

# **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 1<br>1977, as amended)? | <b>Type I Threshold i</b><br>YES | n 6 NYCRR Part                  | : 617.4 or 43 RCNY §6-15()                           | A) (Executive Oi         | rder 91 of |
|---|----------------------------------|---------------------------------|--|--------------------------|------------|
| If "yes," STOP and complete the                       | FULL EAS FORM.                   |                                 |  |                          |            |
| 2. Project Name 895 Bedford A                         | ve                               |                                 |  |                          |            |
| 3. Reference Numbers                                  |                                  |                                 |  |                          |            |
| CEQR REFERENCE NUMBER (to be assign                   | ned by lead agency)              |                                 | BSA REFERENCE NUMBER (if a                           | pplicable)               |            |
| 18DCP040K   |                                  |                                 |  |                          |            |
| ULURP REFERENCE NUMBER (if applicable)                |                                  |                                 | OTHER REFERENCE NUMBER(S) (if applicable)            |                          |            |
| 180229 ZMK, 180230 ZRK                                |                                  | (e.g., legislative intro, CAPA) |  |                          |            |
| 4a. Lead Agency Information                           |                                  | 4b. Applicant Information       | on   |                          |            |
| NAME OF LEAD AGENCY                                   |                                  | NAME OF APPLICANT               |  |                          |            |
| NYC Department of City Planning                       | 5                                |                                 | 895 Bedford Avenue Realty, LLC                       |                          |            |
| NAME OF LEAD AGENCY CONTACT PERS                      | ON                               |                                 | NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON |                          |            |
| Robert Dobruskin, Director, EARI                      | D                                |                                 | Hiram A. Rothkrug, EPDSCO, Inc.                      |                          |            |
| ADDRESS 120 Broadway, 31 <sup>st</sup> Floor          |                                  | ADDRESS 55 Water Mill Road      |  |                          |            |
| CITY New York   | STATE NY                         | ZIP 10271                       | CITY Great Neck                                      | STATE NY                 | ZIP 11021  |
| TELEPHONE 212-720-3423 EMAIL                          |                                  | TELEPHONE 718-343-              | EMAIL  |                          |            |
|   | rdobrus@planni                   | ng.nyc.gov                      | 0026   | hrothkrug@environmentals |            |
|   |                                  |                                 |  | udiescorp.com            | า          |

### 5. Project Description

The applicant, 895 Bedford Avenue Realty, LLC ("the Applicant") seeks a zoning map amendment and zoning text amendment (the "Proposed Actions") to facilitate a new seven-story mixed-use building in the Bedford-Stuyvesant section of Brooklyn Community District #3.

The Proposed Actions would affect the southern portion of a single block (Block 1750; Lots 44, 46, 47, 49 and p/o 1, 24, 48), hereafter the "Rezoning Area") near the intersection of Bedford and Willoughby Avenues and would include a zoning map amendment from M1-2 to R7A/C2-4, as well as a zoning text amendment to Appendix F of the Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the Rezoning Area, pursuant to §23-154(d).

The Proposed Actions would facilitate a new seven-story mixed-use building on Block 1750, Lots 1 and 49 (hereafter, the "Development Site") to contain 38,427 square feet of floor area (4.59 FAR). The building would rise to a height of approximately 68 feet (without a setback) and contain 33,901 square feet of residential space (36 dwelling units) and 4,526 square feet of commercial retail space (hereafter, the "Proposed Development").

The Development Site is under the Applicant's control, while remaining lots within the Rezoning Area would also be rezoned but are not under the Applicant's control (Block 1750; Lots 44, 46, 47, and p/o 24 and 48). It should be noted that a small portion of Lot 1 would fall outside of the Rezoning Area but is still within the Development Site. See attached Project Description for details.

### **Project Location**

| воrоugh Brooklyn   | COMMUNITY DISTRICT(S) $3$         | STREET ADDRESS 8 | 95 Bedford Avenue; 381, 383, 385, |
|--|-----------------------------------|------------------|-----------------------------------|
|  |                                   | 387, and 389 WI  | lloughby Avenue                   |
| TAX BLOCK(S) AND LOT(S) Block 175  | 0; Lots 44, 46, 47, 49 and p/o 1, | ZIP CODE 11205   |                                   |
| 24, 48   |                                   |                  |                                   |
| DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Willoughby Avenue between Bedford Avenue and Spencer Street     |                                   |                  |                                   |
| EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-2 ZONING SECTIONAL MAP NUMBER 17a |                                   |                  |                                   |
| 6. Required Actions or Approvals (check all that apply)  |                                   |                  |                                   |
| City Planning Commission: 🖂 🕅  | res 🗌 NO                          | UNIFORM LANI     | D USE REVIEW PROCEDURE (ULURP)    |

| CITY MAP AMENDME   |   | NING CERTIFICATION               |                                | SION                               |  |
|--|---|----------------------------------|--------------------------------|------------------------------------|--|
| ZONING MAP AMEND   | MENT ZON  | NING AUTHORIZATION               |                                |                                    |  |
| ZONING TEXT AMEND  |   | DUISITION-REAL PROPERTY          |                                | BLE CONSENT                        |  |
| SITE SELECTION-PUB   |   | POSITION—REAL PROPERTY           |                                | IISE                               |  |
| HOUSING PLAN & PRO   | HOUSING PLAN & PROJECT  |                                  |                                |                                    |  |
| SPECIAL PERMIT (if ap  | propriate, specify type:  | modification: renewal:           | other): EXPIRATION DA          | TE:                                |  |
| SPECIFY AFFECTED SECTION   | NS OF THE ZONING RESOLUTI   | ON Appendix F                    |                                |                                    |  |
| Board of Standards a   | nd Appeals: VES   |                                  |                                |                                    |  |
|  |   |                                  |                                |                                    |  |
|  |   |                                  |                                |                                    |  |
|  | propriato, specify type:  | modification: ronowal:           |                                | тс.                                |  |
|  |   |                                  |                                | 12.                                |  |
| Department of Enviro   | nmontal Protoction:   |                                  | If "upp" specific              |                                    |  |
| Other City Approvale   | Subject to CEOR (sheet al   |                                  | n yes, specny:                 |                                    |  |
|  | Subject to CEQR (check a  | li that apply)                   |                                |                                    |  |
|  |   |                                  | FUNDING OF CONSTRUCTION        | JN, specify:                       |  |
|  |   |                                  | POLICY OR PLAN, specify:       |                                    |  |
|  | JBLIC FACILITIES  |                                  | FUNDING OF PROGRAMS, s         | pecify:                            |  |
| 384(b)(4) APPROVAL   |   |                                  | PERMITS, specify:              |                                    |  |
| OTHER, explain:  |   |                                  |                                |                                    |  |
| Other City Approvals   | Not Subject to CEQR (ch   | eck all that apply)              |                                |                                    |  |
| PERMITS FROM DOT'S   | OFFICE OF CONSTRUCTION  | MITIGATION AND                   | LANDMARKS PRESERVATIO          | N COMMISSION APPROVAL              |  |
| COORDINATION (OCMC)  |   |                                  | OTHER, explain:                |                                    |  |
| State or Federal Actio   | ns/Approvals/Funding:   | : 🗌 YES 🛛 NO                     | If "yes," specify:             |                                    |  |
| 7. Site Description: Th  | e directly affected area consi  | ists of the project site and the | area subject to any change i   | in regulatory controls. Except     |  |
| where otherwise indicated,   | provide the following inform  | nation with regard to the dire   | ctly affected area.            |                                    |  |
| Graphics: The following  | graphics must be attached a   | nd each box must be checked      | off before the EAS is comple   | te. Each map must clearly depict   |  |
| the boundaries of the direc  | tly affected area or areas and  | d indicate a 400-foot radius d   | rawn from the outer bounda     | ries of the project site. Maps may |  |
| not exceed 11 x 17 inches in   | n size and, for paper filings, n                                      | nust be folded to 8.5 x 11 inch  | ies.                           |                                    |  |
| SITE LOCATION MAP  | ZOM   | NING MAP                         | 🔀 SANBOF                       | RN OR OTHER LAND USE MAP           |  |
| 🔀 ΤΑΧ ΜΑΡ  | FOF   | R LARGE AREAS OR MULTIPLE        | SITES, A GIS SHAPE FILE THA    | T DEFINES THE PROJECT SITE(S)      |  |
| PHOTOGRAPHS OF TH  | E PROJECT SITE TAKEN WITH   | IN 6 MONTHS OF EAS SUBMI         | SSION AND KEYED TO THE SI      | TE LOCATION MAP                    |  |
| Physical Setting (both o   | developed and undeveloped   | areas)                           |                                |                                    |  |
| Total directly affected area   | (sq. ft.): 16,000   | Wat                              | erbody area (sq. ft) and type  | ::                                 |  |
| Roads, buildings, and other  | paved surfaces (sq. ft.): 16,   | , <b>000</b> Oth                 | er, describe (sq. ft.):        |                                    |  |
| 8. Physical Dimension  | s and Scale of Project (i   | f the project affects multiple   | sites, provide the total devel | opment facilitated by the action)  |  |
| SIZE OF PROJECT TO BE DE   | VELOPED (gross square feet):  | 67,901                           |                                |                                    |  |
| NUMBER OF BUILDINGS: 3   |   | GROSS FLOO                       | OR AREA OF EACH BUILDING       | (sq. ft.): 46,608, 15,787, and     |  |
|  |   | 5,506 gsf                        |                                |                                    |  |
| HEIGHT OF EACH BUILDING (ft.): 80, 80, and 40 NUMBER OF STORIES OF EACH BUILDING: 7, 8, and 4                                  |   |                                  |                                |                                    |  |
| Does the proposed project involve changes in zoning on one or more sites? $\times$ YES $\wedge$ NO                             |   |                                  |                                |                                    |  |
| If "yes," specify: The total square feet owned or controlled by the applicant: 8.360   |   |                                  |                                |                                    |  |
| The total  | The total square feet not owned or controlled by the applicant: 8.330 |                                  |                                |                                    |  |
| Does the proposed project  | involve in-ground excavation  | or subsurface disturbance, i     | ncluding, but not limited to f | oundation work, pilings, utility   |  |
| lines, or grading?   |   |                                  |                                |                                    |  |
| If "yes," indicate the estimate  | ated area and volume dimens   | sions of subsurface permaner     | nt and temporary disturbance   | e (if known):                      |  |
| AREA OF TEMPORARY DISTURBANCE: 5,889 sq. ft. (width x length) VOLUME OF DISTURBANCE: 53,001 cubic ft. (width x length x depth) |   |                                  |                                |                                    |  |
| AREA OF PERMANENT DIST   | URBANCE: <b>5,889</b> sa. ft. (wi                                     | dth x length)                    |                                | , - <u></u>                        |  |
| Description of Pronos  | ed Uses (please complete t  | he following information as a    | ppropriate)                    |                                    |  |
|  | Residential   | Commercial                       | Community Facility             | Industrial/Manufacturing           |  |
| Size (in gross so ft )   | 60 875 gsf *  | 7 026 gsf *                      |                                |                                    |  |
| Type (e.g. rotail office   | 50,075 g51  | Retail                           |                                |                                    |  |
| <b>i ype</b> (e.g., recall, office,  | JJ units  | NELAII                           |                                |                                    |  |

| Does the proposed project increase the population of residents and/or on-site workers? 🛛 YES 🗌 NO                                  |  |  |  |  |
|--|--|--|--|--|
| f "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 153 NUMBER OF ADDITIONAL WORKERS: 7                                       |  |  |  |  |
| Provide a brief explanation of how these numbers were determined: 56 units (net increase over no-action condition) x 2.74 (avg. HH |  |  |  |  |
| size for Brooklyn CD 3); 1 employee per 1,000 gsf  |  |  |  |  |
| * RWCDS projected development on all Projected Development Sites   |  |  |  |  |
| Does the proposed project create new open space? 🗌 YES 🛛 NO If "yes," specify size of project-created open space: sq. ft.          |  |  |  |  |
| las a No-Action scenario been defined for this project that differs from the existing condition? 🔲 YES 🛛 🛛 NO                      |  |  |  |  |
| f "yes," see <u>Chapter 2</u> , "Establishing the Analysis Framework" and describe briefly:  |  |  |  |  |
| Analysis Year CEQR Technical Manual Chapter 2  |  |  |  |  |
| ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2021   |  |  |  |  |
| ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 24   |  |  |  |  |
| 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?   |             | $\square$              |
| (b) Would the proposed project result in a change in zoning different from surrounding zoning?  | $\boxtimes$ |                        |
| (c) Is there the potential to affect an applicable public policy?   |             | $\square$              |
| (d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.  |             |                        |
| (e) Is the project a large, publicly sponsored project?   |             | $\square$              |
| <ul> <li>If "yes," complete a PlaNYC assessment and attach.</li> </ul>  |             |                        |
| (f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?   |             | $\square$              |
| <ul> <li>If "yes," complete the <u>Consistency Assessment Form</u>.</li> </ul>  |             |                        |
| 2. SOCIOECONOMIC CONDITIONS: CEQR Technical Manual Chapter 5  |             |                        |
| (a) Would the proposed project:   |             |                        |
| <ul> <li>Generate a net increase of 200 or more residential units?</li> </ul>   |             | $\square$              |
| <ul> <li>Generate a net increase of 200,000 or more square feet of commercial space?</li> </ul>   |             | $\square$              |
| <ul> <li>Directly displace more than 500 residents?</li> </ul>  |             | $\square$              |
| <ul> <li>Directly displace more than 100 employees?</li> </ul>  |             | $\square$              |
| <ul> <li>Affect conditions in a specific industry?</li> </ul>   |             | $\overline{\boxtimes}$ |
| 3. COMMUNITY FACILITIES: CEQR Technical Manual Chapter 6  |             |                        |
| (a) Direct Effects  |             |                        |
| <ul> <li>Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational<br/>facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?</li> </ul> |             | $\square$              |
| (b) Indirect Effects  |             |                        |
| <ul> <li>Child Care Centers: Would the project result in 20 or more eligible children under age 6, based on the number of low or<br/>low/moderate income residential units? (See Table 6-1 in <u>Chapter 6</u>)</li> </ul>  |             | $\square$              |
| <ul> <li>Libraries: Would the project result in a 5 percent or more increase in the ratio of residential units to library branches?<br/>(See Table 6-1 in Chapter 6)</li> </ul>   |             | $\square$              |
| <ul> <li>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 <u>Chapter 6</u>)</li> </ul>  |             | $\square$              |
| <ul> <li>Health Care Facilities and Fire/Police Protection: Would the project result in the introduction of a sizeable new<br/>neighborhood?</li> </ul>   |             | $\square$              |
| 4. OPEN SPACE: CEQR Technical Manual Chapter 7  |             |                        |
| (a) Would the proposed project change or eliminate existing open space?   |             | $\square$              |
| (b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?   |             | $\square$              |
| o 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?   |             | $\square$              |
| o 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<br>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?  | $\boxtimes$ |           |
| (b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a   |             | $\square$ |
| 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<br>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  |             | $\square$ |
| 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?  | $\square$   |           |
| (c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information of the above and attach supporting information of the above and attach support of the above and attach support of the above attach support of the | ion on      |           |
| whether the proposed project would potentially affect any architectural or archeological resources. See attached   |             |           |
| 7. URBAN DESIGN AND VISUAL RESOURCES: <u>CEQR Technical Manual Chapter 10</u>  |             |           |
| (a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streatscape or public space in the vicipity of the proposed project that is not surroutly allowed by existing zoning?  | $\boxtimes$ |           |
| (b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by   |             | N 7       |
| 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  |             | $\square$ |
| <u>Chapter 11</u> ?  |             |           |
| <ul> <li>If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources</li> </ul>   | sources.    |           |
| (b) Is any part of the directly affected area within the <u>Jamaica Bay Watershed</u> ?  |             | $\square$ |
| <ul> <li>If "yes," complete the <u>Jamaica Bay Watershed Form</u>, and submit according to its <u>instructions</u>.</li> </ul>   |             |           |
| 9. HAZARDOUS MATERIALS: CEQR Technical Manual Chapter 12   |             |           |
| (a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a   | $\square$   |           |
| manufacturing area that involved hazardous materials?  |             |           |
| ( <b>b</b> ) Does the proposed project site have existing institutional controls ( <i>e.g.</i> , (E) designation or Restrictive Declaration) relating to bazardous materials that preclude the potential for significant adverse impacts?  |             | $\square$ |
| (c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or   |             |           |
| existing/historic facilities listed in <u>Appendix 1</u> (including nonconforming uses)?   | Å           |           |
| (d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials,  | $\square$   |           |
| contamination, illegal dumping or fill, or fill material of unknown origin?  |             |           |
| (e.g., gas stations, oil storage facilities, heating oil storage)?   | $\bowtie$   |           |
| (f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality;  |             | $\square$ |
| 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-<br>listed voluntary cleanup/brownfield site, current or former nower generation/transmission facilities, coal gasification or gas  | $\square$   |           |
| storage sites, railroad tracks or rights-of-way, or municipal incinerators?  |             |           |
| (h) Has a Phase I Environmental Site Assessment been performed for the site?   | $\boxtimes$ |           |
| <ul> <li>If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See attached</li> </ul>   |             |           |
| 10. WATER AND SEWER INFRASTRUCTURE: CEOR Technical Manual Chapter 13   |             |           |
| (a) Would the project result in water demand of more than one million gallons per day?   |             | $\square$ |
| (b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000   |             |           |
| square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of  |             | $\square$ |
| commercial space in the Bronx, Brooklyn, Staten Island, or Queens?   |             |           |
| (c) If the proposed project located in a <u>separately sewered area</u> , would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 132  |             | $\square$ |
| (d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface  |             |           |
| would increase?  |             | M         |
| (e) If the project is located within the Jamaica Bay Watershed or in certain <u>specific drainage areas</u> , including Bronx River, Coney   |             |           |
| isiand creek, Flushing bay and creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, Would it<br>involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?  |             |           |
|  | 1           |           |

|   | YES               | NO                     |
|---|-------------------|------------------------|
| (f) Would the proposed project be located in an area that is partially sewered or currently unsewered?  |                   | $\square$              |
| (g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater<br>Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?  |                   | $\boxtimes$            |
| (h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?  |                   | $\square$              |
| 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  | ek): <b>3,0</b> 2 | 13                     |
| <ul> <li>Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?</li> </ul>   |                   | $\square$              |
| (b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or<br>recyclables generated within the City?  |                   | $\square$              |
| 12. ENERGY: CEQR Technical Manual Chapter 15  |                   |                        |
| (a) Using energy modeling or Table 15-1 in <u>Chapter 15</u> , the project's projected energy use is estimated to be (annual BTUs): 9,2   | 32,586            |                        |
| (b) Would the proposed project affect the transmission or generation of energy?   |                   | $\square$              |
| 13. TRANSPORTATION: CEQR Technical Manual Chapter 16  |                   |                        |
| (a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?   |                   | $\boxtimes$            |
| (b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following q   | uestions          | :                      |
| <ul> <li>Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?</li> </ul>   |                   |                        |
| If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection?<br>**It should be noted that the lead agency may require further analysis of intersections of concern even when a project  |                   |                        |
| generates fewer than 50 vehicles in the peak hour. See Subsection 313 of <u>Chapter 16</u> for more information.  |                   |                        |
| <ul> <li>Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?</li> </ul>  |                   |                        |
| 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?  |                   |                        |
| <ul> <li>Would the proposed project result in more than 200 pedestrian trips per project peak hour?</li> </ul>  |                   |                        |
| 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?  |                   |                        |
| (a) Mobile Sources: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?  |                   | $\square$              |
| (b) Stationary Sources: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?  |                   |                        |
| <ul> <li>o If "ves." would the proposed project result in the conditions outlined in Section 220 in <u>endpter 17</u>.</li> </ul>   |                   |                        |
| (Attach graph as needed) See attached   |                   | $\bowtie$              |
| (c) Does the proposed project involve multiple buildings on the project site?   |                   | $\square$              |
| (d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?   |                   | $\square$              |
| (e) Does the proposed project site have existing institutional controls ( <i>e.g.</i> , (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?  |                   | $\boxtimes$            |
| 15. GREENHOUSE GAS EMISSIONS: CEOR Technical Manual Chapter 18  |                   |                        |
| (a) Is the proposed project a city capital project or a power generation plant?   |                   | $\square$              |
| (b) Would the proposed project fundamentally change the City's solid waste management system?   |                   | $\overline{\boxtimes}$ |
| (c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?   |                   | $\square$              |
| 16. NOISE: CEQR Technical Manual Chapter 19   |                   |                        |
| (a) Would the proposed project generate or reroute vehicular traffic?   |                   | $\square$              |
| (b) Would the proposed project introduce new or additional receptors (see Section 124 in <u>Chapter 19</u> ) near heavily trafficked<br>roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed<br>rail line with a direct line of site to that rail line? | $\boxtimes$       |                        |
| (c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of   |                   | $\bowtie$              |
| <ul> <li>(d) Does the proposed project site have existing institutional controls (<i>e.g.</i>, (E) designation or Restrictive Declaration) relating to pairs that proclude the notability for significant educates impacts?</li> </ul>  |                   |                        |
| 17. PUBLIC HEALTH: CEOR Technical Manual Chapter 20   |                   | *                      |
| (a) Paced upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Ourlithe  |                   |                        |
| (a) based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;  |                   | M                      |

