determination of their significance and need for mitigation is generally based on the duration and magnitude of the impacts. Construction impacts are considered when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise levels, and area air quality conditions. In addition, because soils may be disturbed during construction, any action proposed for a site that has been found to have the potential to contain hazardous materials should also consider the potential construction impacts that could result from contamination.

A construction assessment is typically warranted for construction activities (a) lasting longer than two years; (b) located along an arterial highway or major thoroughfare; (c) involving the closing, narrowing, or otherwise impeding of traffic, transit, or pedestrian elements; (d) involving multiple buildings; (e) involving the operation of several pieces of diesel equipment in a single location; (f) resulting in the closure or disruption of a community facility service; (g) located within 400 feet of a historic or cultural resource; (h) disturbing a site containing or adjacent to a natural resources; and/or (i) occurring on multiple sites in the same geographic area.

The extent of construction that could result from the Proposed Actions is estimated to take 27 months and is located in a historic district. Therefore, an assessment of construction impacts is warranted. See **Section 12, Construction**.

1

Introduction

As discussed in **Part II: Supplemental Analysis** of this Environmental Assessment Statement (EAS), several technical areas were identified for further analysis:

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

Analysis of these areas follow in **Section 2** through **Section 12**.

2

Land Use, Zoning, and Public Policy

This section considers the potential for the Proposed Project to result in significant adverse impacts to land use, zoning, and public policy. Under the guidelines of the *2020 City Environmental Quality Review (CEQR) Technical Manual*, this analysis evaluates the uses in the area that may be affected by the Proposed Project and determines whether the Proposed Project is compatible with land use, zoning, and public policy conditions, or may otherwise affect them. The analysis also considers the Proposed Project's compatibility with zoning regulations and other public policies applicable to the area.

Introduction

This analysis of land use, zoning and public policy follows the guidelines set forth in the *2020 CEQR Technical Manual*. It characterizes the existing conditions in the area surrounding the Project Site and addresses potential impacts to land use, zoning, and public policy that would be associated with the Proposed Actions.

Methodology

This analysis of land use, zoning, and public policy follows the guidelines set forth in the *CEQR Technical Manual* for a preliminary assessment (Section 320). According to the *CEQR Technical Manual*, a preliminary land use and zoning assessment:

- Describes existing and future land uses and zoning information, and describes any changes in zoning that could cause changes in land use;
- Characterizes the land use development trends in the area surrounding the Project Site that might be affected by the Proposed Actions; and
- Determines whether the Proposed Project is compatible with those trends or may alter them.

The following assessment method was used to determine the potential for the Proposed Project to result in significant adverse impacts on land use, zoning, and public policy:

1. Establish a "Study Area," a geographic area surrounding the Project Area to determine how the Proposed Project may affect the immediate surrounding area. For this assessment, a study area of 400 feet surrounding the Project Area was used.
2. Identify data sources, including any public policies (formal plans, published reports) to be used to describe the existing and No-Action conditions related to land use, zoning, and/or public policy.
3. Assess the Proposed Project's potential effects on land use, zoning and public policy to determine whether the Proposed Project is consistent with or conflicts with area land uses, zoning, or the identified policies.
    - If a Proposed Project could conflict with the identified policies, a detailed assessment would be conducted; or
    - If the Proposed Project is found to not conflict with the identified policies, no further assessment is needed.

The Study Area for this analysis is the area within 400 feet of the Project Area which, for the Proposed Project, is generally bounded by Ft. Greene Place to the east, Atlantic Avenue to the south, just west of Flatbush Avenue to the west, and Lafayette Avenue to the north (see **EAS Figure 5**). This is the area in which the Proposed Project would be most likely to have effects in terms of land use, zoning, and public policy.

Assessment

Existing Conditions

Land Use

Project Site and Project Area

The Project Site, located at 130 St. Felix, is an irregularly-shaped through-lot with frontage along both St. Felix Street and Ashland Place in Downtown Brooklyn (Block 2111, Lot 40). It is located in the center of the project block, which is bounded by St. Felix Street to the east, Hanson Place to the south, Ashland Place to the west, and Lafayette Avenue to the north. The Project Site is currently vacant and consists of a total area of approximately 12,548 square feet, with approximately 84 feet of frontage along St. Felix Street and 47 feet along Ashland Place. It is also part of a single zoning lot together with One Hanson Place/Williamsburgh Savings Bank (Block 2111, Lot 7501). The "Development Site" includes the existing zoning lot as well as Lot 37, which is improved with the Brooklyn Music School

(BMS). As described in **Part I: Project Description**, Lot 37 would be merged with the existing zoning lot to facilitate the Proposed Project.

The Project Area is roughly coterminous with the boundaries of the proposed zoning map amendment and, in addition to the Project Site, consists of Lots 37, 45, and 7501 on Block 2111. Together, the Project Area lots compose the southern half of the project block. Lot 37, located just north of the Project Site fronting St. Felix Street, contains the four-story Brooklyn Music School (BMS). BMS is a community school for the performing arts, founded in 1909, providing music and dance instruction. Currently, BMS is operating at full capacity in its existing facilities. One Hanson Place (Lot 7501), located at the corner of Hanson Place and Ashland Place, is a mixed residential and commercial building with residential units on the upper floors and commercial office space on the lower floors. One Hanson Place was constructed in 1929 originally to house the Williamsburg Savings Bank. Additionally, the Project Area also contains the Hanson Place Central United Methodist Church, constructed in 1929, located on Lot 45 at the southeast corner of the block. Lot 45 has an area of 16,447 sf and currently contains the largely vacant, three-story religious building as well as three commercial storefronts fronting Hanson Place. The church is on the State and National Register of Historic Places (see **Section 5, Historic and Cultural Resources**).

Study Area

The Project Site and Project Area are located within the Downtown Brooklyn neighborhood. As shown in **EAS Figure 5** and **Table 2-1**, the study area is predominately characterized by residential, commercial and institutional uses. Outside the Project Area but on the same block are two lots containing uses affiliated with the Brooklyn Academy of Music (BAM). BAM is a multi-arts center home to programs such as theater, dance, music, opera and other arts-related programs. Lot 15 on the northern portion of the project block contains the five-story BAM Howard Gillman Opera House, built in 1908. Lot 11, located directly north of the Project Site fronting Ashland Place, has an area of 7,367 sf and currently contains the seven-story BAM Fisher facility, containing classrooms and theater, rehearsal, and performance space, built in 1927.

The block immediately to the east of the project block consists predominately of townhome style, single- and multi-family residences as well as the Hanson Place Seventh-Day Adventist Elementary School on the northwest corner of the block and a vacant lot on the southeast corner. Further east, along Fort Greene Place, single- and multi-family three-story townhomes comprise the block with mixed-use and commercial uses such as office buildings anchoring the block on the east and west sides.

The large block to the south of the project block contains the Atlantic Terminal Mall, a multi-story commercial use, Atlantic Terminal which contains a major transportation hub with many subway lines and the Long Island Rail Road station, and 2 Hanson Place, a 14-story office building. Just east of the Atlantic Terminal Mall is Atlantic Center, another large, multi-story commercial use with destination retail.

The western portion of the study area predominately contains mixed-use buildings with commercial retail uses on the lower levels and residential above. These buildings are located along well-trafficked roadways including Flatbush Avenue and Atlantic Avenue. Specifically, directly adjacent to the Project Site to the west, 300 Ashland Place is a 32-story mixed-use, residential and commercial apartment building, built in 2016. This mixed-use building

consists of commercial retail space on the lower levels, including an Apple Store and 365 by Whole Foods, with 379 residential units above. To the west of 300 Ashland is a large site currently under construction that will contain a large mixed-use development, as discussed further under the **No-Action Condition** section below. Southwest of the Project Area on the corner of Fourth Avenue and Flatbush Avenue there is an irregular corner lot that has a four-story mixed residential and commercial building with destination retail including two banks on the ground floor.

Table 2-1 Study Area Generalized Land Uses

Land Use	Number of Tax Lots[2]	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)
One & Two Family Residential	35	40%	59,176	8%
Multifamily Walkup Residential	21	24%	44,479	6%
Mixed Commercial/Residential	12	14%	153,306	20%
Commercial and Office	6	7%	410,997	53%
Transportation/Utility	1	1%	0	0%
Public Facilities and Institutions	6	7%	80,182	10%
Open Space	2	2%	1,959	0%
Parking Facilities	1	1%	1,700	0%
Vacant Land	4	5%	18,519	2%
Total	**88**	**100%[1]**	**770,318**	**100%[1]**

Source: Map PLUTO 19v1

[1] Numbers may not add up to 100% due to rounding

[2] All Lots intersecting the 400-foot radius study area were included in analysis

Zoning

Project Site and Project Area

The Project Site and the Project Area are both located in the C6-1 commercial zoning district within the Special Downtown Brooklyn District (DB District) (see **EAS Figure 3**). The C6-1 zoning district in this general area is bounded by Fulton Street to the north, St. Felix Street to the east, Hanson Place to the south, and Ashland Place to the west. The C6-1 district allows for a maximum floor area ratio (FAR) of 6.0 for commercial uses and 3.44 for residential uses (4.0 FAR for residential uses developed pursuant to Quality Housing regulations) based on the residential equivalent R7-2 district. C6 districts allow a wide range of high-bulk commercial uses, including corporate headquarters, department stores, and entertainment facilities. C6 districts are often mapped in areas close to mass transit and in areas characterized as central business districts.

The Special Downtown Brooklyn District was established in 2001 to promote and support the continued growth of Downtown Brooklyn as a unique mixed-use area through establishing special height and setback regulations. Specifically, this special district was mapped to provide height limits and other bulk and use controls to allow flexibility in the design of modern commercial buildings and provide opportunities for new housing development in Downtown Brooklyn. DB District regulations were substantially modified in 2004 (C 040171 ZMK) to incorporate urban design guidelines and establish additional special height and setback regulations. This special district reflects the area's location as a hub for office buildings, courthouses and government buildings, academic and cultural institutions and retail corridors, surrounded by historic residential neighborhoods. Under the DB District, there are flexible height and setback regulations for a range of moderate- to high-density residential and commercial zoning districts to facilitate development on small irregularly-shaped lots within Downtown Brooklyn.

In 1962, the Project Site and One Hanson Place were merged into a single tax lot by the New York City Department of Finance. Although the tax lot was subsequently subdivided, the two tax lots continue to be considered a single zoning lot. One Hanson Place is currently overbuilt beyond the maximum permitted floor area, with a zoning floor area of 324,757 sf and a lot area of 19,363 sf, leaving no developable floor area in the existing zoning lot shared with the Project Site.

Study Area

As shown in **EAS Figure 3**, in addition to the C6-1 zoning district, the study area is also mapped with C6-2, C6-9, R6B, and R7A/C2-4 districts generally to the west, a C6-4 district to the south, and an R6B residential zoning district to the east. There are also very small portions of R8A/C2-4 and R7A/C2-4 that intersect the southwest corner and northeast corner of the study area respectively. The DB District generally extends to the south and west of the project block. The locations of these zoning districts within the study area are illustrated on **EAS Figure 3.**

A C6-4 district is located to the south of the Project Area and at the northwest corner of the study area and covers the major commercial-only uses in the study area. C6-4 zones permit a base FAR of 10.0 for residential, commercial, and community facility uses. The residential FAR may be increased to 12.0 pursuant to the Inclusionary Housing program.

A C6-9 zoning district is located to the west of the Project Area across Flatbush and encompasses an irregularly shaped parcel bounded by State Street, Third Avenue and Flatbush Avenue that is currently under construction. This block was rezoned from C6-2 to the current C6-9 district in 2019. While C6-9 (DB) zones generally allow for an FAR of 18.0, specific regulations for this particular C6-9 district allow for commercial development to a maximum commercial FAR of 15.0 and up to 12.0 FAR for residential use. Additionally, up to 46,050 sf of floor space used for a public school is exempt from the definition of floor area for purposes of calculating the FAR. Another rezoning to C6-9 was implemented in 2019 just outside the study area on the corner of Flatbush Avenue and Fulton Street at 570 Fulton Street to facilitate the development of a mixed-use, 550-foot-tall residential and commercial building that is currently stalled in construction.

The block directly adjacent to the Project Area across Ashland Place (Block 2110, Lot 3) was rezoned in 2013 from C6-1 to C6-2 as part of the BAM South rezoning (C 130116 ZMK). This

rezoning facilitated the development of the 32-story, 300 Ashland Place mixed residential and commercial building on the block bounded by Lafayette Avenue, Flatbush Avenue, and Ashland Place. Like the C6-1 district, the C6-2 district permits a commercial FAR of 6.0 and a community facility FAR of 6.5, but it allows a residential FAR of 6.02 (and 7.2 for residential uses developed pursuant to Quality Housing regulations on portions of zoning lots within 100 feet of a wide street outside of the Manhattan Core) and heights are regulated by the sky exposure plane. The 300 Ashland Place project also created and made use of a special permit to increase the community facility FAR onsite to 7.0 and modified certain bulk regulations to facilitate the building.

Areas directly east of the Project Site are zoned R6B. This contextual district consists of primarily four-story attached buildings developed during the 19th century. The permitted residential FAR of 2.0 and mandatory Quality Housing regulations accommodate buildings ranging from four to five stories.

An R7A/C2-4 district is mapped on the block to the southwest of the Project Site. This zoning district is a contextual district subject to Quality Housing bulk regulations. R7A allows a maximum FAR of 4.0 for residential uses and a maximum building height of 80 feet. The portion of the R7A zoning district located to the southwest of the Project Site is also located within the DB District and is mapped with a C2-4 commercial overlay to allow for local-serving commercial uses up to 2.0 FAR. This portion of the study area is also located within the Atlantic Avenue Subdistrict of the DB District. The Atlantic Avenue Subdistrict was established to preserve the scale and character of Atlantic Avenue through its own bulk, use, and urban design regulations.

An R8A/C2-4 district is mapped in the southwest corner of the study area. R8A zoning districts contain residential apartment buildings with high lot coverage and apartment buildings of roughly 12 to 14 stories. This zoning district is a contextual district subject to Quality Housing bulk regulations. R8A allows for an FAR of 6.02 and a maximum height of 125 feet for buildings that include a qualifying ground floor.

Public Policy

Housing New York: A Five-Borough, Ten-Year Plan

On May 5, 2014, the de Blasio administration released Housing New York: A Five-Borough, Ten-Year Housing Plan (“Housing New York”), a plan to build or preserve 200,000 affordable residential units. To achieve this goal, the plan aims to double the New York City Department of Housing Preservation and Development (HPD)’s capital budget, target vacant and underused land for new development, protect tenants in rent-regulated apartments, streamline rules and processes to unlock new development opportunities, contain costs, and accelerate affordable construction. The plan details the key policies and programs for implementation, including developing affordable housing on underused public and private sites. In 2017, Housing New York 2.0 was released as an update to the original 10-year plan, which increased the plan’s goal from 200,000 to 300,000 affordable homes through 2026. The plan promotes homeownership as a critical tool for families to move up the economic ladder and highlights that moderate-income homeownership is important to stabilize neighborhoods and help families build assets and equity,

New York City Landmarks Law

The New York City Landmarks Law of 1965 established the New York City LPC and authorized the Commission to designate individual buildings, historic districts, interior landmarks and scenic landmarks of historical, cultural and architectural significance. The study area is within two Historic Districts and contains a number of historic resources, discussed further in **Section 5, Historic and Cultural Resources**.

The Project Area is located in the LPC-designated Brooklyn Academy of Music Historic District (LP-01003) and the National Register-listed Fort Greene Historic District Boundary Expansion (90NR01301). Within the study area, these two historic districts extend over the entire project block and the block to the east as well as a small portion of the eastern side of Fort Greene Place. The buildings within these historic districts are listed as City, State and National resources. Furthermore, the One Hanson Place building was designated as an individual landmark by LPC for both the building exterior and ground floor interior (LP-0971 and LP-1909). Additionally, the Brooklyn Academy of Music (BAM) building is listed as an individual resource on the State and National Register of Historic Places. The Atlantic Avenue Subway Station (IRT/BMT) and Atlantic Avenue Control House south of the Project Area are also individually listed resources on the State and National Register of Historic Resources.

No-Action Condition

Absent the Proposed Project (the future No-Action condition), the Project Site would continue to operate under the existing conditions, as a vacant lot, and no affordable housing or expansion space for the Brooklyn Music School would be created as a result.

Land Use

No new land uses or changes in land use would occur within the Project Area under the future No-Action condition, as conditions would remain the same as existing. As One Hanson Place is currently overbuilt beyond the maximum allowable floor area, there is no developable floor area available in the existing zoning lot shared with the Project Site, and therefore no further development could occur in the No-Action condition on the Project Site or the Project Area. Within the Project Area but outside of the Development Site, the Central United Methodist Church is also a contributing resource to the BAM Historic District and therefore it is highly unlikely that LPC would approve any substantial exterior modification, significant visible enlargement, or demolition of this resource.

Within the study area, there are two new developments, 80 Flatbush and 100 Flatbush that would be completed by the 2024 analysis year (see **Table 2-2**). Site preparation including demolition has been completed at 80 Flatbush Avenue to accommodate an 840-foot-tall, mixed-use building. The mixed-use building would be located approximately 533 feet west of the Project. On the same block, site preparation including demolition has been completed at 100 Flatbush Avenue to accommodate a 510-foot-tall mixed-use building. Under City Council Modifications announced in a Technical Memorandum in September 2018, the two buildings would total 1,125,000 gsf and would have a combined FAR of 15.0 (excluding a floor area exemption for up to 46,050 square feet of floor area used for a public school), providing a total of approximately 850 residences, including 180 affordable units. 150,000 gsf would be dedicated to a high school and a lower school with 700 seats, 45,000 gsf for retail, and 165,000 gsf for office space.

These two proposed developments are consistent with the land uses already present in the study area and recent new developments, and continue the trend toward tall, high-density development within the study area.

Table 2-2 No-Action Developments in the Study Area

Location	Description	Building Program	Build Year
80 Flatbush Avenue	Two mixed-use community facility, commercial, and residential buildings	› 700 seats between two schools › 850 residential units › 165,000 SF of office space › 45,000 SF retail space	2023
100 Flatbush Avenue			

Source: 80 Flatbush Technical Memorandum 01 (CEQR NO. 17ECF001K)

Zoning

There are no anticipated zoning changes within the study area under the No-Action condition. The Project Site and study area would continue to be governed by the various zoning regulations in the area, as described in the existing conditions section above.

Public Policy

In the future No-Action condition, there are no known public policy changes that are anticipated to affect the Project Site or study area.

With-Action Condition

The Proposed Actions, detailed **Part I: Project Description**, would facilitate the development of a 166,402-gsf (146,794 zoning square feet (zsf)) mixed-use building with 20,120 gsf (16,458 zsf) of community facility space, 130,032 gsf (127,945 zsf) of residential space, and 16,250 gsf of service and mechanical space, including development rights from the BMS site. The Proposed Project would be 23 stories and 270 feet in height. Due to the presence of the overbuilt One Hanson building, the Development Site would have a total FAR of 12.15; however, if One Hanson were not part of the zoning lot, the remainder of the Development Site would have an FAR of 7.77 with the Proposed Project. The community facility space would be located on the cellar level, first, and second floors and would accommodate expanded instructional space for the adjacent BMS. On the upper floors, the building would contain 130 residential units, of which 20 percent of residences would be affordable under the Mandatory Inclusionary Housing (MIH) Workforce Option program. The Proposed Project would be facilitated by the proposed zoning lot merger of Lot 37 and the Project Site and One Hanson Place zoning lot (together, the "Development Site"), allowing the Applicant to acquire a portion of the excess development rights from BMS's existing facility, facilitated by the zoning actions, and generating needed proceeds for the school towards core and shell costs and to fit out its new facility in coordination with the Applicant.

Within the Development Site, it is not expected that the Brooklyn Music School or One Hanson Place would be redeveloped or enlarged. The Proposed Project would utilize a

substantial amount of floor area that would be available as a result of the Proposed Actions. Furthermore, as landmarked and contributing buildings, it is unlikely that LPC would approve any substantial alteration or enlargement of One Hanson or BMS. Under the Proposed Actions, the Brooklyn Music School would have expanded space in the Proposed Project building. Within the Project Area but outside of the Development Site, the Central United Methodist Church is also contributing resource to the Brooklyn Academy of Music Historic District and therefore it is highly unlikely that LPC would approve any substantial exterior modification, significant visible enlargement, or demolition of this resource.

Land Use

The Proposed Actions would facilitate a change in land use under the future With-Action condition, as compared to the future No-Action condition, with the introduction of the mixed-use residential and community facility building on the currently vacant Project Site. As discussed above, the study area is characterized predominately by residential, institutional and commercial uses, with mixed-use commercial/residential uses prevalent along Ashland Place and Flatbush Avenue to the west. The Proposed Project would be consistent with the mixed-use buildings in the surrounding area, including One Hanson Place and 300 Ashland Place, and fits well within a study area characterized by a mixture of different heights and bulks. The Proposed Project would be consistent with the trend toward higher-density mixed-use development exhibited by the 80 Flatbush Avenue and 100 Flatbush Avenue developments. Although the building would be taller than those in the district to the east, which are low-rise rowhouses, it would be shorter than the tallest building on the project block and the large-scale buildings to the west including 300 Ashland and the future buildings on the 80 and 100 Flatbush sites. The Proposed Project would reflect a scale and bulk appropriate for an area that transitions from low to high density. As such, the Proposed Project would be consistent with the higher-density, mixed-use residential, commercial, and institutional (community facility) character of the project block and its immediate surroundings, and would not have a significant adverse impact on land use.

Zoning

As detailed in **Part I: Project Description**, the Proposed Actions would include the following zoning changes:

Proposed Zoning Map Amendment

The Applicant is seeking a zoning map amendment to Zoning Map 16c to rezone the Project Area from C6-1 to C6-6 on the southern and western portion of the project block to a depth of 100 feet from Hanson Place and to the block centerline, and from C6-1 to C6-4 remainder of the of the Project Area to a maximum depth of 330 feet from Hanson Place in the DB District on St. Felix Street and a maximum depth of 250 feet from Hanson Place on Ashland Place, as illustrated on **EAS Figure 4**. The Project Site would be zoned C6-4 (DB). The Central United Methodist Church building and BMS would be contained within the proposed C6-4 (DB) district. One Hanson Place would be split between the proposed C6-4 (DB) and C6-6 (DB) districts.

The proposed zoning map amendment would bring One Hanson Place, which is currently overbuilt, into closer compliance with zoning. The Project Site, which is vacant and has no existing development rights, would be able to be developed as facilitated by the Proposed

Actions and zoning lot merger. The Project Site is near a major transportation hub and within a central business district, and is therefore an appropriate location for residential and community facility development.

Proposed Zoning Text Amendments

Establish a Mandatory Inclusionary Housing Area

A zoning text amendment to Appendix F of the Zoning Resolution (ZR), "Mandatory Inclusionary Housing Areas," would establish a MIH Area that is coterminous with the Project Area. It is anticipated that the zoning text amendment would map MIH Option 1 and the Workforce Option.[1]

ZR Section 101-82

A zoning text amendment to ZR Section 101-82 (Modification of Bulk Regulations for Certain Buildings on Irregular Sites) is proposed to make this special permit, which is currently applicable in C6-9 districts in the DB District, applicable in C6-4 and C6-6 districts in the DB District as well.

ZR Section 101-21(d)

A zoning text amendment to ZR Section 101-21(d) (Special Floor Area and Lot Coverage Regulations) is proposed to permit an FAR of 12 for residential uses within MIH areas in C6-6 districts in the DB District.

Special Permits

Special Permit pursuant to ZR Section 101-82

The Applicant is requesting a special permit pursuant to ZR 101-82 to modify required tower floor plate coverage above 150 feet, inner court requirements, and rear yard equivalent regulations to address irregular site conditions on the Development Site.

Special Permit pursuant to ZR 74-533

The Applicant is requesting a waiver of all the required off-street parking spaces pursuant to ZR 74-533, which permits the reduction of parking spaces to facilitate affordable housing. As required, the Proposed Project is located in a Transit Zone and the waiver would facilitate the development of the building with 20 percent of residences set aside as income-restricted housing units.

Discussion

The proposed zoning map amendments to establish C6-4 and C6-6 districts, which are typically mapped within major business districts including Downtown Brooklyn, appropriately

[1] It is anticipated that 30 percent of units within the proposed project would be affordable units within the MIH program, complying with the applicant's intended MIH Workforce Option to reserve 30 percent of the floor area for permanent affordable housing.

reflect the location of the Project Area and are compatible with the surrounding zoning districts.

The proposed zoning text amendments are required to establish the permitted residential floor area ratio in MIH areas in C6-6 (DB) districts; make an existing special permit for bulk modifications applicable in C6-4 and C6-6 districts in the DB District; and establish an MIH area. As discussed below, these text amendments are necessary to facilitate development of mixed-income housing and expansion space for BMS on the currently vacant site and would result in appropriate size and scale of development that is cohesive with the existing zoning landscape in the study area.

The special permit to modify bulk regulations is necessary for the development of the Proposed Project due to the difficulties posed by the irregularly shaped Development Site and Project Site and the presence of existing historic buildings, particularly One Hanson Place, on the Development Site. As a result of the configuration of One Hanson, and in the absence of this special permit, reasonable development would not be viable. The modifications being requested are generally minor in nature and are limited to a small inner court condition between One Hanson and the Proposed Project, an adjustment in rear yard equivalent areas, and a modification of lot coverage controls above a height of 150 feet to compensate for the high lot coverage of the existing One Hanson Building. The special permit will allow for a building with regularly sized floorplates typical of a mid-rise residential building and for a building that is appropriately-scaled for its location.

Lastly, the parking special permit would waive a requirement for parking spaces, which is necessary to accommodate at-grade and below-grade Brooklyn Music School space and facilitate the construction of affordable housing. As discussed in **Section 8, Transportation**, the Proposed Actions would not result in a parking impact. This requested waiver is also appropriate for the highly transit-accessible location of the Project Site. Therefore, the Proposed Actions would not result in a significant adverse impact to zoning.

Public Policy

Housing New York: A Five-Borough, Ten-Year Plan

The Proposed Actions would be consistent with the Housing New York plan and would result in approximately 26 new permanently affordable home ownership units in the Downtown Brooklyn neighborhood. Furthermore, the Proposed Actions would facilitate the development of affordable residences for middle-income New Yorkers, a stated goal of the Housing New York 2.0 Plan as discussed above. Therefore, the Proposed Actions would be supportive of this public policy, and no significant adverse impact with regards to Housing New York would occur.

New York City Landmarks Law

The Proposed Actions would result in new development immediately adjacent to the LPC-designated landmark building at One Hanson Place as well as within the LPC-designated Brooklyn Academy of Music Historic District. However, as analyzed in detail in **Section 5, Historic and Cultural Resources,** no impacts to surrounding historic resources are anticipated as a result of the Proposed Project. On August 4, 2020, the LPC adopted a resolution approving the issuance of a Certificate of Appropriateness for the Proposed

Project at the Development Site (see **Appendix A** for the conditional approval letter from LPC dated August 10, 2020). A Certificate of Appropriateness (CofA) will be issued upon review and approval of the final Department of Buildings filing drawings for the approved work. Therefore, the Proposed Actions would be supportive of this public policy and no adverse impacts with regards to the New York City Landmarks Law would occur.

Conclusion

As described above, the Proposed Actions would result in the development of a mixed-use community facility and residential building on the Project Site. Though the Proposed Actions would facilitate an increase in density compared with the No-Action condition, the proposed density and uses on the Project Site (i.e., residential and community facility) would be consistent with the mixed-use character and building scale exhibited in the study area. The Proposed Actions would facilitate the development of a mid-rise building that would provide an appropriate transition from the lower density areas to the east and the high density areas to the west. This building form is in character with the trend toward higher-density mixed-use development, and in line with applicable public policies, including the NYC Landmarks Law. In addition, the Proposed Actions would provide additional affordable housing units to the neighborhood and would expand facility space for the existing institutional use adjacent to the Project Site, which is currently operating at capacity. Therefore, the Proposed Project would not result in any significant adverse impacts to land use, zoning, or public policy and further analysis is not needed.

3

Open Space

This section assesses the potential impacts of the Proposed Actions on open space. The *2020 City Environmental Quality Review (CEQR) Technical Manual* defines open space as publicly or privately-owned land that is publicly accessible and available for leisure, play, or sport, or is set aside for the protection and/or enhancement of the natural environment.

Introduction

This section assesses the potential effects on open space that could result from the Proposed Actions. Open space is defined as publicly- or privately-owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment. Open space that is used for sports, exercise, or active play is classified as active, while open space that is used for relaxation, such as sitting or strolling, is classified as passive. According to the *2020 CEQR Technical Manual*, an analysis of open space is conducted to determine whether a proposed action would have a direct impact resulting from the elimination or alteration of open space and/or an indirect impact resulting from overtaxing available open space.

As described in **Part I: Project Description**, the Applicant is seeking several discretionary approvals from the City Planning Commission (CPC), including a zoning map amendment, special permits, and zoning text amendments (the "Proposed Actions"), to facilitate an approximately 166,402-gross-square-foot (gsf) mixed-use development (the "Proposed Project") on Lot 40 on Brooklyn Block 2111 in Downtown Brooklyn (the "Project Site"). The

"Project Area" is roughly coterminous with the boundaries of the proposed map amendment, which in addition to the Project Site, includes Lots 37, 45, and 7501 on the project block.

Compared to the No-Action condition, the Proposed Project would result in a net increase in the number of residents greater than CEQR thresholds. Therefore, in accordance with CEQR guidelines, this open space analysis of the Proposed Actions evaluates the change in residential population relative to the total amount of open space in the study area. The anticipated number of net new workers would not trigger a non-residential analysis.

Methodology

Per guidance in the *CEQR Technical Manual*, an open space analysis is generally conducted if a proposed project would generate more than 200 new residents or 500 new employees. However, the need for an analysis varies in certain areas of the City that have been identified as either well-served or under-served by open space.[1] If a project is located in an underserved area, the threshold for an open space analysis is 50 new residents or 125 new employees. If a project is located in a well-served area, the threshold for an open space analysis is 350 new residents or 750 new employees. Maps in the Open Space Appendix of the *CEQR Technical Manual* indicate that the Project Site is neither well-served nor under-served. Thus, the threshold used in this analysis was for an area that is neither well-served nor under-served (i.e., a threshold of 200 residents or 500 employees).

As shown in **Table 3-1**, the Proposed Project would introduce a new residential population above the 200 resident threshold, and thus a residential open space analysis is necessary. The anticipated number of workers introduced by the Proposed Project is not expected to exceed 500. Therefore, a non-residential open space analysis is not required.

Table 3-1 Future No-Action and With-Action Population/Employment Summaries

Use	Existing Conditions	Future No-Action Condition	Future With-Action Condition	Increment
Residential[1]	0	0	130,032 gsf	130,032 gsf
Community Facility	0	0	20,120 gsf	20,120 gsf
Population/Employment				
Residents[2]	0	0	295	295
Workers[3]	0	0	22	22

Notes:

[1] Marketable residential space only

[2] Based on the average household size within the Fort Greene NTA (2014-2018 5-year ACS)

[3] 1 employee per 25 dwelling units, 17 faculty (average daily on-site) expected in Brooklyn Music School (BMS) expansion, as provided by BMS.

The open space analysis has been conducted in accordance with the methodology outlined in the *CEQR Technical Manual*. The purpose of the analysis is to provide an evaluation of the study area's existing open space conditions relative to the open space needs of the study

[1] The *CEQR Technical Manual* defines underserved areas as areas of high population density in the City that are generally the greatest distance from parkland, where the amount of open space per 1,000 residents is currently less than 2.5 acres. Well-served areas are defined as having an open space ratio above 2.5 accounting for existing parks that contain developed recreational resources, or are located within a quarter-mile (i.e., approximately a 10-minute walk) from developed and publicly accessible portions of regional parks.

area's open space users, and to predict and compare open space conditions relative to open space needs in the future No-Action and With-Action conditions. Because the Proposed Actions would introduce additional residents to the area, which would place demands on the study area's active and passive open space resources, the analysis examines the amount of active and passive open space available in the No-Action and With-Action conditions in order to quantify the potential project-related impact.

Open Space Study Area

According to the *CEQR Technical Manual*, the first step in an open space analysis is to define and map a study area to allow analysis of both the open spaces and the population using those open spaces within a specified distance of a project. The size of the study area is based on the distance a person may be reasonably assumed to walk to reach a local open space. Workers typically use passive open spaces within a quarter mile of their workplace, while residents use both passive and active open spaces and are more likely to travel farther—up to a half-mile from their places of residence—to reach open spaces. Because the Proposed Project would not generate a net increase in workers above the 500-employee threshold compared to the future No-Action condition, only a residential study area was defined. The residential study area comprises the area within a half-mile distance from the Project Area.

Pursuant to *CEQR Technical Manual* guidance, the residential study area comprises all census tracts that have at least 50 percent of their area located within a half-mile radius of the Project Area. Nine census tracts in Kings County have at least 50 percent of their area located within a half-mile of the Project Area: Tracts 33, 35, 39, 41, 127, 129.01, 129.02, 179, and 181. See **Figure 3-1** for the open space study area and census tracts.

Direct Effects Analysis

Consistent with the *CEQR Technical Manual*, a direct effects analysis should be performed if a proposed project would directly affect open space conditions by causing the loss of public open space; changing the use of an open space so that it no longer serves the same user population; limiting public access to an open space; or increasing noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space. A project can also directly affect an open space by enhancing its design or increasing its accessibility to the public. The Proposed Project would not result in the physical loss or direct displacement of publicly accessible open space or increase access to open space, and thus no direct effects analysis is warranted.

Indirect Effects Analysis

The *CEQR Technical Manual* states that indirect effects may occur when the population generated by a project would overtax the capacity of open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished. The Proposed Project would result in a net increase of 295 residents and 22 workers compared to the future No-Action condition. Therefore, only a residential analysis of indirect effects is required, with a study area encompassing an approximately half-mile distance around the Project Area. The purpose of the indirect effects analysis is to quantitatively assess the adequacy of open space in the study area for existing and potential future users based on an

inventory of open space resources and the effect of the residential population increase anticipated with the Proposed Project as well as any population increase in the No-Action Condition due to other planned or proposed developments.

Specifically, an indirect effects analysis includes:

- Identification of the open space user groups: residents. To determine the number of residents to be included in the analysis, population data from the 2014-2018 5-year American Community Survey were compiled for census tracts within the study area.
- An inventory of all publicly accessible open spaces in the study area, using secondary sources supplemented with field surveys.
- A quantitative assessment of the open space ratio in the study area—calculated as the ratio of open space acreage to user population—compared to benchmarks established in the *CEQR Technical Manual*. These include the optimal ratio for resident populations, which is 2.0 acres of active open space per 1,000 residents and 0.5 acres of passive open space per 1,000 residents.

According to the *CEQR Technical Manual*, projects that may result in significant quantitative impacts on open space resources, or projects that would exacerbate an existing underserved area in relation to open space, are typically further assessed in a qualitative assessment to determine the overall significance of the impact. Because the open space study area is not underserved, and the quantitative assessment concluded that there would be no significant adverse impacts on open space resources, a qualitative assessment was not warranted.

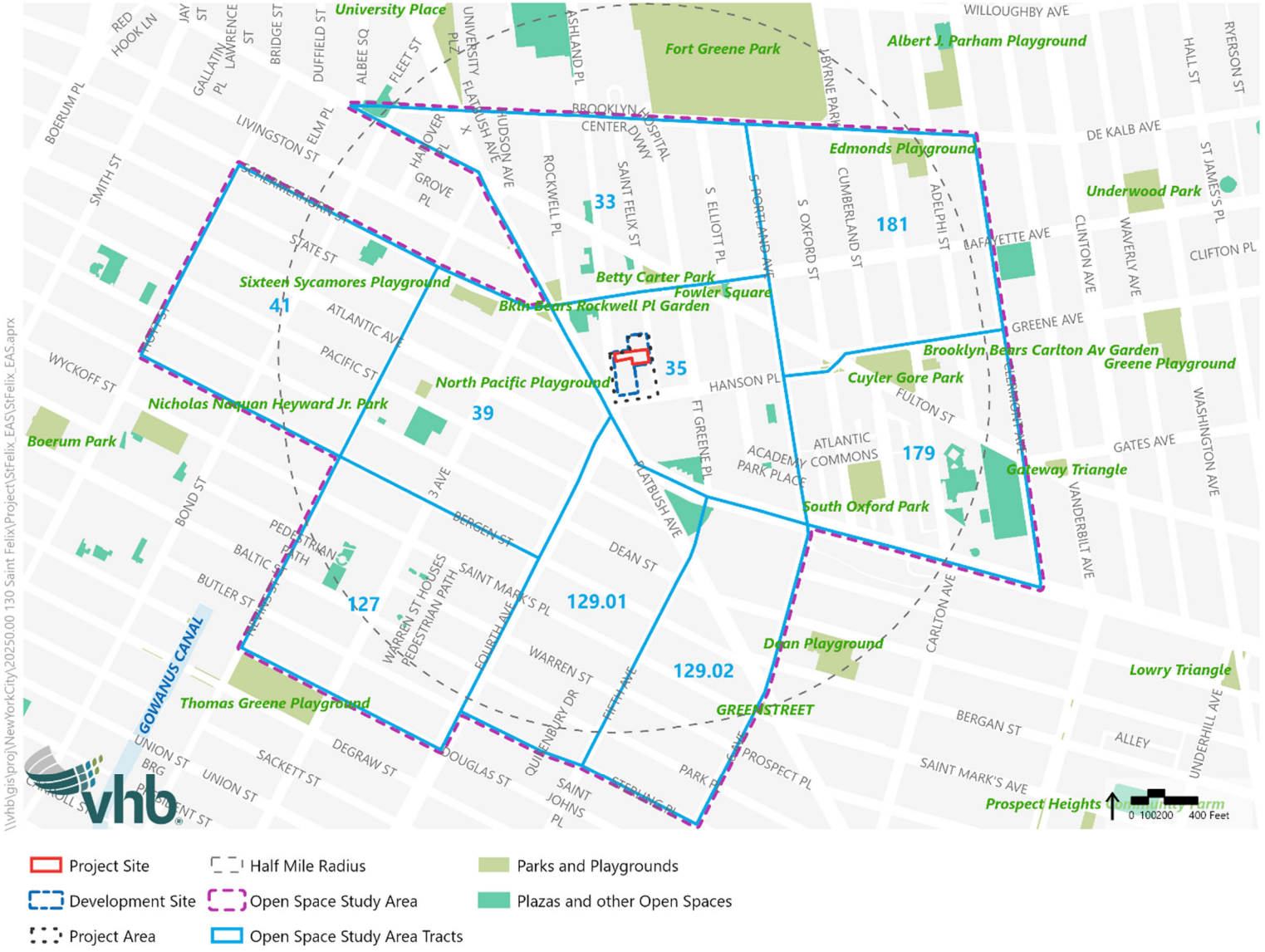
Impact Assessment

The adequacy of open space in the study area is based on ratios of usable open space acreage to the study area populations (the "open space ratios"). The *CEQR Technical Manual* outlines the following guidelines for residential assessments:

- The City attempts to achieve a ratio of 2.50 acres per 1,000 residents for large-scale proposals. Ideally, this would consist of 0.50 acres of passive open space and 2.00 acres of active open space per 1,000 residents. However, these goals are often not feasible for many areas of the City and they do not constitute an impact threshold. Rather, it is a benchmark that represents how well an area is served by its open space.
- A ratio that meets the Citywide Community District median ratio of 1.50 acres of open space per 1,000 residents is also recommended.

The determination of significant adverse impacts is based on how a project would change the open space ratios in a study area, as well as qualitative factors not reflected in the quantitative assessment. According to the *CEQR Technical Manual*, if a project would reduce an open space ratio and consequently result in overburdening existing facilities, or if it would substantially exacerbate an existing deficiency in open space, it may result in a significant impact on open space resources. In general, if (1) a study area's open space ratios fall below City guidelines, and (2) a project would result in a decrease in the open space ratio of more than five percent, it could be considered a substantial change requiring additional analysis. However, in areas that have been determined to be extremely lacking in open space, a reduction as small as one percent may be considered significant, warranting further analysis.

Figure 3-1 Residential Open Space Study Area Map



Preliminary Assessment

Existing Conditions

Study Area Population

As shown in **Table 3-2**, based on the 2014-2018 5-year American Community Survey (ACS) data, the nine census tracts in the open space study area contain a total residential population of 29,627.

Table 3-2 Existing Population in the Residential Study Area

Census Tract	Residential Population
33	3,705
35	1,892
39	2,364
41	3,642
127	4,800
129.01	2,641
129.02	2,390
179	4,318
181	3,875
Total	**29,627**

Source: 2014-2018 ACS 5-year estimates.

Study Area Open Space Resources

Open space that is accessible to the public on a constant and regular basis, including for designated daily periods, is defined as publicly accessible and is analyzed as such per *CEQR Technical Manual* guidelines. Publicly accessible open space may be under government or private jurisdiction and includes open space designated through regulatory approvals, such as public plazas. Private open space—that which is not publicly-accessible or is available only to limited users and is not available to the public on a constant and regular basis—is not included in CEQR-compliant quantitative open space analyses.

In addition to the distinction between public and private open spaces, individual spaces may also be classified as either active or passive, according to the types of activities for which the space is primarily used. Open space that is used for sports, exercise, or active play is classified as active and consists mainly of recreational facilities, while open space that is used for relaxation, such as a plaza, is classified as passive. Some types of open space facilities, such as esplanades, may be devoted to both active and passive uses.

In conducting the open space analysis for the Proposed Actions, publicly accessible open spaces within the study area were inventoried. The open space resources were identified by their location, owner, features, total acreage, and acreage of passive and active areas. The secondary sources for this analysis included land use and geographic PLUTO data at the tax lot level and additional data provided by the New York City Department of Parks and

Recreation (DPR). According to the *CEQR Technical Manual*, public open space does not include Greenstreets, malls without seating, or sidewalks.

All of the publicly accessible open space resources that include passive and active open space within the study area are shown in **Figure 3-2** and listed in **Table 3-3**. The study area contains 17 open space resources. These 17 resources are a mix of neighborhood parks, playgrounds, plazas, and gardens, and comprise 8.17 total acres of open space, of which approximately 4.58 is active and 3.59 is passive.

Larger parks and playgrounds in the study area are to the east of the Project Site, and include Edmonds Playground, Cuyler Gore Park, and South Oxford Park. These resources contain a mix of passive and active open space, and include amenities like fields, courts, playgrounds, and shaded lawns. There are also a number of plazas and Privately-Owned Public Spaces (POPS) in the study area, with larger ones around Atlantic Avenue/Barclays to the south of the Project Site, and a number of smaller ones to the north of the Project Site near the larger developments within the study area.

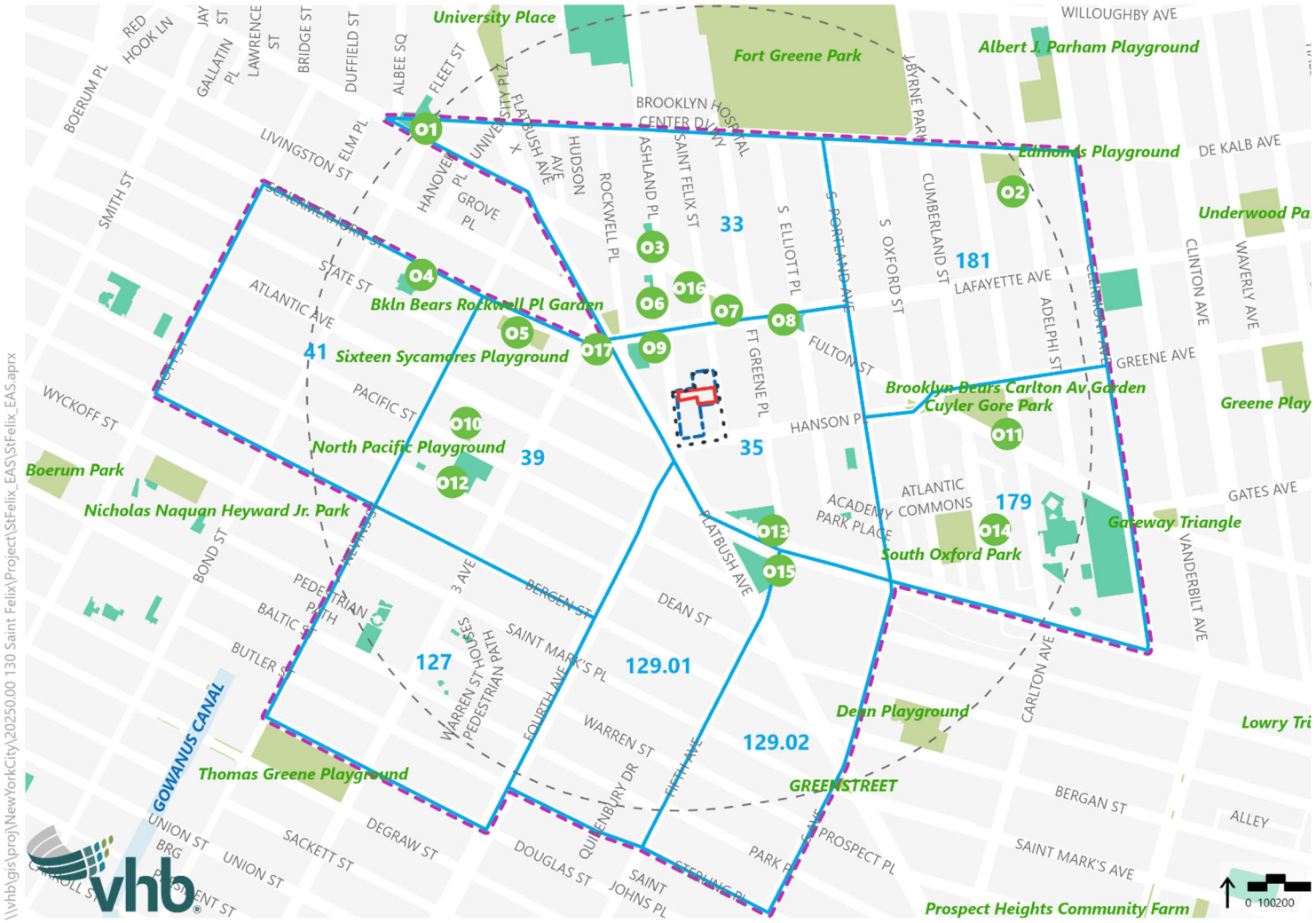
It is important to note that while not within the residential study area, there are some notable open spaces within a half-mile from the Project Site that residents of the Proposed Project would be expected to visit. Fort Greene Park is two and a half blocks north of the Project Site and totals 30 acres. It contains fields and gardens, two playgrounds, an amphitheater, a large monument, tennis and basketball courts, picnic areas, bathrooms, and walking paths. The Long Island University (LIU) campus is also located within a half-mile of the Project Site, and has plazas that are open to the public, including University Place. To the south, Dean Playground has a baseball field, playground, and basketball courts. Furthermore, there are two community gardens—the Brooklyn Bears Carlton and Rockwell Place Gardens—that are within the study area and open to the public on the weekends but were not included in the analysis for conservative purposes. There are also other open space resources, such as the athletic fields associated with Brooklyn Technical Highschool and LIU; however, the levels of public access to these resources were unable to be confirmed during a field visit. These resources were not considered in the quantitative open space analysis but are considered qualitatively due to their proximity to the Project Site.

