

**Environmental Assessment Statement  
and  
Supplemental Report**

**for**

**West 22nd - West 23rd Street Coney Island  
Rezoning**

**Prepared by:**

**Environmental Studies Corp.  
55 Water Mill Road  
Great Neck, NY 11021**

**August 2018**

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## City Environmental Quality Review

### ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) SHORT FORM

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

#### Part I: GENERAL INFORMATION

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

If “yes,” STOP and complete the [FULL EAS FORM](#).

**2. Project Name** West 22<sup>nd</sup> - West 23<sup>rd</sup> Street Coney Island Rezoning

#### 3. Reference Numbers

CEQR REFERENCE NUMBER (to be assigned by lead agency)  
18DCP064K

BSA REFERENCE NUMBER (if applicable)

ULURP REFERENCE NUMBER (if applicable)  
170458ZMK, N170459ZRK

OTHER REFERENCE NUMBER(S) (if applicable)  
(e.g., legislative intro, CAPA) Project ID 2014K0494

#### 4a. Lead Agency Information

NAME OF LEAD AGENCY

YC Department of City Planning

NAME OF LEAD AGENCY CONTACT PERSON

Robert Dobruskin

#### 4b. Applicant Information

NAME OF APPLICANT

West 16-22 St. Properties, LLC

NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON

John Strauss for Hiram A. Rothkrug, Environmental Studies Corp.

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#### 5. Project Description

The Applicant, West 16-22 St. Properties, LLC, proposes the following actions to expand the Special Coney Island District and rezone an existing R5 zoning district to R7D/C2-4 and R6A/C2-4 districts on the northern portion of Block 7071, bounded by West 22<sup>nd</sup> and West 23<sup>rd</sup> Streets, Surf Avenue, and the northern boundary of the Seaside Park and Community Arts Center in the Coney Island neighborhood within Brooklyn Community District 13.

- A zoning text amendment to enlarge the Special Coney Island District (“SCID”) with a new Parcel H of the Coney West Subdistrict, consisting of Block 7071, Lots 1, 3-9, 13, 16, 18, 19, 24, 26, 83, 85, 86, 89-91, 93, 94, 96, 97, and 114 (the “Project Area”);

- A zoning map amendment to map SCID Coney West Subdistrict Parcel H;

- A zoning map amendment to ZR section 28d to change the existing R5 zoning district to an R7D/C2-4 zoning district on a portion of Block 7071, including Lots 1, 3-9, 13, 16, 18, 19, 24, 26, p/o 91, 93, 94, 96, 97, and 114, and to an R6A/C2-4 zoning district on a portion of Block 7071, including Lots 83, 85, 86, 89, 90, and p/o 91;

- A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (“MIH”) Areas for Community District 13, Brooklyn to establish an MIH Area coterminous with the Project Area. A percentage of the new dwelling units in the proposed development must be affordable units, resulting in an affordable housing set-aside of either 25 percent (Option 1) of the residential floor area at an average of 60 percent of Area Median Income (AMI), or 30 percent (Option 2) of the residential floor area at an average of 80 percent AMI. The Applicant proposes mapping both MIH Option 1 and Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The Applicant seeks Option 1 for the Development Site, resulting in approximately 20 permanently affordable units. However, as MIH options are not selected until the end of the ULURP process, up to 23 affordable units could be provided on the Development Site pursuant to MIH, which is 30% of the currently proposed total of 78 dwelling units; and

- A zoning text amendment of ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone.

The proposed Zoning Map Change and Zoning Text Amendments would facilitate a proposal by the Applicant to construct a new five-story, twelve-story, and basement mixed-use UG2 residential and UG6 commercial building totaling 103,654.37 gross square feet (gsf) in size on the Applicant owned property (Block 7071, Lots 13, 16, 93, 94, 114). The building would include 78 dwelling units, 20 units of which would be affordable to lower income residents, 14,903 gsf of retail space, and 39 parking spaces accessory to the residential uses. In order to develop the proposed project, the Applicant owned property would be merged into a single zoning lot. The remainder of the Proposed Project Area, Block 7071, Tax Lots 1, 3-9, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 96, and 97, is not proposed for development and is not controlled by the Applicant. See attached Project Description.

**Project Location**

|   |                          |   |
|---|--------------------------|---|
| BOROUGH Brooklyn  | COMMUNITY DISTRICT(S) 13 | STREET ADDRESS 3016, 3022 West 22 <sup>nd</sup> Street and 3017, 3023 West 23 <sup>rd</sup> Street (Applicant site) |
| TAX BLOCK(S) AND LOT(S) Block 7071, Lots 13, 114, 16, 94, 93 (Applicant site); Block 7071, Tax Lots 1, 3-9, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 96, and 97 (Non-Applicant properties) |                          | ZIP CODE 11224  |

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Northern portion of Block 7071, bounded by West 22<sup>nd</sup> and West 23<sup>rd</sup> Streets, Surf Avenue, and the northern boundary of the Seaside Park and Community Arts Center

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R5 ZONING SECTIONAL MAP NUMBER 28d

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

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

|   |  |  |
|---|--|--|
| <input type="checkbox"/> CITY MAP AMENDMENT               | <input type="checkbox"/> ZONING CERTIFICATION      | <input type="checkbox"/> CONCESSION        |
| <input checked="" type="checkbox"/> ZONING MAP AMENDMENT  | <input type="checkbox"/> ZONING AUTHORIZATION      | <input type="checkbox"/> UDAAP             |
| <input checked="" type="checkbox"/> ZONING TEXT AMENDMENT | <input type="checkbox"/> ACQUISITION—REAL PROPERTY | <input type="checkbox"/> REVOCABLE CONSENT |
| <input type="checkbox"/> SITE SELECTION—PUBLIC FACILITY   | <input type="checkbox"/> DISPOSITION—REAL PROPERTY | <input type="checkbox"/> FRANCHISE         |
| <input type="checkbox"/> HOUSING PLAN & PROJECT           | <input type="checkbox"/> OTHER, explain:           |  |

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION Article 13, Chapter 1, Appendix A: Maps 1, 2, and 4-6; ZR 23-933, Appendix F; ZR Appendix I; ZR 28d

**Board of Standards and Appeals:**  YES  NO

VARIANCE (use)

VARIANCE (bulk)

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

**Department of Environmental Protection:**  YES  NO If "yes," specify:

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

|  |  |
|--|--|
| <input type="checkbox"/> LEGISLATION                       | <input type="checkbox"/> FUNDING OF CONSTRUCTION, specify: |
| <input type="checkbox"/> RULEMAKING                        | <input type="checkbox"/> POLICY OR PLAN, specify:          |
| <input type="checkbox"/> CONSTRUCTION OF PUBLIC FACILITIES | <input type="checkbox"/> FUNDING OF PROGRAMS, specify:     |
| <input type="checkbox"/> 384(b)(4) APPROVAL                | <input type="checkbox"/> PERMITS, specify:                 |
| <input type="checkbox"/> OTHER, explain:                   |  |

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

|   |  |
|---|--|
| <input type="checkbox"/> PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) | <input type="checkbox"/> LANDMARKS PRESERVATION COMMISSION APPROVAL                    |
|   | <input checked="" type="checkbox"/> OTHER, explain: Dept. of Buildings building permit |

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

**7. Site Description:** The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.

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

|  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> SITE LOCATION MAP  | <input checked="" type="checkbox"/> ZONING MAP  | <input checked="" type="checkbox"/> SANBORN OR OTHER LAND USE MAP |
| <input checked="" type="checkbox"/> TAX MAP  | <input type="checkbox"/> FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S) |   |
| <input checked="" type="checkbox"/> PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP |   |   |

**Physical Setting** (both developed and undeveloped areas)  
 Total directly affected area (sq. ft.): 89,369 (Project Area); 17,467 (Proposed Development Site) Waterbody area (sq. ft) and type: 0  
 Roads, buildings, and other paved surfaces (sq. ft.): 89,369 (Project Area); 17,467 (Proposed Development Site) Other, describe (sq. ft.): 0

**8. Physical Dimensions and Scale of Project** (if the project affects multiple sites, provide the total development facilitated by the action)  
 SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 103,654  
 NUMBER OF BUILDINGS: 1 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 103,654  
 HEIGHT OF EACH BUILDING (ft.): 61'-3"; 131'-5" NUMBER OF STORIES OF EACH BUILDING: 5; 12

Does the proposed project involve changes in zoning on one or more sites?  YES  NO  
 If "yes," specify: The total square feet owned or controlled by the applicant: 17,467  
 The total square feet not owned or controlled by the applicant: 71,902

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading?  YES  NO  
 If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):  
 AREA OF TEMPORARY DISTURBANCE: sq. ft. (width x length) VOLUME OF DISTURBANCE: 17,467 cubic ft. (width x length x depth)  
 AREA OF PERMANENT DISTURBANCE: 17,467 sq. ft. (width x length)

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

|  | <i>Residential</i> | <i>Commercial</i> | <i>Community Facility</i> | <i>Industrial/Manufacturing</i> |
|--|--------------------|-------------------|---------------------------|---------------------------------|
| <b>Size</b> (in gross sq. ft.)             | 88,751             | 14,903            | 0                         | 0                               |
| <b>Type</b> (e.g., retail, office, school) | 78 units           | retail            | 0                         | 0                               |

Does the proposed project increase the population of residents and/or on-site workers?  YES  NO  
 If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 114 NUMBER OF ADDITIONAL WORKERS: 48  
 Provide a brief explanation of how these numbers were determined: Residents: Based on average household size of 1.46 residents per dwelling unit (2010 Census data); Workers: assumes 3 workers per 1,000 gsf retail space, .04 workers per dwelling unit (78 units)

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

Has a No-Action scenario been defined for this project that differs from the existing condition?  YES  NO  
 If "yes," see [Chapter 2](#), "Establishing the Analysis Framework" and describe briefly:

**9. Analysis Year** [CEQR Technical Manual Chapter 2](#)  
 ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2020 (Proposed Development Site); 2027 (Projected Development Sites 2-8)  
 ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 12

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: community facility, vacant land

**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                                  |
|---|-------------------------------------|-------------------------------------|
| <b>1. LAND USE, ZONING, AND PUBLIC POLICY:</b> <a href="#">CEQR Technical Manual Chapter 4</a>  |                                     |                                     |
| (a) Would the proposed project result in a change in land use different from surrounding land uses?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) Would the proposed project result in a change in zoning different from surrounding zoning?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (c) Is there the potential to affect an applicable public policy?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (d) If “yes,” to (a), (b), and/or (c), complete a preliminary assessment and attach.  |                                     |                                     |
| (e) Is the project a large, publicly sponsored project?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If “yes,” complete a PlaNYC assessment and attach.  |                                     |                                     |
| (f) Is any part of the directly affected area within the City’s <a href="#">Waterfront Revitalization Program boundaries</a> ?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| o If “yes,” complete the <a href="#">Consistency Assessment Form</a> . See attached report.   |                                     |                                     |
| <b>2. SOCIOECONOMIC CONDITIONS:</b> <a href="#">CEQR Technical Manual Chapter 5</a>   |                                     |                                     |
| (a) Would the proposed project:   |                                     |                                     |
| o Generate a net increase of 200 or more residential units?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Generate a net increase of 200,000 or more square feet of commercial space?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Directly displace more than 500 residents?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Directly displace more than 100 employees?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Affect conditions in a specific industry?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>3. COMMUNITY FACILITIES:</b> <a href="#">CEQR Technical Manual Chapter 6</a>   |                                     |                                     |
| (a) Direct Effects  |                                     |                                     |
| o Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) Indirect Effects  |                                     |                                     |
| o <b>Child Care Centers:</b> Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in <a href="#">Chapter 6</a> )                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o <b>Libraries:</b> Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in <a href="#">Chapter 6</a> )   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o <b>Public Schools:</b> 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 <a href="#">Chapter 6</a> )                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| o <b>Health Care Facilities and Fire/Police Protection:</b> Would the project result in the introduction of a sizeable new neighborhood?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>4. OPEN SPACE:</b> <a href="#">CEQR Technical Manual Chapter 7</a>   |                                     |                                     |
| (a) Would the proposed project change or eliminate existing open space?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) Is the project located within an under-served area in the <a href="#">Bronx</a> , <a href="#">Brooklyn</a> , <a href="#">Manhattan</a> , <a href="#">Queens</a> , or <a href="#">Staten Island</a> ?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If “yes,” would the proposed project generate more than 50 additional residents or 125 additional employees?  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| (c) Is the project located within a well-served area in the <a href="#">Bronx</a> , <a href="#">Brooklyn</a> , <a href="#">Manhattan</a> , <a href="#">Queens</a> , or <a href="#">Staten Island</a> ?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If “yes,” would the proposed project generate more than 350 additional residents or 750 additional employees?   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| (d) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

|  | YES                                 | NO                                  |
|--|-------------------------------------|-------------------------------------|
| <b>5. SHADOWS:</b> <a href="#">CEQR Technical Manual Chapter 8</a>   |                                     |                                     |
| (a) Would the proposed project result in a net height increase of any structure of 50 feet or more?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>6. HISTORIC AND CULTURAL RESOURCES:</b> <a href="#">CEQR Technical Manual Chapter 9</a>   |                                     |                                     |
| (a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the <a href="#">GIS System for Archaeology and National Register</a> to confirm) | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See attached report.   |                                     |                                     |
| <b>7. URBAN DESIGN AND VISUAL RESOURCES:</b> <a href="#">CEQR Technical Manual Chapter 10</a>  |                                     |                                     |
| (a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>8. NATURAL RESOURCES:</b> <a href="#">CEQR Technical Manual Chapter 11</a>  |                                     |                                     |
| (a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of <a href="#">Chapter 11</a> ?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.  |                                     |                                     |
| (b) Is any part of the directly affected area within the <a href="#">Jamaica Bay Watershed</a> ?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If "yes," complete the <a href="#">Jamaica Bay Watershed Form</a> , and submit according to its <a href="#">instructions</a> .   |                                     |                                     |
| <b>9. HAZARDOUS MATERIALS:</b> <a href="#">CEQR Technical Manual Chapter 12</a>  |                                     |                                     |
| (a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in <a href="#">Appendix 1</a> (including nonconforming uses)?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (e.g., gas stations, oil storage facilities, heating oil storage)?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (h) Has a Phase I Environmental Site Assessment been performed for the site?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See attached report.   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>10. WATER AND SEWER INFRASTRUCTURE:</b> <a href="#">CEQR Technical Manual Chapter 13</a>  |                                     |                                     |
| (a) Would the project result in water demand of more than one million gallons per day?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (c) If the proposed project located in a <a href="#">separately sewered area</a> , would it result in the same or greater development than the amounts listed in Table 13-1 in <a href="#">Chapter 13</a> ?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (e) If the project is located within the <a href="#">Jamaica Bay Watershed</a> or in certain <a href="#">specific drainage areas</a> , including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

|   | YES                                 | NO                                  |
|---|-------------------------------------|-------------------------------------|
| (f) Would the proposed project be located in an area that is partially sewerred or currently unsewerred?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>11. SOLID WASTE AND SANITATION SERVICES:</b> <a href="#">CEQR Technical Manual Chapter 14</a>  |                                     |                                     |
| (a) Using Table 14-1 in <a href="#">Chapter 14</a> , the project's projected operational solid waste generation is estimated to be (pounds per week): 6,753   |                                     |                                     |
| o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>12. ENERGY:</b> <a href="#">CEQR Technical Manual Chapter 15</a>   |                                     |                                     |
| (a) Using energy modeling or Table 15-1 in <a href="#">Chapter 15</a> , the project's projected energy use is estimated to be (annual BTUs): 14,468,270   |                                     |                                     |
| (b) Would the proposed project affect the transmission or generation of energy?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>13. TRANSPORTATION:</b> <a href="#">CEQR Technical Manual Chapter 16</a>   |                                     |                                     |
| (a) Would the proposed project exceed any threshold identified in Table 16-1 in <a href="#">Chapter 16</a> ?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:  |                                     |                                     |
| o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection?<br><i>**It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of <a href="#">Chapter 16</a> for more information.</i> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| o Would the proposed project result in more than 200 pedestrian trips per project peak hour?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <b>14. AIR QUALITY:</b> <a href="#">CEQR Technical Manual Chapter 17</a>  |                                     |                                     |
| (a) <i>Mobile Sources:</i> Would the proposed project result in the conditions outlined in Section 210 in <a href="#">Chapter 17</a> ?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) <i>Stationary Sources:</i> Would the proposed project result in the conditions outlined in Section 220 in <a href="#">Chapter 17</a> ?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in <a href="#">Chapter 17</a> ?<br>(Attach graph as needed) See attached report.  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (c) Does the proposed project involve multiple buildings on the project site?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (e) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>15. GREENHOUSE GAS EMISSIONS:</b> <a href="#">CEQR Technical Manual Chapter 18</a>   |                                     |                                     |
| (a) Is the proposed project a city capital project or a power generation plant?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) Would the proposed project fundamentally change the City's solid waste management system?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in <a href="#">Chapter 18</a> ?  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <b>16. NOISE:</b> <a href="#">CEQR Technical Manual Chapter 19</a>  |                                     |                                     |
| (a) Would the proposed project generate or reroute vehicular traffic?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| (b) Would the proposed project introduce new or additional receptors (see Section 124 in <a href="#">Chapter 19</a> ) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (d) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>17. PUBLIC HEALTH:</b> <a href="#">CEQR Technical Manual Chapter 20</a>  |                                     |                                     |
| (a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |



|   | 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>Chapter 20</u> , "Public Health." Attach a preliminary analysis, if necessary.  |                                     |                                     |
| <b>18. NEIGHBORHOOD CHARACTER:</b> <u>CEQR Technical Manual Chapter 21</u>  |                                     |                                     |
| (a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in <u>Chapter 21</u> , "Neighborhood Character." Attach a preliminary analysis, if necessary.  |                                     |                                     |
| <b>19. CONSTRUCTION:</b> <u>CEQR Technical Manual Chapter 22</u>  |                                     |                                     |
| (a) Would the project's construction activities involve:  |                                     |                                     |
| o Construction activities lasting longer than two years?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| o The operation of several pieces of diesel equipment in a single location at peak construction?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Closure of a community facility or disruption in its services?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Activities within 400 feet of a historic or cultural resource?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| o Disturbance of a site containing or adjacent to a site containing natural resources?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| o Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| (b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in <u>Chapter 22</u> , "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. |                                     |                                     |

See attached report.

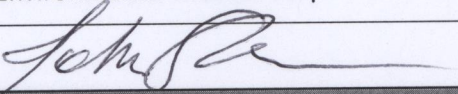
**20. APPLICANT'S CERTIFICATION**

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME  
John Strauss, Environmental Studies Corp.

DATE  
August 17, 2018

SIGNATURE  


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



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

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

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

**Potentially Significant Adverse Impact**

**IMPACT CATEGORY**

**YES NO**

Land Use, Zoning, and Public Policy

Socioeconomic Conditions

Community Facilities and Services

Open Space

Shadows

Historic and Cultural Resources

Urban Design/Visual Resources

Natural Resources

Hazardous Materials

Water and Sewer Infrastructure

Solid Waste and Sanitation Services

Energy

Transportation

Air Quality

Greenhouse Gas Emissions

Noise

Public Health

Neighborhood Character

Construction

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

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

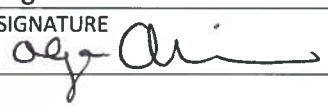
3. Check determination to be issued by the lead agency:

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

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

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

**4. LEAD AGENCY'S CERTIFICATION**

|  |  |
|--|--|
| TITLE<br>Deputy Director, EARD   | LEAD AGENCY<br>Department of City Planning |
| NAME<br>Olga Abinader  | DATE<br>August 17, 2018                    |
| SIGNATURE<br> |  |



**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.

**Shadows:** A detailed analysis of shadows is included in this EAS. The analysis concludes that, on June 21st new shadows would be cast as a result of the proposed actions on up to one-half of Seaside Park for a maximum period of 6 hours and 11 minutes. Shadows would cover over less than 10% of the lawn seating area and between 50% and 75% of the playground. At no time would sunlight reaching the vegetation on the lawn be less than four hours during the growing season (considered necessary for vegetation survival). Shadows cast on the playground occur only during the summer months. Between 25% and 50% of the playground would receive sunlight year round. No other open space, historic, or other resources would be affected by shadows from the proposed project. The Proposed Actions would not result in any significant shadows impacts.

**Hazardous Materials, Air Quality and Noise:** An (E) designation for Hazardous Materials, Air Quality and Noise has been incorporated into the proposed action. Refer to "Appendix I: (E) Designation" for a list of the sites affected by the proposed (E) designation and applicable (E) designation requirements. With these measures in place, the proposed actions would not result in significant adverse impacts to Hazardous Materials, Air Quality or Noise. An analysis of surrounding noise sources considers the potential for impacts from vehicle traffic on Surf Avenue and noise from the adjacent Ford Amphitheater. Detailed noise analysis of the Ford Amphitheater, conducted as part of the Environmental Impact Statement for the Seaside Park and Community Arts Center (13DME014K) is referenced in this analysis and is included as an appendix to this EAS.

**Urban Design and Visual Resources:** The EAS contains a detailed analysis of urban design and visual resources. It concludes that the proposed actions would not result in any significant impacts to the visual resources in the vicinity of the Project Area. Specifically publicly accessible views to the Coney Island Beach and Boardwalk and the Ford Amphitheater and Seaside Park would still be available from the streets bordering the Project Area. The proposed actions would not result in significant adverse impacts to urban design or visual resources.

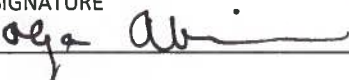
*No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA).*

TITLE  
Deputy Director, Environmental Assessment and Review Division

LEAD AGENCY  
Department of City Planning, acting on behalf of the City Planning Commission

NAME  
Olga Abinader

DATE  
08/17/2018

SIGNATURE  




## Appendix 1: (E) Designations

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

The E designation requirements related to hazardous materials would apply to:

**Projected Development Site 1:**        **Block 7071, Lots 13, 16, 93, 94, 114**  
**Potential Development Sites 2-8:**    **Block 7071, Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97**

### Hazardous Material

#### Task 1-Sampling Protocol

The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of 81 sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

#### Task 2-Remediation Determination and Protocol

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

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

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

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

**Projected Development Site 1:**        **Block 7071, Lots 13, 16, 93, 94, 114**

Any new residential or commercial development on the above-referenced property must exclusively use electric heat pumps for heating, ventilating, and air conditioning system, and high efficiency condensing tankless gas water heaters for the hot water system to avoid any potential significant adverse air quality impacts.

**Projected Development Site 2: Block 7071, Lots 3, 4, 5**

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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 98 feet above grade, and at least 45 feet from the lot line facing Highland View Avenue to avoid any potential significant adverse air quality impact.

**Potential Development Site 3: Block 7071, Lots 7, 8**

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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 98 feet above grade, and at least 45 feet from the lot line facing Highland View Avenue to avoid any potential significant adverse air quality impact.

**Potential Development Site 4: Block 7071, Lot 18**

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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 108 feet above grade, and at least 20 feet from the lot line facing Surf Avenue to avoid any potential significant adverse air quality impact.

**Potential Development Site 5: Block 7071, Lot 26**

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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 108 feet above grade, and at least 20 feet from the lot line facing Surf to avoid any potential significant adverse air quality impact.

**Potential Development Site 6: Block 7071, Lots 83, 85, 86**

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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 88 feet above grade, at least 70 feet from the lot line facing West 22nd Street to avoid any potential significant adverse air quality impact.

**Potential Development Site 7: Block 7071, Lot 91**

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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 88 feet above grade, and at least 55 feet from the lot line facing West 22nd Street to avoid any potential significant adverse air quality impact.

**Potential Development Site 8: Block 7071, Lots 96, 97**

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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 88 feet above grade, and at least 47 feet from the lot line facing West 22nd Street to avoid any potential significant adverse air quality impact.

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To ensure that there would be no significant adverse **noise** impacts associated with the proposed project, an E designation (E) will be placed on the project sites as follows:

**Projected Development Sites 1-8: Block 7071, Lots 3, 4, 5, 7, 8, 13, 16, 18, 26, 83, 85, 86, 91, 93, 94, 96, 97, 114**

In order to ensure an acceptable interior noise environment, future residential uses must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on the façades facing Surf Avenue on Projected Development Sites 1, 2, and 3 in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

**For Illustrative Purposes Only**



## **WEST 22<sup>ND</sup> – West 23<sup>RD</sup> STREET CONEY ISLAND REZONING**

### *Reasonable Worst-Case Development Scenario*

#### **INTRODUCTION**

The Applicant, West 16-22 St. Properties, LLC, is proposing a zoning map amendment to the New York City Zoning Map, section 28d, to rezone a portion of a block located in the Coney Island neighborhood of Brooklyn, Community District 13 from the existing R5 zoning district to a combination of R7D/C2-4 and R6A/C2-4 zoning districts. The proposed Project Area comprises Block 7071, Tax Lots 1, 3-9, 13, 16, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 93, 94, 96, 97, and 114 which occupy the northern portion of Block 7071, bounded by West 22<sup>nd</sup> and West 23<sup>rd</sup> Streets, Surf Avenue, and the northern boundary of the Seaside Park and Community Arts Center. The Applicant proposes to extend the Coney West Subdistrict portion of the Special Coney Island District directly east of the Project Area onto the Project Area within a new Parcel H. The Applicant is proposing the following Zoning Text Amendments:

- Modify Maps 1, 2, and 4-6 of Appendix A of ZR Article 13, Chapter 1 to include a new Parcel H. On Maps 1 and 2, include Parcel H within the Coney West Subdistrict (CW).
- Amend ZR 23-933 Appendix F to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the Proposed Project Area. Pursuant to the Mandatory Inclusionary Housing (MIH) Text Amendment provisions applicable to the Proposed Actions, a percentage of the new dwelling units in the proposed development must be affordable units, resulting in an affordable housing set-aside of either 25 percent (Option 1) of the residential floor area at an average of 60 percent of Area Median Income (AMI) [\$46,620 per year for a family of three], or 30 percent (Option 2) of the residential floor area at an average of 80 percent AMI (\$62,150 for a family of three). The Applicant proposes mapping both MIH Option 1 and Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The Applicant seeks Option 1 for the Development Site, resulting in approximately 20 permanently affordable units. However, as MIH options are not selected until the end of the ULURP process, up to 23 affordable units could be provided pursuant to MIH which is 30% of the currently proposed total of 78 dwelling units.
- Amend ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone.

The proposed Zoning Map Change and Zoning Text Amendments would facilitate a proposal by the Applicant to construct a new five-story, twelve-story, and basement mixed-use UG2 residential and UG6 commercial building totaling 103,654 gross square feet (gsf) in size on the Applicant owned property (Block 7071, Lots 13, 16, 93, 94, 114). The building would include 78 dwelling units, up to 23 of which would be affordable to lower income residents, 14,903 gsf of retail space, and 39 parking spaces accessory to the residential uses. In order to develop the proposed project, the Applicant owned property would be merged into a single zoning lot and the existing development would be demolished. The remainder of the Proposed Rezoning Area, Block 7071, Tax Lots 1, 3-9, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 96, and 97 is not proposed for development and is not controlled by the Applicant.

#### **ACTIONS NECESSARY TO FACILITATE THE PROPOSAL**

The Applicant, West 16-22 St. Properties, LLC, proposes the following actions to expand the Special Coney Island District and rezone an existing R5 zoning district to R7D/C2-4



and R6A/C2-4 districts in the Coney Island neighborhood within Brooklyn Community District 13.

- I. A zoning text amendment to enlarge the Special Coney Island District (“SCID”) with a new Parcel H of the Coney West Subdistrict, consisting of Block 7071, Lots 1, 3-9, 13, 16, 18,19, 24, 26, 83, 85, 86, 89-91, 93, 94, 96, 97, and 114 (the “Project Area”);
- II. A zoning map amendment to map SCID Coney West Subdistrict Parcel H;
- III. A zoning map amendment to ZR section 28d to change the existing R5 zoning district to an R7D/C2-4 zoning district on a portion of Block 7071, including Lots 1, 3-9, 13, 16, 18, 19, 24, 26, p/o 91, 93, 94, 96, 97, and 114, and to an R6A/C2-4 zoning district on a portion of Block 7071, including Lots 83, 85, 86, 89, 90, and p/o 91;
- IV. A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (“MIH”) Areas for Community District 13, Brooklyn to establish an MIH Area coterminous with the Project Area; and
- V. A zoning text amendment of ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone.

## **DESCRIPTION OF THE SURROUNDING AREA**

The Project Area is located along the southern edge of the Coney Island neighborhood of Brooklyn, Community District 13 approximately one-half block from Coney Island Beach. The neighborhood consists of a mixture of one-, two-, and multi-family residences, community facility uses including several residences for seniors, open space areas, scattered commercial and industrial uses, and parking and vacant land. Several parks and playgrounds are located within three blocks of the site including Steeplechase Park. East-west roadway access from the Project Area through the Coney Island peninsula is provided by Surf Avenue which connects into Cropsey and Stillwell Avenues providing north-south roadway access off the peninsula into the Bensonhurst neighborhood of Brooklyn.

The discussion below identifies prior actions in the immediate vicinity of the Project Area and contains a description of the nearby Seaside Park site including an explanation of how its proposed zoning boundaries were developed.

The Comprehensive Coney Island Rezoning Plan (N 090273A ZRK and related actions), adopted in 2009, created a 27-acre amusement and entertainment district, located primarily to the east and south of the Project Area, which was designed to re-establish Coney Island as an open and accessible mixed-use destination by preserving and growing amusement uses in perpetuity in their historic location along the Riegelmann Boardwalk. In addition, new mixed-use residential and retail neighborhoods were planned to address the local need for housing, greater access to retail goods and services, and jobs.

The Special Coney Island District (SCID) was established with three subdistricts: Coney East, the core amusement and entertainment area, and the Coney North and Coney West Subdistricts, which provide opportunities for the development of approximately 5,000 units of housing, including approximately 900 units of affordable housing units, and a significant amount of local retail space to service the existing community and the new residences, as well as provide jobs.

In furtherance of the Comprehensive Plan, the City Council approved an application by a private applicant and the NYC Economic Development Corporation to facilitate the development of the Seaside Park and Community Arts Center on the southern portion of Block 7071 to the south of



the proposed Project Area (C 140063 ZSK and related actions, effective December 19, 2013). This action enlarged the SCID and created a new Parcel G of the Coney West Subdistrict on the southern portion of Block 7071 (Lots 27, 28, 30, 32, 34, 76, 79, 81, 130, 142, 226, and 231). The project involved the restoration and adaptive reuse of the former Childs Restaurant building, a designated NYC landmark, for an approximately 5,100-seat amphitheater, public open space, and a new restaurant.

A 1.4-acre portion of the southernmost portion of Block 7071 and the beds of Highland View Avenue and a portion of West 22nd Street were mapped as parkland as part of the 2009 Coney Island Plan reserved for Highland Park. The 2013 Seaside Park application (C 140063 ZSK) established this area as Parcel G of the Coney West Subdistrict with the SCID. Its boundaries were developed in the context of the underlying ULURP application and correspond to the parkland mapped in 2009.

### **DESCRIPTION OF THE PROPOSED PROJECT AREA**

The Project Area is located entirely within an R5 zoning district. R5 districts permit Use Groups 1-4 and allow for up to 1.25 Floor Area Ratio (FAR) of residential use and 2.0 FAR of community facility use. The Project Area consists of Block 7071, Tax Lots 1, 3-9, 13, 16, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 93, 94, 96, 97, and 114, totaling approximately 89,369 square feet of land area. Of this total land area, 17,467 square feet belongs to the Proposed Development Site that is owned by the Applicant. The Non-Applicant owned sites total 71,902 square feet in area. The following discussion provides a description of the Applicant owned Proposed Development Site, and the Non-Applicant owned sites.

#### *Proposed Development Site (Applicant-Owned)*

**Block 7071, Lots 13, 16, 93, 94, 114** - The combined lot area is 17,467 square feet per survey and the 5 contiguous lots are developed with approximately 17,661 gsf of floor area including 34 dwelling units. The combined lots are developed to an FAR of 1.01, close to the maximum permitted residential FAR of 1.25. The component lots are developed as follows:

- Block 7071, Lot 13 - 2,022 sf lot developed with a 1-story 1,218 sf building containing 4 dwelling units.
- Block 7071, Lot 16 - 4,436 sf vacant lot.
- Block 7071, Lot 93 - 2,200 sf lot developed with a 2-story 3,000 sf building containing 3 dwelling units.
- Block 7071, Lot 94 - 4,400 sf lot developed with a 2-story 3,840 sf building containing 6 dwelling units.
- Block 7071, Lot 114 - 4,408 sf lot developed with a 3-story 9,603 sf building containing 21 dwelling units.

#### *Non-Applicant Owned Sites*

**Block 7071, Lot 1** - The 2,400 square foot lot is developed with an existing 2-story, approximately 4,800 square foot mixed-use building containing 2 residential dwelling units and 1 commercial unit.

**Block 7071, Lot 3** - The 3,502 square foot lot consists of vacant land.

**Block 7071, Lot 4** - The 2,196 square foot lot consists of vacant land.

**Block 7071, Lot 5** - The 2,208 square foot lot consists of vacant land.

**Block 7071, Lot 6** - The 2,376 square foot lot is developed with an existing 1-story, approximately 2,328 square foot industrial building.

**Block 7071, Lot 7** - The 2,074 square foot lot consists of vacant land.

**Block 7071, Lot 8** - The 2,169 square foot lot consists of vacant land.

**Block 7071, Lot 9** - The 7,009 square foot lot is developed with an existing 2-story, approximately 10,300 square foot mixed-use building containing 18 residential dwelling units and 2 commercial units.

**Block 7071, Lot 18** - The 3,308 square foot lot is developed with an existing 1-story, approximately 2,530 square foot industrial building.

**Block 7071, Lot 19** - The 12,117 square foot lot is developed with an existing 6-story, approximately 36,624 square foot mixed-use building containing 40 residential dwelling units and 1 ground floor commercial unit.

**Block 7071, Lot 24** - The 3,280 square foot lot is developed with an existing 3-story, approximately 9,000 square foot residential building containing 15 residential dwelling units.

**Block 7071, Lot 26** - The 3,263 square foot lot consists of vacant land.

**Block 7071, Lot 83** - The 3,960 square foot lot consists of vacant land.

**Block 7071, Lot 85** - The 2,640 square foot lot consists of vacant land.

**Block 7071, Lot 86** - The 6,600 square foot lot consists of vacant land.

**Block 7071, Lot 89** - The 2,000 square foot lot is developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units.

**Block 7071, Lot 90** - The 2,000 square foot lot is developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units.

**Block 7071, Lot 91** - The 4,400 square foot lot consists of vacant land.

**Block 7071, Lot 96** - The 2,200 square foot is developed with an existing 1-story, approximately 2,200 square foot vehicle repair garage.

**Block 7071, Lot 97** - The 2,200 square foot lot consists of vacant land.

Summary

Table 1 (below) presents a zoning summary of the above including the zoning lot size, the total development gsf and gsf by use, whether the existing use conforms with the R5 district use regulations; whether the existing development square footage conforms with the R5 district bulk maximum FAR regulations, and the ownership of each lot.

| <b>Block/Lot Nos.</b> | <b>Zoning Lot Size (SF)</b> | <b>Total GSF</b> | <b>Resid GSF</b> | <b>Com'l/ Man GSF</b> | <b>Comm Facili GSF</b> | <b>Conform-ance (Use)</b> | <b>Compliance (Bulk- Max FAR, Exstg FAR)</b>  | <b>Owner</b>                             |
|-----------------------|-----------------------------|------------------|------------------|-----------------------|------------------------|---------------------------|---|--|
| 13, 16, 93, 94,114    | 17,467                      | 17,661           | 17,661           | 0                     | 0                      | Yes                       | Max R FAR 1.25, 1.01 Yes                      | West 16-22 St Properties                 |
| 1                     | 2,400                       | 4,800            | 2,400            | 2,400                 | 0                      | Yes-Res/ No-Cml           | Max R FAR 1.25; 0.5 Yes: Max C FAR 0; 0.5 No  | H Kassim                                 |
| 3                     | 3,502                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | 2216-22 Surf Avenue LLC                  |
| 4                     | 2,196                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | 2216-22 Surf Avenue LLC                  |
| 5                     | 2,208                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | 2216-22 Surf Avenue LLC                  |
| 6                     | 2,376                       | 2,328            | 0                | 2,328 M               | 0                      | No                        | Max M FAR 0; 0.94 No                          | Nier-Matus Roofing Co.                   |
| 7                     | 2,074                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | S Salerno                                |
| 8                     | 2,169                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | S Salerno                                |
| 9                     | 7,009                       | 10,300           | 9,270            | 1,030                 | 0                      | Yes-Res/ No-Cml           | Max R FAR 1.25; 1.32 No: Max C FAR 0; 0.15 No | SESA 22 Realty Corp                      |
| 18                    | 3,308                       | 2,530            | 0                | 2,530                 | 0                      | No                        | Max M FAR 0; 0.76 No                          | R Eidlin                                 |
| 19                    | 12,117                      | 36,624           | 34,624           | 2,000                 | 0                      | Yes-Res/ No-Cml           | Max R FAR 1.25; 2.86 No: Max C FAR 0; 0.17 No | 3040 West 22 Properties                  |
| 24                    | 3,280                       | 9,000            | 9,000            | 0                     | 0                      | Yes                       | Max R FAR 1.25, 2.74 No                       | 3040 West 22 Properties                  |
| 26                    | 3,263                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | 3046 West 22 <sup>nd</sup> Street Owners |
| 83                    | 3,960                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | A Dicker                                 |
| 85                    | 2,640                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | A Dicker                                 |
| 86                    | 6,600                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | A Dicker                                 |
| 89                    | 2,000                       | 4,404            | 4,404            | 0                     | 0                      | Yes                       | Max R FAR 1.25, 2.2 No                        | 3031 West 23 <sup>rd</sup> St            |
| 90                    | 2,000                       | 4,404            | 4,404            | 0                     | 0                      | Yes                       | Max R FAR 1.25, 2.2 No                        | I Stern                                  |
| 91                    | 4,400                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | A Dicker                                 |
| 96                    | 2,200                       | 2,200            | 0                | 2,200                 | 0                      | No                        | Max M FAR 0; 1.0 No                           | IRL Realty Inc.                          |
| 97                    | 2,200                       | 0                | 0                | 0                     | 0                      | Yes                       | Max R FAR 1.25/Max CF FAR 2.0; 0.0 Yes        | IRL Realty Inc.                          |
| <b>TOTAL</b>          | <b>89,369</b>               | <b>94,251</b>    | <b>81,763</b>    | <b>12,488</b>         | <b>0</b>               |                           |   |  |

## **DESCRIPTION OF THE PROPOSED DEVELOPMENT**

As stated above, the Applicant intends to rezone the existing R5 district to a combination of R7D/C2-4 and R6A/C2-4 zoning districts on a portion of Block 7071, the Proposed Project Area. The Proposed Development Site, Block 7071, Lots 13, 16, 93, 94, 114, would be rezoned to R7D/C2-4. The Non-Applicant Owned Lots 3, 4, 5, 7, 8, 18, 26, 96, and 97 in the Project Area would also be rezoned from R5 to R7D/C2-4. The Non-Applicant Owned Lots 83, 85, and 86 would be rezoned from R5 to R6A/C2-4 and the Non-Applicant Owned Lot 91

would be rezoned from R5 to R7D/C2-4 and R6A/C2-4 (split zone).

The R7D district permits a residential and community facility FAR of 4.2. Under the Mandatory Inclusionary Housing (MIH) Program zoning regulations in this location, the R7D district permits a base FAR of 4.2 and a maximum FAR of 5.8 as a bonus for inclusionary housing. A maximum building height of 150 feet would be allowed within the R7D/C2-4 zoned area within 100 feet of Surf Avenue or 100 feet of West 22<sup>nd</sup> Street. Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within the Transit Zone. Residential and community facility Use Groups 1-4 are permitted in the R7D district.

The R6A district permits a residential and community facility FAR of 3.0. Under the MIH Program zoning regulations in this location, the R6A district permits a base FAR of 3.0 and a maximum FAR of 3.6 as a bonus for inclusionary housing. The maximum building height for eligible MIH program buildings with qualifying ground floors is 85 feet after a setback from the base height of up to 65 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 8 floors. Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within specified Transit Zones. Residential and community facility Use Groups 1-4 are permitted in the R6A district.

The C2-4 commercial overlay district permits commercial Use Groups 6 through 9 and 14, which include most retail establishments, as well as residential and community facility Use Groups 1 through 4. It would allow a maximum commercial FAR of 2.0 in the proposed R7D and R6A districts. The proposed C2-4 district requires one accessory parking space per 1,000 square foot of commercial floor area for all types of commercial uses.

The Applicant proposes to develop the Proposed Development Site with a new five-story, maximum 61'-3" tall; twelve-story, maximum 131'-5" tall; and basement mixed-use Use Group 2 residential and Use Group 6 commercial building totaling 103,654 gsf (100,583 zoning square feet [zsf]). The development would consist of one 5-story and one 12-story tower built over a 1-story basement. The building would contain 78 dwelling units within 88,751 gsf (85,680 zsf) primarily on floors 2-12. Option 1 has been chosen under the MIH provisions applicable to the Proposed Actions. Under this option, 25% of the residential floor area must be for affordable housing units for residents with incomes averaging 60% AMI (\$51,780 per year for a family of four in 2015) with 10% at 40% AMI. It is currently assumed that 20 of the units would be affordable to lower income residents. The remaining 58 units would be market rate. The average unit size would be approximately 1,138 square feet. As MIH options are not selected until the end of the ULURP process, up to 23 affordable units would be provided pursuant to MIH which is 30% of the currently proposed total of 78 dwelling units.

The proposed building would also contain 14,903 gsf of retail space in the basement and on the first floor in a 15-foot deep commercial mezzanine. 39 parking spaces accessory to the residential uses would be provided, at a ratio of 1 space for every two dwelling units, and would be located on the first floor of the 5- and 12-story portions of the building as well as on the roof of the basement between the two towers. 2,843 sf of common recreational space would be provided for the residents of the development. The existing structures and uses on the site would be demolished and removed.

The total proposed zoning floor area of 100,583 zsf represents an FAR of 5.76 comprised of a

residential FAR of 4.91 and a commercial FAR of 0.85.

The Proposed Development Site is located in a flood area, as defined by FEMA. It is within Flood Zone AE Elevation 11 (NAVD88) with a Base Flood Elevation (BFE) on West 22<sup>nd</sup> Street of 7.2 feet and a BFE on West 23<sup>rd</sup> Street of 5.84 feet. This area is subject to storm surge flooding from the one percent annual chance coastal flood. Such zones are not subject to high velocity wave action but are still considered high risk flooding areas. Accordingly, the proposed development would incorporate all New York State and New York City flooding and erosion requirements, including compliance with ZR Article VI, Chapter 4 “Special Regulations Applying in Flood Hazard Areas” and Appendix G of the Building Code.

Due to the development’s location in an AE flood zone, the building has been designed to meet the requirements of the NYC Building Code in order to minimize the effect of flooding. Thus, the building, consistent with these regulations, has a Design Flood Elevation (DFE) of 12 feet which includes one-foot of freeboard. The DFE is the BFE of 11 feet plus one-foot, which is the minimum dry flood proofing elevation. Pursuant to the Zoning Resolution, the building height is measured from this elevation. Below this elevation, the floor area must be dry flood proofed in order to permit habitable floor area. In the absence of dry flood proofing below the DFE, only crawlways, parking, storage, and building access are allowed.

The building’s basement would be located partially below and partially above the BFE but would be dry flood proofed to grade level, and would be used for building lobbies and entrances and commercial space. The residential entrance will be dry flood proof with flood proof barriers. The project will include a flood emergency egress at the DFE for the residential lobby. The first story, which would be used for parking and commercial space, would begin above the BFE/DFE, and would be at an elevation of 22.88 feet. The lowest residential floor would be at an even higher elevation of 33.22 feet. The development will be landscaped with salt water proof plantings.

### **BUILD YEAR/PROJECT PHASING**

Based on an estimated 12-month approval process and a 12-month construction period, the Build Year for the Applicant’s Proposed Development Site (Projected Development Site 1) is assumed to be 2019. However, in order to accommodate the seven soft sites that are projected to be developed as a result of the Proposed Actions, the Build Year has been extended for several more years until 2027.

### **PURPOSE AND NEED OF THE PROPOSED ACTIONS**

The Proposed Actions would enable the Applicant to develop approximately 78 new dwelling units, including up to 23 affordable housing units, in the Coney Island area of Brooklyn on currently underutilized land. The Proposed Development Site (Projected Development Site 1) is close to extensive park and athletic facilities and mass transit. It is in an area that already has substantial residential activity, with which this use would be totally consistent. The Proposed Actions are needed to allow the proposed floor area of the new building on the site.

The proposed buildings would be built pursuant to Quality Housing standards, insuring a better designed residential environment. The development of the buildings with affordable housing is consistent with the expressed desires of the City’s current mayoral administration to substantially increase the amount of affordable housing, particularly in areas such as this with substantial mass transit access. It is also consistent with the City’s desire to restore the overall

Coney Island area.

The Applicant seeks to develop a portion of the zoning lot with affordable housing consistent with the standards of the Quality Housing Program as well as the Mandatory Inclusionary Housing (MIH) Program zoning regulations.

Special Coney Island District Enlargement

The proposed text amendment to modify ZR § 131-00 et seq. is necessary to enlarge the SCID, enlarge the Coney West Subdistrict, create a new Parcel H with modified height and bulk regulations, and establish the applicability of the MIH program within R6A districts in the SCID. Pursuant to ZR § 131-321, residential development with Inclusionary Housing within R7D districts in Parcels A, B, C, D of the Coney West Subdistrict are permitted up to a maximum FAR of 5.8. This action would establish SCID use and bulk regulations, including the 5.8 maximum FAR, within the Project Area with specific provisions for the new Parcel H. Without the Proposed Actions, development at the site would be subject to the existing R5 zoning district regulations.

In addition to preserving and enhancing the amusement area, the Special Coney Island District was established to facilitate and guide the development of a residential and retail district; provide a transition to the neighboring areas to the north and west; provide flexibility for architectural design that encourages building forms that enhance and enliven the streetscape; control the impact of development on the access of light and air to streets, the Boardwalk and parks in the district and surrounding neighborhood; and promote development in accordance with the area's District Plan and thus conserve the value of land and buildings, and thereby protect the City's tax revenues. The proposal to expand the SCID and create a new Parcel H within the Coney West Subdistrict would further these goals by promoting development on underutilized property adjacent to the boundary of the SCID as further discussed below.

Currently, approximately half of the Surf Avenue frontage is vacant, approximately 20 percent of the West 22<sup>nd</sup> Street frontage is vacant, and approximately 70 percent of the West 23<sup>rd</sup> Street frontage is vacant. In connection with the proposed SCID R7D/C2-4 and R6A/C2-4 zoning districts, enlarging the SCID would create new opportunities for mixed-use housing and commercial development. New development at the Development Site and within the Project Area pursuant to the SCID provisions would strengthen the mixed-use character of Surf Avenue, and provide a transition to the neighboring areas to the north and west, and enliven West 22<sup>nd</sup> and 23<sup>rd</sup> Streets.

In addition, the proposed zoning map amendment is necessary to map the SCID Coney West Subdistrict Parcel H within the Project Area, subjecting the Project Area to the SCID Parcel H use and bulk regulations. The proposed boundary for the new Parcel H would abut the existing boundary of SCID Parcel G on the southern portion of Block 7071, which was mapped as parkland in 2009 and developed as Seaside Park (pursuant to C 140063 ZSK).

The proposed Zoning Text Amendment extending the Coney West Subdistrict portion of the Special Coney Island District (SCID) directly east of the Project Area across West 22<sup>nd</sup> Street onto the Proposed Development Site is necessary in order to accommodate the increase in floor area ratio up to 5.8 FAR including lower income housing on the Site as well as transitional height and setback regulations. The Zoning Text Amendment is needed to permit a proposed FAR of up to 5.8 on the Applicant's Proposed Development Site in order to provide sufficient floor area to accommodate lower income dwelling units as part of the project. The proposed Zoning Text Amendment extending the existing Inclusionary Housing Designated Area shown

in ZR 23-933 Appendix F, Brooklyn Community District 13, Map 1 to include the northern portion of Block 7071 coterminous with the proposed Zoning Map Amendment is necessary in order to make the newly mapped R7D/C2-4 district an Inclusionary Housing designated area.

The proposed Zoning Text Amendment to modify ZR Article 13, Chapter 1 would create a zone where the permitted heights of buildings would transition from the greater heights permitted in the Coney West Subdistrict portion of the Special Coney Island District directly east of the Project Area across West 22<sup>nd</sup> Street. The Text Amendment would limit the heights of buildings along a portion of West 23<sup>rd</sup> Street across from the R5 district further to the west but would allow taller structures on West 22<sup>nd</sup> Street opposite the existing Special District where taller buildings are already permitted.

#### Proposed R7D/C2-4 and R6A/C2-4 Districts

The proposed Zoning Map Amendment would include rezoning the Proposed Development Site from its existing R5 district to the proposed R7D/C2-4 district which is required in order to develop the proposed residential and commercial uses and density on the property. It is required to allow the proposed bulk of the new building to be increased from the current permitted FAR of 1.25 for residential uses to 4.2 for residential and community facility uses and a residential FAR of 5.8 as a bonus for inclusionary housing. It would also permit a commercial FAR of 2.0.

The proposed zoning change also involves rezoning properties in addition to the Proposed Development Site from R5 to R7D/C2-4 and R6A/C2-4. The change to R7D/C2-4 would serve to alter the permitted bulk in that area from the current permitted FAR of 1.25 for residential uses and 2.0 for community facility uses to 4.2 for residential and community facility uses and a residential FAR of 5.8 as a bonus for inclusionary housing. It would also permit a commercial FAR of 2.0. A maximum building height of 150 feet would be allowed within the R7D/C2-4 zoned area within 100 feet of Surf Avenue or 100 feet of West 22<sup>nd</sup> Street. The area proposed to be rezoned to R6A would permit a residential bulk of 3.0 for residential and community facility uses and a residential FAR of 3.6 with inclusionary housing and building heights would be limited to 85 feet. It would also permit a commercial FAR of 2.0. The increase in permitted bulk is appropriate given the location of the Coney West Subdistrict of the Special Coney Island District directly east of the Project Area across West 22<sup>nd</sup> Street.

The proposed zoning map amendment to establish R7D/C2-4 and R6A/C2-4 zoning districts within the Project Area is necessary for the proposed development project and creates a transition between the existing SCID R7D mapped to the east and the R5 that would remain mapped to the west.

Within the proposed new SCID Parcel H, the proposed R7D zoning district would be subject to modified use provisions pursuant to ZR § 131-132 and modified bulk provisions pursuant to ZR § 131-32. The proposed R7D would allow medium-density apartment buildings at a maximum FAR of 5.8 for developments that provide affordable housing pursuant to the MIH program requirements. Within Parcel H, the maximum height of a building within 100 feet of Surf Avenue or 100 feet of West 22<sup>nd</sup> Street is 150 feet (the remainder of Parcel H, which would be mapped R6A, is subject to the R6A maximum height pursuant to ZR § 23-664). Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within the Transit Zone. The proposed C2-4 commercial district would permit Use Groups 6-9 and 14 to allow commercial development with up to 2.0 FAR. The

proposed C2-4 district requires one accessory parking space per 1,000 sq. ft. of commercial floor area for all types of commercial uses. The proposed development would comply with the bulk regulations of the proposed SCID R7D/C2-4 zoning district. Similarly, the proposed residential and commercial uses would conform with the use provisions of the proposed SCID R7D/C2-4 zoning district.

Mapping an R7D in this area provides opportunities for medium-density housing development under the MIH program. The Coney Island Plan mapped the area immediately to the west of the proposed Project Area with a SCID R7D/C2-4 zoning district. The Project Area presents a similar opportunity for new transit-oriented housing development, including affordable housing, on underutilized property - directly addressing the City's Housing New York: A Five-Borough, Ten-Year Plan objectives. The proposed C2-4 overlay would support the development of mixed residential and commercial uses to strengthen the character of Surf Avenue as a mixed corridor, and promote mixed-use development within Parcel H consistent with the goals of the SCID. New ground floor commercial uses would activate the streetscape and create an enhanced pedestrian experience along Surf Avenue and West 22nd Street - creating a connection between the surrounding residential neighborhood north of Surf Avenue to the Seaside Park and Community Arts Center, Riegelmann Boardwalk, and the Coney Island Beach. New commercial uses would serve the existing residential community and future residents, and would create job opportunities in the area.

The proposed R6A zoning district would allow medium-density apartment buildings at a maximum FAR of 3.6 for developments that provide affordable housing pursuant to the MIH program requirements. The maximum building height for eligible MIH program buildings with qualifying ground floors is 85 feet after a setback from the base height of up to 65 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 8 floors. Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within specified Transit Zones. Mapping an R6A in this area provides opportunities for medium-density housing development under the MIH program, while creating an appropriate transition to the R5 district mapped to the west. The proposed C2-4 commercial district would permit Use Groups 6-9 and 14 to allow commercial development with up to 2.0 FAR. The proposed C2-4 district requires one accessory parking space per 1,000 sq. ft. of commercial floor area for all types of commercial uses. The proposed R6A creates a transition between the existing SCID R7D mapped to the east of the Project Area and in the proposed new Parcel H and the R5 mapped to the west. The proposed overlay would promote mixed-use development on West 23<sup>rd</sup> Street consistent with the goals of the SCID. New active ground floor uses on West 23<sup>rd</sup> Street would similarly enliven the streetscape and link Surf Avenue to the parkland to the south.

#### Mandatory Inclusionary Housing Text Amendment

The proposed text amendment of ZR Appendix F is necessary to establish an MIH Area coterminous with the Project Area. Pursuant to the MIH program, a percentage of the new dwelling units in the proposed development must be affordable units, resulting in an affordable housing set-aside for either 25 percent of the residential floor area at an average of 60 percent of AMI (Option 1) or 30 percent of the residential floor area at an average of 80 percent AMI (Option 2). The Applicant proposes mapping both MIH Option 1 and Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The Applicant seeks Option 1 for the Development Site, resulting in approximately 20 permanently affordable



units. As MIH options are not selected until the end of the ULURP process, up to 23 affordable units would be provided on the Development Site pursuant to MIH, which is 30% of the currently proposed total of 78 dwelling units.

#### Transit Zone Text Amendment

The proposed text amendment of ZR Appendix I is necessary to establish the Project Area within the Transit Zone. MIH Areas within the Transit Zone are subject to reduced parking requirements for income-restricted units. The enlargement of the Transit Zone is appropriate due to the Project Area's accessibility to mass transit, including the N, Q, D, and F subway lines at the Stillwell Avenue subway station and B36, X28, and X38 bus service along Surf Avenue. The entire SCID is within the Transit Zone, including the southern portion of Block 7071, which is located farther from mass transit options than the Project Area. The proposed text amendment ensures that the parking regulations for the proposed new SCID Parcel H would be consistent with the rest of the SCID.

#### **NO-ACTION SCENARIO**

Under the No-Action Scenario for the Project Build Year of 2027, it is assumed that the Applicant's Proposed Development Site (Projected Development Site 1), identified as Block 7071, Lots 13, 16, 93, 94, 114 in Brooklyn, would remain in its existing underutilized condition. No new as-of-right development would occur on the property as the property's existing R5 zoning limits residential FAR to 1.25 and these properties are already developed to a residential FAR of 1.01. Therefore, no new development would be anticipated. The existing 34 dwelling units on these parcels are anticipated to remain.

Under the No-Action Scenario for the Project Build Year of 2027, it is assumed that the following conditions would exist on the remaining lots in the Project Area, identified as Block 7071, Lots 1, 3, 4, 5, 6, 7, 8, 9, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 96, 97 in Brooklyn as further explained below.

Projected Development Site 2 - Block 7071, Lots 3, 4, and 5, under the same ownership, consist of a total lot area of 7,658 sf of vacant land. These parcels could be developed with approximately 9,572 sf of residential use or 10 dwelling units.

Projected Development Site 3 - Block 7071, Lots 7 and 8, under the same ownership, consist of a total lot area of 4,048 sf of vacant land. These parcels could be developed with approximately 5,060 sf of residential use or 5 dwelling units.

Projected Development Site 4 - Block 7071, Lot 18 consists of a 3,308 sf lot developed with a 1-story, 2,530 sf manufacturing building. This property could be developed with approximately 1,605 sf of residential use or 2 dwelling units.

Projected Development Site 5 - Block 7071, Lot 26 consists of a 3,261 sf vacant lot. This property could be developed with approximately 4,076 sf of residential use or 4 dwelling units.

Projected Development Site 6 - Block 7071, Lots 83, 85, and 86, under the same ownership, consist of 13,200 sf of vacant land. This property could be developed with approximately 16,500 sf of residential use or 17 dwelling units.

Projected Development Site 7 - Block 7071, Lot 91 consists of a 4,400 sf vacant lot. This property could be developed with approximately 5,500 sf of residential use or 6 dwelling units.

Projected Development Site 8 - Block 7071, Lots 96 & 97, under the same ownership, consist of a 4,400 sf lot including a 1-story 2,200 sf auto repair garage on a 2,200 sf lot and a 2,200 sf vacant

lot. These parcels could be developed with approximately 3,300 sf of residential use or 3 dwelling units.

Therefore, a total new development of approximately 47 dwelling units is anticipated on Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97.

No additional development would occur on Lots 1, 6, 9, 19, 24, 89, and 90 as all lots have some or all of the following characteristics: less than 3,000 sf in size; not in common ownership; and/or developed close to or in excess of the maximum permitted residential FAR of 1.25.

The existing 115 dwelling units plus the existing 7 commercial and manufacturing uses on these parcels are anticipated to remain.

## **WITH-ACTION SCENARIO**

This With-Action Scenario reflects the proposed Zoning for Quality and Affordability (ZQA) and Mandatory Inclusionary Housing (MIH) Text Amendments. For the purpose of providing a conservative analysis, the With-Action Scenario analyzes residential buildings with affordable housing on all sites where future residential development would be feasible. The Applicant proposes mapping both MIH Option 1 and Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The Applicant seeks the MIH 25% Option 1 for the Development Site. However, as MIH options are not selected until the end of the ULURP process, additional affordable units could be provided pursuant to MIH under the 30% Option 2.

### **Projected Development Sites**

#### **Applicant Owned**

**Projected Development Site 1 (Block 7071, Lots 13, 16, 93, 94, 114)** - The proposed rezoning to an R7D/C2-4 district within the proposed Coney West Subdistrict portion of the Special Coney Island District proposed to be extended over the Proposed Development Site would limit the use and bulk of future development on Projected Development Site 1 to closely match the proposed project. The intent of the proposed rezoning is primarily to allow for the development of a residential project with accessory commercial uses to serve the residential occupants of the project and the surrounding area given the overall lack of such services in the vicinity. Therefore, the With-Action RWCDs would essentially be the same as the proposed development described above with the exception of the number of dwelling units, which under the With-Action Scenario are based on an average size of 1,000 gsf per dwelling unit. The With-Action Scenario would have 89 dwelling units whereas the proposed development would include 78 dwelling units.

The With-Action Scenario for the Project Build Year of 2027 would entail the development of Projected Development Site 1 with a new five-story, twelve-story, and basement, maximum 131'-5" tall mixed-use Use Group 2 residential and Use Group 6 commercial building totaling 103,654.37 gsf and containing 89 dwelling units within 88,751.17 gsf primarily on floors 2-12 based on an average size of 1,000 gsf per dwelling unit. Under the MIH 25% option it is assumed that 25% or 22 of the units would be affordable to lower income residents. The remaining 75% or 67 of the units would be market rate. Under the MIH 30% option it is assumed that 30% or up to 27 of the units would be affordable to lower income residents. The remaining 75% or 62 of the units would be market rate. As MIH options are not selected until the end of the ULURP process, up to 27 affordable units would be provided pursuant to MIH which is 30% of the With Action total of 89 dwelling units.

The proposed building would also contain 14,903 gsf of retail space in the basement and on the

first floor in a 15-foot deep commercial mezzanine. Up to 44 parking spaces<sup>1</sup> accessory to the residential uses would be provided, at a ratio of 1 space for every two dwelling units, and would be located on the first floor of the 5- and 12-story portions of the building as well as on the roof of the basement between the two towers. 2,843 sf of common recreational space would be provided for the residents of the development. The existing structures and uses on the site would be demolished and removed.

### Non-Applicant Owned

Lots identified as soft sites where potential development could occur in the future under the proposed rezoning share the following characteristics:

- all soft sites are larger than 3,000 square feet in size either as a single lot or multiple lots in common ownership;
- lots do not contain residential buildings with six (6) or more units constructed before 1974. These buildings are likely to be rent-stabilized and difficult to legally demolish due to tenant relocation requirements;
- lots are not developed with new residential structures built after 2000; and
- all lots are substantially underdeveloped relative to the permitted base FAR of 4.2 and the FAR of 5.8 with the bonus for inclusionary housing that would be permitted under the proposed R7D/C2-4 zoning within the proposed Coney West Subdistrict portion of the Special Coney Island District proposed to be extended over most of the Project Area. Lots within the proposed R6A/C2-4 zoning area within the proposed Coney West Subdistrict portion of the Special Coney Island District proposed to be extended over the remainder of the Project Area are substantially underdeveloped relative to the permitted base FAR of 3.0 and the FAR of 3.6 with the bonus for inclusionary housing that would be permitted.

**Projected Development Site 2 (Block 7071, Lots 3, 4, and 5)** – These three vacant lots are under common ownership (2216 – 22 Surf Ave) and are therefore projected to become a merged zoning lot. Under the proposed R7D/C2-4 zoning, it is assumed that the 7,658-square foot property could be developed with a new 9-story, 95-foot, 45,535 gsf/44,414 zsf structure containing 7,058 gsf/7,058 zsf of ground floor commercial space and 38,476 gsf/37,356 zsf of residential floor area primarily on the upper 8 floors of the building for the creation of approximately 38 dwelling units at 1,000 square feet per unit, including up to 11 affordable and 27 market rate units. The building would not be constructed at the maximum permitted height of 15 stories, 150' as at this height the gross residential floor plate would be approximately 3,266 gsf and 2,742 sf net (after losses for exterior walls and the building core) for floors 2 through 6 and just 2,765 gsf/2,345 sf net for floors 7 through 15. Although these floor plates may not appear to be excessively small, the shallowness of the building due to the width of the lot of close to 76 feet would create a building depth of only 53 feet at floors 1 through 6 and 43 feet at floors 7 through 15. Such limited depth would drastically affect unit configuration which is even more negatively impacted by the acute angle formed by the street line intersection with the property. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 44,414 zsf on the 7,658-square foot lot would represent an FAR of 5.8. No parking would be required as the

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<sup>1</sup> 31 to 33 parking spaces would be required for the 62 to 67 market rate units (1 space for every two dwelling units) and no parking would be required for the 22 to 27 affordable units as the site would be located in the Transit Zone.

development falls below both the residential and commercial parking waiver.

**Projected Development Site 3 (Block 7071, Lots 7 & 8)** - These two vacant lots are under common ownership (S. Salerno) and are therefore projected to become a merged zoning lot. Under the proposed R7D/C2-4 zoning, it is assumed that the 4,048-square foot property could be developed with a new 9-story, 95-foot, 24,107 gsf/23,483 zsf structure containing 3,449 gsf/3,449 zsf of ground floor commercial space and 20,658 gsf/20,034 zsf of residential floor area primarily on the upper 8 floors of the building for the creation of approximately 21 dwelling units at 1,000 square feet per unit, including up to 6 affordable and 15 market rate units. The building would not be constructed at the maximum permitted height of 15 stories, 150' as at this height the gross residential floor plate would be approximately 1,602 gsf and 1,200 sf net (after losses for exterior walls and the building core) for floors 2 through 6 and just 1,341 gsf/923 sf net for floors 7 through 15 which would restrict an economical mix of unit types without wasting space for the duplexing of units. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 23,483 zsf on the 4,048-square foot lot would represent an FAR of 5.8. No parking would be required as the development falls below both the residential and commercial parking waiver.

**Projected Development Site 4 (Block 7071, Lot 18)** - Under the proposed R7D/C2-4 district with the Mandatory Inclusionary Housing bonus FAR of 5.8, the 3,308 square foot lot could be developed with a new 10-story, 105-foot 19,678 gsf/19,184 zsf structure containing 2,708 gsf/2,708 zsf of ground floor commercial space and 16,970 gsf/16,476 zsf of residential floor area primarily on the upper 9 floors of the building. On the basis of 1,000 square feet per unit, it is assumed that the property could be developed with approximately 17 dwelling units, including up to 5 affordable and 12 market rate units. The site is currently developed with an approximately 2,530 square foot, 1-story, industrial building which would be demolished to facilitate this development. The building would not be constructed at the maximum permitted height of 150' as at this height the gross residential floor plate would be approximately 1,160 sf and after losses for exterior walls and the building core there would be a net floor plate of less than 920 sf per floor which would restrict an economical mix of unit types without wasting space for the duplexing of units. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 19,184 zsf on the 3,308 square foot lot would represent an FAR of 5.8. No parking would be required as the development falls below both the residential and commercial parking waiver.

**Projected Development Site 5 (Block 7071, Lot 26)** - Under the proposed R7D/C2-4 zoning, it is assumed that the 3,261 square foot vacant property could be developed with a new 10-story, 105-foot, 19,401 gsf/18,914 zsf structure containing 2,661 gsf/2,661 zsf of ground floor commercial space and 16,740 gsf/16,253 zsf of residential floor area primarily on the upper 9 floors of the building for the creation of approximately 17 dwelling units at 1,000 square feet per unit, including up to 5 affordable and 12 market rate units. The building would not be constructed at the maximum permitted height of 150' as at this height the gross residential floor plate would be approximately 1,160 sf and after losses for exterior walls and the building core there would be a net floor plate of less than 920 sf per floor which would restrict an economical mix of unit types without wasting space for the duplexing of units. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 18,914 zsf on the 3,261 square foot lot would represent an FAR of 5.8. No parking would be required as the development falls below both the residential and commercial parking waiver.

**Projected Development Site 6 (Block 7071, Lot 83, 85, and 86)** - These three vacant lots are under common ownership (A. Dicker) and are therefore projected to become a merged zoning lot. Under the proposed R6A/C2-4 zoning, it is assumed that the 13,200 square foot property could be developed with a new 8-story, 85-foot, 48,568 gsf/47,520 zsf structure containing 12,600 gsf/12,600 zsf of ground floor commercial space and 35,968 gsf/34,920 zsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 36 dwelling units at 1,000 square feet per unit, including up to 11 affordable and 25 market rate units. The new building would be constructed at the maximum building height of 85 feet. The proposed R6A zone for the lot would allow a maximum FAR of 3.6 under MIH. The total proposed building floor area of 47,520 zsf on the 13,200 square foot lot would represent an FAR of 3.6. 17 cellar level parking spaces would be provided for the residential units including 3 spaces for the affordable units and 14 spaces for the market rate units. The 13 required spaces for the commercial space would be waived as it would fall below the commercial parking waiver.

**Projected Development Site 7 (Block 7071, Lot 91)** - This 4,400 square foot vacant lot would have a split zoning designation with approximately 1,100 square feet of the lot within the proposed R7D/C2-4 zone and approximately 3,300 square feet within the proposed R6A/C2-4 district. It is assumed that the property could be developed with a new 8-story, 85-foot, 18,724 gsf/18,260 zsf structure containing 3,800 gsf/3,800 zsf of ground floor commercial space and 14,924 gsf/14,460 zsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 15 dwelling units at 1,000 square feet per unit, including up to 5 affordable and 10 market rate units. The building would be constructed at the maximum building height of 85 feet. The proposed R6A/R7D zone for the lot would allow an adjusted maximum FAR of approximately 4.15 under MIH. The total proposed building floor area of 18,260 zsf on the 4,400 square foot lot would represent an FAR of 4.15. No parking would be required as the development falls below both the residential and commercial parking waiver.

**Projected Development Site 8 (Block 7071, Lots 96 & 97)** - These two lots are under common ownership (IRL Realty) and are therefore projected to become a merged zoning lot. The 4,400 square foot lot is developed with an approximately 2,200 square foot, 1-story, vehicle repair garage<sup>2</sup> which would be demolished in order to accommodate a new development under the proposed rezoning. Under the proposed R7D/C2-4 zoning, it is assumed that the 4,400 square foot property could be developed with a new 8-story, 85-foot, 23,620 gsf/23,620 zsf structure containing 3,800 gsf/3,800 zsf of ground floor commercial space and 19,820 gsf/19,820 zsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 20 dwelling units at 1,000 square feet per unit, including up to 6 affordable and 14 market rate units. The new building would be constructed at the maximum building height of 85 feet. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. However, the total proposed building floor area of 23,620 zsf on the 4,400 square foot lot would represent an FAR of only 5.37. This is due to the fact that the height of the building is restricted to comply with the maximum 8-story, 85-foot requirement of the R6A zone even though the property is located in in the R7D zoning district. Although the R7D district permits an FAR of 5.8, the project cannot realize the maximum FAR due to the height restriction and compliance with other bulk regulations (yards, etc.). No parking would be required as the development

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<sup>2</sup> The garage is on Lot 96; Lot 97 consists of vacant land.

falls below both the residential and commercial parking waiver.

Under the With-Action Scenario for the Project Build Year of 2027, it is assumed that Projected Development Sites 2 through 8, including Block 7071, Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97 in Brooklyn, would be developed with up to 164 new dwelling units, within approximately 163,556 gsf of residential floor area, and 36,076 gsf of commercial space.

#### Other Sites

Other Sites are sites where additional development would be allowed but which are not seen as Projected Development Sites by the project build year of 2027 as further detailed below. The remaining lots in the Project Area, identified as Block 7071, Lots 1, 6, 9, 19, 24, 89, and 90 in Brooklyn, are not anticipated to be developed as they do not meet the soft site criteria noted under the Non-Applicant Owned Projected Development Sites discussed above.

**Block 7071, Lot 1** - The 2,400 square foot lot developed with an existing 2-story, approximately 4,800 square foot mixed-use building containing 2 residential dwelling units and 1 commercial unit could be developed with an additional 9,120 square feet of floor area under the proposed R7D/C2-4 zoning with the Mandatory Inclusionary Housing bonus FAR of 5.8. However, the lot size of 2,400 square feet is considered to be too small and the additional permitted floor area is considered to be insufficient to be redeveloped based on the City's soft site criteria.

**Block 7071, Lot 6** - The 2,376 square foot lot developed with an existing 1-story, approximately 2,328 square foot industrial building could be developed with an additional 11,452 square feet of floor area under the proposed R7D/C2-4 zoning with the Mandatory Inclusionary Housing bonus FAR of 5.8. However, the lot size of 2,376 square feet is considered to be too small and the additional permitted floor area is considered to be insufficient to be redeveloped based on the City's soft site criteria.

**Block 7071, Lot 9** - The 7,009 square foot lot developed with an existing 2-story, approximately 10,300 square foot mixed-use building containing 18 residential dwelling units and 2 commercial units could be developed with an additional 30,352 square feet of floor area under the proposed R7D/C2-4 zoning with the Mandatory Inclusionary Housing bonus FAR of 5.8. However, the lot is developed with a residential building containing six or more dwelling units built before 1974 and is therefore unlikely to be redeveloped based on the City's soft site criteria.

**Block 7071, Lot 19** - The 12,117 square foot lot developed with an existing 6-story, approximately 36,624 square foot mixed-use building containing 40 residential dwelling units and 1 ground floor commercial unit could be developed with an additional 33,654 square feet of floor area under the proposed R7D/C2-4 zoning with the Mandatory Inclusionary Housing bonus FAR of 5.8. However, the building is rent-stabilized and would be difficult to legally demolish due to tenant re-location requirements.

**Block 7071, Lot 24** - The 3,280 square foot lot developed with an existing 3-story, approximately 9,000 square foot residential building containing 15 residential dwelling units could be developed with an additional 10,024 square feet of floor area under the proposed R7D/C2-4 zoning with the Mandatory Inclusionary Housing bonus FAR of 5.8. However, the building is rent-stabilized and would be difficult to legally demolish due to tenant re-location requirements.

**Block 7071, Lot 89** - The 2,000 square foot lot developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units could be developed with an additional 7,200 square feet of floor area under the proposed R7D/C2-4 zoning with the

Mandatory Inclusionary Housing bonus FAR of 5.8. However, the lot size of 2,000 square feet is considered to be too small and the additional permitted floor area is considered to be insufficient to be redeveloped based on the City’s soft site criteria.

**Block 7071, Lot 90** - The 2,000 square foot lot developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units could be developed with an additional 7,200 square feet of floor area under the proposed R7D/C2-4 zoning with the Mandatory Inclusionary Housing bonus FAR of 5.8. However, the lot size of 2,000 square feet is considered to be too small and the additional permitted floor area is considered to be insufficient to be redeveloped based on the City’s soft site criteria.

**INCREMENT**

Under No-Action conditions, the 8 Projected Development Sites would be developed with 63,584 gsf of residential space for 81 dwelling units, and 4,730 gsf of commercial space. Under With-Action conditions the 8 Projected Development Sites would be developed with 252,307 gsf of residential space for 253 dwelling units (including up to 76 affordable units and 177 market rate units), 50,979 gsf of commercial space, and 61 accessory residential parking spaces. The increment between the No-Action and With-Action development scenarios would be 188,723 gsf of additional residential space for 172 additional dwelling units, (including up to 76 affordable units and 96 market rate units), 46,249 gsf of additional commercial space, and 61 new residential accessory parking spaces. In order to allow for the projected development, the following existing/no-action development would be demolished.

- Site 1: 17,661 gsf of residential floor area containing 34 dwelling units
- Site 4: a 2,530 gsf industrial building
- Site 8; a 2,200 gsf garage

All the projected commercial development would be comprised of new commercial floor area while 206 new residential units would be constructed relative to no-action conditions (206 units minus 34 no-action units results in 172 total additional units). These losses are reflected in the increment numbers above. Table 2 below summarizes the No-Action and With-Action conditions for the 8 Projected Development Sites within the Project Area.

| <b>Table 2: No-Action and With-Action Summary of Projected Development Sites Within Project Area</b> |                             |                  |                          |                    |                    |                  |                         |                  |                   |                             |
|--|-----------------------------|------------------|--------------------------|--------------------|--------------------|------------------|-------------------------|------------------|-------------------|-----------------------------|
|  |                             | <b>No-Action</b> |                          |                    | <b>With-Action</b> |                  |                         |                  |                   |                             |
| <b>Block 7071/ Lot Nos.</b>  | <b>Zoning Lot Size (SF)</b> | <b>Total GSF</b> | <b>Resid GSF/# of DU</b> | <b>Com'l/M GSF</b> | <b>Total GSF</b>   | <b>Resid GSF</b> | <b>Total DU/ Afford</b> | <b>Com'l GSF</b> | <b>Pkg Spaces</b> | <b>Increment</b>            |
| 13, 16, 93, 94, 114 (Site 1)   | 17,467                      | 17,661           | 17,661/34                | 0                  | 103,654            | 88,751           | 89/22                   | 14,903           | 44                | +55 DUs, +14,903 C, +44 pkg |
| 3, 4, 5 (Site 2)   | 7,658                       | 9,882            | 9,882/10                 | 0                  | 45,535             | 38,476           | 38/10                   | 7,058            | 0                 | +28 DUs, +7,058 C           |
| 7, 8 (Site 3)  | 4,048                       | 5,060            | 5,060/5                  | 0                  | 24,107             | 20,658           | 21/5                    | 3,449            | 0                 | +16 DUs, +3,449 C           |
| 18 (Site 4)  | 3,308                       | 4,135            | 1,605/2                  | 2,530 (M)          | 19,678             | 16,970           | 17/4                    | 2,708            | 0                 | +15 DUs, +178 C             |

|                           |               |               |                             |              |                |                |               |               |           |   |
|---------------------------|---------------|---------------|-----------------------------|--------------|----------------|----------------|---------------|---------------|-----------|---|
| 26<br>(Site 5)            | 3,261         | 4,076         | 4,076/4                     | 0            | 19,401         | 16,740         | 17/4          | 2,661         | 0         | +13 DUs,<br>+2,661 C                                    |
| 83, 85,<br>86 (Site<br>6) | 13,200        | 16,500        | 16,500/17                   | 0            | 48,568         | 35,968         | 36/9          | 12,600        | 17        | +19 DUs, +<br>12,600 C,<br>+17 pkg                      |
| 91<br>(Site 7)            | 4,400         | 5,500         | 5,500/6                     | 0            | 18,724         | 14,924         | 15/4          | 3,800         | 0         | +9 DUs,<br>+3,800 C                                     |
| 96, 97<br>(Site 8)        | 4,400         | 5,500         | 3,300/3                     | 2,200 (M)    | 23,620         | 19,820         | 20/5          | 3,800         | 0         | +17 DUs, +<br>1,600 C                                   |
| <b>TOTAL</b>              | <b>57,742</b> | <b>68,314</b> | <b>63,584</b><br><b>/81</b> | <b>4,730</b> | <b>303,287</b> | <b>252,307</b> | <b>253/63</b> | <b>50,979</b> | <b>61</b> | <b>+172 DUs,</b><br><b>+46,249 C,</b><br><b>+61 pkg</b> |



## ENVIRONMENTAL ASSESSMENT STATEMENT

### INTRODUCTION

Based on the analysis and the screens contained in the Environmental Assessment Statement Short Form, the analysis areas that require further explanation include land use, zoning, and public policy, community facilities, open space, shadows, historic and cultural resources, urban design and visual resources, hazardous materials, water and sewer infrastructure, transportation, air quality, noise, and construction as further detailed below. The subject heading numbers below correlate with the relevant chapters of the *CEQR Technical Manual*.

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

Under the *City Environmental Quality Review (CEQR) Technical Manual* guidelines, a land use analysis evaluates the use and development trends in the area that may be affected by a proposed action and determines whether the proposed action is compatible with those conditions or may affect them. Similarly, the analysis considers the proposed action's compliance with, and effect on, the area's zoning and other applicable public policies.

The Proposed Actions consist of a zoning map amendment that would rezone a portion of Block 7071 in Brooklyn Community District 13 from R5 to R7D/C2-4 (Lots 1, 3-9, 13, 16, 18, 19, 24, 26, p/o 91, 93, 94, 96, 97, and 114) and R6A/C2-4 (Lots 83, 85, 86, 89, 90, and p/o 91). The Proposed Actions also include the following zoning text amendments:

- Modify Maps 1, 2, and 4-6 of Appendix A of ZR Article 13, Chapter 1 to include a new Parcel H. On Maps 1 and 2, include Parcel H within the Coney West Subdistrict (CW).
- Amend ZR 23-933 Appendix F to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the Proposed Project Area. Pursuant to the Mandatory Inclusionary Housing (MIH) Text Amendment provisions applicable to the Proposed Actions, a percentage of the new dwelling units in the proposed development must be affordable units, resulting in an affordable housing set-aside of either 25 percent (Option 1) of the residential floor area at an average of 60 percent of Area Median

Income (AMI) [\$46,620 per year for a family of three], or 30 percent (Option 2) of the residential floor area at an average of 80 percent AMI (\$62,150 for a family of three). The Applicant proposes mapping both MIH Option 1 and Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The Applicant seeks Option 1 for the Development Site, resulting in approximately 20 permanently affordable units. However, as MIH options are not selected until the end of the ULURP process, up to 23 affordable units could be provided pursuant to MIH which is 30% of the currently proposed total of 78 dwelling units.

- Amend ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone.

The proposed Zoning Map Change and Zoning Text Amendments would facilitate a proposal by the Applicant to construct a new five-story, twelve-story, and basement mixed-use UG2 residential and UG6 commercial building totaling 103,654 gross square feet (gsf) in size on the Applicant owned property (Block 7071, Lots 13, 16, 93, 94, 114). The building would include 78 dwelling units, 20 of which would be affordable to lower income residents, 14,903 gsf of retail space, and 39 parking spaces accessory to the residential uses. In order to develop the proposed project, the Applicant owned property would be merged into a single zoning lot and the existing development would be demolished. Absent the Proposed Actions (the No-Action condition) it is assumed that the development site would remain the same as under existing conditions. The remainder of the Proposed Project Area, Block 7071, Tax Lots 1, 3-9, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 96, and 97 is not proposed for development and is not controlled by the Applicant. As discussed in the Project Description, the Proposed Development is expected to be complete by 2019. However, in order to accommodate the seven soft sites that are projected to be developed as a result of the Proposed Actions, the Build Year has been extended for several more years until 2027.

According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning and public policy is related to the type and size of the project, as well as the location and context of the area that could be affected by the project. To assess the potential for project related impacts, the land use study area has been defined as the area located within a 400-foot radius of the proposed Project Area. The 400-foot radius study area is generally bounded on the north by an area between Surf and Neptune

Avenues, on the south by the Coney Island beach and boardwalk, on the east by an area slightly to the east of West 21<sup>st</sup> Street, and on the west by an area slightly to the west of West 34<sup>th</sup> Street. 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.

## LAND USE

### Existing Conditions

#### *Project Area*

The Project Area (the area subject to the Zoning Map and Zoning Text Amendments) is located in the Coney Island neighborhood of Brooklyn on the northern portion of Block 7071, bounded by West 22<sup>nd</sup> and West 23<sup>rd</sup> Streets, Surf Avenue, and the northern boundary of the Seaside Park and Community Arts Center and consists of Tax Lots 1, 3-9, 13, 16, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 93, 94, 96, 97, and 114. On Lot 114 there are 15 rent regulated units; on Lot 19 there are 40 rent regulated units; and on Lot 24 there are 10 rent regulated units. Block 7071, Lots 13, 16, 93, 94, 114) constitutes the Applicant's property which is proposed for development. Block 7071, Tax Lots 1, 3-9, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 96, and 97 would be rezoned but are not controlled by the Applicant. Additional development is projected to occur on Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97. No development would occur on Lots 1, 6, 9, 19, 24, 89, and 90 as their lot sizes are considered to be too small and the additional permitted floor area is considered to be insufficient to be redeveloped based on the City's soft site criteria or they are developed with 6 or more residential rent stabilized dwelling units and would be difficult to legally demolish due to tenant re-location requirements.

The Applicant's property (Block 7071, Lots 13, 16, 93, 94, 114) is currently developed with 34 dwelling units. The remainder of the Project Area is developed with 128 two-, three-, and multi-family units, and 12,488 gsf of commercial and manufacturing floor area. The existing development on each of the Projected Development Sites is detailed below.





1. View of the amphitheater facing south on West 22nd Street.



2. View of the amphitheater facing south on West 22nd Street.



3. View of the amphitheater facing south on West 22nd Street.







1. View of West 22nd Street facing south.



2. View of West 22nd Street facing north.



3. View of the side of West 22nd Street facing northwest.







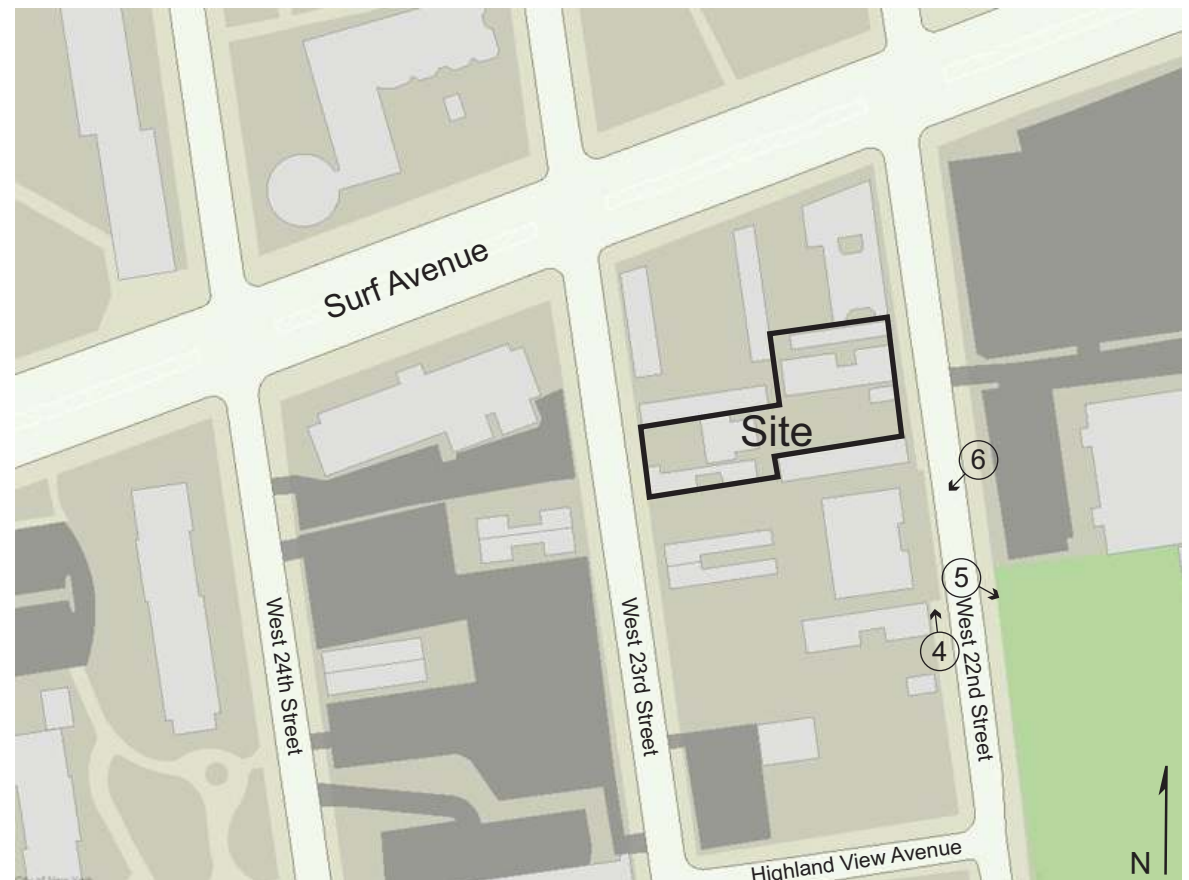
4. View of the sidewalk along the west side of West 22nd Street facing north.



5. View of the side of West 22nd Street facing southeast.



6. View of the side of West 22nd Street facing southwest.







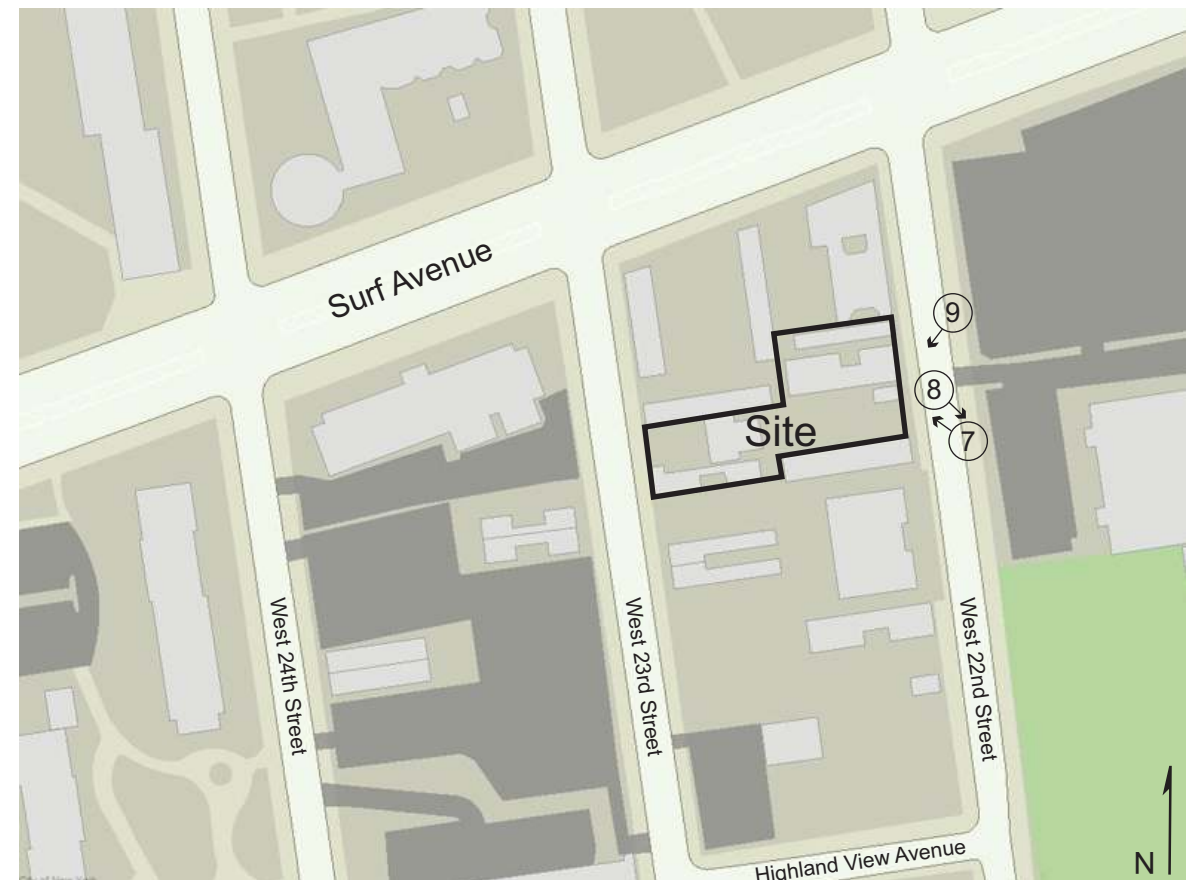
7. View of the Site facing northwest from West 22nd Street.



