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* Sea Park North Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
17DCP098K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
170240ZMK and 1702421ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			The Arker Companies		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Robert Dobruskin			John Strauss for Hiram A. Rothkrug, Environmental Studies Corp.		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 55 Water Mill Road		
CITY New York	STATE NY	ZIP 10007	CITY Great Neck	STATE NY	ZIP 11021
TELEPHONE 212-720-3423	EMAIL rdobrus@planning.nyc.gov		TELEPHONE 718-343-0026	EMAIL jstrauss@environmentalstudiescorp.com	

5. *Project Description*

The Applicant, the Arker Companies, 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 and R5/C1-2 zoning districts to a mixture of R5, R6, R6A, and R7A/C2-4 zoning districts. The Proposed Rezoning Area comprises Block 7011, Lots 1, 11, 43-47, 49, 51-54, 95 (part of), 96, and 97 which occupy the West 28th Street and the Neptune and Mermaid Avenue frontages of the block. The rezoning proposes to eliminate a C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of), 96, and 97 while retaining the underlying R5 zoning on these parcels.The Applicant is also proposing a zoning text amendment to Appendix F, Inclusionary Housing Designated Areas, to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the proposed Rezoning Area (with the exception of Block 7011, Lots 95 (part of), 96, and 97).

The Proposed Development Site (Projected Development Site 1), Block 7011, Lot 11, is an L-shaped lot principally located along West 28th Street extending to Neptune Avenue and West 29th Street and occupying close to 50% of the block. The actions would facilitate a proposal by the Applicant to develop two residential buildings totaling 160,770 gsf in size and containing 153 residential units. The development will also contain 68 accessory at-grade and garage parking spaces. The project would be developed with the use of HPD's Extremely Low & Low-Income Affordability (ELLA) Program which funds the new construction of low income multi-family rental projects in which a minimum of 70% of the units are at low income rents affordable to households earning up to 60% of Area Median Income (AMI). Up to 30% of the units may have rents affordable to moderate income households earning up to 100% of AMI. At least 10% of units must be set aside for formerly homeless households.

The remainder of the Proposed Rezoning Area, Block 7011, Lots 1, 43-47, 49, 51-54, 95 (part of), 96, and 97, is not controlled by the Applicant. However, new development is projected to occur on Lots 45, 46, 47, 49, 51, 52, 53, and 54. Other sites which are not seen as Projected Development Sites by the project build year of 2020 include Lots 1, 43, 44, 95, 96, and 97. See attached Project Description.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 13	STREET ADDRESS 2828 West 28th Street
TAX BLOCK(S) AND LOT(S) Block 7011, Lots 1, 11, 43-47, 49, 51-54, 95 (part of), 96, and 97		ZIP CODE 11224

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Portion of block bounded by West 28th Street, Neptune Avenue and Mermaid Avenue and partially by West 29th Street

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R5, R5/C1-2 | 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)

- ☐ CITY MAP AMENDMENT
- ☒ ZONING MAP AMENDMENT
- ☒ ZONING TEXT AMENDMENT
- ☐ SITE SELECTION—PUBLIC FACILITY
- ☐ HOUSING PLAN & PROJECT
- ☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
- ☐ ZONING CERTIFICATION
- ☐ ZONING AUTHORIZATION
- ☐ ACQUISITION—REAL PROPERTY
- ☐ DISPOSITION—REAL PROPERTY
- ☐ OTHER, explain:
- ☐ CONCESSION
- ☐ UDAAP
- ☐ REVOCABLE CONSENT
- ☐ FRANCHISE

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION Appendix F

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

- ☐ VARIANCE (use)
- ☐ VARIANCE (bulk)
- ☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

- ☐ LEGISLATION
- ☐ RULEMAKING
- ☐ CONSTRUCTION OF PUBLIC FACILITIES
- ☐ 384(b)(4) APPROVAL
- ☐ OTHER, explain:
- ☒ FUNDING OF CONSTRUCTION, specify: HPD-Extremely Low & Low-Income Affordability (ELLA) Program
- ☐ POLICY OR PLAN, specify:
- ☐ FUNDING OF PROGRAMS, specify:
- ☐ PERMITS, specify:

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

- ☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)
- ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
- ☒ OTHER, explain: 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.*

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 136,867 (Rezoning Area); 89,357 (Proposed Development Site)

Waterbody area (sq. ft) and type: 0

Roads, buildings, and other paved surfaces (sq. ft.): 136,867 (Rezoning Area); 89,357 (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): 160,770 (Applicant owned project site)

NUMBER OF BUILDINGS: 2
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 70,855, 89,915
HEIGHT OF EACH BUILDING (ft.): 79'-4", 79'-4"
NUMBER OF STORIES OF EACH BUILDING: 8, 7-8

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: 89,357
The total square feet not owned or controlled by the applicant: 47,510

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: 89,357 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 89,357 sq. ft. (width x length)

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

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	160,770	0	0	0
Type (*e.g.,* retail, office, school)	153 units	0	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: 439 NUMBER OF ADDITIONAL WORKERS: 6
Provide a brief explanation of how these numbers were determined: Residents: Based on average household size of 2.87 residents per dwelling unit (2010 Census data); Workers: assumes .04 workers per dwelling unit (153 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

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
o If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
o If "yes," complete the Consistency Assessment Form. See attached report.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of 200 or more residential units?	☒	☐
o Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
o Directly displace more than 500 residents?	☐	☒
o Directly displace more than 100 employees?	☐	☒
o Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
o **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☒	☐
o **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
o **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☒	☐
o **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
o If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
o If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐

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

	YES	NO
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 6,273		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 21,088,201		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☒
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See attached report.	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☒	☐
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;	☐	☒

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

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
John Strauss, Environmental Studies Corp.	09/01/2017

SIGNATURE

Dana Feingold for John Strauss

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

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

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

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

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

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ YES ☒ NO

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

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

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

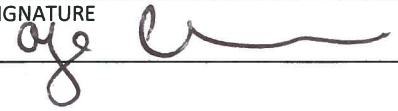
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result.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

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

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment & Review Division	New York City Department of City Planning
Olga Abinader	DATE: September 1, 2017

SIGNATURE



2017 SITE PHOTOS

1. View of West 29th Street facing south.

2. View of sidewalk along the east side of West 29th Street facing south.

3. View of the side of West 29th Street facing northeast.

4. View of the sidewalk along the east side of West 29th Street facing north.

5. View of Mermaid Avenue facing east from West 29th Street.

6. View of West 29th Street facing north.

7. View of the side of Mermaid Avenue facing north.

8. View of the sidewalk along the north side of Mermaid Avenue facing east.

9. View of the sidewalk along the north side of Mermaid Avenue facing west.

10. View of the side of Mermaid Avenue facing southeast.

11. View of the side of Mermaid Avenue facing southwest.

12. View of the intersection of Mermaid Avenue and West 28th Street facing northwest.

13. View of West 28th Street facing north.

14. View of Mermaid Avenue facing west from West 28th Street.

15. View of the sidewalk along the west side of West 28th Street facing north.

16. View of the side of West 28th Street facing northwest.

17. View of the side of West 28th Street facing southwest.

18. View of the Site facing northwest from West 28th Street.

19. View of the side of West 28th Street facing southeast.

20. View of the side of West 28th Street facing northeast.

21. View of the side of West 28th Street facing southeast from the Site.

22. View of the Site facing west from West 28th Street.

23. View of the Site facing southwest from West 28th Street.

24. View of the Site facing northwest from West 28th Street.

25. View of the side of West 28th Street facing east from the Site.

26. View of the side of West 28th Street facing southeast from the Site.

27. View of the side of West 28th Street facing northeast from the Site.

28. View of the Site facing east from West 28th Street.

29. View of the Site facing southwest from West 28th Street.

30. View of the Site facing northwest from West 28th Street.

31. View of the sidewalk along the west side of West 28th Street facing south (Site at right).

33. View of the sidewalk along the south side of Neptune Avenue facing east.

32. View of the sidewalk along the south side of Neptune Avenue facing west (Site at left).

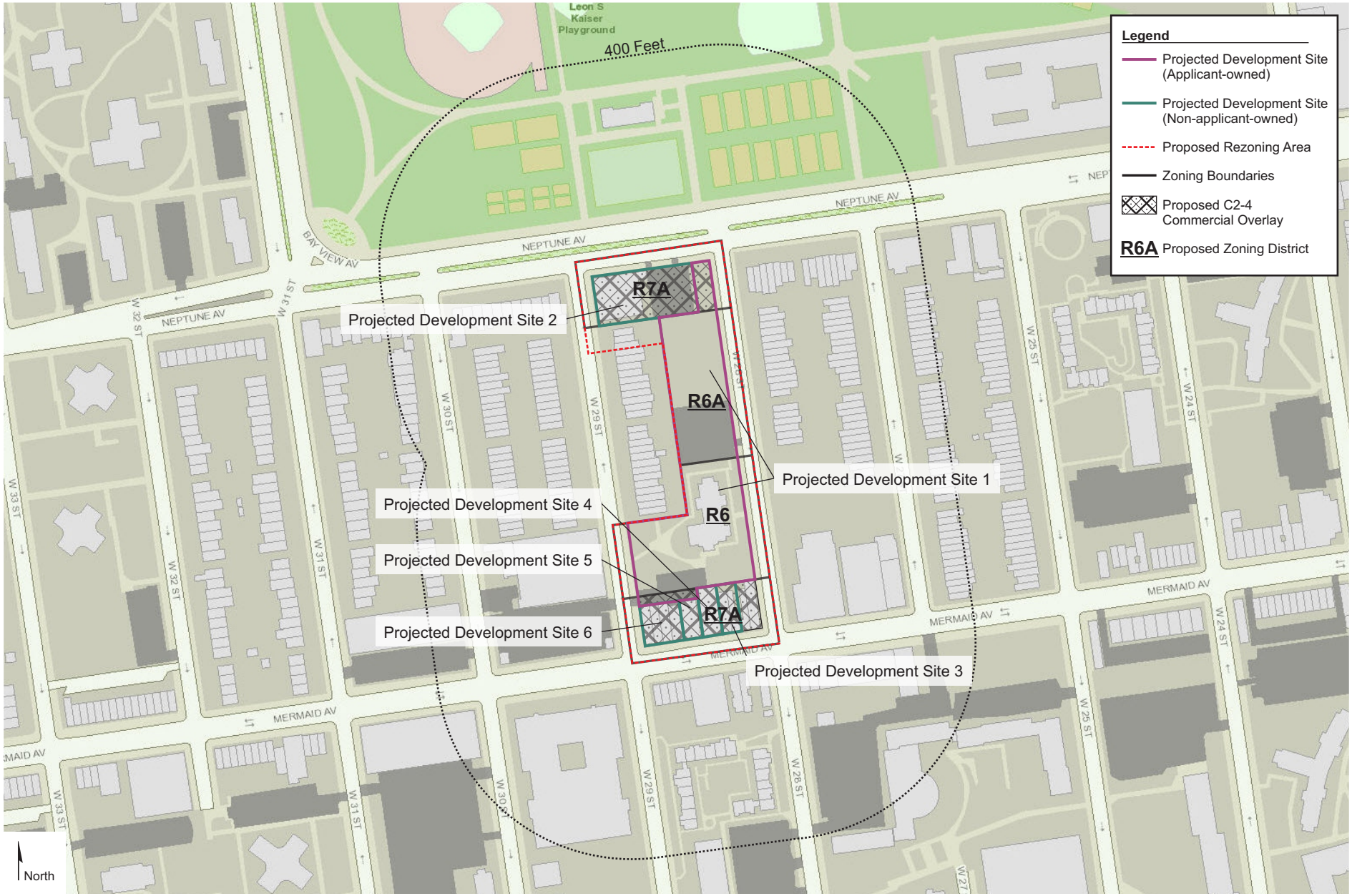
34. View of Neptune Avenue facing east.

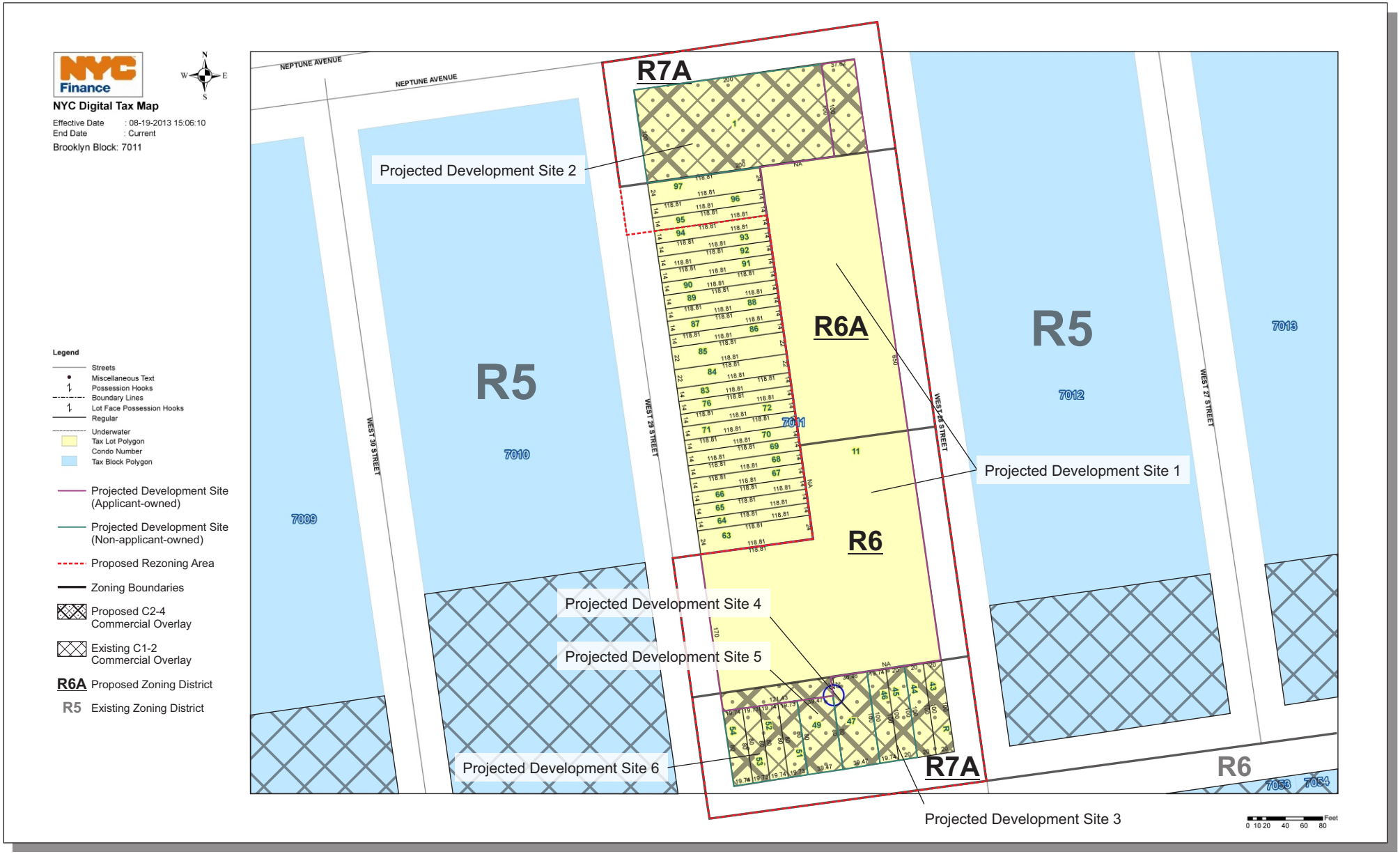
35. View of the side of Neptune Avenue facing southeast.

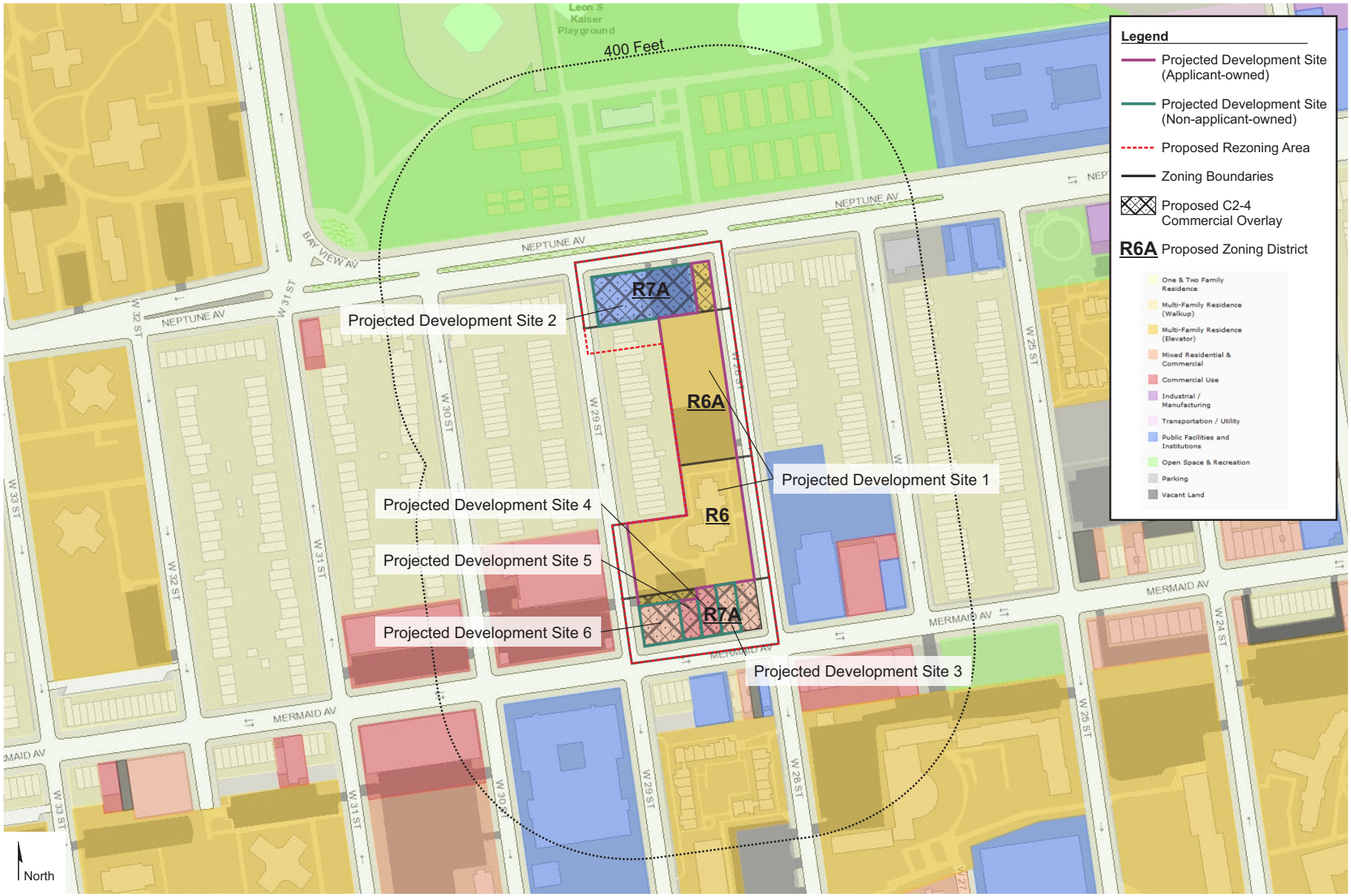
36. View of West 28th Street facing south from Neptune Avenue (Site at right).

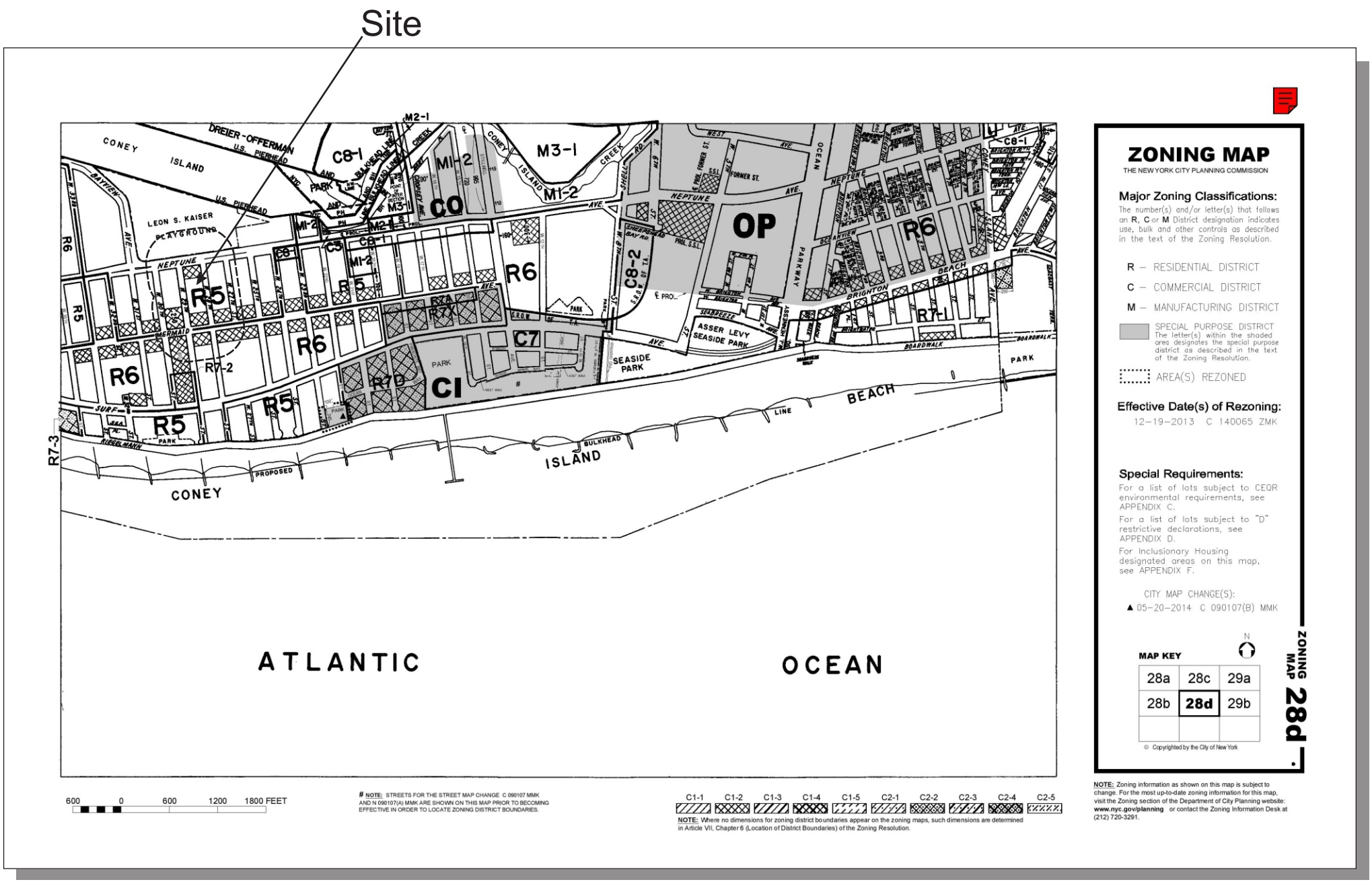
37. View of the Site facing southwest from the intersection of Neptune Avenue and West 28th Street.

38. View of Neptune Avenue facing west (Site at left).


Leon S Kaiser Playground
400 Feet
Legend
Projected Development Site (Applicant-owned)
Projected Development Site (Non-applicant-owned)
Proposed Rezoning Area
Zoning Boundaries
Proposed C2-4 Commercial Overlay
R6A Proposed Zoning District
R7A
R6A
R6
R7A
Projected Development Site 1
Projected Development Site 2
Projected Development Site 3
Projected Development Site 4
Projected Development Site 5
Projected Development Site 6
NEPTUNE AV
BAY VIEW AV
MERMAID AV
W 32 ST
W 31 ST
W 30 ST
W 29 ST
W 28 ST
W 27 ST
W 25 ST
W 24 ST
W 33 ST
North
0
200
400
600 Feet


NYC Finance
NYC Digital Tax Map
Effective Date : 08-19-2013 15:06:10
End Date : Current
Brooklyn Block: 7011
N
W
E
S
Legend
Streets
Miscellaneous Text
Possession Hooks
Boundary Lines
Lot Face Possession Hooks
Regular
Underwater
Tax Lot Polygon
Condo Number
Tax Block Polygon
Projected Development Site (Applicant-owned)
Projected Development Site (Non-applicant-owned)
Proposed Rezoning Area
Zoning Boundaries
Proposed C2-4 Commercial Overlay
Existing C1-2 Commercial Overlay
R6A Proposed Zoning District
R5 Existing Zoning District
NEPTUNE AVENUE
NEPTUNE AVENUE
WEST 30 STREET
WEST 29 STREET
WEST 28 STREET
WEST 27 STREET
R7A
R6A
R6
R5
R5
R5
R6
R7A
7009
7010
7011
7012
7013
7053
7054
Projected Development Site 1
Projected Development Site 2
Projected Development Site 3
Projected Development Site 4
Projected Development Site 5
Projected Development Site 6
Feet
0 10 20 40 60 80


Leon S Kaiser Playground
400 Feet
NEPTUNE AV
BAY VIEW AV
W 32 ST
W 31 ST
W 30 ST
W 29 ST
W 28 ST
W 25 ST
W 24 ST
W 33 ST
MERMAID AV
R7A
R6A
R6
R7A
Projected Development Site 1
Projected Development Site 2
Projected Development Site 3
Projected Development Site 4
Projected Development Site 5
Projected Development Site 6
Legend
Projected Development Site (Applicant-owned)
Projected Development Site (Non-applicant-owned)
Proposed Rezoning Area
Zoning Boundaries
Proposed C2-4 Commercial Overlay
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
North
0
200
400
600 Feet



600 0 600 1200 1800 FEET

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.

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

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

N

MAP KEY

28a	28c	29a
28b	**28d**	29b

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** or contact the Zoning Information Desk at (212) 720-3291.


Kaiser Playground
400 Feet
NEPTUNE AV
W 33 ST
W 32 ST
W 31 ST
W 30 ST
W 29 ST
W 28 ST
W 27 ST
W 25 ST
W 24 ST
W 23 ST
MERMAID AV
R7A
R6A
R6
R7A
Projected Development Site 1
Projected Development Site 2
Projected Development Site 3
Projected Development Site 4
Projected Development Site 5
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Legend
Projected Development Site (Applicant-owned)
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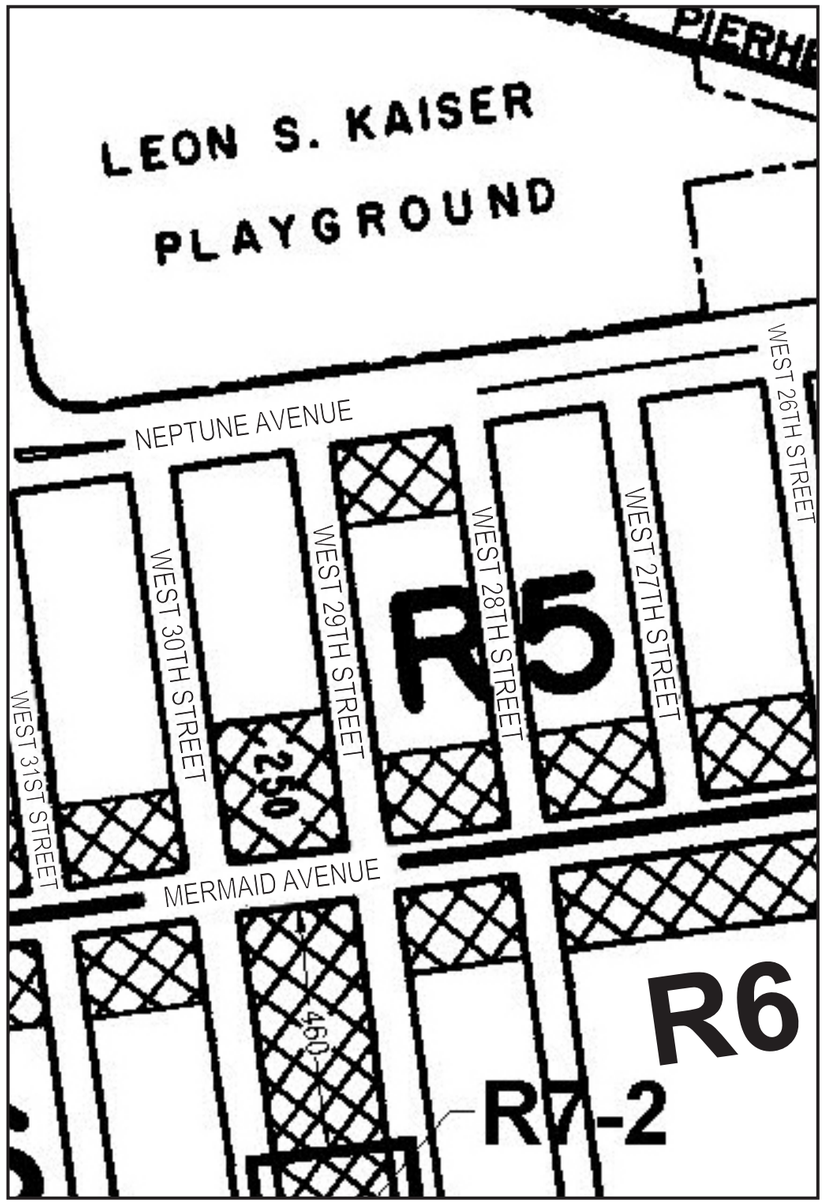
Proposed Rezoning Area
Zoning Boundaries
Proposed C2-4 Commercial Overlay
R6A Proposed Zoning District
North
0
200
400
600 Feet

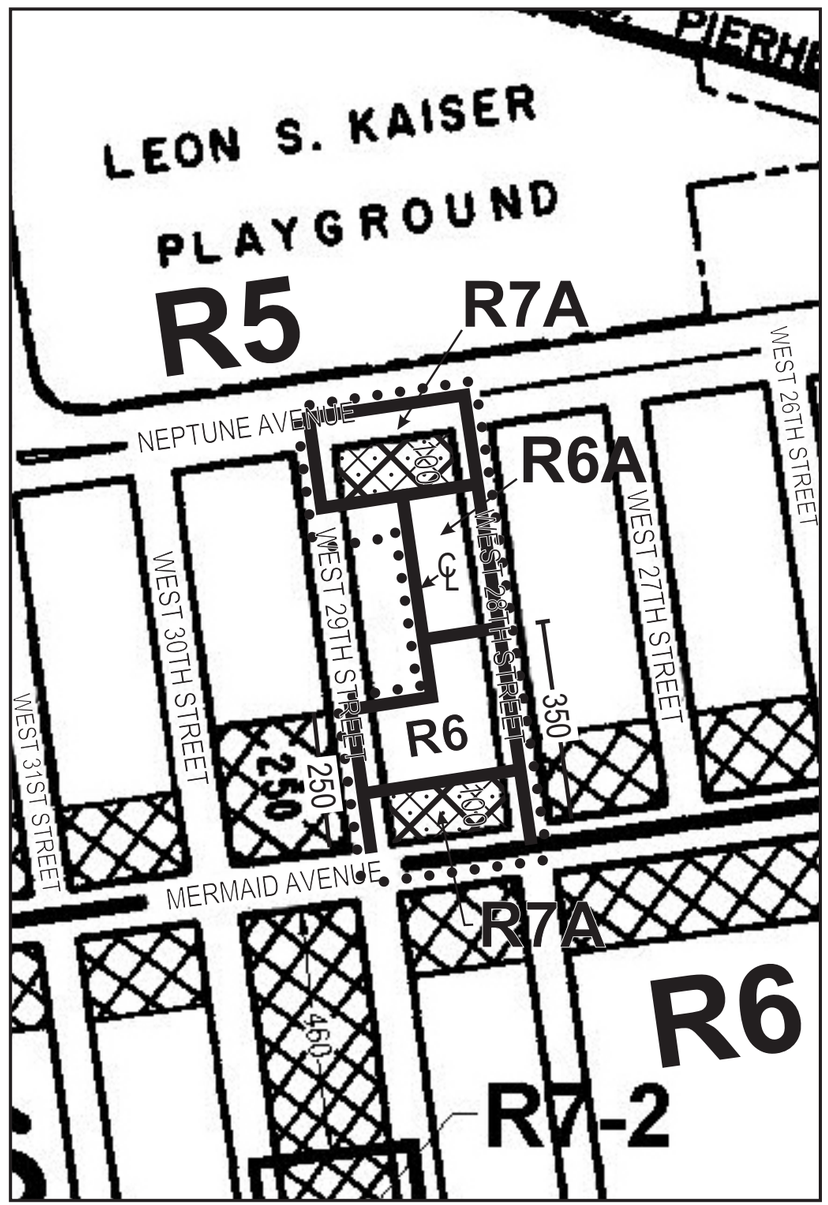
Sea Park North
Block 7011, Brooklyn

Zoning Change Map



Current Zoning Map (Map 28d)

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



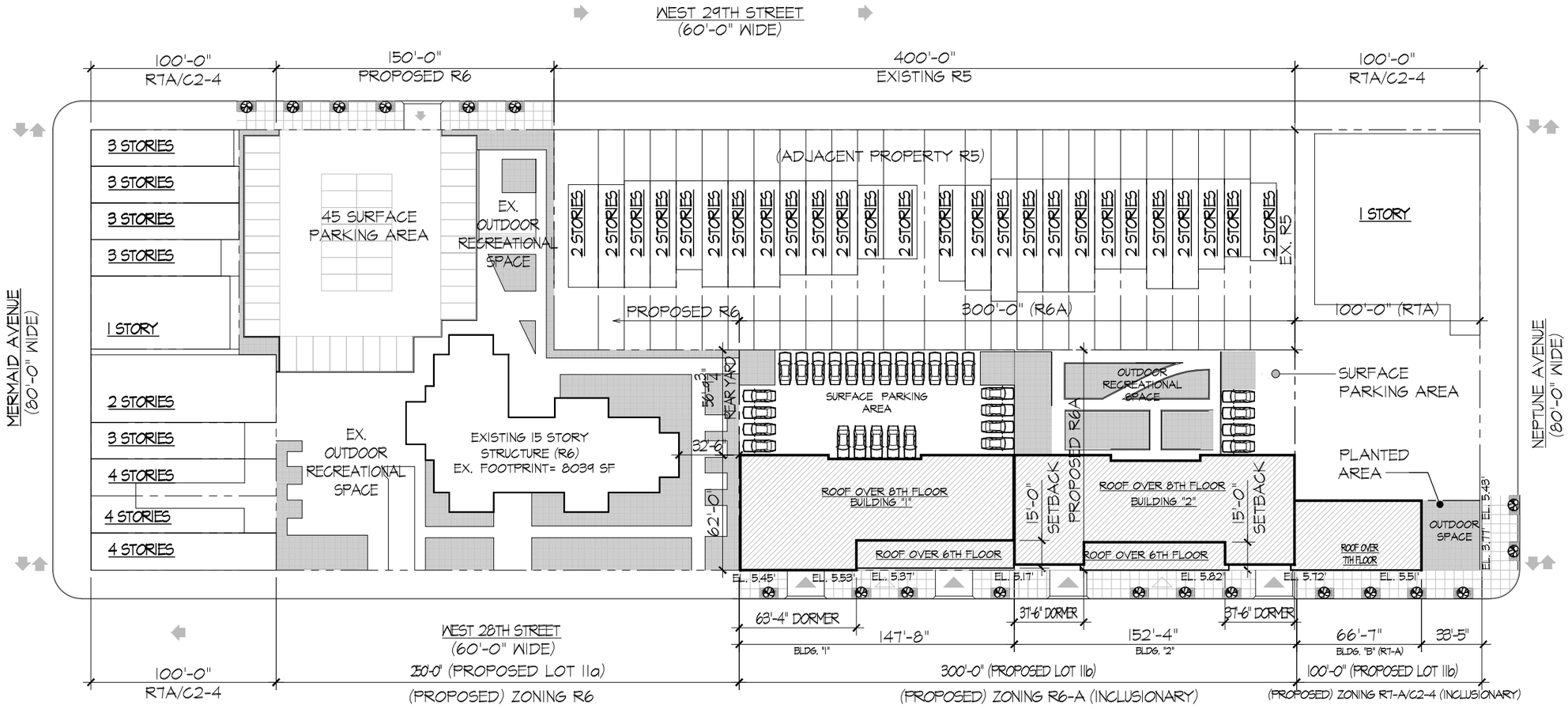
Proposed Zoning Map (Map 28d)

Rezoning from:
- R5/C1-2 to R7A/C2-4
- R5 to R6A
- R5 to R6
- R5/C1-2 to R5
- R5/C1-2 to R6A
- R5/C1-2 to R6

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS



PLOT PLAN
SCALE 1/64" = 1'-0"

N

FOR ILLUSTRATIVE PURPOSES ONLY

SCHEMATIC PLOT PLAN

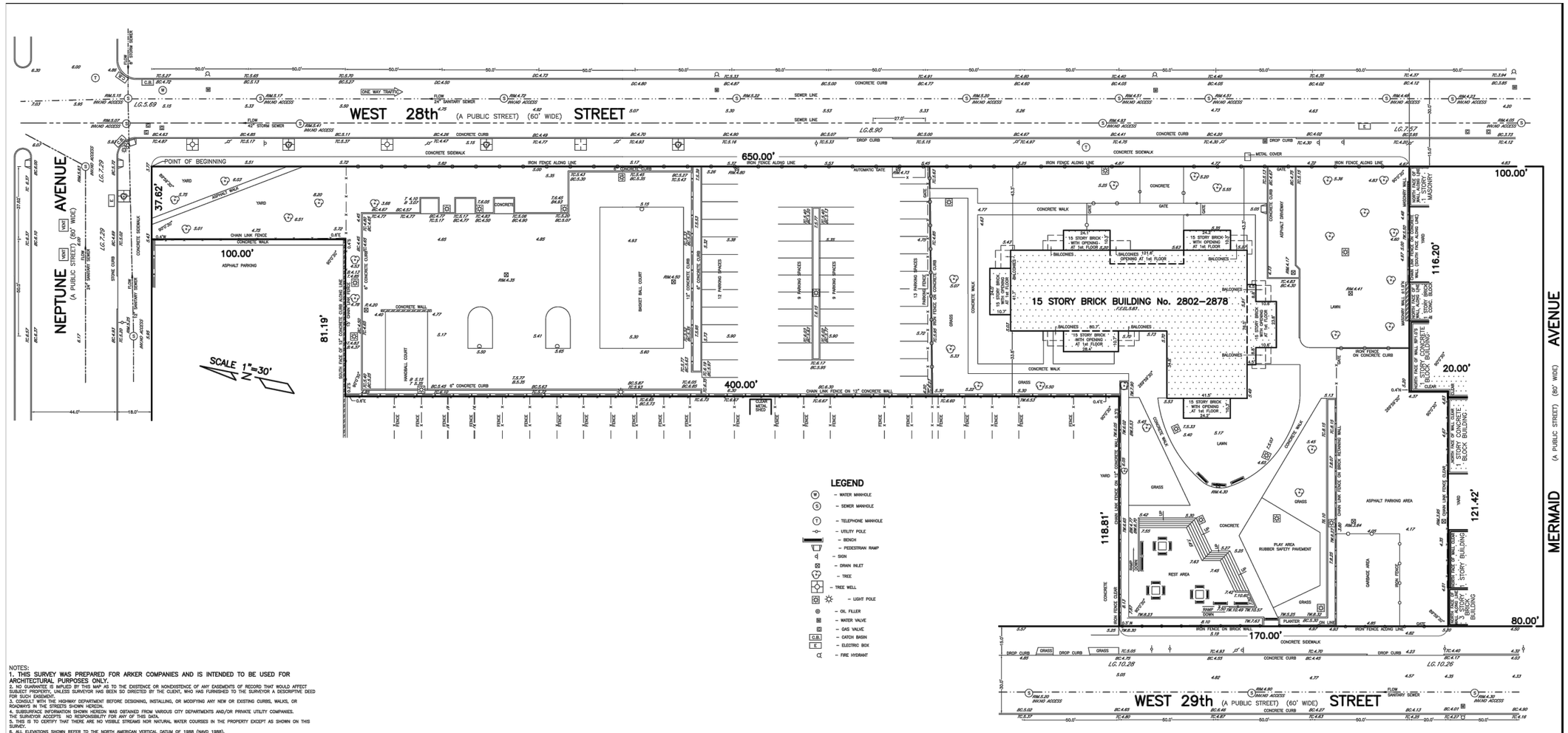
Z-101.00

PARKING REQUIREMENTS	EXISTING BUILDING INFORMATION
EXISTING DEVELOPMENT = 32 PARKING SPACES REQUIRED EXISTING DEVELOPMENT = 45 PARKING SPACES PROPOSED TOTAL SURFACE PARKING AREA = 15,000 SQ. FT. 15,000 SQ. FT. / 45 P.S. = 333 SQ. FT. PER CAR	Address: 2828 WEST 28 STREET11224 Number of Buildings: 1 Number of Floors: 15 Gross Floor Area: 120,585 Sq. Ft. Lot Coverage: 8,039 Sq. Ft. Residential Units: 122 Total Land Use: Multi-Family Elevator Building

LEGEND

- PARKING ENTRANCES
- PROPOSED DEVELOPMENT RESIDENTIAL ENTRANCES
- PROPOSED REZONE TO R6
- PROPOSED REZONE TO R7A/C2-4 (M.I.H.)
- PROPOSED REZONE TO R6A (M.I.H.)

09.06.16
BLOCK:7011 LOT: 11



LEGEND

- W – WATER MANHOLE
- S – SEWER MANHOLE
- T – TELEPHONE MANHOLE
- – UTILITY POLE
- – BENCH
- – PEDESTRIAN RAMP
- – SIGN
- – DRAIN INLET
- – TREE
- – TREE WELL
- – LIGHT POLE
- – OIL FILLER
- – WATER VALVE
- – GAS VALVE
- C.B. – CATCH BASIN
- E – ELECTRIC BOX
- – FIRE HYDRANT

NOTES:
1. THIS SURVEY WAS PREPARED FOR ARKER COMPANIES AND IS INTENDED TO BE USED FOR ARCHITECTURAL PURPOSES ONLY.
2. NO GUARANTEE IS IMPLIED BY THIS MAP AS TO THE EXISTENCE OR NONEXISTENCE OF ANY EASEMENTS OF RECORD THAT WOULD AFFECT SUBJECT PROPERTY, UNLESS SURVEYOR HAS BEEN SO DIRECTED BY THE CLIENT, WHO HAS FURNISHED TO THE SURVEYOR A DESCRIPTIVE DEED FOR SUCH EASEMENT.
3. CONSULT WITH THE HIGHWAY DEPARTMENT BEFORE DESIGNING, INSTALLING, OR MODIFYING ANY NEW OR EXISTING CURBS, WALKS, OR ROADWAYS IN THE STREETS SHOWN HEREON.
4. SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FROM VARIOUS CITY DEPARTMENTS AND/OR PRIVATE UTILITY COMPANIES. THE SURVEYOR ACCEPTS NO RESPONSIBILITY FOR ANY OF THIS DATA.
5. THIS IS TO CERTIFY THAT THERE ARE NO VISIBLE STREAMS NOR NATURAL WATER COURSES IN THE PROPERTY EXCEPT AS SHOWN ON THIS SURVEY.
6. ALL ELEVATIONS SHOWN REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).
7. SEWER MANHOLE RIM AND INVERT ELEVATIONS SHOWN HEREON WERE OBTAINED FROM FIELD MEASUREMENTS.
8. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

CERTIFIED TO:
NEW YORK CITY DEPARTMENT OF BUILDINGS

DATE SURVEYED: MAY 1st, 2003
REVISED: MAY 3, 2016

GERALD T. O'BUCKLEY
PROFESSIONAL LAND SURVEYORS
43-14 162nd STREET, FLUSHING, NY 11358
TEL. 718-321-1231 FAX 718-321-8076
EMAIL: gtobuckley@nyc.rr.com

TAX MAP
SECTION
BLOCK 7011
LOT 11

FILED MAP
SECTION
BLOCK
LOT

BOROUGH OF BROOKLYN
COUNTY OF KINGS
STATE OF NEW YORK

TITLE No.

GERALD T. O'BUCKLEY, P.L.S.
NEW YORK LICENSE 039834

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

SITE SURVEY
NOT TO SCALE

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

SITE SURVEY

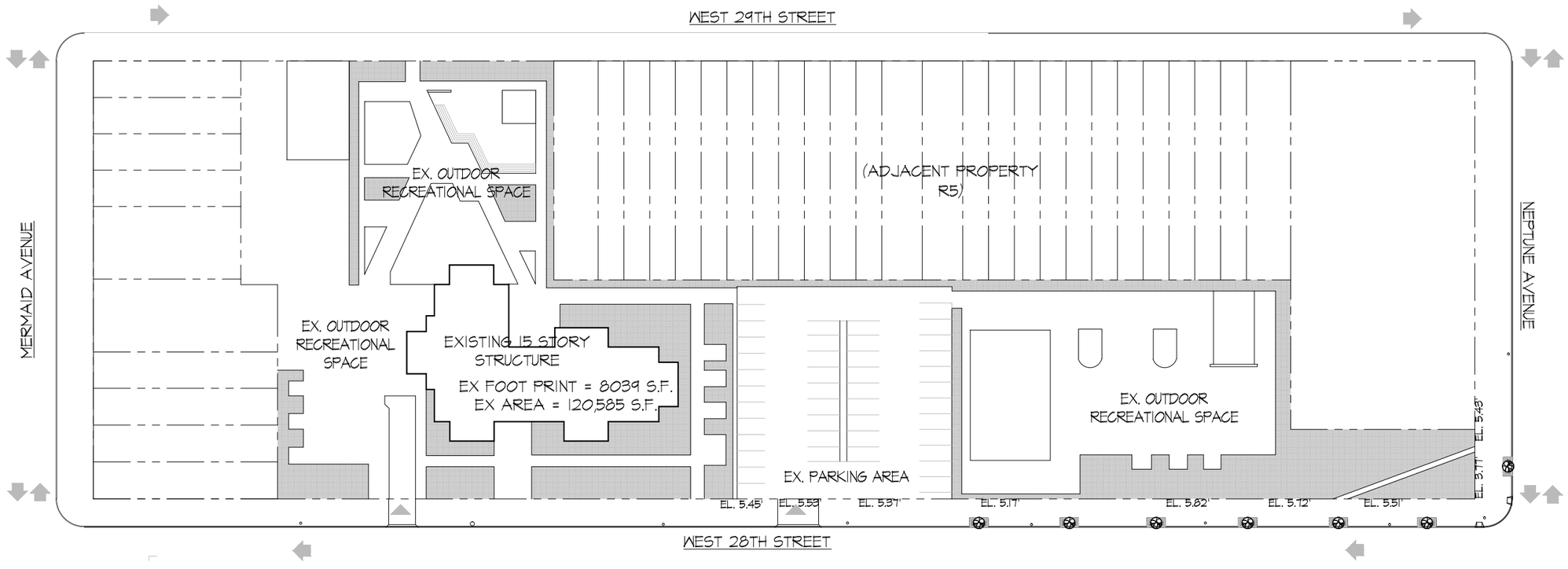
Z-105.00

09.06.16
BLOCK:7011 LOT: 11

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS



SCHEMATIC EXISTING PLOT PLAN
SCALE: 1/64" = 1'-0"

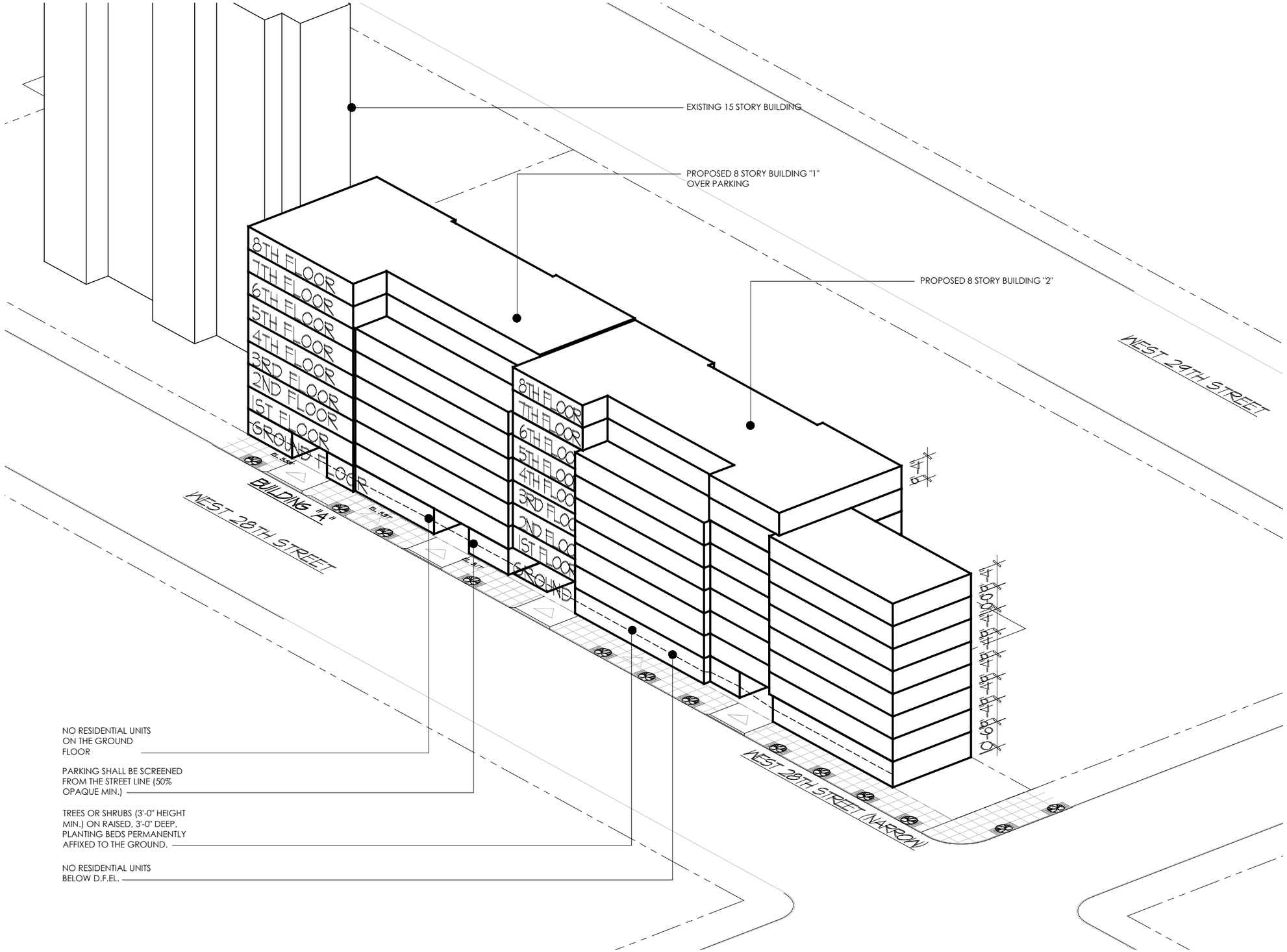
N

FOR ILLUSTRATIVE PURPOSES ONLY

SCHEMATIC EXISTING PLOT PLAN

Z-106.00

09.06.16
BLOCK:7011 LOT: 11



SCHEMATIC PERSPECTIVE

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

SCHEMATIC PERSPECTIVE

Z-108.00

09.06.16
BLOCK:7011 LOT: 11

ILLUSTRATIVE RENDERING

SCHEMATIC RENDERING

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

SCHEMATIC RENDERING

Z-100.00

09.06.16
BLOCK:7011 LOT: 11

SEA PARK NORTH REZONING

INTRODUCTION

The Applicant, the Arker Companies, is proposing a zoning map amendment to the New York City Zoning Resolution (ZR) 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 and R5/C1-2 zoning districts to a mixture of R5, R6, R6A, and R7A/C2-4 zoning districts. The Proposed Rezoning Area comprises Block 7011, Lots 1, 11, 43-47, 49, 51-54, 95 (part of), 96, and 97 which occupy the West 28th Street and the Neptune and Mermaid Avenue frontages of the block. The rezoning proposes to eliminate a C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of), 96, and 97 while retaining the underlying R5 zoning on these parcels. The Applicant is also proposing a zoning text amendment to Appendix F, Inclusionary Housing Designated Areas, to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the proposed Rezoning Area (with the exception of Block 7011, Lots 95 (part of), 96, and 97).

The Proposed Development Site (Projected Development Site 1), Block 7011, Lot 11, is an L-shaped lot principally located along West 28th Street extending to Neptune Avenue and West 29th Street and occupying close to 50% of the block. The actions would facilitate a proposal by the Applicant to develop two residential buildings totaling 160,770 gsf in size and containing 153 residential units. The development will also contain 68 accessory at-grade and garage parking spaces. The Applicant's project differs from the With-Action Scenario (192 units) for Projected Development Site 1.

The actual project would be developed pursuant to HPD's Extremely Low & Low-Income Affordability (ELLA) Program which funds the new construction of low income multi-family rental projects. The ELLA term sheet requires a minimum of 70% of the units to be rented to households earning up to 60% of Area Median Income (AMI) with up to 30% of the units being rented to households earning up to 100% of AMI. At least 10% of units must be set aside for formerly homeless households. However, for purposes of CEQR analysis it is assumed that a minimum of 70% of the units will be rented to households earning up to 80% of AMI.

The remainder of the Proposed Rezoning Area, Block 7011, Lots 1, 43-47, 49, 51-54, 95 (part of), 96, and 97 is not controlled by the Applicant and is not proposed for development. However, new development is projected to occur on Lots 45, 46, 47, 49, 51, 52, 53, and 54. Other sites which are not seen as Projected Development Sites by the project build year of 2020 include Lots 1, 43, 44, 95, 96, and 97.

ACTIONS NECESSARY TO FACILITATE THE PROPOSAL

The Applicant, the Arker Companies, proposes the following actions:

I. A zoning map amendment to ZR section 28d to rezone Block 7011, Lot 11 (the "Applicant-Owned Site") from R5 and R5/C1-2 to R6, R6A and R7A/C2-4 and Block 7011, Lots 1, 43-47, 49, and 51-54 from R5/C1-2 to R7A/C2-4. The rezoning proposes to eliminate a C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of[1]), 96, and 97 while retaining the underlying R5 zoning on these parcels.

[1] The existing C1-2 commercial overlay within the Rezoning Area measures 150 feet in depth as measured from Neptune Avenue along West 29th Street. Proceeding south along West 29th Street, Lot 1 is 100' deep;

II. A zoning text amendment to amend Appendix F, Inclusionary Housing Designated Areas, to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the proposed Rezoning Area. There are two MIH options available for the Applicant Site and Non-Applicant Sites. Option 1 requires that 25% of the residential floor area be set aside for affordable housing units for residents with incomes averaging 60% AMI ($46,620 per year for a family of three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. Option 2 requires that 30% of the residential floor area be set aside for affordable housing units for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI.