Table 3-3 Existing Study Area Open Spaces

Map No.	Name	Owner/ Agency	Features and Amenities	Total Acres	Active (Acres)	Passive (Acres)
O1	Albee Square	NYC DOT	Tiered seating, moveable tables and chairs, planter beds, trees	0.49	0.00	0.49
O2	Edmonds Playground	NYC Parks/NYC DOE	Basketball courts, playground, spray showers, bathrooms, trees, benches	0.92	0.92	0.00
O3	230 Ashland Place Plaza	230 Ashland Place	Bench seating, planter beds, trees	0.13	0.00	0.13
O4	PS K369 Coy L. Cox Playground	NYC DOE	Playground, basketball court	0.36	0.36	0.00
O5	Sixteen Sycamores Playground	NYC Parks	Playground, basketball courts, handball courts, spray showers, bathroom, trees, benches	0.57	0.57	0.00
O6	Polonsky Shakespeare Center Plaza	NYC HPD	Plaza, bench seating, trees	0.17	0.00	0.17
O7	Betty Carter Park	NYC Parks	Trees, planter beds, various seating	0.23	0.12	0.11
O8	Fowler Square	NYC Parks/DOT	Plaza, statue, planters, moveable chairs and tables, trees	0.15	0.00	0.15
O9	BAM South POPS	300 Ashland/Downtown Brooklyn Partnership	Plaza, amphitheater, trees, plantings, movable table and chairs	0.41	0.00	0.41
O10	North Pacific Playground	NYC Parks	Playground, garden, seating, trees	0.15	0.04	0.11
O11	Cuyler Gore Park	NYC Parks	Playground, lawns, trees, benches, gardens and planter beds, spray showers	1.16	0.70	0.46
O12	Pacific School Playground	NYC DOE	Basketball court, playground, track, turf field, trees	0.80	0.80	0.00
O13	Atlantic Terminal Mall Plaza	Atlantic Terminal Mall	Plaza, seating, trees and platers, Citibike station	0.48	0.00	0.48
O14	South Oxford Park	NYC Parks	Tennis courts, turf field, playground, trees, benches, planter beds	1.19	1.07	0.12
O15	Barclays Center Plaza	BSE Global	Plaza, seating, planters	0.81	0.00	0.81
O16	620 Fulton Street POPS	620 Fulton Street	Plaza, trees and planter beds, benches	0.07	0.00	0.07
O17	Temple Square	DOT	Benches and trees	0.07	0	0.07
			Total	**8.17**[1]	**4.58**[1]	**3.59**[1]

Source: NYC Department of Parks and Recreation
1 Numbers may not add up to the hundredths due to rounding

Figure 3-2 Residential Open Space Inventory



Adequacy of Open Spaces

The open space analysis focuses on open space that may be used by residential populations. Using *CEQR Technical Manual* guidelines, the adequacy of open space was first analyzed quantitatively by comparing the ratio of existing active and passive open space acreage in the study area per 1,000 residents with the CEQR benchmark of 2.0 acres of active open space and 0.5 acres of passive open space per 1,000 residents.

The existing residential population of the study area was estimated at 29,627 people. The residential study area currently has an overall open space ratio of 0.276 acres per 1,000 residents, which is well below the City's goal of 2.5 acres per 1,000 residents and average of 1.5 acres per 1,000 residents (see **Table 3-4**). The study area's residential active open space ratio is 0.155 acres per 1,000 residents, which is also below the City's guideline of 2.0 acres per 1,000 residents, and the residential passive open space ratio is 0.121 acres per 1,000 residents, below the City guideline of 0.5 acres per 1,000 residents. Thus, based on the quantitative analysis, there is an existing deficiency in open space to serve the residential population of the study area.

Table 3-4 Existing Conditions – Adequacy of Open Space Resources in Residential Half-Mile Study Area

Population	Open Space Acreage		Ratios*	DCP Guidelines
29,627	Active	4.58	0.155	2.00
	Passive	3.59	0.121	0.50
	Total	**8.17**	**0.276**	**2.50**

*Acres per 1,000 residents

No-Action Condition

As described in the **Methodology** section above, the No-Action condition accounts for population growth and changes expected to the inventory of open space resources.

Study Area Population

New development in the residential study area would result in an additional 2,844 residential units, increasing the residential population by 6,484 for a total residential population of 36,111 persons in 2024.

Table 3-5 No-Action Condition: No-Build Developments Estimated Population

Development Name/Location	Total GSF	Residential Units	Estimated Residents[1]
50 Nevins Street	42,009	129	294
18 Sixth Avenue	832,448	858	1,956
58 St. Marks Place	200,263	105	239
100 Flatbush Avenue	1,125,000	850	1,938
80 Flatbush Avenue			
625 Fulton Street	1,800,000	902	2,057
TOTAL	**3,999,720**	**2,844**	**6,484**

Source: New York City Department of Buildings, New York City Department of City Planning, Greater East Midtown FEIS, One Vanderbilt FEIS

Notes:

[1] Based on the Average Household Size for the study area census tracts of 2.28 (2018 5-yr ACS)

Study Area Open Spaces

In the No-Action condition, there is one new confirmed open space planned within the study area:

› 625 Fulton Street - Plans would include a quarter of an acre of outdoor space. It is expected that this would include passive open space like other POPS in the study area.

Times Plaza, an NYC Department of Transportation initiative to create a plaza at the intersection of Flatbush Avenue, Fourth Avenue, and Atlantic Avenue, was slated for 2018 construction and is still on the current projects list. However, it is unknown if it will be completed before the build year of the Proposed Project and therefore was not included for conservative analysis purposes.

The one open space expected in the No-Action condition would bring the study area total to 12.65 acres, with 8.12 acres of active open space and 4.53 acres of passive open space.

Adequacy of Open Spaces

In the No-Action condition, the open space ratios in the residential study area would decrease and remain below the City's guidelines. The total open space ratio would decrease to 0.233 acres per 1,000 residents. The active and passive open space ratios would also decrease as shown in **Table 3-6** . As in existing conditions, the active and passive open space ratios would remain well below the guidelines of 2.0 acres of active open space and 0.5 acres of passive open space per 1,000 residents (see **Table 3-6**).

Table 3-6 No-Action Condition – Adequacy of Open Space Resources in Residential Half-Mile Study Area

Population	Open Space Acreage		Ratios*	DCP Guidelines
36,111	Active	4.58	0.127	2.00
	Passive	3.84	0.106	0.50
	Total	**8.42**	**0.233**	**2.50**

*Acres per 1,000 residents

With-Action Condition

Study Area Population

In the With-Action condition, 130 units would be introduced to the Project Site, which is estimated to introduce approximately 295 residents and result in a total residential population of 36,406 in the half-mile study area.

Adequacy of Open Spaces

Under the With-Action condition, the open space ratio for the residential population would decrease slightly from the No-Action condition open space ratio (see **Table 3-7**). The total open space ratio would be reduced to 0.231 acres per 1,000 residents in the With-Action condition. This is a 0.9 percent decrease in the overall open space ratio (and absolute decrease of 0.002 acres per 1,000 residents). The active and passive open space ratios would also be reduced slightly: to 0.126 and 0.105 acres per 1,000 residents, respectively. This would represent a 0.9 percent decrease for the passive open space ratio and a 0.8 percent decrease for the active open space ratio (and an absolute decrease of 0.001 acres per 1,000 residents for each ratio).

Table 3-7 With-Action Condition – Adequacy of Open Space Resources in Residential Half-Mile Study Area

Population	Open Space Acreage		Ratios*	DCP Guidelines
36,406	Active	4.58	0.126	2.00
	Passive	3.84	0.105	0.50
	Total	**8.42**	**0.231**	**2.50**

*Acres per 1,000 people

As described previously, a project could result in a significant adverse open space impact if it would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.50 acres per 1,000 residents. This area is well below the median open space ratio, but the Proposed Project would have minimal effects on the open space ratio for residents in the study area, with decreases of less than one percent and absolute change in the ratio of 0.002 acres per 1,000 residents overall.

The Proposed Actions would not result in a decrease of the open space ratio by more than five percent, and therefore, no significant adverse impact would result.

Conclusion

Under the With-Action condition, the total open space ratio for the residential population would decrease by 0.9 percent compared to the No-Action condition open space ratio: 0.233 to 0.231 acres per 1,000 residents. The study area would continue to have open space ratios below the City guideline of 2.50 acres per 1,000 residents and below the Citywide median of 1.50 acres per 1,000 residents. The active and passive open space ratios would also decrease slightly (see **Table 3-8**).

It is important to note, as described under existing conditions above, that there are open spaces within a half-mile that were not included in the open space analysis. Fort Greene Park is two and a half blocks north of the Project Site and totals 30 acres. The open spaces associated with LIU campus and Dean Playground are also within the half mile radius, and total 4.9 and 0.2 acres respectively, and if considered would greatly improve the open space ratios in the study area, though they would not greatly affect the percent change overall. Furthermore, within the study area, there are two community gardens- the Brooklyn Bears Carlton and Rockwell Place Gardens- that are open to the public on the weekends that were not included in the analysis.

The Proposed Actions would not result in a greater than five percent decrease in the open space ratio, and therefore no significant adverse impact to open space resources would result.

Table 3-8 Open Space Ratio Summary

	No-Action*	With-Action*	Percent Change (%)	Absolute Change
Active	0.127	0.126	-0.8	-0.001
Passive	0.106	0.105	-0.9	-0.001
Total	**0.233**	**0.231**	**-0.9**	**-0.002**

*Acres per 1,000 people

4

Shadows

A shadow is defined in the *2020 CEQR Technical Manual* as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space, or feature. The purpose of this section is to assess whether new structures may cast shadows on sunlight-sensitive publicly accessible resources or other resources of concern such as natural resources, and to assess the significance of their impact.

Introduction

According to the *CEQR Technical Manual*, a shadows assessment is required for Proposed Actions that would result in new structures greater than 50 feet in height or located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features. A significant adverse shadow impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

The Proposed Actions are expected to facilitate the construction of an approximately 270-foot-tall building (with bulkhead) in the With-Action condition. Therefore, further assessment is warranted.

Methodology

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. In accordance with the *CEQR Technical Manual*, a preliminary screening assessment is conducted to ascertain whether shadows resulting from a project could reach any sunlight-sensitive resource at any time of year; if the preliminary assessment indicates that, in the absence of intervening buildings, shadows from a project could reach sunlight-sensitive resources on any of the representative analysis days, a detailed analysis is typically warranted.

Sunlight-Sensitive Resources

The *CEQR Technical Manual* defines sunlight-sensitive resources as those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. The following are considered to be sunlight-sensitive resources:[1]

- Public open space (e.g., parks, beaches, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions of roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The uses and vegetation in an open space establish its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather-dependent features like wading pools and sand boxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include passive uses, such as sitting or sunning; active uses, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.
- Features of historic architectural resources that depend on sunlight for their enjoyment by the public. Only the sunlight-sensitive features are considered, as opposed to the entire architectural resource. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained-glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy (multicolored) features found on Victorian Gothic Revival or Art Deco façades); historic landscapes, such as scenic landmarks including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.

[1] According to the CEQR Technical Manual, City streets, sidewalks, and private open spaces (such as private residential front and back yards, stoops, and vacant lots) are not considered to be sunlight-sensitive resources.

› Natural resources where the introduction of shadows could alter the resource's condition or microclimate. Such resources could include surface water bodies, wetlands, or designated resources such as coastal fish and wildlife habitats.

Preliminary Assessment

The preliminary screening assessment consists of three tiers of analysis:

› **Tier 1 Screening:** The first tier determines a simple radius around the proposed building representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier.

› **Tier 2 Screening:** The second-tier analysis reduces the area that could be affected by project-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. According to the *CEQR Technical Manual*, shadows cannot be cast within New York City within 108 degrees from True North. Topographic lines are included to demonstrate the terrain of the area.

› **Tier 3 Screening:** If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day. For the Tier 3 screening, three-dimensional modeling software with the capacity to model shadows is used, and the maximum building envelope that could be achieved as a result of a proposed project is modeled and geo-located within the program. Terrain, which has been included in the Tier 1 and Tier 2 Screenings, is also incorporated into the model to account for how changes in elevation throughout the study area can influence shadows that could be cast by a proposed project. The representative analysis days are December 21 (winter solstice), June 21 (summer solstice), March 21/September 21 (vernal/autumnal equinox), and May 6/August 6 (halfway between summer solstice and the equinoxes). The modeling software is also used to approximate times that shadows cast from a proposed project could enter and exit a resource.

Detailed Assessment

As noted above, if the Tier 3 screening indicates that, in the absence of intervening buildings, shadows from a proposed project would reach a sunlight-sensitive resource on any of the representative analysis days, a detailed shadow analysis would be warranted. Because existing buildings (or No-Action buildings) may already cast shadows on a sun-sensitive resource, a proposed project may not result in additional (incremental) shadows upon that resource. The detailed shadow analysis models a baseline condition (future No-Action) that is compared to the future condition resulting from a proposed project (future With-Action) to illustrate the shadows cast by the No-Action development and distinguish the additional (incremental) shadow cast by the project. The detailed shadows analysis uses a combination of Geographic Information Systems (GIS) 3D modeling and modeling in Sketchup, as well as GIS data provided publicly.

Determination of Significance

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

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

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

Preliminary Assessment

Tier 1 and 2 Screening

The Proposed Project would consist of an approximately 270-foot-tall building and could cast a maximum shadow up to 4.3 times as long, equaling 1,161 feet (see **Figure 4-1**). **Figure 4-1** also identifies the location of the historic resources with sunlight-sensitive features and open spaces within the potential shadow sweep. There are no natural resources within the potential shadow sweep. As discussed in **Chapter 6, Historic and Cultural Resources,** historic resources within the maximum shadow radius were first evaluated to determine whether they contained features that depend on sunlight for their enjoyment by the public; those that contain such features were included in the base map. Within the

longest shadow study area, excluding the area that cannot be shaded by the Proposed Project, 12 open spaces and 4 historic resources were identified.[2]

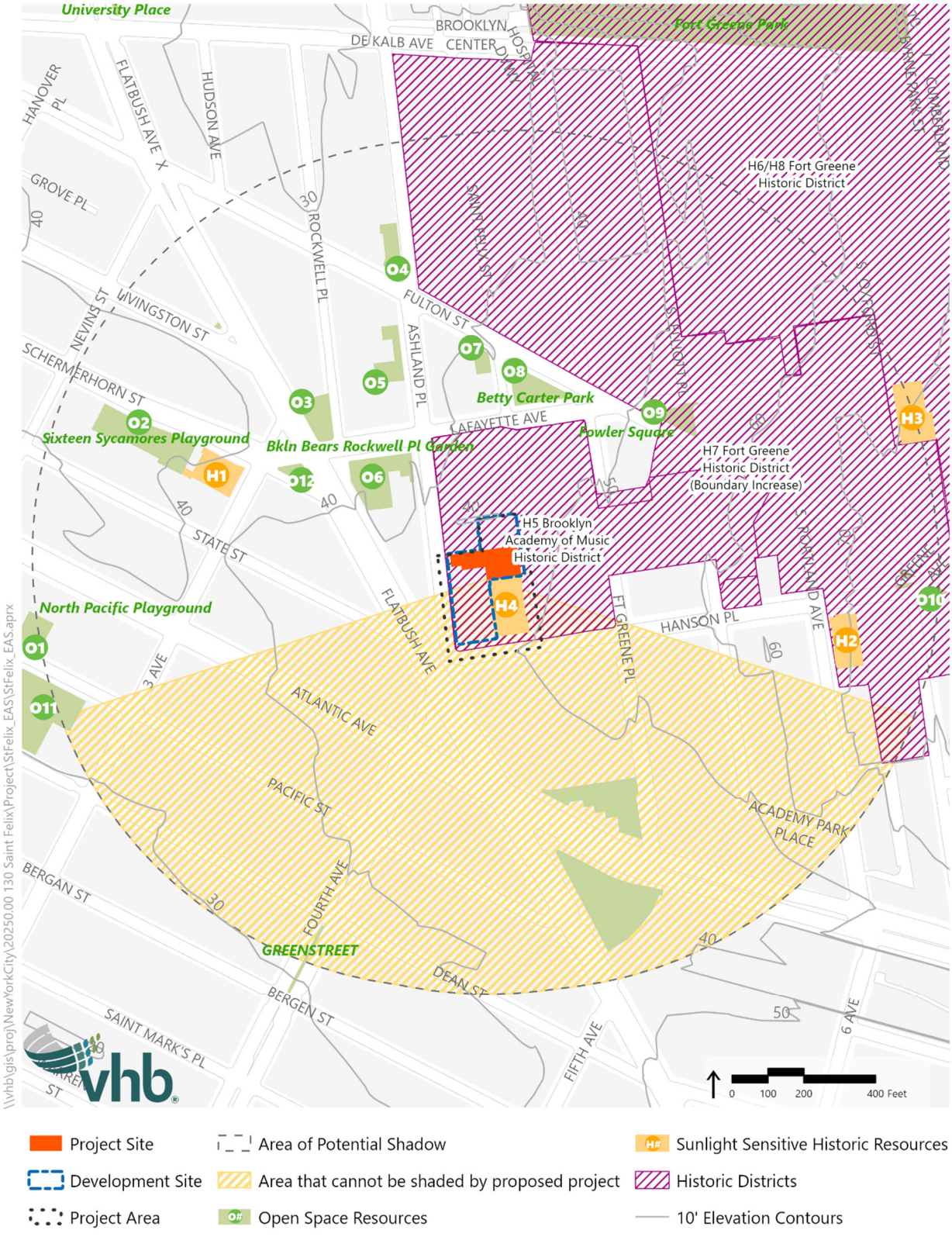
Table 4-1 Potential Sunlight Sensitive Open Space and Historic Resources of Concern

Map ID #	Name/Location	Sunlight Sensitive Features
Open Space Resources		
O1	North Pacific Playground	Play equipment, garden, vegetation, seating
O2	Sixteen Sycamores Playground	Vegetation, play equipment, spray showers, courts, seating
O3	Brooklyn Bears Rockwell Place Garden	Vegetation and active use of garden
O4	230 Ashland Place Plaza	Vegetation, seating
O5	Polonsky Shakespeare Center Plaza	Vegetation, seating
O6	BAM South POPS	Vegetation, seating
O7	620 Fulton Street POPS	Vegetation, seating
O8	Betty Carter Park	Vegetation, seating
O9	Fowler Square	Vegetation, seating
O10	Greenstreets	Vegetation
O11	Pacific School Playground	Courts, play equipment, vegetation
O12	Temple Square	Vegetation
Historic Resources		
H1	Baptist Temple	Stained-glass windows
H2	Hanson Place Seventh Day Adventist Church	Stained-glass windows
H3	Lafayette Avenue Presbyterian Church	Stained-glass windows
H4	Hanson Place Methodist Church	Stained glass windows

Source: New York Cultural Resource Information System, New York City Landmarks Preservation Commission map, New York City Department of Parks and Recreation open space database, NYC Capital Planning Platform POPS map, field surveys

[2] There is one additional historic resource in the radius that has features that may be considered sunlight sensitive. One Hanson Place, formerly the Williamsburgh Savings Bank (LP-0971), is a designated interior and exterior landmark and has large, west-facing, arched windows with decorative limestone screens and mullions. These features could not be shaded by the Proposed Project due to the sensitive facades position relative to the Proposed Project and are therefore not included.

Figure 4-1 Tier 1 and Tier 2 Screening



Tier 3 Screening Assessment

In accordance with the *CEQR Technical Manual*, a Tier 3 screening assessment was performed because the Tier 1 and Tier 2 assessments identified several sunlight-sensitive resources within ±108 degrees of True North and within the area of the longest shadow that could be cast by the Proposed Project.

The 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/August 6, the midpoints between the summer solstice and the equinoxes; and June 21, the summer solstice and the longest day of the year.

In accordance with the *CEQR Technical Manual*, a model of the building in the With-Action condition was developed in a three-dimensional computer program (Sketchup). The model was geolocated, and the surrounding terrain was imported into the model to account for differences in topography. As noted above, the Tier 3 shadow screening shows the shadows that could be cast as a result of the Proposed Project but does not account for existing buildings surrounding the Project Site that may already cast shadows on the identified resources.

Figure 4-2 through **Figure 4-5** below show the Tier 3 screening results, which indicate that in the absence of intervening structures:

- Shadows cast by the Proposed Project could reach eight sunlight-sensitive resources: six open spaces, and two sunlight-sensitive historic resources. These shadows could only reach these resources on either the December and/or March/September analysis days. These resources were then considered further in the detailed analysis (see "Detailed Analysis" below).
- A number of resources, both open spaces and architectural resources, would fall outside the area of potential shadow because of their location relative to the Project Site:
  - The open space resources and individual sunlight-sensitive historic resources that fall outside the area of Tier 3 potential shadow are detailed in **Table 4-2**.
  - The four historic districts within the Tier 1 and Tier 2 shadow area would fall within the Tier 3 shadow area. These include H5 - New York City Brooklyn Academy of Music Historic District (LP-1003), H6 - New York City Fort Greene Historic District (LP-0973), H7 - NR/SR Fort Green Historic District Boundary Increase (90NR1301), and H8 - NR/SR Fort Greene Historic District (90NR01318). None of these historic districts are noted for their sunlight-sensitive resources. Therefore, these districts are not considered further. However, individually listed buildings within these historic districts with sunlight-sensitive features are considered under the individual resources listed above.

Table 4-2 Sunlight Sensitive Open Space and Historic Resources Not Affected by Incremental Shadow (Screened at Tier 3)

Map ID #	Name/Location
Open Space Resources	
O1	North Pacific Playground
O2	Sixteen Sycamores Playground
O4	230 Ashland Place Plaza
O9	Fowler Square
O10	Greenstreets
O11	Pacific School Playground
Historic Resources	
H2	Hanson Place Seventh Day Adventist Church
H3	Lafayette Avenue Presbyterian Church

Source: New York Cultural Resource Information System, New York City Landmarks Preservation Commission map, New York City Department of Parks and Recreation open space database, NYC Capital Planning Platform POPS map, field surveys

Figure 4-2 Tier 3 Screening December 21 Analysis Day



Figure 4-3 Tier 3 Screening March 21 Analysis Day



Figure 4-4 Tier 3 Screening May 6 Analysis Day



Figure 4-5 Tier 3 Screening June 21 Analysis Day



Detailed Assessment

No-Action Condition

In the future without the Proposed Actions (the No-Action condition), the Project Site would remain in its existing condition as a vacant lot.

There are two development projects within the shadows study area currently under construction at the 80 and 100 Ashland development sites. These buildings were included in the detailed shadows model using information on their proposed heights, FARs, and building footprints.

With-Action Condition

In the future with the Proposed Actions (the With-Action condition), the Project Site would be developed with a 270-foot-tall building (including the bulkhead).

The detailed shadow analysis compares the future condition resulting from the Proposed Project (With-Action condition) to the baseline condition (No-Action condition) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the Proposed Project. Any new shadows projected to be cast onto the identified resources from the Proposed Project are considered "incremental shadows."

Modeling Results

As noted above, based on the Tier 3 screening results, eight sunlight-sensitive resources were identified for detailed analysis. **Table 4-3** provides the modeled incremental shadow entry/exit times for the sunlight-sensitive resources. The start times shown in the table represent the time that incremental shadow would enter any portion of the open space or sunlight-sensitive feature of the historic resource, and the end time represents the time that the incremental shadows leave the open space or sunlight-sensitive feature of the historic resource.[3]

Detailed shadow analyses are discussed for each resource in the relevant sub-sections below.

[3] These include resources with stained-glass windows (Baptist Temple (H1), Hanson Place Methodist Church (H4))

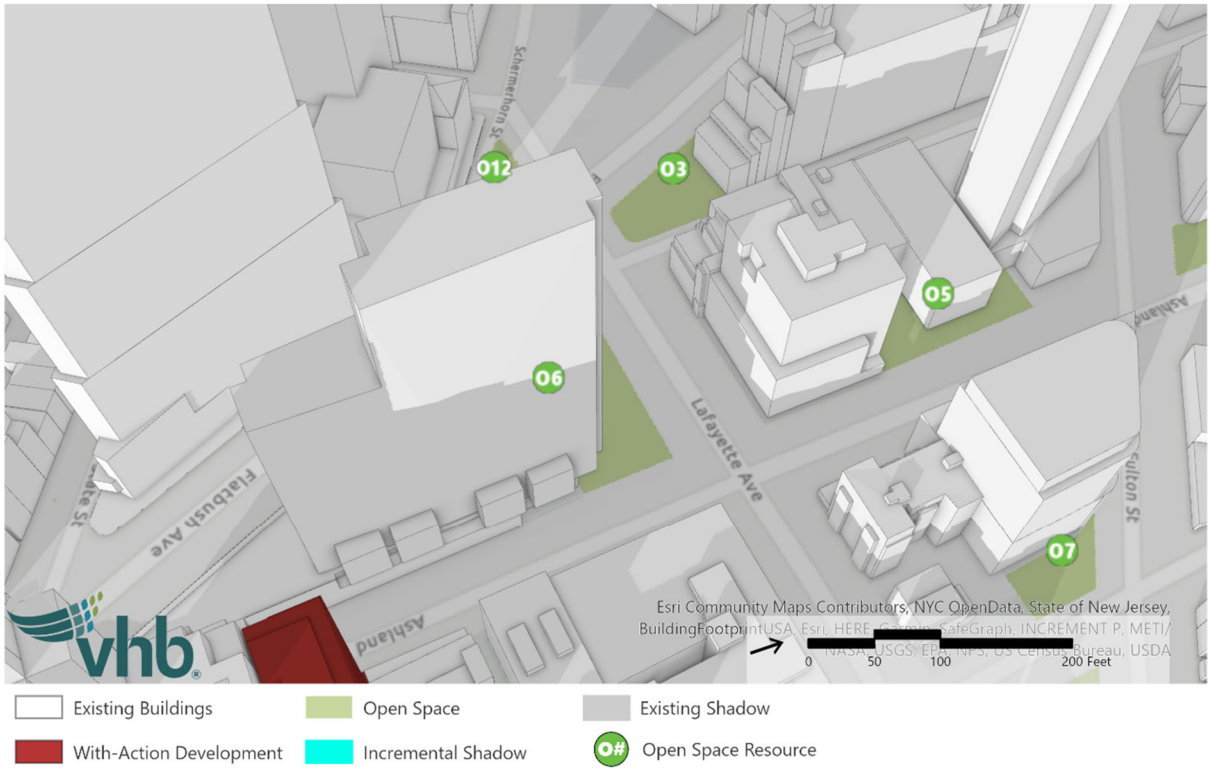
Table 4-3 Detailed Analysis Summary of Incremental Shadow Entry/Exit Times

		Analysis Day			
			March 21/		
Map No.	Resource	Dec 21 8:51A- 02:53P	Sept 21 7:36A-4:29P	May 6/Aug 6 6:27A-5:18P	June 21 5:57A-6:01P
Open Space					
O3	Brooklyn Bears Rockwell Place Garden	-	-	-	-
O5	Polonsky Shakespeare Center Plaza	9:53A-10:38A 45 minutes	-	-	-
O6	BAM South POPS	9:21A-9:41A 20 minutes	9:29A-10:39A 1 hour, 10 minutes	-	-
O7	620 Fulton Street POPS	11:35A-12:03P, 12:10P- 12:28P 46 minutes	-	-	-
O8	Betty Carter Park	12:13P-1:49P 1 hour, 36 minutes	-	-	-
O12	Temple Square	-	-	-	-
Historic Resources					
H1	Baptist Temple	-	-	-	-
H4	Hanson Place Methodist Church	-	-	-	-

O3- Brooklyn Bears Rockwell Place Garden

The Brooklyn Bears Rockwell Place Garden is a community garden at the junction of Rockwell Place and Lafayette and Flatbush Avenues. As indicated by the Tier 3 analysis, the garden could potentially receive shadow from the Proposed Project in the early morning on the December 21st Analysis day. However, when existing and No-Action buildings are factored in, the Proposed Project would not cast incremental shadow on the garden, as the garden would already be cast in shadow by 300 Ashland Place to the west. See **Figure 4-6** for an image showing the garden already in No-Action and existing shadow at this time. Therefore, the garden would not be adversely impacted due to shadows and further analysis is not warranted.

Figure 4-6 O3 - December 21 - 8:51 AM



O5 - Polonsky Shakespeare Center Plaza

The Polonsky Shakespeare Center Plaza is a 0.17-acre plaza that contains benches and trees. The detailed analysis shows that on the December 21st analysis day, incremental shadow would fall on this resource for a 45-minute period in the morning from 9:53 AM to 10:38 AM (see **Figure 4-7** through **Figure 4-9**). The incremental shadow would fall largely in the center of the plaza by the entrance to the Center, where there are two benches. The viability of vegetation due to incremental shadow would not be a concern on this analysis day because it is outside of the growing season. Throughout the period that incremental shadow would fall on the plaza, direct sunlight would still reach the northern part of the plaza where there is another bench. At its largest extent the incremental shadow would cover approximately 24 percent of the plaza area. Due to the relatively small extent, that sunlight would not be eliminated entirely from sunlight-sensitive features of the plaza, and that vegetation would not be impacted since shadows are outside the growing season, there would be no adverse impact to the plaza from the Proposed Project due to shadows. Further analysis is not warranted.

Figure 4-7 O5 - December 21 - 10:00 AM

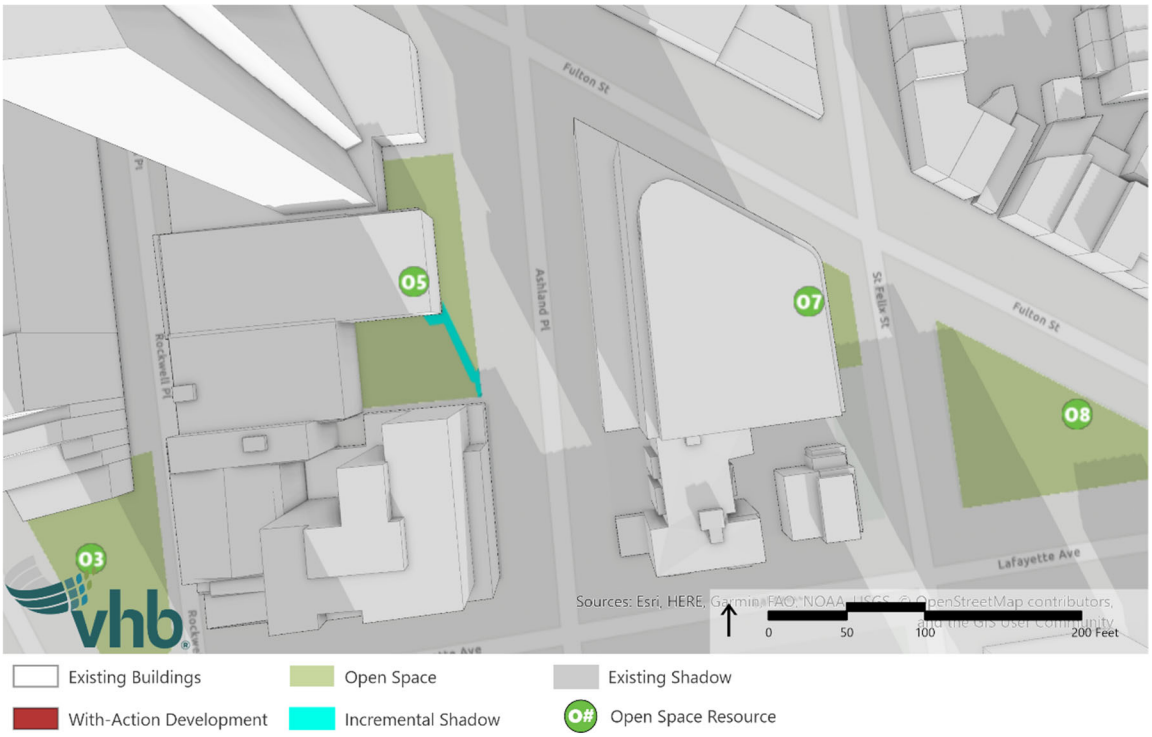
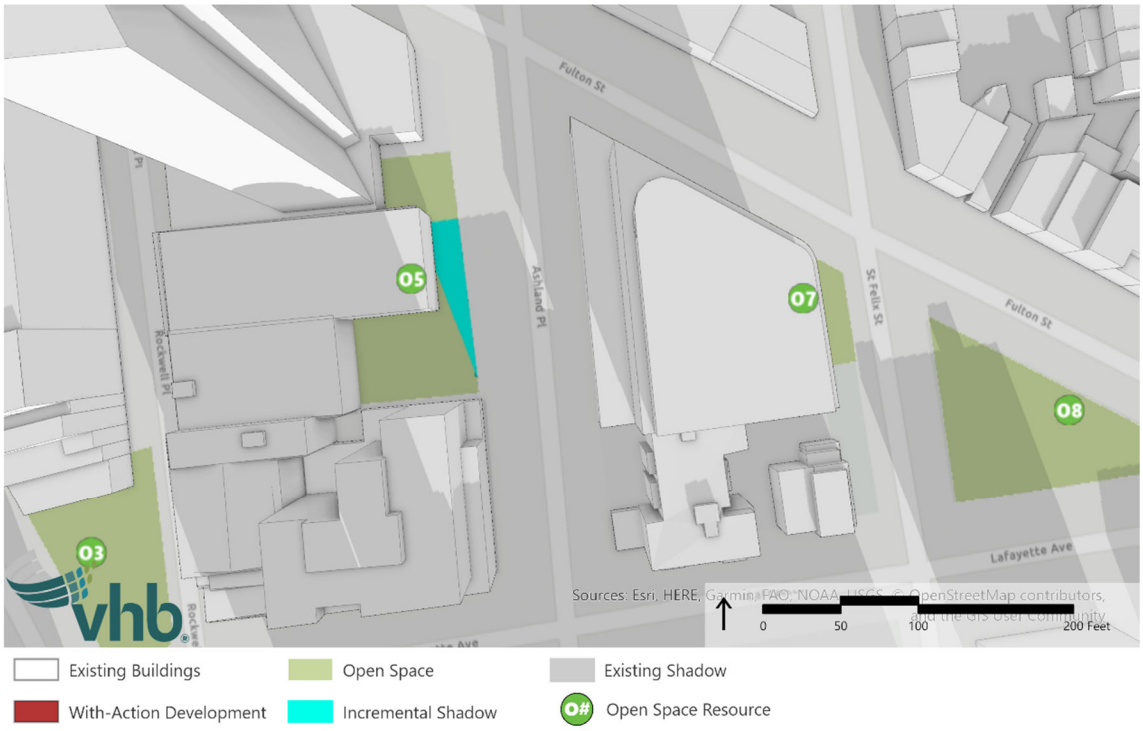


Figure 4-8 O5 - December 21 - 10:15 AM



Figure 4-9 O5 - December 21 - 10:30 AM



O6 - BAM South POPS

The BAM South POPS is a 0.41-acre plaza on the north side of 300 Ashland Place that has an amphitheater for events and seating, plaza space, moveable tables and chairs, trees and planted beds. Incremental shadow from the Proposed Project would fall on the plaza on two analysis days - December 21st and March/September 21st - for 20 minutes and 1 hour and 10 minutes respectively (see **Figure 4-10** through **Figure 4-16**).

As shown in **Figure 4-10** and **Figure 4-11** on the December 21st analysis day, incremental shadow would fall on the eastern portion of the plaza from 9:21 AM to 9:41 AM (a duration of 20 minutes) and would not reach the western side that contains the plaza's vegetation and amenities. This portion of the plaza contains a small enclosed stairway to access below ground parking, and otherwise functions only as empty plaza space. Direct sunlight would be eliminated from the plaza for a total of 19 minutes from 9:21 AM to 9:40 AM when sunlight begins to enter the eastern portion of the plaza. At its largest extent the incremental shadow would cover approximately 9% of the plaza area. Though direct sunlight would be fully eliminated, due to the lack of amenities in this region of the plaza and the relatively small extent and duration of incremental shadow, this shadow would not alter the public's use of the resource and therefore there would be no adverse impact to the plaza on the December analysis day.

On the March/September 21st analysis day, incremental shadow would fall on the eastern portion of the plaza from 9:29 AM to 10:39 AM (a duration of 1 hour and 10 minutes) (see **Figure 4-12** through **Figure 4-16**). This portion of the plaza does not have any amenities and functions as an extended sidewalk for the building's commercial entrance. Furthermore, sunlight would reach other portions of the plaza during this period. Therefore, no adverse impact would occur to the plaza on the March/September 21 analysis day due to shadows. Further analysis is not warranted.