8. View of the side of West 22nd Street facing southeast from the Site.



9. View of the Site facing southwest from West 22nd Street.







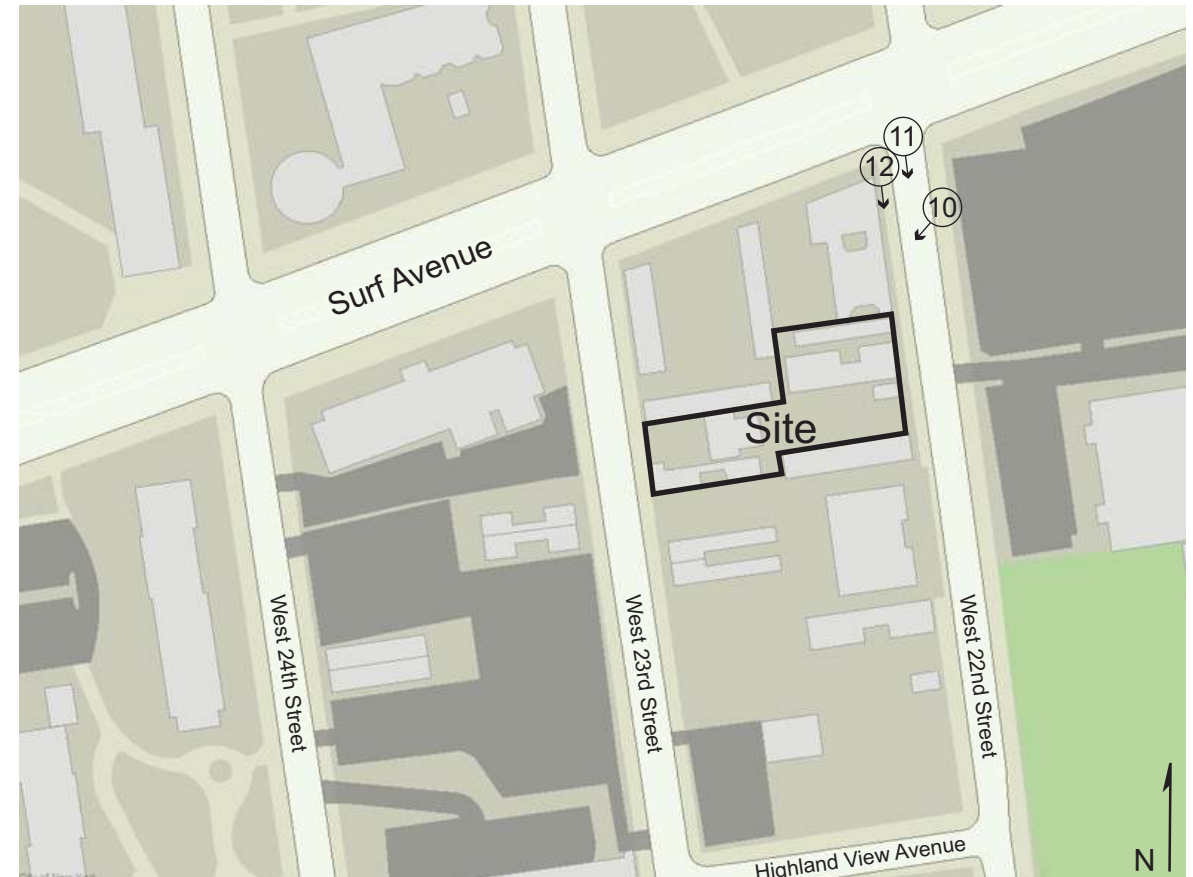
10. View of the side of West 22nd Street facing southwest.



11. View of West 22nd Street facing south from Surf Avenue.



12. View of the sidewalk along the west side of West 22nd Street facing south from Surf Avenue.







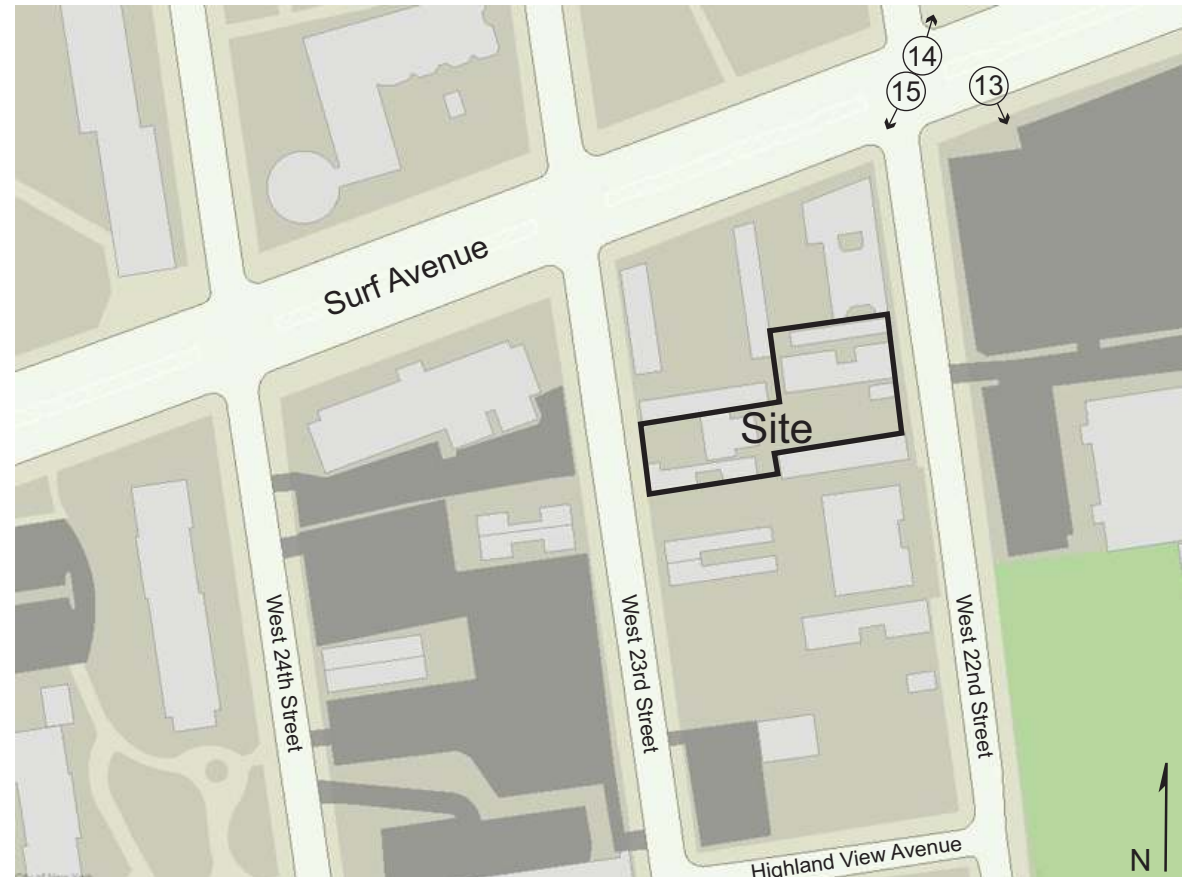
13. View of the side of Surf Avenue facing south.



14. View of the intersection of Surf Avenue and West 22nd Street facing northeast



15. View of the intersection of Surf Avenue and West 22nd Street facing southwest.







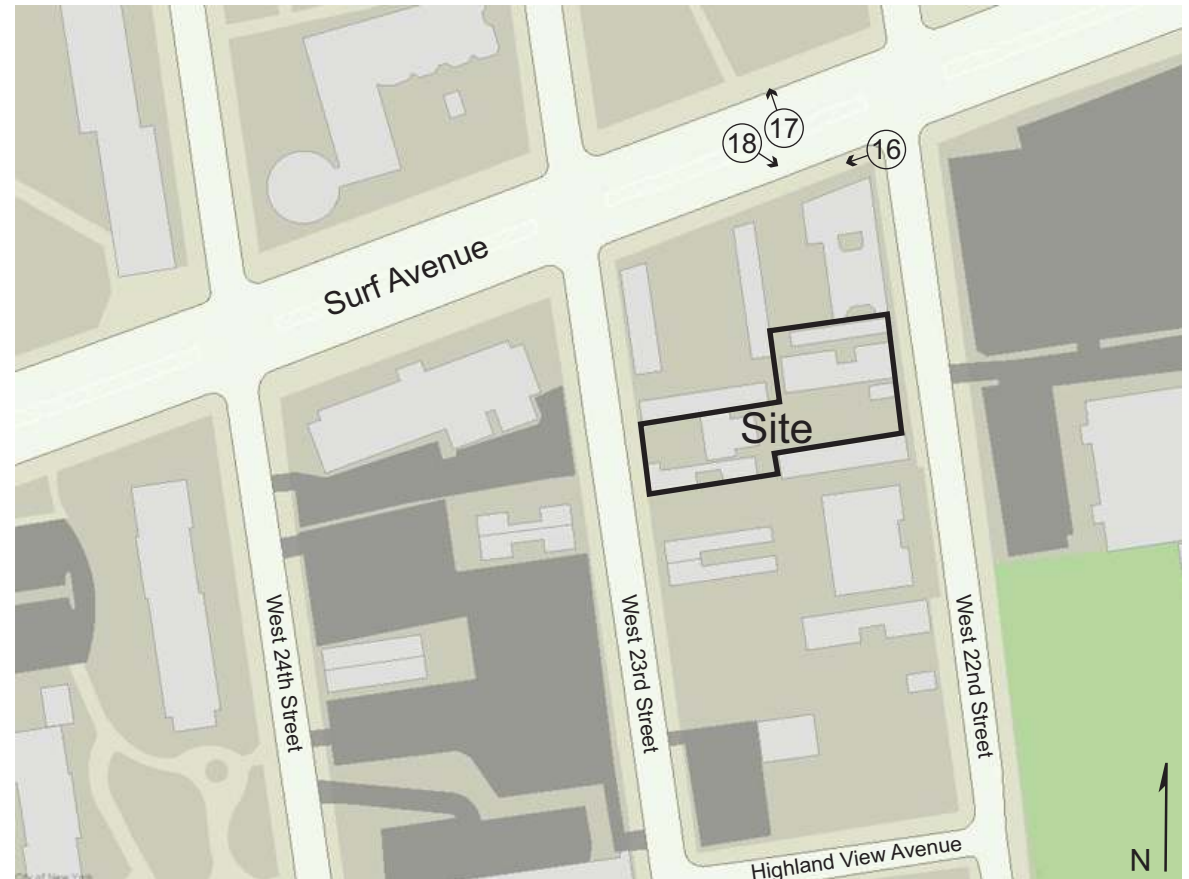
16. View of the sidewalk along the south side of Surf Avenue facing west from West 22nd Street.



17. View of the side of Surf Avenue facing northwest.



18. View of the side of Surf Avenue facing southeast.







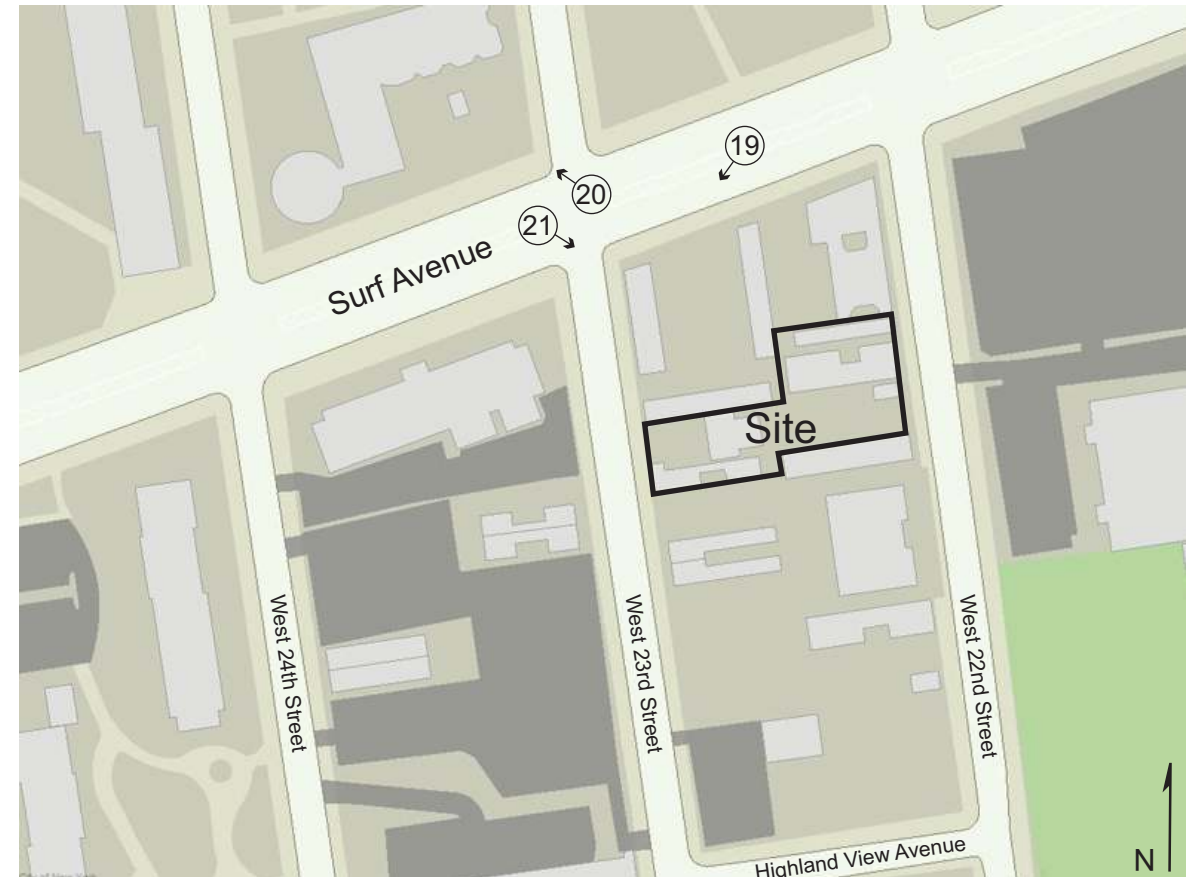
19. View of the side of Surf Avenue facing southwest.



20. View of the intersection of Surf Avenue and West 23rd Street facing northwest.



21. View of the intersection of Surf Avenue and West 23rd Street facing southeast.







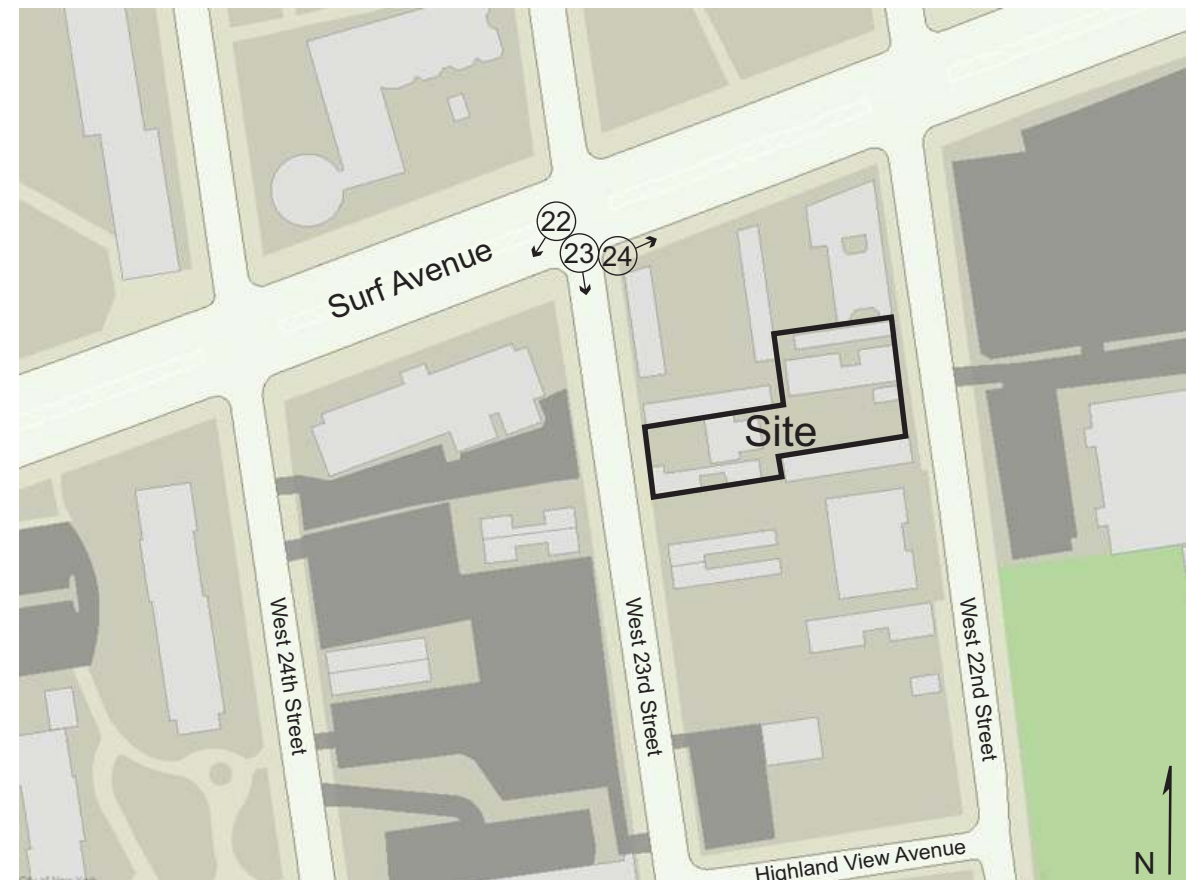
22. View of the side of Surf Avenue facing southwest from West 23rd Street.



23. View of West 23rd Street facing south from Surf Avenue.



24. View of the sidewalk along the south side of Surf Avenue facing east from West 23rd Street.







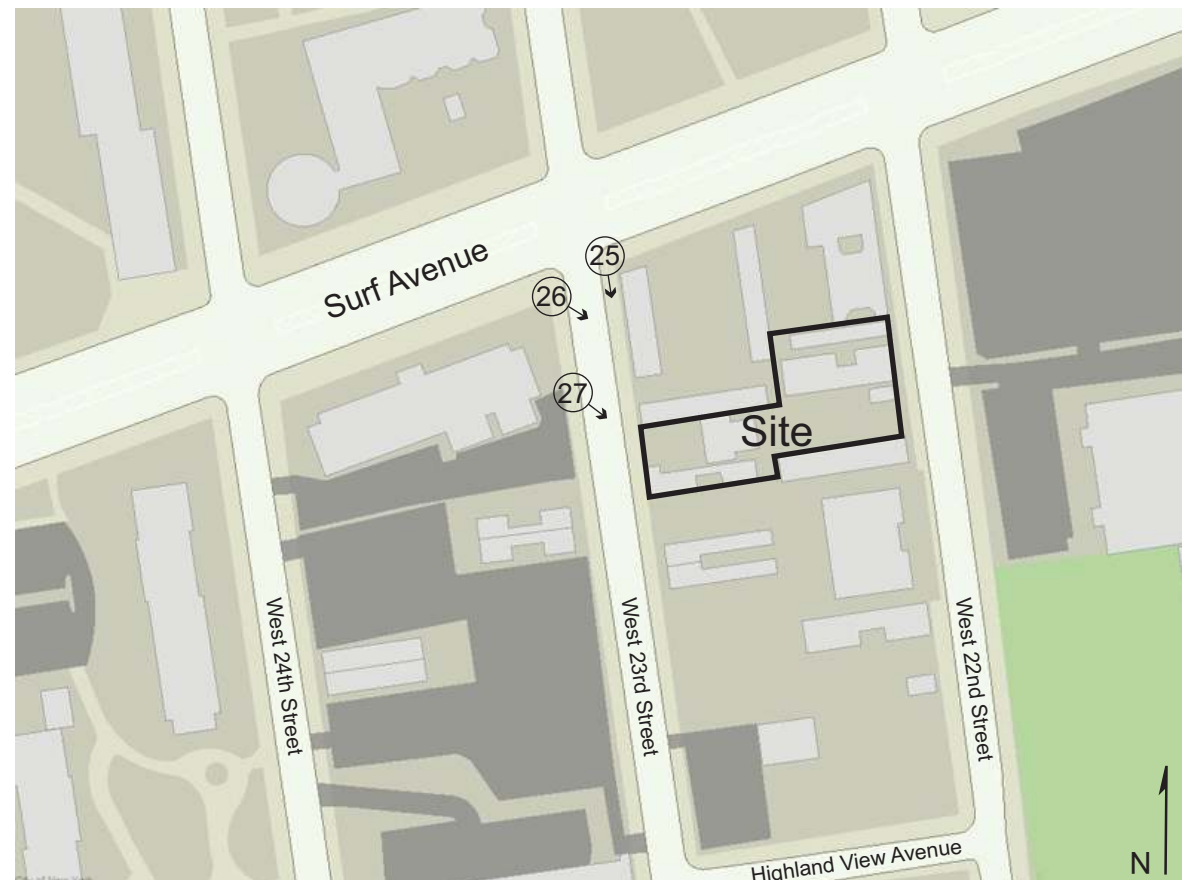
25. View of the sidewalk along the east side of West 23rd Street facing south from Surf Avenue.



26. View of the side of West 23rd Street facing southeast.



27. View of the Site facing southeast from West 23rd Street.







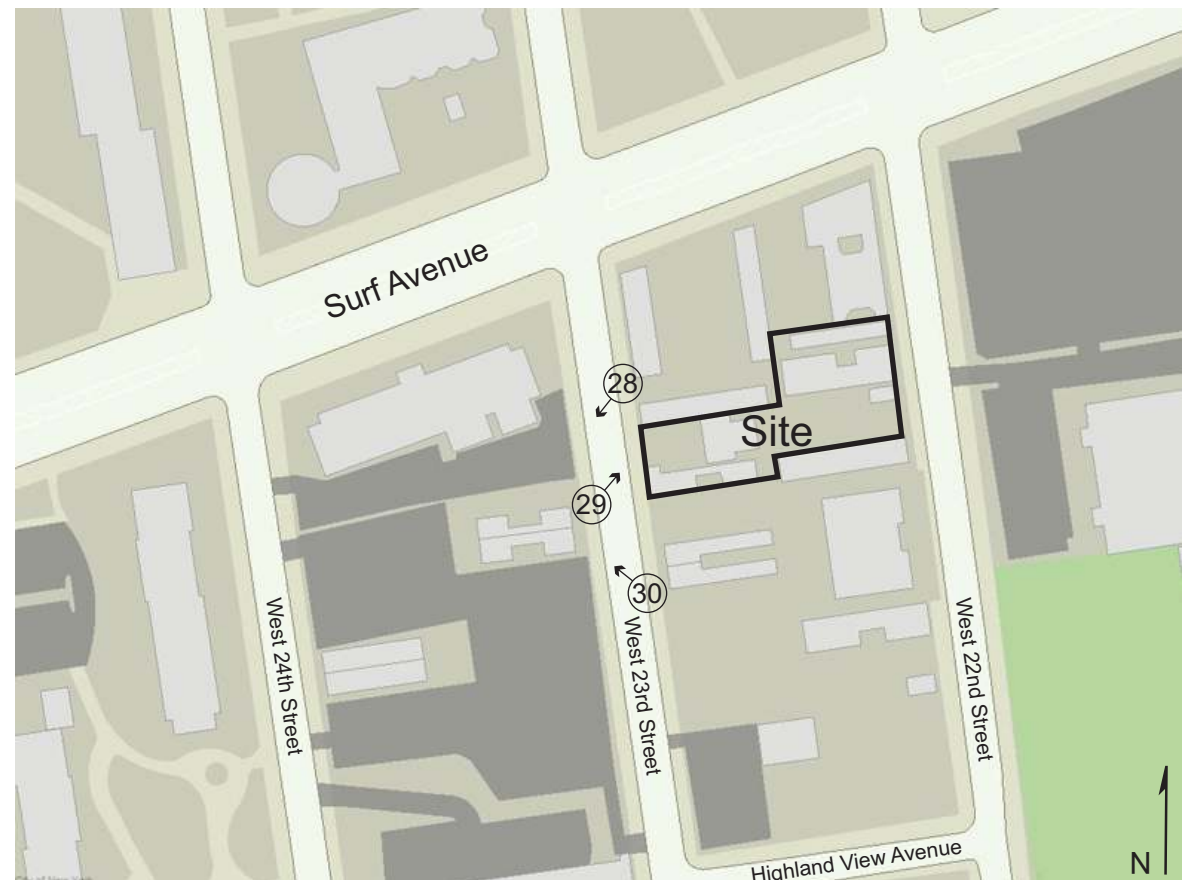
28. View of the side of West 23rd Street facing southwest.



29. View of the Site facing northwest from West 23rd Street.



30. View of the side of West 23rd Street facing northwest.







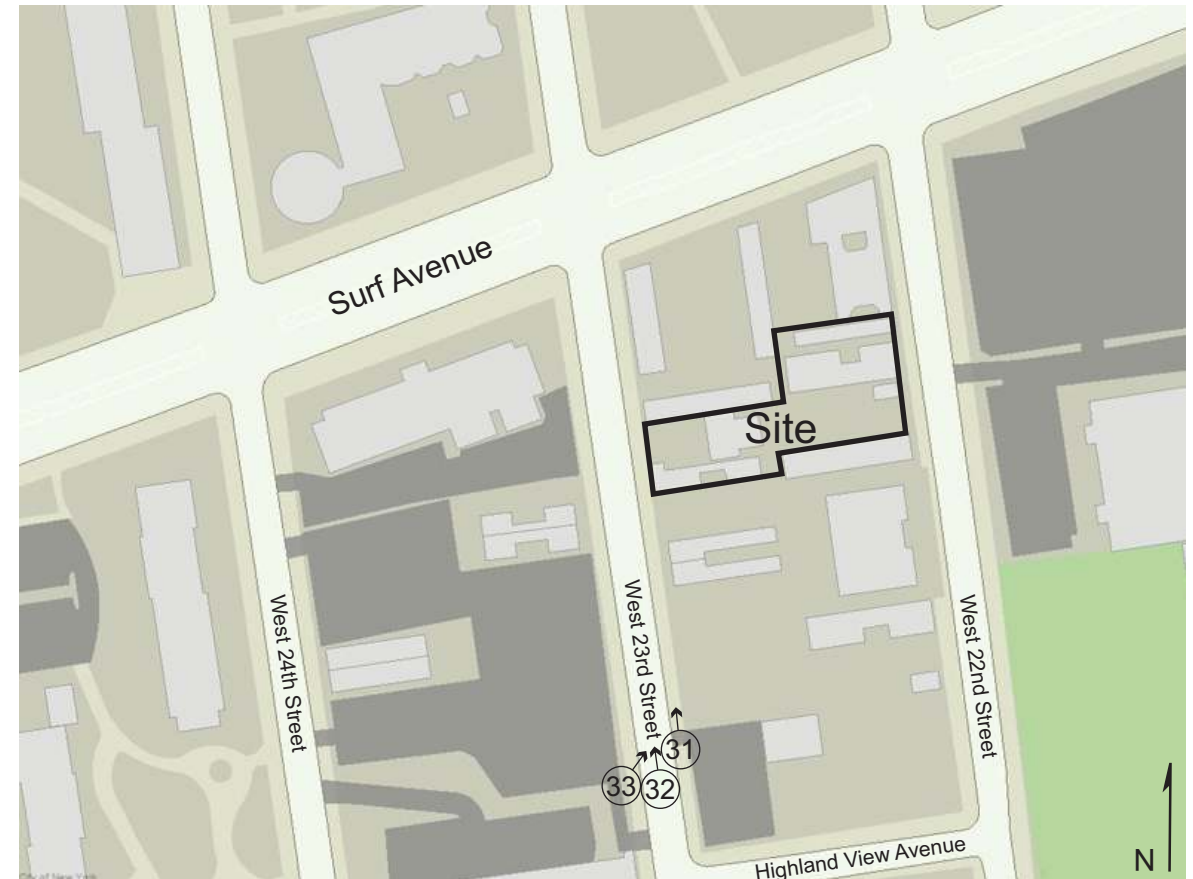
31. View of the sidewalk along the east side of West 23rd Street facing north.



32. View of West 23rd Street facing north.



33. View of the side of West 23rd Street facing northeast.







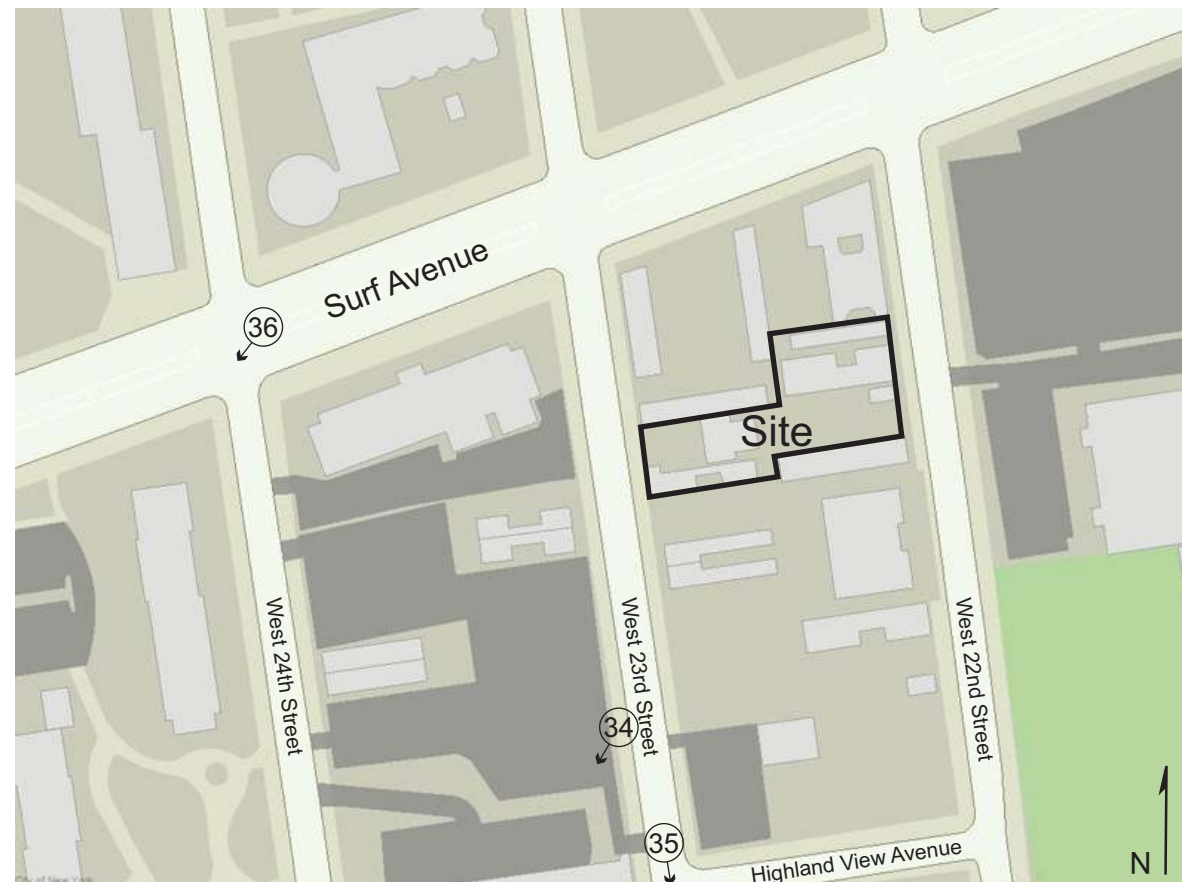
34. View of the side of West 23rd Street facing southwest.



35. View of West 23rd Street facing south.



36. View of the side of Surf Avenue facing southwest from West 24th Street.







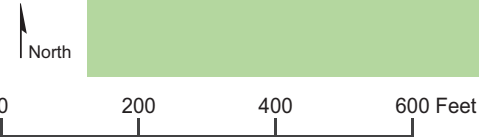
37. View of the side of West 24th Street facing northwest from Surf Avenue.





**Legend**

- # Projected Development Site #
- █ Projected Development Site (Applicant-owned)
- █ Projected Development Site (Non-applicant-owned)
- Proposed Rezoning Area
- Zoning Boundaries
- R6A** Proposed Zoning District



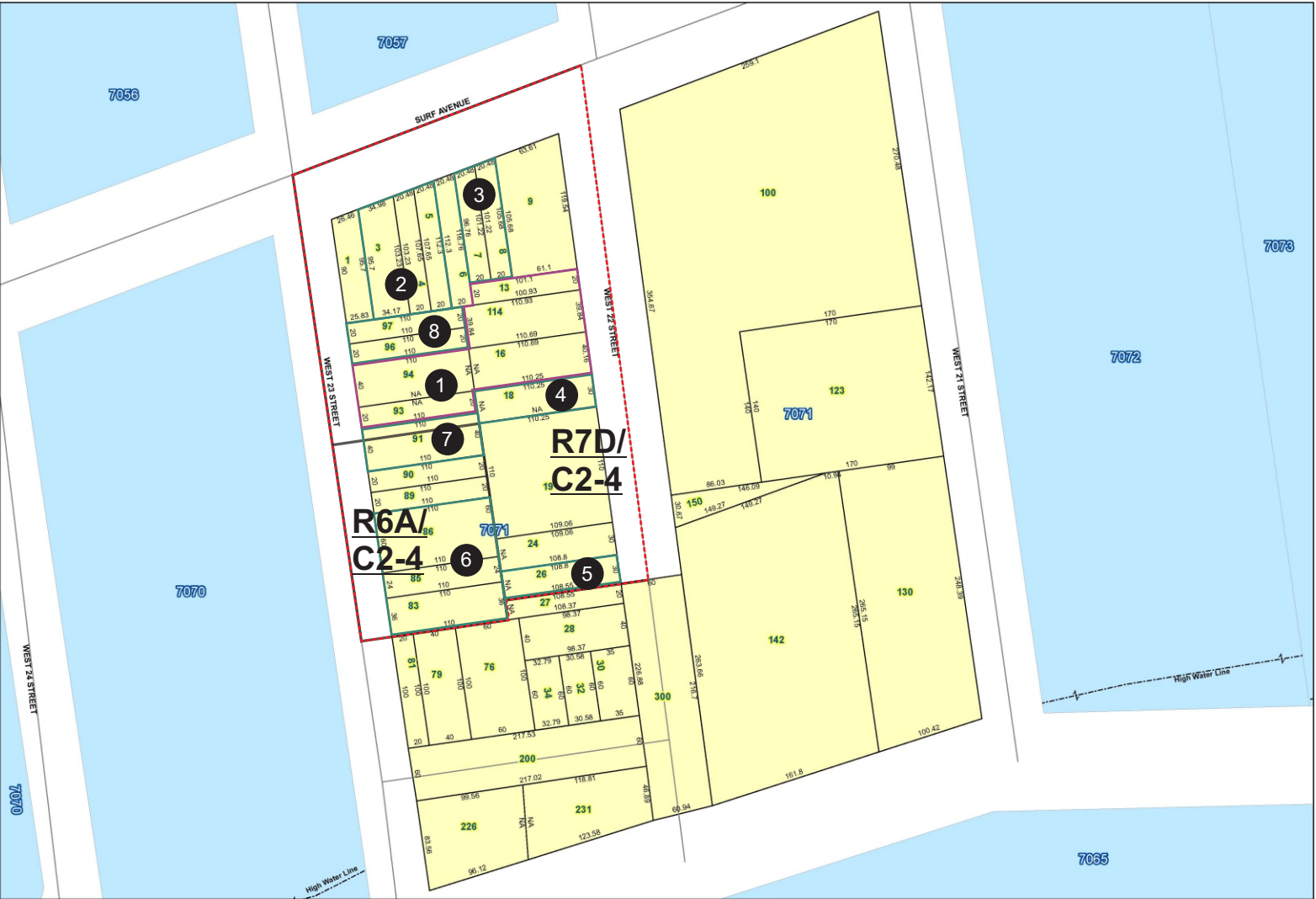




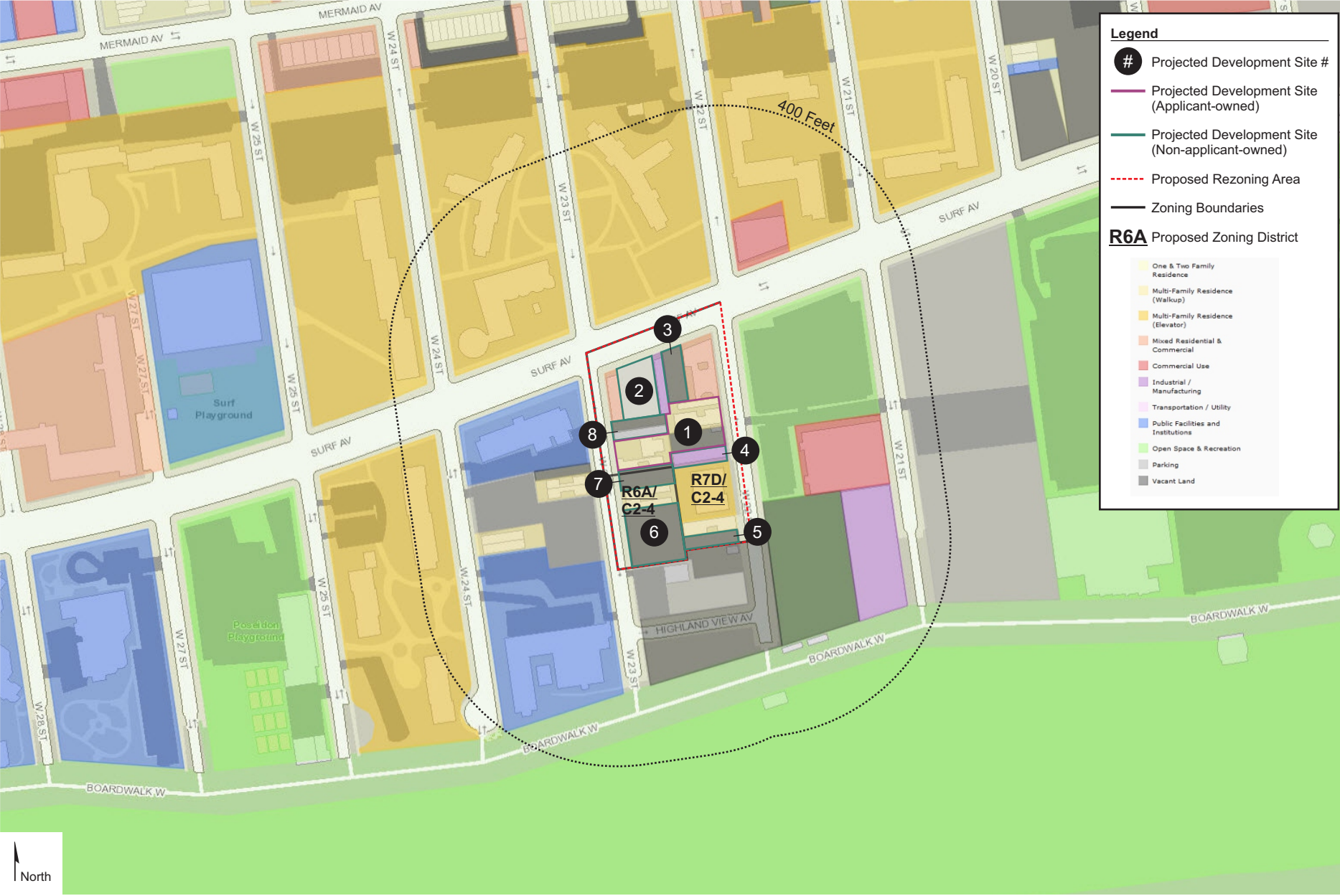
NYC Digital Tax Map

Effective Date : 06-27-2014 16:05:20  
End Date : Current  
Brooklyn Block: 7071

- Legend**
- Streets
  - Miscellaneous Text
  - Possession Hooks
  - Boundary Lines
  - Lot Face Possession Hooks
  - Regular
  - Undewater
  - Tax Lot Polygon
  - Condo Number
  - Tax Block Polygon
  - #** Projected Development Site #
  - Projected Development Site (Applicant-owned)
  - Projected Development Site (Non-applicant-owned)
  - Proposed Rezoning Area
  - Zoning Boundaries
  - R6A** Proposed Zoning District



0 50 100 Feet  
05/02/2030 40



**Legend**

- # Projected Development Site #
- Projected Development Site (Applicant-owned)
- Projected Development Site (Non-applicant-owned)
- - - Proposed Rezoning Area
- Zoning Boundaries

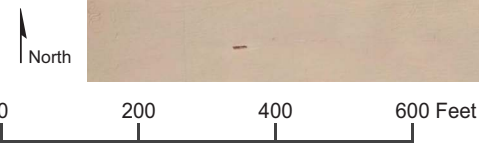
**R6A Proposed Zoning District**

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















Projected Development Site 1 (Block 7071, Lots 13, 16, 93, 94, 114) consists of 5 contiguous lots developed with approximately 17,661 gsf of floor area including 34 dwelling units as follows:

- Block 7071, Lot 13 – 2,022 sf lot developed with a 1-story 1,218 sf building containing 4 dwelling units.
- Block 7071, Lot 16 – 4,436 sf vacant lot.
- Block 7071, Lot 93 – 2,200 sf lot developed with a 2-story 3,000 sf building containing 3 dwelling units.
- Block 7071, Lot 94 – 4,400 sf lot developed with a 2-story 3,840 sf building containing 6 dwelling units.
- Block 7071, Lot 114 – 4,408 sf lot developed with a 3-story 9,603 sf building containing 21 dwelling units.

Projected Development Site 2 (Block 7071, Lots 3, 4, 5) is comprised of 3 vacant lots totaling 7,658 square feet in area.

Projected Development Site 3 (Block 7071, Lots 7 and 8) is comprised of 2 vacant lots totaling 4,048 square feet in area.

Projected Development Site 4 (Block 7071, Lot 18) is comprised of a 3,308 square foot lot developed with an existing 1-story, approximately 2,530 square foot industrial building.

Projected Development Site 5 (Block 7071, Lot 26) is comprised of one 3,261 square foot vacant lot.

Projected Development Site 6 (Block 7071, Lots 83, 85, and 86) is comprised of 3 vacant lots totaling 13,200 square feet in area.

Projected Development Site 7 (Block 7071, Lot 91) is comprised of one 4,400 square foot vacant lot.

Projected Development Site 8 (Block 7071, Lots 96 and 97) is comprised of a 2,200 square foot lot (Lot 96) developed with an existing 1-story, approximately 2,200 square foot vehicle repair garage. Lot 97 is a 2,200 square foot vacant lot.

Block 7071, Lot 1 is a 2,400 square foot lot developed with an existing 2-story, approximately 4,800 square foot mixed-use building containing 2 residential dwelling units and 1 commercial unit. Block 7071, Lot 6 is a 2,376 square foot lot developed with an existing 1-story, approximately 2,328 square foot industrial building. Block 7071, Lot 9 is a 7,009 square foot lot developed with an existing 2-story, approximately 10,300 square foot mixed-use building containing 18 residential dwelling units and 2 commercial units. Block 7071, Lot 19 is a 12,117 square foot lot developed with an existing 6-story, approximately 36,624 square foot mixed-use building containing 40 residential dwelling units and 1 ground floor commercial unit. Block 7071, Lot 24 is a 3,280 square foot lot developed with an existing 3-story, approximately 9,000 square foot residential building containing 15 residential dwelling units. Block 7071, Lot 89 is a 2,000 square foot lot developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units. Block 7071, Lot 90 is a 2,000 square foot lot developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units.

#### ***400-Foot Radius Project Study Area***

The lots in the Project Area occupy the bulk of the block on which they are located, Block 7071. The remainder of the block to the south of the Project Area consists of the Seaside Park and Community Arts Center. The 400-foot radius area to the south of the Project Area consists of the Coney Island beach and boardwalk.

Directly to the north of the proposed Project Area, across Surf Avenue on Blocks 7056, and 7057 (as well as Block 7015 beyond the 400-foot radius) between West 22<sup>nd</sup> and West 24<sup>th</sup> Streets, is the New York City Housing Authority (NYCHA) Carey Gardens development that consists of one 15-story and two 17-story buildings with 684 total units. To the east of Carey Gardens on Block 7058 between West 21<sup>st</sup> and West 22<sup>nd</sup> Streets is the 12-story Surf 21 development with 237 affordable units subject to a regulatory agreement. On Block 7059 between West 20<sup>th</sup> and West 21<sup>st</sup> Streets is the 18-story NYCHA Coney Island 1 Site 1B building with 193 units. To the west of Carey Gardens on Block 7055 between West 24<sup>th</sup> and West 25<sup>th</sup> Streets is the 19-story Ocean Towers development with 360 affordable units subject to a regulatory agreement.

On Block 7070, south of Surf Avenue between West 23<sup>rd</sup> Street and West 24<sup>th</sup> Streets directly west of the Project Area, there are two community facility buildings. Surf Manor is a four-story assisted living facility for adults fronting Surf Avenue with approximately 200 residents. The Sea Crest Health Care Center, on the southern portion of the block, is a five-story nursing home specializing in therapy and rehabilitation with approximately 305 residents. There are also three-story residential buildings on Block 7070 and lots that are vacant or accommodate vehicle storage and parking. Further to the west of the proposed Project Area on Block 7070 between West 24<sup>th</sup> and West 25<sup>th</sup> Streets is the NYCHA Haber Houses development, a seniors-only residence that consists of three 14- story buildings with 380 total units.

Block 7071 between West 22<sup>nd</sup> Street and West 21<sup>st</sup> Street directly east of the Project Area consists primarily of undeveloped open space owned by the City of New York. Other uses on the block include a 3-story commercial and office building and the 3-story former Childs Restaurant building. Block 7072 further to the east is a development site subject to the Coney West Subdistrict regulations.

### **Future No-Action Scenario**

#### ***Project Area***

Under the No-Action Scenario for the Project Build Year of 2027, it is assumed that the Applicant's Proposed Development Site (Projected Development Site 1), identified as Block 7071, Lots 13, 16, 93, 94, 114 in Brooklyn, would remain in its existing underutilized condition. No new as-of-right development would occur on the property as the property's existing R5 zoning limits residential FAR to 1.25 and these properties are already developed to a residential FAR of 1.01. Therefore, no new development would be anticipated. The existing 34 dwelling units on these parcels are anticipated to remain.

Under the No-Action Scenario for the Project Build Year of 2027, it is assumed that the following conditions would exist on the remaining lots in the Project Area, identified as Block 7071, Lots 1, 3, 4, 5, 6, 7, 8, 9, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 96, 97 in Brooklyn as further explained below.

Projected Development Site 2 - Block 7071, Lots 3, 4, and 5, under the same ownership, consist of a total lot area of 7,658 sf of vacant land. These parcels could be developed with approximately 9,572 sf of residential use or 10 dwelling units.

Projected Development Site 3 - Block 7071, Lots 7 and 8, under the same ownership, consist of a total lot area of 4,048 sf of vacant land. These parcels could be developed with approximately 5,060 sf of residential use or 5 dwelling units.

Projected Development Site 4 - Block 7071, Lot 18 consists of a 3,308 sf lot developed with a 1-story, 2,530 sf manufacturing building. This property could be developed with approximately 1,605 sf of residential use or 2 dwelling units.

Projected Development Site 5 - Block 7071, Lot 26 consists of a 3,261 sf vacant lot. This property could be developed with approximately 4,076 sf of residential use or 4 dwelling units.

Projected Development Site 6 - Block 7071, Lots 83, 85, and 86, under the same ownership, consist of 13,200 sf of vacant land. This property could be developed with approximately 16,500 sf of residential use or 17 dwelling units.

Projected Development Site 7 - Block 7071, Lot 91 consists of a 4,400 sf vacant lot. This property could be developed with approximately 5,500 sf of residential use or 6 dwelling units.

Projected Development Site 8 - Block 7071, Lots 96 & 97, under the same ownership, consist of a 4,400 sf lot including a 1-story 2,200 sf auto repair garage on a 2,200 sf lot and a 2,200 sf vacant lot. These parcels could be developed with approximately 3,300 sf of residential use or 3 dwelling units.

Therefore, a total new development of approximately 47 dwelling units is anticipated on Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97.

No additional development would occur on Lots 1, 6, 9, 19, 24, 89, and 90 as all lots have some or all of the following characteristics: less than 3,000 sf in size; not in

common ownership; or/and developed close to or in excess of the maximum permitted residential FAR of 1.25.

The existing 115 dwelling units plus the existing 7 commercial and manufacturing uses on these parcels are anticipated to remain.

Therefore, under No-Action conditions the Project Area would be developed with existing and new development including 127,686 gsf of residential space for 162 dwelling units, and 12,488 gsf of commercial and manufacturing space.

#### ***400-Foot Radius Project Study Area***

No new development projects have been identified for the 400-foot radius project study area based on a review of the NYC Department of City Planning's (DCP) Land Use & CEQR Application Tracking System (LUCATS) for Brooklyn Community District 13 back to the year 2010. Therefore, no development plans are known to exist within the project study area as identified above by the project build year of 2027.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2027. The 400-foot area surrounding the Project Area is developed with a mixed-use community containing residential two-, three- and multi-family residences, community facilities, commercial uses, open space, parking, and vacant land. It is anticipated that no significant new development would occur within this area by 2027.

#### **Future With-Action Scenario**

##### ***Project Area***

##### **Summary**

Under No-Action conditions, the 8 Projected Development Sites would be developed with 63,584 gsf of residential space for 81 dwelling units, and 4,730 gsf of commercial space. Under With-Action conditions the 8 Projected Development Sites would be developed with 252,307 gsf of residential space for 253 dwelling units (including up to 76 affordable units and 177 market rate units), 50,979 gsf of commercial space, and 61 accessory residential parking spaces. The increment between the No-Action and With-

**ZONING ANALYSIS COMPARATIVE R7-D/C2-4**

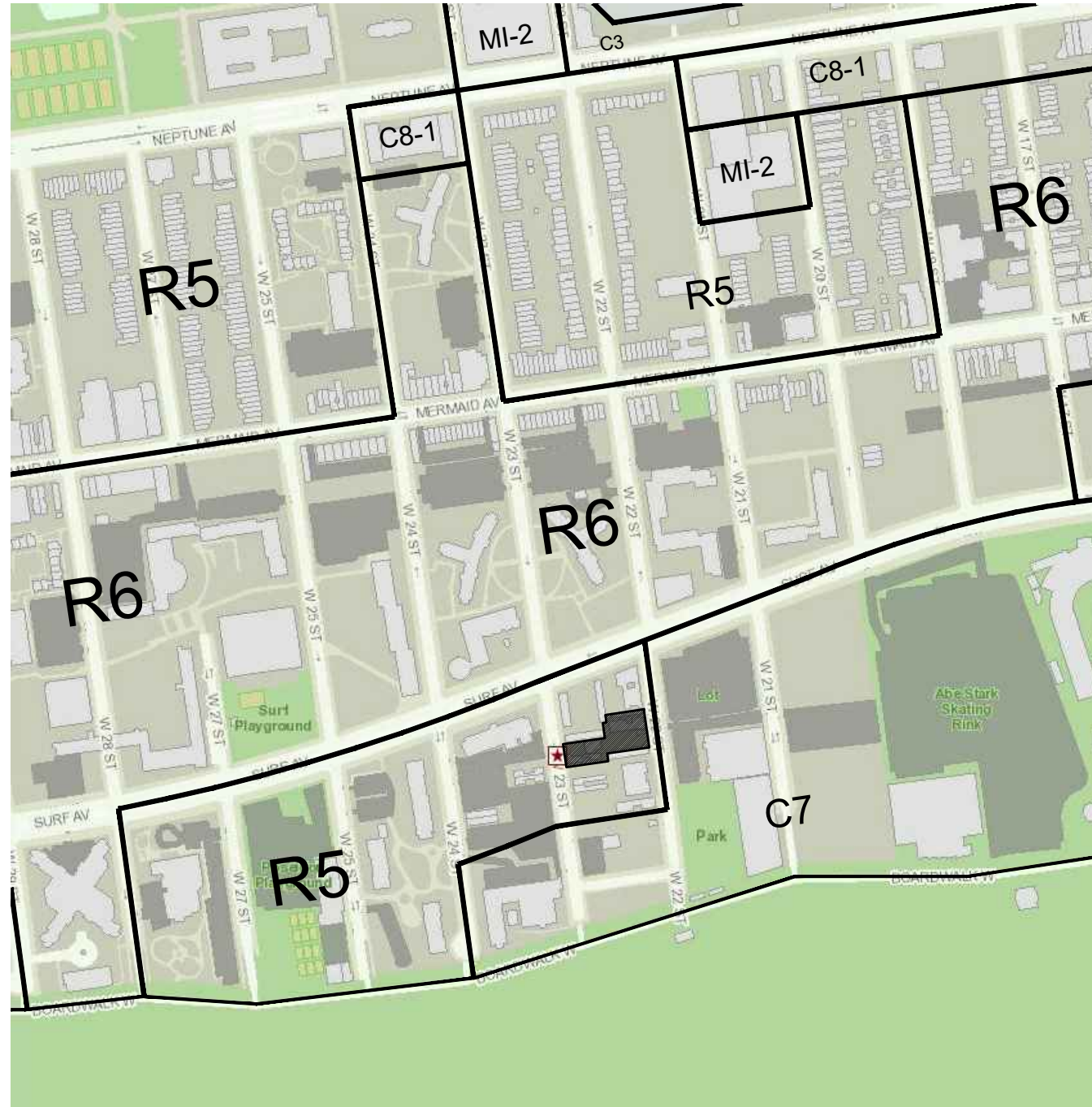
DCP Project ID: P2014K0494

Location: 3022 W22nd St, 2031 W23rd ST Borough: Brooklyn Block: 7071  
 Applicant: Lot: 16, 114, 13, 93, 94  
 Zoning District: R7-D/C2-4( Inclusionary Housing ) Special District: Special Coney Island District (CI)  
 Lot Area: 17,467.31 SF  
 Parcel: Proposed Parcel 'H'

|   | ZR Section                       | Required/Maximum                        | Protypical Submittal                 |
|---|----------------------------------|---|--------------------------------------|
| Floor Area Ratio (Residential)            | 131-121                          | 5.80                                    | 4.91                                 |
| Floor Area (Residential Zoning FA)        | 131-121                          | 101,310.40                              | 85,680.00                            |
| Floor Area (Residential Gross)            | 131-121                          |   | 85,680.00                            |
| Floor Area Ratio (Commercial)             | 33-121                           | 2.00                                    | 0.85                                 |
| Floor Area (Commercial)                   | 33-121                           | 34,934.62                               | 14,903.20                            |
| Total Max. FAR (Residential + Commercial) | 131-121                          | 5.80                                    | 5.76                                 |
| Floor Area (Residential + Commercial)     | 35-31                            | 101,310.40                              | 100,583.20                           |
| Lot Coverage (Residential)                | 23-145                           | 65%                                     | 65%                                  |
| Lot Coverage (Residential)                | 23-145                           | 11,353.75                               | 11,353.75                            |
| Front Yard                                | 35-51/23-45                      | None for R7D                            | None Required                        |
| Side Yard                                 | 35-52/23-462c                    | 0'-0" or 8'-0"                          | 0                                    |
| Rear Yard (Through Lot Portion)           | 35-532                           | 60'-0" MIN.                             | 77'-1"                               |
| Rear Yard (Interior Lot Portion)          | 33-47                            | 30'-0" MIN.                             | 35'-6" and 32'-1"                    |
| <b>Max. Heights</b>                       |                                  |   |                                      |
| <b>WEST 22nd STREET</b>                   |                                  |   |                                      |
| Max. Base Height                          | 131-431                          | 65'                                     | 61'-4"                               |
| Max. Building Height/No Stories           | 131-434                          | 150'                                    | 131'-5"                              |
| Setback                                   | 15'-0" measured from street line |   | 15'-0"                               |
| <b>WEST 23rd STREET</b>                   |                                  |   |                                      |
| Max. Base Height                          | 23-664                           | 65'                                     | 61'-3"                               |
| Max. Building Height                      | 23-664                           | 85'                                     | 61'-3"                               |
| Setback                                   | 10'-0" measured from street line |   | N/A                                  |
| Dwelling Units                            | 23-22                            | 127                                     | 78                                   |
| Density                                   | 23-22                            | 680 S.F.                                | VARIES                               |
| Market Value Units 75%                    | 23-22                            |   | 56                                   |
| Affordable Housing Units 25%              | 23-22                            |   | 22                                   |
| 1 Bedroom Units                           |                                  |   | 15 Total - 11 Market - 4 Affordable  |
| 2 Bedroom Units                           |                                  |   | 63 Total - 45 Market - 18 Affordable |
| Street Tree Planting                      | 23-03/26-41                      | 1 tree per 25' frontage                 | 6 Trees Req. 5 Exist / 1 New         |
| Windows                                   | 28-22                            | All double glazed                       | All windows double glazed            |
| Refuse-Enclosed Storage                   | 28-23                            | 2.9 Cubic Feet per D.U.                 | 226.2                                |
| Refuse-Disposal Room                      | 28-23                            | 12 s.f. per story with entrance         | 47 s.f.                              |
| Laundry Facilities                        | 28-24                            | If provided: (a,b,c,d)                  | 1 per Dwelling Unit                  |
| Corridor Daylight                         | 28-25                            | If provided: (a,b)                      | None Required                        |
| Rec. Space: R6, R7 Equiv.                 | 28-31                            | 3.3% of Residential F.A.                | 0.033*                               |
| Recreation Standards                      | 28-32                            | All rec. space accessible               | All rec. space accessible            |
|   | 28-32                            | Minimum dimensions-various              | Min. Dimensions met                  |
|   | 28-32                            | Outdoor sky requirement                 | Compliant                            |
|   | 28-32                            | Indoor window requirement               | N/A                                  |
| Planting                                  | 28-33                            | Req'd: Street line to street wall       | Area planted as per ZR. 28-33        |
| Residential Parking -                     | 25-23                            | 50%                                     | 50% x 78 = 39 Spaces                 |
| Commercial Parking                        | 36-21                            | U.G. 6: 1 per 1000sf of floor area      | 14.90 ~15 Spaces                     |
| Commercial Parking Waiver                 | 36-232                           | If less than 40 required parking waived | 15 < 40 commercial parking waived    |

**ZONING & VICINITY MAP**

SOURCE: ZOLA NYC



**LEGEND:**



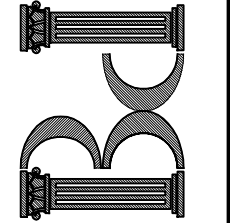
DENOTES SUBJECT TAX LOTS: 16, 114, 13, 93, 94



P1-A

1 OF 5

BRICOLAGE  
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& DESIGN, PLLC  
6321 New Utrecht Avenue  
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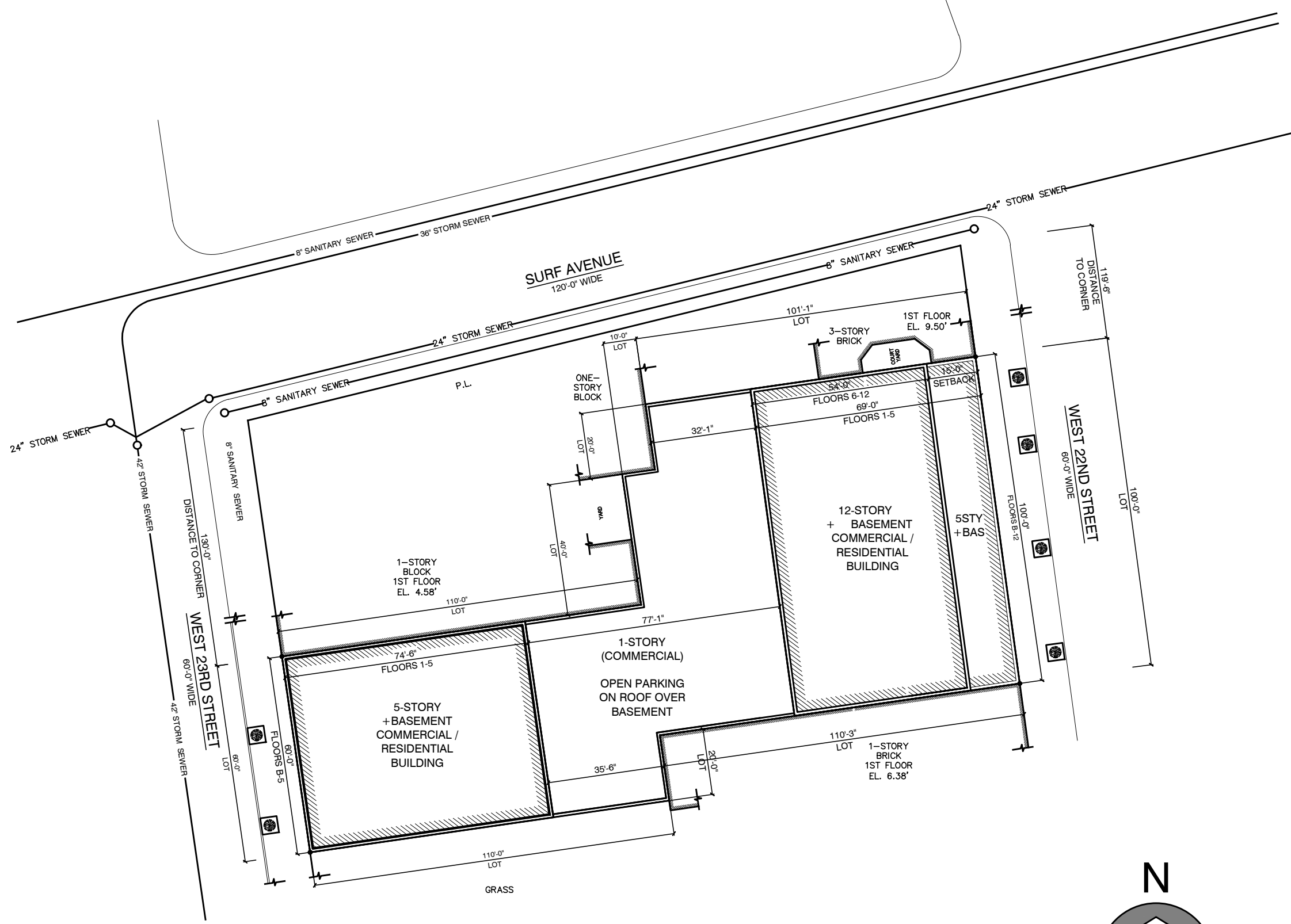
BLOCK: 7071  
LOT: 16, 114, 13, 93, 94  
ZONING: R7D

DATE: 2/27/18

SCALE: N.T.S.

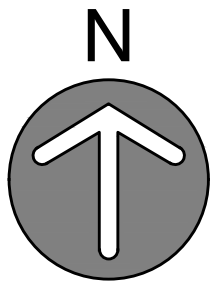
JOB NO 16-124  
3021 WEST 23RD STREET / 3022 WEST 22ND STREET  
Brooklyn, New York 11224

R7D BUILD OUT SCENARIO



**LEGEND:**

- PROPOSED RESIDENTIAL / COMMERCIAL
- PROPOSED PARKING ( NOT INCLUDING PARKING AREA UNDER PROPOSED COMMERCIAL / RESIDENTIAL BUILDING )



JOB NO 16-124

3021 WEST 23RD STREET / 3022 WEST 22ND ST.  
Brooklyn, New York 11224

R7D BUILD OUT SCENARIO

SCALE: N.T.S.

BLOCK: 7071  
LOT: 16, 114, 13, 93, 94  
ZONING: R7D

**BD**

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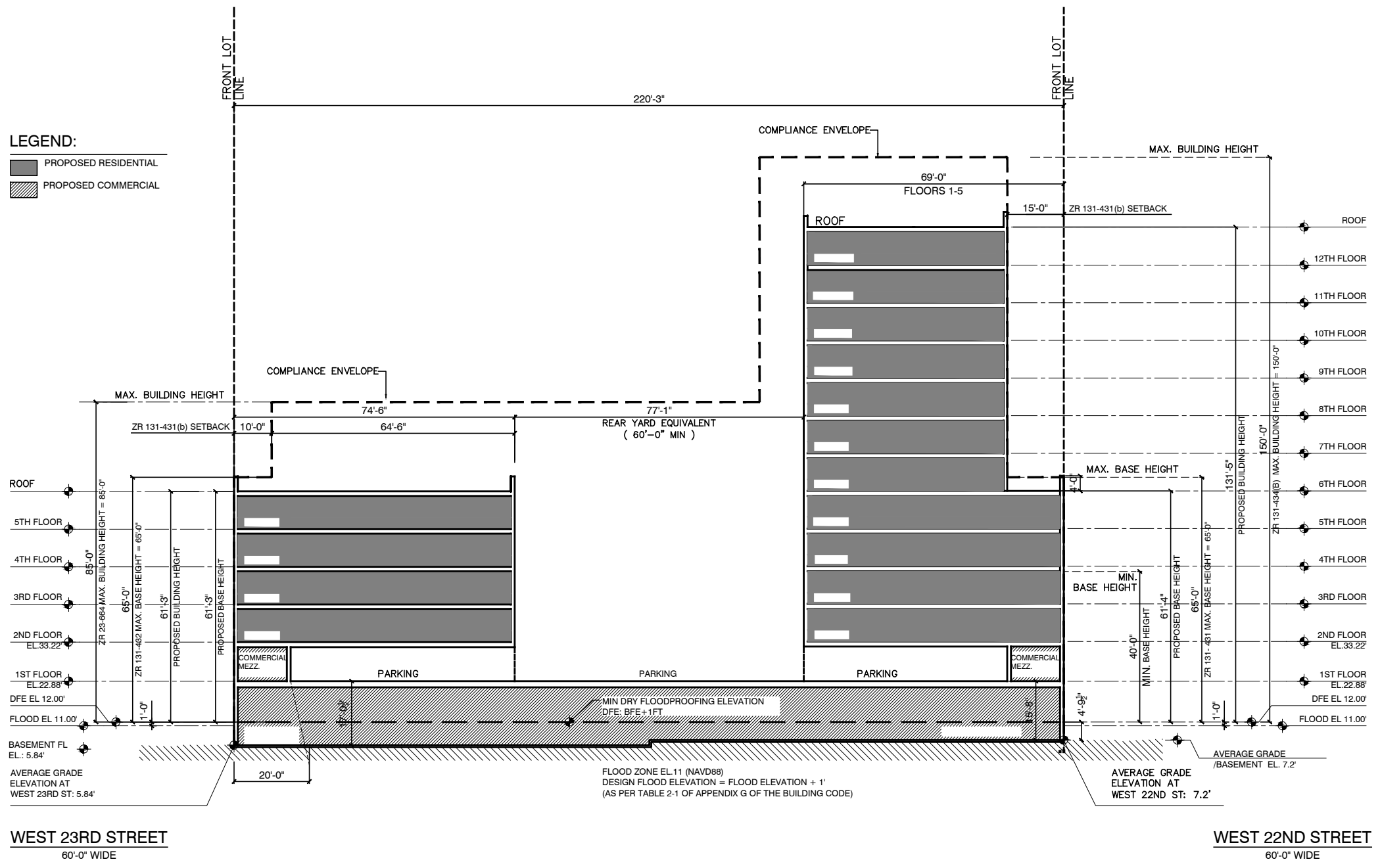
P1-B

2 OF 5



**LEGEND:**

- PROPOSED RESIDENTIAL
- PROPOSED COMMERCIAL



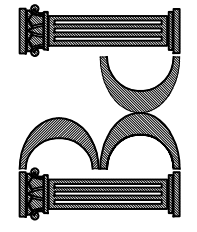
**HEIGHT & SETBACK DIAGRAM**

SCALE: 1/32" = 1'-0"

**P1-C**

**3 OF 5**

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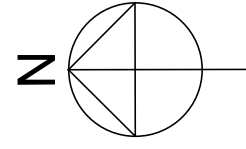
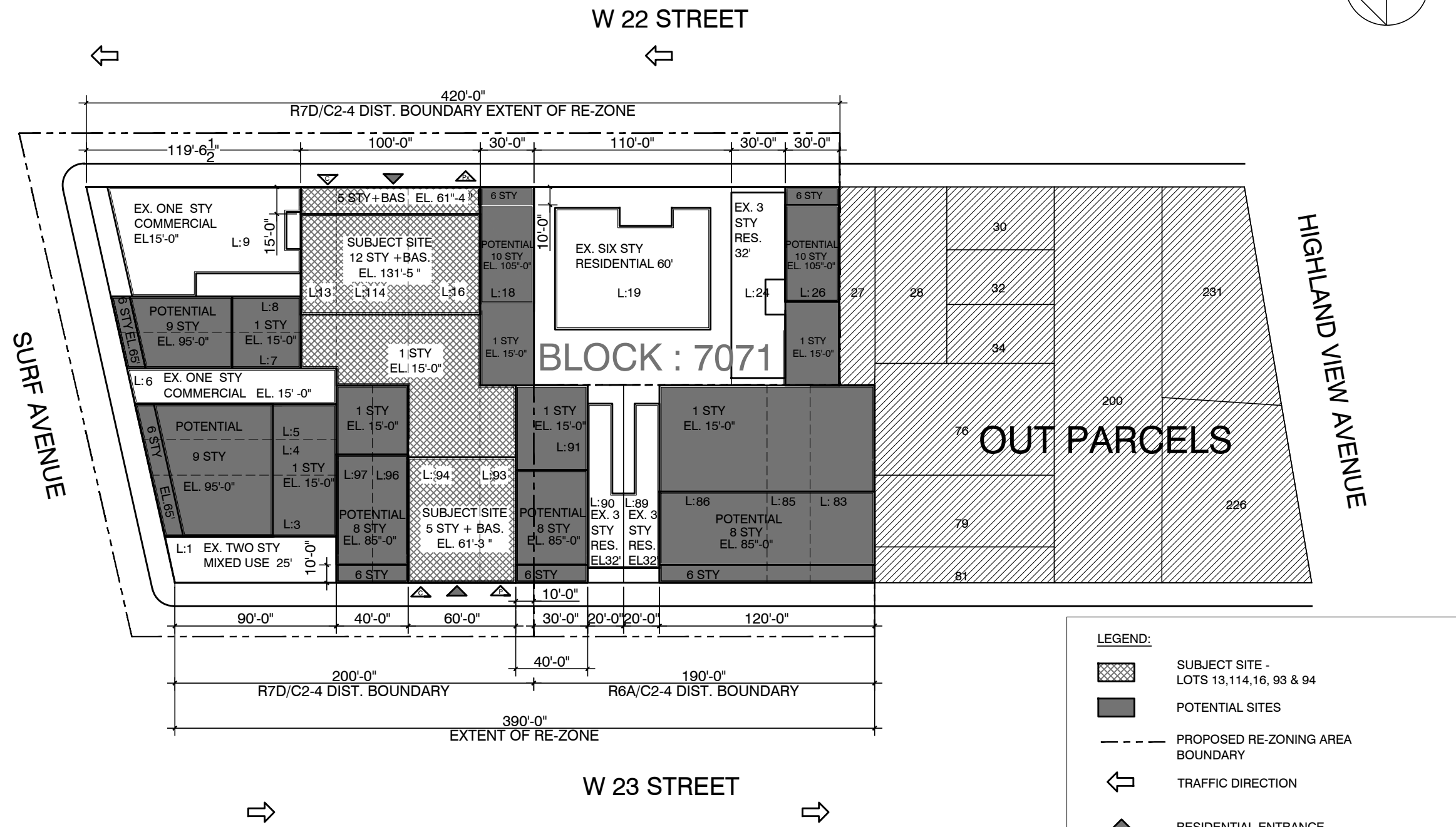


BLOCK: 7071  
LOT: 16, 114, 13, 93, 94  
ZONING: R7D

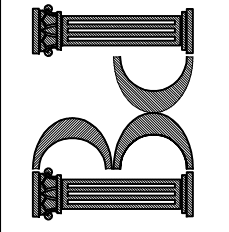
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DATE: 9/11/17

**JOB NO 16-124**  
**3021 WEST 23RD STREET / 3022 WEST 22ND ST.**  
Brooklyn, New York 11224

**R7D BUILD OUT SCENARIO**



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BLOCK: 7071  
LOT: 16, 114, 13, 93, 94  
ZONING: R7D

SCALE: N.T.S.  
DATE: 9/11/17

JOB NO 16-124  
3021 WEST 23RD STREET / 3022 WEST 22ND ST.  
Brooklyn, New York 11224  
R7D BUILD OUT SCENARIO



CONTEXTUAL VICINITY RENDERING

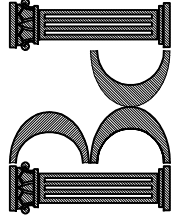
JOB NO 16-124

3021 WEST 23RD STREET / 3022 WEST 22ND ST.  
Brooklyn, New York 11224

R7D BUILD OUT SCENARIO

SCALE: N.T.S. DATE: 9/11/17

BLOCK: 7071  
LOT: 16, 114, 13, 93, 94  
ZONING: R7D



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P1-E

5 OF 5

Action development scenarios would be 188,723 gsf of additional residential space for 172 additional dwelling units (including up to 76 affordable units and 96 market rate units), 46,249 gsf of additional commercial space, and 61 new residential accessory parking spaces. In order to allow for the projected development, the following no-action development would be demolished.

- Site 1: 17,661 gsf of residential floor area containing 34 dwelling units
- Site 4: a 2,530 gsf industrial building
- Site 8; a 2,200 gsf garage

All the projected commercial development would be comprised of new commercial floor area while 206 new residential units would be constructed relative to no-action conditions (206 units minus 34 no-action units results in 172 total additional units). The projected development on each of the 8 Development Sites is detailed below.

#### Applicant Owned Projected Development Site 1

The Applicant owned Projected Development Site 1 would be developed with a new five-story, twelve-story, and basement maximum 131'-5" tall mixed-use Use Group 2 residential and Use Group 6 commercial building totaling 103,654 gsf and containing 89 dwelling units within 88,751.17 gsf primarily on floors 2-12 based on an average size of 1,000 gsf per dwelling unit. Under the MIH 25% option, it is assumed that 25% or 22 of the units would be affordable to lower income residents. The remaining 75% or 67 of the units would be market rate. Under the MIH 30% option, it is assumed that 30% or up to 27 of the units would be affordable to lower income residents. The remaining 75% or 62 of the units would be market rate. As MIH options are not selected until the end of the ULURP process, up to 27 affordable units would be provided pursuant to MIH which is 30% of the With Action total of 89 dwelling units.

The proposed building would also contain 14,903.2 gsf of retail space in the basement and on the first floor in a 15-foot deep commercial mezzanine. Up to 44 parking spaces<sup>1</sup>

---

<sup>1</sup> 31 to 33 parking spaces would be required for the 62 to 67 market rate units (1 space for every two dwelling units) and no parking would be required for the 22 to 27 affordable units as the site would be located in the Transit Zone.



accessory to the residential uses would be provided, at a ratio of 1 space for every two dwelling units, and would be located on the first floor of the 5- and 12-story portions of the building as well as on the roof of the basement between the two towers. 2,843 sf of common recreational space would be provided for the residents of the development. The existing structures and uses on the site would be demolished and removed.

#### Non-Applicant Owned Sites

Projected Development Site 2 consists of three vacant lots under common ownership (2216 – 22 Surf Ave) and are therefore projected to become a merged zoning lot. Under the proposed R7D/C2-4 zoning, it is assumed that the 7,658-square foot property could be developed with a new 9-story, 95-foot, 45,535 gsf/44,414 zsf structure containing 7,058 gsf/7,058 zsf of ground floor commercial space and 38,476 gsf/37,356 zsf of residential floor area primarily on the upper 8 floors of the building for the creation of approximately 38 dwelling units at 1,000 square feet per unit, including up to 11 affordable and 27 market rate units. The building would not be constructed at the maximum permitted height of 15 stories, 150' as at this height the gross residential floor plate would be approximately 3,266 gsf and 2,742 sf net (after losses for exterior walls and the building core) for floors 2 through 6 and just 2,765 gsf/2,345 sf net for floors 7 through 15. Although these floor plates may not appear to be excessively small, the shallowness of the building due to the width of the lot of close to 76 feet would create a building depth of only 53 feet at floors 1 through 6 and 43 feet at floors 7 through 15. Such limited depth would drastically affect unit configuration which is even more negatively impacted by the acute angle formed by the street line intersection with the property. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 44,414 zsf on the 7,658-square foot lot would represent an FAR of 5.8. No parking would be required as the development falls below both the residential and commercial parking waiver.

Projected Development Site 3 consists of two vacant lots under common ownership (S. Salerno) and are therefore projected to become a merged zoning lot. Under the proposed R7D/C2-4 zoning, it is assumed that the 4,048-square foot property could be developed with a new 9-story, 95-foot, 24,107 gsf/23,483 zsf structure containing 3,449 gsf/3,449 zsf of ground floor commercial space and 20,658 gsf/20,034 zsf of residential floor area primarily on the upper 8 floors of the building for the creation of

approximately 21 dwelling units at 1,000 square feet per unit, including up to 6 affordable and 15 market rate units. The building would not be constructed at the maximum permitted height of 15 stories, 150' as at this height the gross residential floor plate would be approximately 1,602 gsf and 1,200 sf net (after losses for exterior walls and the building core) for floors 2 through 6 and just 1,341 gsf/923 sf net for floors 7 through 15 which would restrict an economical mix of unit types without wasting space for the duplexing of units. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 23,483 zsf on the 4,048-square foot lot would represent an FAR of 5.8. No parking would be required as the development falls below both the residential and commercial parking waiver.

Under the proposed R7D/C2-4 district with the Mandatory Inclusionary Housing bonus FAR of 5.8, the 3,308 square foot Projected Development Site 4 could be developed with a new 10-story, 105-foot 19,678 gsf/19,184 zsf structure containing 2,708 gsf/2,708 zsf of ground floor commercial space and 16,970 gsf/16,476 zsf of residential floor area primarily on the upper 9 floors of the building. On the basis of 1,000 square feet per unit, it is assumed that the property could be developed with approximately 17 dwelling units, including up to 5 affordable and 12 market rate units. The site is currently developed with an approximately 2,530 square foot, 1-story, industrial building which would be demolished to facilitate this development. The building would not be constructed at the maximum permitted height of 150' as at this height the gross residential floor plate would be approximately 1,160 sf and after losses for exterior walls and the building core there would be a net floor plate of less than 920 sf per floor which would restrict an economical mix of unit types without wasting space for the duplexing of units. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 19,184 zsf on the 3,308 square foot lot would represent an FAR of 5.8. No parking would be required as the development falls below both the residential and commercial parking waiver.

Under the proposed R7D/C2-4 zoning, it is assumed that the 3,261 square foot vacant Projected Development Site 5 could be developed with a new 10-story, 105-foot, 19,401 gsf/18,914 zsf structure containing 2,661 gsf/2,661 zsf of ground floor commercial space and 16,740 gsf/16,253 zsf of residential floor area primarily on the upper 9 floors of the

building for the creation of approximately 17 dwelling units at 1,000 square feet per unit, including up to 5 affordable and 12 market rate units. The building would not be constructed at the maximum permitted height of 150' as at this height the gross residential floor plate would be approximately 1,160 sf and after losses for exterior walls and the building core there would be a net floor plate of less than 920 sf per floor which would restrict an economical mix of unit types without wasting space for the duplexing of units. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. The total proposed building floor area of 18,914 zsf on the 3,261 square foot lot would represent an FAR of 5.8. No parking would be required as the development falls below both the residential and commercial parking waiver.

The three vacant lots comprising Projected Development Site 6 are under common ownership (A. Dicker) and are therefore projected to become a merged zoning lot. Under the proposed R6A/C2-4 zoning, it is assumed that the 13,200 square foot property could be developed with a new 8-story, 85-foot, 48,568 gsf/47,520 zsf structure containing 12,600 gsf/12,600 zsf of ground floor commercial space and 35,968 gsf/34,920 zsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 36 dwelling units at 1,000 square feet per unit, including up to 11 affordable and 25 market rate units. The new building would be constructed at the maximum building height of 85 feet. The proposed R6A zone for the lot would allow a maximum FAR of 3.6 under MIH. The total proposed building floor area of 47,520 zsf on the 13,200 square foot lot would represent an FAR of 3.6. 17 cellar level parking spaces would be provided for the residential units including 3 spaces for the affordable units and 14 spaces for the market rate units. The 13 required spaces for the commercial space would be waived as it would fall below the commercial parking waiver.

The 4,400 square foot vacant Projected Development Site 7 would have a split zoning designation with approximately 1,100 square feet of the lot within the proposed R7D/C2-4 zone and approximately 3,300 square feet within the proposed R6A/C2-4 district. It is assumed that the property could be developed with a new 8-story, 85-foot, 18,724 gsf/18,260 zsf structure containing 3,800 gsf/3,800 zsf of ground floor commercial space and 14,924 gsf/14,460 zsf of residential floor area primarily on the



upper 7 floors of the building for the creation of approximately 15 dwelling units at 1,000 square feet per unit, including up to 5 affordable and 10 market rate units. The building would be constructed at the maximum building height of 85 feet. The proposed R6A/R7D zone for the lot would allow an adjusted maximum FAR of approximately 4.15 under MIH. The total proposed building floor area of 18,260 zsf on the 4,400 square foot lot would represent an FAR of 4.15. No parking would be required as the development falls below both the residential and commercial parking waiver.

The two lots comprising Projected Development Site 8 are under common ownership (IRL Realty) and are therefore projected to become a merged zoning lot. The 4,400 square foot lot is developed with an approximately 2,200 square foot, 1-story, vehicle repair garage which would be demolished in order to accommodate a new development under the proposed rezoning. Under the proposed R7D/C2-4 zoning, it is assumed that the 4,400 square foot property could be developed with a new 8-story, 85-foot, 23,620 gsf/23,620 zsf structure containing 3,800 gsf/3,800 zsf of ground floor commercial space and 19,820 gsf/19,820 zsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 20 dwelling units at 1,000 square feet per unit, including up to 6 affordable and 14 market rate units. The new building would be constructed at the maximum building height of 85 feet. The proposed R7D zone for the lot would allow a maximum FAR of 5.8 under MIH. However, the total proposed building floor area of 23,620 zsf on the 4,400 square foot lot would represent an FAR of only 5.37. This is due to the fact that the height of the building is restricted to comply with the maximum 8-story, 85-foot requirement of the R6A zone even though the property is located in in the R7D zoning district. Although the R7D district permits an FAR of 5.8, the project cannot realize the maximum FAR due to the height restriction and compliance with other bulk regulations (yards, etc.). No parking would be required as the development falls below both the residential and commercial parking waiver.

Under the With-Action Scenario for the Project Build Year of 2027, it is assumed that Projected Development Sites 2 through 8, including Block 7071, Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97 in Brooklyn, would be developed with up to 164 new dwelling

units, up to 49 of which would be affordable units, within approximately 163,556 gsf of residential floor area, and 36,076 gsf of commercial space.

For the purpose of providing a conservative analysis, the With-Action Scenario analyzes residential buildings with affordable housing on all sites where future residential development would be feasible. Although the Applicant seeks Option 1 for the Proposed Development Site, the Applicant proposes mapping both MIH 25% Option 1 (25% of residential floor area for residents with incomes averaging 60% AMI) and 30% Option 2 (30% of residential floor area for residents with incomes averaging 80% AMI) within the Project Area to provide maximum flexibility for non-Applicant controlled sites. As MIH options are not selected until the end of the ULURP process, up to 76 affordable units could be provided on the Applicant and non-Applicant properties pursuant to MIH which is 30% of the With-Action total of 253 dwelling units.

No development would occur on Block 7071, Lots 1, 6, 9, 19, 24, 89, and 90 as their lot sizes are considered to be too small and the additional permitted floor area is considered to be insufficient to be redeveloped based on the City's soft site criteria or they are developed with 6 or more residential rent stabilized dwelling units and would be difficult to legally demolish due to tenant re-location requirements.

Table 4-1 below presents the No-Action and With-Action developments on the 8 Projected Development Sites and shows the increment between these two scenarios.

| <b>Table 4-1</b>   |                             |                  |                          |                    |                    |                  |                         |                  |                   |                            |
|--|-----------------------------|------------------|--------------------------|--------------------|--------------------|------------------|-------------------------|------------------|-------------------|----------------------------|
| <b>No-Action and With-Action Development Scenarios and Increment</b> |                             |                  |                          |                    |                    |                  |                         |                  |                   |                            |
|  |                             | <b>No-Action</b> |                          |                    | <b>With-Action</b> |                  |                         |                  |                   |                            |
| <b>Block 7071/ Lot Nos.</b>  | <b>Zoning Lot Size (SF)</b> | <b>Total GSF</b> | <b>Resid GSF/# of DU</b> | <b>Com'l/M GSF</b> | <b>Total GSF</b>   | <b>Resid GSF</b> | <b>Total DU/ Afford</b> | <b>Com'l GSF</b> | <b>Pkg Spaces</b> | <b>Increment</b>           |
| 13, 16, 93, 94, 114 (Site 1)   | 17,467                      | 17,661           | 17,661/34                | 0                  | 103,654            | 88,751           | 89/22                   | 14,903           | 44                | +55 DUs, +14,903 C, 44 pkg |
| 3, 4, 5 (Site 2)   | 7,658                       | 9,882            | 9,882/10                 | 0                  | 45,535             | 38,476           | 38/10                   | 7,058            | 0                 | +28 DUs,                   |



|                           |               |               |                             |              |                |                |               |               |           |   |
|---------------------------|---------------|---------------|-----------------------------|--------------|----------------|----------------|---------------|---------------|-----------|---|
|                           |               |               |                             |              |                |                |               |               |           | +7,058 C                                    |
| 7, 8<br>(Site 3)          | 4,048         | 5,060         | 5,060/5                     | 0            | 24,107         | 20,658         | 21/5          | 3,449         | 0         | +16 DUs,<br>+3,449 C                        |
| 18<br>(Site 4)            | 3,308         | 4,135         | 1,605/2                     | 2,530 (M)    | 19,678         | 16,970         | 17/4          | 2,708         | 0         | +15 DUs,<br>+178 C                          |
| 26<br>(Site 5)            | 3,261         | 4,076         | 4,076/4                     | 0            | 19,401         | 16,740         | 17/4          | 2,661         | 0         | +13 DUs,<br>+2,661 C                        |
| 83, 85,<br>86 (Site<br>6) | 13,200        | 16,500        | 16,500/17                   | 0            | 48,568         | 35,968         | 36/9          | 12,600        | 17        | +19 DUs,<br>+ 12,600 C,<br>+17 pkg          |
| 91<br>(Site 7)            | 4,400         | 5,500         | 5,500/6                     | 0            | 18,724         | 14,924         | 15/4          | 3,800         | 0         | +9 DUs,<br>+3,800 C                         |
| 96, 97<br>(Site 8)        | 4,400         | 5,500         | 3,300/3                     | 2,200 (M)    | 23,620         | 19,820         | 20/5          | 3,800         | 0         | +17 DUs,<br>+ 1,600 C                       |
| <b>TOTAL</b>              | <b>57,742</b> | <b>68,314</b> | <b>63,584</b><br><b>/81</b> | <b>4,730</b> | <b>303,287</b> | <b>252,307</b> | <b>253/63</b> | <b>50,979</b> | <b>61</b> | <b>+172 DUs,<br/>+46,249 C,<br/>+61 pkg</b> |

### ***400-Foot Radius Project Study Area***

The Proposed Actions would not result in any changes in land use within the 400-foot radius project study area.