DESCRIPTION OF THE SURROUNDING AREA

The Rezoning Area is located in the central portion of the Coney Island neighborhood of Brooklyn, Community District 13. The neighborhood primarily consists of a mixture of one- and two-family residences and multi-family residences, many of which contain ground floor commercial uses. Commercial uses are primarily located along Mermaid and Surf Avenues. Numerous community facility uses are located along Mermaid, Surf, and Neptune Avenues. A large playground, Leon S. Kaiser Playground, is located across Neptune Avenue from the Rezoning Area and the Coney Island Boat Basin adjoins this playground to the north. The Coney Island Beach and Boardwalk and the waters of the Atlantic Ocean beyond are two blocks to the south of the Rezoning Area. 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.

DESCRIPTION OF THE REZONING AREA

The Rezoning Area is located entirely within an R5 and R5/C1-2 zoning district with the C1-2 overlay district mapped on both Mermaid and Neptune Avenues to a depth of 150 feet. 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. C1-2 commercial overlay districts permit Use Groups 1-4 and 6 and allow a maximum commercial FAR of 1.0. The Rezoning Area consists of Block 7011, Lots 1, 11, 43-47, 49, 51-54, 95 (part of), 96, and 97, totaling approximately 136,867 square feet of land area. Of this total land area, 89,357 square feet belongs to the Project Site that is owned by the Applicant. The Non-Applicant owned sites total 47,510 square feet in area. The following discussion provides a description of the Applicant-owned Project Site, and Non-Applicant owned sites.

Project Site (Applicant-Owned)

Block 7011, Lot 11 – The 89,357 square foot lot is developed with an existing 15-story, approximately 102,000 square foot residential building (FAR of 1.14) including 122 dwelling units (116 low- income and 6 market rate units), 43 accessory at-grade parking spaces, and two outdoor recreational areas. The 15-story housing development built in 1972 was originally

Lot 97 is 24′ deep; Lot 96 is 14′ deep; and Lot 95 is 14′ deep. Adding these numbers results in a total depth of 152′. Therefore, a 2′ by 118.81′ area of Lot 95, the southernmost of the four lots, is not included in the existing C1-2 commercial overlay area proposed to be eliminated.

created through the Mitchell-Lama Program (see attached Site Survey). The building has an affordable housing regulatory agreement with the NYS Homes and Community Renewal (HCR) agency. The Empire State Development Corporation (ESDC) originally developed the project and then took title again in 1989 through a deed in lieu of foreclosure. The property had fallen into serious disrepair and the Applicant was selected through an RFP process by ESDC to preserve this much-needed affordable housing in the Coney Island community. The Applicant entered into a 50-year Regulatory Agreement in 2006 with the Department of Housing and Community Renewal for the substantial rehabilitation of the existing 122 rental affordable dwelling units. Units are leased to families with an AMI of 30% or less or 60% or less of the area's reported median family income with the exception of six market rate units. The building provides outdoor parking, a community room, laundry facilities, and exterior seating and play areas. The Applicant purchased the building in 2004 and, with the exception of the six market rate units, has maintained it as an affordable development.

Non-Applicant Owned Sites

Block 7011, Lot 1 - The 20,000 square foot lot is developed with an existing 1-story, approximately 8,712 square foot church with 35 accessory at-grade parking spaces.

Block 7011, Lot 43 - The 2,000 square foot lot is developed with an existing 4-story, approximately 6,200 square foot mixed-use building containing 6 residential dwelling units and 2 ground floor retail stores.

Block 7011, Lot 44 - The 2,000 square foot lot is developed with an existing 4-story, approximately 6,800 square foot mixed-use building containing 7 residential dwelling units and 1 ground floor retail store.

Block 7011, Lot 45 - The 2,000 square foot lot is developed with an existing 4-story, approximately 6,100 square foot mixed-use building that previously contained 3 residential dwelling units and 1 ground floor retail store. The building is currently entirely vacant. The March 25, 1995 Certificate of Occupancy shows that the three upper stories of the building are vacant and to be sealed off.

Block 7011, Lot 46 - The 1,967 square foot lot is developed with an existing 3-story, approximately 3,541 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store.

Block 7011, Lot 47 - The 3,887 square foot lot is developed with an existing 2-story, approximately 7,751 square foot mixed-use commercial/community facility building containing 1 ground floor retail store and a community center on the second floor.

Block 7011, Lot 49 - The 3,146 square foot lot is developed with an existing 1-story, approximately 3,146 square foot commercial building containing 1 ground floor retail store.

Block 7011, Lot 51 - The 1,573 square foot lot is developed with an existing 3-story, approximately 3,541 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store.

Block 7011, Lot 52 - The 1,573 square foot lot is developed with an existing 3-story, approximately 3,541 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store.

Block 7011, Lot 53 - The 1,573 square foot lot is developed with an existing 3-story, approximately

3,541 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store.

Block 7011, Lot 54 - The 1,573 square foot lot is developed with an existing 3-story, approximately 3,836 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store.

Block 7011, Lot 95 - The 1,663 square foot lot is developed with an existing 2-story, approximately 1,344 square foot single-family residence.

Block 7011, Lot 96 - The 1,663 square foot lot is developed with an existing 2-story, approximately 1,344 square foot single-family residence.

Block 7011, Lot 97 - The 2,850 square foot lot is developed with an existing 2-story, approximately 1,344 square foot single-family residence.

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/C1-2 district use regulations; whether the existing development square footage conforms with the R5/C1-2 district bulk maximum FAR regulations, and the ownership of each lot.

Table 1: Zoning Summary of Rezoning Area

Block/Lot Nos.	Zoning Lot Size (SF)	Total GSF	Resid GSF	Comm'l GSF	Comm Facili GSF	Conform-ance (Use)	Compliance (Bulk- Max FAR, Exstg FAR)	Owner
B 7011, L 11	89,357	102,000	102,000	0	0	Yes	Max R FAR 1.25, 1.14 Yes	Sea Park North Housing
B 7011, L 1	20,000	8,712	0	0	8,712	Yes	Max CF FAR 2.0, 0.44 Yes	Calvary Taberancle
B 7011, L 43	2,000	6,200	4,650	1,550	0	Yes	Max C FAR 1.0; 0.78 Yes; Max R FAR 1.25, 2.3 No	I. Sinkevitch
B 7011, L 44	2,000	6,800	5,100	1,700	0	Yes	Max C FAR 1.0; 0.85 Yes; Max R FAR 1.25, 2.6 No	Bloodstone Realty Co.
B 7011, L 45	2,000	6,100	4,575 (vacant	1,525 (vacant)	0	Yes	Max C FAR 1.0; 0.76 Yes; Max R FAR 1.25, 2.3 No	M. Smith
B 7011, L 46	1,967	3,541	2,361	1,180	0	Yes	Max C FAR 1.0; 0.6 Yes; Max R FAR 1.25, 1.2 Yes; Max Tot FAR 1.25, 1.8 No	A. Birnbaum
B 7011, L 47	3,887	7,751	0	3,876	3,875	Yes	Max CF FAR 2.0, 1.0 Yes; Max C FAR 1.0, 1.0 Yes; Max Tot FAR 1.25, 2.0 No	Farhi Realty
B 7011, L 49	3,146	3,146	0	3,146	0	Yes	Max C FAR 1.0, 1.0 Yes	B 2815 Trading LLC
B 7011, L 51	1,573	3,541	2,361	1,180	0	Yes	Max C FAR 1.0; 0.75 Yes; Max R FAR 1.25, 1.5 No	B 2815 Trading LLC
B 7011, L 52	1,573	3,541	2,361	1,180	0	Yes	Max C FAR 1.0; 0.75 Yes; Max R FAR 1.25, 1.5 No	L G Mathai
B 7011, L 53	1,573	3,541	2,361	1,180	0	Yes	Max C FAR 1.0; 0.75 Yes; Max R FAR 1.25, 1.5 No	L G Mathai
B 7011, L 54	1,573	3,836	2,557	1,279	0	Yes	Max C FAR 1.0; 0.81 Yes; Max R FAR 1.25, 1.63 No	DNK 52 LLC
B 7011, L 95	1,663	1,344	1,344	0	0	Yes	Max R FAR 1.25, 0.8 Yes	J. Noel
B 7011, L 96	1,663	1,344	1,344	0	0	Yes	Max R FAR 1.25, 0.8 Yes	H. Elagmy
B 7011, L 97	2,850	1,344	1,344	0	0	Yes	Max R FAR 1.25, 0.47 Yes	J H Wei
TOTAL	**136,825**	**162,741**	**132,358**	**17,796**	**12,587**			

DESCRIPTION OF THE PROPOSED DEVELOPMENT

As mentioned above, the Applicant intends to rezone the existing R5 and R5/C1-2 districts to R5, R6, R6A, and R7A/C2-4 on portions of Block 7011, the Rezoning Area. The Project Site, Block 7011 Lot 11, would be rezoned to R6, R6A, and R7A/C2-4. The R6 district permits a residential FAR of 2.43 and a community facility FAR of 4.8. Under the Mandatory Inclusionary Housing (MIH) Program, the R6 district permits a base FAR of 2.2 and a maximum FAR of 2.42 beyond 100 feet of a wide street. The R6A district permits a residential and community facility FAR of 3.0 and under MIH it permits a base FAR of 2.7 with a maximum FAR of 3.6. The R7A district permits a residential and community facility FAR of 4.0 and under MIH it permits a base FAR of 3.45 with a maximum FAR of 4.6. 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, 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 R7A/C2-4 district.

Block 7011, Lots 1, 11, 43-47, 49, 51-54 (the Non-Applicant owned lots in the rezoning area) would be rezoned from R5/C1-2 to the R7A/C2-4 district described above. The existing C1-2 overlay districts would be rezoned to C2-4 and reduced in depth from 150 to 100 feet. Block 7011, Lots 95 (part of), 96, and 97 are currently located within the 150-foot deep C1-2 commercial overlay but would not be located within the proposed 100-foot deep C2-4 commercial overlay. These three small parcels are developed with single-family homes and do not contain any commercial uses. It is therefore proposed to remove the existing C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of), 96, and 97 while retaining their underlying R5 residential zoning.

The Applicant proposes to subdivide the existing zoning lot, Lot 11, into zoning lots A and B, and rezone both newly created zoning lots in order to provide the proposed number of new units and prevent creation of non-compliance. Zoning lot A would be 49,952 square feet in size and zoning lot B would be 39,405 square feet in area. The existing 15-story building on the site would be located on the Lot 11 A. The existing parking lot on Lot 11 would be moved from its current location north of the existing building to the west of the existing building and it would contain 45 parking spaces compared to the existing 43 spaces. The 45 spaces would be for use by tenants of the existing building only. With the rezoning, only 32 parking spaces would be required because the units are income-restricted housing units; however, the Applicant will be providing 45 parking spaces and relocating the existing parking lot from West 28th Street to West 29th Street. In addition, the northernmost recreational area on the lot would be removed and the western recreational area would be reconfigured and decreased in size in order to accommodate the new parking lot and the subdivision of the lot needed to accommodate the proposed project (See Drawing Z-106.00, Schematic Existing Plot Plan).

The new zoning lot, Lot 11 B, is proposed to be developed with two buildings, a primarily eight-story residential building (Building 1) and an eight- and seven-story residential building (Building 2) which together will total 160,770 gsf in size and contain 153 affordable dwelling units built consistent with the standards of the Quality Housing Program as well as the Mandatory Inclusionary Housing zoning regulations. All of the units are intended to be affordable. The Applicant's project differs from the With-Action Scenario (192 units) for Projected Development

Site 1. Based on consultation with HPD, the proposed development would be financed through HPD's ELLA Program which requires that 70% of the proposed residential units would be affordable at 60% of AMI and below (135 units), while the remaining units (57 units) would be affordable at 100% of AMI and below. However, for purposes of CEQR analysis it is assumed that a minimum of 70% of the units will be rented to households earning up to 80% of AMI. The development will also contain 68 accessory at-grade and garage parking spaces (48 spaces for Building 1 and 20 spaces for Building 2) and two outdoor recreational areas. The area of the building and the lot dedicated to parking cannot be used to provide additional residential space and it was therefore determined to provide parking in accordance with ZR Section 25-251 which governs parking requirements for income-restricted housing. ZR Section 25-251 requires parking for 25% of such dwelling units in the R6A district and for 15% of these units in the R7A district for income-restricted housing units located outside of the Transit Zone.

The proposed 8-story, 79'-4"[2] tall Building 1, which would have a partial setback above the seventh story, would be located just north of the existing 15-story building and would contain 70,855 gsf and 63,448 zsf of floor area and 64 dwelling units (average unit size = 1,107 square feet) on the second through the eighth floors of the building. 44 parking spaces would be provided on the ground floor of the building and in the building's rear yard. The curb cut for Building 1 would be located approximately 22' from the northern end of the building. Building 1 will be located in an R6A zoning district and built consistent with R6A Mandatory Inclusionary Housing requirements and the Quality Housing Program.

The proposed 7- to 8-story 79'-4"[3] tall Building 2 would have a partial setback above the seventh story on the 8-story portion of the building with a smaller, entirely seven story portion of the building to the north. It would be located adjacent to and north of Building 1 and would contain 89,915 gsf and 82,154 zsf of floor area and 89 dwelling units (average unit size = 1,010 square feet) on the second through the eighth floors of the building. The 8-story portion of the building would reach a height of 79'-4" while the 7-story portion of the building would be 70' in height. 24 parking spaces would be provided on the first floor of the building and in the building's rear yard. The curb cut for Building 2 would be located at the extreme northern end of the eight-story portion of this building. Building 2, occupying a split lot portion of the Site zoned R6A and R7A/C2-4, will be built compliant with the R6A and R7A zoning districts in addition to the Mandatory Inclusionary Housing Program and the Quality Housing Program.

In the R7A district, the minimum/maximum building base height ranges from 40 to 75 feet with a maximum building height of 95 feet. However, the R7A portion of the Building 2 cannot be built any higher than 70'-0" because it is a part of Building 2 located in the R6A district where the height of the building would be limited to 80'.[4] In addition, the maximum permitted floor area of the R7A portion of the building is provided within a 7-story building.

An on-grade outdoor recreational area accessible to the building's tenants is required per zoning and would be provided to the rear of the 8-story portion of Building 2. An outdoor space would also be provided at the northern end of the site adjacent to the 7-story portion of Building 2.

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[2] The maximum building height of Building 1 is 79'-4" above the DFE and the maximum base height where a 15-foot setback is required at 65 feet above DFE.

[3] The maximum building height of the eight-story portion of Building 2 is 79'-4".

[4] The maximum height would be 85' with a qualifying ground floor which would not be provided here.

Two MIH options are available for the Applicant Site but the applicable option has not been finalized yet. MIH Option 1 requires that 25% of the residential floor area be set aside for residents with incomes averaging 60% AMI ($46,620 per year for a family of three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. MIH Option 2 requires that 30% of the residential floor area be for affordable housing units for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI. However, for purposes of the CEQR analysis, it is assumed that a minimum of 70% of the units will be rented to households earning up to 80% of AMI. New York City and/or New York State financing would be obtained for the development from the New York City Department of Housing Preservation and Development (HPD) and/or the New York City Housing Development Corporation (HDC) or a New York State funding source.

The development is required to comply with FEMA standards and Appendix G of the Building Code because of its location in the Coastal Zone. The Proposed Development Site is located within the AE Flood Hazard Zone on the New York City Preliminary Flood Insurance Rate Maps (FIRM) with a Base Flood Elevation (BFE) of 11 feet. An AE designated zone is an area of high flood risk subject to inundation by the 1% annual-chance flood event.

Due to the development's location in an AE flood zone, the buildings have been designed to meet the requirements of the NYC Building Code in order to minimize the effect of flooding. Thus the buildings, consistent with these regulations, have a Design Flood Elevation (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 there may not be habitable floor area and only crawlways, parking, storage, and building access are allowed. As a result of these regulations, the ground floors of the buildings will be used for required parking and for building lobbies and entrances. Additionally, the boiler equipment and standby generator will be located on the roof of the building or as suggested by Con Edison, and electric and gas systems will be mounted at the ceiling level of the first floor (above D.F.E.).

The lowest residential floors and mechanicals are planned to be above the DFE and 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 parking will be wet/unprotected. The development will be landscaped with salt water proof plantings.

BUILD YEAR/PROJECT PHASING

Based on an estimated 12-month approval process and an 18-month construction period, it is anticipated that construction and occupancy on the Proposed Development Site (Projected Development Site 1) would be completed by mid-2019. Both buildings would be developed concurrently. However, in order to accommodate the five soft sites that are projected to be developed as a result of the proposed action, the Build Year has been extended until 2020.

PURPOSE AND NEED OF THE PROPOSED ACTION

The proposed actions would enable the Applicant to develop approximately 153 new affordable housing units in the Coney Island area of Brooklyn on currently underutilized land. The Applicant's project differs from the With-Action Scenario (192 units) for Projected Development Site 1. For purposes of CEQR analysis, 70% of the proposed residential units would be affordable at 80% of AMI and below (135 units), while the remaining units (57) would be

affordable at 100% of AMI and below pursuant to the ELLA term sheet. The Proposed Development Site (Projected Development Site 1) is adjacent to extensive park and athletic facilities and excellent mass transit facilities. 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 buildings on the site, and to provide enough floor area to maintain the existing 15-story building on the site in compliance with zoning.

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.

The Proposed Development Site already has one residential building on the property. In order to provide the proposed number of new units and prevent creation of a non-compliance, it is intended to split the existing zoning lot, which is the entirety of Tax Lot 11, into two zoning lots (zoning lots A and B) and rezone both newly created zoning lots.

The purpose of the zoning map amendments is to provide sufficient floor area to accommodate the existing building on the Proposed Development Site as well as the proposed new buildings in a complying manner. Currently, the existing building on the Site is complying, with its 102,000 square feet of floor area on the 89,357 square foot lot resulting in an FAR of 1.14 (1.25 FAR is permitted). If it remained zoned R5 then only 9,696 additional square feet of zoning floor area would be permitted on the lot (total of 111,696 zsf). Accordingly, splitting Lot 11 into two zoning lots would cause the new Lot A to be non-complying in floor area. Thus, the up zoning from R5 to R6 is being requested. Similarly, for the new zoning lot B, the existing R5 zoning is not sufficient to accommodate the proposed floor area of the two new buildings. An R5 zone would only allow 49,626 zsf of floor area while the two buildings proposed for zoning lot B contain 141,601.5 zsf of floor area. Further, even if the entire zoning lot B were up zoned entirely to R6A, the district would not allow sufficient FAR to accommodate the floor area of the proposed building. This is the reason that the 100-foot portion of zoning lot B fronting on Neptune Avenue is proposed to be rezoned to R7A/C2-4. The proposed zoning map amendments would allow for sufficient floor area on both portions of the zoning lot to be in compliance with zoning. In addition, in order to be able to use the MIH Program provisions of the Zoning Resolution described below, a site has to be zoned R6A or higher.

In order to qualify for the benefits of the MIH Program, in addition to being in the correct zoning district as discussed above, the Site must also be designated a Mandatory Inclusionary Housing Area (MIHA) pursuant to ZR Section 23-90. The proposed text change would amend Appendix F of the Zoning Resolution to graphically delineate the Project Area as an MIHA.

The Coney Island housing market is emerging as an affordable market rental option that is readily served by public transportation within close proximity to excellent mass transit options. In addition, there is a high demand for affordable housing within this neighborhood of Brooklyn. However, there have not been many new housing developments in this area to serve

this growing population for decades. Coney Island is a prime location to accommodate that market. Two MIH options would be available for the Applicant Site but the applicable option has not been finalized yet. MIH Option 1 requires that 25% of the residential floor area be set aside for residents with incomes averaging 60% AMI ($46,620 per year for a family of three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. MIH Option 2 requires that 30% of the residential floor be set aside for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI. The affordable apartments generated through MIH would be permanently affordable, making them a long-term, sustainable source of affordable housing. The Applicant commits to working with DCP, HPD, and the New York City Housing Development Corporation (HDC) to implement the appropriate MIH option with income levels as of the date of development. Rents can be adjusted on an annual basis as approved by HDC/HPD as applicable. The project would therefore create much needed affordable housing for the Coney Island neighborhood.

The proposed zoning change also involves rezoning properties in addition to the Proposed Development Site (Projected Development Site 1) from R5/C1-2 to R7A/C2-4. This change would serve to change the permitted bulk in the project area from 1.25 for residential uses, 2.0 for community facility uses, and 1.0 for commercial uses to 4.6 for residential uses under the Mandatory Inclusionary Housing Program, 4.0 for community facility uses, and 2.0 for commercial uses. The existing C1-2 overlay districts mapped on the Proposed Rezoning Area would be rezoned to C2-4 and reduced in depth from 150 to 100 feet. Block 7011, Lots 95 (part of), 96, and 97 are currently located within the 150-foot deep C1-2 commercial overlay but would not be located within the proposed 100-foot deep C2-4 commercial overlay. These three small parcels are developed with single-family homes and do not contain any commercial uses. It is therefore proposed to remove the existing C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of), 96, and 97 while retaining their underlying R5 residential zoning. The change in zoning would be appropriate for the Non-Applicant owned lots as the uses and density permitted would be compatible with the Applicant's proposed development on the same block. In addition, the Non-Applicant owned lots are located along the Neptune and Mermaid Avenue frontages of the block where commercial uses and higher density development would be appropriate.

NO-ACTION SCENARIO

It is assumed that under the No-Action Scenario, existing conditions would continue on the Project Site and the Non-Applicant Owned sites.

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 projected sites not owned by the Applicant, where future residential development would be feasible. Two MIH options would be available for the Applicant Site and the Non-Applicant Sites but the applicable options have not been finalized yet. MIH Option 1 requires that 25% of the residential floor area be set aside for residents with incomes averaging 60% AMI ($46,620 per year for a family of three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. MIH Option 2 requires

that 30% of the residential floor area be set aside for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI.

For the purposes of the CEQR analysis, it is currently assumed based on consultations with HPD, that the proposed development on the Applicant property (Projected Development Site 1) would be financed through HPD's ELLA Program in which 70% of the proposed residential units would be affordable at 80% of AMI and below (135 units), while the remaining units (57) would be affordable at 100% of AMI and below. On the Non-Applicant owned sites, Projected Development Sites 2 through 6, it is assumed that 20% of the projected residential units would be affordable at 80% of AMI and below (26 units) and the remainder would be market rate (102 units).

Projected Development Sites

Projected Development Site 1 (Block 7011, Lot 11) - The Applicant owned lot would be subdivided into zoning lots A and B. Zoning lot A would be 49,952 square feet in size and zoning lot B would be 39,405 square feet in area. The existing 15-story building on the site, comprised of 102,000 gsf of floor area and containing 122 dwelling units, would be located on Lot 11 A which would be zoned R6. The existing parking lot on Lot 11 would be moved from its current location east of the existing building to the west of the existing building and it would contain 45 parking spaces compared with the existing 43 spaces. In addition, the easternmost recreational area on the lot would be removed and the northern recreational area would be reconfigured and decreased in size in order to accommodate the new parking lot and the subdivision of the lot needed to accommodate the proposed project.

The proposed R6 zone for Lot 11A allows a maximum FAR of 2.42 under MIH and the existing structure on the lot would have an FAR of 2.04. The R6 parking requirements applicable to the lot pursuant to ZR Section 25-23 is 50% for the 6 market rate units in the building or 3 spaces and, pursuant to ZR Section 25-251, 25% for the 116 affordable units in the building or 29 spaces, for a total of 32 required parking spaces. As 45 parking spaces would be provided, the building would comply with the relevant parking requirements.[5]

The new zoning lot, Lot 11 B, would be developed with two buildings, a primarily eight-story residential building (Building 1) and an eight- and seven-story residential building (Building 2) totaling 160,770 gsf and 141,605.5 zsf in size including 192 affordable dwelling units based on HPD term sheets (based on the average unit size in the existing residential building on Block 7011, Lot 11 of 836 gsf per dwelling unit), built consistent with the standards of the Quality Housing Program, 68 accessory at-grade and garage attended parking spaces, and two outdoor recreational areas. The area of the building and the lot dedicated to parking cannot be used to provide additional residential space and it was therefore determined to provide parking in accordance with ZR Section 25-25 which governs parking requirements for government assisted housing. ZR Section 25-25 requires parking for 25% of such dwelling units in the R6A district and for 15% of these units in the R7A district. Market rate parking requirements in the R6A and R7A district is for parking to be provided for 50% of the dwelling units. The proposed R6A and R7A zones for Lot 11B would allow a maximum FAR of 3.6 and 4.6, respectively, under MIH.

[5] The existing R5 zoning of the building requires, pursuant to ZR Section 25-23, that parking be provided for 85% of the 6 market rate units in the building or 5 spaces and, pursuant to ZR Section 25-251, for 42.5% of the 116 affordable units in the building or 49 spaces, for a total of 54 required parking spaces while 45 parking spaces would be provided.

The R6A portion of the lot would measure 35,643 square feet and would be developed with 128,311.5 zsf of new residential floor area, representing an FAR of 3.6. The R7A portion of the lot would measure 3,762 square feet and would be developed with 17,290 zsf of new residential floor area, representing an FAR of 4.6. The combined R6A and R7A portions of the property would allow an FAR of 3.69 as a weighted average. The actual combined FAR on the 39,405 square foot Lot 11 B based on the total floor area of 141,605.5 zsf would be 3.59 which would be close to the permitted weighted average FAR of 3.69.

Projected Development Site 2 (Block 7011, Lot 1) - The 20,000 square foot lot developed with an approximately 8,712 square foot church and 35 parking spaces could be developed with an additional 71,288 square feet of community facility floor area. However, no new community facility development is anticipated on this property as it is likely that the existing church has sufficient space for its needs. Currently in this area, few commercial uses are located along Neptune Avenue with most commercial development located on Mermaid Avenue. However, under the proposed rezoning it is assumed that some ground floor commercial development may occur along Neptune Avenue in the future.

It is assumed that the property could be developed with a new 9-story, 95', 75,750 gsf/60,114 zsf structure containing 7,680 gsf/zsf of ground floor commercial space and 58,090 gsf/52,434 zsf of residential floor area primarily on the upper eight floors of the building for the creation of approximately 69 dwelling units at 836 square feet per unit, including 14 affordable and 55 market rate units. 38 cellar level parking spaces would be provided including 2 spaces for the affordable units, 28 spaces for the market rate units, and 8 spaces for the commercial floor area. The existing 8,712 square foot church would remain and the new building would be constructed adjacent to it. The existing at-grade parking for the church would be removed to accommodate the construction of the new building (no parking is required for the church pursuant to zoning). Approximately 400 square feet of common recreational space would also be provided. The new building would be constructed at the maximum building height of 95 feet. The proposed R7A zone for the lot would allow a maximum FAR of 4.6 under MIH. The total existing and proposed building floor area of 68,826 zsf on the 20,000 square foot lot would represent an FAR of 3.44[6].

Projected Development Site 3 (Block 7011, Lots 45 & 46) – The 2,000 square foot lot 45 is developed with an approximately 6,100 square foot, 4-story mixed-use building that previously contained 3 residential dwelling units and 1 ground floor retail store. The building is currently entirely vacant. The March 25, 1995 Certificate of Occupancy shows that the three upper stories of the building are vacant and to be sealed off. The 1,967 square foot lot 46 is developed with an approximately 3,541 square foot mixed-use, 3-story, residential/commercial building[7]. It is assumed that these lots would be combined and the 3,967 square foot site would be developed with a total of 18,795 gsf of floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6 which would be comprised of 14,828 gsf of residential

[6] This site cannot be developed to the maximum permitted FAR of 4.6 as the parking requirements for any additional development over and above what is currently shown could not be met without demolishing the existing church on the lot. The proposed lot coverage of approximately 16,392 sf would represent 82% of the lot surface area. In addition, as there is a high water table in the area, parking cannot be provided below one cellar level.

[7] The building contains 2 existing dwelling units within 2,361 square feet of floor area and a 1,180 square foot retail store.

floor area and 3,967 square feet of ground floor commercial space. The existing 1,180 square feet of commercial space and 2,361 square feet of residential floor area on Lot 46 containing two dwelling units would remain and are included in the totals above. The building on Lot 45 would be demolished. On the basis of 836 square feet per unit, it is assumed that the property could be developed with approximately 17 dwelling units (including the two existing dwelling units that would remain), 3 of which would be affordable, in a 7-story, 75' tall building. It would not be practical to construct a building to the maximum permitted height of 95' due to the small lot size and small building footprint. At a height of 95', dwelling units would have to be split between multiple floors or floor heights would need to be made impractically tall. Parking would be waived. The total existing and proposed building floor area of 18,795 gsf/18,248 zsf on the 3,967 square foot lot would represent an FAR of 4.6.

Projected Development Site 4 (Block 7011, Lot 47) - The 3,887 square foot lot developed with an approximately 7,751 square foot, 2-story, mixed-use commercial/community facility building could be developed with approximately 10,665 gsf of additional residential floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. On the basis of 836 square feet per unit, it is assumed that the property could be developed with approximately 12 dwelling units, including 2 affordable and 10 market rate units, in a 7-story, 75' tall building. It would not be practical to construct a building to the maximum permitted height of 95' due to the small lot size and small building footprint. At a height of 95', dwelling units would have to be split between floors or floor heights would need to be made impractically tall. Parking would be waived. The total existing and proposed building floor area of 18,416 gsf/17,880 zsf on the 3,887 square foot lot would represent an FAR of 4.6.

Projected Development Site 5 (Block 7011, Lot 49) - The 3,146 square foot lot developed with an approximately 3,146 square foot, 1-story, commercial building could be developed with approximately 11,759 gsf of additional residential floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. On the basis of 836 square feet per unit, it is assumed that the property could be developed with approximately 14 dwelling units, including 3 affordable and 11 market rate units. The C2-4 commercial overlay to be mapped on the parcel would also permit a commercial FAR of 2.0 compared to the current permitted commercial FAR of 1.0. However, it is not considered likely that additional commercial floor area would be developed on this parcel given the prevailing development pattern in the surrounding area which is for residential space to be located above one floor of commercial space on the ground level in a 7-story, 75' tall building. It would not be practical to construct a building to the maximum permitted height of 95' due to the small lot size and small building footprint. At a height of 95', dwelling units would have to be split between floors or floor heights would need to be made impractically tall. Parking would be waived. This site is projected as an enlargement where the existing ground floor commercial use would remain and the new residential floor area would be constructed above it. The total existing and proposed building floor area of 14,905 gsf/14,471 zsf on the 3,146 square foot lot would represent an FAR of 4.6.

Projected Development Site 6 (Block 7011, Lots 51-54) – Lots 52 and 53 are under common ownership (L G Mathai) and are therefore projected to become a merged zoning lot. The 1,573 square foot lot 52 is developed with an approximately 3,541 square foot, 3-story, mixed-use residential/commercial building containing 2 residential dwelling units within 2,361 square feet of floor area and 1,180 square feet of commercial space. The 1,573 square foot lot 53 is developed with an approximately 3,541 square foot, 3-story, mixed-use residential/commercial building containing 2 residential dwelling units within 2,361 square feet of floor area and 1,180 square feet

of commercial space. A merger of lots 52 and 53 would result in a total lot size of 3,146 square feet developed with a total building floor area of 7,082 square feet comprised of 4,722 square feet of residential floor area and 2,360 square feet of commercial space.

Lots 51 and 54, which adjoin lots 52 and 53 to the east and west, share the same building façade as lot 51 and 54. The 1,573 square foot lot 51 is developed with an existing 3-story, approximately 3,541 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store within 2,361 square feet of floor area and 1,180 square feet of commercial space. The 1,573 square foot lot 54 is developed with an existing 3-story, approximately 3,836 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store within 2,557 square feet of floor area and 1,279 square feet of commercial space. In the future With Action Scenario, it is anticipated that lots 51 and 54 would be consolidated with lots 52 and 53. Lots 51 and 54 have a total lot size of 3,146 square feet developed with a total building floor area of 7,377 square feet comprised of 4,918 square feet of residential floor area and 2,459 square feet of commercial space.

The size of the merged Lots 51-54 would total 6,292 square feet. It is assumed that the existing development on the four merged lots would be enlarged with a vertical addition and the property would be developed with a total of 29,811 gsf/28,943 zsf of floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. The development would include a mixture of existing and new development. It would include approximately 4,819 gsf of existing commercial space and 24,992 gsf of residential floor area comprised of 9,640 gsf of existing residential floor area and 15,352 gsf of new residential floor area. On the basis of 836 square feet per unit, it is assumed that the 15,352 gsf of new residential floor area on the property would accommodate approximately 18 dwelling units, including 4 affordable and 14 market rate units. There would be a total of 26 dwelling units on the merged lots comprised of 4 affordable and 22 market rate units.

The buildings on lots 52 and 53 would be enlarged and expanded vertically to reach a height of 9 stories and 95' while the buildings on lots 51 and 54 would be reconfigured internally. Parking would be waived. The total proposed building floor area of 29,811 gsf/28,943 zsf on the 6,292 square foot lot would represent an FAR of 4.6. The consolidated site is considered to be a Projected Enlargement Site.

Projected Development Site 6 would be developed with 29,811 gsf of floor area including a total of 26 dwelling units, 4 of which would be affordable, within approximately 24,992 gsf of residential floor area and 4,819 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 2020 as further detailed below.

Block 7011, Lot 43 - The 2,000 square foot lot developed with an approximately 6,200 square foot mixed-use residential/commercial building containing 6 residential dwelling units could be developed with an additional 3,000 square feet of residential floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. 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 7011, Lot 44 - The 2,000 square foot lot developed with an approximately 6,800 square foot mixed-use residential/commercial building containing 3 residential dwelling units could be

developed with an additional 2,400 square feet of residential floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. 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 for the lot to be redeveloped based on the City's soft site criteria.

INCREMENT

Under No-Action conditions, the six Projected Development Sites would be developed with the existing development which includes 114,001 gsf of residential space for 132 dwelling units (including 116 affordable and 16 market rate units), 13,021 gsf of commercial space, 12,587 gsf of community facility space, and 78 accessory parking spaces. Under With-Action conditions the six Projected Development Sites would be developed with seven buildings and additions to existing buildings containing 383,104 gsf of residential space for 452 dwelling units (including 334 affordable and 118 market rate units), 23,488 gsf of commercial space, 12,587 gsf of community facility space, and 151 accessory parking spaces. The increment between the No-Action and With-Action development scenarios would be 269,103 gsf of additional residential space for 320 new dwelling units based on an average size of 836 gsf per dwelling unit (including 218 affordable and 102 market rate units), 10,467 gsf of additional commercial space, and 73 new accessory parking spaces. In order to allow for the proposed development, one existing vacant building on Block 7011, Lot 45 would be demolished. The building totals 6,100 gsf in size and contains 4,575 gsf of vacant residential space (3 vacant DUs) and 1,525 gsf of vacant retail space. 78 accessory parking spaces would also be removed on Block 7011, Lots 1 and 11. These losses are reflected in the increment numbers above. Table 2 below summarizes the No-Action and With-Action conditions for the six Projected Development Sites within the Rezoning Area.

Table 2: No-Action and With-Action Summary of Projected Development Sites Within Rezoning Area												
		No-Action					With-Action					
Block/ Lot Nos.	**Zoning Lot Size (SF)**	**Total GSF**	**Resid GSF/DUs**	**Com'l GSF**	**Comm Facili GSF**	**Pkg Spc**	**Total GSF**	**Resid GSF/ DUs**	**Com'l GSF**	**Com Facili GSF**	**Pkg Spc/ GSF**	**Increment**
B 7011, L 11 (Proj Site 1)	89,357	102,000	102,000/ 122	0	0	43	262,770	262,770/ 314	0	0	113	+192 DUs, +70 pkg sp
B 7011, L 1 (Proj Site 2)	20,000	8,712	0	0	8,712	35	84,462	58,090/69	7,680	8,712	38/ 9,980	+69 DUs, +7,680 com'l, +3 pkg sp
B 7011, L 45 (Proj Site 3)	2,000	6,100 (vacant)	4,575/3 (vacant)	1,525 (vacant)	0	N/A	18,795	14,828/17	3,967	0	0	+15 DUs, +2,787 com'l
B 7011, L 46 (Proj Site 3)	1,967	3,541	2,361/2	1,180	0	N/A						
B 7011, L 47 (Proj Site 4)	3,887	7,751	0	3,876	3,875	N/A	18,416	10,665/12	3,876	3,875	0	+12 DUs
B 7011, L 49 (Proj Site 5)	3,146	3,146	0	3,146	0	N/A	14,905	11,759/14	3,146	0	0	+14 DUs
B 7011, L 51 (Proj Site 6)	1,573	3,541	2,361/2	1,180	0	N/A	29,811	24,992/26	4,819	0	0	+18 DUs
B 7011, L 52 (Proj Site 6)	1,573	3,541	2,361/2	1,180	0	N/A						
B 7011, L 53 (Proj Site 6)	1,573	3,541	2,361/2	1,180	0	N/A						
B 7011, L 54 (Proj Site 6)	1,573	3,836	2,557/2	1,279	0	N/A						
TOTAL	126,649	139,609[8]	114,001/ 132[9]	13,021[10]	12,587	78	429,151	383,104/ 452	23,488	12,587	151/ 9,980	+320 DUs, +10,467 com'l,+73 pkg sp

[8] Does not include vacant floor area on Lot 45.

[9] Does not include vacant floor area on Lot 45.

[10] Does not include vacant floor area on Lot 45.

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the Project Area affected by the proposed land use actions. The increment is the difference between the No-Action and the With-Action conditions.

If your project involves multiple development sites, it is generally appropriate to include total development projections in the table below and attach separate tables outlining the reasonable development scenarios for each site. Applicants may re-use information from this table, in its approved form, within the CEQR Full Form.

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type of residential structures	multi-family residences	multi-family residences	multi-family residences	
No. of dwelling units	132	132	452	+320
No. of low- to moderate-income units	116	116	334	+218
Gross floor area (sq. ft.)	114,001	114,001	383,104	+269,103
Commercial	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)	retail	retail	retail	
Gross floor area (sq. ft.)	13,021	13,021	23,488	+10,467
Manufacturing/Industrial	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify:				
Community Facility	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Type	church, community center	church, community center	church, community center	
Gross floor area (sq. ft.)	12,587	12,587	12,587	
Vacant Land	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
Other Land Uses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
PARKING				
Garages	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces			38	+38
Lots	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces	78	78	113	+35
ZONING				
Zoning classification	R5, R5/C1-2	R5, R5/C1-2	R5, R6, R6A, and R7A/C2-4	+R6, R6A, R7A/C2-4; R5/C1-2
Maximum amount of floor area that can be developed	R5:1.25 R, 2.0 CF; C1-2: 1.0 C	R5:1.25 R, 2.0 CF; R5/C1-2:1.25 R, 2.0 CF, 1.0 C	R6: 2.43 R, 2.42 R (MIH), 4.8 CF; R6A: 3.0 R/CF, 3.6 R/CF (MIH); R7A: 4.0 R/CF, 4.6 R/CF (MIH); C2-4: 2.0 C	up to +3.35 R, +2.8 CF, +1.0 C
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	R, C, CF, open space; R5, R6, C1-2	R, C, CF, open space; R5, R6, C1-2	R, C, CF, open space; R5, R6, R6A, R7A, C1-2, C2-4	+R6A, R7A/C2-4

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, socioeconomics, 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. A short neighborhood character discussion is also included. 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 7011 in Brooklyn Community District 13 from R5 and R5/C1-2 to R6, R6A and R7A/C2-4 (Lot 11) and from R5/C1-2 to R7A/C2-4 (Lots 1, 43-47, 49, and 51-54) and would eliminate a C1-2 commercial overlay while retaining the underlying R5 zoning (Lots 95 (part of[1]), 96, and 97). The Proposed Actions also include of a zoning text amendment to Zoning Resolution (ZR) Section 23-933 Appendix F to establish a Mandatory Inclusionary Housing (MIH) area over the Affected Area (with the exception of Lots 95 (part of), 96, and 97). The proposed zoning map and text amendments would facilitate a proposal by the Applicant to construct two 8-story residential buildings on one development site within the Rezoning Area (Block 7011, Lot 11) totaling 160,770 gross square feet (gsf) of residential use for 192 affordable dwelling units built consistent with the standards of the Quality Housing Program, 68 accessory at-grade and garage parking spaces, and two outdoor recreational areas. The Applicant intends to lease the units to tenants with an average family median income (AMI) of 30% or less and 60% or less of the area's reported median family income. As discussed in the Project Description, the Proposed Development is expected to be complete by 2020. Absent the Proposed Actions

[1] The existing C1-2 commercial overlay within the Rezoning Area measures 150 feet in depth as measured from Neptune Avenue along West 29th Street. Proceeding south along West 29th Street, Lot 1 is 100' deep; Lot 97 is 24' deep; Lot 96 is 14' deep; and Lot 95 is 14' deep. Adding these numbers results in a total depth of 152'. Therefore, a 2' by 118.81' area of Lot 95, the southernmost of the four lots, is not included in the existing C1-2 commercial overlay area proposed to be eliminated.

(the No-Action condition) it is assumed that the development site would remain the same as under existing conditions.

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 Rezoning Area. The 400-foot radius study area is generally bounded on the north by an area between Neptune Avenue and the Coney Island Boat Basin, on the south by an area between Mermaid and Surf Avenues, on the east by West 27th Street, and on the west by West 30th 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

Rezoning Area

The Rezoning Area (the area subject to the Zoning Map and Zoning Text Amendments) is located in the Coney Island neighborhood of Brooklyn on a portion of the block located between West 28th Street, West 29th Street, Neptune Avenue, and Mermaid Avenue. The Rezoning Area is on Block 7011 and consists of the entirety of Lots 1, 11, 43-47, 49, 51-54, 96, and 97 and a portion of Lot 95. Block 7011, Lot 11 constitutes the Applicant's property which is proposed for development. Block 7011, Lots 1, 43-47, 49, 51-54, 95 (part of), 96, and 97 would be rezoned but are not controlled by the Applicant. Additional development is projected to occur on Lots 1, 45-47, 49, and 51-54. No development would occur on Lots 43 and 44 as their lot sizes are considered to be too small and the additional permitted floor area are considered to be insufficient to be redeveloped based on the City's soft site criteria.

The Applicant's property (Lot 11) is currently developed with 122 dwelling units (116 low- income and 6 market rate units), 43 accessory at-grade parking spaces, and two outdoor recreational areas. The remainder of the Rezoning Area is developed with 29 one, two, three-, and multi-family units, an 8,712 gsf church with 35 accessory parking spaces, 17,796 gsf of ground floor retail space, and a 3,875 gsf community center. The existing development on each of the Projected Development Sites is detailed below.

Projected Development Site 1 (Block 7011, Lot 11) is developed with a 15-story, approximately 102,000 gsf residential building including 122 dwelling units (116 low-income and 6 market rate units), 43 accessory at-grade parking spaces, and two outdoor recreational areas. The 15-story housing development built in 1972 was originally created through the Mitchell-Lama Program. Units are leased to families with an AMI of 30% or less or 60% or less of the area's reported median family income with the exception of six market rate units. The building provides outdoor parking, a community room, laundry

facilities, and exterior seating and play areas. The Applicant purchased the building in 2004 and, with the exception of the six market rate units, has maintained it as an affordable development.

Projected Development Site 2 (Block 7011, Lot 1) is developed with a 1-story, approximately 8,712 gsf church with 35 accessory at-grade parking spaces.

Projected Development Site 3 (Block 7011, Lots 45 and 46) is developed with a 3-story, approximately 3,541 gsf mixed-use building containing 2 residential dwelling units (2,361 gsf) and 1 ground floor retail store (1,180 gsf) on lot 46. Lot 45 is developed with an existing 4-story, approximately 6,100 square foot mixed-use building that previously contained 3 residential dwelling units and 1 ground floor retail store. The building is currently entirely vacant. The March 25, 1995 Certificate of Occupancy shows that the three upper stories of the building are vacant and to be sealed off.

Projected Development Site 4 (Block 7011, Lot 47) is developed with a 2-story, approximately 7,751 gsf mixed-use commercial/community facility building containing 1 ground floor retail store (3,876 gsf) and a community center (3,875 gsf) on the second floor.

Projected Development Site 5 (Block 7011, Lot 49) is developed with a 1-story, approximately 3,146 gsf commercial building containing 1 ground floor retail store.

Projected Development Site 6 (Block 7011, Lots 51, 52, 53, and 54) is developed with two 3-story, approximately 3,541 gsf mixed-use buildings containing a total of 4 residential dwelling units (4,722 gsf) and 2 ground floor retail stores (2,360 gsf) on lots 52 and 53. Lots 52 and 53 are under common ownership and are therefore projected to become a merged zoning lot. Lot 51 is developed with an existing 3-story, approximately 3,541 square foot mixed-use building containing 2 residential dwelling units (2,361 gsf) and 1 ground floor retail store (1,180 gsf). Lot 54 is developed with an existing 3-story, approximately 3,836 square foot mixed-use building containing 2 residential dwelling units (2,557 gsf) and 1 ground floor retail store (1,279 gsf).

Block 7011, Lot 43 is developed with a 4-story, approximately 6,200 gsf mixed-use building containing 6 residential dwelling units (4,650 gsf) and 2 ground floor retail stores (1,550 gsf). Block 7011, Lot 44 is developed with a 4-story, approximately 6,800 gsf mixed-use building containing 3 residential dwelling units (5,100 gsf) and 1 ground floor retail store (1,700 gsf). Block 7011, Lots 95, 96, and 97 are each developed with an existing 2-story, approximately 1,344 square foot single-family residence.

400-Foot Radius Project Study Area

The lots in the Rezoning Area occupy the bulk of the block on which they are located, Block 7011. The remaining uses on the block consist of rows of attached and semi-detached one- and two-family dwellings occupying the middle portion of the block fronting on 29th Street.

The project study area to the east of the Rezoning Area across 28th Street on Block 7012 is developed with rows of attached and semi-detached one- and two-family dwellings along the Neptune Avenue frontage of the block and along the northern one-half to two-thirds of the West 27th and West 28th Street frontages of the block. The Mermaid Avenue frontage of the block continuing partially to the north along the West 27th and West 28th Street frontages of the block is occupied by community facility and commercial uses including a post office, a church, a medical office, and a retail store. Continuing across West 27th Street, the West 27th Street frontage of Block 7013 is primarily occupied by rows of attached and semi-detached one- and two-family dwellings. A parking garage is located at the corner of Neptune Avenue and West 27th Street.

The project study area to the west of the Rezoning Area across 29th Street on Block 7010 is developed with rows of attached and semi-detached one- and two-family dwellings along the Neptune Avenue frontage of the block and along the northern two-thirds of the West 29th and West 30th Street frontages of the block. The Mermaid Avenue frontage of the block continuing partially to the north along the West 29th and West 30th Street frontages of the block is occupied by commercial uses including a supermarket and accessory parking lot. Continuing across West 30th Street, the West 30th Street frontage of Block 7009 is primarily occupied by rows of attached and semi-detached one- and two-family dwellings. A retail strip mall and accessory parking lot is located along the Mermaid Avenue frontage of the block.

The project study area to the north of the Rezoning Area across Neptune Avenue on Block 6965 consists of a portion of Leon S. Kaiser playground.

The project study area to the south of the Rezoning Area across Mermaid Avenue contains portions of four blocks. Proceeding east to west, the northwest corner of Block 7053 at West 28th Street is developed with a row of retail stores and a multi-story public housing complex with an accessory parking area and playground. The northern end of Block 7052 between West 28th and West 29th Streets is developed with a row of attached one- and two-family dwellings, two churches, two small multi-family dwellings, and a small parking lot. The northern end of Block 7051 between West 29th and West 30th Streets is developed with a public elementary school (P.S. 329). The northeast corner of Block 7050 contains part of a retail strip.

Future No-Action Scenario

Rezoning Area

Under the No-Action Scenario for the Project Build Year of 2020, it is assumed that the six Projected Development Sites would remain in their existing condition as detailed above. No new as-of-right development is expected to occur on these sites as the sites are generally built close to or in excess of the permitted commercial and residential FAR under the existing R5 and R5/C1-2 zoning. While additional community facility FAR remains for Lot 11, it is not anticipated that the existing church on this site has a need or desire to expand.

No development is projected to occur on the other lots in the Rezoning Area including Block 7011, Lots 43 and 44, as their lot sizes, which are both 2,000 square feet in size, are considered to be too small to be redeveloped. Also, the additional permitted floor area under the proposed zoning is considered to be insufficient for these lots to be redeveloped based on the City's soft site criteria. No development is projected to occur on Block 7011, Lots 95, 96, and 97, which are each developed with an existing 2-story, approximately 1,344 square foot single-family residence, as the Proposed Action would only remove the existing C1-2 commercial overlay on these lots while leaving the underlying R5 zoning in place.

Therefore, under No-Action conditions the Rezoning Area would be developed with the existing development which includes 127,783 gsf of residential space for 144 dwelling units, 16,271 gsf of commercial space, 12,587 gsf of community facility space, and 78 accessory parking spaces. The Rezoning Area also contains a 6,100 gsf vacant building comprised of 4,575 gsf of vacant residential floor area for 3 dwelling units and 1,525 gsf of vacant commercial space.

400-Foot Radius Project Study Area

No new development projects are 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. No development plans are known to exist within the project study area as identified above by the project build year of 2020.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2020. The 400-foot area surrounding the project site is developed with a stable mixed-use community containing residential one-, two-, and multi-family residences, community facilities, retail facilities, and open space. Few undeveloped parcels remain within the project study area and it is therefore anticipated that no significant new development would occur within this area by 2020.

Future With-Action Scenario

Rezoning Area

Summary

Under No-Action conditions, the six Projected Development Sites would be developed with the existing development which includes 114,001 gsf of residential space for 132 dwelling units (including 116 affordable and 16 market rate units), 13,021 gsf of commercial space, 12,587 gsf of community facility space, and 78 accessory parking spaces. Under With-Action conditions the six Projected Development Sites would be developed with seven buildings and additions to existing buildings containing 383,104 gsf of residential space for 452 dwelling units (including 334 affordable and 118 market rate units), 23,488 gsf of commercial space, 12,587 gsf of community facility space, and 151 accessory parking spaces. The increment between the No-Action and With-Action development scenarios would be 269,103 gsf of additional residential space for 320 new

dwelling units based on an average size of 836 gsf per dwelling unit (including 218 affordable and 102 market rate units), 10,467 gsf of additional commercial space, and 73 new accessory parking spaces. In order to allow for the proposed development, one existing building on Block 7011, Lot 45 would be demolished. The building totals 6,100 gsf in size and contains 4,575 gsf of residential space (3 vacant DUs) and 1,525 gsf of vacant retail space. 78 accessory parking spaces would also be removed on Block 7011, Lots 1 and 11. These losses are reflected in the increment numbers above. The projected development on each of the six Development Sites is detailed below.

Applicant Owned Projected Development Site 1

The Applicant owned Projected Development Site 1 would be subdivided into zoning lots A and B. Zoning lot A would be 49,952.4 square feet in size and zoning lot B would be 39,404.21 square feet in area. The existing 15-story building on the site, comprised of 102,000 gsf of floor area and containing 122 dwelling units, would be located on Lot 11 A. The existing parking lot on Lot 11 would be moved from its current location east of the existing building to the west of the existing building and it would contain 45 parking spaces compared with the existing 43 spaces. In addition, the easternmost recreational area on the lot would be removed and the northern recreational area would be reconfigured and decreased in size in order to accommodate the new parking lot and the subdivision of the lot needed to accommodate the proposed project.

The new zoning lot, Lot 11 B, would be developed with two 8-story residential buildings totaling 160,770 gsf in size including 192 affordable dwelling units (based on the average unit size in the existing residential building on Block 7011, Lot 11 of 836 gsf per dwelling unit) built consistent with the standards of the Quality Housing Program, 68 accessory at-grade and garage attended parking spaces, and two outdoor recreational areas. The area of the building and the lot dedicated to parking cannot be used to provide additional residential space and it was therefore determined to provide parking in accordance with ZR Section 25-25 which governs parking requirements for government assisted housing. ZR Section 25-25 requires parking for 25% of such dwelling units in the R6A district and for 15% of these units in the R7A district.

The actual project would be developed pursuant to HPD's Extremely Low & Low-Income Affordability (ELLA) Program which funds the new construction of low income multi-family rental projects. The ELLA term sheet requires a minimum of 70% of the units to be rented to households earning up to 60% of Area Median Income (AMI) with up to 30% of the units being rented to households earning up to 100% of AMI. At least 10% of units must be set aside for formerly homeless households. However, for purposes of the CEQR analysis, it is assumed that a minimum of 70% of the units will be rented to households earning up to 80% of AMI (135 units), while the remaining units (57) would be affordable at 100% of AMI and below.

Two MIH options are available for the Applicant Site but the applicable option has not been finalized yet. MIH Option 1 requires that 25% of the residential floor area be set aside for residents with incomes averaging 60% AMI ($46,620 per year for a family of

three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. MIH Option 2 requires that 30% of the residential floor area be for affordable housing units for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI. However, for purposes of the CEQR analysis, it is assumed that a minimum of 70% of the units will be rented to households earning up to 80% of AMI.

Non-Applicant Owned Sites

The 20,000-square foot Projected Development Site 2 developed with an approximately 8,712 square foot church and 35 parking spaces could be developed with an additional 71,288 square feet of community facility floor area. However, no new community facility development is anticipated on this property as it is likely that the existing church has sufficient space for its needs. Currently in this area, few commercial uses are located along Neptune Avenue with most commercial development located on Mermaid Avenue. However, under the proposed rezoning it is assumed that some ground floor commercial development may occur along Neptune Avenue in the future.

It is assumed that the property could be developed with a new 9-story, 95', 75,750 gsf structure containing 7,680 gsf of ground floor commercial space and 58,090 gsf of residential floor area primarily on the upper eight floors of the building for the creation of approximately 69 dwelling units (at 836 gsf per unit), including 14 affordable and 55 market rate units. 38 cellar level parking spaces would be provided including 2 spaces for the affordable units, 28 spaces for the market rate units, and 8 spaces for the commercial floor area. The existing 8,712 square foot church would remain and the new building would be constructed adjacent to it. The existing at-grade parking for the church would be removed to accommodate the construction of the new building (no parking is required for the church pursuant to zoning). Approximately 400 square feet of common recreational space would also be provided. The new building would be constructed at the maximum building height of 95 feet.

The 1,967-square foot Projected Development Site 3 is developed with an approximately 3,541 square foot mixed-use, 3-story, residential/commercial building and a vacant 4-story, 6,100 square foot structure. It is assumed that these lots would be combined and the 3,967 square foot site would be developed with a total of 18,795 gsf of floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6 which would be comprised of 14,828 gsf of residential floor area and 3,967 square feet of ground floor commercial space. The existing 1,180 square feet of commercial space and 2,361 square feet of residential floor area on Lot 46 containing two dwelling units would remain and are included in the totals above. The building on Lot 45 would be demolished. On the basis of 836 square feet per unit, it is assumed that the property could be developed with approximately 17 dwelling units (including the two existing dwelling units that would remain), 3 of which would be affordable, in a 7-story, 75' tall building. It would not be practical to construct a building to the maximum permitted height of 95' due to the small lot size and small building footprint. At a height of 95', dwelling units would have to be

split between multiple floors or floor heights would need to be made impractically tall. Parking would be waived.