|  |   | YES                           | NO               |
|--|---|-------------------------------|------------------|
| Hazardous Materials; Noise?  |   |                               |                  |
| (b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in <u>Char</u> preliminary analysis, if necessary.   | oter 20, "Public Health."   | Attac                         | h a              |
| 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: La<br>and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design<br>Resources; Shadows; Transportation; Noise?   | and Use, Zoning,<br>and Visual  | $\boxtimes$                   |                  |
| (b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guida<br>Character." Attach a preliminary analysis, if necessary.  | nce in <u>Chapter 21</u> , "Nei   | ghborh                        | ood              |
| 19. CONSTRUCTION: CEQR Technical Manual Chapter 22   |   |                               |                  |
| (a) Would the project's construction activities involve:   |   |                               |                  |
| <ul> <li>Construction activities lasting longer than two years?</li> </ul>   |   |                               | $\square$        |
| <ul> <li>Construction activities within a Central Business District or along an arterial highway or major thoroug</li> </ul>   | hfare?  |                               | $\boxtimes$      |
| <ul> <li>Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking s<br/>routes, sidewalks, crosswalks, corners, <i>etc.</i>)?</li> </ul>  | paces, bicycle  |                               | $\square$        |
| <ul> <li>Construction of multiple buildings where there is a potential for on-site receptors on buildings comple<br/>build-out?</li> </ul>   | ted before the final  |                               | $\square$        |
| <ul> <li>The operation of several pieces of diesel equipment in a single location at peak construction?</li> </ul>   |   |                               | $\square$        |
| <ul> <li>Closure of a community facility or disruption in its services?</li> </ul>   |   |                               | $\boxtimes$      |
| <ul> <li>Activities within 400 feet of a historic or cultural resource?</li> </ul>   |   |                               | $\square$        |
| <ul> <li>Disturbance of a site containing or adjacent to a site containing natural resources?</li> </ul>   |   |                               | $\boxtimes$      |
| <ul> <li>Construction on multiple development sites in the same geographic area, such that there is the potent<br/>construction timelines to overlap or last for more than two years overall?</li> </ul>   | tial for several  |                               | $\square$        |
| (b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted<br><u>22</u> , "Construction." It should be noted that the nature and extent of any commitment to use the Best Ave<br>equipment or Best Management Practices for construction activities should be considered when making a<br>should be considered when making a should be considered when a should be considered when making a should be considered when a should be c | based on the guidance i<br>ailable Technology for co<br>this determination. | in <u>Chap</u><br>onstruc     | ter<br>tion      |
| 20. APPLICANT'S CERTIFICATION  |   |                               |                  |
| I swear or affirm under oath and subject to the penalties for perjury that the information provided in<br>Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my person<br>with the information described herein and after examination of the pertinent books and records and<br>have personal knowledge of such information or who have examined pertinent books and records.   | this Environmental A<br>al knowledge and fam<br>/or after inquiry of pe     | ssessr<br>niliarity<br>ersons | nent<br>/<br>who |
| Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant o that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.  | r representative of th  | ie enti                       | ty               |
| APPLICANT/REPRESENTATIVE NAME DATE   |   |                               |                  |
| Dana Feingold, Environmental Studies Corp. 8/15/18   |   |                               |                  |
| SIGNATURE  |   |                               |                  |
| PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES  | IN THIS FORM AT T   | ΉE                            |                  |

DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

### EAS FULL FORM PAGE 10

| <b>INSTRUCTIONS:</b> In completing Part III, the lead agency shou   | Id consult 6 NYCRR 617.7 and 43 RCNY § 6-0   | 06 (Execut                                   | ive                        |  |
|---|--|--|----------------------------|--|
| Order 91 or 1977, as amended), which contain the State and  | d City criteria for determining significance.  |  |                            |  |
| <ol> <li>For each of the impact categories listed below, consider v<br/>adverse effect on the environment, taking into account it<br/>duration; (d) irreversibility; (e) geographic scope; and (f)</li> </ol>           | whether the project may have a significant<br>(a) location; (b) probability of occurring; (c)<br>magnitude.  | Poten<br>Signif<br>Adverse                   | itially<br>ficant          |  |
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|   |  |  |                            |  |
| Socioeconomic Conditions  |  | <u> </u>                                     |                            |  |
|   |  | <u> </u>                                     |                            |  |
| Chedeure  |  |  |                            |  |
| Snadows   |  |  |                            |  |
| Historic and Cultural Resources   |  |  |                            |  |
| Urban Design/Visual Resources   |  | <u> </u>                                     |                            |  |
| Natural Resources   |  | <u> </u>                                     |                            |  |
| Hazardous Materials   |  |  |                            |  |
| Water and Sewer Infrastructure  |  |  |                            |  |
| Solid Waste and Sanitation Services   |  | <u> </u>                                     |                            |  |
| Energy  |  |  |                            |  |
| Transportation  |  |  |                            |  |
| Air Quality   |  |  |                            |  |
| Greenhouse Gas Emissions  |  |  |                            |  |
| Noise   | Noise  |  |                            |  |
| Public Health   |  |  | $\square$                  |  |
| Neighborhood Character  |  |  | $\square$                  |  |
| Construction  |  |  |                            |  |
| 2. Are there any aspects of the project relevant to the deter<br>significant impact on the environment, such as combined<br>covered by other responses and supporting materials?  | rmination of whether the project may have a<br>f or cumulative impacts, that were not fully  |  |                            |  |
| If there are such impacts, attach an explanation stating w have a significant impact on the environment.  | whether, as a result of them, the project may  |  |                            |  |
| 3. Check determination to be issued by the lead agence  | iy:  |  |                            |  |
| <b>Positive Declaration</b> : If the lead agency has determined that<br>and if a Conditional Negative Declaration is not appropria<br>a draft Scope of Work for the Environmental Impact State                          | at the project may have a significant impact on t<br>ate, then the lead agency issues a <i>Positive Decla</i><br>ement (EIS).                        | he environ<br><i>ration</i> and              | iment,<br>prepares         |  |
| Conditional Negative Declaration: A Conditional Negative<br>applicant for an Unlisted action AND when conditions im<br>no significant adverse environmental impacts would resu<br>the requirements of 6 NYCRR Part 617. | e Declaration (CND) may be appropriate if there<br>posed by the lead agency will modify the propo-<br>Ilt. The CND is prepared as a separate documen | is a private<br>sed project<br>it and is sul | e<br>t so that<br>bject to |  |
| Negative Declaration: If the lead agency has determined the environmental impacts, then the lead agency issues a New separate document (see template) or using the embedded   | nat the project would not result in potentially signative Declaration. The Negative Declaration meed Negative Declaration on the next page.          | gnificant ac<br>ay be prep                   | dverse<br>ared as a        |  |
| 4. LEAD AGENCY'S CERTIFICATION  |  |  |                            |  |
| Deputy Director, Environmental Assessment and Review<br>Division  |  |  |                            |  |
| NAME DATE   |  |  |                            |  |
| Olga Abinader   | August 17, 2018  |  |                            |  |
| SIGNATURE   |  |  |                            |  |
| and me  |  |  |                            |  |

### NEGATIVE DECLARATION (Use of this form is optional)

#### **Statement of No Significant Effect**

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

#### **Reasons Supporting this Determination**

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

#### Hazardous Materials, Air Quality, & Noise

An (E) designation (E-491) for hazardous materials, air quality, and noise has been incorporated into the sites affected by the proposed actions. Refer to "Determination of Significance Appendix: (E) Designation" for a list of the sites affected by the proposed (E) designation and applicable requirements. With these measures in place, the proposed actions would not result in significant adverse impacts related to hazardous materials.

#### Shadows

A Tier 1 Shadows Screening is included in this EAS because the proposed project would result in a net height increase of 50 feet or more. As a result of the proposed actions, no sunlight-sensitive resources are anticipated to experience shadows cast from the proposed project. Considering the area within the maximum affected shadow distance of 408 feet, the analysis finds that the shadows cast by the proposed project would not result in significant adverse impacts.

#### Urban Design

A detailed analysis of Urban Design and Visual resources is included in this EAS. The analysis concludes that the proposed actions would not result in significant adverse impacts related to urban design or visual resources.

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

| TITLE  | LEAD AGENCY   |
|--|---|
| Deputy Director, Environmental Assessment and Review | Department of City Planning, acting on behalf of the City |
| Division   | Planning Commission                                       |
| NAME   | DATE  |
| Olga Abinader  | 08/17/2018  |
| SIGNATURE  |   |
| Ole (le )  |   |

| NAME<br>Marisa Lago<br>SIGNATURE  | , , ,  |   |
|---|--|---|
|   | NAME<br>Marisa Lago  | DATE<br>08/20/2018  |
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#### Appendix 1: (E) Designations

To ensure that there would be no significant adverse hazardous material, air quality or noise impacts associated with the proposed project, an E designation (E-491) will be placed on the project sites as follows:

The E designation requirements related to hazardous materials, air quality, and noise would apply to:

Projected Development Site 1: Block 1750, Lots 1 & 49

Projected Development Sites 2 & 3 (non-applicant owned): Block 1750, Lots 46, 47, & 48

### Hazardous Material

*Projected Development Site 1(Block 1750, Lots 1 and 49)* 

Task 1

A proposed remediation plan will be prepared and 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.

Projected Development Sites 2 &3 (Block 1750, Lots 46, 47, & 48)

### Task 1-Sampling Protocol

The applicant will submit 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 nonpetroleum 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.

#### Air Quality

Projected Development Site 1 (Block 1750, Lots 1 and 49)

#### Task 1

Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water equipment and ensure that the HVAC and/or hot water equipment stack is located at the highest tier or at least 98 feet above the grade to avoid any potential significant adverse air quality impacts.

*Projected Development Site 2 (Block 1750, Lots 46 and 47)* 

#### Task 1

Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water equipment and ensure that the HVAC and/or hot water equipment stack is located at the highest tier or at least 98 feet above the grade to avoid any potential significant adverse air quality impacts.

### <u>Noise</u>

Projected Development Site 1 (Block 1750, Lots 1 and 49)

### Task 1

To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 33 dBA of window/wall attenuation. To maintain a closed- window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Projected Development Site 2 (Block 1750, Lots 46 and 47)

#### Task 1

To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 28 dBA of window/wall attenuation. To maintain a closed- window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

Projected Development Site 3 (Block 1750, Lot 48)

### Task 1

To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 28 dBA of window/wall attenuation. To maintain a closed- window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.





Data Source: MapPLUTO 2016v1, NYC DOF Digital Tax Map 03-16 downloaded from https://nycopendata.socrata.com



Site







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







Current Zoning Map (Map 17a)

 C1-1
 C1-2
 C1-3
 C1-4
 C1-5
 C2-1
 C2-2
 C2-3
 C2-4
 C2-5

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Proposed Zoning Map (Map 17a) Rezoning from an M1-2 to R7A/C2-4 district.



1. View of the Site facing northeast from the intersection of Bedford Avenue and Willoughby Avenue.



3. View of Bedford Avenue facing south (Site at left).



2. View of the Site facing southeast from Bedford Avenue.





4. View of the west side of Bedford Avenue facing northwest from the Site.



6. View of the sidewalk along the east side of Bedford Avenue facing north (Site at right).



5. View of the sidewalk along the east side of Bedford Avenue facing south (Site at left).





7. View of Willoughby Avenue facing east from Bedford Avenue (Site at left).



9. View of the intersection of Willoughby Avenue and Bedford Avenue facing southwest from the Site.



8. View of Bedford Avenue facing north from Willoughby Avenue (Site at right).





10. View of the sidewalk along the north side of Willoughby Avenue facing east (Site at left).



12. View of the north side of Willoughby Avenue between Bedford Avenue and Spencer Street facing northeast.



11. View of the Site facing northwest from Willoughby Avenue.





13. View of the south side of Willoughby Avenue facing southeast from the Site.



15. View of the intersection of Willoughby Avenue and Spencer Street facing northwest.



14. View of the sidewalk along the north side of Willoughby Avenue facing west (Site ahead, on right).





16. View of Spencer Street facing north from Willoughby Avenue.



18. View of the intersection of Willoughby Avenue and Spencer Street facing southeast.



17. View of Willoughby Avenue facing west from Spencer Street.





19. View of the sidewalk along the west side of Spencer Street facing north from Willoughby Avenue.



21. View of the west side of Spencer Street facing southwest towards Willoughby Avenue.



20. View of the sidewalk along the west side of Spencer Street facing south towards Willoughby Avenue.





22. View of Spencer Street facing south towards Willoughby Avenue.



24. View of the east side of Spencer Street between Willoughby Avenue and Dekalb Avenue facing southeast.



23. View of the east side of Spencer Street between Myrtle Avenue and Willoughby Avenue facing northeast.



### PROJECT DESCRIPTION

### **Proposed Actions**

The applicant, 895 Bedford Avenue Realty, LLC ("the Applicant") seeks a zoning map amendment and zoning text amendment (the "Proposed Actions") to facilitate a new sevenstory mixed-use building in the Bedford-Stuyvesant section of Brooklyn Community District #3.

The Proposed Actions would affect the southern portion of a single block (Block 1750; Lots 44, 46, 47, 49 and p/o 1, 24, 48), hereafter the "Rezoning Area") near the intersection of Bedford and Willoughby Avenues and would include a zoning map amendment from M1-2 to R7A/C2-4, as well as a zoning text amendment to Appendix F of the Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the Rezoning Area, pursuant to §23-154(d).

The Development Site is under the Applicant's control, while remaining lots within the Rezoning Area would also be rezoned but are not under the Applicant's control (Block 1750; Lots 44, 46, 47, and p/o 24 and 48). It should be noted that a small portion of Lot 1 would fall outside of the Rezoning Area but is still within the Development Site.

The applicant seeks the following discretionary actions (hereafter "the Proposed Actions") from the Department of City Planning (DCP):

(1) a zoning map amendment from M1-2 to R7A/C2-4 (Block 1750, extending north to approximately 80 feet in depth from the front lot line of Willoughby Avenue); and

(2) a zoning text amendment to make the Project Area applicable to the Mandatory Inclusionary Housing (MIH) Program.

The Proposed Actions would facilitate a new seven-story mixed-use building on Block 1750, Lots 1 and 49 (hereafter, the "Development Site") to contain 48,608 gross square feet (gsf) of floor area (38,427 zoning square feet (zsf), 4.59 FAR). The building would rise to a height of approximately 68 feet (without a setback). The building would contain 42,082 gsf (33,901 zsf, FAR 4.06) of residential floor area and 4,526 gsf (4,526 gsf, FAR 0.54) of commercial space on the ground floor. A Reasonable Worst Case Development Scenario (RWCDS) has been established for analysis purposes, which differs from the proposed development in that it considers 42 dwelling units (DUs), assuming 1 DU per 1,000 gsf of floor area, and that it considers a building height of 95 feet. The RWCDS is further outlined below under Reasonable Worst Case Development Scenario.

No parking is proposed or required. Parking is waived for affordable dwelling units (DUs) per ZR Section 25-251. Parking is waived for market-rate DUs per ZR Section 25-261 because fewer than 15 spaces would be required under ZR Section 25-241. Parking for commercial use is waived under ZR Section 36-232.

### **Description of Surrounding Area**

The Project Area is located in the Northwest section of the Bedford-Stuyvesant neighborhood in Brooklyn, CD 3, and falls within City Council District 33.

The area surrounding the Development Site is characterized by residential, office, commercial,

and light manufacturing uses. Residential uses are found along Franklin and Skillman Avenue. Light manufacturing uses are found east of the Development Site, along Spencer and Walworth Street and are interspersed by multifamily elevator residential buildings. There are some vacant lots and public facilities scattered also around the Development Site. The largest public facility is an alcohol treatment center located at the corner of Myrtle Avenue and Walworth Street.

The B44 Select Bus Service runs north along Bedford Avenue and south along Nostrand Avenue. The B38 bus runs west along DeKalb Avenue and east of Lafayette Street. The Bedford-Nostrand and Myrtle-Willoughby Stations (G train) are located within 0.5 miles from the development site.

The built form varies within the vicinity of the Development Site. South of Willoughby Avenue, there are some 2- to 3- story, walk-up residential buildings west of Bedford Avenue and a mix of multi-family elevator residential that range from 6- to 9 stories tall and three-story walk-ups to the east of Bedford Avenue. To the far southeast is a Home Depot commercial retail store.

Northwest of the development site can be characterized with multifamily residential apartment buildings. To the northeast of the development site are a number of manufacturing and public facilities uses. The tallest manufacturing use structure rises to four stories. A large multi-family elevator building occupies the northeast corner of Block 1750, Lot 24. The building appears to have been a residential conversion from manufacturing use. At the base of that building is a supermarket.

# **Description of Affected Area**

The Proposed Project Area (also referred to as the "Rezoning Area" or the "Project Area") affects seven lots (Block 1750; Lots 44, 46, 47, 49 and p/o 1, 24, 48) located along the southern end of a Block 1750 near the intersection of Bedford and Willoughby Avenues in the Bedford-Stuyvesant neighborhood of Brooklyn Community District #3.

These parcels combined contain a total lot area of approximately 16,000 square feet with frontage along three streets: 80 feet along the east side of Bedford Avenue; 200 feet along the north side of Willoughby Avenue; and 78 feet along the west side of Spencer Street. Bedford Avenue is classified as a wide street with 80 feet in width, while Willoughby Avenue and Spencer Street are classified as narrow streets, with less than 75 feet in width. The Project Area is zoned M1-2.

As noted above, the proposed rezoning extends 80 feet from the Willoughby Avenue street line. Therefore, a sliver measuring 4 feet in width at the northern edge of the rezoning area will also be affected by the proposed action. This area covers approximately 400 square feet (sf) of the property identified as Block 1750, Lot 24, and would be rezoned under the proposed action from M1-2 to R7A/C2-4, creating a split lot condition.1 The area affected by the rezoning represents 0.9% of Lot 24, which has an area of 44,493 sf and is full developed with two, six-story residential buildings. No new development is anticipated on Lot 24 as the area of this lot affected by the rezoning would be miniscule.

<sup>&</sup>lt;sup>1</sup> A split lot is a zoning lot located in two or more zoning districts and divided by a zoning district boundary. In most cases, zoning regulations for each district are applied separately for each portion of the lot.

## Applicant-controlled area:

• Lot 1 (895 Bedford Avenue) has an area of 7,280 square feet and is currently in use as an automotive service use (gas station) with a one-story building. The automotive building has a floor area of approximately 1,260 square feet with an FAR of 0.17, where 2.0 commercial/light industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. A majority of the lot is within the Rezoning Area, with 360 square foot area on the north end of the lot that would remain as M1-2. Approximately 8 accessory parking spaces are on the site.

Lot 49 (381 Willoughby Avenue) has an area of 1,080 square feet and is currently paved for use as additional area for the gas station on the adjacent Lot 1. The lot has an FAR of 0, where 2.0 commercial/ industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. Approximately 8 accessory parking spaces are on the site.