### **Conclusion**

The Applicant seeks to develop an underutilized property in order to provide market rate and affordable housing. For the purposes of a conservative analysis, 8 parcels within the Project Area are projected to be developed with 252,307 gsf of residential space for 253 dwelling units (including up to 76 affordable units and 177 market rate units), 50,979 gsf of commercial space, and 61 accessory residential parking spaces. This would be a net increase over the No-Action condition of 188,723 gsf of additional residential space for 172 additional dwelling units (including up to 76 affordable units

and 96 market rate units), 46,249 gsf of additional commercial space, and 61 new residential accessory parking spaces. This would constitute a significant land use change in the Project Area but the Applicant believes this change would be beneficial as it would fully develop these underutilized sites and would provide market rate and affordable housing, local retail space, and residential accessory parking.

The projected developments would replace some existing dwelling units, an industrial building, and a garage as well as vacant undeveloped lands within the Project Area but this impact would not be considered significant. The proposed project would not create additional non-conforming uses within the Project Area or the 400-foot radius study area since residential use already exists and is permitted in these areas. The projected developments could alter existing development patterns in the future, especially on the underdeveloped parcels in the vicinity of the site, by encouraging the development of additional residential uses. However, this would be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City.

Based on the above analyses, it has been determined that no potentially significant adverse impacts related to land use are expected to occur as a result of the Proposed Actions. Therefore, further analysis of land use is not warranted.

## ZONING

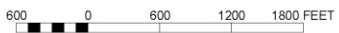
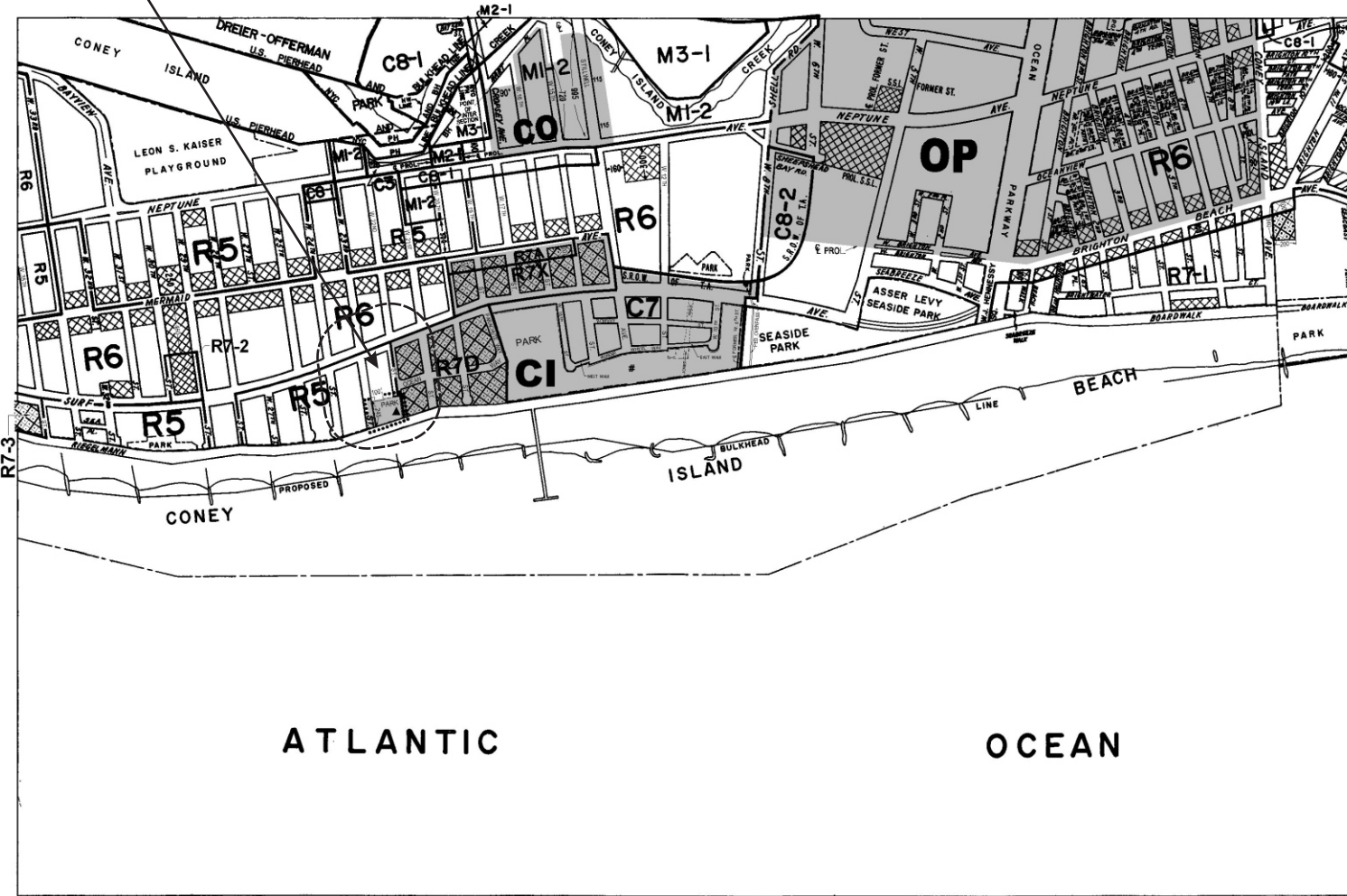
### Existing Conditions

#### *Project Area*

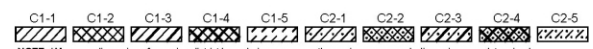
The Project Area is located entirely within an R5 zoning district, which is generally mapped between Surf Avenue and the Riegelmann Boardwalk from West 22<sup>nd</sup> Street to West 37<sup>th</sup> Street. R5 districts allow a floor area ratio (“FAR”) of 1.25. The maximum street wall height of a new building is 30 feet and the maximum building height is 40 feet. Above a height of 30 feet, a setback of 15 feet is required from the street wall of the building. In addition, any portion of the building that exceeds a height of 33 feet must be set back from a rear or side yard line. Detached houses must have two side yards that total at least 13 feet, each with a minimum width of five feet. Semi-detached houses



Site



# NOTE: STREETS FOR THE STREET MAP CHANGE C 090107 MMK AND N 090107(A) MMK ARE SHOWN ON THIS MAP PRIOR TO BECOMING EFFECTIVE IN ORDER TO LOCATE ZONING DISTRICT BOUNDARIES.



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



**ZONING MAP**

THE NEW YORK CITY PLANNING COMMISSION

**Major Zoning Classifications:**

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

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

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

**AREA(S) REZONED**

**Effective Date(s) of Rezoning:**

12-19-2013 C 140065 ZMK

**Special Requirements:**

For a list of lots subject to CEQR environmental requirements, see APPENDIX C.

For a list of lots subject to "D" restrictive declarations, see APPENDIX D.

For Inclusionary Housing designated areas on this map, see APPENDIX F.

CITY MAP CHANGE(S):  
▲ 05-20-2014 C 090107(B) MMK

MAP KEY

|     |            |     |
|-----|------------|-----|
| 28a | 28c        | 29a |
| 28b | <b>28d</b> | 29b |
|     |            |     |

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ZONING MAP 28d

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](http://www.nyc.gov/planning) or contact the Zoning Information Desk at (212) 720-3291.

are required to have one eight-foot wide side yard. Apartment houses are required to have two side yards, each at least eight feet wide. Front yards must be 10 feet deep. Off-street parking is required for 85 percent of the dwelling units in the building. For blocks entirely within R5 districts, the regulations for predominately-built up areas may be applied to permit a maximum residential FAR of 1.65.

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

#### ***400-Foot Radius Project Study Area***

The 400-foot radius project study area to the west and south of the Project Area is zoned R5 which is discussed under the Project Area above.

The 400-foot radius project study area to the north of the Project Area is zoned R6. The R6 zoning district generally extends between Surf Avenue and Mermaid Avenue from West 20<sup>th</sup> Street to West 37<sup>th</sup> Street. R6 districts allow all housing types at a maximum FAR of up to 2.43 and a maximum FAR of up to 4.8 for buildings containing community facility uses. R6 is a height factor district where residential and community facility uses are permitted with no fixed height limits and building envelopes are regulated by a sky exposure plane and open space ratio after a maximum base height of 60 feet. Residential development under the optional Quality Housing Program has a maximum FAR of 2.2 on narrow streets with a 55-foot building height limit and a maximum of 3.0 FAR on wide streets with a height limit of 70 feet. Off-street parking is required for 70 percent of the dwelling units. This requirement is lowered to 50 percent of the units if the lot area



is less than 10,000 square feet or if Quality Housing provisions are used. In R6 districts, if fewer than five spaces are required, the off-street parking requirement is waived.

The 400-foot radius project study area to the south of the proposed Project Area is within the Special Coney Island District (SCID) within the R5 district. The 400-foot radius project study area to the east of the proposed Project Area is within the SCID Coney West Subdistrict, which is within an R7D/C2-4 zoning district. This area generally extends between Surf Avenue, West 19<sup>th</sup> Street and Steeplechase Plaza, the Riegelmann Boardwalk, and West 22<sup>nd</sup> Street (and the southernmost portion of Block 7071 to West 23<sup>rd</sup> Street). The underlying R7D/C2-4 zoning is subject to additional regulations associated with the special district.

Within the Coney West Subdistrict, the R7D district regulations are modified to allow for residential development, and commercial use as defined in the SCID special use regulations. Within 70 feet of the Riegelmann Boardwalk, SCID commercial use included in specified use groups is mandatory. Transient hotels are also permitted above boardwalk level within 70 feet of the boardwalk edge, as is auditorium and arena use with a maximum of 2,000 seats. Portions of the area beyond 70 feet of the Riegelmann Boardwalk are subject to the C2-4 regulations as modified by the SCID, allowing a variety of local retail and service businesses tailored to support the goals of the SCID. The maximum floor area for buildings containing residences is 5.8 FAR with the Inclusionary Housing Program. Commercial uses pursuant to the SCID special use rules are allowed for lower floors in the area up to a maximum of 2.0 FAR. The maximum building height is 40 feet at the Riegelmann Boardwalk, and steps up to a maximum height of 65 feet with limited footprint towers permitted to a maximum of 170 feet. The maximum community facility FAR is 2.0. Parking is required for residential developments for 50 percent of the units. Required accessory parking spaces and public parking provided in addition to required accessory parking is exempted from the definition of floor area and is required to be wrapped by active uses on all street frontages. Parking entrances and curb cuts are prohibited on Surf Avenue and Ocean Way.

The Special Coney Island District is intended to re-establish Coney Island as an open and accessible mixed-use destination. It seeks to preserve existing and promote new

amusement uses in perpetuity in their historic location along the Riegelmann Boardwalk. In addition, new mixed-use residential and retail neighborhoods were planned to address the local need for housing, greater access to retail goods and services, and jobs.

The Coney Island Plan established the SCID with three subdistricts. The Coney East Subdistrict is the core amusement and entertainment area. The Coney North and Coney West Subdistricts provide opportunities for the development of approximately 5,000 units of housing, including approximately 900 units of affordable housing and a significant amount of local retail space to service the existing community and the new residences, as well as provide jobs. The Coney West Subdistrict is bounded by Surf Avenue to the north, the Riegelmann Boardwalk to the south, West 19<sup>th</sup> Street and Steeplechase Plaza to the east, and West 22<sup>nd</sup> Street to the west.

The entire 400-foot radius project study area is located within the boundaries of the FRESH program described under the Project Area above. The project study area is eligible for various tax incentives related to grocery store development and operation

The entire SCID to the south and east of the Project Area is within the Transit Zone. While the Project Area is not within the Transit Zone, it is accessible via mass transit to the entire New York City metropolitan area via the N, Q, D, and F subway lines terminating at the Stillwell Avenue subway station. There is bus service along Surf Avenue including the B36, X28, and X38 with additional lines available at the Stillwell Avenue Bus Loop.

An Inclusionary Housing Designated Area is mapped along the eastern edge of the 400-foot radius project study area east of West 22<sup>nd</sup> Street and south of Surf Avenue. The Inclusionary Housing Program promotes economic integration in areas of the City undergoing substantial new residential development by offering an optional floor area bonus in exchange for the creation or preservation of affordable housing, on-site or off-site, principally for low-income households. The Inclusionary Housing Program requires a percentage of the dwelling units within a building to be set aside, or new or rehabilitated affordable units be provided off-site within the same community district or within one-half mile of the bonused development. All affordable residential units

created through the Inclusionary Housing Program must remain permanently affordable. Affordable apartments may be rental units or, under modifications made to the program in 2009, available in an ownership plan.

### **Future No-Action Scenario**

#### ***Project Area***

In the future and absent the Proposed Actions, the Project Area would continue to be zoned R5.

#### ***400-Foot Radius Project Study Area***

Based on a review of DCP's LUCATS listings for Brooklyn Community District 13, no rezonings are proposed for the 400-foot radius project study area. No rezoning actions are presently being contemplated by the DCP, as indicated on the DCP website, for the study area by the final project build year of 2027.

### **Future With-Action Scenario**

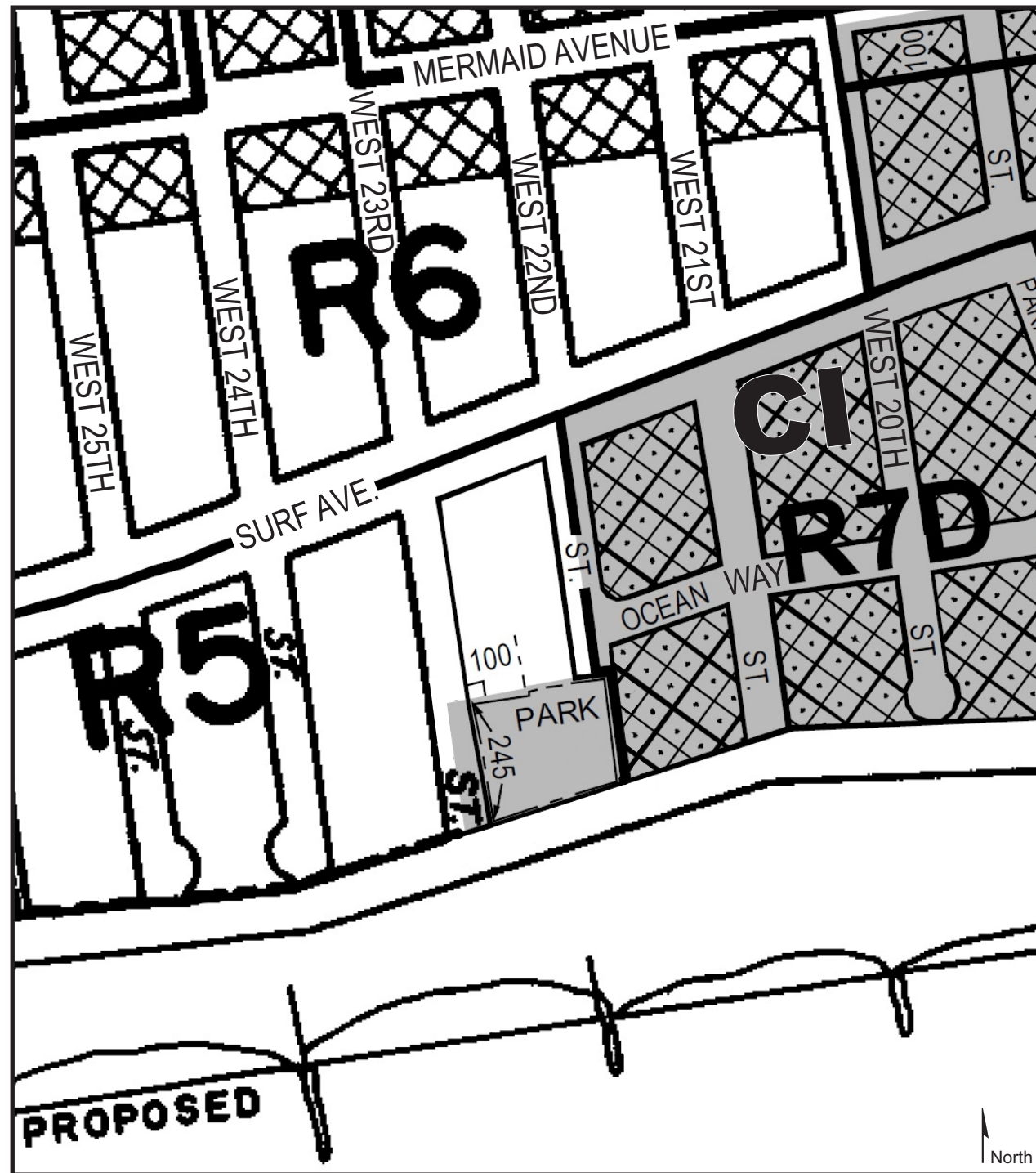
#### ***Project Area***

The Applicant proposes the following zoning map amendment and zoning text amendments to expand the Special Coney Island District and rezone an existing R5 zoning district to R7D/C2-4 and R6A/C2-4 districts in the Coney Island neighborhood within Brooklyn Community District 13.

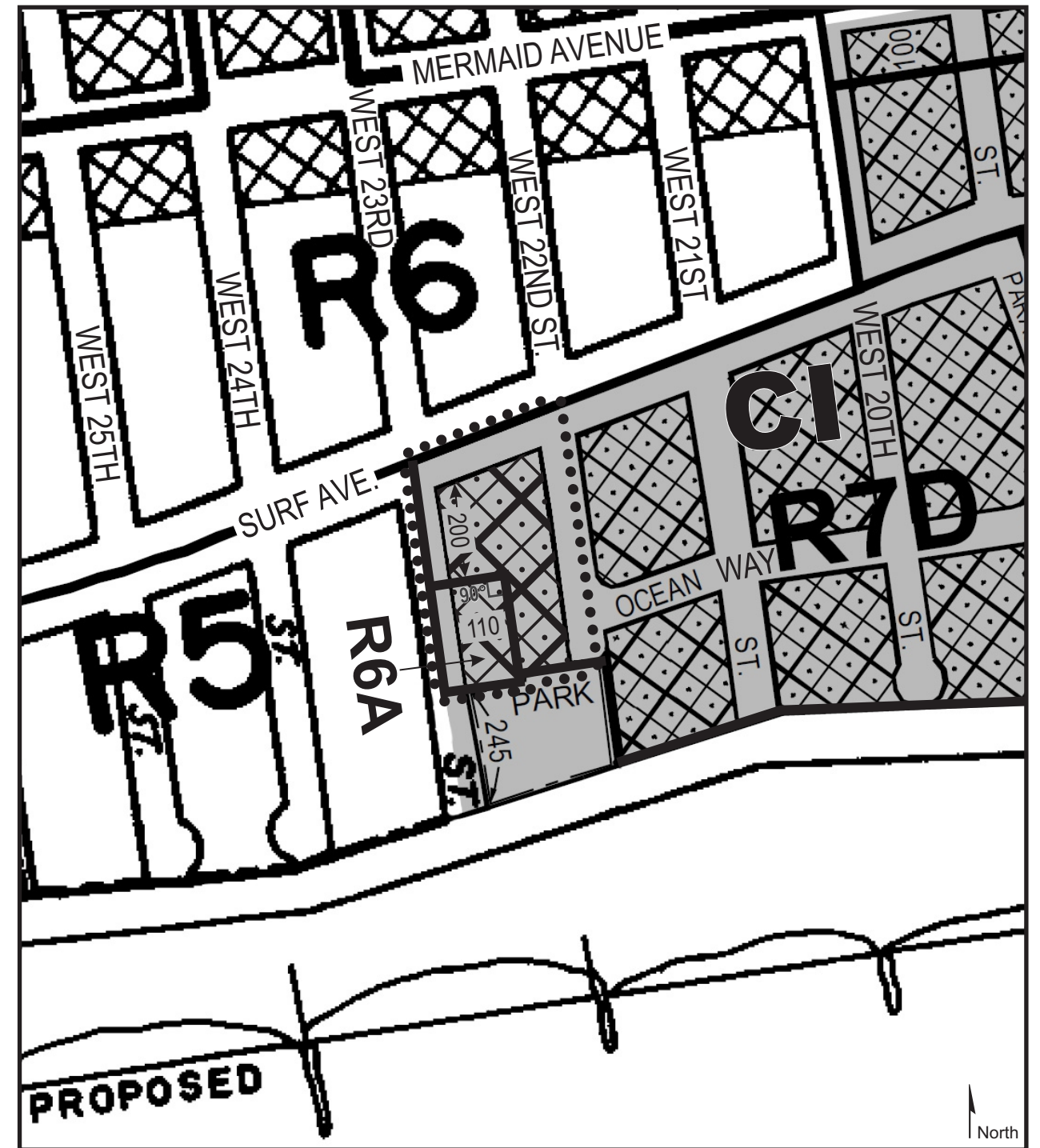
- I. A zoning text amendment to enlarge the Special Coney Island District ("SCID") with a new Parcel H of the Coney West Subdistrict, consisting of Block 7071, Lots 1, 3-9, 13, 16, 18,19, 24, 26, 83, 85, 86, 89-91, 93, 94, 96, 97, and 114 (the "Project Area");
- II. A zoning map amendment to map SCID Coney West Subdistrict Parcel H;
- III. A zoning map amendment to ZR section 28d to change the existing R5 zoning district to an R7D/C2-4 zoning district on a portion of Block 7071, including Lots 1, 3-9, 13, 16, 18, 19, 24, 26, p/o 91, 93, 94, 96, 97, and 114, and to an R6A/C2-4



# Zoning Change Map



Current Zoning Map (28d)



Proposed Zoning Map (28d) - Area being rezoned is outlined with dotted lines

Rezoning from R5 to R7D/C2-4 (Special District CI)  
 Rezoning from R6 to R6A/C2-4 (Special District CI)

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

zoning district on a portion of Block 7071, including Lots 83, 85, 86, 89, 90, and p/o 91;

- IV. A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (“MIH”) Areas for Community District 13, Brooklyn to establish an MIH Area coterminous with the Project Area; and
- V. A zoning text amendment of ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone.

As described above, the Project Area is projected to be developed with 252,307 gsf of residential space for 253 dwelling units (including up to 76 affordable units and 177 market rate units), 50,979 gsf of commercial space, and 61 accessory residential parking spaces. This would be a net increase over the No-Action condition of 188,723 gsf of additional residential space for 172 additional dwelling units (including up to 76 affordable units and 96 market rate units), 46,249 gsf of additional commercial space, and 61 new residential accessory parking spaces.

Table 4-2 below summarizes the major provisions of the existing and proposed zoning districts as applicable to the 8 Projected Development Sites.

| <b>Table 4-2</b>                                       |                 |                |                     |                    |            |                        |   |  |        |          |
|--|-----------------|----------------|---------------------|--------------------|------------|------------------------|---|--|--------|----------|
| <b>No-Action and With-Action Development Scenarios</b> |                 |                |                     |                    |            |                        |   |  |        |          |
| Proj Devel Site #/Lot Size                             | Existing Zoning |                |                     |                    |            | Proposed Zoning        |   |  |        |          |
|  | Zoning          | Max FAR        | Max GSF             | Max Ht             | Use Groups | Zoning                 | Max FAR                                 | Max GSF                                | Max Ht | Use Grps |
| 1/17,467 sf  | R5              | 1.25 R, 2.0 CF | 21,833 R, 34,934 CF | 30' before setback | 1-4        | R7D/C2-4/SCID-Parcel H | R7D: 4.2 R/CF, 5.8 R (MIH), C2-4: 2.0 C | 73,361 R/CF; 101,308 R (MIH); 34,934 C | 150'   | 1-9, 14  |
| 2/7,658 sf   | R5              | 1.25 R, 2.0 CF | 9,572 R, 15,316 CF  | 30' before setback | 1-4        | R7D/C2-4/SCID-Parcel H | R7D: 4.2 R/CF, 5.8 R (MIH), C2-4: 2.0 C | 32,163 R/CF; 44,416 R (MIH); 15,316 C  | 150'   | 1-9, 14  |

|   |    |                   |                        |                       |     |                                |   |   |      |            |
|---|----|-------------------|------------------------|-----------------------|-----|--------------------------------|---|---|------|------------|
| 3/4,048<br>sf                                       | R5 | 1.25 R,<br>2.0 CF | 5,060 R,<br>8,096 CF   | 30' before<br>setback | 1-4 | R7D/C2-<br>4/SCID-<br>Parcel H | R7D: 4.2<br>R/CF, 5.8 R<br>(MIH), C2-4:<br>2.0 C  | 17,001<br>R/CF;<br>23,478 R<br>(MIH);<br>8,096 C                                    | 150' | 1-9,<br>14 |
| 4/3,308<br>sf                                       | R5 | 1.25 R,<br>2.0 CF | 4,135 R,<br>6,616 CF   | 30' before<br>setback | 1-4 | R7D/C2-<br>4/SCID-<br>Parcel H | R7D: 4.2<br>R/CF, 5.8 R<br>(MIH), C2-4:<br>2.0 C  | 13,893<br>R/CF;<br>19,186 R<br>(MIH);<br>6,616 C                                    | 150' | 1-9,<br>14 |
| 5/3,261<br>sf                                       | R5 | 1.25 R,<br>2.0 CF | 4,076 R,<br>6,522 CF   | 30' before<br>setback | 1-4 | R7D/C2-<br>4/SCID-<br>Parcel H | R7D: 4.2<br>R/CF, 5.8 R<br>(MIH), C2-4:<br>2.0 C  | 13,696<br>R/CF;<br>18,913 R<br>(MIH);<br>6,522 C                                    | 150' | 1-9,<br>14 |
| 6/13,200<br>sf                                      | R5 | 1.25 R,<br>2.0 CF | 16,500 R,<br>26,400 CF | 30' before<br>setback | 1-4 | R6A/C2-<br>4/SCID-<br>Parcel H | R6A: 3.0<br>R/CF, 3.6 R<br>(MIH); C2-4:<br>2.0 C  | 39,600<br>R/CF;<br>47,520 R<br>(MIH);<br>26,400 C                                   | 85'  | 1-9,<br>14 |
| 7/4,400<br>sf (1,100<br>in R7D;<br>3,300 in<br>R6A) | R5 | 1.25 R,<br>2.0 CF | 5,500 R,<br>8,800 CF   | 30' before<br>setback | 1-4 | R6A/C2-<br>4/SCID-<br>Parcel H | R7D: 4.2<br>R/CF, 5.8 R<br>(MIH), C2-4:<br>2.0 C & R6A:<br>3.0 R/CF, 3.6<br>R (MIH); C2-<br>4: 2.0 C;<br>adjusted R<br>(MIH) 4.15 | 18,480<br>R/CF;<br>25,520 R<br>(MIH);<br>8,800 C;<br>adjusted-<br>18,260 R<br>(MIH) | 85'  | 1-9,<br>14 |
| 8/4,400<br>sf                                       | R5 | 1.25 R,<br>2.0 CF | 5,500 R,<br>8,800 CF   | 30' before<br>setback | 1-4 | R7D/C2-<br>4/SCID-<br>Parcel H | R7D: 4.2<br>R/CF, 5.8 R<br>(MIH), C2-4:<br>2.0 C  | 18,480<br>R/CF;<br>25,520 R<br>(MIH);<br>8,800 C                                    | 85'  | 1-9,<br>14 |

The proposed R7D/SCID-Parcel H regulations would permit a residential and community facility FAR of 4.2. Under the Mandatory Inclusionary Housing (MIH) Program zoning regulations it would permit a maximum residential FAR of 5.8. The proposed R6A/SCID-Parcel H regulations would permit a residential and community facility FAR of 3.0 and under MIH it would permit a maximum FAR of 3.6. Residential and community facility Use Groups 1-4 are permitted in these districts. The C2-4 commercial overlay district permits commercial Use Groups 6 through 9 and 14, which include most retail establishments as well as residential and community facility Use Groups 1 through 4, and would allow a maximum commercial FAR of 2.0 in the



proposed R7D and R6A districts.

*Special Coney Island District Enlargement*

The proposed text amendment to modify ZR § 131-00 et seq. is necessary to enlarge the SCID, enlarge the Coney West Subdistrict, create a new Parcel H with modified height and bulk regulations, and establish the applicability of the MIH program within R6A districts in the SCID. Pursuant to ZR § 131-321, residential development with Inclusionary Housing within R7D districts in Parcels A, B, C, D of the Coney West Subdistrict are permitted up to a maximum FAR of 5.8. This action would establish SCID use and bulk regulations, including the 5.8 maximum FAR, within the Project Area with specific provisions for the new Parcel H. Without the Proposed Actions, development at the site would be subject to the existing R5 zoning district regulations.

In addition to preserving and enhancing the amusement area, the Special Coney Island District was established to facilitate and guide the development of a residential and retail district; provide a transition to the neighboring areas to the north and west; provide flexibility for architectural design that encourages building forms that enhance and enliven the streetscape; control the impact of development on the access of light and air to streets, the Boardwalk and parks in the district and surrounding neighborhood; and promote development in accordance with the area's District Plan and thus conserve the value of land and buildings, and thereby protect the City's tax revenues. The proposal to expand the SCID and create a new Parcel H within the Coney West Subdistrict would further these goals by promoting development on underutilized property adjacent to the boundary of the SCID as further discussed below.

Currently, approximately half of the Surf Avenue frontage is vacant, approximately 20 percent of the West 22<sup>nd</sup> Street frontage is vacant, and approximately 70 percent of the West 23<sup>rd</sup> Street frontage is vacant. In connection with the proposed SCID R7D/C2-4 and R6A/C2-4 zoning districts, enlarging the SCID would create new opportunities for mixed-use housing and commercial development. New development at the Development Site and within the Project Area pursuant to the SCID provisions would strengthen the mixed-use character of Surf Avenue, and provide a transition to the neighboring areas to the north and west, and enliven West 22<sup>nd</sup> and 23<sup>rd</sup> Streets.

In addition, the proposed zoning map amendment is necessary to map the SCID Coney West Subdistrict Parcel H within the Project Area, subjecting the project Area to the SCID Parcel H use and bulk regulations. The proposed boundary for the new Parcel H would abut the existing boundary of SCID Parcel G on the southern portion of Block 7071, which was mapped as parkland in 2009 and developed as Seaside Park (pursuant to C 140063 ZSK).

The proposed Zoning Text Amendment extending the Coney West Subdistrict portion of the Special Coney Island District (SCID) directly east of the Project Area across West 22<sup>nd</sup> Street onto the Proposed Development Site is necessary in order to accommodate the increase in floor area ratio up to 5.8 FAR including lower income housing on the Site as well as transitional height and setback regulations. The Zoning Text Amendment is needed to permit a proposed FAR of up to 5.8 on the Applicant's Proposed Development Site in order to provide sufficient floor area to accommodate lower income dwelling units as part of the project. The proposed Zoning Text Amendment extending the existing Inclusionary Housing Designated Area shown in ZR 23-933 Appendix F, Brooklyn Community District 13, Map 1 to include the northern portion of Block 7071 coterminous with the proposed Zoning Map Amendment is necessary in order to make the newly mapped R7D/C2-4 district an Inclusionary Housing designated area.

The proposed Zoning Text Amendment to modify ZR Article 13, Chapter 1 would create a zone where the permitted heights of buildings would transition from the greater heights permitted in the Coney West Subdistrict portion of the Special Coney Island District directly east of the Project Area across West 22<sup>nd</sup> Street. The Text Amendment would limit the heights of buildings along a portion of West 23<sup>rd</sup> Street across from the R5 district further to the west but would allow taller structures on West 22<sup>nd</sup> Street opposite the existing Special District where taller buildings are already permitted.

#### *Proposed R7D/C2-4 and R6A/C2-4 Districts*

The proposed Zoning Map Amendment would include rezoning the Proposed Development Site from its existing R5 district to the proposed R7D/C2-4 district which is required in order to develop the proposed residential and commercial uses and

density on the property. It is required to allow the proposed bulk of the new building to be increased from the current permitted FAR of 1.25 for residential uses to 4.2 for residential and community facility uses and a residential FAR of 5.8 as a bonus for inclusionary housing. It would also permit a commercial FAR of 2.0.

The proposed zoning change also involves rezoning properties in addition to the Proposed Development Site from R5 to R7D/C2-4 and R6A/C2-4. The change to R7D/C2-4 would serve to alter the permitted bulk in that area from the current permitted FAR of 1.25 for residential uses and 2.0 for community facility uses to 4.2 for residential and community facility uses and a residential FAR of 5.8 as a bonus for inclusionary housing. It would also permit a commercial FAR of 2.0. A maximum building height of 150 feet would be allowed within the R7D/C2-4 zoned area within 100 feet of Surf Avenue or 100 feet of West 22<sup>nd</sup> Street. The area proposed to be rezoned to R6A would permit a residential bulk of 3.0 for residential and community facility uses and a residential FAR of 3.6 with inclusionary housing and building heights would be limited to 85 feet. It would also permit a commercial FAR of 2.0. The increase in permitted bulk is appropriate given the location of the Coney West Subdistrict of the Special Coney Island District directly east of the Project Area across West 22<sup>nd</sup> Street.

The proposed zoning map amendment to establish R7D/C2-4 and R6A/C2-4 zoning districts within the Project Area is necessary for the proposed development project and creates a transition between the existing SCID R7D mapped to the east and the R5 that would remain mapped to the west.

Within the proposed new SCID Parcel H, the proposed R7D zoning district would be subject to modified use provisions pursuant to ZR § 131-132 and modified bulk provisions pursuant to ZR § 131-32. The proposed R7D would allow medium-density apartment buildings at a maximum FAR of 5.8 for developments that provide affordable housing pursuant to the MIH program requirements. Within Parcel H, the maximum height of a building within 100 feet of Surf Avenue or 100 feet of West 22<sup>nd</sup> Street is 150 feet (the remainder of Parcel H, which would be mapped R6A, is subject to the R6A maximum height pursuant to ZR § 23-664). Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within the Transit Zone. The proposed C2-4 commercial district would permit Use



Groups 6-9 and 14 to allow commercial development with up to 2.0 FAR. The proposed C2-4 district requires one accessory parking space per 1,000 sq. ft. of commercial floor area for all types of commercial uses. The proposed development would comply with the bulk regulations of the proposed SCID R7D/C2-4 zoning district. Similarly, the proposed residential and commercial uses would conform with the use provisions of the proposed SCID R7D/C2-4 zoning district.

Mapping an R7D in this area provides opportunities for medium-density housing development under the MIH program. The Coney Island Plan mapped the area immediately to the west of the proposed Project Area with a SCID R7D/C2-4 zoning district. The Project Area presents a similar opportunity for new transit-oriented housing development, including affordable housing, on underutilized property - directly addressing the City's Housing New York: A Five-Borough, Ten-Year Plan objectives. The proposed C2-4 overlay would support the development of mixed residential and commercial uses to strengthen the character of Surf Avenue as a mixed corridor, and promote mixed-use development within Parcel H consistent with the goals of the SCID. New ground floor commercial uses would activate the streetscape and create an enhanced pedestrian experience along Surf Avenue and West 22nd Street - creating a connection between the surrounding residential neighborhood north of Surf Avenue to the Seaside Park and Community Arts Center, Riegelmann Boardwalk, and the Coney Island Beach. New commercial uses would serve the existing residential community and future residents, and would create job opportunities in the area.

The proposed R6A zoning district would allow medium-density apartment buildings at a maximum FAR of 3.6 for developments that provide affordable housing pursuant to the MIH program requirements. The maximum building height for eligible MIH program buildings with qualifying ground floors is 85 feet after a setback from the base height of up to 65 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 8 floors. Off-street parking is required for 50 percent of the residential dwelling units, but is not required for affordable housing units within specified Transit Zones. Mapping an R6A in this area provides opportunities for medium-density housing development under the MIH program, while creating an appropriate transition

to the R5 district mapped to the west. The proposed C2-4 commercial district would permit Use Groups 6-9 and 14 to allow commercial development with up to 2.0 FAR. The proposed C2-4 district requires one accessory parking space per 1,000 sq. ft. of commercial floor area for all types of commercial uses. The proposed R6A creates a transition between the existing SCID R7D mapped to the east of the Project Area and in the proposed new Parcel H and the R5 mapped to the west. The proposed overlay would promote mixed-use development on West 23<sup>rd</sup> Street consistent with the goals of the SCID. New active ground floor uses on West 23<sup>rd</sup> Street would similarly enliven the streetscape and link Surf Avenue to the parkland to the south.

#### Mandatory Inclusionary Housing Text Amendment

The proposed text amendment of ZR Appendix F is necessary to establish an MIH Area coterminous with the Project Area. Pursuant to the MIH program, a percentage of the new dwelling units in the proposed development must be affordable units, resulting in an affordable housing set-aside for either 25 percent of the residential floor area at an average of 60 percent of AMI (Option 1) or 30 percent of the residential floor area at an average of 80 percent AMI (Option 2). The Applicant proposes mapping both MIH Option 1 and Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The MIH program would ensure that development within the Project Area would address the need for low-income housing. The Applicant seeks Option 1 for the Development Site, resulting in approximately 22 permanently affordable units in the With Action scenario. As MIH options are not selected until the end of the ULURP process, up to 27 affordable units would be provided on the Development Site pursuant to MIH, which is 30% of the With Action total of 89 dwelling units.

#### Transit Zone Text Amendment

The proposed text amendment of ZR Appendix I is necessary to establish the Project Area within the Transit Zone. MIH Areas within the Transit Zone are subject to reduced parking requirements for income-restricted units. The enlargement of the Transit Zone is appropriate due to the Project Area's accessibility to mass transit, including the N, Q, D, and F subway lines at the Stillwell Avenue subway station and B36, X28, and X38 bus service along Surf Avenue. The entire SCID is within the Transit Zone, including

the southern portion of Block 7071, which is located farther from mass transit options than the Project Area. The proposed text amendment ensures that the parking regulations for the proposed new SCID Parcel H would be consistent with the rest of the SCID.

#### ***400-Foot Radius Project Study Area***

The Proposed Actions would not result in any changes in zoning in the 400-foot radius project study area.

#### **Conclusion**

The proposed zoning map and zoning text amendments would only apply to the Project Area and would not affect lots beyond this area. The Proposed Actions would not result in any significant impacts to zoning patterns in the area since the mapping of the proposed R7D/C2-4 and R6A/C2-4 zoning districts, the creation of SCID-Parcel H, and the mapping of the MIH and Transit Zone in the Project Area would result in development that would be close in size and form to the existing neighborhood context while also providing enough floor area to develop a reasonable number of affordable dwelling units. The proposed zoning map amendment to establish R7D/C2-4 and R6A/C2-4 zoning districts within the Project Area is necessary for the proposed development project to occur and creates a transition between the existing SCID R7D mapped to the east and the R5 that would remain mapped to the west.

Based on the above analysis, it has been determined that no potentially significant adverse impacts related to zoning are expected to occur as a result of the Proposed Actions. Therefore, further analysis of zoning is not warranted.

### **PUBLIC POLICY**

#### **Existing Conditions**

According to the *CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an



analysis of public policy. Public policies applicable to the Project Area and 400-foot radius project study area are discussed below.

***Project Area and 400-Foot Radius Project Study Area***

A portion of the Project Area is subject to rent regulation. On Lot 114 there are 15 rent regulated units; on Lot 19 there are 40 rent regulated units; and on Lot 24 there are 10 rent regulated units.

The Project Area and the entire 400-foot radius project study area are located within the City's Coastal zone boundary. These areas are therefore subject to the provisions of the City's Waterfront Revitalization Program (WRP).

The Project Area and the entire 400-foot radius project study area are located within the boundaries of the City's FRESH Program. The City has established the Food Retail Expansion to Support Health (FRESH) program in response to the issues raised in neighborhoods that are underserved by grocery stores. FRESH provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in underserved communities throughout the five boroughs. The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator in FRESH-eligible areas that meet the following criteria:

- Provide a minimum of 6,000 square feet (sf) of retail space for a general line of food and non-food grocery products intended for home preparation, consumption and utilization;
- Provide at least 50 percent of a general line of food products intended for home preparation, consumption and utilization;
- Provide at least 30 percent of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish, and frozen foods; and
- Provide at least 500 sf of retail space for fresh produce.

Financial incentives are available to eligible grocery store operators and developers to facilitate and encourage FRESH Food Stores in the designated area. These incentives include real estate tax reductions, sales tax exemptions, floor area bonuses, and mortgage recording tax deferrals. The Project Area and the 400-foot radius project study

area are eligible for various tax incentives related to grocery store development and operation.

An Inclusionary Housing Designated Area is mapped along the eastern edge of the 400-foot radius project study area east of West 22<sup>nd</sup> Street and south of Surf Avenue. The Inclusionary Housing Program promotes economic integration in areas of the City undergoing substantial new residential development by offering an optional floor area bonus in exchange for the creation or preservation of affordable housing, on-site or off-site, principally for low-income households. The Inclusionary Housing Program requires a percentage of the dwelling units within a building to be set aside, or new or rehabilitated affordable units be provided off-site within the same community district or within one-half mile of the bonused development. All affordable residential units created through the Inclusionary Housing Program must remain permanently affordable. Affordable apartments may be rental units or, under modifications made to the program in 2009, available in an ownership plan.

One NYC Landmarks Preservation Commission (LPC) designated resource, the Former Childs Restaurant Building at 2101 Boardwalk and West 21<sup>st</sup> Street is located within 400 feet of the site. This resource is subject to the provisions of the New York City Landmarks Law. No Historic Districts or other individually designated historic resources are located within the Project Area or the surrounding 400-foot radius study area.

No other public policies would apply to the Proposed Actions as the Project Area and the surrounding 400-foot radius study area are not located within the boundaries of any 197-a Community Development Plans or Urban Renewal Area plans<sup>2</sup>, and also are not within a critical environmental area, a significant coastal fish and wildlife habitat, a wildlife refuge, or a special natural waterfront area.

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<sup>2</sup> The Project Area was in the Coney Island 1 Urban Renewal Area and subject to the Plan. The Urban Renewal Area designation and related plan both expired on July 25, 2008.

### **Future No-Action Scenario**

In the future, without the action, new development in the Project Area and within the 400-foot radius project study area would remain within the boundaries of the City's Coastal Zone and the FRESH Program, and would therefore remain subject to the provisions of the WRP and FRESH Program. The Inclusionary Housing Designated Area mapped along the eastern edge of the 400-foot radius project study area east of West 22<sup>nd</sup> Street and south of Surf Avenue would also remain and development within this area would be subject to the provisions of this designation. Finally, and development within 400 feet of the LPC designated Former Childs Restaurant Building would be subject to the provisions of the New York City Landmarks Law. No other public policy initiatives would pertain to the Project Area or to the 400-foot study area around the Area by the final project build year of 2027. In addition, no changes are anticipated to any public policy documents relating to the Project Area or the surrounding study area by the project build year.

### **Future With-Action Scenario**

#### ***Project Area***

As part of the Mayor's Housing New York plan, the City Council has recently approved a citywide zoning text amendment to authorize a Mandatory Inclusionary Housing (MIH) program (ULURP # 160051ZRY). The purpose of the MIH program is to promote neighborhood economic diversity in locations where land use actions create substantial new housing opportunities. The text amendment will have no effect until mapped through subsequent discretionary actions of the CPC, each of which will be subject to a public review process and separate environmental review. As with zoning actions generally, MIH Areas may be applied through DCP-initiated actions or as part of private applications, including certain zoning map amendments, text amendments, and Special Permits that create opportunities for significant new housing development. The MIH program would require (through zoning) that when CPC actions create significant new housing capacity in medium and high-density areas, either 25 or 30 percent of new housing would be *permanently* affordable. Under the proposal, the CPC and ultimately the City Council would apply at least one of these requirements to each MIH area:



- 25 percent of residential floor area must be for affordable housing units for residents with incomes averaging 60 percent Area Median Income (AMI) (\$46,620 for a family of three) with no unit targeted at a level exceeding 130% AMI; or
- 30 percent of residential floor area must be for affordable housing units for residents with incomes averaging 80 percent AMI (\$62,150 for a family of three) with no unit targeted at a level exceeding 130% AMI.

In addition to the options above, the City Council and the CPC could decide to apply one or both of the following options:

- A deep affordability option, where
  - o 20% of the total residential floor area must be for housing units for residents with incomes averaging 40% AMI (\$31,080 per year for a family of three);
  - o No direct subsidies could be used for these units except where needed to support more affordable housing; or
- An additional, limited workforce option for markets where moderate-income development is marginally feasible without subsidy. Under this option,
  - o 30 percent of the residential floor area must be for housing units for residents with incomes averaging 115 percent AMI (\$104,895/year for a family of three);
  - o No units could go to residents with incomes above 130 percent AMI (\$101,010/year for a family of three);
  - o No direct subsidies could be used for these affordable housing units; and
  - o This option would not be available in Manhattan CDs 1-8, which extend south of 96th Street on the east side and south of 110th Street on the west side.

Requirements would apply to developments, enlargements and residential conversions of more than ten units. Developments between 11 and 25 units would have the optional alternative of making a payment into an affordable housing fund, to be used to support affordable housing within that Community District. As indicated, the Proposed Actions include a Zoning Text Amendment to modify ZR Section 23-933, Appendix F to

designate the newly mapped R7D/C2-4/SCID and R6A/C2-4/SCID districts as Inclusionary Housing designated areas. The Applicant proposes mapping both the MIH 25% Option 1 and the 30% Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The Applicant seeks Option 1 for the Development Site, resulting in approximately 22 permanently affordable units in the With-Action scenario. However, as MIH options are not selected until the end of the ULURP process, up to 27 affordable units could be provided pursuant to MIH which is 30% of the With Action total of 89 dwelling units on the Proposed Development Site. Under With-Action conditions, the 8 Projected Development Sites would be developed with 253 dwelling units, including up to 76 affordable units.

Waterfront approval is required for the proposed development as the Project Area is located within the City's Coastal Zone Boundary Area and the project must be assessed for its consistency with the City's Waterfront Revitalization Program. The Waterfront Consistency Assessment Form and a narrative explaining how the Proposed Actions would be consistent with WRP policies are attached to this document. The narrative explains how the Actions comply with the policies noted after each Consistency Assessment Form question that has been affirmatively responded to. The Proposed Actions are consistent with WRP policies, and no potentially significant adverse impacts related to the WRP are anticipated as a result of these Actions.

While the Project Area is within the boundaries of the city's FRESH program, the proposed development would not be relevant to the FRESH program as no grocery stores are proposed as part of the project.

#### ***400-Foot Radius Project Study Area***

The proposed development would not have any impact on the Coastal Zone within a 400-foot radius of the Project Area. The Proposed Actions would not affect the Former Childs Restaurant Building to the southeast of the Project Area. The project would be designed and built to conform and comply with LPC regulations pertaining to historic resources (see Construction section).

## **Conclusion**

No impact to public policies would occur as a result of the Proposed Actions. The action would be an appropriate development in the Project Area and would be a positive contribution to Brooklyn Community District 13 and to the surrounding neighborhood.

The proposed project would meet the City's public policy goals as explained above as well as similar State and national public policy goals related to the provision of affordable housing. All development would comply with the provisions of the City's WRP applicable to the Coastal Zone area.

Based on the above analyses, it has been determined that no potentially significant adverse impacts related to public policy are expected to occur as a result of the Proposed Actions. Therefore, further analysis of public policy is not warranted.



## **6. COMMUNITY FACILITIES AND SERVICES**

### **Introduction**

The community facilities and services considered under CEQR are public schools, public or publicly subsidized day care centers, public libraries, hospitals and other health care facilities, and police and fire protection services. Under the guidelines set forth in the *CEQR Technical Manual*, a detailed analysis is required only if a proposed action would displace or otherwise directly affect an existing community facility or if it would place significant new demands on facilities or services. Most of the demand for community facility services is generated by the introduction of new residents in an area.

### **Direct Effects**

The Proposed Actions would not physically displace or affect any existing community facilities, and would therefore have no direct impact on any community facilities or services. Therefore, further assessment of direct impacts is not warranted.

### **Indirect Effects**

The *CEQR Technical Manual* provides a set of thresholds to use in determining whether detailed studies of potentially significant adverse indirect impacts related to community facilities and services are warranted. The With-Action RWCDs includes the development of 89 dwelling units, including up to 27 units of affordable housing, on the Applicant controlled Projected Development Site 1 while the No-Action RWCDs on this property includes 34 existing dwelling units for a net increase of 55 dwelling units, including 27 affordable and 28 market rate units. The With-Action RWCDs also includes 164 new dwelling units, including up to 49 units of affordable housing, on the non-Applicant controlled properties identified as Projected Development Sites 2 through 8 while the No-Action RWCDs on these properties include 47 new dwelling units for a net increase of 117 units, including 49 affordable and 68 market rate units. Therefore, the Proposed Actions would result in the development of a net increase of 172 dwelling units, including up to 76 affordable units, in the Project Area.

The Applicant proposes mapping both the MIH 25% Option 1 and the 30% Option 2 within the Project Area to provide maximum flexibility for non-Applicant controlled sites. The Applicant seeks Option 1 for the Development Site, resulting in

approximately 22 permanently affordable units in the With-Action scenario. However, as MIH options are not selected until the end of the ULURP process, up to 27 affordable units could be provided pursuant to MIH which is 30% of the With Action total of 89 dwelling units on the Proposed Development Site. Under With-Action conditions, the 8 Projected Development Sites would be developed with 253 dwelling units, including up to 76 affordable units.

Based on *CEQR Technical Manual* criteria (Table 6-1), the development of 172 dwelling units would exceed the minimum number of 121 dwelling units for conducting a detailed analysis of impacts to public elementary and middle schools in the Borough of Brooklyn. An assessment of the project's potential impacts on these facilities is described below.

### Public Schools

The *CEQR Technical Manual* states that, in general, if a project would introduce more than 50 school-age children (elementary and intermediate grades), significant impacts on public schools may occur and further analysis of schools may be appropriate. The RWCDS under the Proposed Actions include the development of 172 net new dwelling units, including 55 units on the property controlled by the Applicant and 117 units in the remainder of the Project Area.

Based on the factors contained in Table 6-1a, the 172 new dwelling units resulting from the Proposed Actions would be anticipated to generate a total of 71 public school students, including 50 elementary school and 21 middle school pupils. The 172 dwelling units would be anticipated to generate a total of 24 public high school students, which would fall below the threshold of concern of 150 high school level pupils. A detailed public elementary and intermediate schools analysis is provided below.

### Other Community Facilities

The development of 172 dwelling units of housing in the Project Area would not be anticipated to exceed the thresholds of concern for any other community facilities and services. Under the criteria in Table 6-1, the development of a maximum of 76 affordable dwelling units in the Project Area would not exceed the minimum number of 141 dwelling units for conducting a detailed analysis of impacts to publicly funded

child care. Based on the *CEQR Technical Manual*, the Proposed Actions would have no adverse impacts to libraries, health care facilities, or fire and police protection.

## **Public Schools**

### **Existing Conditions**

#### *Primary Study Area (Sub-district Analysis)*

The proposed development site is located in Brooklyn Community School District (CSD) 21, Sub-district 1. CSD 21, Sub-district 1 is considered to be the primary study area for the analysis of elementary and intermediate schools.

Within CSD 21, Sub-district 1, there are 7 elementary schools and 5 intermediate level schools. Figure 6-1, Public Elementary and Intermediate Schools Within CSD 21, Sub-district 1, illustrates the locations of these public elementary and intermediate schools.

Table 6-1 provides a listing of the elementary and intermediate schools within CSD 21, Sub-district 1. The table identifies the schools by school number/name, address, and grades served, and includes the latest available enrollment and school capacity numbers.

Elementary school capacity numbers are less than actual building capacities as they assume a class size reduction for Kindergarten through the third grades of 20 children per class, 28 children for grades 4-8; and 30 children for grades 9-12 (“target capacity”).

Table 6-1 indicates that the elementary schools within CSD 21, Sub-district 1 are generally somewhat over capacity and have an average utilization rate of approximately 101% with enrollments ranging from 63% to 146% of target capacity at individual school buildings. The elementary schools within CSD 21, Sub-district 1 have a total enrollment of 4,309 students relative to a target capacity of 4,248 seats resulting in a shortfall of 61 seats.



| <b>Table 6-1</b>   |                                    |                      |               |                              |                            |                            |                       |
|--|------------------------------------|----------------------|---------------|------------------------------|----------------------------|----------------------------|-----------------------|
| <b>CSD 21, Sub-district 1 (Primary Study Area) - Existing Enrollment, Capacity and Utilization</b> |                                    |                      |               |                              |                            |                            |                       |
| <b>2015-2016 School Year</b>   |                                    |                      |               |                              |                            |                            |                       |
| <b>#</b>   | <b>School Number<br/>(Bldg ID)</b> | <b>Address</b>       | <b>Grades</b> | <b>School<br/>Enrollment</b> | <b>Target<br/>Capacity</b> | <b>Available<br/>Seats</b> | <b>%<br/>Utilized</b> |
| <b>ELEMENTARY SCHOOLS</b>  |                                    |                      |               |                              |                            |                            |                       |
| 1  | P.S. 90                            | 2840 West 12 St.     | PK-5, SE      | 649                          | 662                        | 13                         | 98                    |
| 2  | P.S. 100                           | 2951 West 3 St.      | PK-5, SE      | 761                          | 623                        | -138                       | 122                   |
| 3  | P.S. 188                           | 3314 Neptune Ave.    | PK-5, SE      | 502                          | 797                        | 295                        | 63                    |
| 4  | P.S./I.S. 225                      | 1075 Ocean View Ave. | PK-8, SE      | 637                          | 520                        | -117                       | 123                   |
| 5 <sup>3</sup>   | P.S. 253                           | 601 Ocean View Ave.  | PK-5, SE      | 878                          | 600                        | -278                       | 146                   |
| 6  | P.S./I.S. 288                      | 2950 West 25 St.     | PK-8, SE      | 462                          | 503                        | 41                         | 92                    |
| 7  | P.S. 329                           | 2929 West 30 St.     | PK-5, SE      | 420                          | 543                        | 123                        | 77                    |
|  | <b>Subtotal</b>                    |                      |               | <b>4,309</b>                 | <b>4,248</b>               | <b>-61</b>                 | <b>101</b>            |
| <b>INTERMEDIATE SCHOOLS</b>  |                                    |                      |               |                              |                            |                            |                       |
| 8  | I.S. 98                            | 1401 Emmons Ave.     | 6-8, SE       | 1,493                        | 1,456                      | -37                        | 103                   |
| 9  | P.S./I.S. 225                      | 1075 Ocean View Ave. | PK-8, SE      | 381                          | 311                        | -70                        | 123                   |
| 10   | I.S. 239                           | 2401 Neptune Ave.    | 6-8, SE       | 1,340                        | 1,660                      | 320                        | 81                    |
| 11   | P.S./I.S. 288                      | 2950 West 25         | PK-8, SE      | 139                          | 151                        | 12                         | 92                    |

<sup>3</sup> Note that the enrollment of the P.S. 253 Transportable School (35 students) is included in total enrollments for P.S. 253 but the capacity of the Transportable School is not included in the Target Capacity number.

|   |                 |               |         |              |              |            |           |
|---|-----------------|---------------|---------|--------------|--------------|------------|-----------|
|   |                 | St.           |         |              |              |            |           |
| 12  | I.S. 303        | 501 West Ave. | 6-8, SE | 499          | 842          | 343        | 59        |
|   | <b>Subtotal</b> |               |         | <b>3,852</b> | <b>4,420</b> | <b>568</b> | <b>87</b> |
| <i>Source: 2015-2016 Enrollment, Capacity and Utilization Report, NYC Department of Education. Target Capacity assumes maximum classroom capacity of 20 children per class for grades K-3; 28 children for grades 4-8; and 30 children for grades 9-12.</i> |                 |               |         |              |              |            |           |

Table 6-1 indicates that most of the intermediate level schools in CSD 21, Sub-district 1 are under capacity with an average utilization rate of 87% with rates ranging from 59% to 123% of target capacity at individual middle school buildings. The intermediate level schools in CSD 21, Sub-district 1 have a total enrollment of 3,852 students relative to a target capacity of 4,420 seats resulting in 568 available seats

Since the NYC Department of Education (DOE) is actively engaged in an ongoing process of repurposing underutilized school space, either for its own programs or for Charter Schools, a school building that is significantly underutilized in the existing condition may be programmed to include a new school organization in the near future. In this case, the available capacity may be radically altered within a few months of when the assessment is made. P.S. 188 and P.S. 329 in CSD 21, Sub-district 1 have been identified in DOE's February 23, 2017 Underutilized Space Memorandum as underutilized by 150 seats or more based on the 2015/2016 Blue Book. However, as utilization plans applicable to these schools have not yet been officially adopted, no adjustment has been made to available capacity within the sub-district study area.

There is one charter school within CSD 21, Sub-district 1. Information about this school is not included in the table above. Per *CEQR Technical Manual* guidelines, charter school enrollments are not included in DOE enrollment projections. The charter school is Coney Island Prep Charter School, 501 West Avenue, K-12, 356 students enrolled, 233 target capacity, shortfall of 123 seats.

CSD 21 does not have an elementary and/or middle school choice policy or other priority admissions programs.

Future No-Action Scenario

This section presents an analysis of public school enrollments (including Pre-Kindergarten enrollments) and capacities for the Project Build Year of 2027 without the Proposed Actions. The analysis includes the primary study area of CSD 21, Sub-district 1 and is derived from NYC Department of Education (DOE) enrollment projections.

Based on the NYC School Construction Authority’s (SCA) “Projected New Housing Starts” (aka Housing Pipeline) projections, additional student enrollments would occur in CSD 21, Sub-district 1 under the No-Build condition by the project build year of 2027 as presented in Table 6-2 below.

As outlined in the *CEQR Technical Manual*, No-Action school capacity changes considered in a community facilities analysis include information on proposed and adopted “Significant Changes in School Utilization” and the DOE’s Five-Year Capital Plan. The NYC SCA February 2017 Proposed Five Year Capital Plan Amendment has identified a need for 476 additional seats in the CSD 21, Coney Island Subdistrict (Subdistrict 1), but these seats are not yet in design or scope. No other changes related to decreases or increases in school capacities within CSD 21, Subdistrict 1 have been identified from a review of the “Significant Changes in School Utilization” and the DOE’s Five-Year Capital Plan.

| <b>Table 6-2</b>   |  |  |                                   |                         |                        |                                |
|--|--|--|-----------------------------------|-------------------------|------------------------|--------------------------------|
| <b>Estimated Public School Enrollment, Capacity, and Utilization Year 2027</b> |  |  |                                   |                         |                        |                                |
| <b>Future Without the Proposed Actions</b>                                     |  |  |                                   |                         |                        |                                |
| <b>School Level</b>  | <b>2027 Projected Enrollment (w/Pre-K)</b> | <b>Students Generated by Development Without Actions</b> | <b>Total Projected Enrollment</b> | <b>Program Capacity</b> | <b>Seats Available</b> | <b>Program Utilization (%)</b> |
| <b>Elementary/K-5 Schools</b>  |  |  |                                   |                         |                        |                                |
| Sub-district 1   | 4,152                                      | 757  | 4,909                             | 4,248                   | -661                   | 115.6%                         |
| <b>Intermediate/Secondary 6-8 Schools</b>                                      |  |  |                                   |                         |                        |                                |
| Sub-district 1   | 4,586                                      | 313  | 4,899                             | 4,420                   | -479                   | 110.8%                         |
| Source: DOE Enrollment Projections (Actual 2014, Projected 2015-2024)          |  |  |                                   |                         |                        |                                |



Table 6-2 indicates that there would be a shortfall in seats at both the elementary and intermediate school levels within Sub-district 1 in 2027 without the Proposed Actions.

Sub-district Projections

|      | <i>Percentages for Sub-district 1</i> | <i>Projected Enrollment</i> |
|------|---------------------------------------|-----------------------------|
| P.S. | 26.41% (x 15,723)                     | 4,152                       |
| I.S. | 47.32% (x 9,693)                      | 4,586                       |

Future With-Action Scenario

As stated above, applying the household multipliers for Brooklyn from Table 6-1a of the *CEQR Technical Manual* to the maximum RWCDS of 172 dwelling units, would result in the anticipated generation of approximately 71 elementary and middle school children. Approximately 50 of these children would be elementary school students and the remaining 21 would be intermediate school enrollments. The development would not include the addition of any new schools or additional capacity in the District.

Table 6-3 presents the anticipated student enrollments that would be generated by the Proposed Actions and the effect of these enrollments on the available capacity of the schools within Sub-district 1. The projected increase of 50 elementary and 21 middle school students resulting from the Proposed Actions in 2027 would have a minimal impact upon the utilization rates of the schools in Sub-district 1. With the addition of these new enrollments, both the elementary and middle schools in Sub-district 1 would remain over capacity. However, based on *CEQR Technical Manual* criteria and as further explained below, it is not anticipated that the elementary school and middle school students that would be generated by the Proposed Actions would result in a significant impact on the elementary and intermediate schools in the area.

| <b>Table 6-3</b>   |   |  |                               |                         |                    |                           |                                  |   |
|--|---|--|-------------------------------|-------------------------|--------------------|---------------------------|----------------------------------|---|
| <b>Estimated Public School Enrollment, Capacity, and Utilization Year 2027</b> |   |  |                               |                         |                    |                           |                                  |   |
| <b>Future With the Proposed Actions</b>  |   |  |                               |                         |                    |                           |                                  |   |
| <b>School Level</b>  | <b>2027 No-Build Projected Enrollment (w/Pre-K)</b> | <b>Students Generated by Develop (With Action)</b> | <b>Total Projected Enroll</b> | <b>Program Capacity</b> | <b>Seats Avail</b> | <b>Program Utiliz (%)</b> | <b>No Action Prog Utiliz (%)</b> | <b>Diff betw No Action/ With Action</b> |
| <b>Elementary/K-5 Schools</b>  |   |  |                               |                         |                    |                           |                                  |   |
| Sub-district 1   | 4,909   | 50   | 4,959                         | 4,248                   | -711               | 116.7%                    | 115.6%                           | 1.1%                                    |
| <b>Intermediate/Secondary 6-8 Schools</b>                                      |   |  |                               |                         |                    |                           |                                  |   |
| Sub-district 1   | 4,899   | 21   | 4,920                         | 4,420                   | -500               | 111.3%                    | 110.8%                           | 0.5%                                    |

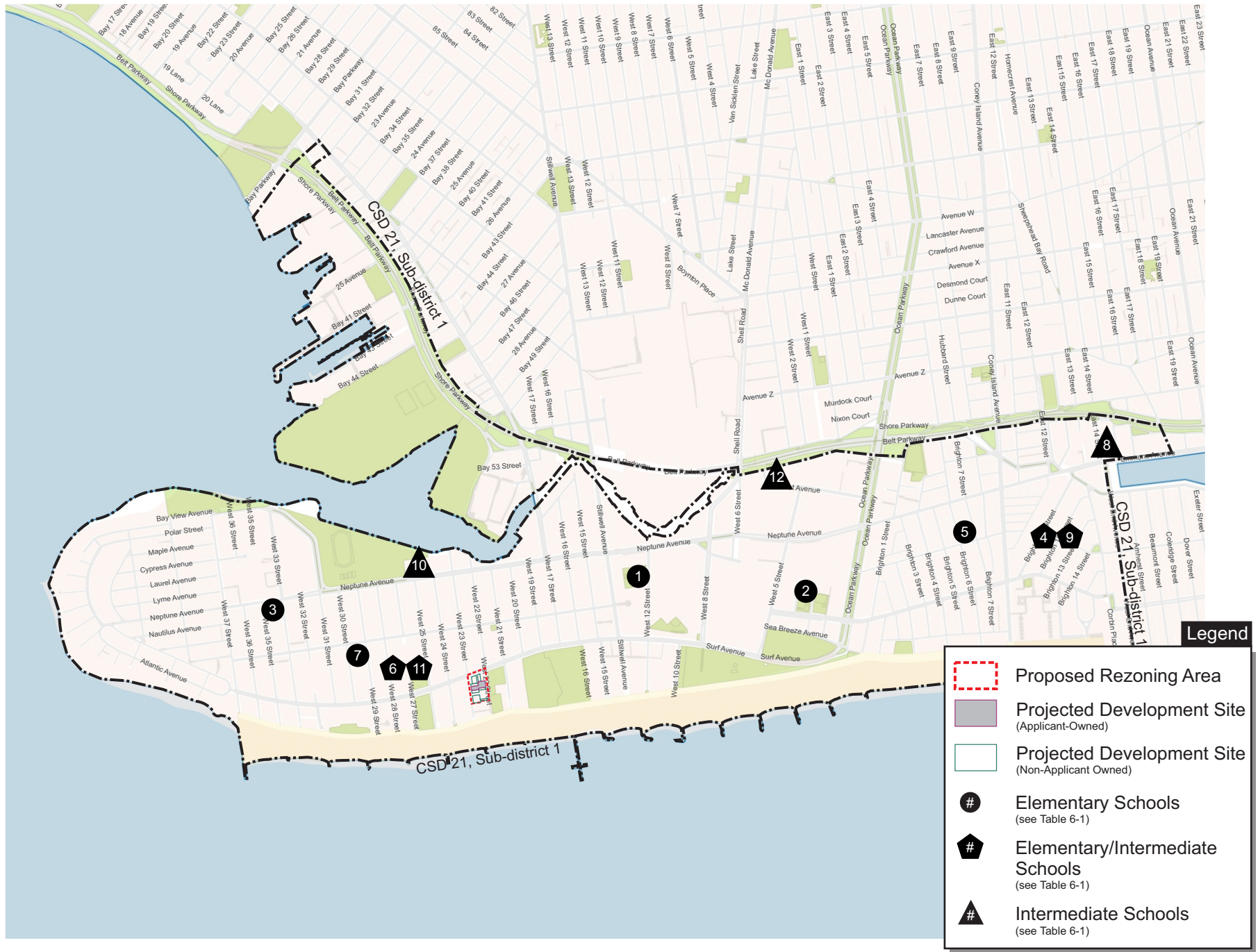
According to the *CEQR Technical Manual*, a significant impact on schools may occur if the following two conditions are met. A significant impact may occur if the project results in a collective utilization rate of the elementary and/or intermediate schools in the Sub-district study area that is equal to or greater than 100 percent in the With-Action Condition, and if the project results in an increase of five percent or more in the collective utilization rate between the No-Action and With-Action conditions. With the Proposed Actions, both the elementary and intermediate schools in Sub-district 1 would be above 100 percent utilization (116.7% for elementary schools and 111.3% for intermediate schools). However, the difference between the No-Action and With-Action utilization rate within Sub-district 1 of the elementary schools would be 1.1 percent while that of the intermediate schools would be 0.5 percent. Therefore, the Proposed Actions would not be expected to result in a significant adverse impact on elementary or intermediate schools. No further analysis of the Proposed Actions on public schools is therefore required.

### **Conclusion**

The proposed project would not physically displace or alter a community facility or cause a change that could affect the service delivery of a community facility. In

addition, the development would not create a demand that would either overtax, or not be met by existing or proposed services or facilities. Development under the Proposed Actions would not adversely affect public schools, publicly financed child care services, hospitals and other health care facilities, public libraries, and police and fire protection services. Therefore, the project would have no potentially significant adverse impacts related to community facilities and services and further assessment is not warranted.





**Legend**

- Proposed Rezoning Area
- Projected Development Site (Applicant-Owned)
- Projected Development Site (Non-Applicant Owned)
- # Elementary Schools (see Table 6-1)
- # Elementary/Intermediate Schools (see Table 6-1)
- # Intermediate Schools (see Table 6-1)



## **7. OPEN SPACE**

### **Introduction**

For the purpose of CEQR, open space is defined as publicly or privately owned land that is publicly accessible and has been designated for leisure, play, or sport; or land that is set aside for the protection and/or enhancement of the natural environment. Under CEQR, an open space analysis is conducted to determine whether or not a proposed action would have either a direct impact resulting from the elimination or alteration of open space or an indirect impact resulting from overtaking the use of open space. The analyses focus only on officially designated existing or planned public open space. Open space may be public or private and may include active and/or passive areas. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation with benches, walkways, and picnicking areas. Certain spaces such as lawns, can be used for both active and passive recreation.

Open space analyses may be necessary when an action would potentially have a direct or indirect effect on open space. A direct impact would physically change, diminish or eliminate an open space or reduce its utilization or aesthetic value. An indirect impact could result from an action introducing a substantial new user population that would create or exacerbate an overutilization of open space resources.

### **Direct Effects**

The Project Area is located adjacent to and across West 22<sup>nd</sup> Street from Seaside Park (and Ford Amphitheater) – see photographs which follow illustrating the location of the project relative to the amphitheater. The Park and Amphitheater are located on portions of two blocks bounded by Surf Avenue, the Coney Island Beach & Boardwalk, West 21<sup>st</sup> Street, and West 23<sup>rd</sup> Street. The Ford Amphitheater is the cornerstone of the Seaside Park and Community Arts Center, a new outdoor live entertainment venue that opened in July 2016. The 5,000-seat covered open-air venue hosts a mix of concerts, family shows, sports, comedy, and multicultural events. The amphitheater is located on Coney Island’s boardwalk and incorporates the Childs Building, built in 1923 as one of the first





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large-format stand-alone restaurants in the country. Seaside Park, adjacent to Ford Amphitheater, comprises one-acre of park space surrounding the one-acre outdoor amphitheater. The park includes a broad hilltop lawn and a series of picnic groves. The park also includes a terraced play garden which consists of a series of landscape rooms that provide play opportunities for children of all ages. Due to the proximity of the Project Area to these open space resources, potential shadow impacts could occur from the proposed and projected developments in the Project Area. A detailed discussion of potential shadows impacts on these facilities is presented in the Shadows section below.

## **Indirect Effects**

### Introduction

On the basis of *CEQR Technical Manual* criteria, the proposed and projected developments in the Project Area could potentially result in indirect effects to open space resources within the project study area and must be further assessed to determine whether significant indirect effects would be expected to occur. For projects that are not located in “underserved” or “well-served” areas identified in the *CEQR Technical Manual*, an open space assessment is conducted if that project would generate more than 200 residents or 500 workers.

The With-Action RWCDS includes the development of 89 dwelling units of housing on the Applicant owned Projected Development Site 1 plus 164 new dwelling units on the Non-Applicant Owned Projected Development Sites 2 through 8 in the Project Area for a total of 253 dwelling units. The No-Action RWCDS development on Projected Development Site 1 would consist of 34 existing dwelling units while the No-Action RWCDS on Projected Development Sites 2 through 8 would include 47 new dwelling units for a total of 81 dwelling units. Therefore, based on the above, the Proposed Actions would result in the development of a net increase of 172 dwelling units in the Project Area. Based on 2010 Census data, the average household size is 2.45 persons per dwelling unit in the Census Tracts located within 1/4-mile of the Project Area (tracts 326, 328, 340, 342, and 352). The development of 172 dwelling units would therefore be expected to generate approximately 421 residents in the Project Area. The Proposed Actions would result in a development that would exceed the threshold number of 200

new residents and a preliminary quantitative analysis of indirect open space impacts is therefore required.

There are 17 existing jobs in the Project Area on the 8 Projected Development Sites. The Proposed Actions would generate approximately 162 new jobs for a net increase of 145 jobs. The new jobs anticipated to be generated are based on the following estimates:

- 3 workers per 1,000 square feet of floor area for the proposed 46,249 gsf of net new retail space on Projected Development Sites 1 through 8 (138 workers),
- .04 workers per dwelling unit for the proposed net new 172 dwelling units on Projected Development Sites 1 through 8 (7 workers).

New employees would therefore not exceed the threshold number of 500 new workers, and a quantitative analysis of indirect open space impacts for employees would not be required.

#### Preliminary Assessment

Based on the methodologies presented in the *CEQR Technical Manual*, an initial quantitative open space assessment involves a determination of an area's open space ratio based on the population of the study area and the acreage of all publicly accessible open space resources within this study area. If an area's open space ratio decreases significantly as a result of a proposed action or if an area has a very low open space ratio, a more detailed assessment may be required.

Based on the calculation of the ratio of publicly accessible open space acres to the study area population, a determination of the adequacy of open space resources in the study area was quantified. The resultant computation for the study area was then compared with the median ratio for New York City, which is 1.5 acres per 1,000 residents, and with the planning benchmarks of 2.5 acres per 1,000 population established by the DCP.

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would decrease the open space ratio substantially, thereby reducing the availability of open spaces for an area's population. A decrease in the open space ratio of 5 percent or more is generally considered to be a significant adverse impact on



open space resources. However, if the existing open space ratio is low even an open space ratio change of less than 1 percent may result in potential significant open space impacts.

The project study area exhibits close to the City's median open space ratio of 1.38 acres per 1,000 residents, (based on 32.37 acres of existing open space divided by the 2010 Census study area population of 23,423 persons).

### Existing Conditions

#### Study Area Population

The study area population was estimated using data from the 2010 U. S. Census of Population and Housing for the accessible census tracts located fully or at least 50 percent within the one-half mile study area. As shown in Table 7-1, in 2010 the study area contained a total of 20,082 residents within the five relevant census tracts.

**Table 7-1**

**Study Area Population**

| <b>Census Tract</b>     | <b>Total Population (2010)</b> |
|-------------------------|--------------------------------|
| 326                     | 6,948                          |
| 328                     | 3,138                          |
| 340                     | 2,248                          |
| 342                     | 6,502                          |
| 352                     | 1,246                          |
| <b>Study Area Total</b> | <b>20,082</b>                  |

#### Study Area Open Space

The one-half mile open space study area is generally bounded by the Coney Island Boat Basin on the north, Coney Island Beach on the south, an area between West 11<sup>th</sup> and West 12<sup>th</sup> Streets on the east, and an area between West 32<sup>nd</sup> and West 33<sup>rd</sup> Streets on the west. Within the census tracts that are fully or at least 50 percent within this area, there

are 7 publicly owned and accessible facilities (See Figure 7-1, Open Space Facilities and Census Tracts and Table 7-2, Inventory of Open Space Resources), providing a total of 85.99 acres of open space resources.

**Table 7-2  
Inventory of Open Space Resources**

| <b>Map Key</b> | <b>Open Space Name and Location</b>  | <b>Total Size (acres)</b> | <b>Size within Study Area (acres)</b> |
|----------------|--|---------------------------|---------------------------------------|
| <b>1</b>       | Surf Playground<br>Surf Ave. between W. 25 St. & W. 27 St  | 0.93                      | 0.93                                  |
| <b>2</b>       | Nautilus Playground<br>Coney Island Beach & Boardwalk<br>between W. 29 St. & W. 32 St.                                 | 1.38                      | 1.38                                  |
| <b>3</b>       | Poseidon Playground<br>Coney Island Beach & Boardwalk to Surf<br>Ave. between W. 25 St. & W. 27 St.                    | 2.94                      | 2.94                                  |
| <b>4</b>       | Ford Amphitheater & Seaside Park<br>south of Surf Ave. to Coney Island Beach<br>& Boardwalk betw. W. 21 St. & W. 23 St | 2.41                      | 2.41                                  |
| <b>5</b>       | Abe Stark Skating Rink<br>Surf Ave. to Coney Island Beach &<br>Boardwalk between W. 19 St. & W. 20 St                  | 8.81                      | 8.81                                  |
| <b>6</b>       | Steeplechase Park<br>Surf Ave. to Coney Island Beach &<br>Boardwalk between W. 16 St. & W. 19 St                       | 10.01                     | 10.01                                 |
| <b>7</b>       | Coney Island Beach and Boardwalk<br>Atlantic Ocean frontage from Coney<br>Island Avenue to W. 37 St                    | 149.47 <sup>4</sup>       | 59.51                                 |
| <b>TOTAL</b>   |  | <b>175.95</b>             | <b>85.99</b>                          |

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<sup>4</sup> An additional 250 acres is located underwater.

### Assessment of Open Space Adequacy

The open space ratio was calculated based on the study area population shown in Table 7-1 and the total open space acreage shown in Table 7-2. The resultant ratio is 4.28 acres per 1,000 residents based on 85.99 acres of existing open space divided by the 2010 Census study area population of 20,082 persons. This ratio is nearly three times the citywide median of 1.5 acres and is also well above the planning benchmark of 2.5 acres per 1,000 population.

### Future No-Action Condition

#### Study Area Population

As stated above, the 2010 census population of the half-mile open space study area was 20,082 persons. In order to account for background growth to the 2027 project build year, a conservative annual growth rate of 0.5% per year was applied to the 2010 population of the ½-mile open space study area. This growth factor would result in the addition of 1,707 additional residents. Therefore, the open space study area would have a No-Action population of 21,789 persons in 2027.

#### Study Area Open Space

There would be no increase or decrease in the 85.99 acres of existing open space area within the project study area by the project build year of 2027.

### Assessment of Open Space Adequacy

The future no-action open space ratio within a ½ mile radius of the Project Area would be approximately 3.95 based on the area population of 21,789 persons in 2027 and the 85.99 acres of open space area.

### Future With-Action Scenario

#### Study Area Population

As discussed above, the Proposed Actions are expected to generate approximately 421 new residents based on existing census data (average household size) for the census tracts located within ¼-mile of the Project Area. Adding this population to the future



no-action population of 21,789 would result in a total study area population of approximately 22,210 persons.

The Proposed Actions would generate approximately 145 net new jobs in the Project Area. New employees would therefore not exceed the threshold number of 500 new workers and a quantitative analysis of indirect open space impacts for employees would not be required. The addition of 145 new workers to the Project Area relative to existing and Future No-Action conditions would not affect the conclusions of this analysis in a substantive manner.

#### Study Area Open Space

No new publicly accessible open space and recreational resources are planned to be added to the study area by 2027 with the Proposed Actions. Therefore, in 2027 with the Proposed Actions, the project study area would contain approximately 85.99 acres of open space resources, the same as under currently existing and future no-action conditions.

#### Assessment of Open Space Adequacy

The future with-action open space ratio within a ½ mile radius of the Project Area would be approximately 3.87 based on the area population of 22,210 persons in 2027 and the 85.99 acres of open space area.

The projected open space ratio in 2027 with the Proposed Actions would be 3.87 acres per 1,000 residents compared with the projected ratio of 3.95 acres in the study area in the future without the project. This represents a decrease of approximately 0.08 acres or 2.0 percent in the open space ratio. Therefore, the community would have an amount of open space well above both the City's median and DCP's open space planning goal.

Table 7-3 shows the calculation of open space ratios for the existing, Future No-Action, and Future With-Action Scenarios.

**Table 7-3****Existing and Future With-Action Open Space Ratios**

|  | Existing Conditions | Future No-Action | Future With-Action           |
|--|---------------------|------------------|------------------------------|
| Publicly Accessible Open Space (Acreage) | 85.99               | 85.99            | 85.99                        |
| Study Area Population                    | 20,082              | 21,789           | 22,210                       |
| Open Space Ratio (Acres/1,000 Residents) | 4.28                | 3.95             | 3.87 - 0.08 ac/2.0% decrease |

**Impact Significance****Quantitative Impact**

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users. The project development associated with the Proposed Actions would not result in the direct displacement of any parklands or recreational facilities. The Proposed Actions would, however, reduce the open space ratio as further discussed below.

At 3.95 acres per 1,000 population, the amount of publicly accessible open space with the Proposed Actions would be more than double the median of 1.5 acres per 1,000 population in community districts in the City. The amount of publicly accessible open space would also be well above the planning benchmark of 2.5 acres per 1,000 population.

The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would directly displace or alter an existing resource to the detriment of its users or generate a substantial enough population to noticeably diminish the capacity of available open spaces to serve the affected neighborhood. A

decrease in the open space ratio of 5 percent or more is generally considered to be a significant adverse impact on open space resources if the area has a median open space ratio of 1.5 acres or less per 1,000 population.

Relative to indirect impacts on open space resources, the proposed development would result in a decrease of 2.0 percent in the open space ratio in the project study area. At an open space ratio of 3.95 the ratio in the project study area would be more than twice the community district median of 1.5 acres per 1,000 population, and would be considered to be a high ratio. Therefore, based on *CEQR Technical Manual* criteria, the proposed project would not result in a significant adverse impact on open space resources.

A detailed open space assessment is not required as it has been determined that the project would not decrease the open space ratio by more than 5 percent. In addition, 2,843 sf of common recreational space would be provided for the residents of the proposed development on Projected Development Site 1 which would serve to meet at least a portion of the open space needs of the project's residents.

#### Qualitative Impact

The Proposed Actions would not result in the creation of any new publicly accessible open space. However, under the Proposed Actions, the proposed development on Projected Development Site 1 would 2,843 sf of common recreational space. This recreational space would be provided for use by project residents, and as it would not be publicly accessible, the area has not been included in any calculations of publicly accessible open space. However, they would help satisfy some of the open space recreational needs of project residents.

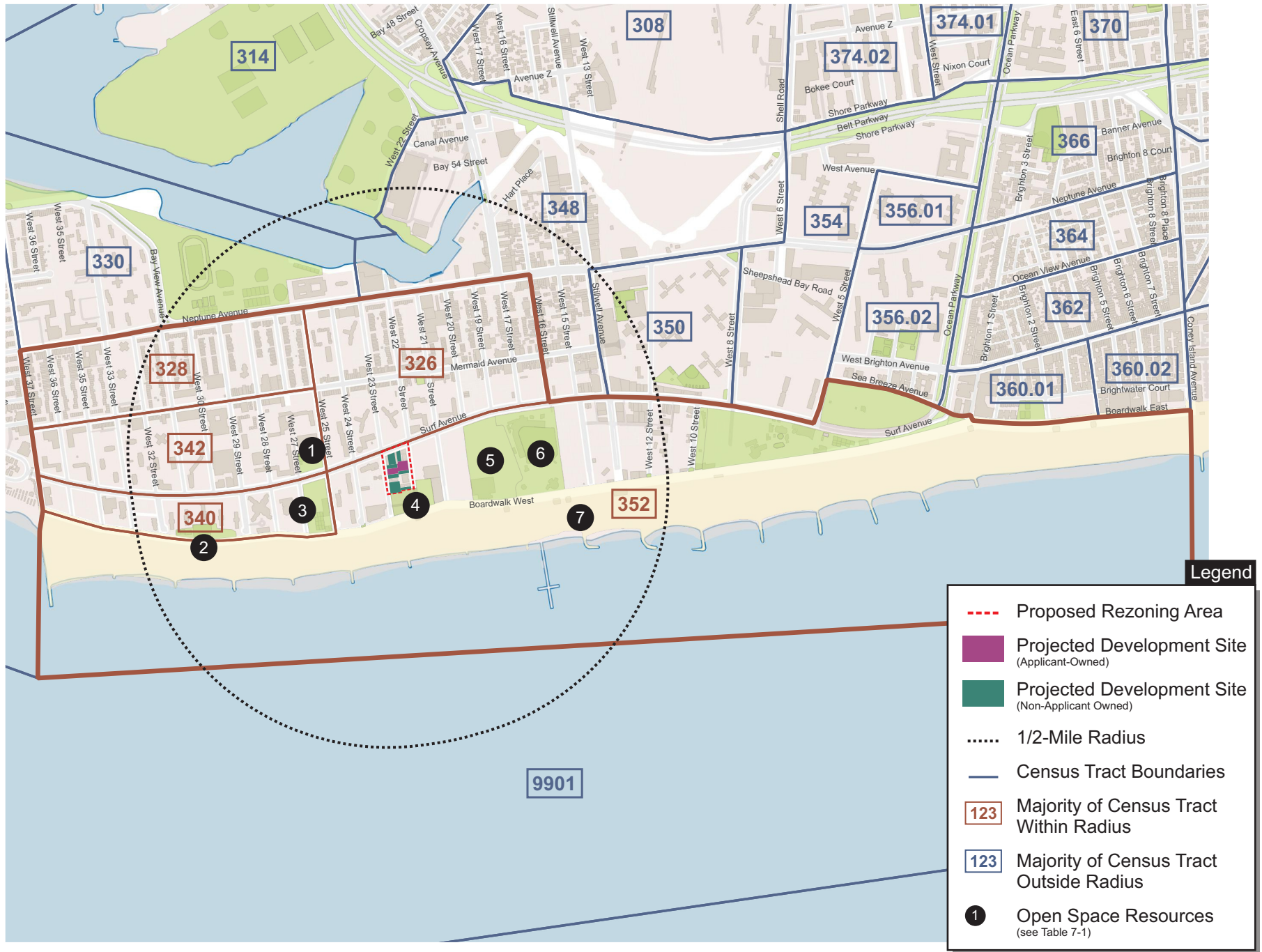
The *CEQR Technical Manual* considers an action to result in significant impacts to open space resources if it would significantly increase shadows, noise, air pollutant emissions, or odors on existing public open spaces resources compared to the future without the action conditions. The project development associated with the proposed rezoning would not significantly increase such impacts on existing public open spaces resources as further explained below.



Based on *CEQR Technical Manual* criteria and as explained further in the Shadows section below, on the longest day of the year, buildings on Projected Development Sites 4, 5, and 6 would cast new shadows on up to one-half of Seaside Park and the maximum period of new shadow would be 6 hours and 11 minutes on approximately 40% of the park. Nearly 5 hours of sunlight would still reach the vegetation in the affected areas of the park on this day and at no time would sunlight reaching this vegetation be less than four hours during the growing season which is considered necessary for vegetation survival. The lawn seating area would barely be affected by shadows from the new developments. The new shadows would affect between 50% and 75% of the playground at various times which would still leave up to 50% of the playground unaffected by new shadows. These shadows would not be considered significant.

### **Conclusion**

Due to the absence of significant direct impacts on any open space resource and the negligible decrease in the future with the action open space ratio, as well as the additional open space to be provided on Projected Development Site 1 under the Proposed Actions, it is concluded that the project would not have any potentially significant adverse open space impacts and further assessment 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.

The heights to the tops of the roofs of the buildings on the Projected Development Sites would be as listed below. Total building heights include a 3' parapet wall.

- Projected Development Site 1: 134.4'
- Projected Development Site 2: 98.0'
- Projected Development Site 3: 98.0'
- Projected Development Site 4: 108.0'
- Projected Development Site 5: 108.0'
- Projected Development Site 6: 88.0'
- Projected Development Site 7: 88.0'
- Projected Development Site 8: 88.0'





**END**

DEPT. OF  
TRANSPORTATION

W14-2

**NO  
PARKING  
SATURDAY**

PA  
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According to the *CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure or an addition to a structure at least 50 feet in height or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource. A shadows analysis is required for this project since the block on which the Projected Development Sites are located is across the street or in close proximity to three open space resources and because the Proposed Actions would result in the development of eight new structures that would exceed 50 feet in height.

## **Preliminary Screening Assessment**

### **Tier 1 Screening Assessment**

There are two shadow sensitive resources in the vicinity of the Projected Development Sites, including Seaside Park and the Coney Island Beach and Boardwalk.

The Project Area is located adjacent to and across West 22<sup>nd</sup> Street from Seaside Park (and Ford Amphitheater) – see photographs which follow illustrating the location of the project relative to the amphitheater. Seaside Park, adjacent to Ford Amphitheater, comprises more than one-acre of park space surrounding the one-acre outdoor amphitheater. The park includes a broad hilltop lawn and a series of picnic groves. The park also includes a terraced play garden which consists of a series of landscape rooms which provide play opportunities for children of all ages. The Park and Amphitheater are located on portions of two blocks bounded by Surf Avenue, the Coney Island Beach & Boardwalk, West 21<sup>st</sup> Street, and West 23<sup>rd</sup> Street. Seaside Park is labeled “1” on the attached Tier 1 Screening Assessment diagram.

The Project Area is located one-half block north of the Coney Island Beach and Boardwalk which is an approximately 149.47-acre open space located along the Atlantic Ocean frontage from Coney Island Avenue to West 37<sup>th</sup> Street. An additional 250 acres is located underwater. The portion of this open space resource located within a one-half mile radius of the Project Area consists of approximately 59.51 acres of beach and a boardwalk which includes a walkway with widely spaced benches for seating. The Coney Island Beach and Boardwalk is labeled “2” on the attached Tier 1 Screening Assessment diagram.



The longest shadow of 578 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum proposed building height of 134.4 feet including the 3-foot parapet wall on the roof of the proposed building on Projected Development Site 1 (the tallest of the eight projected buildings). This building is labeled as Building 1 on the diagram.