The 3,887-square foot Projected Development Site 4 developed with an approximately 7,751 square foot, 2-story, mixed-use commercial/ community facility building could be developed with approximately 10,665 square feet of additional residential floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. On the basis of 836 square feet per unit, it is assumed that the property could be developed with approximately 12 dwelling units, including 2 affordable and 10 market rate units, in a 7-story, 75' tall building. It would not be practical to construct a building to the maximum permitted height of 95' due to the small lot size and small building footprint. At a height of 95', dwelling units would have to be split between floors or floor heights would need to be made impractically tall. Parking would be waived.

The 3,146-square foot Projected Development Site 5 developed with an approximately 3,146 square foot, 1-story, commercial building could be developed with approximately 11,759 square feet of additional residential floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. On the basis of 836 square feet per unit, it is assumed that the property could be developed with approximately 14 dwelling units, including 3 affordable and 11 market rate units. The C2-4 commercial overlay to be mapped on the parcel would also permit a commercial FAR of 2.0 compared to the current permitted commercial FAR of 1.0. However, it is not considered likely that additional commercial floor area would be developed on this parcel given the prevailing development pattern in the surrounding area which is for residential space to be located above one floor of commercial space on the ground level in a 7-story, 75' tall building. It would not be practical to construct a building to the maximum permitted height of 95' due to the small lot size and small building footprint. At a height of 95', dwelling units would have to be split between floors or floor heights would need to be made impractically tall. Parking would be waived. This site is projected as an enlargement where the existing ground floor commercial use would remain and the new residential floor area would be constructed above it.

Projected Development Site 6 would consist of four lots. Lots 52 and 53 are under common ownership and are therefore projected to become a merged zoning lot. The 1,573 square foot lot 52 is developed with an approximately 3,541 square foot, 3-story, mixed-use residential/commercial building containing 2 residential dwelling units within 2,361 square feet of floor area and 1,180 square feet of commercial space. The 1,573 square foot lot 53 is developed with an approximately 3,541 square foot, 3-story, mixed-use residential/commercial building containing 2 residential dwelling units within 2,361 square feet of floor area and 1,180 square feet of commercial space. A merger of lots 52 and 53 would result in a total lot size of 3,146 square feet developed with a total building floor area of 7,082 square feet comprised of 4,722 square feet of residential floor area and 2,360 square feet of commercial space.

Lots 51 and 54, which adjoin lots 52 and 53 to the east and west, share the same building façade as lot 51 and 54. The 1,573 square foot lot 51 is developed with an existing 3-story, approximately 3,541 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store within 2,361 square feet of floor area and 1,180 square feet of commercial space. The 1,573 square foot lot 54 is developed with an existing 3-story, approximately 3,836 square foot mixed-use building containing 2 residential dwelling units and 1 ground floor retail store within 2,557 square feet of floor area and 1,279 square feet of commercial space. In the future With Action Scenario, it is anticipated that lots 51 and 54 would be consolidated with lots 52 and 53. Lots 51 and 54 have a total lot size of 3,146 square feet developed with a total building floor area of 7,377 square feet comprised of 4,918 square feet of residential floor area and 2,459 square feet of commercial space.

The size of the merged Lots 51-54 would total 6,292 square feet. It is assumed that the existing development on the four merged lots would be enlarged with a vertical addition and the property would be developed with a total of 29,811 gsf/28,943 zsf of floor area under the proposed R7A district with the Mandatory Inclusionary Housing bonus FAR of 4.6. The development would include a mixture of existing and new development. It would include approximately 4,819 gsf of existing commercial space and 24,992 gsf of residential floor area comprised of 9,640 gsf of existing residential floor area and 15,352 gsf of new residential floor area. On the basis of 836 square feet per unit, it is assumed that the 15,352 gsf of new residential floor area on the property would accommodate approximately 18 dwelling units, including 4 affordable and 14 market rate units. There would be a total of 26 dwelling units on the merged lots comprised of 4 affordable and 22 market rate units.

The buildings on lots 52 and 53 would be enlarged and expanded vertically to reach a height of 9 stories and 95' while the buildings on lots 51 and 54 would be reconfigured internally. Projected Development Site 6 would be developed with 29,811 gsf of floor area including a total of 26 dwelling units, 4 of which would be affordable, within approximately 24,992 gsf of residential floor area and 4,819 gsf of commercial space. Parking would be waived. The consolidated site is considered to be a Projected Enlargement Site.

Two MIH options would be available for the Non-Applicant Sites but the applicable options have not been finalized yet. MIH Option 1 requires that 25% of the residential floor area be set aside for residents with incomes averaging 60% AMI ($46,620 per year for a family of three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. MIH Option 2 requires that 30% of the residential floor area be set aside for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI. For the purposes of the CEQR analysis on the Non-Applicant owned sites, Projected Development Sites 2 through 6, it is assumed that 20% of the projected residential units would be affordable at 80% of AMI and below (26 units) and the remainder would be market rate (102 units).

No development would occur on Lots 43 and 44 as their lot sizes are considered to be too small and the additional permitted floor area are considered to be insufficient to be redeveloped based on the City's soft site criteria. No development is projected to occur on Block 7011, Lots 95, 96, and 97, which are each developed with an existing 2-story, approximately 1,344 square foot single-family residence, as the Proposed Action would only remove the existing C1-2 commercial overlay on these lots while leaving the underlying R5 zoning in place.

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

Table 4-1
No-Action and With-Action Development Scenarios and Increment

Proj Devel Site #	Block/Lot	Applic/ Non-Applic Owned	Lot Size (SF)	No-Action Scenario	With-Action Scenario	Increment
1	7011, 11	Applicant	89,357	102,000 gsf residential bldg (122 DUs), 43 parking spaces	15-story, 102,000 gsf bldg (122 DUs), 45 parking spaces; two 8-story, 160,770 gsf bldgs (192 DUs); 68 parking spaces	Added: 192 DUs, 70 access parking spaces
2	7011, 1	Non-Applicant	20,000	8,712 gsf church, 35 parking spaces	8,712 gsf church; 9-story 75,750 gsf bldg containing 69 DUs within 58,090 gsf, 7,680 gsf commercial space, 38 parking spaces	Added: 69 DUs, 7,680 gsf commercial, 3 access parking spaces
3	7011, 45 & 46	Non-Applicant	3,967	2,361 gsf residential space (2 DUs), 1,180 gsf retail store; vacant 6,100 gsf bldg	7-story, 18,795 gsf bldg containing 17 DUs within 614,828 gsf, 3,967 gsf retail store	Added: 15 DUs, 2,787 gsf commercial
4	7011, 47	Non-Applicant	3,887	3,876 gsf retail store, 3,875 community center	7-story, 18,416 gsf bldg containing 12 DUs within 10,665 gsf, 3,876 gsf retail store, 3,875 community center	Added: 12 DUs
5	7011, 49	Non-Applicant	3,146	3,146 gsf retail store	7-story, 14,905 gsf bldg containing 14 DUs within 11,759 gsf, 3,146 gsf retail store	Added: 14 DUs
6	7011, 51-54	Non-Applicant	6,292	4 bldgs with 9,640 gsf residential space (8 DUs), 4 retail stores (4,819 gsf)	9-story, 29,811 gsf bldg containing 26 DUs within 24,992 gsf, 4,819 gsf commercial space	Added: 18 DUs

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 residential property in order to provide additional affordable housing. For the purposes of a conservative analysis, six parcels within the Rezoning Area are projected to be developed with 383,104 gsf of residential space for 452 dwelling units (including 334 affordable and 118 market rate units), 23,488 gsf of commercial space, 12,587 gsf of community facility space, and 151 accessory parking spaces. This would be a net increase over the No-Action condition of 269,103 gsf of additional residential space for 320 new dwelling units based on an average size of 836 gsf per dwelling unit (including 218 affordable and 102 market rate units), 10,724 gsf of additional commercial space, and 73 new accessory parking spaces. This would constitute a significant land use change in the Rezoning Area but the Applicant believes this change would be beneficial as it would fully develop these underutilized sites and would provide affordable housing, local retail and community facility space, and accessory parking.

The projected developments would replace existing accessory parking lots and other undeveloped lands within the Rezoning Area but this impact would not be considered significant. The proposed project would not create additional non-conforming uses within the Rezoning 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

Rezoning Area

The Rezoning Area is located entirely within an R5 and R5/C1-2 zoning district. The R5/C1-2 zoning district is mapped along the Neptune and Mermaid Avenue frontages of Block 7011 which includes the entire rezoning area. 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 R5 district typically produces three-and four-story attached houses and small apartment houses. 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. Off-street parking is typically required for 85% of the dwelling units in the building. C1-2 commercial overlay districts permit Use Groups 1-4 and 6 and allow a maximum commercial FAR

of 1.0. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. Parking is required based on the type of use and the size of the establishment.

400-Foot Radius Project Study Area

The 400-foot radius project study area to the north, east, and west of the Rezoning Area is zoned R5. C1-2 commercial overlays are mapped on the Mermaid Avenue frontages of these blocks. The area to the south of the Rezoning Area is primarily zoned R6 with C1-2 commercial overlays mapped on the Mermaid Avenue frontages of these blocks. The 400-foot radius project study area also includes a park known as the Leon S. Kaiser playground which is not zoned. The FRESH program is also mapped over the entire 400-foot radius area. The R6 zoning district is discussed in the paragraph below and the FRESH program is discussed in the Public Policy section of this document.

R6 zoning districts are widely mapped in built-up, medium-density areas of the City. The character of R6 districts can range from neighborhoods with a diverse mix of building types and heights to large-scale "tower in the park" developments. Two sets of bulk regulations apply in the R6 district. Standard height factor regulations produce small multi-family buildings on small zoning lots and, on larger lots, tall buildings that are set back from the street. Optional Quality Housing regulations produce high lot coverage buildings within height limits that often reflect the scale of older, pre-1961 apartment buildings in the neighborhood.

Future No-Action Scenario

Rezoning Area

In the future and absent the action, the Rezoning Area would continue to be zoned R5 and R5/C1-2.

400-Foot Radius Project Study Area

Based on a review of DCP's LUCATS listings for Brooklyn Community District 13, no rezoning 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 2020.

Future With-Action Scenario

Rezoning Area

The Proposed Actions consist of a zoning map amendment and text amendment. The zoning map amendment would rezone a portion of Block 7011 from R5 and R5/C1-2 to R6, R6A and R7A/C2-4 (Lot 11) and from R5/C1-2 to R7A/C2-4 (Lots 1, 43-47, 49, and 51-54) and would eliminate a C1-2 commercial overlay while retaining the underlying R5 zoning (Lots 95 (part of[2]), 96, and 97). The zoning text amendment would amend ZR

[2] The existing C1-2 commercial overlay within the Rezoning Area measures 150 feet in depth as measured from Neptune Avenue along West 29th Street. Proceeding south along West 29th Street, Lot 1 is 100' deep; Lot 97 is 24' deep; Lot 96 is 14' deep; and Lot 95 is 14' deep. Adding these numbers results in a total depth of 152'. Therefore,

Section 23-933 Appendix F to establish a Mandatory Inclusionary Housing (MIH) area over the Rezoning Area (with the exception of Lots 95 (part of), 96, and 97).

As described above, the Rezoning Area is projected to be developed with seven existing and proposed buildings and additions to existing buildings containing 383,104 gsf of residential space for 452 dwelling units (including 334 affordable and 118 market rate units), 23,488 gsf of commercial space, 12,587 gsf of community facility space, and 151 accessory parking spaces. This would be a net increase over the No-Action condition of 269,103 gsf of additional residential space for 320 new dwelling units based on an average size of 836 gsf per dwelling unit (including 218 affordable and 102 market rate units), 10,467 gsf of additional commercial space, and 73 new accessory parking spaces.

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

Table 4-2
No-Action and With-Action Development Scenarios

Proj Devel Site #	Existing Zoning					Proposed Zoning				
	Zoning	Max FAR	Max GSF	Max Ht	Use Groups	Zoning	Max FAR	Max GSF	Max Ht	Use Grps
1	R5, R5/C1-2	1.25 R, 2.0 CF, 1.0 C	111,696 R, 178,714 CF, 89,357 C	30′ before setback	1-4, 6	R6, R6A and R7A/C2-4	R6: 2.43 R, 2.42 R (MIH), 4.8 CF; R6A: 3.0 R/CF, 3.6 R/CF (MIH); R7A: 4.0 R/CF, 4.6 R/CF (MIH); C2-4: 2.0 C	R6: n/a (exstg bldg); R6A: 106,926 R/CF, 128,311 R/CF (MIH); R7A: 15,048 R/CF, 17,305 R/CF (MIH); C2-4: 7,524 C	R6: n/a (exstg bldg); R6A: 85′; R7A: 95′	1-4, 6-9
2	R5/C1-2	1.25 R, 2.0 CF, 1.0 C	25,000 R, 40,000 CF, 20,000 C	30′ before setback	1-4, 6	R7A/C2-4	R7A: 4.0 R/CF, 4.6 R/CF (MIH); C2-4: 2.0 C	80,000 R/CF; 92,000 R/CF (MIH); 40,000 C	95′	1-4, 6-9
3	R5/C1-2	1.25 R, 2.0 CF,	3,708 R, 7,934 CF,	30′ before setback	1-4, 6	R7A/C2-4	R7A: 4.0 R/CF, 4.6 R/CF (MIH);	15,868 R/CF; 18,248	95′	1-4, 6-9

a 2′ by 118.81′ area of Lot 95, the southernmost of the four lots, is not included in the existing C1-2 commercial overlay area proposed to be eliminated.

		1.0 C	3,967 C				C2-4: 2.0 C	R/CF (MIH); 7,934 C		
4	R5/C1-2	1.25 R, 2.0 CF, 1.0 C	4,858 R, 7,774 CF, 3,887 C	30′ before setback	1-4, 6	R7A/C2-4	R7A: 4.0 R/CF, 4.6 R/CF (MIH); C2-4: 2.0 C	15,548 R/CF; 17,880 R/CF (MIH); 7,774 C	95′	1-4, 6-9
5	R5/C1-2	1.25 R, 2.0 CF, 1.0 C	3,932 R, 6,292 CF, 3,146 C	30′ before setback	1-4, 6	R7A/C2-4	R7A: 4.0 R/CF, 4.6 R/CF (MIH); C2-4: 2.0 C	12,584 R/CF; 14,471 R/CF (MIH); 6,292 C	95′	1-4, 6-9
6	R5/C1-2	1.25 R, 2.0 CF, 1.0 C	7,865 R, 12,584 CF, 6,292 C	30′ before setback	1-4, 6	R7A/C2-4	R7A: 4.0 R/CF, 4.6 R/CF (MIH); C2-4: 2.0 C	25,168 R/CF; 28,943 R/CF (MIH); 12,584 C	95′	1-4, 6-9

The proposed R6 district permits a residential FAR of 2.43 and a community facility FAR of 4.8. Under the Mandatory Inclusionary Housing (MIH) Program zoning regulations it permits a base FAR of 2.2 and a maximum FAR of 2.42. The R6A district permits a residential and community facility FAR of 3.0 and under MIH it permits a base FAR of 2.7 with a maximum FAR of 3.6. The R7A district permits a residential and community facility FAR of 4.0 and under MIH it permits a base FAR of 3.45 with a maximum FAR of 4.6. 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, 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 R7A district. The purpose and need for the proposed R7A/C2-4 zoning along Mermaid Avenue serves to contextualize the existing built conditions for certain sites that are currently overbuilt and appear to have rent-stabilized residences, and could facilitate redevelopment or expansion on soft sites.

The Applicant proposes to subdivide the existing zoning lot, Lot 11, into zoning lots A and B, and rezone both newly created zoning lots in order to provide the proposed number of new units and prevent creation of non-compliance. Zoning lot A would be 49,952.4 square feet in size and would be zoned R6 while zoning lot B would be 39,404.21 square feet in area and would be zoned R6A and R7A/C2-4 with the C2-4 commercial overlay extending 100 feet in depth along Neptune Avenue. The existing 15-story building on the site would be located on the Lot 11 A. The existing parking lot on Lot 11 would be moved from its current location north of the existing building to the west of the existing building and it would contain 45 parking spaces compared to the existing 43 spaces.

Under the future with action scenario, the new zoning lot, Lot 11 B, would be developed with two 8-story residential buildings totaling 160,770 gsf in size including 192 affordable dwelling units (based on the average unit size in the existing residential building on Block 7011, Lot 11 of 836 gsf per dwelling unit) built consistent with the standards of the Quality Housing Program and 68 accessory at-grade and garage parking spaces. Under ZQA, parking would not be required for any of the proposed dwelling units, which would all be considered affordable. Nevertheless, the area of the building and the lot dedicated to parking cannot be used to provide additional residential space and it was therefore determined to provide parking in accordance with ZR Section 25-251 which governs parking requirements for government assisted housing. ZR Section 25-251 requires parking for 25% of such dwelling units in the R6A district and for 15% of these units in the R7A district.

Under ZQA in the R7A district, the minimum/maximum building base height would range from 40 to 75 feet with a maximum building height of 95 feet. However, the R7A portion of the Building B cannot be built any higher than 70' because it is a part of Building B located in the R6A district where maximum building height would be limited to 79'-4". In addition, the maximum permitted floor area of the R7A portion of the building is provided within 7 stories and it would be less economically feasible to provide additional building height for an affordable housing development.

The proposed zoning text amendment to modify ZR Section 23-933, Appendix F is necessary in order map the Rezoning Area as an MIH area. Two MIH options are available for the Applicant Site but the applicable option has not been finalized yet. MIH Option 1 requires that 25% of the residential floor area be set aside for residents with incomes averaging 60% AMI ($46,620 per year for a family of three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. MIH Option 2 requires that 30% of the residential floor area be for affordable housing units for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI. The Applicant intends to make all the units affordable to tenants on Projected Development Site 1 with an AMI of 30% or less and 60% or less of the area's reported median family income. However, for purposes of the CEQR analysis, it is assumed that a minimum of 70% of the units will be rented to households earning up to 80% of AMI.

As an MIH area, developments within the proposed R6A district, would be required to provide the specified amount of income restricted units, and may build up to a maximum residential FAR of 3.6 and a maximum total building height of 85 feet with qualifying ground floors. For future development within the proposed R7A district, the maximum residential FAR may increase up to 4.6 and the maximum total building height may increase up to 95 feet with qualifying ground floors.

Parking would be provided on Projected Development Site 1 as described above. 38 parking spaces would be provided for Projected Development Site 2 as required for the R7A district including parking for 75% of the market rate units (28 spaces), for 15% of the affordable units (2 spaces), and one space per 10,000 square feet of commercial space (8 spaces). No parking would be provided on Projected Development Sites 3 through 6 as the residential developments on these parcels are too small to require the provision of parking.

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 text and map amendments would only apply to the Rezoning 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 R6, R6A, and R7A/C2-4 zoning districts in the Rezoning 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 actions are also needed to provide enough floor area to maintain the existing 15-story building on the Applicant's site in compliance with zoning. The mapping of a C2-4 commercial overlay to replace the existing C1-2 commercial overlay is intended to allow a wider range of local retail services to be provided in the area.

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 Rezoning Area and 400-foot radius project study area are discussed below.

Rezoning Area and 400-Foot Radius Project Study Area

The entire Rezoning Area and the 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 entire Rezoning Area and the 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 Rezoning Area and the 400-foot radius project study area are eligible for various zoning and tax incentives related to grocery store development and operation.

No other public policies would apply to the Proposed Actions as the Rezoning 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[3], 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. No Historic Districts or individually designated historic resources are located within the Rezoning Area or the surrounding 400-foot radius study area.

Future No-Action Scenario

In the future, without the action, new development in the Rezoning Area and within the 400-foot radius project study area would remain within the boundaries of the City's Coastal Zone, and would therefore remain subject to the provisions of the WRP, and the FRESH Program. No other public policy initiatives would pertain to the Rezoning Area or to the 400-foot study area around the Area by the final project build year of 2020. In addition, no changes are anticipated to any public policy documents relating to the Rezoning Area or the surrounding study area by the project build year.

[3] 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 With-Action Scenario

Rezoning 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
    - 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);
    - 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,
    - 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);
    - No units could go to residents with incomes above 130 percent AMI ($101,010/year for a family of three);
    - No direct subsidies could be used for these affordable housing units; and
    - 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 R6, R6A, and R7A/C2-4 districts as Inclusionary Housing designated areas. Under the MIH provisions applicable to the project, two MIH options would be available for the Applicant Site and the Non-Applicant Sites but the applicable options have not been finalized yet. MIH Option 1 requires that 25% of the residential floor area be set aside for residents with incomes averaging 60% AMI ($46,620 per year for a family of three), with at least 10% of the residential floor area affordable at or below 40% AMI with no unit targeted at a level exceeding 130% AMI. MIH Option 2 requires that 30% of the residential floor area be set aside for residents with incomes averaging 80% AMI ($62,150 for a family of three) with at least 20% affordable at or below 80% with no unit targeted at a level exceeding 130% AMI.

For the purposes of the CEQR analysis, it is currently assumed based on consultations with HPD, that the proposed development on the Applicant property (Projected Development Site 1) would be financed through HPD's ELLA Program in which 70% of the proposed residential units would be affordable at 80% of AMI and below (135 units), while the remaining units (57) would be affordable at 100% of AMI and below. On the Non-Applicant owned sites, Projected Development Sites 2 through 6, it is assumed that 20% of the projected residential units would be affordable at 80% of AMI and below (26 units) and the remainder would be market rate (102 units).

Waterfront approval is required for the proposed development as the Rezoning 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 Rezoning 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 Rezoning Area.

Conclusion

No impact to public policies would occur as a result of the Proposed Actions. The action would be an appropriate development in the Rezoning 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.

FOR INTERNAL USE ONLY
Date Received: _____

WRP No. _____
DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

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

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: The Arker Companies

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 7011 Lot 11, would be rezoned to R6, R6A, and R7A/C2-4 to allow for the development of two 7- to 8-story residential buildings totaling 160,770 gsf in size including 153 affordable dwelling units (192 units under the RWCDS), 68 accessory at-grade parking spaces, and two outdoor recreational areas.

2. Purpose of activity

The proposed actions would enable the Applicant to develop approximately 153 new affordable housing units (192 units under the RWCDS) in the Coney Island area of Brooklyn on currently underutilized land. The Proposed Development Site (Projected Development Site 1) is adjacent to extensive park and athletic facilities and excellent mass transit activities. 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 buildings on the site, and to provide enough floor area to maintain the existing 15-story building on the site in compliance with zoning.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): B 7011, L 11

Street Address: 2828 West 28th Street, Brooklyn

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

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

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

Board of Standards and Appeals ☐ Yes ☑ No

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

Other City Approvals

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

State Actions/Approvals/Funding

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

Federal Actions/Approvals/Funding

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

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

E. LOCATION QUESTIONS

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

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

F. WRP POLICY ASSESSMENT

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

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

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

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

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

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

G. CERTIFICATION

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

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

Applicant/Agent's Name: John 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: August 9, 2017

Sea Park North 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 Rezoning Area is not located directly on the waterfront but is separated from it by a large playground and park to the north and two blocks of existing commercial and community facility development and the Coney Island Boardwalk and Beach to the south. Nevertheless, the proposed rezoning and the associated development would bring new residents, shoppers, and other visitors to the area resulting in new activity in the playground and park across Neptune Avenue from the site and 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 Rezoning Area does not border the shoreline and is separated from it by a large playground and park to the north and two blocks of existing commercial and community facility development and the Coney Island Boardwalk and Beach to the south. The Rezoning Area does not contain any unique and significant natural features. The Applicant's 89,357 square foot lot is developed with an existing 15-story, approximately 102,000 square foot residential building including 122 dwelling units, 43 accessory at-grade parking spaces, and two outdoor recreational areas. The five Non-Applicant owned Projected Development Sites are developed with a church and paved parking lot, and four commercial, mixed commercial and community facility, and mixed-use residential/commercial buildings.

The Applicant proposes to subdivide the existing zoning lot, Lot 11, into zoning lots A and B. The existing 15-story building on the site would be located on the Lot 11 A. The existing parking lot on Lot 11 would be moved from its current location north of the existing building to the west of the existing building and it would contain 45 parking spaces compared to the existing 85 spaces. In addition, the northernmost recreational area on the lot would be removed and the western recreational area would be reconfigured and decreased in size in order to accommodate the new parking lot and the subdivision of the lot needed to accommodate the proposed project. The new zoning lot, Lot 11 B, is proposed to be developed with two 7- to 8-story residential buildings totaling 160,770 gsf in size including 153 affordable dwelling units (192 units under the RWCDS), 68 accessory at-grade parking spaces, and two outdoor recreational areas.

The surrounding area primarily consists of a mixture of one- and two-family residences and multi-family residences, many of which contain ground floor commercial uses. Commercial uses are primarily located along Mermaid and Surf Avenues. Numerous community facility uses are located along Mermaid, Surf, and Neptune Avenues. A large playground, Leon S. Kaiser Playground, is located across Neptune Avenue from the Rezoning Area and the Coney Island Boat Basin adjoins this playground to the north. The Coney Island Beach and Boardwalk and the waters of the Atlantic Ocean beyond are two blocks to the south of the Rezoning Area. 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 would add to and strengthen the surrounding mixed-use community. The development would have no impact upon public access to the waterfront as the Rezoning Area is not located along the waterfront. The development would not result in the loss of any existing jobs, and is anticipated to result in the generation of approximately 6 new residential service jobs on the Applicant's property. Additional jobs would be generated by new development on the Non-Applicant owned projected development sites.

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

The Rezoning Area is bounded by Neptune and Mermaid Avenues and West 28th and West 29th Streets. 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 Rezoning Area is approximately 0.7 miles from the Stillwell Avenue subway station (D, F, N, and Q trains) at the intersection of Stillwell and Neptune 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. 329 at 2929 West 30th Street serving grades pre-K through 5, is located approximately 600 from the Rezoning Area. The most recent enrollment and capacity data from the NYC Department of Education indicates that in the 2015-2106 school year, the target capacity of P. S. 329 was 543 seats while 420 students were enrolled, representing a utilization rate of 77%.

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.

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

As shown on FEMA Panel 3604970353G, effective 1/31/2015, the Rezoning 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. The proposed development would meet these standards which require that all spaces below the flood elevation, plus 1 foot for freeboard, are floodproofed and uses are limited to parking, storage, or access.

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

The building does not contain a publicly accessible waterfront and is located upland from any shore. The lowest elevation of the proposed development would be at 5.4 feet and would consist of the ground floor of the 2 proposed buildings which would contain 68 accessory at-

grade and garage parking spaces and residential lobbies. These floors would currently be below the current 1% annual chance floodplain height of 11 feet, and 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 parking areas and residential lobbies. This could result in a temporary loss of building services, minor damage to property, and temporary displacement of residents and their vehicles. No building mechanicals would be utilized in this area as they would be located on higher levels of the structure.

The next lowest point in the proposed development would consist of the occupied residential first floors at a minimum elevation of 16 feet. Building electric and gas systems would also be mounted at the ceiling levels of the first floors. These floors would be above the current 1% annual change flood elevation height of 11 feet and would remain above the 1% flood elevation under all but the highest-level projections for the year 2100, which would represent the anticipated lifespan of the project. At worst, there could be some minor damage to the lowest occupied residential floor and the electric and gas systems of each building in 2100 under the highest-level projections. This could result in damage to property and temporary displacement of residents.

Building boilers and standby generators would be installed on the 7th and 8th floor roofs of the 2 proposed buildings at heights of between 70 and 80 feet. These levels would be above the elevation of the 1% annual chance flood level under all projections. There is no chance for flooding of any building boilers or standby generators under these projections. The parking and residential lobby could be flooded by mean higher water under by the 2080s the high SLR projections, and by 2100 under the high or high-mid projections. Daily flooding by high tide would likely cause disruption to building residents 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 which are further discussed below. The buildings have been designed to only locate parking and building lobbies below the level of the floodplain which, if exposed to flood waters, would result in minimal damage to the buildings and their operations. No dwelling units or critical building mechanicals are proposed on the ground floor levels of the buildings. In addition, the residential 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.

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, Aufgang 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 buildings on the Applicant's property have been designed to meet the requirements of the NYC Building Code in order to minimize the effect of flooding. Thus, the proposed buildings, consistent with these regulations, will have a Design Flood Elevation (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 there may not be habitable floor area and only crawlways, parking, storage, and building access are allowed. As a result of these regulations, the ground floors of the buildings will be used for required parking and for building lobbies and entrances. Additionally, the boiler equipment and standby generator will be located on the roofs of the buildings, and electric and gas systems will be mounted at the ceiling level of the first floor.

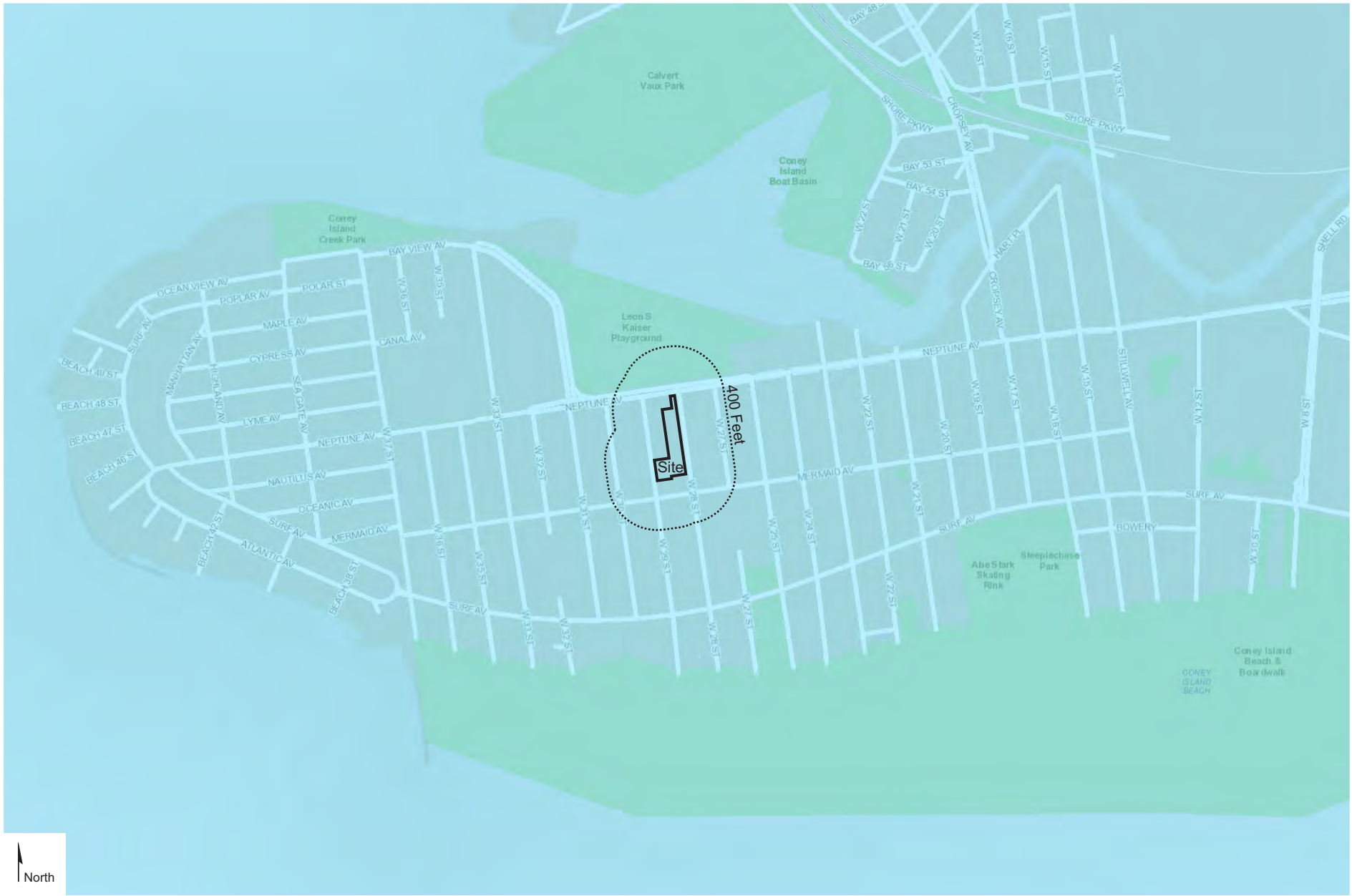
The lowest residential floors and mechanicals are planned to be above the DFE and the residential entrances will be dry flood proof with flood proof barriers. The project will include a flood emergency egress at the DFE for the residential lobbies. The parking will be wet/unprotected. The development will be landscaped with salt water proof plantings.

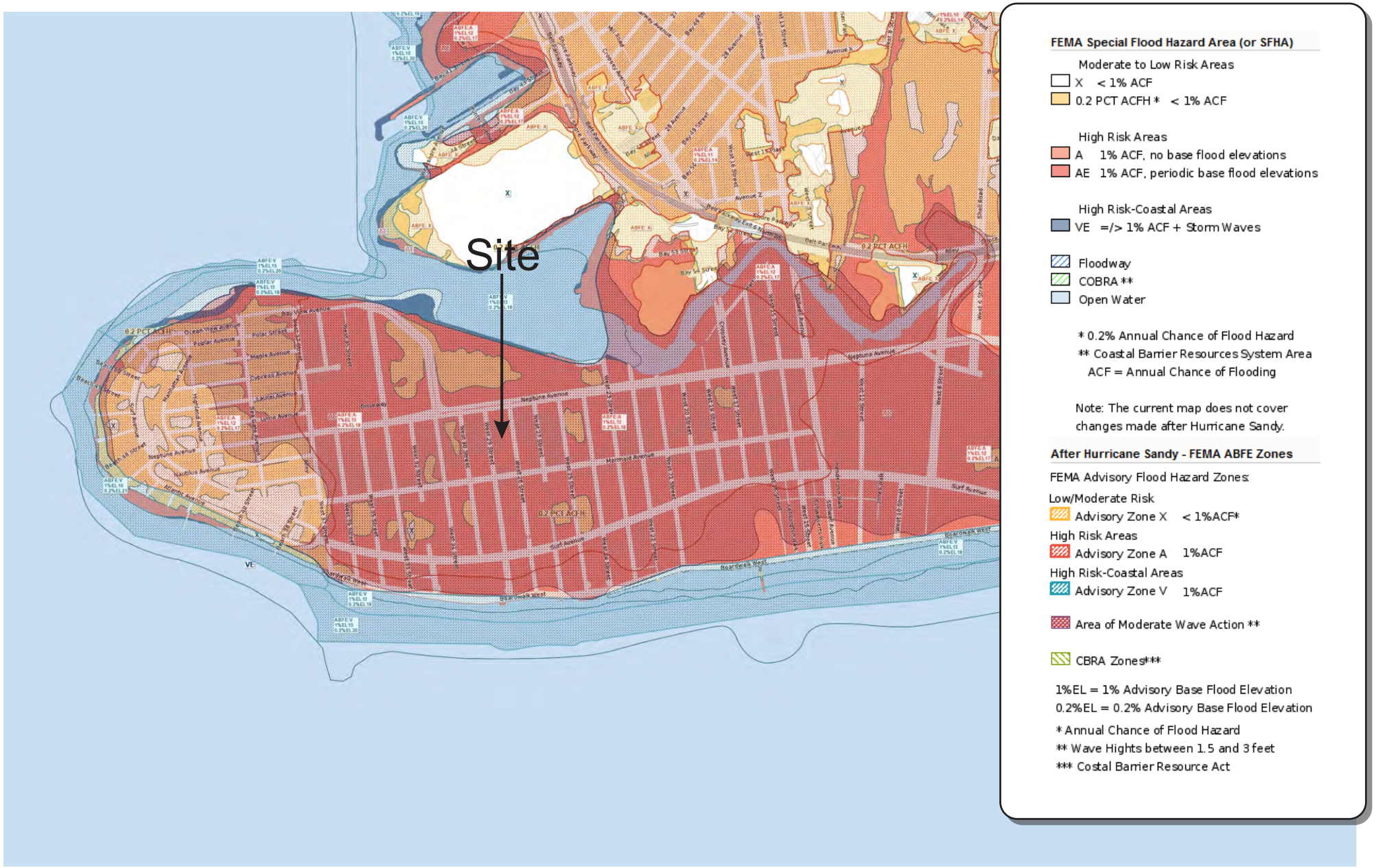
Adaptive measures to protect the project site from future flooding could include elevation of the site or the construction of a floodwall to protect the site from higher water levels. Although elevation of the site may not be feasible, construction of a floodwall or installation of water barriers will be given ongoing consideration as water levels continue to rise.

The proposed project is consistent with Policy 6.2. The proposed buildings are 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.


Leon S Kaiser Playground
NEPTUNE AV
BAY VIEW AV
W 31 ST
W 32 ST
W 30 ST
W 29 ST
W 28 ST
W 27 ST
W 25 ST
W 24 ST
W 23 ST
MERMAID AV
Site
400 Feet
North
0
200
400
600 Feet
Coastal Resource Boundary

Figure X - Waterfront Revitalization Program Map Zoomed Out

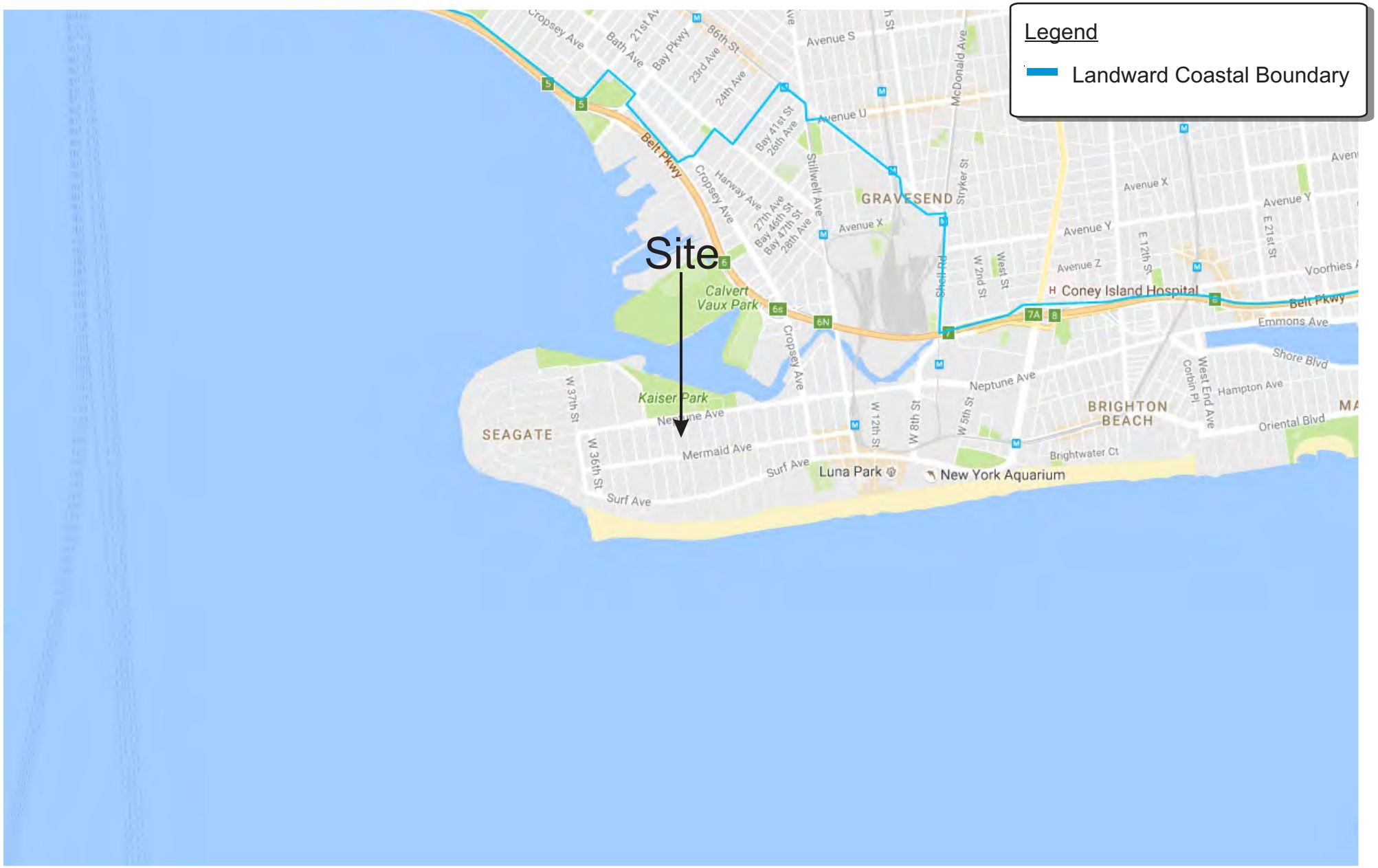




Source: Federal Emergency Management Agency (fema.gov) / PropertyShark.com

Source: Federal Emergency Management Agency (fema.gov)

Source: U.S. Fish and Wildlife Service (fws.gov)



Source: NYS DOS Office of Communities and Waterfronts (dos.ny.gov)

5. SOCIOECONOMIC CONDITIONS

The proposed rezoning of the Rezoning Area from R5 and R5/C1-2 to a mixture of R5, R6, R6A, and R7A/C2-4 zoning districts under the Mandatory Inclusionary Housing (MIH) Program would facilitate the proposed development consisting of approximately 153 affordable housing units. The aim of the proposed action is to facilitate the Applicant's development program, which would occur on underutilized land, and apply the MIH program to the area, which requires zoning districts of R6A and above. As noted in the Purpose and Need discussion in the Project Description, the Rezoning Area already contains substantial residential activity with which the proposed use would be totally consistent. The area is appropriate for additional density and for the development of new affordable housing units.

While the proposed development is anticipated to create 153 new housing units, the development assumed in the RWCDS is anticipated to result in the loss of 78 accessory parking spaces on Block 7011, Lots 1 and 11 (Projected Development Site 1). However, the With-Action scenario is anticipated to be developed with seven existing and proposed buildings and additions to existing buildings within the Rezoning Area containing 383,104 gsf of residential space for 452 dwelling units (including 334 affordable and 118 market rate units), 23,488 gsf of commercial space, 12,587 gsf of community facility space, and 151 accessory parking spaces. This would be a net increase over the No-Action condition of 269,103 gsf of additional residential space for 320 new dwelling units based on an average size of 836 gsf per dwelling unit (including 218 affordable and 102 market rate units), 10,467 gsf of additional commercial space, and 73 new accessory parking spaces.

The increment of 320 dwelling units is greater than the *CEQR Technical Manual* threshold of 200 dwelling units, so a preliminary assessment is required. Therefore, the following provides a preliminary assessment of the potential for the proposed action to result in any significant adverse impacts related to indirect residential displacement.

The proposed action would not result in any commercial displacement. Table 5-1 provides a list of all the existing businesses and residents on the Projected Development Sites including block and lot, address, name of the business, type of business, approximately how many people the business employs, and the number of dwelling units. No further analysis is required for direct residential, direct business or indirect business displacement.

Table 5-1

Existing Development on Projected Development Sites

Proj Devel Site #	Block/ Lot	Address	Name of Business/ Housing	Description of Use	No. of Employees
1	B 7011, L 11	2828 West 28th Street	Mitchell Lama Housing	122 dwelling units (116 low-income and 6 market rate units)	8
2	B 7011, L 1	2828 Neptune Ave	Coney Island Gospel Assembly	church	4
3	B 7011, L 45, 46	2805, 2807 Mermaid Ave	Yummy Taco Panda	Vacant bldg.; restaurant, 2 DUs	6
4	B 7011, L 47	2809 Mermaid Ave	Bargain Land	retail store, community facility	10
5	B 7011, L 49	2815 Mermaid Ave	99 Cents Express	retail store	10
6	B 7011, L 51-54	2819, 2823, 2825, 2827 Mermaid Ave	Mermaid Optical, Island Meats Market & Grocery, Prince Deli & Grocery	4 retail stores, 8 DUs	30

Indirect Residential Displacement

As indicated in the *CEQR Technical Manual*, "the objective of the indirect residential displacement analysis is to determine whether the proposed project may either introduce a trend or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change." The risk of indirect residential displacement is typically associated with rising rents caused by new higher-income housing that may contribute to increased area housing costs to an extent that could potentially force lower-income residents out of the neighborhood. The potential for impact is generally limited to households in unprotected, private rental units.

The proposed rezoning would allow for the development of approximately 320 units within the Project Area for the With-Action RWCDS. The average household size for the surrounding census tracts is 2.66 persons per household. Using the average household size found within the study area's census tracts; the increment generated by the RWCDS would be expected to generate a total residential population of 851 persons. This would represent less than 4 percent of the study area population, based on the total population size of 21,849 (See Table 5-2). The *CEQR Technical Manual* notes "if the population increase is less than 5 percent within the study area, or identified sub-areas, further analysis is not necessary as this change would not be expected to affect real estate market conditions." Therefore, the proposed action would not be expected to significantly impact the

neighborhood's socioeconomic fabric and no further analysis is warranted. However, a preliminary assessment of indirect residential displacement is discussed below.

Table 5-2: Population and Household Size

Census Tract	Population (2013)
326	7,140
328	2,363
330	4,331
340	2,321
342	5,694
Total	**21,849**

Source: US Census, U.S. Census Bureau, 2015 5-Year American Community Surveys

The first step in the preliminary assessment is to determine whether the proposed action would add a new higher income population as compared to the existing population. The *CEQR Technical Manual* indicates that if a project would introduce a more costly type of housing, then the new population may be expected to have higher incomes. 218 of the 320 new dwelling units would be reserved for low-income households at an average of 60% of area median income (AMI), which consists of $46,620 per year for a family of three. It is assumed for analysis purposes that the remaining residences would be market-rate units which could be expected to rent or sell within the price levels comparable to borough-wide levels.

The development site is located within Brooklyn Census Tract 328. The surrounding half-mile study area generally encompasses five Census Tracts 326, 328, 330, 340 and 342 (see attached Socioeconomics Map) As shown in the population, housing and economic information for these census tracts in Table 5-3, the affected census tract (328) is slightly higher in household income than neighboring tracts but overall lower than the Brooklyn average.

Table 5-3: Income and Housing Value/Costs

Census Tract	Median Household Income	Poverty Level: Families	Median Value Owner Occupied	Median Contract Rent
326	$22,493	39.60%	$557,500	$815
328	$39,805	23.40%	$372,600	$794
330	$20,705	40.10%	$313,300	$508
340	$19,022	26.90%	n/a*	$477
342	$15,167	34.50%	$176,600	$355
Brooklyn (Kings County)	$46,958	19.80%	$357,200	$1,087

Source: U.S. Census Bureau, 2014 5-Year American Community Surveys (ACS).

*Data unavailable.

Levels of poverty are mixed within the study area compared to the Brooklyn average. Census Tract 330 contains 40.1% of residents below the poverty line, while Census Tract 328 contains 23.4%. This is likely due to the housing characteristics of Census Tract 330, which predominantly contains the New York City Housing Authority (NYCHA) Gravesend Houses, with the remaining land area as parkland (Kaiser Park).

Based on this information, these census tracts would be classified as relatively low-income socioeconomic status compared to the citywide income of $52,737 and marginally lower borough-wide income of $46,958. As noted above, a large portion of Census Tract 330 consists of NYCHA housing and overall the study area contains a high concentration of NYCHA developments (Coney Island Houses including O'Dwyer Gardens, Gravesend Houses and Surfside Gardens), likely contributing to the higher rates of poverty and lower median household income in the study area. However, these units are publicly owned and residents would, therefore, be protected from indirect displacement pressures.

The residential units that would be developed as a result of the proposed action would be a mix of affordable and market-rate units. Of the 320 projected units of housing, 218 units or 68.1% of the projected new housing would be affordable for low-income households at 60% of an adjusted median income (AMI) or below. This would entail $38,100 for an individual, $43,500 for a family of two, $48,960 for a family of three; and $54,360 for a family of four. The remaining 118 dwelling units could be considered market rate and could be expected to rent or sell at the median value of the local market. As noted in Table 5-3, the median monthly rent within the neighborhood is lower than borough-wide levels.

As a result, the socioeconomic characteristics of any new residents would generally not be enough to substantially affect socioeconomic conditions in the neighborhood.

Even if the socioeconomic characteristics of the population that would result from the proposed action were to be dramatically different, the associated increase in population would be relatively small in relation to the study area (less than 4%) and would not be substantial enough to affect real estate market conditions. Therefore, the Proposed Actions would not be expected to significantly impact the neighborhood's socioeconomic fabric and no further analysis is warranted.


314
308
330
348
336
328
326
350
342
340
352
Bay View Avenue
Ocean View Avenue
Poplar Avenue
Polar Street
Maple Avenue
Cypress Avenue
Laurel Avenue
Lyme Avenue
Neptune Avenue
Nautilus Avenue
Oceanic Avenue
Surf Avenue
Mermaid Avenue
Atlantic Avenue
Canal Avenue
Bay 52 Street
Bay 53 Street
Bay 54 Street
Belt Parkway
Shore Parkway
Avenue Z
Hart Place
Manhattan Avenue
Highland Avenue
Sea Gate Avenue
Beach 43 Street
Beach 42 Street
Beach 38 Street
West 35 Street
West 36 Street
West 37 Street
West 33 Street
West 32 Street
West 31 Street
West 30 Street
West 29 Street
West 28 Street
West 27 Street
West 25 Street
West 24 Street
West 23 Street
West 22 Street
West 21 Street
West 20 Street
West 19 Street
West 17 Street
West 16 Street
West 15 Street
West 13 Street
Stillwell Avenue
Croposey Avenue
North
Legend
Proposed Rezoning Area
Projected Development Site
(Applicant-Owned)
Projected Development Site
(Non-Applicant Owned)
1/2-Mile Radius
Census Tract Boundaries
123
Majority of Census Tract
Within Radius
123
Majority of Census Tract
Outside Radius

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 192 dwelling units of housing on the Applicant controlled property on Projected Development Site 1. It also includes 128 new dwelling units on the non-Applicant controlled properties identified as Projected Development Sites 2 through 6. The No-Action RWCDS does not include any new development or any new housing on the Projected Development Sites. Therefore, the Proposed Actions would result in the development of a net increase of 320 dwelling units in the Rezoning Area.

The Proposed Actions would result in the development of 218 affordable dwelling units as further detailed below.

The Applicant intends to lease the units on Projected Development Site 1 to tenants with an average family median income (AMI) of 30% or less and 60% or less of the area's reported median family income so all 192 units under the RWCDS would be considered affordable and eligible for publicly funded child care. All affordable units would be permanently affordable. The project would be developed pursuant to HPD's Extremely Low & Low-Income Affordability (ELLA) Program which funds the new construction of low income multi-family rental projects. The ELLA term sheet requires a minimum of 70% of the units (135 units) to be rented to households earning up to 60% of Area Median Income (AMI) with up to 30% of the units (57 units) being rented to households earning up to 100% of AMI. At least 10% of units must be set aside for formerly homeless households. However, for purposes of CEQR analysis it is assumed that a minimum of 70% of the units (135 units) will be rented to households earning up to 80% of AMI.

On the Non-Applicant owned sites, Projected Development Sites 2 through 6, it is assumed that 20% of the projected residential units would be affordable at 80% of AMI and below (26 units) and the remainder would be market rate (102 units). 26 of the units developed on the Non-Applicant owned sites would be considered affordable and eligible for publicly funded child care. All affordable units would be permanently affordable.

Based on *CEQR Technical Manual* criteria (Table 6-1), the development of 320 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. Under the criteria in Table 6-1, the development of 218 dwelling units at or below 80% of Area Median Income (AMI) would exceed the minimum number of 141 dwelling units for conducting a detailed analysis of impacts to publicly funded child care. 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 320 dwelling units, including 192 units on the property controlled by the Applicant and 128 units in the remainder of the Rezoning Area.

Based on the factors contained in Table 6-1a, the 320 new dwelling units resulting from the Proposed Actions would be anticipated to generate a total of 131 public school students, including 93 elementary school and 38 middle school pupils. The 320 dwelling units would be anticipated to generate a total of 45 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.

Publicly Funded Child Care Centers

Analyses of impacts to day care facilities are generally conducted for projects that produce substantial numbers of subsidized, low- to moderate-income family housing units which may generate a significant number of children who would be eligible for subsidized child care at publicly financed day care centers. The threshold number requiring further analysis would be the generation of 20 eligible children. Based on the Brooklyn multipliers in Table 6-1b of the *CEQR Technical Manual*, 110 dwelling units at or below 80% of AMI would be expected to generate 20 children under the age of 6 who would be eligible for public child care. Based on the With-Action RWCDS, the six Projected Development Sites would be developed with a net increase of 320 dwelling units, 161 of which would be reserved for low- and moderate-income tenants who would be at or below 80% of AMI (135 on Projected Development Site 1 + 26 on Projected Development Site 2-6) and would therefore require the preparation of a child care analysis which is provided below.

Other Community Facilities

The development of 320 dwelling units of housing on the project site would not be anticipated to exceed the thresholds of concern for any other community facilities and services. 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 project 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 4,274 students relative to a target capacity of 4,248 seats resulting in a shortfall of 26 seats.

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.

Table 6-1

CSD 21, Sub-district 1 (Primary Study Area) - Existing Enrollment, Capacity and Utilization 2015-2016 School Year

#	School Number (Bldg ID)	Address	Grades	School Enrollment	Target Capacity	Available Seats	% Utilized
ELEMENTARY SCHOOLS							
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	P.S. 253	601 Ocean View Ave.	PK-5, SE	843	600	-243	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
	Subtotal			**4,274**	**4,248**	**-26**	**101**
INTERMEDIATE SCHOOLS							
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 St.	PK-8, SE	139	151	12	92
12	I.S. 303	501 West Ave.	6-8, SE	499	842	343	59
	Subtotal			**3,852**	**4,420**	**568**	**87**
	TOTAL			**8,126**	**8,668**	**542**	**94**

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.

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, P.S. 288, P.S. 329, and I.S. 239 in CSD 21, Sub-district 1 have been identified in DOE's April 14, 2016 Underutilized Space Memorandum as underutilized by 150 seats

or more based on the 2014/2015 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.

The schools that are zoned for the subject project site include the following:

1. P.S. 329, 2929 West 30th Street, grades PK-5, SE
2. P.S./I.S. 288, 2950 West 25th Street, grades PK-8, SE

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 2020 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.

In the future and absent the actions, it is assumed that no new residential development would occur in the Rezoning Area by the project build year of 2020. However, 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 2020 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 March 31, 2016 Capital Plan Management Data Report 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.

Table 6-2

Estimated Public School Enrollment, Capacity, and Utilization Year 2020
Future Without the Proposed Actions

School Level	2020 Projected Enrollment (w/Pre-K)	Students Generated by Development Without Actions	Total Projected Enrollment	Program Capacity	Seats Available	Program Utilization (%)
Elementary/K-5 Schools						
Sub-district 1	4,139	757	4,896	4,248	-648	115.3%
Intermediate/Secondary 6-8 Schools						
Sub-district 1	4,498	313	4,811	4,420	-391	108.8%
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 2020 without the Proposed Actions.