# Non-applicant controlled area

- Lot 24 (692 Myrtle Avenue) has an area of 44,943 square feet and is improved with a sixstory commercial building. The building contains 147,209 square feet (3.28 FAR), where 2.0 commercial/light industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. The building was constructed in 1937 as a commercial warehouse building and was subsequently converted into artist studios in 2005. Only a small portion of the southern end of the lot is within the Project Area, which runs at a depth of 2 feet by a length of 80 feet or approximately 160 square feet. As explained above under Description of the Affected Area, Lot 24 is not considered in the analysis as the Proposed Actions would not affect this 160 square foot area.
- Lot 44 (391 Willoughby Avenue) has an area of 3,120 square feet and is developed with a six-story building containing commercial offices, community facility space (offices and religious use), and one indoor parking space. Per public records, the building has a floor area of 21,216 sf with an FAR of 6.8, where 2.0 commercial/industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. The building is nonconforming and noncomplying with the bulk requirements of the underlying zoning district.
- Lot 46 (387 Willoughby Avenue) has an area of 1,560 square feet and is developed with a two-story residential building containing two dwelling units (DUs). The building has a floor area of 1,200 square feet with an FAR of 0.77, where 2.0 commercial/industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. The building is legally nonconforming, as it was constructed in approximately 1910 and has continuously been occupied with a residential use since that time period.
- Lot 47 (385 Willoughby Avenue) has an area of 1,560 square feet and is developed with a two-story residential building containing two dwelling units (DUs). The building has a floor area of 1,200 square feet with an FAR of 0.77, where 2.0 commercial/industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. The building is legally nonconforming, as it was constructed in approximately 1910 and has continuously been occupied with a residential use since that time period.
- Lot 48 (383 Willoughby Avenue) has an area of 2,000 square feet and is developed with a

four-story building containing ground floor commercial space, three residential units, and three indoor accessory parking spaces. The building has a floor area of 5,506 square feet with an FAR of 2.75, where 2.0 commercial/industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. The building was constructed in 2001 for commercial use. No BSA or zoning documents are on file that confirm the legality of the residential units, so it is assumed they are not legally conforming.

# **Description of Proposed Development**

The proposed development consists of a seven-story residential building with ground floor commercial space, containing 46,608 gsf (38,427 zsf, FAR 4.59). The building would contain 42,082 gsf (33,901 zsf, FAR 4.06) of residential floor area (36 dwelling units) and 4,526 gsf (4,526 gsf, FAR 0.54) of commercial space on the ground floor.

No parking is proposed or required. Per ZR Section 25-251, parking is waived for affordable DUs within a Transit Zone. Per ZR Section 25-241, parking is required for 30 percent of market-rate DUs, and per ZR Section 25-261, parking requirements are waived for up to 15 spaces.

As described below under Reasonable Worst Case Development Scenario, the two parcels affected by the proposed actions that are not under the control of the applicant are anticipated for redevelopment as a result of the proposed actions.

# Purpose and Need

The proposed development requires a Zoning Map Amendment from M1-2 to R7A/C2-4 and a zoning text amendment to make the R7A/C2-4 area applicable to the Mandatory Inclusionary Housing (MIH) Program (Option 1 or 2). The proposed zoning map amendment would more accurately reflect existing development within the Project Area, which is currently developed with residential, commercial and mixed-use buildings.

R7A districts facilitate the development of medium density elevator apartment building between seven- and eight-stories in height with an FAR of 4.6 (with Inclusionary Housing bonus) and a maximum height of 95 feet (with Inclusionary Housing bonus). R7A permits residential and community facility uses. C2-4 commercial overlays are typically mapped with medium-density residential districts to offer retail needs such as grocery stores, restaurants, and repair services to residents and allow for mixed-use buildings with retail use on the ground floor and residential use above. C2-4 overlays can also be stand-alone retail buildings at a maximum of 2.0 FAR.

# **Required Approvals**

The proposed development requires a zoning map amendment to rezone the project area and a zoning text amendment to establish a MIH area coterminous with the area to be rezoned. The granting of the zoning map amendment is a discretionary action that is subject to both the Uniform Land Use Review Procedure (ULURP) as well as the City Environmental Quality Review (CEQR). ULURP is a process that allows public review of the proposed action at four levels: the Community Board; the Borough President; the City Planning Commission; and, if applicable, the City Council. CEQR is a process by which agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment.

## Reasonable Worst Case Development Scenario (RWCDS)

## Introduction

The applicant seeks to redevelop the Project Site (Projected Development Site 1) with a residential building containing ground-floor retail space. In addition to the Project Site, Lots 46 and 47 on Block 1750 (Projected Development Site 2) and Lot 48 (Projected Development Site 3) have been identified as soft sites for redevelopment under the proposed zoning. Projected Development Site 2 consists of two lots built well below their development potential in the future with the proposed action, and Projected Development Site 3 contains a nonconforming use that would be legalized under the proposed zoning, thus qualifying it as a development Site. The final lot in the Project Area, Block 1750, Lot 44, was not identified as a soft site. The building on this property is a recent construction (Final Certificate of Occupancy #320714438F granted in August 2015) that occupies more than the entire development potential on the lot, and as such is not anticipated for redevelopment in the With-Action Condition.

Existing conditions on these properties are detailed above under Description of Affected Area.

# **Future No-Action Condition**

In the future without the proposed actions, Lot 48 would convert to a conforming use while all other lots within the Project Area would remain in their current condition (as described above). The no-action condition is described below.

- Lot 48 has an area of 2,000 square feet and is developed with a four-story building containing ground floor commercial space, three residential units, and three indoor accessory parking spaces. The building has a floor area of 5,506 gsf (5,506 zsf, FAR 2.75), where 2.0 commercial/industrial FAR or 4.8 community facility FAR is permitted under the existing M1-2 zoning district. The building was constructed in 2001 for commercial use. No BSA or zoning documents are on file that confirm the legality of the residential units, so it is assumed they are not legally conforming.
- Absent the proposed actions, the building on Lot 48 would remain, but the nonconforming residential units would be converted into conforming commercial office use. No additional parking would be required or provided, in accordance with ZR Section 36-232.

## **Future With-Action Condition**

In the future with the proposed action, the applicant site and three other lots are anticipated for redevelopment. Conditions on Lot 44 would not change. The development sites are identified in Table 1-1.

| Site ID                         | Block | Lot    | Address                               |
|---------------------------------|-------|--------|---------------------------------------|
| Projected<br>Development Site 1 | 1750  | 1, 49  | 895 Bedford Ave., 381 Willoughby Ave. |
| Projected<br>Development Site 2 | 1750  | 46, 47 | 385-387 Willoughby Ave.               |
| Projected<br>Development Site 3 | 1750  | 48     | 383 Willoughby Ave/                   |

**Table 1-1: Development Site Identification** 

## Applicant-controlled area

In the future with the proposed actions, the applicant proposes a mixed-use building on Lots 1 and 49 (Projected Development Site 1). Since the proposed development on the Project Site maximizes the available floor area under the proposed R7A/C2-4 district (proposed FAR of 4.59 where 4.60 is permitted), the proposed development constitutes the most conservative development program to be considered for the With-Action scenario in terms of FAR. However, the RWCDS assumes smaller apartment sizes (1,000 gsf per dwelling unit for a total of 42 DUs) than the floorplans proposed by the applicant (which provides 36 DUs), yielding more units and thus a more conservative analysis.

No parking is proposed or required. Per ZR Section 25-251, parking is waived for affordable DUs within a Transit Zone. Per ZR Section 25-241, parking is required for 30 percent of market-rate DUs, and per ZR Section 25-261, parking requirements are waived for up to 15 spaces.

# Non-applicant controlled area

Lots 46 and 47 constitute **Projected Development Site 2** (proposed zoning R7A/C2-4). Together, the lots have an area of 3,120 sf. Under the With-Action scenario, Lot 46 and 47 would be merged. On the combined lots, 4.6 FAR of mixed-use development could occur, resulting in an 8-story (95-foot-high) building containing 15,787 gsf (14,352 zsf) of which 1,500 gsf (1,500 zsf) would be commercial space and 14,287 gsf (12,852 zsf) would be residential. Assuming 1,000 gsf per DU, the building would contain 14 DUs. Because the MIH option has not been chosen, the RWCDS assumes 20 percent affordability at 80 percent Area Median Income (AMI). Thus, the RWCDS considers 3 affordable DUs and 11 market-rate DUs. The RWCDS building height is 95 feet, the maximum height permitted under the proposed zoning.

No parking would be included on Projected Development Site 2 in accordance with the ZR Sections cited above under Projected Development Site 1.

Lot 48 constitutes **Projected Development Site 3** (proposed zoning R7A/C2-4). The proposed zoning would legalize the residential use in this currently mixed-use building. Because the building is a recent construction on a narrow lot, a full teardown and redevelopment is not anticipated. The 4-story (40-foot-high) building would retain its 5,506 gsf of floor area (5,506 zsf, FAR 2.75) and would contain 1,000 gsf of ground floor commercial space, three non-accessory parking spaces, and 4,500 gsf of residential space (3 DUs). Because the building would have fewer than 10 DUs, it is assumed that MIH will not apply on this site. Thus, the RWCDS considers and 4 market-rate DUs.
Lot 44 (**Other Site**, proposed zoning R7A/C2-4) has an area of 3,120 square feet and is developed with a four-story building containing commercial offices, community facility space, and one indoor parking space. Per public records, the building has a floor area of 21,216 sf with an FAR of 6.8. The building on this property is a recent construction (Final Certificate of Occupancy #320714438F granted in August 2015) that occupies more than the entire development potential on the lot. This nonconforming and noncomplying building is not anticipated for redevelopment in the With- Action Condition.

The difference between the No-Action and With-Action development scenarios is available in **Table 2: Description of Existing and Proposed Conditions (RWCDS)** on the following page.

#### DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS (RWCDS) ON THE PROJECTED DEVELOPMENT SITES

|   | EXISTING<br>CONDITION  |                | NO-ACTION<br>CONDITION |       | WITH-ACTION<br>CONDITION |       | INCREMENT                                   |
|---|------------------------|----------------|------------------------|-------|--------------------------|-------|---|
| LAND USE                                      |                        |                | ·                      |       |                          |       |   |
| Residential                                   | YES                    | NO NO          | YES                    | NO NO | YES                      | NO    |   |
| If "yes," specify the following:              |                        |                |                        |       |                          |       |   |
| Describe type of residential structures       | Two two-family         |                | Two two-family         |       | Three multi-family       |       | +2 multi-family                             |
|   | One mixed              | d-use building | contaings              |       | o unungo                 |       | -2 two-family<br>buildings                  |
| No. of dwelling units                         | 7                      |                | 4                      |       | 59                       |       | + 55 DU                                     |
| No. of low- to moderate-income units          | 0                      |                | 0                      |       | 11                       |       | + 11 DU                                     |
| Gross floor area (sq. ft.)                    | 6,906                  |                | 2,400                  |       | 60,875                   |       | + 58,475 gsf                                |
| Commercial                                    | YES                    | NO             | YES                    | NO    | YES                      | NO    |   |
| If "yes," specify the following:              |                        |                |                        |       |                          |       |   |
| Describe type (retail, office, other)         | Gas station<br>Office  |                | Gas station<br>Offices |       | Retail<br>Office         |       | - Gas station<br>+ Retail space<br>+ Office |
| Gross floor area (sq. ft.)                    | 2,260                  |                | 6,766                  |       | 7,026                    |       | + 260 gsf                                   |
| Manufacturing/Industrial                      | YES                    | NO             | YES                    | NO    | YES                      | NO    |   |
| If "yes," specify the following:              |                        |                |                        |       |                          |       |   |
| Type of use                                   |                        |                |                        |       |                          |       |   |
| Gross floor area (sq. ft.)                    |                        |                |                        |       |                          |       |   |
| Open storage area (sq. ft.)                   |                        |                |                        |       |                          |       |   |
| If any unenclosed activities, specify:        |                        |                |                        |       |                          |       |   |
| Community Facility                            | YES                    | 🖂 NO           | YES                    | 🛛 NO  | YES                      | 🖂 NO  |   |
| If "yes," specify the following:              |                        |                |                        |       |                          |       |   |
| Туре  |                        |                |                        |       |                          |       |   |
| Gross floor area (sq. ft.)                    |                        |                |                        |       |                          |       |   |
| Vacant Land                                   | YES                    | 🛛 NO           | YES                    | 🖂 NO  | YES                      | 🖂 NO  |   |
| If "yes," describe:                           |                        |                |                        |       |                          |       |   |
| Other Land Uses                               | YES                    | NO             | YES                    | NO    | YES                      | NO NO |   |
| If "yes," describe:                           |                        |                |                        |       |                          |       |   |
|   |                        |                |                        |       |                          |       |   |
| Garages                                       | YES                    | NO             | YES                    | NO    | YES                      | NO    |   |
| If "yes " specify the following:              | TLS                    |                | TES                    |       | TES                      |       |   |
| No. of public spaces                          |                        |                |                        |       |                          |       |   |
| No. of accessory spaces                       |                        |                |                        |       |                          |       |   |
| Lots  | X YES                  | NO             | X YES                  | NO    | YES                      | X NO  |   |
| If "yes" specify the following:               |                        | 110            |                        | 110   | TES                      |       |   |
| No. of public spaces                          |                        |                |                        |       |                          |       |   |
| No. of accessory spaces                       | 10                     |                | 10                     |       | 3                        |       | 16  |
|   | 19                     |                | 19                     |       | 5                        |       | - 10  |
| ZONING<br>Zoning elessification               | M1.2                   |                | M1.2                   |       | D7A/C2 4                 |       |   |
| Zonnig classification                         |                        |                | 1VI1-2                 |       | N/A/C2-4                 |       |   |
| Maximum amount of floor area that can be      | 2.0 Commercial /       |                | 2.0 Commercial /       |       | 4 6 Residential          |       | 1 6 Pasidantial                             |
| developed                                     | 4.8 Community Facility |                | 4.8 Community Facility |       | 2.0 Commercial.          |       | + 4.0 Residential                           |
| Predominant land use and zoning               | Residential.           |                | Residential.           |       | Residential.             |       | Residential                                 |
| classifications within land use study area(s) | Commercial.            |                | Commercial.            |       | Commercial,              |       | Commercial.                                 |
| or a 400 ft. radius of proposed project       | Industrial             |                | Industrial             |       | Industrial               |       | Industrial                                  |

#### **Analysis Framework and Increment**

For analysis purposes, the Future With-Action Scenario consists of three development sites identified above. The increment between the No-Action and the With-Action scenarios consists of a net increase of 58,475 gsf of residential space (55 DUs), a net increase of 260 gsf of commercial space, and a net decrease of 16 private, non-accessory parking spaces.

Based on an estimated 12-month approval process and a 24-month buildout period, the analysis year will be 2021.

# 895 BEDFORD AVENUE REZONING ENVIRONMENTAL ASSESSMENT STATEMENT (EAS)

#### INTRODUCTION

Based on the analysis and screens contained in the Environmental Assessment Statement Short Form, the analysis areas that require further explanation include land use, zoning, and public policy; shadows; historic and cultural resources; urban design and visual resources; hazardous materials; air quality; noise; and neighborhood character.

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

### **Introduction**

The analysis of land use, zoning and public policy characterizes the existing conditions of the Development Site and the surrounding study area; anticipates and evaluates those changes in land use, zoning and public policy that are expected to occur independently of the proposed project; and identifies and addresses any potential impacts related to land use, zoning and public policy resulting from the project. Various sources have been used to prepare a comprehensive analysis of land use, zoning and public policy characteristics of the area, including field surveys, studies of the neighborhood, census data, and land use and zoning maps.

The proposed action involves the mapping of an R7A/C2-4 district in place of an existing M1-2 district to facilitate the proposed construction of a mixed-use building on the Development Site. Four additional properties would be rezoned as a result of the proposed actions, three of which are anticipated for redevelopment as a result of the proposed actions.

### Land Use, Zoning, and Public Policy Study Area

In order to assess the potential for project-related impacts, a study area has been defined that includes the area located within 400 feet of the Project Area. This 400-foot area is the area within which the proposed actions have the potential to affect land use, land use trends, zoning, or public policy. The study area is generally bounded by Myrtle Avenue to the north, Walworth Street to the east, midblock between Dekalb Avenue and Willoughby Avenue to the south, and Skillman Street to the west. (See Figure 1, Site Location.)

#### Land Use

### **Existing Conditions**

The Project Area is located in the northwest section of the Bedford-Stuyvesant neighborhood of Brooklyn Community District 3. The Project Area includes all or part of

seven lots (Block 1750; Lots 44, 46, 47, 49 and p/o 1, 24, 48) located along the southern end of a Block 1750 near the intersection of Bedford and Willoughby Avenues in the Bedford-Stuyvesant neighborhood of Brooklyn Community District #3.

These parcels combined contain a total lot area of approximately 16,000 square feet with frontage along three streets: 80 feet along the east side of Bedford Avenue; 200 feet along the north side of Willoughby Avenue; and 78 feet along the west side of Spencer Street. Bedford Avenue is classified as a wide street with 80 feet in width, while Willoughby Avenue and Spencer Street are classified as narrow streets, with less than 75 feet in width. The Project Area is zoned M1-2.

The applicant-controlled Development Site (Projected Development Site 1, Block 1750, Lots 1 and 49) contains a total of 8,360 sf and has 80 feet of frontage on Bedford Avenue and 100 feet of frontage on Willoughby Avenue. Lot 1 has an area of 7,280 sf and is in use as a gas station with a one-story building containing 1,260 sf (FAR 0.17). Lot 49 has an area of 1,080 sf. It is adjacent to Lot 1 and is paved for use as additional parking and storage area for the gas station on Lot 1.

Projected Development Site 2 (Block 1750, Lots 46 and 47) contains a total lot area of 3,120 sf and has 40 feet of frontage on Willoughby Avenue. Lot 46 has an area of 1,560 sf and is developed with a two-story residential building containing two dwelling units. The building has an area of 1,200 sf (FAR 0.77). Lot 47 also has an area of 1,560 sf and is developed with a two-story residential building. The building has an area of 1,200 sf (FAR 0.77). The buildings on Lots 46 and 46 are legally nonconforming, as they were constructed in approximately 1910 and have been occupied with residential use since that time.

Projected Development Site 3 (Block 1750, Lot 48) has an area of 2,000 sf and has 20 feet of frontage on Willoughby Avenue. Lot 48 is developed with a four-story building containing ground floor commercial space, three residential units, and three indoor accessory parking spaces. The building has a floor area of 5,506 sf (FAR 2.75). The building was constructed in 2001 for commercial use. No BSA or zoning documents are on file that confirm the legality of the residential units, so it is assumed they are not legally conforming.

Lot 44 has an area of 3,120 square feet and is developed with a six-story building containing commercial offices, community facility space (offices and religious use), and one indoor parking space. Per public records, the building has a floor area of 21,216 sf with an FAR of 6.8.

The area surrounding the Project Area is characterized by residential, office, commercial, and light manufacturing. Residential uses are found along Franklin and Skillman Avenue. Light manufacturing uses are found east of the Development Site, along Spencer and Walworth Street, and are interspersed by multifamily elevator residential buildings. There are some vacant lots and public facilities scattered also around the Project Area. The largest

public facility is an alcohol treatment center located at the corner of Myrtle Avenue and Walworth Street.

Northwest of the development site can be characterized with multifamily residential apartment buildings. To the northeast of the development site are a number of manufacturing and public facilities uses. The tallest manufacturing use structure rises to four stories. A large multi-family elevator building occupies the northeast corner of the subject block (Block 1750, Lot 24). The building appears to have been a residential conversion from manufacturing use. At the base of that building is a supermarket.

(See Figure 3, Land Use Map.)

## **No-Action Conditions**

Absent the proposed actions, it is assumed that Lot 48 within the Project Area (Projected Development Site 3) would convert the residential units to conforming commercial use. Thus, the future no-action scenario on Lot 48 is a commercial building containing 5,506 sf.

The remaining lots within the Project Area are anticipated to remain in their existing conditions, as described above.

## With-Action Conditions

In the future with the proposed actions, the Project Area is anticipated for redevelopment, with the exception of Lot 44. Block 1750, Lot 44, was not identified as a soft site. The building on this property is a recent construction (Final Certificate of Occupancy #320714438F granted in August 2015) that occupies the entire development potential on the lot, and as such is not anticipated for redevelopment in the With-Action Condition. The RWCDS for the rest of the project area is defined below.

## Applicant-controlled area

In the future with the proposed actions, the applicant proposes a mixed-use building on Lots 1 and 49 (Projected Development Site 1). Since the proposed development on the Project Site maximizes the available floor area under the proposed R7A/C2-4 district (proposed FAR of 4.59 where 4.60 is permitted), the proposed development constitutes the most conservative development program to be considered for the With-Action scenario.