Due to the proximity of the Projected Development Sites to the open space resources noted above, potential shadow impacts could occur from the proposed development on Seaside Park and the Coney Island Beach and Boardwalk.

### **Tier 2 Screening Assessment**

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

The attached Tier 2 Screening Assessment diagram shows the area south of the block on which the Projected Development Sites are located that cannot be shaded by the proposed project. As illustrated on the figure, most of the Coney Island Beach and Boardwalk located within the maximum shadow radius of the project and approximately one-half of Seaside Park cannot be shaded by the project. The remaining approximately 50% of Seaside Park and a small portion of the Coney Island Beach and Boardwalk to the east of the Project Area could experience new shadows from the project and further assessment is required.

### **Tier 3 Screening Assessment**

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

A Tier 3 screening assessment was performed for the four representative days of the year set forth in the *CEQR Technical Manual*: December 21, the winter solstice and shortest day of the year; March 21/September 21, the equinoxes; May 6, the midpoint

between the summer solstice and the equinox (and equivalent to August 6); and June 21, the summer solstice and the longest day of the year. The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset. In accordance with the *CEQR Technical Manual*, surrounding buildings are not included in the Tier 3 shadow assessment model.

A Tier 3 screening assessment has been performed as approximately 50% of Seaside Park and a portion of the Coney Island Beach and Boardwalk to the east of the Project Area lie within the area that could be shaded by the proposed project. As shown on the attached Tier 3 Screening Assessment diagram, shadows from the projected buildings could potentially reach Seaside Park on each of the four analysis days. A negligible shadow would barely touch the Coney Island Boardwalk on June 21<sup>st</sup> (a period of 2 minutes from 5:59 PM to 6:01 PM) and will not be further analyzed.

The attached Tier 3 Incremental Impact Screening Assessment diagram shows the times and durations of new shadows that would be cast by the projected development on Seaside Park on each of the four analysis days taking into account existing development located between Seaside Park and the Projected Development Sites. It also provides the incremental shadow after accounting for Future No-Action development on the Projected Development Sites<sup>5</sup>.

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<sup>5</sup> Note that the difference between the no-action and with-action scenarios is so substantial that most of the incremental impact still exists. Under the no-action scenario, new development on the affected Projected Development Sites would be limited to three stories in height which would barely cast any shadows on Seaside Park. On the Tier 3 Incremental Impact Screening Assessment diagram, there are some small carve outs at the base of the shadow cast by the with-action buildings. Those small carve outs are the small area of the shadow that would be cast by the no-action three-story buildings. For example, see the final page of the analysis. In the park to the south of the development sites, between the #1 on a black background and the #5 on a white background, the small patch of green is a carve out (i.e. area of shadow that would be cast in the no-action scenario).

New shadows would be cast by the projected buildings on Seaside Park as follows:

- December 21: Projected Development Site 5 would cast a new shadow on Seaside Park from 1:58 PM to 2:53 PM, a period of 55 minutes. Projected Development Site 6 would cast a new shadow on Seaside Park from 11:27 PM to 2:53 PM, a period of 3 hours and 26 minutes.
- March 21: Projected Development Site 5 would cast a new shadow on Seaside Park from 1:36 PM to 4:29 PM, a period of 2 hours and 53 minutes. Projected Development Site 6 would cast a new shadow on Seaside Park from 11:46 PM to 4:29 PM, a period of 4 hours and 43 minutes.
- May 6: Projected Development Site 5 would cast a new shadow on Seaside Park from 1:49 PM to 5:18 PM, a period of 3 hours and 19 minutes. Projected Development Site 6 would cast a new shadow on Seaside Park from 11:42 PM to 5:18 PM, a period of 5 hours and 36 minutes.
- June 21: Projected Development Site 4 would cast a new shadow on Seaside Park from 5:43 PM to 6:01 PM, a period of 18 minutes. Projected Development Site 5 would cast a new shadow on Seaside Park from 2:08 PM to 6:01 PM on June 21, a period of 3 hours and 53 minutes. Projected Development Site 6 would cast a new shadow on Seaside Park from 11:50 PM to 6:01 PM on June 21, a period of 6 hours and 11 minutes.

### **Significance of Shadows Impacts**

Based on *CEQR Technical Manual* criteria and as shown on the Tier 3 Incremental Impact Screening Assessment diagrams, the significance of the new shadows on Seaside Park identified above from the buildings on Projected Development Sites 4, 5, and 6 would be as follows:

- December 21 – The 55 minute shadow from Projected Development Site 5 and the 3 hour and 26 minute shadow from Projected Development Site 6 would only reach a tiny portion of the extreme northwest corner of Seaside Park between West 21<sup>st</sup> and West 22<sup>nd</sup> Streets and would not be significant.

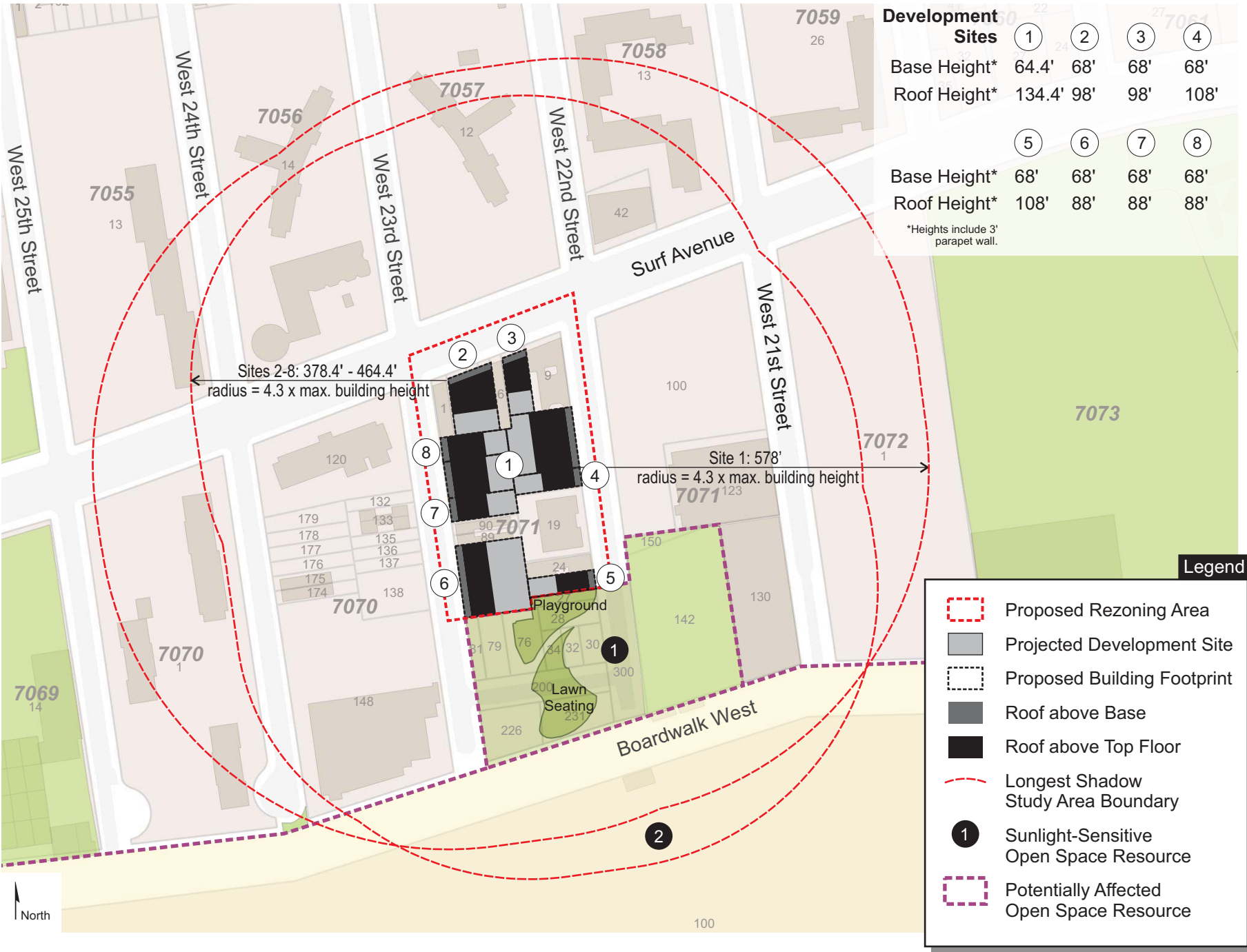


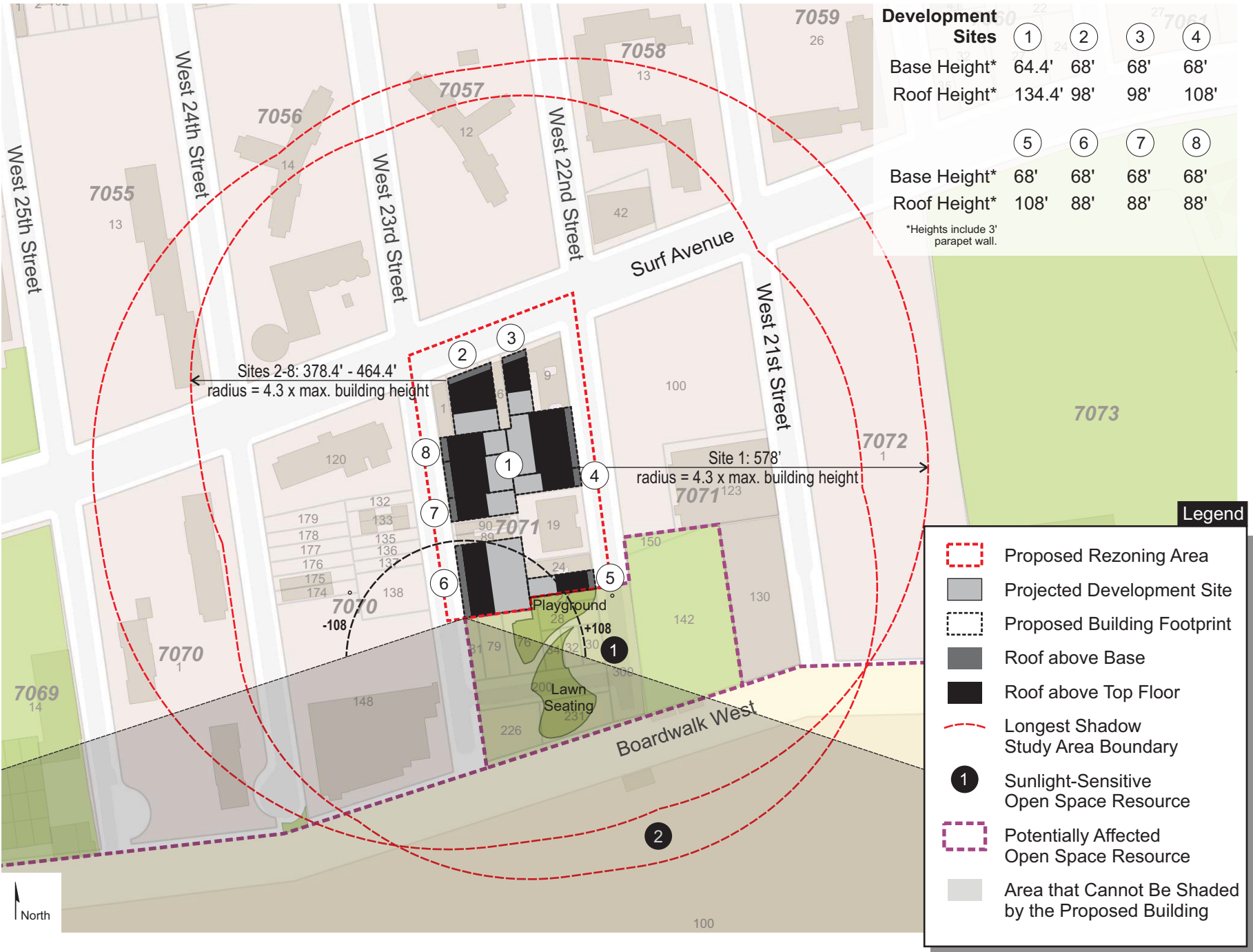
- March 21 – The 2 hour and 53 minute shadow from Projected Development Site 5 and the 4 hour and 43 minute shadow from Projected Development Site 6 on Seaside Park, which would overlap, would cover most of the northern 20% of the area of the park between West 21<sup>st</sup> and West 22<sup>nd</sup> Streets. This shadow would not be considered significant as it would affect only about 10% of the total area of the park and would be occurring during the late winter period when minimal use of the park would be expected.
- May 6 – The 3 hour and 19 minute shadow from Projected Development Site 5 and the 5 hour and 36 minute shadow from Projected Development Site 6 on Seaside Park, which would overlap, would cover approximately 25% of the total area of the park. This shadow would not be considered significant as approximately 75% of the park would not be in shadow and the new shadows would affect only about 50% of the playground and would not affect the lawn seating area at all. The shadows would occur between approximately noon and 5 PM with the period 1.5 hours after sunrise (5:48 AM) from 7:18 AM to at least 11:42 AM providing 4 hours and 24 minutes of sunlight on the vegetation in the affected portions of the park. Based on *CEQR Technical Manual* criteria, four to six hours a day of sunlight in the growing season is a minimum requirement. The projected developments on Sites 5 and 6 would allow more than four hours of sunlight to reach the affected vegetation.
- June 21 – The 18 minute shadow on Seaside Park from Projected Development Site 4, the 3 hour and 53 minute shadow from Projected Development Site 5, and the 6 hour and 11 minute shadow from Projected Development Site 6, which would overlap, would cover up to approximately 50% of the park. This shadow would not be considered significant as approximately one-half of the park would not be in shadow, and the new shadows would affect between 50% and 75% of the playground at various times and would barely reach the lawn seating area at all. The maximum period of shadow would occur between approximately noon and 6 PM with the period 1.5 hours after sunrise (5:25 AM) from 6:55 AM to at least 11:50 AM providing 4 hours and 55 minutes of sunlight on the vegetation in the affected portions of the park. Based on *CEQR Technical Manual* criteria, four

to six hours a day of sunlight in the growing season is a minimum requirement. The projected developments on Sites 4, 5, and 6 would allow more than four hours of sunlight to reach the affected vegetation.

### **Conclusion**

On the longest day of the year, buildings on Projected Development Sites 4, 5, and 6 would cast new shadows on up to one-half of Seaside Park and the maximum period of new shadow would be 6 hours and 11 minutes on approximately 40% of the park. Nearly 5 hours of sunlight would still reach the vegetation in the affected areas of the park on this day and at no time would sunlight reaching this vegetation be less than four hours during the growing season which is considered necessary for vegetation survival. Less than 10% of the lawn seating area would be affected by shadows from the new developments. The new shadows would affect between 50% and 75% of the playground at various times which would still leave up to 50% of the playground unaffected by new shadows. Shadows cast by the new developments would fall on the covered amphitheater during all of the analysis days; this is not a sunlight sensitive feature of the park. As explained above, these shadows would not be considered significant. No other open space, historic, or other resources would be affected by shadows from the proposed project. Therefore, the Proposed Actions would not result in any significant shadows impacts, and no further assessment is needed for the project.













| Development Sites | 1      | 2   | 3   | 4    |
|-------------------|--------|-----|-----|------|
| Base Height*      | 64.4'  | 68' | 68' | 68'  |
| Roof Height*      | 134.4' | 98' | 98' | 108' |
|                   | 5      | 6   | 7   | 8    |
| Base Height*      | 68'    | 68' | 68' | 68'  |
| Roof Height*      | 108'   | 88' | 88' | 88'  |

\*Heights include 3' parapet wall.

**Legend**

- Proposed Rezoning Area
- Projected Development Site
- Proposed Building Footprint
- Roof above Base
- Roof above Top Floor
- Shadow Cast / Analysis Time
- 1 Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource







| Development Sites          | 1      | 2   | 3   | 4    |
|----------------------------|--------|-----|-----|------|
| Base Height*               | 64.4'  | 68' | 68' | 68'  |
| Roof Height*               | 134.4' | 98' | 98' | 108' |
| Shadows Cast on Resource 1 | n/a    | n/a | n/a | n/a  |

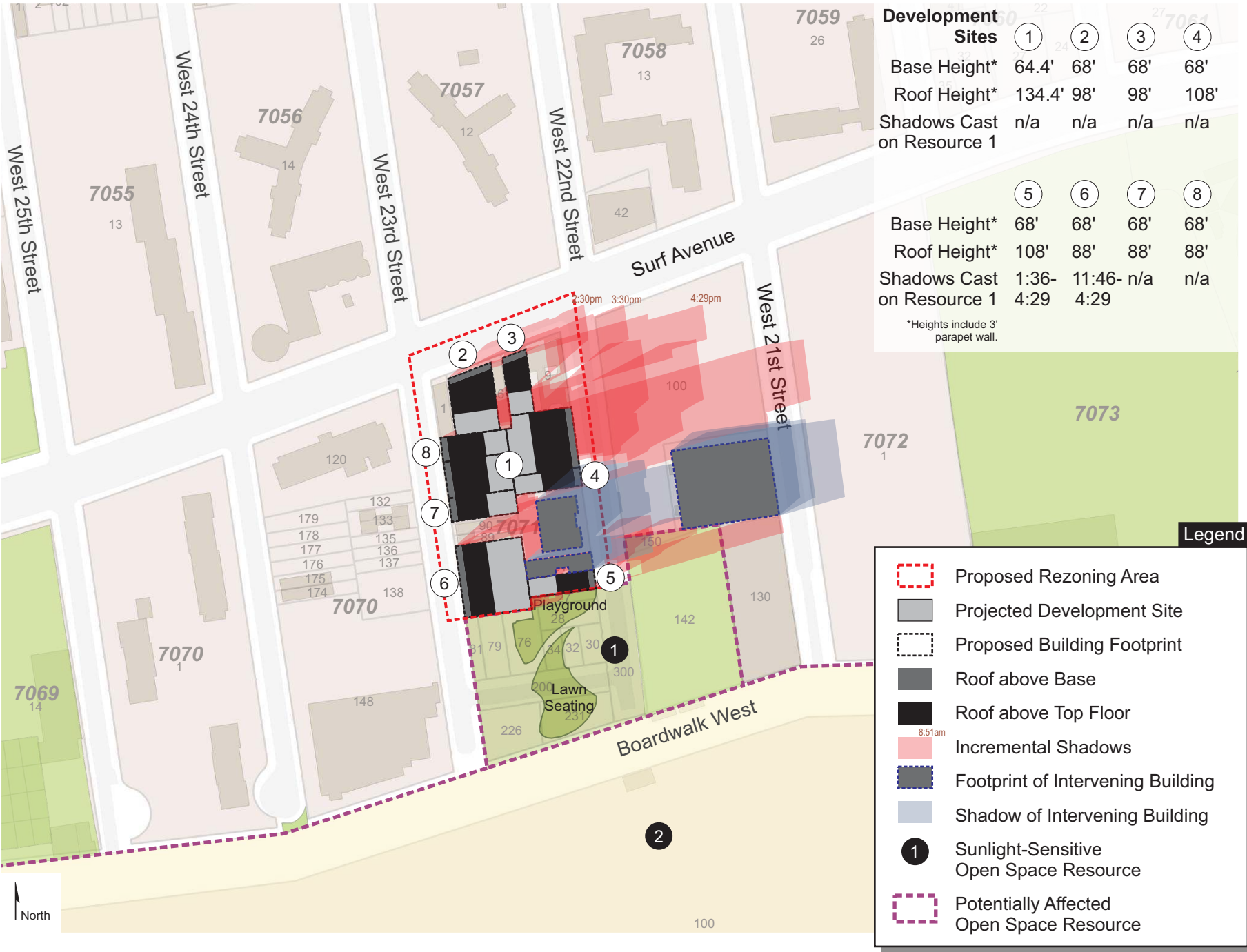
  

|                            | 5         | 6          | 7   | 8   |
|----------------------------|-----------|------------|-----|-----|
| Base Height*               | 68'       | 68'        | 68' | 68' |
| Roof Height*               | 108'      | 88'        | 88' | 88' |
| Shadows Cast on Resource 1 | 1:58-2:53 | 11:27-2:53 | n/a | n/a |

\*Heights include 3' parapet wall.

**Legend**

- Proposed Rezoning Area
- Projected Development Site
- Proposed Building Footprint
- Roof above Base
- Roof above Top Floor
- Incremental Shadows
- Footprint of Intervening Building
- Shadow of Intervening Building
- 1 Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

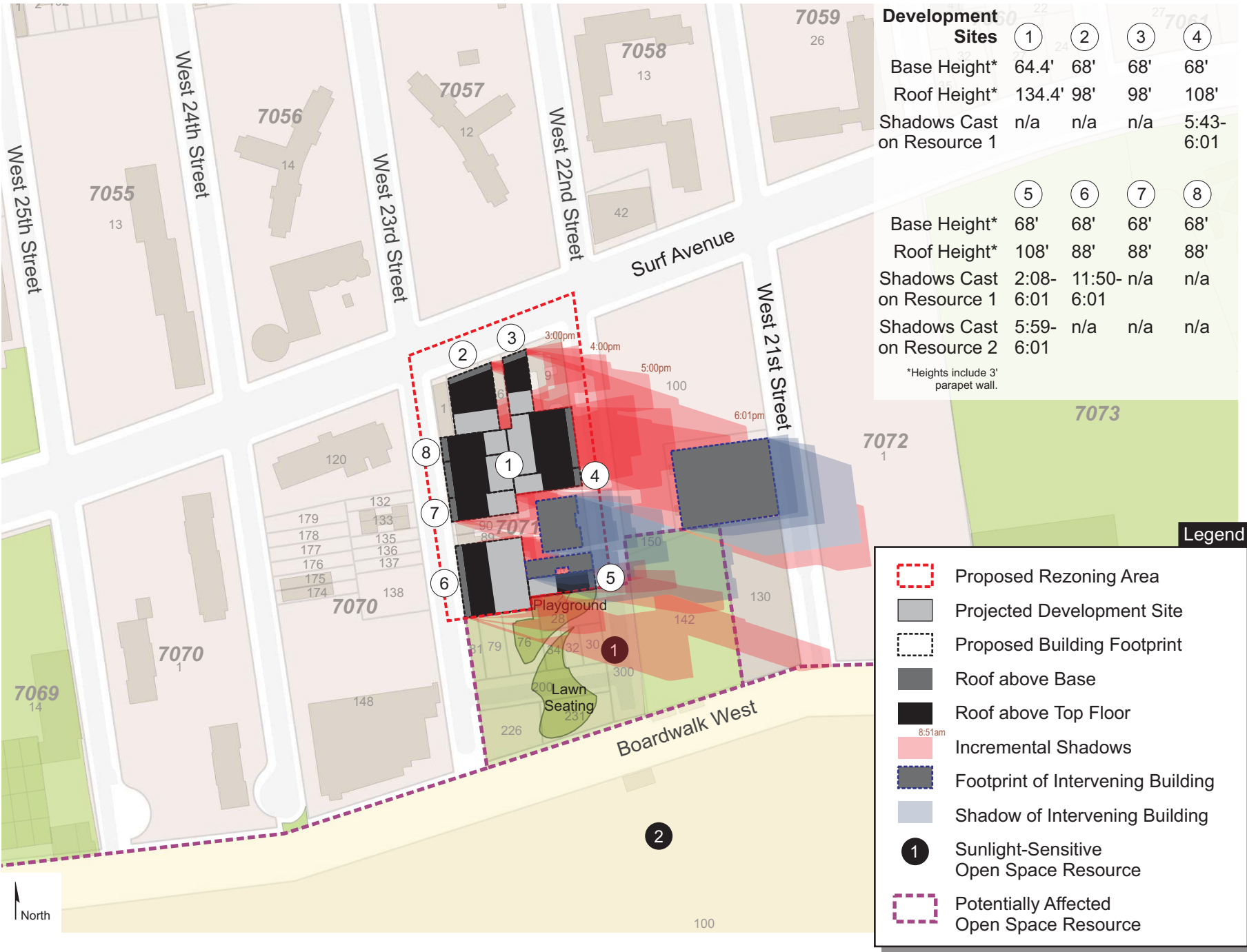




Legend

- Proposed Rezoning Area
- Projected Development Site
- Proposed Building Footprint
- Roof above Base
- Roof above Top Floor
- Incremental Shadows
- Footprint of Intervening Building
- Shadow of Intervening Building
- 1 Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource







## **9. HISTORIC AND CULTURAL RESOURCES**

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.

As discussed in the Project Description, the Proposed Actions consist of a zoning map amendment that would rezone a portion of Block 7071 in Brooklyn Community District 13 from R5 to R7D/C2-4 (Lots 1, 3-9, 13, 16, 18, 19, 24, 26, p/o 91, 93, 94, 96, 97, and 114) and R6A/C2-4 (Lots 83, 85, 86, 89, 90, and p/o 91). The Proposed Actions also include the following zoning text amendments:

- Modify Maps 1, 2, and 4-6 of Appendix A of ZR Article 13, Chapter 1 to include a new Parcel H. On Maps 1 and 2, include Parcel H within the Coney West Subdistrict (CW).
- Amend ZR 23-933 Appendix F to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the Proposed Project Area.
- Amend ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone.

The Project Area is not a Federal, State, or New York City designated Historic District and does not contain any individually designated historic resources. There is one individually designated resource located within 400 feet of the Project Area, that being the former Childs Restaurant Building at 2101 Boardwalk and West 21<sup>st</sup> Street. This

property was designated by the LPC on February 4, 2003. The LPC Designation report summarizes the resource as follows:

On the basis of a careful consideration of the history, the architecture, and other features of this building, the Landmarks Preservation Commission finds that the (Former) Childs Restaurant has a special character, and special historical and aesthetic interest and value as part of the development, heritage, and cultural characteristics of New York City.

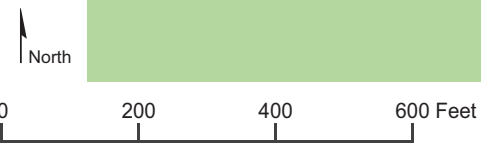
The Commission further finds that, among its important qualities, the (Former) Childs Restaurant building was constructed in 1923 on the then-new Boardwalk at Coney Island; that the Childs Restaurant chain for which it was built, provided wholesome food at reasonable prices in a festive atmosphere for the thousands of beach-goers at Coney Island; that the Childs Restaurant chain was begun in 1889 by brothers Samuel and William Childs to furnish a clean environment for low-cost meals and that by 1925, the chain owned more than one hundred restaurants in 33 cities in the United States and Canada; that the building was designed by architects Dennison & Hirons, who often used terracotta as a major element of their building designs; that the design for the Childs Restaurant, including elaborate "Churrigueresque" details executed with marine motifs in a resort style with Spanish Revival influence, was unusual for New York, but appropriate to its location at the great playground of Coney Island; that the designers used flamboyant three dimensional ornament to mark window openings, arches, and end piers, in nautical motifs such as seashells, fish and the sea god Neptune to link the building to its location by the sea; that these decorative elements were finely executed in terracotta by the Atlantic Terra Cotta Company, using models by Max Keck, and coloration by Duncan Smith; that the building is a rare survivor of Coney Island's heyday as New York's premier seaside playground and continues to provide a unique presence on the Boardwalk and near the attractions of the Parachute Jump and the Brooklyn Cyclones baseball field.

An assessment of archaeological resources is typically required for projects that involve in-ground disturbance, unless such disturbance occurs in an area that has already been excavated. The Proposed Actions are expected to cause additional in-ground

disturbance on Projected Development Site 1. No additional disturbance would be anticipated on Projected Development Sites 2 through 8 as additional in ground disturbance is projected to occur on these sites under the No-Action condition.

LPC has determined that the lots within the Project Area do not have any architectural or archaeological significance. (See 12/12/17 LPC letter in Historic and Archaeological Resources Appendix to this document.)

The Proposed Actions would not result in any significant adverse impacts to historic or archaeological 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, including the following:

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

The Proposed Actions include:

- (1) A zoning text amendment to enlarge the Special Coney Island District ("SCID") with a new Parcel H of the Coney West Subdistrict, consisting of Block 7071, Lots 1, 3-9, 13, 16, 18, 19, 24, 26, 83, 85, 86, 89-91, 93, 94, 96, 97, and 114 (the "Project Area");
- (2) A zoning map amendment to map SCID Coney West Subdistrict Parcel H;
- (3) A zoning map amendment to ZR section 28d to change the existing R5 zoning district to an R7D/C2-4 zoning district on a portion of Block 7071, including Lots 1, 3-9, 13, 16, 18, 19, 24, 26, p/o 91, 93, 94, 96, 97, and 114, and to an R6A/C2-4 zoning district on a portion of Block 7071, including Lots 83, 85, 86, 89, 90, and p/o 91;
- (4) A zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing ("MIH") Areas for Community District 13, Brooklyn to establish an MIH Area coterminous with the Project Area; and
- (5) A zoning text amendment of ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone.

The maximum amount of floor area that would be permitted in the 89,369 square foot Project Area in the future under the existing zoning is up to 111,711 zsf of residential space and up to 178,738 zsf of community facility space. In the Future Without the Action, no new as-of-right development would occur on the Applicant's property, identified as Brooklyn Block 7071, Lots 13, 16, 93, 94, 114, as the property's existing R5

zoning limits residential FAR to 1.25 and these properties are already developed to a residential FAR of 1.01. However, it is anticipated that approximately 45,923 zsf of residential space would be constructed on Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97. No additional development would occur on Lots 1, 6, 9, 19, 24, 89, and 90 as all lots have some or all of the following characteristics: less than 3,000 sf in size; not in common ownership; or/and developed close to or in excess of the maximum permitted residential FAR of 1.25. Therefore, in the future without the action development in the Project Area would include the existing 115 dwelling units, the existing 7 commercial and manufacturing uses, and approximately 45,923 zsf of new residential space for 47 dwelling units.

The maximum amount of floor area that would be permitted in the 89,369 square foot Project Area in the future under the proposed zoning with the MIH program would include up to 421,482 zsf of residential floor area, up to 178,558 of commercial space, or up to 500,983 zsf of community facility space. This would include in the R7D/C2-4 zoned area: 263,842 zsf of residential floor area, 90,980 zsf of commercial space, and 191,058 zsf of community facility space and in the R6A/C2-4 zoned area: 157,640 zsf of residential floor area, 87,578 zsf of commercial space, and 131,367 zsf of community facility space.

Under No-Action conditions, the 8 Projected Development Sites would be developed with 63,584 gsf of residential space for 81 dwelling units, and 4,730 gsf of commercial space. In the Future With the Action, the 8 Projected Development Sites would be developed with 252,307 gsf of residential space for 253 dwelling units (including up to 76 affordable units and 177 market rate units), 50,979 gsf of commercial space, and 61 accessory residential parking spaces. The increment between the No-Action and With-Action development scenarios would be 188,723 gsf of additional residential space for 172 additional dwelling units (including up to 76 affordable units and 96 market rate units), 46,249 gsf of additional commercial space, and 61 new residential accessory parking spaces. In order to allow for the projected development, the following existing/no-action development would be demolished.

- Site 1: 17,661 gsf of residential floor area containing 34 dwelling units
- Site 4: a 2,530 gsf industrial building

- Site 8; a 2,200 gsf garage

All the projected commercial development would be comprised of new commercial floor area while 206 new residential units would be constructed relative to no-action conditions (206 units minus 34 no-action units results in 172 total additional units).

Therefore, based on a comparison of the Future No-Action and Future With-Action scenarios, the Proposed Actions would facilitate the development in the Project Area of 172 additional dwelling units (including up to 76 affordable units and 96 market rate units), 46,249 gsf of additional commercial space, and 61 new residential accessory parking spaces. The Proposed Actions would also permit the modification of the existing yard, height, and setback requirements of the lots within the Project Area and introduce new buildings with greater height. A preliminary urban design assessment is therefore required.

## **Preliminary Assessment**

### Existing Conditions

#### *Project Area*

The Project Area consists of the northern portion of Block 7071, bounded by West 22<sup>nd</sup> and West 23<sup>rd</sup> Streets, Surf Avenue, and the northern boundary of the Seaside Park and Community Arts Center in the Coney Island neighborhood of Brooklyn. Surf Avenue is a two-way east-west running street while West 23<sup>rd</sup> Street is a one-lane roadway running south and the one-lane West 22<sup>nd</sup> Street runs north. The Project Area consists of approximately 89,369 square feet of land area.

The Applicant's property is currently developed with 34 dwelling units. The remainder of the Project Area is developed with 128 two-, three-, and multi-family units, and 12,488 gsf of commercial and manufacturing floor area. Existing development in the Project Area is as follows:

Projected Development Site 1 consists of 5 contiguous lots totaling 17,467 square feet in area and developed with approximately 17,661 gsf of floor area on four of the lots including 34 dwelling units. One 4,436 sf lot is vacant.

Projected Development Site 2 is comprised of 3 vacant lots totaling 7,658 square feet in area.

Projected Development Site 3 is comprised of 2 vacant lots totaling 4,048 square feet in area.

Projected Development Site 4 is comprised of a 3,308 square foot lot developed with an existing 1-story, approximately 2,530 square foot industrial building.

Projected Development Site 5 is comprised of one 3,261 square foot vacant lot.

Projected Development Site 6 is comprised of 3 vacant lots totaling 13,200 square feet in area.

Projected Development Site 7 is comprised of one 4,400 square foot vacant lot.

Projected Development Site 8 is comprised of a 2,200 square foot lot developed with an existing 1-story, approximately 2,200 square foot vehicle repair garage and a 2,200 square foot vacant lot.

Remaining development in the Project Area consist of:

- a 2,400 square foot lot developed with an existing 2-story, approximately 4,800 square foot mixed-use building containing 2 residential dwelling units and 1 commercial unit.
- a 2,376 square foot lot developed with an existing 1-story, approximately 2,328 square foot industrial building.
- a 7,009 square foot lot developed with an existing 2-story, approximately 10,300 square foot mixed-use building containing 18 residential dwelling units and 2 commercial units.
- a 12,117 square foot lot developed with an existing 6-story, approximately 36,624 square foot mixed-use building containing 40 residential dwelling units and 1 ground floor commercial unit.
- a 3,280 square foot lot developed with an existing 3-story, approximately 9,000 square foot residential building containing 15 residential dwelling units.



- a 2,000 square foot lot developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units.
- a 2,000 square foot lot developed with an existing 3-story, approximately 4,400 square foot residential building containing 3 residential dwelling units.

#### ***400-Foot Radius Project Study Area***

The lots in the Project Area occupy the bulk of the block on which they are located, Block 7071. The remainder of the block to the south of the Project Area consists of the Seaside Park and Community Arts Center. The 400-foot radius area to the south of the Project Area consists of the Coney Island beach and boardwalk.

Directly to the north of the proposed Project Area, across Surf Avenue on Blocks 7056, and 7057 (as well as Block 7015 beyond the 400-foot radius) between West 22<sup>nd</sup> and West 24<sup>th</sup> Streets, is the New York City Housing Authority (NYCHA) Carey Gardens development that consists of one 15-story and two 17-story buildings with 684 total units. To the east of Carey Gardens on Block 7058 between West 21<sup>st</sup> and West 22<sup>nd</sup> Streets is the 12-story Surf 21 development with 237 affordable units subject to a regulatory agreement. On Block 7059 between West 20<sup>th</sup> and West 21<sup>st</sup> Streets is the 18-story NYCHA Coney Island 1 Site 1B building with 193 units. To the west of Carey Gardens on Block 7055 between West 24<sup>th</sup> and West 25<sup>th</sup> Streets is the 19-story Ocean Towers development with 360 affordable units subject to a regulatory agreement.

On Block 7070, south of Surf Avenue between West 23<sup>rd</sup> Street and West 24<sup>th</sup> Streets directly west of the Project Area, there are two community facility buildings. Surf Manor is a four-story assisted living facility for adults fronting Surf Avenue with approximately 200 residents. The Sea Crest Health Care Center, on the southern portion of the block, is a five-story nursing home specializing in therapy and rehabilitation with approximately 305 residents. There are also three-story residential buildings on Block 7070 and lots that are vacant or accommodate vehicle storage and parking. Further to the west of the proposed Project Area on Block 7070 between West 24<sup>th</sup> and West 25<sup>th</sup> Streets is the NYCHA Haber Houses development, a seniors-only residence that consists of three 14-story buildings with 380 total units.

Block 7071 between West 22<sup>nd</sup> Street and West 21<sup>st</sup> Street directly east of the Project Area consists primarily of undeveloped open space owned by the City of New York. Other uses on the block include a 3-story commercial and office building and the 3-story former Childs Restaurant building. Block 7072 further to the east is a development site subject to the Coney West Subdistrict regulations.

Visual resources in the vicinity of the Project Area include the Coney Island Beach and Boardwalk at the southern end of the Project Area and the Ford Amphitheater and Seaside Park located across West 22<sup>nd</sup> Street from the Project Area between Surf Avenue and the Coney Island Beach and Boardwalk.

An aerial photograph of the project study area and ground level photographs of the Project Area and the immediate context are attached which show existing conditions on the site and in the surrounding area. Zoning calculations of the existing conditions on the site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below.

#### No-Action Scenario

##### *Project Area*

As stated above, in the Future Without the Action, no new as-of-right development would occur on the Applicant's property, identified as Brooklyn Block 7071, Lots 13, 16, 93, 94, 114, as the property's existing R5 zoning limits residential FAR to 1.25 and these properties are already developed to a residential FAR of 1.01. However, it is anticipated that approximately 45,923 zsf of residential space would be constructed on Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97. No additional development would occur on Lots 1, 6, 9, 19, 24, 89, and 90 as all lots have some or all of the following characteristics: less than 3,000 sf in size; not in common ownership; or/and developed close to or in excess of the maximum permitted residential FAR of 1.25. Therefore, in the future without the action development in the Project Area would include the existing 115 dwelling units, the existing 7 commercial and manufacturing uses, and approximately 45,923 zsf of new residential space for 47 dwelling units.

The development of 47 new dwelling units in the Project Area would result in a modest change to the existing urban design and visual character of the Project Area. However,

this change would be consistent with existing zoning and development character as the new buildings would generally be 3 stories in height or less as with the existing residential buildings in the area.

#### ***400-Foot Radius Project Study Area***

No new development projects have been identified for the 400-foot radius project study area based on a review of DCP's LUCATS for Brooklyn Community District 13 back to the year 2010. Therefore, no other development plans are known to exist within the project study area as identified above by the project build year of 2027.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2027. The 400-foot area surrounding the Project Area is developed with a mixed-use community containing residential two-, three- and multi-family residences, community facilities, commercial uses, open space, parking, and vacant land. It is anticipated that no significant new development would occur within this area by 2027. The character of the surrounding project study area would therefore not be expected to change significantly in the absence of the project.

Since no significant changes are expected to occur in the future with the existing zoning districts, the No-Action Scenario would not result in any significant impacts to the visual resources in the vicinity of the site. Views to the Coney Island Beach and Boardwalk and the Ford Amphitheater and Seaside Park would still be available from the streets bordering the Project Area. Zoning calculations of future No-Action conditions on the site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below.

#### **Future With-Action Scenario**

The future With-Action Development Scenario on Projected Development Site 1 would result in a denser development on the property as compared to the future Existing/No-Action Development Scenario. The With-Action Scenario would entail the development of Projected Development Site 1 with a new five-story, twelve-story, and basement maximum 131'-5" tall mixed-use Use Group 2 residential and Use Group 6 commercial building totaling 103,654.37 gsf and containing 89 dwelling units within 88,751.17 gsf

primarily on floors 2-12 based on an average size of 1,000 gsf per dwelling unit. Under the MIH 25% option it is assumed that 25% or 22 of the units would be affordable to lower income residents. The remaining 75% or 67 of the units would be market rate. Under the MIH 30% option it is assumed that 30% or up to 27 of the units would be affordable to lower income residents. The remaining 75% or 62 of the units would be market rate. As MIH options are not selected until the end of the ULURP process, up to 27 affordable units would be provided pursuant to MIH which is 30% of the With Action total of 89 dwelling units.

The proposed building would also contain 14,903.2 gsf of retail space in the basement and on the first floor in a 15-foot deep commercial mezzanine. Up to 44 parking spaces<sup>6</sup> accessory to the residential uses would be provided, at a ratio of 1 space for every two dwelling units, and would be located on the first floor of the 5- and 12-story portions of the building as well as on the roof of the basement between the two towers. 2,843 sf of common recreational space would be provided for the residents of the development. The existing structures and uses on the site would be demolished and removed.

New development is also projected to occur on seven of the Non-Applicant controlled sites in the Project Area, Projected Development Sites 2 through 8 as follows.

Projected Development Site 2 consists of three vacant lots under common ownership and are therefore projected to become a merged zoning lot. Under the proposed R7D/C2-4 zoning, it is assumed that the 7,658-square foot property could be developed with a new 9-story, 95-foot, 45,535 gsf structure containing 7,058 gsf of ground floor commercial space and 38,476 gsf of residential floor area primarily on the upper 8 floors of the building for the creation of approximately 38 dwelling units at 1,000 square feet per unit, including up to 11 affordable and 27 market rate units. No parking would be provided.

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<sup>6</sup> 31 to 33 parking spaces would be required for the 62 to 67 market rate units (1 space for every two dwelling units) and no parking would be required for the 22 to 27 affordable units as the site would be located in the Transit Zone.



Projected Development Site 3 consists of two vacant lots under common ownership and are therefore projected to become a merged zoning lot. Under the proposed R7D/C2-4 zoning, it is assumed that the 4,048-square foot property could be developed with a new 9-story, 95-foot, 24,107 gsf structure containing 3,449 gsf of ground floor commercial space and 20,658 gsf of residential floor area primarily on the upper 8 floors of the building for the creation of approximately 21 dwelling units at 1,000 square feet per unit, including up to 6 affordable and 15 market rate units. No parking would be provided.

Under the proposed R7D/C2-4 district with the Mandatory Inclusionary Housing bonus FAR of 5.8, the 3,308 square foot Projected Development Site 4 could be developed with a new 10-story, 105-foot 19,678 gsf structure containing 2,708 gsf of ground floor commercial space and 16,970 gsf of residential floor area primarily on the upper 9 floors of the building. On the basis of 1,000 square feet per unit, it is assumed that the property could be developed with approximately 17 dwelling units, including up to 5 affordable and 12 market rate units. The site is currently developed with an approximately 2,530 square foot, 1-story, industrial building which would be demolished to facilitate this development. No parking would be provided.

Under the proposed R7D/C2-4 zoning, it is assumed that the 3,261 square foot vacant Projected Development Site 5 could be developed with a new 10-story, 105-foot, 19,401 gsf structure containing 2,661 gsf of ground floor commercial space and 16,740 gsf of residential floor area primarily on the upper 9 floors of the building for the creation of approximately 17 dwelling units at 1,000 square feet per unit, including up to 5 affordable and 12 market rate units. No parking would be provided.

The three vacant lots comprising Projected Development Site 6 are under common ownership and are therefore projected to become a merged zoning lot. Under the proposed R6A/C2-4 zoning, it is assumed that the 13,200 square foot property could be developed with a new 8-story, 85-foot, 48,568 gsf structure containing 12,600 gsf of ground floor commercial space and 35,968 gsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 36 dwelling units at 1,000 square feet per unit, including up to 11 affordable and 25 market rate units. 17

cellar level parking spaces would be provided for the residential units including 3 spaces for the affordable units and 14 spaces for the market rate units.

It is assumed that the 4,400 square foot vacant Projected Development Site 7 could be developed with a new 8-story, 85-foot, 18,724 gsf structure containing 3,800 gsf of ground floor commercial space and 14,924 gsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 15 dwelling units at 1,000 square feet per unit, including up to 5 affordable and 10 market rate units. No parking would be provided.

The two lots comprising Projected Development Site 8 are under common ownership and are therefore projected to become a merged zoning lot. The 4,400 square foot lot is developed with an approximately 2,200 square foot, 1-story, vehicle repair garage which would be demolished in order to accommodate a new development under the proposed rezoning. Under the proposed R7D/C2-4 zoning, it is assumed that the 4,400 square foot property could be developed with a new 8-story, 85-foot, 23,620 gsf structure containing 3,800 gsf of ground floor commercial space and 19,820 gsf of residential floor area primarily on the upper 7 floors of the building for the creation of approximately 20 dwelling units at 1,000 square feet per unit, including up to 6 affordable and 14 market rate units. No parking would be provided.

The difference between the No-Action and With-Action Scenarios would be the development under the With-Action Scenario of an additional gsf of residential space for 172 additional dwelling units (including up to 76 affordable units and 96 market rate units), 46,249 gsf of additional commercial space, and 61 new residential accessory parking spaces. 34 dwelling units, a 2,530 gsf industrial building, and a 2,200 gsf garage would be demolished.

The With-Action development would change the partially vacant and low-density residential and mixed-use character of the Project Area to a higher density community with a significantly greater number of residential dwelling units and amount of commercial space. In addition to a significantly greater amount of floor area, most building heights would be significantly greater under the With-Action Scenario with new buildings ranging from 8- to 12-stories in height. The existing buildings in the

Project Area are one- to three-stories in height with the exception of an existing 6-story building on a lot that is not anticipated to be redeveloped. Parking for the With-Action development would be provided underground while most of the parking spaces for the Existing/No-Action Scenario are provided at-grade.

Zoning calculations of future With-Action conditions on the site, including floor area calculations, lot coverage, and building heights, are shown in Table 10-1 below. Three-dimensional representations of the future With-Action condition streetscape are also attached.

**Table 10-1  
Zoning Calculations Relevant to Urban Design Analysis**

| <b>Item</b>                 | <b>Existing Conditions</b>   | <b>No-Action Conditions</b>   | <b>With-Action Conditions</b>   |
|-----------------------------|--|---|---|
| <b>Development Scenario</b> | 6 ground floor retail stores, garage, & industrial uses (12,488 gsf); 115 DUs in one-, two, and multi-family bldgs; 12 vacant lots | 6 ground floor retail stores, garage, & industrial uses (12,488 gsf); 162 DUs in one-, two, and multi-family bldgs. | 11 ground floor retail stores (56,076 gsf); 321 DUs in one-, two, and multi-family bldgs., 61 accessory parking spaces.   |
| <b>Building Floor Area</b>  | 94,251 sf  | 140,174 sf  | 359,822 sf  |
| <b>Lot Coverage</b>         | Most developed lots are close to 100% coverage   | Most lots would be developed close to 100% coverage   | Most lots would be developed close to 100% coverage   |
| <b>Building Heights</b>     | Four 1-story bldgs; four 2-story bldgs; four 3-story bldgs; one 6-story bldg   | Two 1-story bldgs; four 2-story bldgs; eleven 3-story bldgs; one 6-story bldg                                       | One 1-story bldg; two 2-story bldgs; three 3-story bldgs; one 5-story bldg; one 6-story bldg; three 8-story bldgs; two 9-story bldgs; two 10-story bldgs; one 12-story bldg |

### **Conclusion**

The Proposed Actions would result in the development of residential, local retail, and accessory parking on 8 parcels located in an area developed with similar uses. The Proposed Actions would result in the development of increased density on these 8 parcels resulting in taller buildings with additional square footage.

The mapping of the proposed R6A/C2-4 and R7D/C2-4 districts is the most appropriate zoning for the area as these districts would result in a development that would be closest in size and form to the existing neighborhood context while also providing enough floor area to develop a reasonable number of affordable dwelling units.

The purpose of the zoning map and text amendments is to provide sufficient floor area to accommodate the proposed new buildings in a complying manner. In addition, in order to be able to use the MIH Program provisions of the Zoning Resolution, a site has to be zoned R6A or higher.

The With-Action Development Scenario would not result in any significant impacts to the visual resources in the vicinity of the Project Area. Views to the Coney Island Beach and Boardwalk and the Ford Amphitheater and Seaside Park would still be available from the streets bordering the Project Area.

The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource that is rare in the area or considered a defining feature of the neighborhood. Although the project would alter the context of natural or built visual resources, specifically the open space area in the vicinity of the site, the development that would be facilitated by the Proposed Actions would represent a visual improvement to the area. A detailed urban design analysis would not be required.





1. View of the amphitheater facing south on West 22nd Street.



2. View of the amphitheater facing south on West 22nd Street.



3. View of the amphitheater facing south on West 22nd Street.







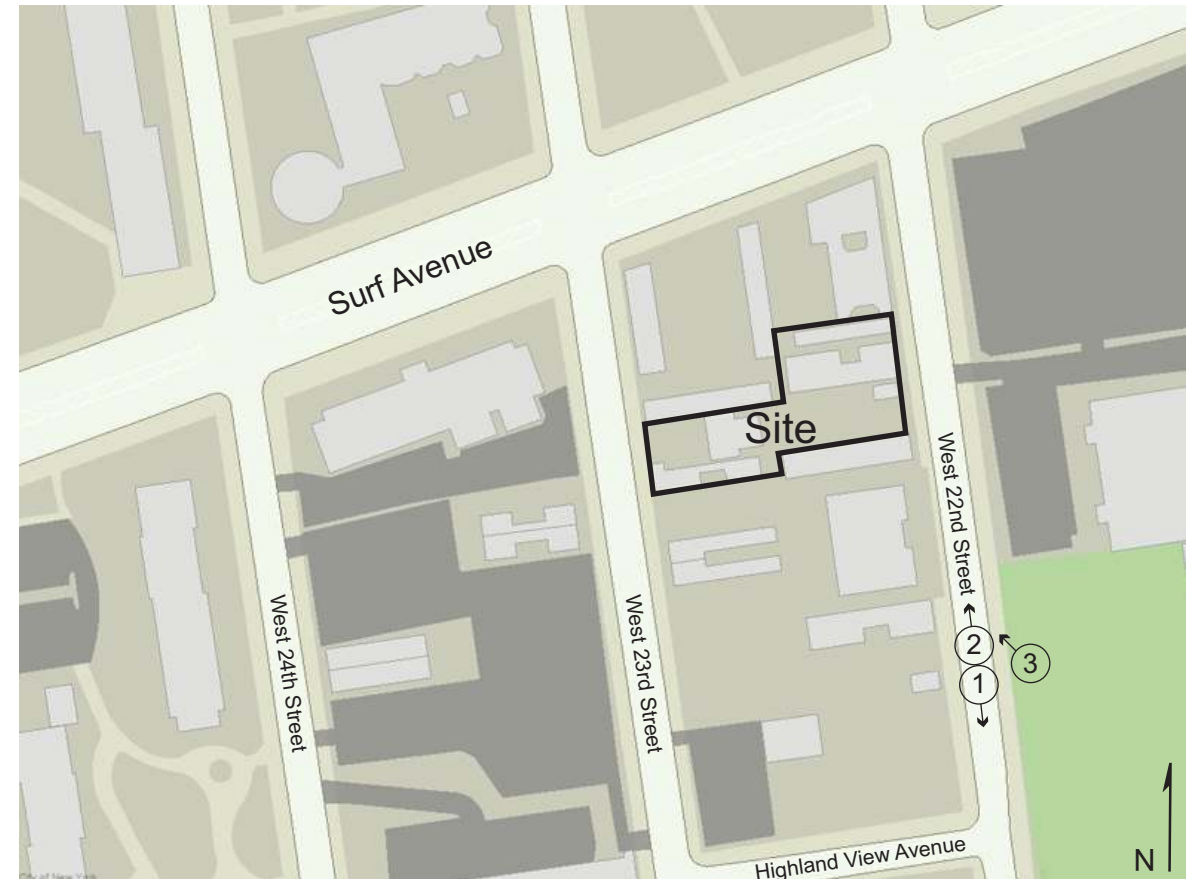
1. View of West 22nd Street facing south.



2. View of West 22nd Street facing north.



3. View of the side of West 22nd Street facing northwest.







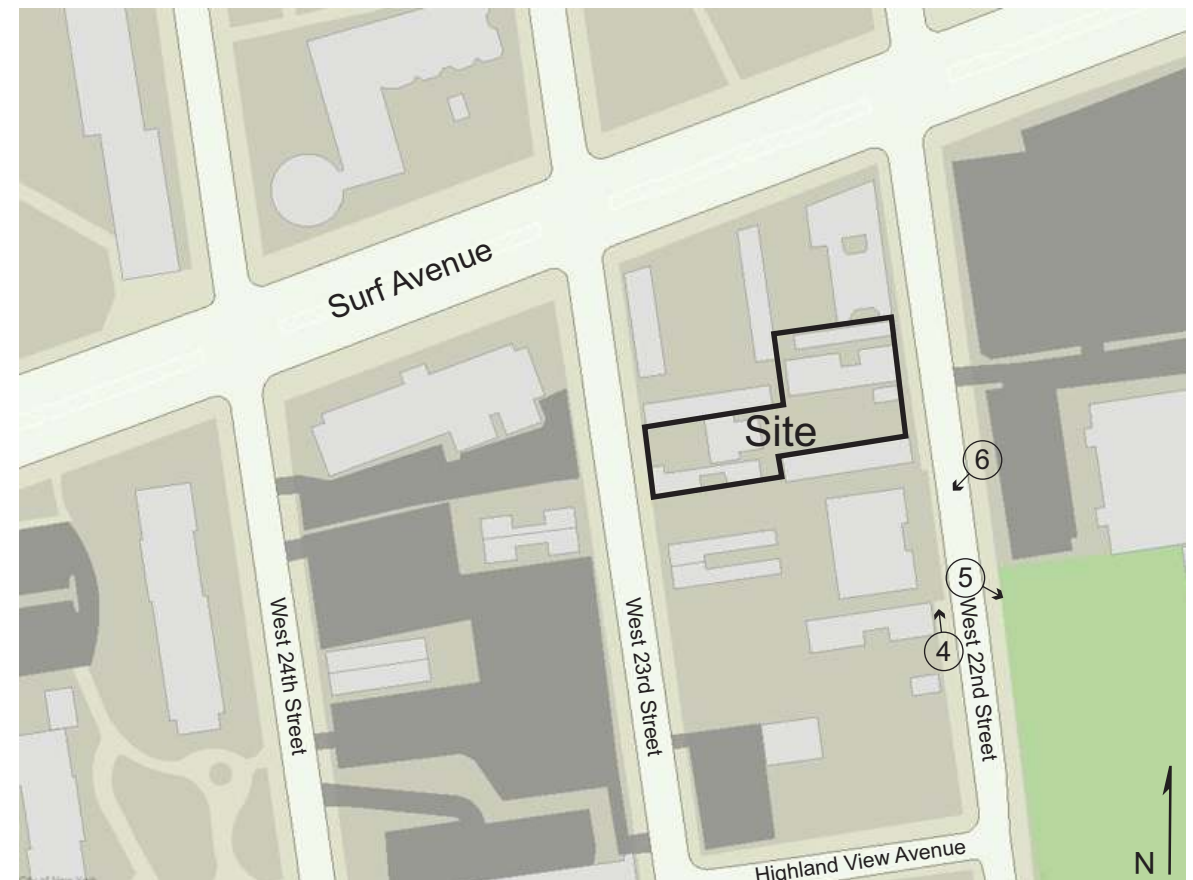
4. View of the sidewalk along the west side of West 22nd Street facing north.



5. View of the side of West 22nd Street facing southeast.



6. View of the side of West 22nd Street facing southwest.







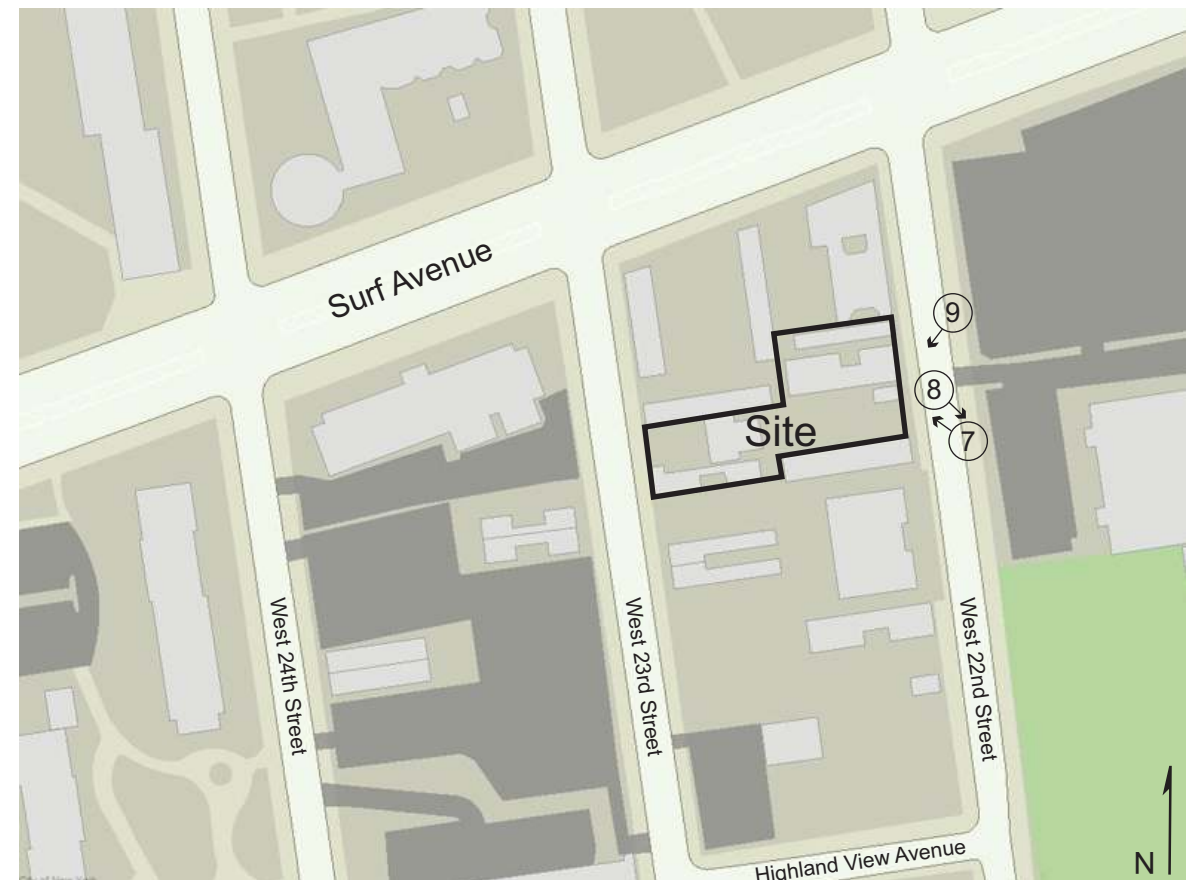
7. View of the Site facing northwest from West 22nd Street.



8. View of the side of West 22nd Street facing southeast from the Site.



9. View of the Site facing southwest from West 22nd Street.







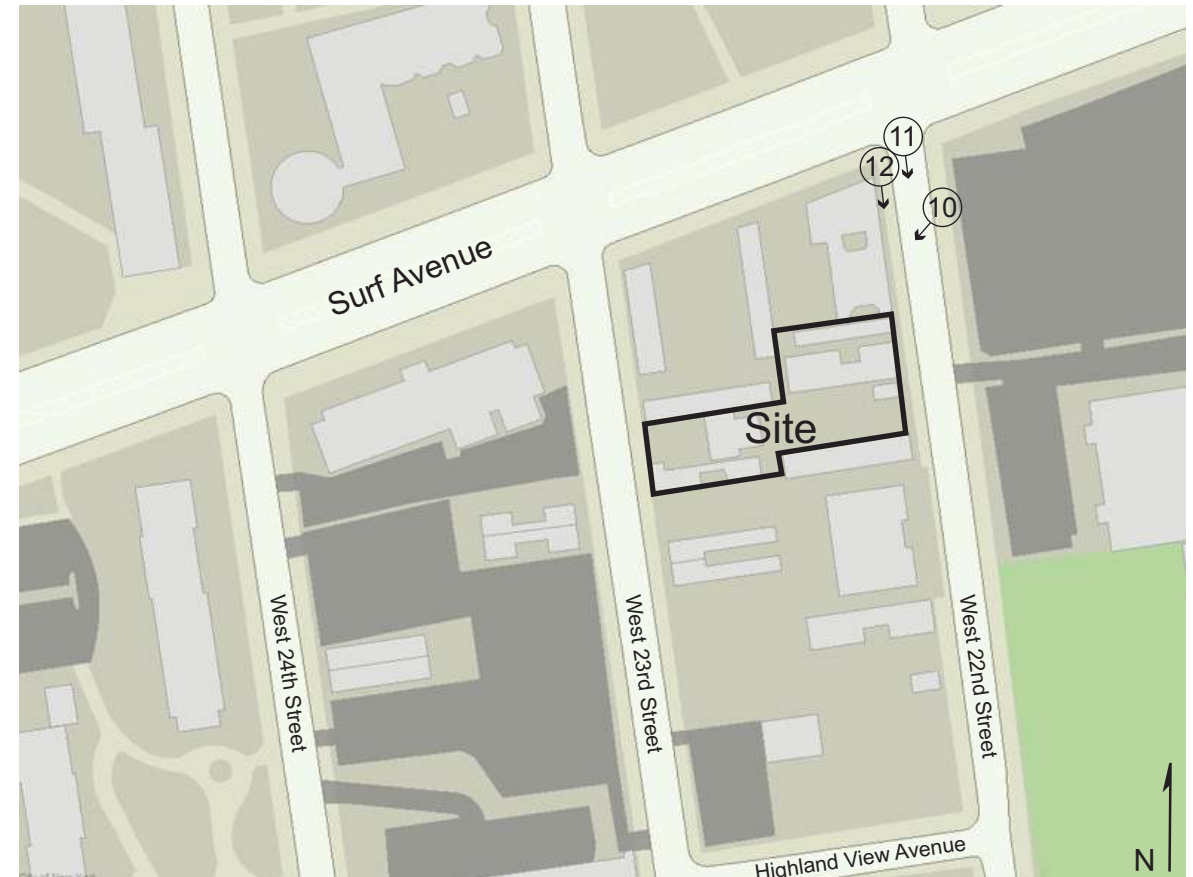
10. View of the side of West 22nd Street facing southwest.



11. View of West 22nd Street facing south from Surf Avenue.



12. View of the sidewalk along the west side of West 22nd Street facing south from Surf Avenue.







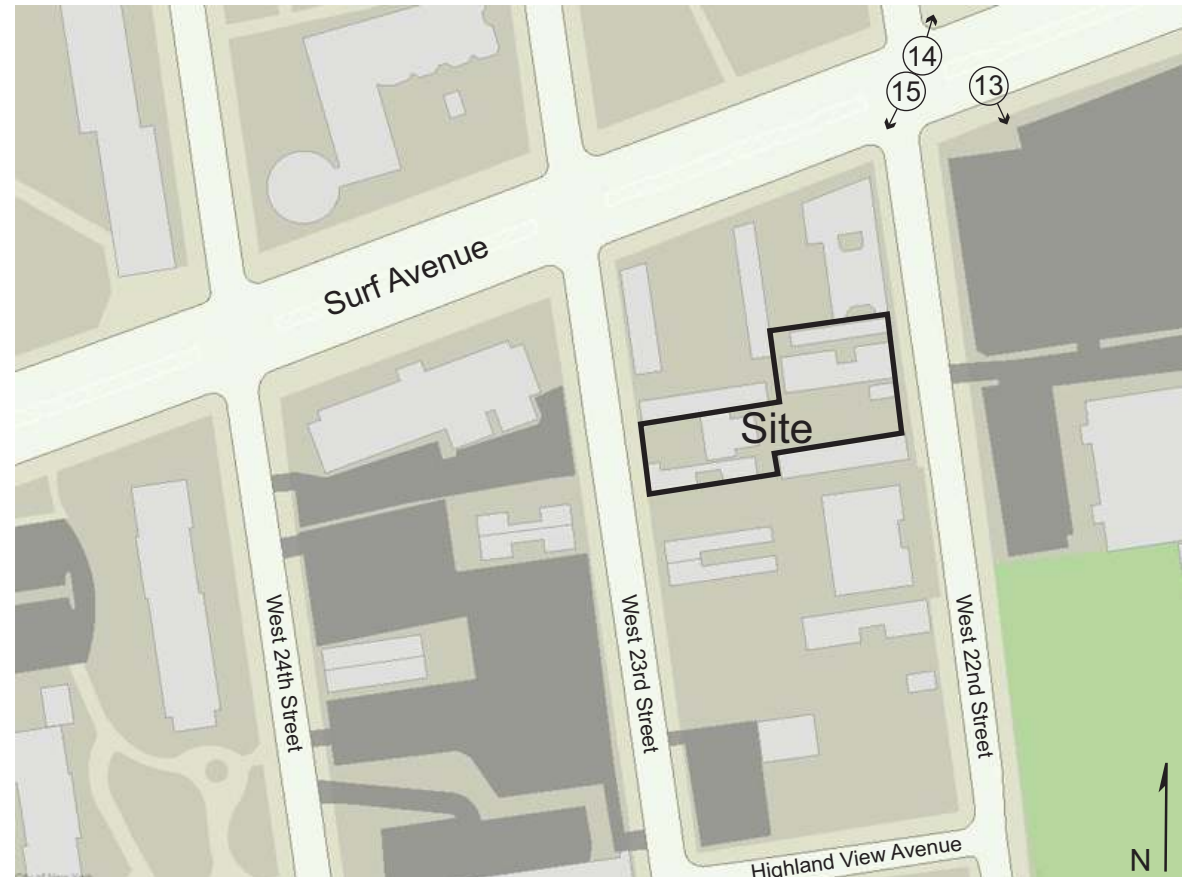
13. View of the side of Surf Avenue facing south.



14. View of the intersection of Surf Avenue and West 22nd Street facing northeast



15. View of the intersection of Surf Avenue and West 22nd Street facing southwest.







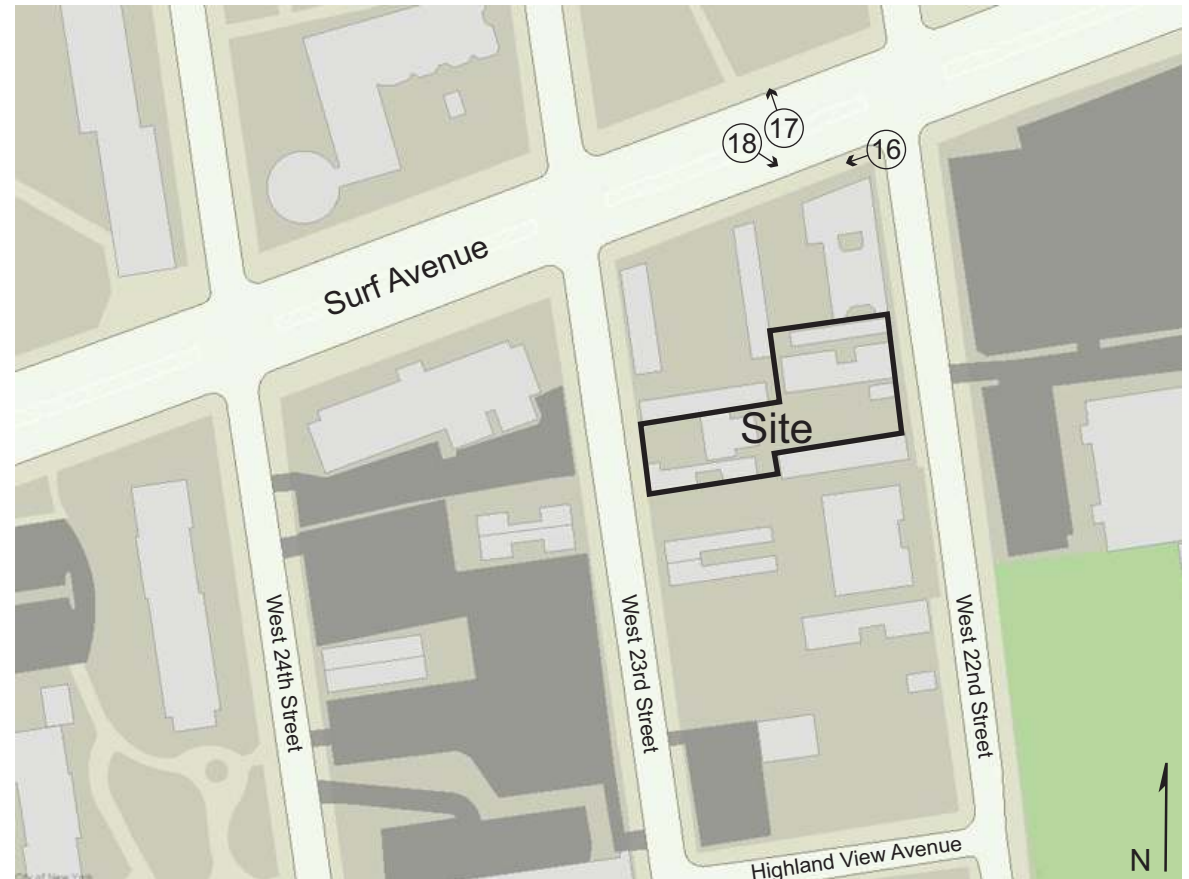
16. View of the sidewalk along the south side of Surf Avenue facing west from West 22nd Street.



17. View of the side of Surf Avenue facing northwest.



18. View of the side of Surf Avenue facing southeast.







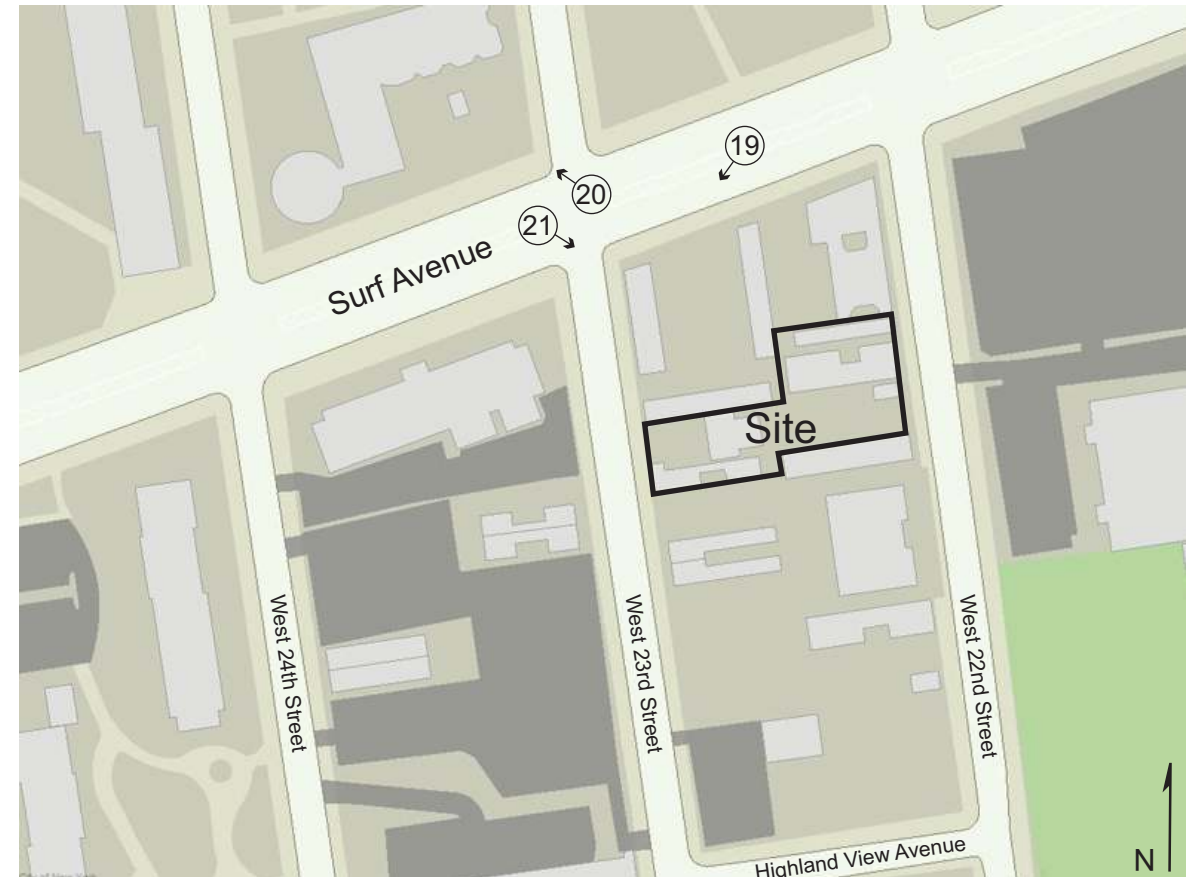
19. View of the side of Surf Avenue facing southwest.



20. View of the intersection of Surf Avenue and West 23rd Street facing northwest.



21. View of the intersection of Surf Avenue and West 23rd Street facing southeast.







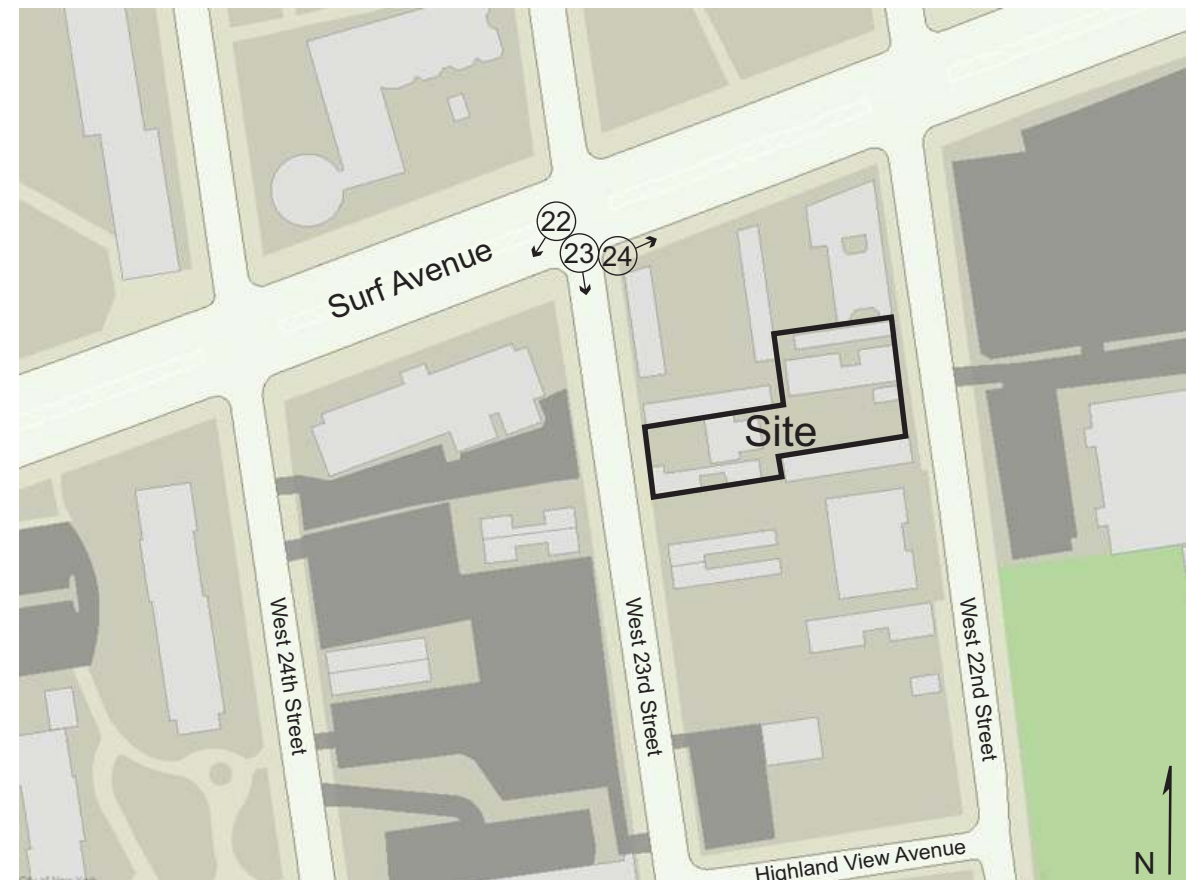
22. View of the side of Surf Avenue facing southwest from West 23rd Street.



23. View of West 23rd Street facing south from Surf Avenue.



24. View of the sidewalk along the south side of Surf Avenue facing east from West 23rd Street.







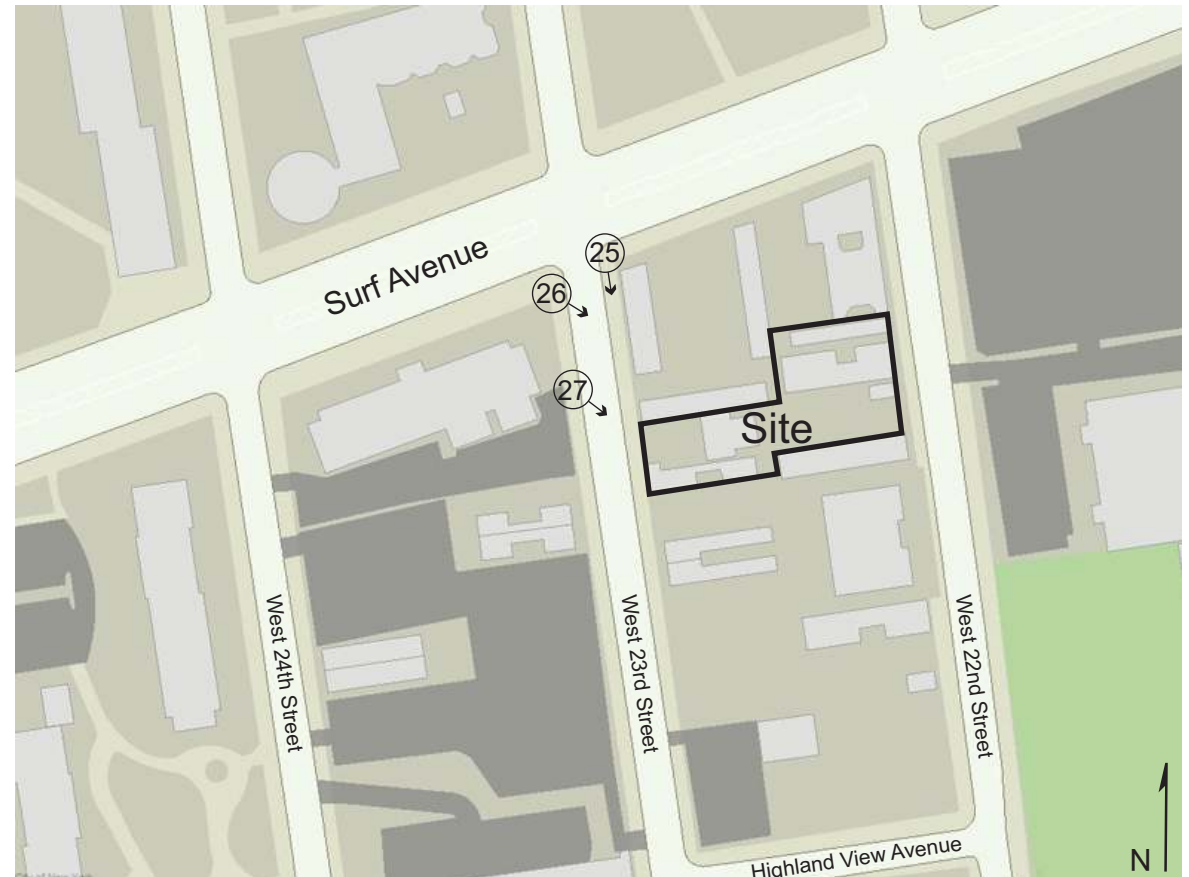
25. View of the sidewalk along the east side of West 23rd Street facing south from Surf Avenue.



26. View of the side of West 23rd Street facing southeast.



27. View of the Site facing southeast from West 23rd Street.







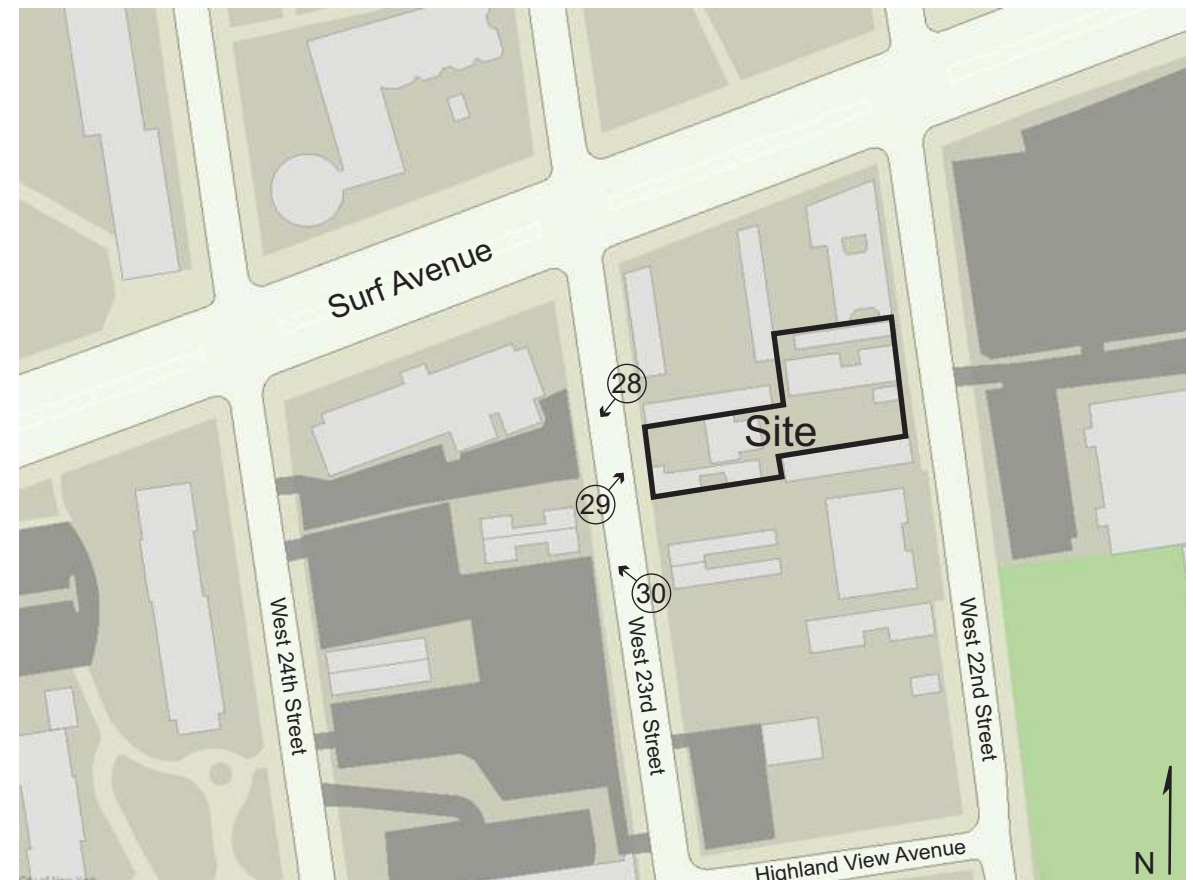
28. View of the side of West 23rd Street facing southwest.



29. View of the Site facing northwest from West 23rd Street.



30. View of the side of West 23rd Street facing northwest.







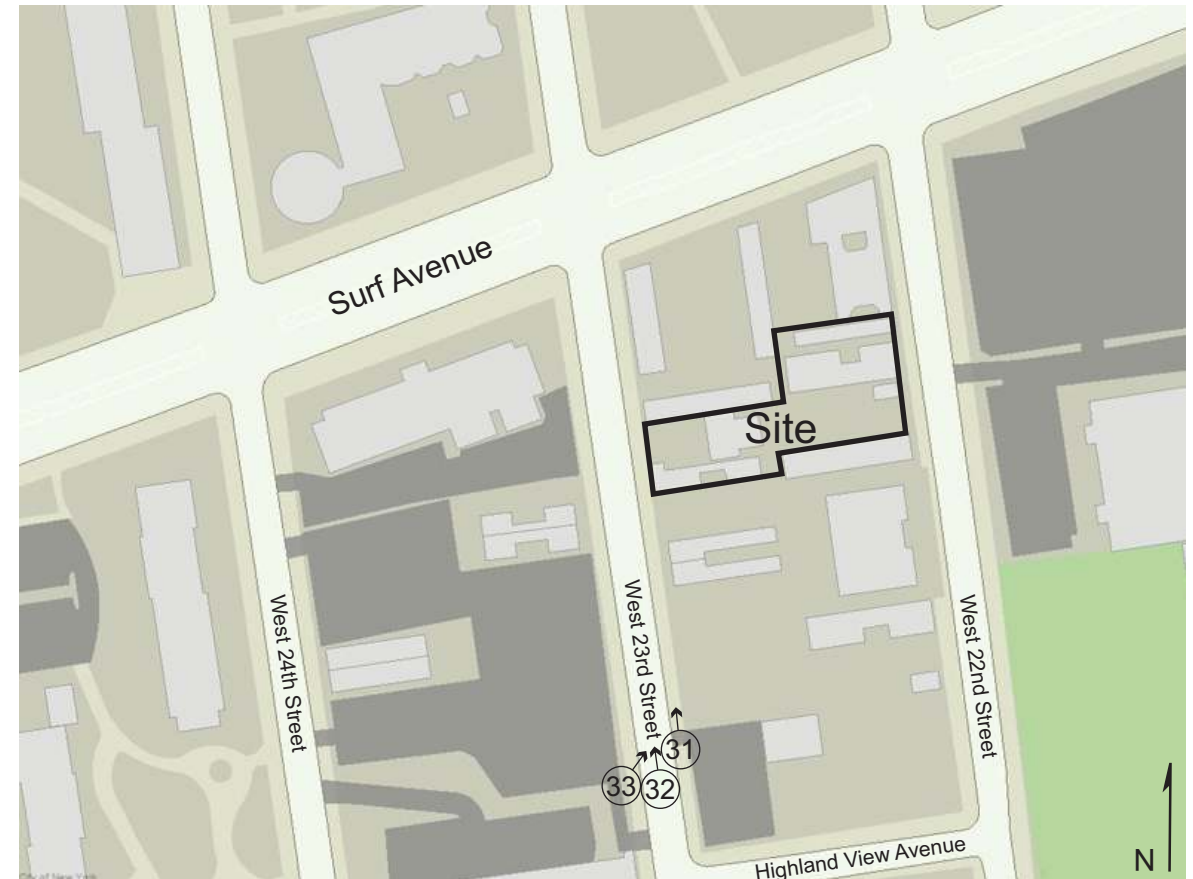
31. View of the sidewalk along the east side of West 23rd Street facing north.



32. View of West 23rd Street facing north.



33. View of the side of West 23rd Street facing northeast.







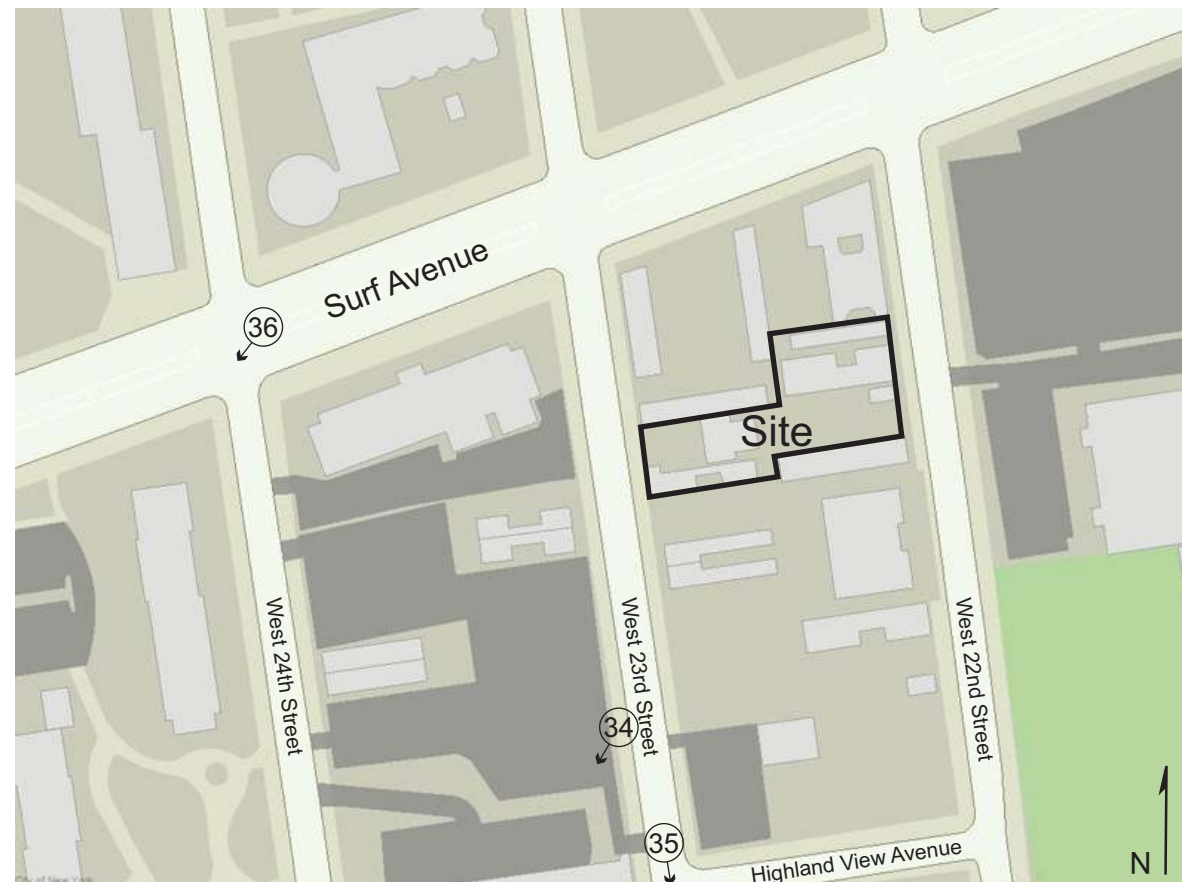
34. View of the side of West 23rd Street facing southwest.



