# Whitestone Lanes Rezoning
## Environmental Assessment Statement

**CEQR Number: 23DCP104Q**

**Prepared For:**
**Mar Mar Realty Inc**

**Prepared By:**
**Environmental Studies Corporation**

**Lead Agency:**
**NYC Dept. of City Planning**

**July 7, 2023**

# Whitestone Lanes Rezoning
## Environmental Assessment Statement
### CEQR No.: 23DCP104Q

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# Section I – EAS Form

# 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*** Whitestone Lanes Rezoning

**3. *Reference Numbers***

| CEQR REFERENCE NUMBER (to be assigned by lead agency) | BSA REFERENCE NUMBER (if applicable) |
|---|---|
| 23DCP104Q | |
| ULURP REFERENCE NUMBER (if applicable) | OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA) |
| 230091ZMQ, N230092ZRQ | |

| **4a. *Lead Agency Information*** | | | **4b. *Applicant Information*** | | |
|---|---|---|---|---|---|
| NAME OF LEAD AGENCY | | | NAME OF APPLICANT | | |
| Department of City Planning | | | Mar Mar Realty Inc. | | |
| NAME OF LEAD AGENCY CONTACT PERSON | | | NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON | | |
| Stephanie Shellooe, AICP, Director (EARD) | | | Hiram Rothkrug, Environmental Studies Corp. | | |
| ADDRESS 120 Broadway, 31st Floor | | | ADDRESS 55 Water Mill Ln. | | |
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**5. *Project Description***

The Applicant, Mar Mar Realty Inc., proposes zoning changes as follows: a rezoning from M1-1 to R7A and a text amendment to Appendix F to map a Mandatory Inclusionary Housing (MIH) area that includes Queens Block 4370, Lots 1, 15, and 48 (the "Project Area"), in the Whitestone neighborhood of Queens Community District 7. If adopted, the proposed actions would facilitate the construction of a 468,682 gross square foot (gsf) nine-story, 95-foot-tall residential building (the "Proposed Development") on Block 4370 Lots 1, 15 and 48 at 30-05 Farrington Street, "Projected Development Site 1". The Proposed Development includes 388,293 gsf of residential floor area and would result in 415 dwelling units, 25-30% (104-125 units) of which would be affordable pursuant to MIH at an average of 60%-80% AMI depending on the Option selected. The Applicant intends to pursue Option 1, which would result in 104 affordable units at an average of 60% AMI. In the cellar of the building, 80,389 gsf would accommodate 200 parking spaces. The Proposed Development includes a new Publicly Accessible Area (PAA) that would encompass approximately 14,400 square feet with approximately 240 feet along Farrington Street and approximately 59 feet along 31st Place. The PAA would contain passive open areas, include a range of tree plantings, landscaped areas, paved open spaces and seating. The Applicant's Proposed Development would be subject to a Restrictive Declaration (RD) for the inclusion of a Project Component Related to the Environment (PCRE). The required PCRE is the PAA which would set minimum standards for the publicly accessible open space area included in the site plan.

For conservative analysis purposes, the Reasonable Worst Case Development Scenario presented in this EAS assumes that the proposed building would include 431 dwelling units, 108-130 of which would be affordable pursuant to MIH, and 199 accessory parking spaces in the cellar. The total GSF of the building is the same as the Proposed Development (468,682 gsf total, consisting of 388,293 residential and 80,389 gsf of parking). The building height (95ft) and number of stories (9) would be the same as the Proposed Development. The proposed building would also include the 14,400 square foot PAA described above.

***Project Location***

| BOROUGH Queens | COMMUNITY DISTRICT(S) 7 | STREET ADDRESS Multiple (Farrington St.) |
|---|---|---|
| TAX BLOCK(S) AND LOT(S) Block 4370, Lots 1, 15 and 48 | | ZIP CODE 11354 |

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The lots in the Project Area are bounded by the Whitestone Expressway to the north, Linden Place to the east, Lot 50 and 31st Road to the south, and Farrington Street to the west. The Project Area includes frontage on the Whitestone Expressway, Linden Place, and Farrington Street.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1 | ZONING SECTIONAL MAP NUMBER 10A

**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
- ☐ ZONING CERTIFICATION
- ☐ ZONING AUTHORIZATION
- ☐ ACQUISITION—REAL PROPERTY
- ☐ DISPOSITION—REAL PROPERTY
- ☐ OTHER, explain:
- ☐ CONCESSION
- ☐ UDAAP
- ☐ REVOCABLE CONSENT
- ☐ FRANCHISE
- ☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

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 ☐ Cogeneration Facility ☐ Title V Permit

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

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

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

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

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

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

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

- ☒ SITE LOCATION MAP
- ☒ 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.): 81,150 | Waterbody area (sq. ft) and type: 0

Roads, buildings, and other paved surfaces (sq. ft.): 81,150 | 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): 468,682

NUMBER OF BUILDINGS: 1 | GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 468,682

HEIGHT OF EACH BUILDING (ft.): 95 | NUMBER OF STORIES OF EACH BUILDING: 9

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: 81,150

The total square feet not owned or controlled by the applicant: 0

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: cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 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.) | 388,293 | 0 | 0 | 0 |
| ***Type*** (*e.g.,* retail, office, school) | 431 units | | | |

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 1,078 NUMBER OF ADDITIONAL WORKERS: -103

Provide a brief explanation of how these numbers were determined: Average household size of renter-occupied unit in the Flushing-Wilets Point Neighborhood Tabulation Area per the 2016-2020 American Community Survey: 2.5 residents/unit * 431; Workers: 3 per 1,000 sf retail use (No-Action), 1 per 1,000 sf amusment use (Existing); 1 per 25 DUs. No-Action: 120 With-Action: 17

Does the proposed project create new open space? ☒ YES ☐ NO If "yes," specify size of project-created open space: 14,400 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: In the No-Action Scenario, four single-story semi-detached buildings totalling 39,996 gsf (0.49 FAR) containing "destination retail" uses would be developed. The buildings would include 133 (1 per 300 sf) parking spaces in a surface parking lot accessible via entrances on Farrington St. and Linden Pl.

**9. *Analysis Year*** CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2026

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 36

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: This project would be completed in a single phase.

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

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

## Part II: TECHNICAL ANALYSIS

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

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

| | YES | NO |
|---|---|---|
| **1. *LAND USE, ZONING, AND PUBLIC POLICY***: CEQR Technical Manual Chapter 4 | | |
| **(a)** Would the proposed project result in a change in land use different from surrounding land uses? | ☒ | ☐ |
| **(b)** Would the proposed project result in a change in zoning different from surrounding zoning? | ☒ | ☐ |
| **(c)** Is there the potential to affect an applicable public policy? | ☐ | ☐ |
| **(d)** If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. See Sec. 2 Ch. 1 | | |
| **(e)** Is the project a large, publicly sponsored project? | ☐ | ☒ |
| ○ If "yes," complete a PlaNYC assessment and attach. | | |
| **(f)** Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries? | ☒ | ☐ |
| ○ If "yes," complete the Consistency Assessment Form. | | |
| **2. *SOCIOECONOMIC CONDITIONS***: CEQR Technical Manual Chapter 5 | | |
| (a) Would the proposed project: | | |
| ○ Generate a net increase of 200 or more residential units? | ☒ | ☐ |
| ○ Generate a net increase of 200,000 or more square feet of commercial space? | ☐ | ☒ |
| ○ Directly displace more than 500 residents? | ☐ | ☒ |
| ○ Directly displace more than 100 employees? | ☐ | ☒ |
| ○ Affect conditions in a specific industry? | ☐ | ☒ |
| **3. *COMMUNITY FACILITIES***: CEQR Technical Manual Chapter 6 | | |
| **(a) Direct Effects** | | |
| ○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations? | ☐ | ☒ |
| **(b) Indirect Effects** | | |
| ○ **Early Childhood Programs:** 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) | ☐ | ☒ |
| ○ **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) | ☒ | ☐ |
| ○ **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) | ☐ | ☒ |
| ○ **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 project change or eliminate existing open space? | ☐ | ☒ |
| **(b)** Would the project generate more than 200 additional residents or 500 additional employees? | ☒ | ☐ |
| **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 | | |

| | YES | NO |
|---|---|---|
| **(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 Sec. 2 Ch. 6 | | |
| **7. *URBAN DESIGN AND VISUAL RESOURCES***: CEQR Technical Manual Chapter 10 | | |
| **(a)** Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning? | ☒ | ☐ |
| **(b)** Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning? | ☐ | ☒ |
| **8. *NATURAL RESOURCES***: CEQR Technical Manual Chapter 11 | | |
| **(a)** Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11? | ☐ | ☒ |
| ○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources. | | |
| **(b)** Is any part of the directly affected area within the Jamaica Bay Watershed? | ☐ | ☒ |
| ○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking 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)** Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure? | ☐ | ☒ |
| **(c)** 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? | ☐ | ☒ |
| **(d)** 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 the Hazardous Materials Appendix (including nonconforming uses)? | ☒ | ☐ |
| **(e)** 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? | ☒ | ☐ |
| **(f)** 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)? | ☐ | ☒ |
| **(g)** 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? | ☐ | ☒ |
| **(h)** 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? | ☐ | ☒ |
| **(i)** Has a Phase I Environmental Site Assessment been performed for the site? | ☒ | ☐ |
| ○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Sec. 3 Ch. 8 | ☒ | ☐ |
| **(j)** Based on the Phase I Assessment, is a Phase II Investigation needed? Yes | ☒ | ☐ |
| **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? | ☐ | ☒ |
| **(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? | ☐ | ☒ |

| | YES | NO |
|---|---|---|
| **(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): 18,326 | | |
| ○ 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): 49,196,723 MBtu | | |
| **(b)** Would the proposed project affect the transmission or generation of energy? | ☐ | ☒ |
| **13. *TRANSPORTATION***: CEQR Technical Manual Chapter 16 | | |
| **(a)** Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16? | ☒ | ☐ |
| **(b)** If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions: | | |
| ○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour? | ☐ | ☒ |
| If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.* | ☐ | ☐ |
| ○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry 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), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing? | ☐ | ☐ |
| ○ 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, or Citywide Ferry Service landing? | ☐ | ☐ |
| **14. *AIR QUALITY***: CEQR Technical Manual Chapter 17 | | |
| **(a)** *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17? | ☒ | ☐ |
| **(b)** *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17? | ☒ | ☐ |
| ○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) | ☐ | ☒ |
| **(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 114 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; Hazardous Materials; Noise? | ☐ | ☒ |

| | YES | NO |
|---|---|---|
| **(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. Based on technical analyses provided below in Section 3, the Proposed Action is not expected to result in significant adverse impacts related to air qualtiy, hazardous materials or noise. Therefore, an assessment of public health is not warranted. | | |
| **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 Sec. 3 Ch. 12 | | |
| **19. *CONSTRUCTION***: CEQR Technical Manual Chapter 22 | | |
| **(a)** Would the project's construction activities involve: | | |
| ○ Construction activities lasting longer than two years? | ☒ | ☐ |
| ○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare? | ☒ | ☐ |
| ○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)? | ☐ | ☒ |
| ○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out? | ☐ | ☒ |
| ○ The operation of several pieces of diesel equipment in a single location at peak construction? | ☒ | ☐ |
| ○ Closure of a community facility or disruption in its services? | ☐ | ☒ |
| ○ Activities within 400 feet of a historic or cultural resource? | ☐ | ☒ |
| ○ Disturbance of a site containing or adjacent to a site containing natural resources? | ☐ | ☒ |
| ○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall? | ☐ | ☒ |
| **(b)** If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. See Sec. 3 Ch. 14 | | |

**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 |
|---|---|
| Kevin Corte, Environmental Studies Corp. | 6/20/2023 |

SIGNATURE Kevin Corte

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

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

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

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

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

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

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

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

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

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

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

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

| TITLE | LEAD AGENCY |
|---|---|
| Director, Environmental Assessment and Review Division | City Planning Commission |
| NAME | DATE |
| Stephanie Shellooe, AICP | July 7, 2023 |

SIGNATURE 

## NEGATIVE DECLARATION

**Statement of No Significant Effect**

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

**Reasons Supporting this Determination**

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

**Land Use, Zoning, and Public Policy**

A detailed analysis of land use, zoning, and public policy is included in this EAS. The Applicant, Mar Mar Realty Inc., is seeking a zoning map amendment from an M1-1 district to an R7A district; and a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to designate the affected area (Block 4370, Lots 1, 15, and 48) as a Mandatory Inclusionary Housing (MIH) area (collectively, the Proposed Actions). The Proposed Actions would facilitate the construction of the Proposed Project: a 468,682 gross square foot (gsf) nine-story, 95-foot-tall residential building located at 30-05 Farrington Street (Block 4370, Lots 1, 15, and 48; "Projected Development Site 1"). The Proposed Project would include 388,293 gsf of residential floor area and 415 dwelling units, 25-30% (104-125 units) of which would be of which would be affordable pursuant to MIH depending on the Option selected; 80,389 gsf of accessory parking use (200 parking spaces) in the cellar of the building; and a new Publicly Accessible Area (PAA) encompassing approximately 14,400 square feet (0.33 acre) of open space. The Reasonable Worst Case Development Scenario (RWCDS) analyzed in the EAS conservatively assumes that the proposed residential building would include 431 units, 25-30% (105-130 units) of which would be affordable. The Proposed Actions would result in a change and density in the type of land use of the Affected Area; however, the introduction of the proposed residential building would be compatible with surrounding land uses, including residential buildings in the adjacent R6 district mapped east of the Affected Area across Linden Place. The proposed R7A district also would not conflict with existing commercial and light manufacturing (warehouse) uses that currently occupy the site and the western portion of the study area. The Proposed Actions are intended to result in the development of dense, mixed income residential buildings with 25-30% of units permanently affordable pursuant to the MIH program. The Proposed Actions would be compatible with public policies applicable to the Affected Area, including the City's Housing New York 2.0 plan and the Waterfront Revitalization Program (WRP# 23-030). The analysis concludes that the Proposed Actions would not result in significant adverse impacts to land use, zoning, or public policy and further assessment is not warranted.

**Open Space**

A detailed analysis related to open space is included in this EAS. The Proposed Actions would result in an increase of greater than 200 residents, exceeding the threshold for an indirect open space analysis for the study area's residential population. Under the With-Action scenario, the total open space ratio in the study area would decrease by 3.8 percent, from 1.33 acres per 1,000 residents under the No-Action scenario to 1.28 under the With-Action scenario. While the Proposed Actions would exceed 2021 *CEQR Technical Manual* guidelines used to determine a possible open space impact, actions that may result in quantitative open space impacts on can be further evaluated using a qualitative assessment approach to determine overall impact significance. The Proposed Project would incorporate a 0.33 acre PAA as a Project Component Related to the Environment (PCRE), which will be codified in a Restrictive Declaration (RD) to be recorded against Projected Development Site 1 in association with the Proposed Actions. The 0.33 acre PAA, comprising 0.10 acres of active open space and 0.23 acres passive open space, would serve to satisfy some of the open space demand created by the Proposed Project. The qualitative analysis demonstrates that the PAA, combined with a few additional resources that were excluded from the quantitative analysis, would help to ameliorate the open space shortfall in the future With-Action scenario. Further, the Proposed Actions would not have a direct effect on existing open space resources. Therefore, the analysis concludes that the Proposed Actions would not result in significant adverse impacts to open space, and further analysis is not warranted.

**Hazardous Materials, Air Quality, and Noise**

An (E) designation (E-719) related to hazardous materials, air quality, and noise would be established as part of the approval of the Proposed Action. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the Proposed Actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

**Construction**

A detailed analysis related to construction is included in this EAS. Construction would occur over an approximately 36-month period, and would adhere to the applicable laws, regulations, and building codes that govern construction in New York City. As detailed in the construction assessment, the Proposed Project would not result in significant adverse construction impacts in the key technical areas of transportation, air quality, and noise. The Applicant will enter a Restrictive Declaration to be recorded against Projected Development Site 1 in association with the Proposed Actions, requiring the implementation of PCREs that would preclude any potential impacts to air quality or noise related to construction activities, including the use of best available tailpipe reduction technologies and a noise barrier surrounding the construction site. Therefore, the analysis concludes that the Proposed Actions would not result in significant adverse impacts related to construction, and further analysis is not warranted.

*No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Stacey Barron, AICP at sbarron@planning.nyc.gov.*

**Project Name: Whitestone Lanes Rezoning**
**CEQR # 23DCP104Q**
**SEQRA Classification: Unlisted**

| | |
|---|---|
| TITLE<br>Director, Environmental Assessment and Review Division | LEAD AGENCY<br>Department of City Planning on behalf of the City Planning Commission<br>120 Broadway, 31st Fl. New York, NY 10271 \| 212.720.3328 |
| NAME<br>Stephanie Shellooe, AICP | DATE<br>7/7/2023 |
| SIGNATURE | |
| TITLE<br>Chair, City Planning Commission | |
| NAME<br>Daniel R. Garodnick | DATE<br>7/10/2023 |
| SIGNATURE | |

**Project Name: Whitestone Lanes Rezoning**
**CEQR # 23DCP104Q**
**SEQRA Classification: Unlisted**

Determination of Significance Appendix

The Proposed Actions were determined to have the potential to result in changes to development on the following site:

| Development Site | Borough | Block and Lot |
|---|---|---|
| Projected Development Site 1 | Queens | Block 4370, Lots 1, 15, and 48 |

(E) Designation Requirements

To ensure that the Proposed Actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-719**) would be established as part of approval of the Proposed Actions on **Projected Development Site 1** as described below:

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

*Hazardous Materials*

The (E) designation requirements applicable to **Projected Development Site 1 (Block 4370, Lots 1, 15, and 48)** for hazardous materials would apply as follows:

*Task 1-Sampling Protocol*

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

*Task 2-Remediation Determination and Protocol*

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

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

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

**Project Name: Whitestone Lanes Rezoning**
**CEQR # 23DCP104Q**
**SEQRA Classification: Unlisted**

*Air Quality*

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

> ***Projected Development Site 1 (Block 4370, Lots 1, 15, and 48):*** *Any new residential development on the above-referenced property must ensure the heating, ventilation and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 98 feet above grade to avoid any potential significant adverse air quality impact.*

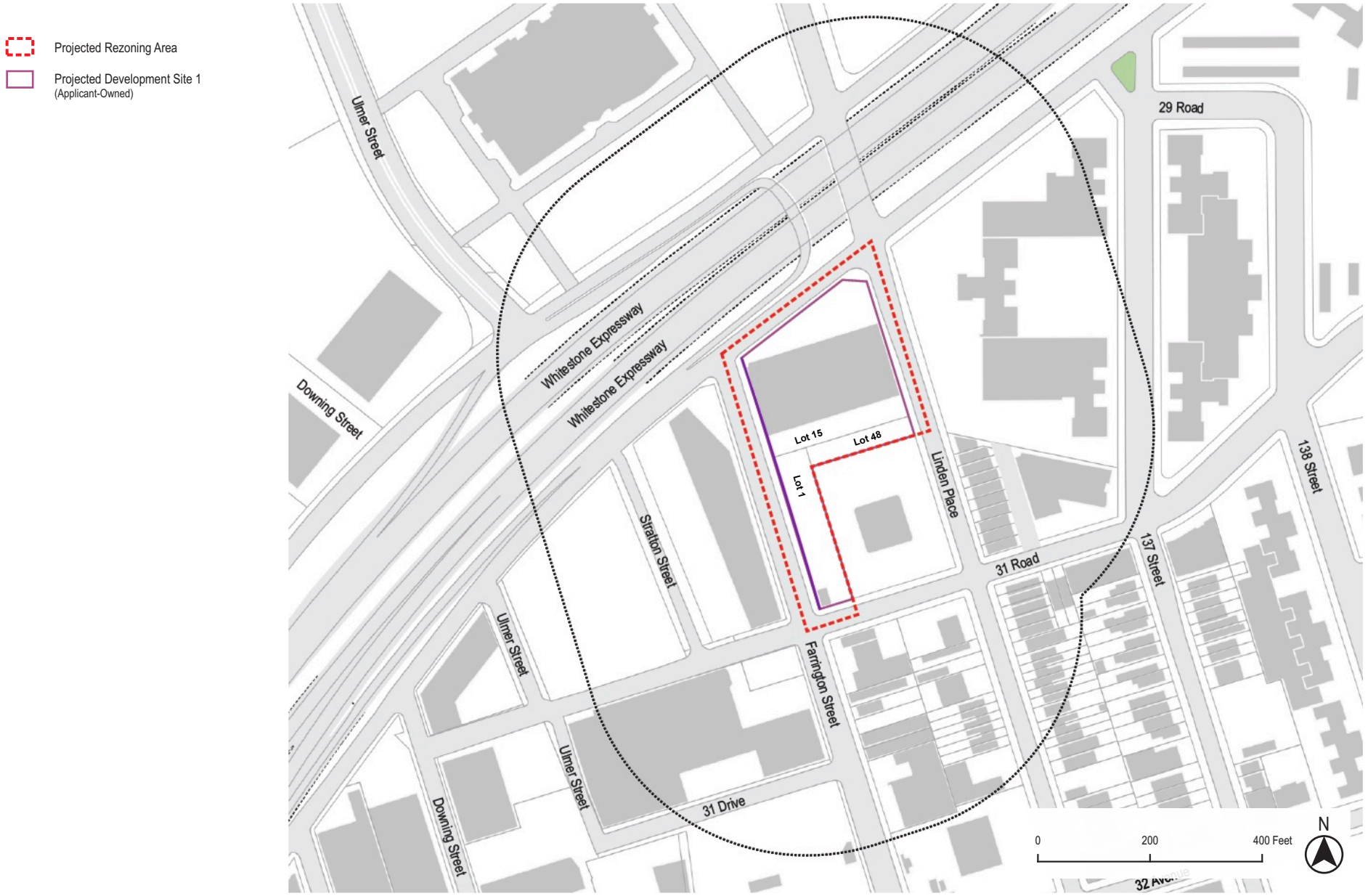
*Noise*

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

> ***Projected Development Site 1*** **(Block 4370, Lots 1, 15, and 48):** *In order to ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 33 dB(A) window/wall attenuation on the facades facing Whitestone Expressway and the facades facing Linden Place within 50 feet of Whitestone Expressway and the facades facing Farrington Street within 50 feet of Whitestone Expressway and 31 dBA of attenuation on the facades facing Linden Place beyond 50 feet of Whitestone Expressway and the facades facing Farrington Street beyond 50 feet of Whitestone Expressway and the facades facing 31st Road within 50 feet of Farrington Street and Linden Place and 28 dBA of attenuation on the remaining facades to maintain an interior L10 noise level not greater than 45 dBA for residential uses as illustrated in the EAS. 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.*

# 30-05 Farrington Street, Queens

Figure 1: Site Location




Data Source: MapPLUTO 2021v2

Urban Cartographics

# Figure 2: Area Map

**30-05 Farrington Street, Queens**
**Block 4370, Lots 1, 15 & 48**

**Project Information**

- 600' Radius
- Development Site
- Project Area
- Zoning Districts
- Special Districts

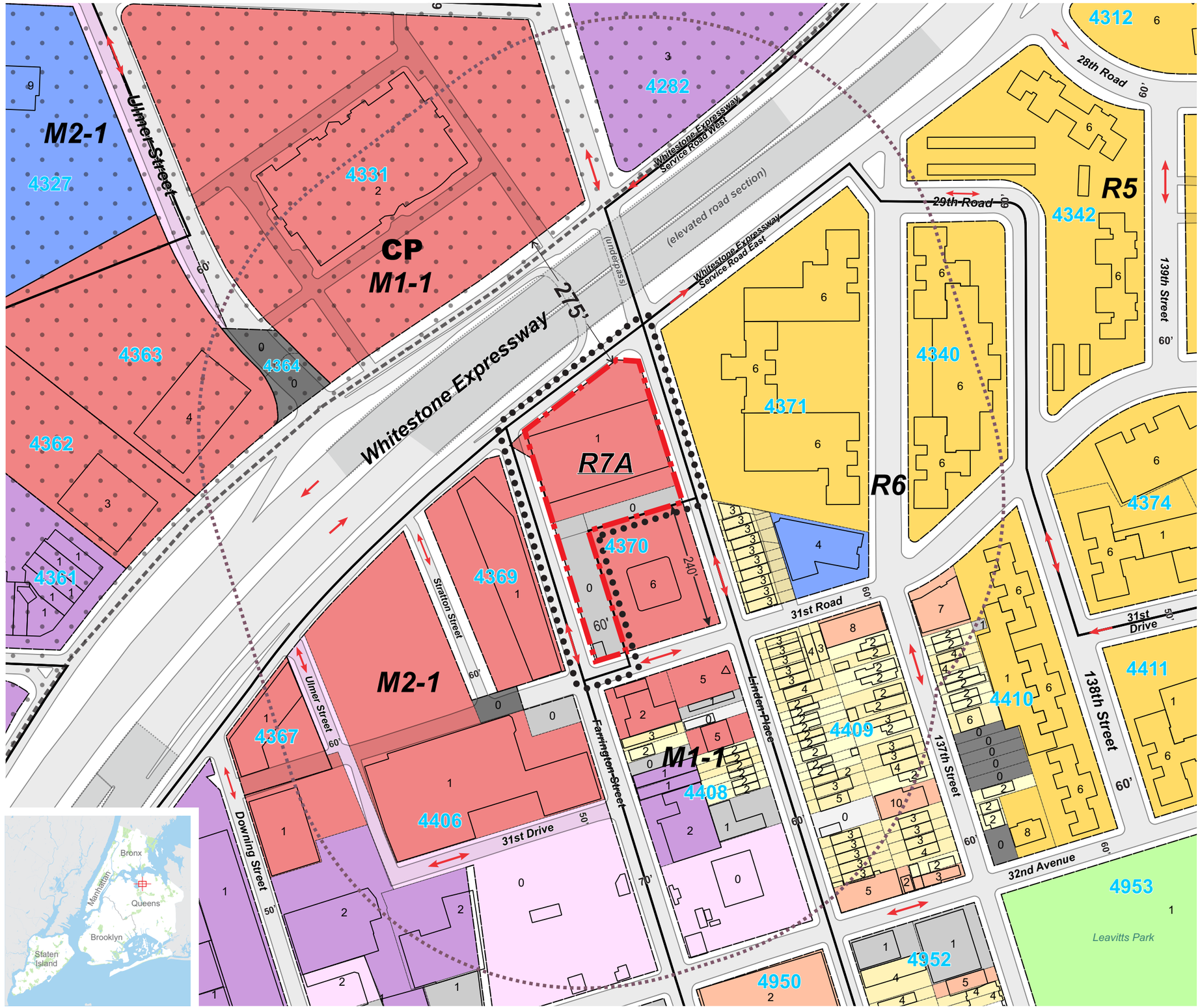
**Existing Commercial Overlays**

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

- Subway Entries
- 5037 Block Numbers
- Elevated Roadway
- Property Lines
- 5 Number of Floors

**Land Uses**

- One & Two Family Residential Buildings
- Multi-Family Residential Buildings (Walk-up)
- Multi-Family Residential Buildings (Elevator)
- Mixed Residential & Commercial Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- No Data/Other

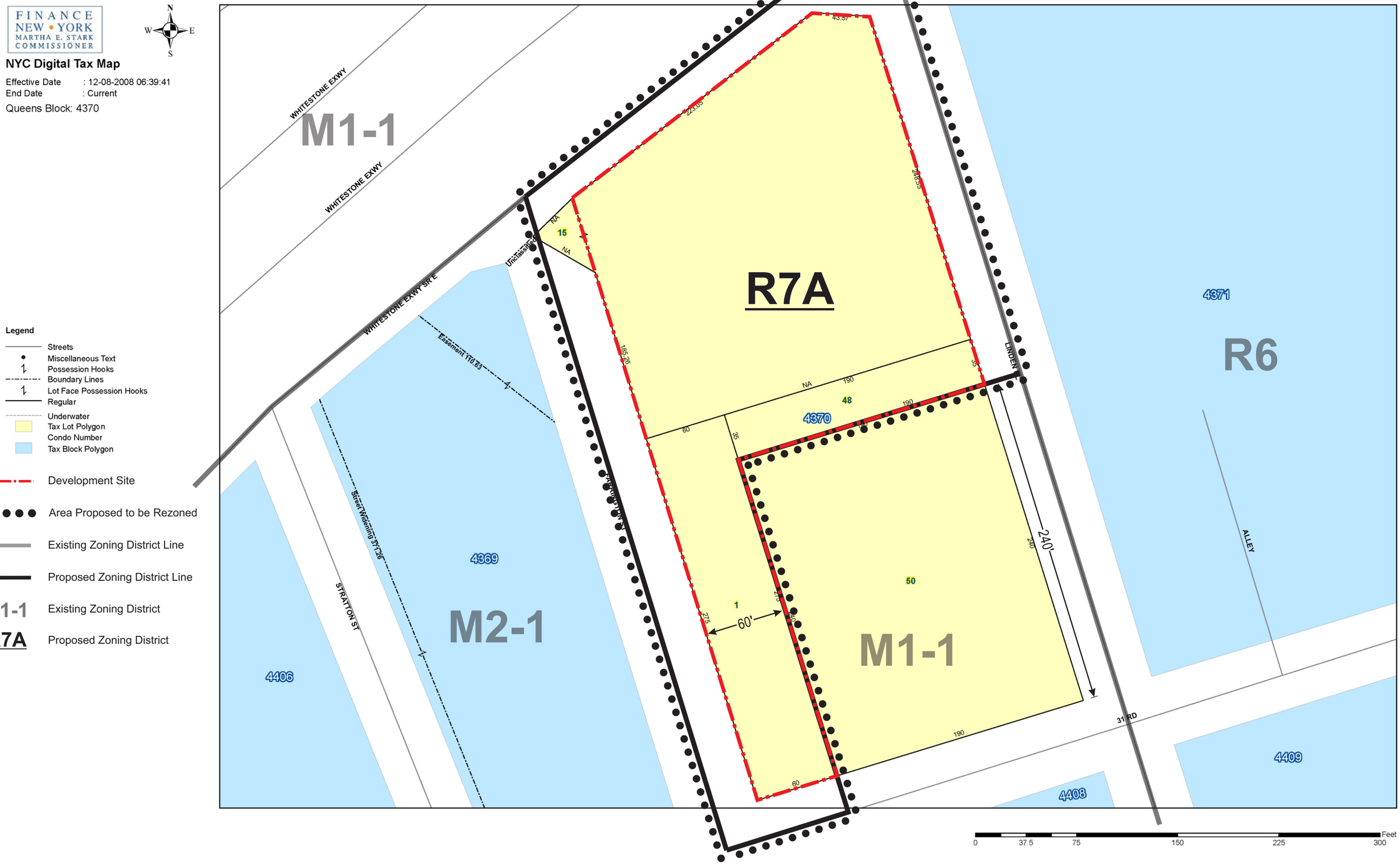



North

0 200 400 600 Feet

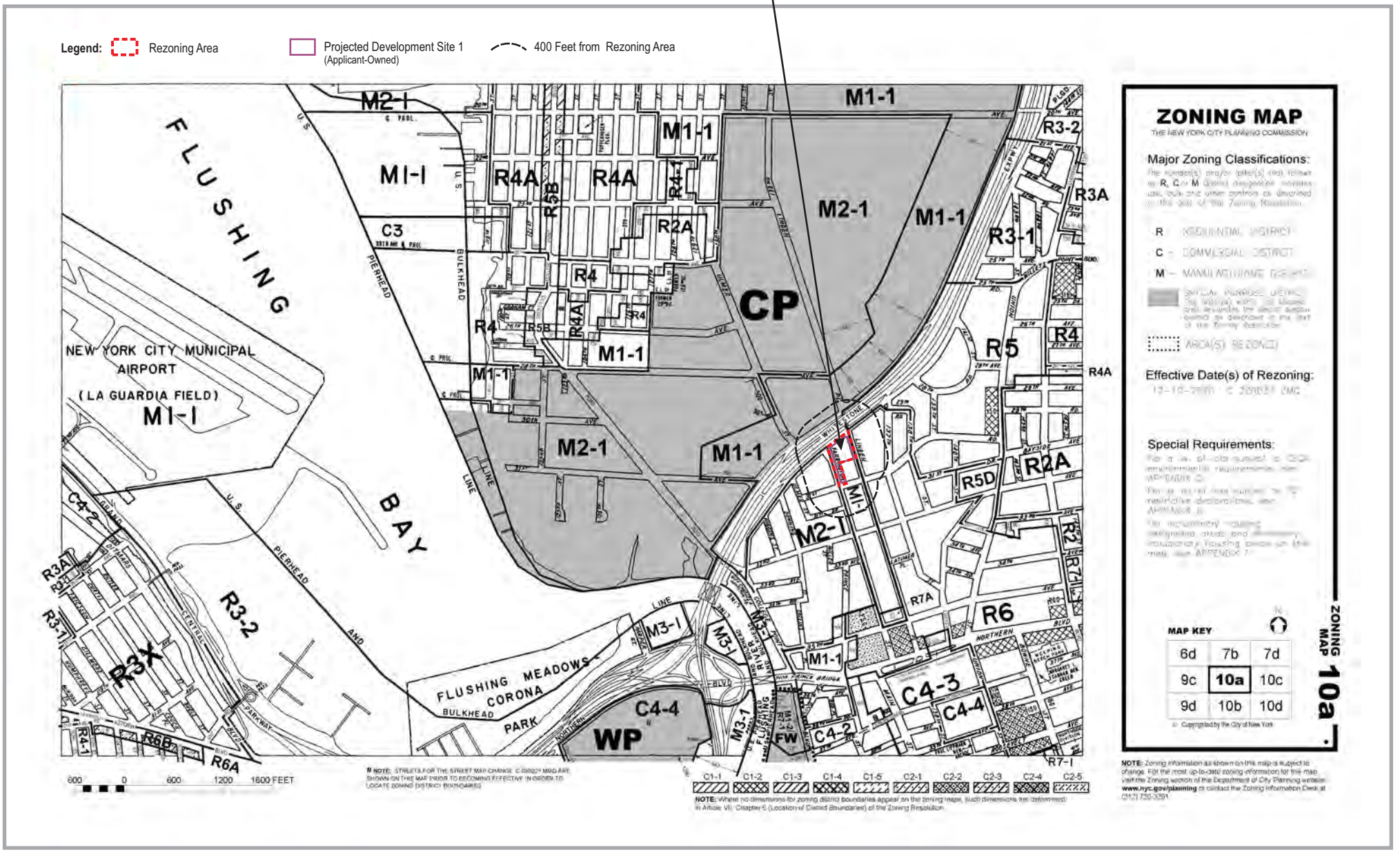
Prepared by Urban Cartographics February 2019

Figure 3: Tax Map



**30-05 Farrington Street, Queens**

Figure 4: Zoning Map




Urban Cartographics



1. View of the Development Site facing northeast from Farrington Street.



2. View of the Development Site facing southeast from Farrington Street.



3. View of the Development Site facing northeast from Farrington Street.



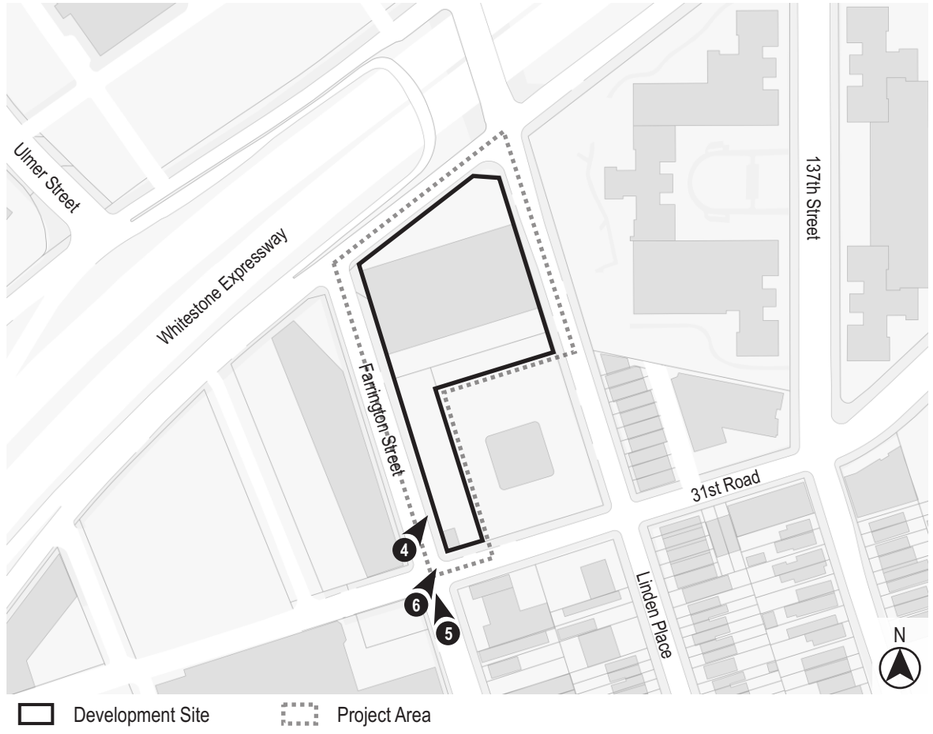
4. View of the Development Site facing northeast from Farrington Street.




5. View of Farrington Street facing northwest from 31st Road.



6. View of the Development Site facing northeast from the intersection of Farrington Street and 31st Road.





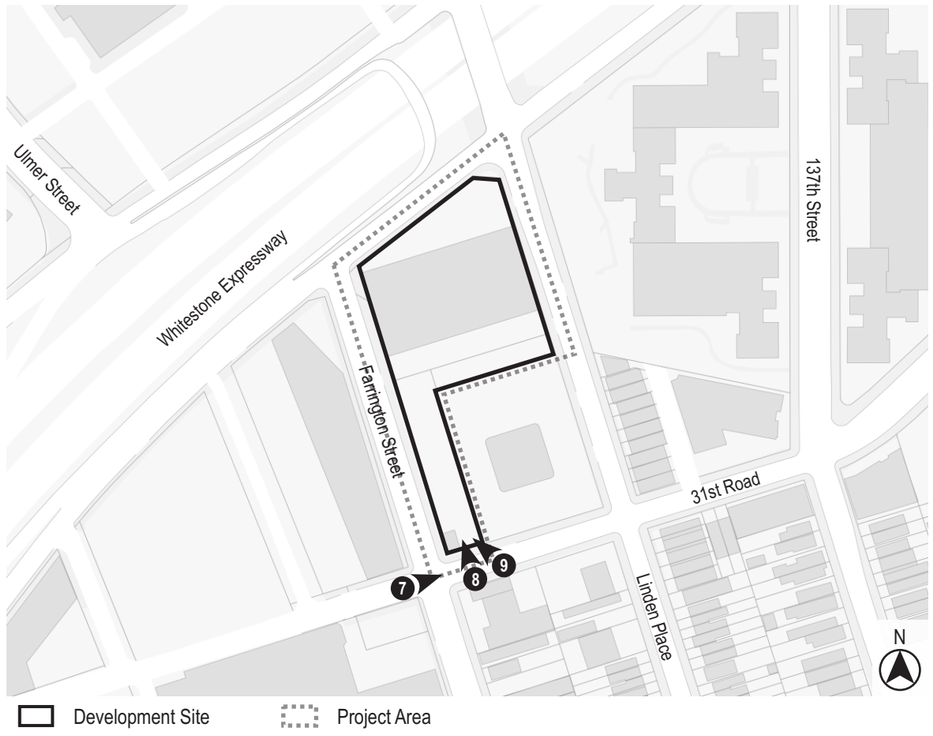

7. View of 31st Road facing northeast from Farrington Street (Development Site at left).



8. View of the Development Site facing northwest from 31st Road.



9. View of the Development Site facing northwest from 31st Road.





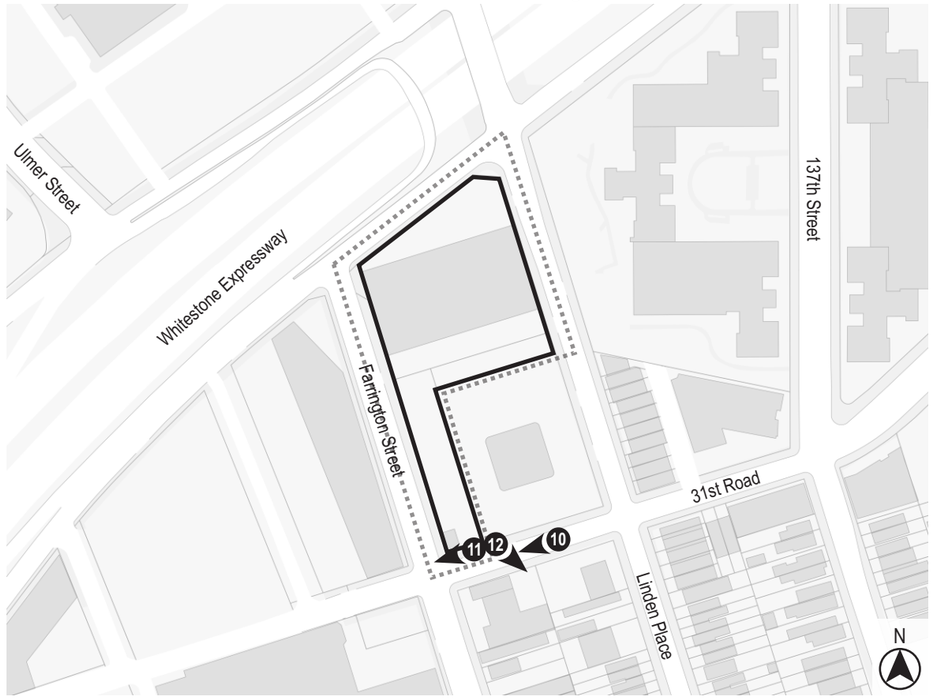

10. View of 31st Road facing southwest (Development Site at right).




11. View of the sidewalk along the north side of 31st Road facing southwest (Development Site at right).




12. View of the south side of 31st Road facing southeast from the Development Site.





13. View of the sidewalk along the north side of 31st Road facing northeast from Farrington Street (Development Site at left).




14. View of the intersection of Farrington Street and 31st Road facing southwest from the Development Site.



15. View of the sidewalk along the east side of Farrington Street facing northwest (Development Site at right).



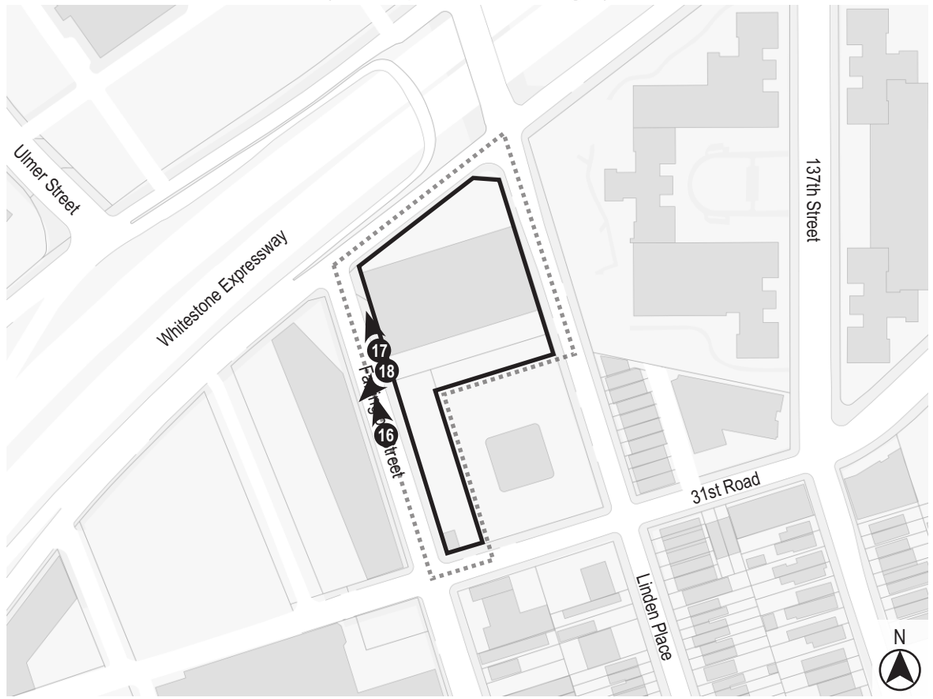

16. View of Farrington Street facing northwest (Development Site at right).




17. View of the sidewalk along the east side of Farrington Street facing northwest (Development Site at right).



18. View of the west side of Farrington Street facing southwest from the Development Site.





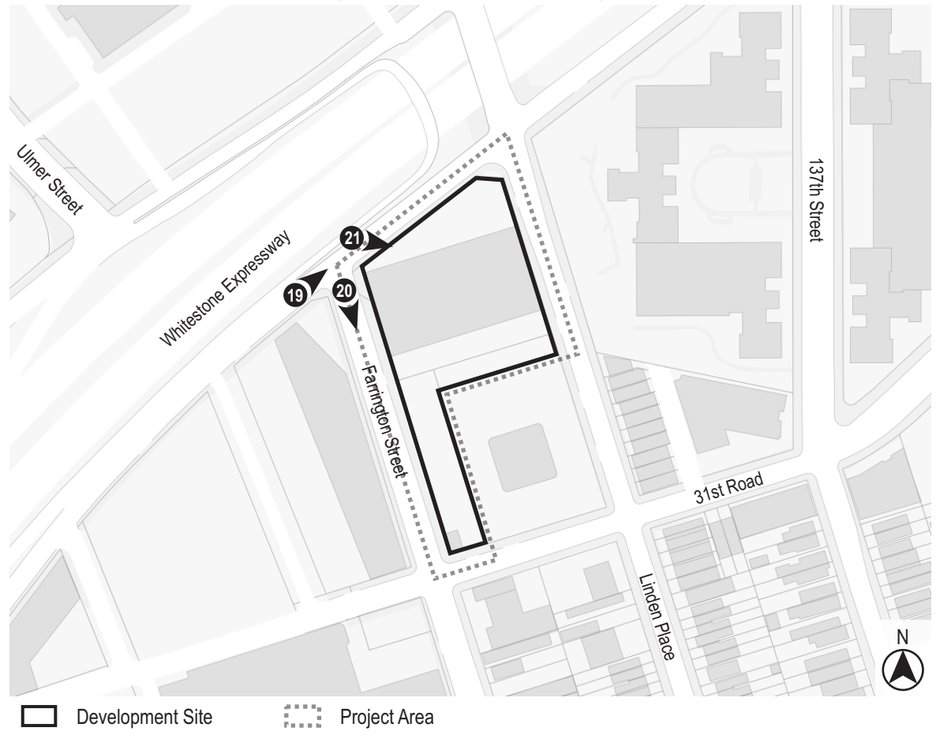

19. View of the Whitestone Expressway facing northeast from Farrington Street (Development Site at right).




20. View of Farrington Street facing southeast from the Whitestone Expressway (Development Site at left).




21. View of the Development Site facing southeast from the Whitestone Expressway.





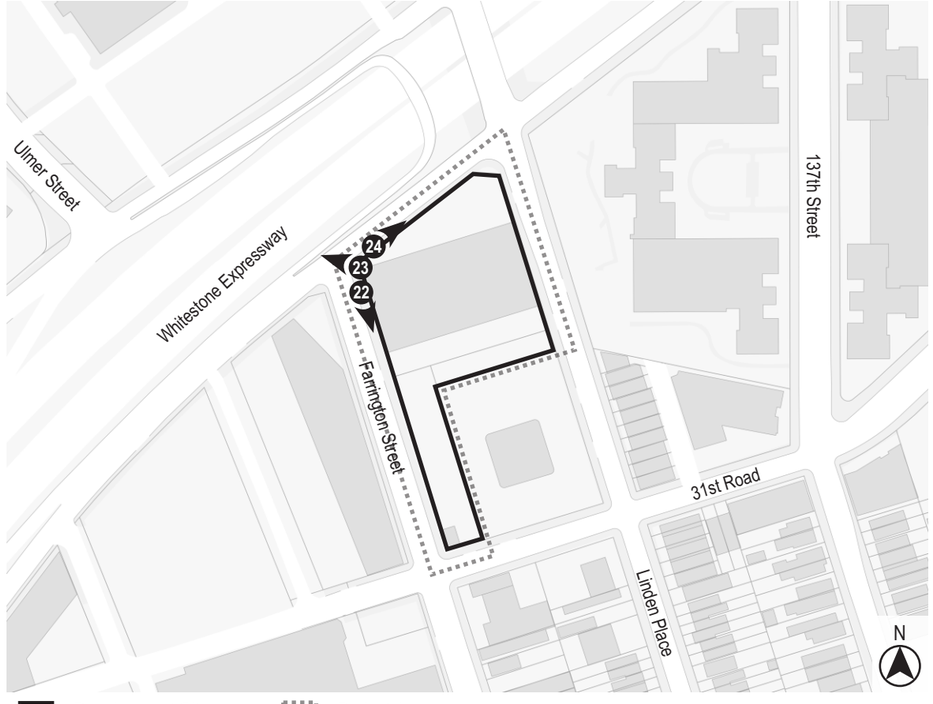
22. View of the sidewalk along the east side of Farrington Street facing southeast from the Whitestone Expressway (Development Site at left).



23. View of the north side of Whitestone Expressway facing northwest from the Development Site.




24. View of the sidewalk along the south side of the Whitestone Expressway facing northeast from Farrington Street (Development Site at right).





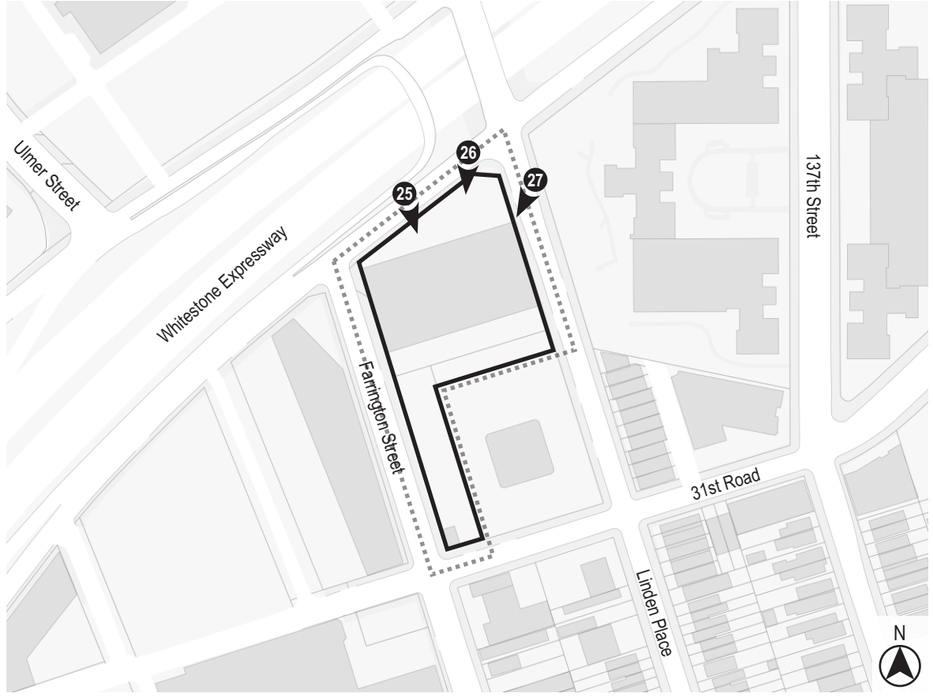

25. View of the Development Site facing southeast from the Whitestone Expressway.




26. View of the Development Site facing south from the Whitestone Expressway.




27. View of the Development Site facing southwest from Linden Place.






28. View of the Whitestone Expressway facing southwest from Linden Place (Development Site at left).




29. View of the Development Site facing southwest from the intersection of Linden Place and the Whitestone Expressway.




30. View of Linden Place facing southeast from the Whitestone Expressway (Development Site at right).



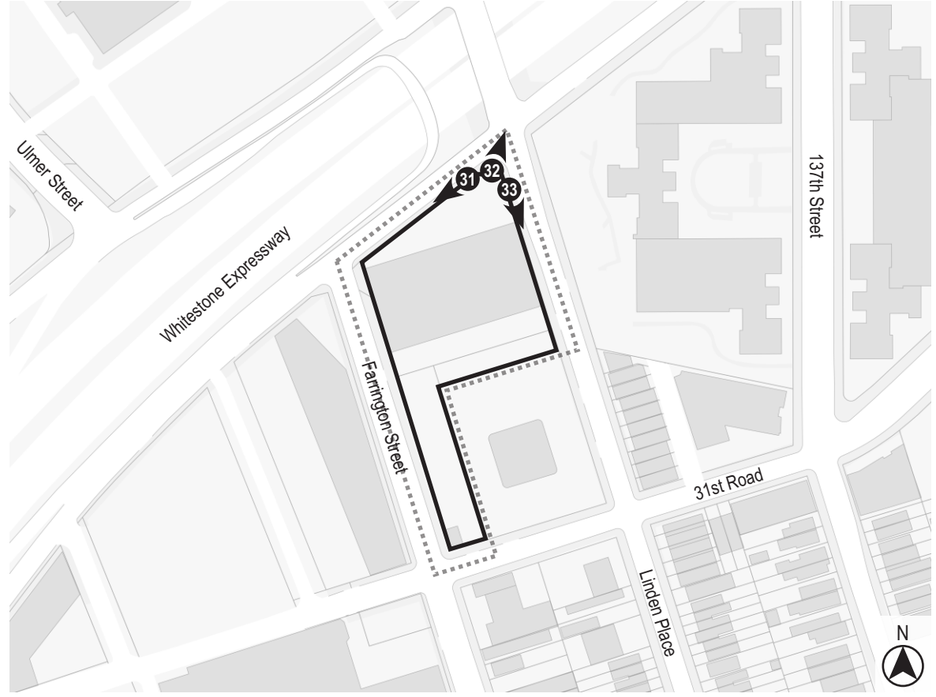

31. View of the sidewalk along the south side of the Whitestone Expressway facing southwest from Linden Place (Development Site at left).




32. View of the intersection of the Whitestone Expressway and Linden Place facing northeast from the Development Site.




33. View of the sidewalk along the west side of Linden Place facing southeast from the Whitestone Expressway (Development Site at right).





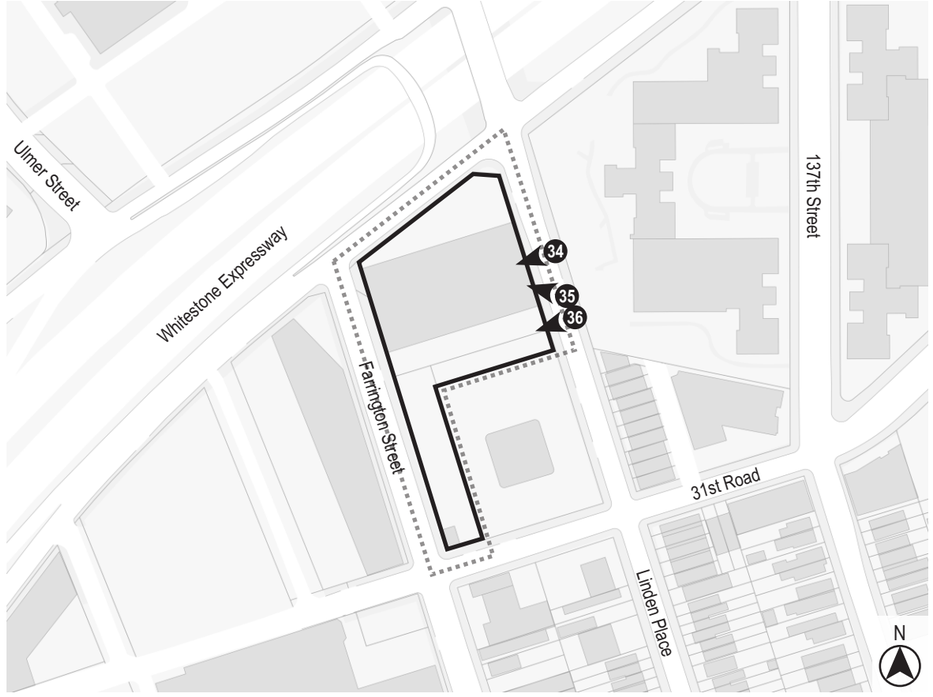
34. View of the Development Site facing southwest from Linden Place.



35. View of the Development Site facing northwest from Linden Place.




36. View of the Development Site facing southwest from Linden Place.





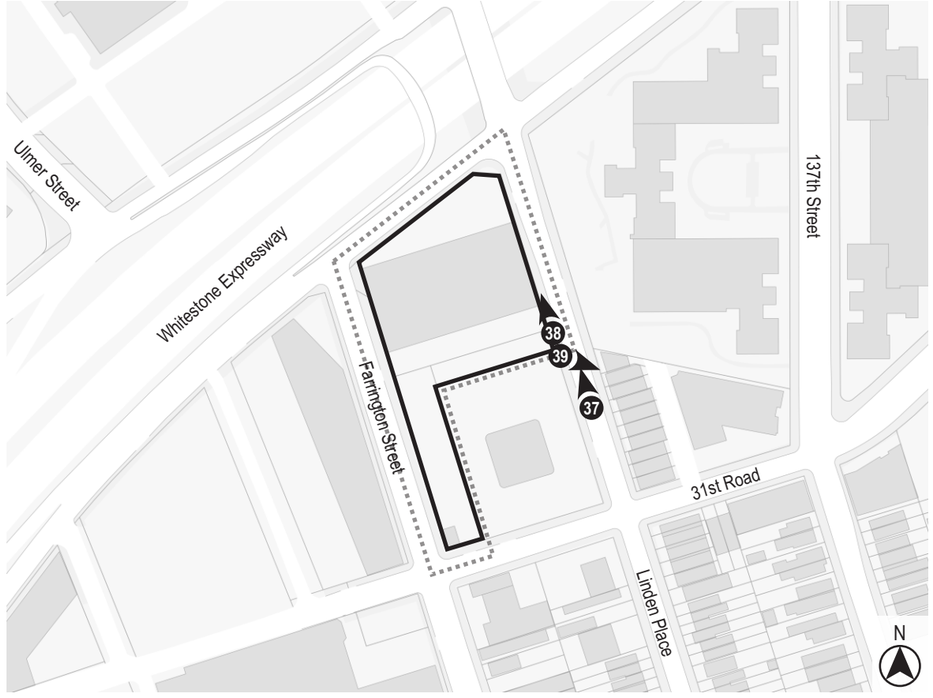

37. View of Linden Place facing northwest (Development Site at left).




38. View of the sidewalk along the west side of Linden Place facing northwest (Development Site at left).



39. View of the east side of Linden Place facing southeast from the Development Site.



# Section II - Project Description

## Project Description

### Proposed Actions

Mar Mar Reality Inc., (the "Applicant") seeks a zoning map amendment and a zoning text amendment to facilitate the development of a site located in the Flushing neighborhood of Queens Community District 7. The Applicant seeks the following actions:

1) A zoning map amendment to rezone an M1-1 district to a R7A district.