Lots 1 and 49 (**Projected Development Site 1**, proposed zoning R7A/C2-4) are proposed for redevelopment with a 7-story (with cellar) residential building with ground-floor commercial space, containing 46,608 gross square feet of floor area (38,427 zoning square feet, 4.59 FAR). The building would contain 42,082 gsf (33,901 zsf, FAR 4.06) of residential floor area (42 DUs, assuming 1,000 gsf per DU) and 4,526 gsf (4,526 gsf, FAR 0.54) of commercial space on the ground floor. Because the MIH option has not been chosen, CEQR analyses will assume 20 percent affordability at 80 percent Area Median Income (AMI). Thus, the RWCDS considers 8 affordable DUs and 34 market-rate DUs. The

RWCDS building height is 95 feet, the maximum height permitted under the proposed zoning.

No parking is proposed or required. Per ZR Section 25-251, parking is waived for affordable DUs within a Transit Zone. Per ZR Section 25-241, parking is required for 30 percent of market-rate DUs, and per ZR Section 25-261, parking requirements are waived for up to 15 spaces.

# Non-applicant controlled area

Lots 46 and 47 constitute **Projected Development Site 2** (proposed zoning R7A/C2-4). Together, the lots have an area of 3,120 sf. Under the With-Action scenario, Lot 46 and 47 would be merged. On the combined lots, 4.6 FAR of mixed-use development could occur, resulting in an 8-story (95-foot-high) building containing 15,787 gsf (14,352 zsf) of which 1,500 gsf (1,500 zsf) would be commercial space and 14,287 gsf (12,852 zsf) would be residential. Assuming 1,000 gsf per DU, the building would contain 14 DUs. Because the MIH option has not been chosen, the RWCDS assumes 20 percent affordability at 80 percent Area Median Income (AMI). Thus, the RWCDS considers 3 affordable DUs and 11 market-rate DUs. The RWCDS building height is 95 feet, the maximum height permitted under the proposed zoning.

No parking would be included on Projected Development Site 2 in accordance with the ZR Sections cited above under Projected Development Site 1.

Lot 48 constitutes **Projected Development Site 3** (proposed zoning R7A/C2-4). The proposed zoning would legalize the residential use in this currently mixed-use building. The 4-story (40-foot-high) building would retain its 5,506 gsf of floor area (5,506 zsf, FAR 2.75) and would contain 1,000 gsf of ground floor commercial space, three non-accessory parking spaces, and 4,500 gsf of residential space (3 DUs). Because the building would have fewer than 10 DUs, it is assumed that MIH will not apply on this site. Thus, the RWCDS considers and 3 market-rate DUs.

# Zoning

# **Existing Conditions**

The Project Area is zoned M1-2. The study area also includes areas zoned M1-5, R6B, and R7A, and R7A with C2-4 overlays.

M1 zoning districts are light industrial districts, often mapped as buffer zones between M2 and M3 districts and residential areas. M1 zoning districts permit Use Groups 4-14 and 16-17 and uses typically include woodworking shops, auto repair shops, and wholesale/storage facilities. These uses are usually located in one and two-story warehouse buildings. The M1-2 zoning district allows a maximum FAR of 2.0 for light manufacturing and industrial uses and allows an FAR of 4.8 for community facility uses. The maximum

building height is based on a sky-exposure plane, which begins 60 feet above the street line. The M1-5 zoning district allows a maximum FAR of 5.0 for light manufacturing and industrial uses and allows an FAR of 6.5 for community facility uses. The maximum building height is based on the sky-exposure plane, which begins 85' feet above the street line.

R6B zoning districts are often traditional row house districts, which preserve the scale and harmonious streetscape of neighborhoods of four-story attached buildings developed during the 19th century. The maximum FAR of 2.0 and the mandatory Quality Housing regulations also accommodate apartment buildings at a similar four- to five-story scale. The base height of a new building must be between 30 and 40 feet, and the maximum permitted height is 50 feet. Buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Off-street parking is required for 50 percent of dwelling units, and the parking must not be located in front of a building.

R7A districts permit a residential and community facility FAR of 4.0 and permits a base FAR of 3.45 with a maximum FAR of 4.6 pursuant to MIH. Residential and community facility Use Groups 1-4 are permitted in these districts. A maximum building height of 95 feet is permitted and off-street parking is required for 50 percent of market rate dwelling units.

The C2-4 zoning district is a commercial overlay that is mapped at a depth of 100 feet. C2-4 districts allow for a wide variety of commercial uses (Use Groups 5-9, 14) such as local retail, funeral homes and repair services. Within lower density residential zoning districts (R1 through R5) the maximum FAR of 1.0, whereas in denser residential districts (R6 through R10) the maximum FAR is 2.0. Parking requirements vary by use.

In October of 2012, the City Council adopted the Bedford-Stuyvesant North Rezoning (C 120294 ZMK, CEQR No. 12DCP156Y), which included zoning map and text amendments for an approximately 140-block are in the northern half of the Bedford-Stuyvesant neighborhood of Community District 3. The rezoning mapped contextual districts, established a new Enhanced Commercial District, and created a new zoning district (C4-4L). The associated citywide zoning text amendment established transparency requirements in R7D, R9D, and C4-5D districts. The rezoning sought to protect residential character of the area while reinforcing commercial corridors, allowing for residential growth, and creating opportunities and incentives for affordable housing development in certain areas.

The Bedford and Willoughby Avenue frontages of the Project Area are directly opposite blockfronts that were rezoned to R6B and R7A under the Bedford-Stuyvesant North Rezoning. The Proposed Action would map an R7A district to the north by 80 feet and add a commercial overlay to the Project Site.

## **No-Action Conditions**

In the future without the proposed action, the provisions of the existing M1-2 zoning district would continue to apply to the Affected Area.

No change would occur on the Development Site. As is noted above, the nonconforming residential use on Projected Development Site 3 is anticipated to convert to a conforming commercial use in accordance with the underlying M1-2 zoning.

The surrounding zoning districts within the immediate study area are expected to remain largely unchanged by the Project Build Year of 2021.

## With-Action Conditions

In the future with the proposed actions, an R7A/C2-4 district would be mapped along Willoughby Avenue between Bedford Avenue and Spencer Street at a depth of 80 feet. Additionally, a text amendment to Appendix F of the Zoning Resolution (ZR) is proposed to make the Project Area applicable as a Mandatory Inclusionary Housing (MIH) Area.

The Applicant feels the proposed zoning would more accurately reflect existing development within the Project Area, which is currently developed with residential and commercial buildings. It would provide opportunities for the creation of new housing, including market rate and affordable dwelling units, as well as new commercial retail space to that would increase investment in the surrounding area and improve the overall vibrancy of the neighborhood.

Table 4-1 provides a comparison of the uses and bulk regulations permitted under the existing/no action and proposed zoning districts.

The development proposed by the Applicant would not result in any non-conforming uses or non-complying developments, as the proposed development would comply with the proposed R7A/C2-4 zoning district.

The proposed rezoning action and the resulting proposed development are not expected to result in any significant adverse impacts or conflicts with the zoning in the study area.

|                                     | M1-2 (Existing and No                         | o-Action)         | R7A/C2-4 (Proposed)      |      |  |  |
|-------------------------------------|---|-------------------|--------------------------|------|--|--|
| Use Groups                          | 1-4   |                   | 1-9,14                   |      |  |  |
| Maximum FAR                         | Industrial                                    | 2.00              | Residential              | 4.00 |  |  |
|                                     | Community Facility                            | 4.80              | Community Facility       | 4.00 |  |  |
|                                     |   |                   | Commercial               | 2.00 |  |  |
| Maximum Height                      | Sky exposure plane be<br>60 feet above street | ginning<br>t line | 95 feet                  |      |  |  |
| Residential Parking<br>Requirements | n/a   |                   | 50% of market rate units |      |  |  |

Table 4-1: Comparison of Zoning Regulations: M1-2 and R7A/C2-4

# Public Policy

## **Existing Conditions**

Other than the Zoning Resolution discussed above, no other public policies apply to the Affected Area or the surrounding 400-foot radius study area. The Affected Area is not covered by any 197-a Community Development Plans, is not within any designated New York State Empire Zone or New York City Industrial Business Zone (IBZ), is not within the NYC Coastal Zone Boundary, and is not located within a critical environmental area, a significant coastal fish and wildlife habitat, a wildlife refuge, or a special natural waterfront area. The proposed action does not involve the siting or displacement of any public facilities.

## **No-Action Conditions**

In the future without the proposed action, any new development within the Project Area would continue to be governed by the provisions of the underlying R5 zoning district. No other public policy initiatives would pertain to the Project Area or to the 400-foot study area around the property by the project build year of 2021. In addition, no changes are anticipated to the zoning districts and zoning regulations or to any public policy documents related to the Affected Area or the surrounding study area by the project build year.

## With-Action Conditions

No impact to public policies would occur as a result of the proposed action. The proposed mixed-use development on the Development Site would be in accordance with the proposed zoning district. The inclusion of the MIH program will help bring much-needed low-income housing to this neighborhood of Brooklyn. The proposed zoning district would be consistent with zoning and bulk regulations in the study area.

# **Conclusion**

## Land Use

The Affected Area already contains a mix of residential, commercial, and light industrial properties. No significant adverse impacts related to land-use would occur as a result of the proposed rezoning.

No potentially significant adverse impacts related to land use are expected to occur as a result of the proposed action. Therefore, further analysis of land use is not warranted.

## Zoning

The Applicant feels the proposed zoning map amendment to R7A/C2-4 is appropriate given the context of the Project Area. The Development Site is located on a heavily-trafficked street in an area that is developed with both residential and commercial uses. The proposed zoning is similar to the zoning patterns of the 2012 Bedford-Stuyvesant North Rezoning, which established contextual R6 and R7 districts, as well as C4-4L districts. The Bedford and Willoughby Avenue blockfronts of the Project Area are directly opposite blockfronts that were zoned R6B and R7A under the Bedford-Stuyvesant North rezoning. Thus, the increase in height and FAR permitted by this proposal is consistent with what is already permitted in the area.

A zoning text amendment to designate the Affected Area a MIH-designated area will allow an increased FAR on the Development Site and will provide the Applicant with the ability to provide affordable dwelling units on-site. Through the MIH designation, the Applicant and all future owners will be required to provide a percentage of permanently affordable housing units.

No significant adverse impacts related to zoning are expected to occur as a result of the proposed action, and a further assessment of zoning is not warranted.

## **Public Policy**

In accordance with the stated public policies within the study area, the proposed action would be suitable for the Affected Area and the study area as a whole. No potential significant adverse impacts related to public policy are anticipated to occur as a result of the proposed action and further assessment of public policy is not warranted.

## 8. SHADOWS

## Introduction

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

According to the 2014 *CEQR Technical Manual*, a preliminary shadow screening is not required unless the project would include a net height increase or addition of at least 50 feet or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, sunlight-sensitive historic resource, or an important natural resource. A shadows screening is required for this project since the with-action scenario buildings on Projected Development Site 1 and 2 exceed 50 feet in height.

### **No-Action Scenario**

There would be no change in the built form of the Project Area in the future without the proposed action.

### With-Action Scenario

The proposed actions would result in the development of two buildings in the Project Area that would reach maximum heights of 95 feet and one building with a height of 40 feet. Based on *CEQR Technical Manual* guidelines, the longest shadow that any building would cast during the year (except within an hour and a half of sunrise or sunset which is not deemed to be of concern) is 4.3 times its height. Applying the 4.3 factor to the proposed maximum building height of 95 feet would result in a maximum shadow distance of approximately 408 feet.

## Preliminary Screening Assessment: Tier 1 Screening

As shown in Tier I shadow diagram, there are no sunlight-sensitive resources that are located within the maximum shadow distance from the Development Site.

Therefore, the proposed development would not result in significant adverse shadows impacts on any open space or other sunlight-sensitive resources.

## Conclusion

There will be no significant adverse shadow impacts.



## 9. HISTORIC AND CULTURAL RESOURCES

#### Introduction

The 2014 *City Environmental Quality Review (CEQR) Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks (NYCL); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed in the State/National Registers of Historic Places (S/NR) or contained within a district listed in or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHL); and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic/archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

#### Archaeological

The proposed project would involve construction potentially resulting in ground disturbance of a site that has not previously experienced extensive excavation. In a letter dated December 21, 2017, the New York City Landmarks Preservation Commission (LPC) stated that the Project Area has no archaeological significance. No further analysis is necessary and there will be no significant adverse impacts to archaeological resources.

#### Architectural

The structures that would be demolished as a result of the proposed action do not have historic or cultural significance. In a letter dated December 21, 2017, the LPC stated that the Project Area has no architectural significance. No further analysis is necessary and there will be no significant adverse impacts to architectural resources.

## **10. URBAN DESIGN AND VISUAL RESOURCES**

## Introduction

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

1. Projects that permit the modification of yard, height, and setback requirements; and

2. Projects that result in an increase in built floor area beyond what would be allowed 'asof-right'.

The Proposed actions are intended to facilitate the redevelopment of the Project Site (Block 1750, Lots 1 and 49) with a seven-story with cellar mixed use building containing ground floor retail space and residential units on the upper stories. The Reasonable Worst Case Development Scenario consists of a seven-story residential building with ground floor commercial space, containing 46,608 gsf (38,427 zsf, FAR 4.59). The building would contain 42,082 gsf (33,901 zsf, FAR 4.06) of residential floor area (42 DUs, assuming 1,000 gsf per DU) and 4,526 gsf (4,526 gsf, FAR 0.54) of commercial space on the ground floor. Because the MIH option has not been chosen, CEQR analyses will assume 20 percent affordability at 80 percent Area Median Income (AMI). Thus, the RWCDS considers 8 affordable DUs and 34 market-rate DUs.

Two soft sites are anticipated for redevelopment as a result of the proposed actions, as descried below under Future With-Action Conditions.

## **Existing Conditions**

The Project area is in the Bedford-Stuyvesant neighborhood of Brooklyn Community District #3. The proposed rezoning affects the southern frontage of Brooklyn Block 1750, on Willoughby Avenue between Bedford Avenue and Spencer Street. The Project Area includes all of part of seven lots (Block 1750; Lots 44, 46, 47, 49 and parts of Lots 1, 24, and 48).

These parcels combined contain a total lot area of approximately 16,000 square feet with frontage along three streets: 80 feet along the east side of Bedford Avenue; 200 feet along the north side of Willoughby Avenue; and 78 feet along the west side of Spencer Street. Bedford Avenue is classified as a wide street with 80 feet in width, while Willoughby Avenue and Spencer Street are classified as narrow streets, with less than 75 feet in width. The Project Area is zoned M1-2, which allows FAR 2.0 for industrial use and FAR 4.8 for community facility use.

Lots 1 and 49 are in use as a gas station with surface parking and a one-story building. The

building has a floor area of approximately 1,260 square feet (FAR 0.17). The two lots constitute the Applicant-controlled **Projected Development Site 1**.

Lot 44 has an area of 3,120 square feet and is developed with a six-story building containing commercial offices, community facility space (offices and religious use), and one indoor parking space. per public records, the building has a floor area of 21,216 sf with an FAR of 6.8.

Lot 46 has an area of 1,560 square feet and is developed with a two-story residential building containing two dwelling units (DUs). The building has a floor area of 1,200 square feet with an FAR of 0.77. The building is legally nonconforming, as it was constructed in approximately 1910 and has continuously been occupied with a residential use since that time period. **Projected Development Site 2** consists of Lots 46 and 47.

Lot 47 has an area of 1,560 square feet and is developed with a two-story residential building containing two dwelling units (DUs). The building has a floor area of 1,200 square feet with an FAR of 0.77. The building is legally nonconforming, as it was constructed in approximately 1910 and has continuously been occupied with a residential use since that time period. **Projected Development Site 2** consists of Lots 46 and 47.

Lot 48 has an area of 2,000 square feet and is developed with a four-story building containing ground floor commercial space, three residential units, and three indoor accessory parking spaces. The building has a floor area of 5,506 square. The building was constructed in 2001 for commercial use. No BSA or zoning documents are on file that confirm the legality of the residential units, so it is assumed they are not legally conforming. Lot 48 constitutes **Projected Development Site 3**.

## **Future No-Action Condition**

In the future without the proposed actions, no changes are anticipated to occur within the project area.

### **Future With-Action Condition**

In the future with the proposed actions, **Projected Development Site 1** would be redeveloped with a seven-story residential building with ground floor commercial space, containing 46,608 gsf (38,427 zsf, FAR 4.59). The building would contain 42,082 gsf (33,901 zsf, FAR 4.06) of residential floor area (42 DUs, assuming 1,000 gsf per DU) and 4,526 gsf (4,526 gsf, FAR 0.54) of commercial space on the ground floor. The building will rise to a maximum rooftop height of 95 feet.

In the future with the proposed actions, Lot 46 and 47 would be merged into a single, 3,120 sf lot, **Projected Development Site 2**. On the combined lots, 4.6 FAR of mixed-use development could occur, resulting in an 8-story (95-foot-high) building containing 15,787 gsf (14,352 zsf) of which 1,500 gsf (1,500 zsf) would be commercial space and 14,287 gsf

(12,852 zsf) would be residential. Assuming 1,000 gsf per DU, the building would contain 14 DUs. The projected building height is 95 feet, the maximum height permitted under the proposed zoning.

Lot 48 constitutes **Projected Development Site**. The proposed zoning would legalize the residential use in this currently mixed-use building. The 4-story (40-foot-high) building would retain its 5,506 gsf of floor area (5,506 zsf, FAR 2.75) and would contain 1,000 gsf of ground floor commercial space, three non-accessory parking spaces, and 4,500 gsf of residential space (3 DUs).

The Applicant's proposed building, as well as any development occurring on the projected development sites, would adhere to the underlying floor area, yard, height, and setback regulations of the proposed zoning district. As shown in the attached streetscape diagrams, the buildings resulting from the proposed actions would not be out of scale with existing development in the study area. As shown in the enclosed streetscape diagrams, the building directly opposite of the project area on Willoughby Ave (occupying the entire blockfront between Bedford Avenue and Spencer Street) is a bulky, 7-story building with a height of approximately 70 feet and a FAR of 5.51. Southeast of the project area at the corner of Spencer Street and Willoughby Avenue is a large, 5- and 6-story residential building.

The Applicant feels the proposed zoning map amendment to R7A/C2-4 is appropriate given the context of the area. The project area is adjacent to a busy street, Bedford Avenue, a major thoroughfare that spans Brooklyn from north to south. Commercial overlays are common along Bedford Avenue, including almost the entire frontage between Fulton Street and DeKalb Avenue (one block south of the project area). Many of the blocks surrounding the project area and study area are zoned R6B and R7A. Thus, the increase in height and FAR plus the allowance of residential use permitted by the proposed actions is consistent with existing development and development controls in the area. The rezoning would bring the project area's development pattern in close conformance with other blocks in the area.

## Conclusion

There are no visual resources, open spaces, or natural features in the project area that could be affected by the proposed actions. The proposed zoning is consistent in scale and use with the surrounding area, and there will be no significant adverse effects relating to urban design or visual character.



1. View of the Site facing northeast from the intersection of Bedford Avenue and Willoughby Avenue.



3. View of Bedford Avenue facing south (Site at left).



2. View of the Site facing southeast from Bedford Avenue.





4. View of the west side of Bedford Avenue facing northwest from the Site.



6. View of the sidewalk along the east side of Bedford Avenue facing north (Site at right).



5. View of the sidewalk along the east side of Bedford Avenue facing south (Site at left).





7. View of Willoughby Avenue facing east from Bedford Avenue (Site at left).



9. View of the intersection of Willoughby Avenue and Bedford Avenue facing southwest from the Site.



8. View of Bedford Avenue facing north from Willoughby Avenue (Site at right).





10. View of the sidewalk along the north side of Willoughby Avenue facing east (Site at left).



12. View of the north side of Willoughby Avenue between Bedford Avenue and Spencer Street facing northeast.



11. View of the Site facing northwest from Willoughby Avenue.





13. View of the south side of Willoughby Avenue facing southeast from the Site.



15. View of the intersection of Willoughby Avenue and Spencer Street facing northwest.



14. View of the sidewalk along the north side of Willoughby Avenue facing west (Site ahead, on right).





16. View of Spencer Street facing north from Willoughby Avenue.



18. View of the intersection of Willoughby Avenue and Spencer Street facing southeast.



17. View of Willoughby Avenue facing west from Spencer Street.





19. View of the sidewalk along the west side of Spencer Street facing north from Willoughby Avenue.



21. View of the west side of Spencer Street facing southwest towards Willoughby Avenue.



20. View of the sidewalk along the west side of Spencer Street facing south towards Willoughby Avenue.





22. View of Spencer Street facing south towards Willoughby Avenue.



24. View of the east side of Spencer Street between Willoughby Avenue and Dekalb Avenue facing southeast.



23. View of the east side of Spencer Street between Myrtle Avenue and Willoughby Avenue facing northeast.



Bedford Avenue facing north (Site at right)



# 

**No-Action Scenario** 

With-Action Scenario Projected Development Site 1

## Bedford Avenue facing north (Site at right)

Willoughby Avenue facing east (Site at left)



#### Willoughby Avenue facing east (Site at left)



No-Action Scenario

With-Action Scenario Projected Development Sites 1, 2 & 3 Willoughby Avenue facing east (Site at left)



#### Willoughby Avenue facing east (Site at left)



No-Action Scenario

With-Action Scenario Projected Development Sites 1, 2 & 3

#### Willoughby Avenue facing west (Site at right)





No-Action Scenario

With-Action Scenario Projected Development Sites 1, 2 & 3

#### Willoughby Avenue facing west (Site at right)

# **12. HAZARDOUS MATERIALS**

# Introduction

A hazardous materials assessment is conducted to determine 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.