35. View of West 23rd Street facing south.



36. View of the side of Surf Avenue facing southwest from West 24th Street.







37. View of the side of West 24th Street facing northwest from Surf Avenue.







0 200 400 600 Feet

North





0 200 400 600 Feet



Surf Boulevard facing southwest (Site at left)



No-Action Scenario

Surf Boulevard facing southwest (Site at left)



With-Action Scenario  
# Projected Development Site



West 22nd Street facing north (Site at left)



No-Action Scenario

West 22nd Street facing north (Site at left)



With-Action Scenario  
# Projected Development Site

West 23rd Street facing north (Site at right)



No-Action Scenario

West 23rd Street facing north (Site at right)



With-Action Scenario  
# Projected Development Site

West 23rd Street facing south (Site at left)



No-Action Scenario

West 23rd Street facing south (Site at left)



With-Action Scenario  
# Projected Development Site



## **12. HAZARDOUS MATERIALS**

### **Projected Development Site 1**

#### **Introduction**

Environmental Studies Corp. has performed a Phase I Environmental Site Assessment (ESA) of the subject property located at 3016-3026 West 22<sup>nd</sup> Street and 3017-3023 West 23<sup>rd</sup> Street, in the Coney Island section of the Borough of Brooklyn, New York City, New York. This Phase I ESA was prepared in accordance with the latest ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13). The ESA was prepared in September 2016.

The goal of an ESA is to identify, to the extent feasible in accordance with ASTM E 1527-13, *recognized environmental conditions (RECs)* in connection with the property. The term *recognized environmental condition* means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not *recognized environmental conditions*. The term *de minimis* condition means a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. The presence or likely presence of hazardous substances or petroleum products at the site includes any form, such as solid or liquid at the surface or subsurface, and vapor in the subsurface.

The Practice also defines two additional *RECs*; *controlled recognized environmental conditions* and *historical recognized environmental conditions*. The term *controlled recognized environmental conditions* means a *recognized environmental condition* resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for

example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

The term *historical recognized environmental condition* means a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been address to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

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

### **Phase I ESA**

The subject property consists of five adjoining tax lots with a total combined area of 17,400+/- square feet. Lot 13 (3016 West 22<sup>nd</sup> Street) is approximately 2,000 square feet and contains a small, 1-story (plus cellar) residential apartment building with five dwelling units. Exterior portions of this lot consist of small, concrete-paved side and rear yards. Lot 114 (3018-3022 West 22<sup>nd</sup> Street) is approximately 4,400 square feet in area and is occupied by a 3-story (plus cellar) apartment building with 22 units. Exterior portions of this lot consist of a concrete-paved rear yard. Lot 16 (3026 West 22<sup>nd</sup> Street) is a 4,400+/- square foot, undeveloped lot which is used by the owner for general storage purposes. Lot 93 (3023 West 23<sup>rd</sup> Street) is approximately 2,200 square feet, and is occupied by a 2-story (plus basement), masonry and wood frame apartment building with four units. Exterior portions of this lot consist of a small, concrete-paved rear yard. Lot 94 (3017 West 23<sup>rd</sup> Street) is approximately 4,400 square, and is occupied by a 2-story (plus basement) residential apartment building with 8 units. Exterior portions of this lot consist of a neatly landscaped front yard and a small, concrete-paved rear yard. Heat and hot water for all four buildings are provided by gas-fired systems.

Research into the history of the property shows that all five subject lots were vacant and undeveloped in 1895, as shown on the Sanborn map for that year. It is considered unlikely that the site was developed prior to this time. From the early 1900s to at least the 1930s, the site was occupied by several small residential buildings, bathhouses

(lockers) and retail stores including grocery stores. Sometime between 1930 and 1950, all of these structures were demolished and the existing residential buildings were constructed. In addition, the former building on Lot 16 was demolished during this time, and the lot has since remained undeveloped. Lot 16 has been used as a private lot for parking and storage by the owner of the site since at least 1986. There were not any operations that typically store or use significant quantities of hazardous substances identified at the project site in the information reviewed for this report.

Typical lavatory drainage structures such as sinks and toilets are present in the subject buildings. In addition, several exterior storm drains were observed in the exterior yards of the properties. The drainage destination of these structures is not known; however, it is likely that they discharge to the municipal sewer system. No staining or other visible indications of past spills, leaks or discharges of petroleum products or hazardous substances were observed around any of the drainage structures at the site.

No aboveground storage tanks (ASTs) were observed at the project site. Two hexagonal-shaped, concrete patches were observed in the sidewalk in front of the subject building at 3018-3022 West 22<sup>nd</sup> Street. The New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) regulations require number 2 fuel oil tank fillports be marked by a green hexagon. Therefore, it is possible that the hexagonal patches in front of the building are former fuel oil tank fillports.

No evidence of the removal of petroleum storage tanks from the project site was found in the information reviewed for this report. It is possible that any tanks at this site were formerly located aboveground, in the cellar, and were removed. However, since no information regarding the removal of tanks from this site was found, it is possible that one or more underground fuel oil tanks are located at 3018-3022 West 22<sup>nd</sup> Street. No additional indications of the possible presence of underground storage tanks were noted at the project site.

Given the age of the subject buildings (constructed prior to the 1950s), it is possible that they contain asbestos-containing building materials and lead-based paints. Potential asbestos-containing material include floor tiles, surfacing materials, roofing materials



and others. No suspected asbestos-containing thermal system insulation materials were observed at the site. Painted surfaces in the buildings were observed to be in generally good condition, with no large areas of chipped or peeling paint noted.

The subject site does not appear in the Federal or State environmental databases reviewed including the USEPA's Superfund, CERCLIS or ERNS databases, the RCRA Hazardous Waste Generators list or hazardous waste Treatment/Storage/Disposal Facilities list, or the NYSDEC's Spill Logs database, Solid Waste Facilities database, Petroleum Bulk Storage database, Registry of Inactive Hazardous Waste Disposal Sites, list of Registered Dry Cleaners, Voluntary Cleanup Program or Brownfield Site databases.

Based on the topography of the area, and the location of the Atlantic Ocean (1,000 feet south of the site), the direction of groundwater flow in the area of the site is likely from north to south, towards the Atlantic Ocean. In addition, the soils in the area are generally sandy and the groundwater is likely to be present less than ten feet below grade.

A review of Sanborn maps shows that land uses adjoining the project site have included residential dwellings, retail stores, undeveloped lots and commercial businesses including roofing companies, auto repair garages, and a paint store. There are auto repair garages shown at 3030 West 22<sup>nd</sup> Street (adjacent to the south of the site) and 3015 West 23<sup>rd</sup> Street (adjacent to the north) on the 1989 through 2007 Sanborn maps. The storage of paints is indicated in the adjoining building to the north of the site (2214 Surf Avenue) on the 1966 through 1991 Sanborn maps.

Historical land uses in the immediate vicinity of the project site were predominantly a mix of residential uses, bath houses, recreational uses, and commercial/retail uses prior to the 1950s. From the 1960s to the present time, land uses have included residential and commercial/retail uses, large housing complexes, undeveloped lots and auto-related uses (e.g., repair garages, parking lots, etc.).

Several upgradient, potential sources of contamination were identified in the immediate vicinity of the project site. The 1966 through 2007 Sanborn maps show furniture

finishing operations in the building at 2204 Surf Avenue, which is located approximately 50 feet north of the project site. An auto repair garage with five buried gasoline tanks appears at 2130 Surf Avenue (A.K.A. 3001 W. 22<sup>nd</sup> St.) on the 1930 and 1950 maps, approximately 150 feet northeast of the site. A gasoline filling station is shown at this location on the 1966 map. The 1986 and 1987 maps show a contractor's storage yard at 2216-2224 Surf Avenue, approximately 50 feet north of the project site. From 1989 to 2006, there were retail dry cleaners located at 2115 Surf Avenue, located approximately 300 feet northeast of the subject property. There are 12 upgradient spill incidents identified in the immediate vicinity of the project site. All 12 of these incidents have been closed by the NYSDEC; however, some of the spills were from leaking underground storage tanks and leaks from other underground structures.

Given the potential off-site sources of contamination identified adjacent to and nearby the project site, the potential exists for groundwater contamination in the area of the subject property. The area contains sandy soils and shallow groundwater, and therefore, the potential also exists for the encroachment of vapors to current and future buildings at the project site from up-gradient, off-site sources of contamination.

## **Conclusions**

Environmental Studies Corp. has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of 3016-3026 West 22<sup>nd</sup> Street and 3017-3023 West 23<sup>rd</sup> Street, Brooklyn, N.Y., the property. This assessment has revealed no evidence of *Controlled Recognized Environmental Conditions* or *Historical Recognized Environmental Conditions* in connection with the property. This assessment also revealed no evidence of *Recognized Environmental Conditions* in connection with the property, with the following exceptions:

- The possible presence of one or more underground fuel oil tanks at 3018-3022 West 22<sup>nd</sup> Street.
- The possible presence of asbestos-containing building materials and lead-based paints in the subject buildings.

- The potential for groundwater contamination in the area of the project site from potential-off-site sources of contamination.
- The potential for the encroachment of vapors to existing or future buildings at the site from off-site, upgradient sources of contamination in the immediate vicinity of the subject property.

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

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

**Block 7071, Lots 13, 16, 93, 94, 114**

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

#### **Task 1-Sampling Protocol**

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



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

#### **Task 2-Remediation Determination and Protocol**

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

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

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

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

#### **Projected Development Sites 2 through 8**

Projected Development Sites 2 through 6 are not under the control or ownership of the Applicant and they are not included in the proposed development plans for this project. An "E" designation for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these properties. These

applicant(s) should be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

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

**Block 7071, Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96 and 97**

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

#### **Task 1-Sampling Protocol**

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

#### **Task 2-Remediation Determination and Protocol**

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

If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete

such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

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

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Actions to result in significant adverse impacts related to hazardous materials on Projected Development Sites 2 through 8.

#### **NYC Department of Environmental Protection Review**

The NYC Department of Environmental Protection (DEP) has reviewed the EAS for the Proposed Actions, and in a letter dated November 14, 2017 states the following (see Hazardous Materials Appendix):

**Projected Development Site 1: Block 7071, Lots 13, 16, 93, 94, and 114 (Sites under the control or ownership of the applicant) and Projected Development Sites 2 through 8: Block 7071, Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97 (Sites not under the control or ownership of the applicant)**

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



## **13. WATER AND SEWER INFRASTRUCTURE**

### **Introduction**

A waste water and storm water infrastructure analysis is required for the proposed project because the Project Area is located in a separately sewered area and would exceed the *CEQR Technical Manual* threshold of an incremental increase of 50 residential units in an existing R5 zone. The Proposed Actions would result in the development of a net increase of approximately 172 dwelling units and 46,249 gsf of additional commercial space on the 8 Projected Development Sites within the Project Area.

### **Infrastructure Analysis**

#### Water Supply

The proposed project does not require an analysis of impacts to water supply as it would not result in an exceptionally large demand for water (i.e., more than one million gallons per day) and the Project Area is not located in an area that experiences low water pressure (such as areas at the end of the water supply distribution system). Nevertheless, a water usage analysis is presented below.

The existing development on the 8 Projected Development Sites consists of 34 dwelling units and 4,730 gsf of commercial space. Based on the water usage rate factors shown in Table 13-2 of the Water and Sewer Infrastructure chapter of the *CEQR Technical Manual*, the existing development on the 8 Projected Development Sites would utilize 9,577 gallons per day (gpd) of water as shown in Table 13-4 below.

**Table 13-4  
Existing Water Usage**

| <b>Use</b>          | <b>Rate Factor</b>           | <b>Water Usage Amount</b> |
|---------------------|------------------------------|---------------------------|
| Residential         | 100 gpd/person x 83 persons* | 8,300 gpd                 |
| Commercial (office) |                              |                           |
| - domestic          | 0.10 gpd/sf (4,730 sf)       | 473 gpd                   |
| - air conditioning  | 0.17 gpd/sf (4,730 sf)       | 804 gpd                   |

|              |  |                  |
|--------------|--|------------------|
| <b>TOTAL</b> |  | <b>9,577 gpd</b> |
|--------------|--|------------------|

\* Based on average household size of 2.45 persons

The No-Action development on the 8 Projected Development Sites would consist of 81 dwelling units and 4,730 gsf of commercial space. Based on the water usage rate factors shown in Table 13-2 of the Water and Sewer Infrastructure chapter of the *CEQR Technical Manual*, the No-Action development on the 8 Projected Development Sites would utilize 21,077 gallons per day (gpd) of water as shown in Table 13-5 below.

**Table 13-5  
No-Action Water Usage**

| <b>Use</b>          | <b>Rate Factor</b>            | <b>Water Usage Amount</b> |
|---------------------|-------------------------------|---------------------------|
| Residential         | 100 gpd/person x 198 persons* | 19,800 gpd                |
| Commercial (office) |                               |                           |
| - domestic          | 0.10 gpd/sf (4,730 sf)        | 473 gpd                   |
| - air conditioning  | 0.17 gpd/sf (4,730 sf)        | 804 gpd                   |
| <b>TOTAL</b>        |                               | <b>21,077 gpd</b>         |

\* Based on average household size of 2.45 persons

The proposed project would result in the development in the Project Area of a net increase of 172 dwelling units and 46,249 gsf of new local retail space. Based on the water usage rate factors shown in Table 13-6 of the Water and Sewer Infrastructure chapter of the *CEQR Technical Manual*, the project would utilize 61,062 gallons per day (gpd) of water as shown in the table below.

**Table 13-6  
With-Action Water Usage**

| <b>Use</b>    | <b>Rate Factor</b>            | <b>Water Usage Amount</b> |
|---------------|-------------------------------|---------------------------|
| Residential   | 100 gpd/person x 421 persons* | 42,100 gpd                |
| Retail Stores |                               |                           |

|                    |                         |                   |
|--------------------|-------------------------|-------------------|
| - domestic         | 0.24 gpd/sf (46,249 sf) | 11,100 gpd        |
| - air conditioning | 0.17 gpd/sf (46,249 sf) | 7,862 gpd         |
| <b>TOTAL</b>       |                         | <b>61,062 gpd</b> |

\* Based on average household size of 2.45 persons

The NYC Department of Environmental Protection (DEP) has reviewed the EAS for the Proposed Actions, and in a memorandum dated January 5, 2018 states the following regarding the water system (see Infrastructure Appendix):

The existing water mains around the above subject Project are being upgraded and should be able to handle the estimated increase in water demand.

#### Sanitary Sewage

The existing development on the 8 Projected Development Sites consists of 34 dwelling units and 4,730 gsf of commercial space. Based on the sewage generation rate factors shown in Table 13-2 of the Water and Sewer Infrastructure chapter of the *CEQR Technical Manual*, the existing development on the 8 Projected Development Sites would generate 8,773 gallons per day (gpd) of sanitary sewage as shown in Table 13-4 below.

**Table 13-4**  
**Existing Sanitary Sewage Generation**

| <b>Use</b>          | <b>Rate Factor</b>           | <b>Sewage Generation Amount</b> |
|---------------------|------------------------------|---------------------------------|
| Residential         | 100 gpd/person x 83 persons* | 8,300 gpd                       |
| Commercial (office) | 0.10 gpd/sf (4,730 sf)       | 473 gpd                         |
| <b>TOTAL</b>        |                              | <b>8,773 gpd</b>                |

\* Based on average household size of 2.45 persons

The No-Action development on the 8 Projected Development Sites would consist of 81 dwelling units and 4,730 gsf of commercial space. Based on the sewage generation rate factors shown in Table 13-2 of the Water and Sewer Infrastructure chapter of the *CEQR Technical Manual*, the No-Action development on the 8 Projected Development Sites



would generate 20,273 gallons per day (gpd) of sanitary sewage as shown in Table 13-5 below.

**Table 13-5  
No-Action Sanitary Sewage Generation**

| <b>Use</b>          | <b>Rate Factor</b>            | <b>Sewage Generation Amount</b> |
|---------------------|-------------------------------|---------------------------------|
| Residential         | 100 gpd/person x 198 persons* | 19,800 gpd                      |
| Commercial (office) | 0.10 gpd/sf (4,730 sf)        | 473 gpd                         |
| <b>TOTAL</b>        |                               | <b>20,273 gpd</b>               |

\* Based on average household size of 2.45 persons

The proposed project would result in the development in the Project Area of a net increase of 172 dwelling units and 46,249 gsf of new local retail space. Based on the sewage generation rate factors shown in Table 13-6 of the Water and Sewer Infrastructure chapter of the *CEQR Technical Manual*, the project would generate 53,200 gallons per day (gpd) of sanitary sewage as shown in the table below.

**Table 13-6  
With-Action Sanitary Sewage Generation**

| <b>Use</b>    | <b>Rate Factor</b>            | <b>Sewage Generation Amount</b> |
|---------------|-------------------------------|---------------------------------|
| Residential   | 100 gpd/person x 421 persons* | 42,100 gpd                      |
| Retail Stores | 0.24 gpd/sf (46,249 sf)       | 11,100 gpd                      |
| <b>TOTAL</b>  |                               | <b>53,200 gpd</b>               |

\* Based on average household size of 2.45 persons

Storm Water

Table 13-7 below presents the existing surface area conditions on the 8 Projected Development Sites.

**Table 13-7**  
**Existing Surface Area Conditions**

| <b>Projected Development Site</b> | <b>Lot Area (SF)</b> | <b>Roof Area</b> | <b>Pavement &amp; Walkways</b> | <b>Grass &amp; Softscape</b> |
|-----------------------------------|----------------------|------------------|--------------------------------|------------------------------|
| 1                                 | 17,467               | 7,838            | 3,629                          | 6,000                        |
| 2                                 | 7,658                | 0                | 7,658                          | 0                            |
| 3                                 | 4,048                | 0                | 0                              | 4,048                        |
| 4                                 | 3,308                | 2,530            | 778                            | 0                            |
| 5                                 | 3,261                | 0                | 3,261                          | 0                            |
| 6                                 | 13,200               | 0                | 0                              | 13,200                       |
| 7                                 | 4,400                | 0                | 0                              | 4,400                        |
| 8                                 | 4,400                | 2,200            | 2,200                          | 0                            |
| <b>TOTAL</b>                      | <b>57,742</b>        | <b>12,568</b>    | <b>17,526</b>                  | <b>27,648</b>                |

Table 13-8 below presents the No-Action surface area conditions on the 8 Projected Development Sites.

**Table 13-8**  
**No-Action Surface Area Conditions**

| <b>Projected Development Site</b> | <b>Lot Area (SF)</b> | <b>Roof Area</b> | <b>Pavement &amp; Walkways</b> | <b>Grass &amp; Softscape</b> |
|-----------------------------------|----------------------|------------------|--------------------------------|------------------------------|
| 1                                 | 17,467               | 7,838            | 3,629                          | 6,000                        |
| 2                                 | 7,658                | 3,190            | 1,000                          | 3,468                        |
| 3                                 | 4,048                | 1,686            | 750                            | 1,612                        |
| 4                                 | 3,308                | 2,530            | 778                            | 0                            |
| 5                                 | 3,261                | 1,358            | 600                            | 1,303                        |
| 6                                 | 13,200               | 5,500            | 1,750                          | 5,950                        |
| 7                                 | 4,400                | 1,833            | 800                            | 1,767                        |
| 8                                 | 4,400                | 2,200            | 2,200                          | 0                            |

|              |               |               |               |               |
|--------------|---------------|---------------|---------------|---------------|
| <b>TOTAL</b> | <b>57,742</b> | <b>26,135</b> | <b>11,507</b> | <b>20,100</b> |
|--------------|---------------|---------------|---------------|---------------|

Table 13-9 below presents the proposed surface area conditions on the 8 Projected Development Sites.

**Table 13-9  
With-Action Surface Area Conditions**

| <b>Projected Development Site</b> | <b>Lot Area (SF)</b> | <b>Roof Area</b> | <b>Pavement &amp; Walkways</b> | <b>Grass &amp; Softscape</b> |
|-----------------------------------|----------------------|------------------|--------------------------------|------------------------------|
| 1                                 | 17,467               | 17,467           | 0                              | 0                            |
| 2                                 | 7,658                | 7,658            | 0                              | 0                            |
| 3                                 | 4,048                | 4,048            | 0                              | 0                            |
| 4                                 | 3,308                | 3,308            | 0                              | 0                            |
| 5                                 | 3,261                | 3,261            | 0                              | 0                            |
| 6                                 | 13,200               | 13,200           | 0                              | 0                            |
| 7                                 | 4,400                | 4,400            | 0                              | 0                            |
| 8                                 | 4,400                | 4,400            | 0                              | 0                            |
| <b>TOTAL</b>                      | <b>57,742</b>        | <b>57,742</b>    | <b>0</b>                       | <b>0</b>                     |

### Sewer Services

The Project Area is located in a separately sewered area. The attached matrix table presents the sanitary and stormwater drainage generation characteristics of the existing, No-Action, and With-Action developments on the combined 8 Projected Development Sites.

Sanitary sewage and storm water flows generated by the proposed building on the Applicant's Projected Development Site 1 would be directed to an existing 42" storm sewer and an 8" sanitary sewer located in the bed of West 23<sup>rd</sup> Street adjacent to the property. In addition to these sewer lines, other sewer lines in the streets adjoining the Project Area include an 8" sanitary sewer line and a 24" storm sewer in the bed of Surf Avenue which would be likely to service Projected Development Sites 2 and 3. It is



likely that the existing sanitary and storm sewer lines located in the bed of West 23<sup>rd</sup> Street would service Projected Development Sites 4 through 8. See the Site Plan included in Infrastructure Appendix which illustrates the sewer lines in the vicinity of the Project Area. The combined sanitary and storm sewer flows would flow to the Coney Island Wastewater Treatment Plant (WWTP) which has a capacity of 110 million gallons per day.

Storm water flows generated by the proposed project would be greater than existing and future No-Action flows as additional impervious surfaces for buildings, pavement, etc. would be constructed on the 8 Projected Development Sites. The NYC Department of Environmental Protection (DEP) will determine whether the projected increased flows would be considered significant.

DEP has reviewed the EAS for the Proposed Actions, and in a memorandum dated January 5, 2018 states the following regarding the sewer system (see Infrastructure Appendix):

1. The proposed rezoning results in an increase of 347% for the sanitary flow in the adjacent sewers based on a DU size of 2.45 people per unit. A hydraulic analysis of the existing sewer system may be needed at the time of submittal of the site connection proposal application to determine whether the existing sewer system is capable of supporting higher density development and related increase in wastewater flow, or whether there will be a need to upgrade the existing sewer system. In addition, there might be a need to amend the existing drainage plan based on the hydraulic analysis calculations.
2. During the submittal of the site connection proposal applications of these sites, please restrict the storm flow per the following:
  - a. As per the new stormwater requirements, the Stormwater Release Rate must be no more than the greater of 0.25 cfs or 10% of the Allowable Flow or, if the Allowable Flow is less than 0.25 cfs, no more than the Allowable Flow. Allowable Flow is defined as the stormwater flow from a development that can be released into an existing storm or combined sewer based on existing sewer design criteria.

b. Specify a method of retaining or detaining the site generated storm flow that adheres to the Stormwater Release Rate requirements stated above.

## **Conclusion**

The proposed actions would not result in significant impacts on water supply since the projected developments would not generate an exceptionally large demand in water. Additionally, the Project Area is not within an area that experiences low water pressure. However, based on the water usage factors provided in the *CEQR Technical Manual*, future development in the Project Area could result in 61,062 gpd of water usage compared to the existing water usage rate of 9,577 gpd and the projected No-Action water usage rate of 21,077 gpd. No significant adverse impacts to the water supply infrastructure would be anticipated.

Based on the sewage generation factors provided in the *CEQR Technical Manual*, future development in the Project Area could result in 53,200 gpd of sanitary sewage compared to the existing sanitary sewage generation of 8,773 gpd and the projected No-Action sanitary sewage flow of 20,273 gpd. While the Proposed Actions would result in an increase in sanitary flow in adjacent sewers, further measures are enforced by the DEP during the Sewer Certification application process to evaluate the adequacy of the existing abutting sewer to receive site storm and sanitary discharge from new development. If determined that there is potential for a significant increase in sanitary flow, DEP may request a hydraulics analysis, prior to issuing a Site Connection Permit, to further assess whether the existing sewer system is capable of supporting potential increase in wastewater flow from any new development (with or without the Proposed Actions). Due to change in zoning, an amendment to the existing City Drainage Plan is required to ensure that the capacity of the sewer system is capable of supporting higher density development and related increase in wastewater flow. Given these measures, it is not anticipated that the increase in sanitary sewage flows generated by the Proposed Actions would result in significant adverse impacts. It is not anticipated that the relatively modest increase in sanitary sewage flows generated by the project would exceed the capacity of existing sewer lines servicing the Project Area or the design capacity of the Coney Island WWTP. No significant adverse impacts to the water and sewer infrastructure are therefore anticipated.

No significant adverse impacts to the water and sewer infrastructure would be anticipated as a result of the Proposed Actions.



**COMPARISON OF EXISTING AND WITH-ACTION VOLUME**

**CSO SUBCATCHMENT AREA:<sup>1</sup>**

| EXISTING             |                                     | Area = 57,742 SF (1.33 ACRES)                   |                           |                             |                          | Area = XX,XXX SF (XX.XX ACRES) |                           |                             |                          | SITE A & B               |
|----------------------|-------------------------------------|---|---------------------------|-----------------------------|--------------------------|--------------------------------|---------------------------|-----------------------------|--------------------------|--------------------------|
|                      |                                     | SITE A  |                           |                             |                          | SITE B <sup>2</sup>            |                           |                             |                          |                          |
| RAINFALL VOLUME (in) | RAINFALL DURATION (hr) <sup>3</sup> | RUNOFF VOLUME DIRECT DRAINAGE (MG) <sup>4</sup> | RUNOFF VOLUME TO CSS (MG) | SANITARY VOLUME TO CSS (MG) | TOTAL VOLUME TO CSS (MG) | RUNOFF VOLUME TO RIVER (MG)    | RUNOFF VOLUME TO CSS (MG) | SANITARY VOLUME TO CSS (MG) | TOTAL VOLUME TO CSS (MG) | TOTAL VOLUME TO CSS (MG) |
| 0.00                 | 3.80                                | 0.00  | 0.00                      | 0.00                        | 0.00                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.00                     |
| 0.40                 | 3.80                                | 0.00  | 0.01                      | 0.00                        | 0.01                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.01                     |
| 1.20                 | 11.30                               | 0.00  | 0.02                      | 0.00                        | 0.02                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.02                     |
| 2.50                 | 19.50                               | 0.00  | 0.05                      | 0.01                        | 0.06                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.06                     |

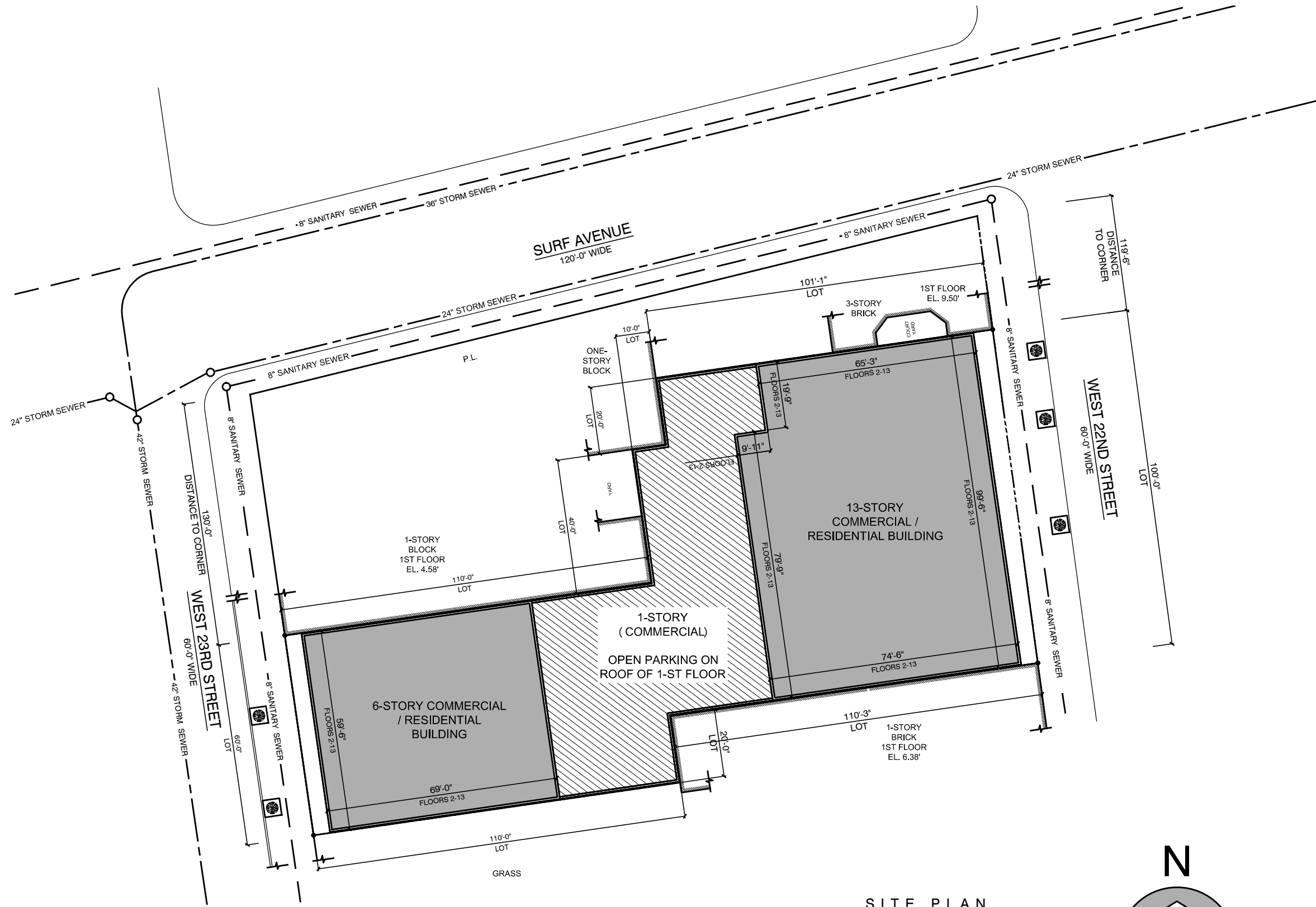
| With-Action          |                                     | Area = 57,742 SF (1.33 ACRES)                   |                           |                             |                          | Area = XX,XXX SF (XX.XX ACRES) |                           |                             |                          | SITE A & B               |
|----------------------|-------------------------------------|---|---------------------------|-----------------------------|--------------------------|--------------------------------|---------------------------|-----------------------------|--------------------------|--------------------------|
|                      |                                     | SITE A  |                           |                             |                          | SITE B <sup>2</sup>            |                           |                             |                          |                          |
| RAINFALL VOLUME (in) | RAINFALL DURATION (hr) <sup>3</sup> | RUNOFF VOLUME DIRECT DRAINAGE (MG) <sup>4</sup> | RUNOFF VOLUME TO CSS (MG) | SANITARY VOLUME TO CSS (MG) | TOTAL VOLUME TO CSS (MG) | RUNOFF VOLUME TO RIVER (MG)    | RUNOFF VOLUME TO CSS (MG) | SANITARY VOLUME TO CSS (MG) | TOTAL VOLUME TO CSS (MG) | TOTAL VOLUME TO CSS (MG) |
| 0.00                 | 3.80                                | 0.00  | 0.00                      | 0.01                        | 0.01                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.01                     |
| 0.40                 | 3.80                                | 0.00  | 0.01                      | 0.01                        | 0.02                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.02                     |
| 1.20                 | 11.30                               | 0.00  | 0.04                      | 0.02                        | 0.06                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.06                     |
| 2.50                 | 19.50                               | 0.00  | 0.09                      | 0.04                        | 0.13                     | 0.00                           | 0.00                      | 0.00                        | 0.00                     | 0.13                     |

<sup>1</sup> If the proposed project crosses over several different CSO subcatchment areas, the above summary table should be completed for each CSO sub-catchment area.

<sup>2</sup> If proposed project includes a phased implementation plan or discrete sites, assess volumes using additional cells above (e.g., Site B).

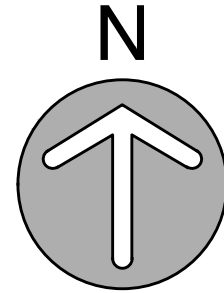
<sup>3</sup> Based on *Intensity/duration/Frequency Rainfall Analysis, New York City and the Catskill Mountain Water Supply Reservoirs*, Vieux & Associates, Inc., April 4, 2006. The 24-hour rainfall volume is based on average rainfall intensity over 24-hours (inch/per) times 24 hrs. (Duration information provided by T. Newman & P. Jadhav, HydroQual).

<sup>4</sup> The volume (calculated in WS2) of stormwater runoff from any portion of the proposed project site draining to a separate storm sewer or as overland flow directly to a waterbody should be entered here.



- LEGEND:**
- PROPOSED RESIDENTIAL / COMMERCIAL
  - PROPOSED PARKING ( NOT INCLUDING PARKING AREA UNDER PROPOSED COMMERCIAL / RESIDENTIAL BUILDING )

**SITE PLAN**



JOB NO 16-124

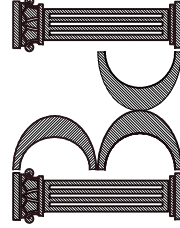
3021 WEST 23RD STREET / 3022 WEST 22ND STREET  
Brooklyn, New York 11224

R7D BUILD OUT SCENARIO

SCALE: N.T.S.

DATE: 3/2/16

BLOCK: 7071  
LOT: 16, 114, 13, 98, 94  
ZONING: R7D



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ARCHITECTURE  
& DESIGN, PLLC  
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P1-B

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## **16. TRANSPORTATION**

### **Introduction**

In order to evaluate the proposed mixed-use development for transportation, trip generation screening analyses were performed pursuant to the methodologies identified in the *2014 CEQR Technical Manual*. Based on the proposed mixed-use development, it was determined that the proposed action would not result in significant adverse impacts as is summarized below.

### **Project Area**

The Project Area is located within the block bounded by Surf Avenue on the north, the Coney Island Beach Boardwalk on the south, West 22<sup>nd</sup> Street on the east, and West 23<sup>rd</sup> Street on the west in the Coney Island neighbourhood of Brooklyn, Community District 13.

### **Future With-Action Scenario**

The Proposed Project involves the development of eight (8) Projected Development Sites with 252,307 gsf of residential space for 253 dwelling units, including up to 76 affordable units and 177 market rate units, 50,979 gsf of commercial local retail space, and 61 accessory residential parking spaces. The proposal on Projected Development Site 1 would also include one residential entrance/exit and one commercial entrance/exit on both West 22<sup>nd</sup> Street and West 23<sup>rd</sup> Street. It would also include a vehicular parking entrance on West 23<sup>rd</sup> Street and a vehicular parking exit on West 22<sup>nd</sup> Street, as shown in the Site Plan. The anticipated development on Projected Development Site 6 would include one residential entrance/exit, one commercial entrance/exit, and one vehicular parking entrance/exit on West 23<sup>rd</sup> Street.

### **Future No-Action Scenario**

Absent the proposed project, the 8 Projected Development Sites would be developed with 63,584 gsf of residential space for 81 dwelling units and 4,730 gsf of commercial local retail space.



## **Increment**

The increment between the No-Action and With-Action development scenarios would consist of an increase of 172 dwelling units (including up to 76 affordable units and 96 market rate units), 46,249 gsf of new local retail space, and 61 new residential accessory parking spaces.

## **Analysis Framework**

The environmental assessment for transportation, including traffic, parking, transit, and pedestrian trip analyses, is based on an analysis of the incremental difference between the Future With-Action scenario and the AOR building development under the Future No-Action scenario as discussed above.

## **Level-One Screening**

According to Table 16-1 of the *2014 CEQR Technical Manual*, the Project Area is located in Zone 4 where the development of a minimum of 200 dwelling units, 10,000 square feet of local retail space, 15,000 square feet of community facility space, or 60 off-street parking spaces would require a transportation analysis. Based on the combination of uses for the proposed development, a trip generation analysis is warranted.

The following trip generation analysis has been performed, the results of which found that the proposed project would generate 37 (10 inbound and 27 outbound), 65 (32 inbound and 33 outbound), 54 (33 inbound and 21 outbound), and 54 (28 inbound and 26 outbound) net vehicle trip ends during the AM, MD, PM, and Saturday peak hours, respectively, as summarized in **Table 3**. Vehicle trips generated by the proposed action would exceed the CEQR threshold of 50 net vehicle trips during all peak hours, except the Weekday AM peak hour. All of the streets in the surrounding area are one-way streets except Surf Avenue, and it is anticipated that there would not be an incremental increase of 50 vehicle trips through any intersection as a result of the Proposed Actions. Therefore, in accordance with the *CEQR Technical Manual*, the proposed project would not result in any conditions that would typically trigger the need for a detailed assessment of traffic and parking impacts.

## **Trip Generation Rates, Modal Split Data, and Sources**

### *Residential Component-Proposed Action and No-Action Scenarios*

Project generated person and vehicular trips are based upon the rates and percent peak hours temporal distribution provided in the *2014 CEQR Technical Manual*, Table 16-2, for the residential portion of the development. The modal split information, including the vehicle occupancy rate, is based on the latest 5-Year 2011-2015 ACS Journey-to-Work (JTW) Census Tract #'s 326, 340 and 352 in Brooklyn, NY. The *2014 CEQR Technical Manual* Table 16-2 was also applied in order to estimate the future truck trips for the residential component.

The results found that approximately 19.7% of those traveling to and from the residential portion of the project would travel by car, zero (0)% would travel by taxi, 13.5% would travel by bus, 54.2% would travel by subway, 11.2% would travel by foot, and 1.4% would travel by other mode of travel, such as bicycle.

### *Local Retail Component-Proposed Action and No-Action Scenarios*

Project generated person and vehicular trips are based upon the rates and percent peak hours temporal distribution provided in the *2014 CEQR Technical Manual*, Table 16-2, for the local retail portion of the development with a linked-trip factor of 25%. The modal split information is based on the vehicle occupancy rates provided in the *East New York Rezoning FEIS*, Table 13-8 (approved by both DCP and DOT for local retail use). The *2014 CEQR Technical Manual* Table 16-2 was also applied in order to estimate the future truck trips for the local retail component.

The results found that approximately 5% of those traveling to and from the retail portion of the With-Action and No-Action projects would travel by car, 1% would travel by taxi, 3% would travel by bus, 6% would travel by subway, and 85 % would travel by foot.

The above trip generation information is summarized in **Table 1**.

## **Person and Vehicle Trips**

### Person Trips

The Proposed Actions would generate a total of 352 net person trip ends during the AM peak hour time period, 1,420 net person trip ends during the Midday peak hour time period, 864 net person trip ends during the PM peak hour time period, and 965 net person trip ends during the Saturday Midday peak hour time period, as summarized in **Table 2**.

### Vehicle Trips

The Proposed Actions would generate 37 (10 inbound and 27 outbound), 65 (32 inbound and 33 outbound), 54 (33 inbound and 21 outbound), and 54 (28 inbound and 26 outbound) net vehicle trip ends during the AM, MD, PM, and Saturday peak hours, respectively, as summarized in **Table 3**. Vehicle trips generated by the Proposed Actions would exceed the CEQR threshold of 50 net vehicle trips during all peak hours, except the Weekday AM peak hour. All of the streets in the surrounding area are one-way streets except Surf Avenue, and it is anticipated that there would not be an incremental increase of 50 vehicle trips through any intersection as a result of the Proposed Actions. Therefore, in accordance with the *CEQR Technical Manual*, the proposed project would not result in any conditions that would typically trigger the need for a detailed assessment of traffic and parking impacts.

## **Transit and Pedestrians**

### Bus Trips

The Proposed Actions would generate a total of 25 net bus trip ends during the Weekday AM peak hour time period, 50 net bus trip ends during the Weekday Midday peak hour time period, 42 net bus trip ends during the Weekday PM peak hour time period, and 43 net bus trip ends during the Saturday peak hour time period, as is summarized in **Table 2**. There are three bus lines, B36, X28 and X38, which run in both directions along Surf Avenue. No bus line would experience more than 50 net bus trip ends per bus per direction during each peak hour time period.

The proposed action would generate less than 200 net bus trip ends/and 50 net bus trip ends per bus per direction during each peak hour time period, and in accordance with



the *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of bus impacts.

#### Subway Trips

The proposed action would generate a total of 88 net subway trip ends during the Weekday AM peak hour period, 119 net subway trip ends during the Weekday Midday peak hour time period, 125 net subway trip ends during the Weekday PM peak hour time period, and 122 net subway trip ends during the Saturday peak hour time period, as summarized in **Table 2**.

The Proposed Actions would generate less than 200 net subway trip ends during each peak hour time period, and in accordance with the *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of subway impacts.

#### Pedestrian Trips

The proposed action would generate a total of 312 net pedestrian (bus, subway, walk and other) trip ends during the Weekday AM peak hour period, 1,326 net pedestrian trip ends during the Weekday Midday peak hour time period, 791 net pedestrian trip ends during the Weekday PM peak hour time period, and 889 net pedestrian trip ends during the Saturday peak hour time period, as summarized in **Table 2**.

The Proposed Actions would generate more than 200 net pedestrian trip ends during all peak hours, but because of several pedestrian ingress and egress points along West 22<sup>nd</sup> Street, West 23<sup>rd</sup> Street, and Surf Avenue, no pedestrian element in the area would likely experience more than 200 net pedestrian trips during any peak hour time periods, and in accordance with the *CEQR Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of pedestrians impacts.

#### **Conclusion**

The results of the transportation analysis indicate that the proposed project would generate fewer than 50 net vehicle trip ends at any intersection during the Weekday Midday, PM, and Saturday peak hour periods. No significant adverse impacts related

to traffic and parking conditions are anticipated to occur. Similarly, the project would not result in 200 or more transit trips or 200 or more pedestrian trips at any pedestrian elements in the study area during any peak hour. Therefore, no significant adverse impacts related to transit and pedestrians would be expected.

No significant adverse impacts related to transportation would occur as a result of the proposed action, and no further assessment is warranted.

## **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 an atypical (*e.g.*, not at-grade) source of vehicular pollutants to significantly impact the proposed development.
- 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.
- 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.
- The potential for facilities' malodorous emissions to unreasonably interfere with the proposed project's occupant's comfortable enjoyment of life or their property.



## The Affected Area

The Affected Area, located in the Seagate-Cony Island neighborhood of Brooklyn, Community District #13, comprises of eighteen lots. The Proposed Actions would facilitate the development of eight mixed-use, primarily residential, buildings on Block 7071. Projected Development Site 1 is the Applicant owned property; the other seven development sites are anticipated for development properties. Table 17-1 shows the development sites block and lot numbers.

*Table 17-1. The Affected Area Block and Lots.*

| Site ID                      |          | Block | Lot         |
|------------------------------|----------|-------|-------------|
| Projected Development Site 1 | 7-Story  | 7071  | 93, 94      |
|                              | 12-Story |       | 13, 16, 116 |
| Projected Development Site 2 |          |       | 3, 4, 5     |
| Projected Development Site 3 |          |       | 7, 8        |
| Projected Development Site 4 |          |       | 18          |
| Projected Development Site 5 |          |       | 26          |
| Projected Development Site 6 |          |       | 83, 85, 86  |
| Projected Development Site 7 |          |       | 91          |
| Projected Development Site 8 |          |       | 96, 97      |

### Projected Development Site 1

Projected Development Site 1 would facilitate a mixed-use, predominantly residential, building consisting of two building segments.

The 6-story building segment (hereinafter “Projected Development Site 1 West Tower”), frontage on West 23<sup>rd</sup> Street, would rise to a height of 61’-4.5”. The 13-story building segment (hereinafter “Projected Development Site 1 East Tower”) with frontage on West 22nd Street would rise to a height of 131’-4.5”.

A 15-foot high first floor would cover the entire lots area. 44 parking spaces accessory to the residential uses would be provided on the roof of the first floor; some below the towers and some between the towers.

Per the building architect, there would not be any flue stacks as most equipment these days (due to strict energy code) is either direct vent or electric heat pumps. The heating and cooling will be provided via mini-split heat pumps which are powered by electricity there is no exhaust discharge for these units. The hot water will be provided via high efficiency condensing hot water heater which operate at an efficiency of 92% AFUE or better. Each unit gets individually exhausted and provided fresh air through small 3" diameter plastic pipe which will be located on an exterior wall or thru the roof thus, there is no central stack as found in conventional heating equipment. As such, no analysis is required.

Projected Development Site 2

Projected Development Site 2 would facilitate a mixed-use, predominantly residential, nine-story, 95 feet high, building. The building would contain 7,058 gross square feet (gsf) ground floor commercial space, and 38,476 gsf of residential space. The building's HVAC system would operate on natural gas.

Projected Development Site 3

Projected Development Site 3 would facilitate a mixed-use, predominantly residential, nine-story, 95 feet high, building. The building would contain 3,449 gsf ground floor commercial space, and 20,658 gsf of residential space. The building's HVAC system would operate on natural gas.

Projected Development Site 4

Projected Development Site 4 would facilitate a mixed-use, predominantly residential, ten-story, 105 feet high, building. The building would contain 2,708 gsf ground floor commercial space, and 16,970 gsf of residential space. The building's HVAC system would operate on natural gas.

Projected Development Site 5

Projected Development Site 5 would facilitate a mixed-use, predominantly residential, ten-story, 105 feet high, building. The building would contain 2,661 gsf ground floor commercial space, and 16,740 gsf of residential space. The building's HVAC system would operate on natural gas.

Projected Development Site 6

Projected Development Site 6 would facilitate a mixed-use, predominantly residential, eight-story, 85 feet high, building. The building would contain 12,600 gsf ground floor commercial space, and 35,968 gsf of residential space. 17 cellar level parking spaces would be provided for the residential units. The building's HVAC system would operate on natural gas.

Projected Development Site 7

Projected Development Site 7 would facilitate a mixed-use, predominantly residential, eight-story, 85 feet high, building. The building would contain 3,800 gsf ground floor commercial space, and 14,924 gsf of residential space. The building's HVAC system would operate on natural gas.

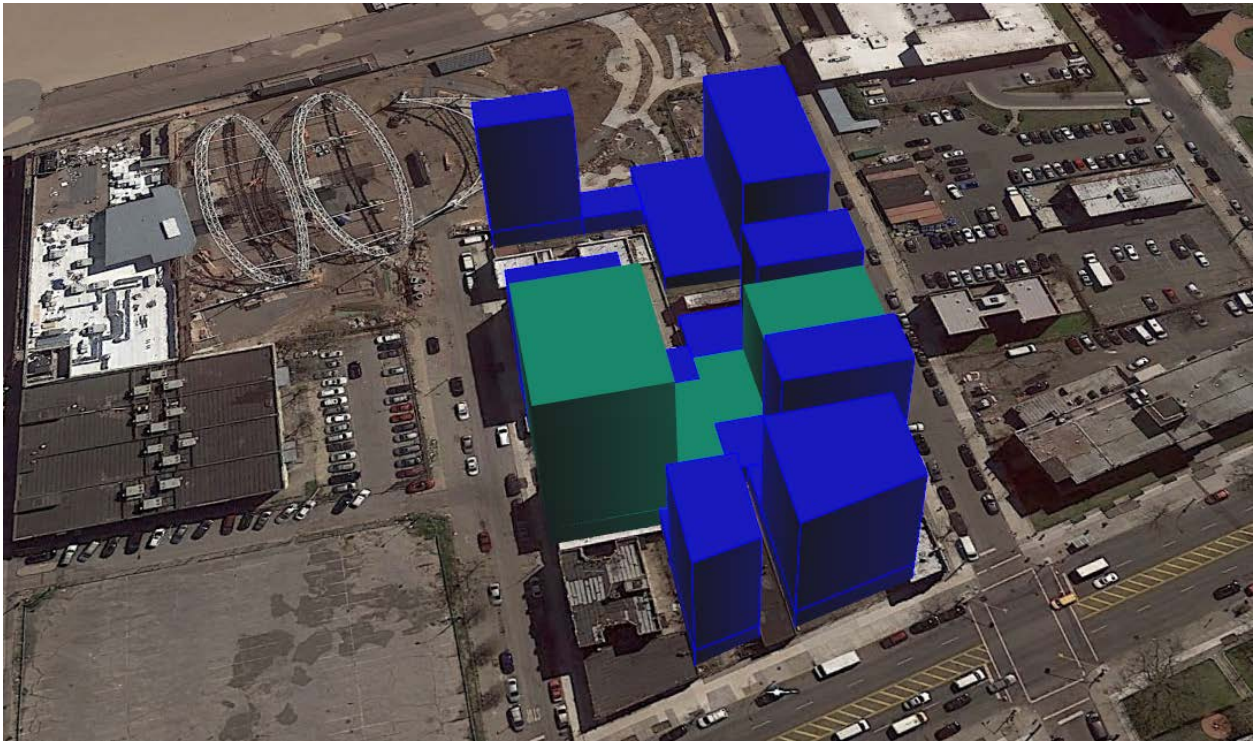
Projected Development Site 8

Projected Development Site 8 would facilitate a mixed-use, predominantly residential, eight-story, 85 feet high, building. The building would contain 3,800 gsf ground floor commercial space, and 19,820 gsf of residential space. The building's HVAC system would operate on natural gas.

Per the building architect, each building ground floor commercial space would cover the entirety of the lot. The residential portion, above the 1<sup>st</sup> floor, would have a setback, providing for residential back yard. The buildings' configurations, provided by the building architect, are shown in Figure 17-1, where the Applicant building is shaded in green.



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



### **Principal Conclusion**

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

The proposed project impacts associated with the boiler stack emissions (HVAC) on existing land uses screened out. Detailed analyses using AERMOD modeling was conducted for the project-on-project impact. The HVAC analysis concluded that: (i) fuel would need to be restricted to the exclusive use of natural gas in all the HVAC systems

of the proposed buildings; (ii) Projected Development Site 1 must exclusively use electric heat pumps for heating, ventilating, and air conditioning system, and high efficiency condensing tankless gas water heaters for the hot water system, and; (iii) the stacks' locations of Projected Development Sites 2-8 require setback distances. (E)-Designations to these effects were written.

No major sources or odor producing facilities were detected within 1,000 feet of the Affected Area. No industrial sources that emit toxic air were identified within 400 feet of the Affected 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 NO<sub>x</sub> 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 use oil or coal as the fossil fuel for the equipment.

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 17-2.

*Table 17-2. National And New York States Ambient Air Quality.*

| Pollutant         | Averaging Period                      | National and State Standards       |
|-------------------|---------------------------------------|------------------------------------|
| NO <sub>2</sub>   | Maximum 1-Hour Concentration          | 0.10 ppm (188 µg/m <sup>3</sup> )  |
|                   | Annual Arithmetic Average             | 0.053 ppm (100 µg/m <sup>3</sup> ) |
| PM <sub>2.5</sub> | 24-Hour Concentration                 | 35 µg/m <sup>3</sup>               |
|                   | Average of 3 Consecutive Annual Means | 12 µg/m <sup>3</sup>               |

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

Nitrogen oxide (NO<sub>x</sub>) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO<sub>x</sub> in these emissions are then gradually converted to NO<sub>2</sub>, 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 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 three 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 NO<sub>x</sub>/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 NO<sub>x</sub>/NO<sub>2</sub> ratio of 80% to the NO<sub>x</sub> 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<sub>2.5</sub> concentration increments greater than 0.3 µg/m<sup>3</sup> 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 Affected Area.

Background concentrations of relevant criteria pollutants were obtained from the NYSDEC's annual report for 2016 at the nearest monitoring stations. Table 17-3 shows the background concentrations.

*Table 17-3. Background Concentration at the Queens College and JHS 126 Monitoring Stations (NYSDEC 2016 Report).*

| Pollutant         | Averaging Period                      | Background Concentration | Monitoring Station |
|-------------------|---------------------------------------|--------------------------|--------------------|
| NO <sub>2</sub>   | Maximum 1-Hour Concentration          | 120.9 µg/m <sup>3</sup>  | Queens College     |
|                   | Annual Arithmetic Average             | 40.8 µg/m <sup>3</sup>   |                    |
| PM <sub>2.5</sub> | 24-Hour Concentration                 | 20.5 µg/m <sup>3</sup>   | JHS 126            |
|                   | Average of 3 Consecutive Annual Means | 8.6 µg/m <sup>3</sup>    |                    |

The *de minimis* criteria for PM<sub>2.5</sub> was evaluated as described in the NYC Interim Guidelines. The concentrations increments are presented below:

- 24-hour PM<sub>2.5</sub> 7.25 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 (screen out) are not expected to have a mobile source impact. Projects that require a detailed analysis, model the ambient air CO and PM<sub>10</sub>/PM<sub>2.5</sub> concentrations – the mobile source pollutants of concern – and compare the modeled concentrations with the applicable air quality standard.

#### Mobile Source Screen

##### Project-Generated Traffic

Per the *CEQR TM*, localized increases in CO and PM<sub>2.5</sub> levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed development. As such, screening analyses for CO and PM<sub>2.5</sub> were carried out to determine whether the project-generated traffic have the potential to cause significant impact. The project-generated traffic is the vehicular trips in any given hour, determined as the difference between the Future With No-Action and the Future With Action.

For this area of the City, the threshold volume for a detailed analysis of CO concentration, is an increment of 170 vehicles. PM<sub>2.5</sub> screen applies a heavy-duty diesel vehicles (HDDVs) threshold criterion.

As outlined in the Transportation section, the Proposed Actions would generate a total of 37 (10 inbound and 27 outbound), 65 (32 inbound and 33 outbound), 54 (33 inbound and 21 outbound), and 54 (28 inbound and 26 outbound) vehicle trip ends during the AM, MD, PM, and Saturday Midday peak hour time periods, respectively. Therefore, the net vehicle trip ends would not trigger the CO 170-vehicle threshold criterion.

According to *CEQR TM*, PM<sub>2.5</sub> detailed analysis is required if a threshold criterion, determined by project-generate peak hour HDDVs traffic or its equivalent in vehicular



emission, is exceeded. The threshold criterion depends on the type of road and the incremental vehicular traffic as followed:

- 12 or more HDDV for paved roads with 5,000 vehicles;
- 19 or more HDDV for collector roads;
- 23 or more HDDV for principal and minor arterials; or
- 23 or more HDDV for expressways and limited access roads.

As seen in the Transportation Chapter Table 3, the maximum HDDVs trip generation increment between the Future With No-Action and the Future With Action is 4 trucks. 4 trucks do not exceed the threshold criterion for paved roads with 5,000 vehicles—the most stringent road type criterion. Therefore, no detailed air quality analysis is required, and no significant mobile source air quality impacts are expected as a result of the Proposed Actions.

#### Parking Garage

Based on CEQR recommendations, the maximum capacities of parking garages are evaluated with a threshold criterion to predict whether the potential impacts associated with mobile source emissions are significant. The threshold criteria level, cited in the *CEQR TM* Table 16-1 in conjunction with the *CEQR TM* Map 16-1, is based on the location of the project. If the threshold is met or exceeded, a detailed analysis is warranted.

The proposed project would contain 44 and 17 accessory parking spaces in Project Development Site 1 and Projected Development Site 6 respectively. The *CEQR TM* situate the Affected Area in Zone 4, as it is within 1.0 miles of a subway station. The threshold criteria that would trigger a detailed analysis in Zone 4 is 60 parking spaces. As none of the Proposed Developments exceeds the parking spaces threshold, no detailed air quality analysis is required, and no significant mobile source air quality impacts are expected as a result of the parking facility.

#### **IV. PROJECT HVAC SYSTEMS ANALYSIS**

The HVAC analysis considers the potential for emissions from the HVAC systems of the proposed developments to significantly impact existing land uses (project-on-existing) within 400 feet, and the potential of each of the proposed developments 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.

##### **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 would consist of eight buildings. Projected Development Site 1, the Applicant building, would not have any flue stacks, as previously describe, and therefore, not included in the analysis. Each of

the other seven buildings would be equipped with their own separate natural gas fueled heat and hot water system. Therefore, screening analyses were performed for natural gas use and environmental designations added to specify use of natural gas only.

Per *CEQR TM*, the CEQR nomograph depicted on Figure 17-3 of the *CEQR TM* 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.

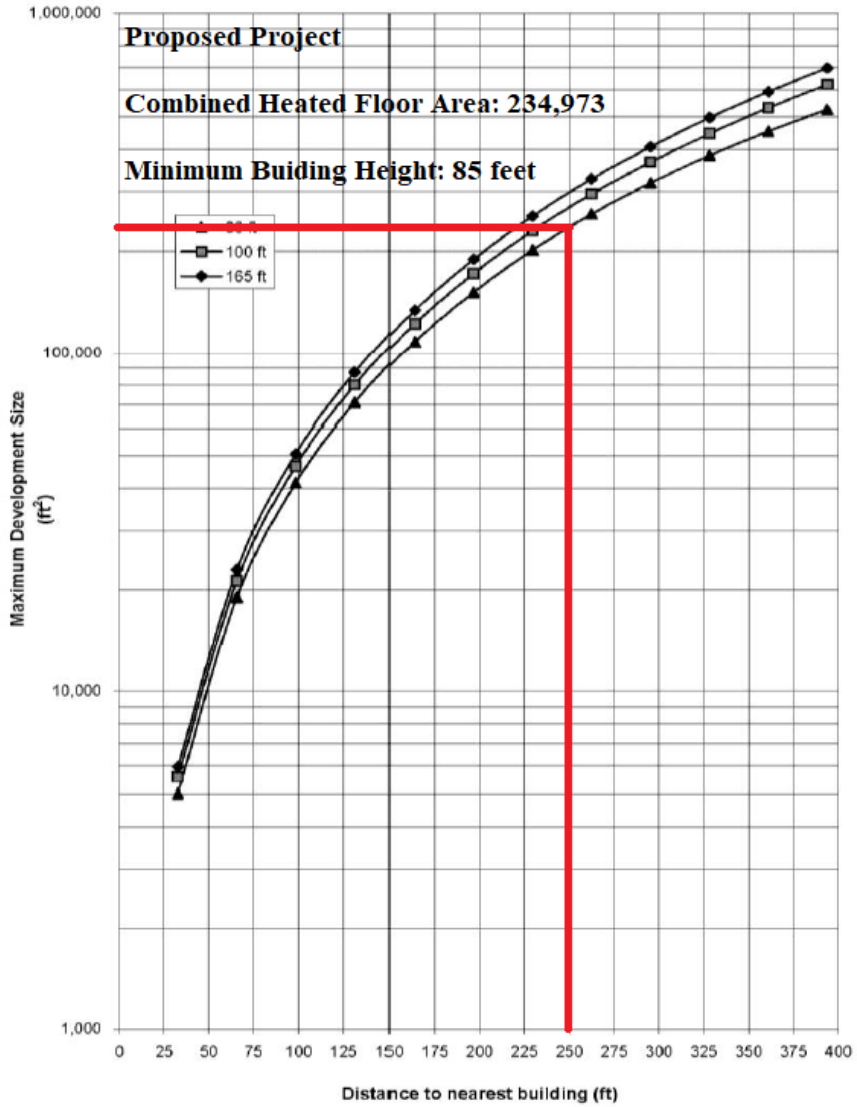
#### Project-on-Existing Screening Analysis

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, the combined square footage of proposed project, 234,973 gsf, was used in the analysis of the potential impact on existing and planned land uses. Figure 17-2 shows the screening analysis of the project-on-existing, where an 85 feet stack height—the lowest proposed building height—was assumed.



Figure 17-2. The Proposed Project Minimum Distance - HVAC Screen All Fuels Nomograph.

Figure 17-3:  
Stationary Source Screen



The screening analysis nomograph shows that a detailed analysis would be required for any existing land uses that is 85 feet or higher and at a distance of less than 250 feet from the Affected Area.

A review of existing land uses within 400 feet of the Affected Area via the New York City Zoning and Land Use (ZoLa) interactive mapping application and Google Earth imaging map showed that there are no existing buildings similar to or greater in height than the lowest Projected Development building within 250 feet of the Affected Area. The closest building of similar or greater height is the 17floor building at 2201 Surf Avenue (Block 7057, Lot 12), situated 253 feet north of Projected Development Site 3.

Therefore, the Proposed Actions passes the screening analysis regarding its potential impact on existing land uses.

#### Project-on-Project Screening Analysis

As mentioned, screening analysis is only applicable to a single smokestack, and this CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. As the proposed buildings are clustered together, the CEQR screening analysis is not applicable. As such, project-on-project detailed analyses were conducted.

#### **Detailed Analysis**

Per CEQR guidelines, buildings that are similar to or greater in height than a source building could be adversely impacted. As such, the potential impact of lower or similar in heights buildings on receiving buildings were modeled using the latest version of the EPA's AERMOD dispersion model version 16216r.

As seen in Figure 17-1, each building ground floor would cover the entirety of the lot. Each building residential portion (above the 1<sup>st</sup> floor) would have a setback, providing for a residential back yard. As such, building stacks were assumed to be located on the residential portion and on the highest tiers. Receiving buildings were modeled per the Site Plans, provided by the building architect. Table 17-4 shows the analysis framework and the distance between each source building and receiving building.

Table 17-4. Project-on-Project Analysis Framework.

| Receiving Building |                      | Nearest and Applicable Source Building |   |                             |                   |                                    |
|--------------------|----------------------|--|---|-----------------------------|-------------------|------------------------------------|
| Receiving Building | Building Height (ft) | Source/s Building                      | Nearest Source Building (for E-Designation) | Source Building Height (ft) | Stack Height (ft) | Distance to Receptor Building (ft) |
| Site 1 East Tower  | 131                  | Site 2                                 | Site 3, Site 4                              | 95                          | 98                | 50                                 |
|                    |                      | Site 3                                 |   | 95                          | 98                | 0                                  |
|                    |                      | Site 4                                 |   | 105                         | 108               | 0                                  |
|                    |                      | Site 5                                 |   | 105                         | 108               | 170                                |
|                    |                      | Site 6                                 |   | 85                          | 88                | 144                                |
|                    |                      | Site 7                                 |   | 85                          | 88                | 87                                 |
|                    |                      | Site 8                                 |   | 85                          | 88                | 78                                 |
| Site 2             | 95                   | Site 3                                 | Site 8                                      | 95                          | 98                | 20                                 |
|                    |                      | Site 6                                 |   | 85                          | 78                | 215                                |
|                    |                      | Site 7                                 |   | 85                          | 78                | 135                                |
|                    |                      | Site 8                                 |   | 85                          | 88                | 35                                 |
| Site 3             | 95                   | Site 2                                 | Site 8                                      | 95                          | 98                | 20                                 |
|                    |                      | Site 6                                 |   | 85                          | 78                | 250                                |
|                    |                      | Site 7                                 |   | 85                          | 78                | 170                                |
|                    |                      | Site 8                                 |   | 85                          | 88                | 75                                 |
| Site 4             | 105                  | Site 2                                 | Site 7                                      | 95                          | 98                | 125                                |
|                    |                      | Site 3                                 |   | 95                          | 98                | 100                                |
|                    |                      | Site 5                                 |   | 105                         | 108               | 140                                |
|                    |                      | Site 6                                 |   | 85                          | 88                | 125                                |
|                    |                      | Site 7                                 |   | 85                          | 88                | 90                                 |
| Site 5             | 105                  | Site 8                                 | Site 6                                      | 85                          | 88                | 85                                 |
|                    |                      | Site 2                                 |   | 95                          | 98                | 270                                |
|                    |                      | Site 3                                 |   | 95                          | 98                | 310                                |
|                    |                      | Site 4                                 |   | 105                         | 108               | 140                                |
|                    |                      | Site 6                                 |   | 85                          | 88                | 105                                |
|                    |                      | Site 7                                 |   | 85                          | 88                | 145                                |
| Site 6             | 85                   | Site 8                                 | Site 7                                      | 85                          | 88                | 225                                |
|                    |                      | Site 7                                 |   | 85                          | 88                | 40                                 |
| Site 7             | 85                   | Site 8                                 | Site 6 & Site 8                             | 85                          | 88                | 140                                |
|                    |                      | Site 6                                 |   | 85                          | 88                | 60                                 |
| Site 8             | 85                   | Site 7                                 | Site 7                                      | 85                          | 88                | 140                                |
|                    |                      | Site 6                                 |   | 85                          | 88                | 60                                 |



As seen in Table 17-4, all the Projected Development Sites 1-8 required cumulative analyses. For each analysis, stacks were located as close as possible to the receiving building, and the stack of the nearest source building was gradually moved further from the receiving building, until no impact was predicted. Where a stack setback distance was required, this setback distance was applied in the other cumulative analyses.

Per *CEQR TM*, the 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.

As previously outlined, AERMOD's Tier 1 modules were initially utilized for the 1-hour NO<sub>2</sub> analyses, followed by a Tier 2 application of NO<sub>x</sub>/NO<sub>2</sub> ratio of 80% to the NO<sub>x</sub> modeled concentration to account for the NO<sub>x</sub> to NO<sub>2</sub> conversion. A detailed Tier 3 approach was then applied if exceedances of the 1-hour NO<sub>2</sub> NAAQS were estimated.

### **HVAC Emissions**

The proposed project proposes to use natural gas as the fossil fuel for the HVACs equipment.

As such, emission rates were estimated as follows:

- The Development Sites are expected to be heated by natural gas, emission rates of NO<sub>x</sub> 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.

Table 17-5 shows the Projected Development Sites NO<sub>2</sub> and PM<sub>2.5</sub> emission rates, both short-term and annual.

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

| Site ID | Floor Area Residential | Floor Area Non-Residential | NO <sub>2</sub> Emission factor <sup>(2)</sup> |              | PM <sub>2.5</sub> Emission factor <sup>(1)</sup> |              |
|---------|------------------------|----------------------------|--|--------------|--|--------------|
|         | ft <sup>2</sup>        | ft <sup>2</sup>            | g/sec 1-hour                                   | g/sec Annual | g/sec 24-hour                                    | g/sec Annual |
| Site 2  | 38,476                 | 7,058                      | 1.36E-02                                       | 3.73E-03     | 1.03E-03   | 2.83E-04     |
| Site 3  | 20,658                 | 3,449                      | 7.23E-03                                       | 1.98E-03     | 5.49E-04   | 1.50E-04     |
| Site 4  | 16,970                 | 2,708                      | 5.91E-03                                       | 1.62E-03     | 4.49E-04   | 1.23E-04     |
| Site 5  | 16,740                 | 2,661                      | 5.83E-03                                       | 160E-03      | 4.43E-04   | 1.21E-04     |
| Site 6  | 35,968                 | 12,600                     | 1.41E-02                                       | 3.88E-03     | 1.08E-03   | 2.95E-04     |
| Site 7  | 14,924                 | 3,800                      | 5.53E-03                                       | 1.52E-03     | 4.20E-04   | 1.15E-04     |
| Site 8  | 19,820                 | 19,820                     | 7.05E-03                                       | 1.93E-03     | 5.36E-04   | 1.47E-04     |

The diameter of the stack 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°F (423°K), which is appropriate for boilers.

## **HVAC Meteorological Data**

All analyses were conducted using the latest five consecutive years of meteorological data (2012-2016). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. Data was processed by Lakes Environmental Software, Inc. using the current EPA AERMET version (14134) and EPA procedures. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

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

Per Lakes Environmental Inc., PM<sub>2.5</sub> 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 Background Concentrations - Tier 3 Analysis**

The NO<sub>2</sub> hourly background concentration was added as a source in the AERMOD Tier 3 models. This produces the combined impact of both the buildings stacks' emissions and the background concentration at corresponding hours.

The hourly ozone and NO<sub>2</sub> background concentrations, obtained from the New York City Department of City Planning was developed from available monitoring data collected by the NYSDEC at the Queens College monitoring station for the 5 consecutive years (2012-2016), and compiled into AERMOD required hourly emission (NO<sub>2</sub>) and concentration (ozone) data format.

## **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. As such, each pollutant was modeled separately and two stacks, one for the short-term and the other for annual averaging times were created. Each stack (or group of stacks) 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. The other parameters of each pollutant corresponding to the scenario modeled were:

1-hour NO<sub>2</sub> Tier 1: NAAQS option enabled, Tier 1 conversion method and 8<sup>th</sup> highest value output.

1-hour NO<sub>2</sub> Tier 3; NAAQS option enabled, Tier 3 conversion method and 8<sup>th</sup> highest value output. The stack's equilibrium ratio and in-stack ratio were set to 0.3 and 0.75 respectively.

Annual NO<sub>2</sub>: NO<sub>2</sub> pollutant selected and Report Maximum Annual Average for Each Met Year enabled.

24-hour PM<sub>2.5</sub> NAAQS: Based on a multi-year average of ranked maximum daily values enabled and 1<sup>st</sup> highest value output.

Annual PM<sub>2.5</sub>: PM<sub>2.5</sub> pollutant selected and Report Maximum Annual Average for Each Met Year enabled.

In total, 36 models were run; one for each pollutant; one with building wake effect enabled; another with the building wake effect disabled; and additional 1-hour NO<sub>2</sub> Tier 3 models where impact was predicted using a Tier 2 approach.

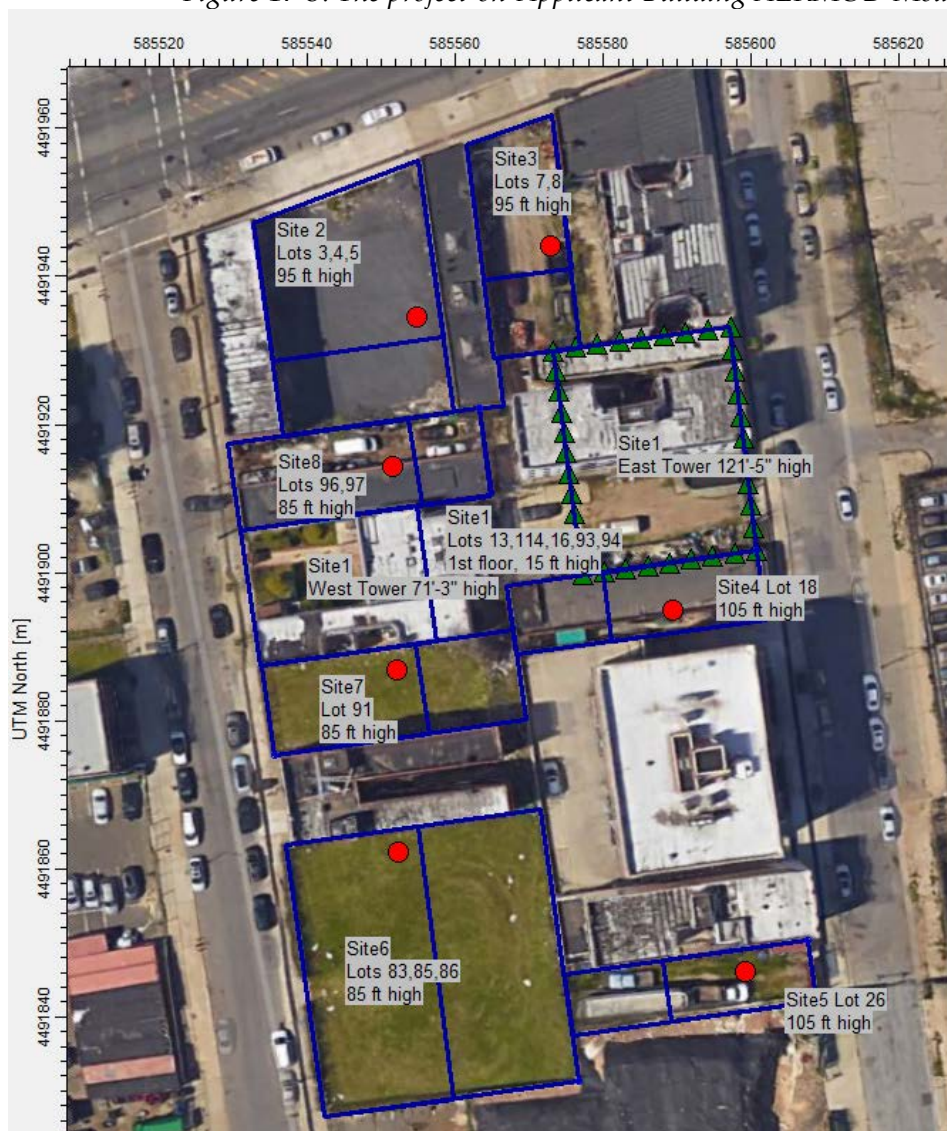
### **HVAC Stacks and Receptors Locations**

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. As such, HVAC stacks of each building were located on the buildings' highest tiers, 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 receiving buildings were placed at sensitive areas, where people have continuous access, at 10 foot increments on all floor levels, and conservatively at 3 feet below the roof line including where buildings are contiguous.

AERMOD Project-on-Applicant Building model displayed in Figure 17-5 shows the buildings configuration, stacks' locations, and the sensitive receptors around the building envelope. As displayed, Projected Development Sites 4 stack required a 20 feet setback distance.

Figure 17-5. The project-on-Applicant Building AERMOD Model.





## Results of Dispersion Analyses

As stated in the AERMOD Setting section, each pollutant averaging time was modeled twice – with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The results are compared with the 24-hour/annual PM<sub>2.5</sub> significant impact criteria, and the 1-hour/annual NO<sub>2</sub> NAAQS. Result of the project-on-project HVAC NO<sub>2</sub> and PM<sub>2.5</sub> analyses are shown in Table 17-6.

Table 17-6. Detailed HVAC Analyses Results.

| Receiving Development Site ID | 24-hr PM <sub>2.5</sub> Impact | Annual PM <sub>2.5</sub> Impact | 1-hr NO <sub>2</sub> Impact |          | Annual NO <sub>2</sub> Impact |
|-------------------------------|--------------------------------|---------------------------------|-----------------------------|----------|-------------------------------|
|                               | µg/m <sup>3</sup>              | µg/m <sup>3</sup>               | µg/m <sup>3</sup>           | Tier No. | µg/m <sup>3</sup>             |
| Site 1                        | 6.95                           | 0.23                            | 180                         | 3        | 43.9                          |
| Site 2                        | 4.35                           | 0.16                            | 133.8                       | 3        | 42.9                          |
| Site 3                        | 1.20                           | 0.05                            | 153                         | 1        | 41.5                          |
| Site 4                        | 1.55                           | 0.11                            | 170                         | 1        | 42.2                          |
| Site 5                        | 1.71                           | 0.06                            | 182                         | 1        | 41.6                          |
| Site 6                        | 0.33                           | 0.01                            | 132                         | 1        | 41.0                          |
| Site 7                        | 0.38                           | 0.01                            | 135                         | 1        | 41.0                          |
| Site 8                        | 0.40                           | 0.01                            | 130                         | 1        | 41.0                          |
| <b>Standard</b>               | <b>7.25</b>                    | <b>0.3</b>                      | <b>188</b>                  |          | <b>100</b>                    |

As seen in Table 17-6, the impact on the Applicant building and the Projected Development Site 2 required a NO<sub>2</sub> Tier 3 approach. In addition, Projected Development Site 4 required a stack setback distance of 20 feet from the Projected Development Site 1 East Tower building.

The PM<sub>2.5</sub> impacts are less than the significant impact criteria of 7.25 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 Actions concluded that fuel would need to be restricted to the exclusive use of natural gas in the HVAC systems. In addition, the minimum stack heights would need to be specified, and Projected Development Site 4 stack setback distance would be required.

The (E) Designation language is as follows:

**Block 7071, Lots 13, 16, 93, 94, 114 (Projected Development Site 1):** Any new residential or commercial development on the above-referenced property must exclusively use electric heat pumps for heating, ventilating, and air conditioning system, and high efficiency condensing tankless gas water heaters for the hot water system to avoid any potential significant adverse air quality impacts.

**Block 7071, Lots: 3, 4, 5 (Projected Development Site 2):** 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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 98 feet above grade, and at least 45 feet from the lot line facing Highland View Avenue to avoid any potential significant adverse air quality impact.

**Block 7071, Lots: 7, 8 (Projected Development Site 3):** 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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 98 feet above grade, and at least 45 feet from the lot line facing Highland View Avenue to avoid any potential significant adverse air quality impact.

**Block 7071, Lot 18 (Projected Development Site 4):** 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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 108 feet above grade, and at least 20 feet

from the lot line facing Surf Avenue to avoid any potential significant adverse air quality impact.

**Block 7071, Lot 26 (Projected Development Site 5):** 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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 108 feet above grade, and at least 20 feet from the lot line facing Surf to avoid any potential significant adverse air quality impact.

**Block 7071, Lots: 83, 85, 86 (Projected Development Site 6):** 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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 88 feet above grade, at least 70 feet from the lot line facing West 22<sup>nd</sup> Street to avoid any potential significant adverse air quality impact.

**Block 7071, Lot 91 (Projected Development Site 7):** 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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 88 feet above grade, and at least 55 feet from the lot line facing West 22<sup>nd</sup> Street to avoid any potential significant adverse air quality impact.

**Block 7071, Lots: 96, 97 (Projected Development Site 8):** 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 system to avoid any potential significant adverse air quality impacts. Stack shall be located at the building's highest level, or at a minimum of 88 feet above grade, and at least 47 feet from the lot line facing West 22<sup>nd</sup> Street to avoid any potential significant adverse air quality impact.



## 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 generally considers industrial sources within 400 feet of the Affected Area and major sources, large sources, and odor producing facilities within 1,000 feet of the Affected Area. These sources are categorized as follows:

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

Major emission sources are identified as those sources located at Title V facilities that require Prevention of Significant Deterioration permits.

Large emission sources are identified as sources located at facilities which require a State facility permit, such as solid waste or medical waste incinerators, asphalt and concrete plants, or large printing facilities.

Odor producing facilities are 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 Affected Area, and emissions of air pollutants from existing major and large sources within 1,000 feet of the Affected 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 Affected 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;

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.

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

The land survey identified the 17-story residential building, located at 2301 Surf Avenue (Block 7056, Lot 14), as having an HVAC system with a 21 MMBtu/hr design capacity. The building is located 350 feet from Projected Development Site 2. However, the stack is located 460 feet from the Affected Area. In addition, the stack on top of the 17-story building is approximately 70 feet above the Projected Development Site 2. As such, no impact is predicted to the proposed project from this boiler emission.

No existing large combustion sources, such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Affected Area were identified. In addition, no odor producing facility was identified within 1,000 feet of the Affected Area. As such, no analysis was warranted.

A search of the EPA Envirofacts database identified two facilities that may have active operational permits within 400 feet of the Affected Area. The registered facilities are King Cleaners at 2115 Surf Avenue (Block 7058, Lot 42), and ConEd at 3054 West 22<sup>nd</sup> Street (Block 7071, Lot 76). Cleaner King at 2115 Surf Avenue is also identified in the NYCDEP database search and the emissions from this facility are discussed in the Industrial Source Toxic Air Emission.

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

The land survey study identified 11 commercial, industrial, or processing facilities that are likely to have NYC operational permits. The permits listed in Table 17-3 show operational permits and boiler permits, where industrial operational permits start with a "P" and boiler permits with a "C". A list of these facilities and the NYCDEP record search are presented in Table 17-7.

Table 27-7. Land Survey Study of Industrial Sources Within 400 Feet of the Affected Area

| Block | Lot | Land Use (Lots within 400 feet) | CATS info   | Permit No. | Current Use (Land Survey)                  |
|-------|-----|---------------------------------|-------------|------------|--|
| 7055  | 13  | Residential                     | Current     | CR641514   | Residential                                |
|       |     |                                 | Current     | CR641614   |  |
|       |     |                                 | Current     | CR641814   |  |
|       |     |                                 | Expired     | CA048197   |  |
|       |     |                                 | Cancelled   | CB026106   |  |
| 7056  | 14  | Residential                     | Current     | CW004017   | Residential                                |
|       |     |                                 | Cancelled   | CB112703   |  |
| 7058  | 42  | Commercial/Retail               | Cancelled   | PA072988   | Supermarket, Pharmacy & Financial Services |
|       |     |                                 | Cancelled   | CA241988   |  |
| 7059  | 26  | Residential                     | Cancelled   | CB112902   | Residential                                |
|       |     |                                 | Cancelled   | CB546903   |  |
| 7070  | 1   | Residential                     | Disapproved | CB009802   | Residential                                |
|       |     |                                 | Cancelled   | CA122995   |  |
|       | 133 | Residential                     | Expired     | CA078993   | Residential                                |
|       |     |                                 | Expired     | CA069192   |  |
|       | 148 | Commercial/Office Building      | Current     | PB010206   | Health Care Center                         |
|       |     |                                 | Current     | CR816215   |  |
| 7071  | 24  | Residential                     | Expired     | CA361992   | Residential                                |
|       | 76  | ConEd Utility                   | No Record   |            | Amphitheater                               |
|       | 96  | Transportation                  | No Record   |            | Car Rental                                 |
| 7171  | 130 | Commercial/Warehouse            | Expired     | CA148874   | Commercial/Warehouse                       |

The record search results show that nine facilities have or had operational permits from the NYCDEP. Operational permits for boilers are treated as HVAC systems of existing land uses, hence no analysis is required. The industrial/processing certificates, those beginning with a "P", were either cancelled or were for an engine/generator. However, the land survey investigated whether these facilities are still operating. The facility with the cancelled industrial/processing certificate is Dial French Cleaners at 2115 Surf Avenue and is no longer in operation at the location. No other facilities that are likely to emit toxic air operate at this location. The facility with the industrial/processing certificate for an engine/generator is the Sea Crest Health Care Center. This facility is



still in operation. However, engine/generator are used in emergency, such as in a power outage, and are not analyzed under CEQR.

In addition to the NYCDEP CATs permit search, the land survey study explored whether there are any other facilities that are likely to emit toxic air operate in the 400 feet influence zone. Brooklyn Stairs, a woodworking facility specializing in wooden stairways and handrails, located at 3030 West 22<sup>nd</sup> Street (Block 7071, Lot 18), was identified as a possible toxic air emitter. However, the facility does not have an active operational permit from the NYCDEP, and this location is Projected Development Site 4. There were not any other facilities that are likely to emit toxic air were identified within the 400 feet influence zone.

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 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 Affected Area, emissions from existing stationary sources would not cause a significant air quality impact to the proposed project.

## **19. NOISE**

### **Introduction**

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

### **Noise Analysis**

#### **Project Area**

Noise monitoring was conducted to support a rezoning application affecting multiple sites, referred to as “The Project Area”. The Project Area consists of Block 7071, Lots 1, 3-9, 13, 16, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 93, 94, 96, 97, and 114. The proposed action would allow for new residential development on the northern half of the block bounded by Surf Avenue to the north, the Coney Island Boardwalk to the south, West 22<sup>nd</sup> Street to the east, and West 23<sup>rd</sup> Street to the west within the Coney Island neighborhood of Brooklyn, New York.

Surf Avenue is a two-way east-west street with two moving lanes in each direction and curbside parking on both sides. West 22<sup>nd</sup> Street and West 23<sup>rd</sup> Street both run north-south and are two-way between Surf Avenue and the dead end at Riegelmann Boardwalk.

The proposed action warrants an assessment of the potential for adverse effects on project occupants from ambient noise. The Ford Amphitheatre in the nearby Seaside Park, which was recently constructed, has the potential to create unacceptable levels of ambient noise around the projected development sites. An analysis for the potential noise impacts of this concert venue has already been reviewed and there is no potential for significant impact on the proposed project. See the Noise Appendix to this

document which includes the Noise Chapter of the Seaside Park and Community Arts Center FEIS.

Vehicular traffic also has the potential to create unacceptable levels of ambient noise around the projected development sites. The proposed action would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. This noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development. (A detailed assessment of noise emitted from the Ford Amphitheatre was included in the FEIS for the Seaside Park and Community Arts Center.)

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



**Table Noise-1: Noise Levels of Common Sources**

| <b>Table 19-1 Noise Levels of Common Sources</b>  |                    |
|---|--------------------|
| <b>Sound Source</b>   | <b>SPL (dB(A))</b> |
| 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                  |
| <i>Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A) is perceived as a doubling or halving in SPL.</i> |                    |
| <i>Source: 2014 CEQR Technical Manual</i>   |                    |

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.
  - $L_{eq}(24)$  is the continuous equivalent sound level over a 24-hour time period.

The sound level exceeded during a given percentage of a measurement period is the percentile- exceeded sound level ( $L_X$ ). 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 consists of vehicular traffic, 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 six (6) locations adjacent to the area proposed for rezoning. These locations are identified in **Figure 1** below.

Noise monitoring was conducted using two (2) Type 1 Casella CEL-633 sound meters with wind screens. The monitors were each placed on a tripod at a height of approximately three feet above the ground, away from any other noise-reflective surfaces. The monitors were calibrated prior to and following each monitoring session. Periods of peak vehicular traffic around the subject site constitute a worst-case condition for noise at the Project Area.