2) A zoning text amendment pursuant to Appendix F to establish a Mandatory Inclusionary Housing ("MIH") Area coterminous with the area being rezoned, with both Options 1 and 2 being mapped.

In addition to the actions listed above, the Proposed Action include a Restrictive Declaration (RD) to require the inclusion of a "Project Component Related to the Environment" (PCRE) on the development site. The PCRE consists of a 14,400 square foot Public Access Area (PAA) in the form of a plaza in front of the proposed development. The PAA is described in detail greater detail below and in the Open Space section of this EAS.

### Project Area

The actions described above (collectively the "Proposed Actions") affect an area that is bound by the Whitestone Expressway to the north, Linden Avenue to the east, 31st Road to the south and Farrington Street to the west. This area includes Queens Block 4370, Lots 1, 15 and 48. The area described above is referred to as the "Project Area". The approval of the Proposed Actions would facilitate development in the Project Area.

The entirety of the Project Area that is owned by the Applicant (Queens Block 4370, Lots 1, 15 and 48) and is referred to as the "Projected Development Site 1". The approval of the Proposed Actions would facilitate development on this site (See Reasonable Worst-Case Development Scenario below).

### Proposed Development

With the approval of the Proposed Actions, the Applicant intends to develop a residential building in Projected Development Site 1. The proposed development is a 468,682 gross square foot (gsf), 9-story building (377,870 zoning square feet or 4.6 FAR). The building

would have a total height of 95 ft and contain 388,293 gsf of residential floor area (415 dwelling units). Of the dwelling units included in the Proposed Development, between 104-125 units would be reserved as moderate to low-income units pursuant to the requirements of Mandatory Inclusionary Housing (MIH). Both MIH Options 1 and 2 would be mapped on the Project Area as part of the Proposed Actions. The final compliance with MIH would be determined through the ULURP process. The Applicant intends to achieve compliance through MIH Option 1.

In addition to residential uses the proposed development would also contain 80,389 gsf of accessory parking in the cellar level (200 spaces). These spaces would be accessed by entrance ramps on Linden Place and Farrington Street. Additional curb cuts would be required on both Linden Place and Farrington Street. The frontage of the Development Site would include 27 new street trees and a new PAA would be provided on the tail end of the property, roughly aligning with the dimensions of Lot 1. This PAA area would encompass approximately 14,400 square feet with approximately 240 feet along Farrington Street and approximately 59 feet along 31st Place. The PAA would contain active and passive open areas, include a range of tree plantings and seating. Passive areas would consist of seating and a community garden, while active areas would include fitness equipment and ping pong tables. In total, 119 linear feet of seating would be provided with 48 movable chairs and 16 movable tables. The PAA would also include signage indicating open hours, lighting, and trash receptables. As the adjacent DOE facility rests at a higher elevation than the PAA space, screening would be employed along the shared lot line between Lots 1 and 50. The PAA would be publicly accessible from Farrington Street and 31st Street.

**Purpose and Need**

The Proposed Actions would facilitate the proposed development (described above). The current zoning does not allow residential uses which are included in the proposed development. The current M1-1 zoning allows for light industrial uses and automobile oriented commercial spaces. It is the applicant's opinion that Proposed Actions would offer an opportunity to maximize the benefits of nearby transit links and the commercial areas of Downtown Flushing by introducing new market rate and affordable housing to a currently underutilized lot. Introducing new residents to areas of the city with strong transit links is advances several public policies, as discussed below. Further, nearby Downtown Flushing has seen an increase in commercial retail uses. The introduction of new residents would support the business in the immediate area.

Lastly, it is the applicant's opinion that the Proposed Actions also provide an opportunity to add much needed affordable housing units to the surrounding neighborhood. The addition of 104-125 affordable units would also include the provision of additional public open space for area residents, workers, and visitors by including a Public Access Area (PAA) as part of the Proposed Development.

**Analysis Year**

Based on an estimated duration of six months for the pre-certification process, a seven-month Universal Land Use Review Procedure (ULURP) and a 36-month construction period, the proposed development is expected to be complete in 2026. The Build Year, or Analysis Year, used in this EAS reflects the date when all development expected to occur with the approval of the Proposed Actions is completed and occupied. The Build Year, or Analysis Year, used in this EAS is 2026.

# Reasonable Worst-Case Development Scenario (RWCDS)

Discretionary actions sometimes permit a range of project characteristics, or development scenarios, to occur even though the action may be sought in order to facilitate a specific development. From the range of possible scenarios that are considered reasonable and likely, the scenario with the worst environmental consequences is chosen to present a conservative analysis. This development scenario is considered to be the Reasonable Worst-Case Development Scenario (RWCDS). By analyzing the potential for adverse impacts of the RWCDS the EAS ensures that, regardless of which scenario occurs, its impacts would be no worse than those considered in the environmental review. The EAS analyzes the incremental differences between the future with approval of the Proposed Actions (where the RWCDS occurs), the "With-Action condition" and the future without the approval of the Proposed Actions (where the RWCDS does not occur), the "No-Action condition."

**Development Sites**

As discussed above, the Proposed Actions would affect all of the lots within the Project Area. The entirety of the Project Area that is owned by the Applicant (Queens Block 4370, Lots 1, 15 and 48) and is referred to as the "Projected Development Site 1". These lots are all controlled by the applicant and would be affected by the Proposed Actions. Because of this, development is expected to occur on these lots. The proposed development described above is expected to be built on this site. For the purposes of presenting a conservative analysis, the RWCDS assumes there would be more units in the future "With-Action" scenario than are included in the proposed development. See "Future With-Action" below.

**Existing Conditions**

As discussed above the Project Area includes Queens Block 4370 Lots 1, 15, and 48. All of the lots in the Project Area are currently occupied by a bowling alley and accessory parking. The Project Area is bound by the Whitestone Expressway to the north, Linden Avenue to the east, 31st Road to the south and Farrington Street to the west.

Block 4370, Lot 1 (no mapped address) is a narrow corner lot with a depth of 60 feet and a length of approximately 279 feet for a lot area of approximately 16,500 square feet. The lot is currently utilized as an accessory parking area for Lot 15. This parcel contains one curb cut along Farrington Street and one along 31st Road.

Block 4370, Lot 15 (30-05 Farrington Street) is an irregular-shaped corner lot with approximately 58,000 square feet of lot area and frontage along three streets: Farrington Street, Linden Place, and the Whitestone Expressway Service Road. The parcel is developed with a 37,520 square foot commercial building that rises to a single story (0.6 FAR). The building currently contains Whitestone Lanes, a bowling alley. The parcel contains two curb cuts, one along the Whitestone Expressway Service Road and one along Linden Place

Block 4370, Lot 48 (no mapped address) is a narrow interior lot with 35 feet of frontage along Linden Place and a length of approximately 190 feet for a lot area of approximately 6,650 square feet. The lot is currently utilized as an accessory parking area for Lot 15. This parcel contains one curb cut along Linden Place.

This information is summarized in **Table 1-Applicant Owned Properties** below.

**Table 1 - Applicant Owned Properties**

| Block | Lot | Projected Development Site | Lot Area (sf) | Land Use | # of Floors | Gross FA (sf) | Res. Floor Area | Com. Floor Area | Manu-Indust. Floor Area | Res. Unit | FAR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4370 | 1 | 1 | 16,500 | Parking | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4370 | 15 | 1 | 58,000 | Commercial (Bowling Alley) | 0 | 37,520 | 0 | 37,520 | 0 | 0 | 0.6 |
| 4370 | 48 | 1 | 6,650 | Parking | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Future No Action

In the future, if the Proposed Actions are not approved (the No-Action condition), development would still occur within the Project Area. As discussed above in the purpose and need section, the current M1-1 zoning allows for light industrial and commercial uses only. The bowling alley has reached the end of its useful lifespan. The No-Action Scenario assumes that the existing commercial building on Lot 15 would be demolished, and a new commercial development would be constructed on Projected Development Site 1.

In the future without the proposed actions, four single story buildings (each measuring 25 feet in height and each containing 9,999 square feet) cumulatively totaling 39,996 gsf (1.0 FAR) containing destination retail uses would be developed. These buildings would

include 133 (1 per 300 sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place.

**Future With-Action**

In the future, if the Proposed Actions are approved (the With-Action condition), the Applicant's Proposed Development described above would be built on Projected Development Site 1.

The Reasonable Worst Case Development Scenario presented in this EAS assumes that the proposed building would include 431 dwelling units, 108-130 of which would be affordable pursuant to MIH, and 199 accessory parking spaces in the cellar. The total GSF of the building is the same as the Proposed Development (468,682 gsf total, consisting of 388,293 residential and 80,389 gsf of parking). The building height (95ft) and number of stories (9) would be the same as the Proposed Development. The proposed building would also include an open space that would encompass approximately 14,400 square feet (0.33 acres) with approximately 240 feet along Farrington Street and approximately 59 feet along 31st Place. The PAA would contain passive open areas, include a range of tree plantings, landscaped areas, paved open spaces and seating.

For the purposes of presenting a conservative analysis the RWCDS assumes a higher dwelling unit factor than what is provided in the applicant's Proposed Development. The RWCDS assumes a dwelling unit factor of 900 sf. Therefore, this EAS analyzes a RWCDS that contains, **431 dwelling units** (of these between 108-130 units would be reserved as moderate to low-income units pursuant to the requirements of MIH).

**Table 3 -Analysis Framework** below details the increment between the No-Action and the With-Action condition below. This increment is the subject of the analysis presented in Part III (Technical Analysis).

**Building Heights**

For assessments that consider building heights, the most conservative heights are assumed for their relevant sections with the maximum building envelope considered for assessments of Shadows and Urban Design. The building heights used for the relevant technical analyses are summarized in Table 2 below.

**Table 2 – Building Heights and Height Analysis Framework**

| **Building Height** | | | |
|---|---|---|---|
| | **Air Quality** | **Shadows** | **Urban Design** |
| **Projected Development Site 1** | 95ft<br>98ft<br>(w/Bulkhead) | 120 Ft (Max. Bulkhead Height) | 120 Ft (Max. Bulkhead Height) |

# Section III – Technical Analysis

The EAS includes the technical analysis sections listed below as one or more of the thresholds for preliminary analysis has been met as described in the CEQR Technical Manual. This EAS does not include preliminary analysis of potential significant adverse impacts to Natural Resources, Solid Waste, Energy, Greenhouse Gas Emissions, or Public Health. The thresholds for preliminary analysis of these sections were not exceeded by the Proposed Actions as demonstrated in the EAS Short Form in Section I of this EAS.

- **Land Use, Zoning and Public Policy (*Chapter 1*)**
- **Socioeconomic Conditions (*Chapter 2*)**
- **Community Facilities (*Chapter 3*)**
- **Open Space (*Chapter 4*)**
- **Shadows (*Chapter 5*)**
- **Historic and Cultural Resources (*Chapter 6*)**
- **Urban Design and Visual Resources (*Chapter 7*)**
- **Hazardous Materials (*Chapter 8*)**
- **Transportation (*Chapter 9*)**
- **Air Quality (*Chapter 10*)**
- **Noise (*Chapter 11*)**
- **Neighborhood Character (*Chapter 12*)**
- **Water and Sewer Infrastructure *(Chapter 13)***
- **Construction (*Chapter 14*)**

# 1. Land Use, Zoning and Public Policy

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

## Land Use

### Study Area

In order 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 site. Per the *CEQR Technical Manual* this is the area where land use and land use trends could be affected by the Proposed Development. This 400-foot radius is referred to as the "Study Area" and is generally bounded by Whitestone Expressway to the north; 137th Street to the east; 32nd Avenue to the South; and Downing Street to the west; (See Figure 1-1 – Land Use Map).

### Existing Conditions

As discussed above the Project Area includes Queens Block 4370 Lots 1, 15, and 48 (Projected Development Site 1). These lots contain commercial use and accessory parking (See RWCDS - Existing Uses). Photographs of the existing conditions within the Project Area are included in Section II (Figure 3 – Figure 14: Site Photographs).

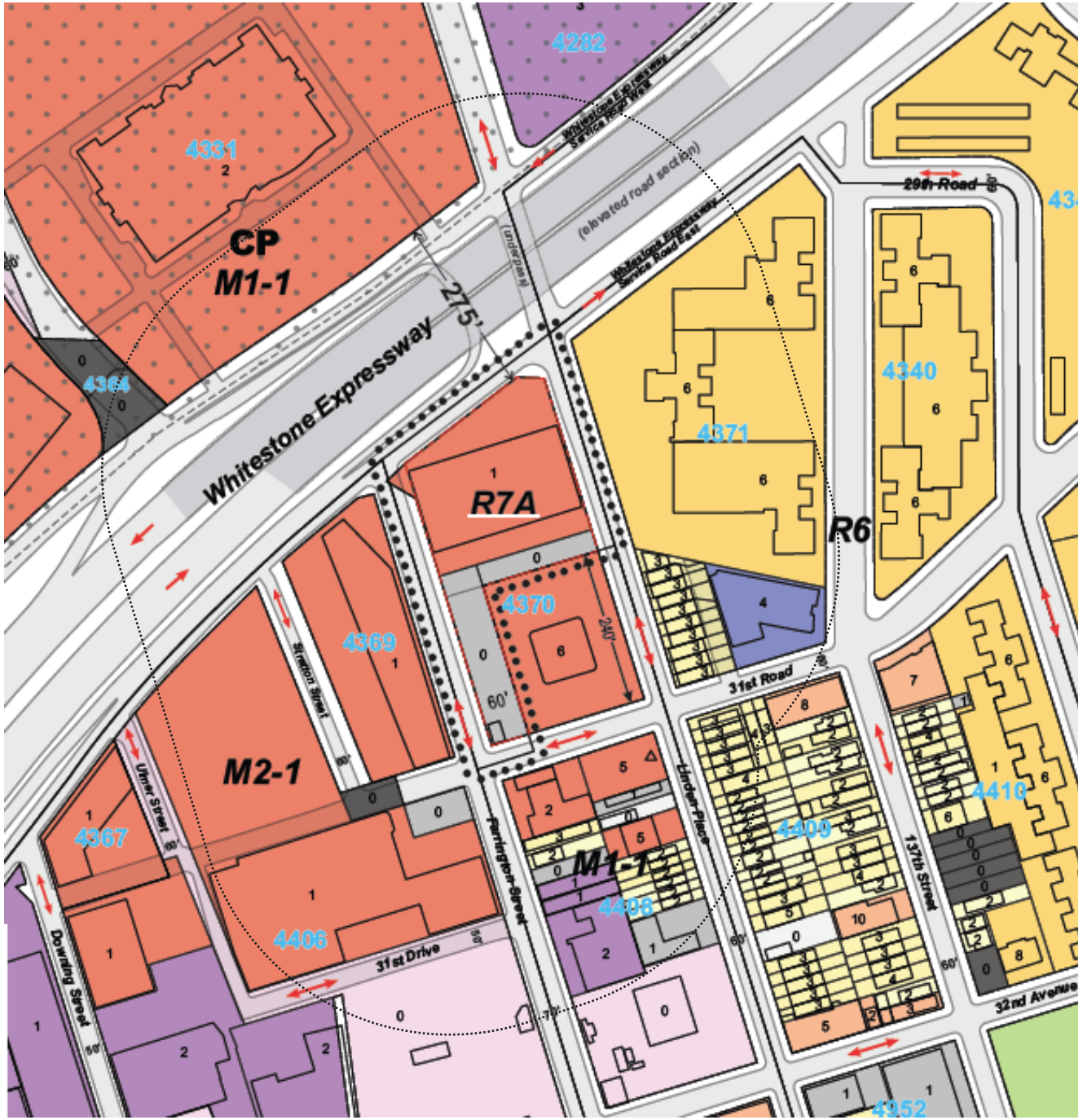
The lots within the larger Study Area contain residential, commercial, community facility, light manufacturing and transportation uses. The lots within the Study Area that are east of Linden Place contain both medium and low-density residential uses including the Linden Towers complex across the street from the Project Area and semi-detached houses further to the south. The lots within the study area that are to the west of Linden Boulevard contain low density commercial uses (including a large grocery store and a large office building owned by NYC Dept. of Education). This area also contains light industrial uses. These are primarily auto repair and warehouses / distribution centers. A large public elementary school (P.S. 242) is also within the Study Area.

Within the Study Area, there are no Open Space uses (parks, plazas, or public access areas). As discussed in "Zoning" below, the districts mapped within the Study Area (M1, M2-1, and R6) are governed by height factor regulations or a sky-exposure plane. The

# 30-05 Farrington Street, Queens

Figure 1-1: Land Use Map

- Rezoning Area
- Projected Development Site 1 (Applicant-Owned)
- 400- Foot Study Area
- One & Two Family Residential Buildings
- Multi-Family Residential Buildings (Walk-up)
- Multi-Family Residential Buildings (Elevator)
- Mixed Residential & Commercial Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- No Data/Other




Data Source: MapPLUTO 2021v2, NYC DOF Digital Tax Map 8/2/21

Urban Cartographics

0 200 400 Feet

N

manufacturing districts have minimum parking requirements and the residential districts within the Study Area have rear and side-yard requirements. Most of the lots within the Study Area contain open space in the form of yards or surface parking.

The Study Area contains a range of building types. To the east of Linden Place, there are a mix of semi-detached and detached single, two, and multiple family residences. Generally, these do not exceed three floors and include side yards, and or front yards. The medium density residential buildings are between 5 and 8 stories and contain green spaces on their lots. The buildings west of Linden Place are also generally low-rise with most being single story commercial or light manufacturing buildings. The majority of lots within the Study Area are occupied though a few vacant lots can be seen in the residential areas to the east of Linden Place. There are also large parking lots along in the commercial / industrial area and there is no continuous street-wall.

The Study area is served by a network of streets in an irregular grid pattern. Downing Street, Farrington Street, Linden Place, and 137th Street provide north-south access but only Linden Place connects the study area to points north across the Whitestone Expressway. 31st Road and 32nd Avenue provide east-west access.

**No-Action Condition**

*Project Area*

In the future without the proposed actions, four single story buildings cumulatively totaling 39,996 gsf (1.0 FAR) containing destination retail uses would be developed. These buildings would be 25 feet in height include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place.

*Study Area*

The No-Action development would mirror existing land use patterns in the Study Area. As such there would be no change to the land use pattern within the Study Area.

**With-Action Condition**

As discussed above, with the approval of the Proposed Actions, the Applicant intends to develop a residential building on **Projected Development Site 1.** For the purposes of presenting a conservative analysis this EAS studies a development scenario that would include more units than the Applicant's Proposed Development. The With-Action development is a 468,682 gross square foot (gsf), 9-story building. The building would have a total height of 95ft and contain 388,293 gsf of residential floor area or 431 dwelling units. Of these units, 108-130 units would be reserved as moderate to low-income units pursuant to the requirements of Mandatory Inclusionary Housing (MIH). Both MIH

Options 1 and 2 would be mapped on the Project Area as part of the Proposed Actions. The final compliance with MIH would be determined through the ULURP process.

The Proposed Actions do not introduce any land uses to the Study Area that are not already present in the existing condition. Although there are some medium density residential buildings in the Project Area, the Proposed Action would result in the development of a new residential building that is larger (with respect to bulk and height) than other existing buildings. Currently there are no multifamily apartment buildings that exceed eight floors within the 400ft Study Area.

The Proposed Actions would not create any land use conflicts with the existing uses in the Study Area. The light manufacturing uses to the south of the Study Area and commercial uses to the north and west of the Study Area do not present any conflicts with the low and medium density residential uses to the east of the Study Area. This would continue to be the case in the future with the Proposed Actions.

**Conclusion**

The Proposed Actions are not anticipated to introduce land uses that are different from surrounding uses. However, it would result in the displacement of a commercial use and a greater concentration of residential use than is currently observed in the Study Area. The Proposed Actions would extend residential uses from their existing boundary on Linden Place, across the street into a part of the Study Area that is primarily commercial and also contains light manufacturing (warehouse) uses.

The introduction of increased residential density is not anticipated to lead to significant land use changes in the Study Area nor would an increase residential density result in the direct displacement of existing land uses. The Proposed Actions are not anticipated to result in significant adverse impacts to land use within the Study Area and further analysis is not warranted.

# Zoning

## Study Area

In order to assess the potential for project related impacts, the zoning study area has been defined as the area located within a 400-foot radius of the site. Per the CEQR Technical Manual this area is coterminous with the land use study area.

## Existing Conditions

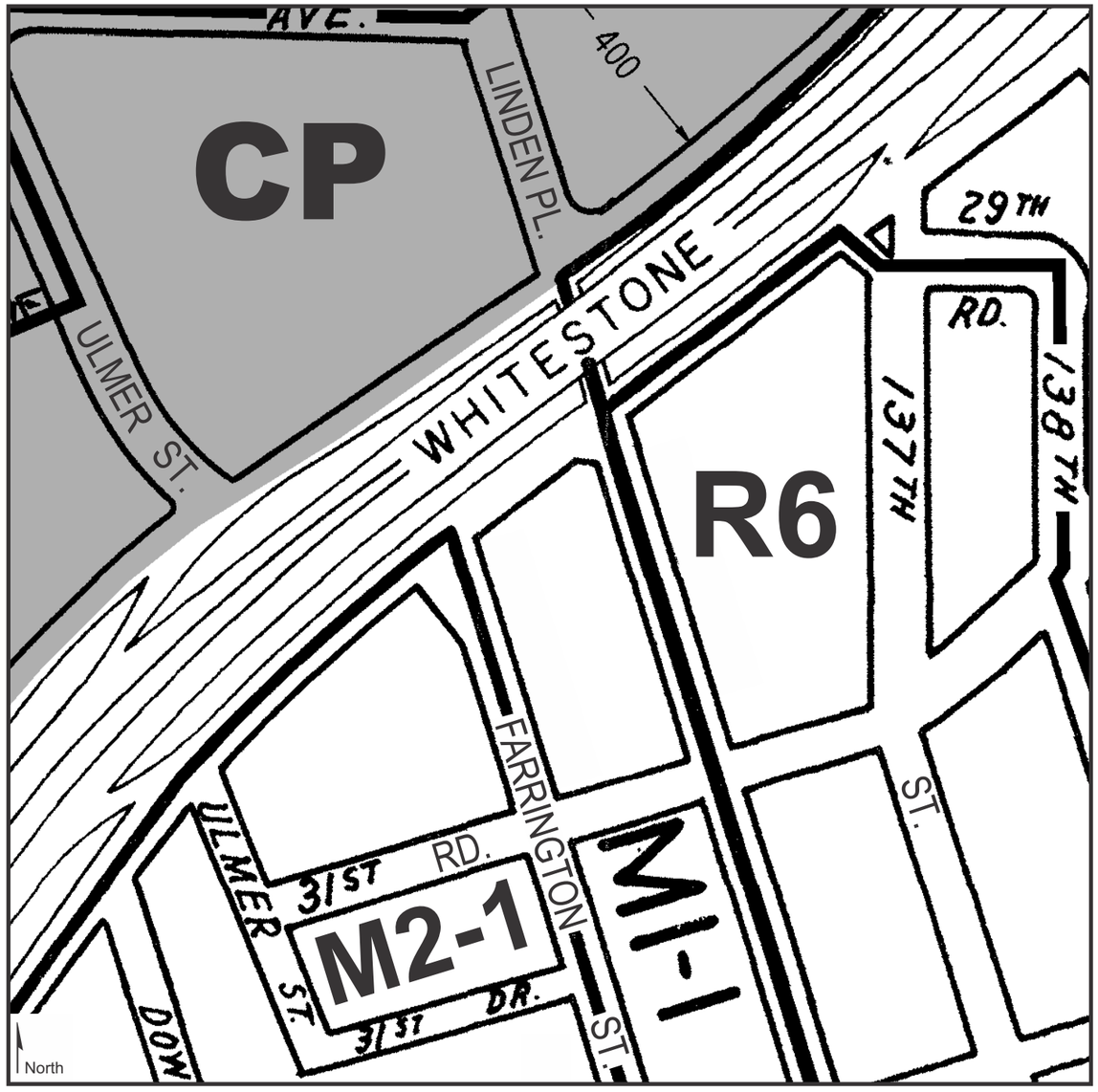
The Proposed Actions include a zoning map amendment and a zoning text amendment to rezone the Project Area from an M1-1 district to a R7A district. All of the lots within the Project Area are located in this M1-1 district. There are however several different zoning districts within the Study Area. The M1-1 district extends along between Linden Place and Farrington Street to the south, past 32nd Avenue and to the north on the other side of the Whitestone Expressway. To the east of Linden Place the residential areas in the Study Area are zoned R6. To the west of Farrington Street an M2-1 zone extends beyond the Study Area boundaries.

The area immediately to the north of the Whitestone expressway was rezoned in 2009 as part of a zoning map amendment (090319 ZMQ) that rezoned a 94-block area from M3-1 and M1-1 to M1-1 and M2-1, respectively, and created a new special district (Special College Point District). The rezoning sought to provide additional bulk and signage regulations to promote a business 'campus-like' environment in the area. Additionally, several blocks that were originally zoned for industrial uses that contained residential uses were amended to reflect a more residential character. Lastly, mixed-use arterials such as College Point Boulevard were rezoned to reflect and reinforce their roles as 'main streets'.

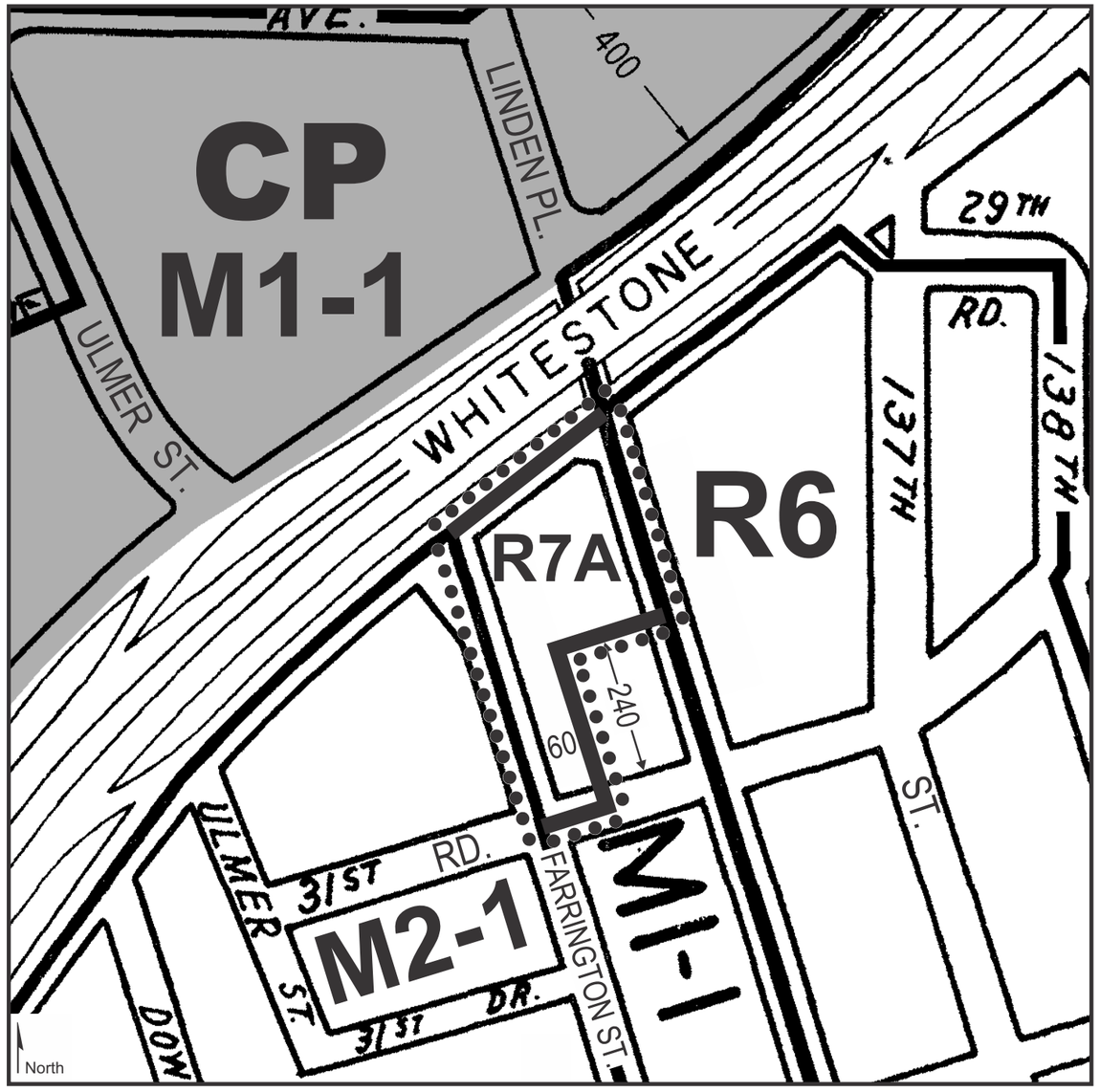
The area to the east (across Union Street) was also rezoned in 2009 as part of the North Flushing Rezoning (090281 ZMQ), which rezoned a 257-block area from R1-2, R2, R3-2, R4, R4-1, R5, R6 districts, along with C1-2 and C1-3 commercial overlays to lower density and contextual districts, such as R1-2A, R2A, R2, R3X, R3-1, R3-2, R4, R4A, R4-1, R4B, R5B and R5D districts with a C1-3 commercial overlay.

To the south of the Project Area, closer to Downtown Flushing, two private rezoning applications were approved in 2010 and 2017. The first, the 35th Avenue Rezoning (030223 ZMQ), was adopted in July of 2010. This rezoning amended an area from M1-1 to R6/C2-2 for an area to the north side of 35th Avenue between Prince and Farrington Streets. The proposed rezoning was intended to facilitate an 11-story mixed-use building to contain residential units, community facility uses and retail. The parcel was subsequently developed with a 16-story mixed use building in 2021.

**Figure 1-2: Zoning Change Map**




Current Zoning Map (10a)




Proposed Zoning Map (10a) - Area being rezoned is outlined with dotted lines

Rezoning from M1-1 to R7A

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

The second, 135-01 35th Avenue Rezoning, was adopted in October of 2017. This rezoning is immediately to the east of the 35th Avenue Rezoning at the northeast corner of 35th Avenue and Farrington Place and amended an M1-1 district to R7A/C2-3 under MIH. The rezoning was sought to facilitate a 9-story residential development with 93 dwelling units, 27 of which would be affordable under MIH. This building has not been fully constructed and is currently under demolition.

The **M1-1** district mapped within the Study Area extends for only one between Farrington Street and Linden Place from east to west but continues south until 35th Avenue. M1-1 districts permit light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. The maximum FAR in M1-1 districts is 1.0. Building heights and setbacks are controlled by a sky exposure plane, although few buildings in M1-1 districts rise above two stories. One accessory parking space is required per 300sf. Most community facility and commercial uses are also permitted as-of-right with a maximum FAR of 1.0. Some uses like hotels and hospitals require a special permit.

The **M2-1** district mapped within the Study Area extends beyond the M1-1 district to the Flushing River. The M2-1 zoning district is designated for medium manufacturing uses and is similar to M1-1 districts but does not permit community facility uses (Use Group 4). M2-1 districts permit a maximum FAR of 2.0 or light manufacturing, commercial and industrial uses (Use Groups 6-14, 16-17) with a maximum 60-foot street wall height and overall maximum height governed by the sky exposure plane.

The **R6** district mapped within the Study Area extends to the east and encompasses a large portion of northern Queens. The R6 district permits medium and higher-density residential uses under Height Factor and Quality Housing regulations. For Height Factor buildings, open space is required with a ratio range of 27.5 to 37.4 with a corresponding maximum FAR range from 0.78 to 2.43. The height factor regulations for R6 districts encourage small apartment buildings on small zoning lots, and tall, narrow buildings that are set back from the street on larger lots with the maximum height governed by the sky exposure plane. Height factor buildings outside of IH or MIH areas are permitted at a maximum height of 70 feet with a maximum street wall height of 65 feet and a maximum FAR of 3.0. For Height Factor buildings, 70% of dwelling units require parking, while for Quality Housing buildings, 50% of dwelling units require parking.

## No-Action Condition

*Project Area*

In the future without the proposed actions, four single story buildings cumulatively totaling 39,996 gsf (1.0 FAR) containing destination retail uses would be developed. These buildings would be 25 feet in height include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place.

If the Proposed Actions discussed above are not approved, no changes would occur to the zoning on the Project Area. The Project Area would continue to be zoned M1-1. No changes to zoning are anticipated to occur within the Project Area

*Study Area*

If the Proposed Actions discussed above are not approved, no changes would occur to the zoning within the Study Area within the Analysis year of 2026.

**With-Action Condition**

If the Proposed Actions discussed above are approved, the Project Area would be rezoned from an M1-1 district to an R7A district. The approval of the Proposed Actions would facilitate development on Projected Development Site 1 as described above (see RWCDS – With Action Scenario). The Proposed Actions do not involve changes in regulatory controls that would affect sites other than Projected Development Site 1.

The **R7A** residential district allow for buildings up to 4.0 FAR (4.6 FAR with MIH) and generally yields 7- to 9-story buildings. Maximum lot coverage is 65% for interior and through lots and 100% on corner lots. Above a base height of 40 to 75 feet, the building must set back to a depth of 10 feet on a wide street, before rising to a maximum of 95 feet or 9-stories (with MIH). Parking is required for 50% of all dwelling units and affordable units are reduced outside the transit zone.

**Conclusion**

Approval of the Proposed Actions would change the underlying zoning district in the Project Area. The Proposed Actions change the zoning in the Project Area from M1-1 to R7A. The CEQR Technical manual states that an analysis of land use and zoning should, "focus on the project's compatibility and consistency with surrounding uses and zoning as they would exist in the future without the project" and determine "whether the project would have the ability to generate land use change in the study area." The new zoning district introduced by Proposed Actions would not introduce any new uses to the Study Area. As discussed above the Study Area contains a mix of community facility, commercial and residential uses. The Proposed Actions would result in the development of a building that is taller and denser than the existing buildings within the Study Area. The introduction of new residential uses remains compatible with the surrounding Study Area. Further, the Proposed Actions mirror past rezonings that allow for the introduction of medium density residential buildings at the edge of commercial and manufacturing districts. The Proposed Actions are not anticipated to result in significant adverse impacts related to zoning within the Study Area and further analysis is not warranted.

# Public Policy

## Study Area

Per the CEQR Technical Manual, assessment of public policy accompanies a land use assessment because such policies may help determine whether or where land uses might change as the result of a proposed project. In addition, some projects may affect other specific public planning efforts by changing land uses in the area.

In order to assess the potential for project related impacts, the public policy study area has been defined as the area located within a 400-foot radius of the site. Per the CEQR Technical Manual this area is coterminous with the land use study area.

## Existing Conditions

The Project Area is located in Flushing which is within Queens Community District 7. Existing public policies that could affect the Rezoning Area include:

- Housing New York: A Five-Borough, Ten-Year Plan
- Where We Live NYC
- Food Retail Expansion to Support Health (FRESH)
- One New York: The Plan for a Strong and Just City (OneNYC)
- NYC Waterfront Revitalization Program (WRP)

*Housing New York: A Five-Borough, Ten-Year Plan* is the current plan under Former Mayor Bill De Blasio to build or preserve 300,000 units of affordable housing in New York City within ten years of the start of his mayoralty.

*Where We Live NYC:* An inclusive, comprehensive, and collaborative process for planning how to fight discrimination, confront segregation, and take action to advance opportunity for all, published under current Mayor Eric Adams.

*The Food Retail Expansion to Support Health (FRESH) Program*, designates areas where for zoning as well as tax incentives are available for the development of a grocery store that sells fresh fruits and vegetables.

*One New York: The Plan for a Strong and Just City* (OneNYC), is the City's strategic plan for inclusive growth and climate action. A major goal of the program is with the creation of new affordable dwelling units.

*The NYC Waterfront Revitalization Program (WRP)* applies to areas within the City's Coastal Zone Boundary. WRP is the City's principal Coastal Zone management tool

and establishes a broad range of public policies for the City's coastal areas. The guiding principle of the WRP is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront, while minimizing the conflicts among these objectives.

No other public policies relate to the Project Area or to the surrounding 400-foot radius study area. The Project Area is not located within a Federal Empowerment Zone or covered by any 197-a Community Development Plans, and is not located within a critical environmental area, a significant coastal fish and wildlife habitat, a wildlife refuge, or a special natural waterfront area.

**No-Action Condition**

*Project Area*

In the future without the proposed actions, four single story buildings cumulatively totaling 39,996 gsf (1.0 FAR) containing destination retail uses would be developed. These buildings would include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place.

*Study Area*

The Proposed Actions do not involve changes to regulatory controls that would affect sites outside of the Projected Development Site.

**With-Action Condition**

As discussed above, of the Proposed Actions are approved, development is expected to occur on Projected Development Site 1 within the Project Area.

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

The Proposed Actions include a zoning text amendment to map a Mandatory Inclusionary Housing Area on the Project Area. Projected Development Site 1 would include 431 units, 25-30% of which would be affordable pursuant to MIH at an average of 60-80% AMI depending on the Option selected. The creation of these units is consistent with this public policy as it furthers the goal of developing affordable units.

*Where We Live NYC*

The Proposed Actions would promote Goal 2 of the plan: facilitate equitable housing development in NYC through the creation of new housing in an amenity rich neighborhood with access to public transportation. The Applicant's proposed development would expand housing options in the Project Area through the of market

rate and affordable housing.

*The Food Retail Expansion to Support Health (FRESH) Program*

The Applicant's proposed development does not include a supermarket nor is a supermarket anticipated to be constructed on Projected Development Site 1 in the With-Action scenario. The FRESH program aims to incentivize the construction of supermarkets in areas where access to fresh produce is limited.

In the Project Area, zoning incentives from the FRESH Program are not available, however discretionary tax incentives could be offered. There is a large supermarket within the study area currently in close proximity to the Project Area.

*One New York: The Plan for a Strong and Just City* (OneNYC)
The Proposed Actions would result in the creation of new market rate and affordable residential units. The development of dense, mixed income, residential buildings furthers the housing objectives presented in OneNYC. Further, the Proposed Development includes publicly accessible open space in an area with limited open space resources.

*The NYC Waterfront Revitalization Program (WRP)*

The Proposed Development Site is wholly located within the NYC Coastal Zone Boundary and is located in an AE area (1% annual flood hazard) and 0.2 Percent Annual Flood Hazard by FEMA's Preliminary Flood Insurance Rate Maps (PFIRM). A WRP Consistency form has been produced for the Proposed Actions and is included as "Attachment B" of this EAS. The WRP Policy Assessment and Consistency form demonstrate that the Proposed Development is consistent with the policies of the WRP (WRP #23-030).

**Conclusion**

The Proposed Actions would advance several public policy objectives as they would result in the development of dense, and mixed income, buildings. These are stated policy goals in both *OneNYC* and *Housing New York*. The Proposed Actions would also provide an opportunity to increase available open space resources within the Study Area. The Proposed Actions are not anticipated to result in for significant adverse impacts to Public Policy. Further analysis of the potential for significant adverse impacts to Public Policy is not warranted.

# 2. Socioeconomic Conditions

## Introduction

According to the CEQR Technical Manual, the socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Even when socioeconomic changes would not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. In some cases, these changes may be substantial but not adverse. In other cases, these changes may be good for some groups but bad for others. The objective of the CEQR analysis is to disclose whether any changes created by the project would have a significant impact compared to what would happen in the No-Action Condition.

The CEQR Technical Manual indicates that two types of potential displacement relevant to socioeconomic conditions should be analyzed: (1) direct and (2) indirect displacement. For each category, the potential direct or indirect displacement effects for (1) residents and (2) businesses are independently assessed, as described below.

Direct displacement (sometimes called primary displacement, is the involuntary displacement of residents or businesses from a site or sites directly affected by a proposed project. Examples include a proposed redevelopment of a currently occupied site for new uses or structures, or a proposed easement or right-of-way that would take a portion of a parcel and thus render it unfit for its current use. The occupants and the extent of displacement are usually known, and the disclosure of direct displacement can therefore focus on specific businesses and a known number of residents and workers.

Indirect displacement, also known as secondary displacement, is the involuntary displacement of residents, businesses or employees that results in a change in socioeconomic conditions created by the proposed project. Examples include lower-income residents forced out due to rising rents caused by a new concentration of higher- income housing introduced by a proposed project; a similar turnover of industrial to higher-paying commercial tenants spurred by the introduction of a successful office project in the area or the introduction of a new use, such as residential; or increased retail vacancy resulting from business closure retailer saturates the market for particular categories of goods. The assessment of indirect displacement usually identifies the size and type of groups of residents, businesses, or employees affected. In keeping with general CEQR practice, the assessment of indirect displacement assumes that the mechanisms for such displacement are legal.

**Threshold Analysis**

As discussed above, with the approval of the Proposed Actions, the Applicant intends to develop a residential building on **Projected Development Site 1.** For the purposes of presenting a conservative analysis this EAS studies a development scenario that would include more units than the Applicant's Proposed Development. The With-Action development is a 468,682 gross square foot (gsf), 9-story building. The building would have a total height of 95ft and contain 388,293 gsf of residential floor area or 431 dwelling units. Of these units, 108-130 (25-30%) would be reserved as moderate to low-income units pursuant to the requirements of Mandatory Inclusionary Housing (MIH), depending on the MIH option selected. Both MIH Options 1 and 2 are proposed to be mapped in the Project Area as part of the Proposed Actions, but the final decision with respect to MIH Options would be determined through the ULURP process.

To facilitate the construction of the development described above, the large format commercial use (Bowling Alley) currently on the site would be demolished. Further analysis of direct business displacement is provided below. The Project Site does not currently contain any residential units. As such, there is no potential for direct residential displacement.

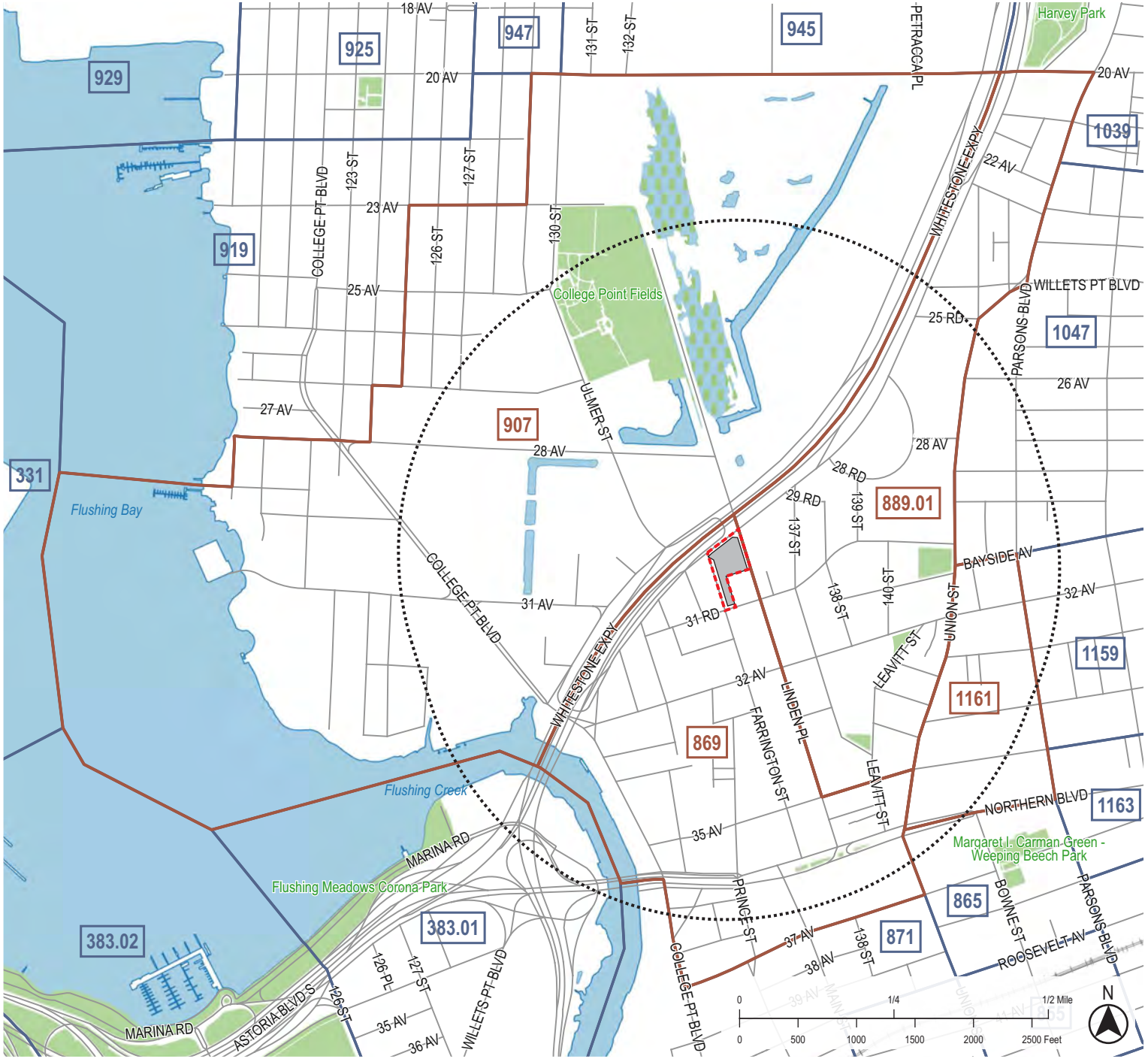
The Proposed Actions furthermore would not generate more than 200,000 square feet of commercial square footage, nor would the Proposed Actions otherwise impact an established industry. As such, there is no potential for indirect business displacement. No further assessment is warranted.

The Proposed Actions would, however, introduce more than 200 additional residential units. As discussed above a total of 431 units are projected in the With-Action scenario. These units would introduce 1,078 residents based on an average household size of renter-occupied unit in the Flushing-Willets Point Neighborhood Tabulation Area (NTA) per the 2016-2020 ACS As such, an analysis of the potential effects of the Proposed Actions on indirect residential displacement is included below. To better estimate the potential new residents in the With-Action conditions this EAS uses data on renter-occupied households which is only available from the American Community Survey. Further, rates from the NTA (a smaller geography compared to the Public Use Microdata Areas or PUMAs) were used instead of the Community District (CD) level averages to reflect the With-Action condition more accurately. The CD as a whole contains large areas of low-density residential uses, which are not representative of the conditions in the Study Area (defined below).

## 30-05 Farrington Street, Queens

Figure 2-1: Socioeconomic Analysis Map

- Proposed Rezoning Area
- Projected Development Site (Applicant-Owned)
- 1/2-Mile Study Area
- Census Tract Boundaries
- 123 — 50% or More of Census Tract Within Study Area
- 123 — Less Than 50% of Census Tract Within Study Area




Urban Cartographics

***Study Area***

Per the *CEQR Technical Manual*, the Study Area for an assessment of socioeconomic conditions may be 400 feet, a 0.25-mile radius, or a 0.5-mile radius depending on the size of the development facilitated by the Proposed Actions. The *CEQR Technical Manual* suggests that if a project increases the population of the 0.25-mile Study Area by more than 5%, a 0.5-mile radius should be used. **Table 2-1** illustrates the anticipated population increase in the preliminary 0.50-mile study area as this larger study area is appropriate given the total number of additional residents that would arrive in the Project Area in the With Action scenario.

**Table 2-1 No-Action vs. With-Action Population in the 0.50 Mile Study Area**

| Census Tracts (Queens) | Existing Condition (Residents) | No-Action Scenario (Residents) | With-Action Scenario (Residents) | No-Action vs. With-Action Population (%) |
|---|---|---|---|---|
| 889.02, 889.03, 869, 907, 1161 | 20,048[1] | 22,447[2] | 23,525 | 1,078 (4.80%) |

[1] Source: Population FactFinder, DCP; 2020 Census (Includes DoB completions since 2020)

[2] Includes DoB Active Permits within the Study Area.

***Direct Residential Displacement***

There are currently no existing residential units on Projected Development Site 1. The CEQR Technical Manual states that directly displacing 500 or more people may cause a direct residential displacement impact. As the number cited is below this threshold, there would not be a direct residential displacement impact in the With-Action Scenario and no further analysis is required.

***Direct Business Displacement***

The CEQR Technical Manual states that there may be a direct business displacement impact when any of the following is true:

- The project would directly displace more than 100 employees;
- The businesses to be displaced provide products or services essential to the local economy that would no longer be available in its "trade area" to local residents or businesses due to the difficulty of either relocating the businesses or establishing new, comparable businesses; and/or
- A category of businesses is the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it.

In terms of direct business displacement, the With-Action Scenario would displace existing local commercial uses (bowling alley) totaling 37,520 gsf. These uses would not be replaced in the Proposed Development which is residential only.

Overall, in the With-Action Scenario less than 100 employees would be potentially displaced. No business or service which provides products or services essential to the local economy which would no longer be available would be displaced. The existing retail uses are commonplace in the surrounding area and the new commercial space provided in the Proposed Developments could substantially replace these uses or provide alternate uses. There are no regulations or publicly adopted plans to preserve, enhance, or otherwise protect any of the businesses that potentially would be displaced. As such, there would be no direct business displacement impacts related to the proposed project and no further analysis is required.

***Indirect Business Displacement***

The CEQR Technical Manual states that Proposed Actions that introduce more than 200,000 square feet of commercial uses to the Study Area may have the potential to create indirect business displacement. The Proposed Actions would not introduce any incremental commercial uses between the with-action and no-action conditions. Further analysis of indirect business displacement is not required.

***Indirect Residential Displacement***

The CEQR Technical Manual states that Proposed Actions that introduce more than 200 residential units to the Study Area may have the potential to create indirect residential displacement.

The Proposed Actions would, introduce 431 additional residential units in the With-Action condition compared to the No-Action condition. As such, an analysis of the potential effects of the Proposed Actions on indirect residential displacement is included below.

**Preliminary Analysis**

The CEQR Technical Manual states that "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. These rising rents 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.

*Existing Conditions*

Based on the 2020 Census data, in 2020 the study area contained 20,014 residents and 7,440 occupied housing units. A review of Department of Buildings Completions for the study area suggests that, as of 2022 there are 20,048 residents and 7,453 occupied housing units within the Study Area.

This analysis uses median household incomes to describe the household income characteristics of the study area population. As shown in **Table 2-2**, in 2020 the median annual household income within the socioeconomic study area was $48,619. This was more than $20,000 less than the median income for Queens ($72,028), and about $20,000 less than the median income for New York City ($67,046). Unlike median incomes for Queens and New York City, which have increased, the study area median income has decreased when compared to 2010 median income.

**Table 2-2 Existing Median Household Income**

| | 2006-2010 ACS | 2016-2020 ACS | Percent Change |
|---|---|---|---|
| Study Area | $ 56,763 | $48,619 | Decrease [1] |
| Queens | $65,785 | $72,028 | +9.5% |
| New York City | $59,829 | $67,046 | +12.1% |

Note: [1]Margin of Error (13.4%) is too large to to indicate an exact percentage decrease
Source: NYC Population Factfinder, DCP (ACS 5-year estimates)

As shown in **Table 2-3**, within the socioeconomic study area, median gross rent in 2020 was approximately $1,636 per month, which was about the same as median rent for Queens ($1,629) and more than for New York City as a whole ($1,489). Median gross rents have increased in the study area since 2010. Over the same time period median gross rents also increased in Queens (by approximately 15.9 percent) and in New York City (by 16.9 percent).

**Table 2-3: Existing Median Rent**

| | 2006-2010 ACS | 2016-2020 ACS | Percent Change |
|---|---|---|---|
| Study Area | $1,386 | $1,636 | Increase[1] |
| Queens | $1,405 | $1,629 | +15.9% |
| New York City | $1,274 | $1,489 | +16.9% |

Note: [1]The Margin of Error (15.4%) is too large to indicate an exact percentage increase
Source: NYC Population Factfinder, DCP (ACS 5-year estimates)

**Table 2-4** summarizes online listings for apartments in the study area from StreetEasy.com within the Flushing-Murray Hill-Whitestone PUMA. This is the same unit of analysis used in the Racial Equity Report produced for this project. The median monthly asking rents in the study area ranged from $1,697 for studio units to $3,151 for 2-Bedroom units.

**Table 2-4: Market Rate Rents in the Flushing-Murray Hill-Whitestone PUMA**

| | Median Rent | Total Listings |
|---|---|---|
| Studio | $1,697 | 4 |
| 1-Bedroom | $2,185 | 28 |
| 2-Bedroom | $3,151 | 20 |

Source: Streeteasy.com (April 2023, Active Listings)

***No-Action Scenario***

In the future without the proposed actions, four single story buildings cumulatively totaling 39,996 gsf (1.0 FAR) containing destination retail uses would be developed. These buildings would include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place. No new residents or residential units would be introduced in the No-Action scenario.

***With-Action Scenario***

Per the CEQR Technical Manual Step 1 of the preliminary indirect residential displacement analysis is to determine if the Proposed Project would add new population with higher average incomes compared to the average incomes of the existing populations and any new population expected to reside in the study area without the Proposed Actions.

As discussed above the Proposed Actions would introduce new market rate and affordable units to the study area. As a new housing product, the market-rate DUs would be expected to rent on the higher end of the range of market-rate asking rents in the study area. For purposes of analysis, the upper quartile of listed asking rents were utilized to estimate market-rate renters' incomes, and it was assumed that households would earn 40X the monthly rent. The resulting projected household incomes, shown in **Table 2-5**, range from $174,600 for households residing in studio units to approximately $277,500 for households in two-bedroom units.

### Table 2-5: Projected Rent and Income for Market Rate D.U.s

| | Projected Rent | Projected Household Income |
|---|---|---|
| Studio | $4,370 | $174,600 |
| 1-Bedroom | $5,050 | $202,000 |
| 2-Bedroom | $6,940 | $277,500 |

Source: Streeteasy.com (April. 2022, Active Listings)

The overall average income for market-rate households would depend on the unit mixes on the Development Site. The Proposed Development has a unit split that consists of 15% studio units, 55.5% One-Bedroom units, and 29.5% Two or more-Bedroom units. Therefore, the average households in the market rate units would earn $220,162 per year. The study area's median annual household income in 2020 was $48,619. Occupants of market-rate units in the With-Action scenario would earn 452% of the median household income within the Study Area.

The Proposed Actions include the application of the City's Mandatory Inclusionary Housing (MIH) Area zoning to the Rezoning Area. The MIH program sets forth two primary options that are characterized by different affordability levels, which promote a range of affordable development. The applicant intends to comply with MIH Option 1 which requires 25 percent of the residential floor area be set aside for households making an average 60 percent Area Median Income (AMI), with 10 percent of that amount set aside for households making up to 40 percent AMI. AMIs are calculated yearly by the U.S Department of Housing and Urban Development (HUD).

### Table 2-6: Projected Rent and Income for MIH D.U.s

| | 40% AMI Projected Rent | 60% AMI Projected Rent | 40% AMI Projected Household Income | 60% AMI Projected Household Income |
|---|---|---|---|---|
| Studio | $934 | $1,401 | $37,360[1] | $56,040[1] |
| 1-Bedroom | $1,001 | $1,501 | $42,720[2] | $64,080[2] |
| 2-Bedroom | $1,201 | $1,801 | $53,360[3] | $80,040[3] |

Source: NYC Housing Preservation and Development (HPD)
Note: [1]Based on a 1-person Household, [2]Based on a 2-person Household, [3]Based on a 4-person Household

As shown in **Table 2-6**, the income of occupants of the affordable units is projected to be between $37,360 and $80,040. The Proposed Development has a unit split that consists of 15% studio units, 55.5% One-Bedroom units, and 29.5% Two or more-Bedroom units. The applicant intends to comply with MIH Option 1 which requires 25 percent of the residential floor area be set aside for households making an average 60 percent Area Median Income (AMI), with 10 percent of that amount set aside for households making

up to 40 percent AMI. Therefore, occupants of the MIH units in the With-Action scenario would earn $58,515 per year on average across all units. The study area's median annual household income in 2020 was $48,619. Occupants of the income restricted units in the With-Action scenario would earn 120% of the median household income within the Study Area.

In the aggregate, the Proposed Project's expected average household income is expected to be higher than the median income in the Study Area. Between the market rate and MIH units the average annual household income of the building's occupants is $179,750.

Based on CEQR Technical Manual guidelines, if the expected average incomes of the new population would exceed the average incomes of the study area population, Steps 2 of the preliminary assessment is warranted. Per the CEQR Technical Manual Step 2 of the preliminary residential assessment is to determine if the Proposed Project's increase in population is large enough relative to the size of the population expected to reside in the study area without the project to affect real estate market conditions in the study area. According to CEQR Technical Manual analysis thresholds, if the population increase is greater than 5 percent in a study area or identified subareas, the incremental population may be large enough to affect real estate market conditions.

As demonstrated in Table 2-1 above, the Proposed Actions are expected to introduce 1,078 new residents into the Study Area. This represents an increase of 4.8% of the ½ mile study area. No further analysis is needed as the Proposed Actions are not expected to introduce a total number of new residents to the Study Area than can affect real estate market conditions in the Study Area.

**Conclusion**

While Step 1 of the preliminary assessment could not rule out the possibility that the Proposed Project could result in new populations with higher average incomes than the existing and future study area population, Step 2 of the analysis determined that the project's increase in population would not be large enough to substantively affect real estate market conditions in the study area. Therefore, based on CEQR Technical Manual guidelines, the Proposed Project would not result in significant adverse impacts due to indirect residential displacement, and no further analysis is warranted.

# 3. Community Facilities

## 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.

## Threshold Analysis

### 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 Proposed Actions would result in incremental development of 431 dwelling units in the Project Area.

The proposed actions include a text amendment mapping the project area as a MIH area. For CEQR purpose it is assumed that 20 percent of the units would be reserved as affordable to households with incomes not exceeding 80 percent of the AMI, or 87 dwelling units.

#### *Libraries*

According to the *CEQR Technical Manual*, a more than 5% increase in the ratio of residential units to library branches would warrant a detailed analysis. The minimum of residential units required in the Borough of the Queens to trigger a detailed analysis is 663 dwelling units. The With-Action Scenario would produce 431 incremental dwelling units. As this number is below the threshold provided in the *CEQR Technical Manual,* no further analysis is required.

*Police/ Fire and Health Care Facilities*

According to the *CEQR Technical Manual*, a detailed analysis for police/fire services and health care services is only required if the With-Action Scenario would introduce a "sizeable new neighborhood, e.g., Hunter's Point South." The With-Action Scenario would introduce an incremental 431 dwelling units in an already built-up area and would not therefore create a "sizeable new neighborhood." As such, no further analysis is required.