Figure 4-10 O6 - December 21 - 9:25 AM

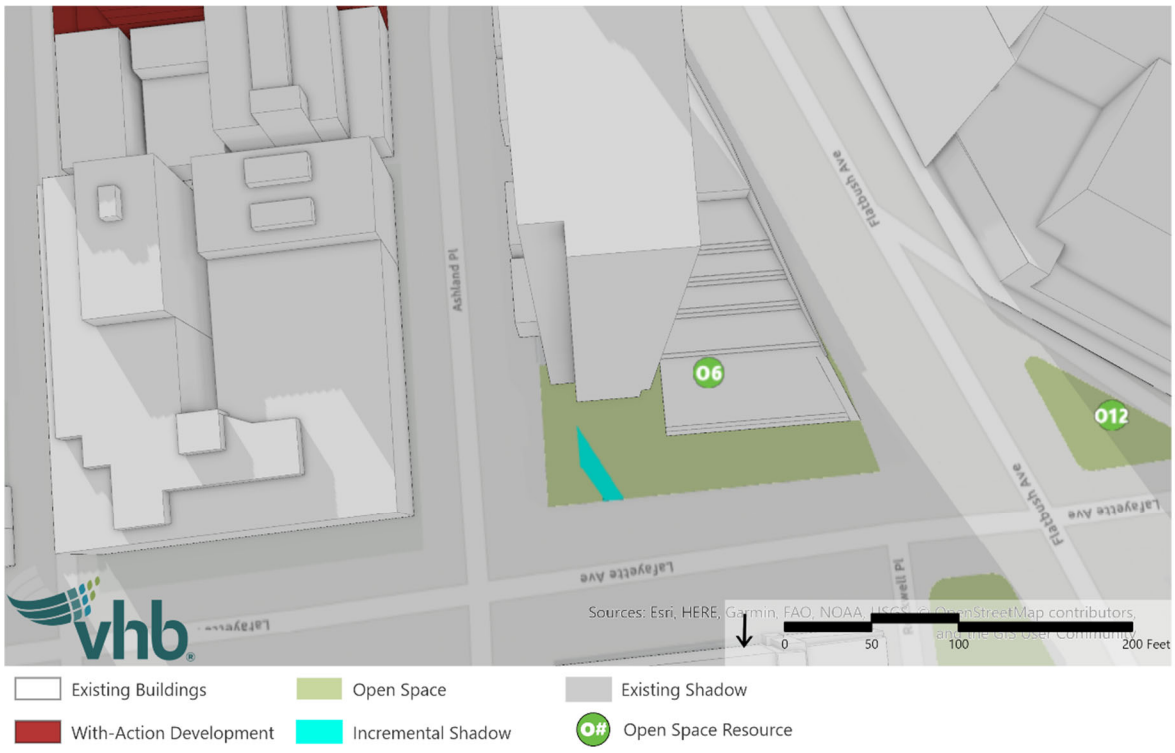


Figure 4-11 O6 - December 21 - 9:40 AM

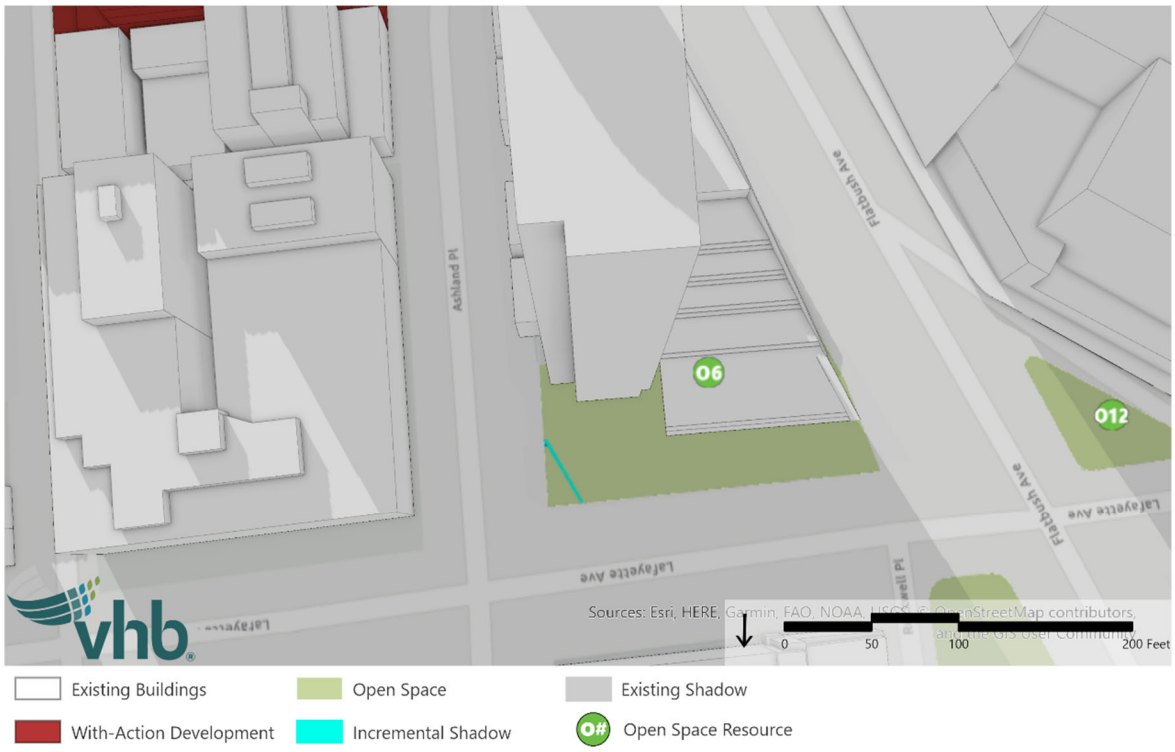


Figure 4-12 O6 - March/September 21 - 9:35 AM

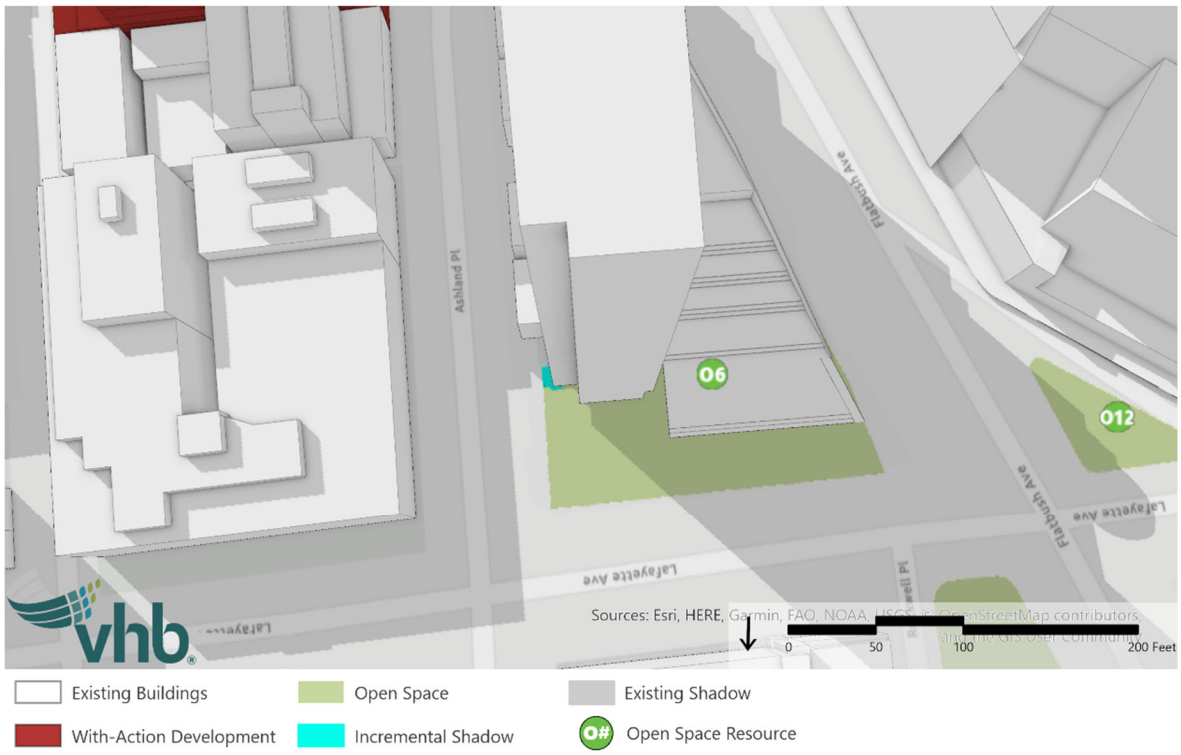


Figure 4-13 O6 - March/September 21 - 9:50 AM

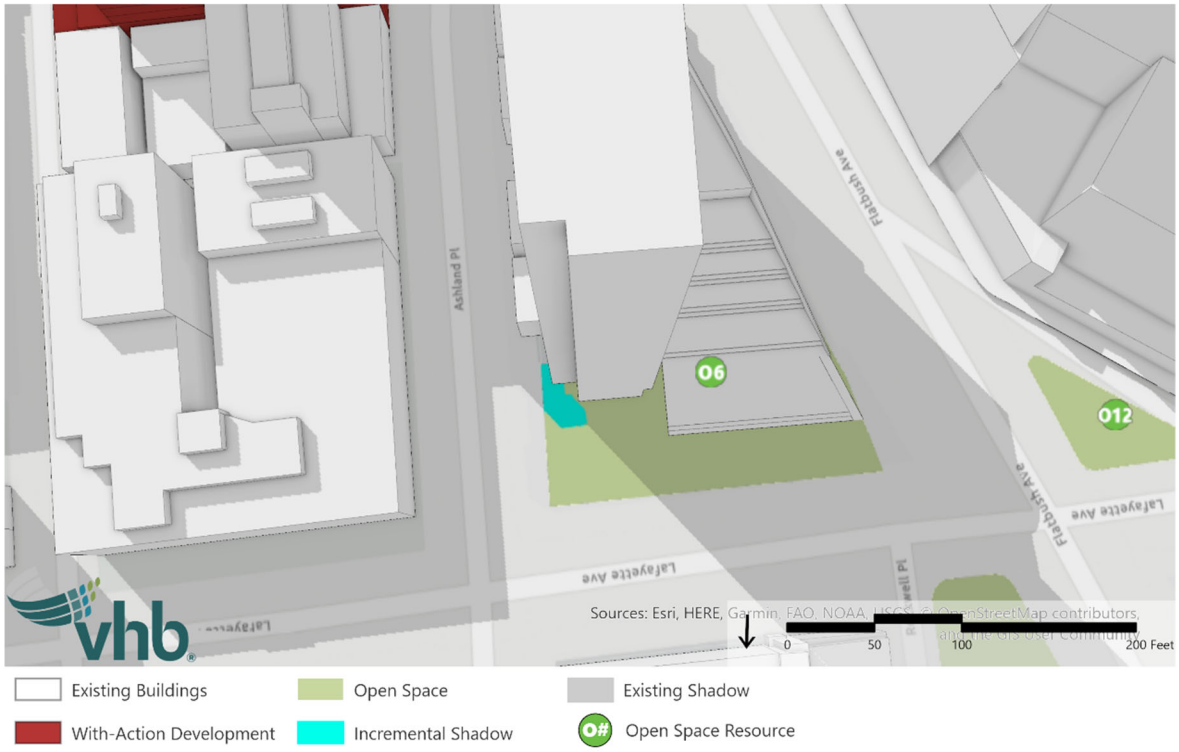


Figure 4-14 O6 - March/September 21 - 10:05 AM

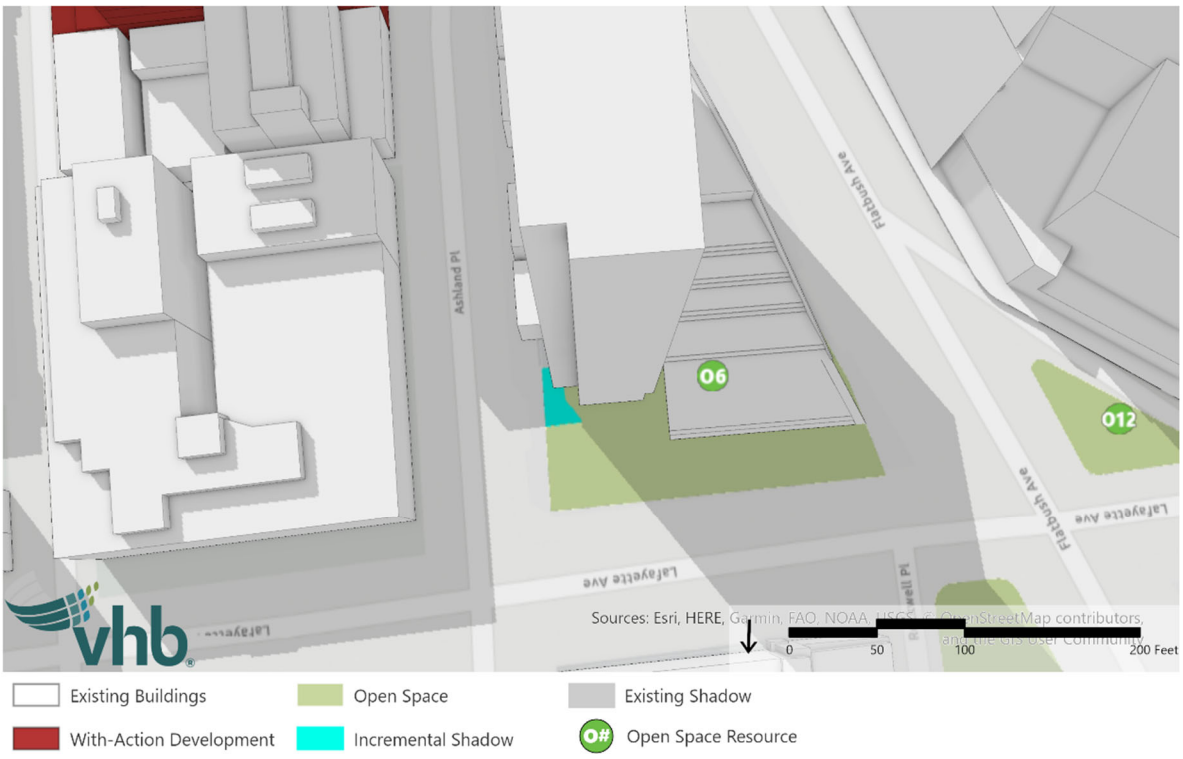


Figure 4-15 O6 - March/September 21 - 10:20 AM

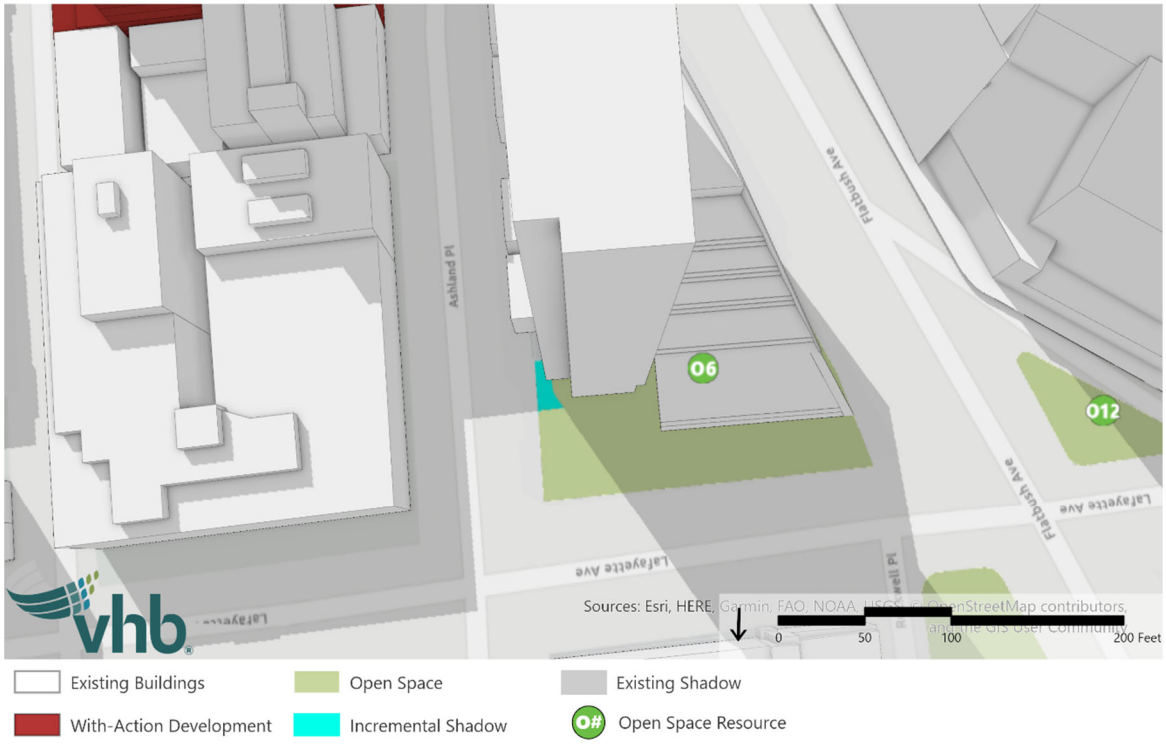
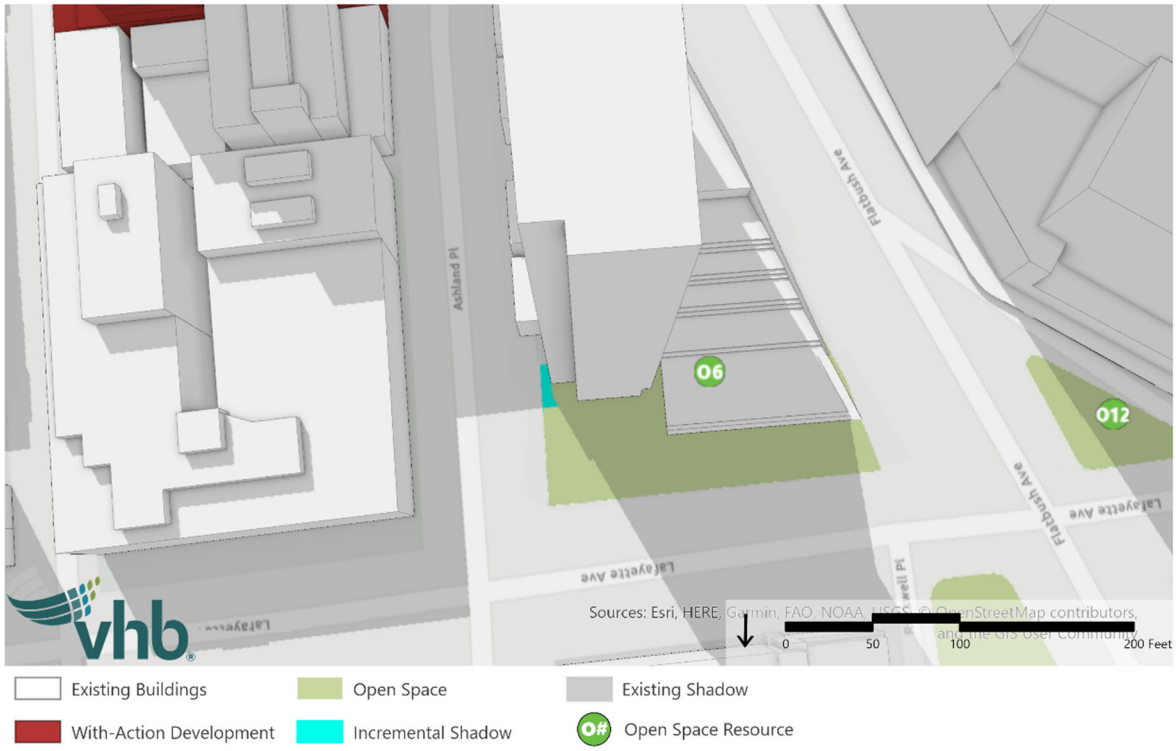


Figure 4-16 O6 - March/September 21 - 10:35 AM



O7 - 620 Fulton Street POPS

The 620 Fulton Street POPS is a 0.07-acre plaza with trees, planter beds, and benches. The detailed analysis indicates that incremental shadow would reach the plaza on the December 21st analysis day for 46 minutes total from 11:35 AM to 12:03 PM and again from 12:10 PM to 12:28 PM (see **Figure 4-17** through **Figure 4-19**). In the first of the two periods, incremental shadow would cause direct sunlight to be eliminated from the plaza for 3 minutes from 12:00 PM to 12:03 PM, but for most of the period sunlight would still reach the plaza. In the second period, direct sunlight would continue to reach other areas of the plaza. Given that vegetation viability due to shadows is not of concern in the winter months, and direct sunlight would continue to reach the plaza throughout the majority of the period of incremental shadow, the plaza would not be adversely impacted due to shadows. Further analysis is not warranted.

Figure 4-17 O7 - December 21- 11:40 AM



Figure 4-18 O7 - December 21 - 11:55 AM

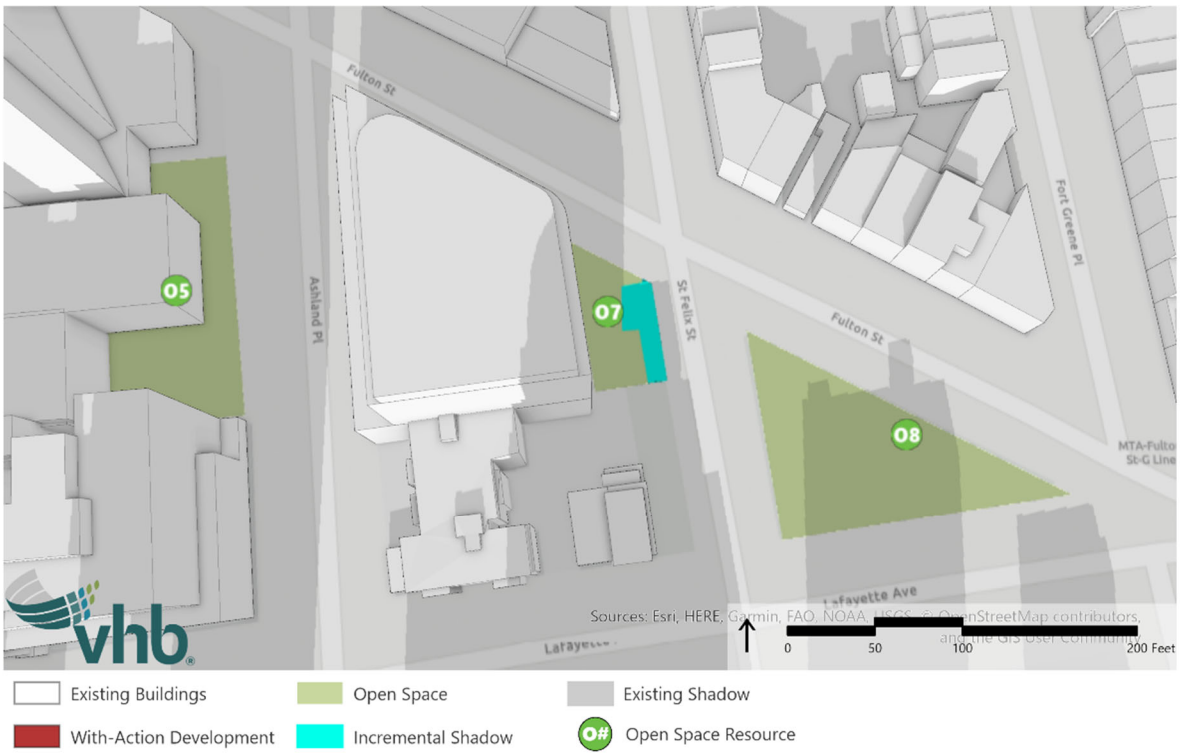


Figure 4-19 O7 and O8 - December 21 - 12:20 PM



O8 - Betty Carter Park

Betty Carter Park is a New York City Department of Parks and Recreation operated space that totals 0.23 acres and sits between Lafayette Avenue and Fulton Street north of the Project Site. It contains trees, planted beds, and various seating. The Proposed Project would cast incremental shadow on the park on the December 21st analysis day from 12:13 PM to 1:49 PM (a duration of 1 hour and 36 minutes) (see **Figure 4-19** through **Figure 4-24**). The incremental shadow would first appear in the center of the park and then disappear while reappearing on the western side and moving eastward again. At its largest extent the incremental shadow would cover 14% of the park and direct sunlight would never be entirely eliminated from the park during this period of time. The shadow would largely be confined to an area that contains trees and planted beds, however their viability would not be of concern in the winter months. In the beginning and later portion of the period of incremental shadow, incremental shadow could reach some of the benches. The park would still receive direct sunlight throughout the day before and after this period. Due to the relatively small extent of the incremental shadow, and the amount of direct sunlight that the park would still receive, the park would not be adversely impacted due to shadows. Further analysis is not warranted.

Figure 4-20 O8 - December 21 - 12:35 PM



Figure 4-21 O8 - December 21 - 12:50 PM

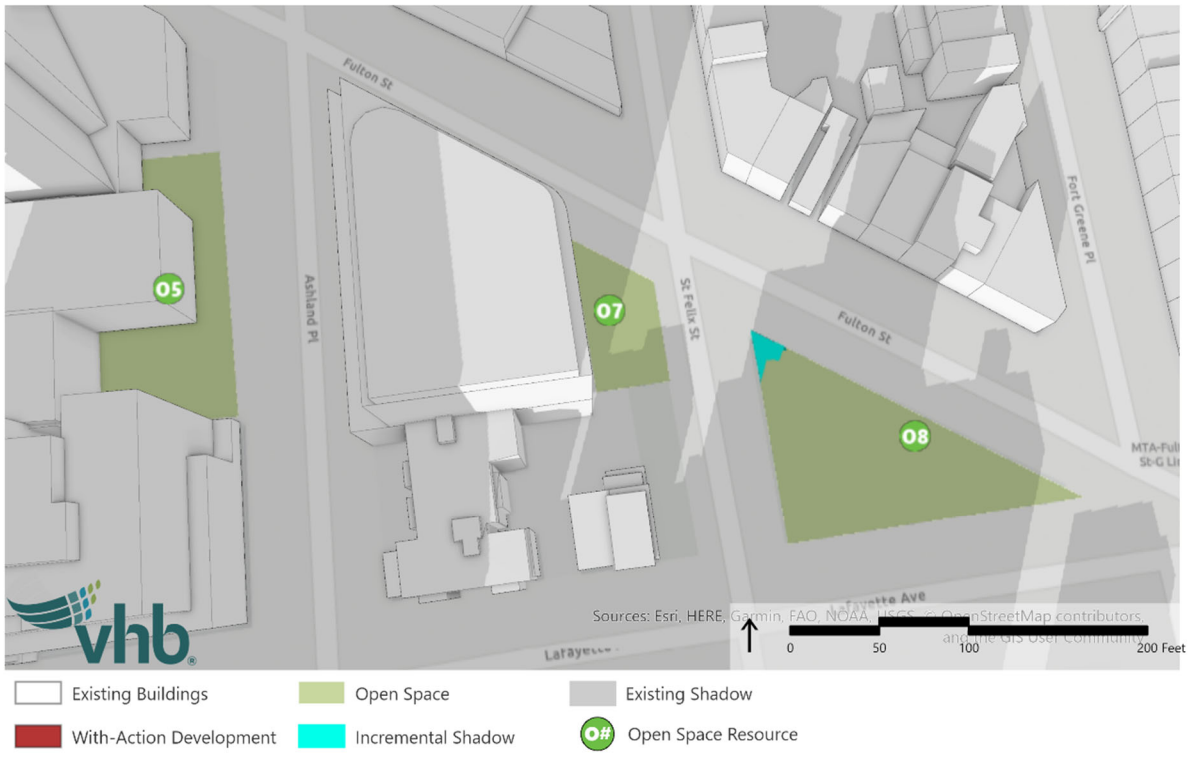


Figure 4-22 O8 - December 21 - 1:05 PM

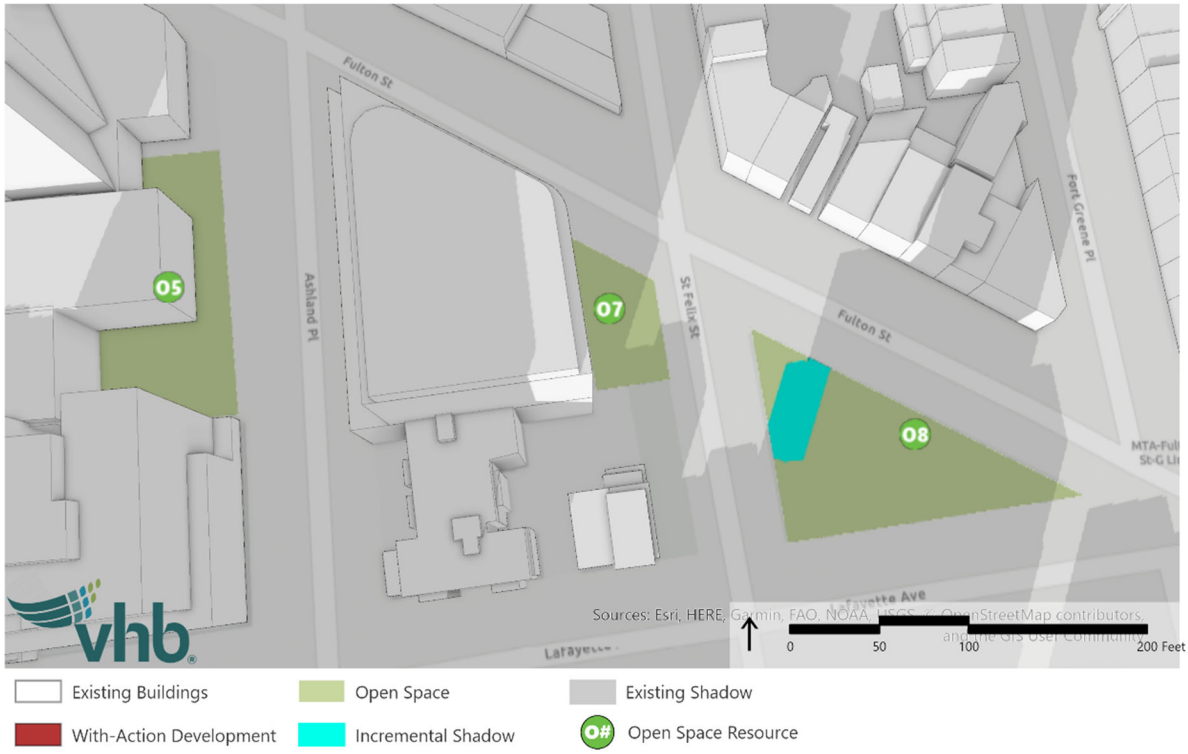
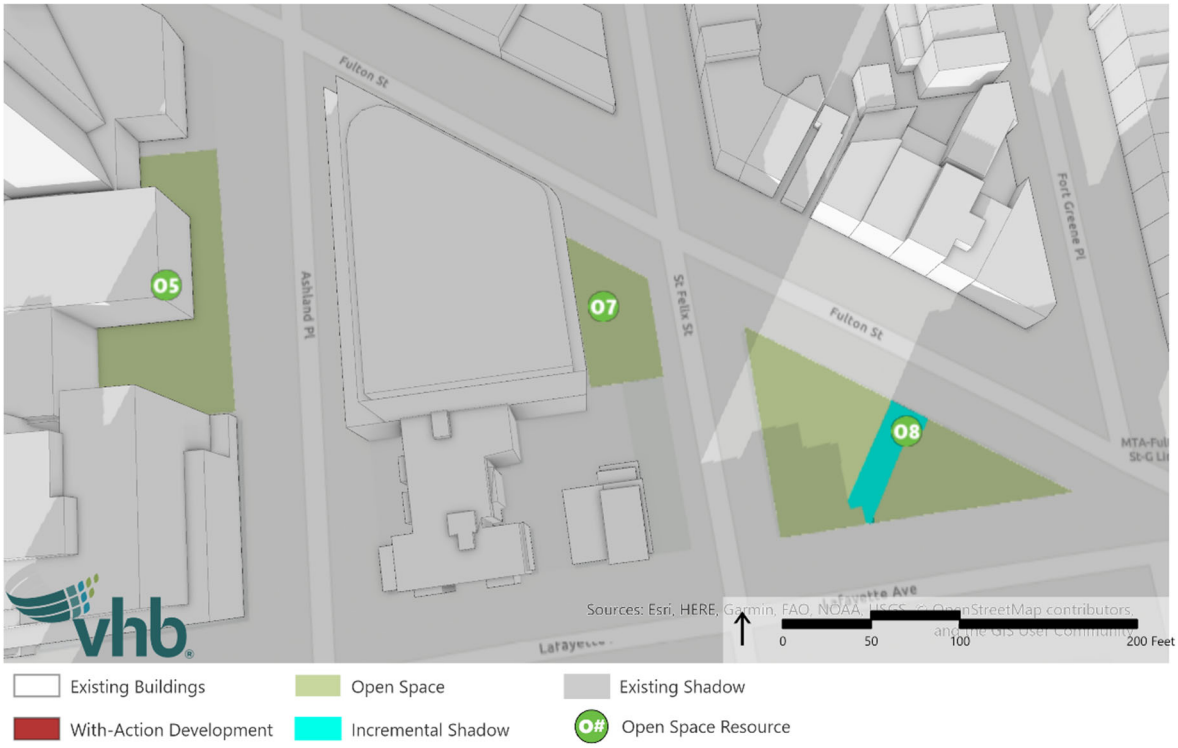


Figure 4-23 O8 - December 21 - 1:20 PM



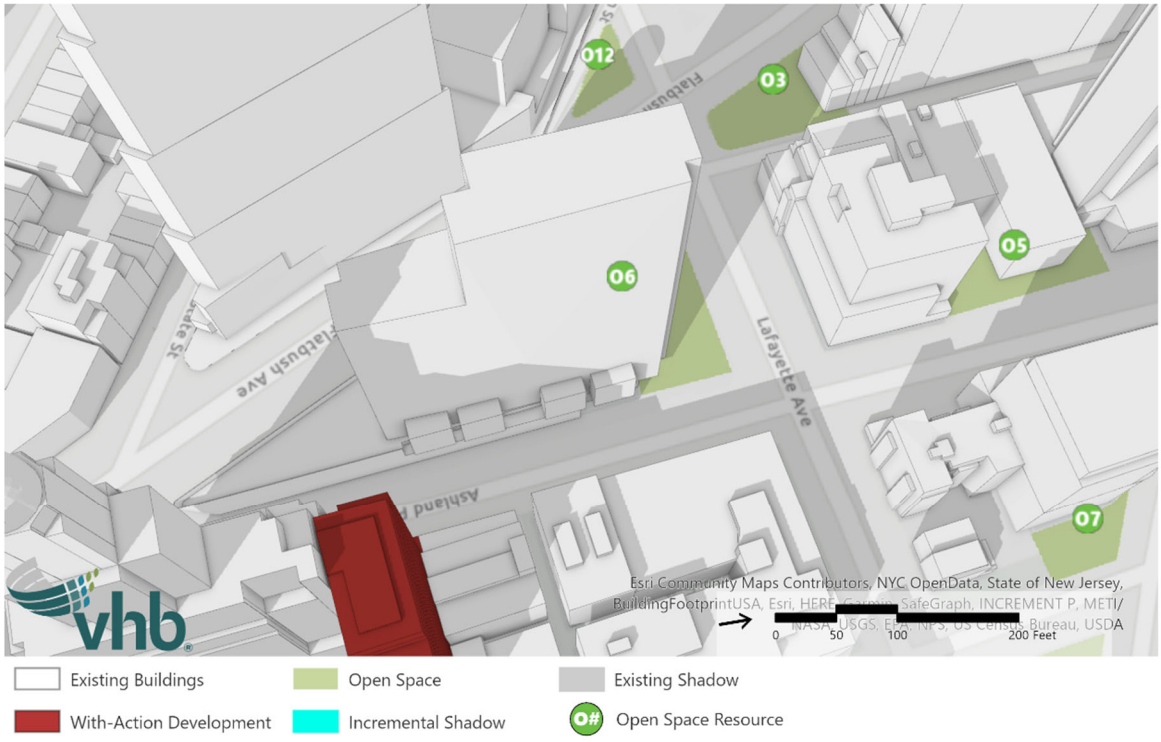
Figure 4-24 O8 - December 21 - 1:35 PM



O12 - Temple Square

Temple Square is a small triangular plaza that contains trees and is primarily used as a pedestrian circulation space. The Tier 3 analysis indicated that in the absence of existing or No-Action buildings, the plaza could receive shadow from the Proposed Project in the morning on the March/September 21st analysis day. However, the detailed shadows model showed that any potential shadow cast by the Proposed Project at this time would be blocked by the 300 Ashland development to the west of the Project Site. See **Figure 4-25**, which demonstrates that the plaza is already in No-Action and existing shadow at 9:30 AM on the March/September 21 analysis day. Therefore, the plaza would not be adversely impacted due to shadows and further analysis is not warranted.

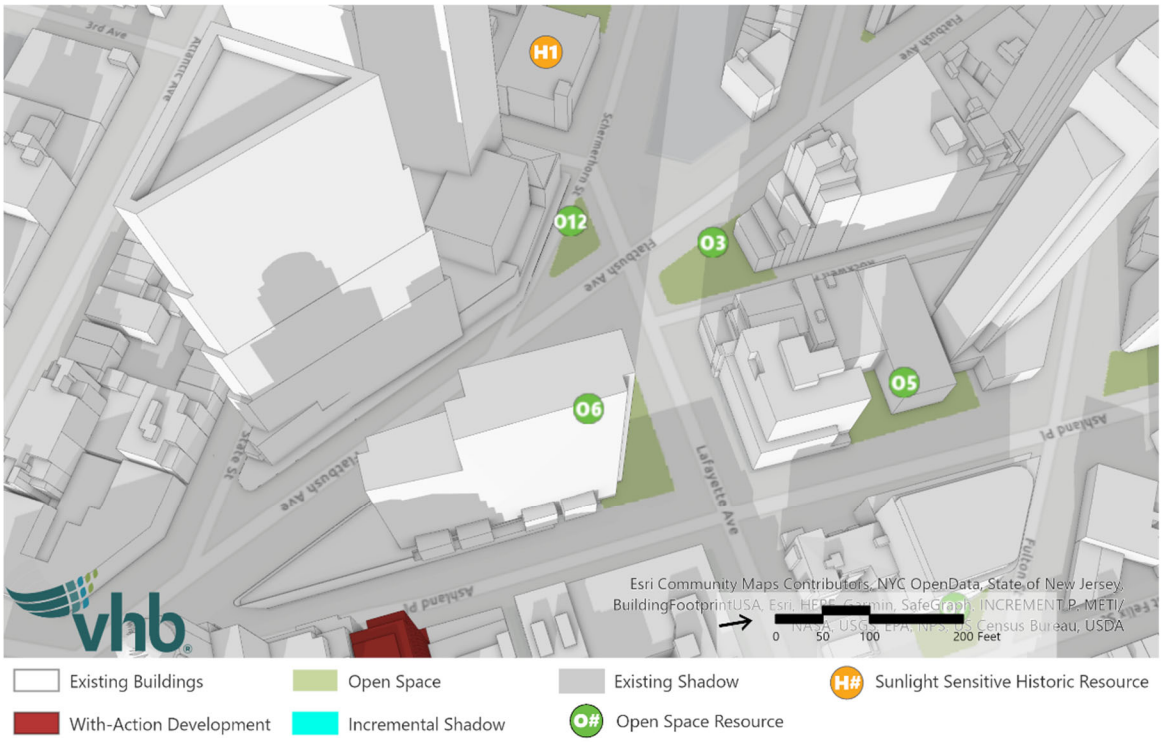
Figure 4-25 O12 - March/September 21 – 9:30 AM



H1 - Baptist Temple

The Baptist Temple is listed on the State and National Register of Historic Places and is located on the southwest corner of Third Avenue and Schermerhorn Street. The building has stained glass windows on all four of its facades that light its main sanctuary space. The main sanctuary space has been damaged by a fire and is currently closed to the public. However, if renovated and re-opened, these stained-glass windows would be sunlight-sensitive features. The Tier 3 analysis indicated that in the absence of existing or No-Action buildings, the Proposed Project could cast shadow on the building's east and north facing facades the morning of the March/September 21st analysis days. However, the detailed shadows model showed that the building would already be cast in shadow at this time from the 80 Flatbush building to be built under the No-Action condition, and any potential shadow from the Proposed Project that could have reach this resource would be blocked by that building, as well as by the 300 Ashland development. See **Figure 4-26** which demonstrates that the temple is already in No-Action and existing shadow on the March/September analysis day at 7:45 AM. Therefore, the Baptist Temple would not be adversely impacted due to shadows and further analysis is not warranted.

Figure 4-26 H1 - March/September 21 - 7:45 AM



H4 - Hanson Place Methodist Church

The Hanson Place Methodist Church, discussed in **Section 5, Historic and Cultural Resources**, is located directly south of the Project Site. The Tier 3 analysis indicated that in the absence of existing or No-Action buildings, the Proposed Project could cast shadow on the church on the May/August 6th and June 21st analysis days in the late afternoon, on the building's northern façade. There is a single, circular stained-glass window on the northern façade of the church near the roof of the building. The church is currently vacant and in need of restoration, but in the event of a restoration this window would be a sunlight-sensitive feature, and therefore was included in the analysis. However, the detailed shadows model showed that the window is already cast in shadow from the 300 Ashland development at this time, and the Proposed Project would not contribute any incremental shadow to the exterior of the church. See **Figure 4-27** and **Figure 4-28** that show the church already in No-Action and existing shadow at this time. The With-Action building is omitted so it can clearly be seen that the church is already in shadow. Therefore, the church would not be adversely impacted due to shadows. Further analysis is not warranted.

Figure 4-27 H4 - May/August 6 - 5:00 PM

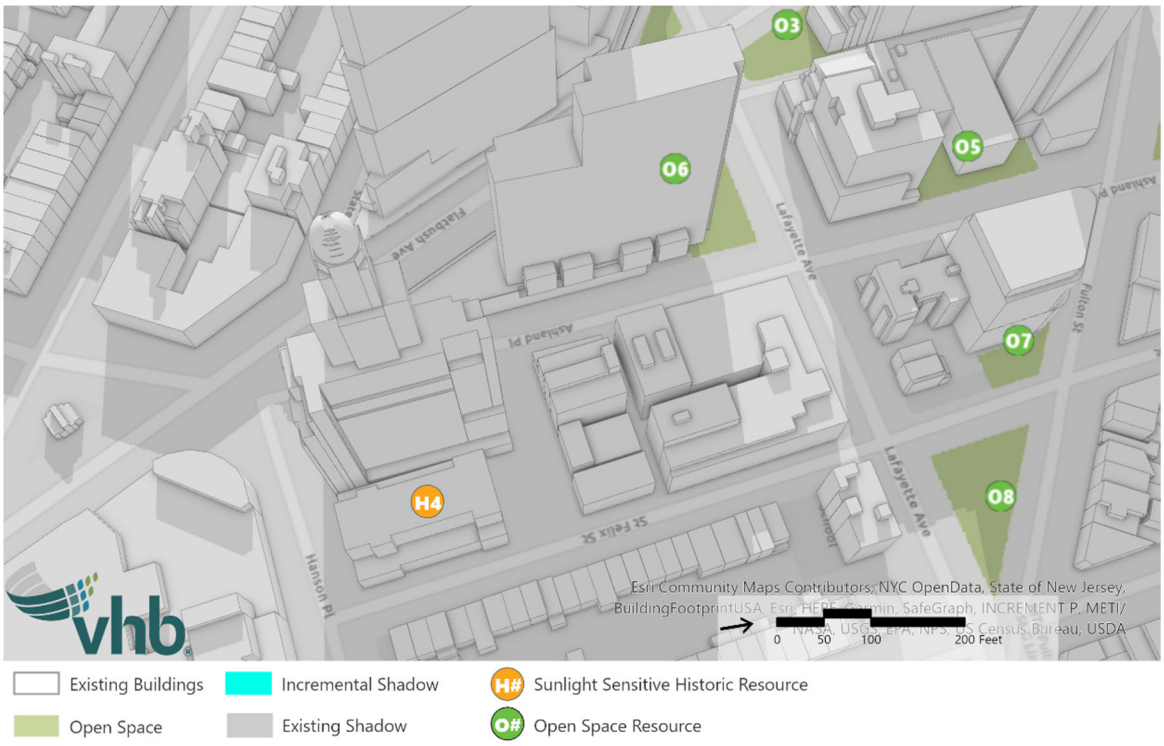


Figure 4-28 H4 - June 21 - 5:30 PM



Conclusion

In conclusion, the detailed analysis showed that there could be incremental shadow cast on four sunlight-sensitive resources out of the eight resources identified in the Tier 3 analysis: the Polonsky Shakespeare Center Plaza, BAM South POPS, 620 Fulton Street POPS, and Betty Carter Park. The other identified resources would receive no incremental shadow from the Proposed Project due to their position relative to surrounding existing or No-Action buildings that block shadow from the Proposed Project, or cast shadow on the resources themselves. Incremental shadows on the above identified resources would range from 20 minutes to 1 hour and 36 minutes. All would be cast on the December 21st analysis day, with the exception of the BAM South POPS that would also receive incremental shadow on the March/September 21st analysis day. These incremental shadows cast by the Proposed Project would be limited in extent and/or have little to no effect on amenities or vegetation in the spaces due to their location and the time of the year that incremental shadows would occur. Therefore, there would be no significant adverse impact from the Proposed Project with respect to shadows, and further analysis is not warranted.

5

Historic and Cultural Resources

This section assesses the potential for a proposed action to result in significant adverse impacts on historic and cultural resources, including both archaeological and architectural resources.

Introduction

Historical and cultural resources are defined as improvements or landscape features that could be or have been determined to have a special character, historical, or aesthetic interest or value. Historic and cultural resources comprise districts, buildings, structures, sites and objects of historical, aesthetic, cultural, and archaeological significance. Per the *2014 CEQR Technical Manual*, these resources include:

- Designated New York City landmarks, interior landmarks, scenic landmarks, and properties within designated New York City historic districts (or resources calendared for consideration by the New York City Landmarks Preservation Commission [LPC]).
- Resources listed on, or formally determined eligible for inclusion on, the State and/or National Register of Historic Places, or contained within a district listed on, or formally determined eligible for listing on, the State and/or National Register of Historic Places.
- Resources recommended by the New York State Board for Historic Preservation for listing on the State and/or National Registers of Historic Places.
- National Historic Landmarks.
- Resources not identified by one of the programs listed above, but that meet their eligibility requirements.

This section assesses the potential for the Proposed Project to affect architectural and archaeological resources located on the Project Site and in the surrounding area. The Project Area is within two Historic Districts - the Fort Greene Historic District boundary increase (90NR01301) and the Brooklyn Academy of Music Historic District (LP-01003).

Methodology

The *2014 CEQR Technical Manual* notes that environmental review for historic and cultural resources includes a survey and planning process that helps protect New York City cultural heritage from the potential impacts of projects undergoing CEQR. Historic and cultural resources include both archaeological and architectural resources. Archaeological resources are physical remains, usually subsurface, of pre-contact, post-contact and historic periods—such as burials, foundations, artifacts, wells, and privies. Architectural resources generally include historically important buildings, structures, objects, sites, and districts. They may include bridges, canals, piers, wharves, and railroad transfer bridges that may be wholly or partially visible above ground.

Archaeological resources are usually assessed for projects that would result in any in-ground disturbance. This is any disturbance to an area not previously excavated, including new excavation that's deeper and/or wider than previous excavation on the same site.

Generally, architectural resources should be surveyed and assessed if the proposed project would result in any of the following, whether any known historic resources are located near the site of the project:

- New construction, demolition, or significant physical alteration to any building, structure, or object;
- A change in scale, visual prominence, or visual context of any building, structure, object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed. For example, a building may be part of an open setting, such as a tower within a plaza, which is either conforming or nonconforming with the street wall in terms of its height, footprint, and/or setback. Visual context is the character of the surrounding built or natural environment. This may include the following: the architectural components of an area's buildings (e.g., height, scale, proportion, massing, fenestration, ground-floor configuration, style), streetscapes, skyline, landforms, vegetation, and openness to the sky;
- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects;
- Additions to or significant removal, grading, or replanting of significant historic landscape features;
- Screening or elimination of publicly accessible views;
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or on an historic structure if the features that make the structure significant depend on sunlight. For example, stained glass windows that cannot be seen without sunlight, or buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements, such as deep window reveals and prominent rustication.

In accordance with CEQR, a letter requesting environmental review and historic clearance was submitted to the New York City Landmarks Preservation Commission (LPC) for the Project Area. A findings statement issued by LPC on September 11, 2020, indicated that there are no properties with archaeological significance in the Project Area, but that the Development Site is located within the LPC-Designated Brooklyn Academy of Music (BAM) Historic District, within the State/National Register (S/NR)-listed Fort Greene Historic District, and adjacent to two S/NR-listed properties (see **Appendix A**).

Consistent with *CEQR Technical Manual* guidance, the assessment of the Proposed Project's potential to result in impacts on architectural resources begins with the survey and documentation of existing resources in the study area, which for this analysis is the area within 400 feet of the Project Area (Block 2111, Lot 40 (the Project Site) and Lots 7501, 37, and 45) and is generally defined as the area bounded to the north by Lafayette Avenue, to the west by an imaginary line approximately 150 feet west of Flatbush Avenue, to the south midblock between Hanson Place and Atlantic Avenue, and to the east by Fort Greene Place. Following existing conditions, the assessment provides a description of future conditions absent the Proposed Project (No-Action condition), and conditions expected with the Proposed Project (With-Action condition).

Assessment

Existing Conditions

Project Site

The Project Site, located at 130 St. Felix Street in Downtown Brooklyn, Community District 2, is an irregularly-shaped through-lot with existing access from both St. Felix Street and Ashland Place. The Project Site has a lot area of approximately 12,548 square feet (sf) and is part of a single zoning lot together with One Hanson Place/Williamsburgh Savings Bank (Block 2111, Lot 7501). It is currently vacant and does not provide public parking.

A desktop review of the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) Cultural Resource Information System (CRIS) and consultation with LPC indicates that the Project Site is listed within the NR-listed Fort Greene Historic District boundary increase and the LPC-Designated BAM Historic District. In addition, the Project Site is adjacent to the former Williamsburgh Savings Bank Building at One Hanson Place, which is a NYC Individual Landmark and a NYC Interior Landmark within the LPC-Designated BAM Historic District. These resources are described in further detail below.

According to a Phase I ESA completed by Langan engineering in 2015, the Project Site was occupied by several multi-story dwellings between 1887 and 1915 (as indicated on historic Sanborn maps).[1] A 1924 aerial photograph appears to depict one- to two-story buildings on the site. While the quality of the 1951 and 1954 aerial photographs are too poor to determine the presence of the buildings, it appears that by 1961 a parking lot is shown on

[1] Phase I Environmental Site Assessment for 130 Saint Felix Street, Brooklyn, New York. Prepared for 130 Saint Felix Street, LLC by Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. May 2015.

the Project Site; these site conditions remain the same through 2011 as indicated on aerial photographs.

As mentioned above, a letter requesting environmental review and historic clearance was submitted to the LPC for the Project Area. A findings statement issued by LPC on September 10, 2020, indicated that there are no properties with archaeological significance in the Project Area (see **Appendix A**). Therefore, no additional analysis is required for archaeological resources.

Study Area

As mentioned above, a 400-foot study radius is implemented to identify and address any potential impacts to historic architectural resources. There are eight identified resources within the study area, of which five are adjacent to the Project Site (see **Figure 5-1** and **Table 5-1**). These historic resources are described in further detail below.

Table 5-1 Known Architectural Resources within 400-foot Radius

Map No.	Block, Lot	Resource Name	NYCL	NYCL-eligible	S/NR	S/NR-eligible
Project Area						
H1	-	Fort Greene Historic District Boundary Expansion			X	
H2	-	Brooklyn Academy of Music Historic District	X			
H3	2111, 7501	Williamsburgh Savings Bank	X[1]		X	
H4	2111, 37	Brooklyn Music School			X	
H5	2111, 45	Central Methodist Church			X	
Study Area						
H1	-	Fort Greene Historic District Boundary Expansion			X	
H6	-	Atlantic Avenue Subway Station (IRT/BMT)			X	
H7	-	Atlantic Avenue Control House (IRT)			X	
H8	2111, 15	Brooklyn Academy of Music			X[2]	

Source: MapPLUTO16v2, NYS Cultural Resources Information System (CRIS), LPC Designation Reports, and LPC correspondence dated 9/10/2020

[1] Interior and exterior landmark

[2] Individually listed, also contributing within the Fort Greene Historic District Boundary Expansion

Figure 5-1 Historic Resources Map



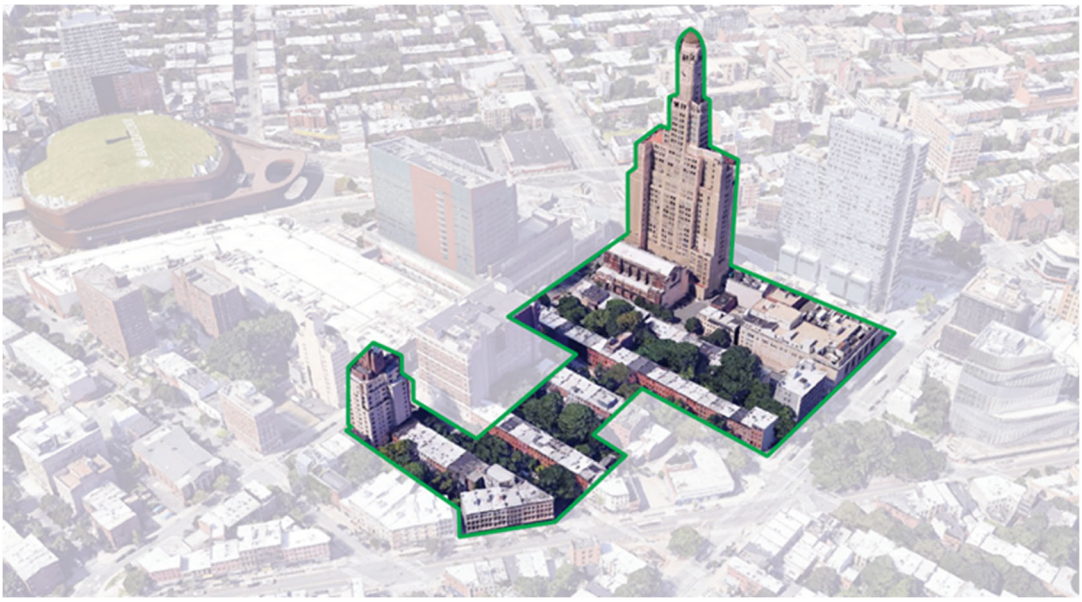
Fort Greene Historic District Boundary Expansion

The Project Area and most of the study area are situated within the S/NR-listed Fort Greene Historic District Boundary Expansion (90NR01301), which extends roughly to DeKalb Avenue on the north, South Oxford Street on the east, Hanson Place on the south, and Ashland Place on the west. The historic district is an expansion of the S/NR-listed Fort Greene Historic District (90NR01318; NYCL, LP-0973), which is bounded roughly by Myrtle Avenue on the north, Vanderbilt Avenue on the east, Fulton Street on the south, and Fort Greene Place on the west and is outside the study area. The district expansion comprises mostly residential buildings but also includes the Brooklyn Technical High School, the Brooklyn Academy of Music, and the Hanson Place Seventh Day Adventist Church, among other non-residential buildings. The district meets NR Criterion C as a rare concentration of architecturally distinguished 19th century townhouses with compatible church, commercial, and apartment buildings along with exceptional urban park landscape design by Olmstead and Vaux; the period of significance is 1840-1932. The row houses in the historic district are primarily three- to five-story brownstone and brick buildings designed in the Italianate, Second Empire, Anglo-Italianate, and neo-Greco styles. By far the most predominant style is the Italianate; building details include high stoops, arched doorways, floor-length parlor windows, and carved brackets supporting windows and cornices.