Sub-district Projections

	Percentages for Sub-district 1	*Projected Enrollment*
P.S.	26.41% (x 15,672)	4,139
I.S.	47.32% (x 9,505)	4,498

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 320 dwelling units, would result in the anticipated generation of approximately 131 elementary and middle school children. Approximately 93 of these children would be elementary school students and the remaining 38 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 93 elementary and 38 middle school students resulting from the Proposed Actions in 2020 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.

Figure 6-1: Public Elementary and Intermediate Schools Within CSD 21, Sub-district 1

Table 6-3
Estimated Public School Enrollment, Capacity, and Utilization Year 2020
Future With the Proposed Actions

School Level	2020 No-Build Projected Enrollment (w/Pre-K)	Students Generated by Develop (With Action)	Total Projected Enroll	Program Capacity	Seats Avail	Program Utiliz (%)	No Action Prog Utiliz (%)	Diff betw No Action/ With Action
Elementary/K-5 Schools								
Sub-district 1	4,896	93	4,989	4,248	-741	117.4%	115.3%	2.1%
Intermediate/Secondary 6-8 Schools								
Sub-district 1	4,811	38	4,849	4,420	-429	109.7%	108.8%	0.9%

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 (117.4% for elementary schools and 109.7% 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 2.1 percent while that of the intermediate schools would be 0.9 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.

Publicly Funded Child Care Centers

Existing Conditions

The *CEQR Technical Manual* states that the study area for publicly funded group child care and Head Start centers is approximately 1.5 miles around a project site. Since there are no locational requirements for enrollment in day care centers, some parents/guardians choose a day care center close to their employment rather than their residence. Nevertheless, the centers closest to the Rezoning Area are more likely to be subject to increased demand. A listing of child care centers within 1.5 miles of the Rezoning Area is provided in Table 6-4 below. Figure 6-2, Publicly Funded Day Care Facilities Within 1.5 miles, illustrates the locations of these day care facilities. Information regarding existing day care facilities within the study area has been obtained from DCP based on Agency for Children's Services (ACS) data.

A summary of this analysis indicates that the 1.5-mile radius around the Rezoning Area is well serviced by existing day care facilities. There are 8 day care facilities within this radius area with an overall capacity of 368 slots. In June 2017, 339 of these slots were in

use, resulting in an overall utilization rate of approximately 92.1% of the day care facility slots in the project study area.

Future No-Action Scenario

Since enrollment projections for child care facilities are not available, CEQR analysis assumes that the existing enrollment and capacity would stay the same for the build year and be the baseline for the No-Action Scenario, unless affordable housing is identified. However, the *CEQR Technical Manual* recommends that ACS be contacted to obtain information on any changes planned for child care programs or facilities in the area of the proposed project, including closing or expansion of existing facilities and establishment of new facilities that would affect capacity in the build year. In discussions with DCP it was determined that it would not be necessary to contact ACS at this time as ACS is in the middle of a contracting cycle and is unlikely to make any changes to child care programs or facilities at the present or in the near future.

Therefore, in the future and absent the actions, it is assumed that no new affordable residential development would occur either in the Rezoning Area or within the surrounding 400-foot radius project study area by the project build year of 2020. In addition, per DCP guidance, at this time no changes to the capacities of day care facilities in the project study area are anticipated by 2020.

Table 6-4

Existing Publicly Funded Group Child Care Facilities Within 1.5-Miles of Rezoning Area
Capacity, Enrollment, and Utilization
June 2017

Site ID	Contractor/Program Name	Site Name	Site Address	Model Type	November 2016 Contracts	Total Enroll	% Enrollment
1	Labor and Industry for Education, Inc.	Coney Island CCC	2757 West 33rd Street	DE	53	53	100%
2	National Assn of Family Development Center, Inc.	Coney Island #1 Head Start	2960 West 27th Street	HS	74	68	92%
3	Police Athletic League, Inc.	PAL Carey Gardens	2964 West 23rd Street	DE	61	56	92%
	Police Athletic League, Inc.	PAL La Puerta Abierta	3001 West 37th Street	DE	54	46	85%
5	YWCA of the City of New York	YWCA-NYC Roberta Bright Early Learning Center	3001 West 37th Street	DE	40	34	85%
6	YWCA of the City of New York	YWCA-NYC Roberta Bright Early Learning Center	3001 West 37th Street	DE	25	18	72%
7	National Association of Family Development Center, Inc.	Shore Parkway Head Start	8885 26th Avenue	HS	62	61	98%
8	Friends of Crown Heights Educational Centers, Inc.	Friends of Crown Heights 6	49 Avenue W	DE	53	49	92%
	TOTAL				**422**	**385**	**91.2%**

Based on the above, the 1.5-mile radius around the Rezoning Area would remain well serviced by day care facilities in the future without the actions. As under the existing condition, 8 day care facilities would serve this radius area with an overall capacity of 422 slots. Approximately 385 of these slots would remain in use, resulting in an overall utilization rate of 91.2% of the day care facility slots in the project study area.

Future With-Action Scenario

The household multipliers for Brooklyn from Table 6-1b of the *CEQR Technical Manual* have been applied to the 161[4] eligible dwelling units on the six Projected Development Sites. The 161 eligible dwelling units within the Rezoning Area would generate 29 children who would qualify for public child care. These 29 additional children when added to the 385 existing/no-action enrollments would result in a total enrollment with the proposed development of 414 children. Comparing this number to the capacity of 422 slots results in a utilization rate of 98.1%. This utilization rate is approximately 6.0% greater than the existing/no-action condition.

According to the *CEQR Technical Manual*, a significant impact on publicly financed child care services 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 group child care/Head Start centers in the study area that is greater than 100 percent in the With-Action Scenario, and if the project results in an increase of 5% or more in the collective utilization rate of the child care/Head Start centers in the study area between the No-Action and With-Action Scenarios.

The Proposed Actions would result in an increase of 6.0% in the collective utilization rate of the child care/Head Start centers in the study area. However, at a utilization of 98.1%, the collective utilization rate of the group child care/Head Start centers in the study area would not exceed 100 percent. Therefore, the project study area would not have a shortage of day care slots. Based on *CEQR Technical Manual* criteria, the Proposed Actions would not be expected to result in a significant adverse impact on publicly financed child care services and no further analysis would be 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.

[4] Units at 80% AMI and below: 135 on the Applicant owned site (70% of 192 DUs) + 26 on the Non-Applicant owned sites 2, 4, 5, and 6 (20% of 128 DUs)

Therefore, the project would have no potentially significant adverse impacts related to community facilities and services and further assessment is not warranted.

Figure 6-2: Publicly Funded Day Care Facilities Within 1.5 Miles

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 overtaxing 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 Rezoning Area is located directly across Neptune Avenue from the Leon S. Kaiser playground and park which extends north of Neptune Avenue to the waters of the Coney Island Boat Basin. It is also located across Neptune Avenue from the Neptune Avenue Greenstreet. Due to the proximity of the project site to these open space resources, potential shadow impacts could occur from the proposed and projected developments in the Rezoning 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 Rezoning 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 192 dwelling units of housing on the Applicant owned Projected Development Site 1 plus 128 new dwelling units on the Non-Applicant Owned Projected Development Sites 2 through 6 in the Rezoning Area for a total of 320 dwelling units. No new residential development is anticipated to occur under the No-Action RWCDS. Therefore, the Proposed Actions would result in the development of a net increase of 320 dwelling units in the Rezoning Area. Based on 2010 Census data, the average household size is 2.66 persons per dwelling unit in the Census Tracts located within 1/4-mile of the Rezoning Area (tracts 326, 328, 330, 340 and 342). The development of 320 dwelling units would therefore be expected to generate approximately 851 residents in the Rezoning 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 53 existing jobs in the Rezoning Area. The Proposed Actions would generate approximately 44 new 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 10,467 gsf of new retail space on Projected Development Sites 2 and 6 (31 workers),

- .04 workers per dwelling unit for the proposed 303 dwelling units on Projected Development Sites 1 through 6 (13 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 23,423 residents within the five relevant census tracts.

Table 7-1

Study Area Population

Census Tract	Total Population (2010)
326	6,948
328	3,138
330	4,587
340	2,248
342	6,502
Study Area Total	**23,423**

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 17th and West 19th Streets on the east, and an area between West 37th Street and Sea Gate Avenue on the west. Within the census tracts that are fully or at least 50 percent within this area, there are five 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 32.37 acres of open space resources.

Table 7-2
Inventory of Open Space Resources

Map Key	Open Space Name and Location	Total Size (acres)	Size within Study Area (acres)
1	Leon S. Kaiser Playground Between Neptune & Bayview Aves. & Coney Island Boat Basin from W. 24 to W. 32 Sts.	26.26	26.26

Map Key	Open Space Name and Location	Total Size (acres)	Size within Study Area (acres)
2	Coney Island Creek Park Bay View Ave. to Coney Island Boat Basin between Sea Gate Ave. & W. 33 St.	8.66	0.86 (approx)
3	Surf Playground Surf Ave. between W. 25 St. & W. 27 St	0.93	0.93
4	Nautilus Playground Coney Island Beach & Boardwalk between W. 29 St. & W. 32 St.	1.38	1.38
5	Poseidon Playground Coney Island Beach & Boardwalk to Surf Ave. between W. 25 St. & W. 27 St.	2.94	2.94
TOTAL		**40.17**	**32.37**

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 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. This ratio is close to the citywide median of 1.5 acres but is below 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 23,423 persons. In order to account for background growth to the 2020 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 1,171 additional residents. Therefore, as projected to 2020, the base population is projected to be 24,594 residents. No new residential development would occur in the Rezoning Area under the future no-action scenario. Therefore, the open space study area would have a No-Action population of 24,594 persons in 2021.

Study Area Open Space

There would be no increase or decrease in the 32.37 acres of existing open space area within the project study area by the project build year of 2020.

Assessment of Open Space Adequacy

The future no-action open space ratio within a ½ mile radius of the Rezoning Area would be approximately 1.32 based on the area population of 24,594 persons in 2020 and the 32.37 acres of open space area.

Future With-Action Scenario

Study Area Population

As discussed above, the Proposed Actions are expected to generate approximately 851 new residents based on existing census data (average household size) for the census tracts located within ¼-mile of the Rezoning Area. Adding this population to the future no-action population of 24,594 would result in a total study area population of approximately 25,445 persons.

The Proposed Actions would generate approximately 44 new workers, added to the 53 existing jobs in the Rezoning Area that would remain. 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 44 new workers to the Rezoning 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 2020 with the Proposed Actions. Therefore, in 2020 with the Proposed Actions, the project study area would contain approximately 32.37 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 Rezoning Area would be approximately 1.27 based on the area population of 25,445 persons in 2020 and the 32.37 acres of open space area.

The projected open space ratio in 2020 with the Proposed Actions would be 1.27 acres per 1,000 residents compared with the projected ratio of 1.32 acres in the study area in the future without the project. This represents a decrease of approximately 0.05 acres or 3.8 percent in the open space ratio. Therefore, the community would have an amount of open space below the City's median and would fall below 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)	32.37	32.37	32.37
Study Area Population	23,423	24,594	25,445
Open Space Ratio (Acres/1,000 Residents)	1.38	1.32	1.27 – 0.05 ac/3.8% 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 rezoning 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 1.27 acres per 1,000 population, the amount of publicly accessible open space with the Proposed Actions would remain below 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 below the planning benchmark of 2.5 acres per 1,000 population. Nevertheless, it is recognized that this goal may not be feasible in many areas of the City, and it is not considered to be an impact threshold.

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 3.8 percent in the open space ratio in the project study area. Although at an open space ratio of 1.27 the ratio in the project study area would be below the community district median of 1.5 acres per 1,000 population, it would not be considered to be an extremely low 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, private open space would be provided on Projected Development Sites 1 and 2 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 two proposed new buildings on Projected Development Site 1 would contain a total of approximately 1,880 square feet of private indoor recreational space and approximately 7,493 square feet of private outdoor recreation space for multi-age use. The existing residential building on Projected Development Site 1 does not contain any indoor recreational space but does contain approximately 42,174 square feet of outdoor recreation space for multi-age use which would decrease to 19,400 square feet following the modification of the lot to accommodate the proposed new development. The anticipated Quality Housing building on Projected Development Site 2 would contain approximately 400 square feet of private indoor recreational space. These private recreational areas would be provided for use by project residents, and as they would not be publicly accessible, the areas have 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.

It should also be noted that a large portion of the Coney Island Beach and Boardwalk west of West 22nd Street is within the ½-mile radius open space study area but has not been included in the assessment as it is located within a census tract where less than 50% of the tract is within ½-mile of the Rezoning Area.

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.

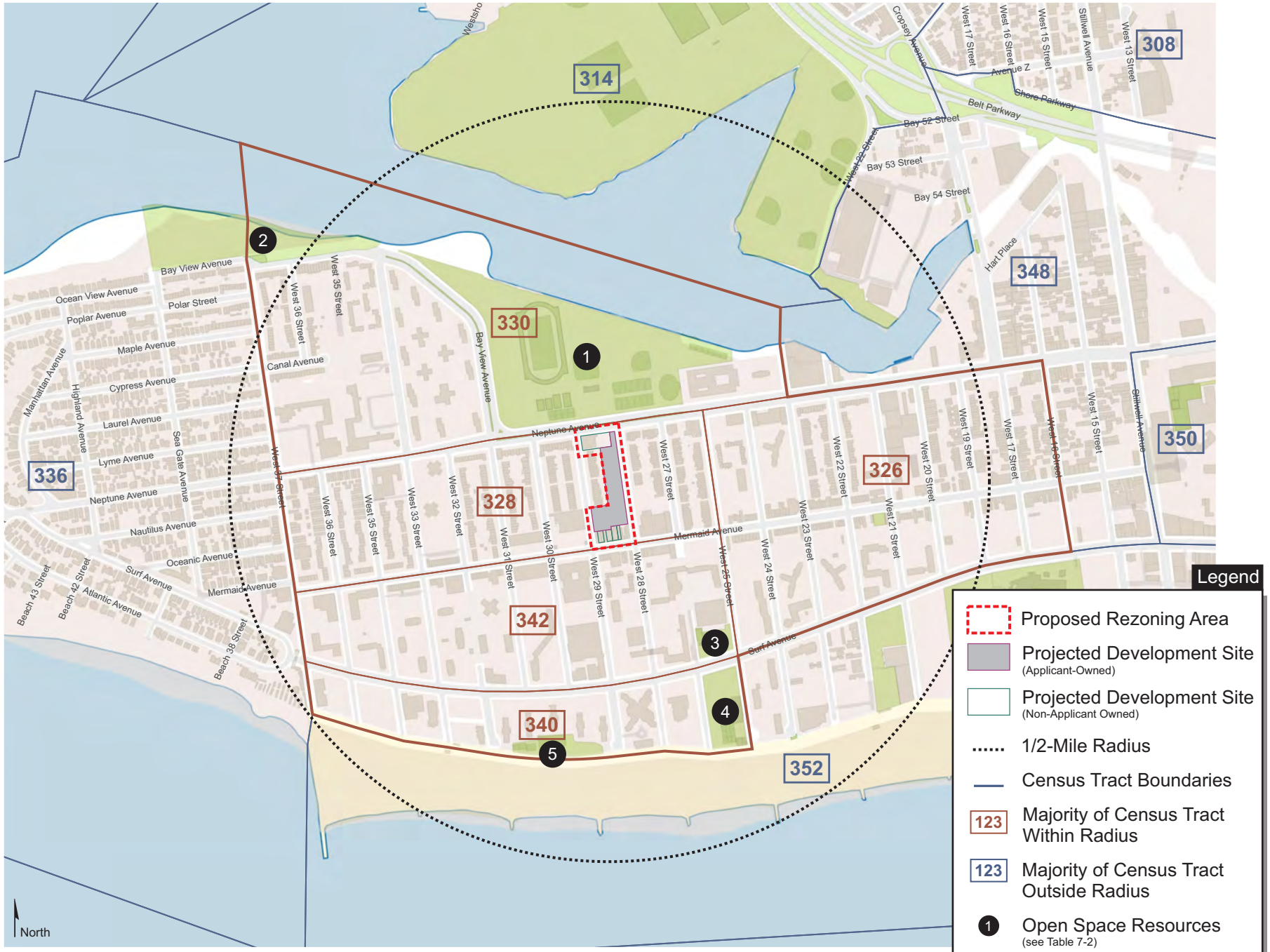
Based on *CEQR Technical Manual* criteria and as explained further in the Shadows section below, buildings on Projected Development Sites 1 and 2 would only cast new shadows on a small portion of Leon S. Kaiser Playground and the Neptune Avenue Greenstreet during the shortest days and coldest period of the year. 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 private open space to be provided on Projected Development Sites 1 and 2 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.

Figure 7-1: Open Space Facilities and Census Tracts



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[5].

- Projected Development Site 1: 88'-10"[6]

- Projected Development Site 2: 98'-0"

- Projected Development Site 3: 78'-0"

- Projected Development Site 4: 78'-0"

- Projected Development Site 5: 78'-0"

- Projected Development Site 6: 98'-0"

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 directly across the street from two open space resources and because the

[5] Note that the building heights are greater than that shown on the Schematic Site Plan for Projected Development Site 1 when including the Design Flood Elevation.

[6] Although two buildings would be constructed on this Site, the shadows analysis refers to the development as one building as the analysis is based on the tallest of the two buildings.

Proposed Actions would result in the development of six 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, Leon S. Kaiser Playground and the Neptune Avenue Greenstreet.

The Rezoning Area is located directly across Neptune Avenue from Leon S. Kaiser Playground, a 26.26-acre park located between Neptune and Bayview Avenues and the Coney Island Boat Basin from West 24th to West 32nd Streets. The portions of this park that could potentially be affected by shadows from the projected development consists of two tennis courts, four basketball courts, handball courts, a baseball diamond, a children's playground, a spray shower, and a running track surrounded by grass covered areas with several scattered trees. Leon S. Kaiser Playground is labeled "A" on the attached Tier 1 Screening Assessment diagram.

The Rezoning Area is located directly across from the Neptune Avenue Greenstreet area which is a narrow strip of land running along the centerline of Neptune Avenue between West 32nd Street to the west and West 25th Street on the east. The strip is planted with widely spaced trees and grass. Portions of the Greenstreet could potentially be affected by shadows from the projected development. The Neptune Avenue Greenstreet is labeled "B" on the attached Tier 1 Screening Assessment diagram.

The longest shadow of 421.4 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum proposed building height of 98 feet including the 3-foot parapet wall on the roofs of the proposed buildings on Projected Development Sites 2 and 6 (the tallest of the six projected buildings). These buildings are labeled as Buildings 2 and 6 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 Leon S. Kaiser Playground and the Neptune Avenue Greenstreet.

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, no portions of Leon S. Kaiser Playground or the Neptune Avenue Greenstreet are located within the area that cannot be shaded by the project. Therefore, the entirety of Leon S. Kaiser Playground and the Neptune Avenue

Greenstreet could still experience new shadows from the project and further assessment is required.

Tier 3 Screening Assessment

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

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

A Tier 3 screening assessment has been performed as Leon S. Kaiser Playground and the Neptune Avenue Greenstreet 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 proposed buildings could only potentially reach Leon S. Kaiser Playground on December 21 while the Neptune Avenue Greenstreet could experience shadows on December 21 and March 21.

The attached Tier 3 Incremental Impact Screening Assessment diagram shows the times and durations of new shadows that would be cast by the proposed development on Leon S. Kaiser Playground on December 21 and on the Neptune Avenue Greenstreet on December 21 and March 21 taking into account existing development located between the these open space facilities and the Projected Development Sites.

New shadows would be cast by the buildings on Projected Development Sites 1 and 2 on Leon S. Kaiser Playground from 8:51 AM to 2:53 PM on December 21. The building on Projected Development Site 1 would cast a new shadow on the children's playground portion of the park from 8:51 AM to 10:26 AM on December 21. The building on Projected Development Site 2 would cast a new shadow on the children's playground portion of the park from 8:51 AM to 1:50 PM on December 21. The building on Projected Development Site 2 would also cast a new shadow on the spray shower in the park from 9:25 AM to 10:00 AM on December 21.

New shadows would be cast by the buildings on Projected Development Sites 1 and 2 on the Neptune Avenue Greenstreet from 8:51 AM to 2:53 PM on December 21. New shadows would be cast by the building on Projected Development Site 1 on the Neptune Avenue Greenstreet from 7:36 AM to 3:38 PM on March 21.

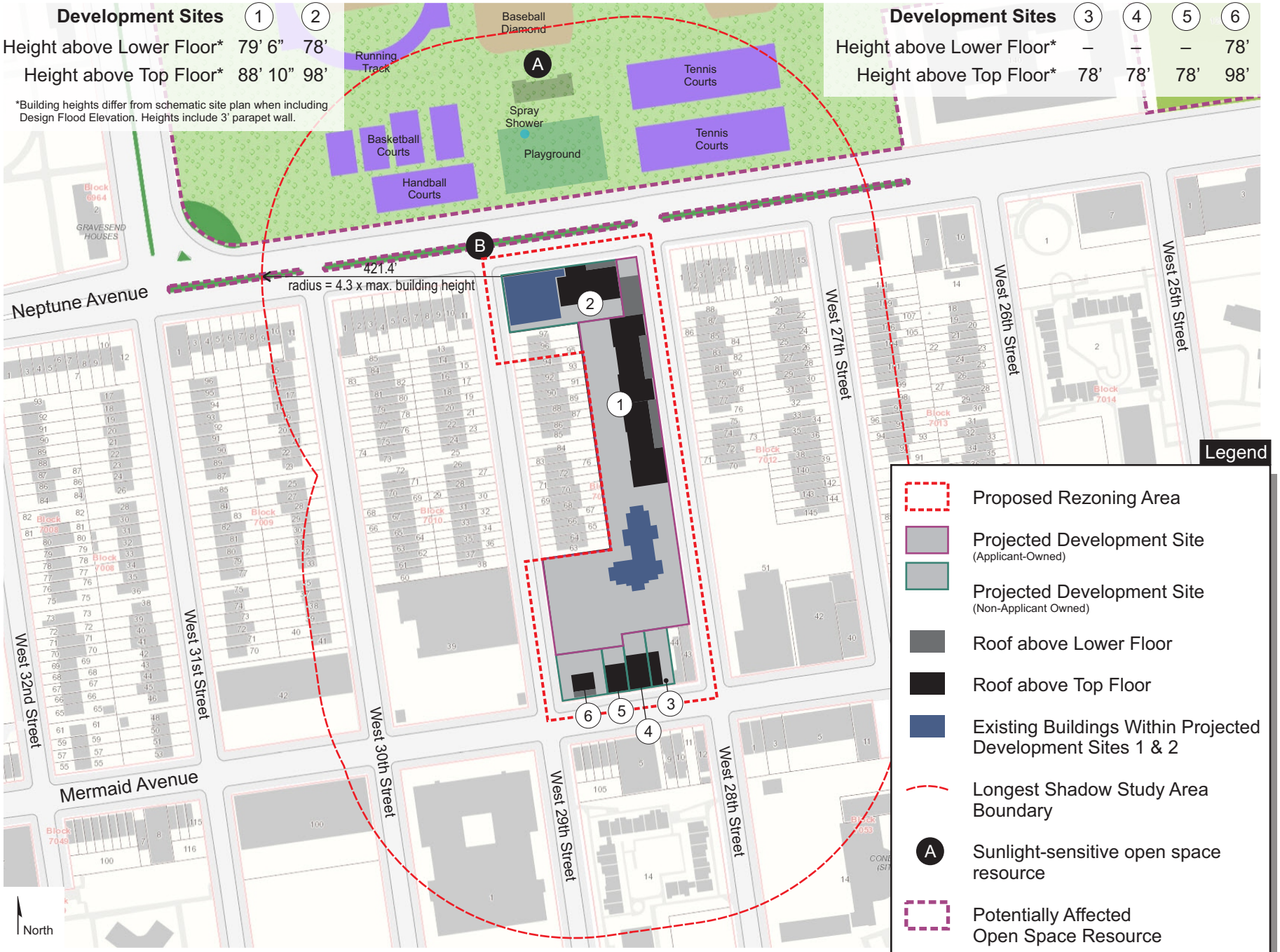
Significance of Shadows Impacts

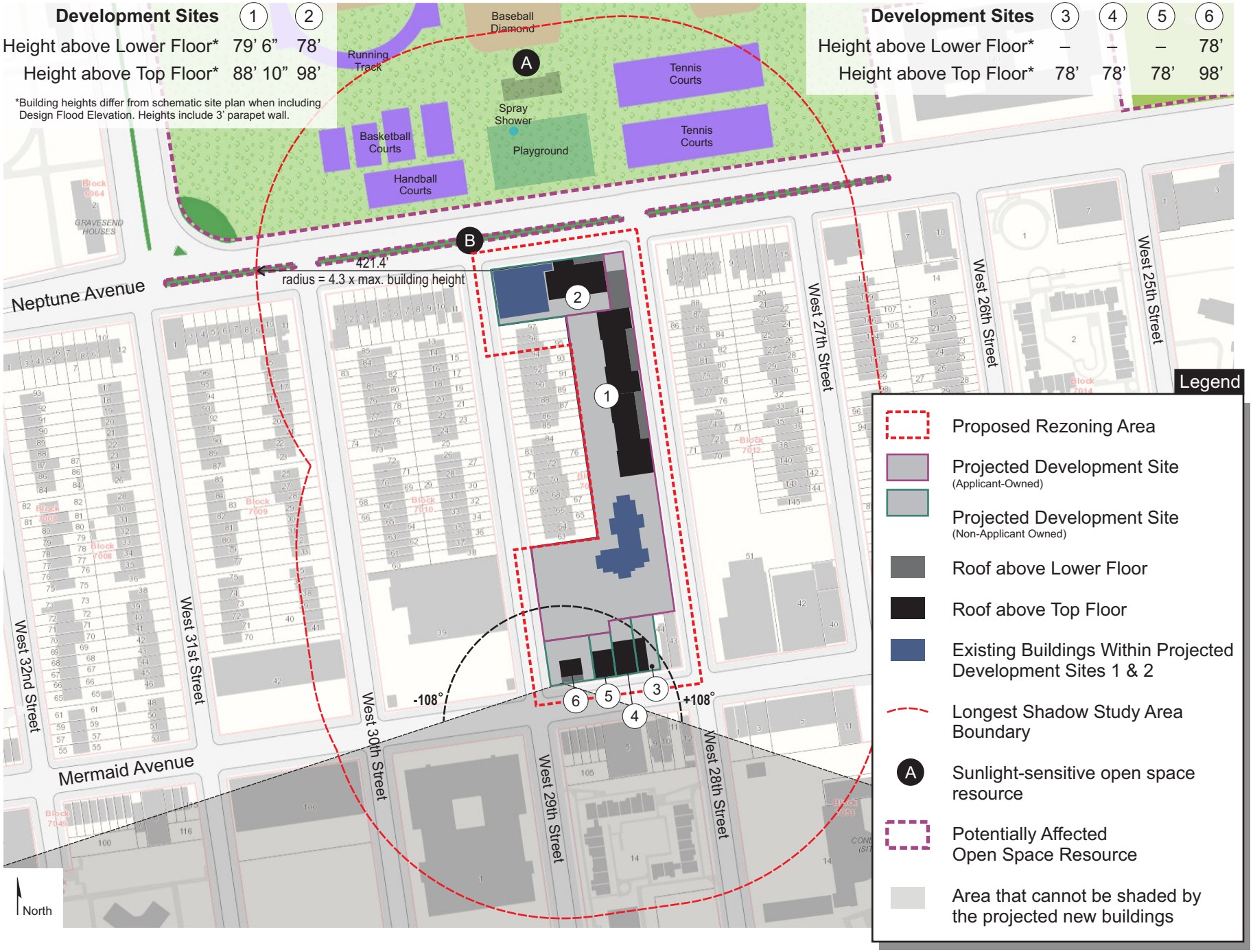
Based on *CEQR Technical Manual* criteria and as shown on the Tier 3 Incremental Impact Screening Assessment diagrams, shadows from the proposed buildings on Projected Development Sites 1 and 2 would have minimal effects on Leon S. Kaiser Playground. These new shadows would extend over a period of six hours and two minutes in total. New shadows would be cast on portions of the southern half of the children's playground area for a period of up to three hours and fifty-nine minutes and on the spray shower for a period of thirty-five minutes. However, these shadows would be occurring during the winter period when minimal use of the park would be expected (the spray shower would not be in use at all). The new shadows would not affect the baseball diamond or the running track but would affect a portion of one tennis court, two basketball courts, and the handball courts. Two of the basketball courts, one of the tennis courts, and approximately three-quarters of the handball court area would experience no new shadows and would therefore remain unaffected by the project. Effects on vegetation would not be considered significant as the new shadows would not be occurring during the growing season.

As with the effects on Leon S. Kaiser Playground, shadows from the proposed buildings on Projected Development Sites 1 and 2 would have minimal effects on the Neptune Avenue Greenstreet. New shadows on December 21 would last for a period of six hours and two minutes and on March 21 they would extend for a period of eight hours and two minutes. Shadows would mainly affect the portion of the Greenstreet between West 28th and West 29th Streets closest to the project site block. As these new shadows would be occurring during the coldest months of the year, it is not anticipated that much public use of the Greenstreet during that period would occur. Effects on vegetation would not be considered significant as the new shadows would not be occurring during the growing season.

Conclusion

Buildings on Projected Development Sites 1 and 2 would only cast new shadows on small portions of Leon S. Kaiser Playground and the Neptune Avenue Greenstreet during the shortest days and coldest period of the year. 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
Height above Lower Floor* 79' 6" 78'
Height above Top Floor* 88' 10" 98'
*Building heights differ from schematic site plan when including Design Flood Elevation. Heights include 3' parapet wall.
Development Sites 3 4 5 6
Height above Lower Floor* – – – 78'
Height above Top Floor* 78' 78' 78' 98'
Baseball Diamond
Running Track
Tennis Courts
Spray Shower
Basketball Courts
Playground
Tennis Courts
Handball Courts
GRAVESEND HOUSES
421.4'
radius = 4.3 x max. building height
Neptune Avenue
West 27th Street
West 26th Street
West 25th Street
West 32nd Street
West 31st Street
West 30th Street
West 29th Street
West 28th Street
Mermaid Avenue
North
Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Roof above Lower Floor
Roof above Top Floor
Existing Buildings Within Projected Development Sites 1 & 2
Longest Shadow Study Area Boundary
Sunlight-sensitive open space resource
Potentially Affected Open Space Resource


Development Sites 1 2
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Playground
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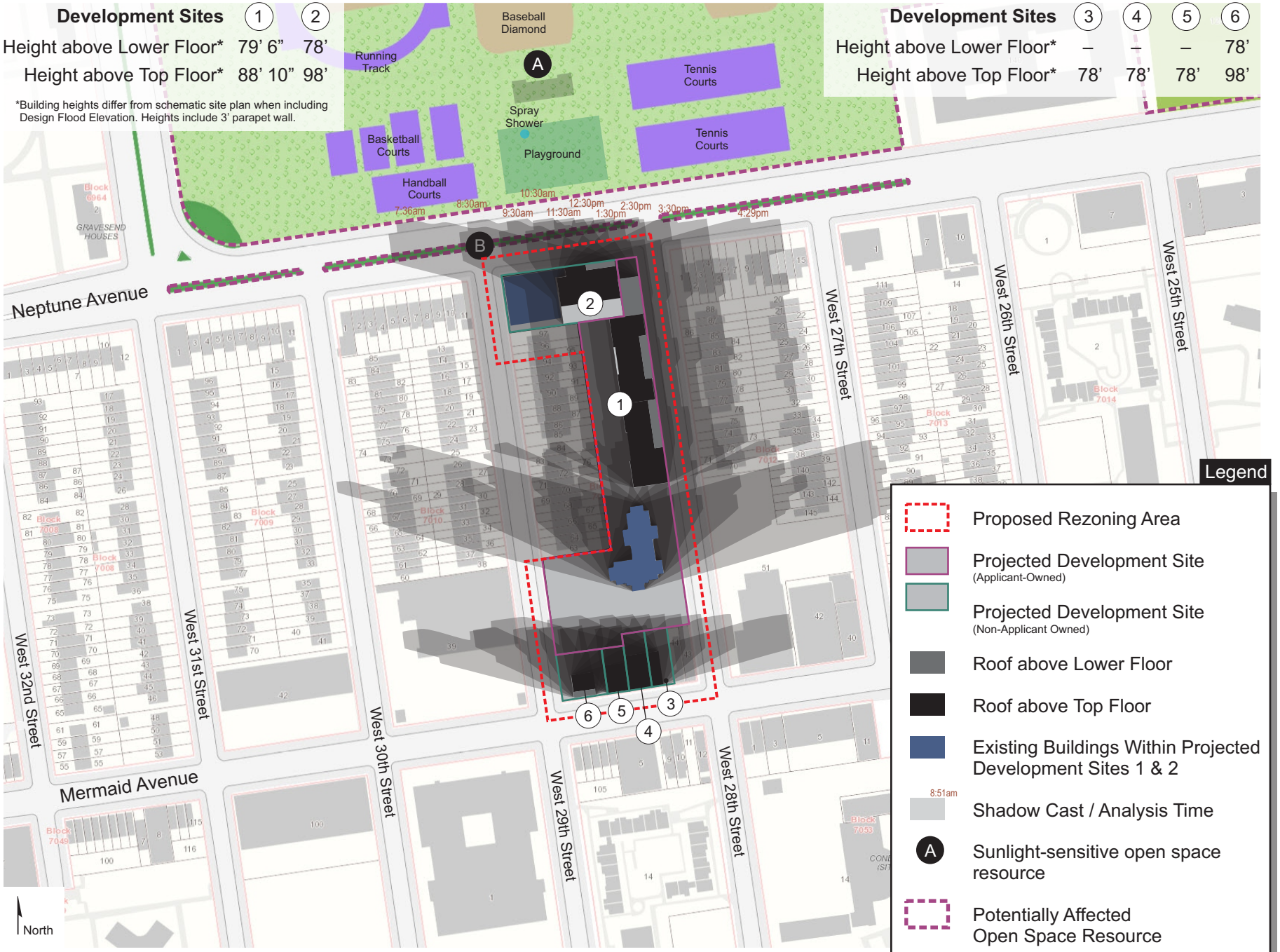
421.4'
radius = 4.3 x max. building height
Neptune Avenue
West 27th Street
West 26th Street
West 25th Street
West 32nd Street
West 31st Street
West 30th Street
West 29th Street
West 28th Street
Mermaid Avenue
-108°
+108°
North
Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Roof above Lower Floor
Roof above Top Floor
Existing Buildings Within Projected Development Sites 1 & 2
Longest Shadow Study Area Boundary
Sunlight-sensitive open space resource
Potentially Affected Open Space Resource
Area that cannot be shaded by the projected new buildings


Development Sites 1 2
Height above Lower Floor* 79' 6" 78'
Height above Top Floor* 88' 10" 98'
*Building heights differ from schematic site plan when including Design Flood Elevation. Heights include 3' parapet wall.
Development Sites 3 4 5 6
Height above Lower Floor* – – – 78'
Height above Top Floor* 78' 78' 78' 98'
Baseball Diamond
Running Track
Tennis Courts
Spray Shower
Basketball Courts
Playground
Handball Courts
Neptune Avenue
Mermaid Avenue
West 25th Street
West 26th Street
West 27th Street
West 28th Street
West 29th Street
West 30th Street
West 31st Street
West 32nd Street
GRAVESEND HOUSES
North
Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Roof above Lower Floor
Roof above Top Floor
Existing Buildings Within Projected Development Sites 1 & 2
Shadow Cast / Analysis Time
Sunlight-sensitive open space resource
Potentially Affected Open Space Resource


Development Sites 1 2
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*Building heights differ from schematic site plan when including Design Flood Elevation. Heights include 3' parapet wall.
Development Sites 3 4 5 6
Height above Lower Floor* – – – 78'
Height above Top Floor* 78' 78' 78' 98'
Baseball Diamond
Running Track
Tennis Courts
Spray Shower
Playground
Basketball Courts
Handball Courts
7:36am
8:30am
9:30am
10:30am
11:30am
12:30pm
1:30pm
2:30pm
3:30pm
4:29pm
GRAVESEND HOUSES
Neptune Avenue
West 32nd Street
West 31st Street
West 30th Street
West 29th Street
West 28th Street
West 27th Street
West 26th Street
West 25th Street
Mermaid Avenue
North
Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Roof above Lower Floor
Roof above Top Floor
Existing Buildings Within Projected Development Sites 1 & 2
8:51am
Shadow Cast / Analysis Time
Sunlight-sensitive open space resource
Potentially Affected Open Space Resource


Development Sites 1 2
Height above Lower Floor* 79' 6" 78'
Height above Top Floor* 88' 10" 98'
*Building heights differ from schematic site plan when including Design Flood Elevation. Heights include 3' parapet wall.
Development Sites 3 4 5 6
Height above Lower Floor* – – – 78'
Height above Top Floor* 78' 78' 78' 98'
Baseball Diamond
Running Track
Tennis Courts
Spray Shower
Playground
Basketball Courts
Handball Courts
GRAVESEND HOUSES
Neptune Avenue
West 27th Street
West 26th Street
West 25th Street
West 32nd Street
West 31st Street
West 30th Street
West 29th Street
West 28th Street
Mermaid Avenue
6:27am
10:30am
3:30pm
4:30pm
5:18pm
North
Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Roof above Lower Floor
Roof above Top Floor
Existing Buildings Within Projected Development Sites 1 & 2
8:51am
Shadow Cast / Analysis Time
Sunlight-sensitive open space resource
Potentially Affected Open Space Resource


Development Sites 1 2
Height above Lower Floor* 79' 6" 78'
Height above Top Floor* 88' 10" 98'
*Building heights differ from schematic site plan when including Design Flood Elevation. Heights include 3' parapet wall.
Development Sites 3 4 5 6
Height above Lower Floor* – – – 78'
Height above Top Floor* 78' 78' 78' 98'
Baseball Diamond
Running Track
Tennis Courts
Spray Shower
Playground
Basketball Courts
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GRAVESEND HOUSES
Neptune Avenue
Mermaid Avenue
West 32nd Street
West 31st Street
West 30th Street
West 29th Street
West 28th Street
West 27th Street
West 26th Street
West 25th Street
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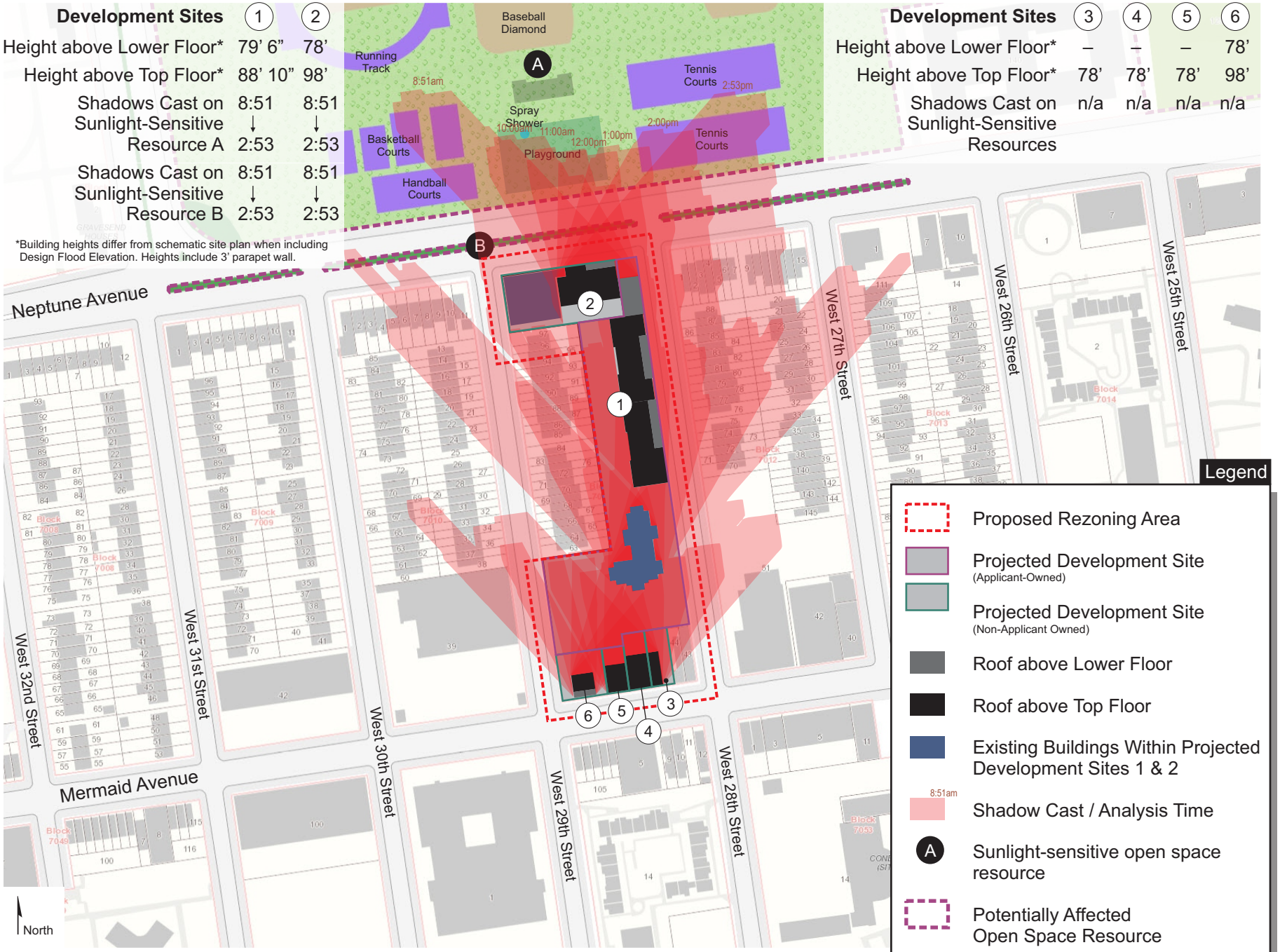
Roof above Lower Floor
Roof above Top Floor
Existing Buildings Within Projected Development Sites 1 & 2
Shadow Cast / Analysis Time
Sunlight-sensitive open space resource
Potentially Affected Open Space Resource

Development Sites	1	2
Height above Lower Floor*	79' 6"	78'
Height above Top Floor*	88' 10"	98'
Shadows Cast on Sunlight-Sensitive Resource A	8:51 ↓ 2:53	8:51 ↓ 2:53
Shadows Cast on Sunlight-Sensitive Resource B	8:51 ↓ 2:53	8:51 ↓ 2:53

Development Sites	3	4	5	6
Height above Lower Floor*	–	–	–	78'
Height above Top Floor*	78'	78'	78'	98'
Shadows Cast on Sunlight-Sensitive Resources	n/a	n/a	n/a	n/a

*Building heights differ from schematic site plan when including Design Flood Elevation. Heights include 3' parapet wall.



Development Sites	1	2
Height above Lower Floor*	79' 6"	78'
Height above Top Floor*	88' 10"	98'
Shadows Cast on Sunlight-Sensitive Resource A	n/a	n/a
Shadows Cast on Sunlight-Sensitive Resource B	7:36 ↓ 3:38	n/a

Development Sites	3	4	5	6
Height above Lower Floor*	–	–	–	78'
Height above Top Floor*	78'	78'	78'	98'
Shadows Cast on Sunlight-Sensitive Resources	n/a	n/a	n/a	n/a

*Building heights differ from schematic site plan when including Design Flood Elevation. Heights include 3' parapet wall.

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 Applicant is seeking a zoning map amendment that would rezone a portion of Block 7011 in Brooklyn Community District 13 from the existing R5 and R5/C1-2 zoning districts to a mixture of R5, R6, R6A, and R7A/C2-4 zoning districts. The Proposed Rezoning Area comprises Block 7011, Lots 1, 11, 43-47, 49, 51-54, 95 (part of), 96, and 97 which occupy the West 28th Street and the Neptune and Mermaid Avenue frontages of the block. The rezoning proposes to eliminate a C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of), 96, and 97 while retaining the underlying R5 zoning on these parcels. The Applicant is also proposing a zoning text amendment to Zoning Resolution (ZR) Section 23-933 Appendix F to establish a Mandatory Inclusionary Housing (MIH) area over the Rezoning Area (with the exception of Block 7011, Lots 95 (part of), 96, and 97).

The Rezoning Area is not a Federal, State, or New York City designated Historic District and does not contain any individually designated historic resources. In a letter dated August 17, 2017, LPC stated that there are no historic resources associated with the project site (Projected Development Site 1) or with Projected Development Sites 2, 3, 4, 5, or 6. As such, a historic architectural analysis is not warranted for the Proposed Actions. (See LPC determination in the Historic and Cultural Resources Appendix.)

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. While the Proposed Actions are expected to cause additional in-ground disturbance, LPC stated in a letter dated August 17, 2017, that there are no archaeological resources associated with the project site (Projected Development Site 1) or with Projected Development Sites 2, 3, 4, 5, or 6. As such, an archaeological analysis is not warranted for the Proposed Actions. (See LPC determination in Historic/Cultural Resources Appendix.)

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 Map Change to Sectional Map # 28d - Rezoning of the Proposed Development Site (Block 7011, Lot 11) from its existing R5 and R5/C1-2 zoning to the proposed R6, R6A and R7A/C2-4 zoning. Rezoning of the Non-Applicant owned sites (Block 7011, Lots 1, 43-47, 49, and 51-54) from their existing R5/C1-2 zoning to the proposed R6/C2-4 and R7A/C2-4 zoning. The rezoning proposes to eliminate a C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of[7]), 96, and 97 while retaining the underlying R5 zoning on these parcels.

(2) A Zoning Text Amendment - Modify ZR §23-933, Appendix F to designate the newly mapped R6, R6A and R7A/C2-4 districts as a Mandatory Inclusionary Housing area.

The maximum amount of floor area that would be permitted in the 136,825-square foot Rezoning Area in the future under the existing zoning is up to 171,031 zoning square feet of residential space, up to 273,650 square feet of community facility space, and up to 21,292 of commercial space. However, in the Future Without the Action it is not anticipated that any new development would occur in the Rezoning Area as the sites are generally built close to or in excess of the permitted commercial and residential FAR under the existing R5 and R5/C1-2 zoning. While additional community facility FAR remains for Lot 1, it is not anticipated that the existing church on this site has a need or desire to expand. Therefore, in the future without the action development in the Rezoning Area would be the same as existing conditions and would include 127,783 gsf of residential space for 144 dwelling units, 16,271 gsf of commercial space, 12,587 gsf of community facility space, and 78 accessory parking spaces plus a 6,100 gsf vacant

[7] The existing C1-2 commercial overlay within the Rezoning Area measures 150 feet in depth as measured from Neptune Avenue along West 29th Street. Proceeding south along West 29th Street, Lot 1 is 100' deep; Lot 97 is 24' deep; Lot 96 is 14' deep; and Lot 95 is 14' deep. Adding these numbers results in a total depth of 152'. Therefore, a 2' by 118.81' area of Lot 95, the southernmost of the four lots, is not included in the existing C1-2 commercial overlay area proposed to be eliminated.

building comprised of 4,575 gsf of vacant residential floor area for 3 dwelling units and 1,525 gsf of vacant commercial space.

The maximum amount of floor area that would be permitted in the 136,825-square foot Rezoning Area in the future under the proposed zoning with the MIH program would be as follows. These calculations are based on 47,524 square feet of land area in the proposed R6 zoning district; 35,643 square feet of land area in the proposed R6A zoning district; 47,524 square feet of land area in the proposed R7A/C2-4 zoning district; and 5,941 square feet of land area in the current R5 district from which the existing C1-2 commercial overlay is proposed to be removed (the MIH program would not apply to the R5 zoned lots)[8]. The maximum zoning floor area of development would be up to 469,358 zoning square feet of residential floor area, up to 95,048 square feet of commercial space, or up to 565,536 square feet of community facility space.

In the Future With the Action, the six Projected Development Sites would be developed with seven existing and proposed buildings and additions to existing buildings containing 383,104 gsf of residential space for 452 dwelling units (including 334 affordable and 118 market rate units), 23,488 gsf of commercial space, 12,587 gsf of community facility space, and 151 accessory parking spaces. The increment between the No-Action and With-Action development scenarios would be 269,103 gsf of additional residential space for 320 new dwelling units based on an average size of 836 gsf per dwelling unit (including 218 affordable and 102 market rate units), 10,724 gsf of additional commercial space, and 73 new accessory parking spaces. In order to allow for the proposed development, one existing vacant building on Block 7011, Lot 45 would be demolished. The building totals 6,100 gsf in size and contains 4,575 gsf of vacant residential space (3 vacant DUs) and 1,525 gsf of vacant retail space. 78 accessory parking spaces would also be removed on Block 7011, Lots 1 and 11. These loses are reflected in the increment numbers above. The projected developments would have a range of heights between 70 and 95 feet.

Therefore, based on a comparison of the Future No-Action and Future With-Action scenarios, the requested rezoning would facilitate the development in the Rezoning Area of 320 additional dwelling units, 10,467 gsf of new local retail space, and 73 accessory parking spaces. The proposed action would also permit the modification of the existing yard, height, and setback requirements of the lots within the Rezoning Area and introduce new buildings with greater height. A preliminary urban design assessment is therefore required.

[8] Note that the 136,632 sf sum of the individual areas by zone is 193 sf or 0.1% less than the total 136,825 sf Rezoning Area due to rounding of area measurements.

Preliminary Assessment

Existing Conditions

Rezoning Area

The Rezoning Area consists of the majority of Block 7011 located between West 28th Street, West 29th Street, Neptune Avenue, and Mermaid Avenue in the Coney Island neighborhood of Brooklyn. The Rezoning Areas comprises the majority of the block including its entire West 28th Street and Neptune and Mermaid Avenue frontages. Neptune and Mermaid Avenues are two-way east-west running streets. West 28th Street is a one-lane roadway running south and the one-lane West 29th Street runs north. The Rezoning Area consists of approximately 136,825 square feet of land area. Existing development in the Rezoning Area is as follows:

Projected Development Site 1 - a 15-story, approximately 102,000 gsf residential building including 122 dwelling units (116 low- income and 6 market rate units), 43 accessory at-grade parking spaces, and two outdoor recreational areas.

Projected Development Site 2 - a 1-story, approximately 8,712 gsf church with 35 accessory at-grade parking spaces.

Projected Development Site 3 - a 3-story, approximately 3,541 gsf mixed-use building containing 2 residential dwelling units and 1 ground floor retail store, and a vacant 4-story, approximately 6,100 gsf mixed-use building that previously contained 3 residential dwelling units and 1 ground floor retail store.

Projected Development Site 4 - a 2-story, approximately 7,751 gsf mixed-use commercial/community facility building containing 1 ground floor retail store and a community center on the second floor.

Projected Development Site 5 - a 1-story, approximately 3,146 gsf commercial building containing 1 ground floor retail store.

Projected Development Site 6 - four 3-story mixed-use buildings totaling approximately 14,459 gsf containing a total of 8 residential dwelling units and 4 ground floor retail stores.

Remaining development in the Rezoning Area consist of a 4-story, approximately 6,200 gsf mixed-use building containing 6 residential dwelling units and 2 ground floor retail stores; a 4-story, approximately 6,800 gsf mixed-use building containing 3 residential dwelling units and 1 ground floor retail store; a 3-story, approximately 3,541 gsf mixed-use building containing 2 residential dwelling units and 1 ground floor retail store; a 3-story, approximately 3,836 gsf mixed-use building containing 2 residential dwelling units and 1 ground floor retail store; and three 2-story, approximately 1,344 square foot single-family residences.

400-Foot Radius Project Study Area

The six Projected Development Sites and the other lots in the Rezoning Area discussed above occupy the bulk of the block on which they are located, Block 7011. The remaining uses on the block consist of rows of attached and semi-detached one- and two-family dwellings occupying the middle portion of the block fronting on 29th Street.

The project study area to the east of the Rezoning Area across 28th Street on Block 7012 is developed with rows of attached and semi-detached one- and two-family dwellings along the Neptune Avenue frontage of the block and along the northern one-half to two-thirds of the West 27th and West 28th Street frontages of the block. The Mermaid Avenue frontage of the block continuing partially to the north along the West 27th and West 28th Street frontages of the block is occupied by community facility and commercial uses including a post office, a church, a medical office, and a retail store. Continuing across West 27th Street, the West 27th Street frontage of Block 7013 is primarily occupied by rows of attached and semi-detached one- and two-family dwellings. A parking garage is located at the corner of Neptune Avenue and West 27th Street.

The project study area to the west of the Rezoning Area across 29th Street on Block 7010 is developed with rows of attached and semi-detached one- and two-family dwellings along the Neptune Avenue frontage of the block and along the northern two-thirds of the West 29th and West 30th Street frontages of the block. The Mermaid Avenue frontage of the block continuing partially to the north along the West 29th and West 30th Street frontages of the block is occupied by commercial uses including a supermarket and accessory parking lot. Continuing across West 30th Street, the West 30th Street frontage of Block 7009 is primarily occupied by rows of attached and semi-detached one- and two-family dwellings. A retail strip mall and accessory parking lot is located along the Mermaid Avenue frontage of the block.

The project study area to the north of the Rezoning Area across Neptune Avenue on Block 6965 consists of a portion of Leon S. Kaiser playground and the Neptune Avenue Greenstreet.

The project study area to the south of the Rezoning Area across Mermaid Avenue contains portions of four blocks. Proceeding east to west, the northwest corner of Block 7053 at West 28th Street is developed with a row of retail stores and a multi-story public housing complex with an accessory parking area and playground. The northern end of Block 7052 between West 28th and West 29th Streets is developed with a row of attached one- and two-family dwellings, two churches, two small multi-family dwellings, and a small parking lot. The northern end of Block 7051 between West 29th and West 30th Streets is developed with a public elementary school (P.S. 329). The northeast corner of Block 7050 contains part of a retail strip.

Visual resources in the vicinity of the Rezoning Area include a portion of 26.26-acre Leon S. Kaiser playground and the Neptune Area Greenstreet across Neptune Avenue from the Area.

An aerial photograph of the project study area and ground level photographs of the Rezoning 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

Rezoning Area

As stated above, in the Future Without the Action it is not anticipated that any new development would occur in the Rezoning Area. Lots in the Rezoning Area are generally built close to or in excess of the permitted commercial and residential FAR under the existing R5 and R5/C1-2 zoning. While additional community facility FAR remains for Lot 1, it is not anticipated that the existing church on this site has a need or desire to expand.

The future No-Action Development Scenario in the Rezoning Area would be the same as the existing condition discussed in the previous section. The existing residential, commercial, and community facility uses, open space, and parking areas would remain as they currently exist. Therefore, no changes would occur to the existing urban design and visual character of the Rezoning Area.

400-Foot Radius Project Study Area

No new development projects are identified for the 400-foot radius project study area based on a review of DCP's LUCATS for Brooklyn Community District 13. No development plans are known to exist within the project study area as identified above by the project build year of 2020.