*Early Childhood Programs*

For the purposes of the childcare analysis, under the criteria in the CEQR Technical Manual (Table 6-1), the development of 87 dwelling units at or below 80% of AMI would not exceed the minimum number of 139 dwelling units in the Borough of Queens for conducting a detailed analysis of impacts to publicly funded childcare. As such, no further analysis is required.

*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 Project Area is located within Combined School District (CSD) 25, Subdistrict 1 as illustrated in **Figure 6-1: Public Schools within CSD 25 Subdistrict 1**.

Based on *CEQR Technical Manual* criteria (Table 6-1), the development of 431 dwelling units would result in the introduction of an estimated 95 elementary school aged children, 30 middle school aged children, and 50 high school aged children. This information is summarized in **Table 6-1: School Seat Multipliers**. The minimum number of total elementary and intermediate school aged children to warrant a detailed analysis is 50 children. The minimum number of high school aged children to warrant a detailed analysis is 150 children. As such, the Proposed Actions have the potential to introduce the minimum number of children necessary to warrant a detailed analysis of impacts to public elementary and middle schools Queens School District 25.

**Table 6-1: School Seat Multipliers**

| | Units | CDS 25 Sub 1 Multipliers | Total Students | Threshold |
|---|---|---|---|---|
| **Elementary** | 431 | 0.22 | 95 | 50 |
| **Intermediate** | | 0.07 | 30 | |
| **High School** | | 0.10 | 50 | 150 |

## Detailed Analysis

### Existing Conditions

*Primary Study Area (Sub-district Analysis)*

The project site is located in Combined School District (CSD) 25, Subdistrict 1. This district is considered to be the primary study area for the analysis of elementary and intermediate schools. Figure 6-1, Public Elementary and Intermediate Schools Within CSD 25 Subdistrict 1, illustrates the locations of these schools.

Table 6-1 provides a listing of the elementary and intermediate schools within the CSD. The table identifies the schools by school 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 6-2 indicates that the elementary and intermediate schools within the Subdistrict are, as a whole, at capacity. Select schools however are over-utilized. The elementary /intermediate schools within Subdistrict 1 have a total enrollment of 7,655 elementary students relative to a target capacity of 5,504 seats, resulting in a deficit of 2,201 seats and a total enrollment of 4,526 intermediate school students relative to a target capacity of 4,270 seats, resulting in a deficit of 68 seats.

# 30-05 Farrington Street, Queens

Figure 1: Public Elementary and Intermediate Schools Within CSD 25, Sub-district 1

- Proposed Rezoning Area
- # Elementary Schools (see Table 6-1)
- # Intermediate Schools (see Table 6-1)
- # High Schools / Prep Schools (see Table 6-1)




Urban Cartographics

## Table 6-2: Elementary/ Intermediate Schools within CSD 25 Subdistrict 1

| Map ID | School Name | Address | Enrollment | | Target Capacity | | Available Seats | | Utilization | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | P.S. | I.S. | P.S. | I.S. | P.S. | I.S. | P.S. | I.S. |
| 1 | P.S. 129 PATRICIA LARKIN | 128-02 7 AVENUE | 1,113 | 0 | 810 | 0 | -303 | 0 | 137% | N/A |
| 2 | P.S. 184 FLUSHING MANOR | 163-15 21 ROAD | 529 | 0 | 351 | 0 | -178 | 0 | 151% | N/A |
| 3 | P.S. 193 ALFRED J. KENNEDY | 152-20 11 AVENUE | 571 | 0 | 469 | 0 | -102 | 0 | 122% | N/A |
| 5 | P.S. 169 BAY TERRACE | 18-25 212 STREET | 385 | 0 | 218 | 0 | -167 | 0 | 177% | N/A |
| 7 | P.S. 032 STATE STREET | 1100 ELM AVENUE | 990 | 0 | 597 | 0 | -393 | 0 | 172% | N/A |
| 10 | P.S. 209 CLEARVIEW GARDENS | 6006 23 AVENUE | 553 | 0 | 464 | 0 | -89 | 0 | 119% | N/A |
| 11 | P.S. 214 CADWALLADER COLDEN | 31-15 140 STREET | 413 | 0 | 382 | 0 | -31 | 0 | 108% | N/A |
| 15 | P.S. 079 FRANCIS LEWIS | 147-27 15 DRIVE | 1,057 | 0 | 744 | 0 | -313 | 0 | 147% | NA |
| 16 | P.S. 029 QUEENS | 125-10 23 AVENUE | 712 | 0 | 570 | 0 | -192 | 0 | 125% | N/A |
| 19 | P.S. 021 EDWARD HART | 147-36 26 AVENUE | 1,332 | 0 | 899 | 0 | -433 | 0 | 148% | N/A |
| 6 | J.H.S. 194 WILLIAM CARR | 154-60 17 AVENUE | 0 | 1,289 | 0 | 1,210 | 0 | -79 | N/A | 107% |
| 12 | Q294 BELL ACADEMY | 18-25 212 STREET | 0 | 361 | 0 | 295 | 0 | -66 | N/A | 122% |
| 13 | Q379 COLLEGE POINT COLLABORATIVE | 124-06 14 AVENUE | 0 | 339 | 0 | 572 | 0 | 233 | N/A | 59% |
| 14 | Q025 ADRIEN BLOCK | 34-65 192 STREET | 0 | 1,066 | 0 | 972 | 0 | 94 | N/A | 110% |
| 18 | J.H.S. 185 EDWARD BLEEKER | 147-26 25 DRIVE | 0 | 1,471 | 0 | 1,221 | 0 | -250 | N/A | 120% |
| **TOTALS** | | | **7,655** | **4,526** | **5,504** | **4,270** | **-2201** | **-68** | **139%** | **106%** |

Per *CEQR Technical Manual* guidelines, charter school enrollments are not included in DOE enrollment projections. However, there are no elementary or intermediate level charter schools in the sub-district.

No-Action Scenario

This section presents an analysis of public-school enrollments (excluding Pre-Kindergarten enrollments) and capacities for the Project Analysis year of 2026 without the Proposed Actions. The analysis includes the primary study area of CSD 25, Sub-district 1 and is derived from NYC Department of Education (DOE) enrollment projections.

According to data from the School Construction Authority, approximately 1,508 new housing units are anticipated in CSD 25 Sub-District 1 by the 2026 build year (Projected Housing Starts for PS Level Analysis, SCA, 2020). This would result in 332 new elementary students anticipated to be added to the district from background residential development. This figure is calculated by using the school seat multiplier of 0.22 for elementary aged children (Projected Public-School Ratio, SCA, 2019).

Further, data from the School Construction Authority, indicated that 1,333 new housing units are anticipated in this Sub-District by the 2026 build year (Projected Housing Starts for MS Level Analysis, SCA, 2020). This would result in 93 new intermediate school students anticipated to be added to the district from background residential development. This figure is calculated by using the school seat multiplier of 0.07 for intermediate school aged children (Projected Public-School Ratio, SCA, 2019).

The 2022 Dept. of Education Five-Year Capital Plan indicates that 6 capacity projects would be complete in District 25 before the 2026 analysis year. Among these are the completion of an addition at P.S. 32 adding 346 additional seats and an addition at P.S. 169 adding 627 new seats. CSD 25 Subdistrict 1, will add 2,385 seats in total before the 2026 analysis year. Of the 6 buildings proposed in all of District 25, 3 would be elementary level only and three would be combined PS/IS schools. Therefore, of the 2,385 new seats in Subdistrict 1, approximately 2/3 of all seats would be elementary seats and 1/3 of all seats would be intermediate school seat. Despite significant the significant increase in capacity created by the Capital Plan, the elementary school seat utilization would remain above 100%. The increase in capacity for intermediate schools would bring the utilization below 100% by 2026.

See table below.

### Table 6-3: No-Action Projected Enrollment[1]

| **Study Area** District 25 - Subdistrict 1 | **Projected 2026 Enrollment[2]** | **Students Introduced by No Action Residential Development[3]** | **Total No Action Enrollment** | **Projected Capacity** | **Available Seats** | **Utilization** |
|---|---|---|---|---|---|---|
| Elementary | 6,981 | 332 | 7,313 | 7,078 | -235 | 103.3% |
| Intermediate | 3,642 | 93 | 3,735 | 5,055 | +1320 | 74% |

1) Based on the projected enrollment in District 25 for the 2025-2026 School Year and 2024 Enrolment Percentage by Zone (Sub-District) of 46.18% for Sub-District 1.
2) Enrollment Projections for New York City Public Schools by the Statistical Forecasting [2021-2030]
3) Projected New Housing Starts as Used in Enrollment Projections [ 2020-2029]

With-Action Scenario

As stated above, the Proposed Actions would generate 95 elementary school students and 30 intermediate school students by the 2026 build year. The Proposed Actions are not anticipated to result in the addition of any new schools or additional capacity in the District. Table 6-4 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 95 elementary and 30 middle school students resulting from the Proposed Actions in 2026 would have a minimal impact upon the utilization rates of the schools in the CSD. With the addition of these new enrollments, and new seat capacity the elementary schools in the CSD would remain over-enrolled. The utilization rate for elementary schools would be 104.6% while for intermediate schools it would be 95%.

### Table 6-4: With-Action Scenario School Enrollment

| **Estimated School Enrollment, Capacity, and Utilization** | | | | | | | |
|---|---|---|---|---|---|---|---|
| School Level | Projected Enrollment Without Project | Students Generated by Project | Projected Enrollment with Project | Projected Capacity | Available Seats | Utilization (%) with Project | Change in Utilization from No-Action |
| Primary Schools | 7,313 | 95 | 7,408 | 7,078 | -330 | 104.6% | ~1.3% |
| Intermediate Schools | 3,735 | 30 | 3,765 | 5,055 | +1,290 | 74.5% | <1% |

According to the *CEQR Technical Manual*, a significant impact on schools may occur if the following two conditions are met: if the project results in a collective utilization rate of the elementary or intermediate schools in the Sub-district study area that is greater than 100% in the With-Action Condition, and if the project results in an increase of 100 or more new students past the 100% utilization rate. The Proposed Actions would introduce 95 elementary school students in a Sub-district that exceeds 100% utilization rate. This is less

than the threshold of 100 new students that is considered in the CEQR Technical Manual as the threshold for potential significant adverse impacts. As the Proposed Actions would introduce fewer students than this threshold significant adverse impacts are not anticipated in the With-Action scenario. The intermediate schools in the Sub-district would not be above 100% utilization, nor would the Proposed Actions generate more than 100 intermediate school children. Therefore, the Proposed Actions would not be expected to result in a significant adverse impact on intermediate schools.

**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 not overtax services or facilities. Development under the Proposed Actions would not adversely hospitals and other health care facilities, public libraries, publicly subsidized child-care centers, and police and fire protection services. Despite considerable investment in the SCA 2020-2024 Capital Plan for School District 25 and for Sub-District 1 in particular, utilization rates for elementary schools would remain above 100% in both the No-Action and With-Action conditions by the 2026 analysis year. Utilization rates at both elementary and intermediate schools are expected to drop significantly due to the capacity projects included in the 2020-2024 Capital Plan, the introduction of 95 elementary school students in the With-Action scenario does not exceed the threshold of 100 students above 100% utilization set in the 2021 *CEQR Technical Manual*. Further, the utilization of intermediate schools in the Sub-District is well below 100%. Therefore, no significant adverse impacts to community facility uses are anticipated in the future with the approval of the Proposed Actions and further analysis is not warranted.

# 4. Open Space

## I. Introduction

This chapter assesses the potential impacts of the proposed project on open space resources. Open space is defined by the 2021 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly, or privately-owned land that operates or is available for leisure, play, or sport, or serves to protect or enhance the natural environment. The CEQR Technical Manual guidelines indicate that an open space analysis should be conducted if an action would result in a direct effect, such as the physical loss or alteration of public open space, or an indirect effect, such as when a substantial new population could place added demand on an area's open spaces. The proposed project would introduce new residential population to the project area that would create new demands for open space. Therefore, an open space assessment was conducted to determine if the Proposed Actions would significantly affect open space.

## II. Methodology

Direct Effects

Per the CEQR Technical Manual, direct effects may occur when the proposed project would encroach on, or cause a loss of, open space. Direct effects may also occur if the facilities within an open space would be so changed that the open space no longer serves the same user population. Limitation of public access and changes in the type and amount of public open space may also be considered direct effects. Other direct effects include the imposition of noise, air pollutant emissions, odors, or shadows on public open space that may alter its usability. The Proposed Development would not remove or alter any existing publicly accessible open spaces. In addition, study area open spaces would not experience project-related significant adverse shadows, air quality, or operational noise impacts, as discussed in this EAS.

Indirect Effects

Per the CEQR Technical Manual, indirect effects may occur when the population generated by the proposed project overtaxes the capacity of existing open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished. For the majority of projects, an assessment is conducted if the proposed project would generate more than 200 residents or 500 employees. The Proposed Actions would introduce 431 units, with approximately 1,078 residents to the Project Area. No incremental workers are anticipated to be introduced to the Project Area with the approval of the Proposed Actions. The Proposed Action would introduce 17 workers (associated with the residential development). There would be no large daytime worker population in the With-Action scenario. As the Proposed Actions are expected to

result in the introduction of more than 200 residents to the Project Area a preliminary analysis is needed.

Study Area

Per the CEQR Technical Manual, the first step in any open space analysis is to define and map a study area. Once the study area is defined, the next step is to determine which analysis is required through calculating the percentage change in the open space ratio between the No-Action condition and the future With-Action condition.

Open space study areas are defined to allow analysis of both the nearby open spaces and the population using those open spaces. They are generally defined by a reasonable walking distance that users would travel to reach local open space and recreation areas—typically 0.5 mile for residential users and 0.25 mile from commercial projects with a worker population.

The Proposed Actions would introduce more than 200 residents to the Project Area. Per the CEQR Technical Manual it is necessary to examine the change in residential population in the study area relative to total, active, and passive publicly accessible open space in the area and to determine whether the increase in population would significantly impact the adequacy of open space resources in the study area. An assessment of the adequacy of open space for the nonresidential (worker) population is not needed.

As recommended in the *CEQR Technical Manual*, the open space study area comprises all census tracts that have at least 50 percent of their area located within a ½-mile of the Project Area, as shown in **Figure 4-1: Open Space Facilities and Census Tracts**.

Analysis Framework

*Indirect Effects Analysis*

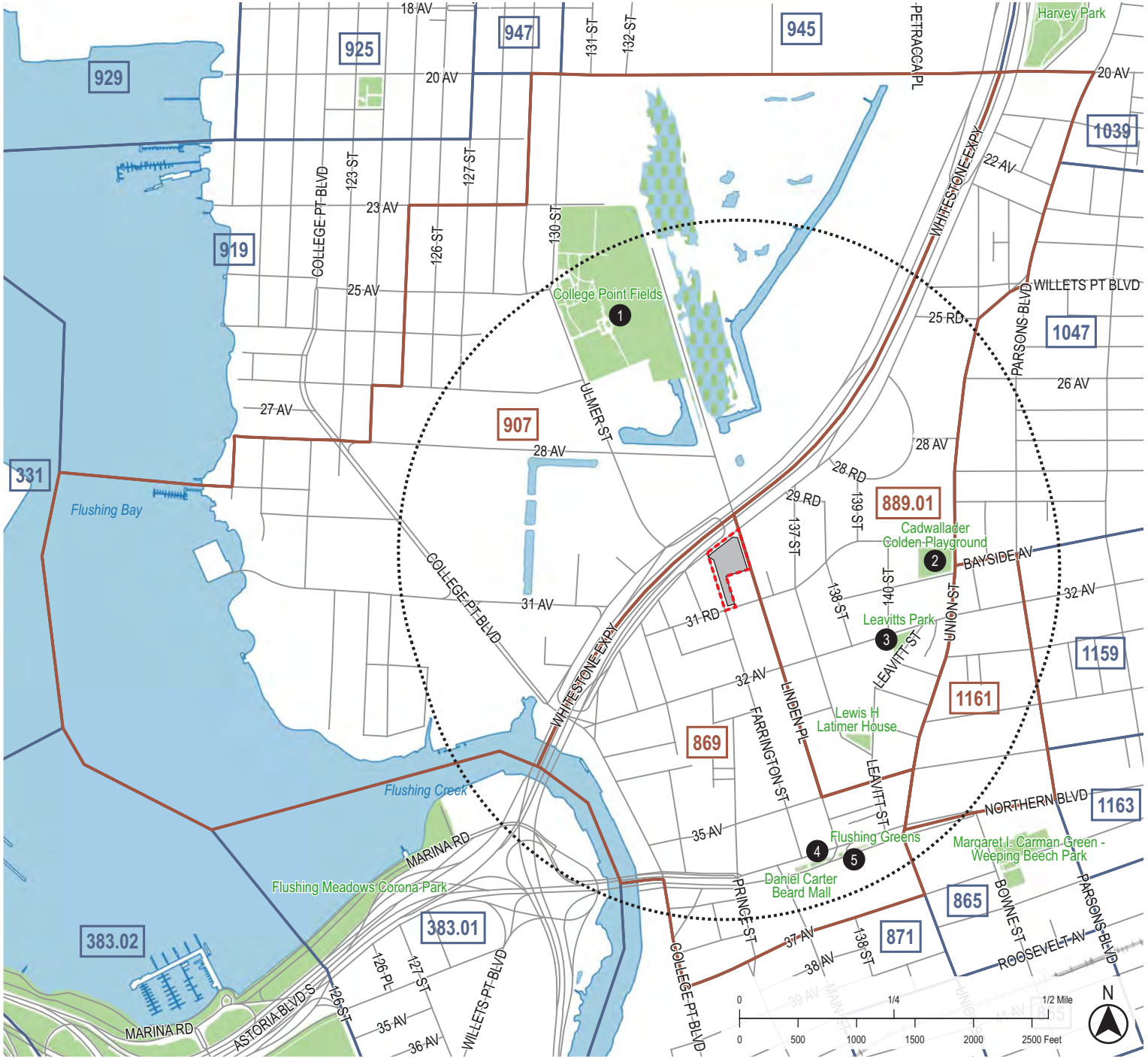
The indirect effects of a proposed action on open spaces may occur when the action adds enough population to substantially or noticeably reduce the capacity of the open space to serve the population. This can occur when the population generated by the proposed action exceeds the capacity of existing public open spaces.

In evaluating the impact of a project on open space, it is important to consider its location in relation to the Walk to a Park Service Area (WPSA). The WPSA is a part of the OneNYC 2050 plan, which aims to have 85% of New York City residents living within walking distance of a park by 2030. According to the plan, an area is considered to be within the WPSA if it is within a half mile walking distance of a park. Areas that are not within the WPSA are known as "walk gap" areas, meaning they are not within walking distance of a park. The project area, as shown in **Figure 4-2: WPSA**, is not located within the WPSA and is not within walking distance of a park.

## 30-05 Farrington Street, Queens

Figure 4-1: Open Space Facilities and Census Tracts

- Proposed Rezoning Area
- Projected Development Site (Applicant-Owned)
- 1/2-Mile Study Area
- Census Tract Boundaries
- 123 — 50% or More of Census Tract Within Study Area
- 123 — Less Than 50% of Census Tract Within Study Area
- 1 — Open Space Resources (see Table 7-1)




Urban Cartographics

# 30-05 Farrington Street, Queens

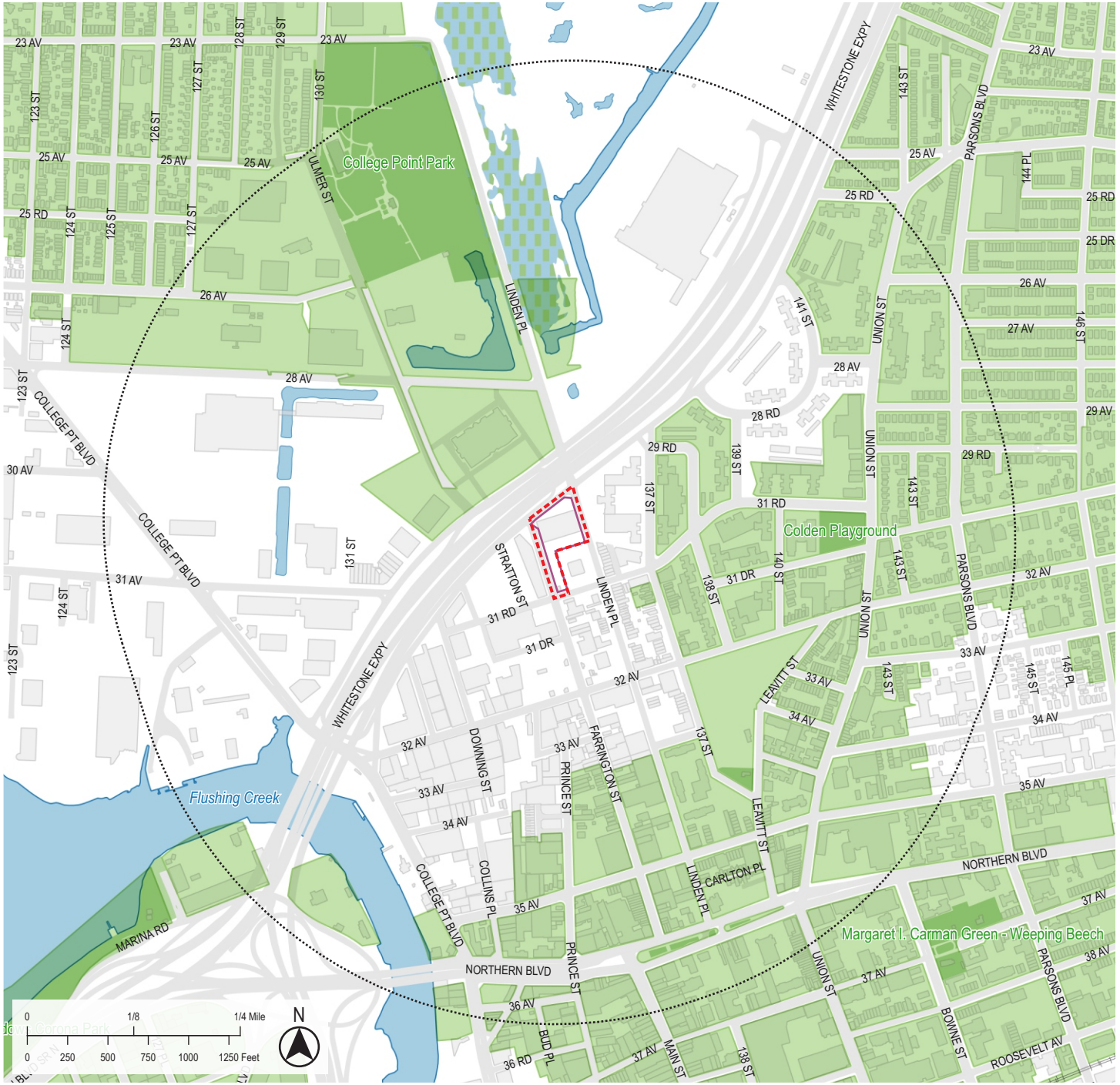
Figure 4-2: Walk to Park Service Areas

Proposed Rezoning Area

Projected Development Sites
(Applicant-Owned)

1/2-Mile Study Area

Walk to Park Service Area




Urban Cartographics

To assess the adequacy of open space in the study area, both quantitative and qualitative methods can be used. The quantitative approach calculates the ratio of open space acreage to the population in the study area and compares it to guidelines. The qualitative assessment considers factors such as the proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. This analysis is provided below.

Impact Assessment

The impact of a project on an area's open spaces is evaluated using both quantitative and qualitative factors. This evaluation considers the project's location, the quality and quantity of open space in the area after the project is completed, and any new open space provided by the project. The impact of the project is also based on how it will affect the ratio of open space in the area, as well as other qualitative factors. According to the CEQR Technical Manual, a project that significantly reduces the ratio of open space (as defined in Table 4-1) may be considered to have a significant impact. The acceptable amount of change in the open space ratio is determined based on the open space ratio in the area and whether the area is within a WPSA (as defined in the CEQR Technical Manual). In a WPSA, a larger percentage change may be allowed. As discussed above, the Project Area is not within a WPSA.

**Table 4-1: Percent Change in Open Space Ratio**

| Open Space Ratio | Percent Change |
|---|---|
| 2.01 to 2.50 or Greater | 5% |
| 1.51 to 2.0 | 4% |
| 1.01 to 1.5 | 3% |
| 0.51 to 1.0 | 2% |
| 0.50 or Less | 1% |

*Source: Table 7-1 in Chapter 7, "Open Space" of the 2021 CEQR Technical Manual.*

## III. Preliminary Assessment

Per the CEQR Technical Manual, projects in study areas where the open space ratio approaches or exceeds the city's planning goal of 2.5 acres per residence may generally tolerate up to a 5% decrease of the open space ratio before considering the need for more detailed analysis. For projects in study areas where the open space ratio is not near the city's planning goal of 2.5 acres per thousand residents the percentage decrease in open space ratio is weighted against how the open space ratio of the study area compares to the city's planning goal for open space. Per the 2021 CEQR Technical Manual, in areas of the city where the existing Open Space Ratio is between 1.51 and 2.00 (as is the case in our study area as demonstrated below) a reduction in Open Space Ratio by less than 4% typically indicates that detailed assessment of Open Space is not warranted. A detailed analysis of Open Space is needed for the Proposed Actions described in this EAS.

## IV. Detailed Analysis

Existing Condition

*Study Area Population*

As recommended in the *CEQR Technical Manual*, the open space study area comprises all census tracts that have at least 50 percent of their area located within a ½-mile of the Project Area. These tracts and their populations are visualized in **Table 4-2: Existing Population**. The total population of the Study Area is 20,048.

**Table 4-2 Existing Population**

| Census Tract | Population |
|---|---|
| 907, 889.02, 889.03, 869, 1161 | 20,048[1] |

[1] Source: Population FactFinder, DCP; 2020 Census (Includes DoB completions since 2020)

The Study Area population was estimated using data from the 2020 U. S. Census data for the census tracts located fully or at least 50 percent within the one-half mile study area. As discussed above, the population the study area contained a total of 20,048 residents within the 5 relevant census tracts. **Table 4-3: Study Area Age Characteristics** summarizes the age distribution of the study area population and compares it to Brooklyn and New York City as a whole. As shown, the study area has a **slightly smaller**

distribution of children and teenagers through age 9; a **smaller** share of people aged 20 to 64 years; and a **noticeably larger** share of seniors compared to Brooklyn and New York City as a whole.

**Table 4-3 Study Area Population Age Characteristics**

| SELECTED AGE CATEGORIES | Study Area | Queens | New York City |
|---|---|---|---|
| Ages 4 and younger | 5.1% | 6.2% | 6.4% |
| Ages 5 to 9 years | 4.2% | 5.2% | 5.5% |
| Ages 10 to 14 years | 3.4% | 5.6% | 5.6% |
| 15 to 19 years | 3.5% | 5.0% | 5.3% |
| 20 to 64 years | 64.2% | 62.1% | 62.2% |
| 65 years and over | 19.4% | 15.8% | 15.0% |
| Source: 2020 Census Data | | | |

Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children 4 years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages 5 through 9 typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for such activities as ball playing, running, and skipping rope. Children age 10 through 14 use playground equipment, court spaces, little league fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 18 and 44 continue to use court game facilities and fields for sports, along with more individualized recreation such as rollerblading, biking, and jogging that require bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports such as Frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation such as handball, tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

Given the range of age groups present in the study area population, the study area has need for both active and passive recreation facilities. However, the Study Area may have a greater need for passive open space that other areas of the city as there is a larger population of senior citizens over 65 years old when compared to both Queens and New York City as a whole. As discussed above, senior citizens use passive recreational spaces more than active recreational spaces and the Study Area has a passive open space ratio that is less than the city target of 0.5 acres per thousand residents.

*Inventory of Open Space*

According to the CEQR Technical Manual, open space can be either public or private, and can be used for either active or passive recreation. Public open space is defined as facilities that are open to the public at designated hours on a regular basis and are evaluated for impacts under CEQR guidance. Private open space is not regularly accessible to the general public and is therefore only considered qualitatively. The number, availability, and condition of publicly accessible open space in the study area was determined using field surveys and secondary sources.

Open space is classified as active, or passive based on the activities that are allowed in the space. Active open space is used for active play such as sports or exercise and may include playground equipment, playing fields, courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas. Passive open space is used for sitting, strolling, and relaxation and may include benches, walkways, and picnicking areas.

All publicly accessible open spaces in the defined study area were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. This information was obtained from the New York City Department of Parks and Recreation's website. The condition of each open space was categorized as excellent, good, fair, or poor, based on a visual assessment of the facilities observed during a field survey conducted in November 2022. The intensity of use of the facilities was also determined qualitatively, based on observations of the degree of activity or utilization on a weekday afternoon. Table 4-4 lists the details of the active and passive open spaces in the study area, including their condition and utilization.

**Table 4-4: Inventory of Open Space Resources**

| Map Key | Open Space Resource Name | Total Size (Acres) | Passive Acres | Active Acres | Condition | Utilization |
|---|---|---|---|---|---|---|
| 1 | College Point Fields | 26.83 | 1.34 | 25.49 | N/A | Low |
| 2 | Colden Playground | 1.47 | 0.00 | 1.47 | Fair | Low |
| 3 | Leavitts Park | 0.42 | 0.42 | 0.00 | Fair | Moderate |
| 4 | Daniel Carter Beard Mall | 0.66 | 0.66 | 0.00 | Fair | Moderate |
| 5 | Flushing Greens | 0.42 | 0.42 | 0.00 | Fair | Moderate |
| **Total** | | **29.80** | **2.84** | **26.96** | | |

*Source: NYC DPR (2021), ZoLa NYC's Zoning and Use Map*

As visualized in Figure 4-1, there are a total of five open space resources within the census tracts that are more than 50% contained in the ½ mile radius around the Project Area. These open space resources are described below and summarized in **Table 4-4: Inventory of Open Space Resources.**

**1. College Point Fields**

College Point Fields is a bounded by Linden Place, 23rd Avenue, 130th Street, and Ulmer Street and contains a mix of active and some passive recreational components.

**2. Colden Playground**

Colden Playground is a 1.47-acre NYC Parks-operated open space bounded by 31st Road, Union Street, and 31st Drive in the east of the study area and contains active recreational facilities.

**3. Leavitts Park**

Leavitts Park is bounded by 137th Street, 32nd Avenue, and Leavitt Street. Although the entire complex contains 7.46 acres, most of it consists of a fenced athletic field that is controlled by the Department of Education and is only periodically open to the public, northeastern portion of the complex, 0.42-acre Leavitt Park, consists of publicly accessible recreational open space, and it is only this portion that is included in the inventory.

**4. Daniel Carter Beard Mall**

Daniel Carter Beard Mall is a central median along Northern Boulevard between Main Street and Linden Place. The malls contain trees and ground vegetation, paved walking paths, and bench seating.

**5. Flushing Greens**

Flushing Greens are central median along Northern Boulevard between Main Street and Linden Place. The malls contain trees and ground vegetation, paved walking paths, and bench seating.

*Quantitative Assessment*

The quantitative assessment of open space is based on ratios of usable open space acreage to the study area populations (the "open space ratios"). In New York City, local open space ratios vary widely. The city's planning goal is a total of 2.5 acres of open space per 1,000 residents. This includes 0.50 acres of passive space and 2.0 acres of active open space per 1,000 residents.

Per the *CEQR Technical Manual*, projects in study areas where the open space ratio approaches or exceeds the city's planning goal of 2.5 acres per residence may generally tolerate up to a 5% decrease of the open space ratio before considering the need for more

detailed analysis. For projects in study areas where the open space ratio is not near the city's planning goal of 2.5 acres per thousand residents the percentage decrease in open space ratio is weighted against how the open space ratio of the study area compares to the city's planning goal for open space. Per the 2021 CEQR Technical Manual, in areas of the city where the existing Open Space Ratio is between 1.51 and 2.00 (as is the case in our study area as demonstrated below) a reduction in Open Space Ratio by less than 4% typically indicates that detailed assessment of Open Space is not warranted.

**Table 4-5: Existing Open Space Ratios,** summarizes the total, active and passive open space ratios within the study area.

The existing open space ratios within the study area are below the citywide target of 2.5 acres of total open space per 1,000 residents, 2 acres of active open space per 1,000 residents, and 0.5 acres of passive open space per 1,000 residents as summarized in the table below. The largest discrepancy between the city's open space ratio targets and the Study Area's open space ratios is the passive open space ratio.

**Table 4-5: Existing Open Space Ratios**

| | Existing Conditions | CEQR TM Guideline |
|---|---|---|
| Publicly Accessible Open Space (Acreage) | 29.80[1] | - |
| Active Open Space (Acreage) | 26.96 | |
| Passive Open Space (Acreage) | 2.84 | |
| Study Area Population | 20,048[2] | - |
| Open Space Ratio (Acres/1,000 Residents) | 1.49 | 2.5 |
| Active Open Space Ratio (Acres/1,000 Residents) | 1.35 | 2 |
| Passive Open Space Ratio (Acres/1,000 Residents) | 0.14 | 0.5 |

1) See Table 4-4 "Inventory of Open Space Resources" for a breakdown total Open Space
2) Population FactFinder, DCP; 2020 Census (Includes DoB completions since 2020)

*Qualitative Assessment*

A qualitative assessment of open space considers the presence of public open space that is excluded from the quantitative analysis, the condition and utilization of open space within the study area, and the presence of open and recreational facilities that do not meet the criteria of open space resources established in the CEQR Technical Manual.

The open space resources within the open space study area do not meet the City's guidelines for the provision of publicly accessible open space. The existing open space ratios per 1,000 residents are below the City's goal of 2.5 acres per 1,000 residents.

There are several factors that may partially offset this deficiency in open space resources. First, the open spaces in the study area are in fair condition. The study area however does not have a good mix of open space and recreational facilities as the majority of open space is reserved for active uses. Around 19% of the study area's residents are under the age of 20, indicating a need for playgrounds, court game facilities, and ballfields, which are often used by this age group. However, additional passive recreation (benches, planted areas, plazas, are needed in the Study Area.

As demonstrated in Figure 4-1, there are open space resources immediately beyond the study area boundary. This includes Margaret I. Carman Green/Weeping Beech Park. It should again be noted that these resources do not contribute to the quantitative analysis of Open Space Ratios presented above as they are outside of the Study Area boundary. Nevertheless, these resources can be considered as part of the qualitative analysis of open space. Per the CEQR Technical Manual, a qualitative analysis of Open Space resources should consider that some residents would choose to travel slightly farther than 0.5 Mile Study Area radius used in the quantitative analysis. Margaret I. Carman Green/Weeping Beech Park is 0.9 miles from the Study Area, a 20-minute walk.

The Lewis H. Latimer House is a historic home operated by NYC Parks. The house is open to the public regularly (twice a week) and sits on surrounding yard which provides publicly accessible passive open space. As this resource is only accessible to the public for two days a week, it was not included in the inventory of open space resources used in the quantitative analysis, despite being within the Study Area. The 0.32 acres of passive recreation space offered by the garden surrounding the house can be considered a passive open space resource for qualitative analysis purposes.

College Point Fields has received improvements that may make the space more capable of absorbing additional users. Generally, the open spaces presented in the quantitative analysis are in fair condition and have moderate utilization. College Point Fields is undergoing a renovation project that will see the construction of new soccer fields, improved sports lighting, and additional security lighting. Completion of this renovation was planned for 2022, however due to the COVID-19 pandemic, this timeframe has been extended. The renovations are expected to be completed in 2024 (before the 2026 Analysis Year). The improvement of this open space resource may increase its capacity and lessen the potential for significant adverse impacts introduced by the Proposed Actions.

No-Action Condition

*Study Area Population*

In the future without the proposed actions, four single story buildings cumulatively totaling 39,996 gsf (1.0 FAR) containing destination retail uses would be developed. These buildings would include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place.

No additional residents would be introduced in the No-Action Condition. In the No-Action Scenario, the Study Area includes 22,447 residents to account for active Department of Buildings (DoB) construction permits through the 2026 build year. The amount of open space would remain unchanged in the No-Action condition.

*Inventory of Open Space*

There will be no changes to the open space resources in the study area in the 2025 No-Action condition. As a result, the open space in the half-mile study area will remain at 29.80 acres, including 2.84 acres of passive open space and 26.96 acres of active open space.

The Environmental Assessment Statement for the Special Flushing Waterfront District (20DCP083Q) was completed in December of 2019. The Special Flushing Waterfront District project includes the introduction of a 3.09-acre shore public walkway by the build year of 2025. Some permits (identified in the EAS as Projected Development Sites) have been filed though later than anticipated by the Special Flushing Waterfront District EAS. Although it is likely that most of the shore public walkway will be completed by the 2026 Analysis Year presented in this EAS, for the purpose of presenting a conservative analysis, the No-Action and With-Action conditions and Open Space Ratios below do not include this space in the quantitative analysis. The shore public walkway is discussed in the qualitative analysis presented below in both the No-Action and With-Action condition.

*Quantitative Assessment*

Table 4-6 shows the open space ratios for the half-mile study area under the No-Action condition, based on the anticipated population increases. As shown in the table, the total, passive, and active open space ratios will be less than the City's goals of 2.5 acres of open space per 1,000 residents, including 0.5 acres of passive open space and 2 acres of active open space. The total open space ratio is expected to decrease from 1.49 to 1.33 acres per 1,000 residents in the No-Action condition, with No-Action passive and active open space ratios of 0.13 and 1.20 acres per 1,000 residents, respectively. It is anticipated that residents of the study area will continue to use open space resources outside of the study area, which were not included in the quantitative assessment.

**Table 4-6: No-Action Open Space Ratios**

| | No-Action Conditions | CEQR TM Guideline |
|---|---|---|
| Publicly Accessible Open Space (Acreage) | 29.80[1] | - |
| Active Open Space (Acreage) | 26.96 | |
| Passive Open Space (Acreage) | 2.84 | |
| Study Area Population | 22,447[2] | - |
| Open Space Ratio (Acres/1,000 Residents) | 1.33 | 2.5 |
| Active Open Space Ratio (Acres/1,000 Residents) | 1.20 | 2 |
| Passive Open Space Ratio (Acres/1,000 Residents) | 0.13 | 0.5 |

1) See Table 4-4 "Inventory of Open Space Resources" for a breakdown total Open Space
2) Includes DoB Active Permits within the Study Area.

*Qualitative Assessment*

In the No-Action scenario, the conditions of the open space resources described are likely to remain substantially similar to the existing conditions. As demonstrated in Figure 7-1, there are open space resources immediately beyond the study area boundary. This includes Margaret I. Carman Green/Weeping Beech Park. As in the existing conditions, the strain placed on the open space sources within the Study Area boundary by the introduction of new residents may be reduced as some residents (particularly users of active open space) choose to travel slightly farther than 0.5 Mile Study Area radius used in the quantitative analysis.

As discussed above, new open space resources may be open to the public in the 2026 analysis year utilized in this EAS. An approximately 3.09-acre shore public walkway would be constructed as part of the Special Flushing Waterfront District (20DCP083Q) project along Flushing Creek. The open space generated by the Special Flushing Waterfront District would contain passive and active open space that would provide views of the west bank of Flushing Creek and farther beyond to Citi Field. Additional amenities as part of the newly created walkway would include passive recreational elements, such as benches, seating, and landscaped vegetation, and active elements such as walking and running paths.

With-Action Condition

*Study Area Population*

If the Proposed Actions are approved development is anticipated to occur on Projected Development Site 1. In total the Proposed Development is expected to introduce 1,078

new residents to the Project Area by creating 431 dwelling units. The study area's population would increase to 23,525 in the With-Action condition.

*Inventory of Open Space*

The Proposed Project would include a Restrictive Declaration (RD) for a Project Component Related to the Environment (PCRE). The PCRE included in the Proposed Project is a Publicly Accessible Area. The new Publicly Accessible Area would be provided on the tail end of the property, roughly aligning with the dimensions of Lot 1. This PAA area would encompass approximately 14,400 square feet (0.33 acres) with approximately 240 feet along Farrington Street and approximately 59 feet along 31st Place. The PAA would contain 0.10 acres of active open areas and 0.23 acres of passive open areas, include a range of tree plantings and seating. Passive areas would consist of seating and a community garden, while active areas would include fitness equipment and ping pong tables. In total, 119 linear feet of seating would be provided with 48 movable chairs and 16 movable tables. The PAA would also include signage indicating open hours, lighting, and trash receptables. As the adjacent DOE facility rests at a higher elevation than the PAA space, screening will be employed along the shared lot line between Lots 1 and 50. The PAA would be publicly accessible from Farrington Street and 31st Street.

As discussed above, although it is likely that most of the 3.09-acre shore public walkway created by the Special Flushing Waterfront District will be completed by the 2026 Analysis Year, for the purpose of presenting a conservative analysis, the No-Action and With-Action conditions and Open Space Ratios below do not include this space in the quantitative analysis and only consider the 0.33 acre PAA, as outlined above.

*Quantitative Assessment*

When compared to the "No-Action" condition the total open space ratio would decline by 3.8% in the "With-Action" condition. The With-Action active open space ratio is expected to decline by 4.2% versus the No-Action condition but the With-Action passive open space ratio is expected to increase slightly versus the No-Action condition. These changes are summarized in **Table 4-7: Open Space Ratio Totals**, below.

### Table 4-7: Open Space Ratio Totals

| | Future No-Action | Future With-Action | CEQR TM Guideline | Percent Change |
|---|---|---|---|---|
| Publicly Accessible Open Space (Acreage) | 29.80[1] | 30.13[2] | - | - |
| Active Open Space (Acreage) | 26.96 | 27.06 | - | - |
| Passive Open Space (Acreage) | 2.84 | 3.07 | - | - |
| Study Area Population | 22,447 | 23,525 | - | +4.8% |
| Open Space Ratio | 1.33 | **1.28** | **2.5** | **-3.8%** |
| Active Open Space Ratio | 1.20 | 1.15 | 2 | -4.2% |
| Passive Open Space Ratio | 0.13 | 0.13 | 0.5 | N/A[3] |

1) See Table 4-4 "Inventory of Open Space Resources" for a breakdown total Open Space
2) Includes open space resources from Table 4-4 with the addition of the 0.33 acre PAA
3) Increase of less than 0.01 Acres per 1,000 residents.

The CEQR Technical Manual specifies that in areas where the existing open space ratio is between 1.01-1.50 a decrease in the open space ratio between the No-Action and With-Action condition approaching 3 percent, is generally considered to be a substantial change which could potentially result in a significant adverse impact.

### Table 4-8 Detailed Assessment – Percentage Change Guidance to determine possible Open Space Impact

| Total Open Space Ratio Range | Active Open Space Ratio Range | Passive Open Space Ratio Range | Percentage Change in Open Space Ratio Signifying a Possible Adverse Open Space Impact |
|---|---|---|---|
| 2.01 to 2.50* Or greater | 1.61 to 2.0* Or greater | 0.41 to 0.50* Or greater | 5% |
| 1.51 to 2.00 | 1.21 to 1.60 | 0.31 to 0.40 | 4% |
| 1.01 to 1.50 | 0.81 to 1.20 | 0.21 to 0.30 | 3% |
| 0.51 to 1.00 | 0.41 to 0.80 | 0.11 to 0.20 | 2% |
| 0.50 or Less | 0.01 to 0.40 | 0.01 to 0.10 | 1% |

The Proposed Actions would exceed the guidelines listed in Table 4-8. As demonstrated above, the Proposed Actions would reduce the total open space ratio by 3.8%. As indicated in Table 4-8 above as the Open Space Ratio in the With-Action condition is 1.28, and generally only a 3% decrease in the OSR is tolerated. The quantitative assessment therefore indicates that there is a possible adverse open space impact. The Active OSR in the With-Action Scenario is 1.15 which represents a 4.2% decrease compared to No-Action conditions. The Passive OSR in the With-Action Scenario is 0.13 which represents a small increase compared to No-Action conditions. The quantitative assessment of Open Space, particularly the Total and Active Open Space ratios suggest that there is the potential for the Proposed Action to result in an adverse Open Space impact. However, according to the CEQR Technical Manual, these optimal open space ratios and percentage reductions do not solely determine the significance of an impact. Other factors, such as the project's location, the quality, quantity, and types of nearby open space, and the balance of passive and active open space, should also be considered. The open spaces in the study area are in fair condition, provide a variety of facilities, and are moderately used.

Projects that may affect open space quantitatively are usually further evaluated in a qualitative assessment to determine the overall significance of the impact. The qualitative assessment below indicates that several qualitative open space features, such as the quality and number of open spaces in the study area, combined with the availability of open spaces outside the study area, creates conditions where no significant adverse impact to open space is anticipated with the approval of the Proposed Actions.

*Qualitative Assessment*

The Proposed Actions would reduce the open space ratio in the study area when compared to the No-Action condition. According to the DCP's guidelines, the area should have 2.5 acres of open space per 1,000 residents, including 0.5 acres of passive open space and 2 acres of active open space. However, the existing and No-Action conditions for the study area fall short of this goal, with 1.49 and 1.33 acres of open space per 1,000 residents, respectively. The Proposed Actions would decrease this number by 3.8% between the No-Action and With-Action condition.

The open space resources in the study area are in fair condition and offer a variety of amenities for passive and active recreation, such as playgrounds, basketball courts, and sitting areas. The population added as a result of the Proposed Actions is not expected to have any characteristics that would place unusually heavy demands on facilities that cater to specific user groups, such as being disproportionately older or younger. The breakdown of the population is also expected to remain the same. As discussed above, The Active OSR in the With-Action Scenario is 1.15 which represents a 4.2% decrease compared to No-Action conditions. This exceeds the thresholds set by the CEQR Technical Manual for potential Open Space Impacts, as summarized in Table 4-8. The

Passive OSR in the With-Action Scenario is 0.13 which represents a slight increase compared to No-Action conditions. New residents generated by the Proposed Actions are expected to have similar characteristics to current residents of the study area. The analysis above suggests that in the existing, No-Action and With-Action scenarios the study area is deficient in open space that offers passive recreation and that the Study Area Population within the Study Area has a higher demand for passive open space based on a larger population of seniors over 65 years old when compared to the borough and city as a whole. The Proposed Actions include the creation of new passive recreation areas discussed below.

As discussed above in "Existing Conditions: Qualitative Assessment", College Point Fields is undergoing a renovation project that will see the construction of new soccer fields, improved sports lighting, and additional security lighting. These improvements will be completed before the 2026 analysis year used in this EAS.

Additionally, there are two open space resources within a half-mile radius of the study area that have been left out of the quantitative analysis and one additional open space resource that has only been partially included in the quantitative analysis. As discussed above this includes Margaret I. Carman Green/Weeping Beech Park. The Lewis H. Latimer House which provides some passive recreation space has also been excluded from the quantitative analysis due to its limited opening hours. Leavitt Park contains 7.46 acres, most of it consists of a fenced athletic field that is controlled by the Department of Education and is only periodically open to the public. Only the northeastern portion of the complex, 0.42-acres of Leavitt Park, consists of publicly accessible recreational open space, and it is included in the Quantitative Analysis.

These resources would continue to attract users within the study area and serve to reduce the pressure on open spaces resources.

The Proposed Development would also include indoor/outdoor recreational areas and residential terraces for the building's occupants. These spaces have not been included in the quantitative assessment but would help to alleviate the deficiency of open space in the study area as the residents introduced by the Proposed Actions would likely use these spaces more frequently than public open spaces in the study area.

Last, as discussed above, new open space resources will be introduced in the With-Action Scenario, and additional resources will likely be completed shortly after the analysis year of 2026 as part of the Special Flushing Waterfront District. The Public Access Area (PAA) that would be created in With-Action condition would include Passive recreation features such as seating areas, walking paths, and decorative plants and trees. Passive recreation features and uses are intended to provide a peaceful and relaxing environment for people to enjoy, as opposed to more active recreational activities that require more physical effort. The PAA created by the Proposed Actions would also include movable seating and chairs.

**Conclusion**

If the Proposed Actions are approved new development in the Project Area would introduce new residents to the Study Area.

The Open Space Ratio in the With-Action condition is 1.28, which represents a 3.8% decrease compared to the No-Action scenario. Generally, only a 3% decrease in the OSR is tolerated. The quantitative assessment therefore does not rule out the potential for an adverse open space impact. The Active OSR in the With-Action Scenario is 1.15 which represents a 4.2% decrease compared to No-Action conditions. The Passive OSR in the With-Action Scenario is 0.13 which represents a slight increase compared to No-Action conditions. The Study Area currently has a total open space ratio which is below the city's target of 2.5 acres of open space per 1,000 residents and both the active and passive OSRs are below the city's target of 2.0 and 0.5 acres of open space per 1,000 residents respectively.

The detailed analysis included above, indicates that the Study Area may have a greater need for passive open space than the citywide average, given seniors over the age of 65 make up a larger share of the Study Area population. The inclusion of the Public Access Area, that includes landscaped areas, benches, and other passive recreation uses has the potential to alleviate additional pressure on existing passive open space resources. Although the reduction of open space rations by 3.8% may be large enough to result in significant adverse impacts. The qualitative factors of this assessment demonstrate that existing resources are in good condition (with some parks receiving recent infrastructure upgrades), that there are additional open space resources within a ½ mile radius of the Project Area, and that the Proposed Project would include a new public open space that corresponds to the specific need for more passive recreation space in the Study Area. Based on the quantitative and qualitative analysis provided above, the Proposed Actions do not have the potential to result in significant adverse open space impacts and further assessment is not warranted.

# 5. Shadows

## Introduction

Per the CEQR Technical Manual, the purpose of a shadows analysis is to assess whether new structures may cast shadows on sunlight sensitive publicly accessible resources or other resources of concern such as natural resources, and to assess the significance of their impact. Sunlight sensitive resources of concern include Open Space Resources (see Open Space above), Architectural Resources (specifically features of landmark or historic structures that depend on direct sunlight), Natural Resources, and Greenstreets (planted areas within the unused portions of roadbeds that are part of the Greenstreets program).

## Methodology

Per the CEQR Technical Manual, a shadows assessment is required if a proposed action would lead to the development of a structure at least 50 feet tall. Shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource also require an analysis. The Proposed Actions would facilitate the development of a new structure more than 50 feet tall. The tallest portion of the Proposed Development is 95 feet tall (98ft w/ bulkhead and parapet wall). A preliminary shadows assessment is required. For the purposes of presenting a conservative analysis, this EAS analyses the maximum permitted bulkhead height of 120 Feet.

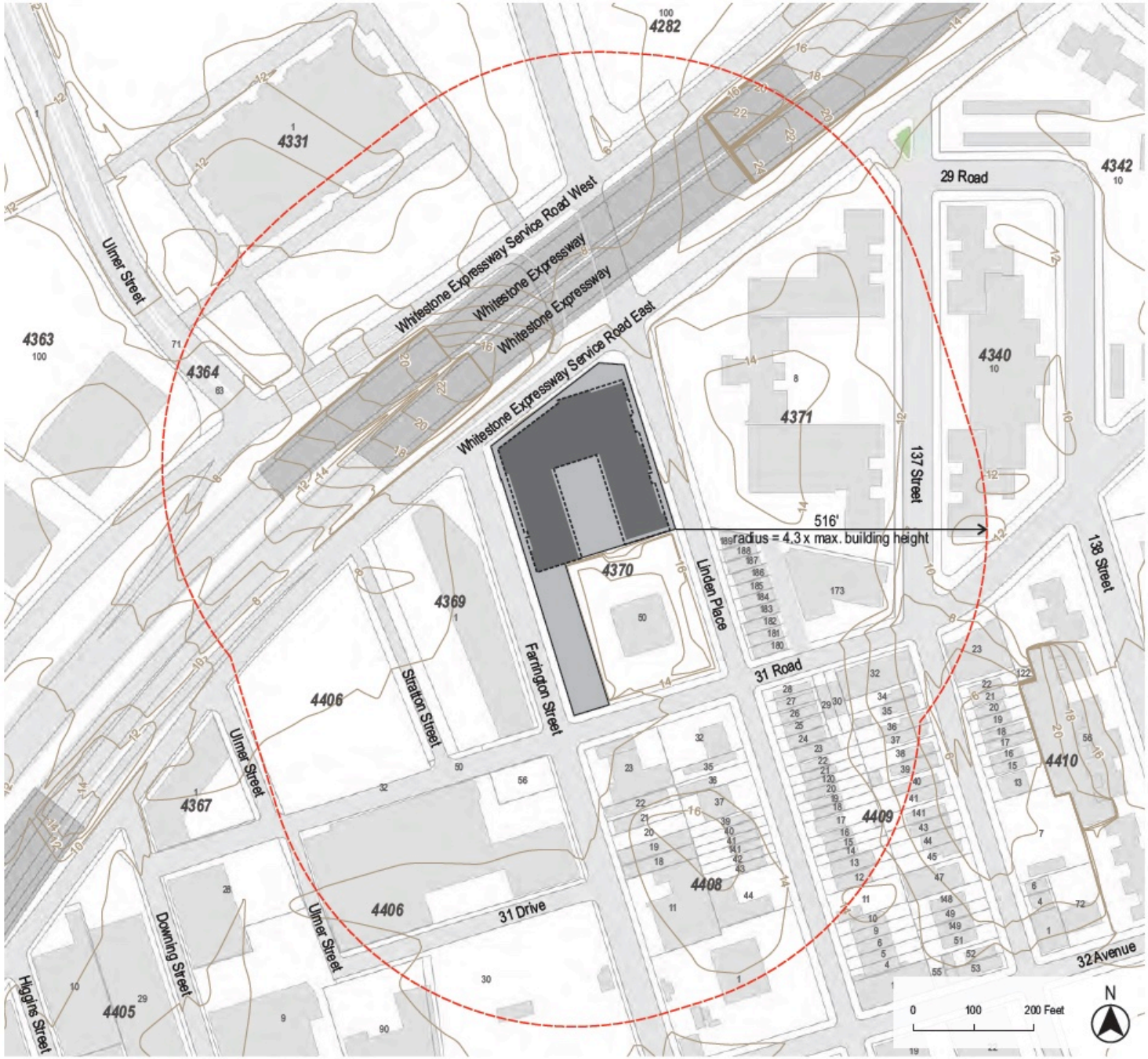
## Preliminary Screening Assessment

Per the CEQR Technical Manual, a preliminary assessment of shadows impact determines whether shadows from a proposed development could reach a sunlight sensitive resource. Per the CEQR Technical Manual, the first step in conducting the screening assessment is to develop a base map that illustrates the proposed site location in relationship to the sunlight-sensitive resources. The longest shadow study area encompasses the Project Area and a perimeter around the area's boundary with a radius equal to the longest shadow that could be cast by the proposed structure which is 4.3 times the height of the structure's maximum feasible heights, including all rooftop mechanical equipment, parapets, and any other parts of the building. The longest shadow cast by the Proposed Development is 4.3 times the maximum permitted bulkhead height of 120 Feet or 516 feet. Therefore, as shown in Figure 8-1, the longest shadow study area has a radius of 516 feet. As demonstrated in Figure 8-1 below there are no sunlight sensitive resources within the Tier I Study Area radius. Figure 8-1: Tier I Screening Assessment demonstrates that no sunlight sensitive resources have the potential to receive shadows from the Proposed Development as a result of the Proposed Actions. As such, the Proposed Action would not result in a significant adverse impact and no additional assessment is required.

# 30-05 Farrington Street, Queens

Figure 5- 1: Tier 1 Assessment

- Projected Development Site 1
- Projected Building Footprint
- Roof Above Top Floor
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource (n/a)
- Potentially Affected Open Space Resource (n/a)




Urban Cart

# 6. Historic and Cultural Resources

## Introduction

Historic and cultural resources include both architectural and archaeological resources. The 2021 City Environmental Quality Review (CEQR) Technical Manual identifies historic and cultural 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 (NYCLPC); 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 this chapter, the Project Area contains no individual landmarks and eligible resources however it is located immediately adjacent to a historic landmark. Therefore, it is necessary to assess the potential impacts of the Proposed Actions on historic architectural resources.

Archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance compared to No-Action conditions; these are limited to any area that may be developed in the Project Area and include projected as well as potential development sites. Because the Proposed Actions would induce development that could result in new in-ground disturbance, they have the potential to affect archaeological resources, and therefore an assessment of the potential effects on archaeological resources is also provided in this chapter.

## Study Area

According to CEQR Technical Manual guidance, impacts on historic architectural resources are considered on those sites affected by the Proposed Actions and in the area surrounding identified development sites. The historic resources study area is therefore defined as the area to be rezoned plus an approximate 400-foot radius around the Project Area, which is typically adequate for the assessment of historic architectural resources, in terms of physical, visual, and historical relationships.

## Preliminary Assessment

### Archeological Resources

Archaeological resources are the physical remnants, usually buried, of past activities on a site. They can include pre-contact archaeological resources associated with the Native American populations who used or occupied a site, or archaeological resources associated with the historic period, which began with the settlement of Europeans in the New York area beginning in the 17th century. In developed areas and in urban regions, archaeological resources are often disturbed or destroyed by grading, excavation, and the installation and improvement of infrastructure. However, some archaeological resources do survive in an urban environment and are often sealed beneath the surface and protected from further disturbance.

In accordance with CEQR Technical Manual guidance, archaeological resources are assessed only in areas where excavation is likely and would result in new in-ground disturbance. In-ground disturbance is any disturbance to an area not previously excavated, including new excavation that is deeper and/or wider than previous excavation on the same site. For projects that would result in new in-ground disturbance, assessment of both prehistoric and historic archaeological resources is appropriate.

As discussed above, the Proposed Actions would facilitate construction on the Projected Development Site within the Study Area, resulting in new in-ground disturbances. As such, an assessment of archaeological resources is necessary for the Proposed Actions. As detailed in the CEQR Technical Manual, only the area of subsurface work for a project is considered the impact area for archaeological resources. Environmental review for archaeological resources is a predictive endeavor. For prehistoric resources, it is appropriate to determine whether there are known prehistoric archaeological resources within a half- mile radius of the site. For historic archaeological resources, it is appropriate to determine if there are known historic archaeological resources in the nearby area, such as on the present-day full tax lot or within the boundaries of the nearest adjacent mapped streets.

As discussed above the Proposed Actions would result in incremental excavation on the Projected Development Site. In a letter dated October 17th, 2018, the New York City Landmarks Preservation Commission (NYCLPC) determined that the Projected Development site consisted of properties with no archeological significance (See Attachment A of this EAS). The Proposed Actions would therefore not have a significant adverse impact on archaeological resources.

**Architectural Resources**

The NYCLPC designates historically significant properties in the City as NYCLs and/or Historic Districts, following the criteria provided in the Local Laws of the City of New York, NYC Charter, Administrative Code, Title 25, Chapter 3. Buildings, properties, or objects are eligible for landmark status when a part is at least 30 years old. Landmarks have a special character or special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the city, state, or nation. There are four types of landmarks: individual landmark, interior landmark, scenic landmark, and historic district.

In a letter dated October 17th, 2018, the New York City Landmarks Preservation Commission (NYCLPC) determined that the Projected Development site consisted of properties with no architectural significance. Further there are no landmarks or historic districts within the Study Area. The Proposed Actions would therefore not have a significant adverse impact on architectural resources.