Brooklyn Academy of Music (BAM) Historic District

The LPC-Designated BAM Historic District (LP-01003) is roughly bounded by Lafayette Avenue, Fulton Street, Ashland Place, and Hanson Place. The district reflects the architectural development of Brooklyn's middle-class residential neighborhoods in the late 1850s. The historic district falls wholly within the borders of the Fort Greene Historic District Boundary Expansion (described above). The majority of the buildings in the district are row houses dating from 1855 to 1859, most of which are three or four stories in height, faced in brick or brownstone, and have Italianate features—high stoops, arched doorways, windows with bracketed lintels, and projecting bracketed cornices. The BAM Historic District is also notable for its legacy of blending larger-scale civic institutions with residential density. Mixed-use or non-residential buildings within the historic district are BAM, the high-rise mixed-use Williamsburgh Savings Bank, the Brooklyn Music School, and the Central Methodist Church, all located on the project block. An aerial image of the BAM Historic District is provided in **Figure 5-2**. As shown, the scale of the district buildings ranges from the residential row houses to the mid-rise buildings on the project block and eastern edge of the district and the high-rise Williamsburgh Savings Bank.

Figure 5-2 BAM Historic District Aerial View facing Southwest



Williamsburgh Savings Bank, One Hanson Place

The Williamsburgh Savings Bank (USNs 04701.008407**,** 04701.014497), located at One Hanson Place, is a NYC Individual Landmark (LP-00971), a NYC Interior Landmark (LP-01909), and is listed in the S/NR within the Fort Greene Historic District boundary increase (90NR01301). It is located adjacent to the Project Site. The 512-foot-tall building was constructed in 1927, when the bank's trustees found it necessary to expand beyond their location in Williamsburg. Designed by the architectural firm of Halsey, McCormick & Helmer, the bank is Byzantine-styled with a series of setbacks rising to a four-faced illuminated clock and gilded copper dome. The base of the building is constructed of Indiana limestone and polished rainbow granite from Minnesota. The 63-foot high main banking room, the interior landmark, is visually expressed on the exterior of the building. The setback portion of the building is introduced by another series of arched windows and is constructed of buff-colored brick with terra-cotta detailing. The various setbacks are accentuated by contrasting limestone trim, with the 13th and 26th floors set off by the use of round arches and a continuous terra-cotta band. The building has been converted to residential use, with the former main banking room now available for leasing to a commercial tenant.

Brooklyn Music School

The Brooklyn Music School (USN 04701.008684), located at 122-128 St. Felix Street, is within the LPC-Designated BAM Historic District (LP-01003) and the S/NR Fort Greene Historic District Boundary Expansion (90NR01301). It is located adjacent to the Project Site. It was founded as a music settlement house in the Navy Yard and moved in 1920 to its current location on St. Felix Street. The main building of the school comprises three row houses remodeled for its use by Meyer & Mathieu architects, and a fourth added in 1924 and remodeled by Slee & Bryson Architects. The exterior was stripped and stuccoed, and a new iron and terra-cotta cornice was added to give the school building a Mediterranean character.

Photo 5-1 One Hanson Place (1978)



Source: Fran Roccaforte, Brooklyn Academy of Music Historic District Designation Report, 1978

Photo 5-2 One Hanson Place (2020)



One Hanson Place building existing conditions

Photo 5-3 Brooklyn Music School (1939)



Source: NYC Department of Finance Historic Tax Photos

Photo 5-4 Brooklyn Music School (2020)



Brooklyn Music School building existing conditions

Photo 5-5 Central Methodist Church (1939)



Source: NYC Department of Finance Historic Tax Photos

Photo 5-6 Central Methodist Church (2020)



Central Methodist Church building existing conditions

Photo 5-7 Brooklyn Academy of Music (1939)



Source: NYC Department of Finance Historic Tax Photos

Photo 5-8 Brooklyn Academy of Music (2020)



Brooklyn Academy of Music building existing conditions

Central Methodist Church, 11-21 Hanson Place

The present Central Methodist Church (USN 04701.008549), located at 11-21 Hanson Place, is within the LPC-Designated BAM Historic District (LP-01003), and a S/NR listed building in the Fort Greene Historic District Boundary Expansion (90NR01301). It is located adjacent to the Project Site. The current building was constructed in 1929 within the footprint of the previous Hanson Place Methodist Church (organized in 1857). The present red brick, neo-Gothic structure sits on a granite base and is trimmed with light colored stone. The entrance on Hanson Place is flanked on either side by two-story wings that are occupied at the

ground floor by commercial tenants. Above the bay entry, which is framed in gothic stone arch, is a triforium gallery decorated with elaborate carvings and clerestory of three stained glass windows. A low gabled roof emphasizes the verticality of the central bay. Today, the church and commercial properties on the ground floor are vacant.

Atlantic Avenue Subway Station (IRT/BMT) and Atlantic Avenue Control House (IRT)

The Atlantic Avenue subway station (IRT/Brooklyn–Manhattan Transit Corporation [BMT]; USN 04701.013844) at Flatbush Avenue is listed on the S/NR (04NR05282) in accordance with Criterion C for its architectural significance. It is located at a major intersection in Downtown Brooklyn. Designed by Heins & LaFarge, it was completed in 1908 as part of the IRT Contract 2 Line. The original portion of the IRT station is aligned in a north-south direction beneath and parallel to Flatbush Avenue. The BMT portion of the station, completed in 1920, is aligned in a north-south direction beneath the block bounded by Flatbush Avenue, Fort Greene Place and Hanson Place. The entire complex, including the Long Island Railroad Terminal, occupies most of the area beneath the intersections of Fourth Avenue, Atlantic Avenue, Flatbush Avenue, and Hanson Place. The boundaries established by the NR nomination include the original IRT station, the BMT-Atlantic Avenue station and associated entrances. The above-ground Atlantic Avenue Control House, which is also S/NR listed (90NR01275) occupies a triangular traffic island formed at the center of this intersection.

Distinguishing architectural features of the Atlantic Avenue Subway Station include platform walls clad in tiles, marble, terra-cotta, and mosaics. Also significant are the remains of a spur at the western end of the LIRR terminal that connected the subways with the LIRR. The spur was designed by August Belmont, the German-Jewish banker who was the president of the IRT company and the subway's principal financier. The subway entrance within the Williamsburgh Savings Bank also includes original detailing and is considered significant. The BMT station was opened in 1920 and is located beneath the block bounded by Flatbush Avenue, Fort Greene Place, and Hanson Place, aligned in a north-south direction.

The Atlantic Avenue Control House is a one-story building constructed of buff-colored brick with limestone and terra-cotta trim that served as an entrance to the subway station until 1971. It was also designed by Heins & LaFarge in 1908. The control house was dismantled in 2000 as part of the Long Island Rail Road (LIRR) Atlantic Avenue terminal and subway station renovation. It was reconstructed on its original site, on the triangular island located at the juncture of Flatbush Avenue and 4th Avenue and serves as a skylight for the interior of the station.

Brooklyn Academy of Music (BAM)

BAM, located at 30 Lafayette Avenue, is within the boundaries of the LPC-Designated BAM Historic District (LP-01003) and is a S/NR listed building in the Fort Greene Historic District Boundary Expansion (90NR01301). The Discover New York City Landmarks Map identified BAM as a Calendared Individual/Interior Landmark.[2] It was constructed in 1906 and designed by the noted theater architecture firm Herts & Tallant. The Italian Renaissance-inspired building is faced in textured, cream-colored brick with polychromatic terracotta detail,

[2] Discover New York Landmarks Map available here https://nyclpc.maps.arcgis.com/apps/webappviewer/index.html?id=93a88691cace4067828b1eede432022b, accessed on October 2, 2020.

including entrances adorned with putti (i.e., figures of small cherubs) singing and playing musical instruments, inspired by the work of Renaissance master Luca della Robbia. A reproduction of the original cornice and a new marquee were installed in 2004. In 2005, the building was individually listed in the NR (05NR05334).

No-Action Condition

Absent the Proposed Project, the Project Site would remain a vacant lot as in existing conditions.

Independent of the Proposed Project, there are no other known planned or proposed modifications to identified historic or cultural resources within the affected area or study area.

With-Action Condition

As stated previously, in the future With-Action condition, the Proposed Actions would facilitate the development of an approximately 166,402-gsf mixed-use development including approximately 20,120 gsf of community facility space on the cellar level and first and second floors, and approximately 146,282 gsf of residential space accommodating up to 130 units, of which 20 percent would be affordable under the MIH program. The community facility space would be occupied by the BMS and would include expanded instructional space. The Proposed Project would be constructed to a height of 23 stories and a maximum of 270 feet (with mechanical bulkhead measured from the sidewalk). The new building will transform a vacant lot and seamlessly complete the block, complementing the surrounding BAM Historic District's legacy of blending civic institutions with residential density.

Because the With-Action condition involves new in-ground disturbance, the potential to impact archaeological deposits was reviewed. A findings statement issued by LPC on September 11, 2020, indicated that there are no properties with archaeological significance on the Project Site; therefore, there are no potential impacts to archaeological resources.

On August 4, 2020, the Landmarks Preservation Commission adopted a resolution approving the issuance of a Certificate of Appropriateness for the Proposed Project at the Development Site (see **Appendix A** for the conditional approval letter from LPC dated August 10, 2020). A Certificate of Appropriateness will be issued upon review and approval of the final Department of Buildings filing drawings for the approved work.

As designed, the Proposed Project would enhance the special architectural and historic character of the BAM Historic District by incorporating architectural details reminiscent of the historic district into a contemporary design that recalls the Art Deco influence of its neighbors. The Proposed Project will possess similar attributes of verticality and pronounced setbacks as it rises to the top. Vertical piers and a unique gradation of brick color both recall and reinvent the historic style and materiality. The overall height of the building is approximately 20 feet lower than the "shoulder" and approximately 250 feet shorter than the top of Williamsburgh Savings Bank, thus preserving the historic tower's iconic presence. A two-story base will blend with the height of the rowhouses and cultural institutions along St. Felix Street, and will house the expansion of the Brooklyn Music School. A series of setbacks away from St. Felix Street will maintain an appropriate scale along St. Felix Street and concentrate massing toward the higher-density built character of Ashland Place. The façade,

with its pattern of vertical windows and palette of light-colored brick and limestone, creates a direct visual connection to the existing school while providing a new accessible front door. In summary, the Proposed Project is designed to blend and contribute to the surrounding district in design and function.

To avoid the potential for construction-related impacts (such as falling objects, vibration, dewatering, subsidence, or collapse), a Construction Protection Plan (CPP) would be developed in coordination with LPC and implemented to protect the Central Methodist Church, the Brooklyn Music School, and the Williamsburgh Savings Bank, as requested by LPC in correspondence dated September 10, 2020 and following the guidelines of the New York City Department of Buildings' *Technical Policy and Procedure Notice (TPPN) #10/88*.[3] The CPP will be submitted to LPC for review and approval prior to the start of construction.

Conclusion

The Proposed Project is located within the LPC-Designated BAM Historic District and the S/NR listed Fort Greene Historic District Boundary Expansion. The design of the Proposed Project has been developed in coordination with LPC to ensure the Proposed Project respects and responds to the existing LPC-designated historic resource. A CPP will be developed and implemented to avoid the potential for construction-period effects on adjacent historic buildings.

The Proposed Project would not significantly alter or affect the setting, visual relationship, or publicly accessible views of the identified historic resources within the study area, and therefore there would be no potential for a significant adverse impact related to historic resources.

[3] TPPN #10/88 was issued by DOB on June 6, 1988, to supplement Building Code regulations with regard to historic structures. TPPN #10/88 outlines procedures for the avoidance of damage to historic structures resulting from adjacent construction.

6

Urban Design and Visual Resources

An urban design assessment under CEQR considers whether and how a project may change the experience of a pedestrian in the study area. The assessment focuses on the components of a proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment.

Introduction

Urban design is the totality of components that may affect a pedestrian's experience of public space. To determine if a proposed action has the potential to change the pedestrian experience, an urban design assessment under CEQR guidelines focuses on the components of a proposed action that may alter the arrangement, appearance, and functionality of the built environment from the pedestrian's perspective. In accordance with the *2020 CEQR Technical Manual*, a preliminary assessment of urban design 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 regulations.

A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

As described in **Part I: Project Description**, the Applicant is requesting a zoning map amendment, special permits, and zoning text amendments (the "Proposed Actions"), to facilitate an approximately 166,402-gross-square-foot (gsf) mixed-use development on Lot 40 on Brooklyn Block 2111 in Downtown Brooklyn (the "Project Site"). The Project Area (which includes the Project Site, as well as Lots 37, 45, and 7501 on Block 2111), would be

rezoned from a C6-1 (DB) district to a C6-6 (DB) district on the western half of the project block and a C6-4 (DB) district on the eastern half of the project block. The proposed districts have different bulk and dimensional regulations than those of the existing zoning district and would therefore result in different No-Action and With-Action conditions. Thus, an urban design and visual resources analysis is warranted.

Methodology

In accordance with the *CEQR Technical Manual* guidelines, the following preliminary urban design and visual resources assessment considers a 400-foot radius study area where the Proposed Actions would be most likely to influence the built environment. The preliminary assessment focuses on those project elements that have the potential to alter the built environment, or urban design, of the Project Area, which is collectively formed by the following components:

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

The following information, if known, is included in a preliminary assessment:

- A concise narrative of the existing study area, and conditions under the future No-Action and With-Action conditions;
- An aerial photograph of the study area and ground-level photographs of the Project Site with immediate context;
- Zoning and floor area calculations of the existing and future No-Action and With-Action conditions;
- Building massing and building heights; and
- A three-dimensional representation of the future With-Action and No-Action condition streetscape.

If the preliminary assessment determines that a change to the pedestrian experience is minimal and unlikely to disturb the vitality, walkability or visual character of the study area, then no further assessment is necessary. However, if it shows that changes to the pedestrian environment and/or visual resources are significant enough to require greater explanation and further study, then a detailed analysis may be appropriate.

The following preliminary urban design and visual resources assessment follows these guidelines and provides a characterization of existing conditions, a description of urban design and visual resources under the future No-Action and With-Action conditions, and an analysis determining the extent to which physical changes resulting from the Proposed Actions would alter the pedestrian experience.

Study Area

The urban design and visual resources study area is typically defined as the area within 400 feet of the Project Area which, for this project, is generally bounded by Ft. Greene Place to the east, Atlantic Avenue to the south, just west of Flatbush Avenue to the west, and Lafayette Avenue to the north. This is the area in which the Proposed Project would be most likely to have effects in terms of urban design and visual resources. A field survey was conducted on August 20, 2020 to document existing conditions in the study area. Representative photographs of the study area are included in the discussion below; **Figure 6-1** provides a key map depicting the location and viewing direction from which each photograph was captured.

Preliminary Assessment

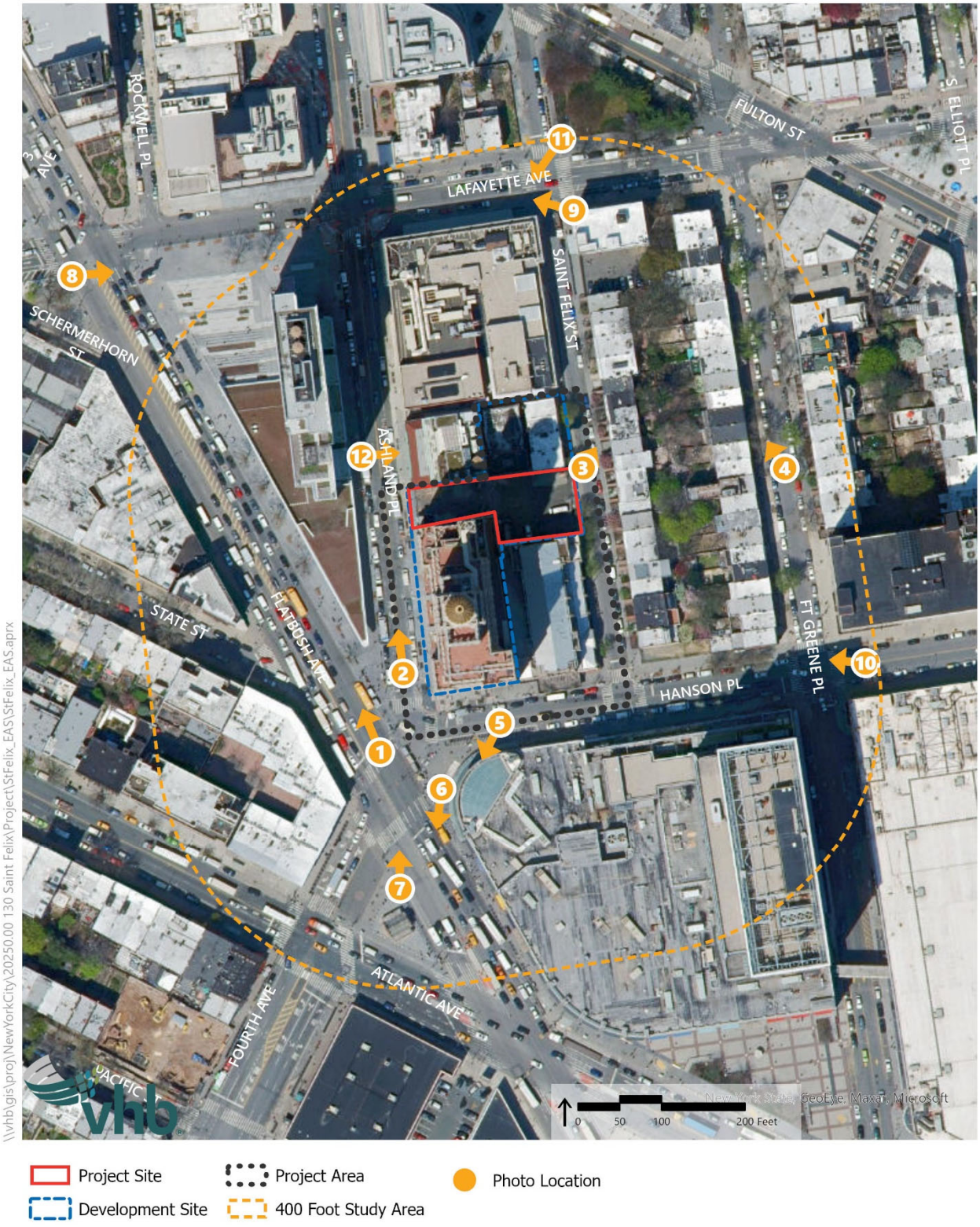
Existing Conditions

Project Site and Project Area

The Project Site comprises Lot 40 and is part of a single zoning lot together with One Hanson Place/Williamsburgh Savings Bank on Lot 7501, on Brooklyn Block 2111. The Project Site is a through lot located within the center of the project block, which is bounded by St. Felix Street to the east, Hanson Place to the south, Ashland Place to the west, and Lafayette Avenue to the north. The Project Site is a currently a vacant lot. The Project Site has a total area of approximately 12,548 square feet, with approximately 84 feet of frontage along St. Felix Street and 47 feet along Ashland Place. The Proposed Project would involve a merger of the existing zoning lot with Lot 37, which contains the Brooklyn Music School (BMS). Overall, the proposed zoning lot would include Lots 37, 40, and 7501 on Block 2111 (the "Development Site"). See the **EAS Figure 6** for photos of the Project Site and Project Area.

The BMS is a community school for the performing arts housed in a four-story building with a brown stucco facade. One Hanson Place (Lot 7501), located at the corner of Hanson Place and Ashland Place, is a mixed residential and commercial building with residential units on the upper floors and commercial office space on the lower floors, as well as the room that contained the former bank, which is available for a commercial lease. One Hanson Place was constructed in 1929 originally to house the Williamsburg Savings Bank. This building was constructed in a modernized Romanesque style using marble, brick and terra cotta building materials. The building is also known for its elaborate windows, setback massing and clock tower. It is 41 stories and 517 feet tall, and for many years this building has dominated the Brooklyn skyline.

Figure 6-1 Study Area Photograph Location Map



In addition to the buildings described above, the Project Area also contains the Hanson Place Central United Methodist Church, constructed in 1929 and located on Lot 45 at the southeast corner of the project block. Lot 45 has an area of 16,447 sf and currently contains the largely vacant, brick, three-story religious building as well as three commercial storefronts fronting Hanson Place.

The Project Area is located in the LPC-designated Brooklyn Academy of Music (BAM) Historic District (LP-01003) and the National Register-listed Fort Greene Historic District boundary expansion (90NR01301). Within the study area, these two historic districts extend over the entire project block and the block to the east as well as a small portion of the eastern side of Fort Greene Place, and the buildings within them are listed as City, State and National Resources. Furthermore, the One Hanson Place building was designated as an individual landmark by LPC for both the building exterior and ground floor interior (LP-0971 and LP-1909). Additionally, the Brooklyn Academy of Music (BAM) building is listed as an individual resource on the State and National Register of Historic Places. The Atlantic Avenue Subway Station (IRT/BMT) and Atlantic Avenue Control House south of the Project area are also individually listed resources on the State and National Register of Historic Resources.

Study Area

As described above, the study area is generally bounded by Ft. Greene Place to the east, Atlantic Avenue to the south, just west of Flatbush Avenue to the west, and Lafayette Avenue to the north. The study area does not contain any open space resources with the exception of a portion of the plaza at 300 Ashland Place.

Urban Design

The eastern portion of the study area is generally divided by a typical street grid with blocks that are short along the Avenues and long along the Streets and Places, with largely one-way residential streets. To the west, the study area is intersected by Flatbush and Atlantic Avenues, two large, heavily trafficked thoroughfares that create irregularly shaped blocks to the west and south of the Project Area. Within the study area, Ashland Place and St. Felix Street provide north to south access. Street widths vary, with the major roadway (i.e., Flatbush Avenue and Atlantic Avenue) generally wider, ranging from approximately 100 feet to 120 feet, than the local roadways which range from 50 feet to 70 feet (i.e. Ashland Place and St. Felix Street). Generally, concrete sidewalks interspersed with street trees and limited grassed areas line either side of the roadways within the study area. Sidewalks widths range from 10 to 36 feet in the study area, with wider sidewalks prevalent along more heavily trafficked roadways. Parking is permitted on both sides of the secondary streets in the study area and, as such, parked cars typically line these roadways (see **Photo 6-1** through **Photo 6-4**).

Just south of the Project Area is a major transportation hub, the Atlantic Terminal, where multiple subway lines and the Long Island Rail Road intersect. The Atlantic Terminal building is two to three stories with a curved façade at the intersection of Flatbush Avenue and Hanson Place (see **Photo 6-5**). Just west of the Atlantic Terminal building is a small island formed by the convergence of Flatbush and Atlantic Avenues and its surrounding streets containing a historic control house for the IRT Atlantic Avenue Subway Station (see **Photo 6-6**). As a major transportation hub, roadways adjacent to Atlantic Terminal contain

significant pedestrian and transportation amenities including benches, bike racks, and bus shelters.

Buildings within the study area represent a diverse assortment of shapes and forms. As discussed in **Section 2, Land Use, Zoning and Public Policy**, uses within the study area include, among others, residential, commercial and institutional buildings. Generally, buildings to the east of the Project Site are lower to mid-rise in scale residential buildings, with mid-rise buildings on and around the project block and large-footprint commercial and mixed commercial and residential mid- and high-rise buildings to the south and west of the Project Site.

To the east of the Project Site, the neighborhood buildings consist of predominately townhome style, single- and multi-family residences that are three to five stories with flat roofs. Façade treatments of the townhomes consist of brick, stucco, and varying color sandstone with leaf brackets and ornamental patterns above some doorways, and high stoops. Street wall conditions of the residential uses within this area are consistent and set back from the roadway, as each townhome contains a small front yard improved with a paved patio area and minimal landscaping. Due to the small front yards in front of these residential uses, the street wall is setback from the roadway. Fences, typically cast-iron, line the front yards and railings line the townhome stairs and stoops (see **Photo 6-3** and **Photo 6-4**). Other buildings to the east and southeast of the Project Site include an eight-story multi-family building at the southeast corner of St. Felix Street and Lafayette Avenue, and a mid-rise office tower connected to Atlantic Terminal Mall (detailed below).

To the west and south of the Project Site, residential buildings consist of multifamily walk up residential and mixed-use buildings with commercial space on the lower levels with multiple stories of residential uses above. These buildings' façades range in treatment styles in keeping with range of when they were constructed (see **Photo 6-7)**. Specifically, newer buildings are modern in design with primarily glass cladding and textured, geometric façade treatments with flat roofs (see **Photo 6-1** and **Photo 6-8**). Older, multistory buildings have varying façade treatments consisting of brick and stucco with tiered stories and varying roof styles. These buildings are built along their property boundaries creating a consistent street wall along the roadways.

Photo 6-1 View from Flatbush Avenue facing northwest near Hanson Place

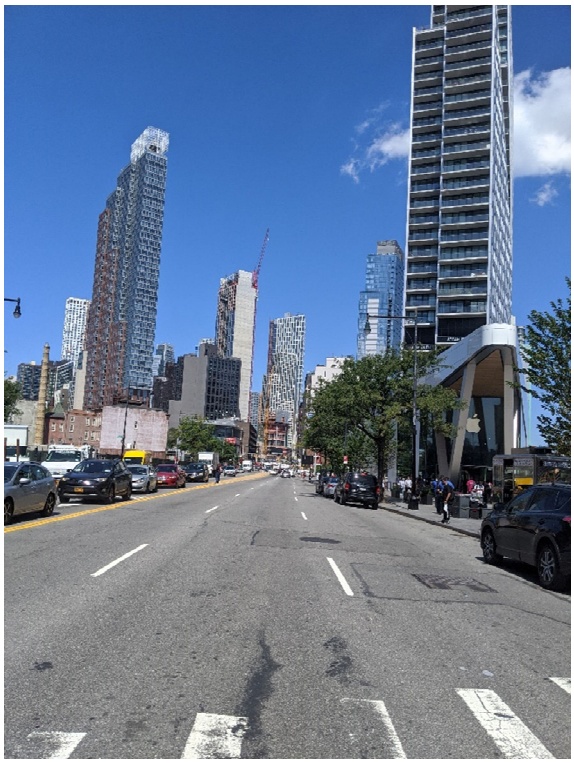


Photo captured 8/20/20

Photo 6-2 View facing north on Ashland Place near Hanson Place

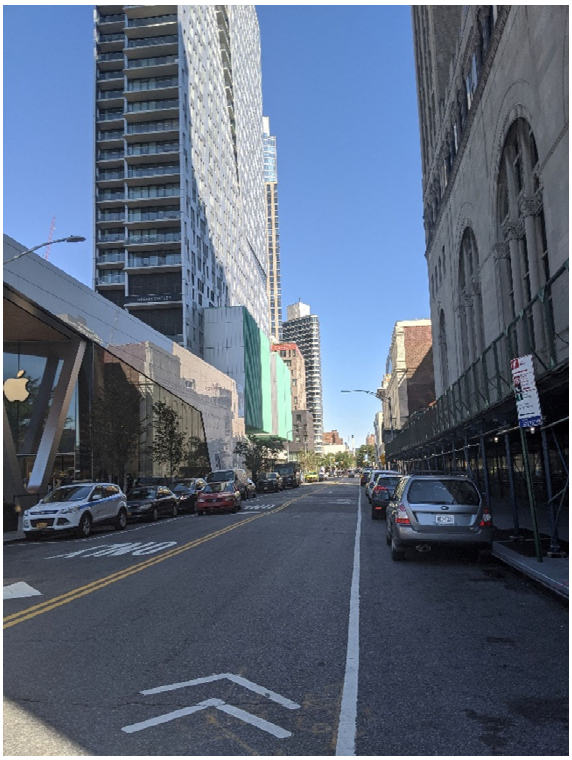


Photo captured 8/20/20

Photo 6-3 View from St. Felix Street facing northeast from middle of the block



Photo captured 8/20/20

Photo 6-4 Townhomes along Ft. Greene Place, facing northwest



Photo captured 8/20/20

Photo 6-5 View of Atlantic Terminal facing south from Hanson Place

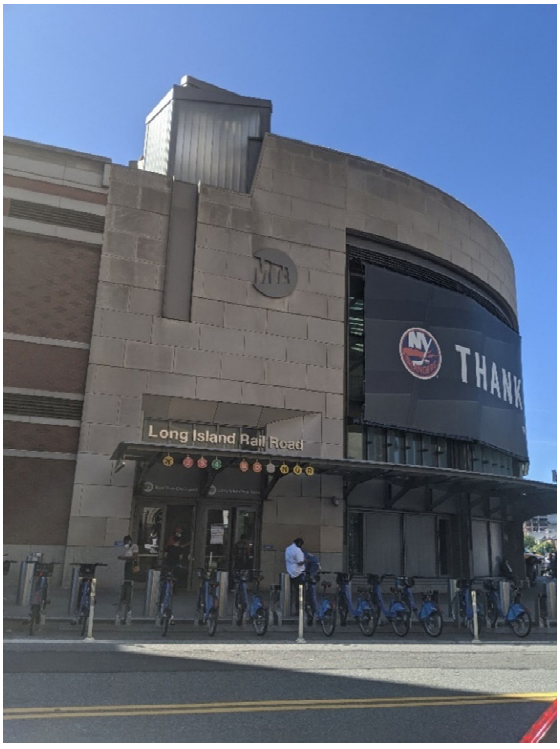


Photo captured 8/20/20

Photo 6-6 View of Atlantic Avenue Control House facing southwest from Flatbush Avenue



Photo captured 8/20/20

Photo 6-7 View facing north from intersection of Fourth Avenue and Flatbush Avenue



Photo captured 8/20/20

Photo 6-8 View of 300 Ashland Place, facing northwest from intersection of Flatbush Avenue and Lafayette Avenue

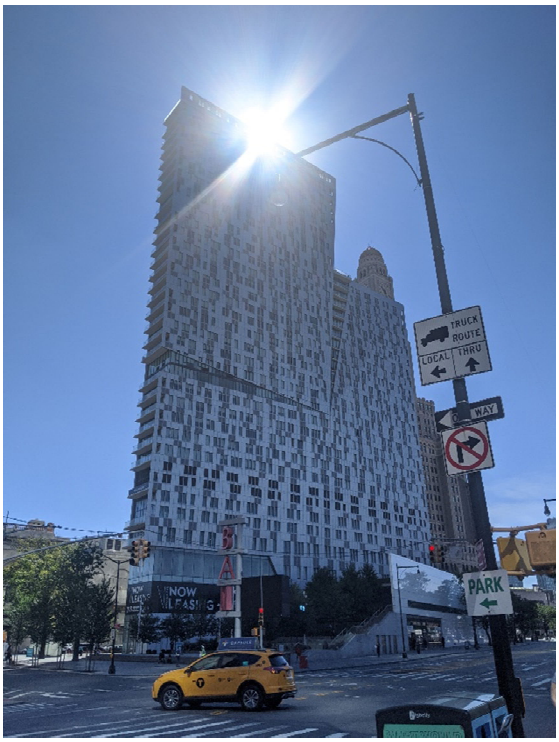


Photo captured 8/20/20

Commercial uses are located throughout the study area within mixed-use buildings, primarily on the lower levels of buildings with residential uses above. As with the area residential buildings, buildings containing commercial uses vary in height and façade styles (see **Photo 6-9**). The tallest building in the study area, besides One Hanson Place, is the 300 Ashland building west of the Project Area, which rises to 364 feet tall (see **Photo 6-10**). Commercial uses on the ground floor are large-footprint retail uses with modern glass facades. The majority of the commercial uses on the ground floors contain awnings, signage and advertisements associated with the commercial uses. There is one large commercial-only use in the study area, the Atlantic Terminal Mall, to the south of the Project Area, which is a multi-story brick-clad building with awnings and large signage on the lower levels as well as a midrise office tower with a glass and brick façade.

Institutional buildings within the study area are generally confined to the project block, from mid-block to Lafayette Avenue. Most prominent is the BAM Howard Gillman Opera House, located at the north end of the project block, which was built in 1908 with a brick and marble exterior with glass windows and metal accents. The BAM Fisher building located on Ashland Place is a four-story brick building with large windows and three arched entranceways (see **Photo 6-9** through **Photo 6-12**).

Photo 6-9 View from the corner of St. Felix Street and Lafayette Avenue facing northwest



Photo 6-10 View facing east along Hanson Place, with One Hanson Place and 300 Ashland in background



Photo captured 8/20/20

Photo 6-11 View of BAM Howard Gillman Opera House, facing southwest from Lafayette Avenue

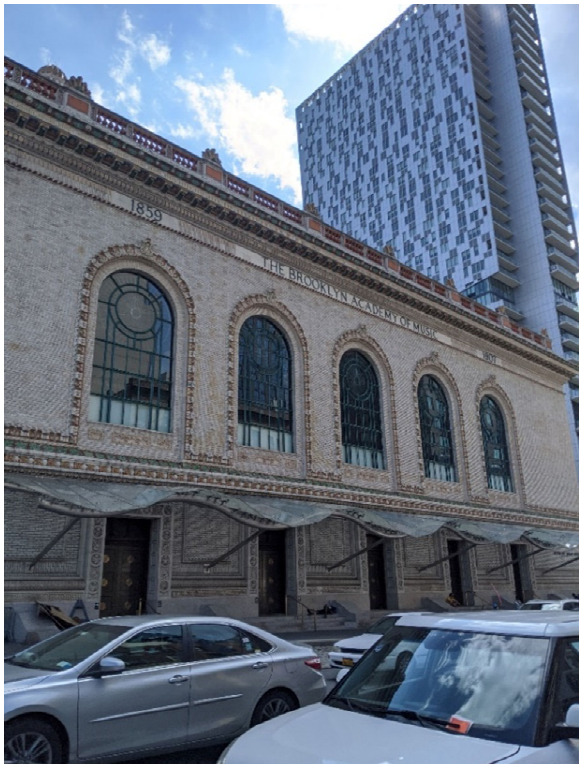


Photo captured 8/20/20

Photo 6-12 View of BAM Fisher building from Ashland Place facing east



Photo captured 8/20/20

Visual Resources

Visual resources within the study area include two of the individually landmarked buildings in the study area that can be seen from the publicly accessible sidewalks adjacent to the Project Site, One Hanson Place and the BAM Howard Gillman Opera House. Both of these buildings are architecturally significant and views to them are important from within the study area and in the case of One Hanson, from the areas surrounding the study area as well.

No-Action Condition

As described in **Part I: Project Description**, absent the Proposed Project (the future No-Action condition), the Project Site would continue to operate under the existing conditions, as a vacant lot with no continuous street wall on a central block within two historic districts, and no affordable housing or expansion space would be created for the Brooklyn Music School as a result.

As discussed in **Section 2, Land Use, Zoning and Public Policy**, there are two anticipated developments within the study area expected to be completed by the 2024 analysis year. The first anticipated development is located at 80 Flatbush Avenue and is an 840-foot-tall, mixed-use building. It would be taller than buildings in the study area, but of a similar style and bulk to much of the development in Downtown Brooklyn. It would feature a tapering tower on a base that cantilevers over the historic school building on the ground floor. The second building would be located at 100 Flatbush Avenue within the same block as 80 Flatbush Avenue. The building would be constructed to a height of 510 feet, and would be triangular in shape with multiple setbacks for a slightly tapered tower. It would be of a similar height and bulk to the taller buildings in the study area.

With-Action Condition

As described in **Part I: Project Description**, in the future With-Action condition, the Project Site would be developed with a 166,402-gsf mixed-use building with 20,120 gsf of community facility space and 146,282 gsf of residential space. The Proposed Project would be 23 stories and 270 feet in height. The community facility space would be located on the cellar level, first, and second floors and would accommodate expanded instructional space for the adjacent BMS. On the upper floors, the building would contain up to 130 residential units, of which 20 percent would be affordable under the Mandatory Inclusionary Housing (MIH) program. See **Figure 6-2** for an aerial perspective of the With-Action condition. **Figure 6-3** through **Figure 6-10** provide comparative visualizations of the future No-Action and With-Action conditions.

The central portion of the Proposed Project would be constructed abutting the northern façade of One Hanson Place. However, with a height of 270 feet, the Proposed Project was designed to be 20 feet lower than the "shoulder" at One Hanson Place so as not to compete visually with the adjacent landmarked building. Along St. Felix Street, the base height of the Proposed Project would be set to establish a "townhouse" scale, similar in height to the BMS, creating a consistent street wall, before setting back 18 feet above the base height of 36 feet. These building setbacks at the base and additional setbacks as the building rises would establish an appropriate scale for the street wall along St. Felix Street and would show a transition from the larger buildings to the west of the Project Site, including One Hanson Place, to the mid-rise buildings and smaller townhouse style homes to the east. Along

Ashland Place, the proposed building would set back 16 feet after a base height of 43 feet to be consistent with adjacent BAM Fisher building.

Figure 6-2 Aerial Perspective, facing northwest



Source: FX Collaborative

Beyond the pronounced setbacks that would create visual cohesiveness with the surrounding buildings, other elements of the building design are characteristic of urban design in the study area. The Proposed Project would incorporate the Art Deco influence of the neighboring buildings into a contemporary design through gradations in brick colors and vertical piers. These elements echo design features of One Hanson Place to the south and other Deco-inspired buildings in the historic district.

Within the Development Site, it is not expected that the BMS or One Hanson Place would be redeveloped. The Proposed Project would substantially use up the remaining floor area available in the proposed zoning lot. Furthermore, both the BMS and One Hanson Place are landmarked buildings; One Hanson Place underwent a redesign in 2008, and the BMS would have expanded space under the Proposed Actions. Within the Project Area but outside of the Development Site, the Central United Methodist Church is also a contributing landmarked building to the BAM Historic District. Therefore, it would not be permitted to be demolished without LPC approval of a hardship application. Additionally, were LPC to

approve the demolition, any future development would also be subject to LPC approval. Therefore, it is assumed it would not be redeveloped.

Urban Design

The With-Action condition would be consistent with the urban design character of the study area. As detailed above and shown in **Figure 6-3** through **Figure 6-7**, the proposed street frontages along St. Felix Street and Ashland Place were designed to match and complete the street wall character and base heights of the adjacent buildings, including the BMS building and the BAM Fisher building. This proposed building form, with setbacks above the base height, contributes to the existing pedestrian scale of the two Project Site street frontages. The base of the Proposed Project would be the portion of the building best perceived from a pedestrian perspective, and providing the lower base that matches the adjacent building would focus this perspective on the consistent datum. The With-Action condition would also improve the pedestrian experience along both St. Felix Street and Ashland Place compared to the No-Action condition through infill development of the existing fenced, vacant site, which disrupts an otherwise consistent street wall and diminishes the overall character of the project block. The Proposed Project would increase vibrancy along the Project Site street frontages, introducing residences (including 26 units of affordable housing) on the upper floors and expansion of the adjacent BMS on the lower floors. The expansion of the BMS would also provide much-needed space that would allow for growth within the important community institution and increase vibrancy along St. Felix Street.

As discussed above, the Project Site is located on a transitional block between the lower-scale townhome to mid-rise style residences to the east and the taller mixed-use towers including One Hanson Place that are characteristic of Downtown Brooklyn to the west. This juxtaposition between lower scale buildings and tall towers is a defining feature of the study area. As shown in **Figure 6-7**, in comparison to the No-Action condition, the proposed height of the building and series of setbacks along the St. Felix Street frontage of the Proposed Project would provide a visual transition between these two sections of the study area, reinforcing this defining feature and improving the relationship between the existing buildings. Development on the Project Site would also be in keeping with the other taller mixed-use buildings that have been recently developed nearby, including 300 Ashland Place, visible behind the Project Site in **Figure 6-7**.

As detailed in **Section 7, Historic and Cultural Resources**, as designed, the Proposed Project would enhance the special architectural and historic character of the BAM Historic District by incorporating architectural details reminiscent of the historic district into a contemporary design that recalls the Art Deco influence of its neighbors. The façade, with its pattern of vertical windows and palette of light-colored brick and limestone along the base of the building, creates a direct visual connection to the existing BMS building while providing a new accessible front door. Overall, the Proposed Project has been carefully designed, in coordination with the LPC, to blend and contribute to the surrounding district in design and function. On August 4, 2020, the Landmarks Preservation Commission adopted a resolution approving the issuance of a Certificate of Appropriateness for the Proposed Project (see **Appendix A**).

Therefore, the Proposed Actions would not result in any adverse impacts to the urban design character of the study area.

Figure 6-3 Comparative View from St. Felix Street, facing south

No-Action Condition



With-Action Condition



For Illustrative Purposes Only

Figure 6-4 Comparative View from St. Felix Street, facing north

No-Action Condition



With-Action Condition



For Illustrative Purposes Only

Figure 6-5 Comparative View from St. Felix Street, facing west

No-Action Condition



With-Action Condition



For Illustrative Purposes Only

Figure 6-6 Comparative View from Ashland Place, facing southeast

No-Action Condition



With-Action Condition



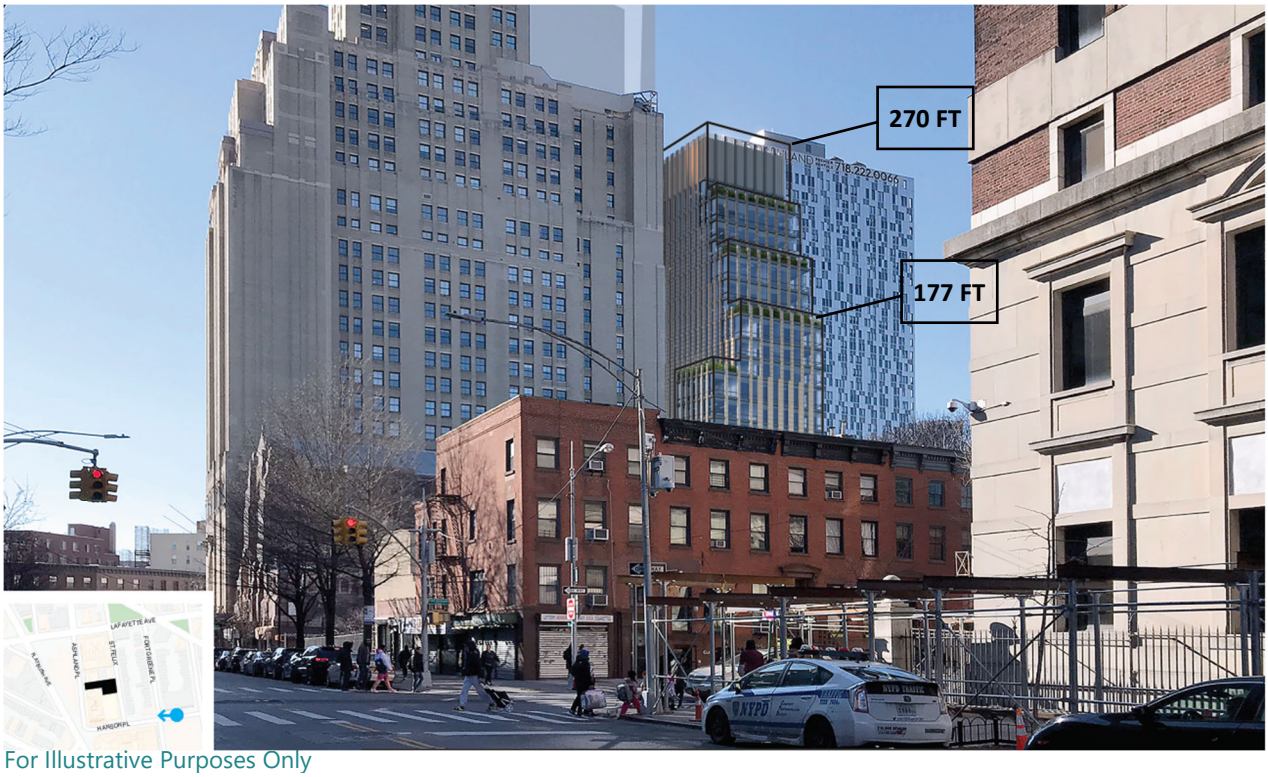
For Illustrative Purposes Only

Figure 6-7 Comparative View from Hanson Place and Fort Greene Place, facing west

No-Action Condition



With-Action Condition



For Illustrative Purposes Only

Visual Resources

As detailed above, there are two significant visual resources within the study area: One Hanson Place and the BAM Howard Gillman Opera House. The following visual resource assessment includes comparative renderings of the No-Action and With-Action conditions from representative views of each of the visual resources.

One Hanson Place

Figure 6-8 and **Figure 6-9** provide significant views of One Hanson Place from just outside the study area, generally facing north toward the Project Area along Fourth Avenue and Flatbush Avenue, respectively. As seen from this vantage point, given the height of the proposed building below the shoulder of One Hanson Place, the Proposed Project would be largely hidden from view. From the perspective of a pedestrian, the view of the visual resource would not be obstructed or significantly affected by the Proposed Project. **Figure 6-7** provides a view of One Hanson Place from which the Proposed Project would be more visible. From this view, and from others within the study area, the Proposed Project would be visible and, in some cases, would obstruct portions of One Hanson Place. However, as detailed above, the Proposed Project has been designed so as not to compete visually with One Hanson Place and to respect the landmark, providing setbacks from the buildings' northern façade and rising to just below the shoulder such that the Proposed Project would blend into the existing context. With these design elements, the Proposed Project would not have significant adverse impacts on the One Hanson Place visual resource.

BAM Howard Gillman Opera House

Figure 6-10 provides a view of the BAM Howard Gillman Opera House south along Ashland Place toward the Project Site. As shown, the Proposed Project would match the shoulder height of One Hanson Place that sits behind it from this viewpoint. As there are already taller buildings surrounding this visual resource, the Proposed Project would not significantly alter the views of the BAM Opera House. Under the With-Action condition the Proposed Project would be lower in height than those buildings and therefore, would be in context with the buildings in the surrounding area. As detailed above, the Proposed Project street frontages have been designed to match the character of the existing St. Felix Street and Ashland Place street walls, and therefore would not significantly alter views toward the BAM Opera House from viewpoints to the south. Overall, the Proposed Project would not have significant adverse impacts on this visual resource.