Therefore, surrounding land uses within the immediate study area are expected to remain largely unchanged by the project build year of 2020. The 400-foot area surrounding the project site is developed with a stable mixed-use community containing residential one-, two-, and multi-family residences, community facilities, retail facilities, and open space. Few undeveloped parcels remain within the project study area and it is therefore anticipated that no significant new development would occur within this area by 2020. 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 Leon S. Kaiser playground and the Neptune Avenue Greenstreet would still be available from the streets bordering the Rezoning 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 Projected Development Site 1 would result in a denser development on the property as compared to the future Existing/No-Action Development Scenario. The Applicant owned lot would be subdivided into zoning lots A and B. Zoning lot A would be 49,952.4 square feet in size and zoning lot B would be 39,404.21 square feet in area. The existing 15-story building on the site, comprised of 102,000 gsf of floor area and containing 122 dwelling units, would be located on Lot 11 A. The existing parking lot on Lot 11 would be moved from its current location east of the existing building to the west of the existing building and it would contain 45 parking spaces compared with the existing 43 spaces. In addition, the easternmost recreational area on the lot would be removed and the northern recreational area would be reconfigured and decreased in size in order to accommodate the new parking lot and the subdivision of the lot needed to accommodate the proposed project.

Under the RWCDS, the new zoning lot, Lot 11 B, would be developed with two 8-story residential buildings totaling 160,770 gsf in size including 192 affordable dwelling units (based on the average unit size in the existing residential building on Block 7011, Lot 11 of 836 gsf per dwelling unit) built consistent with the standards of the Quality Housing Program, 68 accessory at-grade and garage attended parking spaces, and two outdoor recreational areas. Under ZQA, parking would not be required for any of the proposed dwelling units, which would all be considered affordable. Nevertheless, the area of the building and the lot dedicated to parking cannot be used to provide additional residential space and it was therefore determined to provide parking in accordance with ZR Section 25-25 which governs parking requirements for government assisted housing. ZR Section 25-25 requires parking for 25% of such dwelling units in the R6A district and for 15% of these units in the R7A district.

New development is also projected to occur on five of the Non-Applicant controlled sites in the Rezoning Area, Projected Development Sites 2 through 6 as follows.

The 20,000-square foot Projected Development Site 2 developed with an approximately 8,712 square foot church and 35 parking spaces would be developed with a new 9-story, 95', 75,750 gsf structure containing 7,680 gsf of ground floor commercial space and 58,090 gsf of residential floor area primarily on the upper eight floors of the building for the creation of approximately 69 dwelling units (at 836 square feet per unit), including 14 affordable and 55 market rate units. 38 cellar level parking spaces would be provided including 2 spaces for the affordable units, 28 spaces for the market rate units, and 8 spaces for the commercial floor area. The existing 8,712 square foot church would remain and the new building would be constructed adjacent to it. The existing at-grade parking for the church would be removed to accommodate the construction of the new building (no parking is required for the church pursuant to zoning). Approximately 400 square feet of common recreational space would also be provided. The new building would be constructed at the maximum building height of 95 feet.

The 3,967-square foot Projected Development Site 3 developed with an approximately 3,541 square foot mixed-use residential/commercial building and a 6,100 square foot vacant building could be developed with approximately 15 market dwelling units including 3 affordable and 12 market rate units (in addition to the two existing dwelling units that would remain) in a 7-story, 75' tall building. No parking would be provided.

The 3,887-square foot lot Projected Development Site 4 developed with an approximately 7,751 square foot mixed-use commercial/ community facility building could be developed with approximately 12 dwelling units, including 2 affordable and 10 market rate units, in a 7-story, 75' tall building. No parking would be provided.

The 3,146-square foot lot Projected Development Site 5 developed with an approximately 3,146 square foot commercial building could be developed with approximately 14 dwelling units, including 3 affordable and 11 market rate units, in a 7-story, 75' tall building. No parking would be provided.

The 6,292-square foot Projected Development Site 6 is developed with three 3,541 square foot and one 3,836 square foot mixed-use residential/commercial buildings. Under the Proposed Actions it is assumed that the existing development on the four merged lots would be enlarged with a vertical addition and the property would be developed with approximately 24,992 square feet of residential floor areas for 26 dwelling units, including 4 affordable and 22 market rate units and approximately 4,819 square feet of commercial space in a 9-story, 95' tall building. 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 320 dwelling units, 218 of which would be affordable, 10,467 gsf of new local retail space, and 73 accessory parking spaces. An existing 6,100 gsf vacant building would be demolished.

With the exception of the existing 15-story, 122 dwelling units building on Projected Development Site 1, the With-Action development would change the primarily low-density residential and mixed-use character of the Rezoning Area to a higher density community with a significantly greater number of residential dwelling units. 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 7- to 9-stories. The existing buildings in the Rezoning Area are one- to four-stories in height with the exception of the existing 15-story on Projected Development Site 1. Most of the 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

Item	Existing Conditions	No-Action Conditions	With-Action Conditions
Development Scenario	10 ground floor retail stores (16,271 gsf); 8,712 gsf church; 3,875 gsf community center; 122 multi-family DUs in one bldg; 22 DUs in one-, two, and multi-family bldgs; 78 accessory parking spaces; vacant building (6,100 gsf)	10 ground floor retail stores (16,271 gsf); 8,712 gsf church; 3,875 gsf community center; 122 multi-family DUs in one bldg; 22 DUs in one-, two, and multi-family bldgs; 78 accessory parking spaces; vacant building (6,100 gsf)	New bldgs & bldgs to be enlarged: 452 DUs in 8 bldgs; 23,488 gsf retail in 5 bldgs; 8,712 gsf church (existing); 3,875 gsf community center; 151 accessory parking spaces. Lots to remain unchanged: 9 DUs in 8 bldgs; 6 ground floor retail stores.
Building Floor Area	162,741 sf	162,741 sf	Projected Development Sites 1-6: 429,151 gsf. Lots to remain unchanged: 30,214 gsf.
Lot Coverage	Lot 1-44%; Lot 11 -20%; remaining lots between 55% & 100%	Lot 1-44%; Lot 11 -20%; remaining lots between 55% & 100%	Lot 1-78%; Lot 11A-35%; Lot 11B -57%; remaining lots between 65% & 100%. Lots to remain unchanged: between 55% & 100%.
Building Heights	One 15-story bldg; two 1-story bldgs; four 2-story bldgs; five 3-story bldgs; three 4-story bldgs	One 15-story bldg; two 1-story bldgs; four 2-story bldgs; five 3-story bldgs; three 4-story bldgs	Projected Development Sites 1-6: One 15-story bldg; two 8-story bldgs; three 7-story bldgs; two 9-story bldgs.; one 1-story bldg. Lots to remain unchanged: three 2-story bldgs; two 3-story bldgs; three 4-story bldgs

Conclusion

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

The mapping of the proposed R5, R6, R6A, and R7A/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 amendments is to provide sufficient floor area to accommodate the existing building on the Proposed Development Site as well as the proposed new buildings in a complying manner. Currently, the existing building on the Site is complying, with its 102,000 square feet of floor area on the 89,357-square foot lot resulting in an FAR of 1.14 (1.25 FAR is permitted). If it remained zoned R5 then only 9,696 additional square feet of zoning floor area would be permitted on the lot (total of

111,696 zsf). Accordingly, splitting Lot 11 into two zoning lots would cause the new Lot A to be non-complying in floor area. Thus, the up zoning from R5 to R6 is being requested. Similarly, for the new zoning lot B, the existing R5 zoning is not sufficient to accommodate the proposed floor area of the two new buildings. An R5 zone would only allow 49,626 zsf of floor area while the two buildings proposed for zoning lot B contain 141,601.5 zsf of floor area. Further, even if the entire zoning lot B were up zoned entirely to R6A, the district would not allow sufficient FAR to accommodate the floor area of the proposed building. This is reason that the 100-foot portion of zoning lot B fronting on Neptune Avenue is proposed to be rezoned to R7A. The proposed zoning map amendments would allow for sufficient floor area on both portions of the zoning lot to be in compliance with zoning. 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.

Block 7011, Lots 95 (part of), 96, and 97 are currently located within the 150-foot deep C1-2 commercial overlay but would not be located within the proposed 100-foot deep C2-4 commercial overlay. These three small parcels are developed with single-family homes and do not contain any commercial uses. It is therefore proposed to remove the existing C1-2 commercial overlay mapped on Block 7011, Lots 95 (part of), 96, and 97 while retaining their underlying R5 residential zoning.

The With-Action Development Scenario would not result in any significant impacts to the visual resources in the vicinity of the Rezoning Area site. Views to Leon S. and the Neptune Avenue Greenstreet playground would still be available from the streets bordering the Rezoning Area.

The proposed action 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 rezoning would represent a visual improvement to the area. A detailed urban design analysis would not be required.


Legend
Projected Development Site (Applicant-owned)
Projected Development Site (Non-applicant-owned)
Proposed Rezoning Area
Zoning Boundaries
Proposed C2-4 Commercial Overlay
R6A Proposed Zoning District
400 Feet
Kaiser Playground
NEPTUNE AV
R7A
R6A
R6
Projected Development Site 1
Projected Development Site 2
Projected Development Site 3
Projected Development Site 4
Projected Development Site 5
Projected Development Site 6
W 23 ST
W 24 ST
W 25 ST
W 27 ST
W 28 ST
W 29 ST
W 30 ST
W 31 ST
W 32 ST
W 33 ST
MERMAID AV
North
0
200
400
600 Feet

1. View of West 29th Street facing south.

2. View of sidewalk along the east side of West 29th Street facing south.

3. View of the side of West 29th Street facing northeast.

4. View of the sidewalk along the east side of West 29th Street facing north.

5. View of Mermaid Avenue facing east from West 29th Street.

6. View of West 29th Street facing north.

7. View of the side of Mermaid Avenue facing north.

8. View of the sidewalk along the north side of Mermaid Avenue facing east.

9. View of the sidewalk along the north side of Mermaid Avenue facing west.

10. View of the side of Mermaid Avenue facing southeast.

11. View of the side of Mermaid Avenue facing southwest.

12. View of the intersection of Mermaid Avenue and West 28th Street facing northwest.

13. View of West 28th Street facing north.

14. View of Mermaid Avenue facing west from West 28th Street.

15. View of the sidewalk along the west side of West 28th Street facing north.

16. View of the side of West 28th Street facing northwest.

17. View of the side of West 28th Street facing southwest.

18. View of the Site facing northwest from West 28th Street.

19. View of the side of West 28th Street facing southeast.

20. View of the side of West 28th Street facing northeast.

21. View of the side of West 28th Street facing southeast from the Site.

22. View of the Site facing west from West 28th Street.

23. View of the Site facing southwest from West 28th Street.

24. View of the Site facing northwest from West 28th Street.

25. View of the side of West 28th Street facing east from the Site.

26. View of the side of West 28th Street facing southeast from the Site.

27. View of the side of West 28th Street facing northeast from the Site.

28. View of the Site facing east from West 28th Street.

29. View of the Site facing southwest from West 28th Street.

30. View of the Site facing northwest from West 28th Street.

31. View of the sidewalk along the west side of West 28th Street facing south (Site at right).

33. View of the sidewalk along the south side of Neptune Avenue facing east.

32. View of the sidewalk along the south side of Neptune Avenue facing west (Site at left).

34. View of Neptune Avenue facing east.

35. View of the side of Neptune Avenue facing southeast.

36. View of West 28th Street facing south from Neptune Avenue (Site at right).

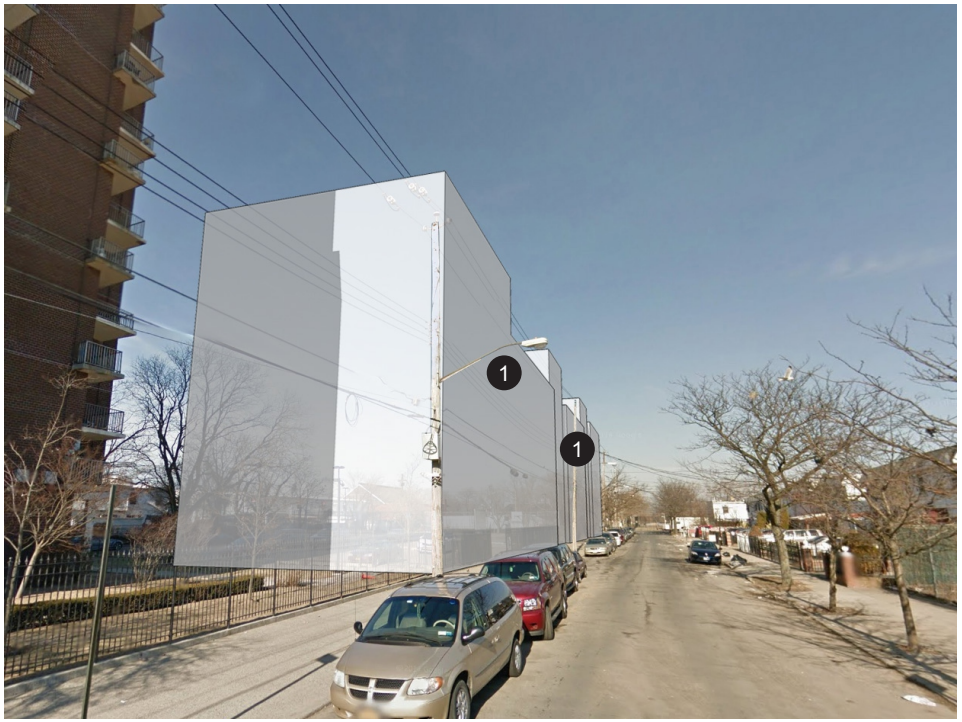
37. View of the Site facing southwest from the intersection of Neptune Avenue and West 28th Street.

38. View of Neptune Avenue facing west (Site at left).

West 28th Street facing north (Site at left)

Existing Site and Context

West 28th Street facing north (Site at left)



Proposed Project
- Projected Development Site 1

Neptune Avenue & West 28th Street facing southwest (Site ahead)

Existing Site and Context

Neptune Avenue & West 28th Street facing southwest (Site ahead)

Proposed Project
- Projected Development Sites 1 & 2

Neptune Avenue facing east (Site at right)

Existing Site and Context

Neptune Avenue facing east (Site at right)

Proposed Project
- Projected Development Site 2

Mermaid Avenue facing west (Site at right)

Existing Site and Context

Mermaid Avenue facing west (Site at right)

Proposed Project
- Projected Development Sites 3, 4, 5 & 6

12. HAZARDOUS MATERIALS

Projected Development Site 1

Introduction

EPDSCO, Inc. has performed a Phase I Environmental Site Assessment (ESA) of the Proposed Development Site located at 2828 West 28th Street (Block 7011, Lot 11), in the Borough of Brooklyn, New York City, New York. The ESA was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13). The ESA was prepared in February 2016.

The purpose of this ESA is to identify, to the extent feasible in accordance with ASTM E 1527-13, recognized environmental conditions in connection with the site with regard to hazardous materials as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. Additionally, several ASTM "Non-Scope" items including asbestos-containing materials, lead-based paints, and radon are also discussed. Recognized Environmental Conditions are identified through research into the history and uses of the site and surrounding area, an inspection of the subject property and a survey of adjoining and nearby uses, and a review of available regulatory agency records and environmental databases.

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

Phase I ESA

The subject property at 2828 West 28th Street, is approximately 89,357 square feet in area and occupies roughly 50 percent of the project block. The lot contains frontage along Neptune Avenue, West 28th Street and West 29th Street. There is a 15-story (on slab), 102,000+/- square foot residential apartment building located on the southeast portion of the site. This building contains 122 dwelling units, a community room, boiler room, utility rooms and general storage areas. Heat and hot water for the building are provided by two dual-fired (i.e., fuel oil and natural gas) boilers located on the first floor.

Exterior portions of the site consist of an asphalt-paved parking area for 43 cars located immediately north of the building, and two recreation areas. The recreation areas consist of a playground located on the southwest portion of the site, a basketball and handball court north of the parking area, and neatly landscaped, grass-covered areas on the southwest and northeast portions of the site.

No operations involving the storage or use of hazardous materials were observed at the property during the site visit. In addition, no visible indications of the past on-site storage or use of hazardous materials were found, such as chemical/oil stained surfaces, discarded drums or chemical containers, dead or dying vegetation, etc.

Research into the history of the property indicates that the site was undeveloped land with no identified operations or uses on the 1906 Sanborn map. Sometime between 1906 and 1927, the site was developed with numerous 1- and 2-story residential dwellings (approximately 37), and one 2-story retail store. These structures occupied the site until their demolition in 1970. The site has been occupied by the existing 15-story building and associated recreation areas since that time. There were not any former operations which typically involve the storage or use of hazardous materials identified at the project site. Given the identified former uses of the site, it is considered unlikely that they would have impacted the property.

Typical lavatory drains such as sinks and toilets were observed in the building. In addition, typical storm water drains were found in exterior areas of the site. The drainage destination of the structures observed at the site is not known; however, it is likely that they discharge to the municipal combined sewer system. No chemical/oil staining or other visible indications of past discharges of hazardous materials or petroleum products were observed around any of the drainage structures at the site.

Given the age of the subject building (constructed in 1971), it is possible that it contains asbestos building materials and lead-based paints. However, and according to New York City Department of Buildings (NYCDOB) records, the building was extensively renovated in 2005. As part of the renovations, the lobbies, apartments, kitchens, baths, finishes, windows and existing roof were replaced. In addition, the boilers were replaced in 2012 after the existing boilers were destroyed during flooding from Hurricane Sandy. No suspected asbestos-containing materials were observed in the portions of the building viewed during the site visit. Painted surfaces in the building were observed to be in good condition with no areas of chipped or peeling paint noted. Therefore, it is considered unlikely that the building would contain significant quantities of asbestos building materials or lead-based paints.

There is currently a 7,098-gallon aboveground fuel oil tank in service at the project site. This tank, which was installed in 2005, is located in a tank room outside the west wall of the building. No staining, petroleum odors or other indications of past fuel oil spills or leaks were observed around this tank.

According to NYCDOB and New York State Department of Environmental Conservation (NYSDEC) records, there is a 10,000-gallon, underground, steel fuel oil tank at the site. This tank was installed in 1973 and was closed in place in 2005. This tank reportedly passed a tightness test in 1998. No tank closure documentation, tank tightness testing results or other documentation such as soil or groundwater sampling results from around the tank, were found in the information reviewed for this report. Any past fuel oil spills or leaks from this tank would be a potential source of contamination to the project site.

The project site is identified in the NYSDEC Petroleum Bulk Storage database. The site does not appear in the other 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, or the Registry of Inactive Hazardous Waste Disposal Sites.

There were not any potential off-site sources of contamination, which are considered likely to have impacted the environmental condition of the property, identified in the regulatory agency database information reviewed.

Conclusions

EPDSCO has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of 2828 West 28th Street, Brooklyn, N.Y., the property. This assessment has revealed no evidence of recognized environmental conditions in connection with the property with the following exception:

- The potential for site contamination from past fuel oil spills or leaks from a buried 10,000-gallon fuel oil tank at the site.

NYC Department of Environmental Protection Review

The NYC Department of Environmental Protection (DEP) has reviewed the Phase I report to determine if any further analysis or remediation is required. In an e-mail from DEP to DCP dated May 17, 2017, DEP requested a Phase II workplan due to the potential for site contamination from past fuel oil spills and/or leaks.

In lieu of a Phase II workplan, 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-447) will be assigned for hazardous materials on the following property:

Block 7011, Lot 11

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

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

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

With this (E) designation 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 6

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-447) will be assigned for hazardous materials on the following properties:

Block 7011, Lots 1, 45/46, 47, 49, and 51-54

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

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

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

With this (E) designation 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 6.

13. WATER AND SEWER INFRASTRUCTURE

Introduction

A waste water and storm water infrastructure analysis is required for the proposed project because the Rezoning Area is located in a separately sewered area and would exceed the *CEQR Technical Manual* threshold of 50 residential units in an existing R5 zone. The Proposed Actions would result in the development of a net increase of approximately 303 dwelling units on the six Projected Development Sites within the Rezoning 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 Rezoning Area is not located in an area that experiences low water pressure (such as areas at the end of the water supply distribution system).

Sanitary Sewage and Storm Water

The existing development on the six Projected Development Sites consists of 132 dwelling units, 13,021 gsf of local retail space, and 12,587 gsf of community facility 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 six Projected Development Sites would generate 39,484 gallons per day (gpd) of sanitary sewage as shown in Table 13-1 below.

Table 13-1

Existing Sanitary Sewage Generation

Use	Rate Factor	Sewage Generation Amount
Residential	100 gpd/person x 351 persons*	35,100 gpd
Retail Stores	0.24 gpd/sf (13,021 sf)	3,125 gpd
Community Facility (office)	0.10 gpd/sf (12,587 sf)	1,259 gpd
TOTAL		**39,484 gpd**

* Based on average household size of 2.66 persons

The proposed project would result in the development in the Rezoning Area of a net increase of 320 dwelling units and 10,467 gsf of new local retail 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 project would generate 82,189 gallons per day (gpd) of sanitary sewage as shown in the table below.

Table 13-2
Project Sanitary Sewage Generation

Use	Rate Factor	Sewage Generation Amount
Residential	100 gpd/person x 851 persons*	85,100 gpd
Retail Stores	0.24 gpd/sf (10,467 sf)	2,512 gpd
TOTAL		**87,612 gpd**

* Based on average household size of 2.66 persons

Table 13-3 below presents the existing surface area conditions on the six Projected Development Sites.

Table 13-3
Existing Surface Area Conditions

Projected Development Site	Lot Area (SF)	Roof Area	Pavement & Walkways	Grass & Softscape
1	89,357	8,039	60,299	21,019
2	20,000	8,712	11,288	0
3	3,967	3,573	394	0
4	3,887	3,887	0	0
5	3,146	3,146	0	0
6	6,292	6,292	0	0
TOTAL	**126,649**	**33,649**	**71,981**	**21,019**

Table 13-4 below presents the proposed surface area conditions on the six Projected Development Sites.

Table 13-4
Proposed Surface Area Conditions

Projected Development Site	Lot Area	Roof Area	Pavement & Walkways	Grass & Softscape
1	89,357	28,594	43,617	17,146
2	20,000	15,666	4,334	0
3	3,967	3,573	394	0
4	3,887	3,887	0	0
5	3,146	3,146	0	0
6	6,292	6,292	0	0
TOTAL	**126,649**	**61,158**	**48,345**	**17,146**

The Rezoning Area is located in a separately sewered area. The attached matrix table presents the sanitary and stormwater drainage generation characteristics of the existing and proposed developments on the combined six 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 a 24" sanitary sewer located in the bed of West 28th Street adjacent to the property. In addition to these sewer lines, other sewer lines in the streets adjoining the Rezoning Area include existing 12" and 24" sanitary sewer lines in the bed of Neptune Avenue, which would be likely to service Projected Development Site 2, and a sanitary sewer line (dimension unknown) in the bed of West 29th Street. It is likely that sanitary and/or storm sewer lines are also located in the bed of Mermaid Avenue at the southern end of the Rezoning Area and these lines would likely service Projected Development Sites 3 through 6. See Site Survey included in Infrastructure Appendix. 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 somewhat greater than current flows as additional impervious surfaces for buildings, pavement, etc. would be constructed on the six Projected Development Sites. The NYC Department of Environmental Protection (DEP) will determine whether the projected increased flows would be considered significant.

NYC Department of Environmental Protection Review

The NYC Department of Environmental Protection (DEP) has reviewed the above infrastructure analysis, and in a memorandum dated June 13, 2017 states the following (see Infrastructure Appendix):

> The proposed rezoning results in an increase of 86% for the sanitary flow in the adjacent sewers. 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 will be a need to amend the existing drainage plan.

Conclusion

The proposed actions would not result in significant impacts on water supply since the projected developments are not anticipated to yield an exceptionally large demand in water. Additionally, the rezoning area is not within an area that experiences low water pressure. Based on the sewage generation factors provided in the *CEQR Technical Manual*, future development in the rezoning area could result in 87,612 gpd of sanitary sewage compared to the existing sanitary sewage generation of 39,484 gsf. While the proposed rezoning would cause 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 rezoning would result in significant adverse impacts. No significant adverse impacts to the water and sewer infrastructure are therefore anticipated.

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 Rezoning Area or the design capacity of the Coney Island WWTP. No significant adverse impacts to the water and sewer infrastructure would be anticipated.

COMPARISON OF EXISTING AND WITH-ACTION VOLUME

CSO SUBCATCHMENT AREA:[1]

EXISTING

		Area = 121,503 SF (2.79 ACRES)								
		SITES 1-6								SITES 1-6
RAINFALL VOLUME (in)	RAINFALL DURATION (hr)[3]	RUNOFF VOLUME DIRECT DRAINAGE (MG)[4]	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	0.02	0.01	0.03	0.00	0.00	0.00	0.00	0.03
1.20	11.30	0.00	0.07	0.02	0.09	0.00	0.00	0.00	0.00	0.09
2.50	19.50	0.00	0.15	0.03	0.18	0.00	0.00	0.00	0.00	0.18

With-Action

		Area = 121,503 SF (2.79 ACRES)								
		SITES 1-6								SITES 1-6
RAINFALL VOLUME (in)	RAINFALL DURATION (hr)[3]	RUNOFF VOLUME DIRECT DRAINAGE (MG)[4]	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	0.03	0.01	0.04	0.00	0.00	0.00	0.00	0.04
1.20	11.30	0.00	0.08	0.04	0.12	0.00	0.00	0.00	0.00	0.12
2.50	19.50	0.00	0.16	0.07	0.23	0.00	0.00	0.00	0.00	0.23

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

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

[3] 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).

[4] 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.

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 Site

The project site is located within the block bounded by Neptune Avenue on the north, Mermaid Avenue on the south, West 28th Street on the east, and West 29th Street on the west in the Coney Island neighborhood of Brooklyn, Community District 13.

Proposed Actions

The Proposed Project involves the development of six projected sites on one block in Coney Island, Brooklyn. The proposed plans for each of the six sites are as follows:

Projected Development Site 1 (Block 7011, Lot 11): This lot, which is Applicant owned, would be subdivided into zoning lots A and B. The existing 15-story residential building on the site (Figure 1), comprised of 102,000 gross square foot (gsf) of floor area, would be located on Lot 11 A. The new zoning lot, Lot 11 B, would be developed with two proposed 8-story residential buildings. Building A, 8-stories tall, would be located just north of the existing 15-story building and would contain 70,855 gsf of floor area. Building B, 7- and 8-stories tall, would be located adjacent to and north of Building A, and would contain 89,915 gsf of floor area.

Projected Development Site 2 (Block 7011, Lot 1): This lot would be developed with a new 9-story, 75,750 gsf, structure containing 7,680 gsf of ground floor commercial space and 58,090 gsf of residential floor area. The existing one-story, 8,712 square foot, church would remain on this lot and the new building would be constructed adjacent to it.

Projected Development Site 3 (Block 7011, Lots 45 and 46): This lot would be developed with a 7-story mixed-use residential/commercial building containing 3,967 gsf of existing/new commercial space and 14,828 gsf of existing/new residential space.

Projected Development Site 4 (Block 7011, Lot 47): This lot would be developed with a 7-story mixed-use commercial/community facility building containing 3,876 gsf of existing commercial space, 3,875 gsf of existing community facility space, and 10,665 gsf of new residential space.

Projected Development Site 5 (Block 7011, Lot 49): The property would be developed with a 7-story mixed-use residential/commercial building

containing 3,146 gsf of existing commercial space and 11,759 gsf of new residential space.

Projected Development Site 6 (Block 7011, Lots 51-54): The lots would be merged and developed with a vertical 9-story addition with the total development comprised of approximately 24,992 square feet of existing/new residential floor area and approximately 4,819 square feet of existing commercial space.

Under With-Action conditions the six Projected Development Sites would be developed with seven existing and proposed buildings and additions to existing buildings containing 383,104 gsf of residential space for 452 dwelling units (including 334 affordable and 118 market rate units), 23,488 gsf of commercial space, 12,587 gsf of community facility space, and 151 accessory parking spaces, with several vehicular ingress and egress points along West 28th and 29th Streets, as shown in the Site Plan. The increment between the No-Action and With-Action development scenarios would be 269,103 gsf of additional residential space for 320 new dwelling units based on an average size of 836 gsf per dwelling unit (including 218 affordable and 102 market rate units), 10,724 gsf of additional commercial space, and 73 new accessory parking spaces. In order to allow for the proposed development, one existing vacant building on Block 7011, Lot 45 (Projected Development Site 3) would be demolished. The building totals 6,100 gsf in size and contains 4,575 gsf of vacant residential space (3 vacant DUs) and 1,525 gsf of vacant retail space. 78 accessory parking spaces would also be removed on Block 7011, Lots 1 and 11 (Projected Development Site 1). These loses are reflected in the increment numbers above.

Reasonable Worst Case Development Scenario

No-Action Scenario

Absent the project, the area to be rezoned would consist of existing development, which includes 127,783 gsf of residential space for 144 dwelling units, 16,271 gsf of commercial space, 12,587 gsf of community facility space, and 78 accessory parking spaces. The Rezoning Area also contains a 6,100 gsf vacant building comprised of 4,575 gsf of vacant residential floor area for 3 dwelling units and 1,525 gsf of vacant commercial space.

Increment

The increment between the No-Action and With-Action development scenarios would consist of an increase of 320 dwelling units, 10,467 gsf of new local retail space, and 73 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 site 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 55 (9 inbound and 46 outbound), 38 (19 inbound and 19 outbound), 65 (44 inbound and 21 outbound), and 56 (29 inbound and 27 outbound) net vehicle trip ends during the AM, MD, PM, and Saturday peak hours, respectively. Vehicle trips generated by the proposed action would exceed the CEQR threshold of 50 net vehicle trips during all peak hours, except the Weekday Midday peak hour. Therefore, and based on the *CEQR Technical Manual* criteria, a Level-Two Screening (project trip assignments) analysis is required.

Level-Two Screening

Project trip assignments (Level-Two Screening analysis) for all peak hours, except the Weekday Midday peak hour, has been prepared for the proposed action, the results of which found that none of the intersections would experience more than 50 net vehicle trip ends during any peak hour time period, as is shown in Figures 1, 2 and 3 (Total Project Generated Vehicle Trips). Therefore and 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, 328, and 342 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 23% of those traveling to and from the residential portion of the project would travel by car, zero (0)% would travel by taxi, 13% would travel by bus, 48% would travel by subway, 12% would travel by foot, and 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 project would generate a total of 307 net person trip ends during the AM peak hour time period, 433 net person trip ends during the Midday peak hour time period, 445 net person trip ends during the PM peak hour time period, and 434 net person trip ends during the Saturday Midday peak hour time period, as summarized in Table 2.

Vehicle Trips

The proposed project would generate a total of 55 (9 inbound and 46 outbound) net vehicle trip ends during the Weekday AM peak hour time period, 38 (19 inbound and 19 outbound) net vehicle trip ends during the Weekday Midday peak hour time period, 65 (44 inbound and 21 outbound) net vehicle trip ends during the Weekday PM peak hour time period, and 56 (29 inbound and 27 outbound) net vehicle trip ends during the Saturday peak hour time period, 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 Midday peak hour. Based on the *CEQR Technical Manual* criteria, a Level-Two Screening (project trip assignments) analysis has been prepared. Based on the proposed trip assignments, none of the project study intersections would experience more than 50 net vehicle trip ends during any peak hour time period, as is shown in Figures 1, 2 and 3 (Total Project Generated Vehicle Trips). Therefore, and in accordance with the *CEQR Technical Manual* criteria, the proposed action 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 action would generate a total of 35 net bus trip ends during the Weekday AM peak hour time period, 26 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 38

net bus trip ends during the Saturday peak hour time period, as is summarized in Table 2.

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 127 net subway trip ends during the Weekday AM peak hour period, 80 net subway trip ends during the Weekday Midday peak hour time period, 146 net subway trip ends during the Weekday PM peak hour time period, and 129 net subway trip ends during the Saturday peak hour time period, as summarized in Table 2.

The proposed action 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 244 net pedestrian (bus, subway, walk and other) trip ends during the Weekday AM peak hour period, 387 net pedestrian trip ends during the Weekday Midday peak hour time period, 370 net pedestrian trip ends during the Weekday PM peak hour time period, and 366 net pedestrian trip ends during the Saturday peak hour time period, as summarized in Table 2.

The proposed action would generate more than 200 net pedestrian trip ends during all peak hours, but because of several pedestrian ingress and egress points along West 28th Street, West 29th Street, Mermaid Avenue, and Neptune 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.

See attached Schematic Site Plan for the block illustrating the assumed auto and pedestrian egress and ingress points for all projected development sites.

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 AM, 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.

Exhibit 1

Modal Split Information

2011-2015 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract #'s 326, 328 and 342 in Brooklyn, NY

Sea Park mixed development, Brooklyn New York

2011-2015 ACS 5-Year, Journey-to-Work:

Census Tract	Total Workers	Car or Van Drive-Alone	Carpool	Bus	Street Car	Subway	R.R.	Ferry	Taxi	Motor cycle	Bi cycle	Walk	Other Means	Worked @ Home	Total
326	2052	360	32	250	0	1052	68	0	0	0	0	261	5	24	2,052
328	1,076	236	23	99	14	535	13	0	0	0	0	132	0	24	1,076
342	1,346	233	155	237	0	559	0	0	0	0	0	132	0	30	1,346
Total	4,474	829	210	586	14	2,146	81	0	0	0	0	525	5	78	4,474
		0.185	***0.047***	***0.131***	***0.00***	***0.480***	***0.018***	***0.00***	***0.00***	***0.00***	***0.00***	***0.117***	***0.00***	***0.017***	***1.00***

Exhibit 2

Vehicle Occupancy Information

Census Tract #'s 326, 328 and 342 Brooklyn, New York

2011-2015 ACS-5 Year (JTW), Vehicle Occupancy Rate:

			carpool						
Census Tract	Total	Drove alone	Total	2person	3 Person	4 Person	5 or 6 Perso	7 or more Person	Total
326	392	360	32	11	21	0	0	0	32
328	259	236	23	13	0	10	0	0	23
342	388	233	155	66	34	0	55	0	155
Total	1,039	829	210	90	55	10	55	0	210
		829		45	18	3	11	0	906
Vehicle Occupancy =			1.15						

Modal Split summary

Auto	0.23
Taxi	0.00
Bus	0.13
Subway	0.48
Walk	0.12
Other	0.04
Total	1.00

Table 1 : Transportation Planning Factors

Sea Park mixed use developments, Brooklyn NY ***-Revised***

Land Use:	Residential	Local Retail	Commnuity Ctr
	d.u.	Space-sq.ft.	Space-sq.ft.
Size/Units:	320	10,467	0
	(1)	**(1)**	**(3)**
Trip Generation:			
Weekday	8.075	205	44.7
Saturday	9.6	240	26.1
	per 1,000 sq-ft	per 1,000 sq.ft.	per 1,000 sq.ft.
Linked-Trip:	0%	25%	0%
Temporal Distribution:	**(1)**	**(1)**	**(3)**
AM Peak Hour	10%	3%	4%
MD Peak Hour	5%	19%	9%
PM Peak Hour	11%	10%	5%
Sat. MDPeak Hour	8%	10%	9%
	(2)	**(3)**	**(3)**
Modal Split :	all periods	all periods	all periods
Auto	23%	5%	5%
Taxi	0%	1%	1%
Subway	48%	6%	6%
Bus	13%	3%	3%
Walk	12%	85%	85%
Other	4%	0%	0%
Total	100%	100%	100%
	(3)	(3)	(3)
In/Out Splits:	In/Out	In/Out	In/Out
AM Peak Hour	15/85	50/50	61/39
MD Peak Hour	50/50	50/50	55/45
PM Peak Hour	70/30	50/50	29/71
Sat. MD Peak Hour	50/50	55/45	49/51
Vehicle Occupancy:	**(2)**	(3)	(3)
Auto	1.15	2	1.65
Taxi	1.30	2	1.3
Truck Trip Generation:	**(1)**	**(1)**	**(3)**
Weekday	0.06	0.35	0.29
Saturday	0.02	0.04	0.29
	per 1,000 sqft	per 1,000 s.f.	per 1,000 s.f.
	(1)	**(1)**	**(3)**
AM Peak Hour	12%	8%	9.6%
MD Peak Hour	9%	11%	11%
PM Peak Hour	2%	2%	1%
Sat. MD Peak Hour	9%	11%	0%
AM/MD/PM/Sat. MD	50/50	50/50	50/50

Sources:

(1)-2014 CEQR Technical Manual, Table 16-2.

(2)-2011-2015 (ACS)-Journey-to-Work (JTW)Census Tract #'s 326, 328 and 342 in Brooklyn N.Y.

(3)_East New York FEIS

Table 2 : Estimated Person Trips

Sea Park Mixed use Developments, Brooklyn NY- ***Revised***

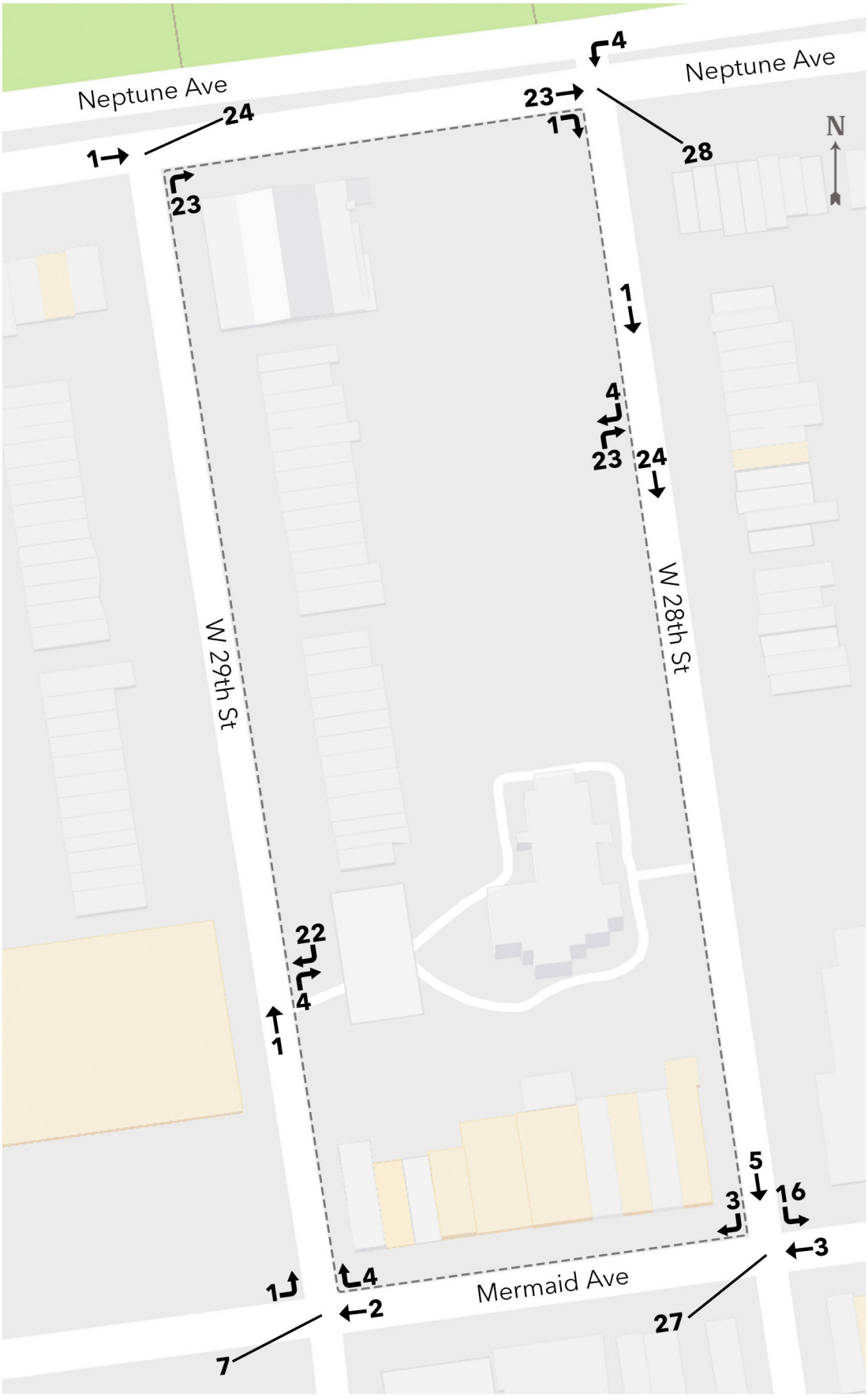
Land Use:	Residential d.u.	Local Retail Space sq.ft.	Commnuity Ctr Space-sq.ft.	Total Net Demand	
Size/Units:	320	10,467	0		
Peak hour Trips					
AM Peak Hour	258	48	0	307	
Midday Peak Hour	129	306	0	435	
PM Peak Hour	284	161	0	445	
Sat. MD Peak Hour	246	188	0	434	
Person Trips:					
AM Peak Hour					
Auto	59	2	0	62	
Taxi	0	0	0	0	
Subway	124	3	0	127	127
Bus	34	1	0	35	35
Walk	31	41	0	72	72
Other	10	0	0	10	10
Total	258	48	0	307	244
Midday Peak Hour					
Auto	30	15	0	45	
Taxi	0	3	0	3	
Subway	62	18	0	80	80
Bus	17	9	0	26	26
Walk	16	260	0	275	275
Other	5	0	0	5	5
Total	129	306	0	435	387
PM Peak Hour					
Auto	65	8	0	73	
Taxi	0	2	0	2	
Subway	136	10	0	146	146
Bus	37	5	0	42	42
Walk	34	137	0	171	171
Other	11	0	0	11	11
Total	284	161	0	445	370
Sat. MD Peak Hour					
Auto	57	9	0	66	
Taxi	0	2	0	2	
Subway	118	11	0	129	129
Bus	32	6	0	38	38
Walk	29	160	0	190	190
Other	10	0	0	10	10
Total	246	188	0	434	366

Table 3 : Estimated Vehicular Trips

Sea Park mixed use developments, Brooklyn NY- ***Revised***

Vehicular Trips	Residential	Local Retail	Commnuity Ctr	Total
AM Peak Hour				
Auto (Total)	52	1	0	53
Taxi	0	0	0	0
Taxi (Balanced)	0	0	0	0
Truck	2	0	0	2
Truck(Balanced)	2	0	0	2
Total	54	1	0	55
	8/46	***1/0***	***0/0***	***9/46***
Midday Peak Hour				
Auto (Total)	26	8	0	34
Taxi	0	2	0	2
Taxi (Balanced)	0	2	0	2
Truck	2	0	0	2
Truck(Balanced)	2	0	0	2
Total	28	10	0	38
	14/14	**5/5**	**0/0**	**19/19**
PM Peak Hour				
Auto (Total)	57	4	0	61
Taxi	0	2	0	2
Taxi (Balanced)	0	4	0	4
Truck	0	0	0	0
Truck(Balanced)	0	0	0	0
Total	57	8	0	65
	40/17	4/4	0/0	44/21
Sat. MD Peak Hour				
Auto (Total)	49	5	0	54
Taxi	0	1	0	1
Taxi (Balanced)	0	2	0	2
Truck	0	0	0	0
Truck(Balanced)	0	0	0	0
Total	49	7	0	**56**
	25/24	**4/3**	**0/0**	**29/27**

Total Project Generated Vehicle Trips
Weekday AM Peak Hour

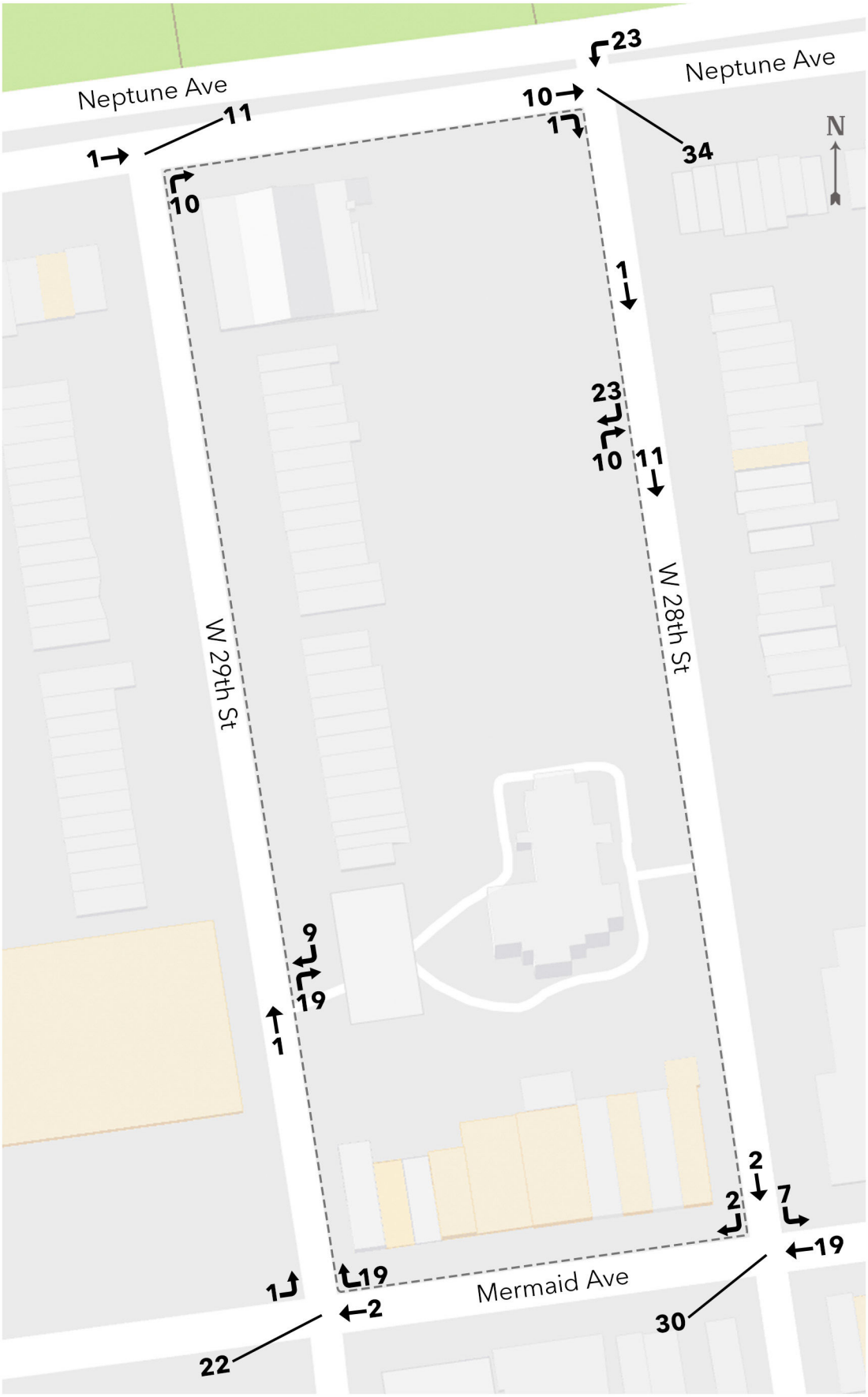


Re-zoning Area, Sea Park Mixed-Use Development

Total Vehicle Trips 9 IN / 46 OUT

Figure 1

Total Project Generated Vehicle Trips
Weekday PM Peak Hour

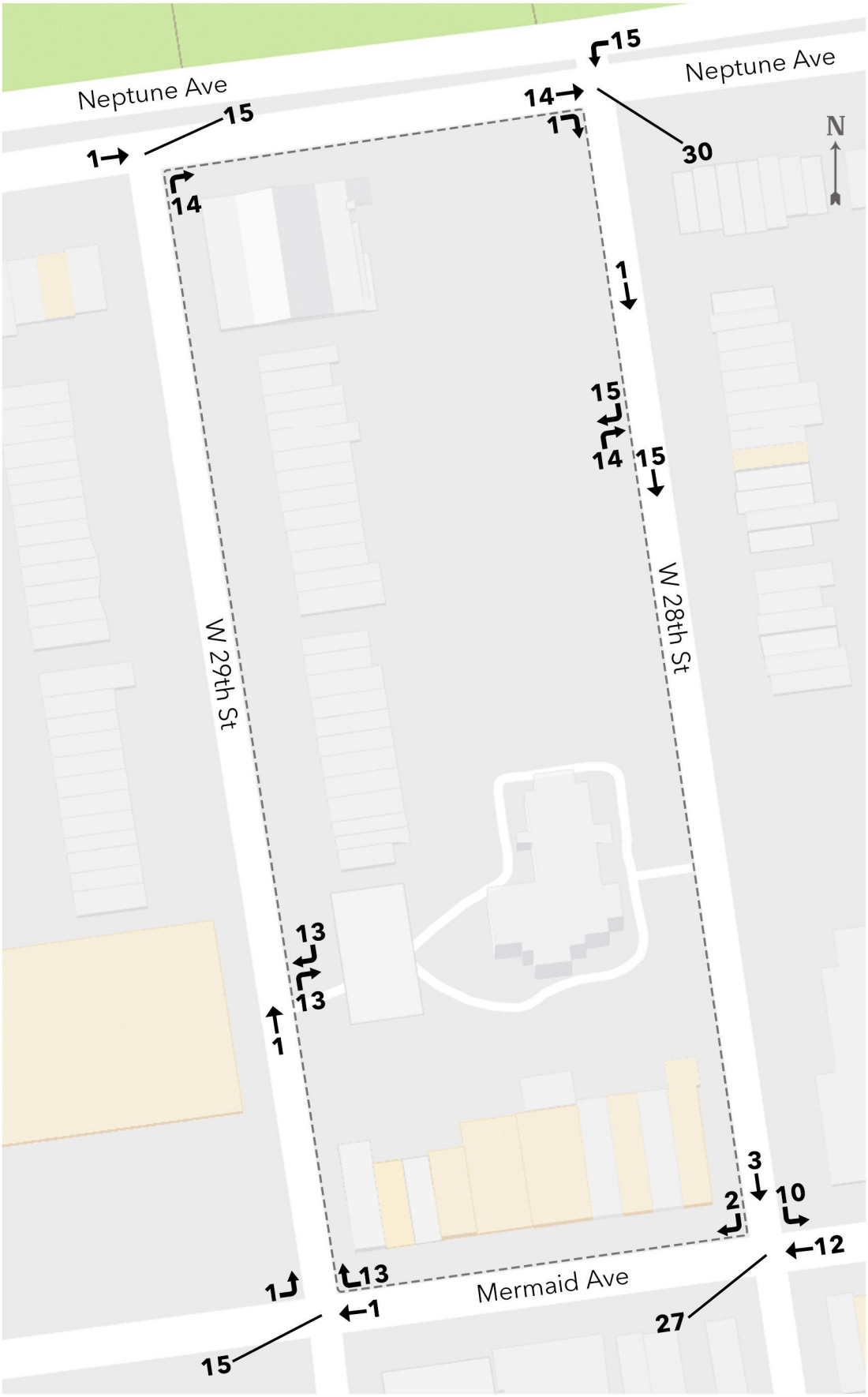


Re-zoning Area, Sea Park Mixed-Use Development

Total Vehicle Trips 44 IN / 21 OUT

Figure 2

Total Project Generated Vehicle Trips
Saturday Peak Hour



Re-zoning Area, Sea Park Mixed-Use Development

Total Vehicle Trips 29 IN / 28 OUT

Figure 3

17. AIR QUALITY

Introduction

Under *CEQR*, two potential types of air quality impacts are examined. These are mobile and stationary source impacts. Potential mobile source impacts are those which could result from an increase in traffic in the area, resulting in greater congestion. Potential stationary source impacts are those that could occur from stationary sources of air pollution, such as the heat and hot water boiler of a proposed development which could adversely affect other buildings in proximity to the proposed development.

Mobile Source

Projects may result in significant mobile source impacts when they create mobile sources of pollutants, change traffic pattern, or add new uses near mobile sources of pollutants. Per CEQR guidelines, a detailed analysis is conducted to predict whether the proposed actions could potentially have a significant adverse air quality impact if certain threshold criteria are met or exceeded, while proposed projects that do not meet or exceed the threshold criteria are not expected to have a mobile source impact. As such, projects that require a detailed analysis model the ambient air CO and $PM_{10}/PM_{2.5}$ concentrations—the mobile source pollutants of concern—and compare the modeled concentrations with the applicable air quality standard.

Industrial and Major Sources

Projects that would introduce new uses near industrial sources, major sources, large sources, and odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers industrial sources within 400 feet of the Proposed Project and major sources, large sources, and odor producing facilities within 1,000 feet of the Proposed Project.

Stationary Source

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).

I. INTRODUCTION

Proposed Action

The Proposed Project involves the development of six projected sites on one block in Coney Island, Brooklyn. The proposed plans for each of the six sites are as follows:

> Projected Development Site 1 (Block 7011, Lot 11B): This lot, which is applicant owned, would be subdivided into zoning lots A and B. The existing 15-story residential building on the site (Figure 17-1), comprised of 102,000 gross square foot (gsf) of floor area, would be located on Lot 11 A. The new zoning lot, Lot 11 B, would be developed with two proposed 8-story residential buildings. Building A,

8-stories tall, would be located just north of the existing 15-story building and would contain 70,855 gross square feet (gsf) of floor area. Building B, 7- and 8-stories tall, would be located adjacent to and north of Building A, and would contain 89,915 gsf of floor area.

The existing parking lot on Lot 11, now Lot 11A, would be moved from its current location east of the existing building to the west of the existing building and it would contain 45 spaces parking lot compared with the existing 43 spaces.

Lot 11B Building A would contain 44 parking spaces, some in an enclosed garage and some in a surface parking, on the ground floor of the building and in the building's rear yard, and Lot 11B Building B would contain 24 parking spaces distributed between 2 parking facilities on the first floor of the building and in the building's rear yard.

Projected Development Site 2 (Block 7011, Lot 1): This lot would be developed with a new 9-story, 75,750 gsf, structure containing 7,680 gsf of ground floor commercial space and 58,090 gsf of residential floor area. The existing one-story, 8,712 square foot, church would remain on this lot and the new building would be constructed adjacent to it. The building would contain a 38 spaces parking garage. The building's HVAC system would operate on natural gas.

Projected Development Site 3 (Block 7011, Lots 45 and 46): Projected Development Site 3 would facilitate a mixed-use, predominantly residential, building. The building would facilitate an 18,795 gsf of floor area and a height of 78 feet. The building's HVAC system would operate on natural gas.

Projected Development Site 4 (Block 7011, Lot 47): Projected Development Site 4 would facilitate a mixed-use, predominantly residential, building. The building would contain 18,416 gsf of floor area and would rise to a height of height of 78 feet. The building's HVAC system would operate on natural gas.

Projected Development Site 5 (Block 7011, Lot 49): Projected Development Site 5 would facilitate a mixed-use, predominantly residential, building. The building would contain 14,905 gsf of floor area and would rise to a height of 78 feet. The building's HVAC system would operate on natural gas.