**Conclusion**

No direct, indirect, or construction related impacts are anticipated as a result of the approval of the Proposed Actions. The Proposed Actions would not result in significant adverse impacts to historic or cultural resources within the Study Area and further assessment is not warranted.

# 7. Urban Design and Visual Resources

## Introduction

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

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 Actions.

The Study Area used in Urban Design and Visual Resources, is generally consistent with the Land Use study area (400' radius around the Project Area). In areas where significant visual resources exist, it may be appropriate to look beyond the Land Use study area to encompass views that are outside of the area (this is often the case in waterfront sites, or within historic districts.

As discussed above in "Land Use, Zoning, and Public Policy", the Proposed Actions include zoning map and text amendments. These actions would both permit the modification of yard, height, and setback requirements and result in an increase in built floor area beyond what would be allowed 'as-of-right'.

The current M1-1 district is a light manufacturing district allowing for manufacturing and commercial uses. Typical uses are automobile repair shops, warehouses, gas stations and car washes. The M1-1 zoning district allows a maximum FAR of 1.0 for light manufacturing, commercial and industrial uses (Use Groups 4-14, 16-17) and allows an FAR of 2.4 for limited community facility uses (Use Group 4). The maximum building height is based on the sky-exposure plane, which begins 30 feet above the street line.

The Proposed Actions would rezone the Project Site to an R7A district. The R7A residential district allows for buildings up to 4.0 FAR (4.6 FAR with MIH) and generally yields 7- to 9-story buildings. Maximum lot coverage is 65% for interior and through lots and 100% on corner lots. Above a base height of 40 to 75 feet, the building must set back to a depth of 10 feet on a wide street, before rising to a maximum of 95 feet or 9-stories (with MIH). Parking is required for 50% of all dwelling units and for 15% affordable units.

The number of parking spaces required for affordable units is further reduced for projects within the transit zone, generally defined as being 0.5 miles from a subway station.

With the approval of the Proposed Actions, the Applicant intends to develop a residential building in **Projected Development Site 1**. The proposed development is a 467,356 gross square foot (gsf), 9-story building. The building would have a total height of 95ft and contain 377,991 gsf of residential floor area or 431 dwelling units. Of these units, 108-130 would be reserved as moderate to low-income units pursuant to the requirements of Mandatory Inclusionary Housing (MIH).

As the Proposed Development is anticipated to result in a different built form at the street level, an assessment of urban design and visual resources is warranted.

## Urban Design

The Urban design characteristics of a neighborhood are composed of various components that define the character of the area: building bulk, use, type and arrangement, block form and street pattern, streetscape elements, street hierarchy, and natural features. These components are discussed below.

### Methodology

Per the CEQR Technical Manual, should provide concise narrative of the existing project area, the future No-Action condition, and the future With-Action condition that includes information related to changes in proposed floor area, lot coverage, building height(s), setbacks, changes in land use(s) and any other urban design aspect that may affect the surrounding built environment and natural environment. Aerial maps, land use maps, and ground level photographs should also be included to show the context of the study area, including major uses and view corridors, vehicular and pedestrian access, open spaces, community facilities, public transit corridors, bike paths and any other elements of urban design that affect the pedestrian experience of the project study area, as applicable. Imposition of no action and with action scenario on aerial imagery/three-dimensional model to understand the larger context of development should also be included.

The study area for urban design is the area where the project may influence land use patterns, the built environment and pedestrian's experiences in the public realm surrounding the project area. The land use study area may serve as the initial basis for analysis. The Study Area used for the analysis of urban design is a 400ft radius around the Project Area.

**30-05 Farrington Street, Queens**

Figure 7-1: Urban Design Diagram

## No-Action Scenario

Linden Place facing northwest (Site at left)




Maximum Permitted Front Wall Height (30')

Proposed Building Height

## With-Action Scenario

Linden Place facing northwest (Site at left)




Maximum Permitted Base Height (75')

Maximum Permitted Building Height (95')

Maximum Bulkhead Height (120')

Proposed Base Height

Proposed Building Height

Proposed Bulkhead Height

Urban Cartographics

**30-05 Farrington Street, Queens**

Figure 7-2: Urban Design Diagram

## No-Action Scenario

Whitestone Expressway facing southwest (Site ahead)

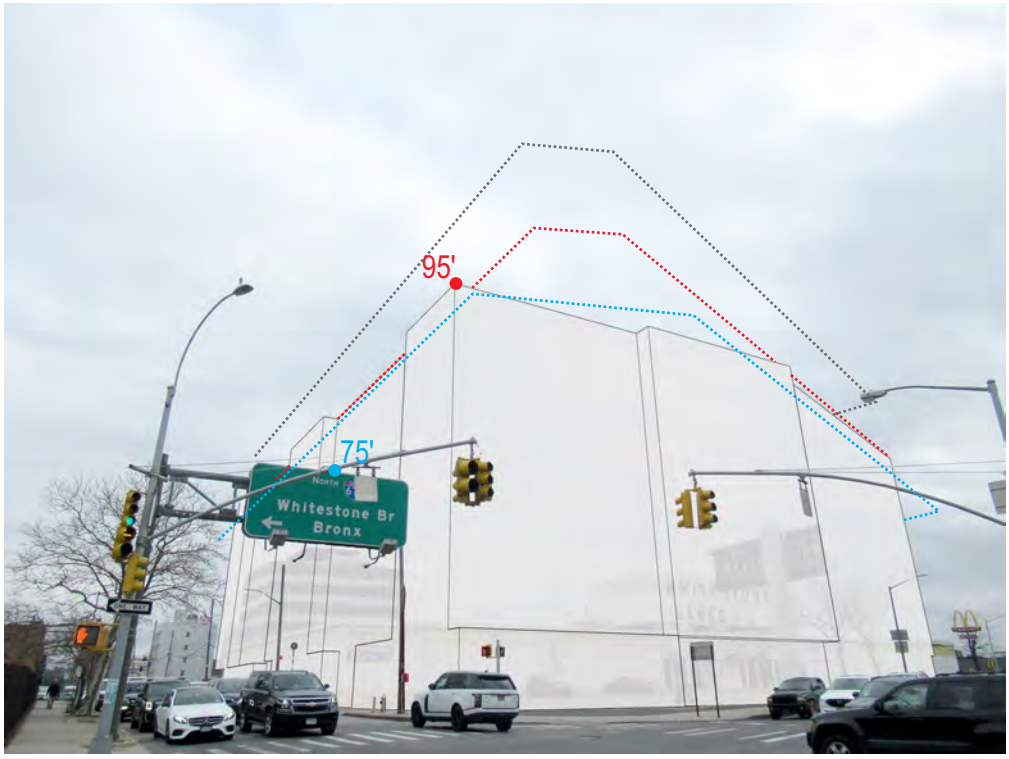



Maximum Permitted Front Wall Height (30')

Proposed Building Height

## With-Action Scenario

Whitestone Expressway facing southwest (Site ahead)




Maximum Permitted Base Height (75')

Maximum Permitted Building Height (95')

Maximum Bulkhead Height (120')

Proposed Base Height

Proposed Building Height

Proposed Bulkhead Height

**30-05 Farrington Street, Queens**

Figure 7-3: Urban Design Diagram

## No-Action Scenario

Farrington Street facing north (Site at right)

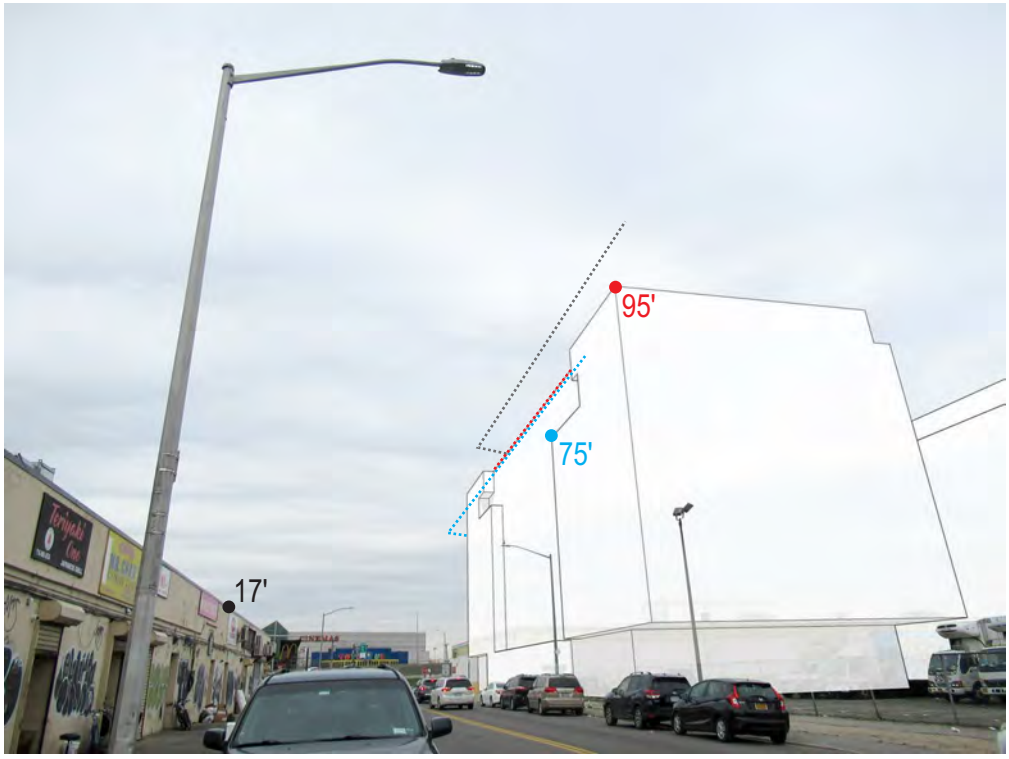



Maximum Permitted Front Wall Height (30')

Proposed Building Height

## With-Action Scenario

Farrington Street facing north (Site at right)




Maximum Permitted Base Height (75')

Maximum Permitted Building Height (95')

Maximum Bulkhead Height (120')

Proposed Base Height

Proposed Building Height

Proposed Bulkhead Height

**Existing Building Bulk, Use, Type, and Arrangement**

The Study Area contains a range of building types. The Study Area is zoned residential to the east of Linden Place and manufacturing to the west. The area to the north of the Whitestone Expressway which cuts across the Study Area is also zoned manufacturing. The buildings in the residential districts consist of a mix of semi-detached and detached single, two, and multiple family residences. The Linden Towers complex is a medium density (7-8 floors) which is also in this area. The areas west of Linden Place contain low rise warehouses, strip mall commercial retail, and a large supermarket. Figures 3-14 in Section II of this EAS demonstrate the existing conditions on this site and provide several vantage points of the Study Area.

Building bulk, use, and type differs within the Study Area between those lots to the west and east of Linden Place. There are no buildings with more than eight floors to the west of Linden Place. Because of the relatively high parking requirements in the M1-1 districts mapped to the west of Linden Place, most buildings have less than 60% lot coverage to accommodate accessory parking spaces.

*Future No-Action – Project Area*

If Proposed Actions are not approved, the built form, use, type, and arrangement of the Project Area would remain unchanged. The development projected in the No-Action scenario consists of four single story buildings (25 ft tall) cumulatively totaling 39,996 gsf (1.0 FAR) and containing destination retail. These buildings would include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place. The building bulk use and type is substantially similar to the existing conditions on the Project Area.

*Future No-Action – Study Area*

If Proposed Actions are not approved, the built form, use, type, and arrangement of the Study Area would not change as no new development is expected to occur outside of the Project Area.

*Future With-Action- Project Area*

If the Proposed Actions are approved, the built form, use, type, and arrangement of the Project Area would change. The Proposed Actions would facilitate construction on Projected Development Site 1. The bulk and height of this development is visualized in the context of the Study Area in **Figures 9-1 through Figures 9-3: Urban Design Diagram.**

A Public Access Area (PAA) would be created on the Project Area as a part of the Proposed Actions. The PAA would encompass approximately 14,400 square feet (0.33

acres) with approximately 240 feet along Farrington Street and approximately 59 feet along 31st Place. The PAA would include a range of tree plantings and seating we well as both active and passive recreation areas. The addition of a Public Access Area would create a landscaped plaza that, in the applicant's opinion, improves the pedestrian experience within the study area.

*Future With-Action- Study Area*

The building on Projected Development Site 1 would be taller and have a higher lot coverage than any building in the Study Area. The building on Projected Development Sites 1 in the with-action scenario would create a continuous street-wall and would provide a public access area. Immediately beyond the Study Area boundaries mixed use and residential buildings of similar height and bulk are present.

***Block Form, Street Pattern, and Street Hierarchy***

As discussed above, the Study Area is divided by Linden Place and the Whitestone Expressway. Within the Study Area, 31st Road and 32nd Avenue are the only other larger roads that provide east -west access through the Study Area. Smaller roads in an irregular grid pattern provide access to the residential areas to the east and west of Linden Place.

*Future No-Action- Project Area*

If the Proposed Actions are not approved the block form, street pattern and street hierarchy would remain as per existing conditions.

*Future No-Action- Study Area*

If the Proposed Actions are not approved the block form, street pattern and street hierarchy would remain as per existing conditions.

*Future With-Action- Project Area*

If the Proposed Actions are approved the block form, street pattern and street hierarchy would remain as per existing conditions as the Proposed Actions would not result in any alterations to the surrounding road network. However, in the With-Action scenario there is a new Public Access Area including a landscaped area and benches.

*Future With-Action- Study Area*

No new street would be built within the Study Area.

***Streetscape Elements***

The Study Area includes few street trees to the west (in the manufacturing district) but has large street trees in the residential areas to the east of Linden Place. Generally, the residential areas have street trees and large green open spaces (tower in a park style developments) as well as sidewalks in various states of repair. 137th Street and 31st Road also have street trees and wide sidewalks. There are no bus shelters within the Study Area. Local buses run along Linden Place to points north and south of the Study Area and 32nd Avenue to points east and west of the Study Area.

Larger streets within the Study Area (Farrington Street, Linden Place, 32nd Avenue) all have wide crosswalks that are clearly marked. Some of the neighboring smaller streets also have crosswalks, though these are often less visible. There are many curb-cuts within the Study Area. In the manufacturing district, the automobile services and light manufacturing uses require wide loading docks and multiple garage entrances. On other streets, off-street parking requirements for residential uses create curb-cuts on most lots.

*Future No-Action- Project Area*

The Development projected in the No-Action scenario is not expected to alter any streetscape elements within the Project Area.

*Future No-Action- Study Area*

In the future without the Proposed Actions, the existing streetscape elements would remain. No development within the Study Area is expected to occur in the No-Action scenario.

*Future With-Action- Project Area*

No street infrastructure (such as benches, plazas, or bus shelters) would be removed as a result of the approval Proposed Actions. In total the Proposed Actions would result in additional curb cuts on Linden Place and Farrington Street within the Project Area. As discussed above, a PAA would be created within the Project Area. The PAA would introduce new benches, landscaped areas, and a plaza within the Project Area.

The remaining streetscape elements would otherwise remain.

*Future With-Action- Study Area*

In the future with the Proposed Actions, the amount of street trees within the Study Area is expected to remain unchanged.

*Natural Features*

There are no natural features in the Project Area or within the surrounding 400 feet. Therefore, no natural features are visible from the Project Area.

*Assessment*

Based on the above, the Proposed Actions would result in higher density development than currently exist within the Study Area. The development within the Project Area would be consistent with the ongoing developments along in the Flushing neighborhood of Queens. Further, previously rezoned areas to the north and south of the Study Area, have encouraged development on larger commercial corridors and discourage large developments from being constructed in the surrounding residential neighborhood. It is also the Applicant's opinion that the larger residential development facilitated by the Proposed Actions is contextual with the adjacent medium density residential buildings with frontage on the Whitestone Expressway. For an illustrative display of the building resulting from the Proposed Actions, as well as the newly permitted maximum permitted building envelopes, see **Figure 9-1** through **Figure 9-3 (Urban Design Diagrams)**. The building would rise 9 stories or a maximum permitted height of 95 feet after 10 or 15-foot setbacks under the proposed R7A zoning district with MIH. Street wall regulations would require that these new buildings would be aligned, forming a more uniform street wall compared to the existing development.

While the new building would be taller than adjacent properties, similar-sized developments exist within the Study Area, as noted above. Further, the building would be consistent with the increasingly dense mixed-use character of the immediate area. The Proposed Actions would not adversely affect the residential and mixed-use character of buildings within the Study Area.

Further the PAA that would be created with the approval of the Proposed Actions would, in the applicant's opinion, improve the pedestrian experience by adding shade trees, seating areas, a landscaped plaza and both passive and active recreation spaces. These spaces would be accessible to both future residents of the Proposed Development and to the public. Lastly, the Proposed Actions would not affect any natural features.

**Visual Resources**

The Proposed Actions would not block the view of any natural resources, as no natural resources are within vicinity of the study area. Furthermore, there are no notable features or buildings in the immediate vicinity of the study area. Therefore, based on the criteria in the *CEQR Technical Manual,* the Proposed Actions would not result in the obstruction of views of a natural or built visual resource. In this context, the Proposed Actions would not result in the significant alteration of views from streets. Therefore, no significant impacts related to visual resources are expected.

**Conclusion**

The Proposed Actions would create additional density and allow a greater maximum height in an area between commercial and light industrial districts and residential districts. As discussed above the Proposed Actions are not anticipated to negatively impact existing building bulk, use, type, and arrangement. The Proposed Actions are not anticipated to negatively impact block form, street pattern, and street hierarchy nor are the Proposed Actions anticipated to negatively impact streetscape elements within the Study Area. The Proposed Actions include the development of a PAA within the Project Area. The PAA would introduce shade trees, landscaped areas and both passive and active recreation space. Furthermore, the Proposed Actions would not affect any natural resources or public view corridors to notable features or buildings in the immediate vicinity of the Rezoning Area. Accordingly, no impacts to the urban design and/or visual resources of the area are expected, and further analysis is not warranted.

# 8. Hazardous Materials

## Introduction

A hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include but are not limited to, heavy metals, volatile and semi volatile organic compounds, methane, polychlorinated biphenyls, and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the CEQR Technical Manual, the potential for significant adverse impacts from hazardous materials can occur when: a) hazardous materials exist on a site and b) an action would increase pathways to their exposure; or c) an action would introduce new activities or processes using hazardous materials.

In accordance with the CEQR Technical Manual guidelines, an assessment was conducted to determine whether the proposed action could lead to increased exposure of people or the environment to hazardous materials and whether the increased exposure would result in significant adverse public health impacts or environmental damage.

The Project Area (Queens Block 4370, Lots 1, 15 and 48) predominantly contain commercial and manufacturing uses, such as warehouses, automotive repair shops, and medical uses ranging in height from one-to three-stories. Since the Proposed Actions are anticipated to result in increased ground disturbance in an area with a history of manufacturing and automotive use, an assessment of Hazardous Materials is required.

## Analysis

Environmental Studies Corp. has performed a Phase I Environmental Site Assessment (ESA) of the subject property located at 30-05 Farrington Street, in the Borough of Queens, New York City, New York. This Phase I ESA was prepared in accordance with the latest ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13).

This assessment has revealed no evidence of Historical Recognized Environmental Conditions or Controlled Recognized Environmental Conditions in connection with the property. This assessment has revealed no evidence Recognized Environmental Conditions in connection with the property, with the following exceptions:

- The potential for contamination in and around the storm drains in the parking area on the west side of the project site from past spills, leaks, or discharges of hazardous substances and/or petroleum products.
- The potential for groundwater contamination in the area of the project site from historical off-site sources of contamination in the immediate vicinity of the subject property.

Based on the RECs noted above and due to the close proximity and similar uses contained on Projected Development Site 1, it is assumed that Lots 1, 15, and 48 would contain similar RECs and the potential for contamination and potentially hazardous building materials.

To protect human health and the environment further testing and possible remediation needs to be conducted prior to any inground disturbance on Projected Development Site 1.

**Phase II Testing**

Further testing on the applicant controlled Projected Development Site 1 cannot be completed at this time. The site is currently occupied by existing (active) business as described in this EAS. The presence of active businesses and the absence of non-paved construction ready areas within Projected Development Site 1 precludes the ability to conduct the necessary testing required as part of a Phase II Environmental Site Assessment prior to the completion of these EAS and approval of the Proposed Actions.

Whitestone Lanes, the business that occupies Projected Development Site 1, is a bowling alley, restaurant, and lounge. The business is open from 10:00am until 1:00am to the public, 7 days a week. Prior to opening hours at 10:00am, the facility would be utilized by staff starting at 7:00am for preparation work and site cleaning, including utilization of parking and/or drive through areas to access dumpsters on-site. The site receives deliveries, from large trucks, and sometimes receives shipments of industrial material and equipment associated with the maintenance of the bowling lanes and automated machines.

Phase II ESA testing will require site investigative work in multiple locations on the property, including the drilling of multiple borings into pavement area, as no area of the property is undeveloped with exposed earth - and the only open areas on the property are paved parking areas.

As discussed above, the site is occupied by an active, 35,000 square foot bowling alley, located on a 58,000 square foot lot. The bowling alley building is slab on-grade, with no cellar. The Hours of Operation are Monday-Thursday, 10AM to 1AM, Friday, 10AM-2AM, Saturday, 8AM-2AM, and Sunday, 8AM-1AM.

The outdoor parking area represents only 60% of the total site. Therefore, a full spectrum of testing, in accordance with DEP guidelines cannot be performed. No testing can be performed within the existing bowling alley, as it would require multiple test areas over the course of several days, and a diesel-powered drill rig drilling through an active bowling alley floor is not feasible. No testing can be performed in the accessory parking lot area, as it would require multiple test areas over the course of several days, in a busy parking lot. In addition to not being an accurate representation of the hazardous materials

condition of the site in accordance with DEP guidelines, the bowling alley's hours of operation does not present itself for several days of active drill rig movement around the site. Further, the presence of deliveries by heavy trucks during non-business hours, chemicals and additives not commonly found in general commercial uses. The above is commonly stated for auto-body uses, and the bowling alley (with its machine maintenance) is closer to an autobody shop than a commercial retail environment)

Phase II ESAs require multiple borings (typically 2-3) deep into the ground to capture subsurface conditions for the entire property, with a rig powerful enough to penetrate pavement. It should be noted these rigs are large enough to prevent parking lot, dumpster, and drive through access. Based on our experience, these tests take approximately a half-day to complete, with some additional time to patch the borings. Given the invasive nature of boring with a large rig, the business would be required to close to permit this work, as it would occur during business hours and/or utilization of the site for cleaning, trash pick-up and other activities associated with the restaurant, lounge, and bowling alley. The closure of the business (which operates 7 days a week) would present a significant financial hardship to the enterprise. As such, Phase II investigative work is not feasible at this time and an (E) Designation is required to undertake Phase II work once the property is vacated, demolished, and cleared, following approval of the Proposed Actions.

**Conclusion**

Therefore, prior to any soil disturbance on these properties, an (E) designation related to hazardous materials would be assigned to Rezoning Area as described below. To avoid any potential impacts associated with hazardous materials, an (E) designation (**E-719**) would be established on Projected Development Site 1 (Block 4370, Lots 1, 15, and 48).

The text of the (E) designation **(E-719**) 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.

The implementation of the preventative and remedial measures established in the (E) designation, detailed above, would preclude the potential for significant adverse hazardous materials impacts from the Proposed Actions. Therefore, no further analysis is warranted.

# 9. TRANSPORTATION

## Introduction

To determine the potential for the Proposed Actions to result in significant adverse transportation impacts, trip generation (Level 1) and trip assignment (Level 2) screening analyses were performed pursuant to the methodologies identified in the *2021 CEQR Technical Manual.* Based on the proposed mixed-use development trip generation (Level 1) and trip assignment screening (Level 2) analyses results, it was determined that the Proposed Actions would not result in significant transportation impacts, as detailed below.

### Project Area

The Project Area is currently zoned M1-1 and is adjacent to the Whitestone Expressway. The project site (Block 4370, Lots 1, 15 and 48) is located at 30-05 Farrington Street in the Flushing neighborhood of Queens, Community Board 7. The project site is located within the block bounded by the Whitestone Expressway Service Road (S.R.), a one-way eastbound roadway to the north, Linden Place, a two-way northbound/southbound roadway to the east, 31st Road, a two-way eastbound/westbound roadway to the south, and Farrington Street, a two-way northbound/southbound roadway to the west, as shown in **Figure 1 (Transportation Appendix)**. The Project Area includes frontage on the Whitestone Expressway, Linden Place, and Farrington Street.

## Existing Conditions

Currently, the Project site consists of:

- Block 4370, Lot 15: Is currently occupied by a single story 37,520 gsf commercial building (Whitestone Lanes Bowling Alley) on a 58,000 sq ft lot;
- Block 4370, Lot 48: contains a surface parking lot on a 6,650 sq ft lot, and
- Block 4370, Lot 1: contains a surface parking lot on a 16,500 sq ft lot.
-

## No-Action Scenario

In the future without the proposed actions, four single story buildings cumulatively totaling 39,996 gsf (1.0 FAR) containing local retail uses would be developed. These buildings would include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place, this is summarized in **Table 1**.

**With-Action Scenario (RWCDS)**

The Proposed Actions would result in a development of 468,682 gross square foot (gsf), 9-story residential building. The proposed development would include 388,293 gsf of residential floor area (431 dwelling units, 108-130 of which would be permanently affordable pursuant to MIH), and 14,400 gsf of publicly accessible open space as summarized in **Table 1**.

The proposed project would include a total of 200 parking spaces in the cellar level with ingress points on Linden Place and Farrington Street and egress point on Farrington Street, as shown in the Site Plan.

**Table 1: No-Action Scenario, With-Action (RWCDS) Scenario, and Increment**

| Land Use | No-Action | With-Action | Increment |
|---|---|---|---|
| Residential DU | 0 | 431 d.u. (388,293 gsf) | 431 d.u. (388,293 gsf) |
| Commercial (gsf) Retail | 39,996 gsf Destination Retail | 0 | -39,996 gsf Destination Retail |
| Accessory Parking | 133 | 200 | 67 |

Source: approved RWCDS.

**Analysis Framework**

The transportation analyses are based on the net difference between the proposed with action and no-action scenarios or build increment, as summarized in **Table 1**.

**Increment**

The Proposed Actions would result in an increase of 431 new residential dwelling units (388,293 gsf), 14,400 gsf of publicly accessible open space, decrease of 39,996 gsf of destination retail, and an increase of 67 parking spaces, as summarized in **Table 1**.

PRINCIPAL CONCLUSIONS

The following detailed trip generation (Level-One Screening) has been conducted for the project increment scenario, as are summarized in **Table 1**.

Based on the results of level 1 (trip generation) screening analysis, as summarized in **Tables 3 through 4 (Transportation Appendix)**, the Proposed Actions would generate fewer traffic, transit (Subway and Bus), and pedestrian trips than the *2021 CEQR Technical Manual thresholds*. Therefore, in accordance with the threshold guidelines as detailed in the *2021 CEQR Technical Manual,* the Proposed Actions would not expect to result in

significant adverse impacts related to traffic, parking, transit (Subway and Bus), and pedestrian trips. Therefore, no further transportation analyses would be warranted, as detailed below.

Traffic

Based on the results of trip generation (Level One) screening analysis, it is concluded that in the future, the Proposed Actions would generate fewer than 50 peak hour vehicle trip-ends, as summarized in **Table 4 (Transportation Appendix)**, during the AM, MD, PM, and Saturday MD peak hours.

Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-ends threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic impacts.

Parking

The Proposed Actions would provide an on-site accessory parking garage with 200 spaces, located in the cellar level with ingress points on Linden Place and Farrington Street and egress point on Farrington Street, as shown in the Site Plan.

The proposed project would screen for vehicular traffic as detailed below, and per the *CEQR Technical Manual,* no detailed parking assessment would be required.

Transit

Subway

Based on the results of the trip generation (Level One) screening analysis, the Proposed Actions would generate fewer subway trips than 200 peak hour subway trip-ends, as summarized in **Table 3 (Transportation Appendix)** for any peak hour periods. Therefore, in accordance with the *CEQR Technical Manual* 200 subway trip-ends threshold, the subway trip-ends generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of subway impacts.

Bus

Based on the results of the trip generation (Level One) screening analysis, the Proposed Actions would generate fewer bus trips than 50 peak hour bus trip-ends during any peak hour, as summarized in **Table 3 (Transportation Appendix)**. Therefore, in accordance with the *CEQR Technical Manual* 200 bus trip-ends threshold/50 or more peak hour bus trip-ends in one direction along a bus route during any peak hour, the bus trip-ends

generated by the Proposed Actions would not result in any conditions requiring a detailed assessment of bus impacts.

Pedestrian

Based on the results of the trip generation (Level One) analyses, as summarized in **Table 3 (Transportation Appendix)**, it is concluded that in the future with the Proposed Actions, none of the four peak hour periods would experience 200 or more pedestrian trip-ends. Therefore, in accordance with the *CEQR Technical Manual* 200 pedestrian trip-ends threshold, no detailed assessment of pedestrian impacts would be warranted.

**Build Year**

The Build Year assumes a seven-month pre-certification timeframe, a seven-month ULURP review and a 36-month construction period, with a Build Year of 2026.

## PRELIMINARY ANALYSIS METHODOLOGY AND SCREENING ASSESSMENTS

The *CEQR Technical Manual* recommends a two-tier screening procedure for the preparation of a "preliminary analysis" to determine if quantified analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation analysis (Tier 1) to estimate the volume of person and vehicle trip-ends attributable to the Proposed Actions. If the Proposed Actions are expected to result in fewer than 50 peak hour vehicle trip-ends and fewer than 200 peak hour transit or pedestrian trip-ends, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Tier 2) are performed to estimate the incremental trip-ends at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the Proposed Actions would result in 50 or more peak hour vehicle trip-ends at an intersection, 200 or more peak hour subway trip-ends at a station, 50 or more peak hour bus trip-ends in one direction along a bus route, or 200 or more peak hour pedestrian trip-ends traversing a pedestrian element, then further quantified analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, and parking.

## LEVEL 1 SCREENING ASSESSMENTS

A Level 1 trip generation screening assessment was conducted for the proposed actions, as summarized in **Tables 3 and 4 (Transportation Appendix),** to estimate the numbers of person and vehicle trip ends by mode of transportation generated by the Proposed Actions during the Weekday AM, midday, PM, and Saturday Midday peak hours (as presented in the **Transportation Appendix**). These trip estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or

quantified operational analyses would be warranted.

The Proposed Actions would generate a total of a total of 234, -84, 18, and -78 net person trip ends; 38, -97, -73, and -132 net vehicle trip-ends; 96, 27, 62, and 54 net subway trip-ends; 33, -10, 4, and -9 net bus trip-ends; and 180, 17, 85, and 54 net pedestrian trip-ends, during the Weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. Based on the results of trips generated by the Proposed Actions, as summarized in **Tables 3 and 4 (Transportation Appendix)**, a Level 2 screening assessment would not be required.

TRAVEL DEMAND FORECAST (TDF)

Travel demand forecast for the Proposed Actions were determined based on information from the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, recent U.S. Census Data, and other recently approved EASs and EISs. The travel demand assumptions and trip generation sources are summarized in **Table 2 (Transportation Appendix)** and detailed below.

Residential Development

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates, including truck trips, and peak hour temporal distribution. The *2015-2019 American Community Survey (ACS) Journey-to Work (JTW) data for Census Tract #'s 383.01, 865, 869, 871, 889.01, 907, and 1161 in Queens, NY* was used for modal split information and auto occupancy rate, as is shown in **Exhibits 1 and 2** and summarized in **Table 2 (Transportation Appendix)**.

The estimated modal split data for residential use found that approximately 33.5% would travel by car, 0% would travel by taxi, 14% would travel by bus, 33.3% would travel by subway, and 19.2% would travel by foot and other mode of travel, such as bicycle, as shown and summarized in **Exhibit 1 (Transportation Appendix)**. The auto occupancy rate is 1.31, based on the *2015-2019 ACS JTW data for Census Tract #'s 383.01, 865, 869, 871, 889.01, 907, and 1161 in Queens, NY*, as summarized in **Exhibit 2 (Transportation Appendix)**. The taxi occupancy rate is 1.30, based on the recently approved *Gowanus Neighborhood Rezoning and Related Actions FEIS, Table 14-8*, as summarized in **Table 2 (Transportation Appendix).**

Commercial Destination Retail Development

The *2021 CEQR Technical Manual Table 16-2* was utilized for trip generation rates, including peak hour temporal distribution, as summarized in **Table 2 (Transportation Appendix)**. Modal split information and auto occupancy rate are based on the *2012-2016 American Community Survey (ACS) Reverse-Journey-to Work (RJTW) data for Census Tract #'s 383.01, 865, 869, 871, 889.01, 907, and 1161 in Queens, NY*, as shown in **Exhibits 3 and 4**

**(Transportation Appendix)**, respectively, and summarized in **Table 2 (Transportation Appendix)**.

The estimated modal split results for commercial destination retail use found that approximately 59% would travel by car, 0.4% would travel by taxi, 13.4% would travel by bus, 13.6% would travel by subway, and 13.5% would travel by foot and other mode of travel, such as bicycle, as shown in **Exhibit 3 (Transportation Appendix)**. The taxi occupancy rate and truck trip rates are based on the recently approved *Gowanus Neighborhood Rezoning and Related Actions FEIS, Table 14-8*, as summarized in **Table 2 (Transportation Appendix).**

VEHICLE TRIPS

Vehicular Trip-Ends

The Proposed Actions would generate a total of 38, -97, -73, and -132 net vehicle trip-ends, during the AM, Midday, PM, and Saturday Midday Peak hour periods, respectively **(Transportation Appendix).** Therefore, in accordance with the *CEQR Technical Manual* 50-vehicle trip-end threshold, the vehicular trip-ends generated by the Proposed Actions would not result in any conditions that would require a detailed assessment of traffic and parking impacts during the AM, Midday, PM and Saturday Midday Peak Hours.

Parking

The Proposed Actions would provide an on-site accessory parking garage with 200 spaces, located in the cellar level with ingress points on Linden Place and Farrington Street and egress point on Farrington Street, as shown in the Site Plan. The proposed project would screen for vehicular traffic as detailed below, and per the *CEQR Technical Manual,* no detailed parking assessment would be required.

TRANSIT

Bus Trip-Ends

The Proposed Actions would generate a total of 33, -10, 4, and -9 net bus trip ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 3 (Transportation Appendix)**. Currently five bus lines serve the Project Area, including bus line Q25 and Q50 which both run along Linden Place; and QM2, QM20, and QM32 bus lines which run along Whitestone Expressway Service Roads in the study area. The Proposed Actions would generate less than 50 peak hour bus trip-ends in one direction along a bus route during any 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 Trip-Ends

The Proposed Actions would generate a total of 96, 27, 62, and 54 net subway trip-ends during the AM, Midday, PM, and Saturday Midday peak hour time periods, respectively, as summarized in **Table 3 (Transportation Appendix)**. Currently there is one subway station in the study area. Main Street subway station (train number 7) is located outside of the ¼ mile radius of the Project Site (Queens Non-Transit Zone). The Proposed Actions would generate less than 200 subway trip-ends per subway station during any peak hour time periods, and in accordance with CEQR *Technical Manual* criteria, would not result in any conditions that would typically trigger the need for a detailed assessment of subway impacts.

Pedestrian Trip-Ends

The Proposed Actions would generate a total of 180, 17, 85, and 54 net pedestrian trip-ends during the AM, Midday, PM, and Saturday Midday peak hour periods, respectively. Per the *CEQR Technical Manual threshold,* none of the peak hour periods would experience 200 or more peak hour pedestrian trip-ends, therefore, a detailed assessment of pedestrian impacts would not be required.

CONCLUSIONS

In accordance with the threshold guidelines as detailed in the *2021 CEQR Technical Manual*, the proposed actions would generate less than the maximum permitted and therefore is not expected to result in significant adverse transportation impacts, as detailed above.

# 10. Air Quality

Ambient air quality, defined as pollutant levels in the surrounding environment to which the public has access, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. The pollutants of concern include six criteria pollutants—known as "criteria" pollutants, and air toxics or toxic air pollutants known as noncriteria pollutants, which include hazardous air pollutants (HAPs) and many other pollutants. Under the City Environmental Review (CEQR), an air quality assessment determines both a proposed project's effects on ambient air quality and the quality of the ambient air at the project. This analysis was conducted in accordance with the *2021 CEQR Technical Manual* methodology.

## Project Description

The Project Area consists of three tax and zoning lots, (Block 4370, Lots 1, 15, and 48) in the Flushing neighborhood of Queens Community District 7. The Project Area is located within the block bounded by the Whitestone Expressway Service Road to the north, Linden Place to the east, 31st Road to the south, and Farrington Street to the west. The Whitestone Expressway is located north of the Whitestone Expressway Service Road and approximately 90 feet from the Project Area.

Absent the Proposed Actions, the existing commercial building on Lot 15 would be demolished, and four single story buildings cumulatively totaling 39,996 gross square feet (gsf) (1.0 FAR) containing destination retail uses would be developed. These buildings would include 133 (1 per 300 sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place.

Under Future With-Action conditions, the Applicant-controlled Projected Development Site 1 (Block 4370, Lots 1, 15, and 48) would be developed with a nine-story residential building, containing 388,293 gsf of residential space and 80,389 gsf of parking space (the "Proposed Development"). The building would have a total height of 95 feet. The Reasonable Worst Case Development Scenario (RWCDS) would facilitate a similar dimension building. The proposed project would include a total of 200 parking spaces in the cellar level with ingress points on Linden Place and Farrington Street and egress point on Farrington Street, as shown in the Site Plan.

## Air Quality Standards, Regulations, and Benchmarks

### Criteria Pollutants

The US Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS) for six of the most common air pollutants—known as "criteria" pollutants. The presence of these pollutants in ambient air is generally due to

numerous diverse and widespread sources of emissions. The NAAQS primary standards are designed to protect public health with adequate margin of safety. The NAAQS secondary standards are designed to protect the public welfare from adverse effects, including those related to effects on soils, water, vegetation, visibility, and other aspects. As required by the Clean Air Act, EPA periodically conducts comprehensive reviews of the scientific literature on health and welfare effects associated with exposure to the criteria air pollutants. The NAAQS have been adopted as the ambient air quality standards for the State of New York.

Determination of significant impact related to criteria pollutants accounts for pollutants concentrations in the ambient air, which include background concentrations. The New York State Department of Environmental Conservation (NYSDEC) measures air pollutants concentrations at more than 50 sites across the state. The primary NAAQS and background concentrations of the pollutants that a detailed analysis was required for, from the nearest federally mandated monitoring station(s), are presented in **Table 10-1.**

**Table 10-1: NAAQS and Background Concentration**

| Pollutant | Averaging Period | National and State Standards | Background Concentration (1) | Monitoring Station |
|---|---|---|---|---|
| CO | 1-Hour | 35 ppm | 1.51 ppm | Queens College |
| | 8-Hour | 9 ppm | 1.10 ppm | |
| $PM_{2.5}$ | 24-Hour | 35 $\mu g/m^3$ | 18.1 $\mu g/m^3$ | Queens College |
| | Annual | 12 $\mu g/m^3$ | 7.0 $\mu g/m^3$ | |

Note:
1. NYSDEC (2019). New York State Ambient Air Quality Report for 2019, <https://www.dec.ny.gov/chemical/8406.html#Quality>.
2. $\mu g/m^3$ – microgram per meter cube; ppm – parts per million.

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply particulate with aerodynamic less than or equal to 2.5 microns ($PM_{2.5}$) and carbon monoxide (CO) significant impact criteria (based on concentration increments). The *CEQR Technical Manual de minimis* criteria set allowable incremental increase in CO and $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. The *de minimis* for CO is:

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

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

The following criteria are used for determination of significant adverse $PM_{2.5}$ incremental impacts for projects subject to the CEQR:

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

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

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

Non-Criteria Pollutants

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the NYSDEC has established guidelines for maximum allowable concentration of noncriteria air contaminants, also referred to as toxic air contaminants, which are potentially toxic or carcinogenic pollutants. These include 188 hazardous air pollutants (HAPs) which are also regulated by the EPA. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations that are published (February 12, 2021, publication) in the DAR-1 Annual and Short-term Guideline Concentration (AGC/SGC Table). In addition, DAR-1 also includes standards for pollutants cumulative risk assessment (acceptable residual risk).

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

**Mobile Source**

According to the *CEQR Technical Manual,* projects may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create any other mobile sources of pollutants (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). Certain types of projects may require further analysis, including microscale analyses.

Screening Assessment

Based on the projected traffic volumes (see Chapter "Transportation"), the maximum projected hourly incremental traffic volumes generated by the Proposed Actions would be 38, -97, -73, and -132 vehicle trips during the AM, midday, PM, and Saturday midday peak hours, respectively. Therefore, the projected traffic volumes would not exceed the

carbon monoxide (CO) screening threshold defined in the 2021 *CEQR Technical Manual* (170 peak hour vehicle trips at an intersection in the study area). Considering the low levels of project-generated traffic, emissions of particulate matter (PM) would not exceed the *de minimis* thresholds referenced in the *CEQR Technical Manual*. The Proposed Development would introduce an automated parking system that is driven by electricity, and therefore, a quantified assessment of emissions from such a facility is not warranted. Therefore, no further assessment of the above-mentioned criterions potential for mobile source air quality impacts is warranted.

The Projected Development Site 1 is located within 200 feet of the Whitestone Expressway (an atypical roadway), and therefore, a detailed microscale analysis is warranted.

Whitestone Expressway Detailed Analysis

Mobile source impacts are a function of vehicular related emissions and the pollutants' dispersion. Emissions of vehicular mechanical components (exhaust, crank case, break ware, and tire wear) were generated with the latest EPA's Mobile Vehicle Emission Simulator (MOVES3). Fugitive road dust emissions were added to estimate total particulate matter emissions. The pollutants' concentrations at sensitive receptors were modeled with the EPA's CAL3QHCR Gaussian dispersion model.

Hourly traffic counts and vehicle classifications on the Whitestone Expressway (I-678) were obtained from the New York State Department of Transportation (NYSDOT) for station 050074. The traffic data report included the average weekly count and classification and annual average counts. The *CEQR Technical Manual* annual background growth rate(s) was used to account for the general background traffic growth in the area. Vehicle's speeds were obtained from UBER Movement for periods of the weekday.[1] The links (roadways) greatest combined peak hour period traffic was applied in the short-term (24-hour $PM_{2.5}$ and CO) analyses.

The EPA's MOVES3 emission factor algorithm was used to compile the CO and $PM_{2.5}$ emission factors. MOVES can be used to calculate emission rates of criteria air pollutants, greenhouse gas emissions, and some hazardous air pollutants for both on-road motor vehicles and non-road equipment. MOVES models calculate emissions at the national, county, and project level by use of databases and by specifying the characteristics (Run Specification) of the scenario that is modeled. For project level analyses, MOVES require the use of site-specific input data of traffic volume and speed, vehicle types, fuel parameters, age distribution, and meteorology conditions, rather than the use of national default data.

The NYSDEC county database (MOVES input file for Queens) was used to further characterize vehicle types and engine technologies. MOVES inputs of inspection/maintenance, fuel data (fuel properties, distribution, and engine technology),

[1] UBER (2022). "UBER Movement." <https://movement.uber.com/?lang=en-US>

age distribution, and meteorology, were all obtained from the NYSDEC. Elevation points along the roadway[2] were used to calculate the links' gradients, which were accounted for in the MOVES model.

Peak hour emission factors were compiled for each season during the PM peak hour period (maximum emission was predicted during the summer), and the maximum emission factor, for each pollutant independently, used in the dispersion analysis. Annual particulate emission factors were compiled for the five periods of the day (early morning, AM, Midday, PM, and evening) during the summer, and the hourly weighted average calculated. Dust generated by vehicles traveling on paved roadways was added to estimate total particulate matter emissions for the short-term analysis (annual fugitive dust emission is negligible, based on similar types of projects). A silt loading factor of 0.015 $g/m^2$ (for expressways) was applied, based on the *CEQR Technical Manual*. In addition, a "dry" road condition was used for the short-term calculation (precipitation reduces silt loading).

Dispersion analysis was conducted using the EPA's CAL3QHCR dispersion model version 13196. $PM_{2.5}$ concentrations were predicted with model-ready meteorology data, obtained from the New York City Department of City Planning (DCP) for another project, at LaGuardia Airport. One-hour CO concentration was predicted using the emulated CAL3QHC meteorology data, specifying 10-deg incremental wind vector direction, 1-meter per second wind speed, natural stability, and 285.5 Kelvin, and 1,000-meter mixing height. A persistence factor of 1 was used to predict the 8-hour CO concentration from the 1-hour CO concentration. All models specified settling and deposition velocities of 0-meter per second, 60-minute averaging time, and urban surface roughness of 108-centimeter. The Whitestone Expressway (I-678) was modeled as a fill type roadway. Receptors at Projected Development Site 1 were placed from 6-95 feet above grade in spaced intervals, except the furthest part of Projected Development Site 1 (p/o Block 4370, Lot 1) where receptors were placed at ground level (6-foot above grade) only as the space will feature no elevated construction. Predicted concentrations were evaluated with the NAAQS. **Table 10-2** shows the dispersion analysis results.

**Table 10-2: Whitestone Expressway (I-678) Dispersion Analysis Results**

| Pollutant and Averaging Time | Modeled Concentration | Background Concentration | Evaluated Concentration | Threshold Concentration |
|---|---|---|---|---|
| **$PM_{2.5}$ 24-hour** | 2.81 $\mu g/m^3$ | 18.1 | 20.9 $\mu g/m^3$ | 35 $\mu g/m^3$ |
| **$PM_{2.5}$ Annual** | 0.21 $\mu g/m^3$ | 7.0 | 7.2 $\mu g/m^3$ | 12 $\mu g/m^3$ |
| **CO 1-hour** | 0.81 ppm | 1.51 | 2.32 ppm | 35 ppm |
| **CO 8-hour** | 0.81 ppm | 1.10 | 1.91 ppm | 9 ppm |

[2] New York City Open Data (2022). "Elevation Points." <https://data.cityofnewyork.us/Transportation/Elevation-points/szwg-xci6>, February 22, 2023.

As seen in **Table 10-2**, pollutants concentrations are within the NAAQS. Therefore, no significant adverse air quality impacts are predicted at Projected Development Site 1 from emissions associated with vehicular traffic on the Whitestone Expressway (I-678).

**Stationary Source**

According to the *CEQR Technical Manual*, air quality analyses of stationary sources may be warranted if a project would (i) create new stationary sources of pollutants – such as emission stacks of industrial plants, hospitals, other large institutional uses, or even a building's boilers – that may affect surrounding uses; (ii) introduce certain new uses near existing or planned emissions stacks that may affect the use, or (iii) introduce structures near such stacks so that changes in the dispersion of emissions from the stacks may affect surrounding uses.

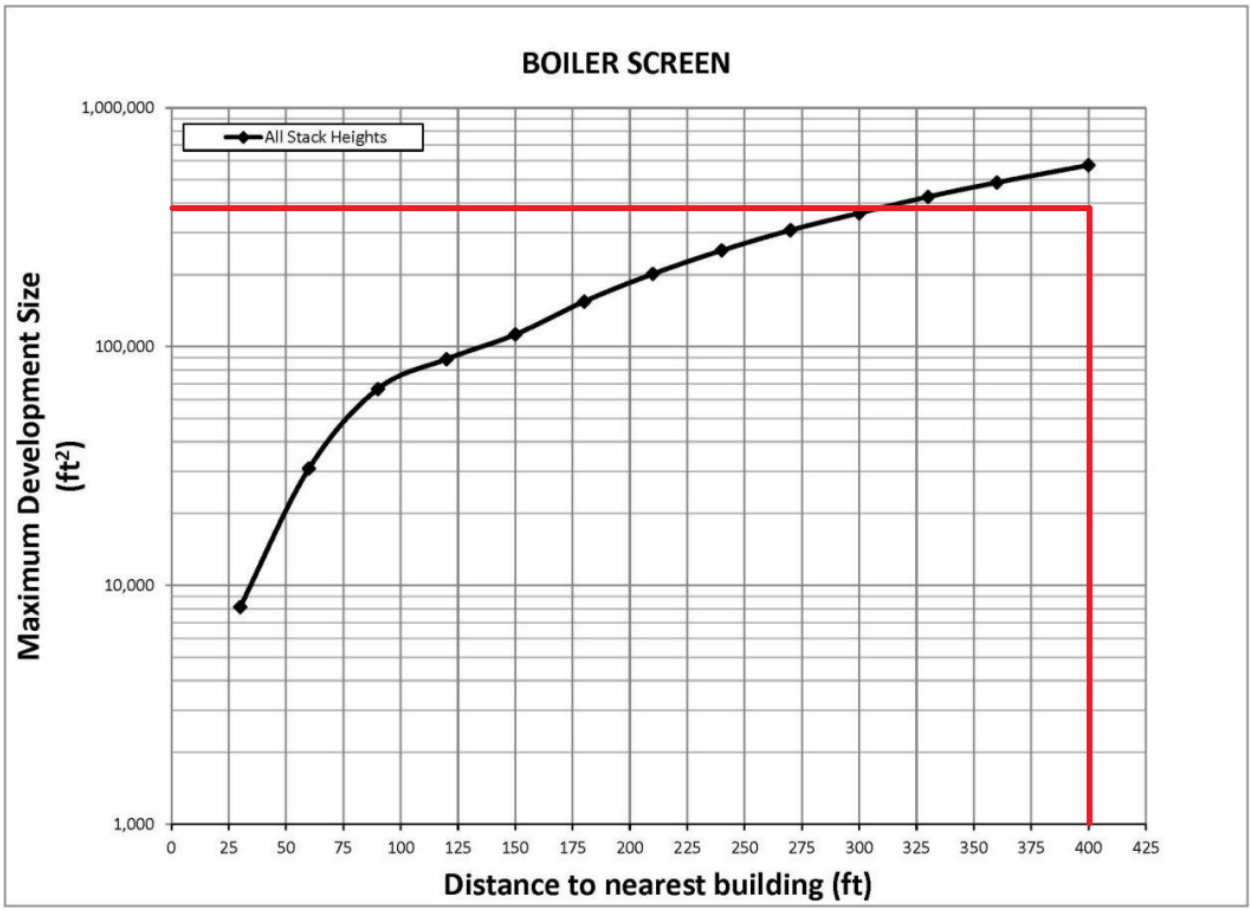
Heating and Hot Water Systems

The heating/hot water, ventilation, and air conditioning (HVAC) systems analysis considered the potential for emissions from the HVAC system(s) of the Projected Development Site 1 to significantly impact existing land uses (project-on-existing). Based on the *CEQR Technical Manual*, a preliminary screening assessment is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system(s) boiler emissions can be significant. A detailed analysis is required if the screening assessment failed.

The *CEQR Technical Manual* Figure 17-3 nomograph was used for the screening assessment. The 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. A detailed analysis is required if the screening assessment failed. Based on the methodology above, the Proposed Development was analyzed as a 95-foot-tall building, containing 388,293 gsf (the RWCDS floor area excluding the parking space floor area). The highest building within 400 feet of the Projected Development Site 1 is the 85-foot-tall (not including the mechanical room bulkhead)[3] Community School District 25 at 30-48 Linden Place (Block 4370, Lot 50). As such, a distance of 400 feet was applied in the screening assessment as no other building similar or greater in height is located within 400 feet of the Projected Development Site 1. **Figure 10-1** shows the project-on-existing screening analysis.

[3] New York City Department of Building (DOB), Certificate of Occupancy (JOB 400581107). January 17, 1997.

**Figure 10-1: Project on Existing – HVAC Screen**




As seen in the screening analysis (see **Figure 10-1**), using the nomograph provided in the *CEQR Technical Manual*, the Projected Development Site 1 gsf would fall below the curve for fossil fuel fired HVAC system. Therefore, the Proposed Actions passes the screening analysis on existing land uses.

**Existing Stationary Sources**

Industrial Sources

Per the *CEQR Technical Manual*, projects that would result in new uses (particularly schools, hospitals, parks, and residences) within 400 feet of manufacturing processing facilities may result in potentially significant adverse impacts. The analysis first determines if there are any existing manufacturing uses within the 400-foot study area containing exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project. If warranted, an air dispersion analysis is then conducted for any existing industrial source(s) located in the study area.

Existing manufacturing uses with exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project were

identified by reviewing the DEP online Clean Air Tracking System (CATS) database, the NYSDEC online database (DECinfo Locator[4]), and through a fieldwork study. The fieldwork study was conducted on February 22nd, 2023.

The study area encompasses all or part of Blocks 4282, 4331, 4369, 4370, 4371, 4406, 4408, and 4409, and includes properties along Whitestone Expressway, Farrington Street, Linden Place, and 31st Road. Land uses in the study area are a mix of commercial/retail uses, residential dwellings, hotels, and light industrial uses. There were not any heavy industrial or manufacturing uses identified in the study area.

The following DEP processing permits associated with properties in the 400 feet study area were identified in the DEP CATS database:

- DEP Processing Permit PB009915 was issued to DC Nice Car at 31-38 Linden Place, Block 4408, Lot 44. The permit was issued for an auto body spray booth and expires on 9/8/2024. At the time of the site visit, this facility was open for business and in operation. A Freedom of Information (FOI) request was submitted to the DEP on 2/13/2023 for information regarding Permit PB009915. The following analysis was prepared using the permit information provided by the DEP:

- There are two expired Processing permits associated with the property at 31-06 Farrington Street (Block 4406, Lot 32). Permits PR032616 was issued for an engine/generator and expired on 10/26/2019. Permits PB441703 was issued for an engine/generator and expired on 9/1/2007. Small combustion installations are exempt, and therefore, no analysis for these generators is required.

- There is an under-review Processing permits associated with the property at 29-66 137th Street (Block 4371, Lot 173). Permits PB047601 for an engine/generator was submitted on 1/26/2023. Small combustion installations are exempt, and therefore, no analysis for this generator is required.

A search of the NYSDEC DECinfo Locator database did not identify any facilities in the study area with air state facility certificate. The results of the field survey did not identify any additional source of air emissions in the study area. There is a ConEd (electric utility) storage yard located at 31-24 Farrington Street, (Block 4406, Lot 30). No stacks, odors or emission were observed at this location during the field survey. There are industrial buildings at 31-33 Farrington Street (Block 4408, Lot 11), and 31-19 to 31-21 Farrington Street (Block 4408, Lots 18 & 19). The building at 31-33 is currently occupied by a commercial HVAC supply warehouse and distribution company (NY HVAC Supplies). The building at 31-19 to 31-21 Farrington Street is occupied by a building materials warehouse and distribution business (Hyatt Cabinet and Stone Depot). There were not

[4] New York State Department of Environmental Conservation (2021). DECinfo Locator. <https://gisservices.dec.ny.gov/gis/dil/> (January 5, 2023).

any stacks, odors or emissions observed at either of these locations during the field survey.

*DC Nice Car Dispersion Analysis*

Processing operation of the auto body repair facility DC Nice Car is associated with spray painting of cars in a spray booth. The facility is located approximately 340 feet south of the Projected Development Site 1. Pollutants emission rates, specified in the DC Nice Car's DEP permit PB009915, are shown in **Table 10-3**.

**Table 10-3: Pollutants emission rates - DC Nice Car DEP Permit PB009915**

| Pollutant | CAS No. | Emission (lb/hr) | Emission (lb/yr) |
|---|---|---|---|
| Particulate | NY079-00-0 | 0.03 | 20 |
| Butanone | 78-93-3 | 0.13 | 104 |
| Ethylbenzene | 100-41-4 | 0.24 | 192 |
| Toluene | 108-88-3 | 0.03 | 24 |
| Xylene | 1330-20-7 | 2.0 | 1,600 |

Particulate emissions (New York Identification number NY079-00-0) shown in **Table 17-3** include PM, $PM_{10}$ and $PM_{2.5}$ combined. For analysis purpose, all PM emission was assumed to be $PM_{2.5}$. The facility daily activity rate (4 hours per day) specified in the DEP permit PB009915 was used to calculate the 24-hour average emission (0.12 pounds per day).

The *CEQR Technical Manual* Industrial Source Screen methodology was used to predict pollutant concentrations. The *CEQR Technical Manual* Industrial Source Screen methodology can be used to predict a pollutant concentration emitted from a single source at various distances (from 30 to 400 feet). A distance shorter or equal to the distance between the DC Nice Car facility and the Projected Development Site 1 was used in the screening analysis. **Table 10-4** shows the VOC air dispersion analysis results.

**Table 10-4: Noncriteria pollutants dispersion analysis result**

| Contaminant | CAS No. | 1-Hour | SGC | Annual | AGC |
|---|---|---|---|---|---|
| | | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) |
| Butanone | 78-93-3 | 21.0 | 13000.0 | 0.1 | 5000.0 |
| Ethylbenzene *** | 100-41-4 | 38.8 | --- | 0.2 | 1000.0 |
| Toluene *** | 108-88-3 | 4.9 | 37000.0 | 0.02 | 5000.0 |
| Xylenes *** | 1330-20-7 | 323.3 | 22000.0 | 1.5 | 100.0 |

Note:
*** Indicates a HAP

As seen in **Table 10-4**, the noncriteria pollutant concentrations are within the SGC/AGC standard. In addition, the carcinogen pollutants inhalation risk is 0.00002 (less than 10), and the Hazardous Index is 0.01 (less than 2) for the non-carcinogenic pollutants.

The criteria pollutants dispersion analysis results are presented in **Table 10-5**. As seen in **Table 10-5**, $PM_{2.5}$ concentrations are within the NAAQS.

**Table 10-5 : Criteria pollutants dispersion analysis results**

| Criteria Pollutant | Increment (Modeled) Concentration (µg/m³) | Background Concentration (µg/m³) (1) | Evaluated Concentration (µg/m³) | NAAQS (µg/m³) |
|---|---|---|---|---|
| $PM_{2.5}$ 24-Hour | 0.31 | 18.1 | 18.4 | 35 |
| $PM_{2.5}$ Annual | 0.02 | 7.0 | 7.02 | 12 |

As shown in **Tables 10-4** and **10-5**, predicted contaminants (criteria pollutants and noncriteria pollutants) concentrations at the Projected Development Site 1 will not exceed the NAAQS or the SGC/AGC and the noncriteria pollutants residual risk (cancer risk and hazard index) is within the acceptable design values. Therefore, no significant adverse air quality impact is predicted at the Projected Development Site 1 from the DC Nice Car facility emissions.