This section examines the proposed action's potential to cause a significant adverse hazardous materials impact by leading to redevelopment or other activities that could expose people to hazardous materials, either by introducing land uses that would involve the use or storage of such materials or by increasing pathways to exposure to existing hazardous materials that contaminate portions of the proposed rezoning area as a result of current or past activities. A hazardous material is any substance that poses a threat to human health or the environment; such substances typically include heavy metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, dioxins, and other toxic, corrosive, or flammable waste products of industrial or other processes. Manufacturing operations, automotive repair shops, gasoline service stations, dry cleaners, exterminators, chemical laboratories, junk yards, solid waste transfer stations, welding shops, and printers are among those land uses that may be associated with subsequent hazardous materials contamination of soil or groundwater, as well as any land use with underground fuel storage tanks.

A Phase I Environmental Site Assessment (ESA) was conducted at Projected Development Site 1 in August 2014. Based on the findings of the Phase I ESA, a Phase II subsurface investigation was conducted on the site in May 2015.

## Site Description

The Site consists of two contiguous parcels of land located in a mixed-use neighborhood consisting of commercial and residential properties. The extent of the Site is approximately 0.17 acres and is situated at the northeast corner of the intersection of Willoughby Avenue of Bedford Avenue, in Brooklyn, Kings County, New York. According to the Property Detail Report obtained from CoreLogic RealQuest, the Site has been assigned the New York City (NYC) Tax Map Designation: Block 1750, Lots 1 and 49 and is categorized as G4 (Gas station with enclosed workshop).

The Site is currently occupied by a Shell retail gasoline service station with automobile repair facilities. The Site is developed with a one-story commercial building of concrete block and brick construction with a slab-on-grade foundation that has an approximate footprint of 1,260 square feet (sf). According the New York City (NYC) Department of

Building (DOB) records, a new building permit was issued for the Site in 1966, and a Certificate of Occupancy for the

Site indicates the building was completed in August 1967. The building houses a small convenience store at the south end and two automobile repair/service bays at the northern portion of the building. The building is serviced via natural gas, and sanitary waste is discharged to the NYC combined sewer system.

A self-service car washing station is located on the south side of the building and a vehicle storage area is located on the east side of the building. Two multi-product fuel dispensers are situated on islands located beneath a canopy on the west portion of the Site. Three underground storage tanks (USTs) are located south of the building and consist of two 8,000-gallon USTs containing gasoline and one 6,000-gallon UST containing diesel fuel.

A review of historic records, documents and maps indicate that auto repair and/or retail gasoline distribution operations have historically occurred, and are part of current operations at the Site. Past generations of USTs are documented for the Site.

## Phase I ESA Findings and Recommendations

The Phase I ESA identified several Recognized Environmental Concerns (RECs) and recommended that a subsurface investigation be conducted:

- Based on available historical and storage tank records for the Site, the first generation of fifteen (15) USTs were installed on the west and northwest portion of the Site circa 1935. There is no documentation available in regard to the removal and/or potential impacts to the environmental quality of the Site from the first generation of USTs. Frequently, abandoned USTs and associated subsurface piping are found at gasoline service station properties during investigations and site upgrade or redevelopment work. These abandoned USTs and associated piping can contain petroleum products with hazardous characteristics and can also be an unknown source for a release at a site. This represents a REC and a remote sensing survey is recommended to investigate the potential presence of said USTs. In addition, it is recommended that a subsurface investigation be performed to determine if the Site has been adversely impacted.
- The second generation of thirteen (13) USTs were reportedly installed on the south portion of the Site in 1967, and were removed in 1997 when the third and current generation of active USTs were installed. During removal of the second generation of thirteen (13) USTs, impacted soil was encountered and NYSDEC Spill Number 9702834 was assigned to the Site. Excavation of 1,044 tons of contaminated soil was completed and the NYSDEC granted closure based on the analytical results of soil samples collected from three soil borings advanced to a terminal depth of 32 feet

BEG. Groundwater was not encountered in the soil borings; therefore, no groundwater samples were collected. This represents an HREC for the Site. Since groundwater was reportedly not evaluated as part of the UST closure investigation, there is the potential that groundwater quality of the Site has been impacted. Accordingly, a limited subsurface investigation should be performed on the Site to determine if the environmental quality of the site has been impacted.

- Two (2) adjacent 4-inch diameter polyvinyl chloride (PVC) pipes, one equipped with a cap labeled with "Warning Monitoring Well" were located at the southwest corner of this area, and are evidence of previous environmental site investigation work performed at the Site. No information regarding the installation of monitoring wells at the Site was found and no laboratory analytical data for groundwater was identified for the Site. This represents a REC for the Site, and a limited subsurface investigation which includes evaluation of groundwater quality should be performed.
- A review of the historical and environmental records for the Site revealed that • automobile servicing/repair operations have historically occurred possibly since 1935 and are currently being performed at the Site. In general, automotive repair facilities handle chemicals and generate hazardous waste through activities associated with common automotive repair activities such as replacement of automotive parts, cleaning and dismantling of engine and other vehicle components, and through regular vehicle maintenance where waste fluids are generated (e.g., used oil, anti-freeze, transmission fluid, brake fluid, etc.). These repair activities have the potential to introduce contaminants into the environment and subsurface media through accidental spills or leaks from containers, as well as through volatilization of the automotive repair solvents during regular handling activities. Additionally, floor drains located in service bays and storm water management drains, if historically present, could have conveyed improperly handled waste to the subsurface environment. The improper handling, management and disposal of automotive repair waste can account for environmental contamination at and around automotive repair shops. These wastes can pose a significant threat to human health and environment, if they are spilled or not properly managed and disposed. Environmental file review information indicates the past disposal of hazardous waste from the Site. This furthermore supports the recommendation for the above mentioned on-site investigative activities.
- Several off-site confirmed or potential contamination sources were identified to exist within the ASTM search radius and historical documents reviewed. The property to the southwest of the Site, across the intersection of Bedford Avenue and Willoughby Avenue, was identified as a coal yard from 1887 to 1904 and was a large service station that also offered painting and battery charging from approximately 1935 until at least 1965. Two USTs were identified at this facility, and where still identified on

the 1989 Sanborn Map covering this property. The property to the south across Willoughby Avenue was identified as a filling station with four tanks from 1950 until at least 1965 when it was listed as C&C Sunoco Service Station. An automotive repair facility was also identified on this property on the property to the east. The north adjoining property was identified as an auto repair facility from 1997 to 2013, and properties further north were identified as auto repair and auto body shops, neon sign manufacturer and auto accessories manufacturer. Furthermore, there are five (5) registered petroleum bulk storage facilities within 1/8 mile of the Site; thirteen (13) active NYSDEC Spill sites, two (2) of which are within 1/8 mile of the Site; and seventeen (17) hazardous waste generators located within 1/8 mile of the Site. There is the potential that the environmental quality of the Site has been impacted as a result of the migration of hazardous substances from adjoining or nearby properties through an unknown historical release(s) to the soil, groundwater and/or other media. This potential represents a recognized environmental condition. In light of the redevelopment plan for the site, it is recommended that a limited subsurface investigation be performed on the site to determine if the environmental quality of the site has been impacted by historic off-site operations.

### Phase II Findings and Recommendations

The Phase II included 1) advancement of twelve (12) soil borings, five of which were completed as monitoring wells; 2) collection of twenty-four (24) unsaturated soil samples soil samples for laboratory analysis: nine (9) soil samples collected from 0-2 feet below grade (BEG) interval, seven (7) soil samples collected from 8-10 feet BEG interval, two (2) soil samples collected from 5-10 feet BEG interval, one (1) soil sample collected from 10-15 feet BEG interval, one (1) soil sample collected from 35 feet BEG, one (1) soil sample collected from 35 feet BEG and two (2) soil samples collected from 30-35 feet BEG interval; 3) collection of five (5) groundwater samples from the five (5) newly installed monitoring wells for laboratory analysis; 4) installation of four (4) semi-permanent soil vapor points and the collection of four (4) soil vapor samples for laboratory analysis; and 4) conduct a groundwater elevation survey to determine groundwater flow direction.

As noted above, several RECs were identified in the Phase I ESA Report for the Site and included a potential vapor migration/intrusion issues resulting from activities associated with historic use of the Site as an automobile repair facility and retail gasoline service station; presence of historic fill material across the Site; and a release of petroleum hydrocarbons to soil and groundwater beneath the Site. The results of this Phase II ESA subsurface investigation are summarized as follows:

A remote sensing survey was performed over portions of the planimetric surface of the Site. The survey was performed to identify underground utilities and determine if UST(s) and/or other underground structures are still present on accessible areas of the Site. The entire paved area surrounding the existing building was surveyed. The analysis of the GPR survey data did not identify subsurface anomalies that may represent a former excavation for USTs.

- Soil vapor sampling results indicate that PCE was detected in soil vapor sampling points SV-1, SV-2, SV-3 and SV-4; and TCE was detected in soil vapor sampling point SV-1 at concentrations above the respective NYSDOH Indoor/Outdoor Air Guidance Values. Elevated VOC concentrations were detected in soil vapor samples SV-1 through SV-4.
- No final standards have been established for soil vapor by the USEPA, NYSDEC or NYSDOH. The purpose of the NYSDOH Indoor/Outdoor Air Guidance Values is to assist with decisions regarding efforts to reduce exposure to the chemicals. The concentrations of the TCE, PCE and VOCs detected require additional vapor monitoring or mitigation.
- Soil borings SB-6 and SB-7 were advanced to approximately 8 feet BEG inside the service bays near the underground hydraulic lifts. PCBs and metals were not detected above the NYSDEC Unrestricted Use SCOs in SB-6 and SB-7. SVOCs were detected however, they were below the NYSDEC Unrestricted Use SCOs.
- Soil samples collected from soil borings SB-1, SB-4, MW-4 and MW-5 at approximately 0-2 feet and 3 feet BEG contained metals (inclusive of heavy metals) above their respective NYSDEC Unrestricted Use SCOs which is indicative of the presence of historic fill material. Based on the samples collected from these soil borings at deeper intervals, the concentrations decreased or were not detected.
- Organochlorine pesticides were detected above the NYCRR Part 375 Unrestricted SCO in the soil samples collected from SB-1 (0-2 feet BEG) and from SB-1 (8-10 feet BEG). No organochlorine pesticides were detected in the other ten (10) soil samples collected above the NYCRR Part 375 Unrestricted SCOs. Chlorinated herbicides were not detected in any of the twelve (12) soil samples collected.
- PCBs were detected in soil boring SB-7 (8 feet BEG), however the concentration was below the NYCRR Part 375 Unrestricted SCO. PCBs were detected in MW-1 (0-2 feet BEG) for Aroclor 1242 and MW-5 (0-2 feet BEG) for Aroclor 1254 above NYCRR Part 375 Unrestricted SCOs. PCBs were not detected in the additional nine (9) soil samples collected.
- Arsenic, copper, lead, nickel, mercury and zinc were detected above the NYCRR Part 375 Unrestricted SCO in soil samples collected from soil borings SB-1, SB-3, SB-4, MW-4 and/or MW-5. Other metals were detected at concentrations below the NYCRR Part 375 Unrestricted SCOs the twenty-three (23) soil samples collected.
- Based on the analytical results from the soil samples collected from the Site, there appears to be petroleum hydrocarbons above standards in deeper soils from 30-35

feet BEG, in the vicinity of MW-1. Additional remedial investigation or remedial action for soil is recommended for the Site.

- The depth to groundwater at the Site is approximately 40 feet BEG. No LNAPL was detected in new monitoring wells MW-1 through MW-5 installed at the Site.
- Total VOCs were detected in MW-1 through MW-5 above NYSDEC AWQS for groundwater samples collected. Gasoline-related VOCs were detected in all the groundwater samples collected for 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, n-Butylbenzene, Ethylbenzene, n-Propylbenzne, o-Xylene, Toluene and p/m-Xylene above NYSDEC AWQS. In addition, solvent related VOCs, Tetrachlorethene (PCE) and Trichloroethene (TCE) were detected in groundwater samples collected from MW-1 through MW-5 above NYSDEC AWQS.
- Concentrations of total SVOCs were detected in MW-1 and MW-2; however, they were below NYSDEC AWQS. Total SVOCs were not detected in MW-3, MW-4 and MW-5 for groundwater samples collected.
- Chromium, lead and nickel were detected in MW-1 above NYSDEC AWQS for total metals. Manganese was detected in MW-1, MW-2, MW-3 and MW-5 above NYSDEC Groundwater Quality Standards for total and dissolved metals. Mercury was detected in MW-5 above groundwater standards for total metals.
- Based on the analytical data for groundwater samples collected from the Site, there does appear to have been a release of petroleum and solvent hydrocarbons that have adversely impacted the groundwater quality beneath the Site. Additional remedial investigation or remedial action for groundwater is recommended for the Site.
- A groundwater elevation survey was performed on the Site to determine groundwater flow direction. Based on the measured groundwater depths and survey data, groundwater was interpreted to flow in a northerly direction.

The analytical data gathered as part of the Phase II ESA investigation are sufficient to determine that releases and/or discharges to the subsurface environment of the Site have resulted from current and/or former retail gasoline distribution operations and the former automobile repair facility at the Site. Additionally, the presence of historic fill is indicated in shallow soil at the Site.

Since chemicals of concern are present at concentrations above NYSDEC standards or NYSDOH Guidelines, as applicable, the NYSDEC must be notified. Additional remedial investigation is warranted. As part of the Site redevelopment process, a remedial action work plan to address soil vapor, groundwater and soil contamination should be prepared and submitted to the NYSDEC and the New York City Department of Environmental Protection (NYCDEP) which may also involve installation of appropriate engineering controls (ECs) at the Site.
# **Conclusions and Recommendations**

An "E" designation for hazardous materials will be places on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property and the projected development sites. The "E" designations will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on the properties.

# Projected Development Site 1 (Applicant Site)

In order to avoid any potential impacts associated with hazardous materials, an "E" designation (E-491) will be assigned for hazardous materials on the following properties:

# Block 1750, Lots 1 and 49

The text for the "E" designation related to hazardous materials on Development Site 1 (E-491) is as follows:

A proposed remediation plan will be prepared and submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

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

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

# Projected Development Sites 2 and 3

Projected Development Sites 2 and 3 are not under the control or ownership of the Applicant and is not included in the proposed development plans for this project. An "E" designation (E-491) for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these properties. These applicant(s) should be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an "E" designation (E-491) will be assigned for hazardous materials on the following properties:

# Block 1750, Lots 46, 47, and 48

The text for the (E) designations (E-491) related to hazardous materials is as follows:

# Task 1-Sampling Protocol

The applicant will submit 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 nonpetroleum 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. With this "E" designation (E-491) in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Actions to result in significant adverse impacts related to hazardous materials on Projected Development Sites 2 and 3.

# **17.** TRANSPORTATION

The objective of the transportation analyses is to determine whether a proposed action is expected to have a significant adverse impact on traffic, parking, transit and pedestrian conditions. The proposed action involves the mapping of an R7A/C2-4 district in place of an existing M1-2 district to facilitate the proposed construction of a mixed-use building on the Development Site. Four additional properties would be rezoned as a result of the proposed actions, three of which are anticipated for redevelopment as a result of the proposed actions.

Based on the *CEQR Technical Manual* description in Table 16-1, the project site is located in Zone 3. The proposed action would add a total of 59 residential units and 7,026 gsf of local retail space to the project site.

Based on the CEQR Technical Manual (Table 16-1, Zone 3) and the weighted average screening equation, the total additional density or the proposed project, as detailed below, would be below one (1). Therefore, the proposed project would screen out and no detailed transportation analysis would be warranted per CEQR:

# 59/200 d.u. residential development + 7,026/15,000 gsf local retail = 0.295 + 0.4684 = 0.7634 < 1

Therefore, there would be no significant adverse impacts relating to transportation.

# 17. AIR QUALITY

#### I. INTRODUCTION

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

- The potential for changes in vehicular travel associated with proposed development activities to result in significant mobile source (vehicular related) air quality impacts.
- The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development to significantly impact nearby existing land uses.
- The potential for air toxic emissions released from existing industrial facilities to significantly impact the proposed development within 400 feet of the proposed development.
- The potential for significant air quality impacts from the emissions of existing HVAC systems with a 20 or more million Btu per hour (MMBtu/hr) design capacity to significantly impact the proposed development within 400 feet of the proposed development.
- The potential for significant air quality impacts from the emissions of facilities that require Prevention of Significant Deterioration permits (Title V), and facilities which require a state facility permit to significantly impact the proposed development within 1,000 feet of the proposed development.

#### The Project Area

The Project Area is located in the Bedford neighborhood of Brooklyn, Community District #3. Six lots are affected by the proposed action: The Projected Development Site 1 (Block 1750, Lots: 1 and 49), the Projected Development Site 2 (Block 1750, Lot 46 and 47), the Projected Development Site 3 (Block 1750, Lot 48), and the property at 391 Willoughby Avenue (Block 1750, Lot 44).

Lot 44, a commercial and office space, is a recently constructed six-story building. Therefore, this property is anticipated to remain in the future with the proposed actions, and thus will not be included in this EAS for analysis purposes.

The total anticipated development within the proposed rezoning area would consist of 66,466 gross square foot (gsf), containing 59 dwelling units, 7,026 gsf of commercial space, and 3 attendant parking spaces.

#### Projected Development Site 1 (Block 1750, Lots: 1, 49)

Projected Development Site 1, the Applicant owned property, located at 895 Bedford Avenue and 381 Willoughby Avenue would facilitate a mixed-use, predominantly residential, sevenstory (with cellar) building. The building reasonable worst-case development scenario (RWCDS) would facilitate a height of 95 feet with 46,608 gsf of floor area, of which 42,082 gsf are residential floor area accommodating 42 dwelling units, and 4,526 gsf are commercial floor area. The building's HVAC system would operate on natural gas.

#### Projected Development Site 2 (Block 1750, Lots: 46, 47)

Projected Development Site 2 located at 385 and 387 Willoughby Avenue would facilitate a mixed-use, predominantly residential, eight-story building. The building's RWCDS would facilitate a height of 95 feet and 14,352 gsf of floor area, of which 12,852 gsf are residential floor area accommodating 13 dwelling units, and 1,500 gsf are commercial floor area. The building's HVAC system would operate on natural gas.

#### Projected Development Site 3 (Block 1750, Lot 48)

Projected Development Site 3 located at 383 Willoughby Avenue is currently developed with a four-story, 45.55 feet tall<sup>2</sup>, residential building. The proposed zoning would legalize the residential use in this currently mixed-use building. Under the With Action scenario, the building would retain its 5,506 gsf of floor area and would contain 1,000 gsf of ground floor commercial space, three non-accessory parking spaces, and 4 dwelling units in 4,500 gsf of residential floor area

#### **Principal Conclusion**

A screening analysis for carbon monoxide and particulate matter associated with on-street traffic showed that a detailed analysis is not warranted. The project-generated traffic would be below the CEQR threshold.

The Projected Development Sites impacts associated with the boiler stack emissions (HVAC) on existing land uses concluded that fuel would need to be restricted to the exclusive use of natural gas in the HVAC systems of the Projected Development Sites 1 and 2. In addition, the minimum stack heights of these Projected Development Sites would need to be specified.

The Proposed Actions impacts associated with the boiler stack emissions (HVAC), project-onproject, required detailed analyses, The HVAC analysis concluded that fuel would need to be restricted to the exclusive use of natural gas in the HVAC systems of the Projected Development Sites and the minimum stacks' heights would need to be specified.