**Photo 1**



**Location 1: Surf Avenue**  
*Approximately 50 feet east of the West 23<sup>rd</sup> Street and Surf Avenue Intersection*



**Photo 2**



**Location 2: Surf Avenue**

*Approximately 50 feet west of the Surf Avenue and West 22<sup>nd</sup> Street Intersection*

**Photo 3**



**Location 3: West 23<sup>rd</sup> Street**

*Approximately 160 feet south of the Surf Avenue and West 23<sup>rd</sup> Street Intersection*

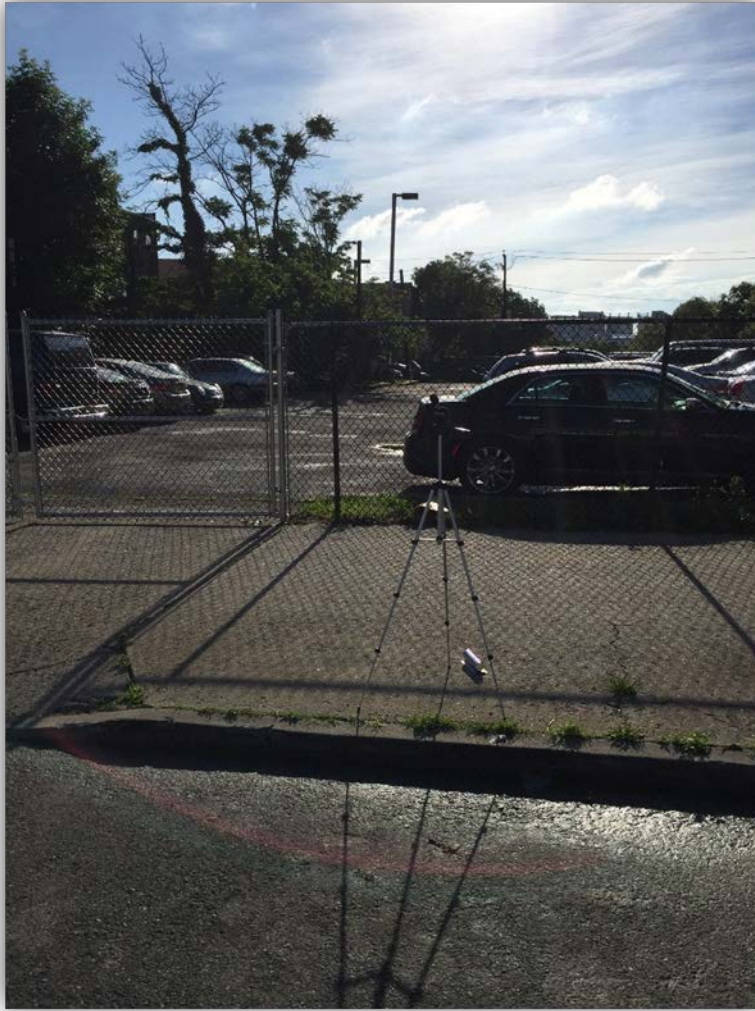
**Photo 4**



**Location 4: West 22<sup>nd</sup> Street**

*Approximately 160 feet south of the Surf Avenue and West 22<sup>nd</sup> Street Intersection*





**Photo 5**

**Location 5: West 23<sup>rd</sup> Street**

*Approximately 200 feet north of Riegelmann Boardwalk*



## Photo 6



### **Location 6: West 22<sup>nd</sup> Street**

*Approximately 200 feet north of Riegelmann Boardwalk*

#### **Measurement Conditions**

Monitoring was conducted during typical midweek conditions, on Tuesday, June 20, 2017. The weather was dry and sunny (approximately 75<sup>o</sup> Fahrenheit) and wind speeds were mild during all monitoring periods. 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. The volume of traffic, and its corresponding level of noise is mild at Locations Three (3), Four (4), Five (5) and Six (6) and moderate 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 highest recorded L<sub>10</sub> noise level at each location.*

**Table Noise-2 (1 of 6): Noise Levels (dB)**

*Location 1: Noise Levels on Surf Avenue*

*Approximately 50 feet east of the West 23<sup>rd</sup> Street and Surf Avenue Intersection*

| Tuesday, June 20, 2017 |                     |                     |                     |
|------------------------|---------------------|---------------------|---------------------|
| Time                   | 07:30 AM - 07:50 AM | 12:00 PM - 12:20 PM | 16:30 PM - 16:50 PM |
| L <sub>max</sub>       | 90.6                | 97.3                | 98.3                |
| <b>L<sub>10</sub></b>  | <b>71.5</b>         | 70.5                | 71.0                |
| L <sub>eq</sub>        | 69.8                | 71.0                | 71.4                |
| L <sub>50</sub>        | 64.0                | 63.5                | 64.5                |
| L <sub>90</sub>        | 56.5                | 58.0                | 59.0                |
| L <sub>min</sub>       | 51.8                | 51.0                | 52.6                |

**Table Noise-2 (2 of 6): Noise Levels (dB)**

*Location 2: Noise Levels on Surf Avenue:*

*Approximately 50 feet west of the Surf Avenue and West 22<sup>nd</sup> Street Intersection*

| Tuesday, June 20, 2017 |                     |                     |                     |
|------------------------|---------------------|---------------------|---------------------|
| Time                   | 07:30 AM - 07:50 AM | 12:00 PM - 12:20 PM | 16:30 PM - 16:50 PM |
| L <sub>max</sub>       | 93.2                | 90.9                | 89.6                |
| <b>L<sub>10</sub></b>  | <b>73.5</b>         | 71.5                | 70.5                |
| L <sub>eq</sub>        | 71.2                | 69.3                | 68.5                |
| L <sub>50</sub>        | 64.0                | 63.5                | 63.5                |
| L <sub>90</sub>        | 56.5                | 57.5                | 58.5                |
| L <sub>min</sub>       | 51.8                | 51.4                | 52.2                |

**Table Noise-2 (3 of 6): Noise Levels (dB)**

*Location 3: West 23<sup>rd</sup> Street*

*Approximately 160 feet south of the Surf Avenue and West 23<sup>rd</sup> Street Intersection*

| Tuesday, June 20, 2017 |                     |                     |                     |
|------------------------|---------------------|---------------------|---------------------|
| Time                   | 07:51 AM - 08:11 AM | 12:21 PM - 12:51 PM | 16:21 PM - 16:41 PM |
| L <sub>max</sub>       | 82.9                | 81.7                | 82.3                |
| <b>L<sub>10</sub></b>  | <b>65.5</b>         | 61.5                | 62.5                |
| L <sub>eq</sub>        | 62.4                | 59.3                | 59.2                |
| L <sub>50</sub>        | 59.0                | 54.0                | 56.5                |
| L <sub>90</sub>        | 55.0                | 52.0                | 53.5                |
| L <sub>min</sub>       | 51.6                | 95 49.6             | 51.2                |

**Table Noise-2 (4 of 6): Noise Levels (dB)**

**Location 4:** West 22<sup>nd</sup> Street

*Approximately 160 feet south of the Surf Avenue and West 22<sup>nd</sup> Street Intersection*

| Tuesday, June 20, 2017 |                     |                     |                     |
|------------------------|---------------------|---------------------|---------------------|
| Time                   | 07:52 AM – 08:12 AM | 12:22 PM – 12:44 PM | 16:52 PM – 17:12 PM |
| L <sub>max</sub>       | 80.0                | 74.6                | 91.3                |
| <b>L<sub>10</sub></b>  | 61.5                | 59.5                | <b>69.0</b>         |
| L <sub>eq</sub>        | 59.4                | 56.5                | 67.5                |
| L <sub>50</sub>        | 56.0                | 54.0                | 59.0                |
| L <sub>90</sub>        | 53.0                | 52.0                | 55.0                |
| L <sub>min</sub>       | 51.0                | 49.3                | 51.9                |

**Table Noise-2 (5 of 6): Noise Levels (dB)**

**Location 5:** West 23<sup>rd</sup> Street

*Approximately 200 feet north of Riegelmann Boardwalk*

| Tuesday, June 20, 2017 |                     |                     |                     |
|------------------------|---------------------|---------------------|---------------------|
| Time                   | 08:12 AM – 08:32 AM | 12:42 PM – 13:02 PM | 17:13 PM – 17:33 PM |
| L <sub>max</sub>       | 101.1               | 84.6                | 84.3                |
| <b>L<sub>10</sub></b>  | 67.5                | 69.0                | 65.0                |
| L <sub>eq</sub>        | 70.7                | 65.0                | 62.8                |
| L <sub>50</sub>        | 61.0                | 60.5                | 60.0                |
| L <sub>90</sub>        | 57.5                | 58.0                | 58.0                |
| L <sub>min</sub>       | 54.4                | 55.7                | 56.1                |

**Table Noise-2 (6 of 6): Noise Levels (dB)**

**Location 6:** West 22<sup>nd</sup> Street

*Approximately 200 feet north of Riegelmann Boardwalk*

| Tuesday, June 20, 2017 |                     |                     |                     |
|------------------------|---------------------|---------------------|---------------------|
| Time                   | 08:14 AM – 08:34 AM | 12:43 PM – 13:03 PM | 17:13 PM – 17:33 PM |
| L <sub>max</sub>       | 83.3                | 81.5                | 87.7                |
| <b>L<sub>10</sub></b>  | <b>67.0</b>         | 59.5                | 62.5                |
| L <sub>eq</sub>        | 64.5                | 58.8                | 60.1                |
| L <sub>50</sub>        | 61.0                | 57.5                | 57.5                |
| L <sub>90</sub>        | 57.5                | 56.0                | 55.0                |
| L <sub>min</sub>       | 55.0                | 53.4                | 52.8                |

*Table Noise-3 below contains the traffic volumes (vehicle counts) and vehicle classifications for the morning, noon, and evening monitor sessions:*

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

*Morning Traffic Volumes and Vehicle Classifications*

|                            | <b>Location<br/>1</b> | <b>Location<br/>2</b> | <b>Location<br/>3</b> | <b>Location<br/>4</b> | <b>Location<br/>5</b> | <b>Location<br/>6</b> |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>Car/ Taxi</b>           | 125                   | 97                    | 18                    | 12                    | 10                    | 3                     |
| <b>Van/Light Truck/SUV</b> | 81                    | 134                   | 18                    | 14                    | 15                    | 7                     |
| <b>Heavy Truck</b>         | 5                     | 5                     | 0                     | 0                     | 2                     | 3                     |
| <b>Bus</b>                 | 11                    | 17                    | 2                     | 2                     | 4                     | 2                     |
| <b>Train</b>               | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     |

**Table Noise-3 (2 of 3):**

*Noon Traffic Volumes and Vehicle Classifications*

|                             | <b>Location<br/>1</b> | <b>Location<br/>2</b> | <b>Location<br/>3</b> | <b>Location<br/>4</b> | <b>Location<br/>5</b> | <b>Location<br/>6</b> |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>Car/ Taxi</b>            | 98                    | 82                    | 14                    | 13                    | 5                     | 10                    |
| <b>Van/ Light Truck/SUV</b> | 48                    | 92                    | 14                    | 4                     | 16                    | 7                     |
| <b>Heavy Truck</b>          | 8                     | 9                     | 1                     | 0                     | 2                     | 0                     |
| <b>Bus</b>                  | 4                     | 5                     | 1                     | 0                     | 0                     | 0                     |
| <b>Train</b>                | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     |



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**Table Noise-3 (3 of 3):***Evening Traffic Volumes and Vehicle Classifications*

|                             | <b>Location 1</b> | <b>Location 2</b> | <b>Location 3</b> | <b>Location 4</b> | <b>Location 5</b> | <b>Location 6</b> |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Car/ Taxi</b>            | 80                | 70                | 7                 | 16                | 14                | 17                |
| <b>Van/ Light Truck/SUV</b> | 52                | 101               | 19                | 18                | 10                | 12                |
| <b>Heavy Truck</b>          | 0                 | 13                | 0                 | 0                 | 0                 | 0                 |
| <b>Bus</b>                  | 9                 | 3                 | 1                 | 1                 | 1                 | 0                 |
| <b>Train</b>                | 0                 | 0                 | 0                 | 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  $L_{10}$  of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An  $L_{10}$  noise level of between 70 and 80 dB(A) is identified as marginally unacceptable.

- The highest recorded  $L_{10}$  at Location One (1) of the subject property was 71.5 dB during the evening monitoring period.
- The highest recorded  $L_{10}$  at Location Two (2) of the subject property was 73.5 dB during the morning period.
- The highest recorded  $L_{10}$  at Location Three (3) of the subject property was 65.5 dB during the morning period.
- The highest recorded  $L_{10}$  at Location Four (4) of the subject property was 69.0 dB during the evening period.
- The highest recorded  $L_{10}$  at Location Five (5) of the subject property was 69.0 dB during the afternoon period.
- The highest recorded  $L_{10}$  at Location Six (6) of the subject property was 67.0 dB during the morning period.

Table 19-3 of the 2014 *CEQR Technical Manual* identified required attenuation values to achieve acceptable interior noise levels. For an  $L_{10}$  noise level between 70 and 73 dB(A), an attenuation value of 28 is required.

Based on these results, a composite window-wall attenuation level of up to 31 dB(A) would be required for future development containing residential/ commercial uses on Surf Avenue. No attenuation measures would be required for other development sites. With

this level of noise attenuation, no significant adverse impacts related to noise would result from the proposed action.

### **Conclusions and Recommendations**

To avoid any potential impacts associated with noise, the Proposed Actions will place an (E) designation (E-488) for noise on the following property:

**Block 7071, Lots 3, 4, 5, 7, 8, 13, 16, 18, 26, 83, 85, 86, 91, 93, 94, 96, 97, 114**

The text of the (E) designation is as follows:

#### **Projected Development Site 2 (Non-Applicant owned): Block 7071, Lots 3, 4, and 5**

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

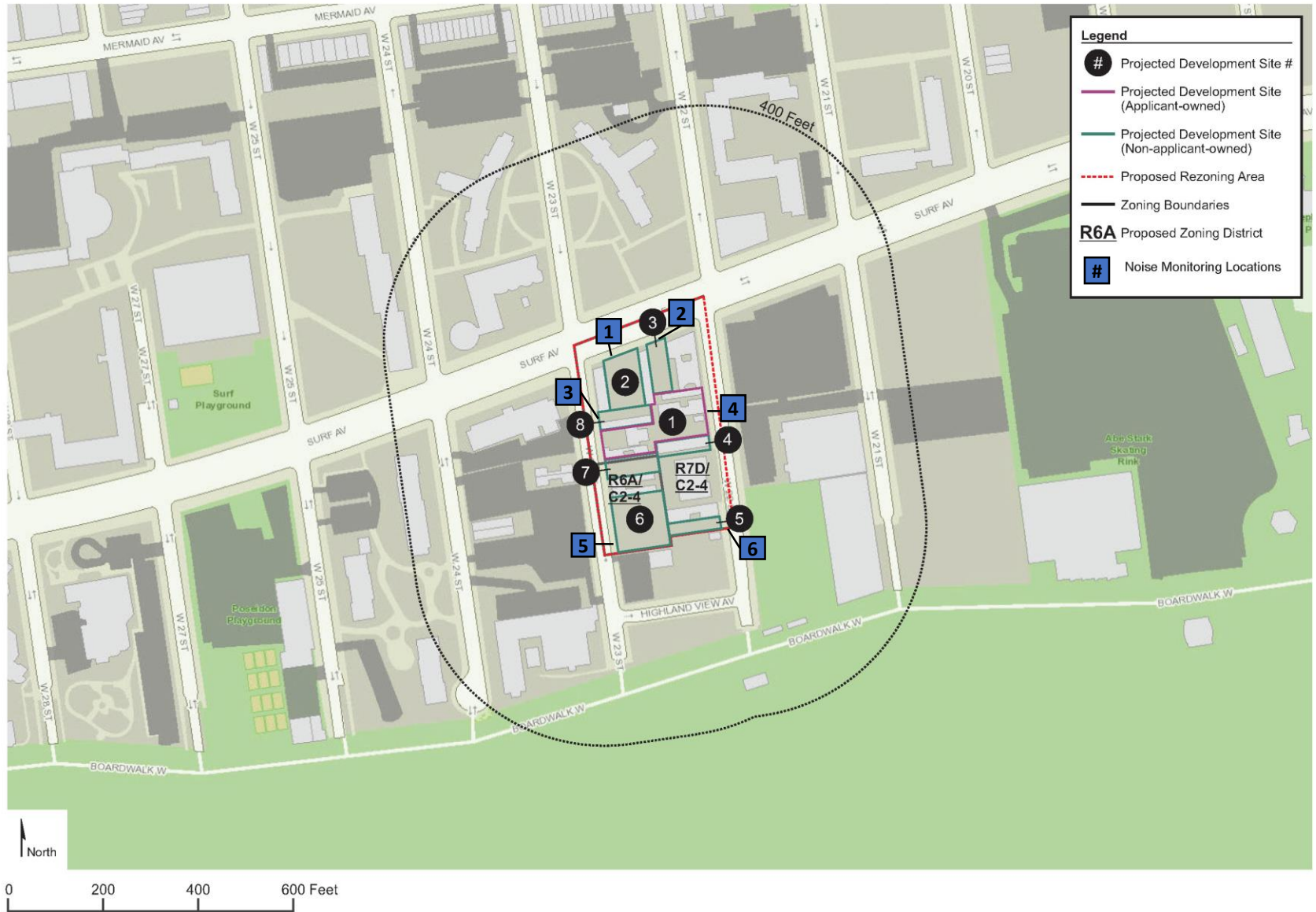
#### **Projected Development Site 3 (Non-Applicant owned): Block 7071, Lots 7 & 8**

“In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed window condition with a minimum of 31 dBA window/wall attenuation *on all facades*. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.”

The owner of Projected Development Site 1 will record the above-referenced (E) designation related to noise with the Mayor’s Office of Environmental Remediation (OER) prior to the City Planning Commission’s approval of the Proposed Actions.

With the implementation of the (E) designation, no significant adverse impacts related to noise would occur.

Therefore, the Actions would not result in any potentially significant adverse stationary or mobile source noise impacts, and further assessment is not warranted.



## **22. CONSTRUCTION**

### Introduction

A preliminary construction analysis may be required because the proposed development would result in the construction of multiple buildings where there is the potential for on-site receptors on buildings completed before the final build out.

### Proposed Construction Schedule

Construction would occur on 8 development sites located on the same block including one Applicant Owned site and 7 Non-Applicant owned parcels as further described below.

Construction on Projected Development Site 1 would occur concurrently over a 12-month period. Construction is anticipated to begin in mid-2018 and be completed by mid-2019. See attached Construction Schedule.

It is not known when construction on the 7 Non-Applicant owned sites would occur but it is assumed that it would occur following the completion of construction on the Applicant owned parcel. It would take approximately 8 years to construct these developments, and they would be completed in 2027 following an expected gap of approximately 6 months following the completion of the development on Projected Development Site 1. See attached Construction Schedule.

### Proposed Construction Activities

#### Applicant Owned Site

Exterior construction activities would include the following in sequence: site clearing, excavation, pile driving, construction of the foundation, construction of the steel structure, construction of the façade, roofing, and exterior site work. Exterior work would take approximately 8 months to complete and interior construction work would take approximately 4 to 5 months to complete.

#### Non-Applicant Owned Sites

Construction activities on the 7 Non-Applicant Owned Sites are anticipated to be similar to those on the Applicant controlled site except that building demolition would only be required on Projected Development Sites 4 and 8. It is assumed that the new buildings on the 7 Non-Applicant Owned Sites would be built sequentially, although it is not known in what sequence the development on these parcels would occur. Each building would probably take only about 6 to 8 months to construct as the projected developments on Sites 2 through 8 would be between 4% and 47% of the size of the building on Projected Development Site 1.

Project construction activities are expected to be typical for larger building construction projects in New York City. Construction activities would predominantly occur Monday through Friday, although limited delivery of certain critical pieces of equipment (e.g., cranes) may be necessary on weekend days if required in order to minimize traffic



disruptions. Any weekend work would be contingent upon any conditions that may be imposed by City agencies that approve and monitor construction activities such as the NYC Department of Buildings (DOB) and the NYC Department of Transportation (DOT). DOB also regulates the permitted hours of construction. In accordance with those regulations, typical construction activities in New York City begin no earlier than 7 AM during the week, and workers typically arrive and begin to prepare work areas between 6 and 7 AM. The standard weekday construction work day ends by 3:30 PM with an occasional extended shift until 6 PM.

### Potential Construction Impacts

In accordance with the 2014 *CEQR Technical Manual*, the proposed project was reviewed to determine whether further analysis of the proposed construction activities is needed for any technical area, as follows.

#### Transportation

According to the *CEQR Technical Manual*, a number of factors should be considered before determining whether a preliminary assessment of the effect of construction on transportation is needed including:

- *Whether the project's construction would be located in a Central Business District (CBD) or along an arterial or major thoroughfare;*
- *Whether the project's construction activities would require closing, narrowing, or otherwise impeding moving lanes, roadways, key pedestrian facilities, parking lanes and/or parking spaces, bicycle routes and facilities, bus lanes or routes, or access points to transit; and*
- *Whether the project would involve construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap, and last for more than two years overall.*

The project's construction would not be located in a Central Business District (CBD) or along an arterial or major thoroughfare. Surf Avenue which adjoins the Project Area is a two-lane, two-way roadway located close to the western end of the Coney Island peninsula and does not carry heavy traffic volumes. West 22<sup>nd</sup> and 23<sup>rd</sup> Streets which also adjoin the Project Area are one-lane, one-way local streets that extend for a total length of three blocks.

The project's construction activities would not require closing, narrowing, or otherwise impeding moving lanes, roadways, key pedestrian facilities, parking lanes and/or parking spaces, bicycle routes and facilities, bus lanes or routes, or access points to transit. The Projected Development Sites (following the demolition of existing structures on Site 1, 4, and 8) contain significant areas of undeveloped land that can accommodate the storage of construction equipment and materials as well as construction activities so construction activities will not need to interfere with traffic, transit, or pedestrian infrastructure on the surrounding streets.

Although the project would involve construction on multiple development sites on the same block there would be little overlap in construction activities under the assumption that buildings would be constructed sequentially. In addition, construction of the projected developments on the 8 Projected Development Sites would each occur over a relatively short time period of approximately 6 to 8 months. Construction on the non-Applicant owned sites would occur following the completion of construction on the Applicant owned sites. It is not known when construction would begin on the non-Applicant owned sites but it is likely that there would be a gap of approximately 6 months before construction would occur on these parcels.

On the basis of the above, construction of the proposed project would not be expected to result in significant adverse impacts on transportation.

#### Air Quality and Noise

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

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

All 8 Projected Development Sites are located near sensitive receptors as they all adjoin or are very close to existing residential development. In addition, the Projected Development Sites are close to the Coney Island Beach and Boardwalk at the southern end of the block and near the Ford Amphitheater and Seaside Park across West 22<sup>nd</sup> Street from the Project Area. The proposed development would result in the construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out. However, construction activities on Projected Development Sites 1 through 8 would be considered short term (less than two years) as they would each occur over a period of 6 to 8 months. Exterior construction activities on each of these developments would take only approximately 4 to 6 months on each site.

The *CEQR Technical Manual* states that if a project meets one or more of the criteria above, a preliminary air quality or noise assessment is not automatically required. Instead, various factors should be considered, such as the types of construction equipment (*e.g.*, gas, diesel, electric), the nature and extent of any commitment to use the Best Available Technology (BAT) for construction equipment, the physical relationship of the Project Area to nearby sensitive receptors, the type of construction activity, and the duration of any heavy construction activity. These measures are discussed below.

Demolition, excavation, and foundation activities, which often generate the highest levels of air emissions, would be temporary and limited in duration and would take approximately 3 months to complete for Projected Development Site 1 and less time than

that for Projected Development Sites 2 through 8 as these would involve significantly smaller structures. These activities would be spread out over 8 separate locations on the block and would not overlap with each other. In addition, any heavy equipment associated with the construction of the buildings (such as a crane) would operate from at least 8 different locations during construction.

### *Air Quality*

The project would make use of the Best Available Technology to minimize impacts to the residential uses and recreational space in the vicinity of the Projected Development Sites as further discussed below. The Applicant would implement the following measures that would minimize air quality and noise impacts on the surrounding community.

- *Diesel Equipment Reduction.* Construction of the proposed project would minimize the use of diesel engines and use electric engines, to the extent practicable. This would reduce the need for on-site generators, and require the use of electric engines in lieu of diesel where practicable.
- *Clean Fuel.* To the extent practicable, ultra-low sulfur diesel (ULSD) would be used for diesel engines on the Projected Development Sites.
- *Best Available Tailpipe Reduction Technologies.* To the extent practicable, non-road diesel engines with a power rating of 50 horsepower (hp) or greater would utilize the best available tailpipe (BAT) technology for reducing diesel particulate matter (DPM) emissions. Diesel particle filters (DPF) have been identified as being the tailpipe technology currently proven to have the highest PM reduction capability.

To the extent practicable, construction contracts would specify that all diesel non-road engines rated at 50 hp or greater would utilize DPFs, either installed on the engine by the original equipment manufacturer (OEM) or retrofit with a DPF verified by EPA or the California Air Resources Board, and may include active DPFs if necessary; or other technology proven to reduce DPM by at least 90 percent.

- *Utilization of Newer Equipment.* EPA's Tier 1 through 4 standards for non-road engines regulate the emission of criteria pollutants from new engines, including PM, CO, NO<sub>x</sub>, and hydrocarbons (HC). To the extent practicable, all non-road construction equipment in the project would meet at least the Tier 2 emissions standard, and construction equipment meeting Tier 3 and/or Tier 4 emissions standards would be used where conforming equipment is widely available, and the use of such equipment is practicable.
- *Dust Control.* Fugitive dust control plans will be implemented as part of the construction process. For example, stabilized truck exit areas would be established for washing off the wheels of all trucks that exit the construction sites. Truck routes within the sites would be watered as needed to avoid the re-suspension of dust. All trucks hauling loose material will be equipped with tight fitting tailgates and their loads securely covered prior to leaving the sites. In addition to regular cleaning by the City, streets adjacent to the site would be cleaned as frequently as needed by the construction contractor. Water sprays will be used

for all transfer of spoils to ensure that materials are dampened as necessary to avoid the suspension of dust into the air.

- *Restrictions on Vehicle Idling.* In addition to adhering to local laws restricting unnecessary idling on roadways, on-site vehicle idle time will also be restricted to three minutes, to the extent practicable, for all equipment and vehicles that are not using their engines to operate a loading, unloading, or a processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine.

Overall, these air emission control commitments would significantly reduce DPM emissions to a level otherwise achieved by applying the currently defined best available control technologies under NYC Local Law 77, which are required only for publically funded City capital projects. In addition, as stated in the *CEQR Technical Manual*, all the necessary measures would be implemented to ensure compliance with the NYC Air Pollution Control Code regulating construction-related dust emissions. Based on the project size and the construction work involved, construction activities for the proposed project would not be considered out of the ordinary or exceptional in terms of intensity and would be of a relatively short duration. Therefore, based on above and with the implementation of an emissions control program, the proposed project would not result in any significant adverse impacts on air quality.

#### *Noise*

While increases in ambient noise levels due to construction exceeding the CEQR impact criteria for two years or less may be noisy and intrusive, they are not considered to be significant adverse noise impacts. As described above, construction of the proposed development on Projected Development Site 1 would occur over a relatively short time period of approximately 12 months and only approximately 3 months would involve the noisiest exterior construction activities. These activities would not overlap with construction to occur on Projected Development Sites 2 through 8.

As described above, construction of Projected Development Sites 2 through 9 would take 6 to 8 months to complete with a shorter period involving exterior construction activities. Construction activities on these sites are expected to occur sequentially and following the completion of all construction on Projected Development Site 1. These activities would be located on 7 separate locations on the block.

Construction noise is regulated by the NYC Noise Control Code and by EPA's noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. If weekend or after hour work is necessary, permits would be required to be obtained, as specified in the NYC Noise Control Code. In addition, the Applicant would commit to a preparing a noise control plan that would be implemented during project construction. The measures to be contained in



the plan would avoid noise impacts on the community. The plan would be prepared to be compliant with the NYC Noise Control Code (which requires a "Construction Noise Mitigation Plan") and would include such measures as construction noise source controls, path controls, and receiver controls. With these measures in place, no significant noise impacts are expected to occur as a result of the project construction.

#### Historic and Cultural Resources

There are no historic or cultural resources on the Applicant's Projected Development Site 1 or elsewhere in the Project Area as confirmed in a LPC letter dated 12/07/17 (see Historic and Cultural Resources section above). One LPC designated resource, the Former Childs Restaurant Building at 2101 Boardwalk and West 21<sup>st</sup> Street, is located within 400 feet of the site. No Historic Districts or other individually designated historic resources are located within the surrounding 400-foot radius study area.

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

#### Hazardous Materials

No hazardous materials concerns would be anticipated in the Project Area which is primarily developed with residential uses and is zoned R5 for residential and community facility use. The 400-foot area surrounding the Project Area is developed with a mixed-use community containing residential two-, three-, and multi-family residences, community facilities, commercial uses, open space, parking, and vacant land. The 400-foot radius is zoned for R5, R6, R7D, and C2-4 for residential, community facility, and commercial use where hazardous materials would typically not be of concern.

#### Natural Resources

According to the *CEQR Technical Manual*, a construction assessment is not needed for natural resources unless the construction activities would disturb a site or be located adjacent to a site containing natural resources. The Projected Development Sites and the adjacent properties are fully developed and do not contain any natural resources. Therefore, there is no potential for significant adverse construction impacts on natural resources.

Open Space, Socioeconomic Conditions, Community Facilities, Land Use and Public Policy, Neighborhood Character, and Infrastructure

According to the *CEQR Technical Manual*, a preliminary construction assessment is generally not needed for these technical areas unless the following are true:

- *The construction activities are considered “long-term” (more than 2 years);*
- *Short-term construction activities would not directly affect a technical area, such as impeding the operation of a community facility.*

As discussed above, construction activities on Projected Development Sites 1 through 8 would be considered short term (less than two years) as they would each occur over a period of 12 months or less with gaps of 6 months or more between construction on each site. Construction of the proposed project would not have any significant direct effects on open space areas, socioeconomic conditions, community facilities, or infrastructure conditions, and would not have cumulative impacts on land use or neighborhood character. Therefore, construction of the proposed project would not be expected to result in any significant adverse construction impacts on these technical areas.

Conclusion

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

CONSTRUCTION SCHEDULE 3022 West 22nd Street Brooklyn, NY

|    | Task                                | Start    | End      | Dur | 2018 |     |     |     |     |     |     |     |     |     |     |     | 2019 |     |     |     |  |  |  |  |  |  |  |  |
|----|-------------------------------------|----------|----------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|--|--|--|--|--|--|--|--|
|    |                                     |          |          |     | May  | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May  | Jun | Jul | Aug |  |  |  |  |  |  |  |  |
|    | Construction Schedule               | 5/25/18  | 8/9/19   | 316 |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 1  | Site Clearing                       | 5/25/18  | 5/31/18  | 5   |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 2  | Excavation, Shoring of Excavation   | 5/31/18  | 6/25/18  | 18  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 3  | Pile driving operations             | 6/26/18  | 7/17/18  | 16  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 4  | Foundation formwork, accessories    | 7/18/18  | 8/7/18   | 15  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 5  | Foundation (conc.) Placement        | 8/8/18   | 8/23/18  | 12  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 6  | Backfilling                         | 8/24/18  | 8/29/18  | 4   |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 7  | Structural Steel placement          | 8/24/18  | 10/11/18 | 35  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 8  | Steel Decking                       | 10/12/18 | 11/6/18  | 18  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 9  | Roofing Membrane /Specialties       | 11/7/18  | 11/16/18 | 8   |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 10 | Deck Concrete placement             | 11/7/18  | 11/27/18 | 15  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 11 | Standpipe/Sprinkler                 | 11/28/18 | 12/14/18 | 13  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 12 | Exterior framing                    | 11/28/18 | 1/10/19  | 32  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 13 | Exterior Storefront                 | 1/11/19  | 1/17/19  | 5   |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 14 | Exterior sheathing                  | 1/11/19  | 2/11/19  | 22  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 15 | Windows/Exterior Doors              | 2/12/19  | 3/5/19   | 16  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 16 | Elevator                            | 2/12/19  | 3/1/19   | 14  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 17 | Rough Mechanical                    | 2/12/19  | 3/8/19   | 19  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 18 | Misc Specialties                    | 3/8/19   | 3/14/19  | 5   |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 19 | Rough Electric/Temp Electric        | 2/12/19  | 3/6/19   | 17  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 20 | Standpipe/Sprinkler                 | 11/9/18  | 11/29/18 | 15  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 22 | Rough carpentry                     | 2/12/19  | 4/10/19  | 42  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 23 | Railings Exterior                   | 12/12/18 | 12/21/18 | 8   |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 24 | Cellar Slab Concrete Placement      | 12/8/18  | 12/14/18 | 5   |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 24 | Rough plumbing                      | 12/4/18  | 1/15/19  | 31  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 25 | Fire Alarm                          | 12/15/18 | 12/31/18 | 11  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 26 | Exterior Finish                     | 3/6/19   | 3/22/19  | 13  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 27 | Finish Carpentry                    | 3/6/19   | 5/8/19   | 46  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 28 | Kitchens Cabinetry                  | 5/9/19   | 6/7/19   | 22  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 29 | Finish Plumbing                     | 5/9/19   | 6/19/19  | 30  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 30 | Finish Electric                     | 5/9/19   | 6/6/19   | 21  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 31 | Finish Mechanical                   | 5/9/19   | 6/3/19   | 18  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 32 | Punch List/ Walk thru/Commissioning | 6/19/19  | 7/10/19  | 16  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |
| 33 | Certificate of Occupancy            | 7/11/19  | 8/9/19   | 22  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |  |  |  |  |  |  |  |  |

West 22 Street Coney Island Rezoning

Projected Development Sites 2 through 8

Preliminary Construction Schedule

01/2020 06/2020 01/2021 06/2021 01/2022 06/2022 01/2023 06/2023 01/2024 06/2024 01/2025 06/2025 01/2026 06/2026 01/2027 06/2027

Site 2

Site 3

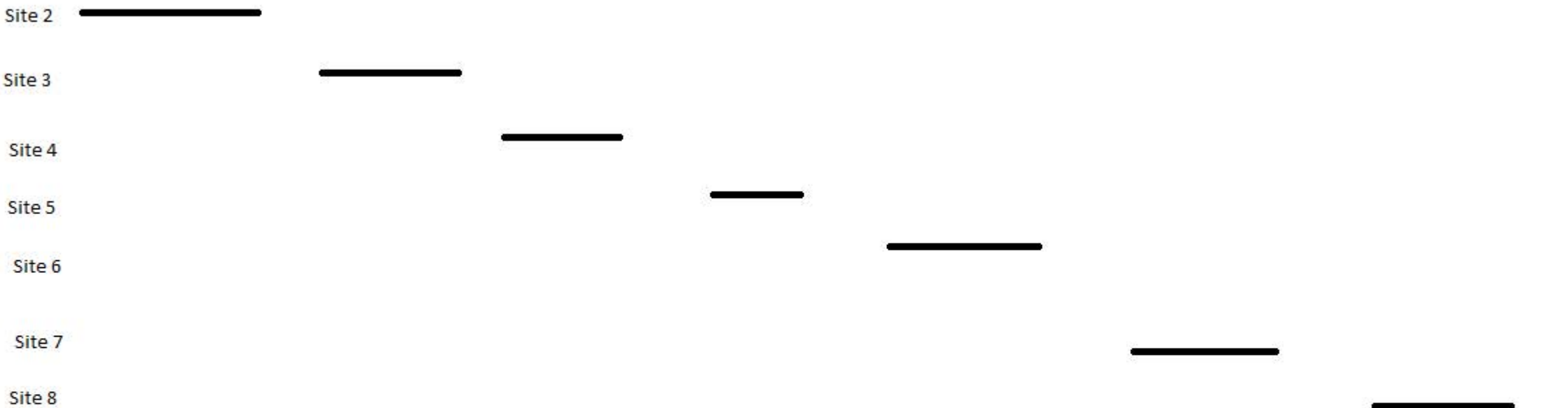
Site 4

Site 5

Site 6

Site 7

Site 8





# **ZONING APPENDIX**

Matter in underline is new, to be added;  
Matter in ~~strikeout~~ is to be deleted;  
Matter within # # is defined in Section 12-10;  
\* \* \* indicates where unchanged text appears in the Zoning Resolution

## Article XIII - Special Purpose Districts

### Chapter 1

#### Special Coney Island District

##### 131-00

##### GENERAL PURPOSES

\* \* \*

##### 131-10

##### SPECIAL USE REGULATIONS

\* \* \*

##### 131-132

##### Coney North and Coney West Subdistricts

In the Coney North and Coney West Subdistricts, #uses# allowed by the underlying district regulations shall apply, except as modified in this Section for #uses# fronting upon #streets# specified on Map 2 (Mandatory Ground Floor Use Requirements) in the Appendix to this Chapter. For the purposes of this Section, the “building line” shown on Parcel F on Map 2 shall be considered a #street line# of Ocean Way or Parachute Way, as applicable. Furthermore, an open or enclosed ice skating rink shall be a permitted #use# anywhere within Parcel F in the Coney West Subdistrict.

\* \* \*

From Use Groups 10A, 10B and 10C:

Depositories for storage, and wholesale offices or showrooms

From Use Group 11:

All #uses#

From Use Groups 12A and 12B:

Trade expositions

From Use Groups 12C and 12D:

All #uses#

From Use Group 14A and 14B:

All #uses#, except for bicycle sales, rental or repair shops.

\* \* \*

### 131-30

#### FLOOR AREA, LOT COVERAGE AND YARD REGULATIONS

The #floor area ratio# regulations of the underlying districts shall be modified as set forth in this Section, inclusive.

\* \* \*

### 131-32

#### Coney, West, Coney North and Mermaid Avenue Subdistrict

\* \* \*

### 131-321

#### Special floor area regulations for residential uses

R6A R7A R7D R7X

(a) Applicability of Inclusionary Housing Program

R6A, R7A, R7D and R7X Districts within the #Special Coney Island District# shall be #Inclusionary Housing designated areas#, or #Mandatory Inclusionary Housing areas#, pursuant to Section 12-10 (DEFINITIONS), for the purpose of making the Inclusionary Housing Program regulations of Section 23-90, inclusive, applicable as modified within the Special District.

(b) Maximum #floor area ratio#

The ~~base~~ #floor area ratio# for any #zoning lot# containing #residences# shall be as set forth in the table in this Section.

For #zoning lots# in #Inclusionary Housing designated areas#, the base #floor area ratio# shall be as set forth in Column 1 of the table in this paragraph. Such base #floor area ratio# may be increased to the maximum #floor area ratio# set forth in Column 2 of the such table through the provision of #affordable housing#, pursuant to the provisions for #Inclusionary Housing designated areas#, as set forth in Section 23-90 (INCLUSIONARY HOUSING), inclusive.

For # Mandatory Inclusionary Housing developments# on #MIH sites# where such #zoning lot# contains all the #affordable floor area# required for such #MIH development# pursuant to paragraph (d)(3) of Section 23-154, the maximum #floor area ratio# is set forth in Column 3 of such table. For #zoning lots# in #MIH areas#, the maximum #floor area ratio# for #zoning lots# containing #residences# subject to the exception provisions of paragraph (d)(4) of Section 23-154 (Inclusionary Housing) is set forth in Column 4 of the table in this paragraph.

For #zoning lot# containing #affordable independent residences for seniors#, the maximum #floor area ratio# shall be as set forth in Section 23-155 (Affordable Independent Residences for Seniors).

Parcels A through F-H within R6A or R7D Districts are shown on Map 1 (Special Coney Island District and Subdistricts).

FLOOR AREA RATIO  
FOR BUILDINGS CONTAINING RESIDENCES

[Delete table]

| <u>Subdistrict/Parcels</u>  | <u>Zoning District</u> | <u>Base<br/>#floor<br/>area<br/>ratio#</u> | <u>Maximum<br/>#floor<br/>area<br/>ratio#</u> |
|-----------------------------|------------------------|--|---|
| Coney West Parcels:         |                        |  |   |
| A, B, C, D                  | R7D                    | 4.35                                       | 5.8   |
| Coney West<br>Parcels: E, F |                        |  |   |
|                             | R7D                    | 4.12                                       | 5.5   |
| Coney North                 | R7X                    | 3.75                                       | 5.0   |
| Mermaid Avenue              | R7A                    | 3.45                                       | 4.6   |



[Insert new table]

|                            |                        |                                |                                   | <u>#Inclusionary Housing designated areas#</u> | <u>#Mandatory Inclusionary Housing Areas#</u> |                 |                 |
|----------------------------|------------------------|--------------------------------|-----------------------------------|--|---|-----------------|-----------------|
|                            |                        |                                |                                   | <u>Column 1</u>                                | <u>Column 2</u>                               | <u>Column 3</u> | <u>Column 4</u> |
| <u>Subdistrict/Parcels</u> | <u>Zoning District</u> | <u>Base #floor area ratio#</u> | <u>Maximum #floor area ratio#</u> | <u>For #MIH developments# on #MIH sites#</u>   | <u>For all other #residences#</u>             |                 |                 |
| <u>Coney West</u>          |                        |                                |                                   |  |   |                 |                 |
| <u>Parcels: A, B, C, D</u> | <u>R7D</u>             | <u>4.35</u>                    | <u>5.8</u>                        |  |   |                 |                 |
| <u>Parcels: E, F</u>       | <u>R7D</u>             | <u>4.12</u>                    | <u>5.5</u>                        |  |   |                 |                 |
| <u>Parcel H</u>            | <u>R7D</u>             |                                |                                   | <u>5.8</u>                                     | <u>4.35</u>                                   |                 |                 |
|                            | <u>R6A</u>             |                                |                                   | <u>3.6</u>                                     | <u>3.0</u>                                    |                 |                 |
| <u>Coney North</u>         | <u>R7X</u>             | <u>3.75</u>                    | <u>5.0</u>                        |  |   |                 |                 |
| <u>Mermaid Avenue</u>      | <u>R7A</u>             | <u>3.45</u>                    | <u>4.6</u>                        |  |   |                 |                 |

(c) Coney West #floor area# distribution

In the Coney West Subdistrict, #floor area# attributable to #zoning lots# within the following sets of parcels, as shown on Map 1 in the Appendix to this Chapter, may be distributed anywhere within such sets of parcels:

- Parcels A and B
- Parcels C and D
- Parcels E and F

In addition, #floor area# attributable to #block# 7071, lot 130, within Parcel B may be distributed anywhere within Parcels C or D

(d) Height and setback

For all #zoning lots#, or portions thereof, located in the Coney West or Coney North Subdistricts, the height and setback regulations of Section 23-664 (Modified height and setback regulations for certain buildings) shall not apply. In lieu thereof, the height and setback regulations of this Chapter shall apply.

\* \* \*

**131-40  
HEIGHT AND SETBACK REGULATIONS**

The underlying height and setback regulations shall not apply. In lieu thereof, the height and setback regulations of this Section, inclusive, shall apply. The height of all #buildings or other structures# shall be measured from the #base plane#.

\* \* \*

**131-43  
Coney West Subdistrict**

The regulations of this Section shall apply to all #buildings or other structures# in the Coney West Subdistrict. Map 4 (Street Wall Location), Map 5 (Minimum and Maximum Base Heights) and Map 6 (Coney West Subdistrict Transition Heights), in the Appendix to this Chapter, illustrate the #street wall# location provisions, minimum and maximum base height provisions and transition height provisions of this Section, inclusive. For the purposes of this Section, the “building line” shown on Parcel F shall be considered a #street line# of Ocean Way or Parachute Way, as indicated on such maps.

All portions of #buildings or other structures# that exceed the height limits set forth in this Section shall comply with the tower provisions of Section 131-434 (Coney West Subdistrict towers).

\* \* \*

**131-431  
Coney West District, Surf Avenue**

The regulations of this Section shall apply along Surf Avenue. The #street wall# location provisions of paragraph (a) of this Section shall also apply along #streets# intersecting Surf Avenue within 50 feet of Surf Avenue, and the #building# base regulations of paragraph (b) of this Section shall also apply along #streets# within 200 feet of Surf Avenue on Parcel H and 100 feet of Surf Avenue on other parcels.

\* \* \*

(b) #Building# base

A #street wall# fronting on Surf Avenue shall rise without setback to a minimum height of six #stories# or 65 feet, or the height of the #building#, whichever is less, and a maximum height of

eight #stories# or 85 feet, whichever is less, before a setback is required. However, on the Surf Avenue #block# frontages of Parcels A and H ~~bounded by West 21st Street and West 22nd Street~~, the minimum height of a #street wall# shall be 40 feet and the maximum height of a #street wall# shall be six #stories# or 65 feet, whichever is less, before a setback is required.

Above the level of the second #story#, up to 30 percent of the #aggregate width of street walls# may be recessed, provided no recesses are located within 15 feet of an adjacent #building# or within 30 feet of the intersection of two #street lines#, except where corner articulation is provided as set forth in paragraph (a)(2) of this Section.

All portions of a #building or other structure# that exceed the maximum heights set forth in this paragraph, (b), shall be set back from the #street line# at least 10 feet

(c) Transition height

Above the maximum base height, a #street wall# may rise to a maximum transition height of nine #stories# or 95 feet, whichever is less, provided that such #street walls# are set back a minimum distance of 10 feet from the Surf Avenue #street line#. However, such transition heights shall not apply to #buildings or other structures# on Parcel H. All portions of #buildings or other structures# that exceed a transition height of 95 feet shall comply with the tower provisions of Section 131-434 (Coney West Subdistrict towers).

**131-432**

**Along all other streets, other than Riegelmann Boardwalk**

The following regulations shall apply along all other #streets# in the Coney West Subdistrict, except within 70 feet of Riegelmann Boardwalk.

(a) #Street wall# location

The #street wall# of a #building# base, or portion thereof, beyond 50 feet of Surf Avenue, shall be located within eight feet of the #street line# except that, to allow portions of towers, where permitted, to rise without setback from grade, a portion of a #building# base below a tower may be set back 10 feet from the #street line#, provided the width of such setback area is not greater than 40 percent of the width of the #street wall# of the tower. In addition, for #street walls# facing Ocean Way, #building# entrances providing direct access to the lowest #story# located above the #base flood elevation# may be recessed up to a depth of 10 feet as measured from the #street line#, provided the width of such recess does not exceed 20 feet and the height of such recessed area is not less than 15 feet at any point as measured from the #base flood elevation#.

(c) Transition heights

Beyond 100 feet of Surf Avenue, a #street wall# may rise to a maximum transition height of nine #stories# or 95 feet, whichever is less, provided that:

\* \* \*

However, such transition heights shall not apply to #buildings or other structures# on Parcel H. A #building or other structure# may exceed such transition heights only in accordance with the tower provisions of Section 131-434.

\* \* \*

**131-434**

**Coney West Subdistrict towers**

All #stories# of a #building# or portions of other structures located partially or wholly above a transition height, or #building# base height, as applicable, shall be considered a “tower” and shall comply with the provisions of this Section.

\* \* \*

(b) Maximum length and height

On Parcels A, B, C, D, E and F, on On #blocks# bounding Surf Avenue, the maximum height of a #building or other structure# shall be 220 feet, and on #blocks# bounding the southerly #street line# of Ocean Way, the maximum height of a #building or other structure# shall be 170 feet. Furthermore, the outermost walls of all tower #stories# shall be inscribed within a rectangle, and no side of such rectangle shall exceed a length of 165 feet

Where #affordable housing# is provided on such parcels pursuant to Section 131-321 (Special floor area regulations for residential uses), the maximum height of a #building# shall be increased to 270 feet, provided that either:

\* \* \*

On Parcel H, the maximum height of a #building or other structure# within 100 feet of Surf Avenue or within 100 feet of West 22<sup>nd</sup> Street shall be 150 feet. Within the remainder of Parcel H, the maximum height for #buildings or other structures# shall comply with the heights set forth in Table 1 of Section 23-664 for an R6A district.

All #buildings# that exceed a height of 170 feet shall provide articulation in accordance with Section 131-46 (Tower Top Articulation).



\* \* \*

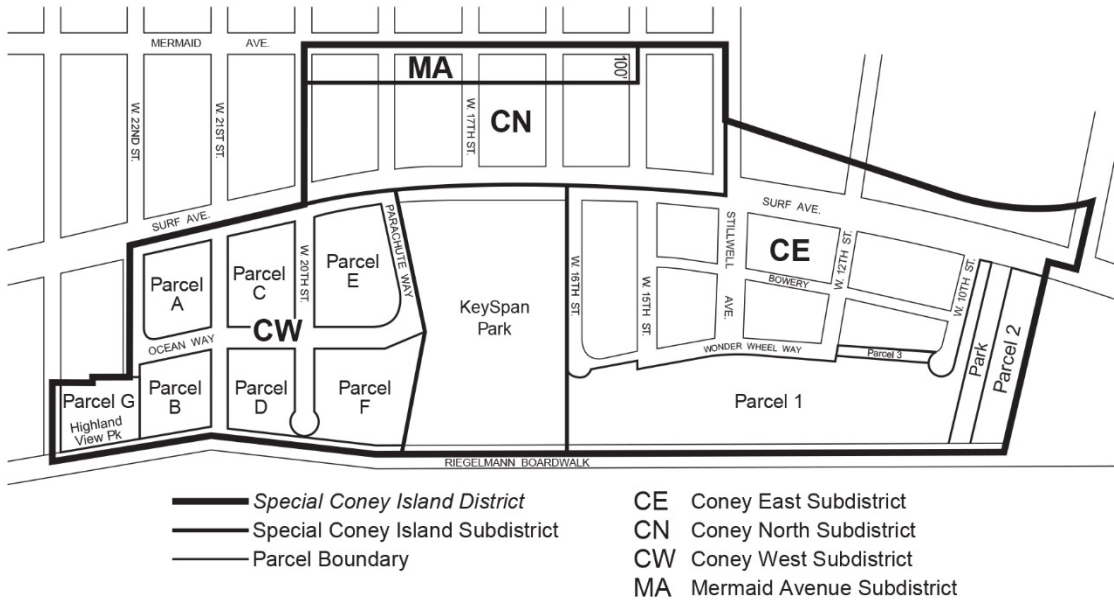
DRAFT

# Appendix A

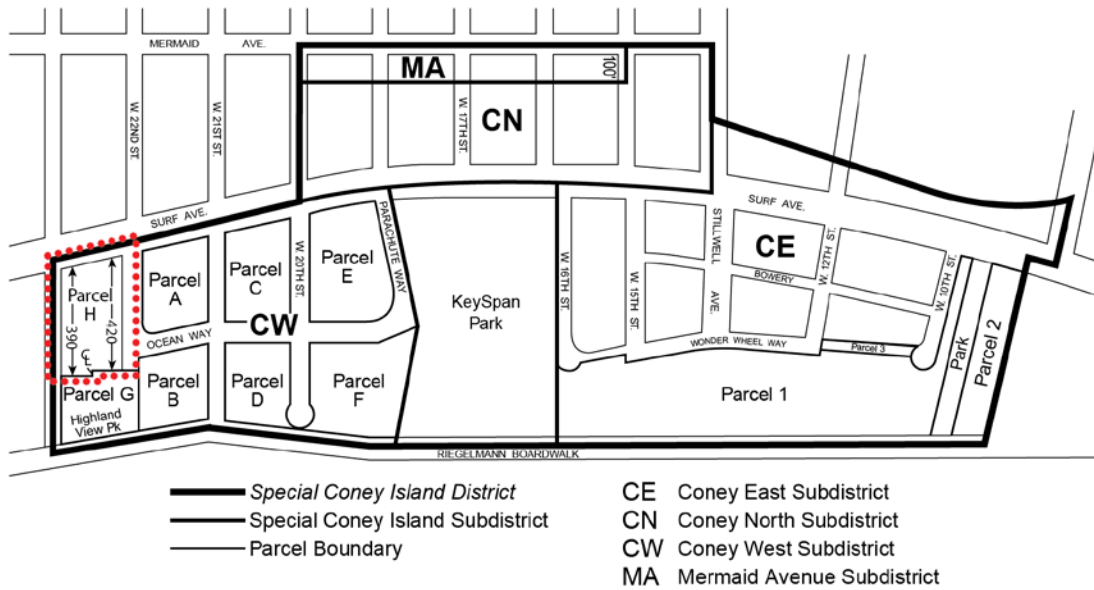
## Coney Island District Plan

Map 1 - Special Coney Island District and Subdistricts

[EXISTING]

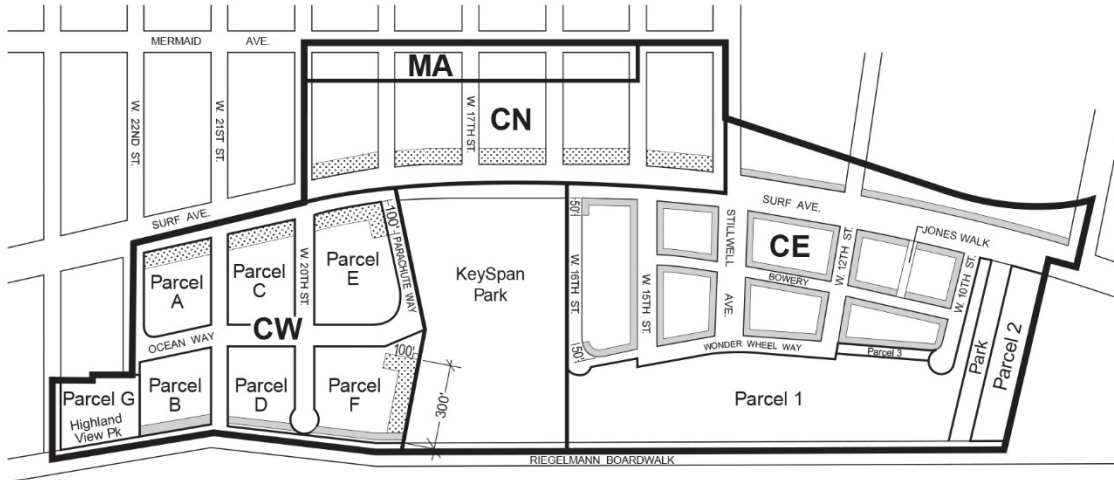


[PROPOSED]



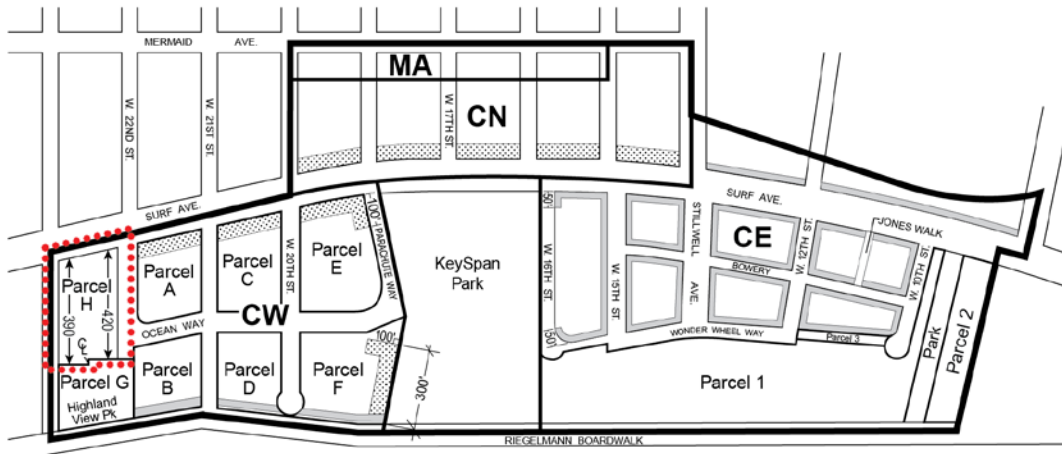
# Map 2 - Mandatory Ground Floor Use Requirements

[EXISTING]



- Special Coney Island District
- Special Coney Island Subdistrict
- 50' Depth (See Section 131-13)
- 15' Depth (See Section 131-13)
- Parcel Boundary

[PROPOSED]



- Special Coney Island District
- Special Coney Island Subdistrict
- 50' Depth (See Section 131-13)
- 15' Depth (See Section 131-13)
- Parcel Boundary

Map 3 - Coney East Subdistrict Floor Area Ratios

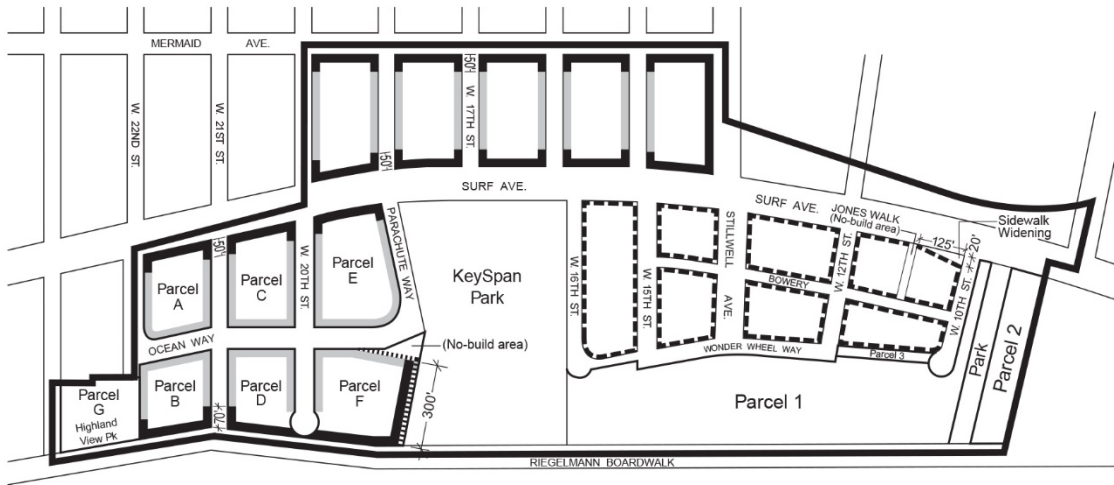
\* \* \*

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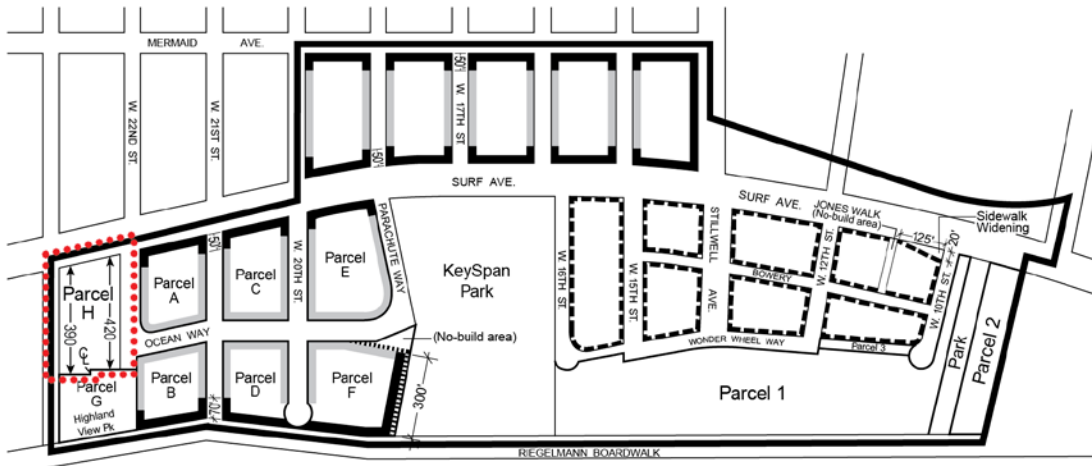
Map 4 - Street Wall Location

[EXISTING]



- Special Coney Island District
- Parcel Boundary
- Building Lines of Parcel F
- On Street Line
- Within 5' of Street Line
- Within 8' of Street Line

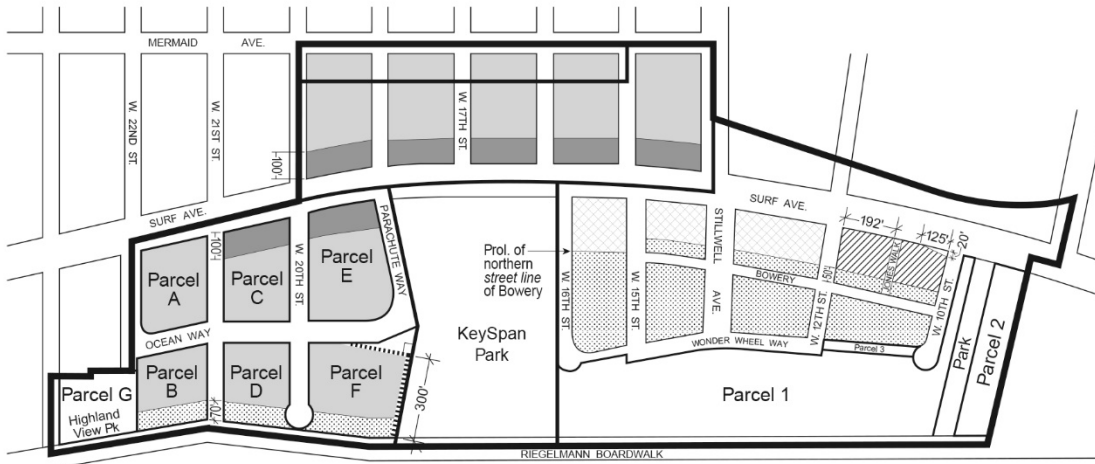
[PROPOSED]



- Special Coney Island District
- Parcel Boundary
- Building Line of Parcel F
- On Street Line
- Within 5' of Street Line
- Within 8' of Street Line

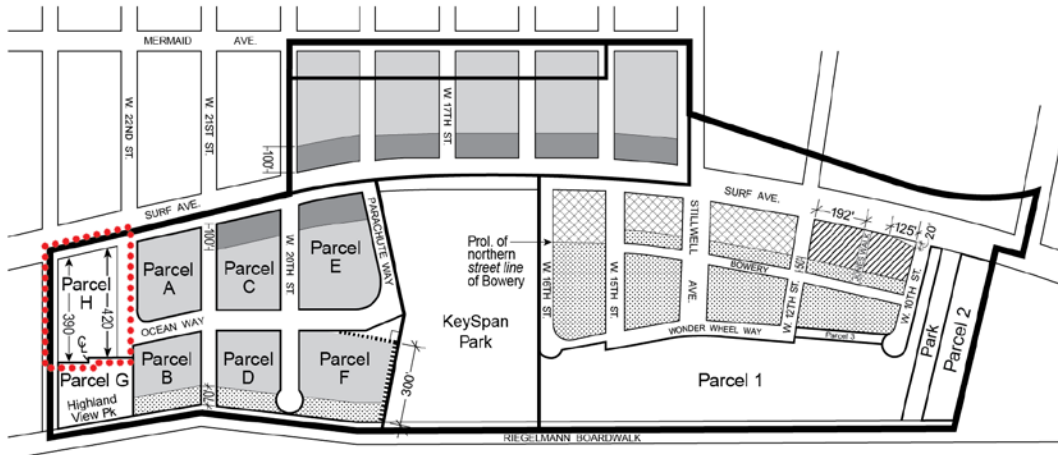
# Map 5 - Minimum and Maximum Base Heights

[EXISTING]



- Special Coney Island District
  - Special Coney Island Subdistrict
  - Parcel Boundary
  - ..... Building Line of Parcel F
- |  |   |
|--|---|
|  | 20' Minimum; 40' Maximum Base Height            |
|  | 35' Minimum; 45' Maximum Base Height            |
|  | 40' Minimum; 65' Maximum Base Height            |
|  | 35' Minimum; 65' Maximum Base Height with Tower |
|  | 65' Minimum; 85' Maximum Base Height            |
- (See Sections 131-42, 131-43, 131-44)

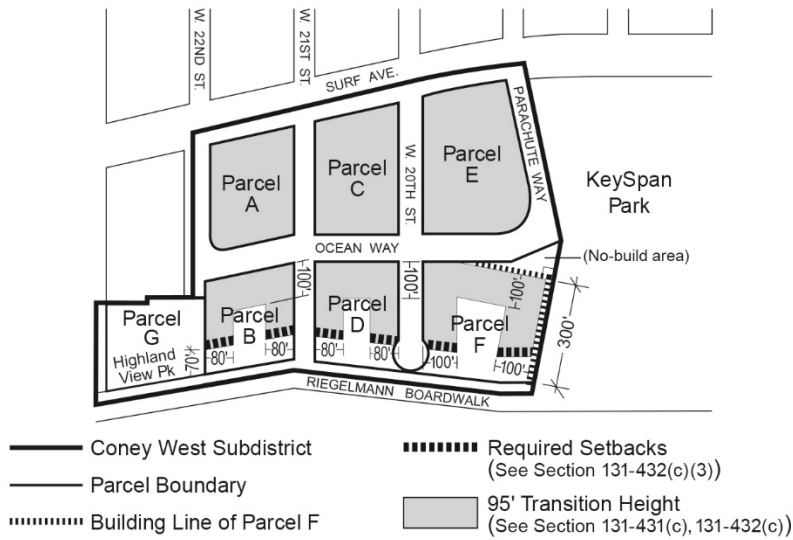
[PROPOSED]



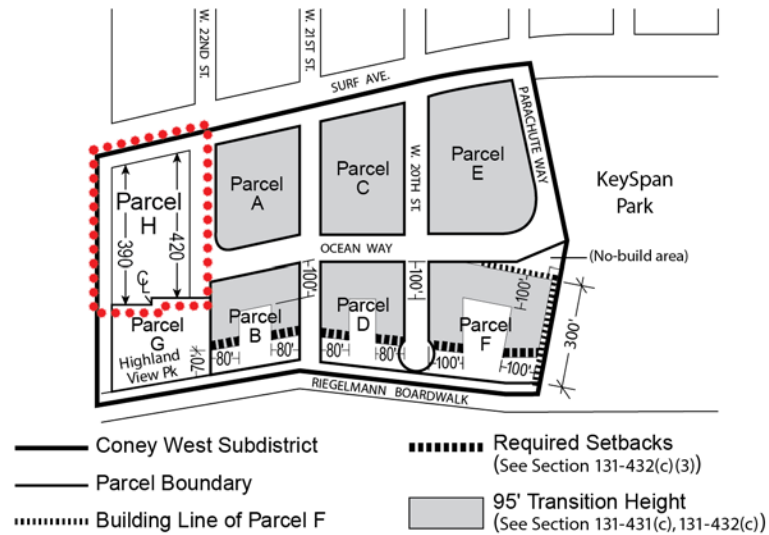
- Special Coney Island District
  - Special Coney Island Subdistrict
  - Parcel Boundary
  - ..... Building Line of Parcel F
- |  |   |
|--|---|
|  | 20' Minimum; 40' Maximum Base Height            |
|  | 35' Minimum; 45' Maximum Base Height            |
|  | 40' Minimum; 65' Maximum Base Height            |
|  | 35' Minimum; 65' Maximum Base Height with Tower |
|  | 65' Minimum; 85' Maximum Base Height            |
- (See Sections 131-42, 131-43, 131-44)

Map 6 - Coney West Subdistrict Transition Heights

[EXISTING]



[PROPOSED]



**W 22nd - W 23rd Street Rezoning  
Community District 13, Brooklyn**

**2/6/18**

\* \* \*

**APPENDIX F**

**Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas**

\* \* \*

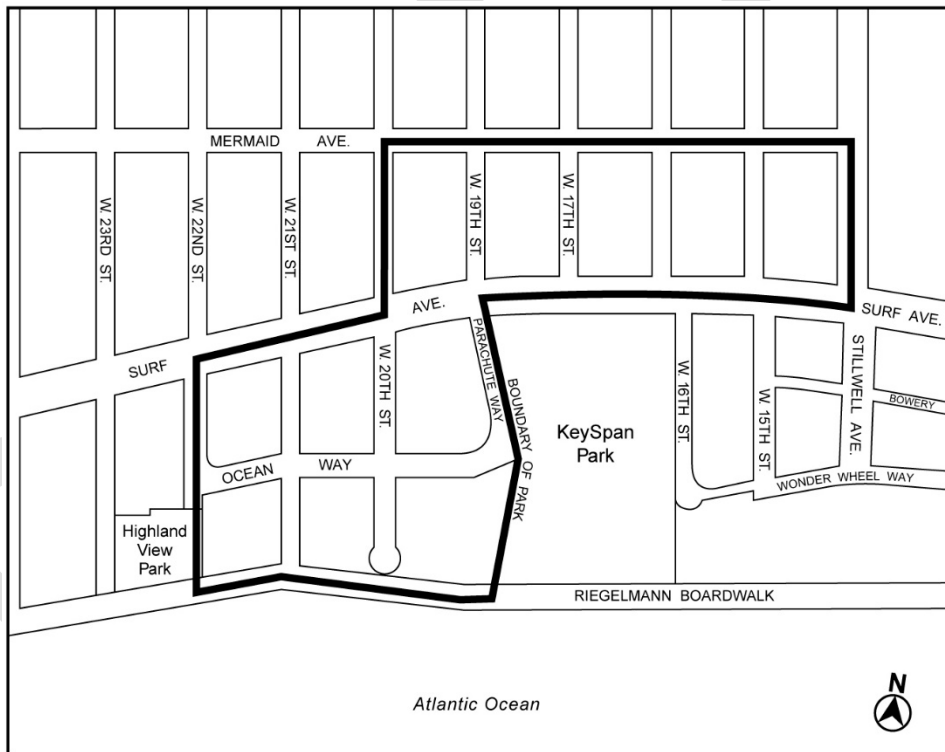
**Brooklyn**

\* \* \*

**Brooklyn Community District 13**

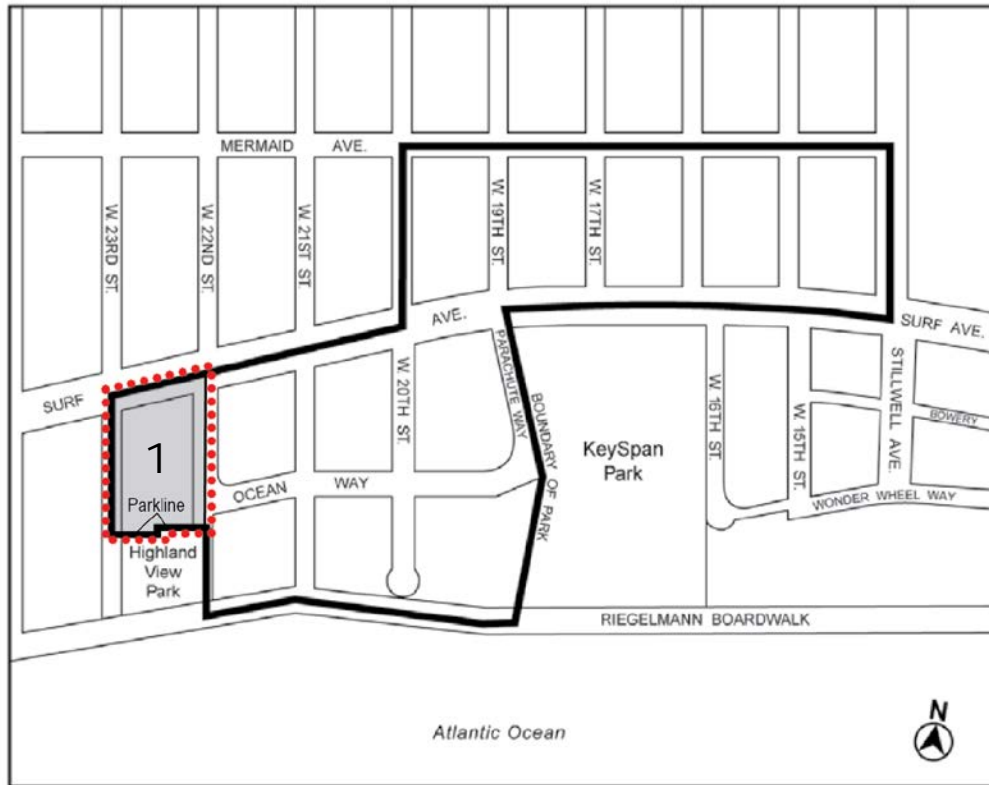
Map 1 - [date of adoption]



[EXISTING]





[PROPOSED]



-  Inclusionary Housing Designated Area
-  Mandatory Inclusionary Housing Area (MIHA)-  
see Section 23-154(d)(3)
- 1 Area 1 — [date of adoption] — MIH Program  
Option 1 and Option 2

Portion of Community District 13, Brooklyn

\* \* \*

**W 22nd - W 23rd Street Rezoning  
Community District 13, Brooklyn**

**10/24/16**

\* \* \*

**APPENDIX I  
Transit Zone**

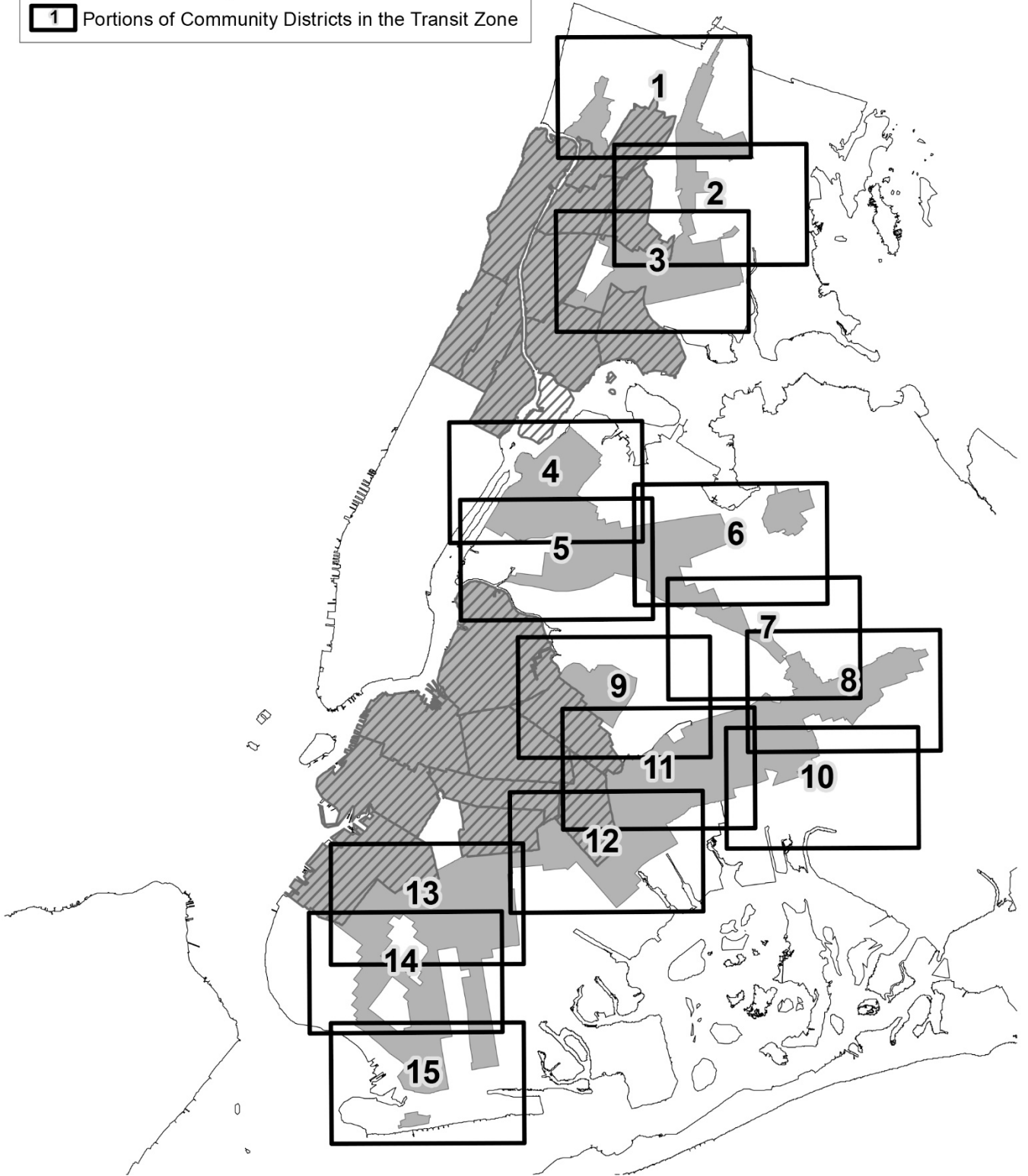
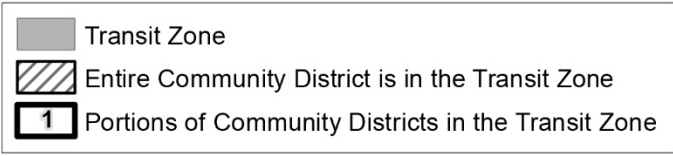
The boundaries of the #Transit Zone# are shown on the maps in this APPENDIX. The #Transit Zone# includes:

all of Manhattan Community Districts 9, 10, 11 and 12;

all of Bronx Community Districts 1, 2, 4, 5, 6 and 7; and

all of Brooklyn Community Districts 1, 2, 3, 4, 6, 7, 8, 9 and 16.

Portions of other Community Districts in the #Transit Zone# are shown on Transit Zone Maps 1 through 15 in this APPENDIX.



Transit Zone Map 15

[EXISTING]





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**WATERFRONT  
REVITALIZATION PROGRAM  
APPENDIX**

## NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM Consistency Assessment Form

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

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

### A. APPLICANT INFORMATION

Name of Applicant: West 16-22 St. Properties, LLC

Name of Applicant Representative: John Strauss for Hiram A. Rothkrug

Address: 55 Water Mill Road, Great Neck, NY 11021

Telephone: 718-343-0026

Email: jstrauss@environmentalstudiescorp.com

Project site owner (if different than above): \_\_\_\_\_

### B. PROPOSED ACTIVITY

*If more space is needed, include as an attachment.*

#### 1. Brief description of activity

The Project Site, Block 7071, Lots 13, 114, 16, 94, 93, would be rezoned to R7D/C2-4 and R6A/C2-4 and would be subject to several zoning text amendments in order to allow for the development of a five- and twelve-story mixed-use UG2 residential and UG6 commercial building totaling 103,654 gsf in size including 78 dwelling units, up to 23 of which would be affordable, 14,903 gsf of retail space, and 39 parking spaces accessory to the residential uses.

#### 2. Purpose of activity

The proposed actions would enable the Applicant to develop approximately 78 dwelling units, up to 23 of which would be affordable, in the Coney Island area of Brooklyn on currently underutilized land. The Proposed Development Site (Projected Development Site 1) is in close proximity to extensive park and athletic facilities and mass transit. It is in an area that already has substantial residential activity, with which this use would be totally consistent. The proposed actions are needed to allow the proposed floor area of the new building on the site, and to provide enough floor area to provide affordable housing



**C. PROJECT LOCATION**

Borough: Brooklyn Tax Block/Lot(s): Block 7071, Lots 13, 114, 16, 94, 93

Street Address: 3016, 3022 West 22nd Street and 3017, 3023 West 23rd Street

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

**D. REQUIRED ACTIONS OR APPROVALS**

Check all that apply.

**City Actions/Approvals/Funding**

**City Planning Commission**

Yes  No

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> City Map Amendment               | <input type="checkbox"/> Zoning Certification        | <input type="checkbox"/> Concession        |
| <input checked="" type="checkbox"/> Zoning Map Amendment  | <input type="checkbox"/> Zoning Authorizations       | <input type="checkbox"/> UDAAP             |
| <input checked="" type="checkbox"/> Zoning Text Amendment | <input type="checkbox"/> Acquisition – Real Property | <input type="checkbox"/> Revocable Consent |
| <input type="checkbox"/> Site Selection – Public Facility | <input type="checkbox"/> Disposition – Real Property | <input type="checkbox"/> Franchise         |
| <input type="checkbox"/> Housing Plan & Project           | <input type="checkbox"/> Other, explain: _____       |  |
| <input type="checkbox"/> Special Permit                   |  |  |

(if appropriate, specify type:  Modification  Renewal  other) Expiration Date: \_\_\_\_\_

**Board of Standards and Appeals**

Yes  No

- Variance (use)
- Variance (bulk)
- Special Permit

(if appropriate, specify type:  Modification  Renewal  other) Expiration Date: \_\_\_\_\_

**Other City Approvals**

- |  |   |
|--|---|
| <input type="checkbox"/> Legislation                       | <input checked="" type="checkbox"/> Funding for Construction, specify: <u>HPD</u>               |
| <input type="checkbox"/> Rulemaking                        | <input type="checkbox"/> Policy or Plan, specify: _____   |
| <input type="checkbox"/> Construction of Public Facilities | <input type="checkbox"/> Funding of Program, specify: _____                                     |
| <input type="checkbox"/> 384 (b) (4) Approval              | <input checked="" type="checkbox"/> Permits, specify: <u>Dept. of Buildings building permit</u> |
| <input type="checkbox"/> Other, explain: _____             |   |

**State Actions/Approvals/Funding**

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

**Federal Actions/Approvals/Funding**

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

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



**E. LOCATION QUESTIONS**

- 1. Does the project require a waterfront site?  Yes  No
- 2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?  Yes  No
- 3. Is the project located on publicly owned land or receiving public assistance?  Yes  No
- 4. Is the project located within a FEMA 1% annual chance floodplain? (6.2)  Yes  No
- 5. Is the project located within a FEMA 0.2% annual chance floodplain? (6.2)  Yes  No
- 6. Is the project located adjacent to or within a special area designation? See *Maps – Part III* of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).  Yes  No
  - Significant Maritime and Industrial Area (SMIA) (2.1)
  - Special Natural Waterfront Area (SNWA) (4.1)
  - Priority Martine Activity Zone (PMAZ) (3.5)
  - Recognized Ecological Complex (REC) (4.4)
  - West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (2.2, 4.2)

**F. WRP POLICY ASSESSMENT**

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

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

|          |   | Promote                             | Hinder                   | N/A                                 |
|----------|---|-------------------------------------|--------------------------|-------------------------------------|
| <b>I</b> | <b>Support and facilitate commercial and residential redevelopment in areas well-suited to such development.</b>  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 1.1      | Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 1.2      | Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.3      | Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 1.4      | In areas adjacent to SMIA's, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.                                | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.5      | Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |



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



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



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

## G. CERTIFICATION

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

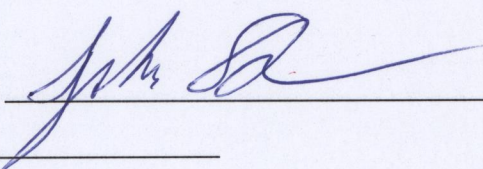
"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: John Strauss for Hiram A. Rothkrug

Address: 55 Water Mill Road, Great Neck, NY 11021

Telephone: 718-343-0026

Email: jstrauss@environmentalstudiescorp.com

Applicant/Agent's Signature: 

Date: 3/16/2018



**West 22<sup>nd</sup> – West 23<sup>rd</sup> Street Coney Island Rezoning**  
**Explanation of Consistency with Waterfront Policies**

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

Policy 1 relates to the development of new residential, commercial, and community facility uses on the waterfront in order to revitalize derelict waterfront areas. The Project Area is not located directly on the waterfront but is separated from it by a one-half block area of existing development and the Coney Island Boardwalk and Beach to the south, and two and one-half blocks of existing development to the north. Nevertheless, the development that would be facilitated by the proposed zoning map and text amendments would bring new residents, shoppers, and other visitors to the area resulting in new activity in the nearby waterfront areas.

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

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

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

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

Relative to Policy 1.1 A., the project site is not designated as a Special Natural Waterfront Area (SNWA), as the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or as a Significant Maritime and Industrial Area (SMIA) nor is it in close proximity to any areas so designated. The Project Area does not border the shoreline and is separated from it by a one-half block area of existing development and the Coney Island Boardwalk and Beach to the south, and two and one-half blocks of existing development to the north. The Project Area does not contain any unique and significant natural features. The Applicant's 17,467 square foot property is developed with 34 dwelling units. The remainder of the Project Area is developed with 128 two-, three-, and multi-family units, and 12,488 gsf of commercial and manufacturing floor area.

Under the With-Action Scenario, the Applicant proposes to develop his property with a new five-story, twelve-story, and basement maximum 131'-5" tall mixed-use Use Group 2 residential

and Use Group 6 commercial building totaling 103,654.37 gsf and containing 89 dwelling units within 88,751.17 gsf primarily on floors 2-12 based on an average size of 1,000 gsf per dwelling unit. Under the MIH 25% option it is assumed that 25% or 22 of the units would be affordable to lower income residents. The remaining 75% or 67 of the units would be market rate. Under the MIH 30% option it is assumed that 30% or up to 27 of the units would be affordable to lower income residents. The remaining 75% or 62 of the units would be market rate. As MIH options are not selected until the end of the ULURP process, up to 27 affordable units would be provided pursuant to MIH which is 30% of the With Action total of 89 dwelling units. The proposed building would also contain 14,903.2 gsf of retail space in the basement and on the first floor. 44 parking spaces accessory to the residential uses would be provided, and would be located on the first floor of the 5- and 12-story portions of the building as well as on the roof of the basement between the two towers. The existing structures and uses on the site would be demolished and removed.

The remainder of the block to the south of the Project Area consists of vacant land and parking and is proposed for development as the Seaside Park and Community Arts Center. The Project Area is located directly across West 22<sup>nd</sup> Street from the Ford Amphitheater and Seaside Park. The 400-foot radius area to the south of the Project Area consists of the Coney Island beach and boardwalk. The remainder of the surrounding 400-foot radius project study area primarily consists of a mixture of small multi-family buildings, mid- and high-rise public housing and affordable housing developments, community facilities (assisted living and nursing home), a commercial and office building, and parking areas and vacant land. East-west roadway access through the Coney Island peninsula is provided by Surf and Neptune Avenues which connect into Cropsey and Stillwell Avenues providing north-south roadway access off the peninsula into the Bensonhurst neighborhood of Brooklyn.

The projected development on the 8 Projected Development Sites would add to and strengthen the surrounding mixed-use community. The development would have no impact upon public access to the waterfront as the Project Area is not located along the waterfront. The development would result in the loss of 17 existing jobs and would generate approximately 162 new jobs for a net increase of 145 jobs.

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

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

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

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

The Project Area is bounded by Surf Avenue, West 22<sup>nd</sup> and West 23<sup>rd</sup> Streets, and the Coney Island beach and boardwalk. East-west roadway access through the Coney Island peninsula is provided by Surf and Neptune Avenues which connect into Cropsey and Stillwell Avenues providing north-south roadway access off the peninsula into the Bensonhurst neighborhood of Brooklyn.

The Project Area is approximately 0.45 miles from the Stillwell Avenue subway station (D, F, N, and Q trains) at Stillwell and Mermaid Avenues. The Rezoning Area is also served by the B36 and B74 bus lines, which serve the Coney Island Peninsula linking it with areas of Brooklyn to the east and north.

The nearest public elementary school, P. S. 288 at 2950 West 25<sup>th</sup> Street serving grades pre-K through 8, is located approximately 750 feet from the Project Area. The most recent enrollment and capacity data from the NYC Department of Education indicates that in the 2015-2016 school year, the target capacity of P. S. 288 was 654 seats while 601 students were enrolled, representing a utilization rate of 92%.

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

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

See discussion under Policy 6.2 below.

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

As shown on FEMA Panel 3604970353G, effective 1/31/2015, the Project Area, and most of the surrounding Coney Island Peninsula, is located within Zone AE, which has a base flood elevation of 11 feet and a 1 percent annual chance flood hazard. Zone AE is described as “Areas subject to inundation by the 100-year flood determined in a Flood Insurance Study by detailed methods. Base flood elevations are shown within these zones. Mandatory flood insurance purchase requirements apply.” In addition, building code requires construction meets flood resistant construction standards. All developments within the Project Area would be required to meet these standards which require that all spaces below the flood elevation, plus 1 foot for freeboard, are floodproofed subject to applicable limitations on use.

The Applicant’s proposed development site is within Flood Zone AE Elevation 11 (NAVD88) with a Base Flood Elevation (BFE) on West 22<sup>nd</sup> Street of 7.2 feet and a BFE on West 23<sup>rd</sup> Street of 5.84 feet. This area is subject to storm surge flooding from the one percent annual chance coastal

flood. Such zones are not subject to high velocity wave action but are still considered high risk flooding areas. Accordingly, the proposed development would incorporate all New York State and New York City flooding and erosion requirements, including compliance with ZR Article VI, Chapter 4 “Special Regulations Applying in Flood Hazard Areas” and Appendix G of the Building Code. The proposed development would meet the standards which require that all spaces below the flood elevation, plus 1 foot for freeboard, are floodproofed.

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

The proposed building would not contain a publicly accessible waterfront and is located upland from any shore. The Project Area is located beyond 1,700 feet of the nearest existing shoreline. A one-half block area of existing development and the Coney Island beach and boardwalk separate the Applicant’s projected development site and the Atlantic Ocean.

The current 1% annual chance floodplain height at the Applicant’s proposed development site (Projected Development Site 1) is 11.0 feet. The property has a Design Flood Elevation (DFE) of 12.0 feet, which includes one foot of freeboard above the Base Flood Elevation (BFE) of 11.0 feet.

The lowest elevations of the proposed development site are 5.84 feet, the average grade elevation at West 23<sup>rd</sup> Street, and 7.2 feet, the average grade elevation at West 22<sup>nd</sup> Street. The basement of the proposed building, which would be constructed at these elevation levels, would contain retail uses and residential lobbies. The building’s basement would be located partially below and partially above the BFE but would be dry flood proofed to grade level. The building entrances will be dry flood proofed with flood proof barriers. The project will include a flood emergency egress at the DFE for the residential and commercial lobbies. This floor will be below the 1% flood elevation between now and the year 2100, the project’s lifespan, under all sea level rise projections. Potential consequences from flooding would include minor damage to retail space and residential lobbies. This could result in a temporary loss of building services, minor damage to property, and temporary displacement of retail services.

As with the basement level of the building discussed above, the lowest heating, cooling, and hot water systems for the building would be sited at an elevation of 5.84 feet and would be dry flood proofed. There would not be any centralized boiler equipment in the building. Heating and cooling will be provided via mini-split heat pumps which are powered by electricity and would be located on each of the floors of the building most of which would be above the DFE. This level will be below the 1% flood elevation between now and the year 2100, the project’s lifespan, under all sea level rise projections. Flooding would likely cause disruption to building occupants and damage to these HVAC systems at the lower levels of the building. However, HVAC equipment for the building’s upper floors would be located at higher levels of the building all of which would be above the 1% flood elevation between now and the year 2100, the project’s lifespan, under all sea level rise projections.