Major and Large Source

Per the *CEQR Technical Manual*, projects that would introduce new uses near "major" sources, "large" sources, or odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers "major" sources, "large" sources, and odor producing facilities within 1,000 feet of the proposed project. "Major" emission sources are identified as those sources located at Title V facilities; "large" emission sources are identified as sources located at facilities which require an Air State Facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large boilers of large public facilities for example, and large industrial facilities are typical type of sources requiring these permits. Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

"Major" and/or "large" source and other facilities of interest, such as odor producing facilities, were identified through a search of the NYSDEC DECinfo Locator map application. The property associated with the NY Times Daily Production Facility Air State Facility (Facility DEC ID: 2630200169), located at 25-70 Whitestone Expressway (Block 4282, Lot 100), is located within 1,000 feet of the Project Area. However, the production facility is located more than 1,000 feet from the Project Area. In addition, no odor producing facility or other emission source of interest, such as power plants, cogeneration facilities, etc. was identified in the database search. As no "major" or "large"

emission source or odor producing facility is located within 1,000 feet of the Project Area, no analysis is warranted.

## Conclusion

Based on the analysis, conditions associated with the Proposed Actions would not result in any violations of the ambient air quality standards. The summary results of the analysis are as follows:

- Vehicular emissions traveling on the Whitestone Expressway would not result in any violations of the ambient air quality standards.

- Project-increment traffic associated with the Proposed Actions will be less than the screening threshold that requires a detailed analysis. Furthermore, there would be an incremental increase of less than 85 parking spaces, which is below the threshold for a detailed analysis and the parking facility would be fully automated (driven by electricity), and therefore, quantitative parking analysis was not required.

- Air toxics concentrations emitted from the DC Nice Car, an industrial source operating within 400 feet of the Projected Development Site 1, would be below the threshold criteria (NAAQS, SGC/AGC and cumulative risk assessments). Additionally, no "major" or "large" emission source is located within a 1,000-foot of the Project Area, and thus, there would be no potential for significant adverse air quality impact from "major" or "large" emission points located within 1,000 feet of the Project Area.

- No significant impact was predicted in the HVAC analysis with the Proposed Development HVAC stack(s) located at least 98 feet above grade as specified in the (E) Designation for the Projected Development Site adhered to.

Therefore, there is no reason to believe that the Proposed Actions would result in any potentially significant adverse stationary or mobile source air quality impacts with the Proposed Development HVAC system compliance with the following (E) Designation:

***(E) Designation (E-719)***

***Block 4370, Lots 1, 15 and 48: Any new residential development on the above-referenced property must ensure the heating, ventilation and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 98 feet above grade to avoid any potential significant adverse air quality impact.***

# 11. Noise

## Introduction

Equity Environmental Engineering, A Division of GZA (Equity) conducted noise monitoring on Tuesday, Tuesday February 14, 2023 in support of zoning map amendment to rezone the Affected Area from a M1-1 zoning district to a R7A zoning district to allow for the development of a nine-story 95-foot-tall residential building. The Project Site is bound by Whitestone Expressway to the north, Linden Place to the east, Farrington Street to the West, and 31st Road to the south. The Affected Area consists of Block 4370 / Lots 1, 15, and 48 on the New York City Tax Map and is located in Queens Community District 7.

Whitestone Expressway is a one-way eastbound street with three moving lanes and curbside parking. Linden Place is a two-way north-south bound street with curbside parking. Farrington Street is a two-wait north-south bound street with curbside parking. 31st Road is a two-way east-west bound street with curbside parking. Local intersections are controlled by traffic signals and stop signs.

An assessment of the potential for adverse effects on project occupants from ambient noise is warranted. The predominant noise source at the Affected Area is vehicular traffic on surrounding streets.

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

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a

function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and C-weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high frequency bands are significantly affected by C-weighting.

**Table 11-1: 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: 2021 CEQR Technical Manual* | |

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

- 3-dBA change is the threshold of change detectable by the human ear;
- 5-dBA change is readily noticeable; and
- 10-dBA change is perceived as a doubling or halving of the noise level.

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

- $L_{eq}$ is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the

mean energy, or intensity, level. High noise levels during a measurement period will have a greater effect on the $L_{eq}$ than low noise levels. $L_{eq}$ has an advantage over other descriptors because $L_{eq}$ values from various noise sources can be added and subtracted to determine cumulative noise levels.

- $L_{max}$ is the highest SPL measured during a given period of time. It is useful in evaluating $L_{eq}$s for time periods that have an especially wide range of noise levels.

- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.

- $L_{dn}$ is the day-night equivalent sound level, defined as a 24-hour continuous Leq with a 10 dB adjustment added to all hourly noise levels recorded between the hours of 10 PM and 7 AM. This 10 dB addition accounts for the extra sensitivity people have to noise during typical sleeping hours.

- DNL is the annual average day-night average sound level. Aircraft noise around airports is usually mapped out in terms of DNL, which are normally depicted as noise contours on a map.

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

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law. 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.

**Noise Standards and Guidelines**

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Quality Review (CEQR) noise exposure guidelines for exterior noise levels. As shown in Table 11-2 below, noise standards classify noise exposure into four categories based on noise level limits and land use, for vehicular traffic, rail, and aircraft noise sources: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable, Table 19-3 of the *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for residential buildings are designed to maintain interior noise levels of 45 dBA (*$L_{10}$ or Ldn, depending on the source*) or below.

## Table 11-2: Noise Exposure Guidelines for Use in City Environmental Impact Review

| Receptor Type | Time Period | Acceptable General External Exposure | Airport[3] Exposure | Marginally Acceptable General External Exposure | Airport[3] Exposure | Marginally Unacceptable General External Exposure | Airport[3] Exposure | Clearly Unacceptable General External Exposure | Airport[3] Exposure |
|---|---|---|---|---|---|---|---|---|---|
| 1. Outdoor area requiring serenity and quiet[2] | | $L_{10} \leq 55$ dBA | ----------DNL ≤ 60 dBA---------- | | ----------60 < DNL ≤ 65 dBA---------- | | (I) 65 < DNL ≤ 75 dBA | | ---------- 75 dBA < DNL ---------- |
| 2. Hospital, nursing home | | $L_{10} \leq 55$ dBA | | $55 < L_{10} \leq 65$ dBA | | $65 < L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| 3. Residence, residential hotel, or motel | (7 AM to 10 PM) | $L_{10} \leq 65$ dBA | | $65 < L_{10} \leq 70$ dBA | | $70 < L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| | (10 PM to 7 AM) | $L_{10} \leq 55$ dBA | | $55 < L_{10} \leq 70$ dBA | | $70 < L_{10} \leq 80$ dBA | | $L_{10} > 80$ dBA | |
| 4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | |
| 5. Commercial or office | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | | Same as Residential Day (7 AM-10 PM) | |
| 6. Industrial, public areas only[4] | Note 4 | Note 4 | | Note 4 | | Note 4 | | Note 4 | |

**Notes:**

(i) In addition, any new activity shall comply with Impact Thresholds detailed in Section 410.

[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.

[2] Tracts of land where serenity and quiet are extraordinarily important and serve as important public need, and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.

[3] One may use the FAA-approved DNL contours supplied by the Port Authority of New York and New Jersey (PANYNJ), or the noise contours may be computed from the federally approved Aviation Environmental Design Tool (AEDT) Computer Model using flight data supplied by the PANYNJ.

[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are listed by octave bands).

**Sources:** New York City Department of Environmental Protection (adopted policy 1983).

**Table 11-3 CEQR TM: Attenuation Values to Achieve Acceptable Interior Noise Levels**

| | Marginally Unacceptable | | | | Clearly Unacceptable |
|---|---|---|---|---|---|
| Vehicular Traffic | 70 < L10 ≤ 73 | 73 < L10 ≤ 76 | 76 < L10 ≤ 78 | 78 < L10 ≤ 80 | 80 < L10 |
| Aircraft[A] | 65 < DNL ≤ 68 | 68 < DNL ≤ 71 | 71 < DNL ≤ 73 | 73 < DNL ≤ 75 | 75 < DNL |
| Train | 65 < Ldn ≤ 68 | 68 < Ldn ≤ 71 | 71 < Ldn ≤ 73 | 73 < Ldn ≤ 75 | 75 < Ldn |
| Attenuation[B] | (i) 28 dB(A) | (ii) 31 dB(A) | (iii) 33 dB(A) | (iv) 35 dB(A) | See Note c |

Note:

A. DNL descriptor based on average values of Ldn over a year period.

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

C. The required attenuation value is the difference between Lbuild and Linterior, using the appropriate noise descriptor Where:

Lbuild is the projected noise level under the build condition rounded up to the whole number

Linterior is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)

## Initial Impact Screening

The *CEQR Technical Manual* recommends an analysis of two principal types of noise sources: mobile sources; and stationary sources. Both types of noise sources are examined in the following sections. The initial impact screening considers whether the project would:

(1) generate any mobile or stationary sources of noise; and/or

(2) introduce a new receptor to an area with existing high ambient noise levels.

As discussed above, the noise analysis presented in this chapter focuses on the operational noise effects of the Proposed Actions and consists of two parts:

- A Preliminary Noise Passenger Car Equivalent (PCE) Screening Analysis to determine whether project-generated traffic will increase Noise PCEs on adjacent roadways by greater than 100%.
- A determination of the level of attenuation necessary to ensure that interior noise levels satisfy City Environmental Quality Review (CEQR) requirements.

### Measurement Location and Equipment

Because the predominant noise sources in the area of the proposed project consist of vehicular traffic, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day for 20-minute periods. Pursuant to CEQR Technical Manual Methodology, five (5) measurements were conducted for 20-minute periods during each of the peak periods at each monitoring location at the Project Area: Location One (1) was at the frontage of Farrington Street; Location Two (2) was at the frontage of Whitestone Expressway; Location Three (3) was at the frontage of Linden Place; Location Four (4) was located at southern façade of the existing building facing 31st Road; and Location Five (5) was located on the rooftop of the exiting building facing the Whitestone Expressway. The noise monitoring locations are shown in **Figure 11-1** and **Photos 11-1** through **Photo 11-5** below.

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

**Photo 11-1:** ***Noise Monitoring Location One (1)***



**Photo 11-2:** ***Noise Monitoring Location Two (2)***



**Photo 11-3:** ***Noise Monitoring Location Three (3)***



**Photo 11-4:** ***Noise Monitoring Location Four (4)***



**Photo 11-5:** ***Noise Monitoring Location Five (5)***

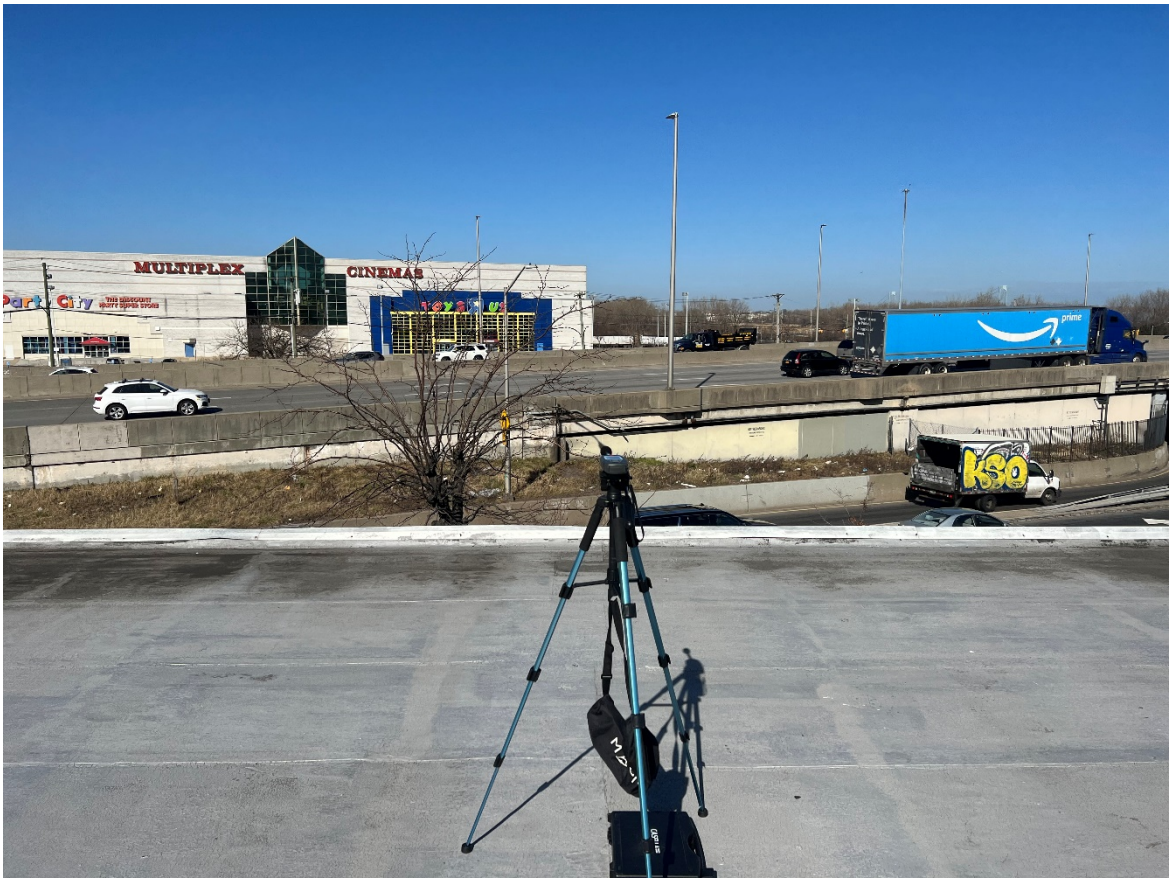
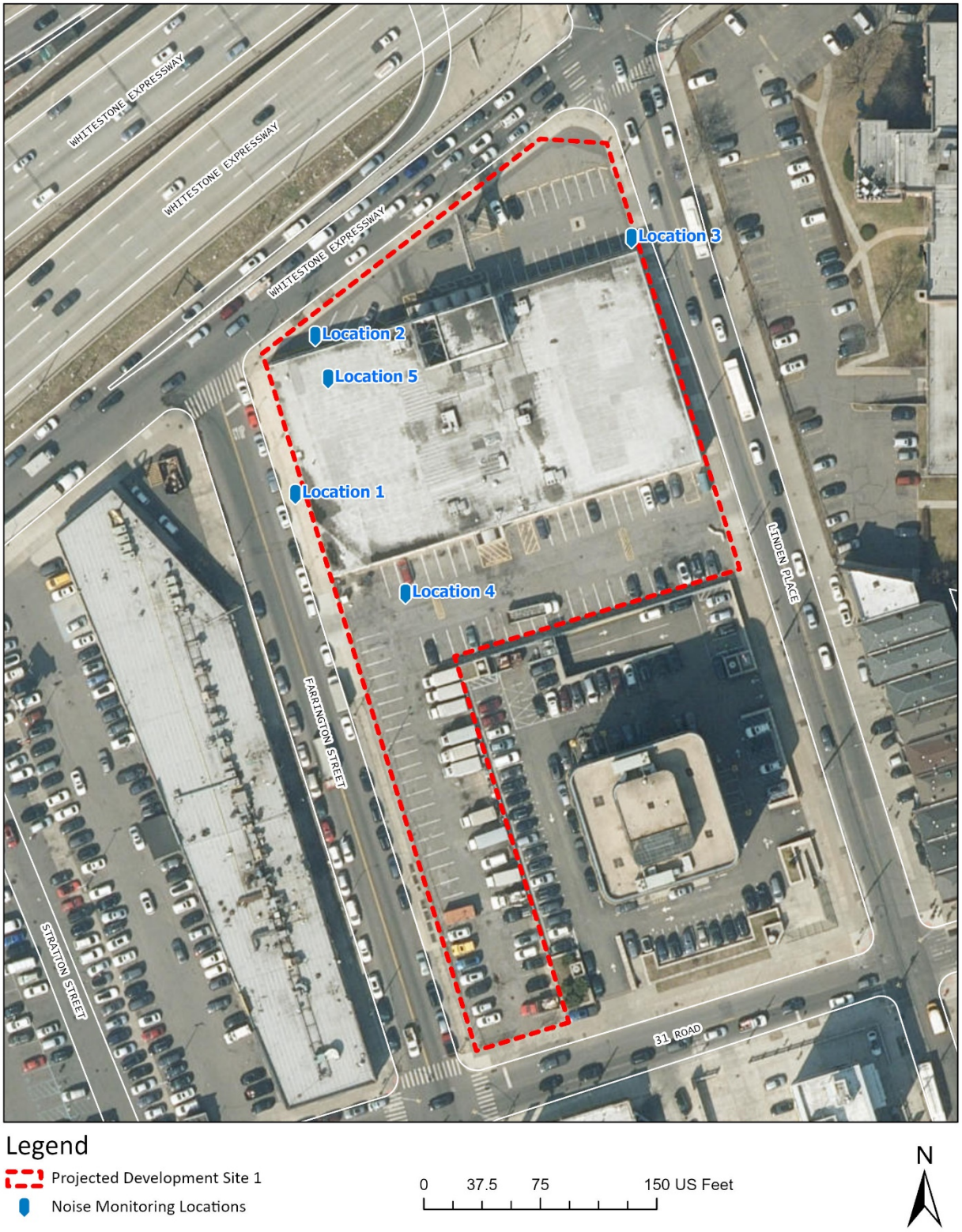


**Figure 11-1: Noise Monitoring Location**



## Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Tuesday, February 14, 2023. The weather was dry and wind speeds were moderate during all monitoring periods. The sound meter was calibrated before and after each monitoring session.

## Existing Conditions

Based on the noise measurements, the predominant source of noise is vehicular traffic.

***Tables 11-4 – 11-8*** *contains the results for the measurements taken at the Project Site:*

| **Table 11-4**<br>*Noise Levels (dB) at Location 1* | | | |
|---|---|---|---|
| *Tuesday, February 14, 2023* | | | |
| Time | **8:17 am – 8:37 am** | **12:45 pm – 1:05 pm** | **5:15 pm – 5:35 pm** |
| $L_{max}$ | 87.0 | 81.6 | 96.6 |
| $L_{10}$ | 75.0 | 73.0 | 71.5 |
| $L_{eq}$ | 71.9 | 70.3 | 72.7 |
| $L_{50}$ | 69.5 | 69.0 | 66.5 |
| $L_{90}$ | 66.0 | 66.5 | 64.5 |
| $L_{min}$ | 63.3 | 63.9 | 62.5 |

| **Table 11-5**<br>*Noise Levels (dB) at Location 2* | | | |
|---|---|---|---|
| *Tuesday, February 14, 2023* | | | |
| Time | **7:53 am – 8:13 am** | **12:23 pm – 12:43 pm** | **4:53 pm – 5:13 pm** |
| $L_{max}$ | 85.4 | 90.6 | 85.7 |
| $L_{10}$ | 76.5 | 77.5 | 73.0 |
| $L_{eq}$ | 74.8 | 75.4 | 71.0 |
| $L_{50}$ | 74.0 | 73.0 | 69.5 |
| $L_{90}$ | 72.5 | 71.0 | 66.5 |
| $L_{min}$ | 70.2 | 68.1 | 63.9 |

| **Table 11-6**<br>*Noise Levels (dB) at Location 3* | | | |
|---|---|---|---|
| *Tuesday, November 15, 2022* | | | |
| Time | **7:30 am – 7:50 am** | **12:00 pm – 12:20 pm** | **4:30 pm – 4:50 pm** |
| $L_{max}$ | 87.1 | 99.0 | 84.3 |
| $L_{10}$ | 75.5 | 74.5 | 72.5 |
| $L_{eq}$ | 73.0 | 75.2 | 69.7 |
| $L_{50}$ | 71.0 | 70.0 | 68.0 |
| $L_{90}$ | 69.0 | 67.5 | 64.5 |
| $L_{min}$ | 67.5 | 65.2 | 60.1 |

| **Table 11-7**<br>*Noise Levels (dB) at Location 4* | | | |
|---|---|---|---|
| *Tuesday, February 14, 2023* | | | |
| Time | **8:20 am – 8:40 am** | **12:45 pm – 1:05 pm** | **5:09 pm – 5:29 pm** |
| $L_{max}$ | 81.4 | 83.8 | 87.2 |
| $L_{10}$ | 72.5 | 69.5 | 69.5 |
| $L_{eq}$ | 69.0 | 67.0 | 67.4 |
| $L_{50}$ | 65.5 | 63.5 | 64.5 |
| $L_{90}$ | 63.0 | 61.5 | 63.0 |
| $L_{min}$ | 61.4 | 59.8 | 61.1 |

| **Table 11-8**<br>*Noise Levels (dB) at Location 5* | | | |
|---|---|---|---|
| *Tuesday, February 14, 2023* | | | |
| Time | **7:43 am – 8:03 am** | **12:10 pm – 12:30 pm** | **4:37 pm – 4:57 pm** |
| $L_{max}$ | 81.3 | 87.4 | 80.5 |
| $L_{10}$ | 77.0 | 77.0 | 72.0 |
| $L_{eq}$ | 75.4 | 75.0 | 69.8 |
| $L_{50}$ | 75.0 | 74.0 | 68.5 |
| $L_{90}$ | 73.5 | 72.0 | 66.5 |
| $L_{min}$ | 71.6 | 67.9 | 64.8 |

***Tables 11-9*** *and* ***11-13*** *below contains the traffic counts and vehicle classifications during each monitoring period for 20-minutes:*

| **Table 11-9**<br>***Location 1:*** *Traffic volumes and vehicle classifications* | | | |
|---|---|---|---|
| | **8:17 am – 8:37 am** | **12:45 pm – 1:05 pm** | **5:15 pm – 5:35 pm** |
| **Car/ Taxi** | 9 | 9 | 23 |
| **Van/Light Truck/SUV** | 23 | 31 | 32 |
| **Medium Truck** | 1 | 6 | 0 |
| **Heavy Truck** | 1 | 2 | 0 |
| **Bus** | 0 | 0 | 0 |

| **Table 11-10**<br>***Location 2:*** *Traffic volumes and vehicle classifications* | | | |
|---|---|---|---|
| | **7:53 am – 8:13 am** | **12:23 pm – 12:43 pm** | **4:53 pm – 5:13 pm** |
| **Car/ Taxi** | 140 | 146 | 111 |
| **Van/Light Truck/SUV** | 318 | 343 | 498 |
| **Medium Truck** | 41 | 40 | 25 |
| **Heavy Truck** | 8 | 9 | 3 |
| **Bus** | 5 | 6 | 4 |

| **Table 11-11**<br>***Location 3:*** *Traffic volumes and vehicle classifications* | | | |
|---|---|---|---|
| | **7:30 am – 7:50 am** | **12:00 pm – 12:20 pm** | **4:30 pm – 4:50 pm** |
| **Car/ Taxi** | 64 | 74 | 80 |
| **Van/Light Truck/SUV** | 174 | 190 | 193 |
| **Medium Truck** | 3 | 9 | 5 |
| **Heavy Truck** | 1 | 1 | 1 |
| **Bus** | 14 | 6 | 12 |

| **Table 11-12**<br>***Location 4:*** *Traffic volumes and vehicle classifications* | | | |
|---|---|---|---|
| | **8:20 am – 8:40 am** | **12:45 pm – 1:05 pm** | **5:09 pm – 5:29 pm** |
| **Car/ Taxi** | 2 | 0 | 2 |
| **Van/Light Truck/SUV** | 4 | 5 | 4 |
| **Medium Truck** | 0 | 0 | 0 |
| **Heavy Truck** | 0 | 1 | 0 |
| **Bus** | 0 | 0 | 0 |

| Table 11-13<br>***Location 5:*** *Traffic volumes and vehicle classifications* | | | |
|---|---|---|---|
| | **7:43 am – 8:03 am** | **12:10 pm – 12:30 pm** | **4:37 pm – 4:57 pm** |
| **Car/ Taxi** | 116 | 122 | 191 |
| **Van/Light Truck/SUV** | 312 | 344 | 445 |
| **Medium Truck** | 44 | 39 | 21 |
| **Heavy Truck** | 11 | 11 | 3 |
| **Bus** | 8 | 9 | 5 |

## Preliminary Noise Passenger Car Equivalent (PCE) Screening Analysis

Pursuant to Section 111 of the *2021 CEQR Technical Manual*, mobile sources are those noise sources that move in relation to a noise-sensitive receptor—principally automobiles, buses, trucks, aircraft, and trains. Each has its own distinctive noise character, and, consequently, an associated set of noise assessment descriptors.

For Mobile Sources, an initial noise assessment may be appropriate if a proposed action would generate additional project-generated vehicular traffic in an area where roadways currently carry no or very low traffic volumes, or where a nearby receptor would potentially be impacted by high ambient noise levels. Receptors are generally the subject of most noise impact analyses. A noise-sensitive location (known as a "receptor") is usually defined as an area where human activity may be adversely affected when noise levels exceed predefined thresholds of acceptability or when noise levels increase by an amount exceeding predefined thresholds of change.

Automobile noise is a function of vehicle speed and engine noise. With changing gears, the noise levels tend to increase in a sawtooth kind of pattern as vehicular speed increases. The interaction of the road surface with the tires generates noise that increases with vehicle speed. At vehicular speeds below 30 miles per hour, the typical automobile noise spectrum is dominated by engine noise. At speeds higher than 30 miles per hour, the automobile noise signature is composed of a combination of lower frequency engine noise and higher frequency tire noise. The engine and tire noise for vehicular speeds above 30 miles per hour are comparable in noise level. Noise generated by buses and heavy trucks is also composed of engine and tire noise, but tire noise tends to dominate the noise signature at vehicular speeds above 30 miles per hour in trucks and buses. Cargo load normally does not significantly affect noise levels because increased load usually results in decreased vehicular speed, and the effects cancel each other out. Because individual trucks and buses are noisier than individual automobiles, the concept of noise passenger car equivalents (PCEs) is used.

Pursuant to Section 332.1 of the *2021 CEQR Technical Manual*, the below values can be used to calculate vehicular noise using projections:

- 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

A preliminary Noise PCE screening was conducted to determine if the Proposed Action would result in an increase to existing Noise PCE values by 100 percent or more. This screening assesses the Noise PCE values of the vehicles projected to arrive on-site during peak hours, compared to the Noise PCE values of existing background traffic recorded during noise monitoring.

**Location 1, 2, 3 Noise PCE Screening Analysis**

This screening analysis was performed based on the total projected vehicular trip-ends projected in the Transportation Analysis: Tier 1 Trip Generation Assessment. All project-generated vehicular trips were assumed to traverse past each noise monitoring location evaluated as part of the Noise PCE screening. The existing vehicular counts were multiplied by three to reflect a 1-hour period.

**Table 11-14** through **Table 11-19** below contains the Noise PCE screening and results for Noise Monitoring Locations 1 through 3. As indicated below, the Proposed Action(s) would not increase existing Noise PCE values by greater than 100%. Therefore, existing noise levels are representative of future noise conditions and no further analysis is warranted.

## Table 11-14 Location 1 Noise PCE Screening

| Location 1 Noise PCE Screen | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Existing Conditions | | | | | | No-Action Conditions | | | | | | With-Action Conditions | | | | | |
| | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs |
| 8:17 AM - 8:37 AM | 27 | 69 | 3 | 3 | 0 | 276 | 77 | 70 | 4 | 3 | 0 | 344 | 111 | 70 | 8 | 3 | 0 | 430 |
| 12:45 PM - 1:05 PM | 27 | 93 | 18 | 6 | 0 | 636 | 179 | 94 | 20 | 6 | 0 | 818 | 77 | 94 | 24 | 6 | 0 | 768 |
| 5:15 PM - 5:35 PM | 69 | 96 | 0 | 0 | 0 | 165 | 222 | 97 | 0 | 0 | 0 | 321 | 146 | 97 | 2 | 0 | 0 | 271 |

*Existing 20-minute vehicle counts multiplied by 3 to reflect 1 hour periods

**All numbers rounded to the nearest whole

## Table 11-15 Location 1 Noise PCE Screening Results

| Peak Hour | Existing | No Action | With Action | Increment (WA - Existing) | % Increase (WA/Existing) |
|---|---|---|---|---|---|
| AM Noise PCE | 276 | 344 | 430 | 154 | 55.86% |
| MD Noise PCE | 636 | 818 | 768 | 132 | 20.69% |
| PM Noise PCE | 165 | 321 | 271 | 106 | 64.43% |

## Table 11-16 Location 2 Noise PCE Screening

| Location 2 Noise PCE Screen | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Existing Conditions | | | | | | No-Action Conditions | | | | | | With-Action Conditions | | | | | |
| | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs |
| 7:54 AM - 8:14 AM | 420 | 954 | 123 | 24 | 15 | 4371 | 476 | 968 | 126 | 24 | 15 | 4501 | 510 | 968 | 130 | 24 | 15 | 4587 |
| 12:23 PM - 12:43 PM | 438 | 1029 | 120 | 27 | 18 | 4620 | 597 | 1045 | 123 | 27 | 18 | 4862 | 495 | 1045 | 127 | 27 | 18 | 4812 |
| 4:53 PM - 5:13 PM | 573 | 1494 | 75 | 9 | 12 | 3681 | 734 | 1517 | 76 | 9 | 12 | 3890 | 658 | 1517 | 78 | 9 | 12 | 3840 |

*Existing 20-minute vehicle counts multiplied by 3 to reflect 1 hour periods

**All numbers rounded to the nearest whole

## Table 11-17 Location 2 Noise PCE Screening Results

| Peak Hour | Existing | No Action | With Action | Increment (WA - Existing) | % Increase (WA/Existing) |
|---|---|---|---|---|---|
| AM Noise PCE | 4371 | 4501 | 4587 | 216 | 4.94% |
| MD Noise PCE | 4620 | 4862 | 4812 | 192 | 4.15% |
| PM Noise PCE | 3681 | 3890 | 3840 | 159 | 4.33% |

## Table 11-18 Location 3 Noise PCE Screening

| Location 3 Noise PCE Screen | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Existing Conditions | | | | | | No-Action Conditions | | | | | | With-Action Conditions | | | | | |
| | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs |
| 7:30 AM - 7:50 AM | 192 | 522 | 9 | 3 | 42 | 1728 | 245 | 530 | 10 | 3 | 43 | 1818 | 279 | 530 | 14 | 3 | 43 | 1904 |
| 12:00 PM - 12:20 PM | 225 | 570 | 27 | 3 | 18 | 1611 | 380 | 579 | 29 | 3 | 18 | 1807 | 278 | 579 | 33 | 3 | 18 | 1757 |
| 4:30 PM - 4:50 PM | 240 | 579 | 15 | 3 | 36 | 1803 | 396 | 588 | 15 | 3 | 37 | 1984 | 320 | 588 | 17 | 3 | 37 | 1934 |

*Existing 20-minute vehicle counts multiplied by 3 to reflect 1 hour periods

**All numbers rounded to the nearest whole

## Table 11-19 Location 3 Noise PCE Screening Results

| Peak Hour | Existing | No Action | With Action | Increment (WA - Existing) | % Increase (WA/Existing) |
|---|---|---|---|---|---|
| AM Noise PCE | 1728 | 1818 | 1904 | 176 | 10.19% |
| MD Noise PCE | 1611 | 1807 | 1757 | 146 | 9.08% |
| PM Noise PCE | 1803 | 1984 | 1934 | 131 | 7.27% |

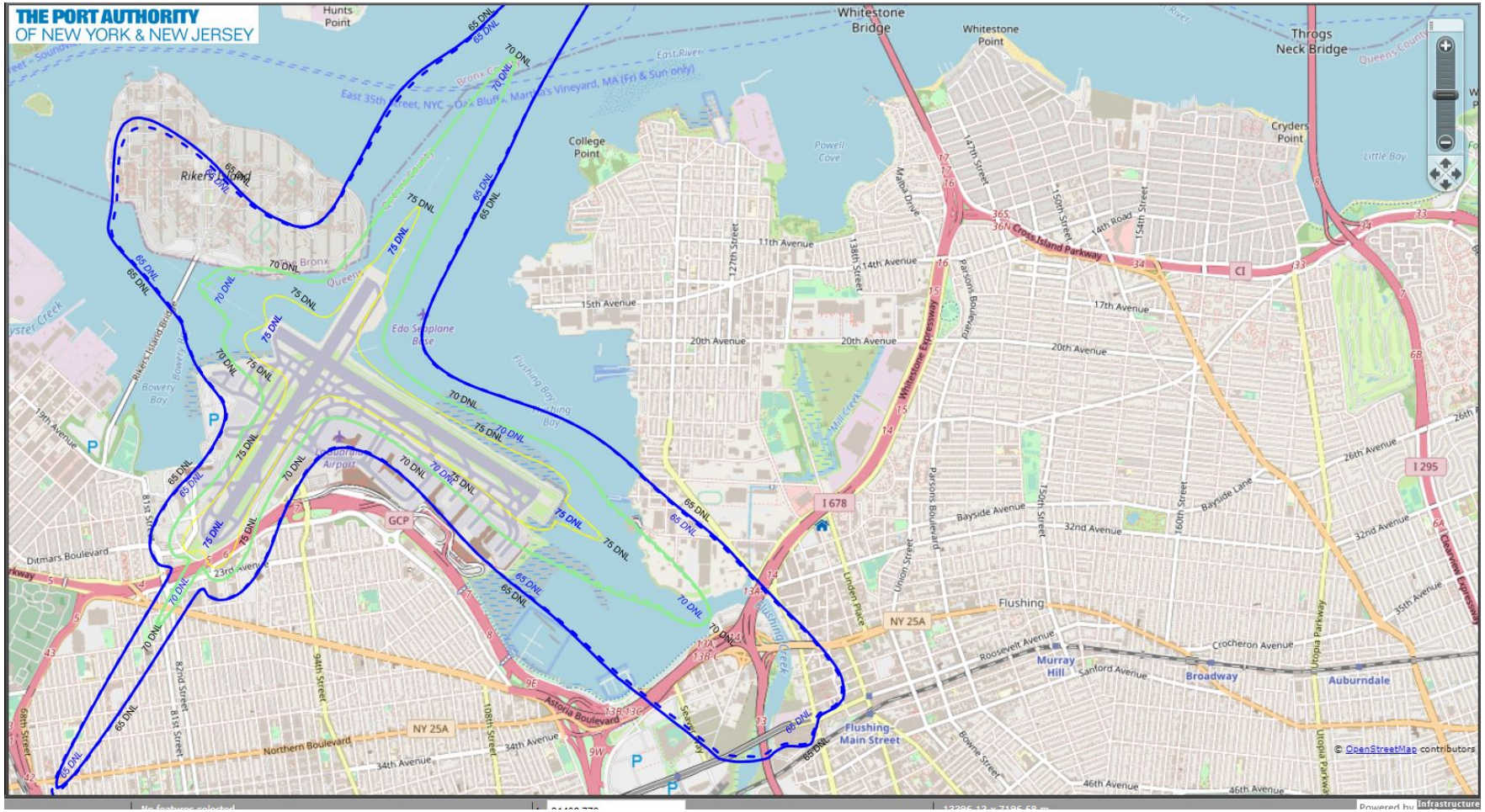
**Aircraft Noise**

According to the *2021 CEQR Technical Manual,* an initial impact screening analysis is appropriate if the proposed project would:

- Generate or reroute aircraft, such as airplanes or helicopters; or
- Introduce a new receptor that is within a 65 dB(A) DNL contour.

**Figure 11-2** below shows the Port Authority of New York and New Jersey DNL Contour Map for LaGuardia International Airport in relation to the Projected Development Site. Based on the map, the Projected Development Site is outside of the 65 dB(A) DNL contour. Therefore, there will be no significant adverse impact do due aircraft noise and no further analysis is warranted.

**Figure 11-2 Port Authority of New York and New Jersey DNL Contour Map for LaGuardia International Airport**



**Stationary Source**

It is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building mechanical equipment.

As part of the proposed actions, the Proposed Development would include new publicly accessible open spaces. These spaces do not include active recreation spaces and would not be a significant source of noise. Therefore, there will be no significant adverse impacts related to noise from the new publicly accessible open space on the Proposed Development.

**Newly Introduced Open Space**

The Proposed Development would include new publicly accessible open spaces. In the With Action condition, predicted noise levels at the proposed open spaces would be in the low to high-70's dBA, which would be above the 55 dBA L10(1) noise level recommended for outdoor areas in the *CEQR Technical Manual* noise exposure guidelines (see **Table 11-2**). As the existing L10(1) noise levels at this location are above 55 dBA, there are no practical and feasible mitigation measures that could be implemented to reduce noise levels to below the 55 dBA L10(1) guideline on the proposed new open spaces. Although noise levels in these areas would be above the guideline noise levels, they would be comparable to noise levels in a number of existing open space areas that are located adjacent to roadways, including Hudson River Park, Riverside Park, Bryant Park, Fort Greene Park, and other urban open space areas. The guidelines are a worthwhile goal for outdoor areas requiring serenity and quiet, such as passive open spaces. However, due to the mix of recreational activity and activity on the surrounding streets present at most New York City open space areas and parks, a relatively low noise level is often not achieved. Therefore, the future projected noise levels would not constitute a significant adverse noise impact to the Proposed Development's open space areas.

**Determination of Impacts/Building Attenuation Requirements**

The *2021 CEQR Technical Manual* Table 11-2 contains noise exposure guidelines or vehicular traffic. For a residential use such as would occur under the proposed action, an $L_{10}$ of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An $L_{10}$ of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure. The highest recorded $L_{10}$ at Location One (1) of the subject property was 75.0 dB(A) during the AM monitoring period. The highest recorded $L_{10}$ at

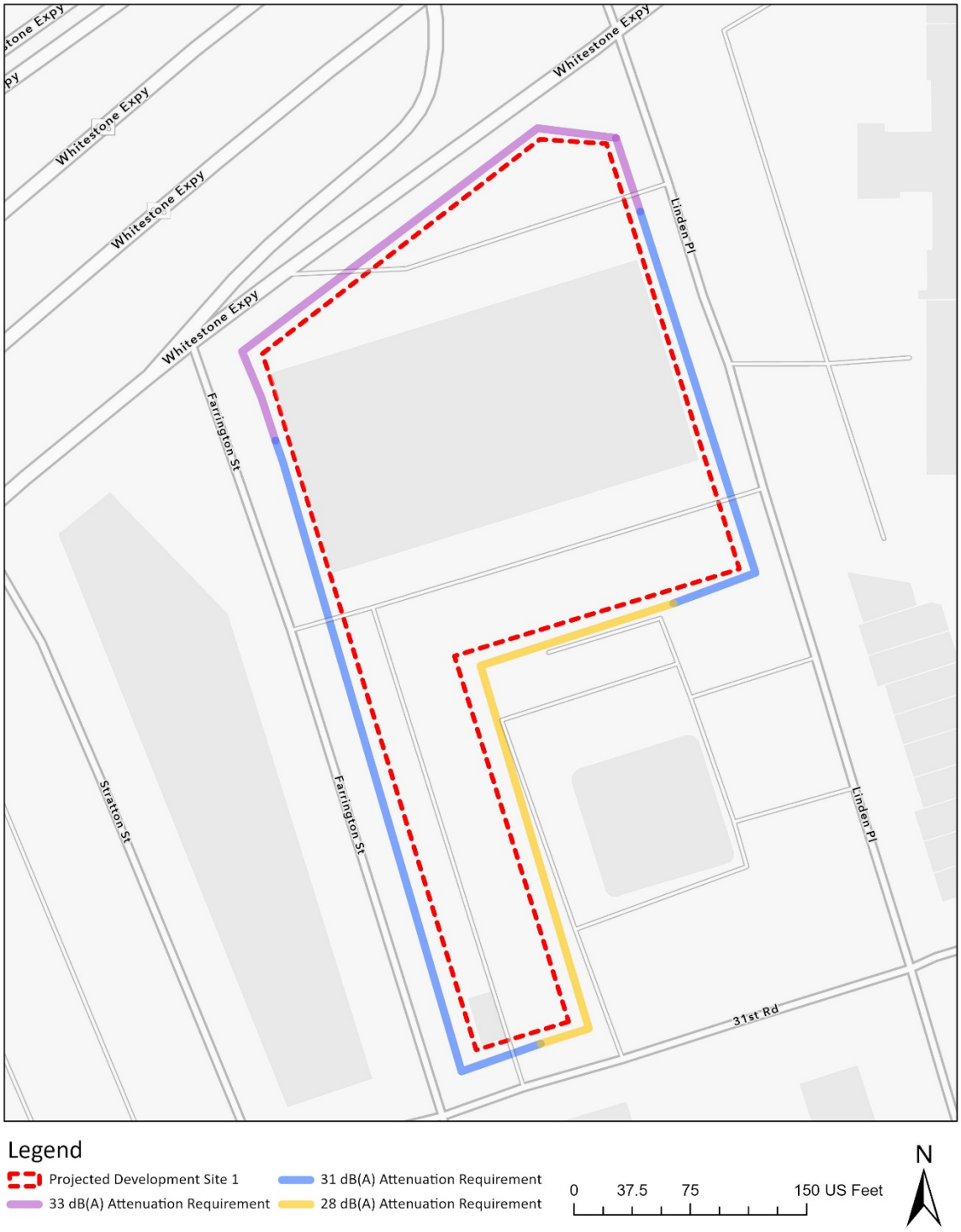
Location Two (2) of the subject property was 77.5 dB(A) during the Midday monitoring period. The highest recorded $L_{10}$ at Location Three (3) of the subject property was 75.5 dB(A) during the AM monitoring period. The highest recorded $L_{10}$ at Location Four (4) of the subject property was 72.5 dB(A) during the AM monitoring period. The highest recorded $L_{10}$ at Location Five (5) of the subject property was 77.0 dB(A) during the AM and Midday monitoring period.

Based on the results of the noise monitoring, The Projected Development Site would require 33 dB(A) window/wall attenuation on the northern (Whitestone Expressway) façade and the eastern (Linden Place) and western (Farrington Street) facades for 50' from the northern (Whitestone Expressway) facades. The remainder of the eastern (Linden Place) and western (Farrington Street) façades would require a 31 dB(A) window/wall attenuation. The southern façade would require a 31 dB(A) window/wall attenuation for 50' from the eastern (Linden Place) and western (Farrington Street) facades. The remainder of the southern façade would require a 28 dB(A) window/wall attenuation. With this level of attenuation, there would be no adverse interior impacts related to noise.

**E-719**

Projected Development Site 1 (Block 4370/ Lots 1, 15, 48): In order to ensure an acceptable interior noise environment, future residential uses must provide a closed-window condition with a minimum of 33 dB(A) window/wall attenuation on the facades facing Whitestone Expressway and the facades facing Linden Place within 50 feet of Whitestone Expressway and the facades facing Farrington Street within 50 feet of Whitestone Expressway and 31 dBA of attenuation on the facades facing Linden Place beyond 50 feet of Whitestone Expressway and the facades facing Farrington Street beyond 50 feet of Whitestone Expressway and the facades facing 31st Road within 50 feet of Farrington Street and Linden Place and 28 dBA of attenuation on the remaining facades to maintain an interior L10 noise level not greater than 45 dBA for residential uses as illustrated in the EAS. 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.

**Figure 11-3: Attenuation Requirements**




Above Window/wall attenuation requirements are for residential uses only. Commercial office uses would require 5 dB(A) less attenuation

# 12. Neighborhood Character

## Introduction

According to the CEQR Technical Manual, an assessment of neighborhood character considers how elements of the environment combine to create the context and feeling of a neighborhood and how a project may affect that context and feeling. The assessment focuses on how proposed project may have the potential to alter long established characteristics of a neighborhood. Per the CEQR Technical Manual, if a project has the potential to result in significant adverse impacts to a neighborhood's land use, zoning, public policy, urban design, visual resources, historic resources, traffic, noise, and or socioeconomics, it may have the potential to result in an impact to neighborhood character. An impact in any one of these categories, analyzed elsewhere in this EAS, does not automatically result in an impact to neighborhood character. This chapter will consider whether the potential for significant adverse impacts in the areas described above has the potential to result in an alteration in the context and feeling of a neighborhood.

The Proposed Actions would result in a development of 468,682 gross square foot (gsf), 9-story residential building. The proposed development would include 388,293 gsf of residential floor area (431 dwelling units, 108-130 of which would be permanently affordable pursuant to MIH), and 14,400 gsf of publicly accessible open space. The proposed project would include a total of 200 parking spaces in the cellar level with ingress points on Linden Place and Farrington Street and egress point on Farrington Street, as shown in the Site Plan.

## Principal Conclusions

No significant adverse impacts to neighborhood character are anticipated as a result of development facilitated by the approval of the Proposed Actions. As discussed above, the Proposed Actions would facilitate the development of a residential building containing 431 dwelling units in the Study Area. As discussed in the relevant chapters of this EAS and below, the Proposed Actions are not expected to result in significant adverse land use, zoning, public policy, urban design, visual resources, historic resources, traffic, noise, or socioeconomic impacts. The Proposed Actions would introduce new residential development including both market rate and affordable units. The introduction of new residential uses would not, when considered cumulatively, negatively affect nor alter the surrounding neighborhood's context or feeling.

## Methodology

Per the CEQR Technical Manual, a preliminary assessment of the potential for the Proposed Actions to result in significant adverse impacts to neighborhood character will answer the following questions:

1. What are the defining features of the neighborhood?

2. Does the project have the potential to affect the defining features of the neighborhood, either through the potential for a significant adverse impact or a combination of moderate effects in relevant technical areas?

As described in the CEQR Technical Manual, a neighborhood's character is the result of the combination of various contributing elements. This chapter will identify the salient features of the neighborhood. This analysis will identify the major characteristics of the neighborhood and discuss how they relate to the area's overall character.

## Preliminary Assessment

### Study Area

Per the CEQR Technical Manual, the study area for an assessment of neighborhood character resources is 400 foot radius around the Project Site. This area is generally bounded by Whitestone Expressway to the north; 137th Street to the east; 32nd Avenue to the South; and Downing Street to the west; (See Figure 4-1 – Land Use Map).

### Defining Neighborhood Features

The lots within the larger Study Area contain residential, commercial, community facility, light manufacturing and transportation uses. The lots within the Study Area that are east of Linden Place contain both medium and low-density residential uses including the Linden Towers complex across the street from the Project Area and semi-detached houses further to the south. The lots within the study area that are to the west of Linden Boulevard contain low density commercial uses (including a large grocery store and a large office building owned by NYC Dept. of Education). This area also contains light industrial uses. These are primarily auto repair and warehouses / distribution centers. A large public elementary school (P.S. 242). Is also within the Study Area.

Generally, the neighborhood is characterized by a mix of commercial and light industrial uses with high amounts of accessory parking provided on surface lots to the west and residential uses to the east. There is an increasing number of residential uses to the south

of the Study Area. The Whitestone Expressway is a major feature in the neighborhood that cuts through the northern portion of the Study Area on an East-West axis.

**Land Use, Zoning, and Public Policy**

As discussed above the Proposed Actions are not anticipated to create a significant impact to Land Use, Zoning or Public Policy. The introduction of increased residential density is not anticipated to lead to additional land use changes in the Study Area. The Proposed Actions are not anticipated to result in significant adverse impacts to land use within the Study Area. The Proposed Actions would result in the development of a building that is taller and more dense than the existing buildings in the Study Area. The introduction of new residential uses in this building remains compatible with the surrounding Study Area. Further, the Proposed Actions mirror past rezonings that allow for the introduction of medium density residential buildings at the edge of commercial and manufacturing districts. The Proposed Actions would advance several public policy objectives as they would result in the development of a more dense residetial building with a mix of incomes. These are stated policy goals in both Where we Live and Housing New York.

**Socioeconomic Conditions**

As discussed above the Proposed Actions are not anticipated to create a significant impact to Socioeconomic Conditions. As stated above, the Project Site does not contain any residential units and contains only one active business. As such, there is no potential for direct residential displacement. The Proposed Actions furthermore would not generate more than 200,000 square feet of commercial square footage, nor would the Proposed Actions otherwise impact an established industry. An assessment regarding the potential effects on indirect residential displacement and direct business displacement was conducted. This analysis found that the Proposed Actions would not create any potential significant adverse impact.

**Community Facilities**

As discussed above the Proposed Actions are not anticipated to create a significant impact to most community facilities. Utilization rates at both elementary and intermediate schools are expected to drop significantly due to the capacity projects included in the 2020-2024 Capital Plan, the introduction of 95 elementary school students in the With-Action scenario does not exceed the threshold of 100 students above 100% utilization set in the 2021 CEQR Technical Manual.

**Open Space**

As discussed above the Proposed Actions are not anticipated to create a significant adverse Open Space impact. Although the Proposed Actions would reduce the "Total" and "Active" Open Space Ratios of the Study Area, the inclusion of a PAA (committed through a Restrictive Declaration) would result in an increase in the "Passive" Open Space Ratio. The qualitative assessment of Open Space resources in the Study Area also supports the determination that the Proposed Actions are not anticipated to create a significant adverse impact to Open Space.

**Shadows**

As discussed above the Proposed Actions are not anticipated to create a significant impact to Shadows. A Tier I Screening Assessment demonstrates that no sunlight sensitive resources have the potential to receive shadows from the Proposed Development as a result of the Proposed Actions. No additional assessment is required.

**Historic and Cultural Resources**

As discussed above, there are no significant historic or cultural resources in the Study Area. As such, the defining neighborhood features in the Study Area are not defined by the presence of historical or architectural landmarks. The Proposed Development's impacts to historic and cultural resources therefore do not alter the defining neighborhood features identified above. The Proposed Actions would not create any adverse impacts to historic and cultural resources.

**Urban Design and Visual Resources**

The Proposed Actions are not anticipated to negatively impact existing building bulk, use, type, and arrangement. The Proposed Actions are not anticipated to negatively impact block form, street pattern, and street hierarchy nor are the Proposed Actions anticipated to negatively impact streetscape elements within the Study Area. The defining neighborhood characteristics do not include the presence of significant visual resources in the Study Area. Therefore, the Proposed Actions would not affect any natural resources or public view corridors to notable features or buildings in the immediate vicinity of the Rezoning Area. The Proposed Actions would introduce a PAA to the Project Area. The PAA would affect the pedestrian experience within the Study Area by adding a new landscaped plaza and spaces for both active and passive recreation. No impacts to the urban design and/or visual resources of the area are expected, and further analysis is not warranted.

**Transportation**

As discussed above the Proposed Actions are not anticipated to create a significant impact to Transportation. The proposed actions would generate less than the maximum permitted vehicle, transit and pedestrian trips and therefore is not expected to result in significant adverse transportation impacts, as detailed above.

**Conclusion**

The Proposed Development, facilitated by the approval of the Proposed Actions, does not have the potential to significantly alter long established characteristics of a neighborhood. The Proposed Project does not have the potential to result in significant adverse impacts to the Study Area's land use, zoning, public policy, urban design, visual resources, historic resources, traffic, noise, nor socioeconomics. When considered cumulatively, the Proposed Project does not have the potential to result in an impact to neighborhood character as the Proposed Actions do not have the potential to result in an alteration in the context and feeling of the neighborhood.

# 13. Water and Sewer Infrastructure

Introduction

Per the CEQR Technical Manual, the purpose of an assessment of water and sewer infrastructure is to assess whether a proposed development may have a significant adverse impact on the City's water distribution or sewer system. The CEQR Technical Manual states that projects that increase density or change drainage conditions on a large site generally require an infrastructure analysis. In addition to water supply, conveyance, and waste water treatment plant (WWTP) assessments, stormwater management is an integral component of an infrastructure analysis due to potential environmental impacts related to how much the built sewer and conveyance system can handle, and related effects such as street flooding, surcharging sewers downstream, sewer back-ups (SBUs), increases in Combined Sewage Overflows (CSOs), and pollutant loadings contained in CSOs or direct stormwater discharges to the City's surrounding waterbodies.

The CEQR Technical Manual states that a preliminary water supply infrastructure analysis is needed if the project would result in an exceptionally large demand for water (e.g., those that are projected to use more than one million gallons per day such as power plants, very large cooling systems, or large developments); or is located in an area that experiences low water pressure (e.g. areas at the end of the water supply distribution system such as the Rockaway Peninsula and Coney Island). A preliminary wastewater and stormwater conveyance and treatment infrastructure analysis would be needed if the project is located in a combined sewer area and would result in the development of more than 400 residential units or 150,000 sq. ft. of commercial, public facility, and institution and/or community facility space or more in the Bronx, Brooklyn, Staten Island, or Queens. A preliminary analysis would also be required if the Proposed Development is located in a separately sewered area and would result in development at the lower thresholds included in the CEQR Technical Manual for separately sewered areas. These thresholds are visible in **Table 13-1: Development Thresholds in Separately Sewered Areas.**

**Table 13-1: Development Thresholds in Separately Sewered Areas**

| Existing Zoning District | Number of Residential Units or Commercial/Public and Institution/Community Facility Use |
|---|---|
| R1, R2, or R3 | 25 residential units or 50,000 sq. ft. of commercial/public and institution/community facility use |
| R4, R5 | 50 residential units or 100,000 sq. ft. of commercial/public and institution/community facility use |
| All remaining zoning designations, including C, M, and Mixed-use districts | 100 residential units or 100,000 sq. ft. of commercial/public and institution/community facility use |

As discussed above, with the approval of the Proposed Actions, the Project Area would be rezoned to from an M1-1 district to an R7A district. The Applicant intends to develop a residential building in **Projected Development Site 1.** The proposed development is a 468,682 gross square foot (gsf), 9-story building. The building would have a total height of 95ft and contain 388,293 gsf of residential floor area or 431 dwelling units.

As the project is located in a separate sewer area and would result in the development of more than 100 residential units in Queens in an R7A district, a preliminary assessment of the Proposed Development's impacts on both water supply infrastructure and wastewater and stormwater conveyance and treatment infrastructure is presented below.

**Preliminary Analysis**

**Water Supply Infrastructure**

Per the CEQR Technical Manual, a preliminary water supply infrastructure analysis is needed if the project would result in an exceptionally large demand for water (e.g., those that are projected to use more than one million gallons per day such as power plants, very large cooling systems, or large developments); or is located in an area that experiences low water pressure (e.g. areas at the end of the water supply distribution system such as the Rockaway Peninsula and Coney Island).

To estimate the water demand of a Proposed Project (in gallons per day), the CEQR Technical Manual provides water usage and sewage generation rates for impact

assessments. These are summarized in **Table 13-2: Water Usage and Sewage Generation Rates.**

**Table 13-2: Water Usage and Sewage Generation Rates**

| Use | Rate (Gallons Per Day) |
|---|---|
| Residential | 100 gpd/person |
| Retail Stores | |
| Domestic | 0.24 gpd/sf |
| Air Conditioning | 0.17 gpd/sf |
| Commercial/Office | |
| Domestic | 0.10 gpd/sf |
| Air Conditioning | 0.17 gpd/sf |
| Hotel | |
| Domestic | 120 gpd/rm/occupant |
| Air Conditioning | 0.17 gpd/sf |
| Schools (day) | |
| Domestic | 10 gpd/seat |
| Air Conditioning | 0.17 gpd/sf |
| **Note:** These rates are for new uses incorporating low-flow fixtures, as required by law. | |

Using the rates provided, the total estimated water usage of the Proposed Development is **107,800** gallons per day. The water usage of the Proposed Development by use is summarized in **Table 13-3: Project Water Usage and Sewage Generation.**

**Table 13-3: Project Water Usage and Sewage Generation**

| | Units | Rates | No-Action Usage | With-Action Usage | Increment |
|---|---|---|---|---|---|
| Residential | 1,078 residents | 100gpd/Person | 0 gpd | 107,800gpd | 107,800gpd |
| Retail Domestic | 39,999 sf | 0.24gpd/sf | 9,600 gpd | 0 gpd | 0 gpd |
| Retail A/C | 39,999 sf | 0.17gpd/sf | 6,800 gpd | 0 gpd | 0 gpd |
| Office Domestic | 0 sf | 0.10gpd/sf | 0 gpd | 0 gpd | 0 gpd |
| Office A/C | 0 sf | 0.17gpd/sf | 0 gpd | 0 gpd | 0 gpd |
| Hotel Domestic | 0 Rooms | 120gpd/Room[1] | 0 gpd | 0 gpd | 0 gpd |
| Hotel A/C | 0 sf | 0.17gpd/sf | 0 gpd | 0 gpd | 0 gpd |
| Schools Domestic | 0 sf | 10gpd/student | 0 gpd | 0 gpd | 0 gpd |
| Schools A/C | 0 sf | 0.17gpd/sf | 0 gpd | 0 gpd | 0 gpd |
| **Total** | | | **16,400 gpd** | **107,800 gpd** | **+91,400 gpd** |

The Proposed Development is not located in an area that experiences low water pressure and is not anticipated to consume more than 1 million gallons of water per day. Further assessment of water supply infrastructure is therefore, not warranted.

**Wastewater and Stormwater Infrastructure**

Sewer Certification & Site Connection Proposal

Any time a project requires connecting to a City sewer, DEP must approve that the sewer can accept the storm and/or sanitary discharge. A sewer certification is required for any new connection to a City sewer, a private sewer, a private drain, a septic system, or an approved outlet. Sewer certification may also be required for an alteration or renovation that increases the sanitary and/or storm flow generated on the site. Sewer certifications must be submitted by New York State licensed Professional Engineers or Registered Architects on behalf of an owner/developer. The subsequent sewer connection permit

provides the authorization from DEP to conduct the connection work. Prior to construction, the Proposed Project will need to submit a Site Connection Proposal and receive approval from DEP.

Based on correspondence with DEP, because the Proposed Actions would result in an increase in sanitary flow in the sewer systems, the existing drainage plan in this area would need to be amended. In addition, a hydraulic analysis of the existing sewer system would 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 would be a need to upgrade the existing sewer system to follow the Amended Drainage Plan.

Unified Stormwater Rule

The Unified Stormwater Rule updates and aligns water quantity requirements in the city's combined sewer drainage areas with water quality requirements in separately sewered drainage areas, providing a comprehensive, citywide stormwater management policy for public and private development.

The Proposed Project would need to comply with the recently approved Unified Stormwater Rule amendments published as final on February 15, 2022. This Rule changed the requirements for how stormwater is managed on all new and redevelopment sites that discharge to City sewers. The rule would result in a reduction in combined sewer overflows and flooding, increase green space, establish greater consistency across stormwater programs, and provide more flexibility in design options, thus resulting in improvements to water quality.

Wastewater Treatment Plants and Collection Facilities

The Proposed Development is located in Whitestone neighborhood of Queens. This area is serviced by the Tallman Island Wastewater Treatment Plant (WTP). The Tallman Island WTP is located in the College Point section of Queens on the banks of the East River. The Tallman Island WTP treats wastewater from a Combined Sewer System, which serves all of the northeastern section of Queens. The Tallman Island WTP received considerable upgrades in 2014 to significantly reduce the nitrogen discharge of the plant (reduction of more than 3,500 pounds per day). As discussed above, the Project Area is located in a Municipal Separate Storm Sewage System (MS4).