No major sources, facilities which require a state facility permit, and odor producing facilities were identified within 1,000 feet of the Project Area.

A field survey and online search identified 26 sites within 400 feet of the Project Area that could potentially require New York City Department of Environmental Protection (NYCDEP) operational permits. Four operational permits were acquired through the NYCDEP Clean Air Tracking System database; one for a gas station, one for an auto body spray booth and work station, one for a dry-cleaner, and one for a coffee roaster. The gas station is a development site and the dry-cleaning machine is non-vented. A screening analysis was conducted to estimate the air quality impact from the auto body shop and the coffee roaster emissions. No significant adverse air quality impacts were predicted from these industrial source emissions

<sup>&</sup>lt;sup>2</sup> https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh

to the Project Area.

#### II. AIR POLLUTANTS AND APPLICABLE STANDARDS/GUIDELINES

#### National Air Quality Standards

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants which are being of concern nationwide, and established threshold concentration based upon adverse effect on human health. The six pollutants and their characteristics are:

- Carbon Monoxide (CO) is mainly produced by motor vehicles from the incomplete combustion of gasoline. The impact of CO on the ambient air is analyzed next to roadways, intersections, parking lots, and parking garages vents as these locations are the most affected.
- Nitrogen Dioxide (NO<sub>2</sub>) is a main concern related to the burning of natural gas. Emitted NOx from the burning of fossil fuel gradually convert to NO<sub>2</sub> in a chemical reaction that is affected by ozone concentration and the presence of sunlight. In a micro scale analysis, buildings HVAC systems are analyzed for NO<sub>2</sub> impact.
- Ozone (O<sub>3</sub>) is formed by chemical reaction between hydrocarbons and nitrogen oxides and its impact is analyzed on a regional scale by monitoring stations.
- Lead (Pb) in the ambient air is monitored on a regional level. In a project scale analysis, impact due to Lead concentration levels are analyzed if a new source, such as lead smelters, is introduced into the environment or if a project is located next to a lead emitter.
- Particulate Matter emissions are associated with both stationary sources and mobile sources. Two sizes of particulate matters are analyzed: Inhalable Particles (PM<sub>10</sub>) and Fine Particulate Matter (PM<sub>2.5</sub>), where the subscript number refers to the diameter of the particulate matter in micrometers.
- Sulfur Dioxide (SO<sub>2</sub>) emission is principally associated with stationary sources that burn oil or coal.

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The relevant standards together with their health-related averaging periods are presented in Table 17-1.

| Pollutant                            | Averaging Period                      | National and State Standards |
|--------------------------------------|---------------------------------------|------------------------------|
| NO                                   | Maximum 1-Hour Concentration          | 0.10 ppm (188 μg/m³)         |
| $NO_2$                               | Annual Arithmetic Average             | 0.053 ppm (100 μg/m³)        |
| DM                                   | 24-Hour Concentration                 | 35 μg/m <sup>3</sup>         |
| <b>F</b> 1 <b>V</b> 1 <sub>2.5</sub> | Average of 3 Consecutive Annual Means | $12 \mu g/m^3$               |
| $PM_{10}$                            | Maximum 24-Hour Concentration         | 150 μg/m <sup>3</sup>        |

| T-1.1. 17 1 NL-1               | ···· Maula Chalas | A           | 01:1.   |
|--------------------------------|-------------------|-------------|---------|
| Tuble 17-1. INUTIONAL AIND INC | W YORK States     | Amoient Air | Quality |

#### NO<sub>2</sub> NAAQS

Nitrogen oxide  $(NO_x)$  emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The  $NO_x$  in these emissions are then gradually converted to  $NO_2$ , which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

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

Per the *CEQR TM*, a Tier 1 approach is initially applied, followed by a Tier 2 application of  $NOx/NO_2$  ratio of 80% to the NOx modeled concentration to determine whether violation of the NAAQS is likely to occur. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO<sub>2</sub> NAAQS were estimated.

#### New York State Standards

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the New York State Department of Environmental Conservation (NYSDEC) has established guidelines for maximum allowable concentration of "noncriteria pollutants," which are potentially toxic or carcinogenic pollutants. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations and are published in the DAR-1 AGC/SGC Table, where AGC/SGC refers to Annual and Short-term Guideline Concentrations. The most recent DAR-1 guidelines were created on July 14, 2016.

NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic or duration.

#### NYC Interim Guidelines

In addition to the NAAQS, the *CEQR TM* requires that projects subject to CEQR apply a PM<sub>2.5</sub> significant impact criteria (based on concentration increments). These criteria are called *de minimis* and they are more stringent than the NAAQS and the state standards as the criteria set a maximum increase of pollutant concentration that is below the national standard. If the estimated impacts of a proposed project are less than the *de minimis* criteria, the impacts are not considered to be significant. As outlined in the *CEQR TM*, PM<sub>2.5</sub> significant impacts are evaluated as follow:

- Predicted 24-hour maximum PM<sub>2.5</sub> concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average  $PM_{2.5}$  concentration increments greater than 0.3  $\mu g/m^3$  at any receptor location for stationary sources.

#### **Background Concentrations**

Determination of significant impact criteria is evaluated by adding the background

concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the project area.

Background concentrations of relevant criteria pollutants were obtained from the NYSDEC's annual report for 2017 at the nearest monitoring stations. Table 17-2 shows the background concentrations.

| Pollutant        | Averaging Period                      | Background<br>Concentration | Monitoring Station |
|------------------|---------------------------------------|-----------------------------|--------------------|
| NO               | Maximum 1-Hour Concentration          | 112.2 μg/m <sup>3</sup>     | Outcome College    |
| NO <sub>2</sub>  | Annual Arithmetic Average             | 30.3 μg/m <sup>3</sup>      | Queens College     |
| DM               | 24-Hour Concentration                 | 19.6 μg/m³                  | ILIC 126           |
| I 1VI2.5         | Average of 3 Consecutive Annual Means | $8.2 \mu g/m^3$             | JH5 126            |
| PM <sub>10</sub> | Maximum 24-Hour Concentration         | 35 μg/m <sup>3</sup>        | Queens College     |

Table 17-2. Background Concentration at the Queens College and JHS 126 Monitoring Stations(NYSDEC 2016 Report)

The *de minimis* criteria for  $PM_{2.5}$  was evaluated as described in the NYC Interim Guidelines and the concentration increment are presented below:

- 24-hour PM<sub>2.5</sub>7.7 μg/m<sup>3</sup>
- Annual PM<sub>2.5</sub>0.3 μg/m<sup>3</sup>

#### **III. MOBILE SOURCE ANALYSIS**

Projects may result in significant mobile source impacts when they create mobile sources of pollutants, change traffic pattern, or add new uses near mobile sources of pollutants. Per CEQR guidelines, a detailed analysis is conducted to predict whether the Proposed Actions could potentially have a significant adverse air quality impact if certain threshold criteria are met or exceeded, while proposed projects that do not meet or exceed the threshold criteria are not expected to have a mobile source impact. As such, projects that require a detailed analysis model the ambient air CO and  $PM_{10}/PM_2$  concentrations—the mobile source pollutants of concern—and compare the modeled concentrations with the applicable air quality standard.

#### Mobile Source Screen

Based on CEQR guidelines, if the vehicular trip generation associated with the Proposed Actions do not meet or exceed the threshold criterion cited in the *CEQR TM Table 16-1*, *Minimum Development Densities Potentially Requiring Transportation Analysis*, no significant adverse air quality associated with the project-generated traffic is expected. The predicted differences in the Future With No-Action and the Future With Action scenarios are presented in Table 17-3.

| Development Type                                    | CEQR<br>Threshold<br>Criteria | Proposed Project<br>Incremental Design<br>Capacity |
|---|-------------------------------|--|
| Residential (Number of New units)                   | 200                           | 59   |
| Local Retail (Number of Additional 1,000 gsf)       | 15                            | 7.0  |
| Community Facility (Number of Additional 1,000 gsf) | 25                            | 0  |
| Off-Street Parking Facility (Number of New Spaces)  | 85                            | 3  |

| <i>Table</i> 17-3. | Threshold    | Criteria | for Traffic | Air Oualitu           | Screen.  |
|--------------------|--------------|----------|-------------|-----------------------|----------|
| 10000 17 01        | 111100110101 | Criteriu |             | $2100 \times 1000000$ | 00100111 |

As seen in Table 17-3, the proposed project does not exceed any of the development thresholds cited in the *CEQR TM Table 16-1*. Therefore, mobile source assessment is not required, and no significant adverse air quality impacts are expected as a result of the Proposed Actions.

#### IV. PROJECTS HVAC SYSTEMS ANALYSIS

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

As outlined in the *CEQR TM*, the analysis of buildings' HVAC systems follows stationary sources methodology, and based on CEQR recommendations, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system boiler emissions can be significant. This CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

Per CEQR recommendations, Projected Development Sites 1 and 2 buildings heights are the RWCDS of 95 feet; Projected Development Site 3 would remain at its existing height of 45.55<sup>3</sup> feet (note that the building's certificate of occupancy show a 3-story, 29'-8" tall building). Figure 17-1 shows the proposed project.

<sup>&</sup>lt;sup>3</sup> https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh



Figure 17-1. The Projected Development Sites Plotted in Google Earth

#### Projected Development Site 3

Projected Development Site 3 is an existing 4-story building. The applicable rule for existing buildings, for the purpose of the air quality analysis, is the New York City Construction Code. The New York City Mechanical Code regulates HVAC systems burning fuels other than fuel gas. The New York City Fuel Gas Code regulates gas fired appliances. The Petroleum Bulk Storage registration does not list a fuel oil tank for this property, there is a gas vent visible on the roof on Google street view, and the Department of Building Schedule B documents show that gas fired hot water heaters, gas meters, and hot air furnaces were installed in 2001. However, it is possible that the building's HVAC system would be fueled by fuel other than fuel gas at the time of construction (or applicable date) of the other development sites. Therefore, both the New York City Mechanical Code and Fuel Gas Code were addressed.

Both the New York City Mechanical Code and Fuel Gas Code require a boiler flue to extend at least three feet above the roof ridge (chimneys serving appliances less than 600-degree Fahrenheit) and to be a minimum distance away from the nearest window as determined by the formula  $D = F^* \sqrt{A}$ ; where D is the minimum distance (in feet) required between chimney flue and nearest window, F is the value determined from the type of fuel used and the appliance heat served by the chimney, and A is the chimney free space, in square inches, of chimney flue space.

As outlined in sections 501.1.1 and 801.1.1 of the New York City Construction Code:

"Whenever a building is erected, enlarged, or increased in height so that any portion of such building, except chimneys or vents, extends higher than the top of any previously constructed chimneys or vents within 100 feet (30 480 mm), the owner of such new or altered building shall have the responsibility of altering such chimneys or vents to make them conform with the requirements of this chapter."

Since Projected Development Site 3 is within 100 feet of the other development sites, it would be the responsibility of these taller buildings (RWCDS) to alter the chimney of Projected Development Site 3. For all other purposes of the air quality analysis, Projected Development Site 3 is considered an existing building. Therefore, no screening analysis, nor detailed analysis is warranted.

#### **Screening Analysis**

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

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

The anticipated development within the proposed rezoning area (Projected Development Site 3 is an existing building) would consist of two buildings, each with its own separate natural gas fueled heat and hot water system. As such, screening analyses were performed for natural gas use and environmental designations added to specify use of natural gas only.

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

- 1. The Projected Development Site 1 impact on Projected Development Site 2 and vice versa (project-on-project).
- 2. The cumulative impact of the Projected Development Sites 1 and 2 on existing land uses that are at least 95 feet high (project-on-existing).

Per *CEQR TM*, the CEQR natural gas nomograph depicted on Figure 17-7 of the *CEQR TM Appendix* for a 30-foot stack height was applied (as the 30 feet curve height is closest to but not higher than the proposed stack height, as the CEQR screening procedure requires). This nomograph depicts the size of the development versus distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. As seen in Figure 17-1, Projected Development Site 3 abuts the other development sites, hence the distance between Projected Development Site 1 and Projected Development Site 2 is 20 feet, the width of Projected Development Site 3. As such, the screening analysis is not applicable and dispersion modeling analysis was conducted to estimate impacts from the stack emissions of the project-on-project scenario. Screening analysis was conducted for the project-on-existing screening analysis.



Figure 17-2. The Proposed Project - HVAC Screen Natural gas Nomograph.

Table 17-4 depict the heights and floor area of the proposed developments and the results of the screening analyses.

| Projected<br>Development<br>Site ID | Lot           | Building<br>Height<br>(ft.) | Heated<br>Area<br>(sq. ft.) | Screen<br>Distance<br>(ft.) | Receptor<br>Building (Site<br>ID or Block/Lot) | Receiving<br>Building<br>Distance<br>(ft.) | Pass/ Fail |
|-------------------------------------|---------------|-----------------------------|-----------------------------|-----------------------------|--|--|------------|
| Project-on-Project                  |               |                             |                             |                             |  |  |            |
| Site 1                              | 1, 49         | 95                          | 46,608                      | N.A.                        | Site 2   | < 30                                       | Fail       |
| Site 2                              | 46, 47        | 95                          | 14,352                      | N.A.                        | Site 1   | < 30                                       | Fail       |
| Project-on-Existing                 |               |                             |                             |                             |  |  |            |
| Site 1, Site 2                      | 1, 49, 46, 47 | 95                          | 60,960                      | 61                          | 1914/36  | 125  | Pass       |

Table 17-4. Screening Analysis Results.

The project-on-existing screening analysis show that detailed analyses would be required for any existing land uses that is 95 feet or higher and at a distance of less than 61 feet from the Projected Development Site 1 or 2. The nearest building of similar or greater height is the 9story residential building at 908 Bedford Avenue (Block1914, lot 36), and 125 feet from the Project Area. Figure 17-4 shows the Project Area distance to the 9-story residential building at 908 Bedford Avenue (Block1914, lot 36) as measured in the NYC Zoning and Land Use (ZoLa).



Figure 17-4. The Screening Analyses Distances measured in NYC ZoLa Map Application.

A seen in Figure 17-4, the existing land use at 908 Bedford Avenue is 125 feet from the Project Area. As such, the proposed project passes the CEQR screening analysis on existing land uses. Therefore, the emissions from the proposed project HVAC systems would not significantly impact any of the existing land uses, with E Designation in place.

# **Detailed Analysis**

Two dispersion modeling analyses were conducted to estimate the impacts from the buildings' stacks emissions: The Projected Development Site 1 impact on Projected Development Site 2 and vice versa. These analyses were conducted using the latest version of EPA's AERMOD dispersion model version 16216r. In accordance with CEQR guidance, these analyses were conducted assuming stack tip downwash, urban dispersion surface roughness length of 1.0 meter, elimination of calms, and with and without downwash effect on plume dispersion.

# **HVAC Emissions**

Emission rates were estimated as follows:

- The Development Site is expected to be heated by natural gas, emission rates of NOx and PM<sub>2.5</sub> were calculated based on annual natural gas usage corresponding to the gross floor area of the buildings, EPA AP-42 emission factors for natural gas combustion in small boilers, and gross heating values of natural gas (1,020 Btu per million cubic feet).
- PM<sub>2.5</sub> emissions from natural gas combustion accounted for both filterable and condensable particulate matter.

- The natural gas fuel usage factor (59.1 cubic foot per square foot per year) was used to estimate annual natural gas usage for residential use and was calculated by dividing the energy consumption rate of 60.3 thousand Btu/ft<sup>2</sup> by natural gas heating value of 1020 Btu/ft<sup>3</sup>.
- The natural gas fuel usage factor of 45.2 cubic foot per square foot per year was used to estimate annual natural gas usage for non-residential use per *CEQR TM Appendix* Table C25. Natural gas Consumption and Conditional Energy Intensity by Census Region for Non-Mall Building, 2003. w

Table 17-5 shows the Projected Development Sites NO<sub>2</sub> and PM<sub>2.5</sub> emission rates, both shortterm and annual. The diameter of the stacks and the exhausts' exit velocities were estimated based on values obtained from the NYCDEP "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million Btu per hour). Boiler sizes were estimated based on the assumption that all fuel was consumed during the 100-day (or 2,400 hour) heating season. The stack exit temperature was assumed to be  $300^{\circ}$ F (423°K), which is appropriate for boilers.

| Projected<br>Development<br>Site ID | Floor Area<br>Residential | Floor Area<br>CommercialNO2 Emission factor (2)PM2.5 Emission fg/secg/secg/sec |          | NO <sub>2</sub> Emission factor <sup>(2)</sup><br>g/sec |          | ssion factor <sup>(1)</sup><br>/sec |
|-------------------------------------|---------------------------|--|----------|---|----------|-------------------------------------|
|                                     | ft²                       | ft <sup>2</sup>  | 1-hour   | Annual  | 24-hour  | Annual                              |
| Site 1                              | 42,082                    | 4,526  | 1.41E-02 | 3.87E-03  | 1.07E-03 | 2.94E-04                            |
| Site 2                              | 12,852                    | 1,500  | 4.34E-03 | 1.19E-03  | 3.30E-04 | 9.04E-05                            |

Table 17-5. Estimated Short-term and Annual Emission Rates of Each Building

# HVAC Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2013-2017). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Meteorological data were combined to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs, and an Anemometer height of 9.4 meters was specified per Lakes Environmental Software Inc.

Per Lakes Environmental Inc.,  $PM_{2.5}$  special procedure which is incorporated into AERMOD calculates concentrations at each receptor for each year modeled, averages those concentrations across the number of years of data, and then selects the highest values across all receptors of the 5-year averaged highest values.

# HVAC AERMOD Setting

AERMOD calculates concentrations according to the dispersion option, pollutant and averaging time, and output specified in the model, where the model is capable of handling multiple sources in a single run. Each pollutant was modeled separately and two stacks, one for the short-term and the other for annual averaging times, were created. Each stack was placed in a different source group and AERMOD outputs concentration for each group is read from the output file.

In addition, all dispersion analyses used the calculated emission factors, Building Profile Input Program (BPIP) was run with the downwash effect enabled, and all models specified elevated terrain and the default urban roughness coefficient of 1.0 meter with a population of 2,000,000.

#### HVAC Stack and Receptor Locations

The New York City Building Code (Building Code) requires that a rooftop stack should be at least 10 feet away from the edge of the roof and at least 3 feet higher than the roofline. HVAC stacks were located on their building's highest level, 10 feet from the edge of the roof, and as close as possible to the receiving building. If the modeled pollutant concentration exceeded the significant impact criteria, the stack distance from the receiving building was increased, until the dispersion model showed no significant impact.

Receptors on the receiving building were placed all around the building envelope at 10 feet increments and6 feet above each floor level including the ground floor level.

#### **Results of Dispersion Analyses**

Result of the project-on-project HVAC  $NO_2$  and  $PM_{2.5}$  analyses are shown in Table 17-6. The reported results are the maximum predicted concentration of the with and without downwash effect on plum dispersion.

| Project<br>Development | Receptor Site             | 24-hr<br>PM <sub>2.</sub> | An<br>nua | 1-hr<br>NO <sub>2</sub> | Annual<br>NO <sub>2</sub> |
|------------------------|---------------------------|---------------------------|-----------|-------------------------|---------------------------|
| Site ID                |                           | μg/m³                     | µg∕m³     | μg/m³                   | μg/m³                     |
| Site 1                 | Site 2                    | 0.39                      | 0.02      | 128                     | 30.6                      |
| Site 2                 | Site 1                    | 0.12                      | 0.004     | 118                     | 30.4                      |
| Threshold Criteria     | μ <b>g/m</b> <sup>3</sup> | 7.7                       | 0.3       | 188                     | 100                       |

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

The results are compared with the 24-hour/annual  $PM_{2.5}$  significant impact criteria, and the 1-hour/annual NO<sub>2</sub> NAAQS. The  $PM_{2.5}$  impacts are less than the significant impact criteria for  $PM_{2.5}$  of 7.7 µg/m<sup>3</sup> and 0.3 µg/m<sup>3</sup>, respectively, and both the 1-hour and annual NO<sub>2</sub> concentrations estimated are less than the 1-hour and annual NO<sub>2</sub> NAAQS of 188 µg/m<sup>3</sup> and 100 µg/m<sup>3</sup>, respectively.

Therefore, with (E) Designations in place, the emissions of the proposed project HVAC systems would not significantly impact any of the other proposed project buildings.