Projected Development Site 6 (Block 7011, Lots 51-54): Following the demolition of the existing buildings on these lots, the lots would be merged and developed with a 9-story mixed-use residential/commercial building with 29,811 square feet of floor area and would rise to a height of 98 feet. The building's HVAC system would operate on natural gas.

Issues

Emissions from vehicular activity produced at parking facilities have the potential to significantly impact the ambient air. Therefore, parking facilities analysis was conducted to determine whether the potential impacts of these emissions would be significant.

Emissions released from the heating, ventilation, and air conditioning (HVAC) systems of each of the proposed developments could potentially impact the air quality of the other proposed buildings. Emissions from buildings of the same height (Building A and B, Sites 3, 4, 5) can impact each other or nearby taller buildings (Site 2 and Site 6), and the combined emissions from the proposed buildings can impact the taller existing applicant-owned building on Lot 11. Therefore, project-on-project analyses and project-on-Applicant building analysis were conducted to determine whether the potential impacts of these emissions would be significant.

A review of existing land uses using NYC Oasis interactive mapping application and Google imaging software show that there are two existing buildings taller than the proposed developments within 400 feet of these development sites – one is a 16-story on Block 7052 Lot 14 and the other one is a 17-story on Block 7053 Lot 14. As such, a project-on-existing building analysis needs also to be conducted.

No existing major emission sources within 1,000 feet of the proposed developments were identified. As such, no analysis of the emissions nearby major sources on the proposed developments is warranted.

A field survey of commercial and manufacturing properties within 400 feet of the Rezoning Area, as shown on the Land Use map included in this EAS, was conducted on June 20, 2016. The survey found no active manufacturing or commercial uses that would be deemed noxious or require DEP Air Quality Permits. See attached letter in Air Quality Appendix.

The potential air quality impacts were estimated following the procedures and methodologies prescribed in the *New York City Environmental Quality Review 2014 Technical Manual (CEQR TM)*.

II. STANDARDS AND GUIDELINES

Relevant Air Pollutants

The EPA has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As the proposed developments would be heated by natural gas, the two criteria pollutants associated with natural gas combustion – nitrogen dioxide (NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) – were considered for analysis. The pollutants associated with mobile source activities - carbon monoxide and particulate matter – were considered for the analysis.

Applicable Air Quality Standards and Significant Impact Criteria

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants in order to protect public health and the nation's welfare, and New York has adopted the NAAQS as the State ambient air quality standards. This analysis addressed compliance of the potential impacts with the 1-hour and annual NO_2 NAAQS and the 24-hour PM_{10} NAAQS.

In addition to the NAAQS, the *CEQR TM* requires that projects subject to CEQR apply CO and $PM_{2.5}$ significant impacts criteria (based on concentration increments) developed by the New York City Department of Environmental Protection (NYCDEP) to determine whether potential adverse CO or $PM_{2.5}$ impacts would be significant. If the estimated impacts of a proposed project are less than these increments, the impacts are not considered to be significant. This analysis addressed compliance of the potential impacts of CO with the 8-hour CEQR significant incremental impact criteria and with the 24-hour and annual $PM_{2.5}$ CEQR significant incremental impact criteria.

The current standards and CEQR significant impact criteria that were applied to this analysis, together with their health-related averaging periods, are provided in Table 17-1.

TABLE 17-1
APPLICABLE NATIONAL AMBIENT AIR QUALITY STANDARDS AND CEQR THRESHOLD VALUES

Pollutant	Averaging Period	NAAQS	CEQR Thresholds
CO	Maximum 1 Hour	35 ppm	-
	Maximum 8 Hour	9 ppm	3.8
NO_2	1 Hour	0.10 ppm (188 µg/m^3)	--
	Annual	.053 ppm (100 µg/m^3)	--
PM_{10}	24 Hour	150 µg/m^3	-
$PM_{2.5}$	24 Hour	35 µg/m^3	7.25
	Annual	12 µg/m^3	0.3

NO_2 NAAQS

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

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For

determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NOx to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NOx estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model, and averages these values over the numbers of the years modeled. Total estimated concentrations are generated in the statistical form of the 1-hour NO_2 NAAQS format and can be directly compared with the 1-hour NO_2 NAAQS standard.

Based on New York City Department of Planning (NYCDCP) guidance, Tier 1, as the most conservative approach, should initially be applied as a preliminary screening tool to determine whether violations of the NAAQS is likely to occur. If exceedances of the 1-hour NO_2 NAAQS were estimated, the less conservative Tier 3 approach should be applied.

The annual NO_2 standard is 0.053 parts per million (ppm or 100 ug/m^3). In order to conservatively estimate annual NO_2 impacts, a NO_2 to NOx ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

CEQR Significant Impact Criteria

***CEQR TM* guidance includes the following criteria for evaluating significant adverse CO incremental impacts:**

> *An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average CO con-centration at a location where the predicted No-Action 8-hour concentration is equal to 8 ppm or between 8 ppm and 9 ppm; or*
>
> *An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.*

An 8-hour CO background concentration of 1.4 ppm was obtained from the NYSDEC Queens College monitoring station as the maximum 8-hour average not to be exceeded more than once per calendar year. As the applicable background value is 1.4 ppm, half of the difference between the 8-hour CO NAAQS and this background value is 3.8 ppm. As such, a significant impact criterion of 3.8 ppm was used for determining whether the potential 8-hour CO impacts of the proposed development are considered to be significant.

CEQR TM guidance includes the following criteria for evaluating significant adverse $PM_{2.5}$ incremental impacts:

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

A 24-hour $PM_{2.5}$ background concentration of 20.5 ug/m^3 was obtained from Brooklyn JHS-126 monitoring station as the average of the 98th percentile for the latest 3 years of available monitoring data collected by the NYSDEC for 2014-2016 As the applicable background value is 20.5 ug/m^3, half of the difference between the 24-hour $PM_{2.5}$ NAAQS and this background value is 7.25 ug/m^3. As such, a significant impact criterion of 7.25 ug/m^3 was used for determining whether the potential 24-hour $PM_{2.5}$ impacts of the proposed development are considered to be significant. Similarly, an annual 3-year average background concentration of 8.6 ug/m^3 was used for determining whether the potential annual $PM_{2.5}$ impacts would exceed the annual significant impact criteria.

For an annual average adverse $PM_{2.5}$ incremental impact, according to *CEQR* guidance:

Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 ug/m^3 at any receptor location for stationary sources.

The above 24-hour and annual significant impact criteria were used to evaluate the significance of predicted $PM_{2.5}$ impacts.

Background Concentrations

Determination of significant impact criteria is evaluated by adding the background concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the project area.

Background concentrations were obtained from the NYSDEC's annual report for 2016. CO, PM_{10}, and NO_2 concentration were obtained from the Queens College monitoring station, and $PM_{2.5}$ concentration was obtained from the JHS126 monitoring station. The concentrations are presented in Table 17-2.

Table 17-1
Background Concentrations at The Proposed Project Site (NYSDEC 2016 Report)

Pollutant	Averaging Period	Background Concentration	Monitoring Station
$PM_{2.5}$	24-Hour Concentration	20.5 µg/m^3	JHS126
	Average of 3 Consecutive Annual Means	8.6 µg/m^3	
PM_{10}	Maximum 24-Hour Concentration	38 µg/m^3	Queens College
NO_2	8th Highest 1-Hour Concentration	120.9 µg/m^3	
	Maximum Annual Average Concentration	8.6 µg/m^3	
CO	Maximum 8-Hour	1.4 ppm	
	Maximum 1-Hour	1.59 ppm	

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

- CO 8-hour 3.8 ppm
- 24-hour $PM_{2.5}$ 7.25 $\mu g/m^3$
- Annual $PM_{2.5}$ (stationary source) 0.3 $\mu g/m^3$

III. MOBILE SOURCE

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. As such, projects that require a detailed analysis model the ambient air CO and $PM_{2.5}$ concentrations—the mobile source pollutants of concern—and compare the modeled concentrations with the applicable air quality standard.

Mobile source impacts are a function of vehicular related emissions and the pollutants dispersion. In a detailed analysis, the emission rates of vehicular mechanical components are generated with the latest EPA's Mobile Vehicle Emission Simulator 2014a version (MOVES2014a), and emission of dust generated by vehicle travelling on paved roadways are added to estimate total particulate matter emission rates. The pollutants' concentrations at sensitive receptors are modeled with the EPA's CAL3QHC or CAL3QHCR Gaussian dispersion models. Alternatively, dispersion analysis of parking facilities may use the spreadsheet and formula referenced in the *CEQR TM Appendices.*

Traffic Air Quality Screen

Per the *CEQR TM*, screening analyses for CO and $PM_{2.5}$ were carried out to determine whether the project-generated traffic have the potential to cause significant impact. The project-generated traffic is the difference between the Future With No-Action and the Future With Action.

As outlined in the Transportation section, the Proposed Actions would generate a total of 66 (11 inbound and 55 outbound), 41 (21 inbound and 20 outbound), 76 (51 inbound and 24 outbound) and 65 (33 inbound and 32 outbound) vehicle trip ends, during the AM, Midday, PM and Saturday Midday peak hours, respectively. These project-generated traffic is the combined traffic traveling through the 4 intersections around the Proposed Project. The peak hourly traffic of 39 vehicles would travel through Mermaid Avenue and 28th Street intersection.

CO Screen

Per the *CEQR TM*, localized increases in CO levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed development. For this area of the City, the threshold volume for a detailed analysis of CO concentration, using MOVES2014 and CAL3QHC, is an increment of 170

vehicles. The highest increment of 76 vehicles would not trigger the 170-vehicle threshold. Therefore, no CO detailed air quality analysis is required and no significant CO mobile source air quality impacts are expected as a result of the proposed development.

$PM_{2.5}$ Screen

Per the *CEQR TM*, localized increases in $PM_{2.5}$ levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed development. Per CQER recommendations, the threshold volume for a detailed analysis of $PM_{2.5}$ concentration, using MOVES2014 and CAL3QHC, is an increment of 50 vehicles traveling through an intersection. The highest increment of 39 vehicles traveling through Mermaid Avenue and 28th Street would not trigger the 50 vehicle threshold. Therefore, no $PM_{2.5}$ detailed air quality analysis is required and no significant $PM_{2.5}$ mobile source air quality impacts are expected as a result of the project-generated traffic.

Parking Facilities Screening Analysis

Based on CEQR recommendations, the maximum capacities of parking garages are evaluated with a threshold criteria to predict whether the potential impacts associated with mobile source emissions are significant. The threshold criteria level, sited in the *CEQR TM* Table 16-1 in conjunction with the *CEQR TM* Map 16-1, is based on the location of the project.

Projected Development Site 1 would contain 4 parking facilities with a combined capacity of 113 spaces and Projected Development Site 2 would contain a 38 space parking garage. Table 17-3 shows the parking facilities distribution.

Table 17-3
Projected Development Sites 1 and 2 Parking Facilities

Lot Number	Site ID	Parking Spaces	Parking Facility Type/Parking Spaces
11A	Projected Development Site 1 - Lot 11A	45	Parking Lot
11B	Projected Development Site 1 – Building A	19	Parking Garage
		25	Parking Lot
	Projected Development Site 1 – Building B	8	Parking Garage
		16	Parking Garage/12
			Parking Lot/4
1	Projected Development Site 2	38	Parking Garage

The *CEQR TM* situate the Rezoning Area in Zone 4, as it is within 1 mile of a subway station. The threshold criteria that would trigger a detailed analysis in Zone 4 is 60 parking spaces.

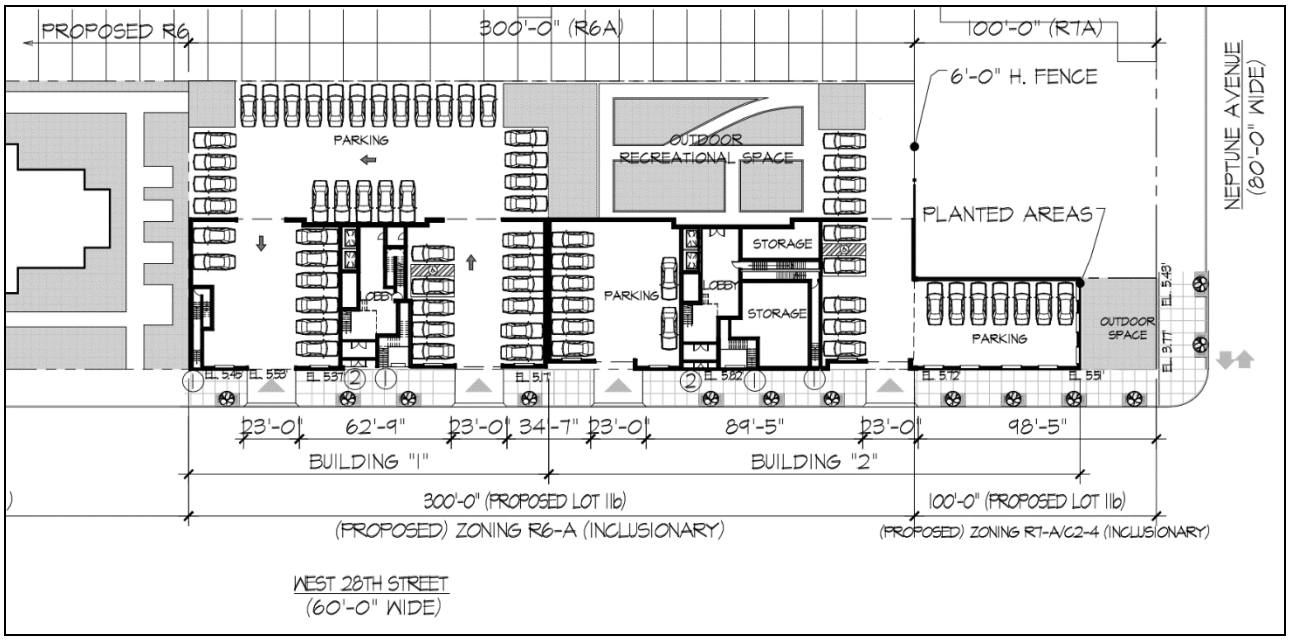
Projected Development Site 1 Lot 11A and Projected Development Site 2 parking spaces are below the CEQR threshold criteria. As such, these parking facilities pass the CEQR screening analysis and no adverse air quality impact is expected from these parking facilities emissions.

Projected Development Site 1 Lot 11B would contain a combined 68 parking spaces, exceeding the 60 parking spaces threshold criteria. Therefore, a detailed analysis was conducted.

Detailed Analysis

Projected Development Site 1 Lot 11B parking facilities are divided between 4 individual parking facilities with separate entrances through 28TH Street. The parking facilities would occupy a combined area of 15,667 square feet, distributed as follows: 3,801 and 3,503 square feet in Building A and 3,348 and 5,015 square feet in Building B. Figure 17-1 shows the parking facilities in Buildings A and B.

Figure 17-1
Projected Development Site 1, Lot 11B parking Facilities.



Vehicular emissions in parking lots is distributed over a large area. Vehicular emissions from parking garages are emitted through a single vent. As such, the impact from parking garages emissions at a nearby receptor situated close to a parking garage vent are greater than a receptor situated nearby a parking lot. Therefore, all facilities' emissions were assumed to be emitted from a single point—a parking garage vent.

The dimension of a parking garage is a factor of the garage's emission. Therefore, each of the 4 parking garages was analyzed with the assumption that all vehicles enter and exit

the analyzed parking garage. This assumption is the most conservative as the garages' combined emissions are vented through a single vent and pollutants concentrations are evaluated next to and directly downwind from that vent. The highest pollutants concentrations were evaluated for significant air quality impact.

As determined by the preliminary traffic analysis and shown in Table 17-4, there is a maximum of 38 vehicles entering the parking garage in the PM hour between 17:00 to 18:00, and a maximum of 38 vehicles exiting the parking garage in the AM hour between 8:00 to 9:00. These traffic data were considered as a worst-case scenario.

In addition, the preliminary traffic analysis for the Projected Development Sites indicated that the weekday PM peak hour increment of 60 passenger cars, some traveling on 28Th Street and some on 29TH Street, is the worst-case increment. As a worst-case scenario, all project-generated traffic was assumed to travel through 28TH Street.

Table 17-4
Parking Accumulation

Time	in	out	total	Parking Accu.
				98
7-8AM	3	16	19	85
8-9	7	38	45	54
9-10	8	26	34	36
10-11	10	15	25	31
11-12N	12	12	24	31
12N-1PM	15	15	30	31
1-2	14	14	28	31
2-3	12	12	24	31
3-4	17	12	29	36
4-5	26	12	37	50
5-6	38	17	56	71
6-7	33	15	48	89
7-8	27	15	42	101
8-9PM	12	7	19	106

Per *CEQR TM*, vehicles exiting the parking garage idle for 1 minute before starting to travel to the parking lot exit and all parking garage vehicles are assumed to drive at a speed of 5 miles per hour. In addition, entering and exiting vehicles are assumed to travel a mean travel distance of two-thirds of the width and the length of the parking garage plus the ramp's length.

The following conditions, as outlined in the *CEQR TM*, are assumed in the analysis to simulate the maximum potential air quality impacts:

- Pollutants within the garage are exhausted through a single vent situated above the parking garage entrance at 12 feet above grade.
- A receptor is placed at 6 feet high and 6 feet from the parking garage entrance, directly downwind from the garage's exhaust vent, to simulate a pedestrian on the adjacent sidewalk of the parking garage.

- A receptor is placed at 6 feet high and at the opposite sidewalk, directly downwind from the garage's exhaust vent.
- A receptor is placed 5 feet above the garage's exhaust vent to simulate a receptor placed in a window above the exhaust vent.
- Wind speed is assumed to be 1 meter per second.
- The garage ventilation rate is assumed to be the minimum rate as required by the New York City Building Code and outlined in the *CEQR TM*.
- The impact of the pollutants generated by on-street traffic are added to the receptor placed on the opposite sidewalk from the parking garage. These include both emissions from vehicular mechanical components and dust generated by vehicles travelling on paved roads.

Pollutants from vehicle emissions were generated by the EPA's mobile source emission factor model, MOVES2014a, as outlined below. Pollutants concentrations from the garage's exhaust vent and from the on-street traffic emissions were calculated using the spreadsheet and formula referenced in the *CEQR TM Appendices.*

Incremental on-street traffic accumulation was considered for the NYC Incremental Guidelines, *de minimis,* and the With-Action traffic considered for the NAAQS. For the With-Action, the incremental on-street traffic was added to traffic data obtained from the New York State Department of Transportation (NYSDOT) Traffic Count Hourly Report for 37TH Street.

A specific receptor was considered for the annual *de minimis* criterion as the garage's exhaust vent is a stationary source.

Per *CEQR TM*, a persistence factor of 0.7 was applied to the 1-hour CO concentrations to evaluate the 8-hour CO concentrations.

According to the EPA's *AERSCREEN User Guide*, the 24-hour concentrations of PM_{10} and $PM_{2.5}$ were evaluated by multiplying the hourly concentrations by a 0.6 persistence factor, and the annual concentration of $PM_{2.5}$ was evaluated by multiplying the hourly concentration by a 0.1 persistence factor.

Emission Factors

CO, $PM_{2.5}$ and PM_{10} emission factors for each parking garage and on-street traffic were developed with the EPA mobile source emission factor model MOVES2014a. MOVES can be used to calculate emission-related parameters such as total mass emissions, total energy consumption, vehicle activity (hours operated and miles travelled). From this output, emission rates (e.g., grams/vehicle-mile or grams/hour) can be determined for a wide variety of spatial and time scales.

MOVES has the capability to determine the emission factors for emission inventory or for project-level analyses for specific roadway segments or links to be used in the microscale analysis. For the project-level analysis, MOVES requires the use of site-specific input data for traffic volume, vehicle type, fuel parameters, age distribution, and other input rather than the use of national default data. When conducting a project-scale analysis, MOVES

also requires the analysis to be performed with no pre-aggregation (i.e., averaging) of input data. The MOVES input used in this analysis are provided in Table 17-5. The full set and detailed description of all input parameters for MOVES model can be found in the backup documentation for this project.

Table 17-5
MOVES2014a Inputs

Geographic bounds	Kings County, New York
Analysis year	2019
Worst-case month	January
Peak hour	Weekday PM 17:00-18:00
On-road fuel and vehicle type	Gasoline fuel passenger cars
Road type	Urban Unrestricted Access
IM and vehicles age distribution	From NYSDEC database
Fuel supply and fuel formulation	From NYSDEC database
Meteorological data	From NYSDEC database for study area
CO emissions	Running exhaust and crankcase running exhaust
$PM_{2.5}/PM_{10}$ emissions	Total running primary exhaust, crankcase running exhaust, brake wear and tire wear; total primary exhaust also included organic and elemental carbon and primary sulfate particulate

In addition to exhaust running $PM_{2.5}/PM_{10}$ emissions, vehicle-related $PM_{2.5}/PM_{10}$ emissions of dust generated by vehicles traveling on paved roadways (28TH Street) were added to estimate total particulate matter emission factors. Depending of the silt content on a road, re-entrained road dust can be a significant contributor to the total $PM_{2.5}/PM_{10}$ concentration. Per the *CEQR TM,* a silt loading factor of 0.4 g/m^2 for local roads and standard average fleet vehicle weight of 3-tons were used in the analysis. In addition, based on DEP guidance, the conservative assumptions of "dry" road conditions were used for the short-term calculation (precipitation reduced silt loading).

Results of Parking Garage Analysis

Table 17-6 shows the predicted highest concentrations of the parking garages analyses, were the highest predicted concentrations were from the largest parking garage.

Table 17-6
Parking Garage Air Quality Impact

Pollutant		Near Sidewalk		Far Sidewalk		Window Above Vent	
CO (ppm)	**Averaging**	**1-hour**	**8-hour**	**1-hour**	**8-hour**	**1-hour**	**8-hour**
	Pollutant	0.0807	0.0565	0.0539	0.0442	0.1775	0.1228
	Background	1.6	1.4	1.6	1.4	1.6	1.4
	Total concentration	**1.7**	**N.A.**	**1.7**	**N.A.**	**1.8**	**N.A.**
	NAAQS	35	9	35	9	35	9
	de minimis	N.A.	3.8	N.A.	3.8	N.A.	3.8
	Impact	**No**		**No**		**No**	
$PM_{2.5}$ ($\mu g/m^3$)		**24-hour**	**Annual**	**24-hour**	**Annual**	**24-hour**	**Annual**
	Pollutant	0.77	0.128	1.2	0.078	1.1	0.18
	de minimis	7.25	0.3	7.25	0.3	7.25	0.3
	Impact	**No**		**No**		**No**	
PM_{10} ($\mu g/m^3$)		**24-hour**		**24-hour**		**24-hour**	
	Pollutant	0.5		9.3		2.7	
	Background	44		44		44	
	Total concentration	**45.5**		**54.3**		**47.7**	
	NAAQS	150		150		150	
	Impact	**No**		**No**		**No**	

Conclusion

The analysis concluded that all the pollutants are within the NAAQS and the *de minimis* criterions. Therefore, no significant air quality impacts are expected as a result of the parking garages facilities.

IV. STATIONARY SOURCE

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.

The anticipated development within the proposed rezoning area would consist of seven buildings, each with its own separate heat and hot water system. A cumulative $PM_{2.5}$ detailed analysis of the projected developments on the Applicant Building, using oil#2 as

the fuel for the HVAC systems, failed. Therefore, analyses were performed for natural gas use and environmental designations added to specify use of natural gas only.

The project-on-project HVAC analysis considered multiple scenarios and combinations as the HVAC emissions from each proposed development may impact one or more of the other proposed developments, including the applicant-owned building.

The following project-on-project, project-on-applicant, and project-on-existing building scenarios were analyzed:

Project-on-Project

- Building A on Building B
- Building B on Building A
- Building A and B on Site 2
- Sites 3 and 4 on Site 5
- Sites 3 and 5 on Site 4
- Sites 4 and 5 on Site 3
- Sites 3, 4, and 5 on Site 6

Project-on-Existing

- Buildings A, B, Sites 3, 4, 5, and 6 on the existing 15-story applicant-owned building
- Sites 3, 4, 5, and 6 on existing 16-story Building on Block 7052 Lot 14
- Sites 3, 4, 5, and 6 on existing 17-story Building on Block 7053 Lot 14

Figure 17-2 shows the proposed project plotted in Google Earth, where the applicant-owned building, shaded in green, is situated between Sites 3, 4, 5, and 6 and Building A, B and Site 2.

Figure 17-2
The Proposed Developments Plotted in Google Earth

Table 17-7 shows the heights and floor areas of the proposed developments.

Table 17-7
The Proposed Developments Dimensions

Site ID	Lot No.	Building Height (ft)	Building Floor Area (ft²)
Building A	11A	88	70,855
Building B	11B	88	89,915
Site 2	1	98	75,750
Site 3	45, 46	78	7,868
Site 4	47	78	18,080
Site 5	49	78	14,471
Site 6	51-54	98	14,472

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.

Per *CEQR TM*, the CEQR natural gas nomograph depicted on Figure 17-7 of the *CEQR TM Appendix* for a 30-foot stack height was applied (as the 30 feet curve height is closest to but not higher than the proposed stack height, as the CEQR screening procedure requires). This nomograph depicts the size of the development versus distance below which the potential impact can occur, and provides a conservative estimate of the threshold distance.

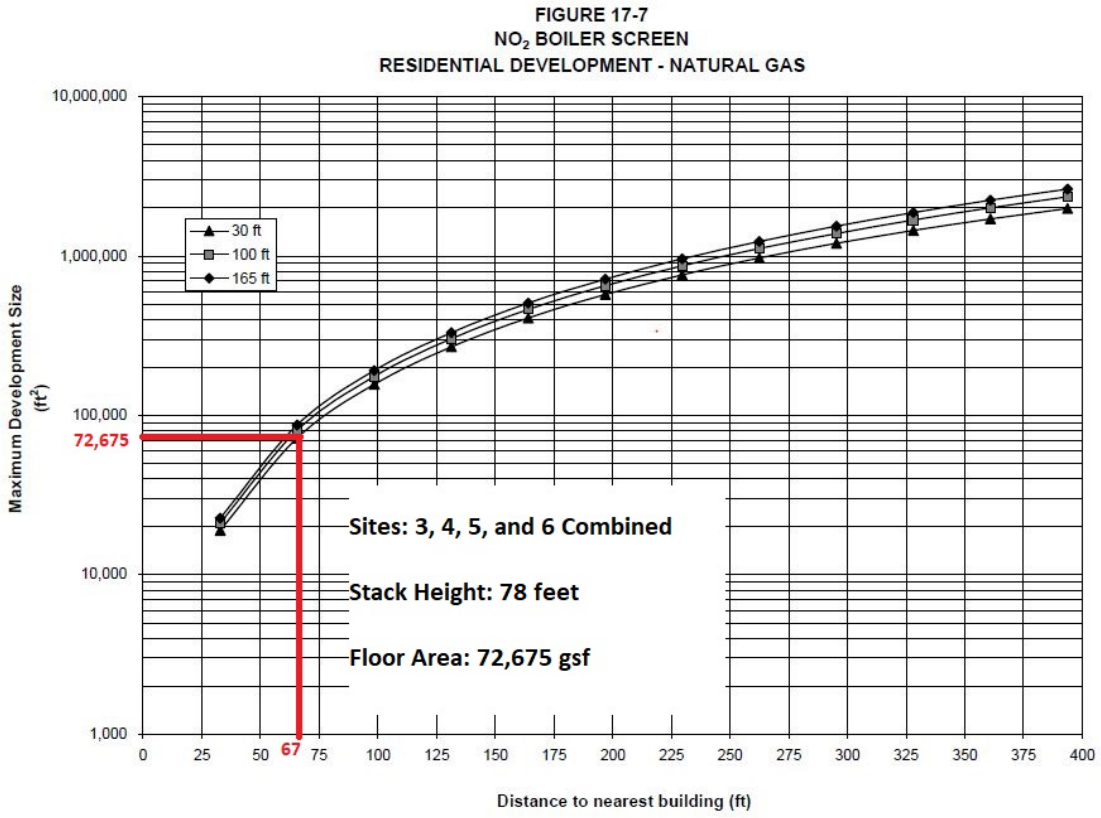
Screening analysis is only applicable to a single smokestack. For purpose of a cumulative analysis, emissions from multiple stacks could be combined in a single stack situated as close as possible to the receiving building. However, this procedure is only applicable to developments that are clustered together. Table 17-8 shows the screening analysis results.

Table 17-8
Results of the Screening Analysis for Project-on-Project and Project-on-Existing Buildings

Source Site ID	Building Height (ft.)	Minimum Screen Distance (ft.)	Receptor Building	Distance to Receiving Building (ft.)	Comments
Building A	88	<30	Building B	0	Use AERMOD
Building B	88	<30	Building A	0	Use AERMOD
Buildings A,B	88	<30	Site 2	0	Use AERMOD
Sites 3,4	78	<30	Site 5	0	Use AERMOD
Sites 3,5	78	<30	Site 4	0	Use AERMOD
Sites 4,5	78	<30	Site 3	0	Use AERMOD
Sites 3,4,5	78	<30	Site 6	0	Use AERMOD
Project-on-Existing					
Sites 3,4,5,6	78	67	7052/14	208	Screens out
			7053/14	348	Screens out
Proposed Project	78	N.A.	Applicant	N.A.	Use AERMOD

As indicated in Table 17-8, all the project-on-project scenarios require detailed analyses as source buildings are less than 30 feet from the nearest receiving buildings. For the proposed project impact on the Applicant-owned building, the screening analysis is not applicable due to the buildings configuration. Figure 17-3 shows the screening analysis monograph of Sites 3, 4, 5, and 6 on existing land uses.

Figure 17-3
Sites 3, 4, 5, and 6 HVAC Screen Residential Use Natural Gas Nomograph



Detailed Analysis

Detailed dispersion modeling analyses were conducted to estimate impacts from the HVAC emissions of each of the proposed sites using the latest version of EPA's AERMOD dispersion model 9.4.0 (EPA version 16216r).

In accordance with CEQR guidance, these analyses were conducted assuming stack tip downwash, urban dispersion surface roughness length of 1.0 meter, elimination of calms, and with and without downwash effect on plume dispersion.

As previously outlined, AERMOD's Tier 1 modules were initially utilized for the 1-hour NO_2 analyses, followed by a Tier 2 application of NOx/NO_2 ratio of 80% to the NOx modeled concentration to account for the NOx to NO_2 conversion. A less conservative Tier 3 approach was then applied if exceedances of the 1-hour NO_2 NAAQS were estimated.

Emission Rates

HVAC emission rates were estimated as follows:

- As all the proposed sites will be heated by natural gas, emission rates of NOx and $PM_{2.5}$ were calculated based on annual natural gas usage corresponding to the gross floor area of the site (gsf), EPA AP-42 emission factors for firing natural gas combustion in small boilers, and gross heating values of natural gas;
- $PM_{2.5}$ emissions from natural gas combustion accounted for both filterable and condensable particulate matter;
- Short-term NO_2 and $PM_{2.5}$ emission rates were estimated by accounting for seasonal variation in heat and hot water demand; and
- The natural gas fuel usage factor 59.1 cubic foot per square foot per year was obtained from CEQR Table US1, Total Energy Consumption, Expenditures and Intensities, 2005, Part I: Housing Unit Characteristics and Energy Use Indicators for New York using conservative factor for residential uses.

Table 17-9 provides estimated $PM_{2.5}$ and NO_2 short-term (e.g., 24-hour and 1-hour) and annual emission rates for each site from the boiler firing natural gas. The diameter of the stacks and the exhaust's exit velocities were estimated based on values obtained from NYCDEP "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million BTUs per hour). Boiler sizes were estimated based on assumption that all fuel would be consumed during the 100-day (or 2,400 hour) heating season. A stack exit temperature was assumed to be 300^{o}F (423^{o}K), which is appropriate for boilers.

Table 17-9
Estimated Pollutant Short-term and Annual Emission Rates

Site ID	Stack Height feet	Total Floor Area	$PM_{2.5}$ Emission Rate		NO_2 Emission Rate	
			g/sec	g/sec	g/sec	g/sec
			24-hr	Annual	1-hr	Annual
Building A	91	70,855	1.67E-03	4.58E-04	2.20E-02	6.02E-03
Building B	91	89,915	2.12E-03	5.81E-04	2.79E-02	7.64E-03
Site 2	101	75,750	1.79E-03	4.89E-04	2.35E-02	6.44E-03
Site 3	81	7,868	4.43E-04	1.21E-05	5.83E-03	1.60E-04
Site 4	81	18,080	4.34E-04	1.19E-04	5.71E-03	1.57E-03
Site 5	81	14,471	3.51E-04	9.63E-05	4.62E-03	1.27E-03
Site 6	101	14,472	7.03E-04	1.93E-04	9.25E-03	2.53E-03

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, Inc.

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

Background Concentrations

Hourly NO_2 and hourly ozone background concentrations were obtained from the NYC Department of City Planning, for the purpose of the 1-hour NO_2 Tier 3 analysis. This data was developed from available monitoring data collected by the New York State Department of Environmental Conservation (NYSDEC) at the Queens College monitoring station for the 5 consecutive years (2012-2016), and compiled into AERMOD's required hourly emission (NO_2) and concentration (ozone) data format.

AERMOD Setting

AERMOD calculates concentrations according to the dispersion option, pollutant and averaging time, and output specified in the model. All models specified flat terrain, the default urban roughness coefficient of 1.0 meter with population of 2,000,000. The other parameters of each pollutant were:

1-hour NO_2: NAAQS option enabled, Tier 3 conversion method and 8^{th} highest value output. The stack's equilibrium ratio and in-stack ratio were set to 0.3 and 0.75 respectively.

Annual averaging time (NO_2 and $PM_{2.5}$): OTHER pollutant selected and Report Maximum Annual Average for Each Met Year enabled.

24-hour $PM_{2.5}$ NAAQS: Based on a multi-year average of ranked maximum daily values enabled and 1^{st} highest value output.

Building Profile Input Program (BPIP) was run with the downwash effect enabled.

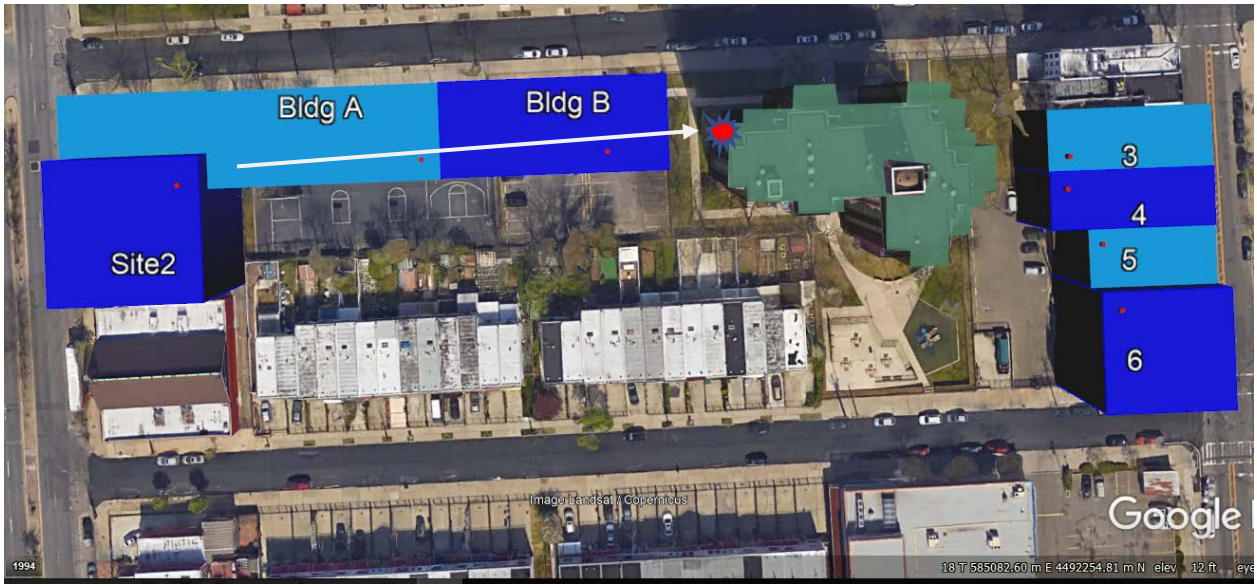
Stack and Receptor Locations

The analysis assumed that the HVAC emissions from each projected development site would be released through a single stack located on the roof -- at the minimum distance feet from the nearest taller building. Therefore, the HVAC exhaust stack on each building was initially placed at the 10 feet distance from the nearest building if the buildings were attached to each other or at 10 feet distance from the lot line where buildings were apart from each other (as per NYC Building Code provision). If exceedances of the CEQR significant threshold values or the NAAQS were predicted, setback distances were increased until the threshold distance at which no exceedances of the CEQR thresholds or NAAQS were predicted. Stack heights were assumed to be 3 feet above the height of the building roof, as per CEQR recommendation.

For cumulative analysis, all stacks were initially placed as close as possible to the receiving building. If the modeled pollutant concentration exceeded the significant impact criteria, the distance of the nearest source building stack was increased, until the dispersion model showed no significant impact.

Buildings A and B stacks setback distance from 28th Street was considered for the cumulative impact on the Applicant owned building. Situating these stacks as far as possible from 28th Street would align Site 2 stack with a direct wind vector. Figure 17-4 shows the stacks locations with the Building A and B furthest away from 28th Street.

Figure 17-4
Projected Developments in Cumulative Impact Assessment

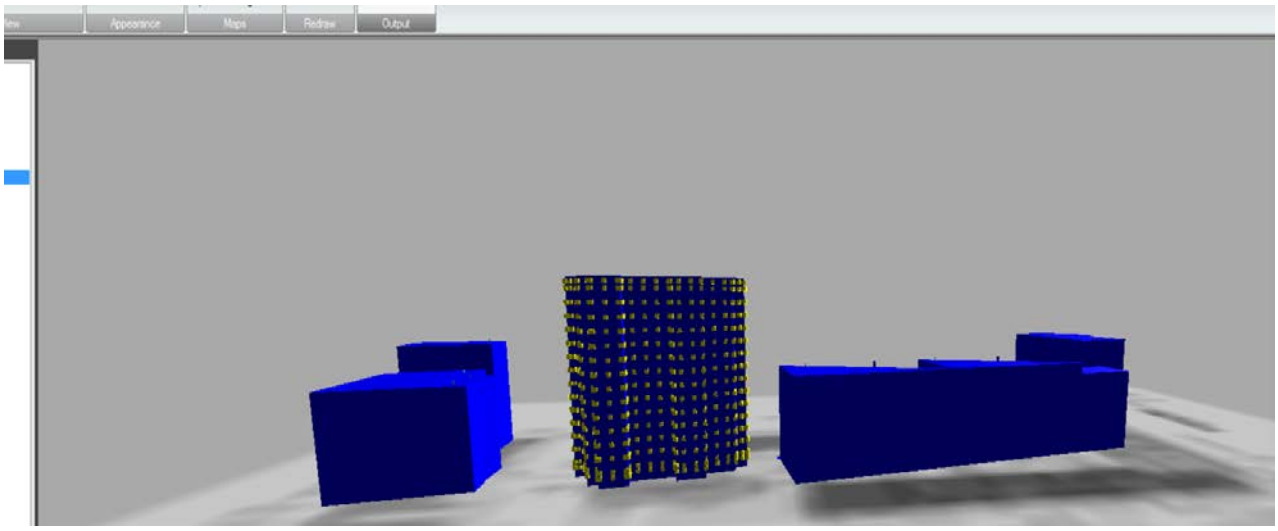


Location of the maximum predicted impact from Building A and B, and Site 2 stacks

As seen in the Figure 17-4, situating Building A and B stacks furthest away from 28th Street would align the three stacks with a wind vector, and the maximum cumulative impact from the emission of these stack is predicted to be at the north-east corner of the building. In addition, AERMOD models were run with Building A and B stacks at 10 feet setback distance from 28th Street, by creating additional short-term and annual source groups in the AERMOD models.

Receptors were placed around all faces of each impacted building (except for the common sides of each structure where buildings are attached to each other) in 10 foot increments on all floor levels, starting 10 feet above the ground and extending up to the level of the upper windows (that was assumed to be approximately 5 feet below roof level). In order to assure that maximum impacts are estimated, more than 2,000 receptors were considered. Figure 17-5 shows the proposed project on the Applicant-owned building model.

Figure 17-5
Receptors on Applicant-owned Building



Dispersion Analyses Results

Results of the project-on-project and project-on-applicant building $PM_{2.5}$ analyses are provided in Table 17-10.

Table 17-10
Project-on-Project and Project-on-Applicant Building $PM_{2.5}$ Analysis Results

Site ID	Receptor Sites	24-hr $PM_{2.5}$ Impacts	Annual $PM_{2.5}$ Impacts	CEQR Significant Impact Criteria
		µg/m³	µg/m³	µg/m³
Building A	Building B	2.05	0.06	7.25/0.3
Building B	Building A	1.92	0.08	7.25/0.3
Building A, B (2)	Site 2	6.92 (2)	0.28	7.25/0.3
Sites 3, 4	Site 5	0.26	0.02	7.25/0.3
Sites 3, 5	Site 4	0.22	0.01	7.25/0.3
Sites 4, 5	Site 3	0.28	0.12	7.25/0.3
Sites 3, 4, 5(3)	Site 6	6.84(3)	0.21	7.25/0.3
Project	Applicant Building	7.02(1)	0.2	7.25/0.3

(1) With 40 feet stack setback
(2) With 75 feet stack setback
(3) With 25 feet stack setback

Based on dispersion modeling analyses with multiple iterations, it was found that the stacks on two of the proposed buildings require setbacks from the buildings they may impact to avoid any potentially significant impacts:

- Building A stack should be setback to at least 40 feet from the lot line facing the Applicant Building and 406 feet from Mermaid Avenue. With this stack setback requirement, no exceedances of the CEQR significant impact criteria or NAAQS would occur. As shown in Table 17-10, the cumulative impact assessment of the $PM_{2.5}$ emissions from all sites combined on the applicant building show that impact would not cause any exceedances of the CEQR significant incremental impact thresholds or NAAQS with required setback for stack on Building A.
- Building B stack should be setback to at least 75 feet from the lot line facing Site 2 Building and 175 feet from Neptune Avenue. With this stack setback requirement, no exceedances of the CEQR significant impact criteria or NAAQS would occur. As shown in Table 17-10, the cumulative impact assessment of the $PM_{2.5}$ emissions from Building A and B combined on the Site 2 building show that impact would not cause any exceedances of the CEQR significant incremental impact thresholds or NAAQS with required setback for stack on Building B.
- Site 5 stack should be setback to at least 25 feet from the lot line facing Site 6 building and 95 feet from West 29th Street. With this stack setback requirement, no exceedances of the CEQR significant impact criteria or NAAQS would occur. As shown in Table 17-10, the cumulative impact assessment of the $PM_{2.5}$ emissions from Sites 3, 4, and 5 combined on the Site 6 building show that impact would not cause any exceedances of the CEQR significant incremental impact thresholds or NAAQS with required setback for stack on Site 5.
- The stacks on Sites 3, 4, and 6 could be located at the minimum allowable by the Building Code distance from the lot line (e.g., 10 feet) facing impacted building without causing any exceedances of the CEQR 24-hour and annual significant incremental impact thresholds of 7.25 $\mu g/m^3$ and 0.3 $\mu g/m^3$, respectively. No stack setbacks are required for these buildings.

Therefore, with these stack setback requirements, the emissions from each site would not significantly impact any of the other sites including the existing applicant building—individually or cumulatively.

NO_2 Results

The NO_2 analysis was conducted using the same stack locations as determined in the $PM_{2.5}$ analyses (with stack setbacks for Buildings A and B).

All the annual models used a Tier 1 approach. Some 1-hour NO_2 analysis required Tier 3 approach. As previously mentioned, with the Tier 1 analysis, the background concentration is added to the estimate 1-hour NO_2 impact, and the total 1-hour NO_2 concentration is compared to the 1-hour NO_2 NAAQS. In a Tier 2 application, a ratio of 80% is applied to the modeled Tier 1 concentration. In a Tier 3 application, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations which include the background concentration. The results of the project-on-project and project-on-Applicant building NO_2 analyses are provided in Table 17-11.

Table 17-11
Project-on-Project and Project-on-Applicant Building NO_2 Analysis Results

(1) With 40 feet stack setback
(2) With 75 feet stack setback
(3) With 25 feet stack setback

The results of the analysis are that the total NO_2 8-highest daily 1-hour concentrations are

Site ID	Receptor Sites	1-hr NO_2 Impacts	Annual NO_2 Impacts	1-hr Tier Approach	NAAQS 1hr/Annual
		µg/m³	µg/m³		µg/m³
Building A	Building B	165.5	41.5	Tier 1	188/100
Building B	Building A	169.4	41.9	Tier 2	188/100
Building A, B (2)	Site 2	177.4(2)	44.5	Tier 1	188/100
Sites 3, 4	Site 5	143.1	41.0	Tier 1	188/100
Sites 3, 5	Site 4	127.9	41.0	Tier 1	188/100
Sites 4, 5	Site 3	127.5	41.0	Tier 1	188/100
Sites 3, 4, 5	Site 6	143.1	43.5	Tier 3	188/100
Cumulative Impact of Building A (1), B, Sites 2, 3, 4, 5, and 6 on Applicant Building		183.7 (1)	43.4	Tier 3	188/100

less than the 1-hour NO_2 NAAQS of 188 µg/m³ for each individual site and cumulatively for all sites together. The estimated annual NO_2 total concentrations, which included impacts and the NO_2 annual background concentration, are also less than the annual NO_2 NAAQS of 100 µg/m³ for all sites considered.

Therefore, NO_2 emissions would not cause significant impacts with the proposed E-designations.

Building A and B Stacks Setback Distance From 28th Street Results

With Building A and B stacks located furthest away from 28th Street, the maximum 1-hour NO_2 and both 24-hour and annual $PM_{2.5}$ concentrations of the project-on-Applicant building were predicted with the building wake effect disabled. These averaging times concentrations were analyzed with the Building A and B stacks located 10 feet from the lot line facing 28th Street. Table 17-12 shows the project-on-Applicant comparison.

Table 17-12
Project-on-Applicant Building Analysis Results

Building A and B Stack Locations	1-hr NO_2 Tier 3 Impacts	Annual NO_2 Tier 1 Impacts	24-hr PM2.5 Impacts	Annual PM2.5 Impacts
	µg/m³	µg/m³	µg/m³	µg/m³
10 feet from lot line facing 28th Street	183.7	43.3	7.02	0.19
10 feet from roofline facing 29th Street	146.6	42.8	6.75	0.16

As seen in Table 17-12, the predicted concentrations with Building A and B stacks located 10 feet from the lot line facing 28th Street are less than the results with the stacks aligning with Site 2 stack along a direct wind vector. As such, Building A and B stack locations do not require setback distance restriction from the lot line facing 28th Street.

E- Designation E-447

An (E) designation (E-447) would be required to restrict fuel to the exclusive use of natural gas in the HVAC systems for all of the proposed developments. Another (E) designation would be required for Building A and Building B to impose stack setback requirements. The (E) designations language is as follows:

Block 7011, Lot 11A (Projected Development Site 1, Building A): Any new commercial or residential 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 systems to avoid any potential significant adverse air quality impacts. Stack shall be located at a minimum of 91 feet above grade, and at 389 feet from Mermaid Avenue to avoid any potential significant adverse air quality impacts.

Block 7011, Lot 11B (Projected Development Site 1, Building B): Any new commercial or residential 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 systems to avoid any potential significant adverse air quality impacts. Stack shall be located at a minimum of 91 feet above grade, and at most 240 feet from Neptune Avenue to avoid any potential significant adverse air quality impacts.

Block 7011 Lot 1 (Projected Development Site 2): Any new commercial or residential 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 systems to avoid any potential significant adverse air quality impacts. Stack shall be located at a minimum of 101 feet above grade.

Block 7011, Lots 45, and 46 (Projected Development Site 3): Any new commercial or residential 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

systems to avoid any potential significant adverse air quality impacts. Stack shall be located at a minimum of 81 feet above grade, and at most 71 feet from West 28th Street to avoid any potential significant adverse air quality impacts.

Block 7011, Lot 47 (Projected Development Site 4): Any new commercial or residential 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 systems to avoid any potential significant adverse air quality impacts. Stack shall be located at a minimum of 81 feet above grade, and at most 147 feet from West 29th Street to avoid any potential significant adverse air quality impacts.

Block 7011, Lot 49 (Projected Development Site 5): Any new commercial or residential 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 systems to avoid any potential significant adverse air quality impacts. Stack shall be located at a minimum of 81 feet above grade, and at most 109 feet from West 29th Street to avoid any potential significant adverse air quality impacts.

Block 7011, Lots 51, 52, 53, and 54 (Projected Development Site 6): Any new commercial or residential 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 systems to avoid any potential significant adverse air quality impacts. Stack shall be located at a minimum of 101 feet above grade.

V. CONCLUSION

The results of the analysis are that:

- Emissions from project-related vehicle trips would not cause significant air quality impacts to receptors at the local or neighborhood scale;
- Emission from the parking facilities would not cause significant air quality impacts to receptors at the local 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;
- All sites would require E-designations that will limit fuel use in the HVAC systems to natural gas exclusively;
- As no existing large or major sources are located within 1,000 feet of the Project Area, emissions from existing stationary sources would not cause a significant air quality impact to the proposed project; and
- As no industrial sources are located within 400 feet of the Project Area, no significant air quality impacts to the proposed project are anticipated from air toxics.

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

Subject Site

The Proposed Actions would allow for development of two residential apartment buildings and accessory parking on Projected Development Site 1. The site is located at 2828 West 28th Street in the Coney Island section of Brooklyn, New York. Vehicular traffic is the predominant source of noise, and therefore the proposed development warrants an assessment of the potential for adverse effects on project occupants from ambient noise. The proposed redevelopment of the site would not create a significant 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.

The project site is identified as Tax Block 7011, Lot 11. The subject property is bounded by West 28th Street to the east, Neptune Avenue to the north, and West 29th Street to the west. West 28th Street is a one-way southbound street. Neptune Avenue is a two-lane east/west street. West 29th Street is a one-way north bound street. The intersections proximate the site are controlled by street lights. The area in which the subject property is located is primarily multi-family residential buildings and commercial facilities. The subject property is currently developed with an apartment building and parking lot enclosed by a metal gate.

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

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

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.

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

  - Leq(24) is the continuous equivalent sound level over a 24-hour time period.

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

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

Measurement Location and Equipment

Because the predominant noise source in the area of the proposed project is vehicular traffic, noise monitoring was conducted during peak vehicular travel periods, 8:00 – 9:00 am, 12:00 -1:00 pm, and 5:00-6:00 pm. Pursuant to *CEQR Technical Manual* methodology, readings on the at the West 28th Street, Neptune Avenue and West 29th Street frontages were conducted for 20-minute periods during each peak hour. Noise monitoring was conducted using a Type 1 Casella CEL-633 sound meter, with wind screen. The monitor was placed on a tripod at a height of approximately three feet above the ground, away from any other surfaces. The monitor was calibrated prior to and following each monitoring session. Vehicular traffic constitutes the primary source for noise at the project site.

Photo 1: W 28th Street frontage monitoring location

Photo 2: Neptune Avenue frontage monitoring location

Photo 3: W 29th Street frontage monitoring location

Photo 4: Mermaid Avenue frontage monitoring location

Measurement Conditions

Monitoring on the West 28th St., West 29th St., and Neptune Avenue frontages were conducted during typical midweek conditions, on Tuesday, May 24, 2016. Monitoring on the Mermaid Avenue frontage was conducted during typical midweek conditions, on Tuesday, November 22, 2016. The weather was sunny and dry throughout the day with the exception of brief light rain showers during the morning of May 24, 2016 and wind speeds were moderate throughout the day. Neighboring properties were not a significant source of ambient noise. Traffic volumes and vehicle classification were documented during the noise monitoring. The sound meter was calibrated before and after each monitoring session.

Existing Conditions

Based on the noise measurements taken at the project site, the predominant source of noise at the site is commercial vehicular traffic. The volume of traffic, and its corresponding level of noise, is light on West 28th and West 29th Streets and heavier on Neptune Avenue. Table Noise-2 contains the results for the measurements taken at the subject site.

Table Noise-2 (1 of 4): Noise Levels at West 28th Street

	Tuesday, May 24, 2016		
	8:57 – 9:18 am	12:32 - 12:53 pm	5:22 – 5:43 pm
Lma	75.1	71.4	72.7
L5	65.5	62.5	63.0
L10	**61.0**	**58.5**	**60.5**
Leq	58.3	55.9	56.7
L50	52.0	51.0	52.0
L90	49.5	48.5	49.0
Lmi	47.3	45.6	46.8

Table Noise-2 (2 of 4): Noise Levels at Neptune Avenue

	Tuesday, May 24, 2016		
	8:33 – 8:54 am	12:05 – 12:25 pm	5:00 – 5:20 pm
Lma	77.9	82.8	80.6
L5	72.5	72.0	72.0
L10	**71.0**	**70.5**	**71.0**
Leq	67.5	69.7	67.4
L50	65.5	64.5	66.0
L90	56.0	56.0	57.0
Lmi	48.8	51.1	52.3

Table Noise-2 (3 of 4): Noise Levels at West 29th Street

	Tuesday, May 24, 2016		
	9:23 - 9:46 am	12:59 - 1:21 pm	5:48 – 6:09 pm
Lma	73.9	81.6	52.0
L5	61.5	66.0	62.5
L10	**59.0**	**65.5**	**60.0**
Leq	57.8	61.2	58.3
L50	55.0	55.5	55.5
L90	53.5	54.0	53.5
Lmi	51.4	52.9	51.8

Table Noise-2 (4 of 4): Noise Levels at Mermaid Avenue

	Tuesday, November 22, 2016		
	8:34-8:54 am	12:00 - 12:20 pm	5:01 – 5:21 pm
L_{max}	84.6	77.6	82.9
L_5	710	67.5	68.5
L_{10}	**68.0**	**66.0**	**66.5**
L_{eq}	65.7	62.9	64.4
L_{50}	62.0	60.5	61.0
L_{90}	54.0	55.0	56.0
L_{min}	49.4	51.0	52.7

Table Noise-3 (1 of 3): Morning Traffic Volumes and Vehicle Classifications (vehicle counts for duration of the morning monitoring session)

	West 28th Street	Neptune Avenue	West 29th Street	Mermaid Ave
Car/ Taxi	9	88	2	72
Van/ Light Truck/SUV	13	135	4	96
Medium Truck	0	7	0	8
Heavy Truck	1	2	0	12
Bus	0	2	0	14

Table Noise-3 (2 of 3): Midday Traffic Volumes and Vehicle Classifications (vehicle counts for duration of the midday monitoring session)

	West 28th Street	Neptune Avenue	West 29th Street	Mermaid Ave
Car/ Taxi	6	135	9	52
Van/ Light Truck/SUV	5	178	10	78
Medium Truck	0	3	0	7
Heavy Truck	0	13	1	13
Bus	0	2	0	12

Table Noise-3 (3 of 3): Evening Traffic Volumes and Vehicle Classifications (vehicle counts for duration of the evening monitoring session)

	West 28th Street	Neptune Avenue	West 29th Street	Mermaid Ave
Car/ Taxi	27	179	5	86
Van/ Light Truck/SUV	24	190	5	107
Medium Truck	1	6	0	5

Heavy Truck	0	2	0	7
Bus	1	9	0	11

No-Action Noise Levels

Development under the proposed action is expected to occur over a four-year period for the multiple development sites identified in the development scenario. In addition to creating new sensitive land uses that may be affected by ambient noise, the proposed action would result in development that generates new vehicular traffic. To determine how project-generated traffic would affect ambient noise levels as experienced by occupants of action-induced development, a proportionality analysis was performed. This analysis accounts for the increase in Passenger Car Equivalents that may occur in the future.