Figure 6-8 Comparative View of One Hanson Place along Fourth Avenue, facing northeast

No-Action Condition



With-Action Condition



For Illustrative Purposes Only

Figure 6-9 Comparative View of One Hanson Place north along Flatbush Avenue

No-Action Condition



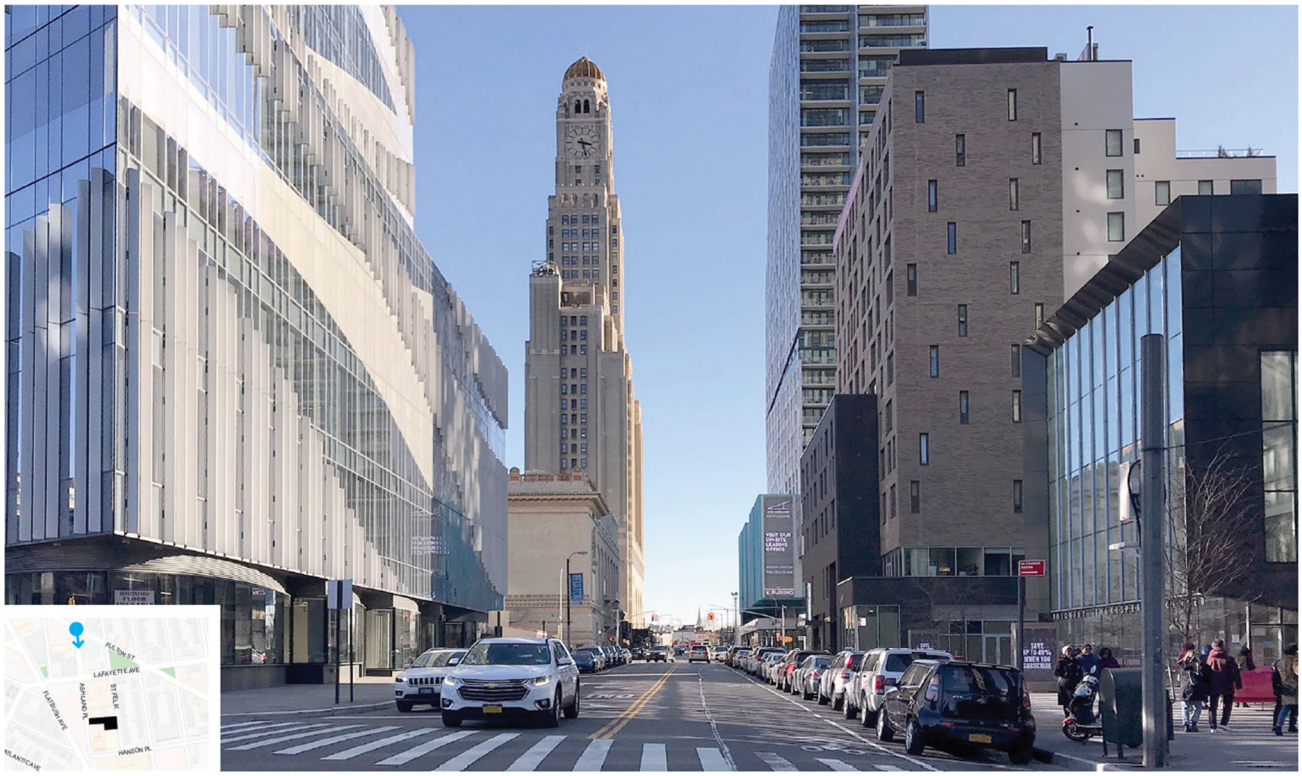
With-Action Condition



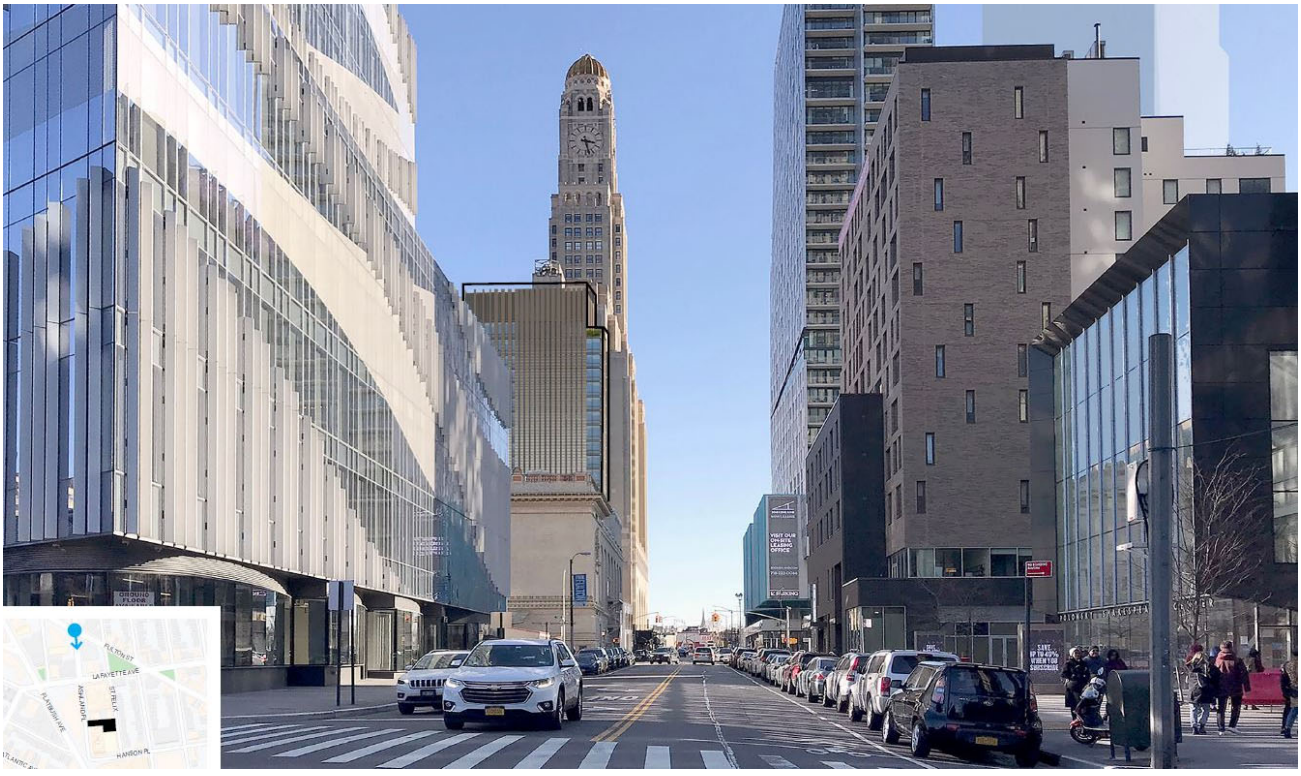
For Illustrative Purposes Only

Figure 6-10 Comparative View facing south from Ashland Place and Fulton Street

No-Action Condition



With-Action Condition



For Illustrative Purposes Only

Conclusion

Overall, the With-Action condition would be compatible with the urban design character of the study area and would be consistent with the surrounding and emerging building form and streetscape (such as that exhibited by the 80 Flatbush proposed development). The Proposed Project would provide infill development on an existing vacant lot, providing a more contiguous street wall such that the quality of urban design at the Project Site and along St. Felix Street and Ashland Place would improve over the No-Action condition. The proposed building design, which has been approved by the LPC, would respect and complement the existing character of the BAM Historic District.

In addition, as demonstrated by the perspective renderings of the With-Action condition, the Proposed Project would not result in any significant adverse impacts on views to and from the prominent visual resources within the study area. Therefore, the Proposed Actions would not result in a significant adverse impact on urban design and visual resources, and no further analysis is necessary.

7

Hazardous Materials

This section assesses whether the Proposed Project may increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts.

Introduction

A hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi-volatile organic compounds, methane, polychlorinated biphenyls (PCBs), and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive or toxic).

According to the *CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when:

- hazardous materials exist on a site;
- an action would increase pathways to their exposure; or
- an action would introduce new activities or processes using hazardous materials.

As indicated in the *CEQR Technical Manual*, the hazardous materials (E) designation is an institutional control that may be placed on a site to establish a hazardous materials review and approval framework. It provides a mechanism to ensure that testing for and remediation of hazardous materials, if necessary, are completed prior to future development of an affected site, thereby eliminating the potential for a hazardous materials impact. (E)

designated parcels are administered under the authority of the New York City Mayor's Office of Environmental Remediation (OER).

This section presents the findings of the hazardous materials assessment and identifies potential issues of concern with respect to workers, the community, and/or the environment during construction and after implementation of the Proposed Project.

Methodology

The potential for hazardous materials was evaluated based on the following documents:

- Phase I Environmental Site Assessment (ESA), dated May 2015, prepared by Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan);
- Subsurface Investigation Report, dated June 2015, prepared by Langan;
- Executed Brownfield Cleanup Agreement Index No. C224306-05-20, dated July 7, 2020, prepared by New York State Department of Environmental Conservation (NYSDEC);
- Remedial Investigation Work Plan, dated August 7, 2020, prepared by Langan; and
- Geophysical Engineering Survey Report, dated January 14, 2020, prepared by Nova Geophysical Engineering (NOVA)

As indicated in **Part I: Project Description**, the Proposed Actions would facilitate an approximately 166,402-gross-square-foot (gsf) mixed-use development on Lot 40 of Brooklyn Block 2111 in Downtown Brooklyn (the "Project Site"). The proposed mixed-use building would include approximately 20,120 gsf of community facility space on the cellar level and first and second floors and approximately 146,282 gsf of residential space, including up to 130 residential units, on the upper floors (the "Proposed Project"). The community facility space would accommodate an expansion of the neighboring Brooklyn Music School which is in need of new and upgraded space for programming.

Preliminary Assessment

Existing Conditions

As indicated in **Part I: Project Description** and detailed above, the Project Site, located at 130 St. Felix Street in Downtown Brooklyn, Community District 2, is an irregularly shaped through-lot with existing access from both St. Felix Street and Ashland Place. The Project Site has a lot area of approximately 12,548 square feet (sf) and is part of a single zoning lot together with One Hanson Place/Williamsburgh Savings Bank (Block 2111, Lot 7501). It is currently vacant and does not provide public parking.

Phase I Environmental Site Assessment

A Phase I ESA was prepared in May 2015 in accordance with ASTM Practice E1527-13, inclusive of the "All Appropriate Inquiry" requirement amended in the Federal Register on December 30, 2013. The United States Environmental Protection Agency (EPA) "All Appropriate Inquiry" requirement establishes specific regulatory requirements for conducting appropriate inquiries into the previous ownership, uses, and environmental conditions of a property for the purposes of qualifying for certain landowner liability

protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

The Phase I ESA was completed for the Project Site and included analyses as specified in the ASTM Method E1527-13. The goal of the Phase I ESA process is to identify Recognized Environmental Conditions (RECs), which 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 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.

Per the current ASTM Standard, the Phase I ESA reviewed a variety of information sources, including current and historic Sanborn Fire Insurance Maps and aerial photographs; state and federal environmental regulatory databases identifying listed sites; and local environmental records. The Phase I ESA also included reconnaissance of the Project Site and surrounding neighborhood.

As stated in the current ASTM Practice E1527-13, there may be environmental issues or conditions at the Project Site, which may be requested by the user to be addressed as part of the Phase I ESA, which are not covered within the scope of ASTM Practice E1527-13. These issues are referred to as "non-scope considerations" and include evaluations relating to asbestos, lead-based paint, mold, etc. Of these added considerations, only radon was evaluated as part of the Phase I ESA.

Based upon the information provided in the Phase I ESA, the following findings and Project Site features were identified:

- The Project Site has a topographic elevation of approximately 45 feet above mean sea level. The Project Site and surrounding area slope to the southwest toward the Gowanus Canal, which is located about a half-mile southwest of the Project Site.
- Based on the general topography of the surrounding area, inferred groundwater flow is to the southwest toward the Gowanus Canal. According to a Phase II ESA performed by Langan on the northern adjoining property in 2008, depth to groundwater is about 38 feet below grade surface (bgs).
- Pits, ponds and lagoons were not observed at the Project Site.
- Pools of liquid were not observed at the Project Site.
- Two storm drains were observed at the Project Site. Both drains appeared to be filled with trash and leaves. One monitoring well was observed in the center of the Project Site. One monitoring well was observed along the southern boundary (adjoining One Hanson Place) of the Project Site.
- Polychlorinated biphenyls (PCBs) containing transformers and suspect equipment were not observed at the Project Site.
- Concrete patches and patched asphalt were observed throughout the Project Site which are likely indicative of underground storage tanks (USTs). The likely presence of unregistered USTs at the Project Site, in conjunction with the Department of Finance classification as a garage/gasoline station, is considered a REC, as potential releases of petroleum products, etc., may have adversely impacted soil, groundwater, and/or soil vapor at the Project Site.

- Soil, groundwater, and/or soil vapor at the Project Site may have been affected by aboveground storage tanks (ASTs) and an associated known spill incident at the southwestern adjoining property (One Hanson Place); therefore, it is considered a REC.
- The condition of asphalt beneath the stored construction materials in the southwest corner of the Project Site could not be observed, and is considered a data gap.

Based upon the information provided in the Phase I ESA, the following RECs were identified with respect to the Project Site:

- Historical Use of the Project Site – According to Sanborn maps, the Project Site has been used as a parking lot since at least 1950. The Department of Finance classified the Project Site as a garage/gasoline station. Auto repair or service activities may have taken place on the Project Site, which is considered a REC. Additionally, during the site reconnaissance, concrete patches and patched asphalt were observed throughout the Project Site, which are likely indicative of USTs. Potential releases of petroleum products, solvents, and/or other hazardous materials may have adversely impacted soil, groundwater, and/or soil vapor at the Project Site.
- Historical Use of Adjoining and Surrounding Properties – The Environmental Database and Sanborn maps review identified the following notable uses on adjoining and surrounding properties with the potential to impact groundwater and/or soil vapor at the Project Site:
  - Drug manufacturer and medical laboratory from 1938 to 1969 and dry cleaner from 2003 to 2007 (western adjoining);
  - Printer from 1915 to 1938 (about 100 feet north);
  - Used cars lot from 1938 to 1950 (about 350 feet northeast);
  - Laundry from 1950 to 1996 (about 400 feet northeast);
  - Filling station from 1969 to 1993 (about 500 feet north);
  - Dry cleaner from 1991 to 2012 (about 850 feet east);
  - Dry cleaner from 2001 to 2003 (about 550 feet northeast);
  - Dry cleaner from 2010 to 2012 (about 600 feet northeast);
  - Dry cleaner from 2004 to 2011 (about 600 feet northeast);
  - Dry cleaner from 2000 to 2010 (about 700 feet northeast); and
  - Dry cleaner from 2007 to 2009 (about 900 feet east).

  These historical uses of adjoining and surrounding properties are considered a REC. Unreported releases of solvents, petroleum products, or other hazardous substances associated with these historical uses may have impacted the groundwater and/or soil vapor at the Project Site.

  Historic use of the adjacent sites also resulted in a spill (NYSDEC Spill No. 0402131) reported at One Hanson Place on May 18, 2004, when an unknown quantity of No. 2 fuel oil was released due to tank failure. Fuel oil impacts were observed in soil from about 4 to 40 feet bgs. Petroleum free phase product was observed on groundwater, which was measured at about 43 feet bgs. A work plan for delineation and an exposure assessment was submitted to the New York State Department of Environmental Conservation (NYSDEC) in November 2013. The spill was closed by NYSDEWC on April 15, 2015; however, closure documentation was not available for review. Groundwater and/or soil

vapor at the Project Site may have been affected by this spill incident and associated tanks.

Subsurface Investigation Report

Based upon the results of the Phase I ESA, Langan conducted a Subsurface Investigation at the Project Site to investigate and/or address the previously identified RECs. The results of the Subsurface Investigation field activities were summarized in a Subsurface Investigation Report (SIR) dated June 2015.

To address the RECs, Langan and its subcontractors advanced five (5) soil borings and collected six (6) soil samples; installed one groundwater monitoring well and collected two groundwater samples; and collected three soil vapor samples and one ambient air sample. Based upon the field work conducted, the following findings, conclusions, and recommendations were provided:

- The five soil samples and one duplicate sample were compared to 6 NYCRR Part 375 Unrestricted Use and Restricted Residential Soil Cleanup Objectives (UUSCOs and RRSCOs, respectively). Herbicides, pesticides, and PCBs were not detected in any samples. The volatile organic compounds (VOCs) naphthalene and total xylenes were detected above UUSCOs in one sample. Several semi-volatile organic compounds (SVOCs) and metals were detected at concentrations above UUSCOs and RRSCOs in one or more samples.
- The groundwater sample and one duplicate sample were compared to NYSDEC Technical and Operation Guidance Series (TOGS) Ambient Water Quality Standards and Guidance Values (AWQSGVs) for class GA (drinking water). PCBs were not detected in either sample. SVOCs were not detected above AWQSGVs. The VOC chloroform exceeded its respective AWQSGV. Total metals concentrations of trivalent chromium, iron, and sodium were detected above AWQSGVs. With the exception of sodium, dissolved metals did not exceed their respective AWQSGVs.
- Soil vapor analytical results were compared to NYSDOH Air Guidance Values (AGV) as a reference. Multiple VOCs, including petroleum-related compounds (i.e., trimethylbenzenes, xylenes, and toluene, etc.) were detected at concentrations above baseline levels in one sample. No soil vapor sample results exceeded any AGVs.
- Fill was observed throughout the Project Site from surface grade to about 6 to 9.5 feet bgs. The fill generally consisted of coarse to fine sand with varying amounts of gravel, slag, coal, brick, concrete, and glass. Free-phase product was not observed in soil or groundwater. Groundwater was measured in the monitoring well at about 42 feet bgs.
- Excavated soil/fill is regulated solid waste and should be transported in accordance with applicable federal, state, and local regulations, using appropriate permits for transportation, to registered or permitted disposal facilities.
- Contingent on the final building design depth, excavation for one or more cellar levels and foundation components will address potential sources of soil and soil vapor contaminants. However, Langan recommended installation of a vapor barrier below the slab of the lowest cellar level and along subgrade foundation walls to prevent potentially contaminated vapor intrusion into the building that may be transported by groundwater flow below the Project Site.

Remedial Investigation Work Plan

A Remedial Investigation Work Plan (RIWP), dated August 7, 2020, was prepared by Langan in order to satisfy the requirements of the NYSDEC Brownfield Cleanup Program (BCP) into which the Project Site was accepted as of July 7, 2020. The RIWP was developed in accordance with the process and requirements identified in the NYSDEC Division of Environmental Remediation (DER-10) *Technical Guidance for Site Investigation and Remediation* (May 2010) and the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York, with updates" (October 2006).

Based on the results of the previous environmental reports, three Areas of Concern (AOCs) related to historical and surrounding site operations have been identified for the Project Site, as follows:

- AOC-1 Historical Site Operations and Potential Historical Presence of USTs. Although review of Sanborn Fire Insurance maps revelated that the Project Site has been operated as a parking lot dating back to at least 1950, the Department of Finance classification of the Project Site as a garage/gasoline station reveals the potential for historical automobile repair or service operations. Additionally, onsite concrete patches and patched asphalt observed during site reconnaissance, and a UST fill port with piping leading into the Site detected during a geophysical survey, indicate the potential presence or previous removal of onsite UST(s).
- AOC-2 Historical Adjacent and Surrounding Site Operations. As discussed in previous sections, historical site operations at adjacent and surrounding properties including drug manufacturing, dry cleaning and laundry, automobile sales, and a gasoline filling station have the potential to adversely impact the environmental conditions at the Project Site.
- AOC-3 Historical Fill. Soil borings advanced throughout the site during Langan's 2015 Subsurface Investigation identified an approximately 9.5-foot thick layer of historical fill material throughout the entire Project Site. Polycyclic aromatic hydrocarbons (PAHs) and metals commonly associated with historic fill were detected at concentrations exceeding the RRSCOs during the 2015 Subsurface Investigation.

The objective of the RIWP is to investigate and characterize "the nature and extent of the contamination at and/or emanating from the brownfield site," in accordance with the requirements of the NYSDEC BCP. The proposed field investigation will include the following tasks to supplement the data and findings of previous investigations:

- Geophysical survey by NOVA consisting of a private utility mark out within the vicinity of proposed boring locations to identify if any subsurface anomalies exist and to assess for the presence of subsurface structures, piping, and/or USTs;
- Installation of seven soil borings advanced to approximately 5-feet below the proposed development depth, corresponding to approximately 25 feet below sidewalk grade;
- Soil sample collection from the interval directly below ground surface or from the two-foot interval within the fill layer where the greatest impacts are observed, the two-foot interval located beneath the top of the native layer, and the two foot interval corresponding to immediately below the anticipated maximum excavation depth for the proposed remediation (i.e., 20 to 22 ft bgs). Samples will be analyzed for VOCs, SVOCs, target analyte list (TAL) metals, hexavalent chromium, PCBs, herbicides, pesticides, and perfluoroalkyl substances (PFAS) and 1,4-dioxane analysis.

- Installation of three monitoring wells, and associated collection of three groundwater samples, and one groundwater sample collected from the 2015 Subsurface Investigation monitoring well. Samples will be analyzed for the same analyses as referenced above.
- Six soil vapor points will be installed at the Project Site to a depth approximately 6 inches below the anticipated depth of development, which corresponds to approximately 20.5 feet bgs. Samples will be analyzed for VOCs using United States Environmental Protection Agency (USEPA) Method TO-15.

As of the preparation of this hazardous materials analysis, the Remedial Investigation has not yet been performed.

Future No-Action Condition

In the No-Action condition, the Project Site would continue to operate under the existing conditions detailed above. One Hanson Place is currently overbuilt beyond the maximum allowable floor area, leaving no developable floor area in the existing zoning lot shared with the Project Site. Therefore, no development could occur in the No-Action condition. Much needed affordable housing would not be generated and the Brooklyn Music School would continue to operate at capacity and would not benefit from an expanded facility on the Project Site.

Additionally, under the future No-Action condition, no further assessment or remediation of hazardous materials would be conducted and an (E) Designation for Hazardous Materials would not be placed on the Project Site.

Future With-Action Condition

As stated previously, in the future With-Action condition, the Proposed Actions would facilitate the development of an approximately 166,402-gsf mixed-use development including 20,120 gsf of community facility space on the cellar level and first and second floors and 146,282 gsf of residential space accommodating up to 130 units, of which approximately 26 would be affordable under the MIH program. The community facility space would be occupied by the Brooklyn Music School, and would include expanded instruction space. The Proposed Project would be constructed to a height of 23 stories and a maximum of 270 feet (with mechanical bulkhead).

The Project Site has been accepted as a volunteer into the NYSDEC BCP, which will provide regulatory oversight by the NYSDEC. As part of the BCP, additional requirements, including the aforementioned implementation of a Remedial Investigation and the preparation and implementation of a Remedial Action Work Plan will be conducted. Participation in the NYSDEC BCP will concurrently satisfy all regulatory requirements of a hazardous materials (E) designation.

To preclude the potential for significant adverse impacts related to hazardous materials, in the unlikely event that the BCP project does not move forward, an (E) designation (E-616) would be incorporated into the rezoning for the Project Site. With the placement of the (E) designation, further hazardous materials assessments would be directed through New York City Mayor's Office of Environmental Remediation (OER). The (E) designation text related to hazardous materials is as follows:

Task 1: Sampling Protocol

Prior to construction, the applicant submits to OER, for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.

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

Task 2: 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 the test results, a proposed Remedial Action Work Plan (RAWP) must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER in accordance with the approved RAWP. The applicant should then provide proper documentation that remedial action has been satisfactorily completed.

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

As previously mentioned, the Project Site has been accepted into the NYSDEC BCP, which provides rigorous environmental and public health protection through regulatory oversight by the NYSDEC. The execution of the BCA, which occurred on July 7, 2020, triggers a series of requirements that must be adhered to: the first step involves the preparation of a Citizen Participation Plan which details the facets of public outreach that is to occur throughout the BCP process. Next is the preparation and submittal of a Remedial Investigation Work Plan (RIWP) to NYSDEC for review and approval, and a subsequent 30-day public comment period. Upon NYSDEC approval, the RIWP will be implemented and a Remedial Investigation Report will be prepared. The data collected will inform the preparation of the publicly-reviewed Remedial Action Work Plan (RAWP). The RAWP will include, but is not limited to, a detailed description of the remedial action and associated remedial technology; a conceptual site model of on-site contamination; descriptions of incorporated plans such as the soil and sediment erosion control plan, health and safety plan, community air monitoring plan, public health exposure assessment, among others; and community outreach procedures. Participation in the NYSDEC BCP will concurrently satisfy regulatory requirements of a hazardous materials (E) designation (see NYCDEP letter dated December 1, 2020, in **Appendix A**).

Given these measures, the future With-Action condition would not result in any significant adverse impacts relating to hazardous materials.

Conclusion

Potential impacts relating to hazardous materials would be identified and investigated prior to subsurface disturbance as require by an (E) designation for hazardous materials on the Project Site (E-616). Any potential remedial action that may be required would also be administered as part of the (E) designation protocol under the regulatory oversight of OER. In order to reduce the potential for hazardous materials exposure to future site occupants, during and following construction, regulatory requirements pertaining to ACM, LBP, PCBs, and chemical use and storage would be followed where necessary.

Notwithstanding the above, the Project Site has been accepted into the NYSDEC BCP, which will provide regulatory oversight by the NYSDEC. As part of the BCP, additional requirements, including implementation of a Remedial Investigation and the preparation and implementation of a Remedial Action Work Plan will be conducted. Participation in the NYSDEC BCP will concurrently satisfy regulatory requirements of a hazardous materials (E) Designation.

With the implementation of these measures, no significant adverse impacts related to hazardous materials would result from the Proposed Actions.

8

Transportation

The objective of the transportation analyses is to determine whether a proposed project may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, cyclists, and motorists), and on- and off-street parking.

Introduction

As discussed in **Part I: Project Description,** the Proposed Actions would facilitate the development of a mixed-income residential building with new space for an expansion of the Brooklyn Music School (the "Proposed Project"). The Project Site is located on a block bounded by Lafayette Avenue to the north, Saint Felix Street to the east, Hanson Place to the south, and Ashland Place to the west. Overall, the Proposed Project would include 146,282 gross square feet (gsf) of new residential space, including up to 130 dwelling units, and 20,120 gsf of new community facility space that would accommodate the expansion of the neighboring Brooklyn Music School.

Methodology and Analytical Framework

According to the *2020 CEQR Technical Manual* procedures for transportation analysis, a two-tiered screening process is to be undertaken to determine whether a quantitative analysis is necessary. The first step, the Level 1 (Trip Generation) screening, determines whether the volume of peak hour person and vehicle trips generated by a proposed action would remain below the minimum thresholds for further study.

These thresholds are:

- 50 peak hour vehicle trip ends;
- 200 peak hour subway/rail or bus transit riders; and
- 200 peak hour pedestrian trips.

If a proposed project results in increments that would exceed any of these thresholds, a Level 2 (Trip Assignment) screening assessment is usually performed. Under this assessment, project-generated trips that exceed Level 1 thresholds are assigned to and from the site through their respective networks (streets, bus and subway lines, sidewalks, etc.) based on expected origin-destination patterns and travel routes. This determines the volume of peak hour vehicle traffic that would be added per intersection, the volume of riders that would be added per subway line or bus route, and the walk trips that would be added per individual pedestrian network element (crosswalk, corner reservoir area, etc.). If the Level 2 screening assessment determines that any specific traffic location, transit line or station element, or pedestrian network element would experience an increase of trips beyond the above thresholds for any peak hour, then a detailed analysis is typically warranted.

Level 1 (Trip Generation) Screening Assessment

The travel demand factors used to calculate the projected number of trips were obtained primarily from the *2020 CEQR Technical Manual*, American Community Survey (ACS) journey-to-work data, New York City Department of Transportation (NYCDOT) surveys, American Association of State Highway and Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data, information from previous New York City environmental assessment studies such as the *2015 BAM North Site II EAS* and the *2009 BAM Fisher Building – 321 Ashland Place EAS*, and operations information from the Brooklyn Music School. **Table 8-1** provides the travel demand assumptions used for the weekday AM, midday, PM, and Saturday midday peak hours.

Table 8-1 Project Travel Demand Assumptions

Land Use	Residential	Students (Children)	Students (Pre-professionals)	Parents	Faculty/Staff
Person Trip Rate	Weekday/ Saturday 8.075/9.6[1] *per dwelling unit*	Weekday/ Saturday 2.0/2.0[4] *per student*	Weekday/ Saturday 2.0/2.0[4] *per student*	Weekday/ Saturday 2.0/2.0[4] *per student*	Weekday/ Saturday 2.0/4.0[4] *per student*
Peak Temporal Distribution					
Weekday AM	10.0%[1]	3.0%[4]	33.0%[4]	6.0%[4]	7.0%[4]
Weekday Midday	5.0%[1]	0.0%[4]	0.0%[4]	0.0%[4]	50.0%[4]
Weekday PM	11.0%[1]	18.0%[4]	0.0%[4]	17.0%[4]	0.0%[4]
Saturday	8.0%[1]	11.0%[4]	0.0%[4]	11.0%[4]	25.0%[4]
Modal Split (%)	**All Periods**	**All Periods**	**All Periods**	**All Periods**	**All Periods**
Auto	7.7%[2]	15.0%[5]	15.0%[5]	15.0%[5]	27.6%[7]
Taxi	0.8%[2]	0.0%[5]	0.0%[5]	0.0%[5]	0.3%[7]
Bus	2.0%[2]	15.0%[5]	15.0%[5]	15.0%[5]	11.5%[7]
Subway	77.4%[2]	30.0%[5]	30.0%[5]	30.0%[5]	46.6%[7]
Railroad	1.2%[2]	0.0%[5]	0.0%[5]	0.0%[5]	6.2%[7]
Walk	10.9%[2]	40.0%[5]	40.0%[5]	40.0%[5]	7.8%[7]
Vehicle Occupancy	**All Periods**	**All Periods**	**All Periods**	**All Periods**	**All Periods**
Auto	1.15[2]	1.00[4]	1.00[4]	1.00[4]	1.09[7]
Taxi	1.15[2]	1.00[4]	1.00[4]	1.00[4]	1.09[7]
Directional Splits (In/Out)					
Weekday AM	24%/76%[3]	50%/50%[4]	50%/50%[4]	50%/50%[4]	100%/0%[4]
Weekday Midday	50%/50%[3]	50%/50%[4]	50%/50%[4]	50%/50%[4]	87%/13%[4]
Weekday PM	61%/39%[3]	50%/50%[4]	50%/50%[4]	50%/50%[4]	50%/50%[4]
Saturday	45%/55%[3]	50%/50%[4]	50%/50%[4]	50%/50%[4]	50%/50%[4]
Delivery Trip Rate	Weekday/ Saturday 0.06/0.02[1] *per dwelling unit*	Weekday/ Saturday 0.14/0.01[6] *per 1,000 gsf*			
Delivery Temporal Distribution					
Weekday AM	12.0%[1]	10.0%[6]			
Weekday Midday	9.0%[1]	11.0%[6]			
Weekday PM	2.0%[1]	2.0%[6]			
Saturday	9.0%[1]	11.0%[6]			
Delivery Trip Directional Split (In/Out) – 50%/50%					

Sources:

[1] *2020 CEQR Technical Manual*

[2] ACS journey-to-work (2014-2018) data for Brooklyn Census Tracts 33, 35, 37, 39, 129,01, 129.02, 161, 179 and 181

[3] NYCDOT citywide residential survey data

[4] Based on student and class projections for the proposed Brooklyn Music School expansion. Assumes all young children are accompanied by parents and 50% of grade school children are accompanied by parents.

[5] Mode splits based on community facility use included in the *2015 BAM North Site II EAS*

[6] Delivery factors based on Dance Studio/Rehearsal use included in the *2009 BAM Fisher Building - 321 Ashland Place EAS*

[7] CTPP reverse journey-to-work (2012-2016) data for Brooklyn Census Tracts 33, 35, 37, 39, 129,01, 129.02, 161, 179 and 181

Residential

For the residential use, trip generation rates of 8.075 daily person trips per dwelling unit (DU) for weekday and 9.6 daily person trips per DU for Saturday were obtained from the *CEQR Technical Manual*. Temporal distributions of 10 percent, 5 percent, 11 percent, and 8 percent for the weekday AM, midday, PM, and Saturday peak hours, respectively, were also obtained from the *CEQR Technical Manual*. Modal splits of 7.7 percent by auto, 0.8 percent by taxi, 2.0 percent by bus, 77.4 percent by subway, 1.2 percent by railroad, and 10.9 percent by walk for all peak hours were based on 2014-2018 ACS journey-to-work data for Brooklyn Census Tracts 33, 35, 37, 39, 129,01, 129.02, 161, 179, and 181. For all peak hours, the auto and taxi vehicle occupancy rate of 1.15 was based on the ACS journey-to-work data. For the directional distributions of 24 percent "in" for the weekday AM peak hour, 50 percent "in" for the weekday midday peak hour, 61 percent "in" for the weekday PM peak hour, and 45 percent "in" for the Saturday peak hour were based on citywide NYCDOT residential survey data.

For residential delivery trips, trip generation rates of 0.06 and 0.02 daily delivery trips per DU for weekdays and Saturdays, respectively, and temporal distributions of 12 percent, 9 percent, 2 percent, and 9 percent for the weekday AM, midday, PM, and Saturday peak hours, respectively, were obtained from the *CEQR Technical Manual*.

Brooklyn Music School

Preliminary programing assumptions for the expanded music school space were provided by the Brooklyn Music School. On weekdays, up to three classes for young children and three for pre-professionals seeking artist certification are expected to take place in the morning from 9 AM to 12 PM. From 3:30 PM to 9 PM, a mix of 75 after-school, group and private classes are expected. On Saturday, a mix of group and private classes are expected throughout the day from 9 AM to 6 PM. For analysis purposes, on weekdays, it is assumed up to 325 students would attend classes taught by 15 faculty members. It was assumed that morning faculty would be replaced by afternoon faculty arriving in the middle of the day. For Saturday, the analysis assumes 500 students and 22 faculty members. These faculty members are assumed to arrive in the morning, take lunch during the midday and end their day in the evening. Lastly, it is assumed that parents would accompany all young children students as well as half of all other non-pre-professional students.

The specific travel demand factors used for students and parents are provided in **Table 8-1**. For all students and parents, temporal distributions and in/out splits were based on the assumption that classes would run between 30 minutes and an hour and be evenly distributed across the specific periods described above. For all students and parents, modal splits of 15 percent by auto, 15 percent by bus, 30 percent by subway, and 40 percent by walk for all peak hours were based on the community facility use included in the *2015 BAM North Site II EAS*. It is assumed that parents arriving via transit or on foot would wait in the waiting area within the school building. For half the children arriving via auto, their trips were treated as pick-up/drop-off trips as their parents are not anticipated to wait in the building. Pick-up and drop-off trips are each counted as two trips; for example, a drop-off has both the "in" trip where the child is dropped off and the "out" trip where the parent drives away.

For faculty/staff members, temporal and directional distributions were based on the anticipated hours of operation and expected arrival and departure times before and after the

start of teaching periods (see **Table 8-1** for the specific rates used). Modal splits of 27.6 percent by auto, 0.3 percent by taxi, 11.5 percent by bus, 46.6 percent by subway, 6.2 percent by railroad, and 7.8 percent by walk for all peak hours were based on 2012-2016 AASHTO CTPP reverse journey-to-work data for Brooklyn Census Tracts 33, 35, 37, 39, 129,01, 129.02, 161, 179, and 181. For all peak hours, the auto and taxi vehicle occupancy rate of 1.09 was based on the CTTP reverse journey-to-work data.

For delivery trips, trip generation rates of 0.14 and 0.01 daily delivery trips per 1,000 square feet for the weekday and Saturday, respectively, and temporal distributions of 10 percent, 11 percent, 2 percent, and 11 percent for the weekday AM, midday, PM, and Saturday peak hours, respectively, were obtained from the *2009 BAM Fisher Building - 321 Ashland Place EAS*.

Level 1 Screening Results

Transit and Pedestrians

The total number of person trips generated by the Proposed Project are provided in **Table 8-2**. The number of transit trips per peak hour (bus, subway, and rail) and pedestrian trips are summarized below:

- During the AM peak hour, the project can be expected to generate 11 bus trips, 99 subway trips, 1 rail trip, and 164 pedestrian trips (34 walk-only plus bus, subway, and rail trips; and walk-from-parking trips linked to 19 auto person trips).
- During the midday peak hour, the project can be expected to generate 4 bus trips, 47 subway trips, 1 rail trip, and 68 pedestrian trips (7 walk-only plus bus, subway, and rail trips; and walk-from-parking trips linked to 9 auto person trips).
- During the PM peak hour, the project can be expected to generate 26 bus trips, 140 subway trips, 2 rail trips, and 279 pedestrian trips (79 walk-only plus bus, subway, and rail trips; and walk-from-parking trips linked to 32 auto person trips).
- During the Saturday peak hour, the project can be expected to generate 28 bus trips, 138 subway trips, 4 rail trips, and 286 pedestrian trips (79 walk-only plus bus, subway, and rail trips; and walk-from-parking trips linked to 37 auto person trips).

As the number of peak hour bus, subway, and rail trips are not expected to exceed the *CEQR Technical Manual* Level 1 screening thresholds, a Level 2 trip assignment is not needed, and further detailed analyses are not warranted for those travel modes.

As the number of pedestrian trips is expected to exceed the Level 1 screening threshold of 200 or more pedestrian trips in the weekday PM and Saturday peak hours, a Level 2 trip assignment is needed to determine whether detailed pedestrian analyses are warranted.

Table 8-2 Project Trip Increment Summary – Person Trips

	AM Peak Hour			Midday Peak Hour			PM Peak Hour			Saturday Peak Hour		
Mode	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Auto	8	11	19	6	3	9	17	15	32	18	19	37
Taxi	0	1	1	0	0	0	1	0	1	0	0	0
Bus	5	6	11	3	1	4	13	13	26	14	14	28
Subway	29	70	99	26	21	47	80	60	140	65	73	138
Rail	0	1	1	1	0	1	1	1	2	2	2	4
Walk	14	20	34	4	3	7	41	38	79	39	40	79
Total	**56**	**109**	**165**	**40**	**28**	**68**	**153**	**127**	**280**	**138**	**148**	**286**

Traffic and Parking

Table 8-3 summarizes the total peak hour vehicular volumes ("ins" plus "outs") for the Proposed Project. The Proposed Project would result in an hourly trip increment of 16 vehicles per hour (vph) during the weekday AM peak hour, 9 vph in the weekday midday peak hour, 33 vph in weekday PM peak hour, and 36 vph in the Saturday peak hour. As the volume of vehicle trips generated by the Proposed Project would not exceed the 50-vehicle trip *CEQR Technical Manual* threshold during any peak hour, a Level 2 trip assignment is not warranted. Consequently, an analysis of parking conditions is also not warranted.

Table 8-3 Project Trip Increment Summary – Vehicle Trips

	Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday Midday Peak Hour		
Mode	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Auto	6	8	14	6	3	9	8	7	15	10	10	20
Taxi	1	1	2	0	0	0	9	9	18	8	8	16
Delivery	0	0	0	0	0	0	0	0	0	0	0	0
Total	**7**	**9**	**16**	**6**	**3**	**9**	**17**	**16**	**33**	**18**	**18**	**36**

Level 2 Screening Results

As shown above, the number of pedestrian trips generated by the Proposed Project would exceed the *CEQR Technical Manual* Level 1 screening thresholds during the weekday PM and Saturday peak hours. The discussion below describes how pedestrians are expected to traverse the surrounding street network based on logical routes to and from the Project Site. The number of new transit and vehicle trips would not exceed the Level 1 screening thresholds, so Level 2 screening was not needed for those travel modes.

Pedestrians

To determine how project-generated pedestrian trips would be distributed across pedestrian street elements (sidewalks, corners, and crosswalks), it is necessary to understand where pedestrian access points will be located at the Project Site. According to the ground floor plan, the entrance to the Brooklyn Music School's new expanded space would be located on Saint Felix Street. The main entrance to the residential lobby would also be located on Saint

Felix Street. Another entrance located on Ashland Place would primarily be used by service providers and function as a secondary convenience entry and egress option for the residential units.

As trips include both start and end points, the location of key pedestrian origin and destination locations in the neighboring area were identified. As explained above, pedestrian trips consist of pedestrians walking entirely on foot as well as to and from subway/rail station entrances, bus stops, and where their vehicles are parked.

Eleven subway lines are located within a quarter-mile of the Project Site. These subway lines include the 2, 3, 4, 5, C, B, D, G, N, Q, and R lines. The G and C subway lines are accessed via the Fulton Street Station and the Lafayette Avenue Station, respectively, which are located to the east of the Project Site. The 2, 3, 4, and 5 subway lines are accessed via the Nevins Street Station northwest of the Project Site and the Atlantic Avenue Barclays Center Station located south of the Project Site. The Atlantic Avenue Barclays Center Station is also served by the B, D, N, Q, and R subway lines. All rail trips were assigned to the Atlantic Avenue Long Island Rail Road Station located half a block south of the Project Site.

In terms of public bus access, there are numerous route options serving the Proposed Project as multiple lines are accessible via streets in the immediate area around the Project Site. The major corridors containing bus stops nearest the Project Site include Fulton Street, Flatbush Avenue, Atlantic Avenue, and Fourth Avenue.

Project-generated drivers would be expected to either park on-street in the neighborhood or utilize off-street parking facilities. The nearest public parking facility is located at 300 Ashland Place, across Ashland Place from the Project Site. In addition, there are several other parking facilities located within walking distance of the Project Site. These public garages are located a couple of blocks southeast towards the Barclays Center, to the west on State Street, and northwest on Schermerhorn Street.

Lastly, walk-only trips are expected to be well-distributed along direct walking paths to and from the Project Site and nearby attractions and destinations.

Considering the routing assumptions detailed above, it is expected that pedestrian trips generated by the Proposed Project would be well-distributed in all directions between access points at the Project Site and many different trip sources across the neighborhood. Therefore, it is unlikely that any potential concentration of pedestrian trips would result in 200 or more trips taking place at any point of the street network and there would be no exceedances of Level 2 screening thresholds. Consequently, a detailed pedestrian analysis is not warranted and there would be no potential for significant adverse pedestrian impacts.

Conclusion

The transportation screening analysis concluded that the number of vehicle and transit trips generated by the Proposed Project would not exceed *CEQR Technical Manual* Level 1 screening thresholds. While the level of peak hour pedestrian trips would exceed the Level 1 screening threshold, a qualitative assessment of Level 2 pedestrian assignments determined that no pedestrian element is expected to exceed Level 2 assignment screening thresholds. As a result, no detailed transportation analysis is warranted. Therefore, there would be no potential for significant adverse transportation impacts as a result of the Proposed Project.

9

Air Quality

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, referred to as "stationary sources"; or by a combination of both. Under CEQR, an air quality assessment determines both a proposed project's effects on ambient air quality as well as the effects of ambient air quality on the project.

Introduction

This section examines the potential for air quality impacts associated with the Proposed Project, which would introduce a new 23-story mixed-use building with residential and community facility uses at 130 Saint Felix Street, fronting Ashland Place and Saint Felix Street. The Project Site is part of a single zoning lot together with One Hanson Place/Williamsburgh Savings Bank. One Hanson Place, located at the corner of Hanson Place and Ashland Place, is a mixed-use building with apartment units on the upper floors and commercial office space on the lower floors. This building is 37 stories and 512 feet tall.

Consistent with the *CEQR Technical Manual*, air quality analyses for a proposed project focus on three main areas of potential concern:

- Potential impacts from mobile sources introduced by a project
- Potential impacts from potential air pollutant sources introduced by a project, such as:
  - Emissions from a project's heating, ventilation, and air conditioning (HVAC) system
  - Emissions from a project's enclosed parking garage

- Potential impacts on a proposed project from either manufacturing/processing facilities or large/major sources that are located near the project site.

The Proposed Project would not introduce any parking, and therefore, an assessment of emissions from such a facility is not warranted. In addition, the Proposed Project would not introduce any diesel vehicles, and the particulate matter emission equivalent from fewer than 50 vehicle trips introduced by the Proposed Project, as detailed in **Section 8, Transportation**, does not warrant a mobile source analysis. Finally, no large or major sources were identified within a 1,000-foot radius of the Project Site. Therefore, this analysis focuses on the following:

› An assessment of the Proposed Project's HVAC systems to affect the surrounding area ("project on existing")

› An assessment of the potential for manufacturing/processing facilities located near the Project Site to affect the Proposed Project.

The proposed HVAC systems will be natural gas-fueled.

Pollutants of Concern

Air pollution is of concern because of its demonstrated effects on human health. Of special concern are the respiratory effects of the pollutants and their potential toxic effects, as described below.

Carbon monoxide (CO) is a colorless and odorless gas that is a product of incomplete combustion. Carbon monoxide is absorbed by the lungs and reacts with hemoglobin to reduce the oxygen carrying capacity of the blood. At low concentrations, CO has been shown to aggravate the symptoms of cardiovascular disease. It can cause headaches, nausea, and at sustained high concentration levels, can lead to coma and death.

Particulate matter is made up of small solid particles and liquid droplets. PM_{10} refers to particulate matter with a nominal aerodynamic diameter of 10 micrometers or less, and $PM_{2.5}$ refers to particulate matter with an aerodynamic diameter of 2.5 micrometers or less. Particulates can enter the body through the respiratory system. Particulates over 10 micrometers in size are generally captured in the nose and throat and are readily expelled from the body. Particulates smaller than 10 micrometers, and especially particles smaller than 2.5 micrometers, can reach the air ducts (bronchi) and the air sacs (alveoli) in the lungs. Particulates are associated with increased incidence of respiratory diseases, cardiopulmonary disease, and cancer.

Nitrogen oxides (NO_X), the most significant of which are nitric oxide (NO) and nitrogen dioxide (NO_2), can occur when combustion temperatures are extremely high (such as in engines) and atmosphere nitrogen gas combines with oxygen gas. NO is relatively harmless to humans but quickly converts to NO_2. Nitrogen dioxide has been found to be a lung irritant and can lead to respiratory illnesses. Nitrogen oxides, along with VOCs, are also precursors to ozone formation.

Sulfur Dioxide (SO_2) emissions are the main components of the "oxides of sulfur," a group of highly reactive gases from fossil fuel combustion at power plants, other industrial facilities, industrial processes, and burning of high sulfur containing fuels by locomotives, large ships, and non-road equipment. High concentrations of SO_2 will lead to formation of other sulfur

oxides. By reducing the SO_2 emissions, other forms of sulfur oxides are also expected to decrease. When oxides of sulfur react with other compounds in the atmosphere, small particles that can affect the lungs can be formed. This can lead to respiratory disease and aggravate existing heart disease.