As discussed above and summarized in **Table 13-3: Project Water Usage and Sewage Generation** the Proposed Development is expected to generate 107,800[5] gallons of

[5] Per the 2021 CEQR Technical Manual expected daily sanitary sewage generation excludes air conditioning generation.

wastewater per day. Per the CEQR Technical Manual, and information from the Department of Environmental Protection, the Tallman Island WTP is currently processing 80 Million Gallons per Day (MGD). The wastewater from the Proposed Development represents 0.13% of the plant's operational capacity. The Hunt's Point WPCP has a design dry-weather flow capacity of 80 MGD and is designed to receive a maximum wet-weather flow of 160 MGD (two times design dry weather flow [2xDDWF]).

The wastewater from the Proposed Development is therefore not expected to significantly strain the wastewater infrastructure in the area. During wet-weather events, stormwater from the Proposed Development would flow into a MS4 which outfalls onto Flushing Creek. During wet-weather events any additional stormwater flow generated by the Project Site would therefore not affect the flows at Tallman Island and not contribute to any Combined Sewage Overflow (CSO) events. No further assessment of water treatment plants or collection plants is warranted. Instead, stormwater from the Proposed Development could affect the MS4 which services the site. This is discussed below.

Sanitary and Stormwater Drainage and Management

Per the CEQR Technical Manual, if analyses indicate the project would increase flows of stormwater, overburden the wastewater or stormwater infrastructure, or create the potential to result in additional Combined Sewage Overflow (CSO) volumes or events, changes to the affected sewer system the Proposed Project may have a significant on water infrastructure.

As described in the EAS, the Project Area is currently occupied by a bowling alley surrounded by a parking lot. In the No-Action condition four single story buildings (each measuring 25 feet in height) cumulatively totaling 39,996 gsf (1.0 FAR) containing destination retail uses would be developed. These buildings would include 133 (1 per 300sf) required parking spaces in a surface level parking lot accessible via entrances on Farrington Street and Linden Place. The Proposed Development would be built on Project Development Site 1 in the With-Action condition. The Proposed Development would include a landscaped Public Access Area, a private ground floor garden for residents, and tree plantings.

The appropriate runoff coefficient was identified for the Project Area for the Existing, No-Action, and With-Action condition based on surface type using the worksheet provided in Chapter 13 of the CEQR TM and are presented in the table below. The ratio of "hard" landscaping features (paved areas used for tables, benches, and other features) to "soft" landscaping features (planted lawn areas, tree planters, and flower beds) in the With-Action condition is estimated to be 70% impermeable to 30% permeable. As demonstrated in the summary table below, the With-Action scenario is expected to

decrease the volume of water to the MS4 during rainfall events. The DEP Volume Calculation Matrix is included as an appendix to this EAS.

The Proposed Actions would decrease total volume to the CSS during rain events of 2.5 inches for 19.5 hours from 0.14 Million Gallons (MG) to 0.11 MG. This represents an increase of 0.03 MG in the With-Action Scenario over existing conditions. Therefore, the Proposed Development is likely to decrease overall stormwater runoff within the Project Area. The Proposed Development does not have the potential to create significant stormwater drainage impacts.

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

**CSO SUBCATCHMENT AREA:**[1]

**EXISTING**

| | | Area = 80,389 SF (1.845 ACRES) | | | | Area = XX,XXX SF (XX.XX ACRES) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SITE A | | | | SITE B[2] | | | | SITE A & B |
| 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 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 |
| 0.40 | 3.80 | 0.02 | 0.02 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 |
| 1.20 | 11.30 | 0.06 | 0.06 | 0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 |
| 2.50 | 19.50 | 0.12 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 |

**With-Action**

| | | Area = 80,389 SF (1.845 ACRES) | | | | Area = XX,XXX SF (XX.XX ACRES) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SITE A | | | | SITE B[2] | | | | SITE A & B |
| 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 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |
| 0.40 | 3.80 | 0.02 | 0.00 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |
| 1.20 | 11.30 | 0.05 | 0.00 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |
| 2.50 | 19.50 | 0.11 | 0.00 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |

[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.

**Conclusion**

Approval of the Proposed Actions would result in an approximate increase of **91,400 gallons per day** in water consumption compared to the No-Action condition. The Proposed Development would also introduce 107,800 gallons of sewage to the Tallman Island WTP. This increase would represent **0.13**% of the total capacity of the Tallman Island WTP and is therefore not anticipated to result in significant adverse impacts. The Proposed Development would increase the total impermeable surface of the Project Site and therefore decrease stormwater volumes. The decrease in stormwater volume, (visible only in stormwater events with more than 2.5 inches of rain over 19.5 hours) would result in less discharge into Flushing Creek and less strain on Tallman Island during wet-weather events. No significant adverse impacts to water or sewer infrastructure are anticipated as a result of development facilitated by the approval of the Proposed Actions.

# 14. Construction

## Introduction

Based on the guidelines presented in the 2021 CEQR Technical Manual (Chapter 22, Section 200), a preliminary construction analysis may be required because future development facilitated by the Proposed Actions could result in:

- Construction activities lasting longer than 2 years
- The operation of several pieces of diesel equipment in a single location at peak construction; and
- Construction activities along an arterial highway

### Proposed Construction Schedule

Construction would occur on Projected Development Site 1 (Applicant-owned Site). It is assumed that the Proposed Actions would be approved in the fourth quarter of 2023. The Proposed Development on the Applicant Controlled Projected Development Site 1 is expected to be completed by 2026 after an up to 36-month construction period.

### Applicant-owned Site

Construction of Projected Development Site 1 is expected to begin in the fourth quarter of 2023 and be completed within 36 months by September 2026. The construction sequence and timeline for Projected Development Site 1 is listed below.

### Proposed Construction Activities

Construction activities on Projected Development Site 1 would be as detailed below and illustrated in the construction schedule graphic which follows. Approximately 27 months would involve exterior construction activities on the proposed building and approximately 9 months would be required for interior fit-out activities. There would be an approximately two -month overlap between the completion of exterior work and the beginning of interior work on the site. The total construction period on the Projected Development Site would be 36 months.

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

## Whitestone Lanes Anticipated Construction Schedule

| Year | 2023 | 2024 | | | | 2025 | | | | 2026 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Quarter** | **Q4** | **Q1** | **Q2** | **Q3** | **Q4** | **Q1** | **Q2** | **Q3** | **Q4** | **Q1** | **Q2** | **Q3** | **Q4** |
| **Construction** *(468,682 GSF)* | | | | | | | | | | | | | |
| A. Demolition, Excavation & Foundation | | | | | | | | | | | | | |
| B. Superstructure and Exterior | | | | | | | | | | | | | |
| C. Interior Fit-out & Site Clean-up | | | | | | | | | | | | | |

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 workday ends by 3:30 PM with an occasional extended shift until 6 PM.

**Potential Construction Impacts**

In accordance with the 2021 *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

**Principal Conclusion**

Peak construction conditions during the third quarter of 2024 through the third quarter of 2025 were considered for the analysis of potential transportation (traffic, parking, transit, and pedestrian) impacts during construction. Based on the trip generation and trip assignment of anticipated incremental construction worker vehicle trips and truck delivery trips during the 2024 Q3-2025 Q3 peak construction period, it is concluded that the vehicular traffic demand from construction workers and truck delivery on the Projected Development Site would not meet the 50 trips/hour/intersection *CEQR Technical Manual* threshold for a detailed traffic and parking analysis. Therefore, significant adverse impacts to vehicular traffic are not expected to occur during the 2024 Q3-2025 Q3 peak construction period.

During the 2024 Q3-2025 Q3 peak construction period, transit demand from construction workers on the Projected Development Site would not meet the 200 trips/hour *CEQR Technical Manual* threshold for a detailed subway analysis, nor the 50 trips/hour/direction threshold for a detailed bus analysis. Therefore, significant adverse impacts to subway and bus services are not expected to occur during the 2024 Q3-2025 Q3 peak construction period.

Similarly, during the 2024 Q3-2025 Q3 peak construction period, pedestrian demand from construction workers on the Projected Development Site (both walk-only trips and trips from transit services) would not meet the 200 trips/hour CEQR Technical Manual analysis threshold for a detailed pedestrian analysis. Significant adverse pedestrian impacts are therefore not expected to occur during the 2024 Q3-2025 Q3 peak construction period.

**Analysis**

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.*

Projected Development Site 1 would be constructed along the Whitestone Expressway, Linden Place and Farrington Street. It is not anticipated that the construction on Projected Development Site 1 would require the closing of any transportation elements adjacent the Project Site. The large site layout of Projected Development Site 1 should allow for many different approaches by heavy machinery and provides for onsite staging of construction materials. It is anticipated that there would be adequate space on Projected Development Site 1 to accommodate construction vehicles without blocking any transportation elements along the Whitestone Expressway.

**Project-Generated Construction Worker and Truck Delivery Traffic**

Construction activities would generate construction worker auto trips and truck trips. Similar to other construction projects in New York City, most of the construction activity at the Development Site is expected to take place during the typical construction shift of 7:00 AM to 3:30 PM. The estimated daily vehicle trips were distributed throughout the workday based on projected work shift allocations and conventional arrival/departure patterns of construction workers and trucks. For analysis purposes, each truck delivery was assumed to result in two truck trips during the same hour (one "in" and one "out"), and each truck trip was assumed to have a passenger car equivalent (PCE) of 2.0, consistent with CEQR Technical Manual guidance. For construction workers, the majority (80 percent) of arrival and departure trips are expected to take place during the hour before and after each shift. For construction trucks, deliveries would typically peak during the early morning, with an estimated 25 percent overlapping with construction worker arrival traffic.

Based on 2000 U.S. Census Reverse Journey-to-Work Means of Transportation for workers in the construction and excavation industry for census tracts in proximity to the Project Development Site, it is estimated that approximately 72.7 percent of construction workers would travel to the Project Area by motor vehicle (approximately 71.7 percent by private autos and 1.0 percent by taxis/rideshare services), 24.1 percent by public transportation, and 3.2 percent by walking, bicycle or other modes. It is also estimated that the auto occupancy would average approximately 1.17 persons per vehicle. These

trip generation assumptions were used as the basis for assessing the potential transportation-related impacts during construction. The construction timeline for the development under the No-Action condition is likely to be significantly shorter than that of the Projected Development. Therefore, for the purpose of conservative analysis, the construction traffic under the No Action condition was not taken into account when analyzing the construction effects associated with the Proposed Actions.

The number of workers and trucks associated with material deliveries varies with the scale of the project and the general construction task. **Table 14-1** below shows the estimated daily number of construction workers and truck deliveries to the Projected Development Site by calendar quarter, based on the proposed construction schedule and projections of construction activities from other approved EASs and EISs. Because the interior fit-out stage will begin before the completion of the exterior construction in November 2025, it will result in a two-month overlap between the exterior construction stage and interior fit-out stage in November and December 2025. Given the overlap between the final phase of exterior construction and the initial phase of interior fit-out, it is reasonable to expect that the construction worker and truck trips during this period will not reach the peak demand projected for both stages. This transportation analysis assumes that 50% of the peak construction worker and truck trips from both the exterior construction stage and the interior fit-out stage will occur during the overlapping months of November and December 2025. Consequently, the projected daily construction worker and truck trips during the overlapping period will be fewer than those of the non-overlapping period in the exterior construction stage, but greater than those of the non-overlapping period in the interior fit-out stage. As shown in **Table 14-1**, the number of workers and trucks would peak in the third quarter of 2024 through the third quarter of 2025 at approximately 196 workers and 25 trucks per day. Based on the modal splits and vehicle occupancy data as discussed above, it was estimated that the number of worker vehicle trips and truck trips would peak in the third quarter of 2024 through the third quarter of 2025, with an estimated 248 worker vehicle trips (240 private auto trips and 8 taxi/rideshare trips) and 100 truck PCE trips (one "in" and one "out") per day, as shown in **Table 14-2**. The average daily construction worker trips by other means of transportation during the projected peak construction period from the third quarter of 2024 to the third quarter of 2025 are summarized and shown in **Table 14-3**.

**Table 14-1 Average Number of Daily Construction Workers and Trucks by Year and Quarter**

| | | 2023 | | | | 2024 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Total | Workers | | | | 51 | 51 | 51 | 196 | 196 |
| | Trucks | | | | 18 | 18 | 18 | 25 | 25 |
| | | 2025 | | | | 2026 | | | |
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Total | Workers | 196 | 196 | 196 | 178 | 142 | 142 | 142 | |
| | Trucks | 25 | 25 | 25 | 20 | 8 | 8 | 8 | |

**Table 14-2 Average Number of Daily Vehicle Trips of Construction Workers and Truck Delivery Trips by Year and Quarter**

| | | 2023 | | | | 2024 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Total | Worker Auto Trips | | | | 64 | 64 | 64 | 240 | 240 |
| | Worker Taxi Trips | | | | 2 | 2 | 2 | 8 | 8 |
| | Truck Trips (PCEs) | | | | 72 | 72 | 72 | 100 | 100 |
| Total | | | | | 138 | 138 | 138 | 348 | 348 |
| | | 2025 | | | | 2026 | | | |
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Total | Worker Auto Trips | 240 | 240 | 240 | 218 | 174 | 174 | 174 | |
| | Worker Taxi Trips | 8 | 8 | 8 | 6 | 6 | 6 | 6 | |
| | Truck Trips (PCEs) | 100 | 100 | 100 | 80 | 32 | 32 | 32 | |
| Total | | 348 | 348 | 348 | 304 | 212 | 212 | 212 | |

**Table 14-3 Average Daily Construction Worker Transit and Walk Trips during the Peak Construction Period 2024 Q3 – 2025 Q3**

| **Peak Construction Period** | **2024 Q3 – 2025 Q3** |
|---|---|
| Construction Worker Transit Trips | 94 |
| Construction Worker Walk & Other Trips | 12 |
| **Total** | 106 |

**Traffic**

As discussed above, the third quarter of 2024 through the third quarter of 2025 was selected as the time period for assessing potential traffic impacts from vehicle trips associated with construction activities, because this period of time includes the peak quarter for construction traffic. **Table 14-4** shows a forecast of hourly construction worker auto and truck delivery trips during the peak construction period between the third quarter of 2024 through the third quarter of 2025. The temporal distribution for these vehicle trips was based on typical work shift allocations and conventional arrival/departure patterns for construction workers. The majority (80 percent) of construction worker arrival and departure trips are expected to take place during the hour before and after each shift, whereas construction truck delivery trips are expected to peak during the early morning, with an estimated 25 percent overlapping with construction worker arrival traffic. Each truck delivery was assumed to result in two truck trips during the same hour (one inbound and one outbound). For analysis purposes, truck trips were converted into PCEs based on one truck being equivalent to an average of two PCEs.

As shown in **Table 14-4** below, during the peak construction period (2024 Q3-2025 Q3), construction-related traffic is expected to peak during the 6 to 7 AM morning peak hour and 3 to 4 PM afternoon peak hour.

**Table 14-4 Hourly Construction Worker Vehicle Trips and Truck Delivery Trips during the Peak Construction Period 2024 Q3 – 2025 Q3**

| | Trucks (PCEs) | | | Workers | | | Taxi | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total | |
| 6-7AM | 13 | 13 | 26 | 96 | 0 | 96 | 2 | 2 | 4 | 126 |
| 7-8AM | 5 | 5 | 10 | 24 | 0 | 24 | 0 | 0 | 0 | 34 |
| 8-9AM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 9-10AM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 10-11AM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11AM-12PM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 12-1PM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 1-2PM | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2-3PM | 3 | 3 | 6 | 0 | 6 | 6 | 0 | 0 | 0 | 12 |
| 3-4PM | 1 | 1 | 2 | 0 | 96 | 96 | 2 | 2 | 4 | 102 |
| 4-5PM | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 18 |
| Daily Total | 50 | 50 | 100 | 120 | 120 | 240 | 4 | 4 | 8 | 348 |

As shown above, construction traffic during the peak construction period is expected to result in 126 PCEs during the 6-7 AM peak hour and 102 PCEs during the 3-4 PM peak hour. Therefore, in accordance with *2021 CEQR Technical Manual* 50 vehicle trips threshold, a Level-2 traffic assignment analysis was conducted for the AM and PM peak hour. The traffic assignment analysis (See Attachment F: **Construction Appendix**) shows that no intersections in the Project Area would exceed the CEQR threshold of 50 vehicle trips for any peak hour during the peak construction period. It is concluded that a detailed assessment of traffic impact of the construction of the Proposed Actions would not be required.

**Parking**

As shown in **Table 14-4**, during the peak construction period, it is estimated that the maximum daily parking demand from construction workers would be 120 in the morning peak period (6:00-8:00 AM). The workers are expected to park on-street and in off-street public parking facilities in proximity to the Projected Development Site throughout the Project Area. Because the construction of the Proposed Actions would screen for vehicular traffic as detailed above, and per the *CEQR Technical Manual*, no detailed parking assessment would be required.

**Transit**

As shown above in **Table 14-3**, the construction of the Proposed Actions would result in 94 daily transit trips during the peak construction period. Therefore, in accordance with the *CEQR* 200 subway/bus trips threshold, a detailed transit impact analysis would not be required for the peak construction period of the Proposed Actions.

**Pedestrians**

As shown above in **Table 14-3**, the construction of the Proposed Actions would result in 106 daily pedestrian trips (a sum of walk-only trips and transit trips) during the peak construction period. Therefore, in accordance with the *CEQR* 200 pedestrian trips threshold, a detailed pedestrian impact analysis would not be required for the peak construction period of the Proposed Actions.

**Transportation Conclusion**

In accordance with the threshold guidelines as detailed in the *2021 CEQR Technical Manual*, the construction work of the Proposed Actions is not expected to result in significant adverse impacts related to transportation.

Construction Air Quality

The need for a quantitative air quality analysis is determined by several factors, such as the type of construction activity and the construction equipment used, the duration of any heavy construction activity, the physical relationship of the project site to nearby sensitive receptors (e.g., residential, hospital, school), and the commitment to use emission control measures.

Construction under the Proposed Actions is anticipated to last approximately 36 months (October 2023 to September 2026). The level of construction activity would vary among the stages of construction. Demolition, excavation, and foundation work will occur in the first stage of the construction, during a 9-month period (October 2023 to June 2024). As one stage is completed, the next stage begins. The superstructure and exterior stage of the construction will occur during an 18-month period (July 2024 to December 2025), where the superstructure buildout will last approximately 9 months. The interior fit-out will last approximately 9 months (January 2026 to September 2026). The emissions generated in the abatement and demolition and excavation and foundation stages are mainly related to on-site diesel equipment, trucks emissions, and particulate matter (as fugitive dust) generated by excavation and earth-moving operations. Generally, there is significantly more particulate emission during the excavation and foundation stage of the construction. In addition to on-site emission sources, the construction air quality analysis also accounted for the emissions of construction-related on-road trucks and passenger vehicles used by the construction workers.

The Project Site is located in an area where there are sensitive receptors, the construction activities would involve heavy-duty diesel equipment and earth-moving operations, and the construction phase will last more than 2 years. Therefore, a quantitative air quality analysis was undertaken to evaluate the potential for significant adverse impact. The analysis included emissions from non-road construction equipment, construction-related dust emissions, and on-road vehicles.

In addition to the construction quantitative air quality analysis, a mobile source screen was conducted to determine if the project-increment construction traffic will exceed the *CEQR Technical Manual* thresholds for carbon monoxide (CO) and particulate matter with aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$).

*Mobile Source Screen*

As indicated in the Transportation section of this Chapter, the vehicular traffic demand from construction workers and truck delivery on the Projected Development Site would not meet the 50 trips/hour/intersection. Therefore, the projected traffic volumes would not exceed the CO screening threshold defined in the 2021 *CEQR Technical Manual* (170 peak hour vehicle trips at an intersection in the study area).

Heavy-duty diesel vehicles (HDDVs) screens were conducted for the construction workers and truck delivery during the AM and PM peak hours at the four intersections surrounding the Projected Development Site 1. Using the New York City Department of Environmental Protection's ("DEP's") Equivalent Truck Calculation Matrix, the $PM_{2.5}$ vehicular emission screening threshold ranges from 12 to 23 HDDVs depending on the type of roadway. For analysis purpose, all autos were assumed to be LDGT1 class vehicles, based on guidance from the DCP for similar projects. To account for both roadways in an intersection (HDDV screening assessment is applicable to a single roadway), based on DCP methodology, the ratios of the equivalent truck calculation to the HDDV threshold for each roadway were summed. If the aggregate ratio at an intersection (for each peak-hour period) is less than 1, the intersection passes the HDDV screen. **Table 14-5** shows the AM and PM peak hours incremental construction workers and truck delivery traffic volumes at the most affected intersections, and the results of the *CEQR Technical Manual* Equivalent Truck Calculation Matrix.

**Table 14-5: Peak traffic demand from construction workers and truck delivery and HDDVs Truck Calculation Matrix**

| Peak Hour | Auto Per Hour | Truck Per Hour | E-Truck Ratio | Auto Per Hour | Truck Per Hour | E-Truck Ratio | Combined E-Truck Ratio |
|---|---|---|---|---|---|---|---|
| | Intersection of Whitestone Expy Service Road South & Linden Place | | | | | | |
| | Whitestone Expy Service Road | | | Linden Place | | | |
| **AM** | 25 | 12 | 0.973 | 1 | 0 | 0.002 | 0.98 |
| **PM** | 24 | 0 | 0.251 | 1 | 0 | 0.002 | 0.25 |
| | Intersection of 31st Road & Linden Place | | | | | | |
| | 31st Road | | | Linden Place | | | |
| **AM** | 12 | 0 | 0.464 | 13 | 10 | 0.525 | 0.99 |
| **PM** | 0 | 0 | 0 | 25 | 2 | 0.148 | 0.15 |
| | Intersection of 31st Road & Farrington Street | | | | | | |
| | 31st Road | | | Farrington Street | | | |
| **AM** | 12 | 0 | 0.464 | 12 | 0 | 0.464 | 0.93 |
| **PM** | 0 | 0 | 0 | 25 | 0 | 0.967 | 0.97 |
| | Intersection of Whitestone Expy Service Road South & Farrington Street | | | | | | |
| | Whitestone Expy Service Road | | | Farrington Street | | | |
| **AM** | 25 | 4 | 0.499 | 0 | 0 | 0.000 | 0.50 |
| **PM** | 1 | 0 | 0.010 | 24 | 0 | 0.929 | 0.94 |

Note:
1. Whitestone Expy Service Road annual average traffic is 11,981, and as such assumed to be a collector road.
2. 31st Road and Farrington Street are local roadways, and Linden Place is an arterial roadway.

As shown in **Table 14-5**, the HDDV equivalent truck to HDDV threshold aggregate ratios is less than 1 at all intersections. Therefore, the Proposed Actions construction workers and truck delivery pass the HDDV screen.

*Pollutants of Concern*

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for major air pollutants, known as criteria pollutants. In addition to the NAAQS, the New York City's *de minimis* criteria are used to determine the significance of the incremental increases in 8-hour carbon monoxide (CO) concentration and the 24-hour and annual particulate matter with aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$) concentrations. The NAAQS and *de minimis* are discussed in Chapter 10, "Air Quality."

The U.S. Environmental Protection Agency (EPA) mandates the use of ultra-low sulfur diesel (ULSD) fuel for all highway and non-road diesel engines. As such, sulfur oxides (SOx) emissions associated with the construction activities would be negligible. Therefore, the pollutants analyzed for the construction period were annual average nitrogen dioxide ($NO_2$), particulate matter with aerodynamic diameter less than or equal to 10 microns ($PM_{10}$), $PM_{2.5}$, and CO.

*Emission Reduction Program*

Emission reduction measures concerning dust suppression measures, idling vehicles, and use of clean fuel would be implemented to reduce pollutants emissions. The following emission reduction measures are specified in the NYC Local Law 77 and the New York City Air Pollution Code (New York City Administrative Code and Rules of the City of New York (RCNY)).

- *Dust Control.* Dust suppression measures would be implemented. Such measures would include, but not be limited to, wetting of construction material and particulate matter kept on-site (e.g. soil or debris piles), wetting where certain construction activities (e.g. drilling and grinding) occur, covering of spoil or loose material during transport and wetting of material prior to loading into trucks, removal of dust from adjacent streets and sidewalks, and requiring that vehicles entering or existing the site travel at low speed.

- *Restrictions on Vehicle Idling.* Idling restrictions require that no motor vehicle idle for longer than three minutes, unless the engine is used to operate a loading, unloading or processing device (e.g., concrete mixing trucks and concrete pump trucks).

- *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.* Ultra-low sulfur diesel (ULSD) would be used for all diesel fueled on-road vehicles and non-road vehicles and engines, where the sulfur content in ULSD is 15 parts per million (ppm). The use of USLD is regulated by the EPA under the diesel fuel regulations.

In addition to the required emission reduction measures specified above, the construction activities under the Proposed Actions are expected to implement additional measures. These control measures are aimed at reducing particulate matter emissions during construction (implementing these control measures could potentially decrease emissions of other pollutants). Commitments were specified to use the following emission control measures:

- *Best Available Tailpipe Reduction Technologies.* Under the Proposed Actions, all diesel-powered non-road construction equipment with hp rating of 50 hp or greater would meet at least the Tier 3 emissions standards and the equipment would utilize diesel particulate filter (DPF). The DPFs would either be installed by the original equipment

manufacturer or retrofitted. The retrofitted DPFs must be verified by EPA or the California Air Resources Board (CARB).

The above measures will be committed by the Applicant as Project Components Related to the Environment (PCREs) related to construction-period air quality.

*Emissions Profile – Air Quality*

Construction emission sources include non-road construction equipment, on-road vehicles, and dust-generating construction activities. Non-road construction equipment may include equipment operating on Site, such as a crane, excavators, and a front-end loader. On-road vehicles may include trucks (e.g., dump trucks) traveling on Site as well as on roadways, and worker vehicles traveling on roadways.

Representative construction equipment schedule was developed based on similar types of projects under CEQR and the stages of construction. Trucks distribution (dump, concrete, and delivery trucks) was based on the stages of construction, equipment schedule, and to maximize emission (dump trucks traveling on-site generate significant amount of emission). As such, minimal number of delivery or concrete mixing trucks were assumed during the demolition, excavation, and foundation stage of construction. During the superstructure build-out truck trip-generation will comprise mainly of concrete mixing trucks. Concrete mixing trucks emissions during unloading were based on 60 minutes idle time. Dump trucks and delivery trucks were assumed to idle for 3 minutes while loading/off-loading. All on-street project-increment vehicles (trucks and worker vehicles) were assumed to travel on Linden Place.

Pollutants emission factors emitted by non-road construction equipment and on-road vehicles were developed with the EPA's Motor Vehicle Emission Simulator version 3 (MOVES3) emission model, or based on Tier 3 engines retrofitted with DPF to achieve 60-90 percent removal efficiency for particulate matter. Tier 3 nonroad diesel engine standard for PM is 0.30 g/kW-hr for engine power category 100≤hp<175 and 0.20 g/kW-hr for engine power category 175hp and greater. The MOVES3 model was discussed in Chapter 10, "Air Quality." Fugitive dust emissions ($PM_{10}$ and $PM_{2.5}$) generated by travelling vehicles (on paved on unpaved roads) and material handling were calculated using the EPA's AP-42 manual *Chapter 13: Miscellaneous Source*.[6] Silt loading factors for paved and unpaved roadways, obtained from the *CEQR Technical Manual*, were used in the analysis. Wetting of piles and/or unpaved roads (trucks and equipment travel on Site) accounted for fifty percent control efficiency. A worst-case analysis period was derived for each pollutant averaging time. The maximum 12-month rolling average emission for each pollutant was applied for the annual time frame analysis.

[6] EPA. "Compilation of Air Pollutant Emission Factors AP-42 Fifth Edition, Vol. 1: Stationary Point and Area Sources." Accessed April 3, 2023. https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-13-miscellaneous-0.

*Dispersion Analysis – Air Quality*

Pollutants concentrations were predicted with AERMOD. AERMOD MPI version 22112 executable was used in the dispersion analysis. Lakes Environmental, Inc. adjusted the EPA AERMOD source code and recompiled the model to parallelize the processing of receptors, reducing run-time significantly. The MPI executable (used in the analysis) modified the EPA AERMOD executable model version 22112. The AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The model was run with the regulatory default option, where applicable, and for both with and without downwash effects options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using five consecutive years of meteorological data (2017-2021), obtained from the New York State Department of Environmental Conservation (NYSDEC). Meteorology surface data is from LaGuardia Airport, upper air data is from Brookhaven station, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Population in Queens, obtained from the New York City Department of City Planning (DCP) 2020 annual report, was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Receptors at nearby existing buildings were placed on all wall façade from ground floor (6-foot above grade) to rooftop height, in spaced intervals. Receptors were also placed on sidewalks and at ground level (6-foot above grade) at the adjacent property and the housing complex located across the street from the Site on the east side of Linden Place. Lakes Environmental, Inc. commercial application of AERMOD (AERMOD View) was used to spatially locate features (buildings, emission sources, and receptors). The U.S. Geological Service (USGS) National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset), the terrain data set recommended by the EPA for use in the United States for regulatory purposes, was used to process buildings, receptors, and sources base elevations. The base elevations of receptors at receiving buildings were set to the base elevations of their buildings. On-street vehicular emissions were modeled as line area sources, where the sources dispersion parameters calculated based on the EPA's guidance manual.[7]

The model was run twice (with building wake effect enabled/disabled). The predicted concentration is the highest concentration of these. The criteria pollutants dispersion

[7] EPA. 2021. *PM Hot-spot Guidance, Transportation Conformity Guidance for Quantitative Hot-spot Analyses in $PM_{2.5}$ and $PM_{10}$ Nonattainment and Maintenance Areas*. EPA-420-B-10-040, Transportation and Regional Programs Division, Office of Transportation and Air Quality, U. S. Environmental Protection Agency, October 2021.

analysis results are presented in **Table 14-6.** As seen in **Table 14-6**, $PM_{2.5}$ and 8-hour CO concentrations are within the *de minimis* and all other pollutants concentrations are within the NAAQS

**Table 14-6: Criteria Pollutants Dispersion Analysis Results**

| Criteria Pollutant | Increment Conc. | Background Conc.(1) | Evaluated Conc. | Standard Conc. | Standard | Conc. Unit(2) |
|---|---|---|---|---|---|---|
| $PM_{2.5}$ 24-Hour | 2.19 | 18.1 | 2.19 | 8.45 | *de minimis* | $\mu g/m^3$ |
| $PM_{2.5}$ Annual | 0.28 | 7.0 | 0.28 | 0.3 | *de minimis* | $\mu g/m^3$ |
| $PM_{10}$ 24-Hour | 24.4 | 28 | 52 | 150 | NAAQS | $\mu g/m^3$ |
| CO 1-Hour | 2.33 | 1.51 | 3.84 | 35 | NAAQS | ppm |
| CO 8-Hour | 1.37 | 1.10 | 1.37 | 3.95 | *de minimis* | ppm |
| $NO_2$ Annual | 4.6 | 26.8 | 31 | 100 | NAAQS | $\mu g/m^3$ |

Note:
1. NYSDEC. 2019. "New York State Ambient Air Quality Report for 2019." Accessed April 3, 2023. https://www.dec.ny.gov/docs/air_pdf/2019airqualreport.pdf.
2. Part per million – ppm; Micrograms per cubic meter $\mu g/m^3$.

*Conclusion – Air Quality*

Predicted pollutants concentrations at nearby sensitive land uses will not exceed the NAAQS and the increment pollutants concentrations will be within the *de minimis*. Therefore, no significant adverse air quality impact is expected to occur as a result of the project construction with the implementation of the emission control measures including the following commitment(s):

**Air Quality Restrictive Declaration**

***Under the Proposed Actions, all diesel-powered non-road construction equipment with hp rating of 175 hp or greater would meet at least the Tier 3 emissions standards and the equipment would utilize diesel particulate filter (DPF). The DPFs would either be installed by the original equipment manufacturer or retrofitted. The retrofitted DPFs must be verified by EPA or the California Air Resources Board (CARB).***

## Noise

Potential impacts on community noise levels during construction of the Proposed Development could result from construction equipment operation and construction trucks and worker vehicles traveling to and from the Development Site. Noise levels at a given location are dependent on the type and number of pieces of construction equipment operated, the acoustical utilization factor of the equipment (i.e., the percentage of time a piece of equipment is operating at full power), the distance from the construction site, and any shielding effects (from structures such as buildings, walls, or barriers). Noise levels from construction activities would vary widely, depending on the stage of construction and the location of the construction relative to receptor locations as described below. The most noise-intensive construction activities would not occur every day or every hour on those days that they would occur. During hours when the loudest pieces of construction equipment are not in use, receptors would experience lower construction noise levels. Construction noise levels would fluctuate during the construction period at each receptor, with the greatest levels of construction noise occurring for limited periods. The most substantial construction noise sources are expected to be impact equipment such as excavators with hydraulic break rams and paving breakers, as well as the movements of trucks.

Construction noise is regulated by the requirements of the *New York City Noise Control Code* (also known as Chapter 24 of the *Administrative Code of the City of New York*, or Local Law 113) and the DEP Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28). These requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. For weekend and after hour work, permits would be required, as specified in the *New York City Noise Control Code*. As required under the *New York City Noise Control Code*, a site-specific noise mitigation plan for the Projected Development Sites would be developed and implemented that may include source and path controls.

### Construction Noise Analysis Fundamentals

The *CEQR Technical Manual* states that an assessment of construction noise is warranted if a proposed project's construction activities include any of the following:

- Is considered long-term construction (greater than two years);
- Is located near sensitive receptors;
- Involves the construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out;
- Generates road traffic (heavy trucks, worker trips).

The construction that would occur as a result of the Proposed Actions is considered long-term construction that would be approximately 3 years at the Projected Development Site

(see construction schedule above). The Project Area is located near various sensitive receptors (listed in **Table 14-9** below). There is a total of one (1) Applicant Controlled Projected Development Site.

In order to determine the possible increased noise level from the construction equipment operations and movement, all equipment used on site is to be generally calculated by computing the sum of the noise produced by all pieces of equipment operating at the construction site as a worst-case scenario. For each piece of equipment, the noise level at each sensitive receptor is a function of the following:

- The noise emission level of the equipment (see **Table 14-7**) (typical reference levels obtained from the *2021 CEQR Technical Manual Table 22-1 and quieter equipment levels considered for PCRE commitment*) (some equipment noise levels obtained from in-field monitoring, other approved Rezonings, and provided by DCP);
- A usage factor, which accounts for the percentage of time the equipment is operating at full power (see **Table 14-7** for typical equipment usage factors);
- The distance between the Project Site and the receptor;
- Topography and ground effects; and
- Shielding.

Construction-related traffic noise levels are a function of the following:

- The noise emission levels of each vehicle type (car, light-duty truck, heavy-duty truck, bus, etc.);
- Volume of vehicular traffic produced by construction activities on each road segment;
- Distance between roadway and the receptor;
- Vehicular speed;
- Topography and ground effects; and
- Shielding.

SoundPLAN was used to determine the worst-case equipment location for each site with respect to each receiver. Worst-case receivers (height and location on the facade) were also determined using SoundPLAN. All equipment was then modeled at that worst-case point on each site for each worst-case receiver to determine the sound level due to each piece of equipment. Multiple sites were modeled simultaneously per the construction schedule. The individual equipment contribution was then added in excel to yield the calculated total construction sound level at each receiver, assuming all equipment was operating simultaneously at that worst-case location on each site.

**Table 14-7: Noise Emission Reference Levels (A-weighted decibels with RMS "slow" time constant)**

| Equipment Description | Typical $L_{max}$ @ 50 feet | Quantity | Usage Factor |
|---|---|---|---|
| Concrete Pump | 72* | 1 | 0.2 |
| Crane | 75* | 1 | 0.16 |
| Excavator | 77* | 2 | 0.4 |
| Forklift | 64 | 1 | 0.5 |
| Front End Loader | 80 | 1 | 0.4 |
| Generator | 70* | 2 | 0.5 |
| Pile Driver | 85* | 1 | 0.2 |
| Troweling Machine 1 | 70 | 1 | 0.3 |
| Troweling Machine 2 | 70 | 2 | 0.3 |
| Rebar Bender | 80 | 2 | 0.2 |
| Compressor | 58 | 2 | 0.4 |
| Concrete Mixer Truck | 85 | 7 | 0.4 |

*PCRE committed equipment noise levels

## Construction Noise Impact Criteria

The noise impact criteria outlined in the *CEQR Technical Manual* serves as a screening-level threshold for potential construction noise impacts. If the construction of a proposed project does not result in an exceedance at a specific sensitive receptor, that receptor screens out of any further analysis. However, if the construction of a proposed project exceeds the screening-level threshold, further analysis would be warranted. The screening-level noise impact criteria for mobile and on-site construction activities are as follows:

- If the No-Action noise level is less than 60 dB(A) $L_{eq(1)}$, a 5 dB(A) $L_{eq(1)}$ or greater increase would require further action;
- If the No-Action noise level is between 60 dB(A) $L_{eq(1)}$ and 62 dB(A) $L_{eq(1)}$, a resulting $L_{eq(1)}$ of 65 dB(A) or greater would require further action;
- If the No-Action noise level is equal to or greater than 62 dB(A) $L_{eq(1)}$, or if the analysis period is a nighttime period (between 10PM and 7AM). The threshold required for further consideration would be 3 dB(A) $L_{eq(1)}$.

If noise levels at a given receptor are predicted to exceed the screening criteria described above, further consideration of the intensity and duration of construction noise at a receptor would be warranted. Noise level increases that would be considered objectionable (i.e., equal to or greater than 15 dB(A)) lasting 12 consecutive months or more and noise level increases considered very objectionable (i.e., equal to or greater than 20 dB(A)) lasting three months or more would be considered significant impacts.

For receptors representing interior spaces (i.e. not open space) that are predicted to experience construction noise exceeding the incremental increase and duration criteria described above, and where façade attenuation can be determined based on readily available information, interior noise level may also be considered in the determination of impact significance. Portions of the construction period during which predicted interior noise level would be in the acceptable range (i.e., not greater than 45 dBA(A) for residential and community facility uses or not greater than 50 dB(A) for commercial office uses), would not be counted toward the consecutive duration of construction noise impact as described above. The consideration of interior noise level is discussed only for receptors at which it would change the determination of impact significance.

**Construction Noise Analysis Methodology**

This construction noise analysis consists of the following:

- Identification of sensitive receptors near the Project Area;
- Identification and development of noise reduction measures that would be deployed during construction of the proposed and projected development;
- Consideration of potential noise impacts from mobile sources (PCE's);
- Analysis of potential noise impacts from the operation of construction equipment during the construction consistent with the impact criteria discussed above. The analysis will first look at the intensity of the noise levels during operation, then look at the possible duration of those noise levels, then make a determination of impact, if any.
- Duration of the construction noise is based on the planned construction schedule.

**Noise Receptor Locations**

The Project Area is located within the Flushing neighborhood of Queens and is bounded by Whitestone Expressway to the north, Linden Place to the east, 31st Road to the south, and Farrington Street to the west. The area surrounding the Project Area is predominantly residential and commercial uses. The sensitive receptors located closest to the Project Area are listed in **Table 14-8** and shown in **Figure 14-1** below. The SoundPlan model used the worst-case points at each receptor for modeling purposes. The receptor points are labeled in **Figure 14-1** below.

**Table 14-8: Sensitive Noise Receptor Locations**

| Receptor | Description | Address | Distance to Projected Development Site (closest point) |
|---|---|---|---|
| 1 | Family Welcome Center (NYCDOE Enrollment for Districts 25 and 26) | 30-48 Linden Place | 70 feet |
| 2 | Linden Co-Op Towers | 29-50 137th Street | 140 feet |
| 3 | Residential Properties along Linden Place | 30-37 through 30-55 Linden Place | 70 feet |

## Noise Monitoring

Noise monitoring was conducted during AM and MD peak vehicular travel periods at the Project Area. For the purpose of the construction noise assessment, the lowest general noise readings of the two peaks period were selected. Noise monitoring was conducted using Type 1 Casella CEL-633C sound meters with wind screen. The monitors were placed on a tripod at least three feet above the ground or roof, away from any other noise-reflective surfaces. Periods of peak vehicular traffic around the Project Area constitute a worst-case condition for noise. As is standard practice, the Casella sound level meters were calibrated before and after readings and the meters have valid laboratory calibration within 1 year of use their use at the site. The data were digitally recorded by the sound level meters and displayed at the end of the measurement period in units of dBA. Measured quantities included $L_{eq}$, $L_{10}$, $L_{50}$, $L_{90}$, and 1/3 octave band levels. A windscreen was used during all sound measurements except for calibration. All measurement procedures were based on the guidelines outlined in ANSI Standard S1.13-2005

## Noise Measurement Results

For the purpose of the construction noise assessment, the lowest peak noise readings collected in-field were utilized as they generally had the lowest noise level of the AM and Midday peak hours. These readings were collected as part of the Noise Chapter. Refer to Chapter 11 for the detailed study. Noise Monitoring Location 4 was selected as the most representative location for the Noise Sensitive Receptor ambient noise levels. This measurement will be used as the baseline levels in the vicinity of the Project Area. Noise monitoring locations are shown in **Figure 14-2** below. The noise levels during the lowest peak hour are shown in **Table 14-9** below.

### *Table 14-9: Noise Measurement Results – Location 4*

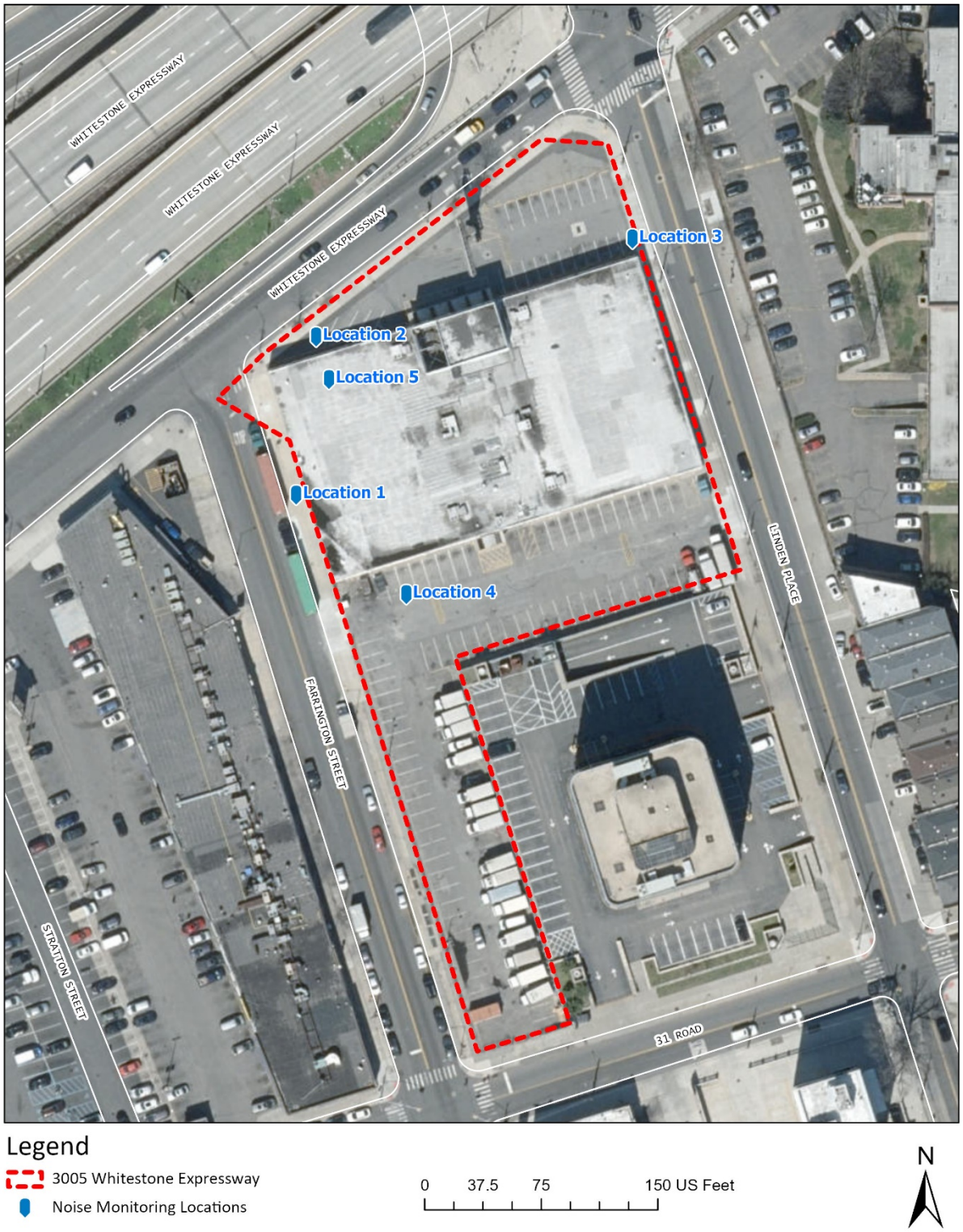
| *Tuesday, February 14, 2023* | | |
|---|---|---|
| Time | **8:20 am – 8:40 am** | **12:45 pm – 1:05 pm** |
| $L_{max}$ | 81.4 | 83.8 |
| $L_{10}$ | 72.5 | 69.5 |
| $L_{eq}$ | 69.0 | 67.0 |
| $L_{50}$ | 65.5 | 63.5 |
| $L_{90}$ | 63.0 | 61.5 |
| $L_{min}$ | 61.4 | 59.8 |

*$L_{eq}$ from the 12:45 pm – 1:05 pm period was used in the SoundPlan analysis

**Figure 14-1: Sensitive Noise Receptor Locations**



**Figure 14-2: Noise Monitoring Locations**



**Noise Reduction Measures**

The construction of the Projected Development Sites would be required to follow the requirements of the New York City Noise Control code (known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) for construction noise control measures. In addition to the minimum requirements, the Applicants would utilize additional noise control measures to reduce the potential noise effects on the surrounding sensitive noise receptors. Specific noise control measures would be incorporated into a Noise Mitigation Plan required under the New York City Noise Code. The measures to be taken for noise control include source controls and path controls.

Source controls are known as measures that reduce noise at the source. The following source controls included under New York regulations would be implemented:

- Equipment that meets the sound level standards specified in Subchapter 5 of the New York City Noise Control Code would be utilized during the entirety of construction. **Table 14-6** above shows the noise levels for the construction equipment that would be used for construction of the Projected Development Site 1;
- As electric power is expected to be available throughout the Projected Development Site, electrically powered equipment such as welders and saws would be used over diesel-powered equipment, where feasible and practicable;
- The construction site would be configured to minimize backup alarm noise where possible. Additionally, trucks would not be allowed to idle more than three minutes at the Projected Development Site based upon Title 24, Chapter 1, Subchapter 7, Section 24-163 of the New York City Administrative Code; and
- Contractors and subcontractors would be required to properly maintain their equipment and mufflers.

The following source controls listed below would be implemented as PCREs beyond New York regulations for the construction of the Proposed Project:

- Equipment that meets the quieter noise level commitments that are to be used for the construction of Projected Development Site 1 is identified in **Table 14-6** with an asterisk.

Path controls are known as measures that reduce noise between the source and receptor. Examples include placement of equipment, implementation of barriers, etc. The following path controls included under New York regulations will be utilized at the Project Site during construction:

- Equipment with high noise emissions, such as cranes and concrete trucks, would be located away from and shielded from sensitive receptor locations when possible;

- Path noise control measures such as portable noise barriers and enclosures would be utilized where feasible for certain dominant noise equipment such as generators and compressors.
- Truck deliveries would take black behind these barriers where possible.

The following path controls would be implemented as PCREs beyond New York regulations at the Project Site during construction:

- Noise barriers that will be constructed of plywood or other materials will surround the entire construction site perimeter. This barrier will provide noise shielding. The barrier would be at least 8 feet tall and include a three foot cantilever towards the construction work to further shield the upper floors of adjacent sensitive noise receptors.

**Mobile Source Construction Noise Analysis**

Pursuant to Section 111 of the *CEQR Technical Manual*, mobile sources are those noise sources that move in relation to a noise-sensitive receptor—principally automobiles, buses, trucks, aircraft, and trains. Each has its own distinctive noise character, and, consequently, an associated set of noise assessment descriptors.

For mobile sources, an initial noise assessment may be appropriate if a proposed action would generate additional project-generated vehicular traffic in an area where roadways currently carry no or very low traffic volumes, or where a nearby receptor would potentially be impacted by high ambient noise levels. Receptors are generally the subject of most noise impact analyses. A noise-sensitive location (known as a "receptor") is usually defined as an area where human activity may be adversely affected when noise levels exceed predefined thresholds of acceptability or when noise levels increase by an amount exceeding predefined thresholds of change.

Automobile noise is a function of vehicle speed and engine noise. With changing gears, the noise levels tend to increase in a sawtooth kind of pattern as vehicular speed increases. The interaction of the road surface with the tires generates noise that increases with vehicle speed. At vehicular speeds below 30 miles per hour, the typical automobile noise spectrum is dominated by engine noise. At speeds higher than 30 miles per hour, the automobile noise signature is composed of a combination of lower frequency engine noise and higher frequency tire noise. The engine and tire noise for vehicular speeds above 30 miles per hour are comparable in noise level. Noise generated by buses and heavy trucks is also composed of engine and tire noise, but tire noise tends to dominate the noise signature at vehicular speeds above 30 miles per hour in trucks and buses. Cargo load normally does not significantly affect noise levels because increased load usually results in decreased vehicular speed and the effects cancel each other out. Because individual trucks and buses are noisier than individual automobiles, the concept of noise passenger car equivalents (PCEs) is used.

Pursuant to Section 332.1 of the *CEQR Technical Manual*, the below values can be used to calculate vehicular noise using the following projections:

- 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

To determine if the Proposed Actions would result in an increase to existing noise PCE values by 100 percent or more, a preliminary screening was conducted. This screening assesses the noise PCE values of the vehicles projected to arrive at the construction site during peak arrival and departure hours as determined by the construction traffic forecast, compared to the PCE values of existing background traffic recorded during noise monitoring at Noise Locations 1 and 3.

Noise PCE Screening

The With-Action project generated construction vehicular volumes were referenced to determine the worst-case PCE year and quarter over the period of construction activities (2024 Q3 through 2025 Q4) In worst-case PCE years, the With-Action AM peak hour is 6-7 AM, and the With-Action PM peak hour is 3-4 PM. Based on the Constriction Traffic Analysis, these AM and PM vehicles were assigned to the local network. The screening was conducted based on the trip generation, which includes the future background traffic growth rate. Accordingly, the PCE screening reflects the incremental project-generated traffic. The heavy trucks referenced in the PCE screening do not reflect the traffic PCE factor. This was removed for the purposes of the PCE screen in order to accurately reflect the number of projected trucks and their corresponding noise PCEs. The existing vehicle classifications collected during noise monitoring were used for the PCE screening. Noise Monitoring Location 3 existing traffic counts were applied to Noise Sensitive Receptor 1 through 3. The existing conditions at all receptors are the same as the traffic count data of the three Receptors all refer to the same noise monitoring location. However, the traffic count of the With-Action condition at Receptor 2 is different from Receptors 1 and 3 as the traffic count at Receptor 2 also accounts for traffic along Whitestone Expressway. **Table 14-10** through **Table 14-12** below show the results of the Construction Noise PCE Screening.

**Table 14-10: Noise Sensitive Receptor 1 Noise PCE Screening Results**

| Peak Hour | Existing | No Action | With Action | Increment | % Increase |
|---|---|---|---|---|---|
| AM Noise PCE | 1728 | 1754 | 2014 | 260 | 14.82% |
| PM Noise PCE | 1803 | 1830 | 1902 | 72 | 3.93% |

**Table 14-11: Noise Sensitive Receptor 2 Noise PCE Screening Results**

| Peak Hour | Existing | No Action | With Action | Increment | % Increase |
|---|---|---|---|---|---|
| AM Noise PCE | 1728 | 1754 | 2062 | 308 | 17.56% |
| PM Noise PCE | 1803 | 1830 | 1879 | 49 | 2.68% |

**Table 14-12: Noise Sensitive Receptor 2 Noise PCE Screening Results**

| Peak Hour | Existing | No Action | With Action | Increment | % Increase |
|---|---|---|---|---|---|
| AM Noise PCE | 1728 | 1754 | 2014 | 260 | 14.82% |
| PM Noise PCE | 1803 | 1830 | 1902 | 72 | 3.93% |

Per the *CEQR Technical Manual*, if existing PCE noise values would not increase by 100 percent or more due to a proposed action, a detailed analysis is not required. A noise PCE screening was conducted for Noise Sensitive Receptors 1 through 3. The Proposed Actions would not result in an increase to existing noise PCE values by greater than 100% at the bounding roadways during the any of the AM or PM peak hours. Therefore, a detailed noise PCE analysis is not warranted.

**On-Site Construction Noise Analysis**

The on-site construction noise analysis determined the intensity of the noise levels generated during construction to assess the potential for adverse impacts on the surrounding noise-sensitive receptors. To determine the anticipated construction noise levels, overall A-weighted sound level data was adjusted based on usage factor (see **Table 14-7** above) and converted to sound power (LwA). The calculations to determine the sound pressure levels due to the equipment at the noise-sensitive areas were performed based on ISO Standard 9613-2 using SoundPLAN acoustical modeling software. The acoustical model considered the propagation of sound over distance, the shielding and reflection of sound due to buildings and structures, and the effect of ground absorption and topography. The model was configured to calculate the maximum sound level from each source at each receiver, assuming the equipment was located at the loudest point for each receiver within the Project Site. The maximum sound level results from each piece of equipment were summed at each receiver to yield the total maximum sound level due to all equipment for each phase of construction. The noise

impacts were evaluated with the noise impact criteria discussed above. The results of the On-Site Construction Noise Analysis are listed below by Noise Sensitive Receptor.

For the purposes of the construction noise analysis and based on the construction schedule, the construction timeframes assigned analysis periods as shown below in **Table 14-13.**

**Table 14-13: Analysis Periods**

| **Analysis Periods** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|---|---|---|---|---|---|---|---|---|
| **Dates** | 10/23 | 11/23 – 1/24 | 2/24 | 3/24 – 4/24 | 5/24 – 6/24 | 7/24 – 3/25 | 4/25 – 12/25 | 1/26 – 9/26 |

Receptor 1: Family Welcome Center (NYCDOE Enrollment for Districts 25 and 26) – 30-48 Linden Place

Noise Sensitive Receptor 1 consists of a 6-story commercial office building. Receptor 1 abuts the Projected Development Site. Based on Noise Monitoring Location 4, the existing noise level $L_{eq}$ at Receptor 1 is 67.0 dB(A). Construction noise (including the baseline) is expected to produce sound levels of 84 dB(A) at this location at its peak for a duration of 8 months. This is an increase of 17 dB(A). Noise level increases that would be considered objectionable (i.e., equal to or greater than 15 dB(A)) lasting 12 consecutive months or more and noise level increases considered very objectionable (i.e., equal to or greater than 20 dB(A)) lasting three months or more would be considered significant impacts. **Table 14-14** below summarizes the results of the SoundPLAN acoustic model. The predicted noise levels are well below the threshold to be considered significant impacts, and therefore no further analysis of Receptor 1 is warranted. See **Photo 14-1 and 14-2** below.

**Table 14-14: Receptor 1 - SoundPLAN Acoustic Model Results**

| AP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Total Construction Noise | **73** | **76** | **76** | **79** | **78** | **84** | **75** | **75** |
| Baseline Noise Level | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 |
| *Total Noise Level* | **74** | **76** | **77** | **79** | **78** | **84** | **76** | **76** |
| *Increment Over Baseline* | *7* | *9* | *10* | *12* | *11* | *17* | *9* | *9* |

*Numbers represent decibels dB(A)
*AP = Analysis Period

**Photo 14-1: Receptor 1 – Aerial**



**Photo 14-2: Receptor 1 – Façade**



Receptor 2: Linden Co-Op Towers – 29-50 137th Street

Noise Sensitive Receptor 2 is known as the Linden Co-Op Towers which consists of a group of 6-story residential apartment buildings. Receptor 2 is located across Linden Place and is approximately 140 feet from the Projected Development Site. Based on Noise Monitoring Location 4, the existing $L_{eq}$ at Receptor 3 is 67.0 dB(A). Construction noise (including the baseline) is expected to produce sound levels of 80 dB(A) at this location at its peak for a duration of 8 months. This is an increase of 13 dB(A). Noise level increases that would be considered objectionable (i.e., equal to or greater than 15 dB(A)) lasting 12 consecutive months or more and noise level increases considered very objectionable (i.e., equal to or greater than 20 dB(A)) lasting three months or more would be considered significant impacts. **Table 14-15** below summarizes the results of the SoundPLAN acoustic model. The predicted noise levels are below the threshold to be considered significant impacts, and therefore further analysis of Receptor 2 is warranted. See **Photo 14-3 and 14-4** below.