Based on the vehicle counts and classifications conducted concurrently with noise monitoring, the Passenger Car Equivalents (PCEs) at each location were determined. Section 19-332 of the *CEQR Technical Manual* identifies the Passenger Car Equivalent for each vehicle type. These PCEs follow:

- Each Automobile or Light Truck: 1 Noise PCE
- Each Medium Truck: 13 Noise PCEs
- Each Bus: 18 Noise PCEs
- Each Heavy Truck: 47 Noise PCEs

Based on these factors, the one-hour Existing Conditions PCEs at each location during the AM, Midday, and PM monitoring periods are as follows:

1) Noise Location 1 – West 28th Street AM 113 PCEs
   Midday 33 PCEs
   PM 184 PCEs
2) Noise Location 2 – Neptune Avenue AM 1032 PCEs
   Midday 2997 PCEs
   PM 2109 PCEs
3) Noise Location 3 – West 29th Street AM 30 PCEs
   Midday 104 PCEs
   PM 24 PCEs
4) Noise Location 4 – Mermaid Ave AM 3264 PCEs
   Midday 3144 PCEs
   PM 2355 PCEs

Noise monitoring was conducted in November of 2016. Since a build year of 2020 was considered for this project, a projection of increased traffic by that year was made to determine no-action noise levels. There are no known developments in the area that would contribute traffic to the locations where noise monitoring was conducted. To determine background traffic increases, an annual background growth rate of 0.5% per year was assumed for years 1-4 consistent with Table 16-4 of the *CEQR Technical Manual*.

One Hour No-Action PCEs for the AM, Midday, and PM Peak Period at each location for the analysis year would be as follows:

1) Noise Location 1 – West 28th Street AM 137 PCEs
   Midday 40 PCEs
   PM 224 PCEs
2) Noise Location 2 – Neptune Avenue AM 1254 PCEs
   Midday 3643 PCEs
   PM 2564 PCEs
3) Noise Location 3 – West 29th Street AM 29 PCEs
   Midday 126 PCEs
   PM 37 PCEs
4) Noise Location 4 – Mermaid Ave AM 3967 PCEs
   Midday 3822 PCEs
   PM 2863 PCEs

To determine no-action noise levels, the following formula is used:

FNA NL =10 log (NA PCE/E PCE) + E NL

where:

FNA NL = Future No Action Noise Level

NA PCE = No Action PCEs

E PCE = Existing PCEs

E NL = Existing Noise Level

The existing L_{10} noise levels at the four monitoring locations were:

1) Noise Location 1 – West 28th St AM 61.0 dB
   Midday 58.5 dB
   PM 60.5 dB
2) Noise Location 2 – Neptune Ave AM 71.0 dB
   Midday 70.5 dB
   PM 71.0 dB
3) Noise Location 3 – West 29th St AM 59.0 dB
   Midday 65.5 dB
   PM 60.0 dB
4) Noise Location 4 – Mermaid Av AM 68.0 dB
   Midday 66.0 dB
   PM 66.5 dB

The resulting calculated value for No Action noise is

1) Noise Location 1 – West 28th St AM 61.8 dB
   Midday 59.3 dB
   PM 61.3 dB
2) Noise Location 2 – Neptune Ave AM 71.8 dB
   Midday 71.3 dB

		PM	71.8 dB
3)	Noise Location 3 – West 29th St	AM	59.8 dB
		Midday	61.3 dB
		PM	60.8 dB
4)	Noise Location 4 – Mermaid Av	AM	68.8 dB
		Midday	66.8 dB
		PM	67.3 dB

In all cases, no-action traffic growth would result in an increase in noise level of 0.8 decibels or less.

With-Action Noise Levels

To document With Action noise levels, the noise contribution of project-related traffic is added to the no-action noise, using the following formula.

FWA NL =10 log (WA PCE/NA PCE) + NA NL

where:

FWA NL = Future No Action Noise Level

WA PCE = With Action PCEs

NA PCE = No Action PCEs

NA NL = No Action Noise Level

Based on the trip generation analysis performed for this project, action-induced development would result in the following incremental traffic at the three monitoring locations, accounting for traffic associated with existing uses that would be displaced by new development:

1)	Noise Location 1 – West 28th St	AM	35 vehicles, 47 PCEs
		Midday	20 vehicles, 32 PCEs
		PM	32 vehicles, 32 PCEs
2)	Noise Location 2 – Neptune Ave	AM	25 vehicles, 25 PCEs
		Midday	11 vehicles, 11 PCEs
		PM	12 vehicles, 12 PCEs
3)	Noise Location 3 – West 29th St	AM	25 vehicles, 37 PCEs
		Midday	11 vehicles, 23 PCEs
		PM	23 vehicles, 23 PCEs
4)	Noise Location 4 – Mermaid Av	AM	6 vehicles, 6 PCEs
		Midday	12 vehicles, 12 PCEs
		PM	24 vehicles, 24 PCEs

By adding these trips to the no-action condition, the following With-action noise levels would occur.

The resulting calculated value for With Action noise is

1)	Noise Location 1 – West 28th St	AM	63.1 dB

		Midday	61.9 dB
		PM	61.9 dB
2)	Noise Location 2 – Neptune Ave	AM	71.9 dB
		Midday	71.4 dB
		PM	71.9 dB
3)	Noise Location 3 – West 29th St	AM	63.4 dB
		Midday	67.1 dB
		PM	63.0 dB
4)	Noise Location 4 – Mermaid Av	AM	68.9 dB
		Midday	66.9 dB
		PM	67.4 dB

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, and an L_{10} of between 70 and 80 dB(A) is identified as marginally unacceptable. The highest recorded L_{10} at the West 28th Street frontage of the subject property was 61.0 during the morning period. The highest recorded L_{10} at the Neptune Avenue frontage of the subject property was 71.0 during the morning and evening period. The highest recorded L_{10} at the West 29th Street frontage of the subject property was 65.5 during the mid-day period. The highest recorded L_{10} at the Mermaid Avenue frontage of the subject property was 68.0 dB during the morning period.

The highest projected L_{10} for the with-action condition at the West 28th Street frontage of the subject property is 63.1 during the morning period. The highest projected L_{10} at the Neptune Avenue frontage of the subject property is 71.9 during the morning and evening period. The highest projected L_{10} at the West 29th Street frontage of the subject property is 67.1 during the mid-day period. The highest projected L_{10} at the Mermaid Avenue frontage of the subject property is 68.9 during the morning period.

Because the L10 value on Neptune Avenue exceeds 70 dB(A), window-wall noise attenuation would be required to ensure an acceptable indoor noise level. Based on Table 19-3 of the *CEQR Technical Manual*, the required attenuation value to achieve acceptable interior noise levels at the Neptune Avenue frontage is 28 dB(A). Provision of this level of window-wall attenuation would ensure that no adverse impacts related to noise would occur.

Conclusions and Recommendations

To avoid any potential impacts associated with noise, the Proposed Actions will place an (E) designation (E-447) for noise on the following properties:

Block 7011, Lot 1
Block 7011, Lot 11

The text of the (E) designation is as follows:

> **Block: 7011, Lot 1**
> **To ensure an acceptable interior noise environment, future Residential/ Commercial/Community Facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on the northern façade facing and within 100 feet from Neptune Avenue to maintain an interior noise level of 45 dBA. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.**
>
> **Block: 7011, Lot 11**
> **To ensure an acceptable interior noise environment, future Residential/ Commercial/Community Facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on the northern façade facing and within 100 feet from Neptune Avenue to maintain an interior noise level of 45 dBA. 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 the project site 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 (E-447), 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.

21. NEIGHBORHOOD CHARACTER

The project would not have the potential to result in any significant adverse impacts to the following analysis areas related to neighborhood character as further discussed below.

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

The rezoning area and the surrounding 400-foot radius project study area consist of a mixture of residential, commercial retail, and community facility uses and a large area of open space. The introduction of the proposed residential development as well as the mixed-use residential, commercial, and community facility developments anticipated on the Projected Development Sites would fit in well with the range of uses in both the rezoning area and the surrounding project study area. The projected developments could alter existing development patterns in the future as it could increase density of on these properties to be closer in character to areas within the project study area to the south. This would also be in compliance with City policies to encourage the development of new housing, especially affordable housing, in underutilized areas of the City.

The proposed text and map amendments would only apply to the Rezoning 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 R6, R6A, and R7A/C2-4 zoning districts in the Rezoning 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. R6 districts are also mapped to the south of the Rezoning Area. The proposed actions are also needed to provide enough floor area to maintain the existing 15-story building on the Applicant's site in compliance with zoning. The mapping of a C2-4 commercial overlay to replace the existing C1-2 commercial overlay is intended to allow a wider range of local retail services to be provided in the area.

No impact to public policies would occur as a result of the Proposed Actions. The action would be an appropriate development in the Rezoning 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 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.

B. Socioeconomic Conditions – As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to socioeconomic conditions. The development assumed in the RWCDS is not anticipated to result in the loss of any occupied dwelling units or commercial space. Therefore, the Proposed Actions

would not result in the direct displacement of residences or businesses. Relative to indirect residential displacement, the proposed rezoning would allow for the development of approximately 320 units within the Project Area for the With-Action RWCDS. The RWCDS would be expected to generate a total residential population of 851 persons which would represent less than 4 percent of the study area population of 21,849. The *CEQR Technical Manual* notes "if the population increase is less than 5 percent within the study area, or identified sub-areas, further analysis is not necessary as this change would not be expected to affect real estate market conditions." Therefore, the proposed action would not be expected to significantly impact the neighborhood's socioeconomic fabric.

C. Open Space - As stated in the conclusion to this section above, the Proposed Actions would not result in significant adverse impacts related to open space. The Proposed Actions would not result in significant direct impacts on any open space resources and relative to indirect open space impacts, would result in a negligible decrease in the open space ratio in the future with action condition. Additional open space would also be provided on Projected Development Sites 1 and 2 under the Proposed Actions.

D. Historic and Cultural Resources - As stated in the conclusion to this section above, the Proposed Actions would not result in any significant adverse impacts to historic or archaeological resources as determined by the LPC. No historic resources are located within the Rezoning Area or the surrounding 400-foot radius project study area. No potential archaeological resources exist on the Projected Development Sites.

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

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

The mapping of the proposed R5, R6, R6A, and R7A/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 amendments is to provide sufficient floor area to accommodate the existing building on the Proposed Development Site as well as the proposed new buildings in a complying manner. The proposed zoning map amendments would allow for sufficient floor area on both portions of the zoning lot to be in compliance

with zoning. 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 Rezoning Area site. Views to Leon S. and the Neptune Avenue Greenstreet playground would still be available from the streets bordering the Rezoning 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 rezoning would represent a visual improvement to the area.

F. Shadows - As stated in the conclusion to this section above, the Proposed Actions would not result in any significant adverse shadows impacts. Buildings on Projected Development Sites 1 and 2 would only cast new shadows on small portions of Leon S. Kaiser Playground and the Neptune Avenue Greenstreet during the shortest days and coldest period of the year. 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.

G. Transportation - As stated in the conclusion to this section above, no significant adverse impacts related to transportation would occur as a result of the Proposed Actions. 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 AM, 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.

H. Noise - The proposed action required a detailed noise analysis due to ambient noise levels in the vicinity of the Rezoning Area that could have a potentially adverse impact on future residents of the Projected Development Sites. As discussed in the noise section above, window-wall noise attenuation will be incorporated into the project design and therefore there would be no adverse impacts related to noise for project occupants. In order to avoid a significant adverse impact related to noise, E designations will be placed on the proposed development site, Block 7011, Lot 11. In addition, no potential significant adverse noise impacts would be generated by the proposed project on the surrounding area.

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 six development sites located on the same block including one Applicant Owned site, which would be developed with two buildings, and five Non-Applicant owned parcels as further described below.

Construction of both new buildings on Projected Development Site 1 would occur concurrently over an 18-month period. Construction is anticipated to begin in early 2018 and be completed by mid-2019. See attached Construction Schedule.

It is not known when construction on the five 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 12 months to construct these developments, as they are substantially smaller than the development on the Applicant Owned site, and they would be completed in 2020 following an expected gap of approximately 6 months. See attached Construction Schedule.

Proposed Construction Activities

Applicant Owned Site

Exterior construction activities on both buildings would occur concurrently and would include the following in sequence over the 18-month construction period: site cut/pile driving, excavation work, construction of the concrete foundation, construction of the masonry block and pre-cast plank structure, construction of the masonry façade, roofing, and exterior site work. Interior construction work and testing and inspections would overlap with the exterior work described above starting with the masonry façade work and would be completed within approximately 12 months.

Non-Applicant Owned Sites

Construction activities on the five Non-Applicant Owned Sites are anticipated to be similar to those on the Applicant controlled site with the exception of Projected Development Site 3 which would also include demolition of an existing structure on this property. As discussed above, it would only take approximately one year to construct these developments, as they are substantially smaller than the development on the Applicant Owned site. It is estimated that demolition and excavation work take approximately 2 months to complete; foundation work would take approximately 2 months; superstructure development would occur over a 4-month period; and interior construction would occur over an approximately 5-month period a portion of which would overlap with the

superstructure construction. It is not known in what sequence the development on these parcels would occur.

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. Neptune and Mermaid Avenues which adjoin the Rezoning Area are two-lane two-way roadways located close to the western end of the Coney Island peninsula and do not carry heavy traffic volumes. West 28th and 29th Streets which also adjoin the Rezoning 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. Projected Development Sites 1, 2, and 3 (following the demolition of the existing structure on Site 3) 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. Development anticipated to occur on Projected Development Sites 4, 5, and 6 will involve relatively small additions to the existing structures on these lots the construction of which would be well accommodated on these sites themselves.

Although the project would involve construction on multiple development sites on the same block with some overlap in construction activities, construction of the proposed development on the Applicant owned site would occur over a relatively short time period of approximately 18 months. Construction on the non-Applicant owned sites would occur following the completion of construction on the Applicant owned sites and would take approximately 12 months to complete. 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 six Projected Development Sites are located near sensitive receptors as they all adjoin or are very close to existing residential development. In addition, Projected Development Sites 1 and 2 are located across Neptune Avenue from Leon S. Kaiser playground.

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. This would be of concern for the potential impacts of construction on Projected Development Sites 2 through 6 on Projected Development Site 1, which would be completed first. It would also be of concern for Projected Development Sites 3, 4, 5, and 6, themselves which are located in close proximity to each other. The two buildings proposed to be developed on Projected Development Site 1 would be built and occupied concurrently so there would not be any air or noise concerns from these buildings on each other. However, construction activities on Projected Development Site 1 and Projected Development Sites 2 through 6 would be considered short term (less than two years) as

they would occur over a period of 18 months and 12 months, respectively, where exterior construction activities could result in air and noise impacts to the surrounding area.

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 site 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 140 days to complete for Projected Development Site 1 and likely less time than that for Projected Development Sites 2 through 6 as these would involve significantly smaller structures. These activities would be spread out over six separate locations on the block and these activities on Projected Development Sites 2 through 6 would not overlap with Projected Development Site 1. In addition, any heavy equipment associated with the construction of the buildings (such as a crane) would operate from at least six 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, NOx, 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 18 months and only 140 days (approximately 4.5 months) would involve the noisiest exterior construction activities. These activities would not overlap with construction to occur on Projected Development Sites 2 through 6.

As described above, construction of Projected Development Sites 2 through 6 would take 12 months to complete with a shorter period involving exterior construction activities. Construction activities on these sites would parallel each other and would occur following the completion of all construction on Projected Development Site 1. These activities would be located on five 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 as confirmed in a LPC dated July 5, 2016 (see Historic and Cultural Resources section above). In addition, there are no historic resources in the Rezoning Area or within 400 feet of the Area. Therefore, no adverse construction impacts would occur to any historic or cultural resources from construction on Projected Development Sites 1 through 6.

Hazardous Materials

As explained in the Hazardous Materials section above, the NYCDEP will determine, based on the findings of the Phase I ESA, if any hazardous materials concerns exist on Projected Development Site 1.

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);*

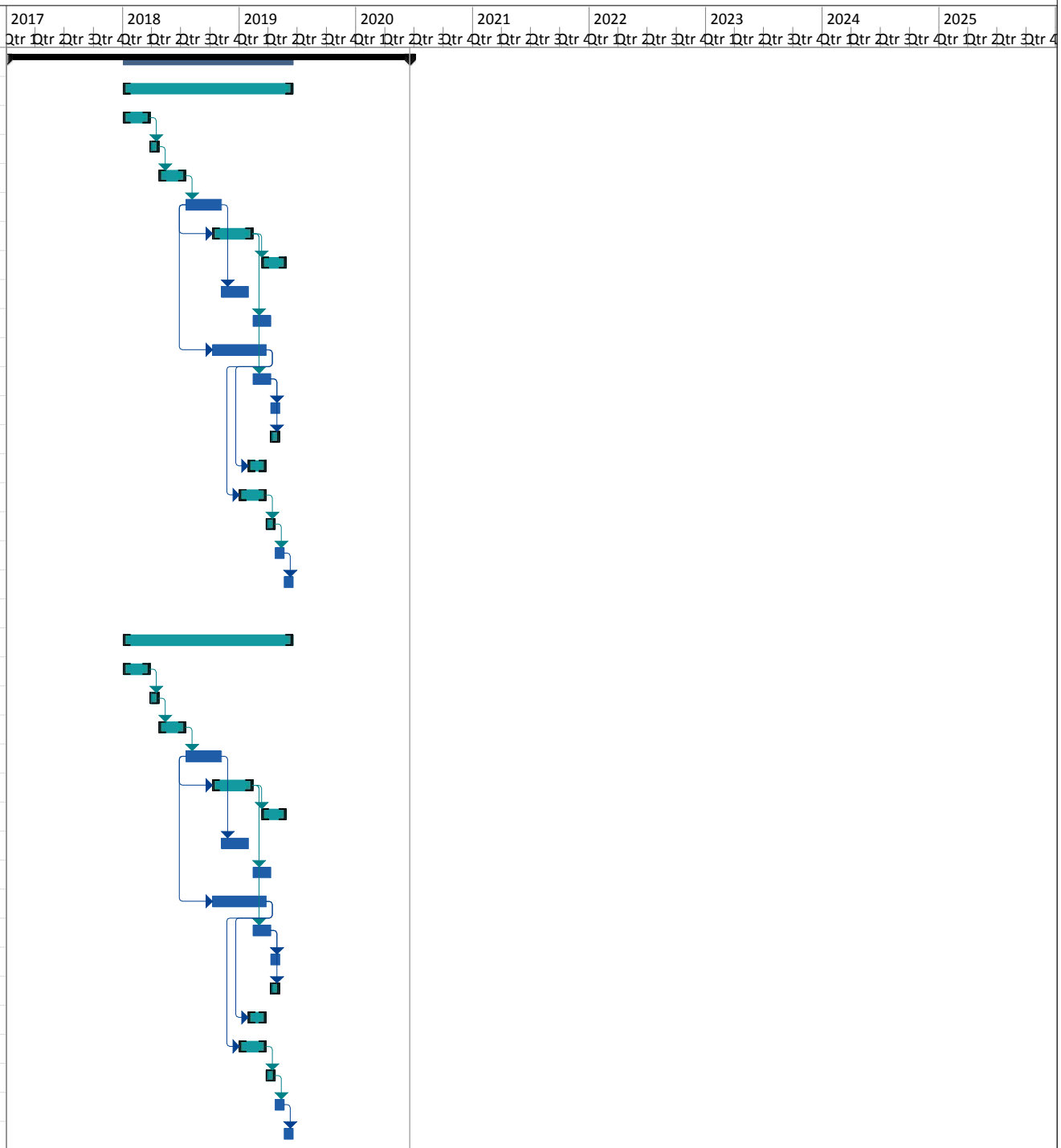
- *Short-term construction activities would not directly affect a technical area, such as impeding the operation of a community facility.*

As discussed above, construction activities on Projected Development Site 1 and Projected Development Sites 2 through 6 would be considered short term (less than two years) as they would occur over a period of 18 months and 12 months, respectively. 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.

ID	Task Name	Duration
1	**SEA PARK NORTH DEVELOPMENT SITE 1 - LOT**	**903 days**
2	**LOT 11B - BUILDING A**	**380 days**
3	**Site Cut, Driven Piles**	**60 days**
4	**Excavation**	**20 days**
5	**Concrete Foundation**	**60 days**
6	**Masonry Block & PreCast Plank Structure**	**80 days**
7	**Masonry Façade**	**90 days**
8	**Roofing**	**55 days**
9	**Elevator Work**	**60 days**
10	**Doors, Windows, Storefront**	**40 days**
11	**Interior Finishes & MEPS**	**120 days**
12	**Utility Company Services**	**40 days**
13	**Fire Sprinkler Testing**	**20 days**
14	**Fire Alarm Testing**	**20 days**
15	**Common Area Flooring**	**40 days**
16	**Lobby Work/Community Area Build Out**	**60 days**
17	**On and Off Site Work, BPP, Asphalt Work**	**20 days**
18	**Punch List, Sign Offs, Inspections**	**20 days**
19	**TCO**	**20 days**
20		
21	**LOT 11B - BUILDING B**	**380 days**
22	**Site Cut, Driven Piles**	**60 days**
23	**Excavation**	**20 days**
24	**Concrete Foundation**	**60 days**
25	**Masonry Block & PreCast Plank Structure**	**80 days**
26	**Masonry Façade**	**90 days**
27	**Roofing**	**55 days**
28	**Elevator Work**	**60 days**
29	**Doors, Windows, Storefront**	**40 days**
30	**Interior Finishes & MEPS**	**120 days**
31	**Utility Company Services**	**40 days**
32	**Fire Sprinkler Testing**	**20 days**
33	**Fire Alarm Testing**	**20 days**
34	**Common Area Flooring**	**40 days**
35	**Lobby Work/Community Area Build Out**	**60 days**
36	**On and Off Site Work, BPP, Asphalt Work**	**20 days**
37	**Punch List, Sign Offs, Inspections**	**20 days**
38	**TCO**	**20 days**



SEA PARK NORTH

PROJECT DEVELOPEMENT SITES 2 THROUGH 6

PRELIMINARY CONSTRUCTION SCHEDULE

APPENDIX

Architectural Plans

SEA PARK
NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

SCHEMATIC RENDERING

Z-100.00

09.06.16
BLOCK:7011
LOT: 11

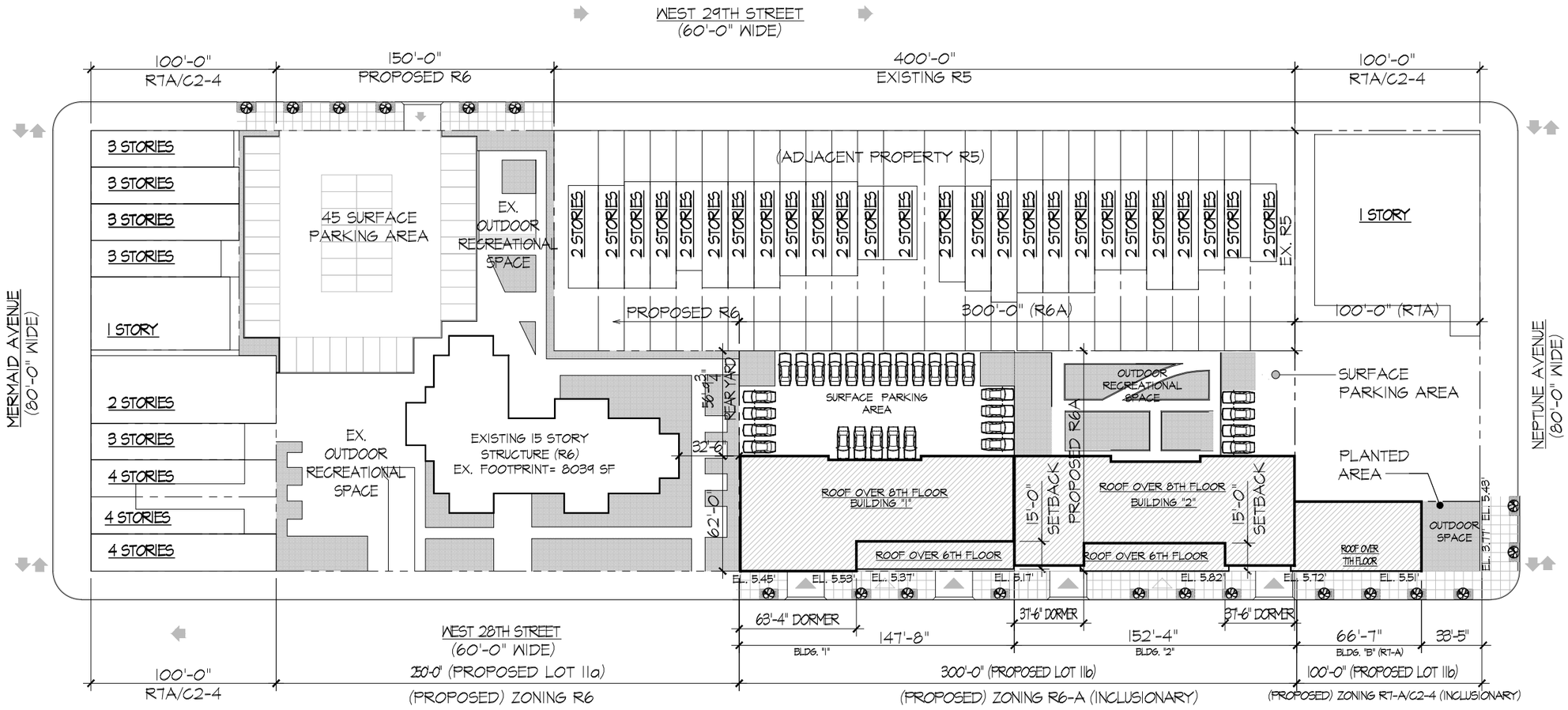
SCHEMATIC RENDERING

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS



PLOT PLAN
SCALE 1/64" = 1'-0"

N

FOR ILLUSTRATIVE PURPOSES ONLY

SCHEMATIC PLOT PLAN

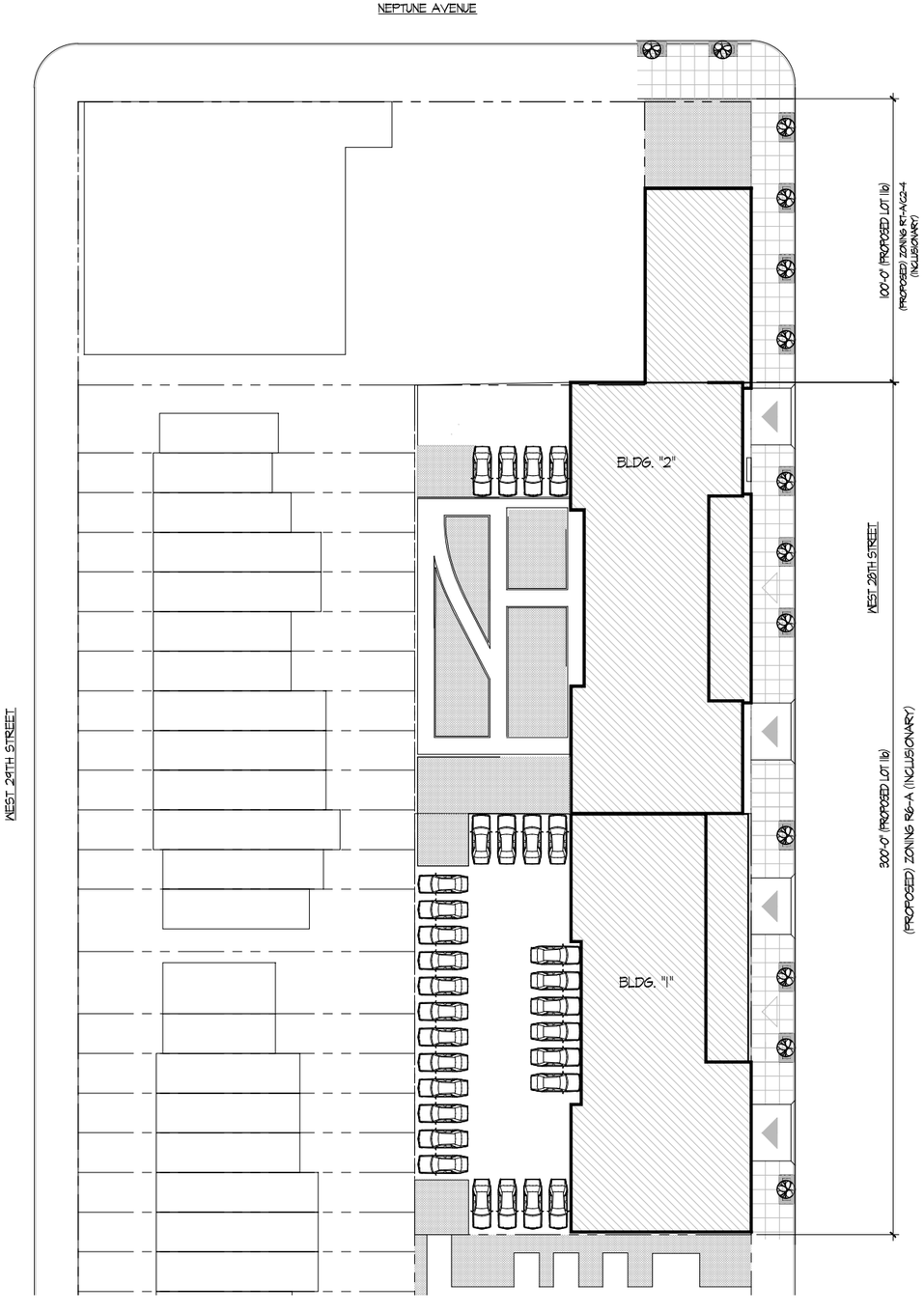
Z-101.00

PARKING REQUIREMENTS	EXISTING BUILDING INFORMATION
EXISTING DEVELOPMENT = 32 PARKING SPACES REQUIRED EXISTING DEVELOPMENT = 45 PARKING SPACES PROPOSED TOTAL SURFACE PARKING AREA = 15,000 SQ. FT. 15,000 SQ. FT. / 45 P.S. = 333 SQ. FT. PER CAR	Address: 2828 WEST 28 STREET11224 Number of Buildings: 1 Number of Floors: 15 Gross Floor Area: 120,585 Sq. Ft. Lot Coverage: 8,039 Sq. Ft. Residential Units: 122 Total Land Use: Multi-Family Elevator Building

LEGEND

- PARKING ENTRANCES
- PROPOSED DEVELOPMENT RESIDENTIAL ENTRANCES
- PROPOSED REZONE TO R6
- PROPOSED REZONE TO R7A/C2-4 (M.I.H.)
- PROPOSED REZONE TO R6A (M.I.H.)

09.06.16
BLOCK:7011 LOT: 11



SCHEMATIC PLOT PLAN

N

FOR ILLUSTRATIVE PURPOSES ONLY

Prorposed lot designation:	11b	CONSTRUCTION CLASS 1-B 2HR RATED - BUILDING TO BE FULLY SPRINKLED - BUILDING TO BE DESIGNED PER 2008 NYC BUILDING CODE
Block:	7011	
Zoning:	R5 - Assumed R7-A & R6A	
	INCLUSIONARY SPECIAL DISTRICT	
Map:	28d	

RESIDENTIAL - INCLUSIONARY HOUSING							
Q.H.P.	PERMITTED/REQUIRED		PROPOSED		PROPOSED TOTAL	REMARKS	RES.
	R7A	R6A	R7A	R6A			
ZONING LOT AREA			3,762.0	35,643.0	39,405.00	OK	23-32
FLOOR AREA RATIO							
BONUS	4.60	3.60	4.60	3.60		OK	23-154
GROSS FLOOR AREA	17,305.20	128,315	17,290.00 *	128,311.50 *	145601.50 *	OK	23-154
LOT COVERAGE							
Interior lot:		23,167.95		17,985.00	17985.00	OK	23-153
Corner Lot:	3,762.00		2,570.00		2570.00	OK	23-153
NO. OF APARTMENTS							
R6 & R7 - 680	25	188	18	135	153	OK	23-22
HEIGHTS REGULATIONS							
Min. Base Height	40'-0"	40'-0"	60'-8"	60'-8"		OK	23-662
Max. Base Height	75'-0"	65'-0"	60'-8"	60'-8"		OK	23-664
Max Building Height w/ Qualifying Ground Floor	90'-0" / 9	80'-0" / 8	79'-4" / 8	79'-4" / 8		OK	23-664
SETBACK ABOVE BASE HEIGHT							
Narrow Street:	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	OK	23-66
YARD REGULATIONS							
Front	NONE	NONE	NONE	NONE	NONE	OK	23-45
Side	NONE	NONE	NONE	NONE	NONE	OK	23-46
Rear	30'-0"	30'-0"	NONE (CORNER)	56'-9 3/4"	56'-9 3/4"	OK	23-47

	PERMITTED/REQUIRED		PROPOSED		PROPOSED TOTAL	REMARKS	RES.
	R7A	R6A	R7A	R6A			
PARKING							
R6A - @25% of DU		34		62	62	OK	25-251
R7A @ 15% of DU	3		6		6	OK	25-251

ZONING CALCULATION - Q.H.P. - PROPOSED BUILDING

* QUALITY HOUSING DEDUCTIONS

QUALITY HOUSING PROGRAM DEDUCTIONS - BUILDING "1" -

FLOOR	RESIDENTIAL GROSS FLOOR AREA SQ.FT.	AREA OF PUBLIC CORR. (SQ.FT.)	OPEN TO BELOW	% OF CORRIDOR DEDUCTABLE (DENSITY)	CORRIDOR DEDUCTION (SQ.FT.)	LAUNDRY/RREC. ROOM	REFUSE ROOM ** (SQ.FT.)	TOTAL RESIDENTIAL ZONING AREA
G	1,727	0		0%	0		0	1,727
1	8,959	845	346	100%	845	800	12	6,956
2	8,959	760		100%	760		12	8,187
3	8,959	760		100%	760		12	8,187
4	8,959	760		100%	760		12	8,187
5	8,959	760		100%	760		12	8,187
6	8,959	760		100%	760		12	8,187
7	7,687	760		100%	760		12	6,915
8	7,687	760		100%	760		12	6,915
TOTALS	**70,855**	**6,165**			**6,165**	**800**	**96**	**63,448**

QUALITY HOUSING PROGRAM DEDUCTIONS - BUILDING "2" - (R6A)

FLOOR	RESIDENTIAL GROSS FLOOR AREA SQ.FT.	AREA OF PUBLIC CORR. (SQ.FT.)	OPEN TO BELOW	% OF CORRIDOR DEDUCTABLE (LIGHT)	CORRIDOR DEDUCTION (SQ.FT.)	LAUNDRY/RREC. ROOM	REFUSE ROOM ** (SQ.FT.)	TOTAL RESIDENTIAL ZONING AREA
G	2,051	0		0%	0			2,051
1	9,026	973	450	50%	487	1,080	12	6,998
2	9,026	752		50%	376		12	8,638
3	9,026	752		50%	376		12	8,638
4	9,026	752		50%	376		12	8,638
5	9,026	752		50%	376		12	8,638
6	9,026	752		50%	376		12	8,638
7	7,859	752		50%	376		12	7,471
8	7,859	642		100%	642		12	7,205
TOTALS	**71,925**	**6,127**			**3,385**	**1,080**	**96**	**64,864**

QUALITY HOUSING PROGRAM DEDUCTIONS - BUILDING "2" - (R7A)

FLOOR	RESIDENTIAL GROSS FLOOR AREA SQ.FT.	AREA OF PUBLIC CORR. (SQ.FT.)	OPEN TO BELOW	% OF CORRIDOR DEDUCTABLE	CORRIDOR DEDUCTION (SQ.FT.)	LAUNDRY/RREC. ROOM	REFUSE ROOM ** (SQ.FT.)	TOTAL RESIDENTIAL ZONING AREA
G	0	0		0%	0		0	0
1	2,570	200		50%	100		0	2,470
2	2,570	200		50%	100		0	2,470
3	2,570	200		50%	100		0	2,470
4	2,570	200		50%	100		0	2,470
5	2,570	200		50%	100		0	2,470
6	2,570	200		50%	100		0	2,470
7	2,570	200		50%	100		0	2,470
TOTALS	**17,990**	**1,400**			**700**	**0**	**0**	**17,290**

SEA PARK NORTH

BROOKLYN, NY

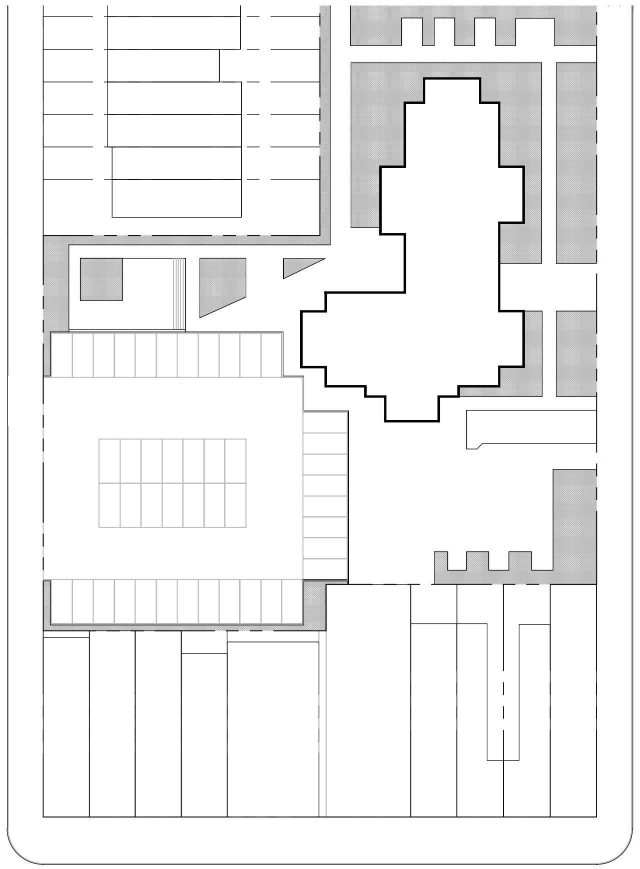
AUFGANG ARCHITECTS

ZONING CALCULATIONS

Z-102.00

09.06.16

BLOCK:7011 LOT: 11



SCHEMATIC PLOT PLAN N

FOR ILLUSTRATIVE PURPOSES ONLY

LEGEND

- PARKING ENTRANCES
- PROPOSED DEVELOPMENT RESIDENTIAL ENTRANCES
- PROPOSED REZONE TO R6
- PROPOSED REZONE TO R7A/C2-4 (M.I.H.)
- PROPOSED REZONE TO R6A (M.I.H.)

SITE DATA		LIST OF REQUIRED ACTIONS		H.F. & Q H.P.
Block:	[illegible]	1. Rezone to R6 (M.I.H.)	CONST. CLASS 1B 2-HR RATED	
Lots:	11		BUILDING CODE OCCUPANCY GROUP R-2	
Street Address:	[illegible]		BUILDING TO BE FULLY SPRINKLERED	
Existing Zoning:	R5		BUILDING TO BE DESIGNED	
Proposed Zoning:	R6		PER 2014 NYC BUILDING CODE	
Community District:	13 BROOKLYN		PER NYC ENERGY CODE	
Zoning Section Map:	28d			
Zoning Lot Area:	[illegible]			

ZR - Section	Title	Description	Per. / Req.	Ex. to Remain	Proposed	Total	Compliance / Notes
22-10	USES	USE GROUP 1, 2, 3, & 4		2			OK
23-151 23-011	HEIGHT FACTOR PROGRAM QUALITY HOUSING PROGRAM	LOT SIZE R6 [illegible] R7A 2,[illegible]		450	[illegible]		OK
	TOTAL	[illegible]					OK
23-32	MIN. LOT AREA	1 [illegible] INTERIOR LOT [illegible] SQ. FT					OK
23-151	HEIGHT FACTOR	TOTAL GROSS AREA FOOT PRINT		[illegible] [illegible]			OK OK
23-151	HEIGHT FACTOR	[illegible] / [illegible]	[illegible]	[illegible]			OK
23-151 23-154 [illegible]-22	FAR R6 [illegible] R7A ADJUSTED	LOT SIZE × FAR [illegible] × [illegible] [illegible] × [illegible] [illegible] × [illegible]	[illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible] [illegible] [illegible]	OK - SEE BELOW ADJUSTED OK OK
23-151 23-153 [illegible]-23	OPEN SPACE RATIO R6 R7A R7A ADJUSTED	EX. GROSS AREA × MIN. REQ. OPEN SPACE [illegible] × [illegible] LOT COVERAGE [illegible] OPEN SPACE OPEN SPACE	[illegible] [illegible] [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible] [illegible]	OK - SEE BELOW ADJUSTED OK OK OK
[illegible]-23	LOCATION OF OPEN SPACE	[illegible] WITHIN DISTRICT	[illegible]	[illegible]			OK
23-64 23-64 23-64	HEIGHT & SETBACKS	NARROW STREET SETBACK BASE HEIGHT SKY EXPOSURE PLANE	[illegible] [illegible] 2.7 TO 1	[illegible] [illegible] 2.7 TO 1			OK OK OK
23-22	DENSITY	R6 [illegible]	[illegible]	122			OK
25-23 25-251	[illegible] PARKING MARKET RATE AFFORDABLE	[illegible] DU [illegible] [illegible] DU 25%	[illegible] [illegible]	[illegible]			OK OK

ZONING CALCULATION - H.F. & Q.H.P. - EXISTING BUILDING

SEA PARK NORTH

BROOKLYN, NY

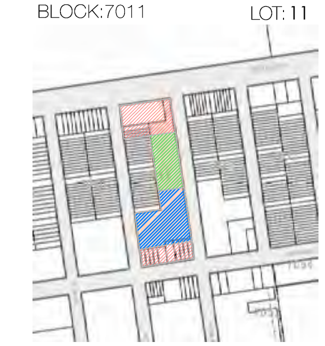
AUFGANG ARCHITECTS

ZONING CALCULATIONS

Z-103.00

09.06.16

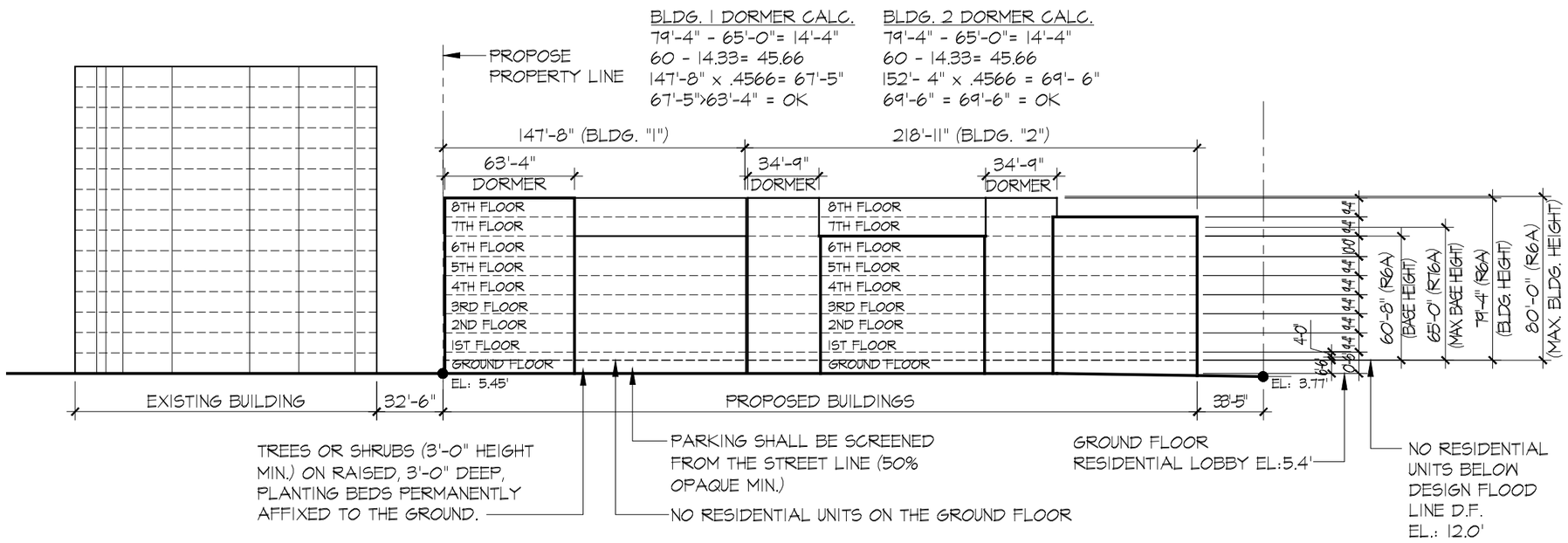
BLOCK: 7011 LOT: 11



SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

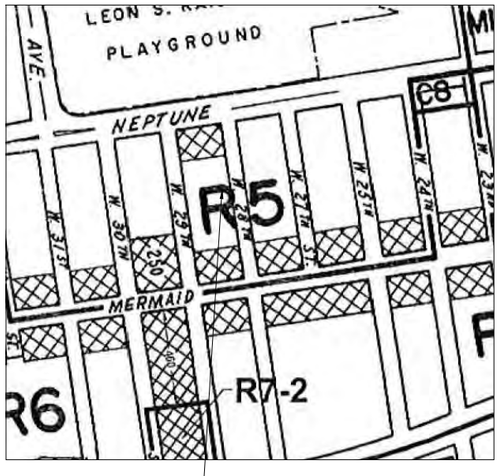


SCHEMATIC ELEVATIONS

SCALE 1/64 " = 1'-0"

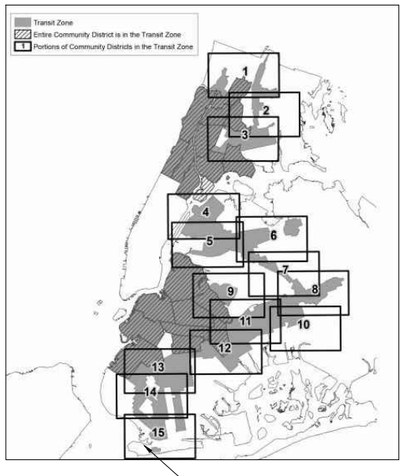
FOR ILLUSTRATIVE PURPOSES ONLY

TAX MAP — SITE LOCATION



EX. ZONING MAP — SITE LOCATION

FEMA MAP — SITE LOCATION

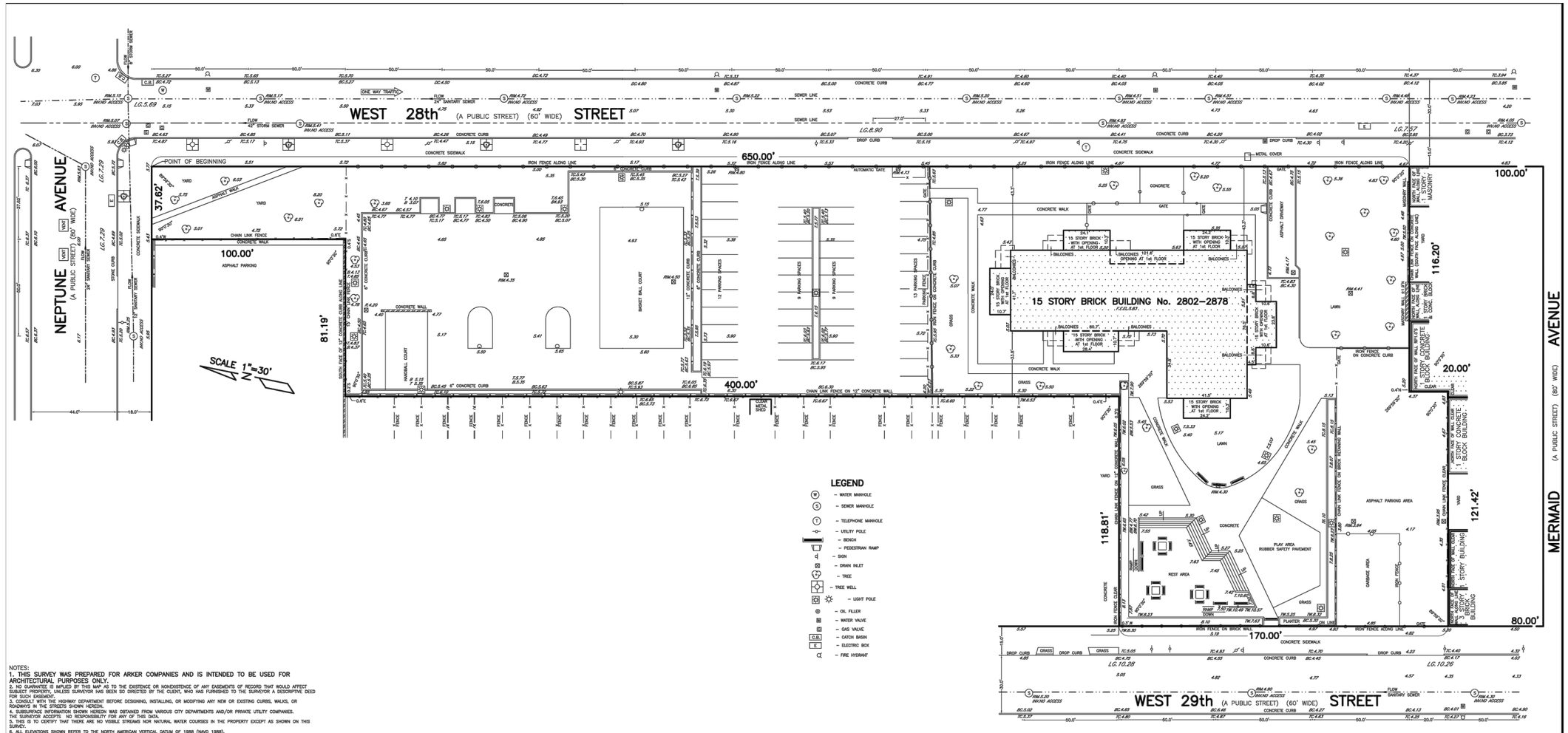


TRANSIT MAP — SITE LOCATION *NOT IN A TRANSIT ZONE

SCHEMATIC HEIGHT DIAGRAM & MAPS

Z-104.00

09.06.16
BLOCK:7011 LOT: 11



LEGEND

- W – WATER MANHOLE
- S – SEWER MANHOLE
- T – TELEPHONE MANHOLE
- – UTILITY POLE
- – BENCH
- – PEDESTRIAN RAMP
- – SIGN
- – DRAIN INLET
- – TREE
- – TREE WELL
- – LIGHT POLE
- – OIL FILLER
- – WATER VALVE
- – GAS VALVE
- C.B. – CATCH BASIN
- E – ELECTRIC BOX
- – FIRE HYDRANT

NOTES:
1. THIS SURVEY WAS PREPARED FOR ARKER COMPANIES AND IS INTENDED TO BE USED FOR ARCHITECTURAL PURPOSES ONLY.
2. NO GUARANTEE IS IMPLIED BY THIS MAP AS TO THE EXISTENCE OR NONEXISTENCE OF ANY EASEMENTS OF RECORD THAT WOULD AFFECT SUBJECT PROPERTY, UNLESS SURVEYOR HAS BEEN SO DIRECTED BY THE CLIENT, WHO HAS FURNISHED TO THE SURVEYOR A DESCRIPTIVE DEED FOR SUCH EASEMENT.
3. CONSULT WITH THE HIGHWAY DEPARTMENT BEFORE DESIGNING, INSTALLING, OR MODIFYING ANY NEW OR EXISTING CURBS, WALKS, OR ROADWAYS IN THE STREETS SHOWN HEREON.
4. SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FROM VARIOUS CITY DEPARTMENTS AND/OR PRIVATE UTILITY COMPANIES. THE SURVEYOR ACCEPTS NO RESPONSIBILITY FOR ANY OF THIS DATA.
5. THIS IS TO CERTIFY THAT THERE ARE NO VISIBLE STREAMS NOR NATURAL WATER COURSES IN THE PROPERTY EXCEPT AS SHOWN ON THIS SURVEY.
6. ALL ELEVATIONS SHOWN REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).
7. SEWER MANHOLE RIM AND INVERT ELEVATIONS SHOWN HEREON WERE OBTAINED FROM FIELD MEASUREMENTS.
8. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

CERTIFIED TO:
NEW YORK CITY DEPARTMENT OF BUILDINGS

DATE SURVEYED: MAY 1st, 2003
REVISED: MAY 3, 2016

GERALD T. O'BUCKLEY
PROFESSIONAL LAND SURVEYORS
43-14 162nd STREET, FLUSHING, NY 11358
TEL. 718-321-1231 FAX 718-321-8076
EMAIL: gtobuckley@nyc.rr.com

TAX MAP
SECTION
BLOCK 7011
LOT 11

FILED MAP
SECTION
BLOCK
LOT

BOROUGH OF BROOKLYN
COUNTY OF KINGS
STATE OF NEW YORK

TITLE No.