Non-criteria pollutants may be of concern in addition to the criteria pollutants discussed above. Non-criteria pollutants are emitted by a wide range of man-made and naturally occurring sources. These pollutants are sometimes referred to as hazardous air pollutants (HAP) and when emitted from mobile sources, as Mobile Source Air Toxics (MSATs). Emissions of non-criteria pollutants from industrial sources are regulated by the United States Environmental Protection Agency (EPA).

NO_2 and $PM_{2.5}$ are expected to be the pollutants of potential concern for this project based on the proposed air quality assessment.

Air Quality Standards

In accordance with the requirements of the Clean Air Act (CAA), as amended 1990, the EPA has promulgated National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) for pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. Primary standards set limits to protect public health, including the health of sensitive populations such as the sick, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set NAAQS for six principal pollutants, which are called "criteria" pollutants. These six pollutants are ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns in diameter (PM_{10}) and less than 2.5 microns in diameter ($PM_{2.5}$), and lead (Pb). EPA reviews and revises these standards periodically.

The State of New York has adopted similar standards as those set by the EPA, and has state-specific standards for sulfur dioxide, particulates, fluorides, and hydrogen sulfide. The NAAQS are presented in **Table 9-1**.

Federal ambient air quality standards do not exist for non-criteria pollutants; however, the New York State Department of Environmental Conservation (NYSDEC) has issued standards for certain non-criteria compounds, including beryllium, gaseous fluorides, and hydrogen sulfide. NYSDEC has also developed guidance document DAR-1 (August 2016), which contains a compilation of annual and short term (1-hour) guideline concentration thresholds for these compounds. The NYSDEC's DAR-1 guidance thresholds represent ambient levels that are considered safe for public exposure. EPA has also developed guidelines for assessing exposure to non-criteria pollutants. These exposure guidelines are used in health risk assessments to determine the potential effects to the public.

Table 9-1 National Ambient Air Quality Standards

Pollutant	Primary/ Secondary	Averaging Level	Level	Form
Carbon Monoxide (CO)	Primary	8 hours	9 ppm	Not to be exceeded more than once per year
		1 hour	35 ppm	
Lead (Pb)	Primary and secondary	Rolling 3-month average	0.15 µg/m^3 (1)	Not to be exceeded
Nitrogen Dioxide (NO_2)	Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Primary and secondary	1 year	53 ppb (2)	Annual mean
Ozone (O_3)	Primary and secondary	8 hours	0.070 ppm (3)	Annual fourth-highest daily maximum concentration, averaged over 3 years
Particulate Matter ($PM_{2.5}$)	Primary	1 year	12.0 µg/m^3	Annual mean, averaged over 3 years
	Secondary	1 year	15.0 µg/m^3	Annual mean, averaged over 3 years
	Primary and secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years
Particulate Matter (PM_{10})	Primary and secondary	24 hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO_2)	Primary	1 hour	75 ppb(4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Notes:

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m3 as a calendar quarter average) also remain in effect.

(2) The level of the annual NO_2 standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O_3 standards additionally remain in effect in some areas. Revocation of the previous (2008) O_3 standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.

(4) The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)). A SIP call is a USEPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

Source: EPA NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table, accessed May 2020

Regulatory Context

The 1990 CAA with Amendments resulted in states being divided into attainment and non-attainment areas, with classifications based upon the severity of their air quality problems. Air quality control regions are classified and divided into one of three categories: attainment, unclassified, or non-attainment depending upon air quality data and ambient concentrations

of pollutants. Attainment areas are regions where ambient concentrations of a pollutant are below the respective NAAQS; non-attainment areas are those where concentrations exceed the NAAQS. Maintenance areas are former non-attainment that achieved attainment. An unclassified area is a region where data are insufficient to make a determination and is generally considered as an attainment area for administrative purposes. A single area can be in attainment of the standards for some pollutants while being in non-attainment for others.

Kings County is designated as a serious non-attainment area for the 2008 8-hour ozone standard and a moderate non-attainment area for the 2015 8-hour ozone standard. Both designations are part of a larger New York-Northern New Jersey-Long Island, NY-NJ-CT non-attainment area. The county has been designated as a maintenance area for CO as of May 20, 2002 and for the 2006 $PM_{2.5}$ standard as of April 18, 2014. Kings County is in attainment for all other criteria pollutants (PM_{10}, Pb, NO_2, and SO_2).

Impact Criteria

The predicted concentrations of pollutants of concern associated with a proposed project are compared with either the NAAQS for criteria air pollutants or ambient guideline concentrations for non-criteria pollutants. In general, if a project would cause the standards for any pollutant to be exceeded, it would likely result in a significant adverse air quality impact.

New York City uses de minimis criteria to determine a project's potential to result in a significant adverse $PM_{2.5}$ impact under CEQR. The de minimis criteria are as follows:

- Predicted increase of more than half the difference between the background concentration and the 24-hour standard;
- Annual average $PM_{2.5}$ concentration increments which are predicted to be greater than 0.1 µg/m3 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 at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or
- Annual average $PM_{2.5}$ concentration increments which are predicted to be greater than 0.3 $\mu g/m^3$ at a discrete receptor location (elevated or ground level).

Background Concentrations

Background concentrations are ambient pollution levels associated with existing stationary, mobile, and other emission sources from the area and not associated with the proposed project. The Proposed Project is expected to affect ambient concentrations of NO_2 and $PM_{2.5}$. The latest three years of monitoring data (2017 to 2019) from the representative monitoring stations were used to develop background concentrations for pollutants of concern (see **Table 9-2**). $PM_{2.5}$ was collected from the station at JHS 126, 424 Leonard Street. 1-hour and annual NO_2 background concentrations were developed from monitoring data collected from the Queens College monitoring station at 65-30 Kissena Boulevard. These concentrations were estimated using the form of the NAAQS (see **Table 9-1**, column Form for information).

Table 9-2 Background Concentrations (2017-2019)

Pollutant	Averaging Time	Monitoring Location	Background Concentration
Nitrogen Dioxide	1-Hour	Queens College	55 ppb
	Annual		14.6 ppb
Particulate Matter ($PM_{2.5}$)	24-Hour	JHS 126	17.7 µg/m^3
	Annual		7.7 µg/m^3

The *CEQR Technical Manual* de minimis threshold for the 24-hour $PM_{2.5}$ concentrations was estimated to be 8.7 µg/m^3 from the JHS 126 observations.

Methodology

HVAC Analysis

As described in **Part I: Project Description**, the Proposed Project would introduce a new building which would have a natural gas-fueled boiler plant to service the building's HVAC system. The HVAC analysis assesses the potential for emissions from the HVAC system to significantly impact existing buildings in the surrounding area. Based on the relative location of the Proposed Project and One Hanson Place building, and the fact that One Hanson Place is taller and its upper floors are used for residential apartments, there was a potential for a significant air quality impact from the project's HVAC exhaust, and analysis needed to be conducted using the USEPA's AERMOD model.

Refined Dispersion Modeling

For projects where a need for detailed analysis is identified, an air quality analysis is performed using EPA's AERMOD model (version 19191). AERMOD is a state-of-the-art dispersion model, applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD is a steady-state plume model that incorporates current concepts about flow and dispersion in complex terrain, including updated treatments of the boundary layer theory, understanding of turbulence and dispersion, and includes handling of terrain interactions. The AERMOD model calculates pollutant concentrations from one or more points (e.g., exhaust stacks) based on hourly meteorological data and has the capability to calculate pollutant concentrations at locations where the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures. AERMOD can be run with and without building downwash (the downwash option accounts for the effects on plume dispersion created by the structure the stack is located on, and other nearby structures).

Emission Rates and Stack Parameters

Emission rates for the proposed HVAC systems were estimated using information from the MEP specifications for the boiler and AP-42, EPA's Compilation of Air Emission. Exhaust parameters were obtained from the MEP specifications.

Methodology Utilized for Estimating NO_2 Concentrations

The 1-hour NO_2 concentration associated with the Proposed Project was estimated using the AERMOD Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM module limits the NO_x to NO_2 conversion by considering NO_2 formation based on the amount of ozone within the plume volume.

Meteorological Data

Dispersion analysis used the latest five years (2015-2019) of hourly meteorological observations from La Guardia Airport National Weather Service station and upper air data obtained from the Brookhaven station, New York.

Receptors

Sensitive receptors were placed on the facades of taller buildings within 400 feet of the Proposed Project. There are only two buildings that are taller than the Proposed Project: One Hanson Place and 300 Ashland Place. As discussed above, the 37-story One Hanson Place/Williamsburgh Savings Bank is located at the corner of Hanson Place and Ashland Place. 300 Ashland Place is a 35-story apartment building located approximately 160 feet away from the Proposed Project. Receptors were placed on all facades with operable windows at 20 feet apart at all floors of each building.

Industrial Source Analysis

As described in Section 220 and Section 321 in Chapter 17 of the *CEQR Technical* Manual, an air quality assessment is required to evaluate the potential impacts of air toxics emissions from ventilation exhaust systems of manufacturing or processing facilities within a 400-foot radius of a project site when a project would result in new sensitive uses (particularly residences, schools, hospitals, or parks). If any sources are identified, a screening analysis is performed based on Table 17-3 in Chapter 17 of the *CEQR Technical Manual*. The screening table provides the maximum 1-hour, 8-hour, 24-hour and annual average modeled values based on a generic emission rate of 1 gram per second of a pollutant from a 20-foot tall point source for the distances between 30 feet and 400 feet from the receptor of the same height. Potential impacts predicted from the industrial source of concern based on the screen table are compared with the short-term guideline concentrations (SGCs) and annual guideline concentration (AGCs) recommended in NYSDEC's DAR-1 AGC/SGC Tables. If a proposed project fails the above screening analysis, or the screening analysis methodology is not applicable to the project, further refined analysis using EPA's AERSCREEN and/or AERMOD model is warranted to determine any potential for significant adverse impacts.

Assessment

HVAC Analysis (Refined Analysis)

The Proposed Project's HVAC stacks were assumed to be located above the building's bulkhead, which would be located next to the northern façade of the One Hanson Place building. Given the relative heights of the two buildings, the Proposed Project's HVAC exhaust would be on the level of the operable windows and balconies of the One Hanson Place residential units.

The Proposed Project's HVAC system would consist of three AERCO 13 ppm Benchmark boilers. **Table 9-3** shows characteristics of these boilers. Each boiler has capacity of 2,500 MBH (2.5 MMBtu per hour) and all three should not operate at more than 7,200 MBH in the peak hour. Each boiler also has a 95% control efficiency, and thus the maximum firing rate of each boiler at the peak hour is 2,375 MBH.

Table 9-3 HVAC Stack Parameters

Parameter	Boiler(s)	Unit
Stack Height	269.5	ft
Stack Diameter	6	in
Exit Velocity	variable	ft/sec
Exhaust Temperature	170	^{o}F

Emission rates from this HVAC system were estimated using the AP-42 emission factors and boiler specifications. Peak hour emission rates were used in the analysis of NO_x emissions and are presented in **Table 9-4.** Emissions presented in this table are for each boiler.

Table 9-4 Emissions Rates from Proposed HVAC System

Pollutant	Averaging Time	Emission Rate (g/sec)
Nitrogen Dioxide	1-Hour	0.0048
	Annual	0.0013
Particulate Matter ($PM_{2.5}$)	24-Hour	variable
	Annual	variable

For the NO_2 modeling, the peak emission rate was used. For the 24-hour $PM_{2.5}$ modeling, the hour-by-hour boiler utilization profile for the coldest day of the year, January 31st, was conservatively used. Weekly hour-by-hour utilization for the coldest week of the year was conservatively used for the annual $PM_{2.5}$ analysis. These variable boiler utilization rates were used to estimate hourly boiler emission rates and exit velocities.

The results of the air quality analysis are presented in **Table 9-5** and **Table 9-6**. As shown in these tables, the highest modeled concentrations at the facades of One Hanson Place and 300 Ashland Place were below the respective NAAQS or CEQR thresholds.

Table 9-5 Highest NO_2 Concentrations from the Proposed HVAC System (ppb)

Pollutant	Time period	Predicted Impact	Background Concentration	Total Concentration	NAAQS
Nitrogen Dioxide	1-hour		-	69.1	100
	Annual		14.6	14.9	53

Table 9-6 Highest $PM_{2.5}$ Concentrations from the Proposed HVAC System (µg/m³)

Pollutant	Time period	Predicted Impact	CEQR *de minimis*
Particulate Matter ($PM_{2.5}$)	24-Hour	4.1	8.7
	Annual	0.15	0.3

To ensure that there are no significant adverse impacts from the HVAC system of the Proposed Project, certain restrictions related to the stack height would be required through the mapping of an (E) designation for air quality.

The (E) designation text would be as follows:

Block 2111, Lot 40 – Proposed Development Site

Any new residential development on the above-referenced property must exclusively use natural gas in any fossil fuel-fired heating, ventilating and air conditioning (HVAC) equipment, be fitted with low NO_x (13 ppm) burners, and ensure that each boiler exhausts to a separate stack. The three (3) HVAC stacks must be located at least 269.5 feet above grade, be at least 30 feet apart from each other along the northern edge of the bulkhead and be no less than 41.5 feet away from the south façade of the proposed building facing the One Hanson Place building to avoid any significant adverse air quality impacts.

Industrial Source Analysis

To assess potential air quality impacts on the Proposed Project from existing industrial sources that emit toxic air contaminants, an investigation of existing land uses within a 400-foot radius of the project block was conducted to identify potential sources and determine if there are active permits associated with those sources.

As a first step, land use maps were reviewed to identify surrounding land uses that could have NYCDEP-issued industrial permits (i.e., sites classified as Industrial/Manufacturing, Transportation/Utility, or Public Facilities/Institutions). Once the potential facilities were identified, an additional review of NYCDEP's Clean Air Tracking System (NYCDEP CATS) was undertaken to assess whether the potential facilities have associated permits. **Table 9-7** lists these potential land uses.

The first four permits listed in **Table 9-7** are for the emergency generators which do not require assessment following the NYSDEC guidance. The last permit listed is for generators that would be used for emergency and demand response. According to the permit, these generators would be used for demand response for no more than 20 hours in a year. These hours are less than the hours allowed for emergency use (500 hours). As such, significant adverse impacts from these generators are not anticipated. Overall, no significant adverse impacts associated with emissions of air toxics are expected, and no further analysis is warranted.

Table 9-7 Industrial Sources within 400 Feet of the Project Block

Address	Owner Name[1]	DEP CATS	Source Type
2 Hanson Place	Brookfield Properties	PB003705	Emergency Generator
2 Hanson Place	Brookfield Properties	PB024410	Emergency Generator
139 Flatbush Ave	Target Corporation	PB018915	Emergency Generator
2 Hanson Place	HSBC North America	PB023114	Emergency Generator
2 Hanson Place	FC Hanson Office Assoc	PW007617	Generators for demand response and emergency use

[1] Source: NYCDEP's Clean Air Tracking System (NYCDEP CATS). https://a826-web01.nyc.gov/DEP.BoilerInformationExt/

Conclusion

The detailed dispersion analysis of the Proposed Project's HVAC system demonstrated that the Proposed Project should meet certain parameters, including the use of natural gas low NO_x (13 ppm) boilers and three stacks to be located at the highest tier of the building, on the bulkhead, at least 269.5 feet above grade, 30 feet apart, and no less than 41.5 feet from the southern edge of the Proposed Project facing the northern façade of One Hanson Place. With the application of an (E) designation for air quality, the Proposed Project would meet these required parameters and there would be no potential for significant adverse stationary source air quality impacts.

In addition, no significant adverse impacts are expected from existing industrial sources within a 400-foot radius of the Proposed Project, and no "large" or "major" emission sources were identified within a 1,000-foot radius.

Therefore, there would be no significant adverse air quality impacts as a result of the Proposed Project.

10

Noise

The goal of this section is to determine whether the Proposed Project may increase noise exposure at existing sensitive receptors and whether new receptors would be introduced into an acceptable ambient noise environment.

Introduction

The Applicant, 130 St. Felix Street LLC, is seeking several discretionary approvals to facilitate a mixed-use development on Lot 40 on Brooklyn Block 2111 in Downtown Brooklyn (the "Project Site"). The proposed mixed-use building would include community facility space on the cellar level and first and second floors and residential space on the upper floors (the "Proposed Project"). The community facility space would accommodate an expansion of the neighboring Brooklyn Music School (BMS).

Because the Proposed Actions would introduce new noise-sensitive receptors to the Project Site, a noise assessment is required under CEQR to determine if:

- The Proposed Actions would significantly increase sound levels from mobile and stationary sources at existing noise receptors adjacent to the Project Site, including residential, commercial, and institutional land uses; and
- New noise receptors introduced at the Project Site would be in an acceptable ambient sound level environment.

Per the *2020 CEQR Technical Manual*, a noise analysis is appropriate if an action would generate mobile or stationary sources of noise or would be located in an area with high ambient noise levels. Mobile sources include vehicular traffic; stationary sources include

rooftop equipment such as emergency generators, cooling towers, and other mechanical equipment.

The noise assessment includes the following:

- Background on metrics used to describe noise;
- The methodology and criteria used to assess potential impacts;
- An assessment of the potential for the Proposed Project to significantly affect existing receptors due to the introduction of new mobile or stationary sources; and,
- An evaluation of the ambient sound levels at new receptor locations.

Noise Background

Noise is defined as unwanted or excessive sound. Sound becomes unwanted when it interferes with normal activities such as sleep, work, or recreation. How people perceive sound depends on several measurable physical characteristics. These factors include:

- Level - Sound level is based on the amplitude of sound pressure fluctuations and is often equated to perceived loudness.
- Frequency - Sounds are comprised of acoustic energy distributed over a variety of frequencies. Acoustic frequencies, commonly referred to as tone or pitch, are typically measured in Hertz (Hz). Pure tones have energy concentrated in a narrow frequency range and can be more audible to humans than broadband sounds. Sound levels are most often measured on a logarithmic scale of decibels (dB). The decibel scale compresses the audible acoustic pressure levels which can vary from the threshold of hearing (0 dB) to the threshold of pain (120 dB). Because sound levels are measured in dB, the addition of two sound levels is not linear. Adding two equal sound levels results in a 3 dB increase in the overall level. Research indicates the following general relationships between sound level and human perception:
  - A 3-dB increase is a doubling of acoustic energy and is the threshold of perceptibility to the average person.
  - A 10-dB increase is a tenfold increase in acoustic energy and is perceived as a doubling in loudness to the average person.

Audible sound is composed of acoustic energy over a range of frequencies typically from 20 to 20,000 Hz. The human ear does not perceive sound levels at each frequency as equally loud. To compensate for this phenomenon in perception, a frequency filter known as A-weighting (dBA) is used to evaluate environmental noise levels. **Table 10-1** presents a list of common outdoor and indoor sound levels.

Table 10-1 Common Indoor and Outdoor Sound Levels

Outdoor Sound Levels	Sound Pressure µPa		Sound Level dBA	Indoor Sound Levels
	6,324,555	-	110	Rock Band at 5 m
Jet Over-Flight at 300 m		-	105	
	2,000,000	-	100	Inside New York Subway Train
Gas Lawn Mower at 1 m		-	95	
	632,456	-	90	Food Blender at 1 m
Diesel Truck at 15 m		-	85	
Noisy Urban Area—Daytime	200,000	-	80	Garbage Disposal at 1 m
		-	75	Shouting at 1 m
Gas Lawn Mower at 30 m	63,246	-	70	Vacuum Cleaner at 3 m
Suburban Commercial Area		-	65	Normal Speech at 1 m
	20,000	-	60	
Quiet Urban Area—Daytime		-	55	Quiet Conversation at 1 m
	6,325	-	50	Dishwasher Next Room
Quiet Urban Area—Nighttime		-	45	
	2,000	-	40	Empty Theater or Library
Quiet Suburb—Nighttime		-	35	
	632	-	30	Quiet Bedroom at Night
Quiet Rural Area—Nighttime		-	25	Empty Concert Hall
Rustling Leaves	200	-	20	
		-	15	Broadcast and Recording Studios
	63	-	10	
		-	5	
Reference Pressure Level	20	-	0	Threshold of Hearing

µPA: MicroPascals describe pressure. The pressure level is what sound level monitors measure.
dBA: A-weighted decibels describe pressure logarithmically with respect to 20 µPa (the reference pressure level).
Source: Highway Noise Fundamentals, Federal Highway Administration, September 1980.

Because sound levels change over time, a variety of sound level metrics can be used to describe environmental noise. The following is a list of sound level descriptors that are used in the noise analysis:

- L10 is the sound level which is exceeded for 10 percent of the time during a given time period. Therefore, it represents the higher end of the range of sound levels. The unit is commonly used in the *2020 CEQR Technical Manual* to evaluate acceptable thresholds for noise exposure for new receptors that would be introduced by a proposed development.
- L_{eq} is the energy-average A-weighted sound level. The L_{eq} is a single value that is equivalent in sound energy to the fluctuating levels over a period of time. Therefore, the L_{eq} considers how loud noise events are during the period, how long they last, and how many times they occur. L_{eq} is commonly used to describe environmental noise and relates well to human annoyance. In accordance with the *2020 CEQR Technical Manual*,

the L_{eq} sound level is used to assess the potential for significant increases in noise due to a proposed development at existing receptors in the study area.

Assessment Methodology

This noise analysis considers two receptor types when evaluating noise for a proposed development; existing and new receptor(s). Since the Proposed Project would introduce new community facility and residential uses, these are considered "new receptors."

The analysis also considers "existing receptors" which are the current noise-sensitive uses, such as residential and commercial properties surrounding the Project Site. The following describes the results of the noise assessment for these two types of receptors.

Noise Assessment for Existing Receptors

Noise impact at existing nearby sensitive receptors is assessed according to the relative increase between No-Action and With-Action sound levels. Noise impact is assessed according to the increase in the L_{eq} sound level in accordance with the *2020 CEQR Technical Manual*. If mobile or stationary sources associated with the Proposed Project would increase L_{eq} sound levels by 3 dB or more and absolute levels would exceed 65 dBA L_{eq}, the Proposed Project would cause a significant adverse impact prior to mitigation. Additionally, if No-Action condition noise levels are 60 dBA L_{eq} or less, a 5-dB increase would be considered a significant adverse noise impact.

Mobile Sources

As described in **Section 8, Transportation**, the Proposed Action would not generate sufficient vehicular traffic to exceed the threshold for a detailed transportation analysis, according to Table 16-1 in the *2020 CEQR Technical Manual*, and therefore, with the relatively moderate to high numbers of vehicles in the immediate area, the Proposed Action would not result in a doubling of noise passenger car equivalents (PCEs), which would be necessary to cause a 3-dBA increase in noise levels. Therefore, the Proposed Action would not cause a significant adverse vehicular noise impact.

Stationary Sources

The Proposed Project is not anticipated to include any substantial stationary source noise generators, such as unenclosed cooling or ventilation equipment, loudspeaker systems, stationary diesel engines, car washes, or other similar types of uses. The project heating, ventilation, and air conditioning equipment would incorporate sufficient noise reduction to comply with applicable noise regulations and standards, including the standards contained in the revised New York City Noise Control Code. This would ensure that mechanical equipment does not result in any significant increases in noise levels by itself or cumulatively with other project noise sources.

Noise Assessment for New Receptors

With-Action noise conditions at new sensitive receptors that would be introduced by the Proposed Actions are evaluated according to absolute exterior sound level. The noise exposure

guidelines for acceptable ambient conditions depend on the type of land use; for residential buildings, the goal is to maintain interior noise levels of 45 dBA or lower. With-Action exterior sound levels are evaluated to determine if receptors would be in an acceptable ambient sound level environment. It is generally assumed that without specific information on a building's window and wall construction, the outdoor-to-indoor noise reduction of the building is 25 decibels. Therefore, exterior ambient sound levels exceeding 70 dBA at residential receptors (which would equate to an interior noise level of 45 dBA) are considered to be Marginally Unacceptable and the need to provide window/wall sound attenuation that is sufficient to reduce interior sound levels to acceptable levels must be considered.

Since the Proposed Actions would introduce community facility and residential uses to the Project Site, the highest L_{10} sound level is used to evaluate whether the Proposed Actions would introduce new receptors into an acceptable noise environment.

Noise Exposure Guidelines

The *2020 CEQR Technical Manual* provides noise exposure guidelines for assessing ambient noise conditions at new residential and community facility receptors, as shown in **Table 10-2**.

Table 10-2 Noise Exposure Guidelines for Use in City Environmental Impact Review

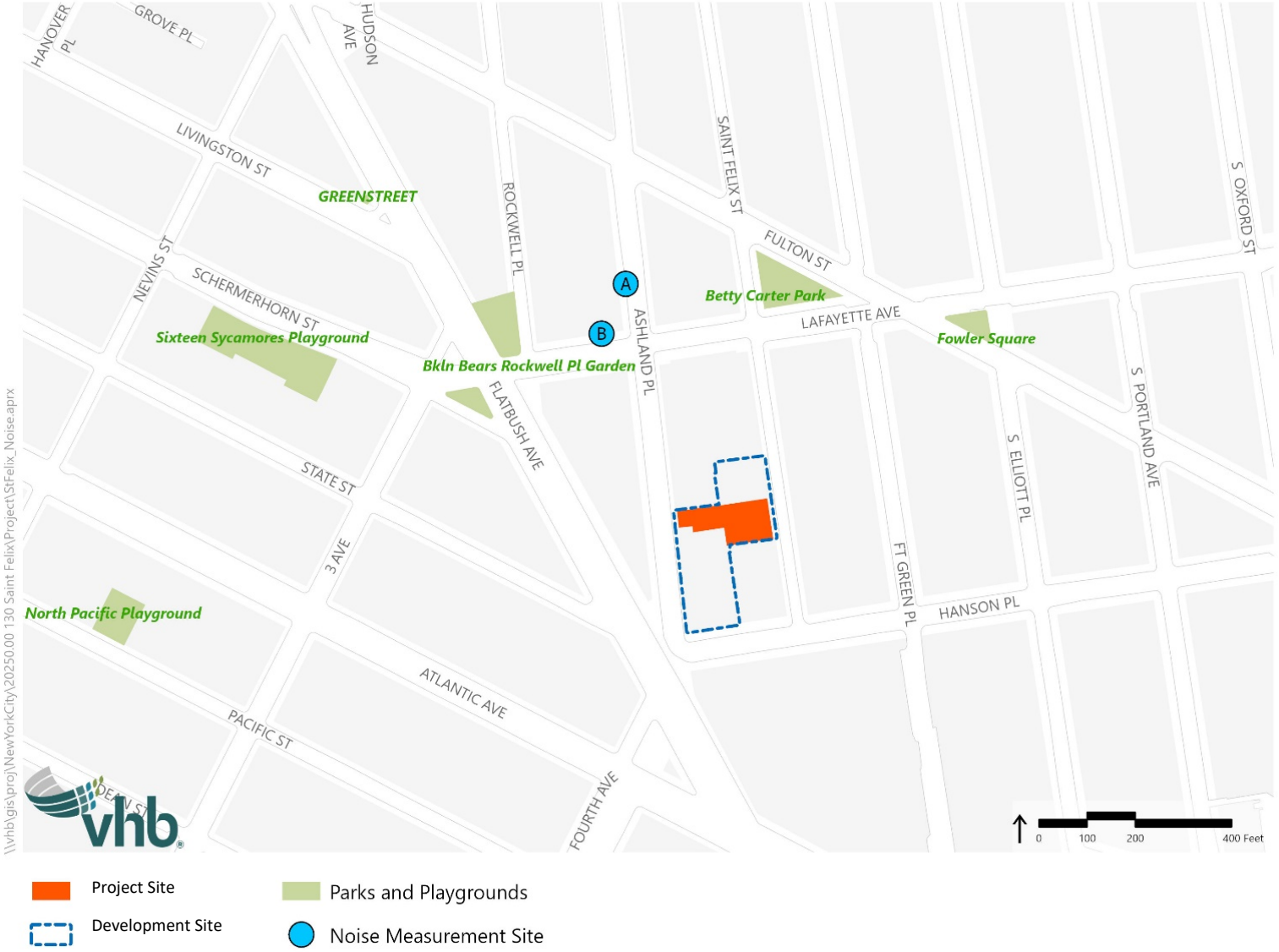
Receptor Type	Time Period	Acceptable External Exposure	Marginally Acceptable External Exposure	Marginally Unacceptable External Exposure	Clearly Unacceptable External Exposure
Community Facility	All Times	$L_{10} \leq 65$ dBA	65 < L10 ≤ 70 dBA	70 < L10 ≤ 80 dBA	L10 > 80 dBA
Residence	7 AM to 10 PM				
Residence	10 PM to 7 AM	$L_{10} \leq 55$ dBA	55 < L10 ≤ 70 dBA	70 < L10 ≤ 80 dBA	L10 > 80 dBA

Source: Table 19-2, *2020 CEQR Technical Manual.*

Existing Sound Levels

Existing ambient noise conditions at the Project Site have been characterized based on previous noise measurements conducted in the area as part of other recent Environmental Assessment Statements (EASs) or Environmental Impact Statements (EISs). As shown in **Figure 10-1,** existing noise measurements in the area have been conducted as part of the *BAM North Site II EAS* (CEQR No. 14HPD069K). Since the predominant source of noise during these measurements was traffic, they would not be substantially different than normal traffic conditions today. As noise relates to traffic volumes, a doubling of traffic volumes relates to a 3 dB increase in noise. Small changes in traffic between the date of these measurements would result in negligible differences in noise.

Figure 10-1 Ambient Noise Measurement Locations



Sound monitoring was previously conducted at two sites on Tuesday October 29, 2013 following methods which are consistent with the guidelines in the *2020 CEQR Technical Manual*. Measurements were conducted for 20 minutes at each site during the peak morning (8:00 to 9:00 AM), midday (12:00 to 1:00 PM), and afternoon peak (5:00 to 6:00 PM). The atmospheric conditions were suitable for sound measurements with temperatures in the low 50's Fahrenheit, wind speeds less than 12 mph, and no precipitation. The microphone was positioned at a height of five feet above ground and a minimum of six feet away from reflective surfaces.

The predominant source of sound was traffic on local streets. As shown in **Table 10-3**, existing (2013) noise levels ranged from 65.8 to 71.7 dBA (L10) and 64.0 to 76.6 dBA (L_{eq}).

Table 10-3 Existing (2013) Ambient Sound Level Measurements

Site	Monitoring Location	Period	Duration	L_{eq}	L_{min}	L_{max}	L_1	L_{10}	L_{50}	L_{90}
A	Ashland Place near Lafayette Avenue (BAM North Site II Site 1)	Morning	20 min	65.1	85.6	54.6	75.1	66.9	60.9	57.7
		Midday	20 min	76.6	108.6	56.1	81.6	67.3	60.6	58.1
		Evening	20 min	64.0	86.2	54.6	73.2	65.8	60.8	57.8
B	Lafayette Avenue near Ashland Place (BAM North Site II Site 2)	Morning	20 min	69.5	94.2	55.7	78.9	71.4	64.8	59
		Midday	20 min	68.7	88.2	58	78.3	71.2	65.0	61.6
		Evening	20 min	73.0	104.5	58.1	79.3	71.7	65.2	61.5

Source: Field measurements were performed by Philip Habib & Associates on Tuesday, October 29, 2013.

Acceptability Assessment

The *2020 CEQR Technical Manual* provides noise exposure guidelines for assessing ambient sound levels, as shown in **Table 10-2**. Based on these noise exposure guidelines, noise impact has been assessed to determine the level of acceptability for new sensitive receptors at the Project Site.

The *BAM North Site II EAS* included an evaluation of future 2017 noise levels with the projected development of that project. Since this 2017 condition includes trip generation that has occurred since the 2013 measurements, it is a closer representation of existing and With-Action conditions. Therefore, With-Action noise conditions for the Proposed Project at 130 St. Felix Street are based on the future noise conditions of the BAM North Site II project.

Table 10-4 summarizes the 2013 measured L_{eq} sound levels, the 2017 L_{eq} sound levels including changes in noise due to traffic as part of the BAM North Site II project, the change in L_{eq}, measured L_{10} and L_{eq} sound levels, and the With-Action L_{10} and L_{eq} sound levels for each site and measurement period. **Table 10-4** indicates that the 2017 With-Action sound levels are Marginally Unacceptable at Site A and Site B according to the *2020 CEQR Technical Manual*.

Table 10-4 With-Action Sound Level Acceptability

Site	Monitoring Location	Period	Existing (2013) L_{eq}	With-Action (2017) L_{eq}	Change in L_{eq}	Measured 2013[B] (L_{10} or L_{eq})	With-Action (2017)[B] (L_{10} or L_{eq})	Acceptability
A	Ashland Place near Lafayette Avenue (BAM North Site II Site 1)	Morning	65.1	67.0	1.9	66.9 (L_{10})	68.8 (L_{10})	Marginally Unacceptable
		Midday	76.6[A]	78.8[A]	2.2	76.6 (L_{eq})[A]	78.8 (L_{eq})[A]	
		Evening	64.0	66.5	2.5	65.8 (L_{10})	68.3 (L_{10})	
B	Lafayette Avenue near Ashland Place (BAM North Site II Site 2)	Morning	69.5	70.1	0.6	71.4 (L_{10})	72.0 (L_{10})	Marginally Unacceptable
		Midday	68.7	69.2	0.5	71.2 (L_{10})	71.7 (L_{10})	
		Evening	73.0	73.2	0.2	73.0 (L_{eq})	73.2 (L_{eq})	

A: Corrected values. Midday measurement was 76.6 dBA Leq and With-Action (2017) noise levels are 2.2 dBA higher than existing (2013).

B: Greater of L10 or Leq value

Source: Philip Habib & Associates, 2013.

Based on the finding of a Marginally Unacceptable sound level at Site A and Site B, sufficient outdoor-to-indoor sound attenuation of the window/wall must be specified to the Proposed Project to provide acceptable sound attenuation from the window/wall materials of the Proposed Project.

Noise Attenuation Measures

The most common measure for reducing interior noise from ambient sources is to specify sufficient outdoor-to-indoor sound attenuation for the Proposed Project. As shown in **Table 10-5**, the required level of attenuation varies based on the exterior sound levels and type of receptor. Based on a maximum sound levels of 78.8 dBA (L_{eq}) at BAM Site 1 and 73.2 dBA (L_{eq}) at BAM Site 2, minimum composite outdoor-to-indoor window/wall sound attenuation is required to obtain acceptable interior noise conditions in residential and community facility spaces, as well as alternate means of ventilation such as well-sealed air conditioners, package-terminal air conditioners, or central air conditioning.

Table 10-5 Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
With-Action Sound Level Attenuation[A]	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
	(I)	(II)	(III)	(IV)	$36+(L_{10}-80)$[B] dBA
	28 dBA	31 dBA	33 dBA	35 dBA	

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

[B] Required attenuation values increase by 1 dBA increments for L10 values greater than 80 dBA.

Source: New York City Department of Environmental Protection (2020 CEQR Technical Manual, Table 19-3)

The composite outdoor-to-indoor transmission classification (OITC) value of the window-wall structure is used to determine the necessary sound attenuation. Sound attenuation

measures would be achieved through construction materials and techniques with sufficient OITC-rated windows and walls.

Table 10-6 presents the applicable With-Action 2017 sound levels for each façade of the Proposed Project and the applicable minimum window wall sound attenuation requirement.

Table 10-6 Minimum Window Wall Sound Attenuation Requirements

Facade	Measurement Site	With-Action (2017) [B] (L_{10} or L_{eq})	Minimum OITC Required
Ashland Place	A	78.8 (L_{eq})	35
St. Felix Street	B	73.2 (L_{eq})	31
Lafayette Avenue	B	73.2 (L_{eq})	31
Hanson Place	B	73.2 (L_{eq})	31

Source: VHB, 2020.

To implement these attenuation requirements, an (E) Designation for noise would be applied to the Project Site specifying the appropriate amount of window/wall attenuation and the need for alternate means of ventilation. The text for the (E) Designation would be as follows:

> **Block 2111, Lot 40**
> *In order to ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 35 dBA window/wall attenuation on the facades facing Ashland Place and 31 dBA of attenuation on the facades facing St. Felix Street and the facades facingLafayette Avenue and the facades facing Hanson Place to maintain an interior noise level not greater than 45 dBA for residential and community facility 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, well-sealed air conditioners, package-terminal air conditioners, or central air conditioning.*

With this commitment, no significant adverse impacts related to noise are expected and no further analysis is warranted.

Conclusion

A noise assessment was conducted to determine whether the Proposed Project would significantly increase sound levels from mobile and stationary sources at existing noise receptors adjacent to the Project Site, and if new noise receptors that would be introduced by the Proposed Project would be in an acceptable ambient sound level environment.

As the Proposed Actions do not exceed the detailed transportation analysis thresholds of Table 16-1 in the *2020 CEQR Technical Manual* and with the relatively moderate to high numbers of vehicles in the immediate area, they would not result in a doubling of noise PCEs, which would be necessary to cause a 3-dBA increase in noise levels. Therefore, the Proposed Project would not result in a significant adverse vehicular noise impact.

The Proposed Actions are not anticipated to include any substantial stationary source noise generators. The design and specifications for the building's mechanical equipment would incorporate sufficient noise reduction devices that would comply with applicable noise regulations and standards, including the standards contained in the revised New York City Noise Control Code.

Noise monitoring was previously conducted at two locations as part of the BAM North Site II Project in accordance with the *2020 CEQR Technical Manual*. Based on maximum 2017 L_{10} sound up to 78.8 dBA (L_{eq}) on the Ashland Place façade and up to 73.2 dBA (L_{eq}) on the St. Felix Street, Lafayette Avenue, and Hanson Place facades, a composite outdoor-to-indoor window/wall sound attenuation of 35 dBA or more is required for facades on Ashland Place and 31 dBA or more is required for facades on St. Felix Street, Lafayette Avenue, and Hanson Place to obtain acceptable interior noise conditions for residential and community facility uses. Additionally, alternate means of ventilation such as well-sealed air conditioners, package-terminal air conditioners, or central air conditioning is required.

11

Neighborhood Character

This section considers how the Proposed Actions would affect neighborhood character, which is defined as the elements of the environment that combine to create the context and feeling of a neighborhood.

Introduction

This analysis of neighborhood character follows the guidelines set forth in the *CEQR Technical Manual*. As defined within the manual, neighborhood character is an amalgam of various elements that give neighborhoods a distinct "personality," including land use, urban design and visual resources, historic resources, socioeconomic conditions, transportation, and noise. Not all of these elements affect neighborhood character in all cases; a neighborhood usually draws its distinctive character from a few defining elements. According to the *CEQR Technical Manual*, neighborhood character impacts are rare and occur under unusual circumstances.

As described in **Part I: Project Description**, the Proposed Project would result in the development of an approximately 166,402-gross-square-foot (gsf) mixed-use development on Lot 40 on Brooklyn Block 2111 in Downtown Brooklyn (the "Project Site"). The Proposed Project would be 23 stories and 270 feet in height. This section includes a preliminary assessment of neighborhood character; prepared in conformance with the *CEQR Technical Manual* using information from the technical analyses presented in other relevant sections of this EAS.

Methodology

A neighborhood character assessment is generally needed when a project has the potential to generate significant adverse impacts to one or more of the contributing elements of neighborhood character. In the absence of an impact on any of the relevant technical areas, a combination of moderate effects to the neighborhood could result in an impact to neighborhood character. A significant impact identified in one of the technical areas that contribute to a neighborhood's character is not necessarily equivalent to a significant impact on neighborhood character. Therefore, an assessment of neighborhood character is generally appropriate if a project has the potential to result in any significant adverse impacts in the technical areas listed below or on open space or shadows. Examples of possible changes in those technical areas that could result in an adverse effect on neighborhood character, should those technical areas be defining features of the neighborhood, are as follows:

- **Land Use, Zoning, and Public Policy**: If development resulting from a proposed action would conflict with surrounding uses, conflict with land use policy or other public plans for the area, or change land use character, neighborhood character could be affected.
- **Socioeconomic Conditions**: If a proposed action results in substantial direct or indirect displacement; additional population, employment, or businesses; or differences in population or employment density, neighborhood character could be affected.
- **Open Space**: If a proposed action would result in a reduction or displacement of an open space or result in additional population that would place a substantial demand on open space, neighborhood character could be affected.
- **Historic and Cultural Resources**: If a proposed action would result in substantial direct changes to a historic resource or substantial changes to public views of a historic resource, neighborhood character could be affected.
- **Urban Design and Visual Resources**: If a proposed action would result in substantially different building block, form, size, scale, or arrangement; block form, street pattern or street hierarchy; streetscape elements; or substantial direct changes to a visual feature, such as unique and important public view corridors and vistas, or to public visual access to such a feature, neighborhood character could be affected.
- **Shadows**: If a project would cast an incremental shadow on sun-sensitive resources, neighborhood character could be affected.
- **Transportation**: When a project would result in a change in traffic patterns or would substantially increase traffic volumes on residential streets, neighborhood character could be affected.
- **Noise**: When a proposed action would substantially increase noise levels in an area, neighborhood character could be affected.

As part of a neighborhood character analysis, the defining features of the neighborhood are identified and then a determination is made as to whether the project has the potential to adversely affect these defining features, either through the potential for a significant adverse impact or a combination of moderate effects in relevant technical areas. If the assessment concludes that a project has the potential to adversely affect defining features of a neighborhood, a detailed analysis is undertaken to determine whether the project would result in a significant adverse impact on neighborhood character.

The neighborhood character analysis draws from the technical assessments listed above. As recommended in the *CEQR Technical Manual*, the study area for the neighborhood character analysis is consistent with the study areas in the relevant technical areas assessed under CEQR that contribute to the defining elements of the neighborhood. As such, the study area for neighborhood character is consistent with the 400-foot study area used for the analysis of land use, zoning, and public policy.

As detailed in the previous sections of this EAS, the Proposed Project would not result in significant adverse impacts in any of the above technical areas; therefore, this analysis evaluates the potential for the Proposed Project to affect neighborhood character through a combination of moderate effects. The analysis begins with an assessment of each of the technical areas, then identifies the defining features of the neighborhood and assesses whether the Proposed Project would adversely affect those defining features.[1]

Project Potential to Adversely Affect the Contributing Elements of Neighborhood Character

This section evaluates the potential for the Proposed Project to result in an adverse impact on neighborhood character through a combination of moderate effects in the various technical areas.

- **Land Use, Zoning, and Public Policy**: As discussed in **Section 2, Land Use, Zoning, and Public Policy**, the Proposed Project would be consistent with the mixed use character of the study area, and the Proposed Actions would facilitate a building that provides a transition from the lower density areas to the east of the Project Site and the higher density areas to the west. The Proposed Project would be in keeping with the trend toward higher density mixed-use development, and would conform to applicable public policies for the area.
- **Open Space**: As discussed in **Section 3, Open Space**, the Proposed Project would not result in the reduction or displacement of open space, nor would it place a substantial demand on open space.
- **Historic and Cultural Resources**: As discussed in **Section 5, Historic and Cultural Resources** and **Section 6, Urban Design and Visual Resources**, the Proposed Project would not significantly alter or affect the setting, visual relationship, or publicly accessible views of the identified historic resources within the study area. The design of the Proposed Project has been developed in coordination with and has been conditionally approved by the New York City Landmarks Preservation Commission (LPC) to ensure the Proposed Project respects and responds to the existing LPC-designated historic resources.
- **Urban Design and Visual Resources**: As discussed in **Section 6, Urban Design and Visual Resources**, the Proposed Project would be compatible with the urban design character of the surrounding area, consistent with the surrounding building form and streetscape, and would provide infill development on a vacant lot, such that the quality of the urban design and visual resources at the Project Site would improve. The proposed building design would respect and complement the existing visual character

[1] An assessment of socioeconomic conditions was not warranted as part of this EAS, as no significant changes to socioeconomic conditions are anticipated as a consequence of the Proposed Actions, and so that technical area is excluded from this analysis.

of the Brooklyn Academy of Music (BAM) Historic District and the Fort Greene Historic District Boundary Expansion. Additionally, the Proposed Project would not result in any significant adverse impacts on views to and from the prominent visual resources within the study area.

- **Shadows**: As discussed in **Section 4, Shadows**, the Proposed Project has the potential to cast shadows on four open space resources. However, due to the limited duration and extent of incremental shadow, the Proposed Project would not result in significant adverse shadow impacts to any of the identified sunlight-sensitive resources.
- **Transportation**: As discussed in **Section 8, Transportation**, there would be no potential for significant adverse transportation impacts as a result of the Proposed Project.
- **Noise**: As discussed in **Section 10, Noise**, the Proposed Project would not substantially increase noise in the study area.

Overall, the Proposed Project would not result in a combination of moderate effects that would adversely affect neighborhood character.

Project Potential to Adversely Affect the Defining Features of the Neighborhood

Identification of the Defining Features of the Neighborhood

The study area for this analysis is the area within 400 feet of the Project Area which, for the Proposed Project, is generally bounded by Ft. Greene Place to the east, Atlantic Avenue to the south, just west of Flatbush Avenue to the west, and Lafayette Avenue to the north (see **EAS Figure 5**). This study area contains several distinct areas, distinguishable from each other by key characteristics including roadway orientation, land use, building bulk and density, and historic character. These areas include the predominantly residential blocks to the east of St. Felix Street; areas to the south of Hanson Place containing large-footprint commercial and transportation uses; the largely institutional project block; and the mixed-use irregularly-shaped blocks to the west of Ashland Place formed by crossing of Flatbush Avenue.

The portion of the study area to the east of the Project Site is generally characterized by smaller residential lots organized along a standard street grid. Buildings on these blocks are predominately townhome style, three- to five-story single- and multi-family residences with small front yards and large stoops. The buildings in this portion of the study area are located within the BAM Historic District and are notable for their prominent features, including the brick or brownstone materials and Italianate features including arched doorways and projecting bracketed cornices. The other notable historic buildings on the project block are the BAM Howard Gillman Opera House, One Hanson Place/Williamsburgh Savings Bank, and the Central Methodist Church. These three buildings, along with the BAM Fisher building and the Brooklyn Academy of Music, define the existing character of the project block as a center and unique concentration of historic institutional buildings.

The areas to the west and south of the project block contain large-footprint commercial and mixed commercial and residential mid- and high-rise buildings. This portion of the study area is intersected by Flatbush and Atlantic Avenues, two large, heavily trafficked thoroughfares that create irregularly shaped blocks. The Atlantic Terminal and Atlantic

Terminal Mall are the defining features of the area just south of the project block. The Atlantic Terminal building is a two-story brick building with a curved façade at the intersection of Flatbush Avenue and Hanson Place and a midrise office tower with a glass and brick façade along Fort Greene Place. As a major transportation hub, roadways adjacent to Atlantic Terminal contain significant pedestrian and transportation amenities including benches, bike racks, and bus shelters.