#### (E) Designation

The HVAC analysis for the Proposed Action concluded that fuel would need to be restricted to the exclusive use of natural gas in the HVAC systems and stacks' heights would need to be specified.

The (E) Designation (E-491) language is as follows:

<u>Block 1750, Lots: 1 and 49 (Projected Development Site 1)</u>: Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water equipment and ensure that the HVAC and/or hot water equipment stack

is located at the highest tier or at least 98 feet above the grade to avoid any potential significant adverse air quality impacts.

<u>Block 1750, Lot 46 and 47 (Projected Development Site 2)</u>: Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water equipment and ensure that the HVAC and/or hot water equipment stack is located at the highest tier or at least 98 feet above the grade to avoid any potential significant adverse air quality impacts.

#### V. INDUSTRIAL AND MAJOR SOURCES

As outlined in the *CEQR TM*, projects that would introduce new uses near industrial sources, major sources, large sources, and odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers industrial sources within 400 feet of the Project Area and major sources, large sources, and odor producing facilities within 1,000 feet of the Project Area. These sources are categorized as follows:

Industrial sources are identified as commercial, industrial, or processing facilities that are likely to have NYC operational permits.

Major emission sources are identified as those sources located at Title V facilities that require Prevention of Significant Deterioration permits. In addition, and as outlined in the CEQR TM, HVAC systems with a 20 or more million Btu per hour (MMBtu/hr) design capacity are considered major sources.

Large emission sources are identified as sources located at facilities which require a State facility permit, such as solid waste or medical waste incinerators, co-generation facilities, and asphalt and concrete plants, or power generating plants.

Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

#### Land Survey Methodology

Information regarding potential emissions of toxic air pollutants from existing industrial sources within 400 feet of the Project Area, and emissions of air pollutants from existing major and large sources within 1,000 feet of the Project Area were developed using the following procedure:

A study area was developed that includes all industrial facilities with potential air toxic emissions located within 400 feet of the Project Area using ZoLa;

New York City's Open Accessible Space Information System Cooperative (OASIS), Google Street View, on-line searches, and land surveys were used to identify and categorize facilities;

A search was performed to identify permits listed in the EPA Envirofacts database in this study area; and

The New York City Department of Environmental Protection (DEP) online Clean Air Tracking System (CATS) was consulted to determine whether air emissions permits had been issued for any of the nonresidential zoned lots; and

A formal request was sent to the NYCDEP to review the current and expired status processing type permits identified in the NYCDEP online CATS database (with blocks and lot numbers).

#### **Study Result - Major and Large Sources and Odor Producing Facilities**

No existing large combustion sources, such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Project Area were identified. The only sites of interest were the Public School 54 (Block 1765, Lot 15) and the Control Electopolishing at 109 Walworth. However, the locations are not registered as Title V facilities or have a state facility permit, and the public-school boiler is smaller than 20 MMBtu/hour per DEP's CATS information system. As such, no analysis was warranted. In addition, no odor producing facility was identified within 1,000 feet of the Project Area. As such, no analysis was warranted.

A search of the EPA Envirofacts database identified three facilities that have operational permits within 400 feet of the Project Area. These are a gasoline service station at 895 Bedford Avenue (Block 1750, Lot 1), Kings County Auto Body at 168 Walworth Street (Block 1751, Lots: 37 and 41), and Atlantis Super wash center at 873 Bedford Avenue (Block 1750, Lot 11). These facilities were also identified in the NYCDEP database search and the emission from these facilities are discussed in the Industrial Source Toxic Air Emission.

#### Study Result - Industrial Sources Toxic Air Emission

The result of the study identified 26 commercial, industrial, or processing facilities that are likely to have NYC operational permits. The permits listed in Table 17-6 show operational permits and boiler permits, where industrial operational permits start with a "P", gasoline dispensing permits start with a "G", and boiler permits with a "C". A list of these facilities and the NYCDEP record search are presented in Table 17-7.

| Block | Lot | Address                  | Use  | Permits   |
|-------|-----|--------------------------|--|---|
|       | 1   | 895 Bedford Avenue       | Gas Station  | <b>Current –</b> GB003306 <sup>4</sup><br><b>Cancelled –</b> GA002597, GA003294 |
|       | 9   | 883 Bedford Avenue       | Auto Repair Shop   | No Record Found   |
|       | 10  | 881 Bedford Avenue       | Kitchen & bath<br>Showroom; residential on                 | No Record Found   |
| 1750  | 11  | 873 Bedford Avenue       | Laundromat & Restaurant                                    | <b>Current -</b> PB045105, CR854915, CR044416<br><b>Disapproved -</b> CR044416  |
|       | 24  | 692 Myrtle Avenue        | Maintenance Store,<br>Grocery Store, &<br>Stationary Store | <b>Cancelled –</b> PA012972, CA053991, CA178986,<br>CA603386, CA092185          |
|       | 49  | 381 Willoughby<br>Avenue | Electrical Contractors                                     | No Record Found <sup>5</sup>  |
| 1751  | 1   | 393 Willoughby<br>Avenue | Offices & Residential                                      | <b>Cancelled –</b> CA106682, CA246181   |
| 1751  | 3   | 165 Spencer Street       | Residential  | Cancelled - CA014091, CA083289  |
| 1751  | 6   | 157 Spencer Street       | New building under construction                            | Cancelled – PA022078  |

Table 17-7. Land Survey Results of Industrial Sources Within 400 Feet of the Project Area.

<sup>&</sup>lt;sup>4</sup> https://a826-web01.nyc.gov/DEP.BoilerInformationExt/

<sup>&</sup>lt;sup>5</sup> https://a826-web01.nyc.gov/DEP.BoilerInformationExt/

| Block       | Lot        | Address                  | Use  | Permits  |
|-------------|------------|--------------------------|--|--|
| 1751        | 10         | 141 Spencer St           | Artist Studios <sup>6</sup>                      | <b>Cancelled - PA045274, PA046588,</b><br>CA175680 |
| <u>1751</u> | <u>3</u> 5 | 156 Walworth Street      | MTA Trading Company                              | No Record Found                                    |
| 1751        | 37, 41     | 168 Walworth Street      | Auto Body Shop                                   | <b>Current -</b> PB017407, PB013906                |
| 1751        | 43         | 178 Walworth Street      | Lighting Company                                 | Cancelled – CA137384                               |
| 1752        | 1          | 409 Willoughby<br>Avenue | Van Blarcom Closures -<br>co-generation facility | No Record Found                                    |
| 1752        | 7          | 161 Walworth Street      | Van Blarcom Closures                             | No Record Found                                    |
| 1752        | 9          | 157 Walworth Street      | Van Blarcom Closures                             | No Record Found                                    |
| 1752        | 11         | 153 Walworth Street      | Van Blarcom Closures                             | No Record Found                                    |
| 1763        | 37         | 406 Willoughby           | Glass/Mirror Store and                           | No Record Found                                    |
| 1763        | 40         | 196 Walworth Street      | Recycling Center                                 | No Record Found                                    |
| 1763        | 42         | 200 Walworth Street      | Warehouse  | No Record Found                                    |
| 1763        | 44         | 204 Walworth Street      | Electrical Supply Store                          | No Record Found                                    |
| 1914        | 1          | 175 Skillman Street      | Auto Repair Shop &<br>Residential                | No Record Found                                    |
| 1914        | 21         | 674 Myrtle Avenue        | Medical Supply Store                             | <b>Current –</b> CR085516                          |
| 1914        | 39         | 910 Bedford Avenue       | Residential                                      | No Record Found                                    |
| 1914        | 46         | 926 Bedford Avenue       | Residential                                      | No Record Found                                    |
| 1928        | 33         | 177 Skillman Street      | Auto Repair Shop                                 | No Record Found                                    |
| 1928        | 34         | 187 Skillman Street      | Kitten Coffee                                    | Current - PB035711                                 |

The record search identified twenty-five permits from the NYCDEP. Sixteen permits were cancelled, and one was disapproved. Cancelled or disapproved permits are not current emission points. Permit GB003306, for a gas station facility, is Projected Development Site 1 (Block 1750, Lot 1 and 49) (permit might be registered to Lot 49); three other permits are for combustion (Block 1914, Lot 21 and Block 1750, Lot 11). Combustion type permits are treated as HVAC equipment of existing land uses, hence, no analysis is required. Per Van Blarcom Closures website, the company specializes in child resistant closure production and 90 percent of their manufacturing is a two piece plastic/plastic continuously threaded closure. The cogeneration stacks are 483 feet from the Project Area, and the facility does not have a NYC DEP permit. In addition, Van Blarcom Closures is not a Title V facility, nor does the facility has an Air State Facility permit.

The facilities with NYCDEP processing type permits that may result in potentially significant adverse air quality impacts are:

- Kings County Auto Body at 168 Walworth Avenue Permits: PB013906 and PB17407
- Kitten Coffee at 187 Skillman Street Permit: PB035711
- Atlantis Launder Center at 873 Bedford Avenue Permit: PB045105

<sup>&</sup>lt;sup>6</sup> <u>http://a810-bisweb.nyc.gov/bisweb/COsByLocationServlet?requestid=2&allbin=3048562</u>,

As presented in Tables 17-7, no other facility that is likely to emit toxics air was identified in the 400-foot study area.

#### Atlantis Launder Center

Atlantis Launder Center (Block 1750, Lot 11), a dry-cleaning facility, has an active operational permit for a non-vented, totally enclosed machine. The emission associated with this machine are non-vented, hence pollutants are not being emitted into the outside air Atlantis Launder Center. Therefore, no significant toxic air quality impacts are expected as a result of this operation to the proposed development.

#### Kings County Auto Body

Kings County Auto Body (Block 1751, Lots: 37 and 41) has two operational permits: PB013906 for an industrial spray booth, and PB017407 for a preparation deck station where cars are prepared for painting. The certificates situate the stacks 31 feet above grade and 6 feet above the roofline, and close to the north-west corner of lot 41, where this location can be seen in Google Earth, Figure 17-6. As such, the stacks are located 232 feet from the Project Area.

Figure 17-6. Kings County Auto Body's Stacks 230 feet from the Affectwed Area, as Seen in Google Earth



#### Preparation Deck Work Station (PB017407)

The contaminant listed in the certificate is NY075-00-0 which is particulate matter  $PM_{10}$ . The certificate indicates that work is performed 8 hours per day and 250 days per year and emissions are controlled by a filter with an 85 percent efficiency. The activity emission rates are displayed in Table 17-8.

| Table 17 9 Emission Date     | from the Work Station at  | Vince County Auto De | du as Listed in DD017407                |
|------------------------------|---------------------------|----------------------|---|
| 1 uule 17-0. Liilission Rule | jioni แน่ vvoik วันแบก นเ | Kings County Maio Do | иу из Цізіси III I DO17 <del>4</del> 07 |

| Contaminant         | Control Efficiency | Emission Rate | Emission Rate |
|---------------------|--------------------|---------------|---------------|
|                     | (Percent)          | (lb/hr)       | (lb/yr)       |
| Solids (NY075-00-0) | 85                 | 0.04          | 80            |

#### Industrial Spray Booth (PB013906)

The emission associated with PB0313906 operational permit is from an industrial spray booth operation with an activity rate of 6 hours per day and 250 day per year. The operation consumes 0.5 gallon per hour and 3 gallons in a maximum of 8 hour day. The coating is applied by an Air Atomizing Handgun and emission of solids are reduced by a custom filter with an 80 percent control efficiency.

The contaminants listed in the certificate are solids (NY identification number NY079-00-0) and solvents (NY identification number NY998-00-0). The activity emission rates are displayed in Table 17-9.

Table 17-9. Groups Emission Rates from the Spray Booth at Kings County Auto Body as Listed inPB030410

| Contaminant           | Control Efficiency<br>(Percent) | Emission Rate<br>(lb/hr) | Emission Rate<br>(lb/yr) |
|-----------------------|---------------------------------|--------------------------|--------------------------|
| Solids (NY079-00-0)   | 80                              | 0.065                    | 97.6                     |
| Solvents (NY998-00-0) | 0                               | 3.1                      | 4,650                    |

Conventional coatings—paints, varnishes, lacquers, sealers, stains, and water thinned paints—are comprises of compounds grouped into solids and volatile organic compounds (VOCs), which are mostly solvents. The coatings contain 30 to 85 percent solvents by volume and this amount is regulated by the EPA and NYSDEC. Per NYCDEP guidance and as outlined in the EPA AP-42, the analysis assumes that all VOCs are emitted. These two groups, VOC and solids, are discussed here:

In accordance with NYCDEP, emissions of solids are analyzed as  $PM_{10}$  and  $PM_{2.5}$ , and the particle size distribution was obtained from the EPA AP-42, Appendix B1, Page B.1-12, Particle Size Distribution Data and Sized Emission Factors for Selected Sources, Table 4.2.2.8 Automobile and Light-Duty Track Surface Coating Operations, Automobile Spray Booths. The emission rates are displayed in Table 17-10.

| Contaminant       | Permitted |          | Permitted Frac |            | Fraction of |        | Emission rate |  |  |  |
|-------------------|-----------|----------|----------------|------------|-------------|--------|---------------|--|--|--|
|                   | Emiss     | ion Kate | Particle Size  | Short-term |             | Annual |               |  |  |  |
|                   | lb/hr     | lb/yr    | Percent        | lb/hr      | g/s         | lb/yr  | g/s           |  |  |  |
| $PM_{10}$         | 0.65      | 97.6     | 46.7           | 3.04E-02   | 3.83E-03    | 45.6   | 6.56E-04      |  |  |  |
| PM <sub>2.5</sub> | 0.00      |          | 28.6           | 1.86E-02   | 2.34E-03    | 27.9   | 4.01E-04      |  |  |  |

Table 17-10. PM<sub>10</sub>/PM<sub>2.5</sub> Estimated Emission rate from Spray Booth

The mixture of different compounds, identified collectively as VOC, have no guideline values in the NYSDEC DAR-1 database and are composed of compounds of varying toxicities. As the composition of the coating substance was not included in the operational permit, a representative composition by percent weight was obtained from the 722-733 *Myrtle Avenue Brooklyn, NY EAS 16DCP177K,* an environmental assessment statement that analyzed the Kings County Auto Body spray booth emissions. As outlined in the EAS, contaminants listed in Material Safety Data Sheets (MSDS) of representative Sherwin-Williams auto body paints were used to produce representative quantities of solvents in a gallon of auto body paint. The ingredients that make up the representative paint, along with their Chemical Abstract Service (CAS) number, by percent weight and the hourly and annual emission rates are shown in Table 17-11.

| Contominant name             | CAENo      | Percent | 1-Hour   |          | Annual   |          |
|------------------------------|------------|---------|----------|----------|----------|----------|
| Containmant name             | CAS NO.    | Weight  | lb/hr    | g/s      | lb/yr    | g/s      |
| Acetone                      | 67-64-1    | 19%     | 5.89E-01 | 7.42E-02 | 8.84E+02 | 1.27E-02 |
| Methanol                     | 67-56-1    | 3%      | 9.30E-02 | 1.17E-02 | 1.40E+02 | 2.01E-03 |
| 2-Propanol                   | 67-63-0    | 5%      | 1.55E-01 | 1.95E-02 | 2.33E+02 | 3.34E-03 |
| Methyl Isobutyl Ketone       | 108-10-1   | 8%      | 2.48E-01 | 3.12E-02 | 3.72E+02 | 5.35E-03 |
| Toluene                      | 108-88-3   | 51%     | 1.58E+00 | 1.99E-01 | 2.37E+03 | 3.41E-02 |
| Isobutyl Acetate             | 110-19-0   | 18%     | 5.58E-01 | 7.03E-02 | 8.37E+02 | 1.20E-02 |
| 1-Methoxy-2-Propanol Acetate | 108-65-6   | 2%      | 6.20E-02 | 7.81E-03 | 9.30E+01 | 1.34E-03 |
| Dibutyl Phthalate            | 84-74-2    | 1%      | 3.10E-02 | 3.91E-03 | 4.65E+01 | 6.69E-04 |
| Talc                         | 14807-96-6 | 32%     | 9.92E-01 | 1.25E-01 | 1.49E+03 | 2.14E-02 |
| Titanium Dioxide             | 13463-67-7 | 7%      | 2.17E-01 | 2.73E-02 | 3.26E+02 | 4.68E-03 |
| Carbon black                 | 1333-86-4  | 2%      | 6.20E-02 | 7.81E-03 | 9.30E+01 | 1.34E-03 |

 Table 17-11. Contaminant Short-term and Annual Emission Rates from Spray Booth Operation as

 listed in 722-733 Myrtle Avenue Brooklyn, NY EAS 16DCP177K

#### Kitten Coffee (PB035711)

Kitten Coffee (Block 1928, Lot 34) has an active operational permit for a natural gas fired coffee roaster. The operation activity rate is 4 hours per day and 100 days per year. The contaminants listed in the certificate are NY075-00-0 which is particulate matter PM<sub>10</sub>, NY210-00-0 which is NOx, and Acetic Acid. Per the operational certificate, the coffee roaster is equipped with an afterburner which has a 98 percent control efficiency. The emission rates are displayed in Table 17-12.

| Table 17-12. Kitten | Coffee En | nission Rates   | from Coffee | Roasting O | peration as  | listed in | PB035711   |
|---------------------|-----------|-----------------|-------------|------------|--------------|-----------|------------|
| 14010 17 12, 101101 |           | 11001011 101100 |             | nononing O | permitten no |           | 1 00007 11 |

| Contaminant               | Control<br>Efficiency<br>(Percent) | Emission Rate (lb/hr) | Emission Rate (lb/yr) |
|---------------------------|------------------------------------|-----------------------|-----------------------|
| Particulates (NY075-00-0) | 98                                 | 1.0E-03               | 4.0E-01               |
| Nitrogen Oxide (NY210-00- | 98                                 | 1.0E-03               | 4.0E-01               |
| Acetic Acid (064-19-2)    | 98                                 | 1.0E-03               | 4.0E-01               |

Kitten Coffee, located at the south-west corner of Willoughby Avenue and Bedford Avenue, is 104 feet from the Project Area. Per the certificate, the stack is located at corner closest to the Project Area and the 10 inch stack is 20 feet above grade and 4 feet above the roofline.

#### Air Dispersion Analysis

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

As outlined in the CEQR TMAIR POLLUTANTS AND *APPLICABLE* STANDARDS/GUIDELINES section, the predicted concentrations are compared with the maximum allowable concentration. If the predicted concentrations are below the allowable maximum concentrations, no significant adverse air quality impacts are expected, else a detailed analysis using AERSCREEN or AERMOD dispersion models are performed. As such, the predicted concentration of PM10 and NO2 were compared with the NAAQS, the PM<sub>2.5</sub> concentration with the 24-hour and annual de minimis, and all other contaminants compared with the DAR-1 SGC and AGC threshold criteria. In addition, and as a conservative measure, the predicted concentrations of pollutants emitted by both facilities (NY075-00-0) were combined and the results compared with the relevant threshold criteria.