**Table 14-15: Receptor 2 – SoundPLAN Acoustic Model Results**

| AP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Total Construction Noise | **69** | **72** | **72** | **75** | **74** | **80** | **71** | **71** |
| Baseline Noise Level | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 |
| *Total Noise Level* | **71** | **73** | **74** | **75** | **75** | **80** | **73** | **72** |
| *Increment Over Baseline* | *4* | *6* | *6* | *8* | *8* | *13* | *6* | *5* |

*Numbers represent decibels dB(A)
*AP = Analysis Period

**Photo 14-3: Receptor 2 – Aerial**

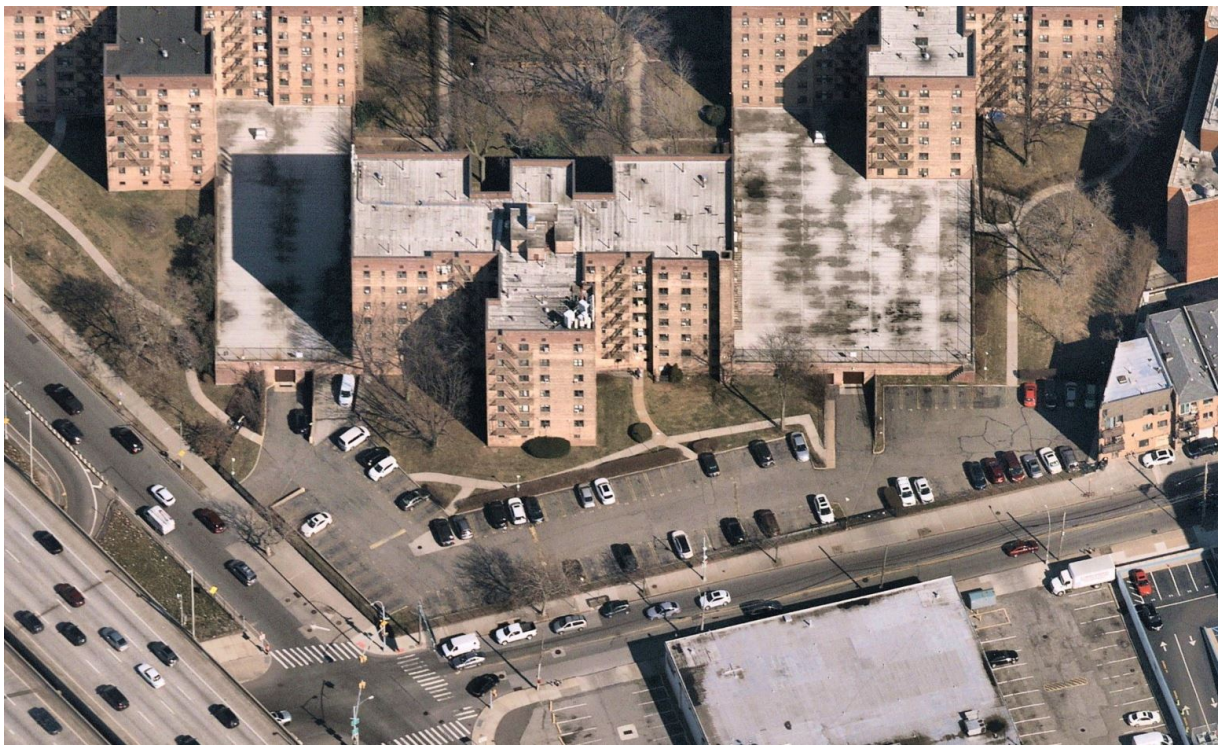


**Photo 14-4: Receptor 2 - Facade**



Receptor 3: Residential Buildings along Linden Place - 30-37 through 30-55 Linden Place

Noise Sensitive Receptor 3 consists of the residential buildings along Linden Place up to the corner of 31st Road. Receptor 3 is located across Linden Place and approximately 70 feet away from the Projected Development Site. Based on Noise Monitoring Location 4, the existing $L_{eq}$ at Receptor 3 is 67.0 dB(A). Construction noise (including the baseline) is expected to produce sound levels of 81 dB(A) at its peak for a duration of 8 months. This is an increase of 14 dB(A). Noise level increases that would be considered objectionable (i.e., equal to or greater than 15 dB(A)) lasting 12 consecutive months or more and noise level increases considered very objectionable (i.e., equal to or greater than 20 dB(A)) lasting three months or more would be considered significant impacts. **Table 14-16** below summarizes the results of the SoundPLAN acoustic model. The predicted noise levels are well below the threshold to be considered significant impacts, and therefore no further analysis of Receptor 3 is warranted. See **Photo 14-5 and 14-6** below.

**Table 14-16: Receptor 3 – SoundPLAN Acoustic Model Results**

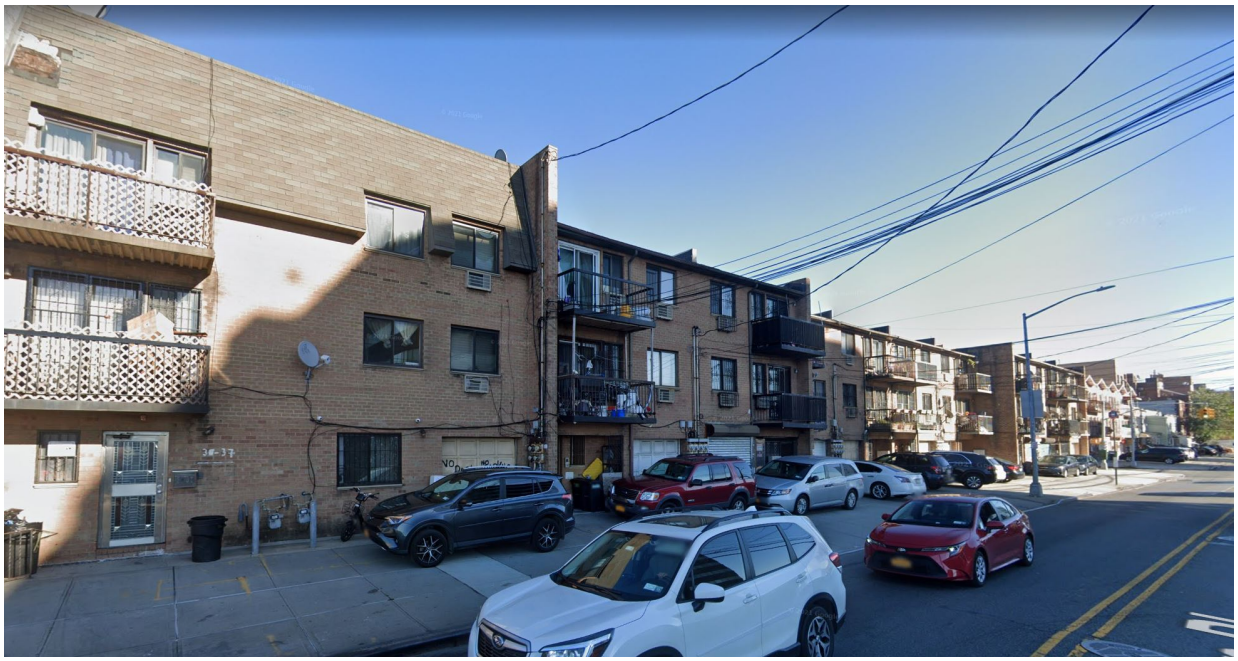
| AP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Total Construction Noise | **71** | **73** | **74** | **76** | **75** | **81** | **73** | **73** |
| Baseline Noise Level | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 |
| *Total Noise Level* | **72** | **74** | **75** | **77** | **76** | **81** | **74** | **74** |
| *Increment Over Baseline* | *5* | *7* | *8* | *10* | *9* | *14* | *7* | *7* |

*Numbers represent decibels dB(A)
*AP = Analysis Period

**Photo 14-5: Receptor 3 – Aerial**



**Photo 14-6: Receptor 3 – façade**



**Construction Noise Conclusion**

With the adherence to existing construction noise regulations and additional noise control measures beyond the minimum required by code, the Proposed Project would not result in significant adverse construction noise impacts.

*Historic and Cultural Resources*

No construction activities would occur within 400 feet of a historic resource as no such resources are located within this distance from the Affected Area. LPC has determined that no historic or archaeological resources are located within the Project Area.

*Hazardous Materials*

As authorized by DEP, an (E) Designation for hazardous materials would be placed on the zoning map pursuant to Section 11-15 of the Zoning Resolution for Projected Development Site 1 to ensure that testing and mitigation would be provided as necessary before any future development and/or soil disturbance on the property.

Following the preparation of the above noted items and approval by DEP, no significant adverse impacts related to hazardous materials during construction are expected as a result of the redevelopment of 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 Site does 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.*

Construction on Projected Development Site 1 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

Based on the above analysis, the Proposed Actions would not have any potentially significant adverse construction impacts, and further analysis would not be warranted.

# Attachment A
# Agency Correspondence

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 / LA-CEQR-Q
Project: WHITESTONE LANES
Date received: 10/15/2018

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Properties with no Architectural or Archaeological significance:

1) ADDRESS: FARRINGTON STREET, BBL: 4043700001
2) ADDRESS: 30-05 FARRINGTON STREET, BBL: 4043700015
3) ADDRESS: LINDEN PLACE, BBL: 4043700048

Gina Santucci

10/17/2018

SIGNATURE DATE

Gina Santucci, Environmental Review Coordinator

File Name: 33723_FSO_DNP_10172018.doc

**Rohit T. Aggarwala**
*Commissioner*

**Angela Licata**
*Deputy Commissioner of Sustainability*

59-17 Junction Blvd.
Flushing, New York 11373

Tel. (718) 595-4398
alicata@dep.nyc.gov

# MEMORANDUM

To: Stacey Barron
DCP EARD

From: Mitchell Wimbish MW
DEP BEPA

Subject: Whitestone Lanes Rezoning
CEQR # 23DCP104Q

Date: March 9, 2023

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The New York City Department of Environmental Protection (DEP) has reviewed the water and sewer infrastructure section of the Environmental Assessment Statement for the above referenced project and has the following comments:

**Sanitary Sewer**
The proposed development will result in an increase of sanitary flow in the sewer system based on the proposed dwelling units and land usage information and in accordance with the City's drainage design criteria. Therefore, there will be a need to amend the existing drainage plan in this area. In addition, a hydraulic analysis of the existing sewer system will 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 to follow the Amended Drainage Plan.

**Storm Sewer**
As part of the DEP site connection approval process, the development must be in compliance with the required stormwater release rate.

**Water System**
Existing infrastructure should be capable to handle the estimated increase in water demand.

C: Steve Carrea, P.E. – BWSO
Lillian Cheng, P.E. – BWSO
Andy Lu, P.E. – BWSO
Phil Simmons – BEPA
Terrell Estesen – BEPA

# Attachment B

# Waterfront Revitalization Program (WRP) Consistency Assessment

| FOR INTERNAL USE ONLY | WRP No. #23-030 |
|---|---|
| Date Received: _____ | DOS No. _____ |

# NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
## Consistency Assessment Form

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

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

### A. APPLICANT INFORMATION

Name of Applicant: Mar Mar Realty Inc

Name of Applicant Representative: Kevin Corte, Environmental Studies Corp.

Address: 55 Water Mill Lane, Great Neck, NY 11021

Telephone: 718-343-0026 Email: kcorte@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 applicant proposes zoning changes as follows: A Zoning Map Amendment to replace the existing M1-1 zoning on the Project Area with R7A zoning. The Applicant is also seeking a zoning text amendment to modify Appendix F to map a Mandatory Inclusionary Housing (MIH) area that includes Queens Block 4370, Lots 1, 15, and 48, in the Whitestone neighborhood of Queens Community District 7 .

2. Purpose of activity

The Applicant intends to develop a residential building on Queens Block 4370, Lots 1, 15, and 48. The proposed development is a 468,682 gross square foot (gsf), 9-story building. The building would have a total height of 95ft and contain 388,293 gsf of residential floor area or 415 dwelling units. Of these units, 104-125 would be reserved as moderate to low-income units pursuant to the requirements of Mandatory Inclusionary Housing (MIH). In the cellar of the building, 80,389 gsf would accommodate 200 parking spaces.

## C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 4370, Lots 1, 15, and 48

Street Address: Multiple (Farrington St.)

Name of water body (if located on the waterfront): Flushing Creek

## 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: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

### 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 Maritime Activity Zone (PMAZ) (*3.5*)
   ☐ Recognized Ecological Complex (REC) (*4.4*)
   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

## F. WRP POLICY ASSESSMENT

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

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

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

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

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

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

## G. CERTIFICATION

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

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

Applicant/Agent's Name: Kevin Corte, Environmental Studies Corp

Address: 55 Water Mill Lane, Great Neck, NY 11021

Telephone: 718-343-0026 Email: kcorte@environmentalstudiescorp.com

Applicant/Agent's Signature: Kevin Corte

Date: 06.05.23

## Submission Requirements

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

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

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

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

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

**New York City Department of City Planning**
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

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

### Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☐ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

**WRP Policy Assessment: Written Statements**

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

Policy 1.1: Encourage commercial and residential redevelopment in appropriate Coastal Zone areas

The Proposed Project would be developed in an area of the city that has received upgrades to coastal protection infrastructure, and waterfront public access.

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

The Proposed Project is located near the Special Flushing Waterfront District which facilitates $2 billion development project to construct 13 towers along the Flushing Creek. This is designed to transform the waterfront with mixed-use developments and includes new public facilities and public waterfront access.

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.

The Proposed Project is located in an area of the Coastal Zone that has recently received considerable investment to provide protection from storms and flood events.

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

A project or action would advance the policy above as it furthers sub-policies 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) and 6.2 (Integrate consideration of the latest New York City projections of climate change and sea level rise).

**Policy 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.

A project or action would advance the policy above as it furthers sub-policy 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). The Proposed Project will not introduce new industrial uses to the waterfront and is not anticipated to create new toxic pollutants or hazardous materials. During the development process, a

Construction Health and Safety Plan (CHASP) will be employed in consultation with the Dept. of Environmental Protection. See the Hazardous Materials section of the EAS.

**Policy 9:** Protect scenic resources that contribute to the visual quality of the New York City coastal area.

A project or action would advance the policy above as it furthers sub-policy 9.1 (Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.). The Proposed Project will add to the urban context of the area by introducing development consistent with the height, bulk and uses found in the surrounding neighborhood. Further the Proposed Project would not alter the visual quality of the surrounding area and views to the waterfront from adjacent streets would remain. See the Urban Design and Visual Resources section of this EAS.

**NYCWRP's Climate Change Adaptation: Policy 6.2 Consistency Assessment**

**Detailed Methodology**

**Step 1: Identifying Vulnerabilities and Consequences**

(a): The completed Flood Elevation Worksheet is included below

(b): The analysis below is based on the charts shown in tab 4 of the Flood Elevation Worksheet. The current 1% flood elevation at the Applicant's proposed development site is 12.0 feet. The elevation of the Applicant's proposed development site will be below the 1% flood elevation by the 2050s under all sea level rise projections and will be for its lifespan under all sea level rise projections. The property has a Design Flood Elevation (DFE) of 13.0 feet (refer to site plans in the Site Plan Appendix). Therefore, the Proposed Development has a "Design Flood Elevation" of 13 feet.

The Projected Development's critical systems would be located on the roof of the building. This would result in no loss of building services which could result in damage to property and temporary displacement of residents. The residential lobby, residential units, and accessory recreation area are above the elevation of the current 1% annual floodplain and will be throughout its lifespan under any projection of sea level rise. The cellar, containing accessory parking spaces, would be dry proofed.

c): There are no building features that are expected to be below the elevation of Mean Higher High Water at some point over its lifespan under any projection of sea level rise.

(d): Coastal storms could bring high winds in addition to the flood hazards described above. The site is within a Coastal A zone.

**Step 2: Identify Adaptive Strategies**

(a): The Proposed Development is designed to meet NYC Building Code standards for flood resistant construction standards, including dry floodproofed walls, flood barriers at building openings, and a foundation system designed to resist hydrostatic pressure. As a result, the cellar level, and lobby level (described above) will be protected from flooding and the rest of the building will be floodproofed up the elevation of the current 1% annual chance floodplain plus 1 foot of freeboard (12' NAVD 88). If the elevation of the floodplain increases beyond that by the 2050s or 2080s, additional protection could be provided through temporary barriers, or subsequent retrofits to extend dry floodproofed materials to higher elevations

(b): As discussed above, there are no building features that are expected to be below the elevation of Mean Higher High Water at some point over its lifespan under any projection of sea level rise.

(c): The Proposed Development would be required to meet NYC Building Code standards for wind loading.

(d): The project would not make flooding on adjacent sites worse, nor would it conflict with other plans for flood protection on adjacent sites.

**Step 3: Assess Policy Consistency**

A project or action would advance the policy when no new vulnerable, critical, or potentially hazardous features would be located within area flooded by current or future high tide, or current or future 1% annual chance flood, over the project's lifespan, **or** all new vulnerable, critical or potentially hazardous features would be protected through flood damage reduction elements or future adaptive measures within the timeframe that they would be needed.

As discussed above, the Proposed Project would introduce vulnerable features to an area currently located in a 1% annual chance flood zone. However, the Proposed Project would ensure that all newly introduced vulnerable features are protected through flood damage reduction elements (specifically dry proofed perimeter wall and removable flood barriers) and does not preclude the possibility that future adaptive measures be installed within the timeframe that they would be needed.

**NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet**

**COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp**

*Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.*

| **Background Information** | |
|---|---|
| Project Name | Whitestone Lanes Rezoning |
| Location | Multiple (Farrington St.) |
| Type(s) | ☑ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facilit ☐ Industrial Uses<br>☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Draina ☐ Coastal Protection |
| Description | The Applicant intends to develop a residential building on Queens Block 4370, Lots 1, 15 and 48. The proposed development is a 468,682 gross square foot (gsf), 9-story building. The building would have a total height of 95ft and contain 388,293 gsf of residential floor area or 361 dwelling units. Of these units, 90-108 would be reserved as moderate to low-income units pursuant to the requirements of Mandatory Inclusionary Housing (MIH). In the cellar of the building, 80,389 gsf would accommodate 152 parking spaces. |
| Planned Completion Date | 2026 |
| Expected Project Lifespan | 100 years |

*The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.*

**For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."**

***Last update: Sept. 7, 2018***

## Establish current tidal and flood heights.

| | FT (NAVD88) | Feet | Datum |
|---|---|---|---|
| MHHW | 3.59 | **3.59** | **NAVD88** |
| 1% flood height | 12.00 | **12.00** | **NAVD88** |
| Design flood elevation | 13.00 | **13.00** | **NAVD88** |
| *As relevant:* | | | |
| 0.2% flood height | --> | | |

*Data will be converted based on the following datums:*

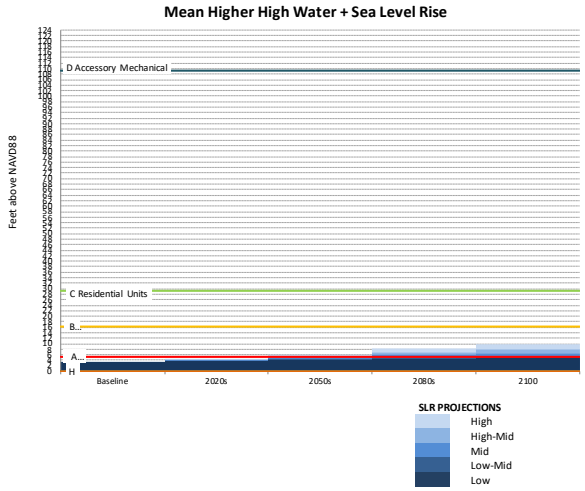
| Datum | FT (NAVD88) |
|---|---|
| NAVD88 | *0.00* |
| NGVD29 | *-1.10* |
| Manhattan Datum | *1.65* |
| Bronx Datum | *1.51* |
| Brooklyn Datum (Sewer) | *0.61* |
| Brooklyn Datum (Highway) | *1.45* |
| Queens Datum | *1.63* |
| Richmond Datum | *2.09* |

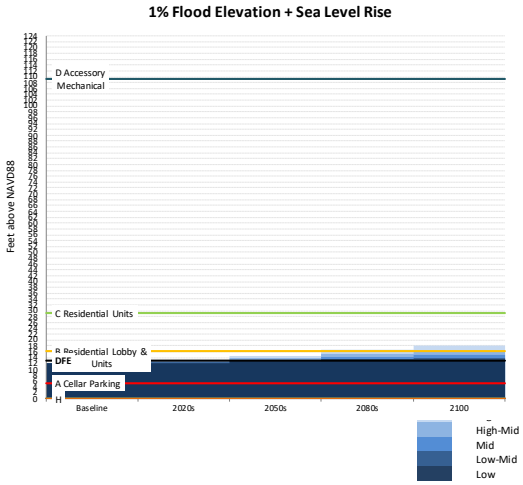
| Source |
| --- |
| *Appendix A* |
| *2015 FEMA Preliminary Flood Insurance Maps* |
| *Project Plans* |
| |
| |

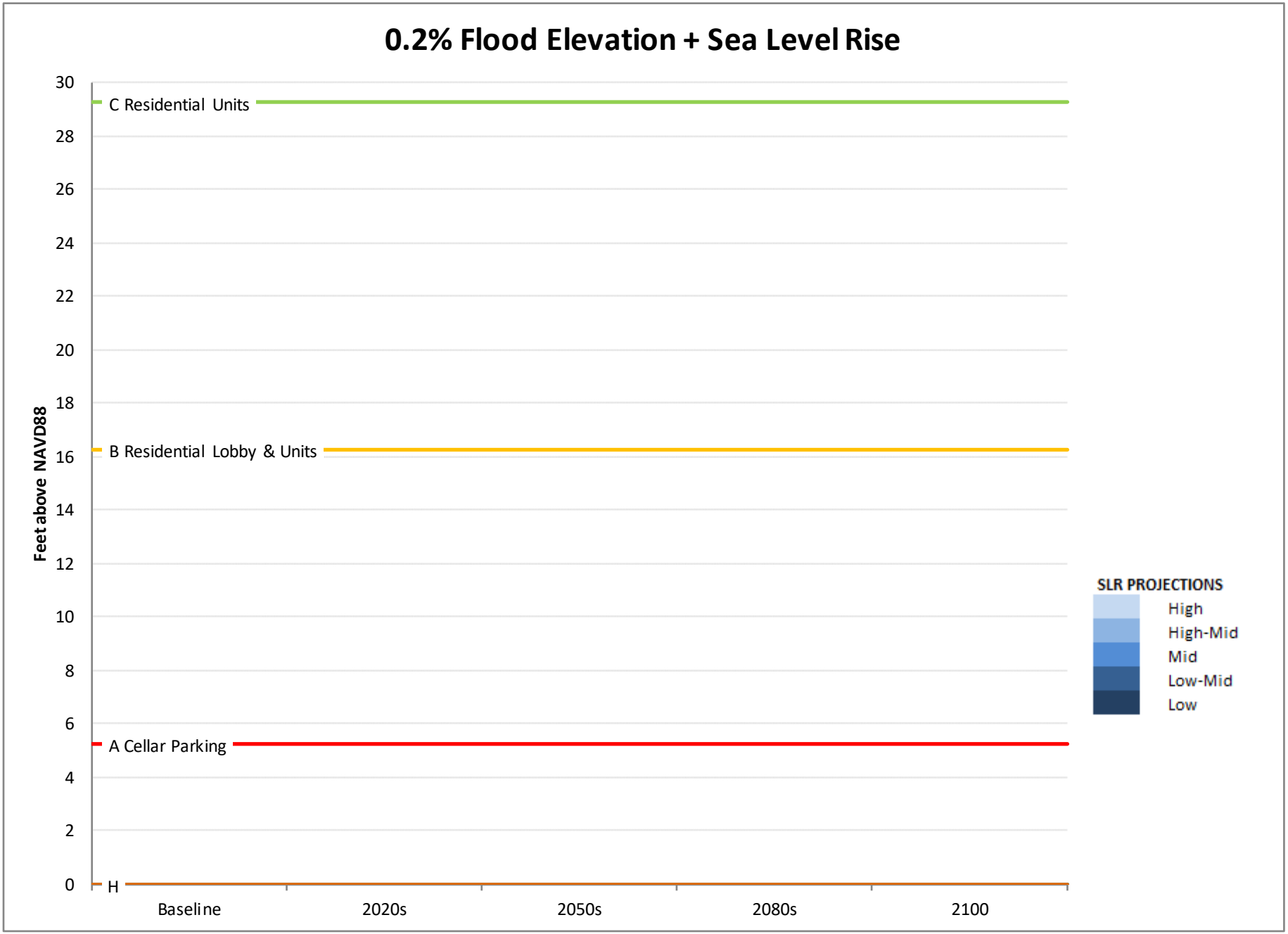
**Describe key physical features of the project.**

| Feature *(enter name)* | Feature Category | Lifespan | Elevation | Units | Datum | Ft | Ft Above NAVD88 | Ft Above MHHW | Ft Above 0.2% flood height |
|---|---|---|---|---|---|---|---|---|---|
| **A Cellar Parking** | ☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other | 2126 | 5.3 | Feet | NAVD88 | *5.3* | *5.3* | *1.7* | *#VALUE!* |
| *The building's cellar contains 152 accessory parking spaces in 80,389 gsf.* | | | | | | | | | |
| **B Residential Lobby & Units** | ☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other | 2126 | 16.3 | Feet | NAVD88 | *16.3* | *16.3* | *12.7* | *#VALUE!* |
| *The building's first floor contains a residential lobby, accessory recreation area, and 35 residential units.* | | | | | | | | | |
| **C Residential Units** | ☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other | 2126 | 29.3 | Feet | NAVD88 | *29.3* | *29.3* | *25.7* | *#VALUE!* |
| *Floors 2-8 would contain residential uses.* | | | | | | | | | |
| **D Accessory Mechanical** | ☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other | 2126 | 109.3 | Feet | NAVD88 | *109.3* | *109.3* | *105.7* | *#VALUE!* |
| *The building's roof contains mechanical and critical infrastructure uses.* | | | | | | | | | |
| **E** | ☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other | | | Feet | NAVD88 | | | | |
| *Description of Planned Uses and Materials* | | | | | | | | | |
| **F** | ☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other | | | Feet | NAVD88 | | | | |
| *Description of Planned Uses and Materials* | | | | | | | | | |
| **G** | ☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other | | | Feet | NAVD88 | | | | |
| *Description of Planned Uses and Materials* | | | | | | | | | |
| **H** | ☐ Vulnerable ☐ Critical ☑ Potentially Hazardous ☐ Other | | | Feet | NAVD88 | | | | |
| *Description of Planned Uses and Materials* | | | | | | | | | |

**Assess project vulnerability over a range of sea level rise projections.**




0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
C Residential Units
B Residential Lobby & Units
A Cellar Parking
H
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

**SLR (ft)**

| | Low | Low-Mid | Mid | High-Mid | High |
|---|---|---|---|---|---|
| **Baseline** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **2020s** | 0.17 | 0.33 | 0.50 | 0.67 | 0.83 |
| **2050s** | 0.67 | 0.92 | 1.33 | 1.75 | 2.50 |
| **2080s** | 1.08 | 1.50 | 2.42 | 3.25 | 4.83 |
| **2100** | 1.25 | 1.83 | 3.00 | 4.17 | 6.25 |

**MHHW+SLR (ft above NAVD88)**

| | Low | Low-Mid | Mid | High-Mid | High |
|---|---|---|---|---|---|
| **Baseline** | 3.59 | 3.59 | 3.59 | 3.59 | 3.59 |
| **2020s** | 3.76 | 3.92 | 4.09 | 4.26 | 4.42 |
| **2050s** | 4.26 | 4.51 | 4.92 | 5.34 | 6.09 |
| **2080s** | 4.67 | 5.09 | 6.01 | 6.84 | 8.42 |
| **2100** | 4.84 | 5.42 | 6.59 | 7.76 | 9.84 |

**1%+SLR (ft above NAVD88)**

| | Low | Low-Mid | Mid | High-Mid | High |
|---|---|---|---|---|---|
| **Baseline** | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| **2020s** | 12.17 | 12.33 | 12.50 | 12.67 | 12.83 |
| **2050s** | 12.67 | 12.92 | 13.33 | 13.75 | 14.50 |
| **2080s** | 13.08 | 13.50 | 14.42 | 15.25 | 16.83 |
| **2100** | 13.25 | 13.83 | 15.00 | 16.17 | 18.25 |

**0.2%+SLR (ft above NAVD88)**

| | Low | Low-Mid | Mid | High-Mid | High |
|---|---|---|---|---|---|
| **Baseline** | #VALUE! | #VALUE! | #VALUE! | #VALUE! | #VALUE! |
| **2020s** | #VALUE! | #VALUE! | #VALUE! | #VALUE! | #VALUE! |
| **2050s** | #VALUE! | #VALUE! | #VALUE! | #VALUE! | #VALUE! |
| **2080s** | #VALUE! | #VALUE! | #VALUE! | #VALUE! | #VALUE! |
| **2100** | #VALUE! | #VALUE! | #VALUE! | #VALUE! | #VALUE! |

| | 0 | 1 |
|---|---|---|
| A Cellar Parking | 5 | 5.26 |
| B Residential Lobby & Units | 16 | 16.26 |
| C Residential Units | 29.26 | 29.26 |
| D Accessory Mechanical | 109.26 | 109.26 |
| E | 0 | 0 |
| F | 0 | 0 |
| G | 0 | 0 |
| H | 0 | 0 |
| DFE | 13.00 | 13.00 |

| | SLR (in) | | | | |
|---|---|---|---|---|---|
| | **Low** | **Low-Mid** | **Mid** | **High-Mid** | **High** |
| **2014** | 0 | 0 | 0 | 0 | 0 |
| **2020s** | 2 | 4 | 6 | 8 | 10 |
| **2050s** | 8 | 11 | 16 | 21 | 30 |
| **2080s** | 13 | 18 | 29 | 39 | 58 |
| **2100** | 15 | 22 | 36 | 50 | 75 |

**NOAA Tide Station Data**

*(to be used only when a site survey is unavailable)*

| *Station ID* | *Station Name* | *Source MHHW (Feet, NAVD88)** | *Adjusted MHHW (Feet, NAVD88)** |
|---|---|---|---|
| 8518687 | Queensboro Bridge | 2.27 | 2.60 |
| 8530095 | Alpine | 2.11 | 2.44 |
| 8516614 | Glen Cove | 3.72 | 4.05 |
| 8516990 | Willets Point | 3.72 | 4.05 |
| 8518639 | Port Morris | 3.33 | 3.66 |
| 8518699 | Williamsburg Bridge | 2.14 | 2.47 |
| 8518750 | The Battery | 2.28 | 2.61 |
| 8531680 | Sandy Hook | 2.41 | 2.74 |
| 8518490 | New Rochelle | 3.71 | 4.04 |
| 8531545 | Keyport | 2.66 | 2.99 |
| 8516891 | Norton Point | 2.08 | 2.41 |
| 8517201 | North Channel | 2.72 | 3.05 |
| 8517137 | Beach Channel | 2.10 | 2.43 |
| 8517756 | Kingsborough | 2.13 | 2.46 |
| 8519436 | Great Kills | 2.22 | 2.55 |
| 8531142 | Port Reading | 2.82 | 3.15 |
| 8519483 | Bergen Point | 2.56 | 2.89 |
| 8519050 | USCG | 2.28 | 2.61 |
| 8518902 | Dyckman St | 2.01 | 2.34 |
| 8517251 | Worlds Fair Marina | 3.59 | 3.92 |
| 8518668 | Horns Hook | 2.54 | 2.87 |
| 8518643 | Randalls Island | 2.60 | 2.93 |
| 8518526 | Throggs Neck | 3.68 | 4.01 |

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-2001 tidal

| *Source* |
|---|
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA VDATUM |
| NOAA Tides and Currents |
| NOAA VDATUM |
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| NOAA VDATUM |
| NOAA VDATUM |
| NOAA VDATUM |
| NOAA Tides and Currents |
| NOAA Tides and Currents |
| NOAA VDATUM |
| NOAA VDATUM |
| NOAA VDATUM |
| NOAA Tides and Currents |

epoch.




Alpine
8530095
New
Rochelle
8518490
Dyckman St
8518902
Glen Cove
8516614
Randalls
Island
8518643
Port
Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
Queensboro
Bridge
8518687
Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
USCG
8519050
Beach
Channel
8517137
Kingsborough
8517756
Sandy Hook
8531680

# Attachment C
# Illustrative Plans

## ZONING ANALYSIS

ADDRESS: 30-05 FARRINGTON STREET, QUEENS, NEW YORK

| ZONING: R7A (PROPOSED) | MAP: 10A | BLOCK: 4370 | TAX LOTS: PORTION OF 1, 15, 48 |
|---|---|---|---|

TOTAL ZONING LOT AREA : 82,152.15 SF (SEE Z-102, LOT AREA CALCULATION)
BUILDING WILL BE DESIGNED UNDER INCLUSIONARY HOUSING (MIH DEVELOPMENT)

| | | |
|---|---|---|
| MAX. F.A.R AND F.A ALLOW FOR RESIDENTIAL: | 4.60 = 4.60 x 82,152.15 = 377,899.89 SQ.F | ZR23-154(b) |
| PROPOSED F.A FOR RESIDENTIAL: | | |
| 1ST FLOOR: | 37,809.67 SQ.F | |
| 2ND FLOOR: | 42,340.29 SQ.F | |
| 3RD FLOOR: | 43,034.07 SQ.F | |
| 4TH FLOOR: | 43,034.07 SQ.F | |
| 5TH FLOOR: | 43,034.07 SQ.F | |
| 6TH FLOOR: | 43,034.07 SQ.F | |
| 7TH FLOOR: | 43,034.07 SQ.F | |
| 8TH FLOOR: | 42,705.57 SQ.F | |
| 9TH FLOOR: | 39,844.74 SQ.F | |
| TOTAL F.A RESIDENTIAL: | 377,870.62 SQ.F < 377,899.89 SQ.F | |
| TOTAL F.A.R RESIDENTIAL: | 377,870.62 SQ.F/82,152.15 SQ.F = 4.60 | COMPLIES |

| | | |
|---|---|---|
| MAX.LOT COVERAGE RES.(CORNER LOT PORTIONS): | 100% OF 27,339.00 SQ.F = 27,339.00 SQ.F | ZR23-153 |
| MAX.LOT COVERAGE RES.(THROUGH LOT PORTION): | 65% OF 41,071.15 SQ.F = 26,696.25 SQ.F | ZR23-153 |
| MAX.LOT COVERAGE RES.(INTERIOR LOT PORTION): | 65% OF 13,742.00 SQ.F = 8,932.30 SQ.F | ZR23-153 |
| TOTAL LOT COVERAGE ALLOW FOR RESIDENTIAL: | 62,967.55 SQ.F | ZR23-153 |
| ADJUSTED MAX.%OF LOT COVERAGE OF ZONING LOT AS PER ZR77-24 | | |
| ADJUSTED MAX.%: | (62,967.55 SQ.F/82,152.15 SQ.F)x 100 = 76.65% | ZR23-153 |
| PROPOSED LOT COVERAGE: | (43,884.07 SQ.F/82,152.15 SQ.F)x 100 = 53% < 76.65% | |

A BUILDING WHOSE LOT COVERAGE DOES NOT EXCEED THE ADJUSTED MAXIMUM PERCENTAGE OF LOT COVERAGE MAY BE LOCATED ANYWHERE ON SUCH ZONING LOT .

| | | |
|---|---|---|
| MAX.NUMBER OF D.U: | 377,870.62 / 680 = 556 D.U | ZR23-22 |
| PROPOSED TOTAL D.U : | 415 D.U < 556 D.U | COMPLIES |
| 25% AFFORDABLE DWELLING UNITS: 25% OF 415 = 104 D.U | | ZR23-154(3)(i), OPTION 1 |
| PROPOSED AFFORDABLE D.U : | 107 D.U > 104 D.U | COMPLIES |
| PROPOSED REGULAR D.U : | 415 - 107 = 308 D.U | COMPLIES |

| | | |
|---|---|---|
| STREET WALL LOCATION: | ALIGN WITH ADJACENT | ZR23-661(a)(b) |
| STREET WALL LOCATION: | NONE ADJACENT STREET WALL | COMPLIES |
| MIN. SIDE YARD REQUIRED: | NONE OR 8' MIN. | ZR23-462(c) |
| PROPOSED SIDE YARD : | NONE | COMPLIES |
| MIN.REAR YARD REQUIRED (WITHIN 100 FT OF CORNER) | NONE | ZR23-523(a) |
| PROPOSED REAR YARD (WITHIN 100 FT OF CORNER) | NONE | COMPLIES |
| MIN.REAR YARD REQUIRED (EQUIVALENT, FOR THROUGH LOT) | 60 FT MIDWAY BETWEEN 2 STREET | ZR23-523(a) |
| PROPOSED REAR EQUIVALENT YARD FOR THROUGH LOT: | 74 FT MIDWAY > 60 FT | COMPLIES |

## ZONING ANALYSIS

ADDRESS: 30-05 FARRINGTON STREET, QUEENS, NEW YORK

| ZONING: R7A (PROPOSED) | MAP: 10A | BLOCK: 4370 | TAX LOTS: PORTION OF 1, 15, 48 |
|---|---|---|---|

| | | |
|---|---|---|
| MIN.BASE HEIGHT: | 40 FT | ZR23-664,table 1 |
| MAX.BASE HEIGHT: | 75 FT | ZR23-664,table 1 |
| MAX.BUILDING HEIGHT W/QUAL.GROUD FL.: | 95 FT / 9 STORY | ZR23-664,table 1 |
| MIN.SETBACK(AT WIDE/AT NARROW ST): | 7 FT | ZR23-662(c)(1) |
| PROPOSED BASE HEIGHT: | 40 FT < 75 FT = 75 FT | COMPLIES |
| PROPOSED BUILDING HEIGHT: | 95 FT / 9 STORY | COMPLIES |
| PROPOSED SETBACK: (AT WIDE/AT NARROW ST): | 10 FT / 15 FT | COMPLIES |

| | | |
|---|---|---|
| MAX.SIZE OF PARKING: | 200 PARKING | ZR25-12, ZR25-13 |
| MIN.REQUIRED PARKING: | 50% OF REGULAR D.U = 308 / 2 = 154 PARKING | ZR25-23 |
| MIN.REQUIRED PARKING FOR AFFORDABLE D.U : | 15% OF 107 D.U =16 PARKING | ZR25-251 |
| | TOTAL PARKING: =154 +16 = 170 PARKING | |
| MAX.SIZE OF PARKING: SEE Z-113(a),(b) | 170 PARKING < 198 PARKING < 200 PARKING | COMPLIES |

| | | |
|---|---|---|
| MIN.BICYCLE FOR REGULAR D.U: | 1 BICYCLE FOR EVERY 2 D.U = 414/2 = 207 BICYCLES | ZR25-811 |
| PROPOSED NUMBER OF BICYCLE : | (128 +81) = 209 > 207 | COMPLIES |

PROPOSED R7A

| No | DATE | ISSUE/REVISION |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

NOTE:
THIS IS A SCHEMATIC DESIGN AND SHALL SUBJECT TO REVIEW AND INTERPRETATION BY NYC DEPARTMENT OF BUILDINGS ON ZONING AND BUILDING CODES.

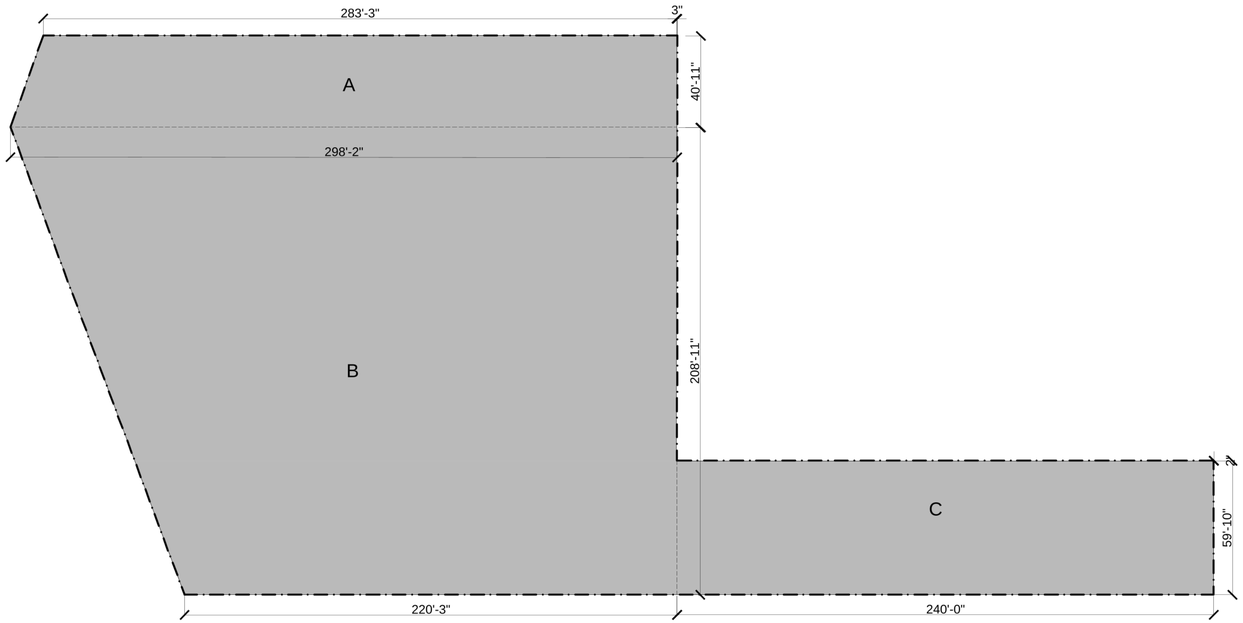
SEAL & SIGNATURE:

RAYMOND CHAN ARCHITECT PC
ARCHITECTS • PLANNERS
136-68 ROOSEVELT AVE. FLUSHING, NEW YORK 11354
Tel: (718) 445-2345 Fax: (718) 359-8809
Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
ZONING ANALYSIS (FOR R7A)

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-101 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |

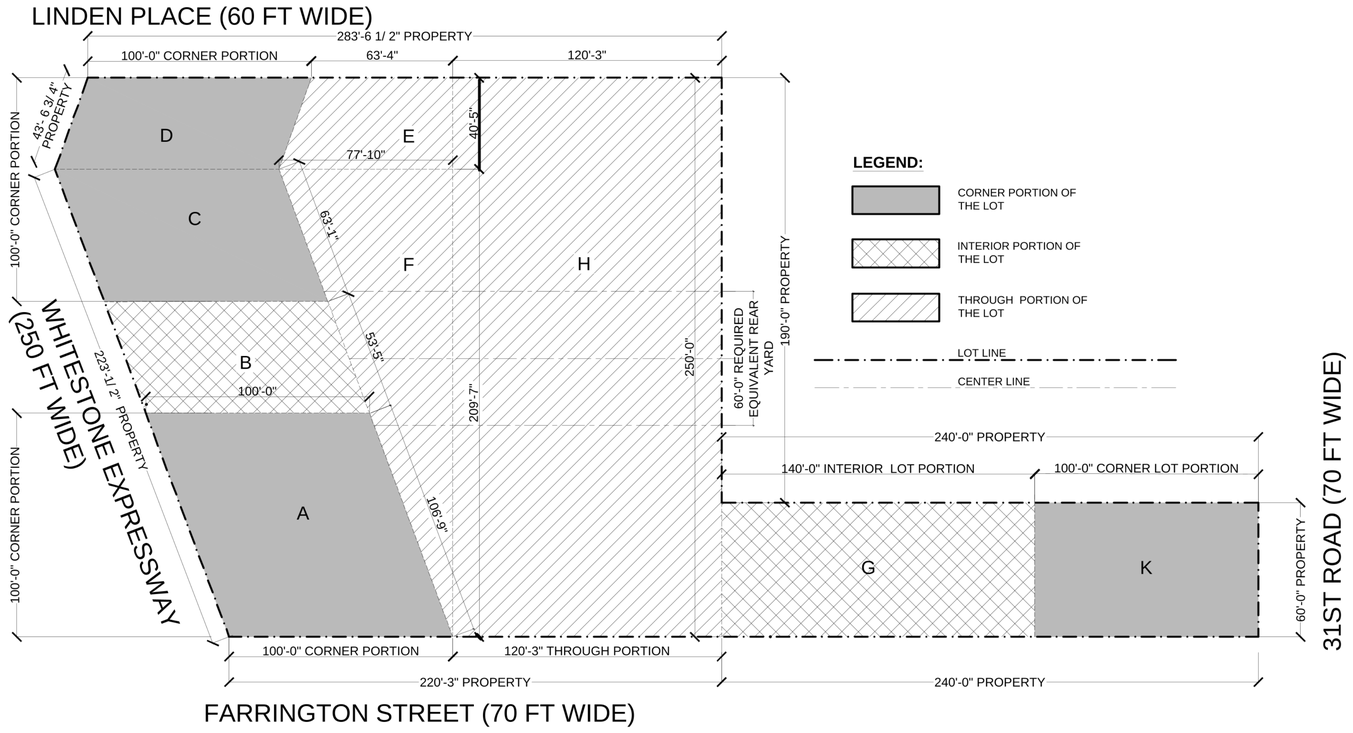



## CELLAR FLOOR AREA DIAGRAM (PARKING)

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

**CELLAR FLOOR AREA CALCULATIONS(PARKING):**

**AREA A: (283.25'+298.16')/2 x 40.92' = 11,895.65 SQ.F**
**AREA B: (298.16'+220.25')/2 x 208.92' = 54,153.11 SQ.F**
**AREA C: 240.00'x 59.75' = 14,340.00 SQ.F**
**TOTAL: 80,388.76 SQ.F**




## LOT AREA CALCULATION

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

**LOT AREA CALCULATIONS:**

**CORNER PORTIONS OF THE LOT:**
**AREA A: 100.00'x106.75' = 10,675.00 SQ.F**
**AREA C: 100.00'x63.08' = 6,308.00 SQ.F**
**AREA D: 100.00'x43.56' = 4,356.00 SQ.F**
**AREA K: 100.00'x60.00' = 6,000.00 SQ.F**
**TOTAL: 27,339.00 SQ.F**

**INTERIOR PORTIONS OF THE LOT:**
**AREA B: 100.00'x53.42' = 5,342.00 SQ.F**
**AREA G: 140.00'x60.00'= 8,400.00 SQ.F**
**TOTAL: 13,742.00 SQ.F**

**THROUGH PORTION OF THE LOT:**
**AREA E: 1/2(63.33'+77.83')x40.42' = 2,852.84 SQ.F**
**AREA F: 1/2(77.83'x209.58') = 8,155.81 SQ.F**
**AREA H: 120.25'x250.00' = 30,062.50 SQ.F**
**TOTAL: 41,0971.15 SQ.F**

**TOTAL ENTIRE LOT: 82,152.15 SQ.F**

**MAX.ALLOWED LOT COVERAGE:**
**FOR CORNER PORTION OF THE LOT: 100%**
**100% OF 27,339.00 = 27,339.00 SQ.F (ZR23-153)**

**FOR INTERIOR/THROUGH PORTIONS OF THE LOT: 65%**
**65% OF 13,742.00 = 8,932.30 SQ.F (ZR23-153)**
**65% OF 41,071.15 = 26,696.25 SQ.F (ZR23-153)**

**TOTAL ALLOWED LOT COVERAGE:**
**27,339.00 + 8,932.30 + 26,696.25 = 62,967.55 SQ.F**

PROPOSED R7A

| No | DATE | ISSUE/REVISION |
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NOTE:
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SEAL & SIGNATURE:

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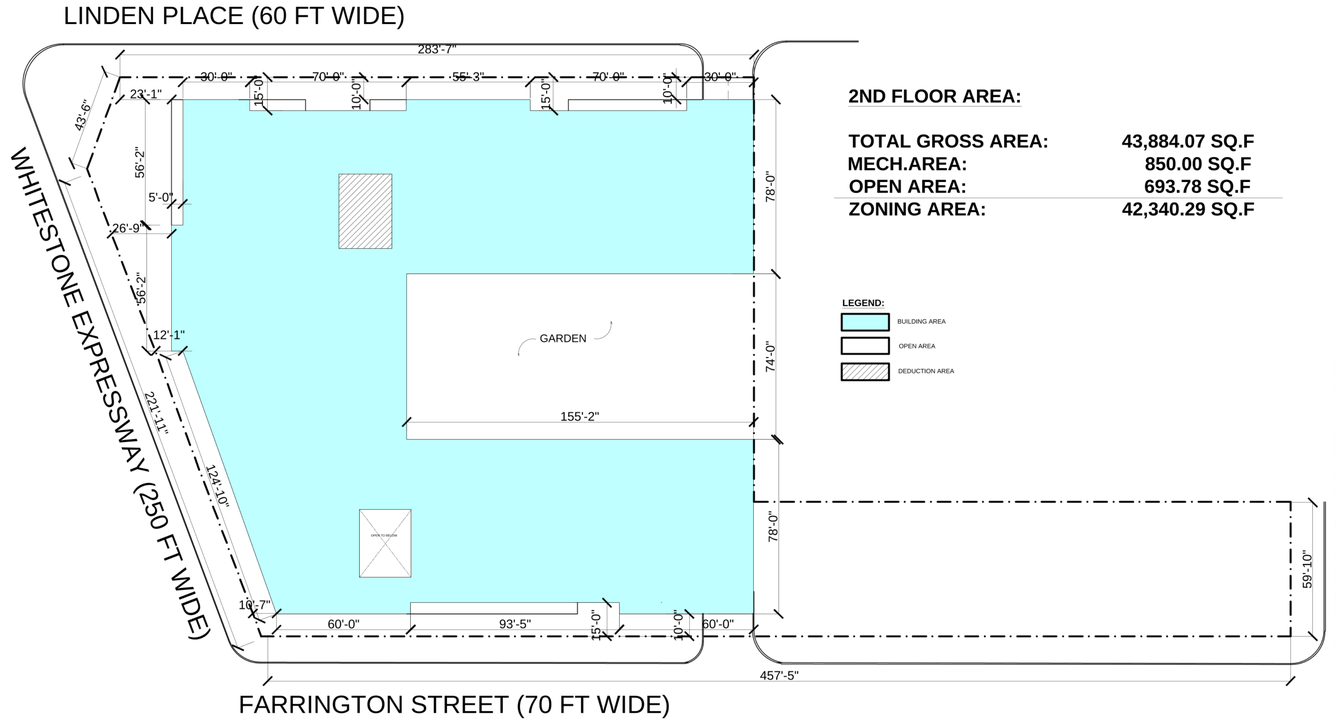
ARCHITECTS • PLANNERS
136-68 ROOSEVELT AVE. FLUSHING, NEW YORK 11354
Tel: (718) 445-2345 Fax: (718) 359-8809
Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
AREA CALCULATION DIAGRAMS

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-102 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




**2ND FLOOR AREA:**

| | |
|---|---|
| **TOTAL GROSS AREA:** | **43,884.07 SQ.F** |
| **MECH.AREA:** | **850.00 SQ.F** |
| **OPEN AREA:** | **693.78 SQ.F** |
| **ZONING AREA:** | **42,340.29 SQ.F** |

**LEGEND:**

- BUILDING AREA
- OPEN AREA
- DEDUCTION AREA

**TOTAL ENTIRE LOT: 82,152.15 SQ.F**

**MAX.ALLOWED LOT COVERAGE:**
**FOR CORNER PORTION OF THE LOT: 100%**
**100% OF 27,339.00 = 27,339.00 SQ.F (ZR23-153)**

**FOR INTERIOR/THROUGH PORTIONS OF THE LOT:**
**65% OF 13,742.00 = 8,932.30 SQ.F (ZR23-153)**
**65% OF 41,071.15 = 26,696.25 SQ.F (ZR23-153)**

**TOTAL ALLOWED LOT COVERAGE:**
**27,339.00 + 8,932.30 + 26,696.25 = 62,967.55 SQ.F**

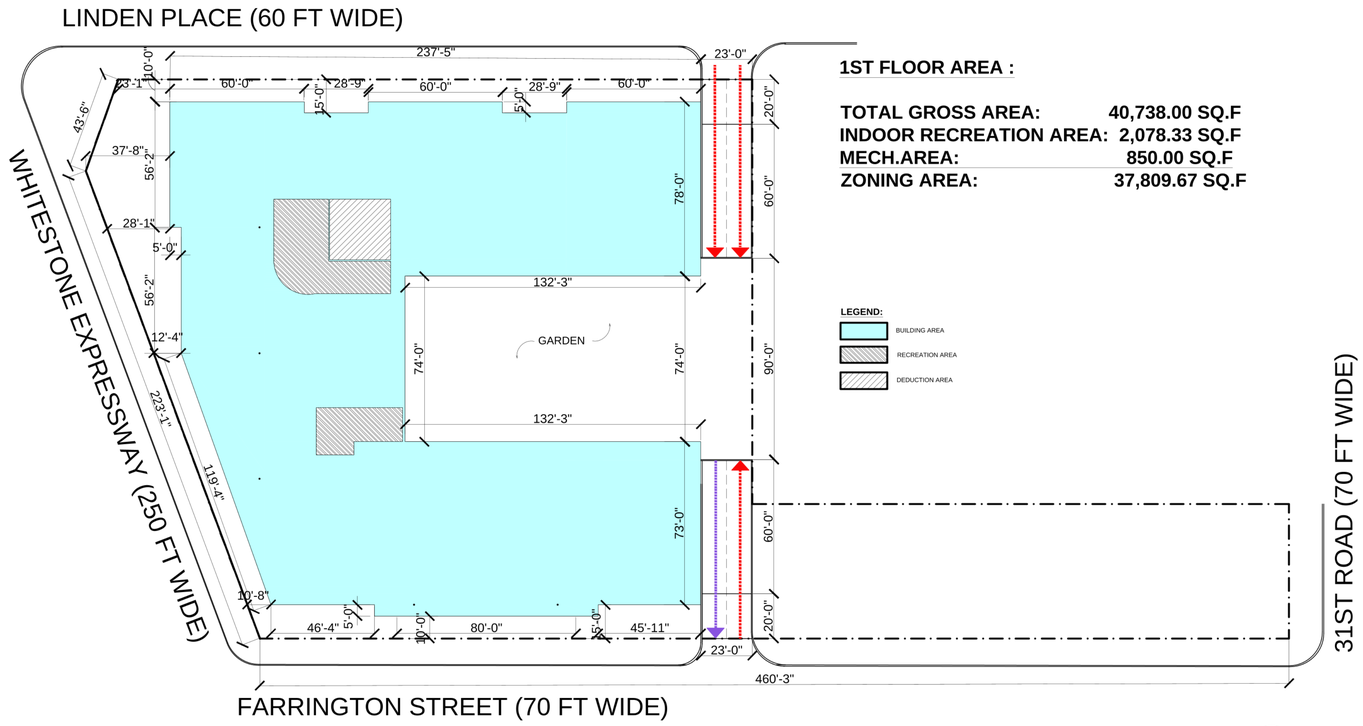
**ADJUSTED MAX.% OF LOT COVERAGE OF ZONING LOT**
**AS PER ZR77-24:**
**(62,967.55/82,152.15)x 100 = 76.65%**

**PROPOSED LOT COVERAGE:**
**(43,884.07/82,152.15)x 100 = 53% < 76.65%**

**A BUILDING WHOSE LOT COVERAGE DOES NOT EXCEED THE ADJUSTED MAX. PERCENTAGE OF LOT COVERAGE MAY BE LOCATED ANYWHERE ON SUCH ZONING LOT OR SUCH PORTION OF SUCH ZONING LOT*

## 2ND FLOOR AREA

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




**1ST FLOOR AREA :**

| | |
|---|---|
| **TOTAL GROSS AREA:** | **40,738.00 SQ.F** |
| **INDOOR RECREATION AREA:** | **2,078.33 SQ.F** |
| **MECH.AREA:** | **850.00 SQ.F** |
| **ZONING AREA:** | **37,809.67 SQ.F** |

**LEGEND:**

- BUILDING AREA
- RECREATION AREA
- DEDUCTION AREA

## 1ST FLOOR ARAA

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

PROPOSED R7A

| No | DATE | ISSUE/REVISION |
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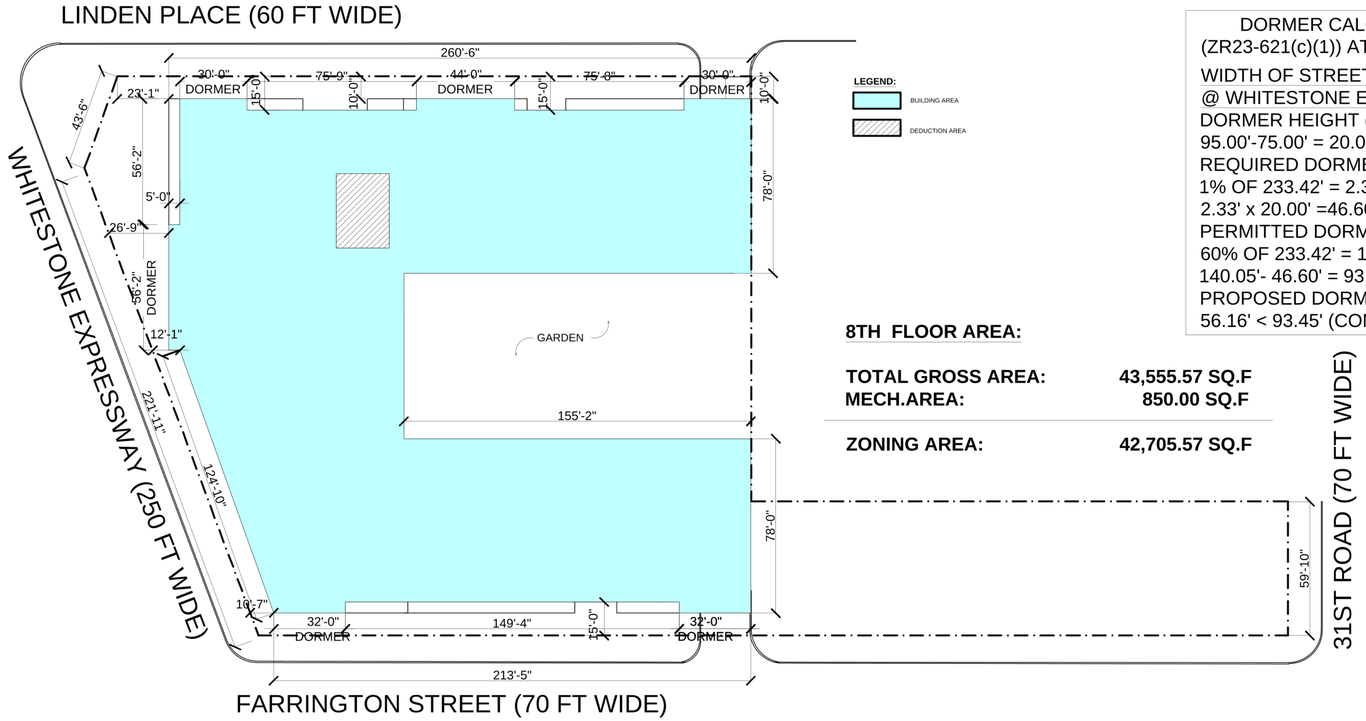
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
FLOOR AREA DIAGRAMS

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-103 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




**8TH FLOOR AREA:**

| | |
|---|---|
| **TOTAL GROSS AREA:** | **43,555.57 SQ.F** |
| **MECH.AREA:** | **850.00 SQ.F** |
| **ZONING AREA:** | **42,705.57 SQ.F** |