To the west of the Project Site at the corner of State Street and Flatbush Avenue, residential buildings consist of multi-family walk up residential and mixed-use buildings with commercial space on the lower levels and multiple stories of residential uses above. The character of this area is also highly influenced by the newer, high-rise buildings that have either recently been constructed or are currently under construction. Amongst the new buildings is 300 Ashland, which rises to 364 feet tall, with large-footprint commercial uses on the ground floor and a modern glass façade. There are also two anticipated developments in this portion of the study area expected to be completed by the 2024 analysis year, at 80 and 100 Flatbush Avenue. These proposed mixed-use modern towers, at 840 feet tall and 510 feet tall, respectively, would reinforce the trend toward high-rise modern building development in this area.

Overall, given the presence of these distinct areas within the study area, the defining features of the neighborhood are:

- Juxtaposition of historic residential buildings to the east and large institutional buildings as well as the 517-foot-tall One Hanson Place/Williamsburgh Savings Bank on the project block, which together contribute to the historic character of the area.
- Transition from lower-density residential development toward high-density mixed-use towers characteristic of Downtown Brooklyn.
- High level of activity associated with a transit-rich area and proximity to a large transportation hub.

Assessment

Overall, the Proposed Project would not adversely affect the defining features of the neighborhood.

The Proposed Project would support infill development on an existing vacant lot, providing a continuous and active streetfront on the project block, thereby improving neighborhood conditions and supporting the level of activity that is characteristic of a transit-rich area. The proposed mixed-use commercial and community facility building would reinforce the existing mixed-use residential, commercial, and community facility character of the study area. The Proposed Project would also contribute to the concentration of institutional buildings on the project block by supporting a prominent community facility, providing much-needed space for the Brooklyn Music School to expand its facilities.

The Proposed Project has also been carefully designed, in coordination with the LPC, to complement and enhance the urban design and historic character of the study area (see **Appendix A** for the conditional approval letter from LPC dated August 10, 2020). With a height of 270 feet, the Proposed Project would be 20 feet lower than the "shoulder" at One Hanson Place so as not to compete visually with the adjacent visual resource. Along St. Felix Street, the base height of the Proposed Project would be set back to establish a "townhouse"

scale, similar in height to the Brooklyn Music School and the historic homes across St. Felix Street from the Project Site, creating a consistent and contextually-appropriate street wall. Additional building setbacks above the base height would create a visual transition from the smaller townhouse style homes to the east to the larger buildings to the west of the Project Site, including One Hanson Place. This would reinforce the function of the project block as a transition block within the study area. Along Ashland Place, the proposed building would set back after a base height that is consistent with the adjacent BAM Fisher building.

Beyond the pronounced setbacks that would create visual cohesiveness with the surrounding buildings, other elements of the building design are characteristic of urban design in the study area. As detailed in **Section 5, Historic and Cultural Resources**, the Proposed Project would incorporate the Art Deco influence of the neighboring buildings into a contemporary design through gradations in brick colors and vertical piers. These elements echo design elements of the BAM Opera House building to the north and One Hanson Place to the south. Given these design elements, the Proposed Project would not have a significant adverse impact on the urban design and historic character of the study area, but rather would respect and reinforce the unique blend of historic residential and institutional buildings in the area, one of the defining features of the neighborhood.

As discussed in detail in **Section 6, Urban Design and Visual Resources** and in the LPC conditional approval letter included in **Appendix A**, the design elements and building form detailed above ensure that the Proposed Project would not detract from nearby visual and historic resources. Comparative views from various study area locations show that the Proposed Project would not compete visually with One Hanson Place/Williamsburgh Savings Bank or the BAM Opera House, and would reinforce the project block's function as a visual transition between the low to medium density blocks to the east and the medium to high density blocks to the south and west.

Therefore, overall, the Proposed Actions would not result in a significant adverse impact on the defining features of the neighborhood.

Conclusion

The Proposed Project would not result in significant adverse impacts in any of the technical areas that contribute to neighborhood character, nor would it adversely affect the defining features of the neighborhood or result in a combination of moderate effects that would adversely affect neighborhood character. As described above, the Proposed Project was designed to complement and benefit the urban design and historic character of the neighborhood by facilitating a building that is in context with surrounding conditions in terms of height and design features, reinforces the existing transitional function of the project block, and provides a continuous and active pedestrian-oriented streetfront. Therefore, no further assessment is warranted, and the Proposed Project would not result in significant adverse impacts on neighborhood character.

12

Construction

Construction activities, although temporary in nature, can sometimes result in significant adverse impacts. A project's construction activities may affect a number of technical areas analyzed for the operational period, such as air quality, noise, and traffic. This chapter assesses the potential for the Proposed Project to result in significant adverse impacts during construction.

Introduction

Construction activities, although temporary in nature, can sometimes result in significant adverse environmental impacts. Consideration of several factors, including the location and setting of the project in relation to other uses, and the intensity and duration of the construction activities, may indicate that a project's construction activities warrant analysis.

The Proposed Project would result in the construction of an approximately 166,402-gross-square-foot (gsf) mixed-use development including 20,120 gsf of community facility space in the cellar level and on the first and second floors and 146,282 gsf of residential space accommodating up to 130 units, of which approximately 26 units would be affordable under the MIH program. The community facility space would be occupied by the Brooklyn Music School and would include expanded instruction space. The Proposed Project would be constructed to a height of 23 stories and a maximum of 270 feet (with mechanical bulkhead).

Based on the construction schedule, construction activity associated with the Proposed Project is anticipated to last a total of approximately 27 months. Because the construction period would be longer than two years ("long-term" per the *2020 CEQR Technical Manual*), a

preliminary assessment of potential construction impacts was prepared in accordance with CEQR guidelines. This assessment is presented below; as detailed in the assessment, construction of the Proposed Project would not result in significant adverse impacts.

Construction Regulations and General Practices

Governmental Oversight

Governmental oversight of construction in New York City is extensive and involves a number of City, State, and Federal agencies, each with specific areas of responsibility, as follows.

- The New York City Department of Buildings (DOB) has primary oversight of construction. DOB oversees compliance with the New York City Building Code to ensure that buildings are structurally, electrically, and mechanically safe. In addition, DOB enforces safety regulations to protect both workers and the general public during construction. Areas of oversight include installation and operation of equipment such as cranes and lifts, sidewalk sheds, safety netting, and scaffolding.
- The New York City Department of Environmental Protection (DEP) enforces the New York City Noise Code, reviews and approves any needed Remedial Action Plans (RAPs) and associated Construction Health and Safety Plans (CHASPs) as well as the removal of fuel tanks and abatement of hazardous materials. DEP also regulates water disposal into the sewer system and reviews and approves any rerouting of wastewater flow.
- The New York City Fire Department (FDNY) has primary oversight of compliance with the New York City Fire Code and the installation of tanks containing flammable materials.
- The New York City Department of Transportation Office of Construction Mitigation and Coordination (DOT OCMC) reviews and approves any traffic lane and sidewalk closures.
- The New York City Landmarks Preservation Commission (LPC) approves studies and testing to prevent loss of archaeological resources and to prevent damage to architectural resources.
- New York City Transit approves any excavation proposed within 200 feet of any subway or tunnel under its jurisdiction.
- The New York State Department of Environmental Conservation (NYSDEC) regulates disposal of hazardous materials, and construction, operation, and removal of bulk petroleum and chemical storage tanks. NYSDEC also regulates discharge of water into rivers and streams.
- The New York State Department of Labor (DOL) licenses asbestos workers.
- The New York State Department of Transportation (NYSDOT) reviews and approves any traffic lane closures on its roadways, should any be necessary.
- The U.S. Environmental Protection Agency (EPA) has wide-ranging authority over environmental matters, including air emissions, noise, hazardous materials, and the use of poisons, however, much of its responsibility is delegated to the state level.
- The Occupational Safety and Health Administration (OSHA) sets standards for work site safety and construction equipment.

Construction Oversight

New York City regulates the hours of construction work through the New York City Noise Control Code, as amended in December 2005 and effective July 1, 2007. Construction is limited to weekdays between the hours of 7:00 AM and 6:00 PM and noise limits are set for certain specific pieces of construction equipment. Most workers arrive between 6:00 AM and 7:00 AM. In New York City, work typically ends at 3:00 PM, with some exceptions when certain critical tasks (e.g., finishing a concrete pour for a floor deck, completing the drilling of piles, or completing the bolting of a steel frame erected that day) require that the workday be extended beyond normal work hours. Any extended workdays generally last until approximately 6:00 PM and do not include all construction workers or pieces of equipment in operation on-site, but only those involved in the specific task requiring additional work time. The City may permit work outside of these hours to accommodate: (1) emergency conditions; (2) public safety; (3) construction projects by or on behalf of City agencies; (4) construction activities with minimal noise impacts; and (5) undue hardship resulting from unique site characteristics, unforeseen conditions, scheduling conflicts, and/or financial considerations. The DOB issues these work permits, and in some instances, approval of a noise mitigation plan from the DEP under the City's Noise Code is also required. Overall, the level of activity for any work outside of normal construction hours is less than a normal workday.

Construction Practices

Access, Deliveries, and Staging Areas

Access to construction sites is controlled. Work areas are fenced off, and limited access points for workers and construction-related trucks are provided. Typically, worker vehicles are not allowed into the construction area, and workers or trucks without a need to be on the site are not allowed entry. After work hours, the gates are closed and locked. Security guards may patrol the construction site after work hours and over weekends to prevent unauthorized access.

Material deliveries to the site are controlled and scheduled. To aid in adhering to the delivery schedules, as is normal for building construction in New York City, flaggers are employed at each of the construction site's access points. Flaggers are typically supplied by either the subcontractor on-site at the time or by the construction manager. The flaggers control trucks entering and exiting the Project Site so that they would not interfere with one another. In addition, they provide an additional traffic aid as trucks enter and exit the on-street traffic streams. Flaggers would be posted at the access point roadway.

For the construction at the Project Site, trucks would deliver materials primarily from St. Felix Street, though some deliveries would occur along Ashland Place. Personnel entry and egress would occur from the St. Felix Street frontage of the Project Site. Construction activities would be staged within the Project Site and are also anticipated to occur on portions of the sidewalk and street immediately adjacent to the Project Site on St. Felix Street and Ashland Place; street closures would be limited to the curb lane and the number of travel lanes would be maintained. These temporary closures are discussed in the following section.

Material deliveries to the site would be controlled and scheduled as discussed above.

Lane and Walkway Closures

Temporary curb lane and sidewalk closures are typical for construction projects in New York City. To manage such closures, a Maintenance and Protection of Traffic (MPT) plan is developed consistent with DOT requirements. DOT OCMC reviews and approves MPT plans, and the implementation of the closures is also coordinated with DOT OCMC. In general, construction managers for major projects on adjacent sites also coordinate their activities to avoid delays and inefficiencies.

For construction on the site, there would be temporary closures of the sidewalk and curb lanes along St. Felix Street and Ashland Place immediately adjacent to the Project Site. The sidewalk closure would be limited to the excavation and superstructure phase of the project during working hours only; the sidewalk would be re-opened once construction activities on-site have concluded for the day. During other phases of construction, a full sidewalk shed, including masonry scaffolding, would be installed thereby allowing pedestrian passage past the site. During the period that the sidewalk is closed, signs informing pedestrians of the sidewalk closures would be posted at the corners of the block on which the lane closure is to be located (i.e., at the intersections of St. Felix Street and Lafayette Avenue, and St. Felix Street and Hanson Place). The curb lane closure would not affect any traffic lanes.

An MPT plan would be developed for review and approval by DOT OCMC for these temporary sidewalk and lane closures.

Public Safety

A variety of measures are employed to ensure public safety during construction at sites within New York City. Examples include the use of sidewalk bridges to provide overhead protection for pedestrians passing by the construction site and the employment of flaggers to control trucks entering and exiting the construction site, to provide guidance to pedestrians, and/or to alert or slow down the traffic. Other safety measures include the installation of safety nettings on the sides of the project as the superstructure advances upward to prevent debris from falling to the ground.

As noted above, flaggers would be posted at the site, and a full sidewalk shed would be installed during most phases of construction to ensure pedestrian safety. In addition, as at other New York City construction sites, the Proposed Project would follow all DOB safety requirements to ensure that construction of the project is conducted with care so as to minimize the disruption to the community.

Rodent Control

Construction projects in New York City typically include provisions for a rodent (i.e., mouse and rat) control program with provisions for this formalized in construction contracts for the development. Rodent control programs are typically carried out throughout construction, beginning with surveying and baiting appropriate areas prior to construction and providing for proper site sanitation and maintenance during construction. Signage would be posted, and coordination would be conducted with appropriate public agencies. Only EPA- and NYSDEC-registered rodenticides would be permitted, and the contractor would be required to implement the rodent control program in a manner that is not hazardous to the general public, domestic animals, and non-target wildlife.

Construction Schedule and Activities

Construction Schedule

The anticipated construction schedule is presented in **Table 12-1** and reflects a reasonable assumption for construction activities at the Project Site. Construction activity would begin in the first quarter of 2022 and full buildout on the Project Site would be completed in the second quarter of 2024. Altogether, it is projected that construction activities would occur on the Project Site over a period of 27 months, with the bulk of construction occurring within less than 24 months and only three months of interior fit-out and site cleanup extending beyond a 24-month period.

As shown in the schedule, construction would begin with the foundation work for approximately eight months. Superstructure work would follow beginning in the fourth quarter of 2022 and would last for approximately nine months. Overlapping with a portion of the superstructure work, the exterior closure of the building would begin in the first quarter of 2023 and would continue for approximately 12 months, and construction of the building elevators would begin in quarter two of 2023 and would continue for approximately six months. Interior fit-out and site cleanup would overlap with the exterior construction work, beginning in the second quarter of 2023 and would continue through the second quarter of 2024. The main stages of construction are discussed in more detail in the following section.

Construction Activities

Construction of the Proposed Project would be subject to the government regulations and oversight detailed above and would employ the general construction practices described above.

Site Preparation, Excavation and Foundation

Construction at the Project Site would begin with a number of activities to prepare the site for construction work. Early activities would involve the installation of public safety measures, such as Jersey barriers and fencing. The construction site would be fenced off, with solid fencing to minimize interference between the persons passing by the site and the construction work. Gates for workers and for trucks would be installed. An office trailer for the construction engineers and managers would be placed on the site. Also, portable toilets, dumpsters for trash, and water and fuel tankers would be brought to the site and installed. Temporary utilities would be connected to the construction trailer. During the startup period, permanent utility connections may be made, especially if the construction manager has obtained early electric power for construction use, but utility connections may be made almost any time during the construction sequence. Interior turnarounds would be established.

Table 12-1 Anticipated Construction Schedule

	Q1 2022	Q2 2022			Q3 2022			Q4 2022			Q1 2023			Q2 2023			Q3 2023			Q4 2023			Q1 2024			Q2 2024	
Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**
Foundation																											
Superstructure																											
Elevators																											
Exterior Construction																											
Interior Fit-out and Site Cleanup																											

Because the Project Site is currently vacant, no demolition is required for construction of the Proposed Project. As part of the Proposed Project, excavators would be used for the task of digging the building's foundation. Any excavated soil to be removed from the Project Site would be loaded onto dump trucks for transport to a licensed disposal facility or for reuse elsewhere on the Project Site or on another construction site that needs fill.

This stage of construction would also include the construction of the Proposed Project's foundation and below-grade elements. Columns and concrete walls would be built to the grade level. Concrete trucks would be used to pour the foundation and the below-grade structures. Excavation and foundation activities would also involve the use of hydraulic drills, cranes, generators, and compressors.

To reduce the potential for public exposure to contaminants during excavation activities, construction activities would be performed in accordance with all applicable regulatory requirements as discussed in **Section 7, Hazardous Materials**.

The Project Site's excavated areas could be subject to accumulated groundwater as well as collected rain and snow until the slab-on-grade is built. This accumulated water would need to be removed, and would be pretreated prior to discharge, if necessary. The decanted water would then be discharged into the City sewer system in accordance with DEP regulations, which specify maximum concentrations of pollutants. DEP can also impose project-specific limits, depending on the location of the project and contamination that has been found in nearby areas. Any groundwater discharged into the City's sewer system would meet the applicable limits. The Project Site has also been accepted as a volunteer into the NYSDEC Brownfield Cleanup Program (BCP), which will provide regulatory oversight by the NYSDEC. As part of the BCP, additional requirements, including implementation of a Remedial Investigation and the preparation and implementation of a Remedial Action Work Plan will be conducted.

For the Proposed Project, foundation work would be undertaken in the first eight months of the construction period, beginning in the first quarter of 2022.

Superstructure and Exterior Construction (Core and Shell)

Construction of the core and shell involves construction of the building's framework, core, and exterior. The superstructure is the building's framework (beams and columns) and floor decks. Construction of the core, or interior structure, includes construction of the building's elevator shafts; vertical risers for mechanical, electrical, and plumbing systems; electrical and mechanical equipment rooms; core stairs; and restroom areas. Construction of the exterior involves the installation of the façade (exterior walls, windows, and cladding and the roof).

Equipment during this phase typically includes air compressors, generators, delivery and concrete trucks, concrete pumps, concrete trowels, welding equipment, and a variety of handheld tools. Temporary construction elevators (hoists) would also be constructed for the delivery of materials and vertical movement of workers when necessary. Superstructure activities would also require the use of mobile cranes, welders, and a variety of trucks. During exterior construction, the building will be hung with three-point scaffolds or swing stages. Public safety measures would include overhead protection measures.

For construction of the Proposed Project, superstructure work is anticipated to occur over approximately nine months beginning in the fourth quarter of 2022, and construction of the

elevators would occur over approximately six months starting in the second quarter of 2023. The exterior construction work would overlap with the superstructure and elevator installation and is expected to be complete in quarter one of 2024. As noted above, during the superstructure work, the sidewalks immediately adjacent to the Project Site on St. Felix Street and Ashland Place would be closed during construction hours and reopened at the end of the workday.

Interior Fit-out and Site Cleanup (MEP, Core Finishes, Fit Out)

Interior fit-out activities include the construction of interior partitions, installation of lighting fixtures and interior finishes (i.e., flooring, painting, etc.); mechanical and electrical work; and lobby finishes. In addition, final cleanup and touchup of the proposed building and final building systems (i.e., electrical system, fire alarm, plumbing, etc.) testing and inspections are part of this stage of construction.

Equipment used during interior construction typically includes exterior hoists, compressors, delivery trucks, and a variety of small hand-held tools. This stage of construction is typically the quietest and does not generate fugitive dust since this work occurs within the building with the façades substantially complete.

This stage of construction is also when the construction protection measures (fencing, sidewalk enclosures, bridges, temporary sidewalks, remaining scaffolding, etc.) around the construction site would be removed. This stage of construction would also include punch list completion activities, which are typically small tasks that were not completely finished and project commissioning to ensure compliance with contract requirements.

For the Proposed Project, this work would begin in the second quarter of 2023 and would continue through the end of the construction period in the second quarter of 2024. Overall, this phase of construction would occur over approximately 14 months.

Assessment of Project Construction

In accordance with the guidelines of the *CEQR Technical Manual*, this preliminary assessment evaluates the effects associated with the Proposed Projects' construction related activities—including transportation, air quality, and noise—on sensitive receptors located near the area of construction, as well as the construction related effects on the Project Site's existing nearby historic architectural resources. Hazardous materials are discussed in **Section 7, Hazardous Materials**.

As discussed in **Section 2, Land Use, Zoning, and Public Policy**, the project block contains the Brooklyn Music School and Brooklyn Academy of Music buildings north of the Project Site, the Hanson Place Central United Methodist Church, and the mixed-use residential and commercial building at One Hanson Place. The Project Site is located within the New York City Landmark Brooklyn Academy of Music Historic District (LP-1003), as well as the New York State/National Fort Greene Historic District (Boundary Increase) (90NR01301). In addition, One Hanson Place, the former Williamsburgh Savings Bank Building, is an individual and interior New York City Landmark (LP-0971 and LP-1909) and the Brooklyn Academy of Music (located 100 feet north of the Project Site) is individually listed in the National Register of Historic Places (05NR05534).

Transportation

Daily Workforce and Truck Deliveries

Construction of the Proposed Project would generate trips from construction workers traveling to and from the Project Site as well as from the delivery of materials and equipment, and the removal of debris. Construction activities would occur over a period of 27 months between 2022 and 2024. An evaluation of construction sequencing and projections of workers and trucks was undertaken to assess potential traffic-related impacts associated with construction. **Table 12-2** shows the estimated number of workers and truck deliveries to the Project Site per quarter (i.e. three-month period) of each calendar year for the duration of construction activities. These represent the average number of daily workers and trucks within each quarter. The average number of workers would be about 96 per day throughout the construction period. The peak number of workers would be 193 per day in the second quarter of 2023. For truck trips, the average number of trucks would be 8 per day, and the peak would occur in the second quarter of 2023 with 14 trucks per day.

Table 12-2 Average Daily Number of Workers and Trucks by Quarter

Year	2022				2023				2024		Project	
Quarter	**1st**	**2nd**	**3rd**	**4th**	**1st**	**2nd**	**3rd**	**4th**	**1st**	**2nd**	**Average**	**Peak**
Workers	20	33	35	93	118	193	158	154	107	45	96	193
Trucks	4	8	8	10	9	14	9	8	6	5	8	14

Construction Worker Modal Splits

The average daily workforce and truck trip estimates in **Table 12-2** were then used to determine the peak quarter for potential traffic-related impacts during construction of the Proposed Project. The projections were further refined to account for the travel characteristics of construction workers including modal splits and vehicle occupancy rates. Based on information obtained from the *Atlantic Yards Arena and Redevelopment FEIS (2006)*, which is located a block away from the Project Site, it is anticipated that construction workers would primarily travel via private auto (approximately 55 percent with an average auto occupancy of 1.90), with a smaller percentage of construction workers taking public transportation (approximately 45 percent) to the Project Site. Transit service within a quarter-mile of the Project Site include the 2, 3, 4, 5, B, C, D, G, N, Q, and R subway lines, the Long Island Rail Road, and numerous bus routes along Fulton Street, Flatbush Avenue, Atlantic Avenue, and Fourth Avenue.

Based on the auto modal split and vehicle occupancy, the average daily construction auto trips and truck trips were then determined for each quarter, as shown in **Table 12-3**. Approximately 140 daily vehicle trips (168 passenger-car equivalents [PCEs][1]) are expected during the peak quarter of construction.

[1] Since larger vehicles such as trucks typically make up a significant portion of construction traffic, a passenger car equivalent factor is applied to these vehicles to account for their size difference. Per the *CEQR Technical Manual*, one truck is assumed to be equivalent to two passenger cars.

Table 12-3 Average Daily Number of PCE Trips by Quarter

Year	2022				2023				2024	
Quarter	**1st**	**2nd**	**3rd**	**4th**	**1st**	**2nd**	**3rd**	**4th**	**1st**	**2nd**
Auto Trips	12	20	20	54	68	112	92	90	62	26
Truck Trips	8	16	16	20	18	28	18	16	12	10
Vehicle Trips	20	36	36	74	86	140	110	106	74	36
PCE Trips	28	50	52	94	104	**168**	128	122	84	44

Traffic

Peak Hour Construction Worker Vehicle and Truck Trips

Construction activities would be expected to occur over one shift between 7 AM and 6 PM. Construction truck trips would typically be distributed throughout the day – depending upon the specific types of construction activities taking place – and most trucks would remain in the area for short durations. Auto trips associated with construction worker travel would typically take place in the hours before and after the daily work shift. For analysis purposes, each worker vehicle was assumed to arrive in the morning and depart in the evening, and each truck was assumed to result in one "in" trip and one "out" trip during the same hour.

The estimated daily vehicle trips for the peak quarter of construction traffic were distributed throughout the workday based on projected arrival/departure patterns of construction workers, and the projected pattern of truck deliveries based on the types of construction activities that would occur during the second quarter of 2023 for the Proposed Project. For construction workers, typical arrival patterns show that most arrivals (approximately 80 percent) occur during the hour of 6 to 7 AM (the hour before the beginning of a regular day shift), and the same percentage of departure trips occurs during the hour of 6 PM to 7 PM (at the end of the shift). For trucks, deliveries are usually spread throughout the day but the peak activity (approximately 25 percent) would occur during the 6 to 7 AM hour. This peak construction-related vehicle activity would not coincide with typical peak hours for background traffic (8 to 9 AM hour).

The peak construction hourly trip projections for the peak construction quarter are summarized in **Table 12-4.**

Table 12-4 Proposed Project Construction Vehicle Trips by Hour – Second Quarter of 2023

	Auto Trips		Truck Trips		Total Vehicle Trips			Total PCE Trips		
Hour	In	Out	In	Out	In	Out	Total	In	Out	Total
6 AM – 7 AM	45	0	3	3	48	3	51	51	6	57
7 AM – 8 AM	11	0	1	1	12	1	13	13	2	15
8 AM – 9 AM	0	0	1	1	1	1	2	2	2	4
9 AM – 10 AM	0	0	1	1	1	1	2	2	2	4
10 AM – 11 AM	0	0	1	1	1	1	2	2	2	4
11 AM – 12 PM	0	0	1	1	1	1	2	2	2	4
12 PM – 1 PM	0	0	1	1	1	1	2	2	2	4
1 PM – 2 PM	0	0	1	1	1	1	2	2	2	4
2 PM – 3 PM	0	0	1	1	1	1	2	2	2	4
3 PM – 4 PM	0	0	1	1	1	1	2	2	2	4
4 PM – 5 PM	0	0	1	1	1	1	2	2	2	4
5 PM – 6 PM	0	11	1	1	1	12	13	2	13	15
6 PM – 7 PM	0	45	0	0	0	45	45	0	45	45

The estimated number of peak hour vehicle trips generated by construction activities during the peak quarter would be 51 vehicle trips (57 PCEs) during the AM construction peak hour (6 AM to 7 AM) and 45 vehicle trips (45 PCEs) during the PM construction peak hour (6PM to 7PM). These trips would exceed the *2020 CEQR Technical Manual* 50-vehicle trip thresholds during the AM construction peak hour. However, once these trips are distributed to the surrounding roadway network; auto trips to nearby parking garages and trucks to the two access points of the Project Site, no intersection would result in 50 vehicle trips or more. Since no intersection would exceed the 50-vehicle thresholds for further traffic analysis, construction activities would not be expected to result in significant traffic impacts.

In addition, as described above, the Proposed Project would comply with an MPT plan, consistent with NYCDOT requirements. Therefore, there would not be the potential for significant adverse construction-related traffic impacts.

Deliveries

Construction trucks would be required to use NYCDOT-designated truck routes, including Flatbush Avenue, Atlantic Avenue, and Lafayette Avenue. Trucks would then use local streets to access the construction site. Construction site deliveries would use the designated loading zone along St. Felix Street and along Ashland Place.

Parking

Construction workers would generate an estimated maximum parking demand for 56 spaces during the peak construction quarter for the Proposed Project which is expected to be accommodated by the off-street parking facilities available within a quarter mile radius. Therefore, the construction of the Proposed Project would not result in significant adverse parking impacts.

Transit and Pedestrians

Based on information from the *Atlantic Yards Arena and Redevelopment FEIS (2006)*, it is anticipated that approximately 45 percent of construction workers would commute to the Project Site by public transportation. During the peak construction quarter, the Proposed Project would expect to generate 193 daily construction workers. It is expected that the majority of these workers (80 percent) would arrive during the AM construction peak hour and depart during the PM construction peak hour – in total construction activities would generate approximately 70 construction workers by public transportation during each of the two peak hours. The study area is well serviced by public transit, including the 2, 3, 4, 5, B, C, D, G, N, Q, and R subway lines, the Long Island Rail Road, and numerous bus routes along Fulton Street, Flatbush Avenue, Atlantic Avenue, and Fourth Avenue. These trips would be distributed to the different transit options and construction activities are not expected to result in transit or pedestrian impacts.

Air Quality

Construction impacts on air quality may occur because of particulate matter (fugitive dust) created by excavation, earth moving operations, etc., increased truck traffic to and from the construction site on local roadways or because of temporary road closings, and from emissions of the construction equipment. As discussed in the *CEQR Technical Manual*, the determination of whether it is sufficient to conduct a qualitative analysis of these emissions or whether a quantitative analysis is required should take into account factors such as the location of the Project Site in relation to existing residential uses or other sensitive receptors, the intensity of the construction activity, and the extent to which the project incorporates commitments to appropriate emission control measures. These factors are analyzed below.

On-Site Construction Related Emissions

For stationary source emissions, the most intense construction activities in terms of air pollutant emissions are typically the demolition, excavation, and foundation stages since it is during these stages that the largest number of large non-road diesel engines would be employed, resulting in the highest levels of air emissions. The other stages of construction, including superstructure, exterior façades, interior finishes and site work, typically result in much lower air emissions since they require fewer pieces of heavy-duty diesel equipment. Equipment used in the latter stages of construction generally have small engines and are dispersed vertically throughout the building, resulting in very low concentration increments in adjacent areas. Additionally, the latter stages of construction do not involve soil disturbance activities and therefore would result in significantly lower dust emissions. Interior finishes activities are better shielded from nearby sensitive receptors by the proposed structures themselves.

For the Proposed Project, the overall construction period would be longer than two years; however, the most intense construction activities in terms of air pollutant emissions are anticipated to occur for substantially less than two years and would not include any demolition activities. Specifically, foundation activities would occur for eight months, and would be completed by the fourth quarter of 2022. Furthermore, the Proposed Project would adhere to the applicable laws, regulations, and building codes in place that focus on clean fuel, dust suppression measures, and idling restrictions for on-road vehicles.

Off-Site Construction Related Emissions

Mobile source emissions typically result from the trucks delivering materials and removing debris, workers' private vehicles, or occasional disruptions in traffic near the construction site. As described above in the Transportation section, it is unlikely that there would be the potential for significant adverse construction-related traffic impacts. Additionally, no traffic lane closures are anticipated as a result of construction activities. The maximum number of construction-related truck trip is not expected to exceed the CEQR mobile source screening thresholds. Therefore, a more detailed assessment of construction-related mobile source air quality analysis is not warranted, and it is not anticipated that the project construction would result in any significant adverse mobile source air quality impacts.

Emission Intensity Analysis

Because the Proposed Project's construction period would last over two years and the project is located next to sensitive residential and community facility receptors, a construction emission intensity analysis was conducted. A construction emission intensity analysis includes estimating construction $PM_{2.5}$ emissions, which are the emissions of primary concern from construction, for the full duration of construction. This analysis provides a comparison of the Proposed Project's peak daily $PM_{2.5}$ emissions and proximity to nearby sensitive receptors to those of a comparable project that conducted a dispersion analysis and demonstrated no significant adverse air quality impacts.

The approach to estimate emissions includes a determination of the peak emission period based on an estimated monthly construction work schedule in which the number of on-site construction equipment types and rated horsepower of each unit, quantities of materials to be excavated, and number of trucks arriving, working, and leaving the site vary from month to month.

The peak daily emissions and the maximum annual emissions (based on a 12-month rolling average) for the Proposed Project construction were determined based on the construction schedule activities and equipment projected to be required for this construction period. The assessment considered three main phases of construction: foundation, superstructure-exterior, and interiors.

The specific construction information used to calculate emissions generated from the construction process included, but is not limited to, the following:

- The number of units and fuel-type of construction equipment to be used;
- Rated horsepower and load factors for each piece of equipment;
- Utilization rates for equipment;
- Hours of operation on site;
- Excavation processing rates; and
- Average distance to approach the site and idling time by dump trucks, cement trucks, box trucks, and trailers for equipment delivery.

Emission Reduction Measures

As noted above, construction-period air emissions could adversely affect air quality because of on-site emissions from the construction equipment and dust-generating activities. To

address potential emissions during construction, the Proposed Project would adhere to the applicable laws, regulations, and building codes in place that focus on clean fuel, dust suppression measures, and idling restrictions for on-road vehicles, and minimization of diesel-powered equipment to the extent practical. The evaluation performed for the Proposed Projects' construction emissions assumes a combination of measures, specifically:

- Clean Fuel. Ultra-low sulfur diesel (ULSD) would be used for diesel engines throughout the construction site.[2]
- Dust Control. Fugitive dust control plans would be required as part of contract specifications. For example, stabilized truck exit areas would be established for washing off the wheels of all trucks that exit the construction site. Truck routes within the site would be watered as needed to avoid the re-suspension of dust. All trucks hauling loose material would be equipped with tight fitting tailgates and their loads securely covered prior to leaving the site. All measures required by the portion of the New York City Air Pollution Control Code regulating construction-related dust emissions would be implemented.
- Restrictions on Vehicle Idling. In addition to adhering to the local law restricting unnecessary idling on roadways, on-site vehicle idle time would also be restricted to three minutes for all equipment and vehicles that are not using their engines to operate a loading, unloading, or processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine.
- Diesel Equipment Reduction. Construction of the Proposed Project could minimize the use of diesel engines and use electric engines, hoists, compressors, lifts, etc. to the extent practical. This is a common practice that has been achieving wider use as technology improves.
- Given the construction timeframe (2022-2024), equipment meeting Tier 4 standards for diesel engines (model years 2011/12 and beyond) would be expected to be in wide use and comprise the majority of contractors' fleets. If contractors choose to use older diesel equipment; the use of diesel particulate filters (DPF) in Tier 3 emission standard for diesel engines (model years 2006-2011 for engine sizes between 100 and 600 hp)[3] would be implemented. Tier 3 with DPF achieves the same emission reductions as a newer Tier 4 emission standard for diesel engines. The combination of Tier 4 and Tier 3 engines with DPF would achieve DPM reductions of approximately 90 percent when compared to older uncontrolled engines.

In addition, as detailed in **Section 7, Hazardous Materials**, as part of the NYSDEC BCP, additional requirements, including the aforementioned implementation of a Remedial Investigation and the preparation and implementation of a Remedial Action Work Plan (RAWP) will be conducted. These documents must undergo a thorough public review and are ultimately approved by the NYSDEC. The RAWP will include a health and safety plan, community air monitoring plan (CAMP), and a public health exposure assessment, among other elements. The CAMP, for example, requires monitoring PM_{10} concentrations (and VOC, if applicable) during construction and forces contractors to apply mitigation measures or

[2] The Environmental Protection Agency (EPA) required a major reduction in the sulfur content of diesel fuel intended for use in locomotive, marine, and non-road engines and equipment, including construction equipment. As of 2015, the diesel fuel produced by all large refiners, small refiners, and importers must be ULSD fuel. Sulfur levels in non-road diesel fuel are limited to a maximum of 15 parts per million.

[3] See Table 2-1 of the USEPA's Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES2014b document

stop work altogether and change site conditions depending on the PM_{10} levels generated by the construction activities.

Overall, these control measures would be expected to significantly reduce particulate matter emissions, and as recommended in the *CEQR Technical Manual*, all the necessary measures would be implemented to ensure that the New York City Air Pollution Control Code regulating construction-related dust emissions is followed.

Location of Nearby Sensitive Receptors

The Proposed Project is located in Downtown Brooklyn. The Project Site is located immediately adjacent to the Brooklyn Music school, BAM Fisher, United Methodist Church, and One Hanson Place building, and across the street from residences on St. Felix Street and Ashland Place. However, there are no ground level residential uses in the buildings located next to the Project Site. The windows on the schools and public facilities adjacent to the Project Site face St. Felix Street or Ashland Place, and not the construction site, and are at least 10 feet away from the Project Site. The nearest low-level residential uses are on St. Felix Street across from the Project Site.

Emissions Intensity Assessment

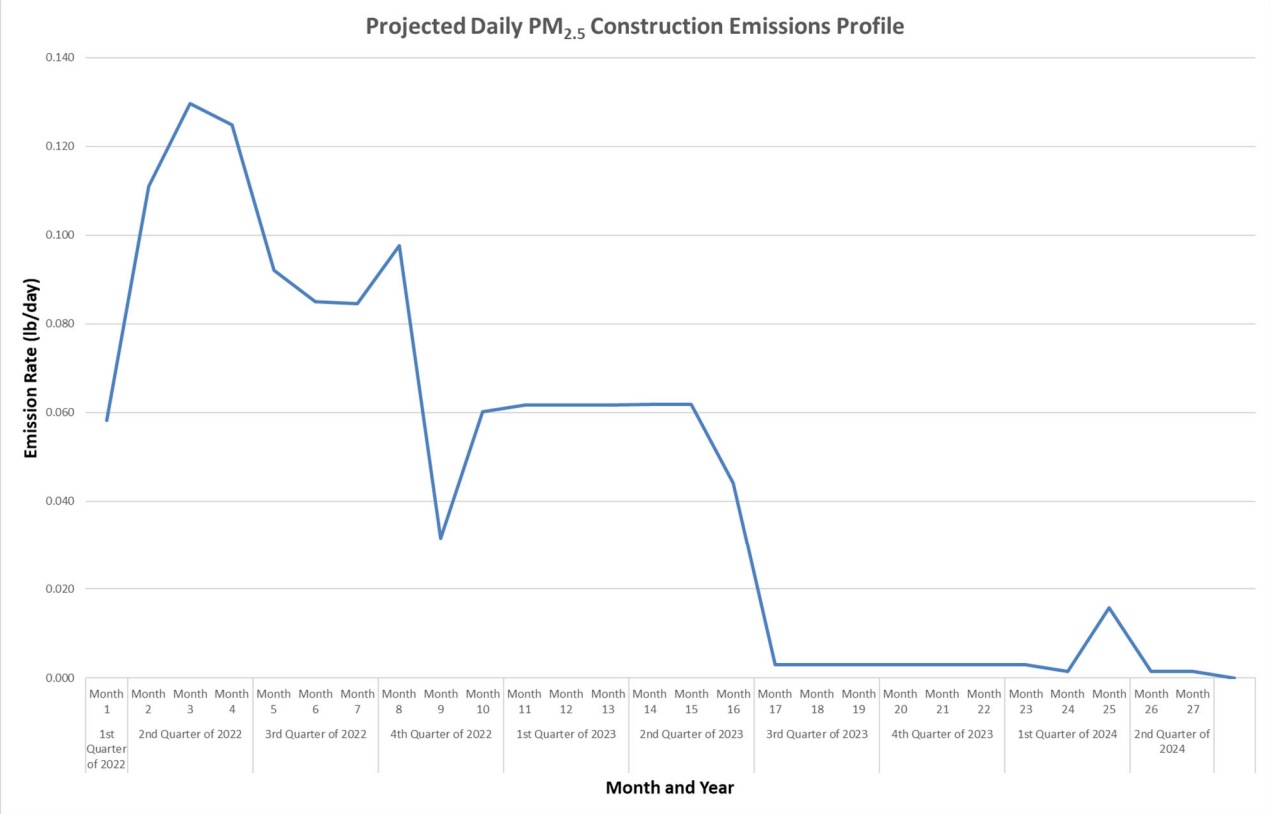
Emission factors for construction equipment were estimated using the MOVES2014b NONROAD model for each piece of equipment for New York County as a weighted average between the years 2008 and 2020 and assuming Tier 4 or Tier 3 with DPF diesel equipment. The difference between New York County nonroad emissions and Kings County nonroad emissions is negligible. Emission factors for trucks were also estimated using MOVES2014b for Kings County. Idling was limited to NYC restrictions for heavy trucks with the exception of cement trucks, for which one-hour idling was assumed. Unpaved road dust emissions were estimated using EPA AP-42, Section 13.2.2 equations.[4] Emissions from material transfer operations for loading debris during excavation were estimated using equations from AP-42, Section 13.2.4.[5]

Construction-related emissions were calculated throughout the duration of construction on a monthly basis using peak daily emissions for short term $PM_{2.5}$, and average monthly usage for annual $PM_{2.5}$ to determine the construction phase that constitutes the peak $PM_{2.5}$ emissions. Based on the results of the $PM_{2.5}$ emissions analysis for the entire construction period, the third month of construction, or May 2022, was identified as having the highest daily $PM_{2.5}$ emissions. The highest annual emissions were identified for the year of construction between April 2022 and March 2023. **Figure 12-1** presents the projected peak daily $PM_{2.5}$ emissions during construction of the Proposed Project.

[4] AP-42: Compilation of Air Emission Factors: https://www.epa.gov/sites/production/files/2020-10/documents/13.2.2_unpaved_roads.pdf

[5] AP-42: Compilation of Air Emission Factors: https://www.epa.gov/sites/production/files/2020-10/documents/13.2.4_aggregate_handling_and_storage_piles.pdf

Figure 12-1 Projected Peak Daily $PM_{2.5}$ Construction Emissions



In order to determine whether there is a potential for construction emissions from the Proposed Project to adversely impact the air quality levels in the neighborhood, the peak daily emissions estimated for the Proposed Project were compared to the peak daily emissions from other projects, which conducted dispersion analyses and demonstrated no significant adverse air quality impacts from construction. **Table 12-5** presents the results of this comparison. As shown in this table, peak daily $PM_{2.5}$ emissions from the Proposed Project are at least 45 percent lower than the other projects' peak daily $PM_{2.5}$ emissions from construction. Peak annual emissions from the Proposed Project are also lower. Sensitive receptors surrounding these projects' construction sites were located at similar distances to the Proposed Project's construction site, e.g., at least 10 feet away.

Conclusion

Based on the location of nearby sensitive receptors relative to the sources of construction air quality emissions, the duration and intensity of construction activities, a comparison of emissions profiles, and the use of emission control measures, the Proposed Project would not result in any significant adverse construction air quality impacts. Further, the maximum number of construction-related vehicle trips is not expected to exceed the *CEQR Technical Manual* thresholds for conducting a mobile source analysis. Therefore, no further analysis is required.

Table 12-5 Comparison between Peak Daily $PM_{2.5}$ Construction Emissions from the Proposed Project to Other Projects.

Project Name	Proposed Building Size(s) (gsf)	Construction Duration (months)	Peak Daily $PM_{2.5}$ emissions (lb/day)	Peak Annual $PM_{2.5}$ emissions (lb/day)
Greater East Midtown Rezoning, Sites 4 & 5	>1,000,000	62	0.505	0.352
GO Broome Street Development	466,901	30	0.237	0.118
130 St. Felix Street	**166,402**	**27**	**0.130**	**0.083**

Noise

Construction activities have the potential to affect the noise conditions of existing receptors near the Proposed Project. Construction noise can vary widely depending on the phase of construction (e.g., excavation, foundation, steel and concrete erection, mechanical and interior fit out) and the specific task equipment and methods being used. The most significant construction noise sources at a construction site are generally concrete trucks, excavators, hoe rams, drill rigs, and cranes. The noisiest phase of construction is typically during excavation and foundation work. Interior finishes typically result in lower noise emissions since they require fewer pieces of heavy-duty diesel equipment and since interior finishes activities are better shielded from nearby sensitive receptors by the proposed structure itself.

As noted above, no demolition is needed at the Project Site as the site is currently vacant, and foundation work would occur over eight months beginning in early 2022. The backhoes are generally the predominant source of noise during the excavation and foundation phase. Although excavation and foundation including backhoes has been assumed to occur over eight months, similar projects that have been recently constructed such as Hunters Point South (HPS) Building G (CEQR No. 08DME006Q) and 55 Suffolk (CEQR No. 19DCP119M) have shown that backhoes are demobilized prior to the end of the overall excavation and foundation phase. Specifically, backhoes were demobilized 4.5 months in to the overall 7-month excavation and foundation phase for HPS Building G Project and 5 months in to the overall 6-month excavation and foundation phase for 55 Suffolk Project. Foundation elements will be drilled, not driven, reducing noise levels. After the excavation and foundation phase concludes after eight months, the following month (month 9) will be a transition to Superstructure activities. During this superstructure transition period (month 9) concrete mixer trucks and concrete pump trucks would not access the Project Site resulting in substantially quieter construction noise levels. During this superstructure transition period, equipment from pouring the cellar slab would be demobilized and framing the first-floor deck and installing rebar would occur. Following this superstructure transition period, Superstructure construction including concrete mixer trucks and a concrete pump truck would occur for the remaining seven months (month 10 to 16).

As discussed in Section 310 of the Construction chapter of the *CEQR Technical Manual*, "For stationary sources, construction noise, generated by pile driving, truck traffic, blasting, demolition, etc., is generally analyzed in detail only when it affects a sensitive receptor over a long period of time. The determination whether it is sufficient to conduct a qualitative analysis or whether a quantitative analysis is required cannot be made based solely on the duration of the construction period, and should take into account such factors as the location of the Project Site in relation to existing residential uses or other sensitive receptors, the intensity of the construction activity, and the extent to which the project incorporates commitments to appropriate noise control measures." These factors are assessed below.

For the Proposed Project, the overall construction period would be approximately 27 months; however, the most intense construction activities in terms of construction noise are anticipated to occur during the first eight months during the foundation phase.

Noise from construction activities and some construction equipment is regulated by the New York City Noise Control Code and by the EPA. The New York City Noise Control Code limits construction activities to weekdays between the hours of 7:00 AM and 6:00 PM, requires that a Construction Noise Mitigation Plan be implemented, and sets noise limits for specific pieces of construction equipment. Noise control measures would be described in the Construction Noise Mitigation Plan and could include a variety of source and path controls.

As noted above, the determination whether it is sufficient to conduct a qualitative analysis of construction-period noise should take into account the extent to which the project incorporates commitments to appropriate noise control measures. The following controls to reduce noise at the source would be implemented as required by the New York City Noise Code:

- Equipment that meets the sound level standards specified in Subchapter 5 of the New York City Noise Control Code would be utilized from the start of construction. Table 12-6 shows the noise levels for typical construction equipment and the mandated noise levels for the equipment that would be used for construction of the Proposed Project.
  - Compressors shall not exceed an Lmax noise level limit at 50 feet of 75 dBA
  - Generators shall not exceed an Lmax noise level limit at 50 feet of 77 dBA
- All construction equipment would be equipped with necessary noise reduction equipment including mufflers. All equipment with internal combustion engines would be operated with the doors closed including noise-insulating materials and at the lowest engine speed allowable.
- In general, the quietest equipment and methods would be used for backhoes, dump trucks, cranes, auger drills and concrete saws to the extent feasible and practical.
- Backhoes would be utilized instead of excavators during the excavation and foundations phase of construction.
- Deep foundation elements will be drilled, not driven.
- Concrete mixer trucks and concrete pump trucks would not access the Project Site during a superstructure transition period (anticipated during month 9 of construction).
- Where feasible, practical and safe, the use of back-up alarms would be minimized and/or quieter back-up alarms would be installed in accordance with OSHA standards.
- Vehicles would not be allowed to idle more than three minutes in accordance with New York City Administrative Code §24-163.

› The contractor would implement a training program to inform workers on methods that can minimize construction noise.

For certain types of equipment such as impact equipment (i.e. jackhammers) and earth-moving equipment, quieter makes and models would be selected as feasible.