The next lowest point in the proposed development would consist of the first floor which would contain a 15-foot deep commercial mezzanine and parking with 39 accessory off-street



spaces at an elevation of 22.88 feet, which is above the DFE. At worst, any flooding at this level of the building would result in minor damage to the retail floor and parking level resulting in damage to property and temporary displacement of retail services and parking. However, this floor would be above the current 1% annual change flood elevation height of 11 feet and would remain above the 1% flood elevation under all sea level rise projections for the year 2100, which would represent the anticipated lifespan of the project.

The lowest residential level would be at the second floor which would be at an elevation of 33.22 feet which is above the DFE. The residential levels would be above the elevation of the 1% annual chance flood level under all projections. There is no chance for flooding of any residential floors or associated heating and cooling systems under these projections.

The residential lobby and the lowest level retail space and associated HVAC equipment could be flooded under all sea level rise projections. Daily flooding by high tide would likely cause disruption to building occupants and possible damage to the building materials.

Coastal storms could bring high winds in addition to the flood hazards described above. The site is not within a Coastal A or V zone.

In summary, the proposed project is currently within the official FEMA 1% annual chance floodplain and is required to meet NYC Building Code requirements for flood resistant construction. The building has been designed so that all building floors and mechanicals below the level of the floodplain, including the basement level retail uses, residential lobbies, and the lowest level HVAC equipment, would be dry flood proofed. In addition, the residential and commercial entrances will be dry flood proof with flood proof barriers and the project will include a flood emergency egress at the DFE for the residential lobbies. Even if the first floor of the building was to be exposed to flood waters, it would result in minimal damage to the building and its operations as only retail space and the lowest level of HVAC equipment would be affected. The commercial mezzanine level and parking at the first floor level, the residential floors of the building at the second through twelfth floors, and the HVAC equipment serving these floors, would be above the DFE.

The project would not make flooding on adjacent sites worse, nor would it conflict with other plans for flood protection on adjacent sites.

The project architect, Bricolage Architects, has provided the following responses regarding the design of the building relative to protecting the structure and its residents, workers, visitors, and natural features.

Due to the development's location in an AE flood zone, the proposed building on the Applicant's property has been designed to meet the requirements of the NYC Building Code in order to minimize the effects of flooding. Thus, the proposed building, consistent with these regulations, will have a DFE of 12 feet which includes one-foot of freeboard. Pursuant to the Zoning Resolution, the building height is measured from this elevation. Below this elevation, the floor area must be dry flood proofed in order to permit habitable floor area. In the absence of dry flood proofing below the DFE, only crawlways, parking, storage, and building access are

allowed. The basement level of the building, at an elevation of between 5.84 and 7.2 feet, will be used for retail space and residential lobbies. Additionally, there would not be any centralized boiler equipment in the building. Heating and cooling will be provided via mini-split heat pumps which are powered by electricity and would be located on each of the floors of the building most of which would be above the DFE of 12 feet.

The first floor will be above the DFE and will be used for retail space and parking. The lowest residential level will be at the second floor of the building and will also be above the DFE. Most critical building mechanicals are planned to be above the DFE and the lowest level HVAC at elevation at 5.84 feet would be dry flood proofed. The residential and commercial entrances will be dry flood proof with flood proof barriers. The project will include a flood emergency egress at the DFE for the residential and commercial lobbies. The development will be landscaped with salt water proof plantings.

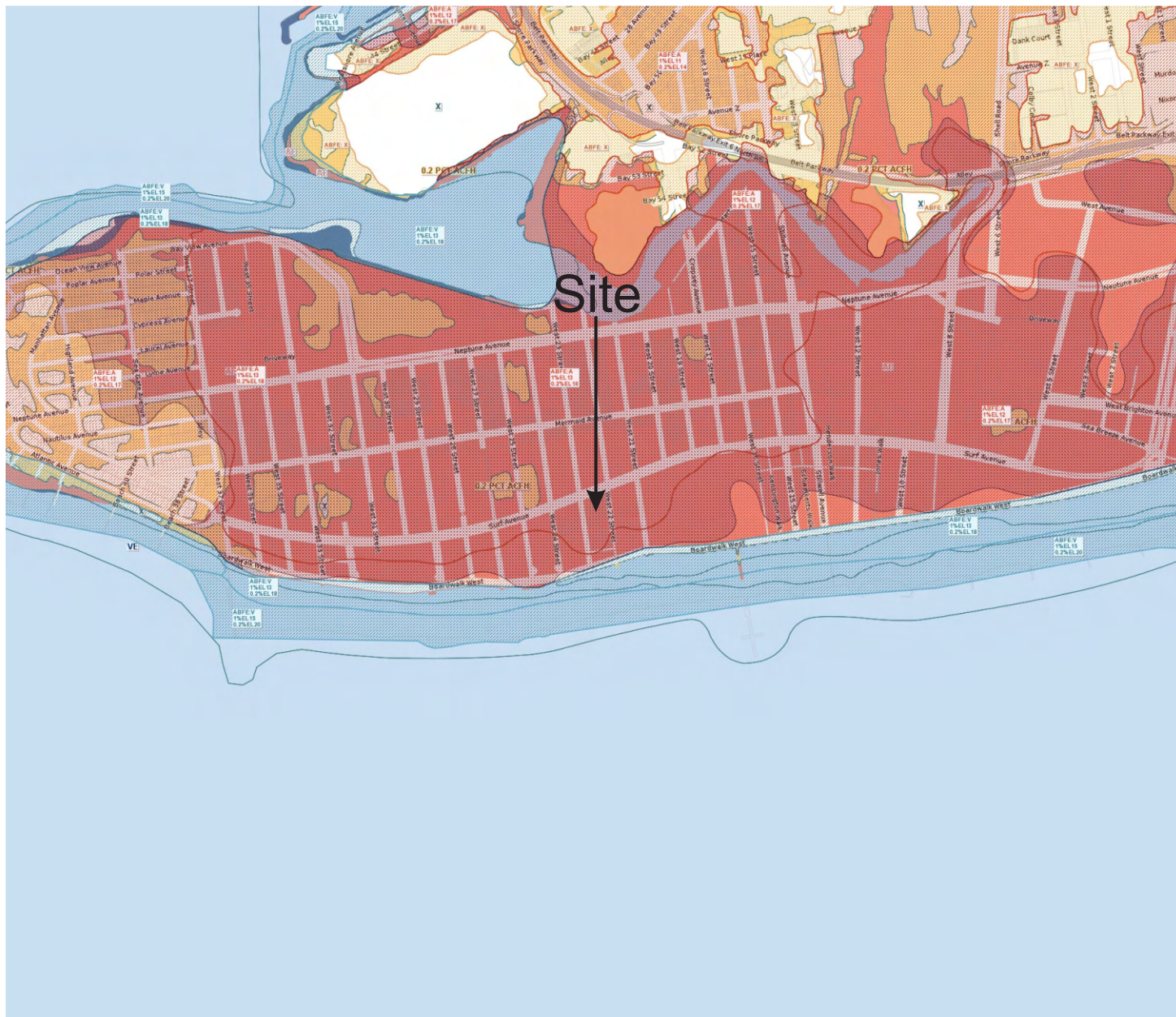
Adaptive measures to protect the project site from future flooding could include elevation of the site or the construction of a floodwall to protect the site from higher water levels. Although elevation of the site may not be feasible, construction of a floodwall or installation of water barriers will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

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



 Coastal Resource Boundary





**FEMA Special Flood Hazard Area (or SFHA)**

Moderate to Low Risk Areas

- X < 1% ACF
- 0.2 PCT ACF\* < 1% ACF

High Risk Areas

- A 1% ACF, no base flood elevations
- AE 1% ACF, periodic base flood elevations

High Risk-Coastal Areas

- VE => 1% ACF + Storm Waves

Floodway

COBRA \*\*

Open Water

\* 0.2% Annual Chance of Flood Hazard  
 \*\* Coastal Barrier Resources System Area  
 ACF = Annual Chance of Flooding

Note: The current map does not cover changes made after Hurricane Sandy.

**After Hurricane Sandy - FEMA ABFE Zones**

FEMA Advisory Flood Hazard Zones:

Low/Moderate Risk

- Advisory Zone X < 1%ACF\*

High Risk Areas

- Advisory Zone A 1%ACF

High Risk-Coastal Areas

- Advisory Zone V 1%ACF

Area of Moderate Wave Action \*\*

CBRA Zones\*\*\*

1%EL = 1% Advisory Base Flood Elevation  
 0.2%EL = 0.2% Advisory Base Flood Elevation

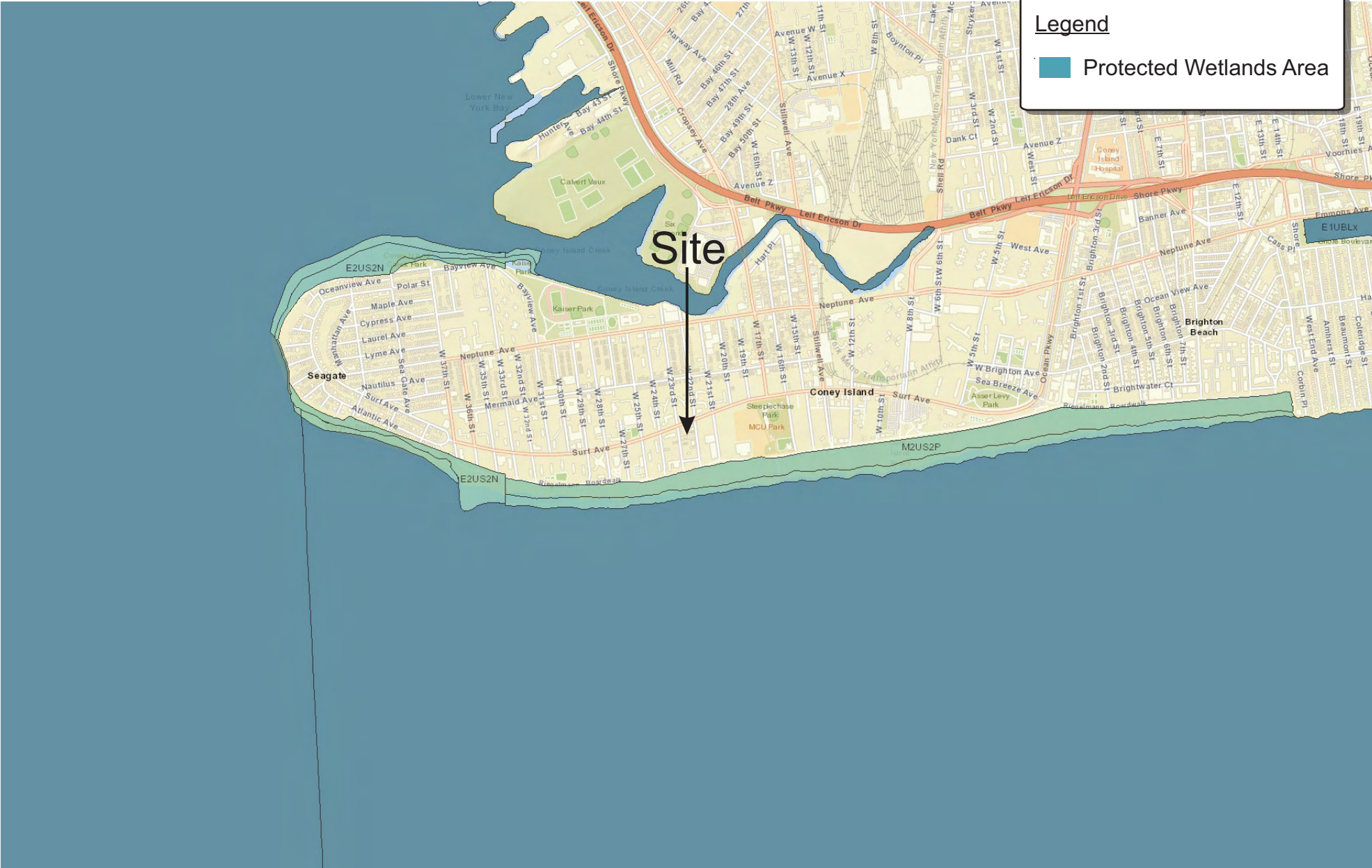
\* Annual Chance of Flood Hazard  
 \*\* Wave Heights between 1.5 and 3 feet  
 \*\*\* Coastal Barrier Resource Act

Source: Federal Emergency Management Agency (fema.gov) / PropertyShark.com





Source: Federal Emergency Management Agency (fema.gov)



**Legend**

Protected Wetlands Area

Source: U.S. Fish and Wildlife Service (fws.gov)





Source: NYS DOS Office of Communities and Waterfronts (dos.ny.gov)

**HISTORIC AND CULTURAL  
RESOURCES APPENDIX**



## ENVIRONMENTAL REVIEW

**Project number:** DEPARTMENT OF CITY PLANNING / 18DCP064K  
**Project:** W. 22 TO W. 23 ST CONEY ISLAND REZONING  
**Date received:** 12/7/2017

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

- 1) ADDRESS: 2226 Surf Avenue, BBL: 3070710001
- 2) ADDRESS: Surf Avenue, BBL: 3070710003
- 3) ADDRESS: Surf Avenue, BBL: 3070710004
- 4) ADDRESS: 18 Surf Avenue, BBL: 3070710005
- 5) ADDRESS: 2214 Surf Avenue, BBL: 3070710006
- 6) ADDRESS: 2210 Surf Avenue, BBL: 3070710007
- 7) ADDRESS: Surf Avenue, BBL: 3070710008
- 8) ADDRESS: 3008 West 22 Street, BBL: 3070710009
- 9) ADDRESS: 3016 West 22 Street, BBL: 3070710013
- 10) ADDRESS: West 22 Street, BBL: 3070710016
- 11) ADDRESS: 3030 West 22 Street, BBL: 3070710018
- 12) ADDRESS: 3040 West 22 Street, BBL: 3070710019
- 13) ADDRESS: 3046 West 22 Street, BBL: 3070710024
- 14) ADDRESS: Highland Avenue, BBL: 3070710026
- 15) ADDRESS: West 23 Street, BBL: 3070710083
- 16) ADDRESS: West 23 Street, BBL: 3070710085
- 17) ADDRESS: 3033 West 23 Street, BBL: 3070710086
- 18) ADDRESS: 3031 West 23 Street, BBL: 3070710089
- 19) ADDRESS: 3029 West 23 Street, BBL: 3070710090
- 20) ADDRESS: 3025 West 23 Street, BBL: 3070710091
- 21) ADDRESS: 3023 West 23 Street, BBL: 3070710093
- 22) ADDRESS: 3017 West 23 Street, BBL: 3070710094
- 23) ADDRESS: 3015 West 23 Street, BBL: 3070710096
- 24) ADDRESS: West 23 Street, BBL: 3070710097
- 25) ADDRESS: 3022 West 23 Street, BBL: 3070710114

*Gina Santucci*

12/12/2017

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SIGNATURE  
Gina Santucci, Environmental Review Coordinator

DATE

**File Name:** 32912\_FSO\_GS\_12122017.doc

# **HAZARDOUS MATERIALS APPENDIX**



November 14, 2017

Robert Dobruskin  
Director, Environmental Assessment and Review Division  
New York City Department of City Planning  
120 Broadway, 31st Floor  
New York, NY 10271

Vincent Sapienza, P.E.  
Commissioner

**Re: West 22nd Street - West 23rd Street Rezoning  
Block 7071, Lots 1, 3, 4, 5, 6, 7, 8, 9, 13, 16, 18, 19, 24, 26, 83, 85, 86,  
89, 90, 91, 93, 94, 96, 97, and 114  
CEQR # 77DCP258K**

Angela Licata  
Deputy Commissioner of  
Sustainability

Dear Mr. Dobruskin:

59-17 Junction Blvd.  
Flushing, NY 11373

Tel. (718) 595-4398  
Fax (718) 595-4422  
alicata@dep.nyc.gov

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the October 2017 Environmental Assessment Statement (EAS) and the September 2017 Phase I Environmental Site Assessment (Phase I) for Block 7071, Lots 13, 16, 93, 94, and 114 prepared by Environmental Studies Corp. on behalf of West 16-22 St. Properties, LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking several discretionary actions from the New York City Department of City Planning (DCP) to expand the Special Coney Island District and rezone an existing R5 zoning district to R7D/C2-4 and R6A/C2-4 districts on the northern portion of Block 7071, bounded by West 22nd and West 23rd Streets, Surf Avenue, and the northern boundary of the future Seaside Park and Community Arts Center in the Coney Island neighborhood of Brooklyn Community District 13. The discretionary actions include a zoning text amendment to enlarge the Special Coney Island District (SCID) with a new Parcel H of the Coney West Subdistrict, consisting of Block 7071, Lots 1, 3, 4, 5, 6, 7, 8, 9, 13, 16, 18, 19, 24, 26, 83, 85, 86, 89, 90, 91, 93, 94, 96, 97, and 114 (the "Project Area"); a zoning map amendment to map SCID Coney West Subdistrict Parcel H; a zoning map amendment to Zoning Resolution (ZR) section 28d to change the existing R5 zoning district to an R7D/C2-4 zoning district on a portion of Block 7071, including Lots 1, 3, 4, 5, 6, 7, 8, 9, 13, 16, 18, 19, 24, 26, p/o 91, 93, 94, 96, 97, and 114, and to an R6A/C2-4 zoning district on a portion of Block 7071, including Lots 83, 85, 86, 89, 90, and p/o 91; a zoning text amendment of ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (MIH) Areas to establish an MIH Area coterminous with the Project Area; and zoning text amendment of ZR Appendix I: Transit Zone, Transit Zone Map 15 to establish the Project Area within the Transit Zone. The proposed zoning map change and zoning text amendments would facilitate a proposal by the applicant to construct a new six- and thirteen-story mixed-use residential and commercial building totaling 103,654.37 gross square feet (gsf) in size on Block 7071, Lots 13, 16, 93, 94, and 114 (Projected Development Site 1). The building would

include 78 dwelling units, 22 units of which would be affordable to lower income residents, 14,903 gsf of retail space, and 39 parking spaces accessory to the residential uses. In order to develop the proposed project, the applicant owned property would be merged into a single zoning lot. Under the With-Action Scenario, it is assumed that Block 7071, Lots 3, 4, and 5 (Projected Development Site 2); Block 7071, Lots 7 and 8 (Projected Development Site 3); Block 7071, Lot 18 (Projected Development Site 4); Block 7071, Lot 26 (Projected Development Site 5); Block 7071, Lots 83, 85, and 86 (Projected Development Site 6); Block 7071, Lot 91 (Projected Development Site 7); and Block 7071, Lots 96 and 97 (Projected Development Site 8) would be developed with up to 164 new dwelling units, within approximately 163,556 gsf of residential floor area, and 36,076 gsf of commercial space. The remaining lots in the Project Area, identified as Block 7071, Lots 1, 6, 9, 19, 24, 89, and 90, are not anticipated to be developed.

The September 2017 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential and commercial uses including apartment buildings, bathhouses, retail stores, parking, storage, recreational uses, auto repair garages, furniture finishing operations, a gasoline filling station, a contractor's storage yard, dry cleaners, community centers, a post office, etc. Based on the age of the subject buildings, asbestos containing materials and lead based paints could be present in the on-site structures. The New York State Department of Environmental Conservation database identified 22 spills within 1/8 mile; 9 underground storage tank sites and 8 aboveground storage tank sites within 1/4 mile; and 20 leaking storage tanks within 1/2 mile of the project site.

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

**Projected Development Site 1: Block 7071, Lots 13, 16, 93, 94, and 114 (Sites under the control or ownership of the applicant) and Projected Development Sites 2 through 8: Block 7071, Lots 3, 4, 5, 7, 8, 18, 26, 83, 85, 86, 91, 96, and 97 (Sites not under the control or ownership of the applicant)**

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

Future correspondence and submittals related to this project should include the following CEQR # 77DCP258K. If you have any questions, you may contact me at (718) 595-4358.



Sincerely,

*Wei Yu*

Wei Yu

Deputy Director, Hazardous Materials

c: R. Weissbard  
T. Estes  
M. Wimbish  
K. Corte – DCP  
O. Abinader – DCP  
M. Bertini – OER

# **INFRASTRUCTURE APPENDIX**



Vincent Sapienza, P.E.  
Commissioner


Angela Licata  
Deputy Commissioner  
of Sustainability

59-17 Junction Boulevard  
Flushing, NY 11373

T: (718) 595-4398  
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alicata@dep.nyc.gov

## MEMORANDUM

To: Kevin Corte  
Project Manager  
DCP EARD

From: Mitchell Wimbish   
Project Manager  
DEP BEPA

Subject: CEQR # 18DCP064K

Date: January 5, 2018

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New York City Department of Environmental Protection has reviewed the Environmental Assessment Statement for the above project and has the following comments:

### Sewer System

1. The proposed rezoning results in an increase of 347% for the sanitary flow in the adjacent sewers based on a DU size of 2.45 people per unit. A hydraulic analysis of the existing sewer system may be needed at the time of submittal of the site connection proposal application to determine whether the existing sewer system is capable of supporting higher density development and related increase in wastewater flow, or whether there will be a need to upgrade the existing sewer system. In addition, there might be a need to amend the existing drainage plan based on the hydraulic analysis calculations.
2. During the submittal of the site connection proposal applications of these sites, please restrict the storm flow per the following:
  - a. As per the new stormwater requirements, the Stormwater Release Rate must be no more than the greater of 0.25 cfs or 10% of the Allowable Flow or, if the Allowable Flow is less than 0.25 cfs, no more than the Allowable Flow. Allowable Flow is defined as the stormwater flow from a development that can be released into an existing storm or combined sewer based on existing sewer design criteria.
  - b. Specify a method of retaining or detaining the site generated storm flow that adheres to the Stormwater Release Rate requirements stated above.

## **Water System**

The existing water mains around the above subject Project are being upgraded and should be able to handle the estimated increase in water demand.

C:     Bhaskar Nookala, BWSO  
       Lillian Cheng, BWSO  
       Bushra Asfare, BWSO  
       Terrell Estesen, BEPA



# **TRANSPORTATION APPENDIX**

**Table 1 : Transportation Planning Factors  
22nd/23rd Streets, Coney Island Brooklyn NY**

| <b>Land Use:</b>          | <b>Residential</b> | <b>Local Retail</b> |
|---------------------------|--------------------|---------------------|
|                           | <b>d.u.</b>        | <b>Space-sq.ft.</b> |
| Size/Units:               | 172                | 46,249              |
|                           | <b>(1)</b>         | <b>(1)</b>          |
| Trip Generation:          |                    |                     |
| Weekday                   | 8.075              | 205                 |
| Saturday                  | 9.6                | 240                 |
|                           | per 1,000 sq-ft    | per 1,000 sq.ft.    |
| Linked-Trip:              | 0%                 | 25%                 |
| Temporal Distribution:    | <b>(1)</b>         | <b>(1)</b>          |
| AM Peak Hour              | 10%                | 3%                  |
| MD Peak Hour              | 5%                 | 19%                 |
| PM Peak Hour              | 11%                | 10%                 |
| Saturday Midday Peak Hour | 8%                 | 10%                 |
|                           | <b>(2)</b>         | <b>(3)</b>          |
| Modal Split :             | all periods        | all periods         |
| Auto                      | 19.7%              | 5%                  |
| Taxi                      | 0.0%               | 1%                  |
| Subway                    | 54.2%              | 6%                  |
| Bus                       | 13.5%              | 3%                  |
| Walk                      | 11.2%              | 85%                 |
| Other                     | 1.4%               | 0%                  |
| Total                     | 100.0%             | 100%                |
|                           | <b>(3)</b>         | <b>(3)</b>          |
| In/Out Splits:            | In/Out             | In/Out              |
| AM Peak Hour              | 15/85              | 50/50               |
| MD Peak Hour              | 50/50              | 50/50               |
| PM Peak Hour              | 70/30              | 50/50               |
| Saturday Midday Peak Hour | 50/50              | 55/45               |
| Vehicle Occupancy:        | <b>(2)</b>         | <b>(3)</b>          |
| Auto                      | 1.06               | 2                   |
| Taxi                      | 1.40               | 2                   |
| Truck Trip Generation:    | <b>(1)</b>         | <b>(1)</b>          |
| Weekday                   | 0.06               | 0.35                |
| Saturday                  | 0.02               | 0.04                |
|                           | per 1,000 sqft     | per 1,000 s.f.      |
|                           | <b>(1)</b>         | <b>(1)</b>          |
| AM Peak Hour              | 12%                | 8%                  |
| MD Peak Hour              | 9%                 | 11%                 |
| PM Peak Hour              | 2%                 | 2%                  |
| Saturday Midday Peak Hour | 9%                 | 11%                 |
| AM/MD/PM/Saturday Midday  | 50/50              | 50/50               |

Sources:

(1)-2014 CEQR Technical Manual, Table 16-2.

(2)-2010-2015 (ACS)-Journey-to-Work (JTW) Census Tract #'s 326, 340 and 352 in Brooklyn N.Y.

(3)\_East New York FEIS

**Table 2 : Estimated Person Trips  
22nd/23rd Streets, Coney Island Brooklyn NY**

| <b>Land Use:</b>                 | <b>Residential</b> | <b>Local Retail</b> | <b>Total Net</b> | <b>Pedestrian</b> |
|----------------------------------|--------------------|---------------------|------------------|-------------------|
| <b>Size/Units:</b>               | <b>d.u.</b>        | <b>Space sq.ft.</b> | <b>Demand</b>    | <b>Trips</b>      |
| Peak hour Trips                  | 172                | 46,249              |                  |                   |
| AM Peak Hour                     | 139                | 213                 | 352              |                   |
| Midday Peak Hour                 | 69                 | 1351                | 1420             |                   |
| PM Peak Hour                     | 153                | 711                 | 864              |                   |
| Saturday Midday Peak Hour        | 132                | 832                 | 965              |                   |
| <b><u>Person Trips:</u></b>      |                    |                     |                  |                   |
| <i>AM Peak Hour</i>              |                    |                     |                  |                   |
| Auto                             | 27                 | 11                  | 38               |                   |
| Taxi                             | 0                  | 2                   | 2                |                   |
| Subway                           | 75                 | 13                  | 88               | 88                |
| Bus                              | 19                 | 6                   | 25               | 25                |
| Walk                             | 16                 | 181                 | 197              | 197               |
| Other                            | 2                  | 0                   | 2                | 2                 |
| Total                            | 139                | 213                 | 352              | 312               |
| <i>Midday Peak Hour</i>          |                    |                     |                  |                   |
| Auto                             | 14                 | 68                  | 81               |                   |
| Taxi                             | 0                  | 14                  | 14               |                   |
| Subway                           | 38                 | 81                  | 119              | 119               |
| Bus                              | 9                  | 41                  | 50               | 50                |
| Walk                             | 8                  | 1148                | 1156             | 1156              |
| Other                            | 1                  | 0                   | 1                | 1                 |
| Total                            | 69                 | 1351                | 1420             | 1326              |
| <i>PM Peak Hour</i>              |                    |                     |                  |                   |
| Auto                             | 30                 | 36                  | 66               |                   |
| Taxi                             | 0                  | 7                   | 7                |                   |
| Subway                           | 83                 | 43                  | 125              | 125               |
| Bus                              | 21                 | 21                  | 42               | 42                |
| Walk                             | 17                 | 604                 | 622              | 622               |
| Other                            | 2                  | 0                   | 2                | 2                 |
| Total                            | 153                | 711                 | 864              | 791               |
| <i>Saturday Midday Peak Hour</i> |                    |                     |                  |                   |
| Auto                             | 26                 | 42                  | 68               |                   |
| Taxi                             | 0                  | 8                   | 8                |                   |
| Subway                           | 72                 | 50                  | 122              | 122               |
| Bus                              | 18                 | 25                  | 43               | 43                |
| Walk                             | 15                 | 708                 | 722              | 722               |
| Other                            | 2                  | 0                   | 2                | 2                 |
| Total                            | 132                | 832                 | 965              | 889               |

**Table 3 : Estimated Vehicular Trips  
22nd/23rd Streets, Coney Island Brooklyn NY**

|                           | <b>Vehicular Trips</b>  | <b>Residential</b>  | <b>Local Retail</b> | <b>Total</b>        |
|---------------------------|---|---------------------|---------------------|---------------------|
| AM Peak Hour              |   |                     |                     |                     |
|                           | Auto (Total)  | 26                  | 5                   | 31                  |
|                           | Taxi  | 0                   | 1                   | 1                   |
|                           | Taxi (Balanced)   | 0                   | 2                   | 2                   |
|                           | Truck   | 1                   | 1                   | 2                   |
|                           | Truck(Balanced)   | 2                   | 2                   | 4                   |
|                           | <b>Total</b>  | <b>28</b>           | <b>9</b>            | <b>37</b>           |
|                           | <b><i>Inbound/Outbound AM Peak Hour Trips</i></b>             | <b><i>5/23</i></b>  | <b><i>5/4</i></b>   | <b><i>10/27</i></b> |
| Midday Peak Hour          |   |                     |                     |                     |
|                           | Auto (Total)  | 13                  | 34                  | 47                  |
|                           | Taxi  | 0                   | 7                   | 7                   |
|                           | Taxi (Balanced)   | 0                   | 14                  | 14                  |
|                           | Truck   | 1                   | 2                   | 3                   |
|                           | Truck(Balanced)   | 2                   | 2                   | 4                   |
|                           | <b>Total</b>  | <b>15</b>           | <b>50</b>           | <b>65</b>           |
|                           | <b><i>Inbound/Outbound Midday Peak Hour Trips</i></b>         | <b><i>7/8</i></b>   | <b><i>25/25</i></b> | <b><i>32/33</i></b> |
| PM Peak Hour              |   |                     |                     |                     |
|                           | Auto (Total)  | 28                  | 18                  | 46                  |
|                           | Taxi  | 0                   | 4                   | 4                   |
|                           | Taxi (Balanced)   | 0                   | 8                   | 8                   |
|                           | Truck   | 0                   | 0                   | 0                   |
|                           | Truck(Balanced)   | 0                   | 0                   | 0                   |
|                           | <b>Total</b>  | <b>28</b>           | <b>26</b>           | <b>54</b>           |
|                           | <b><i>Inbound/Outbound PM Peak Hour Trips</i></b>             | <b><i>20/8</i></b>  | <b><i>13/13</i></b> | <b><i>33/21</i></b> |
| Saturday Midday Peak Hour |   |                     |                     |                     |
|                           | Auto (Total)  | 25                  | 21                  | 46                  |
|                           | Taxi  | 0                   | 4                   | 4                   |
|                           | Taxi (Balanced)   | 0                   | 8                   | 8                   |
|                           | Truck   | 0                   | 0                   | 0                   |
|                           | Truck(Balanced)   | 0                   | 0                   | 0                   |
|                           | <b>Total</b>  | <b>25</b>           | <b>29</b>           | <b>54</b>           |
|                           | <b><i>Inbound/Outbound Saturday Midday Peak Hour Trip</i></b> | <b><i>12/13</i></b> | <b><i>16/13</i></b> | <b><i>28/26</i></b> |



# Exhibit A

## Modal Split Information

2011-2015 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 326, 340 and 352 in Brooklyn, NY

22nd Street, Coney Island Brooklyn New York

2011-2015 ACS 5-Year, Journey-to-Work:

| Census Tract | Total Workers | Car or Van Drive-Along | Carpool | Bus   | Street Car | Subway | R.R.  | Ferry | Taxi | Motor cycle | Bicycle | Walked | Other Means | Worked @ Home | Total |
|--------------|---------------|------------------------|---------|-------|------------|--------|-------|-------|------|-------------|---------|--------|-------------|---------------|-------|
| 326          | 2052          | 360                    | 32      | 250   | 0          | 1052   | 68    | 0     | 0    | 0           | 0       | 261    | 5           | 24            | 2,052 |
| 340          | 480           | 106                    | 9       | 101   | 0          | 229    | 0     | 0     | 0    | 0           | 0       | 35     | 0           | 0             | 480   |
| 352          | 103           | 8                      | 5       | 4     | 0          | 78     | 0     | 0     | 0    | 0           | 0       | 0      | 0           | 8             | 103   |
| Total        | 2,635         | 474                    | 46      | 355   | 0          | 1,359  | 68    | 0     | 0    | 0           | 0       | 296    | 5           | 32            | 2,635 |
|              |               | 0.180                  | 0.017   | 0.135 | 0.00       | 0.516  | 0.026 | 0.00  | 0.00 | 0.00        | 0.00    | 0.112  | 0.00        | 0.012         | 1.00  |

# Exhibit B

## Modal Split summary

### Vehicle Occupancy Information

2011-2015 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 326, 340 and 352 in Brooklyn, NY

2011-2015 ACS-5 Year (JTW), Vehicle Occupancy Rate:

| Census Tract | Total | Drove alone | Total | carpool |          |          |               |                  | Total |
|--------------|-------|-------------|-------|---------|----------|----------|---------------|------------------|-------|
|              |       |             |       | 2person | 3 Person | 4 Person | 5 or 6 Person | 7 or more Person |       |
| 0            | 0     | 0           | 0     | 0       | 0        | 0        | 0             | 0                | 0     |
| 326          | 392   | 360         | 32    | 11      | 21       | 0        | 0             | 0                | 32    |
| 340          | 115   | 106         | 9     | 4       | 5        | 0        | 0             | 0                | 9     |
| 352          | 13    | 8           | 5     | 5       | 0        | 0        | 0             | 0                | 5     |
|              | 520   | 474         |       | 10      | 9        | 0        | 0             | 0                | 493   |

Vehicle Occupancy = 1.06

|               |              |
|---------------|--------------|
| <b>Auto</b>   | <b>0.197</b> |
| <b>Taxi</b>   | <b>0.000</b> |
| <b>Bus</b>    | <b>0.135</b> |
| <b>Subway</b> | <b>0.542</b> |
| <b>Walk</b>   | <b>0.112</b> |
| <b>Other</b>  | <b>0.014</b> |
| <b>Total</b>  | <b>1.000</b> |

**NOISE**

# Seaside Park and Community Arts Center

## Chapter 12: Noise

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### A. INTRODUCTION

The proposed project involves the development of approximately 2.41-acres of publicly accessible open space, which would include an approximately 5,100-seat seasonal amphitheater for concerts and other events. The proposed project also includes the landmarked (Former) Childs Restaurant Building, which would be restored and altered to provide the stage area for the open-air concert venue and renovated for adaptive reuse as a restaurant and banquet facility (refer to Figure 12-1). The (Former) Childs Restaurant Building also would be used as an indoor entertainment venue during the off-season months.

The proposed amphitheater would be an interim use authorized for a period of ten years pursuant to a new City Planning Commission Special Permit. Upon completion, the amphitheater would be owned by the City of New York and operated by a joint venture that involves a not-for-profit entity under a long term lease with the city. It would serve as the venue for a variety of concerts, community events, and public gatherings, such as the Seaside Summer Concert Series. The proposed amphitheater and other project components are expected to be completed by summer 2015, and the first full year of operation would be 2016.

The proposed amphitheater would operate during the summer concert season and would feature a tensile fabric roof ~~canopy~~ that would be removed during the off-season, but remain in position throughout the summer concert season. The tensile fabric roof would be harnessed by truss structural supports and would provide transparency and create appropriate shade. During concerts, the proposed amphitheater would also have additional noise reduction features, including a deployable tensile canopy extension and acoustical curtains. The temporary canopy extension would extend ~~100~~ approximately 95 feet to the west of the seasonal tensile fabric roof ~~canopy~~, and its maximum width would be ~~167~~ approximately 180 feet ~~6 inches~~. The temporary canopy extension would be attached to the westernmost arch by a closure flap at a height of 45 feet 6 inches above the boardwalk and fastened to the ~~five~~ six westernmost floodlight poles at a height of 17 feet 6 inches to 20 feet above the boardwalk. In addition, ~~five~~ a total of six acoustical curtains would be attached to, and drop down from, the edges of both the tensile fabric roof and the canopy ~~roof~~ extension at various locations. The bottoms of five of the acoustical curtains would be affixed to the ~~five floodlight poles~~ ground. The acoustical curtain at the West 22<sup>nd</sup> Street entrance would not drop to the ground. Instead, an 80 inch clearance is proposed to create an entrance and a view corridor through to West 22<sup>nd</sup> Street. In addition, for concert events, backing sound baffles would be affixed to the inside of the tensile fabric roof, the deployable canopy extension, and sound curtains. These sound reduction features would be temporary and would only be deployed immediately before concerts and subsequently removed.

The project area is located in Brooklyn Community District 13 along the western portion of the Riegelmann Boardwalk at Coney Island Beach on Block 7071 and Lots 27, 28, 30, 32, 34, 76, 130, 142, 226, and 231. It is bounded by the boardwalk to the south, West 23<sup>rd</sup> Street to the west, West 21<sup>st</sup> Street to the east, and properties fronting Surf Avenue to the north. Figure 12-1 shows the project location.

**FIGURE 12-1**  
**Project Location**



 = Site Location.

## B. PRINCIPAL CONCLUSIONS

Noise levels were evaluated for the traffic network, as well as for the concert itself, for sensitive receptor locations in the vicinity of the project site. No impacts due to increases in traffic are likely.

Based on design features to limit propagation of noise levels beyond the site boundaries, and a commitment to limit the  $L_{max}$  concert levels at the mixing board to 98 dBA before 10 PM and 92 dBA after 10 PM (equivalent levels at the front row of to 90-100 dBA before 10 PM and 87-94 dBA at and after 10 PM) with a specific speaker array as described in Appendix D, no impacts due to concert noise are projected. No further measures are required to avoid noise impacts. As part of the commitment to limit the  $L_{max}$  concert music amplification levels, the amphitheater operator will set forth the restrictions on concert music amplification in the Artist Booking Sheet provided to the talent performing at the venue. The same restriction will be set forth in the contracts between the venue operator and the individuals and groups performing at the amphitheater. A dB meter will be installed at the mix position in the amphitheater and used for every event, which will enable the venue operator to confirm compliance with the limit on the amplification levels during concert events.

In addition, the analysis results also indicated that concert noise levels would not exceed the permissible noise increments in Section 24-244 of the NYC Noise Code. Further, based on the results of the CEQR analysis, the proposed project is not anticipated to exceed the commercial music standards in Section 24-231 of the Noise Code, although predicting noise levels within receiving properties is difficult. Should



~~a violation occur, it would be handled as an enforcement action. However, if potential noise impacts are identified during refinement of analyses to further enhance noise attenuating measures of the project prior to the issuance of the FEIS, the Applicant commits to providing additional measures as necessary to ensure that no such significant adverse noise impacts occur due to the proposed project.~~

## **C. METHODOLOGY**

The purpose of this analysis is to determine existing noise levels, project future noise levels without and with the proposed project as the amphitheater is described above, and to ~~identify~~ determine whether the project would generate potential significant impacts. The analysis was carried out in accordance with the 2012 NYC City Environmental Quality Review (CEQR) Technical Manual.

## **D. NOISE FUNDAMENTALS**

### **Description**

Noise is measured in sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the A-weighted scale are termed “dBA.” The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB, and the threshold of pain is about 140 dB. Table 12-1 shows the A-weighted range of noise levels for a variety of indoor and outdoor noise levels. The C-weighted scale (dBC) is used for evaluating environmental noise sources that have high values in the lower frequencies below 500 Hz. This would be applicable to music where the bass sounds are of concern.

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

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

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

- $L_{eq}$  is the continuous equivalent sound level. The sound energy from the fluctuating sound pressure levels is averaged over time to create a single number to describe the mean energy or intensity level. High noise levels during a monitoring period will have greater effect on the  $L_{eq}$  than low noise levels. The  $L_{eq}$  has an advantage over other descriptors because  $L_{eq}$  values from different noise sources can be added and subtracted to determine cumulative noise levels.
- $L_{max}$  is the highest SPL measured during a given period of time. It is useful in evaluating  $L_{eq}$ s for time periods that have an especially wide range of noise levels.

**TABLE 12-1**  
**Sound Pressure Level and Loudness of Typical Noises in Indoor and Outdoor Environments**

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

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

- $L_{10}$  is the SPL exceeded 10% of the time. Similar descriptors are the  $L_{50}$ ,  $L_{01}$ , and  $L_{90}$ .
- $L_{dn}$  is the day-night equivalent sound level. It is similar to a 24-hour  $L_{eq}$ , but with 10 dBA added to SPL measurements between 10 pm and 7 am to reflect the greater intrusiveness of noise experienced during these hours.  $L_{dn}$  is also termed DNL.

- Continuous sound is sound that lasts more than two seconds.
- Impulsive sound is of short duration, where each peak of sound lasts two seconds or less. The sound is characterized by abrupt onset and rapid decay.

## **Addition**

Because they are logarithmic, decibels cannot be added and subtracted arithmetically. The formula for adding together SPLs is:

$$L_{\text{total}} \text{ dB} = 10 \log \sum_{i=1}^N 10^{(L_i/10)}$$

where:  $L_i$  is an individual SPL and  $L_{\text{total}}$  is the sum of the SPLs.

Based on this formula, adding together two noise levels that are equally loud would result in a noise level that was 3 dBA higher. Thus, if the noise from a fan on an industrial site is 60 dBA at a residential property line, and a second fan was added at the industrial site, the total noise level at the property line would be 63 dBA, not 120 dBA.

~~In most cases, where the addition of decibels only needs to be accurate by +/- 1 dB, the following rule of thumb can be used to add decibels:~~

| <u>When two decibel values differ by:</u> | <u>Add the following amount to the higher value:</u> |
|---|--|
| 0 or 1 dB                                 | 3 dB   |
| 2 or 3 dB                                 | 2 dB   |
| 4 or 9 dB                                 | 1 dB   |
| 10 dB or more                             | 0 dB   |

## **Passenger Car Equivalents**

Vehicular traffic volumes can be converted into Passenger Car Equivalent (PCE) values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of 13 cars, one bus (capable of carrying more than nine passengers) is assumed to generate the noise equivalent of 18 cars, and one heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, as summarized below from the *CEQR Technical Manual*.

- autos and light trucks = 1 passenger car,
- medium trucks = 13 passenger cars,
- heavy trucks = 47 passenger cars, and
- public buses = 18 passenger cars.

Thus, Passenger Car Equivalents (PCEs) are the numbers of autos that would generate the same noise level as the observed vehicular mix of autos, medium trucks, and heavy trucks. PCEs are useful for comparing the effects of traffic noise on different roadways or for different future scenarios.

Where traffic volumes are projected to change, proportional modeling techniques, as described in the 2012 NYC CEQR Technical Manual, typically are used to project incremental changes in traffic noise levels. This technique uses the relative changes in traffic volumes to project changes between (e.g.) No-Action and With-Action noise levels. The change in future noise levels is calculated using the following proportionality equation:

$$\text{FNL} = \text{ENL} + 10 \times \log_{10} (\text{FPCE}/\text{EPCE}),$$

where:

FNL= Future Noise Level

ENL= Existing Noise Level

FPCE= Future PCEs

EPCE= Existing PCEs

Because sound levels use a logarithmic scale, this model proportions logarithmically with traffic change ratios. For example, assume that traffic is the dominant noise source at a particular location. If the existing traffic volume on a street is 100 PCEs, and if the future traffic volume were increased by 50 PCEs to a total of 150 PCEs, the noise level would increase by 1.8 dBA. If the future traffic were increased by 100 PCEs, (i.e., doubled to a total of 200 PCEs), the noise level would increase by 3.0 dBA.

## Attenuation

Noise from a given source attenuates (diminishes) with distance. A roadway or railway is considered a line source because a motor vehicle or diesel engine moves from one point to another along a fixed linear route, and the receiver experiences noise from all points along the line. Noise from a line source typically attenuates at the rate of 3 dBA per distance doubling, based on a reference distance of 50 feet. Thus, a traffic noise level of 65 dBA at a distance of 50 feet from the roadway would be 62 dBA 100 feet from the roadway and 59 dBA 200 feet from the roadway. The 3 dBA attenuation rate is used for noise traveling through the air or over a hard surface. Noise traveling over a soft surface, such as grass, may attenuate at a more rapid rate of about 4.5 dBA.

Noise from a source at a fixed location is termed a stationary source or point source. It attenuates at a rate of 6 dBA when noise is traveling through air or over a hard surface and up to 7 or 8 dBA when traveling over a soft surface. These attenuation rates are rules of thumb for total noise levels from a given source. Music from the proposed action would be a point source.

## Octave Bands

Although the SPL heard in the environment typically is composed of many different frequencies, it can be broken down into the numerous individual frequencies. These frequencies are grouped into octave bands. An octave band is a group of frequencies in the interval between a given frequency (such as 350 Hz) and twice that frequency (e.g., 710 Hz). The standard octave bands are each named by their center frequencies. Thus, each octave band will be represented by a single SPL. The representative SPLs from the individual octave bands can be added together logarithmically to obtain an overall SPL. Typically, the octave bands are weighted before they are combined so that the resulting SPL will represent a noise level in dBA or dBC. The weighting for dBA and dBC for each octave band is shown below.



|             |       |       |       |       |      |      |      |      |      |      |       |
|-------------|-------|-------|-------|-------|------|------|------|------|------|------|-------|
| Octave Band | 16    | 31.5  | 63    | 125   | 250  | 500  | 1000 | 2000 | 4000 | 8000 | 16000 |
| A-weighting | -56.7 | -39.4 | -26.2 | -16.1 | -8.6 | -3.2 | 0.0  | 1.2  | 1.0  | -1.1 | -6.6  |
| C-weighting | -8.5  | -3.0  | -0.8  | -0.2  | 0.0  | 0.0  | 0.0  | -0.2 | -0.8 | -3.0 | -8.5  |

## E. NOISE STANDARDS AND GUIDELINES

### New York City CEQR Noise Exposure Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEQR) noise standards for exterior noise levels. They are the basis for classifying noise exposure into four categories based on the  $L_{10}$ : Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable (see Table 12-2). The CEQR Noise Exposure Guidelines shown in Table 12-2 are guidelines, not a law. However, City review agencies use the guidelines in determining potential impacts when a project comes under their review.

**TABLE 12-2**  
**CEQR Noise Exposure Guidelines for use in City Environmental Impact Review<sup>1</sup>**

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

**Notes:**

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

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

Table 12-3 shows the required attenuation for sensitive uses within the last three categories. For example, an  $L_{10}$  may approach 80 dBA provided that buildings are constructed of materials that reduce exterior to interior noise levels by at least 35 dBA. The acceptable general exposure guidelines shown in Table 12-3 are based on the assumption that the average building would provide 20 dBA of combined window/wall noise attenuation. Thus, the desired interior daytime noise level is an  $L_{10}$  of 45 dBA or lower and the desired nighttime level is an  $L_{10}$  of 35 dBA or lower.

**TABLE 12-3**  
**Required Attenuation Values to Achieve Acceptable Interior Noise Levels**

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

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

<sup>B</sup>Required attenuation values increase by 1 dBA increments for  $L_{10}$  values greater than 80 dBA.

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

## New York City Noise Code

Whereas the CEQR noise exposure guidelines are applicable to total noise levels for a proposed action requiring environmental review, the New York City Noise Code legislation defines sound-level standards for specific noise sources—~~both existing and proposed~~. The Code's enforcement is driven by complaints of violations. The most recent version of the Code (July 2007) generally seeks to reduce ambient noise and prohibits all unreasonable and unnecessary noise, addresses construction hours and activities, and sets the standards for a variety of sources, including music from commercial establishments.

~~The NYC Noise Code has not traditionally been used for purposes of CEQR Environmental Assessments. However, since~~Because the project involves an outdoor amphitheater in a residential neighborhood, and because the proposed action includes a zoning special permit that requires a finding specific to noise at nearby residences and community facilities, a discussion of the Code is also included in this chapter because violations could lead to fines and/or sealing of the sound equipment. The most recent version of the Code (July 2007) prohibits all unreasonable and unnecessary noise and also restricts the decibel levels generated by music from commercial establishments. Under Section 24-24418, ~~General prohibitions, no person shall make operate or use, continue, or cause to be operated or used any sound reproduction device in such a manner as to create or permit to be made or continued any unreasonable noise, which is considered, based on Section 24-218 General Prohibitions defined as:~~

- Sound, other than impulsive sound, attributable to the source, measured at a level of 7 dBA or more above the ambient sound level at or after 10:00 PM and before 7:00 AM, as measured at any point within a receiving property or as measured at a distance of 15 feet or more from the source on a public right-of-way;
- Sound, other than impulsive sound, attributable to the source, measured at a level of 10 dBA or more above the ambient sound level at or after 7:00 AM and before 10:00 PM, as

measured at any point within a receiving property or as measured at a distance of 15 feet or more from the source on a public right-of-way; and

- Impulsive sound, attributable to the source, measured at a level of 15 dBA or more above the ambient sound level, as measured at any point within a receiving property or as measured at a distance of 15 feet or more from the source on a public right-of-way.

Section 24-218 does not apply to any sound from any source where the decibel level of such sound is within the limits prescribed by another section. With reference to the above, Section 24-203 (33), General Definitions, states that impulsive sound does not include music. Therefore that particular criterion does not apply to the proposed action. The reference to sound attributable to the source is based on the  $L_{max}$ . However, the descriptor to be used for the ambient sound level is not defined.

According to Section 24-231, Commercial Music, no person shall make or cause or permit to be made or caused any music originating from or in connection with the operation of any commercial establishment or enterprise when the level of sound attributable to such music, as measured inside any receiving property dwelling unit:

- Is in excess of 42 dBA as measured with a sound level meter; or
- Is in excess of 45 dB in any one-third octave band having a center frequency between 63 hertz and 500 hertz; or
- Causes a 6 dBC or more increase in the total sound level above the ambient sound level as measured in the "C" weighting network provided that ambient sound level exceeds 62 dBC.

Section 24-244, Sound reproduction devices, states that no person shall operate or use any sound reproduction device in such a manner as to create unreasonable noise. Section 24-218 defines unreasonable noise (see above); where unreasonable noise is used in any other section, the definition in 24-218 becomes the standard.

## **Criteria for Determining the Need for Mitigation**

Future conditions requiring mitigation measures will be identified for the purposes of both CEQR and the NYC Noise Code. In determining potential impacts to a community from a proposed project, NYCDEP defines a significant impact under CEQR as:

- An increase of 3 dBA or more where the no action noise level is an  $L_{eq}$  of 62 dBA or more; or
- An increase of up to 5 dBA where the no action noise  $L_{eq}$  is below 62 dBA, providing the total resulting  $L_{eq}$  is equal to or less than 65 dBA; or
- An increase of 3 dBA in the  $L_{eq}$  during the nighttime hours between 10 pm and 7 am; or

For the purposes of assessing future compliance with Section 24-~~244~~18 of the NYC Noise Code, a condition requiring analysis of mitigation measures will be identified as sound reproduction devices causing unreasonable noise, which is considered to be:

- A projected difference of 10 dBA between the  $L_{max}$  associated with the concerts and the  $L_{eq}$  for ~~No~~With-Action Conditions before 10 PM and/or

- A projected difference of 7 dBA between the  $L_{max}$  associated with the concerts and the  $L_{eq}$  for No-Action Conditions at or after 10 PM.

If any sites are projected to exceed the criteria above, then mitigation measures to address Section 24-241~~8~~ of the Noise Code would be considered. ~~For the purposes of assessing future compliance with Section 24-218 of the NYC Noise Code, which refers to outdoor noise levels, a condition requiring analysis of mitigation measures will be identified as:~~

~~A projected difference of 10 dBA between the  $L_{max}$  associated with the concerts and the  $L_{eq}$  for No-Action Conditions before 10 PM and/or~~

~~A projected difference of 7 dBA between the  $L_{max}$  associated with the concerts and the  $L_{eq}$  for No-Action at or after 10 PM.~~

Predicting future noise levels under Section 24-231 of the Noise Code is difficult because the Noise Code requirements for commercial music pertain to indoor noise levels at receiving properties. If projected future noise levels exceed would exceed either the CEQR criteria or Section 24-218 of the NYC Noise Code, then mitigation measures to address the conditions in Section 24-231 of the noise code, the general enforcement powers of the Noise Code would result in violations and/or additional mitigation measures also would be considered required.

## F. EXISTING CONDITIONS

### Development Site

The development site is generally bounded by the boardwalk to the south, West 23<sup>rd</sup> Street to the west, West 21<sup>st</sup> Street to the east, and properties fronting Surf Avenue to the north. The development site is an assemblage of ten tax lots on Block 7071 (Lots 27, 28, 30, 32, 34, 76, 130, 142, 226, and 231), as well as the beds of Highland View Avenue and a portion of West 22<sup>nd</sup> Street (approved for demapping in 2009 in the Coney Island Rezoning), and covers an aggregate lot area of approximately 130,404 sf (3.0 acres).

The area is currently underdeveloped, and the only built structure occupying the site is the Former Childs Restaurant Building (25,400 sf; Lot 130), a designated New York City landmark that is currently vacant and in deteriorated condition. The remainder of the development site is comprised of vehicle storage (18,004 sf; Lots 27, 28, 30, 32, 34, and 76), vacant unimproved land (14,157 sf; Lots 226 and 231), an unimproved City-owned lot (44,327 sf; Lot 142) that at one time was a community garden<sup>1</sup>, and approximately 28,516 sf of paved streets, (Highland View Avenue and a portion of West 22<sup>nd</sup> Street, approved for demapping in 2009 in the Coney Island Rezoning). Figure 1-3 in Chapter 1, "Project Description", provides photos of existing conditions on the development site. The former community garden and streets (72,843 sf) are City-owned, and the remainder of the site is under ownership of the Applicant (57,561 sf).

The proposed zoning map amendment would also encompass Lots 79 and 81 on Block 7071, which are located immediately to the northwest of the development site (refer to Figure 1-1 in Chapter 1, "Project

<sup>1</sup> Although the community garden is decommissioned, field observations indicate that it is currently being used for gardening purposes.



Description”). Both outparcels are currently comprised of paved lots, with a combined lot area of approximately 6,000 sf, and are under private ownership by persons/entities independent of the Applicant. Lots 79 and 81 are not part of the proposed Seaside Park and Community Arts Center project. They are part of the planned Highland View Park that has been approved through ULURP, but has not been formally mapped yet. These two lots were originally part of a 1.41 acre neighborhood park, envisioned as part of the Coney Island Rezoning EIS (2009), which would include both active and passive recreational amenities. The proposed amphitheater would occupy most of the lots designated for Highland View Park, but the two outparcels are excluded from the defined development site described above. Since the two outparcels (Lots 79 and 81) are still in private ownership, they are not anticipated to be developed by the analysis year of 2016, although they may be incorporated into Highland View Park at some future time as contemplated in the 2009 FEIS.

## **Surrounding Neighborhood**

To the north and west of the site, residential walk-ups and apartment complexes exist along Surf Avenue and West 20<sup>th</sup> to West 24<sup>th</sup> Streets. To the east of the project site is a vacant lot that has served in recent years as a temporary location for the Seaside Summer Concert Series. Two blocks to the east of the development site is MCU Park, the home of the Brooklyn Cyclones, a New York Mets minor league baseball team. The newly opened Steeplechase Plaza, which features the landmark Parachute Jump and iconic B & B Carousel, is also located to the east of the development site. Farther east along Stillwell and Surf Avenues is the Coney Island subway terminal.

The Brooklyn Cyclones play at MCU Park, which is at 1904 Surf Avenue adjacent to the boardwalk to the south and the Luna Park amusement area to the east. Seating capacity for the stadium currently stands at 7,501. The baseball team plays a shortened season annually, starting in late June and extending into the middle of September, with approximately 37 home games for the 2013 season. Most games start between 5 p.m. and 7 p.m., and last for approximately 2 to 3 hours. An at-grade parking lot is adjacent to the stadium to the east of the park along Surf Avenue. Fans arriving by car typically begin to enter the lot approximately an hour before game time, and continue to exit the lot for an hour after the game is over.

Apart from baseball games at MCU Park, Coney Island hosts numerous events and activities throughout the spring and summer months. ~~The events for 2013 span 13 dates in May, 21 dates in June, 26 dates in July, 30 dates in August, and 10 dates in September — a total of 100 days. Some dates have multiple events.~~ During the months of July and August, nearly every evening has a scheduled event. These include the six Seaside Summer Concert Series that have taken place at a vacant lot immediately to the east of the project site for the past three years, 19 nights with fireworks on the boardwalk, movies on the beach, and karaoke nights, among others.

## **Sensitive Receptors**

Sensitive receptors that could potentially be affected by the proposed project are those to the west of the proposed concert venue on Blocks 7070 and 7071. Residential buildings on these blocks are shown in Table 12-4 and on Figure 12-2. Most are multifamily buildings constructed in the late 1920s and early 1930s. Thus, they may not have double-glazed windows. However, most appear to have air conditioning as an alternate means of ventilation.

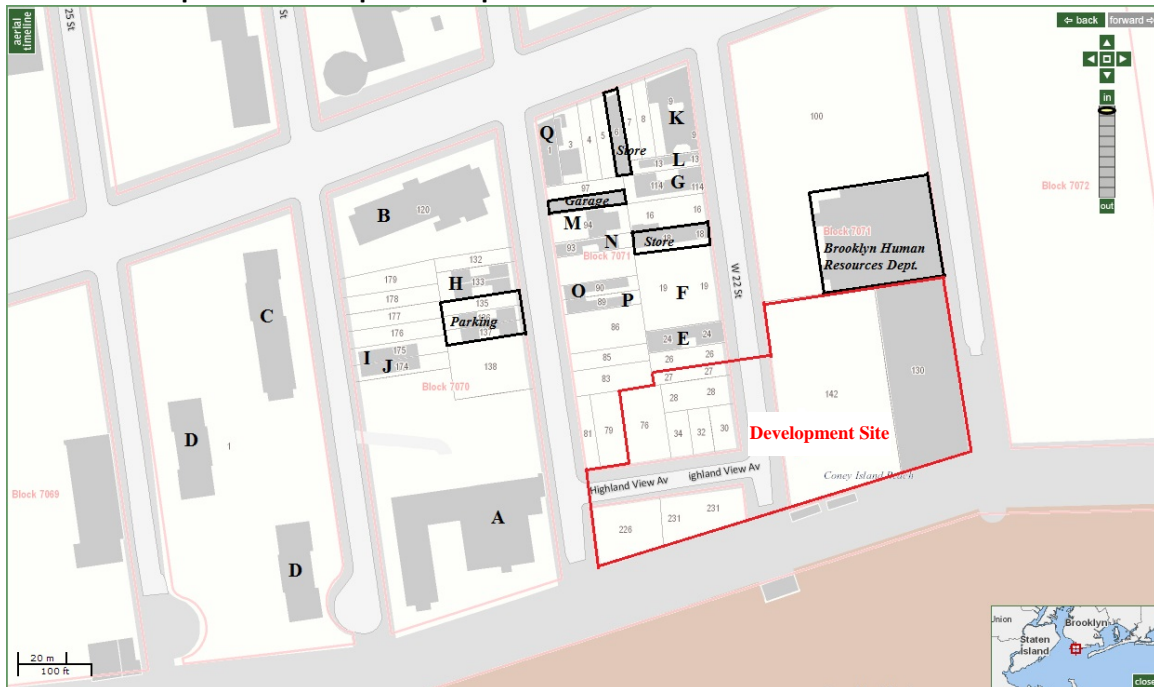
**TABLE 12-4**  
**Nearby Sensitive Receptors**

| ID | Address                           | Block | Lot | # Floors | # DUs | Comments  |
|----|-----------------------------------|-------|-----|----------|-------|---|
| A  | 3035 W. 24 <sup>th</sup> St.      | 7070  | 148 | 5        | NA    | Sea Crest Health Care Center. Built in 1973.        |
| B  | 2316 Surf Ave.                    | 7070  | 120 | 4        | 100   | Surf manor home for adults (assisted living)        |
| C  | 3024 W. 24 <sup>th</sup> St.      | 7070  | 1   | NA       | NA    | Haber House Neighborhood Senior Center              |
| D  | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | NYCHA housing. 3 buildings. Built in 1964           |
| E  | 3046 W. 22 <sup>nd</sup> St.      | 7071  | 24  | 3        | 15    | No balconies. Built in 1935. Worst case location    |
| F  | 3040 W. 22 <sup>nd</sup> St.      | 7071  | 19  | 7        | 40    | Balconies on W. 22 <sup>nd</sup> St. Built in 2005. |
| G  | 3018-3022 W. 22 <sup>nd</sup> St. | 7071  | 114 | 3        | 21    | Built in 1930.                                      |
| H  | 3024 W. 23 <sup>rd</sup> St.      | 7070  | 133 | 3        | 10    | Built in 1928.                                      |
| I  | 3027 W. 24 <sup>th</sup> St.      | 7070  | 175 | 3        | 6     | Built in 1930.                                      |
| J  | 3039 W. 24 <sup>th</sup> St.      | 7070  | 174 | 3        | 6     | Built in 1930.                                      |
| K  | 3008 W. 22 <sup>nd</sup> St.      | 7071  | 9   | 2        | 20    | Built in 1930.                                      |
| L  | 3016 W. 22 <sup>nd</sup> St.      | 7071  | 13  | 1        | 4     | Built in 1930.                                      |
| M  | 3017 W. 23 <sup>rd</sup> St.      | 7071  | 94  | 2        | 6     | Built in 1932.                                      |
| N  | 3023 W. 23 <sup>rd</sup> St.      | 7071  | 93  | 2        | 3     | Built in 1930.                                      |
| O  | 3029 W. 23 <sup>rd</sup> St.      | 7071  | 90  | 3        | 3     | Built in 1935.                                      |
| P  | 3031 W. 23 <sup>rd</sup> St.      | 7071  | 89  | 3        | 3     | Built in 1935.                                      |
| Q  | 2226 Surf Ave.                    | 7071  | 1   | 2        | 2     | Built in 1940                                       |

Notes: NA = not available

Source: Sandstone Environmental Associates, Inc.

**FIGURE 12-2**  
**Sensitive Receptors Near Proposed Amphitheater**



Legend: A – Q = buildings with residential uses

Source: Sandstone Environmental Associates, Inc.

## **Noise Levels**

Existing noise levels were monitored at ten sites representing sensitive receptor locations within the study area. Sites 1-6 were monitored on August 23<sup>rd</sup> and 25<sup>th</sup>, 2012. Sites 7 through 10 were monitored on June 20<sup>th</sup>, June 29<sup>th</sup>, and July 17<sup>th</sup>, 2013. The monitoring sites were selected as representative sensitive receptors on roadways that would experience traffic increases due to the proposed project, as well as sensitive receptors in the vicinity of the proposed amphitheater. The locations of the sites are listed below and shown in Figure 12-3.

1. Midblock on West 17<sup>th</sup> Street between Mermaid and Neptune Avenues;
2. Northwestern corner of West 19<sup>th</sup> Street and Mermaid Avenue;
3. Midblock on West 20<sup>th</sup> Street, between Surf Avenue and Mermaid Avenue;
4. Southwestern corner of West 21<sup>st</sup> Street and Surf Avenue;
5. Midblock on West 22<sup>nd</sup> Street between Surf Avenue and Reigelmann Boardwalk;
6. Southeastern corner of West 20<sup>th</sup> Street and Surf Avenue;
7. Midblock ~~at a storefront in front of the church~~ on the north side of Surf Avenue between West 21<sup>st</sup> and West 22<sup>nd</sup> Streets<sup>2</sup>;
8. South end of West 23<sup>rd</sup> Street near Reigelmann Boardwalk<sup>3</sup>;
9. Midblock on Surf Avenue between West 23<sup>rd</sup> and West 24<sup>th</sup> Streets; and
10. Southern end of West 24<sup>th</sup> Street near Reigelmann Boardwalk<sup>4</sup>.

Noise levels were monitored on Thursdays and Saturdays when Brooklyn Cyclones' baseball games were scheduled. Monitoring on game nights was carried out to coincide and be consistent with the periods of traffic data collection. Monitoring on game nights was also determined to be representative of typical conditions during the anticipated concert season. Since Coney Island features 100 nights of special events in any given summer, the 40 to 50 concert nights are likely to coincide with other scheduled events during the June-September period. Therefore, a Brooklyn Cyclones game night with no other concerts was considered an appropriate ~~and somewhat conservative~~ baseline, given the fact that some of the scheduled events (e.g., fireworks) are much noisier than the games.

Measurement times differed for the two days due to the start times of the baseball games, with observations set to coincide with the pre-event and post-event periods for each ball game. On Thursdays, monitoring was conducted during the PM (5:30 - 7:30 p.m.) and Evening (9-11 p.m.) time periods. On Saturdays, was carried out during the PM (4:30- 6:30 p.m.) and the Evening (8 -10 p.m.) periods. Traffic classification counts were carried out concurrently with noise monitoring.

Weather conditions ranged from partly cloudy to sunny with temperatures in the 70s and 80s. Winds were minimal except for Sites 8 and 10 on June 20, 2013. Due to the breezy conditions on West 23<sup>rd</sup> and West 24<sup>th</sup> Streets, the midblock monitoring sites had to be moved to the end of the streets, near the boardwalk, to ensure that the winds at the noise monitor were below 12 mph. Therefore, the subsequent monitoring periods for these sites also were placed at these locations to maintain consistency. Given the low volume of traffic on those two streets, the change in locations had a negligible effect on the determination of ambient noise levels.

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<sup>2</sup> This site was originally included due to the presence of a church at that location. However, the church has apparently vacated the storefront and this site is no longer a sensitive receptor location.

<sup>3</sup> Located at the end of the street instead of midblock due to wind during noise monitoring.

<sup>4</sup> Located at the end of the street instead of midblock due to wind during noise monitoring.

**FIGURE 12-3**  
**Noise Monitoring Locations**



Noise levels were monitored according to the procedures outlined in the 2012 NYC CEQR Technical Manual. The instruments used were Larson Davis 831 and B&K 2250 Sound Level Meters, ANSI Type I-certified instruments. Each device was mounted on a tripod at a height of five feet above the ground. The noise monitors were calibrated before and after use. Wind screens were used during all sound



measurements except for calibration. All measurement procedures conformed to the requirements of ANSI Standard S1.13-1971 (R1976).

Sources of noise varied with the site observed. Traffic noise was the predominant noise source except for Sites 8 and 10, which were influenced primarily by pedestrian voices, walk-bys, car radios, and the hum of HVAC units on nearby buildings. Pedestrian voices and walk-bys also were significant along Sites 2, 4, and 6. Crowd noise from the Brooklyn Cyclones game at nearby MCU Park could be heard near Sites 3, 4, 6, and 7. A post-game fireworks presentation took place at MCU Park on August 25, 2012 during the evening measurement at Site 3, and on June 29, 2013 during the evening measurement at Site 10. Train noise from subway activity on Stillwell Avenue was audible at Site 2.

Table 12-5 shows the existing noise levels based on the noise monitoring results. The values for Site 6 on August 25, 2012 were estimated using the results for the weekday period and the proportionality equation for the PCEs for August 23<sup>rd</sup> and August 25<sup>th</sup>. The maximum  $L_{10}$  noise level for the pre-event period was 70.9 dBA which occurred on Surf Avenue between 21<sup>st</sup> and 22<sup>nd</sup> Streets (Site 7). With the exception of the fireworks at Site 3, the highest  $L_{10}$  for the post-event period was 71.1 dBA, which occurred at Site 9 on Surf Avenue between 23<sup>rd</sup> and 24<sup>th</sup> Streets. The differences between the  $L_{eq}$  and  $L_{10}$  are generally two to three dBA. The  $L_{max}$  values, on the other hand, are highly variable and do not correlate with traffic volumes. They range from 6.1 to 25.0 dBA higher than the  $L_{eq}$  values.

Ambient noise levels are also affected by Coney Island's Seaside Summer Concert Series, which is held on a temporary stage at West 21<sup>st</sup> Street and Surf Avenue. The concerts are free, and attendees bring their own lawn chairs for seating. During 2013, the concerts ~~are took place~~ took place at 7:30, once a week on a Wednesday, Thursday, or Friday, from July 12<sup>th</sup> to August 21<sup>st</sup>.

To help characterize noise levels during a local music event, noise monitoring was carried out at four locations during the concert on Friday, July 12<sup>th</sup> when Cheap Trick and The Cringe were playing. Cheap Trick, the main act, is a rock band. The Cringe, the opening act, is an American indie rock band. No information was available regarding the type of speaker system or the noise levels at the front row.

Table 12-6 shows the sound level data. Two of the locations were Monitoring Sites 5 and 8, which were as shown in Table 12-5. The differences between the  $L_{eq}$  and  $L_{10}$  descriptors were two to three dBA, which is similar to the differences for the concert noise levels. However, the differences between the  $L_{max}$  and the  $L_{eq}$  are much smaller for the music event than for the ambient monitoring. They range from about 6 to 11 dBA for Monitoring Sites 5 and 8. For a point just east of the stage, which is close to the music source, the difference was approximately 5 dBA. This was considered an estimate of the relationship of the  $L_{max}$  to the  $L_{eq}$  for a music event since the greater  $L_{max}$  noise levels at Monitoring Sites 5 and 8 could be due to more local influences.

Based on Table 12-6, weekday  $L_{10}$  noise levels for Site 5 are four dBA higher during one of the summer concerts when compared with the pre-event time period. If the summer concerts extend beyond 10 pm, the relative difference increases to about twelve dBA. At Site ~~58~~, the  $L_{10}$  noise levels during the summer concert were seven to twelve dBA higher compared to the noise levels without the concert in Table 12-5.

**TABLE 12-5**  
**Existing Noise Levels (dBA)**

| ID  | Site  | Date and Time |                       | CEQR Noise Category | Leq  | L10  | Lmin | Lmax | L01  | L50  | L90  |
|-----|---|---------------|-----------------------|---------------------|------|------|------|------|------|------|------|
|     |   |               |                       |                     |      |      |      |      |      |      |      |
| 1   | W. 17th Street, midblock                                  | 8/23/2012     | 5:53 pm - 6:13 pm     | M.U. (I)            | 66.2 | 70.1 | 50.5 | 81.9 | N/A  | 60.3 | 53.6 |
|     |   |               | 9:06 pm - 9:26 pm     | M.A.                | 65.4 | 68.7 | 50.7 | 84.4 | 77.5 | 56.8 | 53.3 |
|     |   | 8/25/2012     | 4:32 pm - 4:53 pm     | M.A.                | 66.6 | 69.8 | 53.5 | 84.6 | 76.5 | 62.6 | 56.2 |
|     |   |               | 9:44 pm - 10:04 pm    | M.A.                | 68.2 | 69.9 | 52.9 | 93.2 | 76.1 | 57.8 | 54.7 |
| 2   | W. 19th Street / Mermaid Avenue                           | 8/23/2012     | 6:19 pm - 6:39 pm     | M.U. (I)            | 68.9 | 70.4 | 54.3 | 89.8 | N/A  | 64.0 | 58.5 |
|     |   |               | 9:32 pm - 9:53 pm     | M.A.                | 66.2 | 68.4 | 68.4 | 82.6 | 77.5 | 62.6 | 56.5 |
|     |   | 8/25/2012     | 4:59 pm - 5:19 pm     | M.A.                | 65.5 | 67.9 | 57.1 | 81.8 | 73.2 | 64.1 | 60.0 |
|     |   |               | 9:18 pm - 9:38 pm     | M.A.                | 66.5 | 68.4 | 54.1 | 84.3 | 77.8 | 62.0 | 58.0 |
| 3   | W. 20th Street, midblock                                  | 8/23/2012     | 6:52 pm - 7:12 pm     | M.A.                | 59.0 | 61.2 | 54.2 | 68.2 | 61.2 | 58.3 | 55.7 |
|     |   |               | 10:00 pm - 10:20 pm   | M.A.                | 59.7 | 61.5 | 53.5 | 76.4 | 61.5 | 57.3 | 55.2 |
|     |   | 8/25/2012     | 5:27 pm - 5:47 pm     | M.A.                | 64.8 | 65.4 | 59.8 | 87.2 | 69.8 | 63.1 | 61.4 |
|     |   |               | 8:53 pm - 9:14 pm*    | C. U.               | 80.7 | 85.5 | 57.4 | 97.6 | 94.6 | 62.5 | 59.4 |
| 4   | W. 21st Street / Surf Avenue                              | 8/23/2012     | 6:04 pm - 6:24 pm     | M.A.                | 66.0 | 69.7 | 53.7 | 77.9 | 73.3 | 63.6 | 56.5 |
|     |   |               | 10:30 pm - 10:50 pm   | M.A.                | 62.7 | 65.3 | 50.2 | 81.3 | 71.9 | 57.7 | 52.7 |
|     |   | 8/25/2012     | 5:54 pm - 6:14 pm     | M.A.                | 68.3 | 68.8 | 58.4 | 88.1 | 82.0 | 63.7 | 60.8 |
|     |   |               | 8:29 pm - 8:49 pm     | M.A.                | 64.5 | 67.3 | 56.2 | 79.1 | 73.7 | 62.1 | 59.0 |
| 5   | W. 22nd Street, midblock                                  | 8/23/2012     | 5:37 pm - 5:57 pm     | M.A.                | 57.5 | 60.2 | 50.6 | 70.8 | 65.6 | 56.8 | 52.8 |
|     |   |               | 10:32 pm - 10:52 pm   | M.A.                | 49.5 | 52.2 | 45.3 | 65.7 | N/A  | 47.1 | 46.1 |
|     |   | 8/25/2012     | 6:19 pm - 6:39 pm     | M.A.                | 65.5 | 64.6 | 54.2 | 81.6 | 79.4 | 58.3 | 56.1 |
|     |   |               | 8:05 pm - 8:25 pm     | M.A.                | 58.6 | 60.0 | 52.2 | 80.2 | 67.1 | 56   | 53.6 |
| 6** | W. 20th Street / Surf Avenue                              | 8/23/2012     | 6:34 pm - 6:55 pm     | M.U. (I)            | 72.3 | 70.3 | 56.1 | 98.4 | 77.1 | 64.9 | 58.8 |
|     |   |               | 10:00 pm - 10:21 pm   | M.A.                | 66.6 | 69.5 | 53.7 | 83.7 | 76.9 | 61.7 | 56.6 |
|     |   | 8/25/2012     | Pre-event Period      | M.U. (I)            | 72.2 | 70.2 |      |      |      |      |      |
|     |   |               | Post-Event Period     | M.A.                | 67.9 | 70.8 |      |      |      |      |      |
| 7   | Surf Avenue Midblock, between 21st Street and 22nd Street | 6/20/2013     | 5:51 pm - 6:11 pm     | M.U. (I)            | 73.6 | 70.9 | 57   | 96.1 | 81.1 | 64.6 | 59.5 |
|     |   | 7/17/2013     | 9:00pm - 9:20 pm      | M.A.                | 66.9 | 68.1 | 52.6 | 88.6 | 77.3 | 61.3 | 55.6 |
|     |   |               | 5:03 pm - 5:23 pm     | M.A.                | 66.1 | 67.8 | 57.8 | 85.1 | 75.1 | 63.7 | 60.3 |
|     |   | 6/29/2013     | 8:05pm - 8:25 pm      | M.A.                | 64.6 | 66.0 | 54.7 | 83.8 | 76.5 | 61.1 | 58.0 |
| 8   | 23rd Street near Boardwalk                                | 7/17/2013     | 6:05 p.m. - 6:25 p.m. | M.A.                | 56.9 | 59.1 | 54.5 | 67.3 | 62.4 | 55.8 | 55.1 |
|     |   |               | 9:25 p.m. - 9:45 p.m. | M.A.                | 54.8 | 55.6 | 53.3 | 61.5 | 58.1 | 54.5 | 53.9 |
|     |   | 6/29/2013     | 5:56 p.m. - 6:16 p.m. | M.A.                | 58.1 | 59.9 | 54.1 | 67.5 | 63.8 | 57.4 | 55.9 |
|     |   |               | 8:57 p.m. - 9:17 p.m. | M.A.                | 61.3 | 57.5 | 51.9 | 84.5 | 66.5 | 53.7 | 52.9 |
| 9   | Surf Avenue Midblock, between 23rd Street and 24th Street | 7/17/2013     | 5:38 p.m. - 5:58 p.m. | M.A.                | 66.8 | 69.9 | 58.5 | 78.8 | 75.9 | 63.5 | 60.6 |
|     |   | 6/20/2013     | 9:24 p.m. - 9:44 p.m. | M.A.                | 68.9 | 71.1 | 52.5 | 86.3 | 80.9 | 62.6 | 55.1 |
|     |   | 6/29/2013     | 5:30 p.m. - 5:50 p.m. | M.A.                | 65.0 | 67.7 | 59.0 | 74.1 | 70.5 | 63.8 | 61.2 |
|     |   |               | 8:30 p.m. - 8:50 p.m. | M.A.                | 65.9 | 68.4 | 58.3 | 80.4 | 72.3 | 64.7 | 61.1 |
| 10  | 24th near Boardwalk                                       | 7/17/2013     | 6:29 p.m. - 6:49 p.m. | M.A.                | 55.8 | 56.1 | 54.2 | 72.3 | 58.5 | 55.1 | 54.6 |
|     |   | 6/20/2013     | 9:00 p.m. - 9:20 p.m. | M.A.                | 50.5 | 51.3 | 48.7 | 56.6 | 54.7 | 50.3 | 49.6 |
|     |   | 6/29/2013     | 4:37 p.m. - 4:57 p.m. | M.A.                | 57.2 | 58.8 | 54.6 | 65.2 | 62.6 | 56.5 | 55.5 |
|     |   |               | 9:28 p.m. - 9:48 p.m. | M.A.                | 55.6 | 57.5 | 51.8 | 67.5 | 62.8 | 54.5 | 53.0 |

\*Fireworks presentation at MCU Park occurred during monitoring at Site 3.

\*\*No data recorded during the second measurement date; noise levels estimated using proportionality equation.

M.A.: Marginally Acceptable; M.U.: Marginally Unacceptable; C.U.: Clearly Unacceptable

Source: Sandstone Environmental Associates, Inc.

**TABLE 12-6  
Seaside Concert Noise Levels (dBA), July 12, 2013**

| Location                                    | Time                | Activity                        | L <sub>eq</sub> | L <sub>10</sub> | L <sub>min</sub> | L <sub>max</sub> | L <sub>01</sub> | L <sub>50</sub> | L <sub>90</sub> |
|---|---------------------|---------------------------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|-----------------|
| Monitoring Site 5                           | 9:24 pm – 9:44 pm   | Main Act                        | 62.4            | 64.3            | 48.6             | 73.4             | 67.6            | 62.3            | 55.0            |
| Monitoring Site 8                           | 8:22 pm – 8:42 pm   | Final 15 minutes of opening act | 63.3            | 66.0            | 56.8             | 69.8             | 67.9            | 63.1            | 57.9            |
|   | 9:02 pm – 9:22 pm   | Main act                        | 65.5            | 67.6            | 55.3             | 71.6             | 69.8            | 65.1            | 61.7            |
| W. 20 <sup>th</sup> St., just east of stage | 9:48 pm – 9:58 pm   | Main act                        | 91.2            | 93.4            | 64.0             | 95.8             | 94.6            | 91.6            | 74.4            |
| Boardwalk directly south of (behind) stage  | 10:00 pm – 10:01 pm | Main act                        | 73.9            | 75.4            | 58.0             | 76.7             | 76.4            | 74.3            | 63.9            |

Source: Cerami Associates, Inc.

**G. THE FUTURE WITHOUT THE PROPOSED PROJECT (NO-ACTION CONDITION)**

In the absence of the proposed project, the development site is expected to be developed with residential, commercial, and open space uses as analyzed in the Coney Island Rezoning FEIS (2009). Based on the programming for the entire projected development site and the illustrative development site plans provided in the 2009 FEIS, the eastern portion of the development site was intended for new residential and commercial development (Lot 142) as well as the restoration and adaptive reuse of the LPC-designated (Former) Childs Restaurant Building (Lot 130).

Lot 142 would accommodate approximately 33,978 square feet of commercial space and 223,118 square feet (223 DUs) of residential space in the future without the proposed action. As illustrated in the 2009 EIS, commercial development would extend the full length of the boardwalk frontage (approximately 162 feet) and would be built to a depth of 70 feet, as only commercial uses are allowed within 70 feet of the boardwalk pursuant to the special district regulations. As the maximum allowable base height is 40 feet (estimated at 3 floors), approximately 33,978 square feet of commercial uses could reasonably be built. Additionally, the Former Childs Restaurant Building on Lot 130 would be restored and adaptively reused at its current floor area of approximately 60,000 square feet, and the western portion of the site would be converted to an approximately 1.27 acre public park.

The 1.27-acre western portion of the development site was intended to be part of the planned 1.41 acre Highland View Park that was approved to be mapped as part of the Coney Island Rezoning project. The two outparcels (Lots 79 and 81) comprise the remainder of the planned Highland View Park. Since they are still in private ownership, they are not anticipated to be developed by the analysis year of 2016, although they may be incorporated into Highland View Park at some future time as contemplated in the 2009 FEIS.

While the Coney Island Rezoning FEIS (2009) had a build year of 2019, ~~it assumed that the development would take place over the course of 10 years.~~ was assumed to Most of the development sites identified in the 2009 *Coney Island Rezoning FEIS*, including Site 1 and the northern portion of Site 2, are not anticipated to be developed by the analysis year of 2016, given that the necessary infrastructure for such development, including the construction of Ocean Way (approved for mapping as part of the 2009 project), would not occur in the near future. This is due to the fact that an office building is currently located within the right-of-way of Ocean Way immediately to the north of the (Former) Childs Restaurant Building and that has not yet been acquired by the City. In contrast, the current development site, which was identified as the southern portion of Site 2 in the *Coney Island Rezoning FEIS*, could be

developed as-of-right with residential and commercial uses, as it is equipped with the physical infrastructure needed for such new development. Therefore, the No-Action scenario outlined in the PDEIS above could occur on the development site by the proposed action's analysis year of 2016.

Projected development Sites 1 and 2 of the Coney Island Rezoning FEIS are both composed of a north parcel (north of Ocean Way) and a south parcel (south of Ocean Way), with the southern parcel of Site 2 comprising the eastern portion of the development site. According to the FEIS, any development on the north parcels would require 35 dBA of attenuation, while the south parcels would require 25 dBA. These levels of attenuation did not include the proposed amphitheater.

The traffic study for the proposed project included 28 affected intersections and traffic analysis for pre-event and post-event periods for a typical weekday and Saturday when games were scheduled for the Brooklyn Cyclones. ~~In the future,~~ During September of 2013, traffic on West 19<sup>th</sup> Street ~~would be~~ was reversed from its ~~current original~~ pattern of one-way northbound to a ~~future new~~ pattern of one-way southbound. As a result a large number of vehicles that ~~currently leave~~ formerly left Coney Island via northbound West 19<sup>th</sup> Street ~~would now~~ leave via northbound West 20<sup>th</sup> Street. This change results in a net decrease in volume for the intersection of Mermaid Avenue and West 19<sup>th</sup> Street under No-Action conditions (refer to Chapter 9, "Transportation"). None of the 28 intersections included in the traffic study would experience a traffic noise increment of 3 dBA or more. Appendix D shows the relative changes in noise levels at the 28 intersections.

As shown in Table 12-7 below, these recent changes in traffic patterns result in No-Action dBA increments that range from -3.4 dBA to 6.4 dBA at the ten noise monitoring sites. The larger changes are due to the revised traffic patterns. Site 3, for example, shows an increase in noise levels of 5.3 to 6.4 dBA. Most of the differences would be less than 3.0 dBA and would not be perceptible.

~~Table 12-7 shows the projected changes in noise level at the ten noise monitoring sites due to growth in traffic. No-Action noise levels were calculated based on relative changes in traffic volume from Existing Conditions to No-Action Conditions. The proportionality equation was used. Traffic for the sites was calculated from the traffic volumes and turning movements for the 28 intersections using either the total intersection volume or the volumes on specific roadway segments. The increments for No-Action Conditions were calculated for the relevant intersections and midblock sites based on the traffic volume diagrams. The vehicular mix used to calculate the PCEs was based on field observations during noise monitoring. Based on the table, the highest L<sub>10</sub> during the pre-event period would be 71.6 dBA at Site 6, while the highest L<sub>10</sub> during the post-event period would be 74.0 dBA at Site 3.~~

Although Coney Island's Seaside Summer Concerts have been a summer staple for the past 35 years, ~~and they~~ were previously held in Asser Levy Park, approximately 4,400 feet (0.85 mile) east of the project site, and in recent years a vacant lot to the east of the project site has served as a temporary location for the concert series. ~~They~~ these concerts must obtain a permit every year and are not projected to continue into the future. Therefore, they were not included in the projection of No-Action noise levels for 2016.

Noise levels projected for the ten noise monitoring sites were assigned to the 17 buildings shown in Figure 12-2 under Existing Conditions. They resultant noise levels at these buildings are shown in Table 12-8. The assignment of monitoring sites to buildings included the following considerations:



**TABLE 12-7  
No-Action Noise Levels (dBA), Monitored Noise Sites**

| ID | Site   | Period          | Existing        |                 | No-Action          |                      |                      |
|----|--|-----------------|-----------------|-----------------|--------------------|----------------------|----------------------|
|    |  |                 | L <sub>eq</sub> | L <sub>10</sub> | Increase           | L <sub>eq</sub>      | L <sub>10</sub>      |
| 1  | W. 17th Street, Midblock between Mermaid Avenue and Neptune Avenue         | Pre-event       | 66.2            | 70.1            | 0.2                | 66.4                 | 70.3                 |
|    |  | Post-event      | 65.4            | 68.7            | 0.1                | 65.5                 | 68.8                 |
|    |  | Sat Pre-event   | 66.6            | 69.8            | 0.1                | 66.7                 | 69.9                 |
|    |  | Sat Post-event  | 68.2            | 69.9            | 0.1                | 68.3                 | 70.0                 |
| 2  | Northwestern corner of W. 19th Street and Mermaid Avenue                   | Pre-event       | 68.9            | 70.4            | -1.7               | 67.2                 | 68.7                 |
|    |  | Post-event      | 66.2            | 68.4            | -3.4               | 62.8                 | 65.0                 |
|    |  | Sat Pre-event   | 65.5            | 67.9            | -1.5               | 64.0                 | 66.4                 |
|    |  | Sat Post-event  | 66.5            | 68.4            | -2.6               | 63.9                 | 65.8                 |
| 3  | W. 20th Street, Midblock between Surf Avenue and Mermaid Avenue            | Pre-event       | 59.0            | 61.2            | 6.3                | 65.3                 | 67.5                 |
|    |  | Post-event      | 59.7            | 61.5            | 6.4                | 66.1                 | 67.9                 |
|    |  | Sat Pre-event   | 64.8            | 65.4            | 5.3                | 70.1                 | 70.7                 |
|    |  | Sat Post-event* | 66.0            | 67.8            | 6.2                | 72.2                 | 74.0                 |
| 4  | Southwestern corner of W. 21 <sup>st</sup> Street and Surf Avenue          | Pre-event       | 66.0            | 69.7            | 0.6                | 66.6                 | 70.3                 |
|    |  | Post-event      | 62.7            | 65.3            | 0.2                | 62.9                 | 65.5                 |
|    |  | Sat Pre-event   | 68.3            | 68.8            | 0.6                | 68.9                 | 69.4                 |
|    |  | Sat Post-event  | 64.5            | 67.3            | 0.2                | 64.7                 | 67.5                 |
| 5  | W. 22 <sup>nd</sup> Street, Midblock between Surf Avenue and the Boardwalk | Pre-event       | 57.5            | 60.2            | 2.3                | 59.8                 | 62.5                 |
|    |  | Post-event      | 49.5            | 52.2            | <del>3.0</del> 2   | <del>52.5</del> 52.7 | <del>55.2</del> 55.4 |
|    |  | Sat Pre-event   | 65.5            | 64.6            | 3.4                | 68.9                 | 68.0                 |
|    |  | Sat Post-event  | 58.6            | 60.0            | -0.1               | 58.5                 | 59.9                 |
| 6  | Southeastern corner of W. 20th Street and Surf Avenue                      | Pre-event       | 72.3            | 70.3            | 1.3                | 73.6                 | 71.6                 |
|    |  | Post-event      | 66.6            | 69.5            | 1.6                | 68.2                 | 71.1                 |
|    |  | Sat Pre-event   | 72.2            | 70.2            | 1.2                | 73.4                 | 71.4                 |
|    |  | Sat Post-event  | 67.8            | 70.7            | 1.4                | 69.2                 | 72.1                 |
| 7  | Surf Avenue, Midblock between W. 21st Street and W.22nd Street             | Pre-event       | 73.6            | 70.9            | 0.5                | 74.1                 | 71.4                 |
|    |  | Post-event      | 66.9            | 68.1            | 0.2                | 67.1                 | 68.3                 |
|    |  | Sat Pre-event   | 66.1            | 67.8            | 0.5                | 66.6                 | 68.3                 |
|    |  | Sat Post-event  | 64.6            | 66.0            | 0.2                | 64.8                 | 66.2                 |
| 8  | Southern end of 23rd Street near the boardwalk                             | Pre-event       | 56.9            | 59.1            | 0.1                | 57.0                 | 59.2                 |
|    |  | Post-event      | 54.8            | 55.6            | 0.4                | 55.2                 | 56.0                 |
|    |  | Sat Pre-event   | 58.1            | 59.9            | 0.1                | 58.2                 | 60.0                 |
|    |  | Sat Post-event  | 61.3            | 57.5            | 0.1                | 61.4                 | 57.6                 |
| 9  | Surf Avenue, Midblock between W.23rd Street and w.24th Street              | Pre-event       | 66.8            | 69.9            | 0.4                | 67.2                 | 70.3                 |
|    |  | Post-event      | 68.6            | 71.1            | 0.3                | 68.9                 | 71.4                 |
|    |  | Sat Pre-event   | 65.0            | 67.7            | 0.4                | 65.4                 | 68.1                 |
|    |  | Sat Post-event  | 65.9            | 68.4            | 0.2                | 66.1                 | 68.6                 |
| 10 | Southern end of 24th Street near the boardwalk                             | Pre-event       | 55.8            | 56.1            | <del>0.0</del> 1.0 | <del>55.8</del> 56.8 | <del>56.1</del> 57.1 |
|    |  | Post-event      | 50.5            | 51.3            | <del>0.0</del> 1.0 | <del>50.5</del> 51.5 | <del>51.3</del> 52.3 |
|    |  | Sat Pre-event   | 57.2            | 58.8            | 0.0                | 57.2                 | 58.8                 |
|    |  | Sat Post-event  | 55.6            | 57.5            | 0.0                | 55.6                 | 57.5                 |

\*Fireworks presentation at MCU Park occurred during monitoring at Site 3. Existing conditions without fireworks estimated using proportionality equation.