GERALD T. O'BUCKLEY, P.L.S.
NEW YORK LICENSE 039834

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

SITE SURVEY
NOT TO SCALE

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

SITE SURVEY

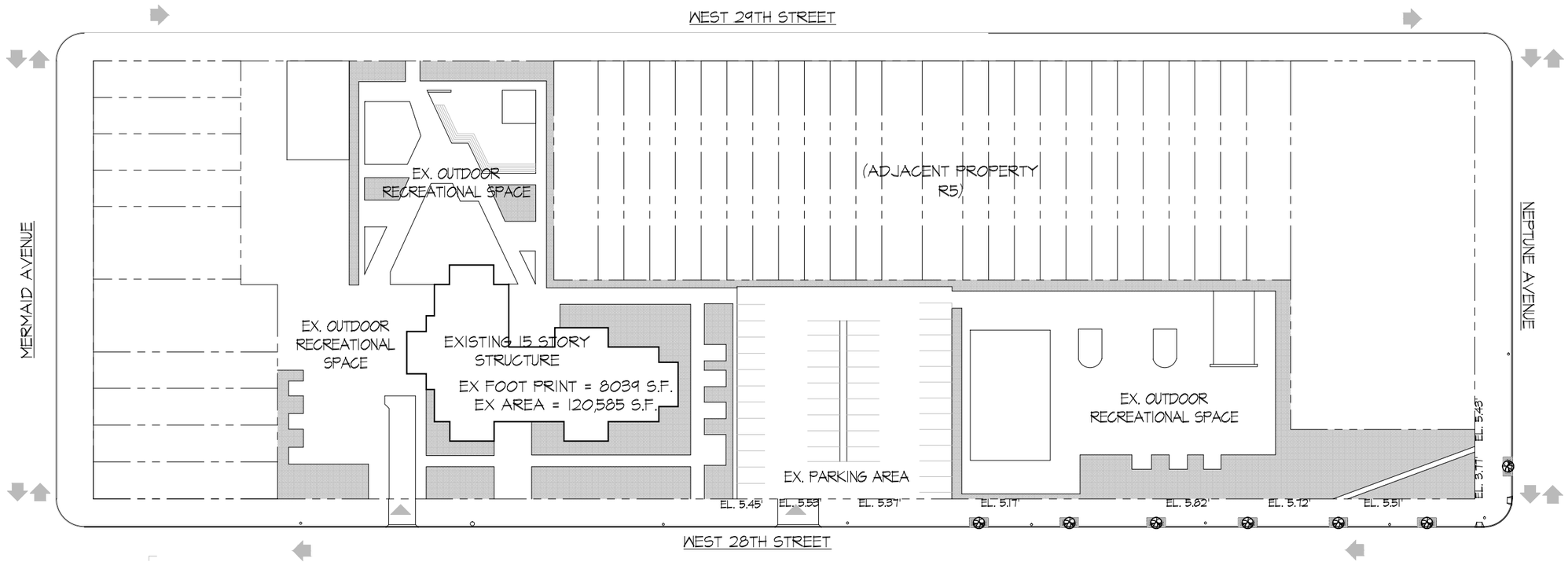
Z-105.00

09.06.16
BLOCK:7011 LOT: 11

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS



SCHEMATIC EXISTING PLOT PLAN
SCALE: 1/64" = 1'-0"

N

FOR ILLUSTRATIVE PURPOSES ONLY

SCHEMATIC EXISTING PLOT PLAN

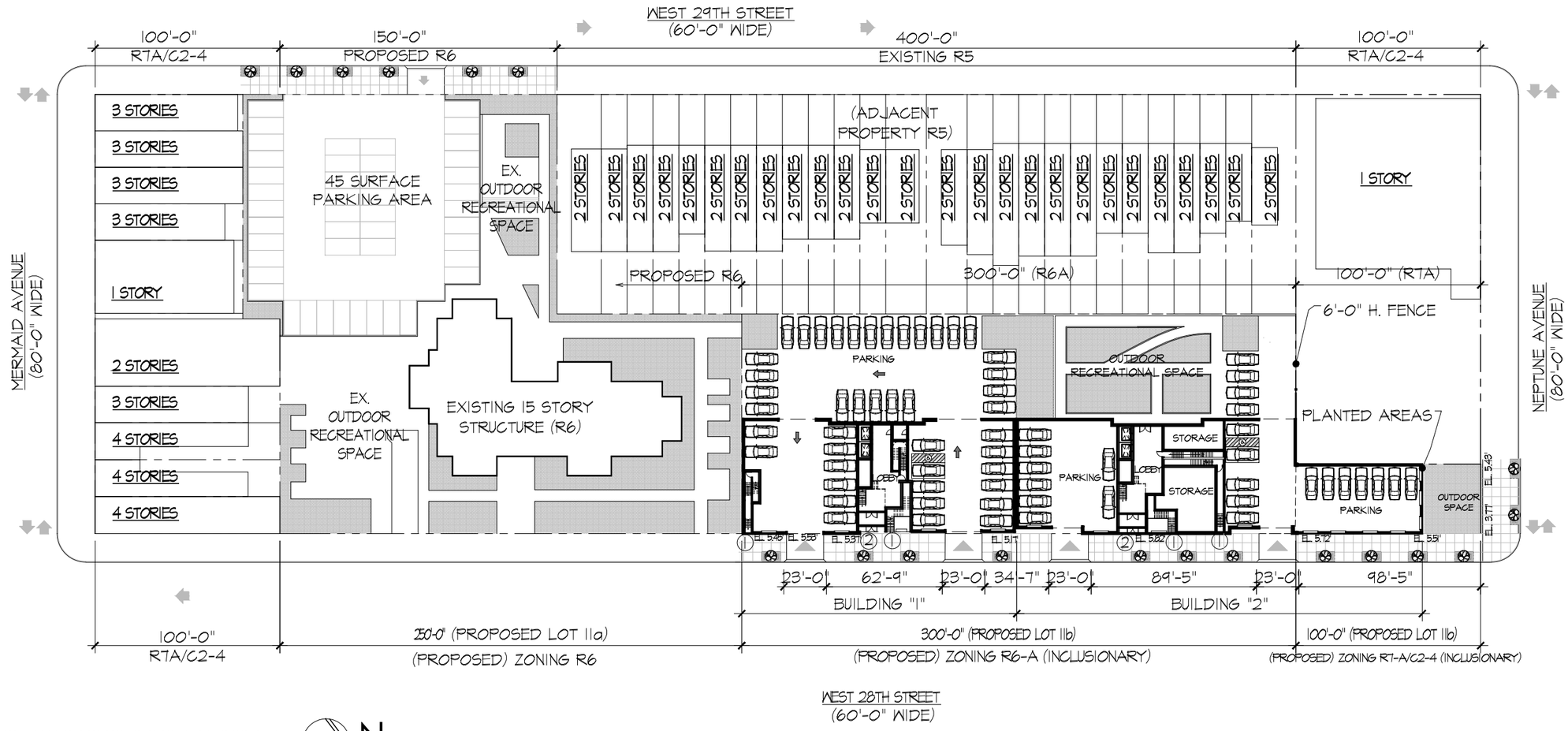
Z-106.00

09.06.16
BLOCK:7011 LOT: 11

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS



SCHEMATIC PROPOSED GROUND FLOOR PLAN
SCALE: 1/64" = 1'-0"

N

LEGEND

① FLOOD EGRESS STAIRS

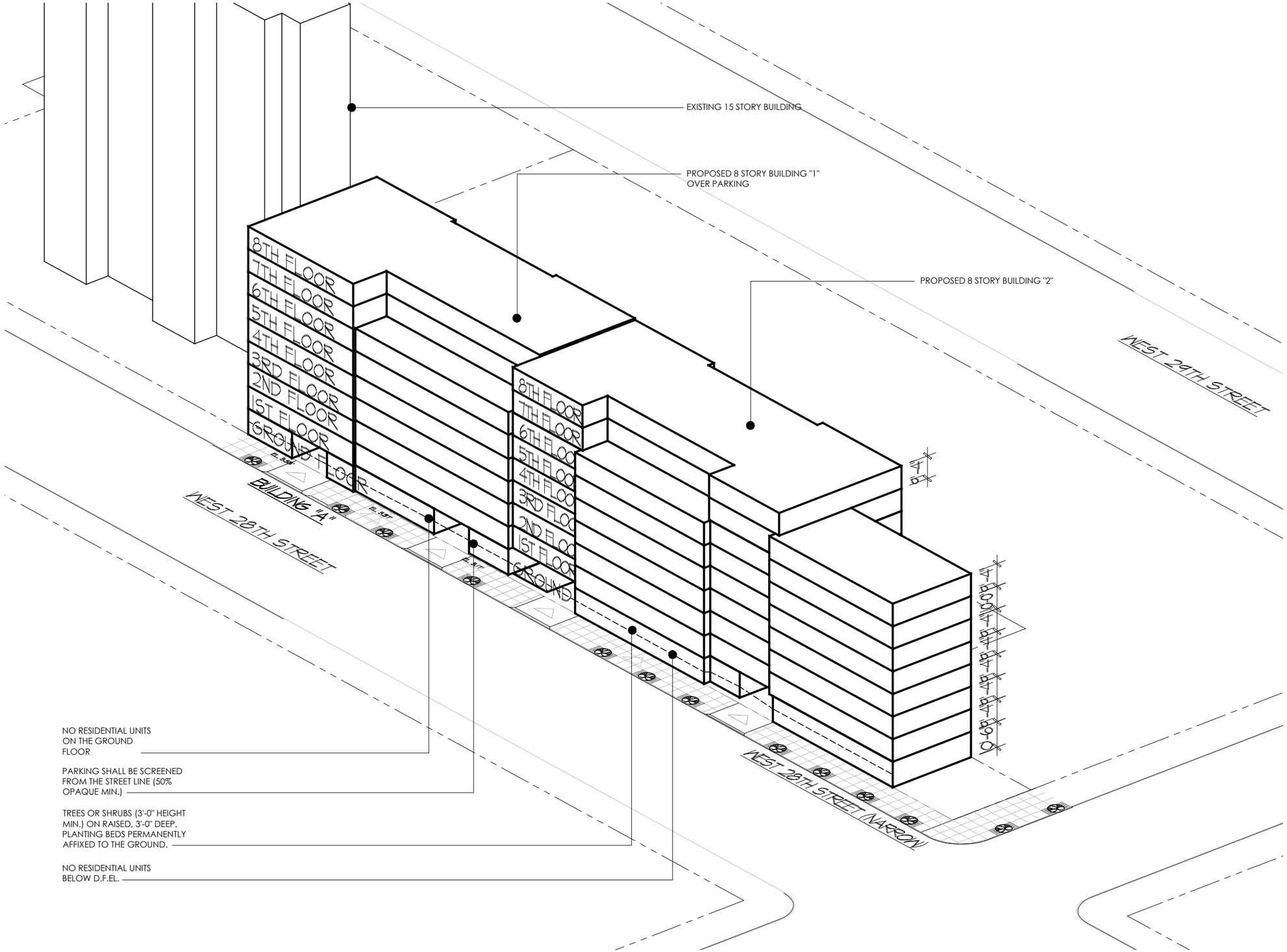
② BUILDING ENTRANCE EL. 5.4'

FOR ILLUSTRATIVE PURPOSES ONLY

SCHEMATIC PROPOSED GROUND FLOOR PLAN

Z-107.00

09.06.16
BLOCK:7011 LOT: 11



SCHEMATIC PERSPECTIVE

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

SCHEMATIC PERSPECTIVE

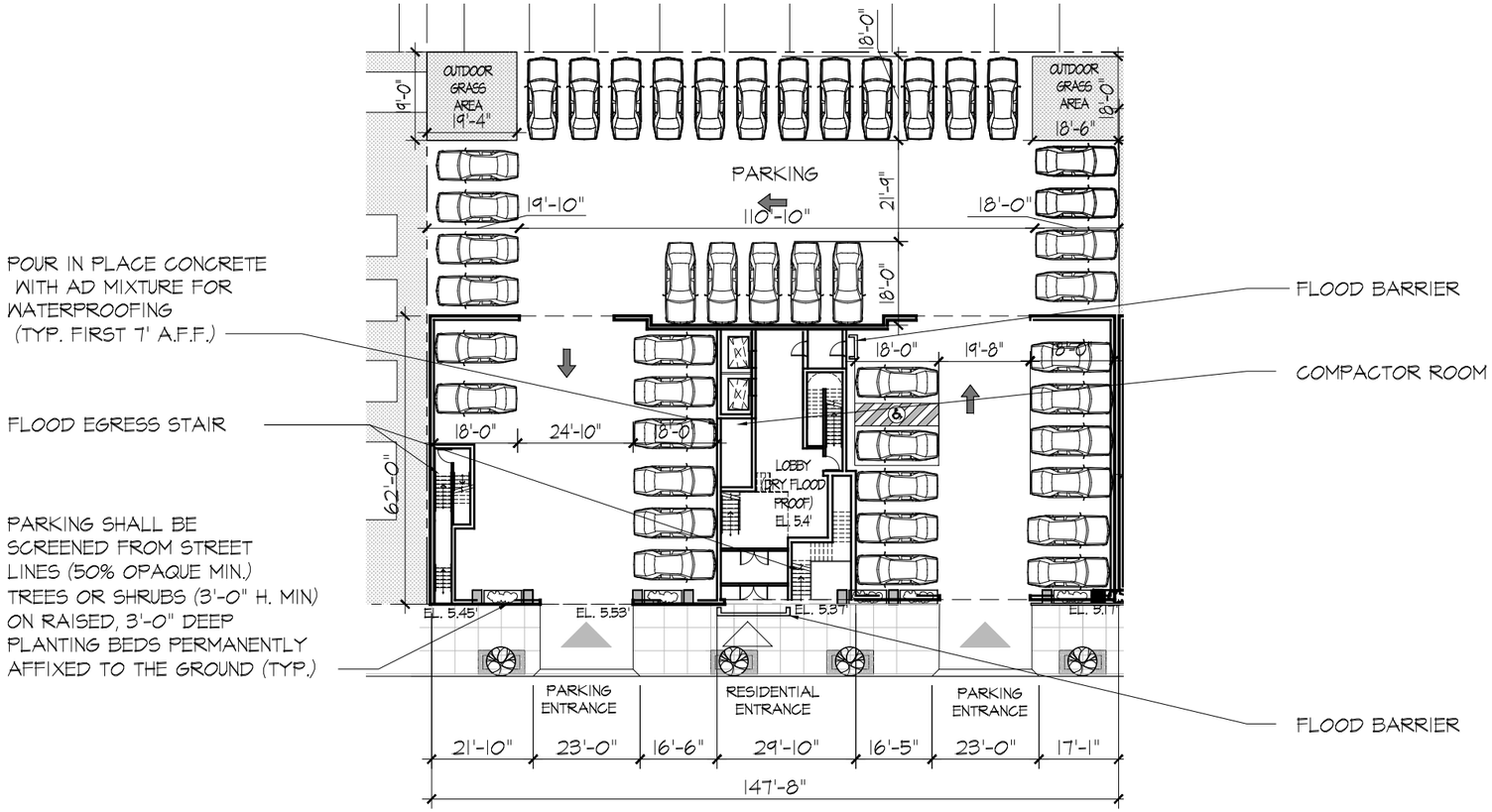
Z-108.00

09.06.16
BLOCK:7011 LOT: 11

SEA PARK NORTH

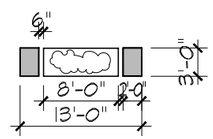
BROOKLYN, NY

AUFGANG ARCHITECTS



BUILDING 1 - GROUND FLOOR PLAN
SCALE: 1/32" = 1'-0"

N



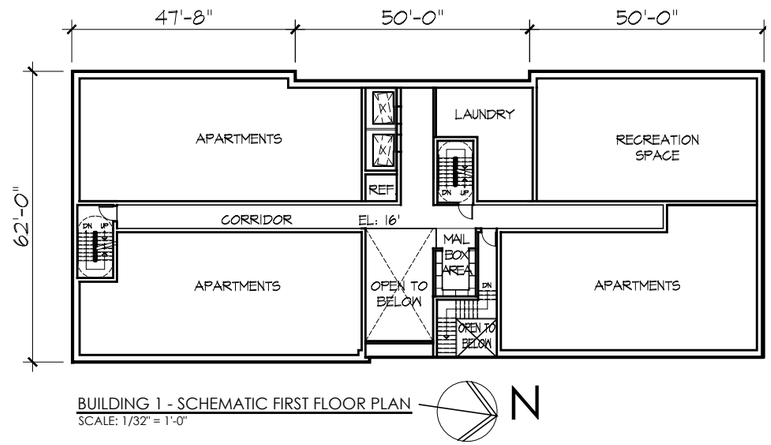
PLANTER DIMENSIONS
SCALE: 1'-0" = 1/16"

FOR ILLUSTRATIVE PURPOSES ONLY

BUILDING A GROUND FLOOR PLAN

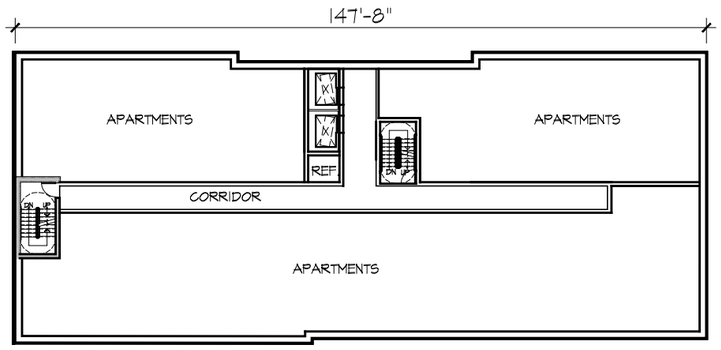
Z-109.00

09.06.16
BLOCK:7011 LOT: 11



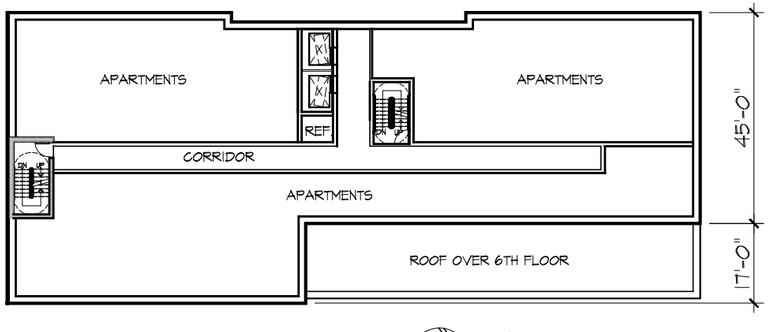
BUILDING 1 - SCHEMATIC FIRST FLOOR PLAN
SCALE: 1/32" = 1'-0"

N



BUILDING 1 - SCHEMATIC 2ND THRU 6TH FLOOR PLAN
SCALE: 1/32" = 1'-0"

N



BUILDING 1 - SCHEMATIC 7TH & 8TH FLOOR PLAN
SCALE: 1/32" = 1'-0"

N

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

BUILDING A SCHEMATIC FLOOR PLANS

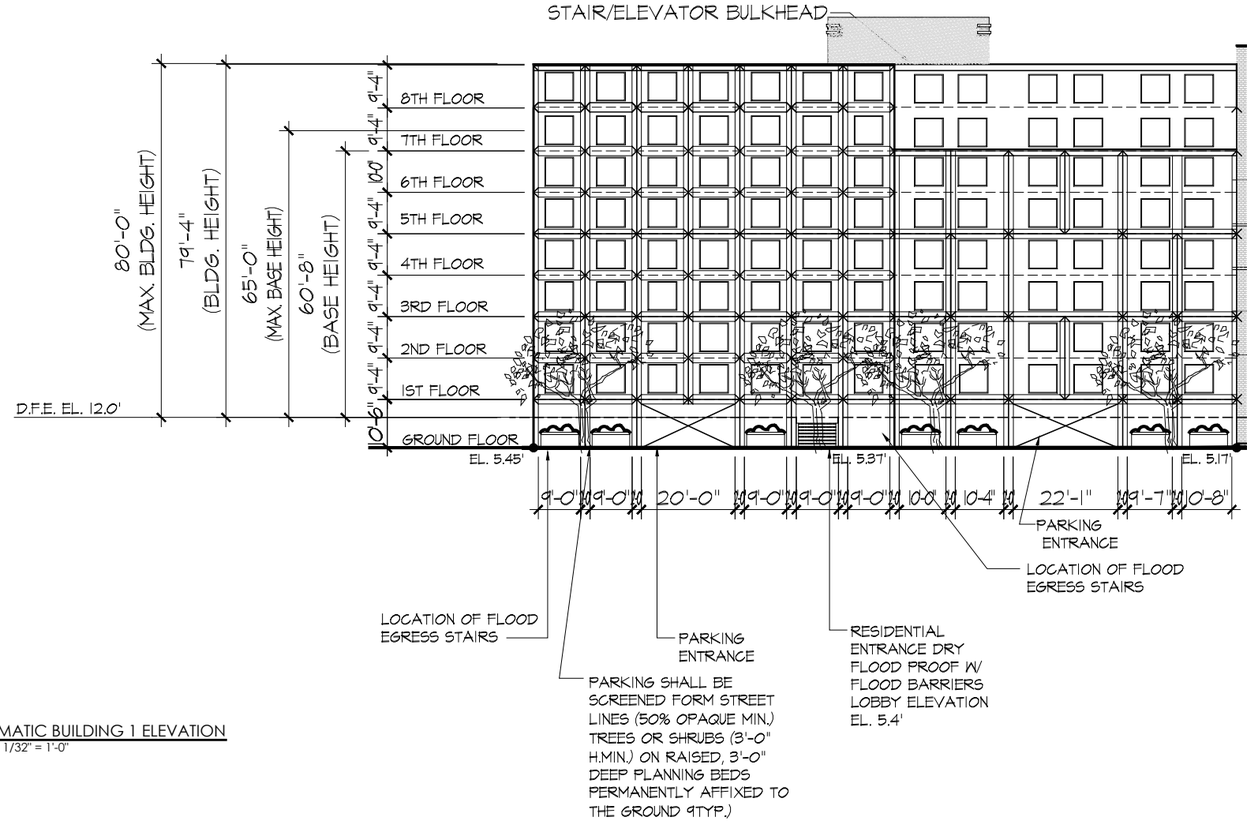
Z-110.00

09.06.16
BLOCK:7011
LOT: 11

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS



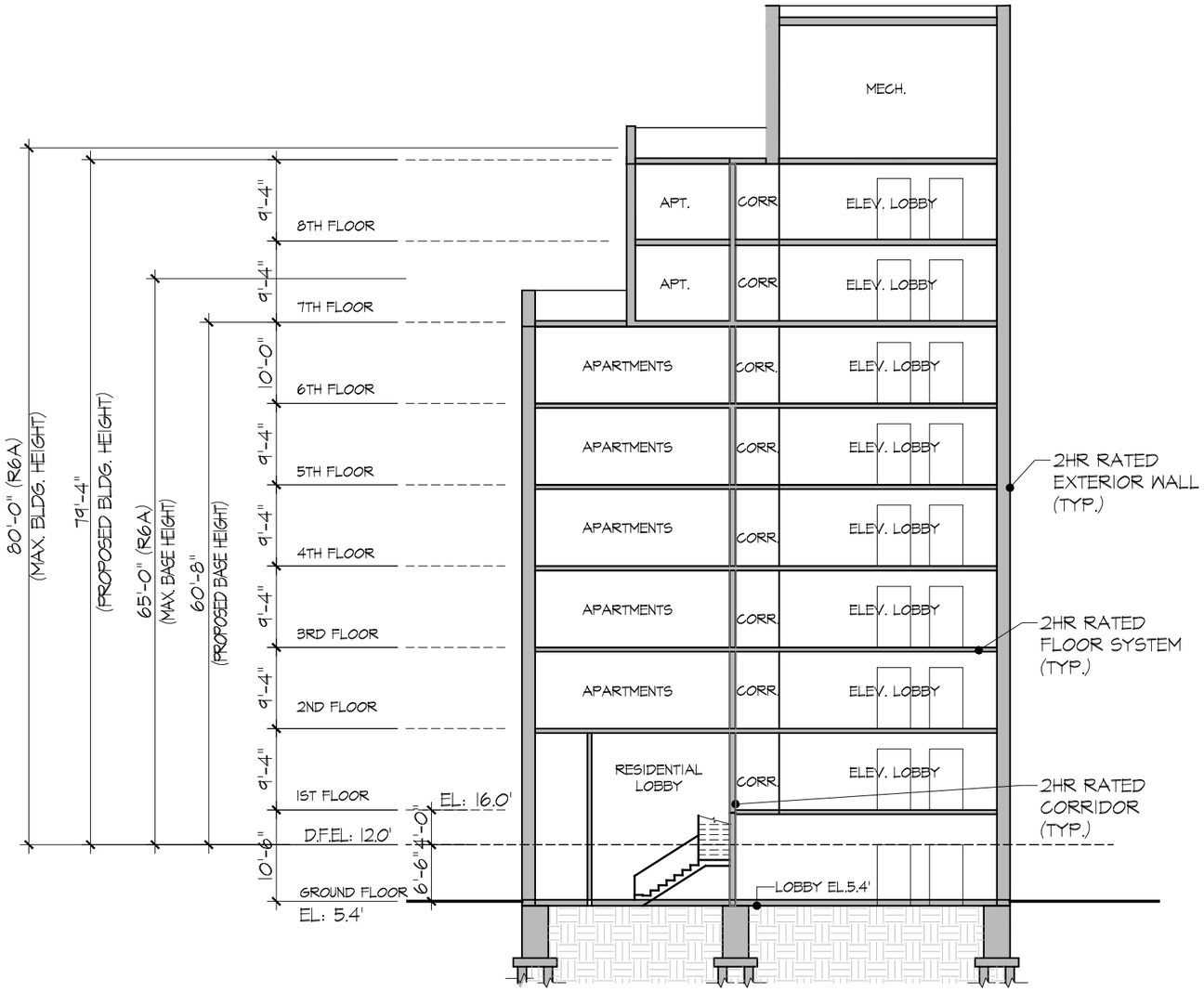
SCHEMATIC BUILDING 1 ELEVATION
SCALE: 1/32" = 1'-0"

FOR ILLUSTRATIVE PURPOSES ONLY

SCHEMATIC BUILDING "A" FRONT ELEVATION

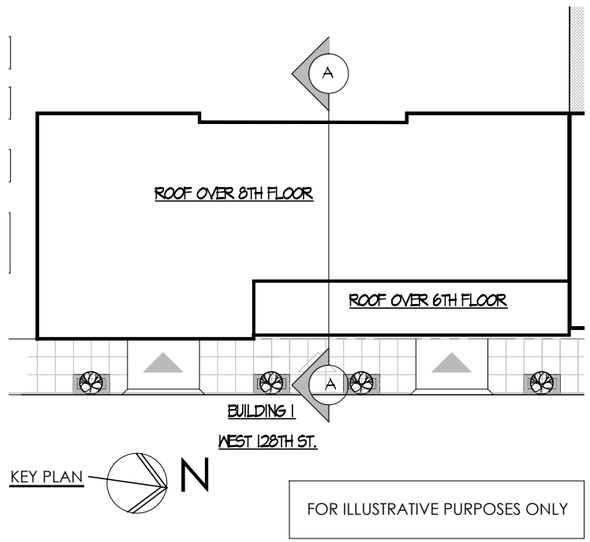
Z-111.00

09.06.16
BLOCK:7011 LOT: 11



BUILDING 1 - CROSS SECTION (TYPICAL)

SCALE 1/16" = 1'-0"



FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

BROOKLYN, NY

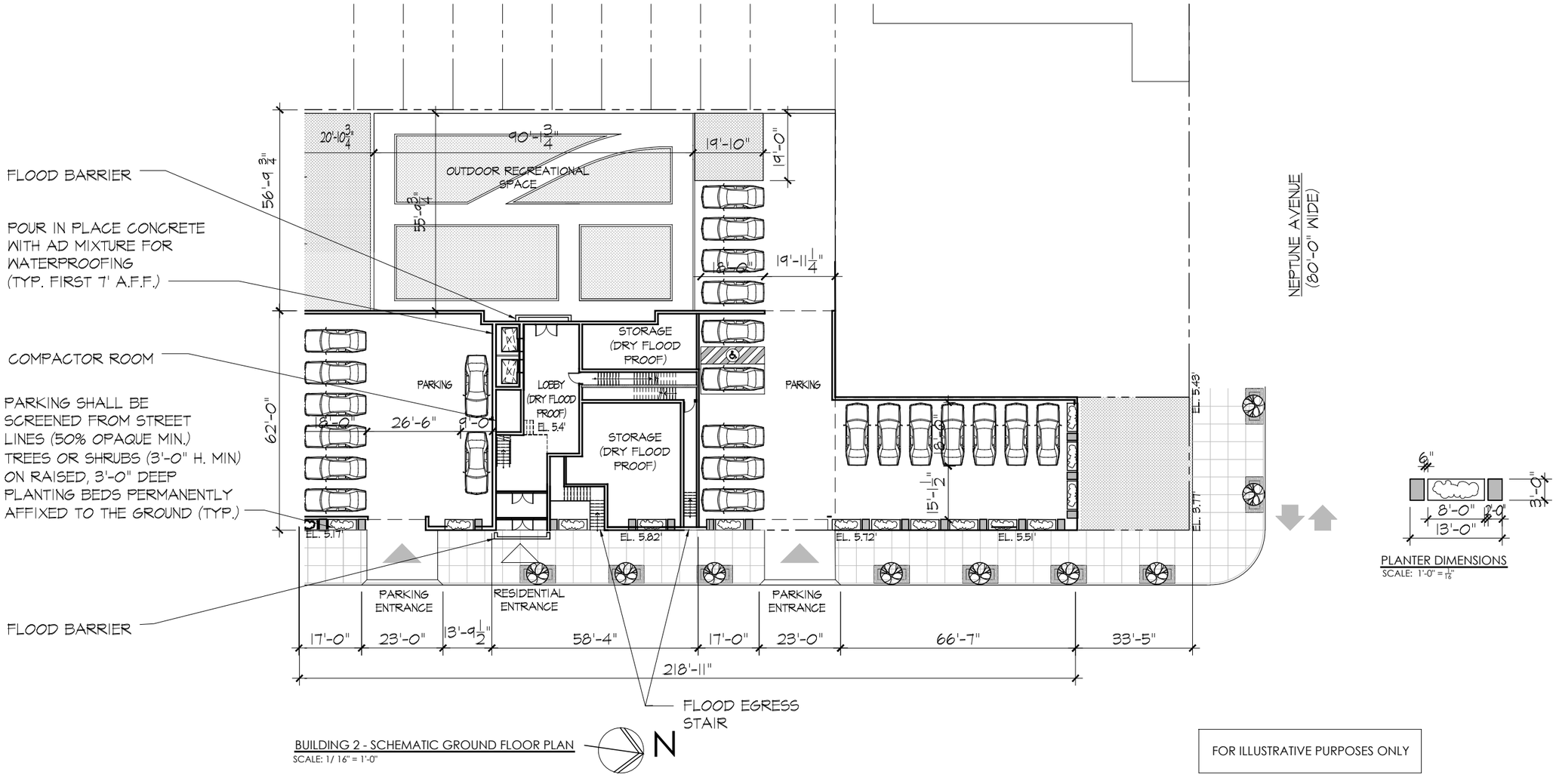
AUFGANG ARCHITECTS

BUILDING A CROSS SECTION (TYPICAL)

Z-112.00

09.06.16

BLOCK:7011 LOT: 11



BUILDING 2 - SCHEMATIC GROUND FLOOR PLAN
SCALE: 1/ 16" = 1'-0"

PLANTER DIMENSIONS
SCALE: 1'-0" = 1/16"

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

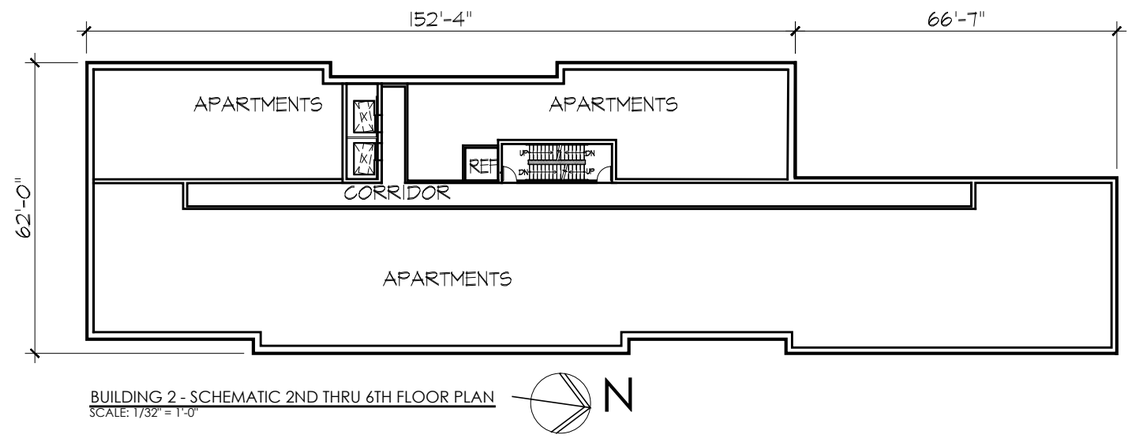
BROOKLYN, NY

AUFGANG ARCHITECTS

BUILDING B SCHEMATIC GROUND PLAN

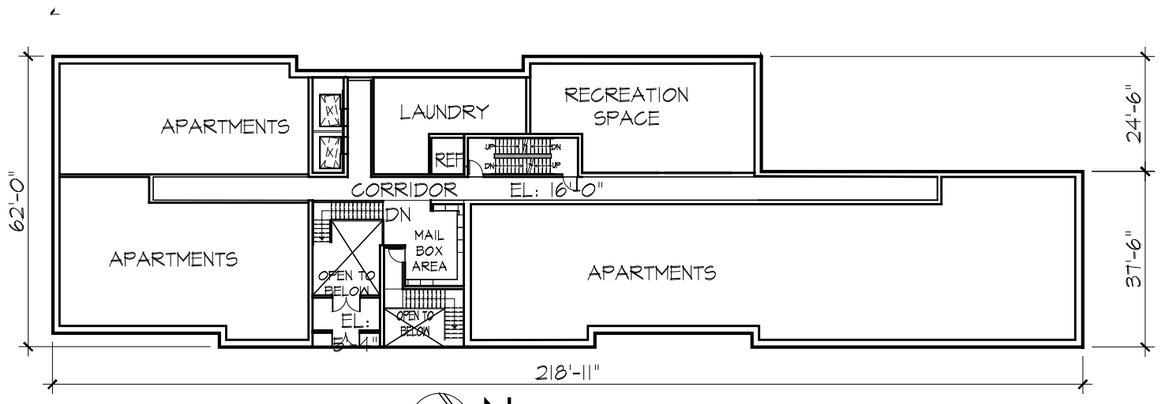
Z-113.00

09.06.16
BLOCK:7011 LOT: 11



BUILDING 2 - SCHEMATIC 2ND THRU 6TH FLOOR PLAN
SCALE: 1/32" = 1'-0"

N



BUILDING 2 - SCHEMATIC 1ST FLOOR PLAN
SCALE: 1/32" = 1'-0"

N

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

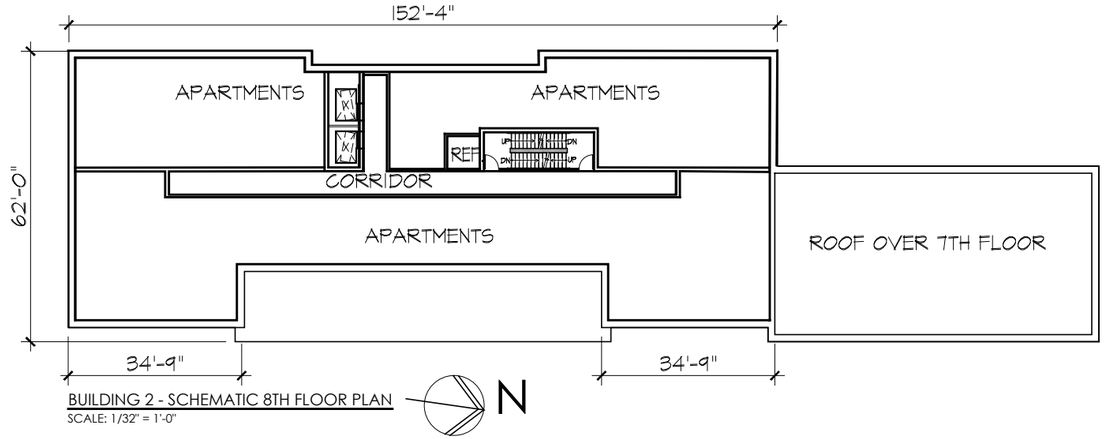
BROOKLYN, NY

AUFGANG ARCHITECTS

BUILDING B SCHEMATIC FLOOR PLANS

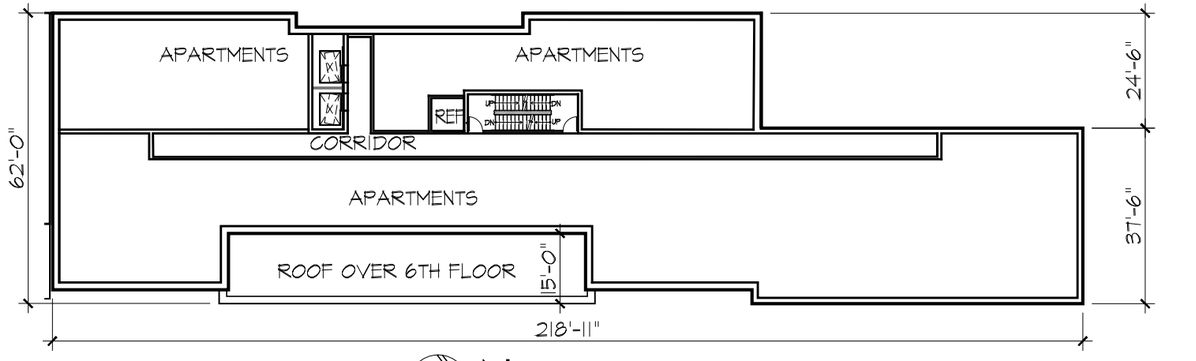
Z-114.00

09.06.16
BLOCK:7011 LOT: 11



BUILDING 2 - SCHEMATIC 8TH FLOOR PLAN
SCALE: 1/32" = 1'-0"

N



BUILDING 2 - SCHEMATIC 7TH FLOOR PLAN
SCALE: 1/32" = 1'-0"

N

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK
NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

BUILDING B SCHEMATIC FLOOR PLANS

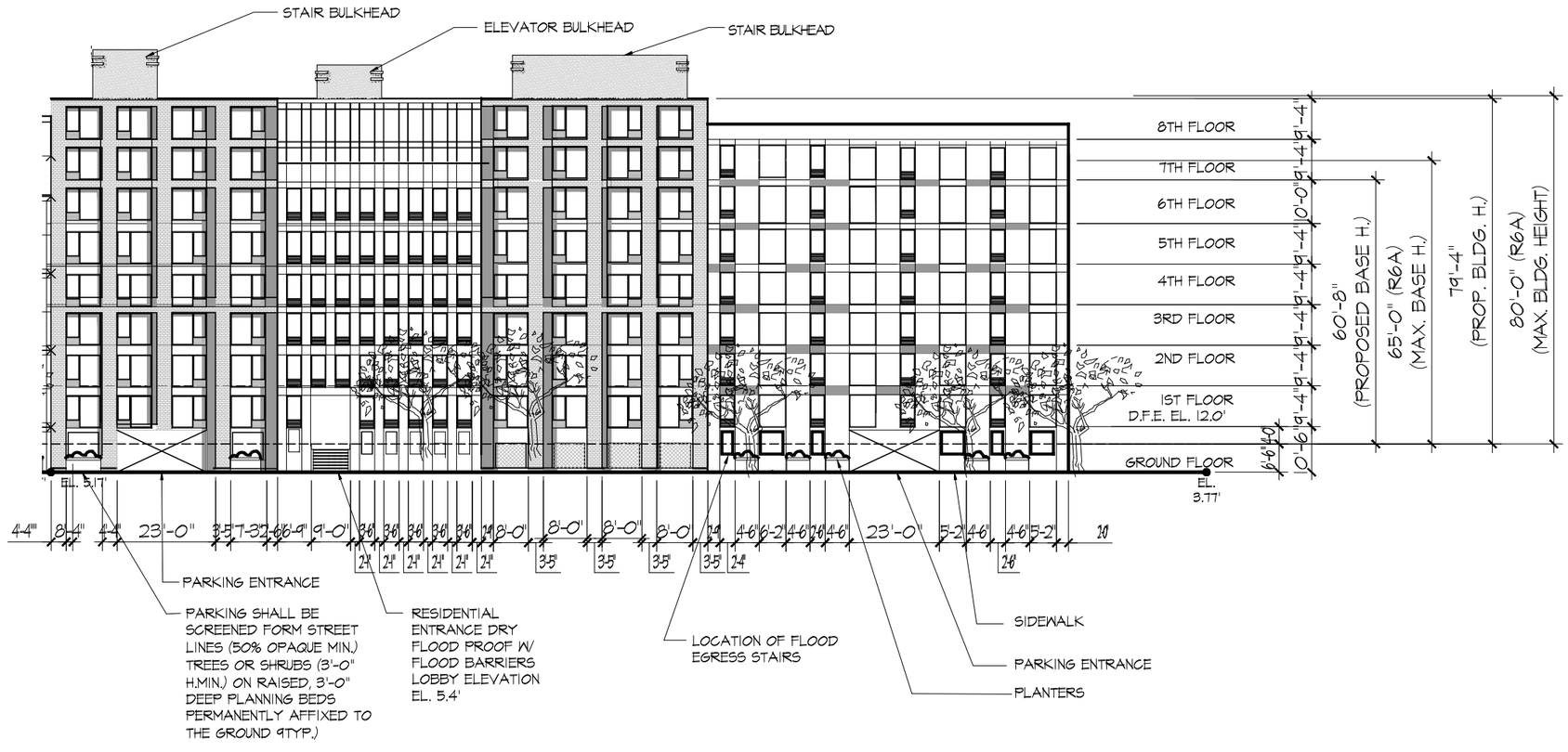
Z-115.00

09.06.16
BLOCK:7011
LOT: 11

SEA PARK
NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS



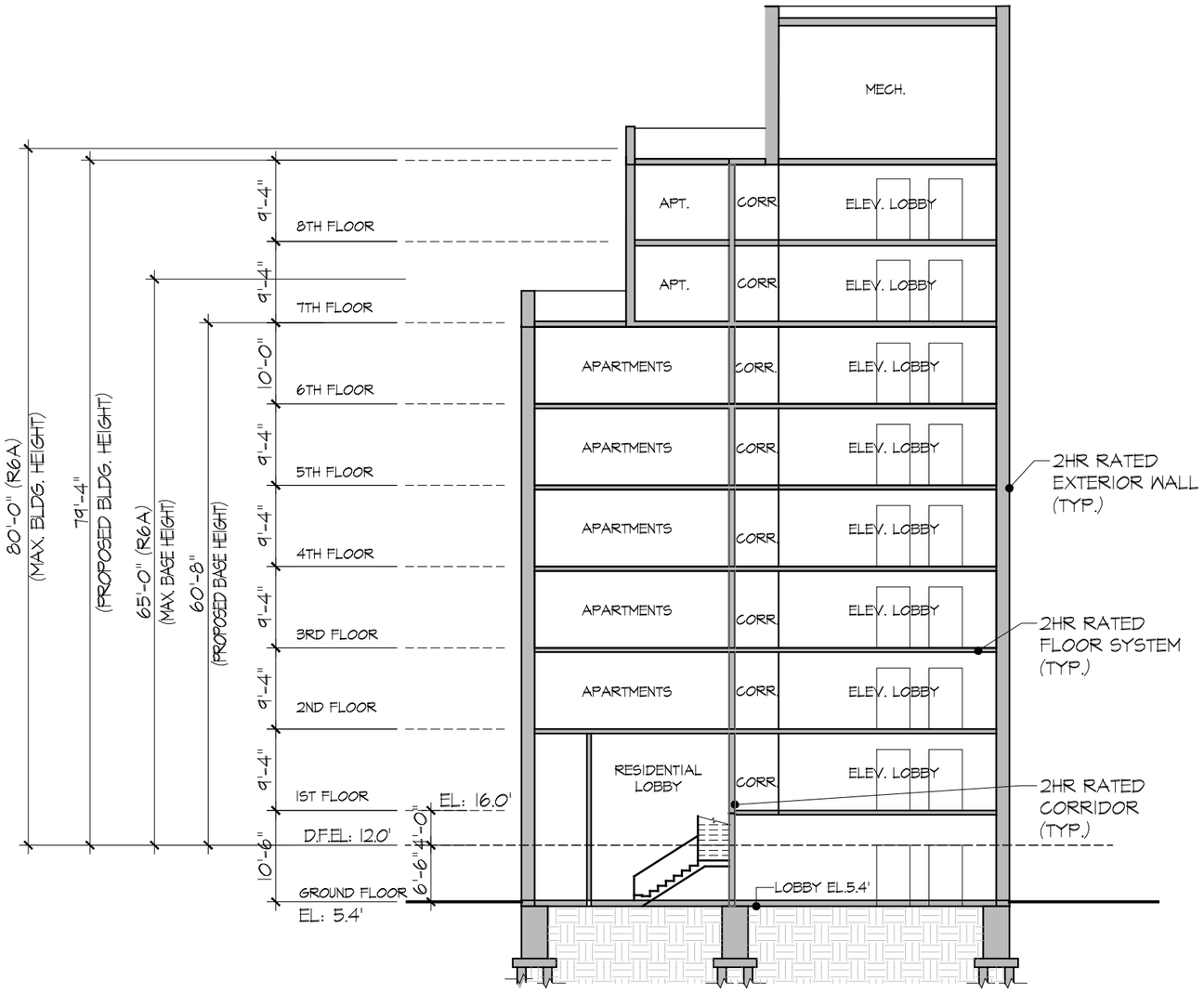
SCHEMATIC BUILDING 2 ELEVATION
SCALE: 1/32" = 1'-0"

SCHEMATIC BUILDING "B" FRONT ELEVATION

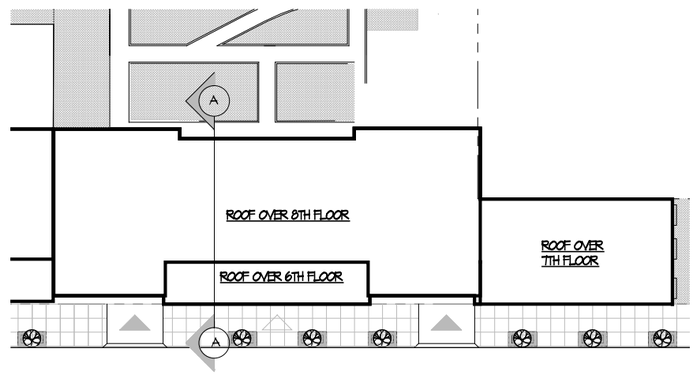
Z-116.00

09.06.16
BLOCK:7011 LOT: 11

FOR ILLUSTRATIVE PURPOSES ONLY



BUILDING 2 - CROSS SECTION (TYPICAL)
SCALE: 1/32" = 1'-0"



KEY PLAN N

FOR ILLUSTRATIVE PURPOSES ONLY

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

BUILDING B CROSS SECTION (TYPICAL)

Z117.00

09.06.16
BLOCK:7011
LOT: 11

SEA PARK
NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

WEST 28TH ST.

SCHEMATIC COLOR ELEVATION

FOR ILLUSTRATIVE PURPOSES ONLY

SCHEMATIC
COLOR
FRONT
ELEVATION

Z118.00

09.06.16
BLOCK:7011 LOT: 11

HISTORIC AND CULTURAL RESOURCES APPENDIX

NYC Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 17DCP098K
Project: SEA PARK NORTH REZONING
Date received: 8/17/2017

Properties with no Architectural or Archaeological significance:

1) ADDRESS: 2828 WEST 28 STREET, BBL: 3070110011
2) ADDRESS: 2828 NEPTUNE AVENUE, BBL: 3070110001
3) ADDRESS: 2807 MERMAID AVENUE, BBL: 3070110046
4) ADDRESS: 2809 MERMAID AVENUE, BBL: 3070110047
5) ADDRESS: 2815 MERMAID AVENUE, BBL: 3070110049
6) ADDRESS: 2823 MERMAID AVENUE, BBL: 3070110052
7) ADDRESS: 2825 MERMAID AVENUE, BBL: 3070110053
8) ADDRESS: 2805 MERMAID AVENUE, BBL: 3070110045
9) ADDRESS: 2819 MERMAID AVENUE, BBL: 3070110051
10) ADDRESS: 2827 MERMAID AVENUE, BBL: 3070110054

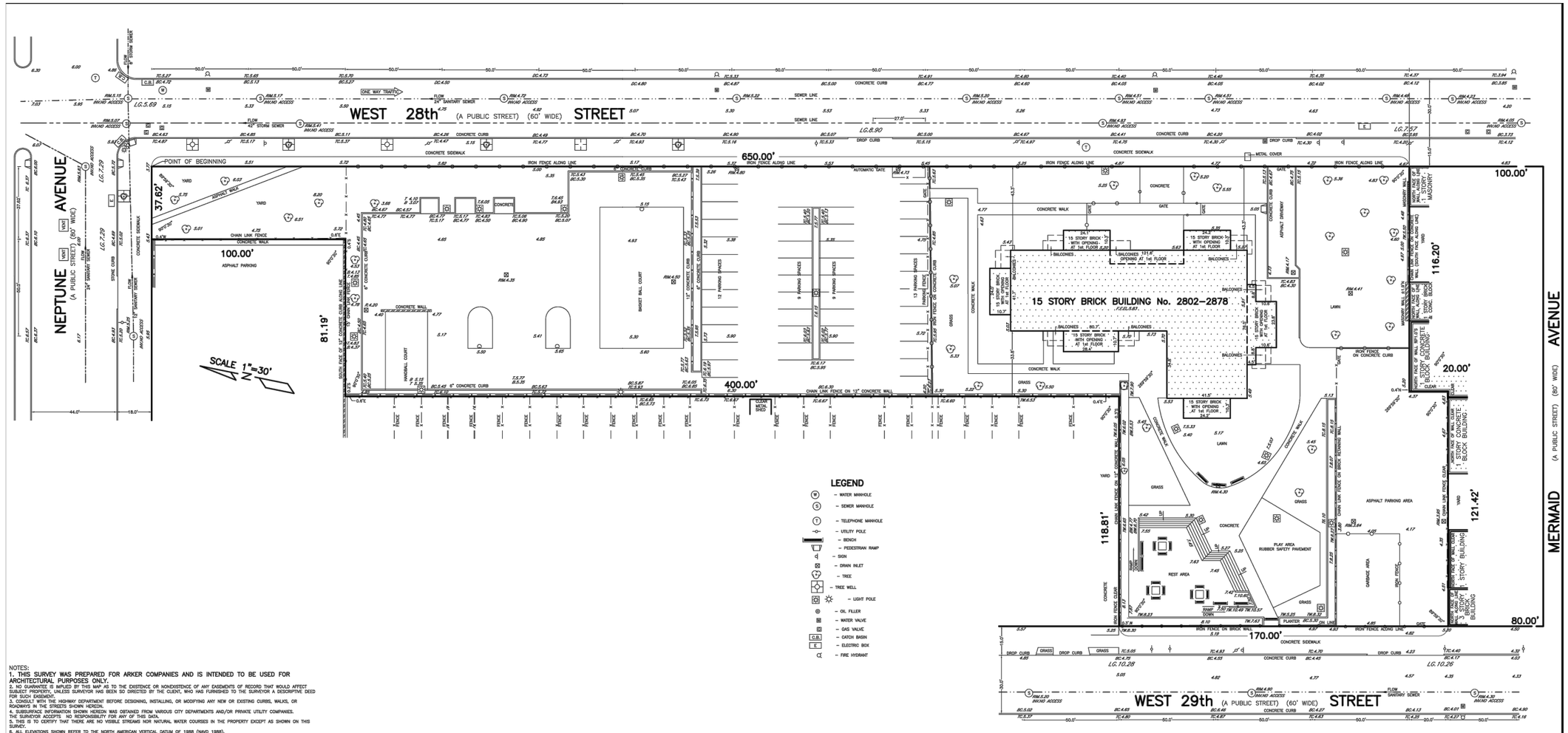
Gina Santucci

8/18/2017

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 31583_FSO_DNP_08182017.doc

INFRASTRUCTURE APPENDIX



LEGEND

- W – WATER MANHOLE
- S – SEWER MANHOLE
- T – TELEPHONE MANHOLE
- – UTILITY POLE
- – BENCH
- – PEDESTRIAN RAMP
- – SIGN
- – DRAIN INLET
- – TREE
- – TREE WELL
- – LIGHT POLE
- – OIL FILLER
- – WATER VALVE
- – GAS VALVE
- C.B. – CATCH BASIN
- E – ELECTRIC BOX
- – FIRE HYDRANT

NOTES:
1. THIS SURVEY WAS PREPARED FOR ARKER COMPANIES AND IS INTENDED TO BE USED FOR ARCHITECTURAL PURPOSES ONLY.
2. NO GUARANTEE IS IMPLIED BY THIS MAP AS TO THE EXISTENCE OR NONEXISTENCE OF ANY EASEMENTS OF RECORD THAT WOULD AFFECT SUBJECT PROPERTY, UNLESS SURVEYOR HAS BEEN SO DIRECTED BY THE CLIENT, WHO HAS FURNISHED TO THE SURVEYOR A DESCRIPTIVE DEED FOR SUCH EASEMENT.
3. CONSULT WITH THE HIGHWAY DEPARTMENT BEFORE DESIGNING, INSTALLING, OR MODIFYING ANY NEW OR EXISTING CURBS, WALKS, OR ROADWAYS IN THE STREETS SHOWN HEREON.
4. SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FROM VARIOUS CITY DEPARTMENTS AND/OR PRIVATE UTILITY COMPANIES. THE SURVEYOR ACCEPTS NO RESPONSIBILITY FOR ANY OF THIS DATA.
5. THIS IS TO CERTIFY THAT THERE ARE NO VISIBLE STREAMS NOR NATURAL WATER COURSES IN THE PROPERTY EXCEPT AS SHOWN ON THIS SURVEY.
6. ALL ELEVATIONS SHOWN REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988).
7. SEWER MANHOLE RIM AND INVERT ELEVATIONS SHOWN HEREON WERE OBTAINED FROM FIELD MEASUREMENTS.
8. ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

CERTIFIED TO:
NEW YORK CITY DEPARTMENT OF BUILDINGS

DATE SURVEYED: MAY 1st, 2003
REVISED: MAY 3, 2016

GERALD T. O'BUCKLEY
PROFESSIONAL LAND SURVEYORS
43-14 162nd STREET, FLUSHING, NY 11358
TEL. 718-321-1231 FAX 718-321-8076
EMAIL: gtobuckley@nyc.rr.com

TAX MAP
SECTION
BLOCK 7011
LOT 11

FILED MAP
SECTION
BLOCK
LOT

BOROUGH OF BROOKLYN
COUNTY OF KINGS
STATE OF NEW YORK

TITLE No.

GERALD T. O'BUCKLEY, P.L.S.
NEW YORK LICENSE 039834

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

SITE SURVEY
NOT TO SCALE

SEA PARK NORTH

BROOKLYN, NY

AUFGANG ARCHITECTS

SITE SURVEY

Z-105.00

06.16.16
BLOCK:7011 LOT: 11

AIR QUALITY APPENDIX

Urban Cartographics

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718.427.5299 www.urbancartographics.com urbancartographics@gmail.com

June 23, 2016

Hiram A. Rothkrug
EPDSCO Inc.
55 Watermill Lane, Suite 200
Great Neck, NY 11021

Re: Sea Park North, Brooklyn

Dear Mr. Rothkrug:

In connection with an environmental assessment being performed for the above referenced project, and pursuant to CEQR process, on June 20, 2016 my office conducted a field survey of commercial and manufacturing properties in the 400 feet surrounding the project area for "Sea Park North" in the Coney Island section of Brooklyn.

Said survey found no active manufacturing or commercial uses that would be deemed noxious or require DEP Air Quality Permits. (The area in which the survey was performed is shown on the 400-foot land use map that is a part of your EAS.)

Please feel free to contact me if you require any additional information.

Respectfully submitted,

Ian Rasmussen