The following path noise controls would be implemented:

› When the DOB regulations require a perimeter barrier or "construction fence" and the site is within 200 feet of a receptor, the barrier shall be constructed in a specific manner (as described in the New York City Noise Code) to provide sufficient sound attenuation. Section 3307.7 of the New York City Building Code requires a solid 8-foot wall made out of wood or other suitable material be constructed where a new building is being constructed or a building is being demolished to grade. This analysis assumes a 15-foot tall solid wall or acoustical blanket will be included along the jersey barrier on St. Felix Street. Additionally, solid 15-foot tall walls or jersey barriers with acoustical blankets would be placed at the sidewalk closure sign locations to reduce noise from construction vehicles to the adjacent buildings. The walls will have an absorptive surface with a Noise Reduction Coefficient rating of 0.85 on the sides facing the interior of the Project Site.

› Should noise complaints occur during construction, the contractor would use path noise control measures such as temporary noise barriers and jersey barriers.

› At the Brooklyn Music School, additional exterior window panes and window air-conditioning units, to provide alternative means of ventilation, will be provided to improve the outdoor-to-indoor noise reduction.

As discussed in the *CEQR Technical Manual*, Chapter 22 (Construction), Section 400, thresholds for significant construction noise impact are based on operational noise impact criteria. As described in Chapter 19 (Noise), Section 410, there would be a significant noise impact from long-term operational conditions if ambient sound levels increase by 3 dBA (L_{eq}) or more and absolute levels would exceed 65 dBA L_{eq}, or, if No-Action ambient sound levels are 60 dBA L_{eq} or less, if noise levels would increase by 5 dBA (L_{eq}) or more. The significance of construction noise effects depends on the intensity and duration of construction activities. If construction noise levels would exceed the screening criteria for 24 months or more, a detailed construction noise analysis is warranted and there is a potential for significant adverse noise impact.

The detailed construction noise analysis evaluates the specific activities, types of equipment, duration of activities, and locations of nearby sensitive receptors. Based on the results of the detailed analysis, there would be significant adverse noise impact if construction noise due to the Proposed Project exceeds the screening criteria for a prolonged period of 24 months or more. A significant adverse noise impact would result if the maximum exterior noise level exceeds 85 dBA, as indicated in the *CEQR Technical Manual* Public Health chapter. Construction noise occurring for shorter durations would not typically result in significant impact unless there is a higher intensity of noise. For example, construction may cause significant impact if noise would increase by 15 dBA or more above existing background ambient conditions for a prolonged period of 12 months or more, or by 20 dBA or more for a prolonged period of 3 months or more.

The Proposed Project is near existing residential and commercial office land uses. Based on the proximity of these noise-sensitive land uses, there is the potential for construction noise levels to exceed the screening criteria.

As shown in **Table 12-6**, the detailed construction noise analysis is based on equipment used during the foundation (Month 6), foundation/superstructure transition (Month 8), superstructure transition (Month 9), superstructure (Month 10), and interior fitout (Month 18) phases of construction. **Table 12-6** presents the type of equipment, the maximum sound level at 50 feet, the utilization factors (percentage of time the equipment is operating at full power), and the number of each piece of equipment that is used during each phase of construction. The construction equipment emissions include 5 dBA of sound attenuation from the acoustic enclosures on compressors and generators.

Table 12-6 Construction Equipment Sound Levels

Equipment[1]	Maximum Sound Level at 50 feet (dBA, L_{max})	Utilization Factor (%)	Construction Phase				
			Month 6 Foundation	Month 8 Foundation/ Superstructure Transition	Month 9 Superstructure Transition	Month 10 Superstructure	Month 18 Interior Fitout
Compressor	75_2	40	2	2	0	2	0
Concrete Mixer Truck	85	40	3	3	0	3	0
Concrete Pump Truck	82	20	1	1	0	1	0
Crane	85	16	0	1	1	1	0
Backhoe	80	40	2	2	0	0	0
Generator	77[2]	50	5	4	2	2	0
Hoist	75	50	0	0	0	0	1

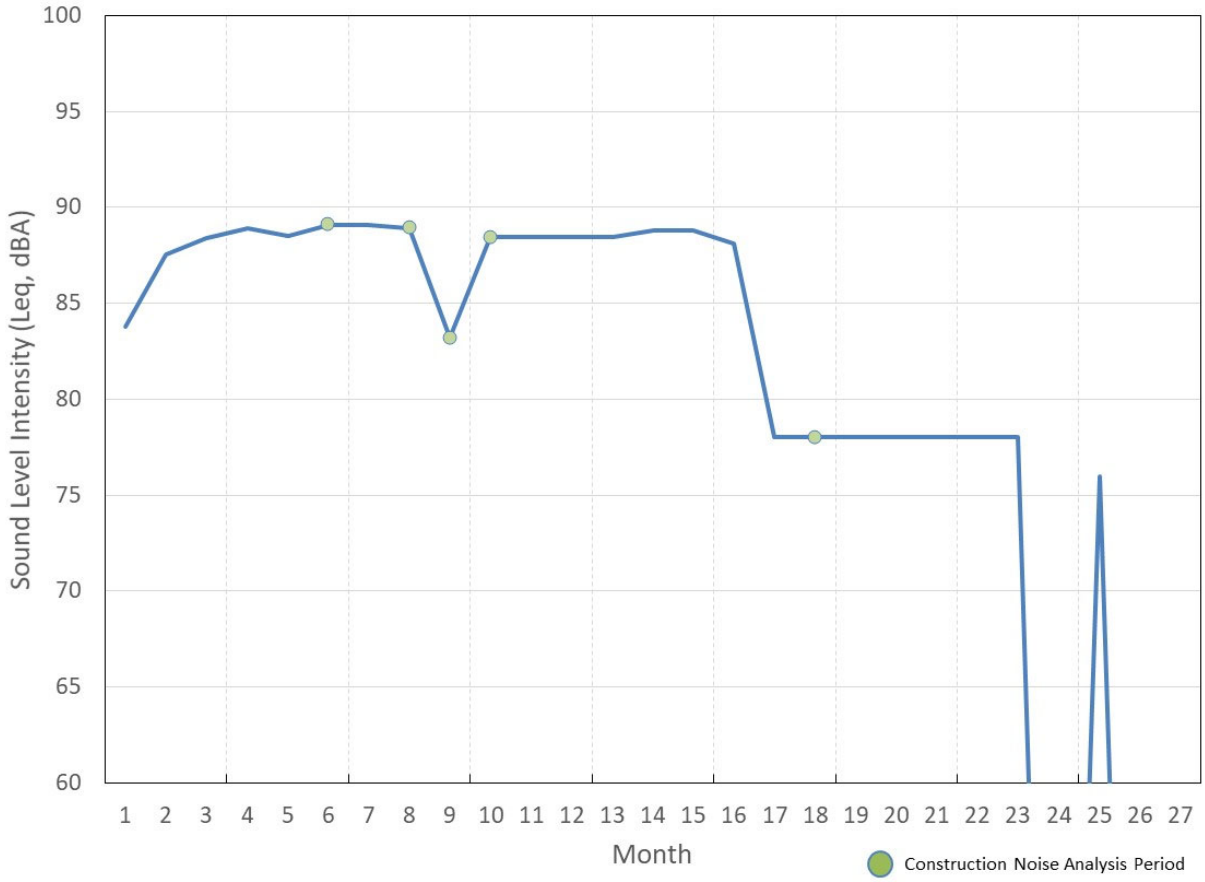
Source: VHB, 2021

[1] Since dump trucks and pickup trucks are not allowed to idle more than three minutes in accordance with New York City Administrative Code §24-163, they have been excluded from the construction noise predictions.

[2] Portable noise enclosures have been included which typically provide 5 dBA of insertion loss according to the New York City Administrative Code §28-101 "Citywide Construction Noise Mitigation".

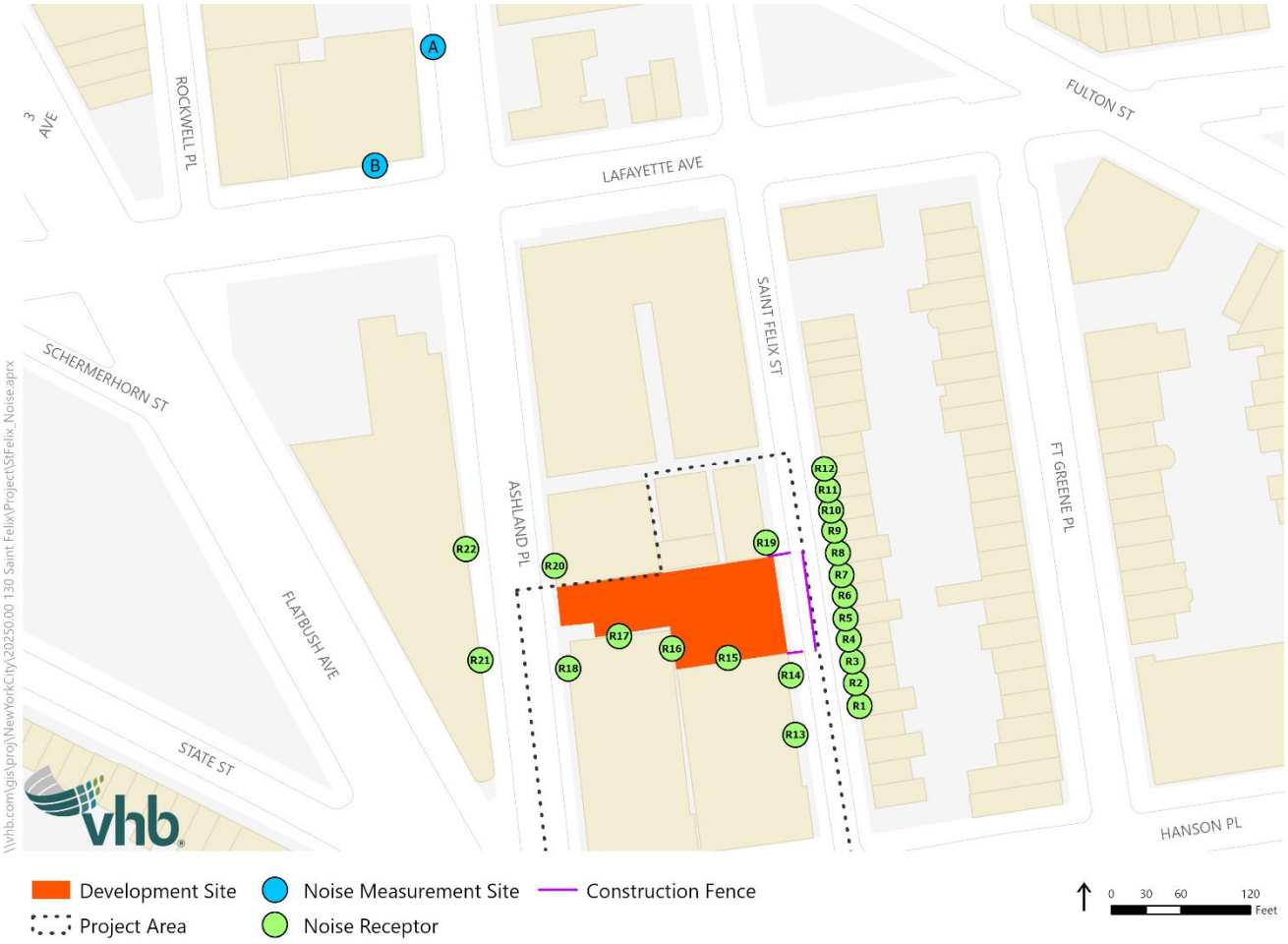
Figure 12-2 presents the construction sound intensity analysis that calculates the total cumulative sound energy (L_{eq}) of the equipment during each month of construction. This assumes that all of the equipment is in the same location, so it is not representative of actual sound levels at receptor locations. The intensity analysis indicates the total sound energy generated during each month of construction. This figure shows that during the first eight months of construction there are relatively similar sound intensities. During the superstructure transition period (month 9), construction noise levels would be quieter as there would only be a crane and generators on site as the contractor demobilizes equipment and begins framing work. During superstructure activities between month 10 and 16, the predominant source of noise would be concrete mixer trucks and the concrete pump truck. Between months 17 and 23, the sound intensity drops substantially as a hoist would be the only stationary construction noise source. There would be stationary construction noise sources present for approximately 23 months. During months 24, 26 and 27, there would be no stationary sources of construction noise. During month 25, there would be a compressor needed at the site for final interior fitout activities.

Figure 12-2 Construction Sound Intensity



Construction noise has been evaluated at 22 receptor locations near the Project Site as shown in **Figure 12-3**. These receptors include residences and the Brooklyn Music School (community facility) on St. Felix Street, the Hanson Place Central United Methodist Church, One Hanson Place with first floor commercial and upper floor residential, and commercial office spaces at 123 Flatbush Avenue and 300 Ashland Place. Receptors have been located at each floor of the 22 receptor locations.

Figure 12-3 Construction Noise Receptors



Existing ambient sound levels have been determined at these receptor locations based on morning peak-period measurements conducted on Ashland Place (Site A) as part of the BAM North Site II EAS (CEQR No. 14HPD069K) (see **Section 10, Noise** for more information). The existing noise level at each receptor is based on the quietest measured level which was 65.1 dBA (L_{eq}). Similar to the noise attenuation used by the New York City Office of Environmental Remediation (OER), ambient noise levels were reduced by 3 dBA at receptors that have a slant distance of 100 feet to 200 feet to the nearest roadway and noise levels were reduced by an additional 3 dBA for receptors with a slant distance of 200 to 400 feet from the nearest roadway. The existing ambient noise level was not reduced below the average L_{90} level (57.9 dBA) during all three measurement periods.

Table 12-7 and **Table 12-8** present the range of ambient levels, construction sound levels (which include construction mobile and stationary sources), future sound levels (which includes ambient and construction sources), and the increase in noise during construction.

Construction mobile source noise has been analyzed using Cadna-A assuming construction trucks and vehicles during the 6:00 AM to 7:00 AM period, as presented in **Table 12-4**, would enter and leave on St. Felix Street.

Table 12-7 Foundation and Foundation/Superstructure Transition Construction Sound Levels

			Foundation (Month 6)			Foundation/Superstructure Transition (Month 8)		
Site	Location	Existing Ambient Sound Level (dBA, L_{eq})	Construction Sound Level (dBA, L_{eq})	Future Sound Level (dBA, L_{eq})	Increase (dBA)	Construction Sound Level (dBA, L_{eq})	Future Sound Level (dBA, L_{eq})	Increase (dBA)
R1	137 St. Felix St	65.1	67.9 - 71.4	69.7 - 72.3	4.6 - 7.2	68.0 - 71.8	69.8 - 72.6	4.7 - 7.5
R2	135 St. Felix St	65.1	73.2 - 75.0	73.8 - 75.4	8.7 - 10.3	73.1 - 75.3	73.7 - 75.7	8.6 - 10.6
R3	133 St. Felix St	65.1	71.1 - 75.7	72.1 - 76.1	7.0 - 11.0	71.2 - 76.2	72.2 - 76.6	7.1 - 11.5
R4	131 St. Felix St	65.1	68.2 - 76.2	69.9 - 76.6	4.8 - 11.5	68.3 - 76.4	70.0 - 76.7	4.9 - 11.6
R5	129 St. Felix St	65.1	69.8 - 77.4	71.0 - 77.7	5.9 - 12.6	69.8 - 77.4	71.0 - 77.7	5.9 - 12.6
R6	127 St. Felix St	65.1	69.1 - 77.7	70.6 - 78.0	5.5 - 12.9	69.2 - 77.9	70.6 - 78.1	5.5 - 13.0
R7	125 St. Felix St	65.1	69.9 - 77.1	71.1 - 77.4	6.0 - 12.3	70.0 - 77.3	71.2 - 77.6	6.1 - 12.5
R8	123 St. Felix St	65.1	70.5 - 77.2	71.6 - 77.5	6.5 - 12.4	70.6 - 77.4	71.7 - 77.7	6.6 - 12.6
R9	121 St. Felix St	65.1	72.9 - 76.5	73.6 - 76.8	8.5 - 11.7	73.7 - 76.9	74.3 - 77.2	9.2 - 12.1
R10	119 St. Felix St	65.1	72.8 - 75.3	73.5 - 75.7	8.4 - 10.6	72.9 - 75.3	73.6 - 75.7	8.5 - 10.6
R11	117 St. Felix St	65.1	69.8 - 73.2	71.1 - 73.8	6.0 - 8.7	70.5 - 73.8	71.6 - 74.3	6.5 - 9.2
R12	115 St. Felix St	65.1	64.5 - 68.9	67.8 - 70.4	2.7 - 5.3	63.6 - 68.5	67.4 - 70.1	2.3 - 5.0
R13	144 St. Felix St SE	65.1	63.2 - 65.2	67.3 - 68.2	2.2 - 3.1	63.5 - 65.7	67.4 - 68.4	2.3 - 3.3
R14	144 St. Felix St NE	65.1	77.7 - 81.3	78.0 - 81.4	12.9 - 16.3	77.7 - 81.3	78.0 - 81.4	12.9 - 16.3
R15	144 St. Felix St N	65.1	83.9 - 83.9	84.0 - 84.0	18.9 - 18.9	84.1 - 84.1	84.2 - 84.2	19.1 - 19.1
R16	1 Hanson Place SE	59.1 - 62.1	65.5 - 81.4	66.4 - 81.5	7.3 - 19.4	65.7 - 81.9	66.6 - 81.9	7.5 - 19.8
R17	1 Hanson Place N	59.1 - 62.1	66.4 - 80.5	67.2 - 80.6	8.1 - 18.5	66.7 - 80.7	67.4 - 80.8	8.3 - 18.7
R18	1 Hanson Place W	59.1 - 65.1	64.1 - 70.9	65.3 - 71.9	6.2 - 9.6	64.5 - 71.6	65.6 - 72.5	6.5 - 10.1
R19	126 St. Felix St	65.1	69.6 - 82.1	70.9 - 82.2	5.8 - 17.1	70.4 - 82.1	71.5 - 82.2	6.4 - 17.1
R20	321 Ashland Pl	65.1	71.9 - 78.6	72.7 - 78.8	7.6 - 13.7	72.2 - 78.9	73.0 - 79.1	7.9 - 14.0
R21	123 Flatbush Ave	65.1	76.4 - 76.4	76.7 - 76.7	11.6 - 11.6	76.9 - 76.9	77.2 - 77.2	12.1 - 12.1
R22	300 Ashland Pl	59.1 - 62.1	65.0 - 72.0	66.0 - 72.4	6.9 - 12.1	65.4 - 73.0	66.3 - 73.3	7.2 - 12.5

Source: VHB, 2021

Table 12-8 Superstructure Transition and Superstructure Construction Sound Levels

			Superstructure Transition (Month 9)			Superstructure (Month 10)		
Site	Location	Existing Ambient Sound Level (dBA, L_{eq})	Construction Sound Level (dBA, L_{eq})	Future Sound Level (dBA, L_{eq})	Increase (dBA)	Construction Sound Level (dBA, L_{eq})	Future Sound Level (dBA, L_{eq})	Increase (dBA)
R1	137 St. Felix St	65.1	57.7 - 62.9	65.8 - 67.2	0.7 - 2.1	66.2 - 70.1	68.7 - 71.3	3.6 - 6.2
R2	135 St. Felix St	65.1	65.3 - 67.0	68.2 - 69.2	3.1 - 4.1	70.8 - 72.9	71.8 - 73.6	6.7 - 8.5
R3	133 St. Felix St	65.1	58.2 - 69.4	65.9 - 70.8	0.8 - 5.7	67.7 - 73.8	69.6 - 74.3	4.5 - 9.2
R4	131 St. Felix St	65.1	60.1 - 69.8	66.3 - 71.0	1.2 - 5.9	67.7 - 74.9	69.6 - 75.4	4.5 - 10.3
R5	129 St. Felix St	65.1	61.4 - 70.2	66.6 - 71.4	1.5 - 6.3	69.3 - 76.1	70.7 - 76.4	5.6 - 11.3
R6	127 St. Felix St	65.1	60.6 - 70.7	66.4 - 71.8	1.3 - 6.7	68.6 - 76.1	70.2 - 76.5	5.1 - 11.4
R7	125 St. Felix St	65.1	60.8 - 69.9	66.5 - 71.1	1.4 - 6.0	69.4 - 75.7	70.8 - 76.1	5.7 - 11.0
R8	123 St. Felix St	65.1	62.2 - 69.6	66.9 - 70.9	1.8 - 5.8	69.9 - 75.9	71.2 - 76.3	6.1 - 11.2
R9	121 St. Felix St	65.1	69.1 - 70.8	70.5 - 71.9	5.4 - 6.8	72.9 - 75.8	73.6 - 76.2	8.5 - 11.1
R10	119 St. Felix St	65.1	64.1 - 66.8	67.7 - 69.0	2.6 - 3.9	69.2 - 73.1	70.7 - 73.7	5.6 - 8.6
R11	117 St. Felix St	65.1	67.4 - 68.7	69.4 - 70.3	4.3 - 5.2	69.4 - 72.7	70.8 - 73.4	5.7 - 8.3
R12	115 St. Felix St	65.1	55.7 - 59.0	65.6 - 66.1	0.5 - 1.0	62.8 - 66.4	67.1 - 68.8	2.0 - 3.7
R13	144 St. Felix St SE	65.1	56.5 - 58.3	65.7 - 65.9	0.6 - 0.8	62.6 - 64.6	67.0 - 67.9	1.9 - 2.8
R14	144 St. Felix St NE	65.1	62.0 - 65.9	66.8 - 68.5	1.7 - 3.4	77.4 - 81.1	77.7 - 81.2	12.6 - 16.1
R15	144 St. Felix St N	65.1	75.7 - 75.7	76.1 - 76.1	11.0 - 11.0	83.1 - 83.1	83.2 - 83.2	18.1 - 18.1
R16	1 Hanson Place SE	59.1 - 62.1	57.1 - 75.2	61.2 - 75.4	2.1 - 13.3	64.9 - 81.0	65.9 - 81.1	6.8 - 19.0
R17	1 Hanson Place N	59.1 - 62.1	61.2 - 76.6	63.3 - 76.8	4.2 - 14.7	65.6 - 78.3	66.5 - 78.4	7.4 - 16.3
R18	1 Hanson Place W	59.1 - 65.1	60.0 - 68.3	62.6 - 70.0	3.5 - 6.7	63.2 - 70.1	64.6 - 71.3	5.5 - 8.9
R19	126 St. Felix St	65.1	59.8 - 70.6	66.2 - 71.7	1.1 - 6.6	68.9 - 81.9	70.4 - 82.0	5.3 - 16.9
R20	321 Ashland Pl	65.1	65.9 - 72.5	68.5 - 73.2	3.4 - 8.1	70.3 - 77.0	71.4 - 77.3	6.3 - 12.2
R21	123 Flatbush Ave	65.1	71.9 - 71.9	72.7 - 72.7	7.6 - 7.6	74.5 - 74.5	75.0 - 75.0	9.9 - 9.9
R22	300 Ashland Pl	59.1 - 62.1	56.6 - 65.6	61.0 - 67.2	1.9 - 6.2	64.4 - 70.9	65.5 - 71.4	6.4 - 11.2

Source: VHB, 2021

Table 12-9 Interior Fitout Construction Sound Levels

Site	Location	Existing Ambient Sound Level (dBA, L_{eq})	Interior Fitout (Month 18)		
			Construction Sound Level (dBA, L_{eq})	Future Sound Level (dBA, L_{eq})	Increase (dBA)
R1	137 St. Felix St	65.1	59.1 - 61.1	66.1 - 66.6	1.0 - 1.5
R2	135 St. Felix St	65.1	60.0 - 62.2	66.3 - 66.9	1.2 - 1.8
R3	133 St. Felix St	65.1	64.9 - 66.4	68.0 - 68.8	2.9 - 3.7
R4	131 St. Felix St	65.1	56.3 - 65.0	65.6 - 68.0	0.5 - 2.9
R5	129 St. Felix St	65.1	58.4 - 65.2	65.9 - 68.1	0.8 - 3.0
R6	127 St. Felix St	65.1	57.3 - 63.8	65.8 - 67.5	0.7 - 2.4
R7	125 St. Felix St	65.1	57.9 - 65.1	65.9 - 68.1	0.8 - 3.0
R8	123 St. Felix St	65.1	58.5 - 64.7	66.0 - 67.9	0.9 - 2.8
R9	121 St. Felix St	65.1	60.2 - 63.5	66.3 - 67.4	1.2 - 2.3
R10	119 St. Felix St	65.1	57.6 - 63.1	65.8 - 67.2	0.7 - 2.1
R11	117 St. Felix St	65.1	61.8 - 62.4	66.8 - 67.0	1.7 - 1.9
R12	115 St. Felix St	65.1	53.9 - 54.7	65.4 - 65.5	0.3 - 0.4
R13	144 St. Felix St SE	65.1	54.5 - 55.2	65.5 - 65.5	0.4 - 0.4
R14	144 St. Felix St NE	65.1	58.5 - 61.3	66.0 - 66.6	0.9 - 1.5
R15	144 St. Felix St N	65.1	70.1 - 70.1	71.3 - 71.3	6.2 - 6.2
R16	1 Hanson Place SE	59.1 - 62.1	52.9 - 68.2	60.0 - 69.2	0.9 - 7.1
R17	1 Hanson Place N	59.1 - 62.1	49.5 - 58.8	59.6 - 63.8	0.5 - 1.7
R18	1 Hanson Place W	59.1 - 65.1	36.9 - 43.3	59.1 - 65.1	0.0 - 0.1
R19	126 St. Felix St	65.1	58.9 - 65.9	66.0 - 68.5	0.9 - 3.4
R20	321 Ashland Pl	65.1	52.7 - 62.7	65.3 - 67.1	0.2 - 2.0
R21	123 Flatbush Ave	65.1	58.3 - 58.3	65.9 - 65.9	0.8 - 0.8
R22	300 Ashland Pl	59.1 - 62.1	49.2 - 54.7	59.5 - 62.8	0.4 - 1.1

Source: VHB, 2021

The following summarizes the results of the construction noise impact assessment by construction period:

› During the excavation and foundation phase of construction (Month 6), future construction noise levels would range from 65.3 to 84.0 dBA (L_{eq}) at all receptor locations. Construction noise levels would not increase by 20 dBA or more over ambient at any receptor. Construction noise levels would increase by more than 15 dBA and less than 20 dBA over ambient at the west and north facades of United Methodist Church (R14 and R15), the northeast and north facades of One Hanson Place (R16 and R17), and the Brooklyn Music School (R19). Construction noise levels would increase by less than 15 dBA at all other receptors. Construction noise levels would not exceed the public health impact criterion of 85 dBA at all locations.

- During the foundation/superstructure transition phase of construction (Month 8), construction noise levels would range from 65.6 to 84.2 dBA (L_{eq}) at all receptor locations. Construction noise levels would not increase by 20 dBA or more over ambient at any receptor. Construction noise levels would increase by 15 dBA or more and less than 20 dBA over ambient at the west and north facades of United Methodist Church (R14 and R15), the northeast and north facades of One Hanson Place (R16 and R17), and the Brooklyn Music School (R19). Construction noise levels would increase by less than 15 dBA at all other receptors. Construction noise levels would not exceed the public health impact criterion of 85 dBA at all locations.
- During the superstructure transition phase of construction (Month 9) construction noise levels would range from 61.0 to 76.8 dBA (L_{eq}) at all receptor locations. Construction noise levels would increase by less than 15 dBA at all receptor locations and would not exceed the public health impact criterion.
- During the superstructure phase of construction (Month 10) construction noise levels would range from 64.6 to 83.2 dBA (L_{eq}) at all receptor locations. Construction noise levels would not increase by 20 dBA or more over ambient at any receptor. Construction noise levels would increase by 15 dBA or more and less than 20 dBA at five receptors including the west and north facades of the United Methodist Church (R14 and R15), the northeast façade of One Hanson Place (R16), the north façade of 1 Hanson Place (R17), and the Brooklyn School of Music (R19). Construction noise levels would increase by less than 15 dBA at all other receptors. Construction noise levels would be below the public health impact criterion of 85 dBA.
- During the interior fitout phase of construction (Month 18), when a hoist would be the only source of stationary construction noise, construction noise levels would range from 59.1 to 71.3 dBA (L_{eq}) at all receptor locations. Construction noise levels would increase by 7.1 dBA or less at all receptor locations. Construction noise levels would be below the public health impact criterion of 85 dBA.

Overall, construction noise levels would not increase by more than 3 dBA for 24 months, by 15 dBA or more for 12 months or longer, or 20 dBA or more for 3 months or longer at any receptor. The following summarizes exterior and interior noise levels for receptors where construction noise levels would increase by 15 dBA or more above ambient. The L_{10} metric is calculated by adding a 3-dBA adjustment factor to the calculated L_{eq} in conformance with FHWA's Roadway Construction Noise Model (RCNM) guidance.

At the United Methodist Church (R14 and R15), construction noise levels would increase up to 16.3 dBA over ambient on the west façade and up to 19.1 dBA at the elevated window on the north façade during the excavation, foundation and superstructure phases. During the superstructure transition phase, construction noise levels would increase up to 3.4 dBA over ambient on the west façade and up to 11.0 dBA at the window on the north façade. During interior fitout, construction noise levels would increase up to 1.5 dBA on the west façade and up to 6.2 dBA on the north façade. Maximum exterior construction noise levels would be 84.2 to 84.4 dBA (L_{10}) on the west façade and 86.2 dBA to 87.2 dBA (L_{10}) on the north façade during excavation, foundation, and superstructure phases. During the superstructure transition phase, exterior noise levels would be 71.5 dBA (L_{10}) on the west façade and 79.1 dBA (L_{10}) on the north façade. During interior fit out, exterior noise levels would be up to 69.6 dBA (L_{eq}) on the west façade and up to 74.3 dBA (L_{eq}) on the north façade. Since the

United Methodist Church is vacant and has not been operating, there would not be significant adverse noise impact at this location.

At the northeast façade of One Hanson Place (R16), construction noise levels would increase by 15 dBA or more and less than 20 dBA over ambient at five floors (floors 4 to 8). Construction noise levels during the excavation, foundation, and superstructure phases would increase up to 19.8 dBA over ambient. During the superstructure transition phase, construction noise levels would increase up to 13.3 dBA over ambient. During interior fitout, construction noise levels would increase up to 7.1 dBA over ambient. Maximum exterior construction noise levels would be 84.1 to 84.9 dBA (L_{10}) during the excavation, foundation, and superstructure phases. During the superstructure transition phase, exterior noise levels would be up to 78.4 dBA (L_{10}). During interior fit out, exterior levels would be up to 72.2 dBA (L_{10}).

Based on street-level field observations, One Hanson Place appears to have insulated glass windows and central air-conditioning. For buildings with insulated glass windows and central air conditioning, interior noise levels would be approximately 35 dBA less than exterior noise levels. Therefore, interior noise levels would be 49.1 to 49.9 dBA (L_{10}) during the excavation, foundation, and superstructure phases, 43.4 dBA (L_{10}) during the superstructure transition phase, and 37.2 dBA (L_{10}) during interior fitout phase. Interior noise levels would exceed the interior noise criterion for residential spaces (45 dBA L_{10}) by up to 4.9 dBA during the excavation, foundation, and superstructure phases and would not exceed the criterion during the superstructure transition or interior fitout phases. Since construction noise would exceed the interior criterion only during excavation, foundation, and superstructure phases which would not occur for 12 consecutive months or longer, there would not be significant adverse construction noise impact.

At the north façade of 1 Hanson Place (R17), construction noise levels would increase by more than 15 dBA and less than 20 dBA over ambient during the excavation, foundation, and superstructure phases; however, the windows on the northern façade are for a stairwell which is not sensitive to noise. Therefore, there would be no significant adverse noise impact at the north façade of One Hanson Place.

At the Brooklyn School of Music (R19), construction noise levels would increase by up to 17.1 dBA over ambient during the excavation, foundation and superstructure phases. During the superstructure transition phase, construction noise levels would increase up to 6.6 dBA over ambient. During interior fitout, construction noise levels would increase up to 3.4 dBA over ambient. Maximum exterior construction noise levels would be 85.0 to 85.2 dBA (L_{10}) during the excavation, foundation, and superstructure phases. During the superstructure transition phase, exterior noise levels would be up to 74.7 dBA (L_{10}). During interior fitout, exterior noise levels would be up to 71.5 dBA (L_{10}).

Based on street-level field observations, the Brooklyn School of Music appears to have double-pane glass windows and window air-conditioning units. For buildings with double-pane glass windows and window air-conditioning units, interior noise levels would be approximately 25 dBA less than exterior noise levels. The applicant would provide an additional exterior pane of glass and window air-conditioning units to provide an alternate means of ventilation to improve interior noise conditions. With this mitigation measure, the interior noise levels would be approximately 30 dBA less than exterior noise levels. Therefore, interior noise levels would be 55.0 to 55.2 dBA (L_{10}) during excavation, foundation, and

superstructure, 44.7 dBA (L_{10}) during the superstructure transition phase, and 41.5 dBA (L_{10}) during interior fitout. Interior noise levels would exceed the interior noise criterion for community facility spaces (45 dBA L_{10}) by up to 10.2 dBA during excavation, foundation, and superstructure and would not exceed the criterion during the superstructure transition or interior fitout phases. Since construction noise would exceed the interior criterion only during excavation, foundation, and superstructure phases which would not occur for 12 consecutive months or longer, there would not be significant adverse construction noise impact.

Therefore, with the adherence to existing construction noise regulations, the proposed noise control measures including 15-foot noise barriers with an absorptive surface, enclosures on generators and compressors, other additional noise control measures beyond the minimum required by code , the inclusion of additional exterior window panes and window air-conditioning units to provide an alternative means of ventilation, and the implementation of a Construction Noise Mitigation Plan, as required by the New York City Noise Code, the Proposed Project would not result in significant adverse construction noise impacts.

Vibration

Construction activities have the potential to generate ground-borne vibration that can potentially cause structural or architectural damage or annoy people in nearby vibration-sensitive spaces, such as residences. The most substantial sources of construction vibration are equipment associated with the excavation and foundation phase, such as drill rigs, and excavators. Vehicles such as trucks typically do not exceed the thresholds for potential structural damage even for the most fragile structures susceptible to vibration.

Buildings within 90 feet of the Project Site, where there is the greatest potential for vibration impact, include the United Methodist Church (R15) and Brooklyn Music School (R19), which are NR-listed properties and the former Willamsburgh Savings Bank Building at One Hanson Place which is a NYC Individual Landmark and a NYC Interior Landmark.

The criteria used by LPC to evaluate potential construction vibration impacts is a peak-particle velocity (PPV) level of 0.5 inches per second or greater. For non-fragile buildings, vibration levels below 0.6 inches per second are not expected to substantially increase the risk of structural damage. **Table 12-10** presents the reference vibration levels from typical equipment at a distance of 25 feet and the distance to potential structural damage for buildings with a criterion of 0.5 inches per second and 0.6 inches per second. This table shows that structural damage may occur from drilling within eight feet. Other sources of vibration, such as bulldozers, may cause potential structural damage when in very close proximity to buildings. Since no construction activities would generate vibration levels in excess of the LPC vibration criteria, there is no potential for significant adverse construction vibration impact.

Since One Hanson Place is an individual landmark and the Brooklyn Music School, and Central Methodist Church are NR-listed properties, the NYCDOB Technical Policy and Protection Notice (TPPN) #10/88 would apply, which requires a vibration monitoring program to reduce the likelihood of construction damage to adjacent New York City Landmarks and NR-listed properties within 90 feet. The Applicant would employ means/methods that meet acceptable vibration levels as mandated by NYCDOB.

Table 12-10 Vibration Levels and Distances to Potential Effects

Equipment	Vibration Level at 25 feet (PPV, in/s)	Distance to Potential Structural Damage (feet)	
		(0.5 in/s) Criterion	(0.6 in/s) Criterion
Drilling	0.089	8	7
Large Bulldozer	0.089	8	7
Small Bulldozer	0.003	1	1

Source: VHB 2020, Federal Transit Administration, 2018.

In terms of construction vibration causing potential annoyance, the threshold for potential annoyance is 65 VdB inside buildings. Assuming a 10 VdB outdoor to indoor vibration attenuation for large masonry buildings, there is potential for human annoyance within 65 feet of most other equipment, such as drilling and bulldozers. These construction activities would only occur for limited periods of time at any particular location. Therefore, there would be no significant adverse impacts as a result of construction vibration.

Historic and Cultural Resources

Archaeological Resources

Construction would involve subsurface disturbance on the Project Site. However, as detailed in **Section 5, Historic and Cultural Resources**, a findings statement issued by LPC on September 11, 2020, indicated that there are no properties with archaeological significance in the Project Area (see **Appendix A**). Therefore, there would be no significant adverse impacts on archaeological resources.

Architectural Resources

As detailed above, the Development Site is located within the Brooklyn Academy of Music (BAM) Historic District and the New York State/National Fort Greene Historic District (Boundary Increase). In addition, One Hanson Place is an individual and interior New York City Landmark and One Hanson Place, the Brooklyn Academy of Music, and the Central Methodist Church are individually listed in the National Register of Historic Places. Given the proximity to these resources, construction activities for the Proposed Project have the potential to result in construction-related effects. Therefore, the Applicant, in consultation with the LPC, would develop and implement a Construction Protection Plan (CPP) to avoid inadvertent construction-period damage from falling objects, vibration, dewatering, subsidence, or collapse to the Central Methodist Church, the Brooklyn Music School, and the Williamsburgh Savings Bank, as requested by LPC in correspondence dated September 11, 2020. The plan would be expected to follow the guidelines of TPPN #10/88, which "requires a monitoring program to reduce the likelihood of construction damage to adjacent historic structures and to detect at an early stage the beginnings of damage so that construction procedures can be changed." It is expected that the CPP will also be prepared in accordance with LPC's guidance document Protection Programs for Landmarked Buildings and the National Park Service's Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction. The CPP will be submitted to LPC for review and approval prior to the start of construction. With the CPP in place,

construction would not be expected to result in significant adverse impacts to nearby architectural resources.

Conclusion

Construction would occur over an approximately 27-month period, and would adhere to the applicable laws, regulations, and building codes that govern construction in New York City. As detailed in the construction assessment above, the Proposed Project would not result in significant adverse construction impacts in the key technical areas of historic and cultural resources, hazardous materials, transportation, air quality, and noise. Therefore, the Proposed Project would not result in construction-period significant adverse impacts and no further analysis is warranted.

Appendix A: Agency Correspondence

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

ENVIRONMENTAL REVIEW

Project number: LA-CEQR-K (DEPARTMENT OF CITY PLANNING)

Address: 130 ST FELIX STREET BBL: 3021110040
Date Received: 9/1/2020

[X**] No archaeological significance**

[X] Designated New York City Landmark or Within Designated Historic District

[X] Listed on National Register of Historic Places

Comments:

DEVELOPMENT SITE WITHIN LPC DESIGNATED BROOKLYN ACADEMY OF MUSIC HISTORIC DISTRICT,AND ADJACENT TO FORMER WILLIAMSBURGH SAVINGS BANK BUILDING, 1 HANSON PLACE (INDIVIDUAL AND INTERIOR DESIGNATION WITHIN HD); SITE WITHIN S/NR LISTED FORT GREENE HISTORIC DISTRICT.

S/NR LISTED ATLANTIC AVENUE SUBWAY STATION, IRT & BMT, FLATBUSH AVENUE WITHIN RADIUS.

All proposed construction shall comply with LPC Certificate of Appropriateness 20-09702. The CofA shall also be appended to the EAS.

As per the CEQR Technical Manual: 2014 (TM) a shadow study will be required as part of the analysis.

Additionally,a Construction Protection Plan (CPP), also per the TM, will be required for the adjacent listed and designated properties:

Central Methodist Church 11-21 Hanson Place
Brooklyn Music School, 128 St. Felix St.
Williamsburg Savings Bank, 1 Hanson Place.

The CPP shall be submitted to the LPC for review and approval prior to start of construction.

Gina Santucci 9/10/2020

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 35146_FSO_DNP_09102020.docx

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

December 1, 2020

Katherine Glass
Senior Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, New York 10271

Re: 130 St. Felix Street Rezoning
Block 2111, Lots 37, 40, 45 & 7501
CEQR # 21DCP083K

Dear Ms. Glass:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the November 2020 Environmental Assessment Statement (EAS) prepared by VHB and the May 2015 Phase I Environmental Site Assessment (Phase I) prepared by Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C., on behalf of 130 St. Felix Street LLC., (applicant), for the above referenced project located between Lafayette Avenue and Hanson Place in the Downtown Brooklyn neighborhood of Brooklyn Community District 2. It is our understanding that the applicant is seeking:

1. A zoning map amendment from the New York City Department of City Planning (DCP) to rezone Block 2111, Lots 37, 40, 45 and 7501 from a C1-6 zoning district to a C6-4 and C6-6 zoning districts;
2. A zoning text amendment to Appendix F of the Zoning Resolution (ZR) to designate the project area as a Mandatory Inclusionary Housing (MIH) Area;
3. A special permit pursuant to Section 101-82 of the ZR to modify tower lot coverage, court, and rear yard regulations;
4. A zoning text amendment to Section 101-82 of the ZR, Modification of Bulk Regulations for Certain Buildings on Irregular Sites, to make this special permit applicable in C6-4 and C6-6 districts in the Downtown Brooklyn District;
5. A zoning text amendment to Section 101-21(d) of the ZR, Special Floor Area and Lot Coverage Regulations, to permit 12 Floor Area Ratio for residential uses within MIH areas in the C6-6 Downtown Brooklyn District;
6. A special permit pursuant to Section 74-533 of the ZR, Reduction of Parking Spaces to facilitate Affordable Housing, to permit a waiver of all required accessory off-street parking spaces.

The proposed actions would facilitate the development of vacant Block 2111, Lot 40 (Project Site) with a new 23-story, 166,402 gross square feet (gsf), mixed-use building containing approximately 146,282 gsf of residential space (130 dwelling units) and approximately 20,120 gsf of community facility space. The remainder of the Project Area not controlled by the applicant, Block 2111, Lots 37, 45 and 7501 are currently developed with five multi-story institutional and mixed-use buildings and is not expected to be redeveloped in the Future With-Action Condition. It should also be noted that the Project Area is located in the New York City Landmarks Preservation

Commission-designated Brooklyn Academy of Music Historic District as well as the National Register-listed Fort Greene Historic District.

Project Site: Block 2111, Lot 40

The May 2015 Phase I report revealed that historical on-site and surrounding area land uses consists of institutional, residential and commercial uses including a drug manufacturer, a medical laboratory, a used car lot, dry cleaners, Brooklyn Music School, Central United Methodist Church, Williamsburg Savings Bank, Brooklyn Academy of Music, Atlantic Terminal Shopping Mall, an elementary school, a laundromat, a filling station, The Apple Store, Whole Foods Market, Atlantic Terminal Train Station, as well as several residential buildings. Regulatory databases such as the New York State Department of Environmental Conservation (NYSDEC) SPILLS, Leaking Underground Storage Tank, Leaking Storage Tanks (LTANKS), Resource Conservation and Recovery Act Generators, and Petroleum Bulk Storage (PBS) Underground Storage Tanks (USTs) and PBS Aboveground Storage Tanks (ASTs) identified several sites in close proximity to the project site. The SPILLS database reported 48 SPILLS within a 1/8-mile radius of the project site and the LTANKS database reported 55 LTANKS within a 1/2-mile radius of the project site. The PBS USTs and the PBS ASTs databases reported 19 USTs and 33 ASTs within a 1/4-mile radius of the project site. The Phase I also reported nine Historical Auto Stations and 14 Historical Cleaners within a 1/4-mile radius of the project site.

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

Project Site: Block 2111, Lot 40 (Site under the control or ownership of the applicant)

- Based on the applicant's proposal to construct subject to NYSDEC Brownfield Cleanup Program (BCP) requirements, DEP concurs that the incorporation of all testing and remedial measures under NYSDEC BCP requirements will ensure that there would be no potential for significant adverse hazardous materials impacts as a result of the proposed project. 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 property. The (E) Designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance in the event the applicant withdraws their participation from the NYSDEC BCP. These measures will ensure the development is protective of human health and the environment through the Mayor's Office of Environmental Remediation oversight as part of the New York City Department of Buildings approval process.

Future correspondence and submittals related to this project should include the following CEQR # **21DCP083K**. If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,

Wei Yu

Wei Yu
Deputy Director, Hazardous Materials

cc: R. Weissbard; T. Estesen; C. Scantlebury; M. Wimbish; R. Lucas; O. Abinader - DCP;
M. Bertini - OER

THIS IS NOT A PERMIT

No work may proceed until the final filing drawings are reviewed and marked as approved by the Landmarks Preservation Commission staff.

THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION
1 CENTRE STREET 9TH FLOOR NORTH NEW YORK NY 10007
TEL: 212 669-7700 FAX: 212 669-7780

August 10, 2020

ISSUED TO:

Bryan Kelly, Executive Vice President
130 St. Felix Street LLC
c/o Gotham Organization, Inc.
432 Park Avenue South, Floor 2
New York, NY 10016

Re: **STATUS UPDATE LETTER**
LPC-20-09702
SUL-20-09702
130 SAINT FELIX STREET
Brooklyn Academy of Music Historic District
BROOKLYN
Block/Lot: 2111 / 40

This letter is to inform you that at the Public Meeting of August 4, 2020, following the Public Hearing and Public Meeting of June 23, 2020, the Landmarks Preservation Commission voted to approve a proposal to construct a new building at the subject premises, as put forward in your application completed on May 28, 2020. The approval will expire on August 4, 2026.

However, in voting to approve this proposal, the Commission stipulated that the scale of the school entrance on St. Felix Street be reduced, and the scale of the streetwall façade at Ashland Place be softened and modified to be more in harmony with the rest of the block, in consultation with staff. No work may begin until a Certificate of Appropriateness has been issued. Upon receipt, review and approval of the signed and sealed, final Department of Buildings filing drawings for the approved work, incorporating the required changes, a Certificate of Appropriateness will be issued.

Please note that all drawings, including amendments which are to be filed at the Department of Buildings, must be approved by the Landmarks Preservation Commission.

Thank you for your cooperation.



James Russiello

Please Note: THIS IS NOT A PERMIT

cc: Caroline Kane Levy, Deputy Director; Dan Kaplan, FAIA, LEED AP, Senior Partner, FXCollaborative Architects LLP; Varun Sanyal, Vice President, Real Estate, Kasirer LLC; Stephanie Rhoades and David Picket, Gotham Organization, Inc.; Lee Hantz and Jim Bushong, AIA, Senior Associate, Design Director, FXCollaborative Architects LLP; and Cory Herrala, LPC Director of Preservation