Source: Sandstone Environmental Associates, Inc.

- Site 9 was assigned to Buildings B, C and Q. Buildings D1, I, and J are about 250 feet south of Surf Avenue, and their noise levels are also based on Site 9. However, a distance attenuation factor of 3 dBA per distance doubling was used to calculate their noise levels.
- Site 4 was assigned to Buildings G, K, and L because they are closer to Site 4 than Site 9. In addition, Site 4 is on the edge of a parking lot with no buildings to help block traffic noise. Buildings G, K, and L face this parking lot, so their frontages have no intervening buildings to block noise from Surf Avenue. 9

**TABLE 12-8**  
**Ambient Noise Levels at Sensitive Receptors, No-Action Conditions**

| ID | Address                           | Block | Lot | # Floors | # DUs | Monitoring Site ID | Period        | No Action $L_{eq}$  | No Action $L_{10}$  |
|----|-----------------------------------|-------|-----|----------|-------|--------------------|---------------|---------------------|---------------------|
| A  | 3035 W. 24 <sup>th</sup> St.      | 7070  | 148 | 5        | NA    | 8                  | Wkday < 10 pm | 57.0                | 59.2                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 55.2                | 56.0                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.2                | 60.0                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 61.4                | 57.6                |
| B  | 2316 Surf Ave.                    | 7070  | 120 | 4        | 100   | 9                  | Wkday < 10 pm | 67.2                | 70.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 68.9                | 71.4                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 65.4                | 68.1                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 66.1                | 68.6                |
| C  | 3024 W. 24 <sup>th</sup> St.      | 7070  | 1   | NA       | NA    | 9                  | Wkday < 10 pm | 67.2                | 70.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 68.9                | 71.4                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 65.4                | 68.1                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 66.1                | 68.6                |
| D1 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | 9*                 | Wkday < 10 pm | 60.2                | 63.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 61.9                | 64.4                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.4                | 61.1                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 59.1                | 61.6                |
| D2 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | 10                 | Wkday < 10 pm | <del>56.860.2</del> | <del>57.163.3</del> |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>51.561.9</del> | <del>52.364.4</del> |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | <del>57.258.4</del> | <del>58.861.1</del> |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | <del>55.659.1</del> | <del>57.561.6</del> |
| E  | 3046 W. 22 <sup>nd</sup> St.      | 7071  | 24  | 3        | 15    | 5                  | Wkday < 10 pm | 59.8                | 62.5                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>52.752.5</del> | <del>55.455.2</del> |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 68.9                | 68.0                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 58.5                | 59.9                |
| F  | 3040 W. 22 <sup>nd</sup> St.      | 7071  | 19  | 7        | 40    | 5                  | Wkday < 10 pm | 59.8                | 62.5                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>52.752.5</del> | <del>55.455.2</del> |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 68.9                | 68.0                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 58.5                | 59.9                |
| G  | 3018-3022 W. 22 <sup>nd</sup> St. | 7071  | 114 | 3        | 21    | 4                  | Wkday < 10 pm | 66.6                | 70.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 62.9                | 65.5                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 68.9                | 69.4                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 64.7                | 67.5                |
| H  | 3024 W. 23 <sup>rd</sup> St.      | 7070  | 133 | 3        | 10    | 5                  | Wkday < 10 pm | 59.8                | 62.5                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>52.552.7</del> | <del>55.455.2</del> |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 68.9                | 68.0                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 58.5                | 59.9                |
| I  | 3027 W. 24 <sup>th</sup> St.      | 7070  | 175 | 3        | 6     | 9*                 | Wkday < 10 pm | 60.2                | 63.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 61.9                | 64.4                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.4                | 61.1                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 59.1                | 61.6                |
| J  | 3039 W. 24 <sup>th</sup> St.      | 7070  | 174 | 3        | 6     | 9*                 | Wkday < 10 pm | 60.2                | 63.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 61.9                | 64.4                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.4                | 61.1                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 59.1                | 61.6                |
| K  | 3008 W, 22 <sup>nd</sup> St.      | 7071  | 9   | 2        | 20    | 4                  | Wkday < 10 pm | 66.6                | 70.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 62.9                | 65.5                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 68.9                | 69.4                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 64.7                | 67.5                |
| L  | 3016 W. 22 <sup>nd</sup> St.      | 7071  | 13  | 1        | 4     | 4                  | Wkday < 10 pm | 66.6                | 70.3                |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 62.9                | 65.5                |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 68.9                | 69.4                |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 64.7                | 67.5                |
| M  | 3017 W. 23 <sup>rd</sup> St.      | 7071  | 94  | 2        | 6     | 85                 | Wkday < 10 pm | <del>59.857.0</del> | <del>62.559.2</del> |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>52.755.2</del> | <del>55.456.0</del> |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | <del>68.958.2</del> | <del>68.060.0</del> |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | <del>58.561.4</del> | <del>59.957.6</del> |
| N  | 3023 W. 23 <sup>rd</sup> St.      | 7071  | 93  | 2        | 3     | 85                 | Wkday < 10 pm | <del>59.857.0</del> | <del>62.559.2</del> |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>52.755.2</del> | <del>55.456.0</del> |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | <del>68.958.2</del> | <del>68.060.0</del> |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | <del>58.561.4</del> | <del>59.957.6</del> |
| O  | 3029 W. 23 <sup>rd</sup> St.      | 7071  | 90  | 3        | 3     | 85                 | Wkday < 10 pm | <del>59.857.0</del> | <del>62.559.2</del> |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>52.755.2</del> | <del>55.256.0</del> |

TABLE 12-8 (cont'd)

| ID | Address                      | Block | Lot | # Floors | # DUs | Monitoring Site ID | Period        | No Action Leq       | No Action L10       |
|----|------------------------------|-------|-----|----------|-------|--------------------|---------------|---------------------|---------------------|
|    |                              |       |     |          |       |                    | Sat < 10 pm   | <del>68.958.2</del> | <del>68.060.0</del> |
|    |                              |       |     |          |       |                    | Sat > 10 pm   | <del>58.561.4</del> | <del>59.957.6</del> |
| P  | 3031 W. 23 <sup>rd</sup> St. | 7071  | 89  | 3        | 3     | <del>85</del>      | Wkday < 10 pm | <del>59.857.0</del> | <del>62.559.2</del> |
|    |                              |       |     |          |       |                    | Wkday >10 pm  | <del>52.755.2</del> | <del>55.456.0</del> |
|    |                              |       |     |          |       |                    | Sat < 10 pm   | <del>68.958.2</del> | <del>68.060.0</del> |
|    |                              |       |     |          |       |                    | Sat > 10 pm   | <del>58.561.4</del> | <del>59.957.6</del> |
| Q  | 2226 Surf Ave.               | 7071  | 1   | 2        | 2     | <del>49</del>      | Wkday < 10 pm | <del>67.266.6</del> | <del>70.370.3</del> |
|    |                              |       |     |          |       |                    | Wkday >10 pm  | <del>68.962.9</del> | <del>71.465.5</del> |
|    |                              |       |     |          |       |                    | Sat < 10 pm   | <del>65.468.9</del> | <del>68.169.4</del> |
|    |                              |       |     |          |       |                    | Sat > 10 pm   | <del>66.164.7</del> | <del>68.667.5</del> |

\*Adjusted for distance attenuation  
Source: Sandstone Environmental Associates, Inc.

- Site 5, a midblock site, was assigned to Buildings E and F on West 22<sup>nd</sup> Street and to Buildings H, M, N, O, and P on West 23<sup>rd</sup> Street. The two streets have similar traffic volumes.

As shown in Table 12-8, Buildings on or near Surf Avenue have the highest noise levels, with L<sub>eq</sub>s in the 60s and L<sub>10</sub>s in the 70s. Buildings further down on side streets generally had L<sub>eq</sub>s in the 50s and L<sub>10</sub>s in the 60s.

## H. THE FUTURE WITH THE PROPOSED PROJECT (WITH-ACTION CONDITION)

### Description of Proposed ~~Action~~Project

In the future with the proposed project, the site would be developed with a publicly accessible open space with opening hours the same as the Boardwalk and containing an approximately 5,100-seat amphitheater and a 60,000 square foot indoor entertainment, banquet, and restaurant facility in the (Former) Childs Restaurant Building. This EIS conservatively assumes an additional 900 standing concert attendees (6,000 total) for all quantitative analyses, as discussed below. Upon completion, the amphitheater would be owned by the City of New York under the jurisdiction of the New York City Economic Development Corporation and operated by a joint venture that involves a non-profit entity under a ten-year lease with the city. The amphitheater would serve as a concert venue for the next ten years, and provide the community with additional recreational and entertainment opportunities during the off-season. In the future with the proposed project, the two outparcels (Lots 79 and 81) are assumed to remain vacant. Table 12-9 shows a comparison of the No-Action and With-Action scenarios for the project site.

### Traffic Noise

Traffic volumes for With-Action Conditions were obtained from the traffic analysis and compared with traffic for No-Action Conditions (refer to Chapter 9, "Transportation"). Based on this information, none of the intersections analyzed in the traffic study would experience noise level increments of 3 dBA or more. ~~The range of increases would be from 0.01 dBA to 1.53 dBA.~~ These increases in traffic-related noise level would not be perceptible. Therefore, all 28 intersections pass the noise screening criterion of a 3 dBA increment, and no significant adverse impacts are projected for traffic noise. Appendix D shows the information for the 28 intersections.

**TABLE 12-9**  
**Comparison of the No-Action and Action Scenarios**

| Use                     | No-Action Scenario   | With-Action Scenario                   | Increment                      |
|-------------------------|----------------------|--|--------------------------------|
| Residential             | 223,118 sf (223 DUs) | 0 sf (0 DUs)                           | <b>-223,118 sf (-223 DUs)</b>  |
| Local Retail            | 33,978 sf            | 0 sf                                   | <b>-33,978 sf</b>              |
| Restaurant              | 60,000 sf            | 60,000 sf                              | <b>0 sf</b>                    |
| Open Space              | 1.27 acres           | 2.41 acres<br>(including amphitheater) | <b>1.14 acres</b>              |
| Amphitheater            | 0 seats              | 5,100 seats                            | <b>5,100 seats*</b>            |
| Population/Employment** | No-Action Scenario   | With-Action Scenario                   | Increment                      |
| Residents               | 524 residents        | 0 residents                            | <b>-524 residents</b>          |
| Workers                 | 291 workers          | <del>250</del> 275 workers             | <b>-<del>164</del> workers</b> |

\* It is important to note that the EIS conservatively assumes an additional 900 standing (6,000 total) concert attendees for all quantitative analyses.

\*\*Calculations for residents are based on the Brooklyn Community District 13 average of 2.35 persons per household (Source: Demographic Profile, NYC DCP; 2010 Census). Widely used employee generation rates for retail are 3 workers per 1,000 sf and 1 worker per 25 DUs. The With-Action scenario employee estimates are provided by the Applicant, with an estimated 75 workers at the (Former) Childs Restaurant Building and ~~175~~200 at the amphitheater during events.

Table 12-10 evaluates noise levels at the ten sites that are representative sensitive receptors. The proportionality equation was used to determine the noise level increments due to changes in traffic. These increments were then added to the noise levels under No-Action Conditions. Based on the table, none of the ten sites would experience an increase of 3 dBA or more due to project-generated traffic, and no significant impacts due to traffic are projected.

Site 5 would experience a decrease in noise due to the reduction in traffic. The reductions occur due to changes in traffic between No-Action and With-Action conditions. No-Action traffic includes vehicles traveling on West 22<sup>nd</sup> Street to and from the 223 residential units and 33,978 sf of retail uses that would be located on the project site in the No-Action scenario, but would not exist in the With-Action scenario. Additionally, in the With-Action scenario, traffic management measures would be in place on West 22<sup>nd</sup> Street south of Surf Avenue, restricting vehicular traffic during concert events primarily to residents. Where the No-Action and With-Action traffic volumes were below around 30 vehicles or less (e.g., 31 vehicles for No-Action and 3 vehicles for With-Action), the noise level reductions were limited to -3 dBA because the relative changes in volume would be overshadowed by the background noise from other sources.

Table 12-11 shows the resulting noise levels due to changes in traffic volumes at the 17 nearby buildings identified as sensitive receptors. As shown in the table, the project-generated increments are low and would not reach the 3 dBA impact criterion. Buildings E, F, and H, M, N, O, and P, which are represented by Monitoring Site 5, would experience a decrease in noise levels.

## Concert Noise

### ***Affected Properties.***

Noise levels were calculated for the noise monitoring sites and sensitive receptors discussed under Existing and No-Action Conditions. Lots 79 and 81 were not included in the analysis because they would not be developed under With-Action Conditions. The properties identified in the 2009 Coney Island Rezoning FEIS as projected development Sites 1 and 2, located to the north and east of the site, would



be shielded from the concert noise by the (Former) Childs Restaurant Building. They are evaluated in a qualitative manner for potential impacts.

**TABLE 12-10**  
**Traffic Noise Levels (dBA), With-Action**

| ID | Site   | Period         | No-Action                   |                             | With-Action                 |                             |                             |
|----|--|----------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|    |  |                | L <sub>eq</sub>             | L <sub>10</sub>             | Increase                    | L <sub>eq</sub>             | L <sub>10</sub>             |
| 1  | W. 17th Street, Midblock between Mermaid Avenue and Neptune Avenue         | Pre-event      | 66.4                        | 70.3                        | 0.8                         | 67.2                        | 71.1                        |
|    |  | Post-event     | 65.5                        | 68.8                        | 0.1                         | 65.6                        | 68.9                        |
|    |  | Sat Pre-event  | 66.7                        | 69.9                        | <del>0.8</del> <u>0.9</u>   | 67.6                        | 70.8                        |
|    |  | Sat Post-event | 68.3                        | 70.0                        | 0.0                         | 68.3                        | 70.0                        |
| 2  | Northwestern corner of W. 19th Street and Mermaid Avenue                   | Pre-event      | 67.2                        | 68.7                        | 0.1                         | 67.3                        | 68.8                        |
|    |  | Post-event     | 62.8                        | 65.0                        | 0.1                         | 62.9                        | 65.1                        |
|    |  | Sat Pre-event  | 64.0                        | 66.4                        | 0.1                         | 64.1                        | 66.5                        |
|    |  | Sat Post-event | 63.9                        | 65.8                        | 0.0                         | 63.9                        | 65.8                        |
| 3* | W. 20th Street, Midblock between Surf Avenue and Mermaid Avenue            | Pre-event      | 65.3                        | 67.5                        | 0.2                         | 65.5                        | 67.7                        |
|    |  | Post-event     | 66.1                        | 67.9                        | 1.3                         | 67.4                        | 69.2                        |
|    |  | Sat Pre-event  | 70.1                        | 70.7                        | 0.1                         | 70.2                        | 70.8                        |
|    |  | Sat Post-event | 72.2                        | 74.0                        | 0.8                         | 73.0                        | 74.8                        |
| 4  | Southwestern corner of W. 21 <sup>st</sup> Street and Surf Avenue          | Pre-event      | 66.6                        | 70.3                        | <del>0.4</del> <u>0.5</u>   | 67.1                        | 70.8                        |
|    |  | Post-event     | 62.9                        | 65.5                        | 1.0                         | 63.9                        | 66.5                        |
|    |  | Sat Pre-event  | 68.9                        | 69.4                        | 0.4                         | 69.3                        | 69.8                        |
|    |  | Sat Post-event | 64.7                        | 67.5                        | 0.6                         | 65.3                        | 68.1                        |
| 5  | W. 22 <sup>nd</sup> Street, Midblock between Surf Avenue and the Boardwalk | Pre-event      | 59.8                        | 62.5                        | <del>-1.3</del> <u>-1.2</u> | 58.6                        | 61.3                        |
|    |  | Post-event     | <del>52.7</del> <u>52.5</u> | <del>55.4</del> <u>55.2</u> | -3.0                        | <del>49.7</del> <u>49.5</u> | <del>52.4</del> <u>52.2</u> |
|    |  | Sat Pre-event  | 68.9                        | 68.0                        | -2.6                        | 66.3                        | 65.4                        |
|    |  | Sat Post-event | 58.5                        | 59.9                        | -3.0                        | 55.5                        | 56.9                        |
| 6  | Southeastern corner of W. 20th Street and Surf Avenue                      | Pre-event      | 73.6                        | 71.6                        | 0.4                         | 74.0                        | 72.0                        |
|    |  | Post-event     | 68.2                        | 71.1                        | 0.5                         | 68.7                        | 71.6                        |
|    |  | Sat Pre-event  | 73.4                        | 71.4                        | 0.3                         | 73.7                        | 71.7                        |
|    |  | Sat Post-event | 69.2                        | 72.1                        | 0.3                         | 69.5                        | 72.4                        |
| 7  | Surf Avenue , Midblock between W. 21st Street and W.22nd Street            | Pre-event      | 74.1                        | 71.4                        | 0.3                         | 74.4                        | 71.7                        |
|    |  | Post-event     | 67.1                        | 68.3                        | 0.3                         | 67.4                        | 68.6                        |
|    |  | Sat Pre-event  | 66.6                        | 68.3                        | 0.3                         | 66.9                        | 68.6                        |
|    |  | Sat Post-event | 64.8                        | 66.2                        | 0.2                         | 65.0                        | 66.4                        |
| 8  | Southern end of 23rd Street near the boardwalk                             | Pre-event      | 57.0                        | 59.2                        | 0.0                         | 57.0                        | 59.2                        |
|    |  | Post-event     | 55.2                        | 56.0                        | 0.0                         | 55.2                        | 56.0                        |
|    |  | Sat Pre-event  | 58.2                        | 60.0                        | 0.0                         | 58.2                        | 60.0                        |
|    |  | Sat Post-event | 61.4                        | 57.6                        | 0.0                         | 61.4                        | 57.6                        |
| 9  | Surf Avenue, Midblock between W.23rd Street and w.24th Street              | Pre-event      | 67.2                        | 70.3                        | 0.2                         | 67.4                        | 70.5                        |
|    |  | Post-event     | 68.9                        | 71.4                        | 0.3                         | 69.2                        | 71.7                        |
|    |  | Sat Pre-event  | 65.4                        | 68.1                        | 0.2                         | 65.6                        | 68.3                        |
|    |  | Sat Post-event | 66.1                        | 68.6                        | 0.2                         | 66.3                        | 68.8                        |
| 10 | Southern end of 24th Street near the boardwalk                             | Pre-event      | <del>56.8</del> <u>55.8</u> | <del>57.1</del> <u>56.1</u> | <del>2.4</del> <u>0.0</u>   | <del>59.2</del> <u>55.8</u> | <del>59.5</del> <u>56.1</u> |
|    |  | Post-event     | <del>51.5</del> <u>50.5</u> | <del>52.3</del> <u>51.3</u> | <del>2.0</del> <u>0.0</u>   | <del>53.5</del> <u>50.5</u> | <del>54.3</del> <u>51.3</u> |
|    |  | Sat Pre-event  | 57.2                        | 58.8                        | 0.0                         | 57.2                        | 58.8                        |
|    |  | Sat Post-event | 55.6                        | 57.5                        | 0.0                         | 55.6                        | 57.5                        |

\*Relative changes in noise level limited to 3dBA where traffic volumes were below 30 vehicles.

Source: Sandstone Environmental Associates, Inc.

**TABLE 12-11**  
**Traffic Noise Levels at Sensitive Receptors, With Action Conditions**

| ID | Address                           | Block | Lot | # Floors | # DUs | Monitoring Site ID | Period        | With-Action Leq     | With-Action L10     | Increment Compared to No-Action |
|----|-----------------------------------|-------|-----|----------|-------|--------------------|---------------|---------------------|---------------------|---------------------------------|
| A  | 3035 W. 24 <sup>th</sup> St.      | 7070  | 148 | 5        | NA    | 8                  | Wkday < 10 pm | 57.0                | 59.2                | 0.0                             |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 55.2                | 56.0                | 0.0                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.2                | 60.0                | 0.0                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 61.4                | 57.6                | 0.0                             |
| B  | 2316 Surf Ave.                    | 7070  | 120 | 4        | 100   | 9                  | Wkday < 10 pm | 67.4                | 70.5                | 0.2                             |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 69.2                | 71.7                | 0.3                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 65.6                | 68.3                | 0.2                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 66.3                | 68.8                | 0.2                             |
| C  | 3024 W. 24 <sup>th</sup> St.      | 7070  | 1   | NA       | NA    | 9                  | Wkday < 10 pm | 67.4                | 70.5                | 0.2                             |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 69.2                | 71.7                | 0.3                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 65.6                | 68.3                | 0.2                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 66.3                | 68.8                | 0.2                             |
| D1 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | 9*                 | Wkday < 10 pm | 60.4                | 63.5                | 0.2                             |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 62.2                | 64.7                | 0.3                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.6                | 61.3                | 0.2                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 59.3                | 61.8                | 0.2                             |
| D2 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | 10                 | Wkday < 10 pm | <del>59.260.4</del> | <del>59.563.5</del> | <del>2.40.2</del>               |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>53.562.2</del> | <del>54.364.7</del> | <del>2.00.3</del>               |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | <del>57.258.6</del> | <del>58.861.3</del> | <del>0.00.2</del>               |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | <del>55.659.3</del> | <del>57.561.8</del> | <del>0.00.2</del>               |
| E  | 3046 W. 22 <sup>nd</sup> St.      | 7071  | 24  | 3        | 15    | 5                  | Wkday < 10 pm | 58.6                | 61.3                | -1.32                           |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>49.549.7</del> | <del>52.252.4</del> | -3.0                            |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 66.3                | 65.4                | -2.6                            |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 55.5                | 56.9                | -3.0                            |
| F  | 3040 W. 22 <sup>nd</sup> St.      | 7071  | 19  | 7        | 40    | 5                  | Wkday < 10 pm | 58.6                | 61.3                | -1.32                           |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>49.549.7</del> | <del>52.252.4</del> | -3.0                            |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 66.3                | 65.4                | -2.6                            |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 55.5                | 56.9                | -3.0                            |
| G  | 3018-3022 W. 22 <sup>nd</sup> St. | 7071  | 114 | 3        | 21    | 4                  | Wkday < 10 pm | 67.1                | 70.8                | 0.45                            |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 63.9                | 66.5                | 1.0                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 69.3                | 69.8                | 0.4                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 65.3                | 68.1                | 0.6                             |
| H  | 3024 W. 23 <sup>rd</sup> St.      | 7070  | 133 | 3        | 10    | 5                  | Wkday < 10 pm | 58.6                | 61.3                | -1.3                            |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>49.549.7</del> | <del>52.252.4</del> | -3.0                            |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 66.3                | 65.4                | -2.6                            |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 55.5                | 56.9                | -3.0                            |
| I  | 3027 W. 24 <sup>th</sup> St.      | 7070  | 175 | 3        | 6     | 9*                 | Wkday < 10 pm | 60.4                | 63.5                | 0.2                             |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 62.2                | 64.7                | 0.3                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.6                | 61.3                | 0.2                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 59.3                | 61.8                | 0.2                             |
| J  | 3039 W. 24 <sup>th</sup> St.      | 7070  | 174 | 3        | 6     | 9*                 | Wkday < 10 pm | 60.4                | 63.5                | 0.2                             |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 62.2                | 64.7                | 0.3                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 58.6                | 61.3                | 0.2                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 59.3                | 61.8                | 0.2                             |
| K  | 3008 W, 22 <sup>nd</sup> St.      | 7071  | 9   | 2        | 20    | 4                  | Wkday < 10 pm | 67.1                | 70.8                | 0.45                            |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 63.9                | 66.5                | 1.0                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 69.3                | 69.8                | 0.4                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 65.3                | 68.1                | 0.6                             |
| L  | 3016 W. 22 <sup>nd</sup> St.      | 7071  | 13  | 1        | 4     | 4                  | Wkday < 10 pm | 67.1                | 70.8                | 0.45                            |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | 63.9                | 66.5                | 1.0                             |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | 69.3                | 69.8                | 0.4                             |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | 65.3                | 68.1                | 0.6                             |
| M  | 3017 W. 23 <sup>rd</sup> St.      | 7071  | 94  | 2        | 6     | 85                 | Wkday < 10 pm | <del>58.657.0</del> | <del>61.359.2</del> | <del>-1.20.0</del>              |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>49.755.2</del> | <del>52.456.0</del> | <del>-3.00.0</del>              |
|    |                                   |       |     |          |       |                    | Sat < 10 pm   | <del>66.358.2</del> | <del>65.460.0</del> | <del>-2.60.0</del>              |
|    |                                   |       |     |          |       |                    | Sat > 10 pm   | <del>55.561.4</del> | <del>56.957.6</del> | <del>-3.00.0</del>              |
| N  | 3023 W. 23 <sup>rd</sup> St.      | 7071  | 93  | 2        | 3     | 85                 | Wkday < 10 pm | <del>58.657.0</del> | <del>61.359.2</del> | <del>-1.20.0</del>              |
|    |                                   |       |     |          |       |                    | Wkday >10 pm  | <del>49.755.2</del> | <del>52.456.0</del> | <del>-3.00.0</del>              |

TABLE 12-11 (cont'd)

| ID | Address                      | Block | Lot | # Floors | # DUs | Monitoring Site ID | Period        | With-Action L <sub>eq</sub> | With-Action L <sub>10</sub> | Increment Compared to No-Action |
|----|------------------------------|-------|-----|----------|-------|--------------------|---------------|-----------------------------|-----------------------------|---------------------------------|
| O  | 3029 W. 23 <sup>rd</sup> St. | 7071  | 90  | 3        | 3     | 85                 | Sat < 10 pm   | 66.358.2                    | 65.460.0                    | -2.60.0                         |
|    |                              |       |     |          |       |                    | Sat > 10 pm   | 55.561.4                    | 56.957.6                    | -3.00.0                         |
|    |                              |       |     |          |       |                    | Wkday < 10 pm | 58.657.0                    | 61.359.2                    | -1.20.0                         |
|    |                              |       |     |          |       |                    | Wkday >10 pm  | 49.755.2                    | 52.456.0                    | -3.00.0                         |
|    |                              |       |     |          |       |                    | Sat < 10 pm   | 66.358.2                    | 65.460.0                    | -2.60.0                         |
|    |                              |       |     |          |       |                    | Sat > 10 pm   | 55.561.4                    | 56.957.6                    | -3.00.0                         |
| P  | 3031 W. 23 <sup>rd</sup> St. | 7071  | 89  | 3        | 3     | 85                 | Wkday < 10 pm | 58.657.0                    | 61.359.2                    | -1.20.0                         |
|    |                              |       |     |          |       |                    | Wkday >10 pm  | 49.755.2                    | 52.456.0                    | -3.00.0                         |
|    |                              |       |     |          |       |                    | Sat < 10 pm   | 66.358.2                    | 65.460.0                    | -2.60.0                         |
|    |                              |       |     |          |       |                    | Sat > 10 pm   | 55.561.4                    | 56.957.6                    | -3.00.0                         |
|    |                              |       |     |          |       |                    | Wkday < 10 pm | 58.657.0                    | 61.359.2                    | -1.20.0                         |
|    |                              |       |     |          |       |                    | Wkday >10 pm  | 49.755.2                    | 52.456.0                    | -3.00.0                         |
| Q  | 2226 Surf Ave.               | 7071  | 1   | 2        | 2     | 49                 | Wkday < 10 pm | 67.467.1                    | 70.570.8                    | 0.20.4                          |
|    |                              |       |     |          |       |                    | Wkday >10 pm  | 69.263.9                    | 71.766.5                    | 0.34.0                          |
|    |                              |       |     |          |       |                    | Sat < 10 pm   | 65.669.3                    | 68.369.8                    | 0.20.4                          |
|    |                              |       |     |          |       |                    | Sat > 10 pm   | 66.365.3                    | 68.868.1                    | 0.20.6                          |
|    |                              |       |     |          |       |                    | Wkday < 10 pm | 67.467.1                    | 70.570.8                    | 0.20.4                          |
|    |                              |       |     |          |       |                    | Wkday >10 pm  | 69.263.9                    | 71.766.5                    | 0.34.0                          |

\*Adjusted for distance attenuation

Source: Sandstone Environmental Associates, Inc.

**Sound Reduction Features Included as Part of Proposed Project**

As part of the proposed project, the applicant is committed to, for every music event, using a specific speaker array (described in Appendix D), and limiting the L<sub>max</sub> concert levels at the mixing board to 98 dBA before 10 PM and 92 dBA after 10 PM. This would be the equivalent to 100 dBA at the front row before 10 PM and 94 dBA at the front row after 10 PM. The venue operator will set forth these restrictions in the Artist Booking Sheet/ Booking Sheet provided to the talent who will perform at the venue. The same restrictions will be clearly set forth in any contracts between the venue operator and the talent, and will also be clearly stated in a venue operations pamphlet that will be distributed to the performers. In addition, a dB meter will be installed at the mix position in the amphitheater and used for every event, which will be monitored throughout the entire entertainment program.

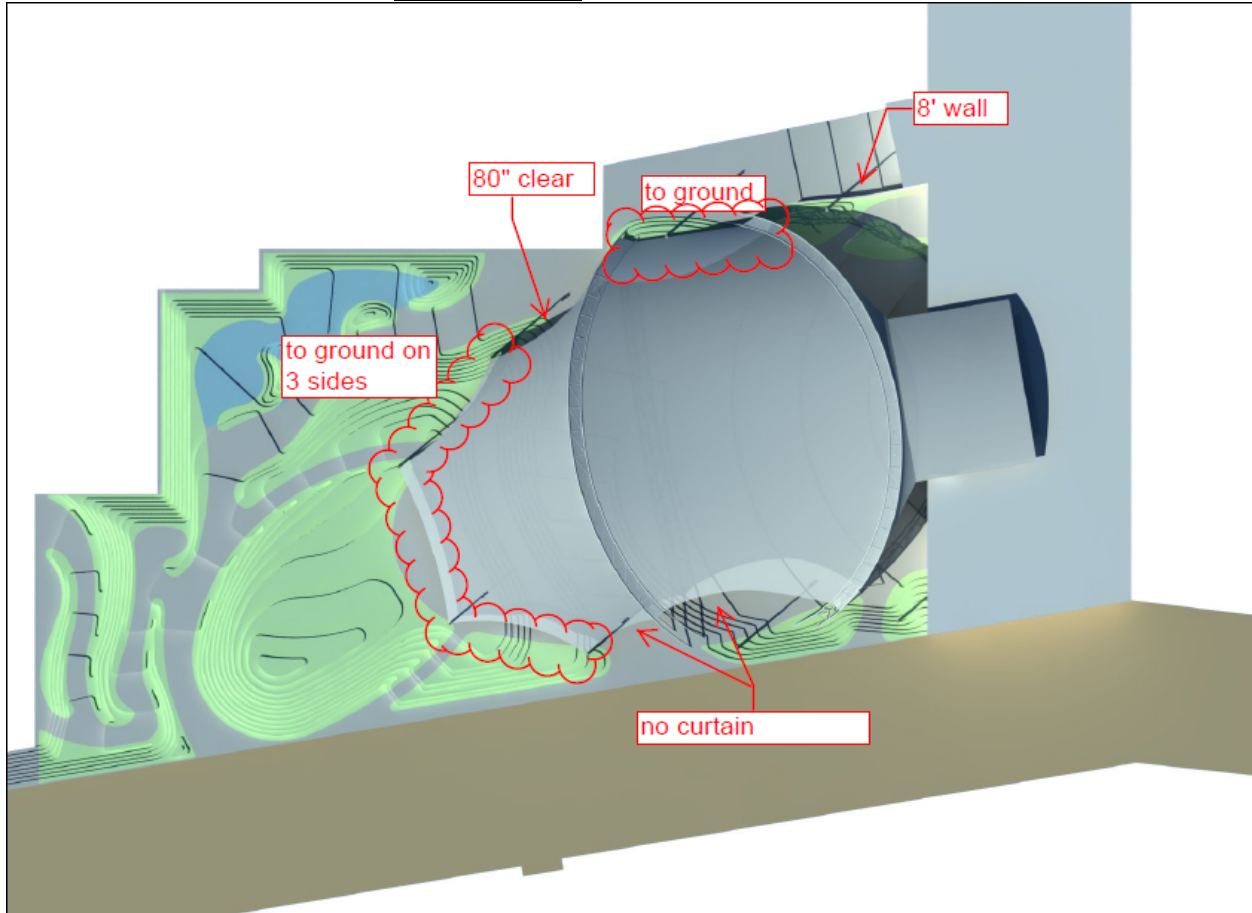
Sensitive receptors are located to the west and northwest of the amphitheater. Therefore, the northwestern and western boundaries of the site will include design elements that substantially reduce the off-site noise levels in these directions. Therefore, in addition to limiting sound levels at the mixing board, the proposed amphitheater would include sound reduction features a canopy extension and sound curtains to limit the propagation of noise beyond the site boundaries as shown in Figures 12-4 through 12-6 and further discussed below.

Section 1 in Figure 12-5 is the loading dock and south wall. It would not have a sound curtain. To reduce sound emissions from the venue north of the site from between the west wall of the (Former) Childs Restaurant Building and the front edge of the tensile fabric roof, the permanent masonry wall at the south edge of the loading dock would be extended to a minimum height of eight feet above ground to intersect the leading edge of the tensile fabric roof, and would extend sufficiently westward to overlap the venue’s sound barrier curtain. This eight-foot high screen wall would be covered with vines planted at its base. The masonry wall was included in the modeling. It reduces the size of the noise level contours immediately north of and adjacent to the concert stage.

During concerts, a canopy extension would be temporarily deployed from the amphitheater roof, and acoustical curtains would be attached to the tensile fabric roof and canopy extension along the north and west edges of the venue. The acoustical curtains for Section 2 would be attached to the tensile fabric roof. The acoustical curtains on Sections 3 to 7 would be attached to the canopy extension. The curtains would reach from the tensile fabric roof or canopy extension to the ground for Sections 2, 4, 5,

6, and 7. A sound curtain at Section #3, the main entrance at the West 22<sup>nd</sup> Street, would maintain a clearance of 80" above the ground for ingress and egress. Section 8 would be open to the boardwalk and would not have a sound curtain.

**FIGURE 12-4**  
**Sound Control Design Measures, Birdseye View**



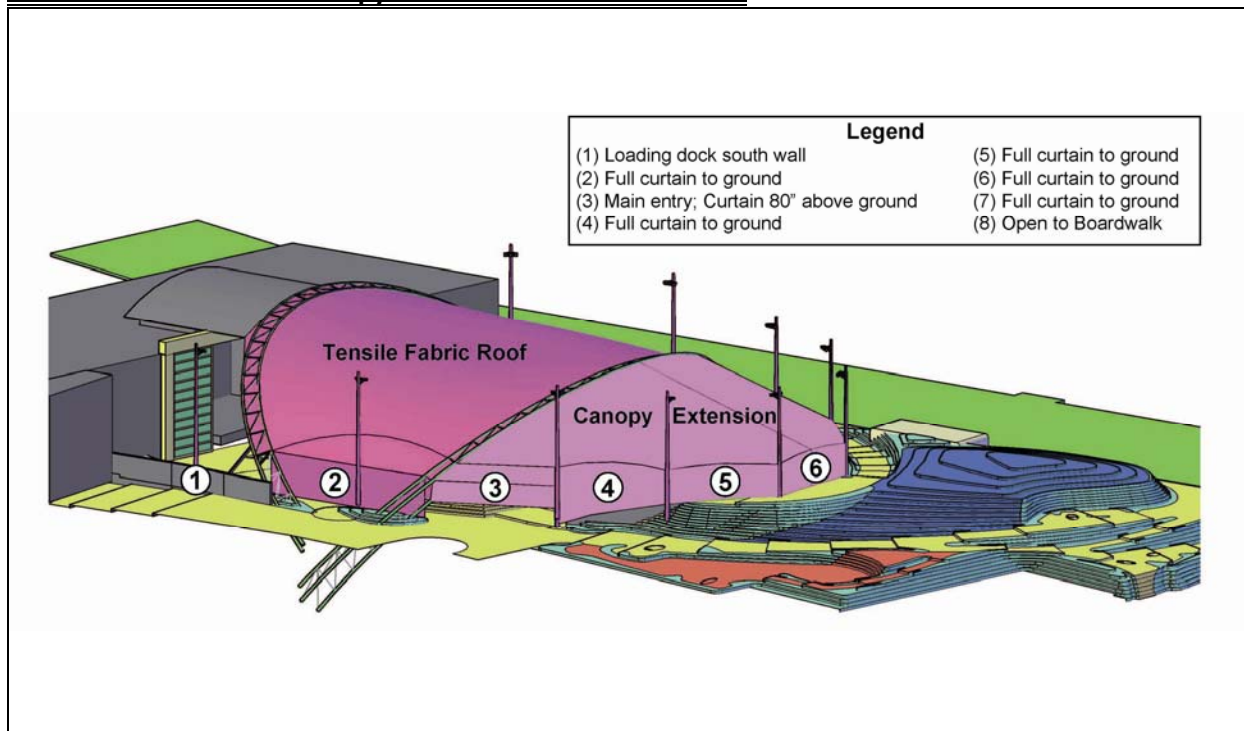
Source: Cerami and Associates, Inc.

The northwestern and western boundaries of the site will include design elements that substantially reduce the off-site noise levels in these directions. To reduce sound emissions from the venue north of the site from between the (Former) Childs Restaurant Building and the front edge of the canopy, the permanent masonry wall at the south edge of the loading dock would be extended to a minimum height of eight feet above ground to intersect the leading edge of the canopy, and would extend sufficiently westward to overlap the venue's sound barrier curtain. This eight-foot high screen wall would be covered with vines planted at its base. The masonry wall was included in the modeling. It reduces the size of the noise level contours immediately north of and adjacent to the concert stage, thereby decreasing noise levels by 5 to 10 dBA for locations within about 100 feet of the stage.

During concerts, a canopy extension would be temporarily deployed from the amphitheater roof. Sound barrier curtains would also be deployed in five sections along the north and west edges of the venue and extend fully to the ground, with the exception of the section at the West 22<sup>nd</sup> Street entrance which would maintain a clearance of 80" above the ground for ingress and egress. These sound curtains would be temporary and only be employed during concerts. On non-concert days, the roof would cover an area equivalent to approximately 3,500 seats. During concert events, the roof and deployable canopy extension on the western side together would cover all seating areas.

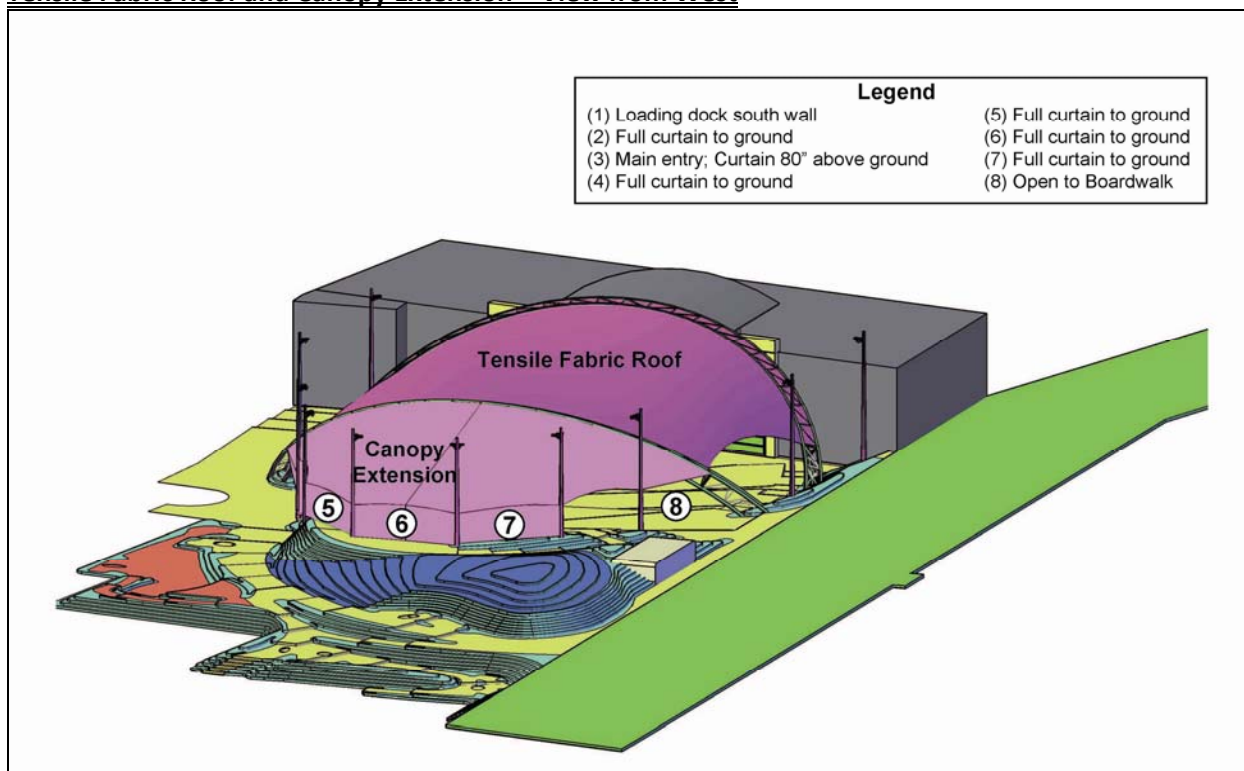


**Figure 12-5**  
**Tensile Fabric Roof and Canopy Extension – View from North**



Source: Cerami and Associates, Inc.

**Figure 12-6**  
**Tensile Fabric Roof and Canopy Extension – View from West**



Source: Cerami and Associates, Inc.

To ensure that these design measures achieve the noise reduction effects modeled, the tensile fabric roof and canopy extension material will be lined with sound absorptive panels with a minimum weight of 1 pound per square foot, and sound barrier curtains shall have a minimum weight of ½ pound per square foot. These materials shall have a minimum Sound Transmission Class of STC-20 in order to meet or exceed the acoustical barrier effects in the acoustical model.

The sound curtains and canopy extension would be temporary measures that are employed during all concerts, when the tensile fabric roof and deployable canopy extension on the western side together would cover all seating areas. On non-concert days, the venue may be used for other events, and the tensile fabric roof would cover the plaza area.

Figure 12-4 shows the configuration of the loading dock wall and the sound curtains that would be deployed, in addition to limiting the concert noise levels.

### **CADNA Model—Concert Noise Modeling**

Two models were used to model the noise from the amphitheater: EASE and CADNA. CADNA was used to calculate noise levels at surrounding receptor locations. EASE allows for the proper modeling of the speaker arrays planned for the venue. These arrays use of many smaller speakers, carefully individually oriented, allows more uniform coverage of the audience area with less sheer sound power emission. These effects, which account for the detailed coverage control that is attainable with modern live sound reinforcement speaker arrays, cannot be replicated within CADNA, which is not intended for such applications. The EASE noise levels at the mixing board and at points at the boundaries of the tensile fabric roof and canopy extension were input to CADNA for use in modeling noise levels at nearby receptor locations. Both models are discussed below.

**EASE.** An interior acoustics model was used to generate a precise prediction of sound coverage within the facility. EASE (Enhanced Acoustic Simulator for Engineers) is a powerful room acoustics and audio modeling software. It is one of a few software packages used for professional high end acoustical analysis of sensitive spaces such as performance spaces, and undisputedly the industry standard for loudspeaker design and implementation in concert halls. It functions by creating a detailed geometric and acoustic model of the space – including detailed acoustic characteristics of all the room surfaces. The acoustic analysis is done with a detailed ray-tracing algorithm which would be, generally speaking, computationally prohibitive and of less impact to the substantive results of a CADNA model that is typically on a much a larger geographic scale. The ray-tracing method breaks the sound emitted by every sound source into thousands of individual rays. These rays are beamed from the emitters. They interact with finishes (reflected and/or absorbed depending on the material type) in order to calculate the resulting sound levels and various metrics of sound quality within the room. As mentioned previously, the model was set up with an Lmax of 98 dBA at the mixing board.

**CADNA.** The Computer Aided Noise Abatement (CADNA Version 3-4) Model uses the international Environmental Noise Directive and ISO guidelines to accurately describe ambient noise in community environments. It is a software program typically used for the calculation and assessment of noise from:

- Commercial and industrial sites,
- Sports and leisure facilities,
- Roads and railways,
- Airports and landing strips, and
- Any other noisy facilities

CADNA accepts inputs in the form of 1/3 octave bands or as a single overall noise level (typically characterized as a frequency of 500 hz) for each source. The model integrates aircraft, rail, and motor vehicle traffic, as well as industrial noise sources, into a seamless platform to predict A-weighted L<sub>dn</sub>, Leq, and SPL values. Results can also be obtained by octave band. Reflections, diffractions, and transmission loss created by buildings, barriers, and other obstacles are incorporated into the resulting noise levels and contours.

Noise results can be analyzed one-dimensionally at receptors, two-dimensionally through contour grids, and three-dimensionally using profile and digital terrain perspectives. Noise remediation measures can be assessed using several program capabilities: barriers, natural embankments, and on-site attenuation measures like sound reducing materials.

For this particular amphitheater project the following parameters were emphasized for the model:

- Terrain – All ~~other surrounding~~ objects (e.g., buildings) were configured to it.
- Ground – The landscaping design of the amphitheater site, including earthen berms and surrounding structures, were defined for the project site.
- Sound Sources – Amplification on the outdoor amphitheater stage was defined within the EASE model, providing resulting sound levels throughout the venue and around the perimeter. These results were carried into CADNA as a series of outward facing sound emitters around the perimeter of the tensile fabric roof and canopy extension. Where included in the design, these sound sources include transmission loss factors for sound barrier curtains.
- ~~Amplification on the outdoor amphitheater stage was defined with minimal or no shielding. The canopy's thin membrane was neglected in the acoustic model due to the low transmission loss which it will provide.~~

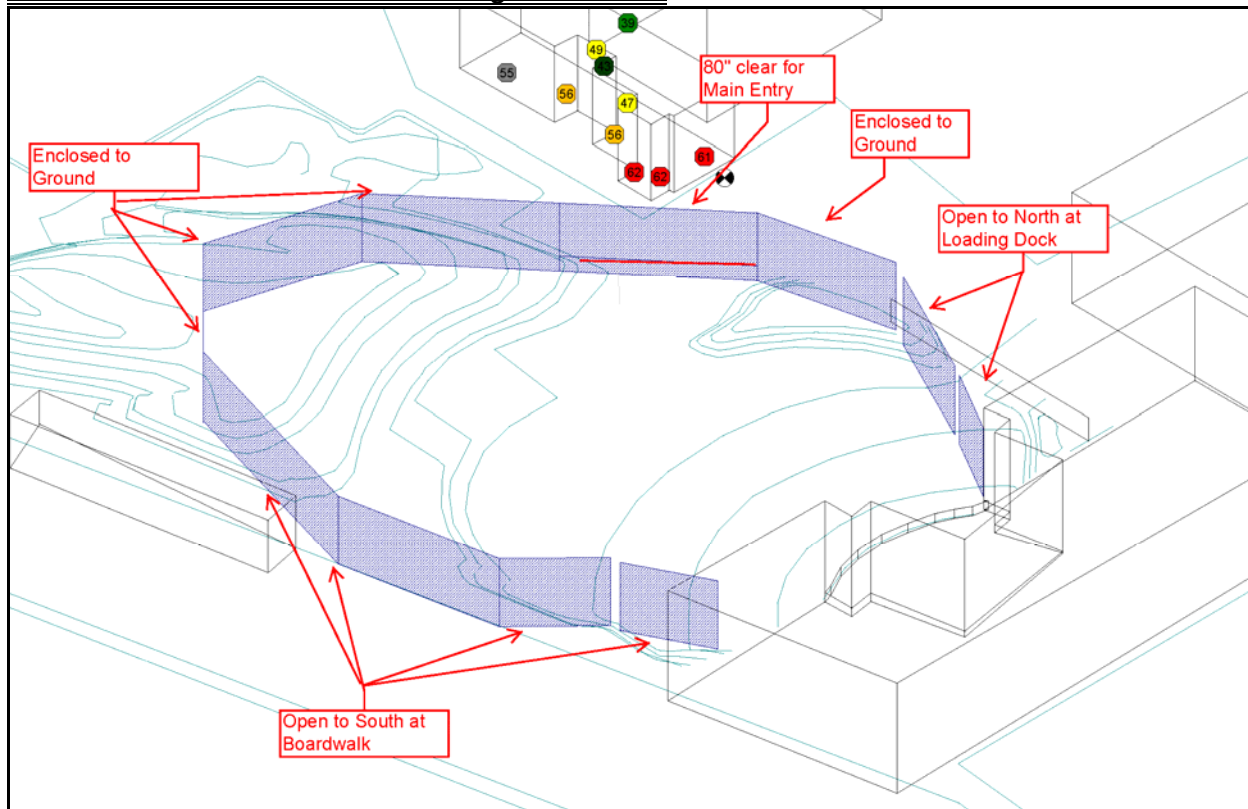
~~Additional factors addressed for the structures and machinery emitting noise were their elevations, points of noise escape (windows, openings, doorways), and attenuation measures.~~

CADNA inputs included L<sub>max</sub> noise levels, by octave band, at the soundboard on stage obtained from EASE at locations around the perimeter of the venue. Thus the venue was simulated as a solid building with the perimeter divided into discrete vertical planes, each radiating a known sound level based on the output of the EASE model. Where a perimeter section of the venue is covered with a sound curtain, the transmission loss from the material is applied directly to the sound source properties. Where the section is open, the transmission loss is modeled as zero. Figure 12-7 shows how the perimeter noise sources were modeled in CADNA.

~~As part of the proposed project, the applicant is committed to limiting the L<sub>max</sub> at the front row to 90 dBA in With Action conditions. As such, the model was calibrated to show an L<sub>max</sub> of 90 dBA for the first row of seating. Given the proposed design of the venue and the topography of the seating area, the L<sub>max</sub> at the row of seats farthest from the stage would be 75.7 dBA. To further avoid the potential for impacts, the L<sub>max</sub> will be limited to 87 dBA at the first row for the nighttime period that begins at 10 PM.~~ Inputs to the model CADNA also included specific structures that would affect or be affected by the propagation of noise from the stage. This included the structures of the (Former) Childs Restaurant Building, the Sea Crest Health Care Center at 3035 West 24<sup>th</sup> Street, the New York City Human Resources Administration's Coney Island Medicaid Office building immediately to the north of the (Former) Childs Restaurant Building, the residential building at 3058-3060 West 24<sup>th</sup> Street, and the residential building at 3046 West 22<sup>nd</sup> Street. These buildings would reflect noise from the concert or help shield other buildings from the concert noise. Specific receptor points were modeled to match the locations of the ten sites monitored for noise levels, as well as the seventeen sensitive receptor buildings listed in Table

12-4, in order to project concert noise levels at these sites. Noise levels were projected for elevations at street level and at 50 feet above ground level for both octave band and A-weighted descriptors.

**Figure 12-7**  
**Perimeter Noise Sources in CADNA Using EASE Results**



Source: Cerami and Associates, Inc.

**Concert Noise Levels.** CADNA modeling limited the  $L_{max}$  at the front row of seating to 90 dBA. Given the planned speaker system, the resulting  $L_{max}$  noise levels at the last row of seating would be 75.7 dBA, was based on the  $L_{max}$ . The  $L_{max}$  was selected in order to avoid significant adverse noise impacts and for project future compliance with Section 24-218 of the NYC Noise Code, which limits noise level increments to 10 dBA above ambient noise levels before 10 pm and 7 dBA at or after 10 pm. Ambient noise levels were defined as the projected  $L_{eq}$  under No Action Conditions.

The  $L_{eq}$  noise levels were calculated from the  $L_{max}$  because  $L_{eq}$ s can be manipulated mathematically and logarithmically added to the With Action  $L_{eq}$ s calculated for traffic noise. The resulting total  $L_{eq}$  noise levels under With Action Conditions were compared with the  $L_{eq}$ s under No Action Conditions in order to determine the potential for impacts for CEQR purposes.

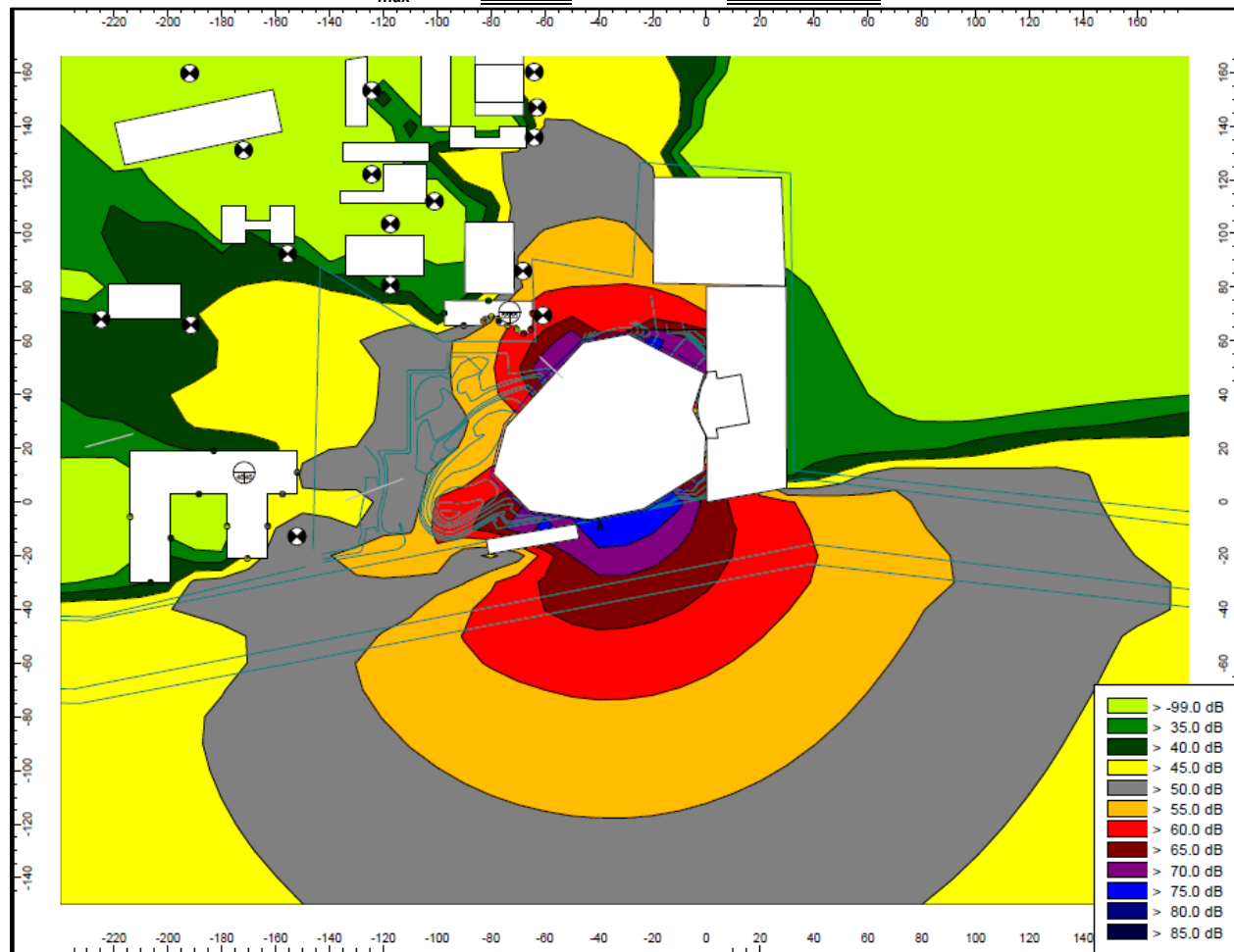
The difference between the  $L_{max}$  and the  $L_{eq}$  for concert noise was set at 5 dBA. The  $L_{eq}$  and  $L_{max}$  for a concert would be close because the high concert noise levels would skew the calculation of the  $L_{eq}$ . Frequency distributions of the modeled CADNA noise levels support a difference of 5 dBA, and the noise levels that were monitored close to the stage at the concert on July 17, 2013, showed a difference of 4.6 dBA between the  $L_{eq}$  and the  $L_{max}$ .

Figure 12-5-8 shows the modeled noise contours for an  $L_{max}$  of 90-100 dBA at the front row (98 dBA at mix location) with all of the proposed design measures in place. The contours shown in the figure are for



an elevation of approximately two meters, as noise levels at this height would be greater than noise levels at ground level. As is evident from the figure, the structure of the (Former) Childs Restaurant Building substantially helps to block and reduces noise levels on the east and northeast. Concert noise levels behind the wall and Human Resources building are below ambient noise levels and would not make a noticeable contribution to total noise levels because they are 40 dBA or lower, causing noise levels to drop to 60 dBA within about 25 feet of the site and to 55 dBA or less within about 150 feet of the project site. Therefore, the proposed window attenuation recommended in the 2009 Coney Island rezoning Rezoning FEIS for projected development Sites 1 and 2 would be sufficient to maintain an indoor noise level of 45 dBA in the future with the proposed amphitheater.

**FIGURE 12-58**  
**Concert Noise Contours With  $L_{max}$  of 90-98 dBA at Front Row/Mix Location**



Numbers in circles are noise monitoring sites and sensitive receptor locations.

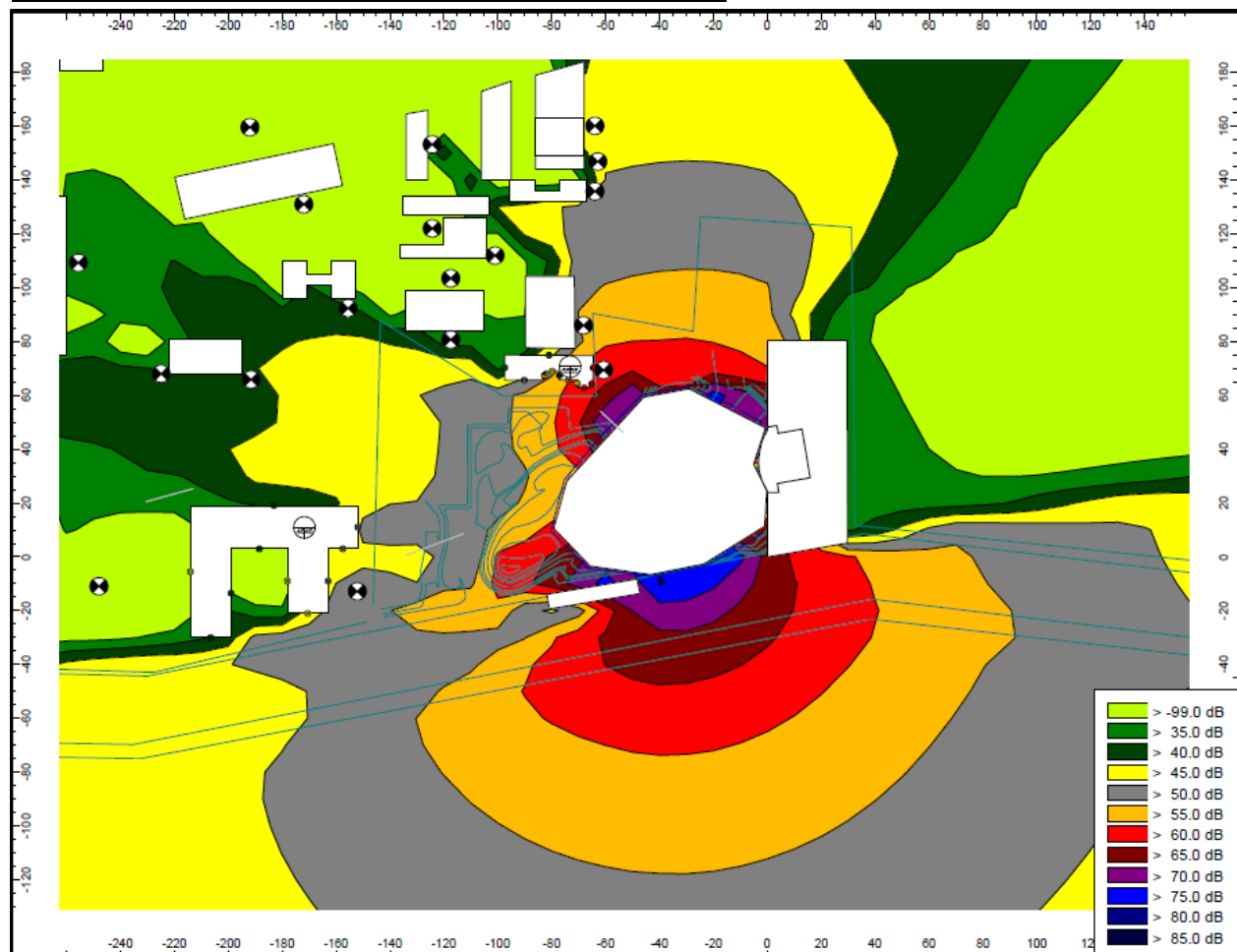
Source: Cerami and Associates, Inc.

With the noise reduction measures in place, the noise levels drop rapidly on the west side of the venue, and the contours fall to approximately 55 dBA or less before reaching any residences. They drop less rapidly on the Boardwalk to the east, where the nearest edge of the boardwalk would experience concert noise levels of 75 dBA. However, the boardwalk is not a sensitive receptor and these noise levels would not constitute an impact. To the west and northwest, the concert noise contours extend much further, depending on the extent to which existing buildings serve as barriers. This leads to long, narrow spikes of relatively high noise levels that run between buildings. The projected concert noise on the

north would place one residence within the 60-65 dBA contour and one within the 55-60 dBA contour. All others would experience concert noise levels of 50 dBA or less. These contours only show concert noise. They do not include traffic noise or other ambient sources of noise. Therefore, they do not reflect total noise levels or relative increases in noise levels.

Additional modeling was carried out to evaluate noise levels without the presence of the Brooklyn Human Resources Building north of the site. The masonry wall at the loading dock functions as a sound reduction measure against northward sound transmission. However, noise levels at Receptors 1, 2, 3, 4, and 6 to the north and east of the venue would increase in the absence of the Human Resources Building. The higher noise levels experienced at Receptors 1 to 4 would range from 0.4 to 4.6 dBA, while the noise difference for Receptor 6 is 13.6 dBA. Because the concert noise levels for all five of these receptors would continue to fall below the ambient noise levels, no impacts would occur and no additional compensating mitigation requirements are anticipated should the Brooklyn Human Resources Department Building be demolished. The proposed window attenuation recommended in the 2009 Coney Island Rezoning FEIS for projected development Sites 1 and 2 still would be sufficient to maintain an indoor noise level of 45 dBA in the future with the proposed amphitheater. Figure 12-9 shows the contours without the Human Resources Building.

**Figure 12-9**  
**Concert Noise Contours Without Human Resources Building**



Numbers in circles are noise monitoring sites and sensitive receptor locations.

Source: Cerami and Associates, Inc.

For the purposes of assessing potential compliance with Section 24-244 of the NYC Noise code, the  $L_{max}$  due solely to concert noise was compared with future ambient noise levels for With Action Conditions. The ambient noise was defined as the traffic noise levels under With Action Conditions. Due to the proposed noise reduction measures, noise levels from the concert would not be high enough to cause a 10 dBA increase over ambient noise prior to 10 pm. Concert noise after 10 pm was projected as being 6 dBA less than the modeled noise levels to represent the commitment to lower noise levels during the nighttime period. This would be equivalent to an  $L_{max}$  of 92 dBA at the mix and 94 dBA at the first row. Resulting noise levels would not be high enough to cause a 7 dBA increase over ambient noise levels after 10 pm. Table 12-12 shows the  $L_{max}$  concert noise levels at sensitive receptors and compares them with the  $L_{eq}$  for No-Action Conditions. The values in the table include the use of an 87 dBA  $L_{max}$  after 10 PM. In many cases, the concert noise would fall below ambient noise levels due to the attenuation with distance.

Based on the results of the analysis, No buildings with sensitive receptors would experience noise levels that would be higher than the increments permitted under Section 24-244 of the NYC Noise Code. Because there would be no adverse CEQR impacts, the project is not anticipated to exceed commercial music standards in Section 24-231 of the Noise Code. However, the prediction of noise levels within a receiving property is difficult, and any violation would be handled as an enforcement action.

**TABLE 12-12**  
**Concert Noise Levels at Sensitive Receptors, With Action Conditions**

| ID | Address                           | Block | Lot | # Floors | # DUs | Monitoring Site ID | Period        | No-Action Traffic/Background Leq | Concert $L_{max}$ Increment |                      |
|----|-----------------------------------|-------|-----|----------|-------|--------------------|---------------|----------------------------------|-----------------------------|----------------------|
|    |                                   |       |     |          |       |                    |               |                                  | Concert                     | Concert - Background |
| A  | 3035 W. 24 <sup>th</sup> St.      | 7070  | 148 | 5        | NA    | 8                  | Wkday < 10 pm | 57.0                             | 51.1                        | (5.9)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 55.2                             | 48.1                        | (7.1)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat < 10 pm   | 58.2                             | 51.1                        | (7.1)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat > 10 pm   | 61.4                             | 48.1                        | (13.3)               |
| B  | 2316 Surf Ave.                    | 7070  | 120 | 4        | 100   | 9                  | Wkday < 10 pm | 67.2                             | 48.9                        | (18.3)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 68.9                             | 45.9                        | (23.0)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat < 10 pm   | 65.4                             | 48.9                        | (16.5)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat > 10 pm   | 66.1                             | 45.9                        | (20.2)               |
| C  | 3024 W. 24 <sup>th</sup> St.      | 7070  | 1   | NA       | NA    | 9                  | Wkday < 10 pm | 67.2                             | 60.3                        | (6.9)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 68.9                             | 57.3                        | (11.6)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat < 10 pm   | 65.4                             | 60.3                        | (5.1)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat > 10 pm   | 66.1                             | 57.3                        | (8.8)                |
| D1 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | 9*                 | Wkday < 10 pm | 60.2                             | 58.4                        | (1.8)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 61.9                             | 55.4                        | (6.5)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat < 10 pm   | 58.4                             | 58.4                        | (0.0)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat > 10 pm   | 59.1                             | 55.4                        | (3.7)                |
| D2 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | 10                 | Wkday < 10 pm | 60.2                             | 45.9                        | (14.3)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 61.9                             | 42.9                        | (19.0)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat < 10 pm   | 58.4                             | 45.9                        | (12.5)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat > 10 pm   | 59.1                             | 42.9                        | (16.2)               |
| E  | 3046 W. 22 <sup>nd</sup> St.      | 7071  | 24  | 3        | 15    | 5                  | Wkday < 10 pm | 59.8                             | 59.2                        | (0.6)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 52.5                             | 56.2                        | 3.7                  |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat < 10 pm   | 68.9                             | 59.2                        | (9.7)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat > 10 pm   | 58.5                             | 56.2                        | (2.3)                |
| F  | 3040 W. 22 <sup>nd</sup> St.      | 7071  | 19  | 7        | 40    | 5                  | Wkday < 10 pm | 59.8                             | 58.0                        | (1.8)                |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 52.5                             | 55.0                        | 2.5                  |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat < 10 pm   | 68.9                             | 58.0                        | (10.9)               |
| -  | -                                 | -     | -   | -        | -     | -                  | Sat > 10 pm   | 58.5                             | 55.0                        | (3.5)                |
| G  | 3018-3022 W. 22 <sup>nd</sup> St. | 7071  | 114 | 3        | 21    | 4                  | Wkday < 10 pm | 66.6                             | 69.3                        | 2.7                  |
| -  | -                                 | -     | -   | -        | -     | -                  | Wkday > 10 pm | 62.9                             | 66.3                        | 3.4                  |

|   |                              |      |     |   |    |    |               |      |      |        |
|---|------------------------------|------|-----|---|----|----|---------------|------|------|--------|
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 68.9 | 69.3 | 0.4    |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 64.7 | 66.3 | 1.6    |
| H | 3024 W. 23 <sup>rd</sup> St. | 7070 | 133 | 3 | 10 | 5  | Wkday < 10 pm | 59.8 | 54.7 | (5.1)  |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 52.5 | 51.7 | (0.8)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 68.9 | 54.7 | (14.2) |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 58.5 | 51.7 | (6.8)  |
| I | 3027 W. 24 <sup>th</sup> St. | 7070 | 175 | 3 | 6  | 9* | Wkday < 10 pm | 60.2 | 62.6 | 2.4    |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 61.9 | 59.6 | (2.3)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 58.4 | 62.6 | 4.2    |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 59.1 | 59.6 | 0.5    |
| J | 3039 W. 24 <sup>th</sup> St. | 7070 | 174 | 3 | 6  | 9* | Wkday < 10 pm | 60.2 | 64.8 | 4.6    |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 61.9 | 61.8 | (0.1)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 58.4 | 64.8 | 6.4    |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 59.1 | 61.8 | 2.7    |
| K | 3008 W. 22 <sup>nd</sup> St. | 7071 | 9   | 2 | 20 | 4  | Wkday < 10 pm | 66.6 | 68.0 | 1.4    |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 62.9 | 65.0 | 2.1    |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 68.9 | 68.0 | (0.9)  |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 64.7 | 65.0 | 0.3    |
| L | 3016 W. 22 <sup>nd</sup> St. | 7071 | 13  | 1 | 4  | 4  | Wkday < 10 pm | 66.6 | 68.8 | 2.2    |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 62.9 | 65.8 | 2.9    |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 68.9 | 68.8 | (0.1)  |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 64.7 | 65.8 | 1.1    |
| M | 3017 W. 23 <sup>rd</sup> St. | 7071 | 94  | 2 | 6  | 8  | Wkday < 10 pm | 57.0 | 48.9 | 8.1    |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 57.0 | 45.9 | (8.1)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 55.2 | 48.9 | (9.3)  |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 58.2 | 45.9 | (9.3)  |
| N | 3023 W. 23 <sup>rd</sup> St. | 7071 | 93  | 2 | 3  | 8  | Wkday < 10 pm | 61.4 | 51.1 | (15.5) |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 57.0 | 48.1 | (5.9)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 55.2 | 51.1 | (7.1)  |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 58.2 | 48.1 | (7.1)  |
| O | 3029 W. 23 <sup>rd</sup> St. | 7071 | 90  | 3 | 3  | 8  | Wkday < 10 pm | 61.4 | 49.5 | (13.3) |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 57.0 | 46.5 | (7.5)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 55.2 | 49.5 | (8.7)  |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 58.2 | 46.5 | (8.7)  |
| P | 3031 W. 23 <sup>rd</sup> St. | 7071 | 89  | 3 | 3  | 8  | Wkday < 10 pm | 61.4 | 54.2 | (14.9) |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 57.0 | 51.2 | (2.8)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 55.2 | 54.2 | (4.0)  |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 58.2 | 51.2 | (4.0)  |
| Q | 2226 Surf Ave.               | 7071 | 1   | 2 | 2  | 4  | Wkday < 10 pm | 61.4 | 58.5 | (10.2) |
| - | -                            | -    | -   | - | -  | -  | Wkday > 10 pm | 66.6 | 55.5 | (8.1)  |
| - | -                            | -    | -   | - | -  | -  | Sat < 10 pm   | 62.9 | 58.5 | (7.4)  |
| - | -                            | -    | -   | - | -  | -  | Sat > 10 pm   | 68.9 | 55.5 | (10.4) |

\*Adjusted for distance attenuation

Note: Numbers in bold type would exceed the increments permitted in Section 24-218 of the NYC Noise Code

Source: Sandstone Environmental Associates, Inc.

## Total Noise

The  $L_{eq}$  concert noise levels modeled for the receptor sites were logarithmically added to the  $L_{eq}$  traffic noise levels projected for With-Action Conditions in order to obtain total  $L_{eq}$  noise levels and noise level increments for affected properties. The total  $L_{eq}$  noise levels under With-Action Conditions are shown in Table 12-13-12 below, and include are based on the  $L_{max}$  limitations of 90-98 and 87-92 dBA at the mixing board discussed previously. Total noise levels for With-Action conditions wouldThey range from 51.349.7 dBA to 70.569.3 dBA. With the proposed noise reduction measures in place, the concert noise increments compared to No-Action conditions would be below 3 dBA at all receptor points. The



increments are negative at some sites, reflecting the projected reduction in traffic volumes at those sites. In these cases, the noise contributed by the concert venue is not sufficient to counteract the effects of the reduced traffic volume. All but one of the buildings would experience an increase of less than 3 dBA. Building J would experience a noise level increment of 3.8 dBA on a typical Saturday evening before 10 PM. However, due to the low traffic noise level of 58.4 dBA for this period, the allowable increment is 5 dBA. Therefore, the increment does not constitute an impact. Based on the foregoing analysis, no noise level impacts are projected.

**TABLE 12-1312**  
**Total Noise Levels at Sensitive Receptors, With-Action Conditions**

| ID | Address                           | Block | Lot | # Floors | # DUs | Period        | No. Action $L_{eq}$ | Total With-Action $L_{eq}$ | Increment         | Allowable       | Impact? |
|----|-----------------------------------|-------|-----|----------|-------|---------------|---------------------|----------------------------|-------------------|-----------------|---------|
| A  | 3035 W. 24 <sup>th</sup> St.      | 7070  | 148 | 5        | NA    | Wkday < 10 pm | 57.0                | <del>57.357.3</del>        | <del>0.30.3</del> | 5               | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | 55.2                | <del>55.455.5</del>        | <del>0.20.3</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 58.2                | <del>58.558.4</del>        | <del>0.30.3</del> | 5               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 61.4                | <del>61.461.5</del>        | <del>0.00.1</del> | 3               | No      |
| B  | 2316 Surf Ave.                    | 7070  | 120 | 4        | 100   | Wkday < 10 pm | 67.2                | <del>67.467.4</del>        | <del>0.20.2</del> | 3               | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | 68.9                | <del>69.269.2</del>        | <del>0.30.3</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 65.4                | <del>65.665.6</del>        | <del>0.20.2</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 66.1                | <del>66.366.3</del>        | <del>0.20.2</del> | 3               | No      |
| C  | 3024 W. 24 <sup>th</sup> St.      | 7070  | 1   | NA       | NA    | Wkday < 10 pm | 67.2                | <del>67.467.7</del>        | <del>0.20.4</del> | 3               | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | 68.9                | <del>69.269.2</del>        | <del>0.30.4</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 65.4                | <del>65.665.9</del>        | <del>0.20.5</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 66.1                | <del>66.366.4</del>        | <del>0.20.3</del> | 3               | No      |
| D1 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | Wkday < 10 pm | 60.2                | <del>60.461.2</del>        | <del>0.24.0</del> | 4.8             | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | 61.9                | <del>62.262.4</del>        | <del>0.30.6</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 58.4                | <del>58.659.7</del>        | <del>0.21.3</del> | 5               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 59.1                | <del>59.359.8</del>        | <del>0.20.7</del> | 3               | No      |
| D2 | 3021 W. 25 <sup>th</sup> St.      | 7070  | 1   | 14       | 380   | Wkday < 10 pm | <del>56.860</del>   | <del>59.260.5</del>        | <del>2.40.2</del> | <del>4.85</del> | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | <del>51.561</del>   | <del>53.562.2</del>        | <del>2.00.3</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | <del>57.258</del>   | <del>57.258.6</del>        | <del>0.00.2</del> | 5               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | <del>55.659</del>   | <del>55.659.3</del>        | <del>0.00.2</del> | 3               | No      |
| E  | 3046 W. 22 <sup>nd</sup> St.      | 7071  | 24  | 3        | 15    | Wkday < 10 pm | 59.8                | <del>61.059.9</del>        | <del>1.20.1</del> | 5               | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | <del>52.552</del>   | <del>53.653.4</del>        | <del>0.90.9</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 68.9                | <del>66.866.6</del>        | =                 | 3               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 58.5                | <del>56.956.8</del>        | =                 | 3               | No      |
| F  | 3040 W. 22 <sup>nd</sup> St.      | 7071  | 19  | 7        | 40    | Wkday < 10 pm | 59.8                | <del>59.359.6</del>        | =                 | 5               | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | <del>52.52.5</del>  | <del>51.052.8</del>        | =                 | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 68.9                | <del>66.466.5</del>        | =                 | 3               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 58.5                | <del>55.956.5</del>        | =                 | 3               | No      |
| G  | 3018-3022 W. 22 <sup>nd</sup> St. | 7071  | 114 | 3        | 21    | Wkday < 10 pm | 66.6                | <del>67.168.9</del>        | <del>0.52.3</del> | 3               | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | 62.9                | <del>63.965.8</del>        | <del>1.02.9</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 68.9                | <del>69.370.5</del>        | <del>0.41.6</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 64.7                | <del>65.366.7</del>        | <del>0.62.0</del> | 3               | No      |
| H  | 3024 W. 23 <sup>rd</sup> St.      | 7070  | 133 | 3        | 10    | Wkday < 10 pm | 59.8                | <del>58.659.1</del>        | =                 | 5               | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | <del>52.752</del>   | <del>49.751.3</del>        | =                 | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 68.9                | <del>66.366.4</del>        | =                 | 3               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 58.5                | <del>55.556.0</del>        | =                 | 3               | No      |
| I  | 3027 W. 24 <sup>th</sup> St.      | 7070  | 175 | 3        | 6     | Wkday < 10 pm | 60.2                | <del>60.462.2</del>        | <del>0.22.0</del> | <del>4.85</del> | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | 61.9                | <del>62.262.9</del>        | <del>0.34.0</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 58.4                | <del>58.661.1</del>        | <del>0.22.7</del> | 5               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 59.1                | <del>59.360.6</del>        | <del>0.21.4</del> | 3               | No      |
| J  | 3039 W. 24 <sup>th</sup> St.      | 7070  | 174 | 3        | 6     | Wkday < 10 pm | 60.2                | <del>60.563.1</del>        | <del>0.32.9</del> | 4.8             | No      |
|    |                                   |       |     |          |       | Wkday >10 pm  | 61.9                | <del>62.263.3</del>        | <del>0.34.4</del> | 3               | No      |
|    |                                   |       |     |          |       | Sat < 10 pm   | 58.4                | <del>58.662.2</del>        | <del>0.23.8</del> | 5               | No      |
|    |                                   |       |     |          |       | Sat > 10 pm   | 59.1                | <del>59.361.2</del>        | <del>0.22.1</del> | 3               | No      |

TABLE 12-12 (cont'd)

| ID | Address                      | Block | Lot | # Floors | # DUs | Period        | No-Action L <sub>eq</sub> | Total With-Action L <sub>eq</sub> | Increment          | Allowable     | Impact? |
|----|------------------------------|-------|-----|----------|-------|---------------|---------------------------|-----------------------------------|--------------------|---------------|---------|
| K  | 3008 W. 22 <sup>nd</sup> St. | 7071  | 9   | 2        | 20    | Wkday < 10 pm | 66.6                      | <del>67.168.5</del>               | <del>0.54.9</del>  | 3             | No      |
|    |                              |       |     |          |       | Wkday >10 pm  | 62.9                      | <del>63.965.4</del>               | <del>1.02.5</del>  | 3             | No      |
|    |                              |       |     |          |       | Sat < 10 pm   | 68.9                      | <del>69.370.2</del>               | <del>0.44.3</del>  | 3             | No      |
|    |                              |       |     |          |       | Sat > 10 pm   | 64.7                      | <del>65.366.4</del>               | <del>0.64.7</del>  | 3             | No      |
| L  | 3016 W. 22 <sup>nd</sup> St. | 7071  | 13  | 1        | 4     | Wkday < 10 pm | 66.6                      | <del>67.168.8</del>               | <del>0.52.4</del>  | 3             | No      |
|    |                              |       |     |          |       | Wkday >10 pm  | 62.9                      | <del>63.965.6</del>               | <del>1.02.7</del>  | 3             | No      |
|    |                              |       |     |          |       | Sat < 10 pm   | 68.9                      | <del>69.370.4</del>               | <del>0.44.5</del>  | 3             | No      |
|    |                              |       |     |          |       | Sat > 10 pm   | 64.7                      | <del>65.366.6</del>               | <del>0.64.9</del>  | 3             | No      |
| M  | 3017 W. 23 <sup>rd</sup> St. | 7071  | 94  | 2        | 6     | Wkday < 10 pm | <del>59.857</del>         | <del>58.657.2</del>               | <del>-1.20.2</del> | 5             | No      |
|    |                              |       |     |          |       | Wkday >10 pm  | <del>52.755</del>         | <del>49.755.4</del>               | <del>-3.00.2</del> | 3             | No      |
|    |                              |       |     |          |       | Sat < 10 pm   | <del>68.958</del>         | <del>66.358.3</del>               | <del>-2.60.2</del> | <del>53</del> | No      |
|    |                              |       |     |          |       | Sat > 10 pm   | <del>58.564</del>         | <del>55.564.4</del>               | <del>-3.00.0</del> | 3             | No      |
| N  | 3023 W. 23 <sup>rd</sup> St. | 7071  | 93  | 2        | 3     | Wkday < 10 pm | <del>59.857</del>         | <del>58.657.3</del>               | <del>-1.20.3</del> | 5             | No      |
|    |                              |       |     |          |       | Wkday >10 pm  | <del>52.755</del>         | <del>49.755.5</del>               | <del>-3.00.3</del> | 3             | No      |
|    |                              |       |     |          |       | Sat < 10 pm   | <del>68.958</del>         | <del>66.358.4</del>               | <del>-2.60.3</del> | <del>53</del> | No      |
|    |                              |       |     |          |       | Sat > 10 pm   | <del>58.564</del>         | <del>55.564.5</del>               | <del>-3.00.4</del> | 3             | No      |
| O  | 3029 W. 23 <sup>rd</sup> St. | 7071  | 90  | 3        | 3     | Wkday < 10 pm | <del>59.857</del>         | <del>58.657.2</del>               | <del>-1.20.2</del> | 5             | No      |
|    |                              |       |     |          |       | Wkday >10 pm  | <del>52.755</del>         | <del>49.755.4</del>               | <del>-3.00.2</del> | 3             | No      |
|    |                              |       |     |          |       | Sat < 10 pm   | <del>68.958</del>         | <del>66.358.4</del>               | <del>-2.60.2</del> | <del>53</del> | No      |
|    |                              |       |     |          |       | Sat > 10 pm   | <del>58.564</del>         | <del>55.564.4</del>               | <del>-3.00.0</del> | 3             | No      |
| P  | 3031 W. 23 <sup>rd</sup> St. | 7071  | 89  | 3        | 3     | Wkday < 10 pm | <del>59.857</del>         | <del>58.657.7</del>               | <del>-1.20.7</del> | 5             | No      |
|    |                              |       |     |          |       | Wkday >10 pm  | <del>52.755</del>         | <del>49.755.8</del>               | <del>-3.00.5</del> | 3             | No      |
|    |                              |       |     |          |       | Sat < 10 pm   | <del>68.958</del>         | <del>66.358.7</del>               | <del>-2.60.5</del> | <del>53</del> | No      |
|    |                              |       |     |          |       | Sat > 10 pm   | <del>58.564</del>         | <del>55.564.5</del>               | <del>-3.00.4</del> | 3             | No      |
| Q  | 2226 Surf Ave.               | 7071  | 1   | 2        | 2     | Wkday < 10 pm | <del>67.266</del>         | <del>67.467.3</del>               | <del>0.20.6</del>  | 3             | No      |
|    |                              |       |     |          |       | Wkday >10 pm  | <del>68.962</del>         | <del>69.264.4</del>               | <del>0.34.2</del>  | 3             | No      |
|    |                              |       |     |          |       | Sat < 10 pm   | <del>65.468</del>         | <del>65.669.4</del>               | <del>0.20.5</del>  | 3             | No      |
|    |                              |       |     |          |       | Sat > 10 pm   | <del>66.164</del>         | <del>66.365.4</del>               | <del>0.20.7</del>  | 3             | No      |

Source: Sandstone Environmental Associates, Inc.

## Summary of Results

Noise levels were evaluated for the traffic network and for specific sensitive receptor locations in order to project future noise levels at buildings near the proposed concert site. No impacts due to increases in traffic were projected. The CADNA and EASE models were used to model concert noise, and the L<sub>max</sub> concert noise levels at the front row of seats mix position were limited to 90-98 dBA before 10 PM and 87-92 dBA beginning at 10 PM. Design features to control the propagation of noise beyond the site boundaries included an 8-foot high masonry wall at the south edge of the loading dock. During concerts, a sound curtain would be temporarily deployed to the ground on the northwestern side of the tensile fabric roof. Additionally, a canopy extension would be deployed with sound curtains extending to the ground on the western edges, with the exception of the entrance at West 22<sup>nd</sup> Street which would maintain a clearance of 80 inches above the ground for ingress and egress. Modeling without the presence of the Brooklyn Human Resources Building was carried out. Although noise levels at some receptors would be higher, no impacts would occur and the proposed window attenuation recommended in the 2009 Coney Island Rezoning FEIS for projected development Sites 1 and 2 still would be sufficient to maintain an indoor noise level of 45 dBA in the future with the proposed amphitheater.

The modeled L<sub>max</sub> noise levels were compared with the L<sub>eq,s</sub> under With-Action traffic-only conditions ~~No-Action Conditions~~. The results showed that concert noise levels would not exceed the permissible noise

increments in Section 24-21844 of the NYC Noise Code. Further, based on the results of the CEQR analysis, the project is not anticipated to exceed the commercial music standards in Section 24-231 of the Noise Code; however, it is difficult to predict noise levels within receiving properties, and any violation would be handled as an enforcement action.

The  $L_{eq}$ s for the concert noise were logarithmically added to the  $L_{eq}$  traffic noise levels for With-Action Conditions and compared to No Action Conditions. This indicated that no sensitive receptors in the vicinity of the amphitheater would experience a significant adverse impact under CEQR. Therefore, no further measures are required to avoid noise impacts. ~~The proposed design plans will be reviewed between the Draft and Final EIS in order to optimize the sound level mitigation. However, if potential noise impacts are identified during refinement of analyses to further enhance noise attenuating measures of the project prior to the issuance of the FEIS, the Applicant commits to providing additional measures as necessary to ensure that no such significant adverse noise impacts occur due to the proposed project.~~