As the Kitten Coffee facility is 104 feet from the Project Area and Kings County Auto Body is 232 feet from the Project Area, the pre-tabulated concentrations corresponding to 100 and 230 feet were utilized. The pre-tabulated concentrations are displayed in Table 17-13.

| Table 17-13. CEQR TM Table 17-3 Industrial Source Screen | for 100 and 230 | feet from the Source |
|--|-----------------|----------------------|
|--|-----------------|----------------------|

| Facility Name          | Distance from Source<br>(ft) | 1-Hour<br>(μg/m³) | 24-Hour<br>(μg/m³) | Annual<br>(µg/m³) |
|------------------------|------------------------------|-------------------|--------------------|-------------------|
| Kitten Coffee          | 104 feet                     | 12,051            | 4,011              | 598               |
| Kings County Auto Body | 232 feet                     | 2,657             | 924                | 131               |

#### Air Dispersion Results

The short-term and annual maximum predicted concentrations of the 1 gram per second dispersion analyses were multiplied by the calculated emission rates, and the predicted concentrations compared with their respective threshold criteria. The results of the criteria pollutants are displayed in Table 17-14.

| Criteria<br>Pollutant<br>(Averaging<br>Time) | Source<br>(Certificate<br>Number) | Threshold<br>Standard | Predicted<br>Concentration<br>(μg/m³) | Background<br>Concentration<br>(µg/m³) | Total<br>Concentration<br>(μg/m³) | Threshold<br>Criteria<br>(μg/m³) |
|--|-----------------------------------|-----------------------|---------------------------------------|--|-----------------------------------|----------------------------------|
| NO <sub>2</sub> (1-Hour)                     | PB035711                          | NAAOS                 | 1.52                                  | 112.1                                  | 113.7                             | 188                              |
| NO <sub>2</sub> (Annual)                     | 1 20007 11                        | 1.1.1.20              | 3.44E-03                              | 30.3                                   | 30.303                            | 100                              |
| PM <sub>10</sub> (24-Hour)                   | PB035711                          | NAAOS                 | 0.51                                  | 35                                     | 43.7                              | 150                              |
| PM <sub>10</sub> (24-Hour)                   | PB013906                          | 1                     | 3.53                                  |  | 2007                              | 200                              |

Table 17-14. Criteria Pollutants Dispersion Analysis Results

| Criteria<br>Pollutant<br>(Averaging<br>Time) | Source<br>(Certificate<br>Number) | Threshold<br>Standard | Predicted<br>Concentration<br>(µg/m³) | Background<br>Concentration<br>(µg/m³) | Total<br>Concentration<br>(µg/m³) | Threshold<br>Criteria<br>(µg/m³) |
|--|-----------------------------------|-----------------------|---------------------------------------|--|-----------------------------------|----------------------------------|
| PM <sub>10</sub> (24-Hour)                   | PB017407                          |                       | 4.66                                  |  |                                   |                                  |
| PM <sub>2.5</sub> (24-<br>Hour)              | PB013906                          | de minimis            | 2.16                                  | N.A.                                   | 2.16                              | 7.7                              |
| PM <sub>2.5</sub> (Annual)                   | PB013906                          |                       | 0.053                                 | N.A.                                   | 0.053                             | 0.3                              |

As displayed in Table 17-14, the  $PM_{10}$  and  $NO_2$  predicted concentrations were compared with the NAAQS, and the  $PM_{2.5}$  compared with 24-hour and annual averaging time interim guidelines. The criteria pollutant analysis shows that all the criteria pollutants are within the NAAQS and NYSDEC Interim Guidelines.

The short-term and annual maximum predicted concentrations of the 1 gram per second dispersion analyses were multiplied by the calculated emission rates, and the predicted concentrations compared with the NYSDEC SGC/AGC guidelines where applicable (some contaminants do not have short-term guideline). The results of the non-criteria pollutants analysis are displayed in Table 17-15.

|                              | CACN       | 1-Hour            | Annual            | SGC      | AGC     |
|------------------------------|------------|-------------------|-------------------|----------|---------|
| Contaminant name             | CAS NO.    | μg/m <sup>3</sup> | μg/m <sup>3</sup> | μg/m³    | μg/m³   |
| Acetone                      | 67-64-1    | 197               | 1.66              | 180000.0 | 28000   |
| Methanol                     | 67-56-1    | 31.1              | 0.26              | 33000.0  | 4000.0  |
| 2-Propanol                   | 67-63-0    | 51.9              | 0.44              | 98000.0  | 7000.0  |
| Methyl Isobutyl Ketone       | 108-10-1   | 83.0              | 0.70              | 31000.0  | 3000.0  |
| Toluene                      | 108-88-3   | 529               | 4.47              | 37000.0  | 400     |
| Isobutyl Acetate             | 110-19-0   | 187               | 1.58              |          | 17000.0 |
| 1-Methoxy-2-Propanol Acetate | 108-65-6   | 20.8              | 0.18              | 55000.0  | 2000.0  |
| Dibutyl Phthalate            | 84-74-2    | 10.4              | 0.09              |          | 12.0    |
| Talc                         | 14807-96-6 | 332               | 2.80              |          | 4.8     |
| Titanium Dioxide             | 13463-67-7 | 72.6              | 0.61              |          | 24.0    |
| Carbon black                 | 1333-86-4  | 20.8              | 0.18              |          | 8.3     |
| Acetic Acid (Kitten Coffee)  | 064-19-2   | 1.52              | 0.003             |          | 60.0    |

Table 17-15. Non-Criteria Pollutants Dispersion Analysis Results

As displayed in Table 17-15, the predicted concentrations of the VOC pollutants emitted from the Kings County Auto Body and the Acetic Acid emitted from the coffee roaster of Kitten Coffee are below the NYSDEC SGC/AGC guidelines. Therefore, no significant toxic air quality impacts are expected as a result of the industrial sources emissions to the proposed development.

#### VI. CONCLUSION

Air quality analyses addressed mobile sources, stationary HVAC systems, and air toxics. The results of the analyses are summarized below.

- Emissions from project-related vehicle trips would not cause significant air quality impacts to receptors at the local or neighborhood scale;
- Emissions from project-related heating, ventilation, and air conditioning systems (HVACs) would not cause significant air quality impacts to receptors at the local scale with (E) Designations (E-491) in place.
- No significant air quality impacts to the proposed project are anticipated from air toxics; and
- As no existing large or major sources are located within 1,000 feet of the Project Area, emissions from these types of existing stationary sources would not cause a significant air quality impact to the proposed project.

895 Bedford Avenue - Land Uses Within 400-foot and 1,000-foot



# 19. NOISE

### **Project Area**

The following Noise Monitoring was conducted in order to support a rezoning application affecting multiple sites ("The Project Area"). The Project Site consists of 895 Bedford Avenue (Block 1750, Lot 1) and is located at the northeast corner of Bedford Avenue and Willoughby Avenue in the Bedford Stuyvesant section of Brooklyn, NY. The proposed action would allow for new residential development in an area where vehicular traffic may be a source of high ambient noise levels along Bedford and Willoughby Avenue. Bedford Avenue is a one-way northbound street with two moving lanes. Willoughby Avenue is one-way, east bound street with one moving lane. The surrounding land uses consist primarily of commercial and multi-family residential.

Vehicular traffic, specifically commercial vans/light trucks, heavy trucks, and NYC Transit and school buses are the predominant source of noise in this area. Therefore, the proposed development warrants an assessment of the potential for adverse effects on project occupants from ambient noise. The proposed development would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, nor would it re-route existing traffic, and therefore would not result in a perceptible increase in vehicular noise. This noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development.

#### Framework of Noise Analysis

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

Because the human ear can detect such a wide range of sound pressures, sound pressure is converted to sound pressure level (SPL), which is measured in units called decibels (dB). The decibel is a relative measure of the sound pressure with respect to a standardized reference quantity. Because the dB scale is logarithmic, a relative increase of 10 dB represents a sound pressure that is 10 times higher. However, humans do not perceive a 10-dB increase as 10 times louder. Instead, they perceive it as twice as loud.

*Table Noise-1* lists some noise levels for typical daily activities.

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

# Table Noise-1: Noise Levels of Common Sources

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

The following is typical of human response to relative changes in noise level:

• 3-dBA change is the threshold of change detectable by the human ear;

- 5-dBA change is readily noticeable; and
- 10-dBA change is perceived as a doubling or halving of the noise level.

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

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

■ L<sub>eq(24)</sub> is the continuous equivalent sound level over a 24-hour time period.

The sound level exceeded during a given percentage of a measurement period is the percentileexceeded sound level ( $L_x$ ). Examples include  $L_{10}$ ,  $L_{50}$ , and  $L_{90}$ .  $L_{10}$  is the A-weighted sound level that is exceeded 10% of the measurement period.

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

# Measurement Location and Equipment

Because the predominant noise sources in the area of the proposed project consist of vehicular traffic including buses and heavy truck movements, noise monitoring was conducted during peak vehicular travel periods (AM, Midday, and PM). Pursuant to CEQR Technical Manual Methodology measurement periods of twenty (20) minutes during each peak hour were conducted at Locations one (1), two (2), and three (3) due to the potential impact of ambient noise from the vehicular traffic in the Project Area.

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

# <u>Photo 1</u>



**Location 1**: Northern end of project site along Bedford Avenue





Location 2: Intersection of Bedford Avenue and Willoughby Avenue





**Location 3**: Approximately 100 feet east of Bedford Avenue and Willoughby Avenue intersection.

#### **Measurement** Conditions

Monitoring was conducted during typical midweek conditions, on Tuesday, June 13, 2017. The weather was dry and wind speeds were mild during all monitoring periods. Locations One (1) and Two (2) are adjacent to Bedford Avenue with stop and go traffic which experienced elevated noise levels due to loud music playing in vehicles, buses stopping at bus stops, and horn blowing. Location Three (3) was within close proximity to a vacuum/air pump at the "Shell Service Station" located at 895 Bedford Avenue and experienced elevated noise levels due to vehicle owners cleaning their vehicles and putting air into their vehicles tires. Traffic volumes and vehicle classification were documented during the noise monitoring. The sound meters were calibrated before and after each monitoring session.

#### **Existing Conditions**

Based on the noise measurements taken around the Project Area, the predominant source of noise is vehicular traffic including commercial vans/light trucks, heavy trucks, and NY Transit and school buses. High ambient noise levels resulted from buses and heavy-truck engine revving. The volume of traffic, and its corresponding level of noise is moderate at Location Three (3), and high at Locations One (1) and Two (2).

# *Table Noise-2* below contains the results for the measurements taken at the Project Area:

Note: **Bold** denotes L10 noise level exceedances, according to Table 19-2 of the CEQR Technical Manual

| Location 1: Noise Levels at northern end of project site along Bedford Avenue |                        |                     |                   |  |  |  |  |
|---|------------------------|---------------------|-------------------|--|--|--|--|
|   | Tuesday, June 13, 2017 |                     |                   |  |  |  |  |
| Time  | 07:30 am – 07:50 am    | 12:00 pm – 12:20 pm | 4:31 pm – 4:51 pm |  |  |  |  |
| L <sub>max</sub>  | 89.6                   | 85.5                | 96.5              |  |  |  |  |
| L <sub>10</sub>   | 75.5                   | 74.0                | 75.0              |  |  |  |  |
| L <sub>eq</sub>   | 72.2                   | 70.3                | 74.4              |  |  |  |  |
| $L_{50}$  | 68.5                   | 66.0                | 68.5              |  |  |  |  |
| L <sub>90</sub>   | 62.0                   | 59.0                | 61.0              |  |  |  |  |
| L <sub>min</sub>  | 53.9                   | 56.0                | 56.9              |  |  |  |  |

# <u>Table Noise-2 (1 of 3):</u> Noise Levels (dB)

| Location 2. Noise Levels at Intersection of Deajora Abenae and Willoughby Abenae |                     |                     |                   |
|--|---------------------|---------------------|-------------------|
| Tuesday, June 13, 2017   |                     |                     |                   |
| Time   | 07:52 am – 08:12 am | 12:22 pm – 12:42 pm | 4:53-5:13 pm – pm |
| L <sub>max</sub>   | 89.0                | 85.0                | 98.5              |
| L <sub>10</sub>  | 77.0                | 74.5                | 75.5              |
| Leq  | 73.5                | 71.0                | 75.6              |
| L50  | 70.0                | 67.5                | 70.0              |
| L90  | 62.0                | 63.5                | 64.5              |
| L <sub>min</sub>   | 58.4                | 59.1                | 61.1              |

<u>Table Noise-2 (2 of 3)</u>: Noise Levels (dB) Location 2: Noise Levels at Intersection of Bedford Avenue and Willoughby Avenue

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

Location 3: Approximately 100 feet east of Bedford Avenue and Willoughby Avenue intersection

| Tuesday, June 13, 2017 |                    |                     |                   |
|------------------------|--------------------|---------------------|-------------------|
| Time                   | 08:14 am- 08:34 am | 12:43 pm – 13:03 pm | 5:14 pm – 5:34 pm |
| L <sub>max</sub>       | 80.2               | 92.3                | 82.7              |
| L <sub>10</sub>        | 68.5               | 69.0                | 71.5              |
| L <sub>eq</sub>        | 65.7               | 67.6                | 68.4              |
| L50                    | 63.0               | 63.0                | 66.0              |
| L90                    | 60.0               | 59.0                | 58.8              |
| L <sub>min</sub>       | 57.0               | 56.5                |                   |

Table Noise-3 below contains the traffic volumes (vehicle counts) and vehicle classifications for the AM, Mid-Day, and PM sessions:

#### Table Noise-3 (1 of 3):

AM Traffic Volumes and Vehicle Classifications

|                     | Location 1 | Location 2 | Location 3 |
|---------------------|------------|------------|------------|
| Car/ Taxi           | 171        | 180        | 42         |
| Van/Light Truck/SUV | 163        | 233        | 54         |
| Motorcycle          | 2          | 2          | 0          |
| Heavy Truck         | 17         | 20         | 6          |
| Bus                 | 35         | 29         | 4          |
| Train               | 0          | 0          | 0          |

# Table Noise-3 (2 of 3):

|                      | Location 1 | Location 2 | Location 3 |
|----------------------|------------|------------|------------|
| Car/ Taxi            | 103        | 135        | 39         |
| Van/ Light Truck/SUV | 119        | 212        | 79         |
| Motorcycle           | 2          | 3          | 1          |
| Heavy Truck          | 34         | 31         | 5          |
| Bus                  | 7          | 10         | 2          |
| Train                | 0          | 0          | 0          |

Mid-Day Traffic Volumes and Vehicle Classifications

#### Table Noise-3 (3 of 3):

PM Traffic Volumes and Vehicle Classifications

|                      | Location 1 | Location 2 | Location 3 |
|----------------------|------------|------------|------------|
| Car/ Taxi            | 103        | 165        | 56         |
| Van/ Light Truck/SUV | 166        | 219        | 82         |
| Motorcycle           | 3          | 0          | 3          |
| Heavy Truck          | 15         | 22         | 4          |
| Bus                  | 11         | 26         | 6          |
| Train                | 0          | 0          | 0          |

# Conclusions

The 2014 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the proposed action, an L10 of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L10 of between 70 dB(A) and 80 dB(A) is marginally unacceptable. The highest recorded L10 at Location One (1) of the subject property was 75.5 dB during the morning monitoring period. The highest recorded L10 at Location Two (2) of the subject property was 77.0 dB during the morning period. The highest recorded L10 at Location Three (3) of the subject property was 71.3 dB during the morning period.

The 2014 *CEQR Technical Manual* Table 19-3 contains required attenuation values to achieve acceptable indoor noise levels. For an ambient L10 noise level greater than 70 dB(A) and up to 73 dB(A), an Outdoor-Indoor Transmission Class (OITC) of 28 is required (28 dBA of window/wall attenuation). Up to 76 dB(A), and OITC of 31 is required, and up to 78, an OITC of 33 is required (33 dBA of window/wall attenuation).

To ensure prosper attenuation of noise levels, an E-designation will be applied to the Applicant-controlled Development Site 1 (Block 1750, Lots 1 and 49) and to Projected Development Sites 2 and 3 (Block 1750, Lots 46, 47, and 48).

The E-designation text for Block 1750, Lots 1 and 49 (Projected Development Site 1):

To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 33 dBA of window/wall attenuation. To maintain a closed- window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

The E-designation text for Block 1750, Lots 46 and 47 (Projected Development Site 2):

To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 28 dBA of window/wall attenuation. To maintain a closed- window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

The E-designation text for Block 1750, Lot 48 (Projected Development Site 3):

To ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 28 dBA of window/wall attenuation. To maintain a closed- window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

With this level of noise attenuation, the proposed actions do not have the potential for significant adverse impacts related to noise.
# Noise Monitoring Locations

Google Maps



Location 2

# **21. NEIGHBORHOOD CHARACTER**

### Introduction

The *CEQR Technical Manual* states that a neighborhood character assessment is generally required when the proposed action would significantly impact land use, urban design, visual resources, historic resources, socioeconomic conditions, open space, shadows, transportation or noise within the neighborhood; or if it would have moderate effects on several of the elements that contribute to neighborhood character. The project would not have the potential to result in any significant adverse impacts to the pertinent analysis areas related to neighborhood character, as discussed below.

### Land Use, Zoning, and Public Policy

As stated in this section above, the proposed action would not result in significant adverse impacts related to land use, zoning, or public policy. Although the Land Use, Zoning, and Public Policy technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Land Use, Zoning, or Public Policy impacts.

Regarding land use, the Affected Area already contains a mix of residential, commercial, and light industrial properties. No significant adverse impacts related to land-use would occur as a result of the proposed rezoning. Regarding zoning, the proposed zoning map amendment to R7A/C2-4 is appropriate given the context of the Project Area. The Development Site is located on a heavily-trafficked street in an area that is developed with both residential and commercial uses. The proposed zoning is similar to the zoning patterns of the 2012 Bedford-Stuyvesant North Rezoning, which established contextual R6 and R9 districts, as well as C4-5D districts. The Bedford and Willoughby Avenue blockfronts of the Project Area are directly opposite blockfronts that were zoned R6B and R7A under the Bedford-Stuyvesant North reasoning. Thus, the increase in height and FAR permitted by this proposal is consistent with what is already permitted in the area. In accordance with the stated public policies within the study area, the proposed action would be suitable for the Affected Area and the study area as a whole.

### Shadows

As stated in the Shadows section, there are no sunlight-sensitive resources within the area that can be shaded by buildings resulting from the proposed action.

### Historic and Cultural Resources

Appended to this document is a letter from the Landmarks Preservation Commission (LPC) stating that the Affected Area does not contain any architectural or archeological resources. No historic or cultural resources in the Affected Area or the surrounding area

would be affected by the proposed actions.

#### **Urban Design and Visual Resources**

As stated in the conclusion to this section above, the proposed action would not result in a significant adverse impact to urban design and visual resources. Although the Urban Design and Visual Resources technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Urban Design and Visual Resources impacts as further discussed below.

The proposed building, as well as any development occurring within the project area as a result of the proposed actions, would adhere to the underlying floor area, yard, height, and setback regulations of the proposed zoning district. The proposed zoning map amendment to R7A/C2-4 is appropriate given the context of the area. The project area is adjacent to a busy street, Bedford Avenue, a major thoroughfare that spans Brooklyn from north to south. Commercial overlays are common along Bedford Avenue, including almost the entire frontage between Fulton Street and DeKalb Avenue (one block south of the project area). Many of the blocks surrounding the project area and study area are zoned R6B and R7A. Thus, the increase in height and FAR plus the allowance of residential use permitted by the proposed actions is consistent with existing development and development controls in the area. The proposed zoning is consistent in scale and use with the surrounding area, and there will be no significant adverse effects relating to urban design or visual character.

#### Noise

The proposed action required a detailed noise analysis due to ambient noise levels in the vicinity of the affected area that could have a potentially adverse impact on future residents of the Projected Development Sites. As discussed in the noise section above, window-wall noise attenuation will be incorporated into the project design and therefore there would be no adverse impacts related to noise for project occupants. In order to avoid a significant adverse impact related to noise, E designations will be placed on the Development Site and Projected Development Sites. In addition, no potential significant adverse noise impacts would be generated by the proposed project on the surrounding area.

### Conclusion

While a combination of moderate changes in several of these technical areas may potentially have a significant effect on neighborhood character, the proposed action would be compatible with the mixed-use character of the neighborhood and, as discussed in the relevant sections of this EAS, is not anticipated to result in any significant adverse impacts on land use, zoning and public policy; open space; shadows; historic and cultural resources; urban design and visual resources; transportation or noise within the neighborhood.

The proposed actions will not alter the character of the neighborhood, impair the appropriate use or development of adjacent property, nor be detrimental to the public welfare. The proposed actions would not negatively affect the pedestrian experience along Astoria Boulevard and would have no adverse effects on the vitality, walkability, or visual character of the area. The neighborhood is a mix of commercial, residential, and community facility uses, and the proposed uses (residential, commercial) would not be inconsistent with the surrounding area.

Therefore, no significant adverse impacts on neighborhood character are anticipated as a result of the proposed action.

#### AGENCY CORRESPONDENCE



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

Voice (212)-669-7700 Fax (212)-669-7960 http://nyc.gov/landmarks

# **ENVIRONMENTAL REVIEW**

Project number: DEPARTMENT OF CITY PLANNING / 18DCP040K Project: Date received: 12/19/2017

#### Properties with no Architectural or Archaeological significance:

- 1) ADDRESS: 895 Bedford Avenue, BBL: 3017500001
- 2) ADDRESS: 381 Willoughby Avenue, BBL: 3017500049
- 3) ADDRESS: 387 Willoughby Avenue, BBL: 3017500046
- 4) ADDRESS: 385 Willoughby Avenue, BBL: 3017500047
- 5) ADDRESS: 383 Willoughby Avenue, BBL: 3017500048

Gina SanTucci

12/21/2017

SIGNATURE Gina Santucci, Environmental Review Coordinator

DATE

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