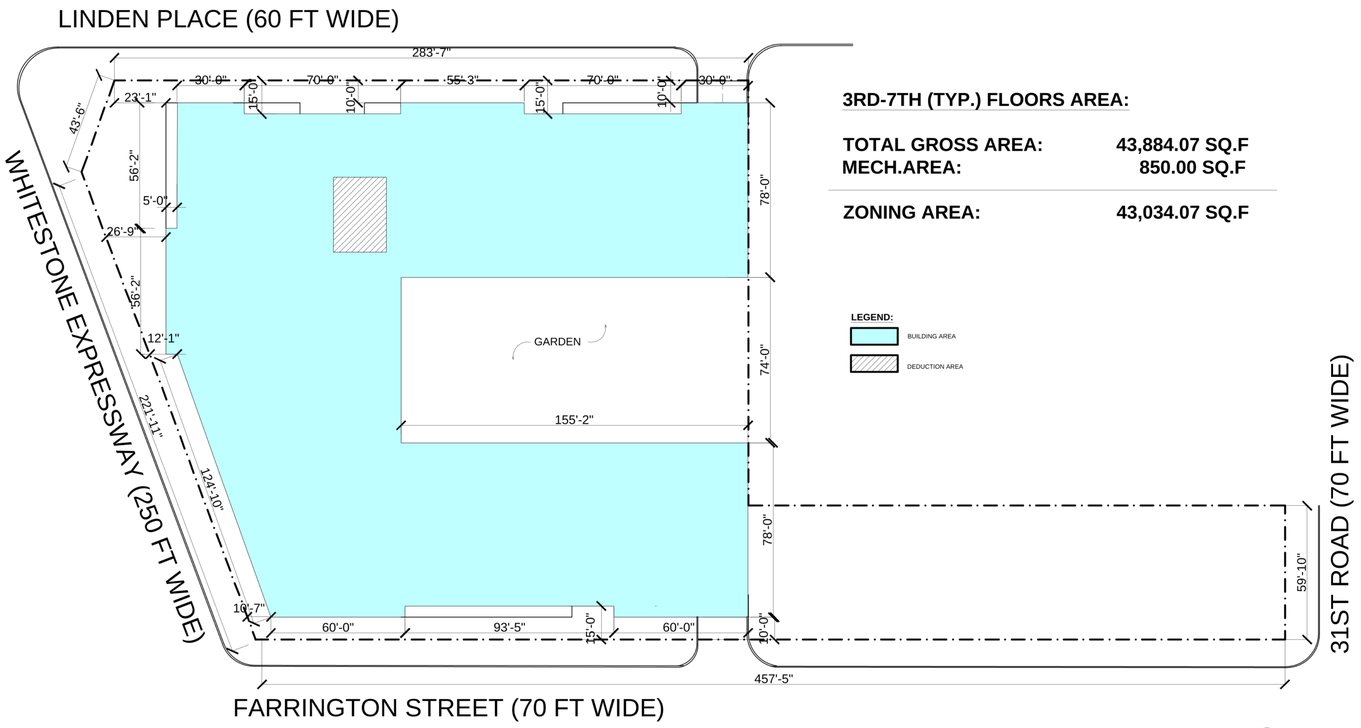
DORMER CALCULATION
(ZR23-621(c)(1)) AT 8TH FLOORS:

WIDTH OF STREET WALL
@ WHITESTONE EXPRESSWAY: 233.42 FT
DORMER HEIGHT (ABOVE MAX.BASE HEIGHT) :
95.00'-75.00' = 20.00'
REQUIRED DORMER WIDTH DECREASE:
1% OF 233.42' = 2.33'
2.33' x 20.00' =46.60'
PERMITTED DORMER WIDTH(MAX.)
60% OF 233.42' = 140.05'
140.05'- 46.60' = 93.45'
PROPOSED DORMER WIDTH:
56.16' < 93.45' (COMPLIES)

WIDTH OF STREET WALL
@FARRINGTON ST: 213.42 FT
DORMER HEIGHT (ABOVE MAX.BASE HEIGHT) :
95.00'-75.00' = 20.00'
REQUIRED DORMER WIDTH DECREASE:
1% OF 213.42' = 3.12'
3.12' x 20.00' =62.48'
PERMITTED DORMER WIDTH(MAX.)
60% OF 213.42' = 128.05'
128.05'-62.48' = 65.57'
PROPOSED DORMER WIDTH:
2x32.00' = 64.00' < 88.15' (COMPLIES)

WIDTH OF STREET WALL
@ LINDEN PLACE: 260.50 FT
DORMER HEIGHT (ABOVE MAX.BASE HEIGHT) :
95.00'-75.00' = 20.00'
REQUIRED DORMER WIDTH DECREASE:
1% OF 260.50' = 2.61'
2.61' x 20.00' =52.20'
PERMITTED DORMER WIDTH(MAX.)
60% OF 260.50' = 156.30'
156.30'-52.20' = 104.10'
PROPOSED DORMER WIDTH:
(2 x30.00)+44.00'= 104.00' < 104.10' (COMPLIES)

## 8TH FLOOR AREA
SCALE: 1/32"=1'-0"




**3RD-7TH (TYP.) FLOORS AREA:**

| | |
|---|---|
| **TOTAL GROSS AREA:** | **43,884.07 SQ.F** |
| **MECH.AREA:** | **850.00 SQ.F** |
| **ZONING AREA:** | **43,034.07 SQ.F** |

## 3RD-7TH FLOOR AREA(TYP.)
SCALE: 1/32"=1'-0"

PROPOSED R7A

| No | DATE | ISSUE/REVISION |
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Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
FLOOR AREA DIAGRAMS AND DORMERS CALCULATIONS

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: |
| PROJECT No: 21612 | Z-104 |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |

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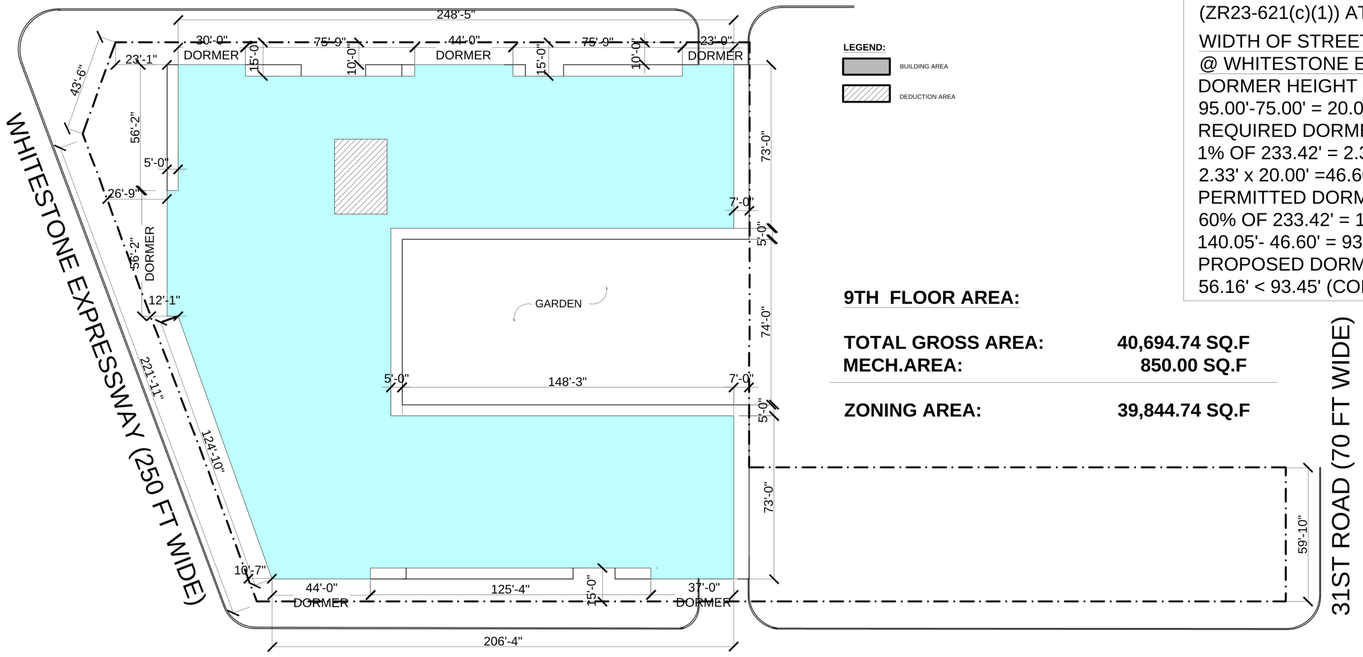
LINDEN PLACE (60 FT WIDE)




**LEGEND:**

BUILDING AREA

DEDUCTION AREA

**9TH FLOOR AREA:**

| | |
|---|---|
| **TOTAL GROSS AREA:** | **40,694.74 SQ.F** |
| **MECH.AREA:** | **850.00 SQ.F** |
| **ZONING AREA:** | **39,844.74 SQ.F** |

DORMER CALCULATION
(ZR23-621(c)(1)) AT 9TH FLOORS:

WIDTH OF STREET WALL
@ WHITESTONE EXPRESSWAY: 233.42 FT
DORMER HEIGHT (ABOVE MAX.BASE HEIGHT) :
95.00'-75.00' = 20.00'
REQUIRED DORMER WIDTH DECREASE:
1% OF 233.42' = 2.33'
2.33' x 20.00' =46.60'
PERMITTED DORMER WIDTH(MAX.)
60% OF 233.42' = 140.05'
140.05'- 46.60' = 93.45'
PROPOSED DORMER WIDTH:
56.16' < 93.45' (COMPLIES)

WIDTH OF STREET WALL
@FARRINGTON ST: 220.25 FT
DORMER HEIGHT (ABOVE MAX.BASE HEIGHT) :
95.00'-75.00' = 20.00'
REQUIRED DORMER WIDTH DECREASE:
1% OF 220.25' =2.20'
2.20' x 20.00' = 44.00'
PERMITTED DORMER WIDTH(MAX.)
60% OF 220.25' =132.15'
132.15'- 44.00' = 88.15'
PROPOSED DORMER WIDTH:
(44.00'+37.00') = 83.00' < 88.15' (COMPLIES)

WIDTH OF STREET WALL
@ LINDEN PLACE: 260.25 FT
DORMER HEIGHT (ABOVE MAX.BASE HEIGHT) :
95.00'-75.00' = 20.00'
REQUIRED DORMER WIDTH DECREASE:
1% OF 260.25' = 2.60'
2.60' x 20.00' =52.00'
PERMITTED DORMER WIDTH(MAX.)
60% OF 260.25' = 156.15'
156.15'-52.00' = 104.15'
PROPOSED DORMER WIDTH:
(30.00' +44.00'+ 23.00')= 97.00'< 104.15' (COMPLIES)

## 9TH FLOOR AREA

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

PROPOSED R7A

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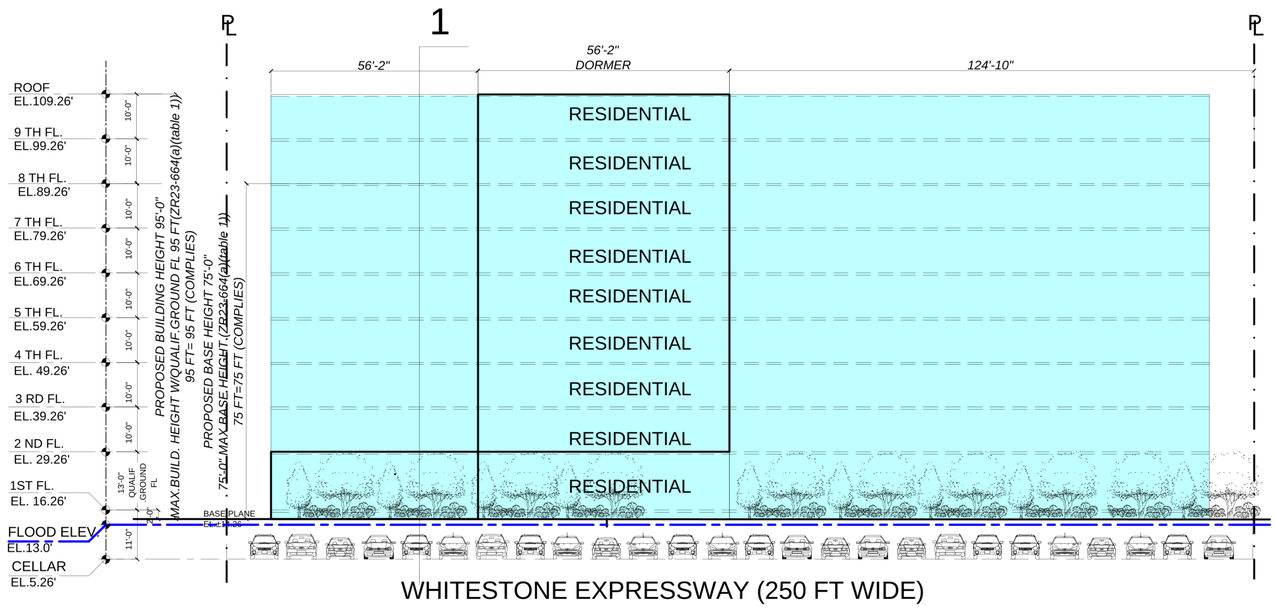
Web: www.raymondchanarchitect.com


PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

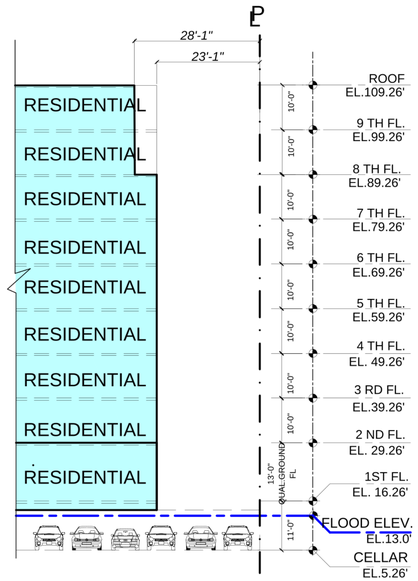
DRAWING TITLE:
FLOOR AREA DIAGRAM AND DORMERS CALCULATIONS

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-105 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |



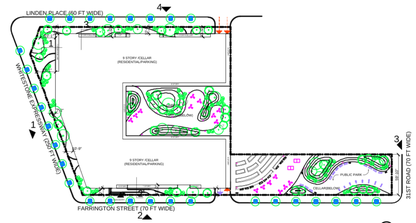

## ELEVATION 1 (FACING WHITESTONE EXPRESSWAY)

NOT IS SCALE

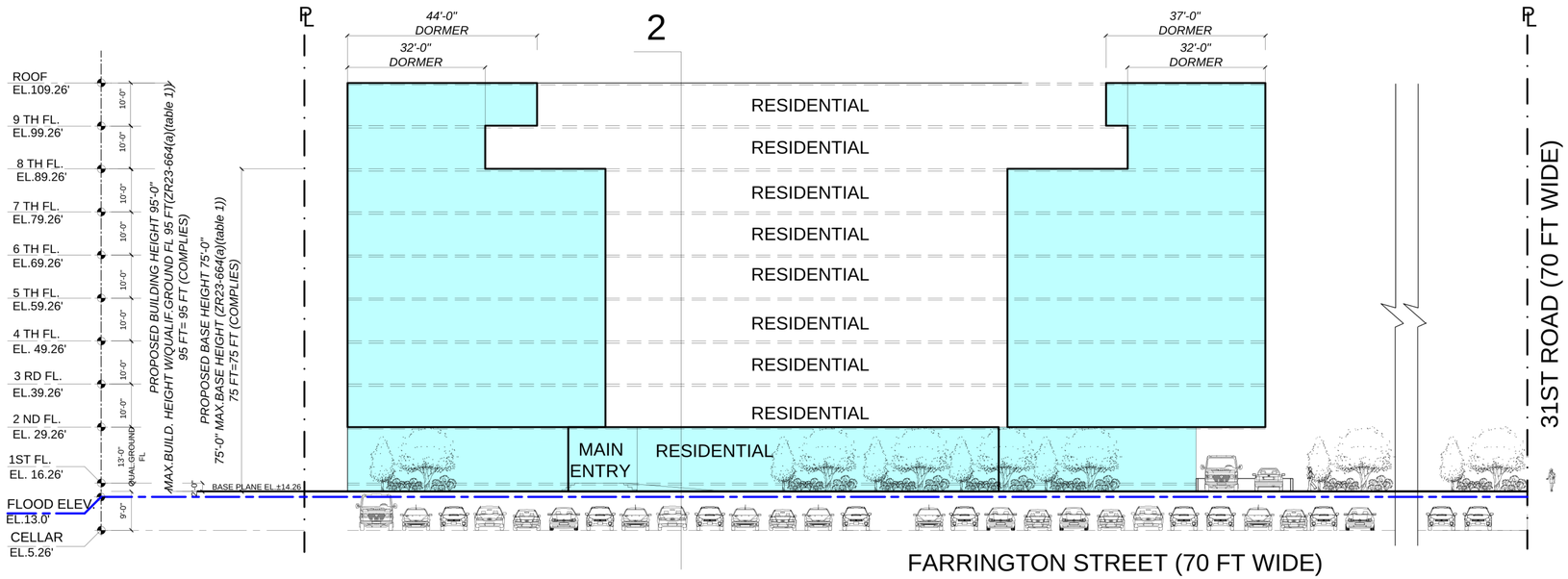



## SECTION 1

NOT IS SCALE



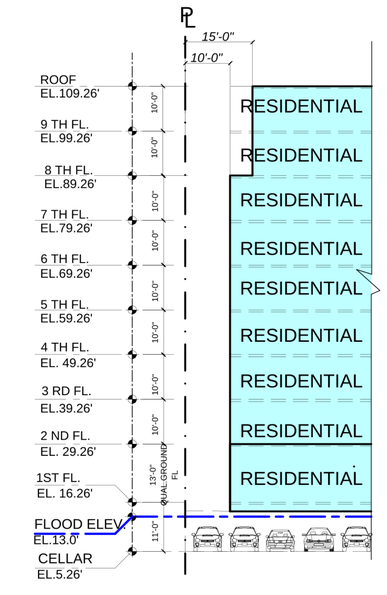

## KEY PLAN




**BASE PLANE CALCULATION:** ((17.16'+12.96')/2 x265.42' +(12.96'+13.0')/2 x248.42' +(17.16'+12.34')/2x 453.42'+(12.34'+12.42')/2x60.00' = 14,651.87'/ 1,027.26' = 14.24'15.30'
265.42 +248.42' + 453.42'+60.00'

## ELEVATION 2( FACING FARRINGTON STREET)

NOT IS SCALE




## SECTION 2

NOT IS SCALE

PROPOSED R7A

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Web: www.raymondchanarchitect.com

PROJECT:

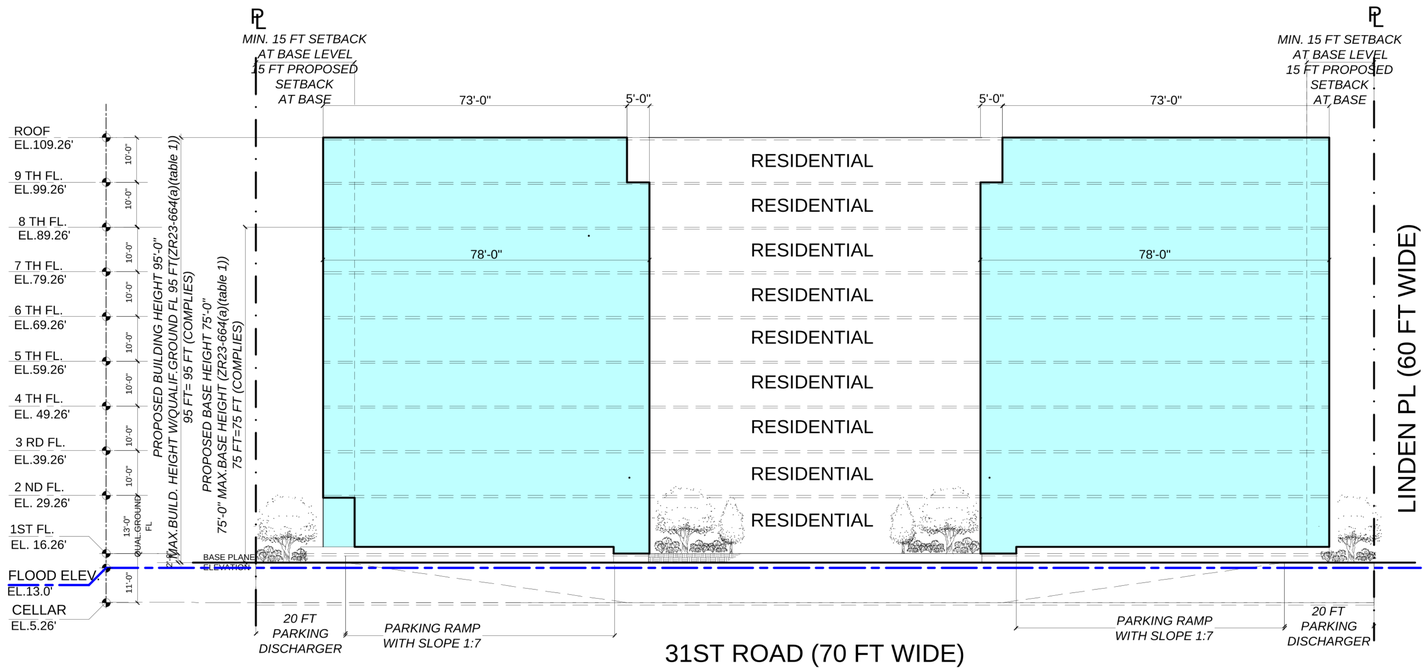
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:

BULK AND BUILDING HEIGHT DIAGRAMS

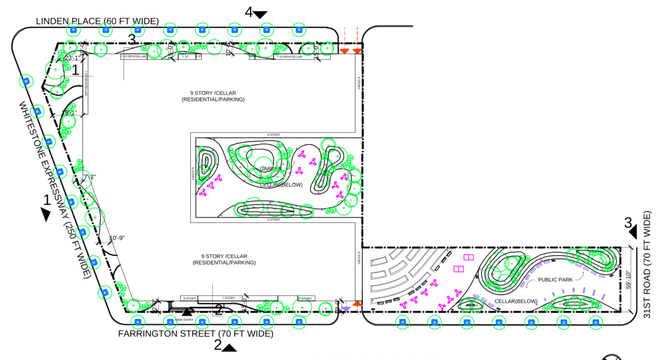
| | |
|---|---|
| DATE: 01/24/2023 | DWG No: |
| PROJECT No: 21612 | Z-106 |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |

CAD FILE No:
30-05 FARRINGTON STREET
QUEENS, NEW YORK

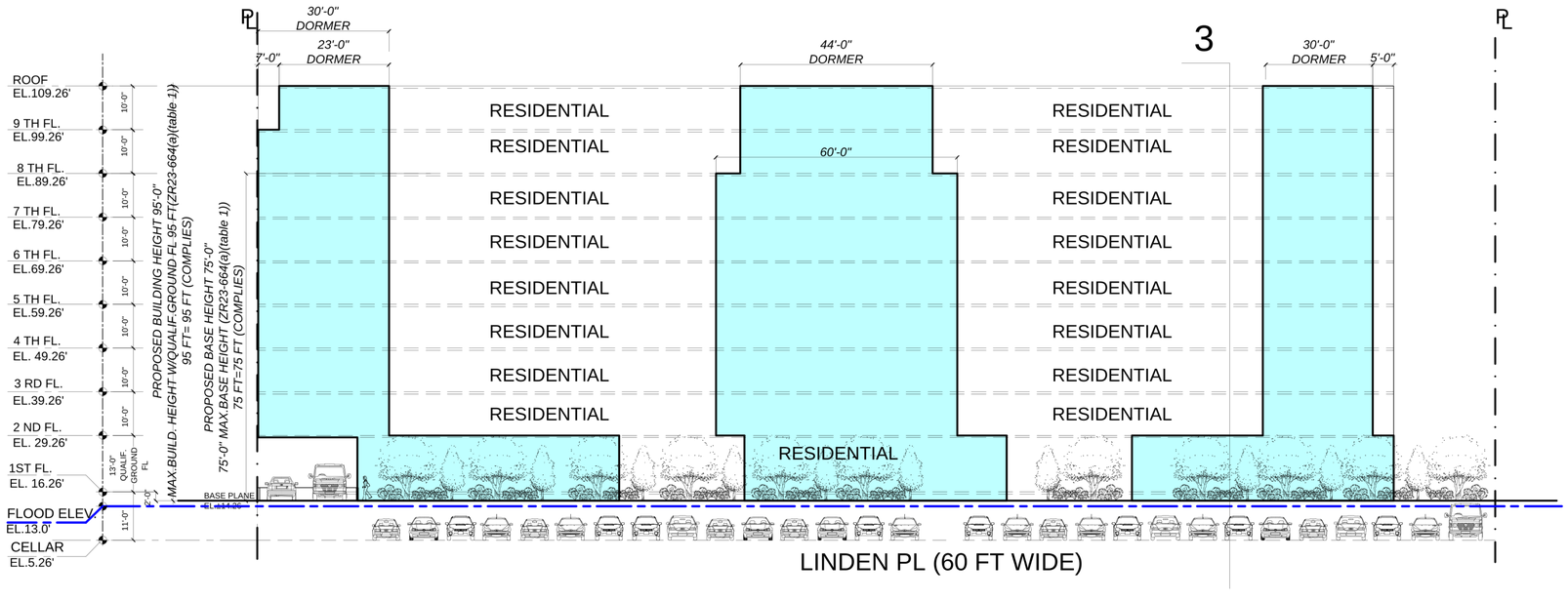



## ELEVATION 3 (FACING WHITESTONE EXPRESSWAY)

NOT IS SCALE

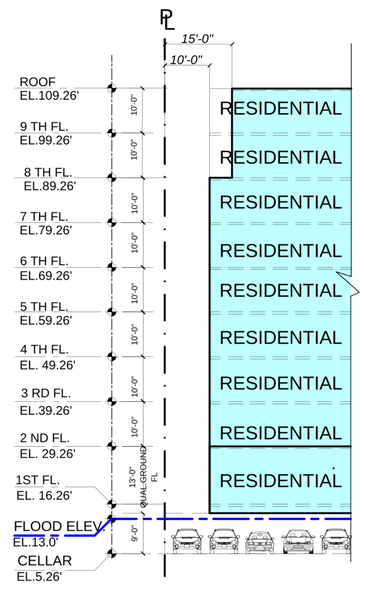



## KEY PLAN




## ELEVATION 4( FACING LINDEN PL)

NOT IN SCALE




## SECTION 3

NOT IN SCALE

PROPOSED R7A

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Web: www.raymondchanarchitect.com

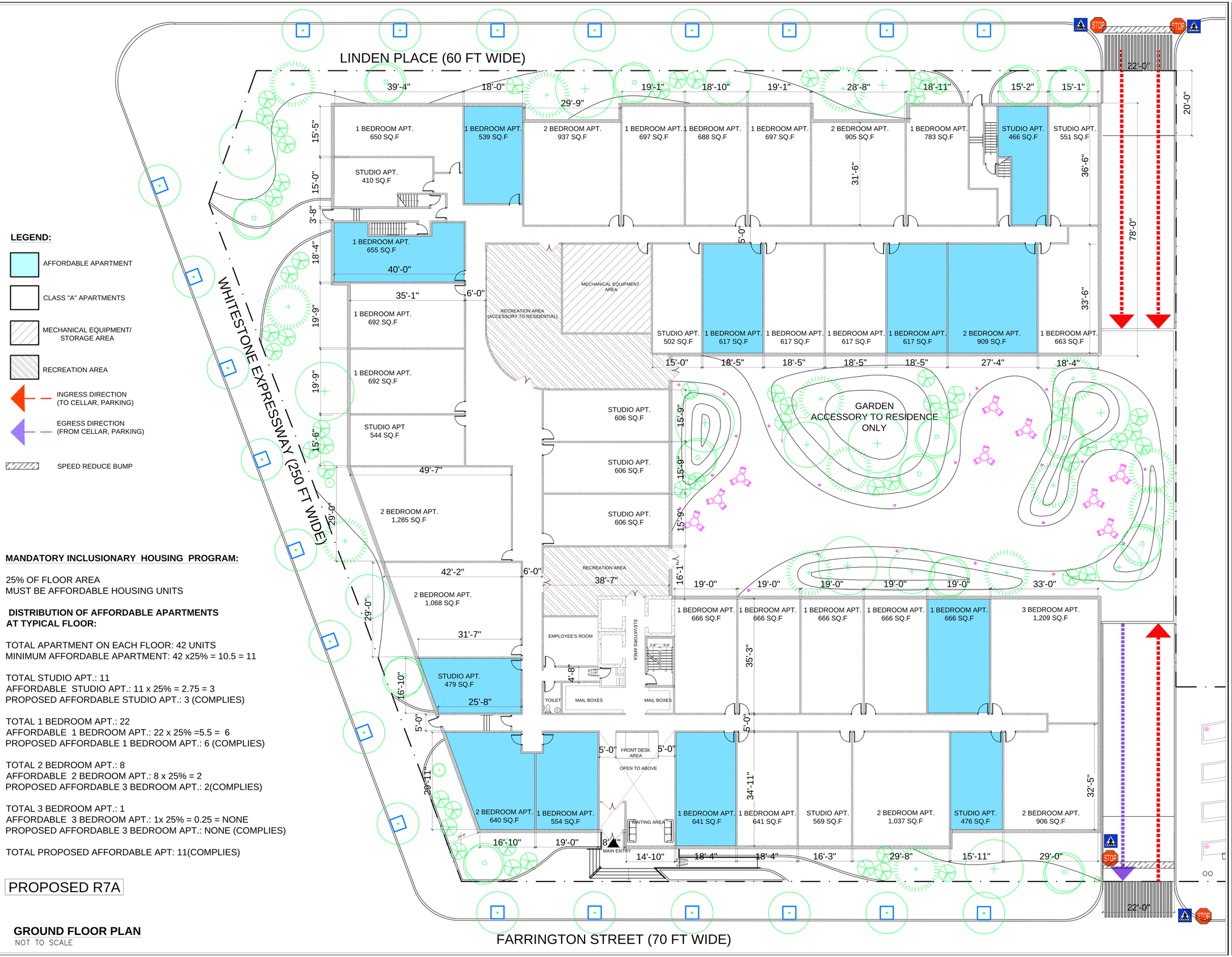
PROJECT:

30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:

BULK AND BUILDING HEIGHT DIAGRAMS

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: |
| PROJECT No: 21612 | Z-107 |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




**LEGEND:**

- AFFORDABLE APARTMENT
- CLASS "A" APARTMENTS
- MECHANICAL EQUIPMENT/ STORAGE AREA
- RECREATION AREA
- INGRESS DIRECTION (TO CELLAR, PARKING)
- EGRESS DIRECTION (FROM CELLAR, PARKING)
- SPEED REDUCE BUMP

**MANDATORY INCLUSIONARY HOUSING PROGRAM:**

25% OF FLOOR AREA
MUST BE AFFORDABLE HOUSING UNITS

**DISTRIBUTION OF AFFORDABLE APARTMENTS AT TYPICAL FLOOR:**

TOTAL APARTMENT ON EACH FLOOR: 42 UNITS
MINIMUM AFFORDABLE APARTMENT: 42 x25% = 10.5 = 11

TOTAL STUDIO APT.: 11
AFFORDABLE STUDIO APT.: 11 x 25% = 2.75 = 3
PROPOSED AFFORDABLE STUDIO APT.: 3 (COMPLIES)

TOTAL 1 BEDROOM APT.: 22
AFFORDABLE 1 BEDROOM APT.: 22 x 25% =5.5 = 6
PROPOSED AFFORDABLE 1 BEDROOM APT.: 6 (COMPLIES)

TOTAL 2 BEDROOM APT.: 8
AFFORDABLE 2 BEDROOM APT.: 8 x 25% = 2
PROPOSED AFFORDABLE 3 BEDROOM APT.: 2(COMPLIES)

TOTAL 3 BEDROOM APT.: 1
AFFORDABLE 3 BEDROOM APT.: 1x 25% = 0.25 = NONE
PROPOSED AFFORDABLE 3 BEDROOM APT.: NONE (COMPLIES)

TOTAL PROPOSED AFFORDABLE APT: 11(COMPLIES)

PROPOSED R7A

**GROUND FLOOR PLAN**
NOT TO SCALE

| No | DATE | ISSUE/REVISION |
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SEAL & SIGNATURE:

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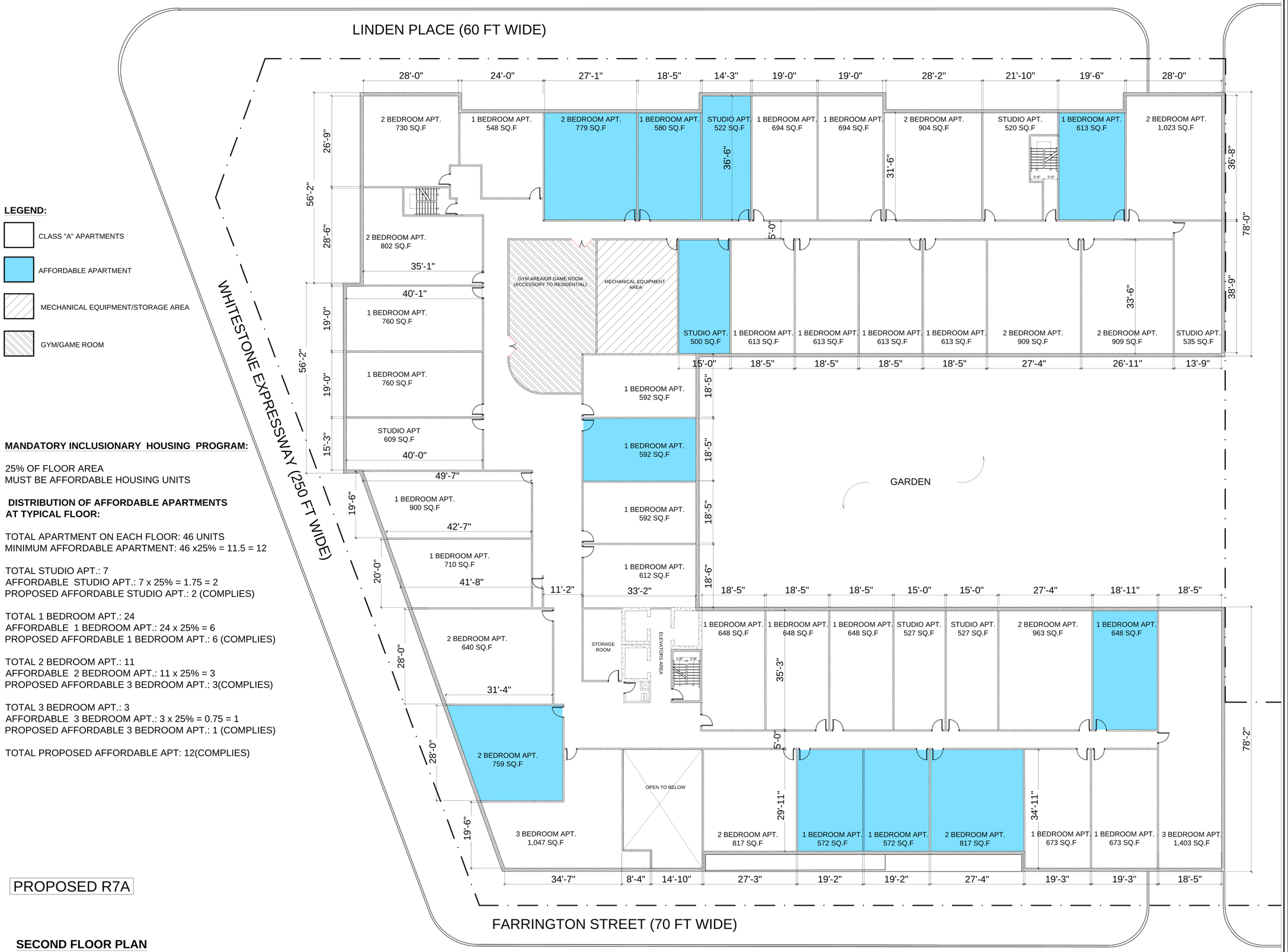
Tel: (718) 445-2345 Fax: (718) 359-8809
Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
GROUND FLOOR AFFORDABLE UNITS ALLOCATION PLAN

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-108 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




**LEGEND:**

- CLASS "A" APARTMENTS
- AFFORDABLE APARTMENT
- MECHANICAL EQUIPMENT/STORAGE AREA
- GYM/GAME ROOM

**MANDATORY INCLUSIONARY HOUSING PROGRAM:**

25% OF FLOOR AREA
MUST BE AFFORDABLE HOUSING UNITS

**DISTRIBUTION OF AFFORDABLE APARTMENTS AT TYPICAL FLOOR:**

TOTAL APARTMENT ON EACH FLOOR: 46 UNITS
MINIMUM AFFORDABLE APARTMENT: 46 x25% = 11.5 = 12

TOTAL STUDIO APT.: 7
AFFORDABLE STUDIO APT.: 7 x 25% = 1.75 = 2
PROPOSED AFFORDABLE STUDIO APT.: 2 (COMPLIES)

TOTAL 1 BEDROOM APT.: 24
AFFORDABLE 1 BEDROOM APT.: 24 x 25% = 6
PROPOSED AFFORDABLE 1 BEDROOM APT.: 6 (COMPLIES)

TOTAL 2 BEDROOM APT.: 11
AFFORDABLE 2 BEDROOM APT.: 11 x 25% = 3
PROPOSED AFFORDABLE 3 BEDROOM APT.: 3(COMPLIES)

TOTAL 3 BEDROOM APT.: 3
AFFORDABLE 3 BEDROOM APT.: 3 x 25% = 0.75 = 1
PROPOSED AFFORDABLE 3 BEDROOM APT.: 1 (COMPLIES)

TOTAL PROPOSED AFFORDABLE APT: 12(COMPLIES)

PROPOSED R7A

**SECOND FLOOR PLAN**
NOT TO SCALE

| No | DATE | ISSUE/REVISION |
|---|---|---|
| | | |

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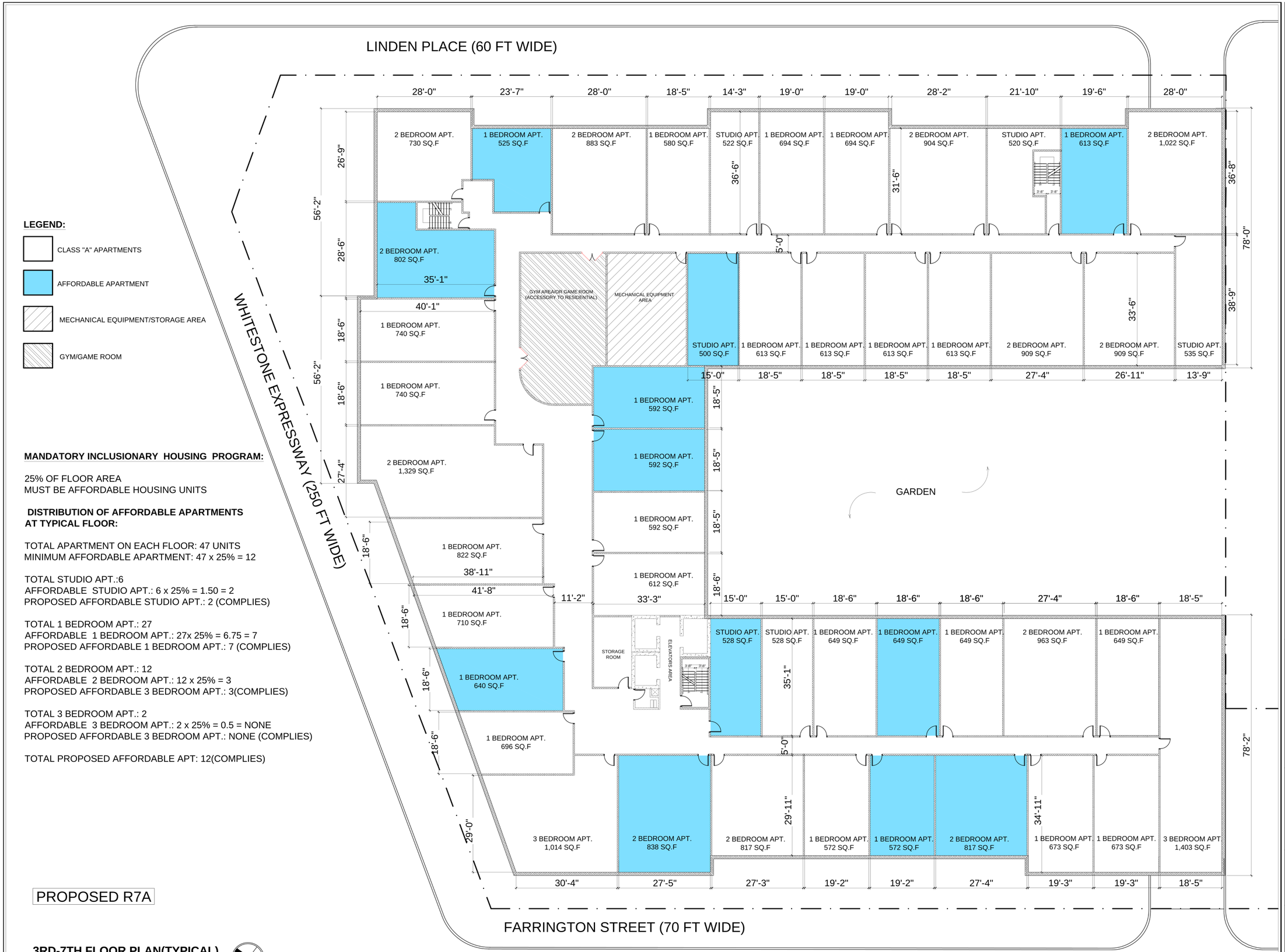
Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
2ND FLOOR AFFORDABLE UNITS ALLOCATION PLAN

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-109 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




**LEGEND:**

- CLASS "A" APARTMENTS
- AFFORDABLE APARTMENT
- MECHANICAL EQUIPMENT/STORAGE AREA
- GYM/GAME ROOM

**MANDATORY INCLUSIONARY HOUSING PROGRAM:**

25% OF FLOOR AREA
MUST BE AFFORDABLE HOUSING UNITS

**DISTRIBUTION OF AFFORDABLE APARTMENTS AT TYPICAL FLOOR:**

TOTAL APARTMENT ON EACH FLOOR: 47 UNITS
MINIMUM AFFORDABLE APARTMENT: 47 x 25% = 12

TOTAL STUDIO APT.:6
AFFORDABLE STUDIO APT.: 6 x 25% = 1.50 = 2
PROPOSED AFFORDABLE STUDIO APT.: 2 (COMPLIES)

TOTAL 1 BEDROOM APT.: 27
AFFORDABLE 1 BEDROOM APT.: 27x 25% = 6.75 = 7
PROPOSED AFFORDABLE 1 BEDROOM APT.: 7 (COMPLIES)

TOTAL 2 BEDROOM APT.: 12
AFFORDABLE 2 BEDROOM APT.: 12 x 25% = 3
PROPOSED AFFORDABLE 3 BEDROOM APT.: 3(COMPLIES)

TOTAL 3 BEDROOM APT.: 2
AFFORDABLE 3 BEDROOM APT.: 2 x 25% = 0.5 = NONE
PROPOSED AFFORDABLE 3 BEDROOM APT.: NONE (COMPLIES)

TOTAL PROPOSED AFFORDABLE APT: 12(COMPLIES)

PROPOSED R7A

**3RD-7TH FLOOR PLAN(TYPICAL)**
NOT TO SCALE

| No | DATE | ISSUE/REVISION |
|---|---|---|
| | | |

NOTE:
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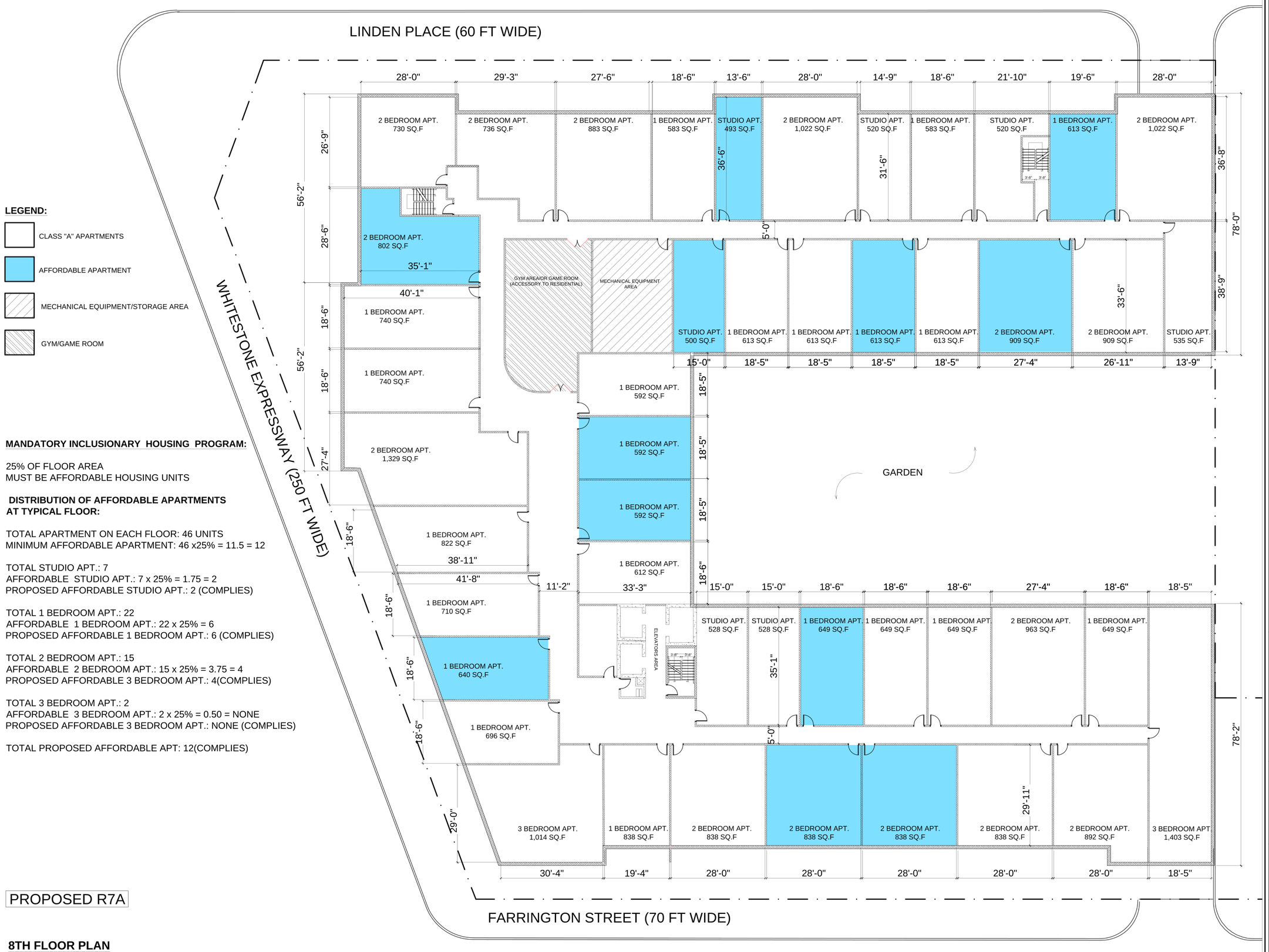
Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
3RD- 7TH FLOORS AFFORDABLE UNITS ALLOCATION PLAN

DATE: 01/24/2023
PROJECT No: 21612
PROJECT MANAGER: R.C.
DRAWING BY: J.C.
CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK

DWG No: Z-110




**LEGEND:**

- CLASS "A" APARTMENTS
- AFFORDABLE APARTMENT
- MECHANICAL EQUIPMENT/STORAGE AREA
- GYM/GAME ROOM

**MANDATORY INCLUSIONARY HOUSING PROGRAM:**

25% OF FLOOR AREA
MUST BE AFFORDABLE HOUSING UNITS

**DISTRIBUTION OF AFFORDABLE APARTMENTS AT TYPICAL FLOOR:**

TOTAL APARTMENT ON EACH FLOOR: 46 UNITS
MINIMUM AFFORDABLE APARTMENT: 46 x25% = 11.5 = 12

TOTAL STUDIO APT.: 7
AFFORDABLE STUDIO APT.: 7 x 25% = 1.75 = 2
PROPOSED AFFORDABLE STUDIO APT.: 2 (COMPLIES)

TOTAL 1 BEDROOM APT.: 22
AFFORDABLE 1 BEDROOM APT.: 22 x 25% = 6
PROPOSED AFFORDABLE 1 BEDROOM APT.: 6 (COMPLIES)

TOTAL 2 BEDROOM APT.: 15
AFFORDABLE 2 BEDROOM APT.: 15 x 25% = 3.75 = 4
PROPOSED AFFORDABLE 3 BEDROOM APT.: 4(COMPLIES)

TOTAL 3 BEDROOM APT.: 2
AFFORDABLE 3 BEDROOM APT.: 2 x 25% = 0.50 = NONE
PROPOSED AFFORDABLE 3 BEDROOM APT.: NONE (COMPLIES)

TOTAL PROPOSED AFFORDABLE APT: 12(COMPLIES)

PROPOSED R7A

**8TH FLOOR PLAN**
NOT TO SCALE

| No | DATE | ISSUE/REVISION |
|---|---|---|
| | | |

NOTE:
THIS IS A SCHEMATIC DESIGN AND SHALL SUBJECT TO REVIEW AND INTERPRETATION BY NYC DEPARTMENT OF BUILDINGS ON ZONING AND BUILDING CODES.

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Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
8TH FLOOR AFFORDABLE UNITS ALLOCATION PLAN

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-111 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




**LEGEND:**

- CLASS "A" APARTMENTS
- AFFORDABLE APARTMENT
- MECHANICAL EQUIPMENT/STORAGE AREA
- GYM/GAME ROOM

**MANDATORY INCLUSIONARY HOUSING PROGRAM:**

25% OF FLOOR AREA
MUST BE AFFORDABLE HOUSING UNITS

**DISTRIBUTION OF AFFORDABLE APARTMENTS AT TYPICAL FLOOR:**

TOTAL APARTMENT ON EACH FLOOR: 46 UNITS
MINIMUM AFFORDABLE APARTMENT: 46 x25% = 11.5 = 12

TOTAL STUDIO APT.: 7
AFFORDABLE STUDIO APT.: 7 x 25% = 1.75 = 2
PROPOSED AFFORDABLE STUDIO APT.: 2 (COMPLIES)

TOTAL 1 BEDROOM APT.: 27
AFFORDABLE 1 BEDROOM APT.: 27 x 25% = 6.75 = 7
PROPOSED AFFORDABLE 1 BEDROOM APT.: 7 (COMPLIES)

TOTAL 2 BEDROOM APT.: 10
AFFORDABLE 2 BEDROOM APT.: 10 x 25% =2.5 = 3
PROPOSED AFFORDABLE 3 BEDROOM APT.: 3(COMPLIES)

TOTAL 3 BEDROOM APT.: 2
AFFORDABLE 3 BEDROOM APT.: 2 x 25% = 0.50 = NONE
PROPOSED AFFORDABLE 3 BEDROOM APT.: NONE (COMPLIES)

TOTAL PROPOSED AFFORDABLE APT: 12(COMPLIES)

PROPOSED R7A

**9TH FLOOR PLAN**
NOT TO SCALE

| No | DATE | ISSUE/REVISION |
|---|---|---|
| | | |
| | | |
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NOTE:
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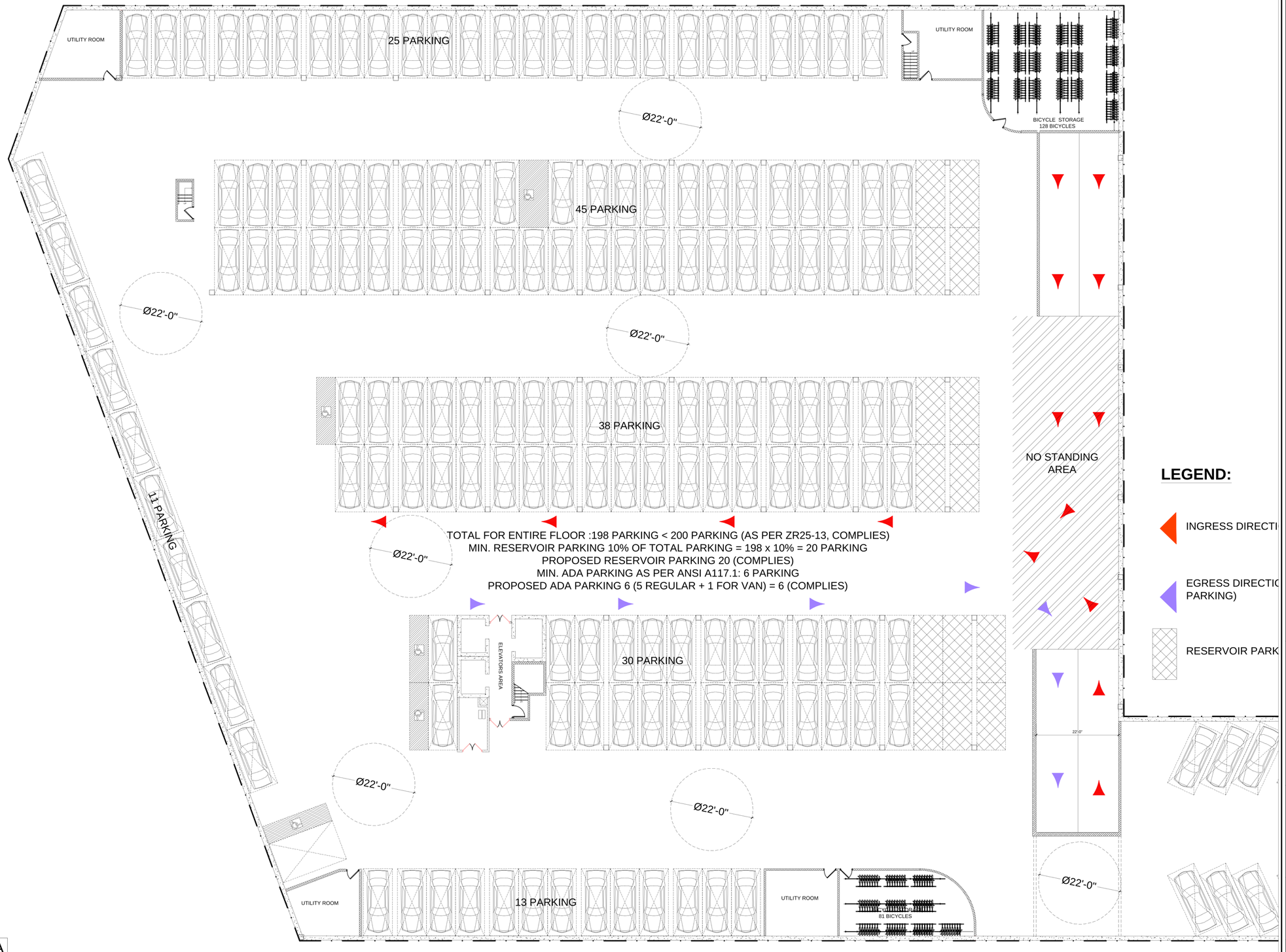
Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
9TH FLOOR AFFORDABLE UNITS ALLOCATION PLAN

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: Z-112 |
| PROJECT No: 21612 | |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




PROPOSED R7A

**CELLAR FLOOR PLAN**
NOT TO SCALE

**LEGEND:**

- INGRESS DIRECTI
- EGRESS DIRECTIC PARKING)
- RESERVOIR PARK

| No | DATE | ISSUE/REVISION |
|---|---|---|
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NOTE:
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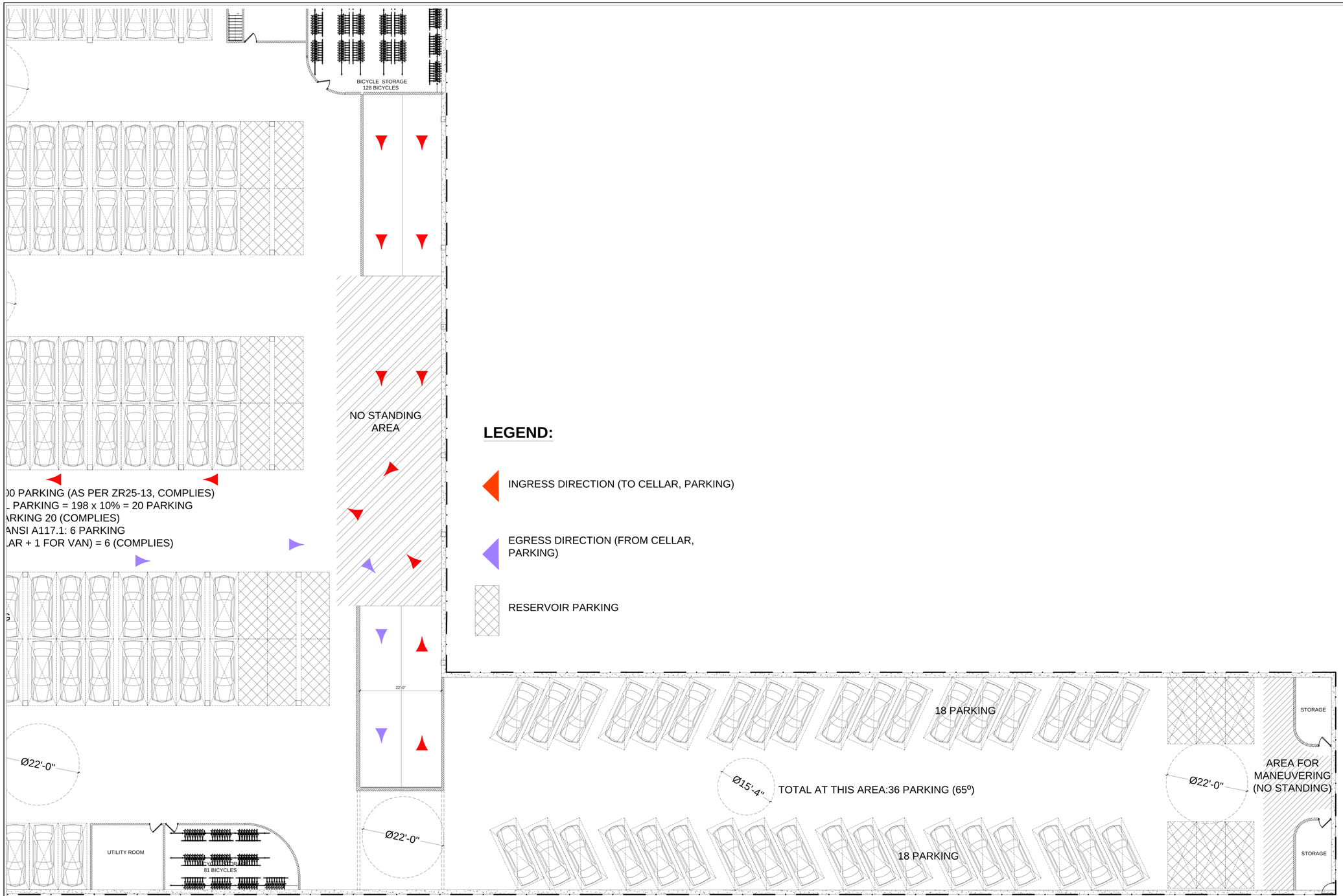
Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:
30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:
CELLAR FLOOR PLAN (PARKING)

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: |
| PROJECT No: 21612 | Z-113(a) |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |




**LEGEND:**

INGRESS DIRECTION (TO CELLAR, PARKING)

EGRESS DIRECTION (FROM CELLAR, PARKING)

RESERVOIR PARKING

PROPOSED R7A

**CELLAR FLOOR PLAN**

NOT TO SCALE

| No | DATE | ISSUE/REVISION |
|---|---|---|
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| | | |

NOTE:
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Email: info@raymondchanarchitect.com
Web: www.raymondchanarchitect.com

PROJECT:

30-05 FARRINGTON STREET, QUEENS, NEW YORK

DRAWING TITLE:

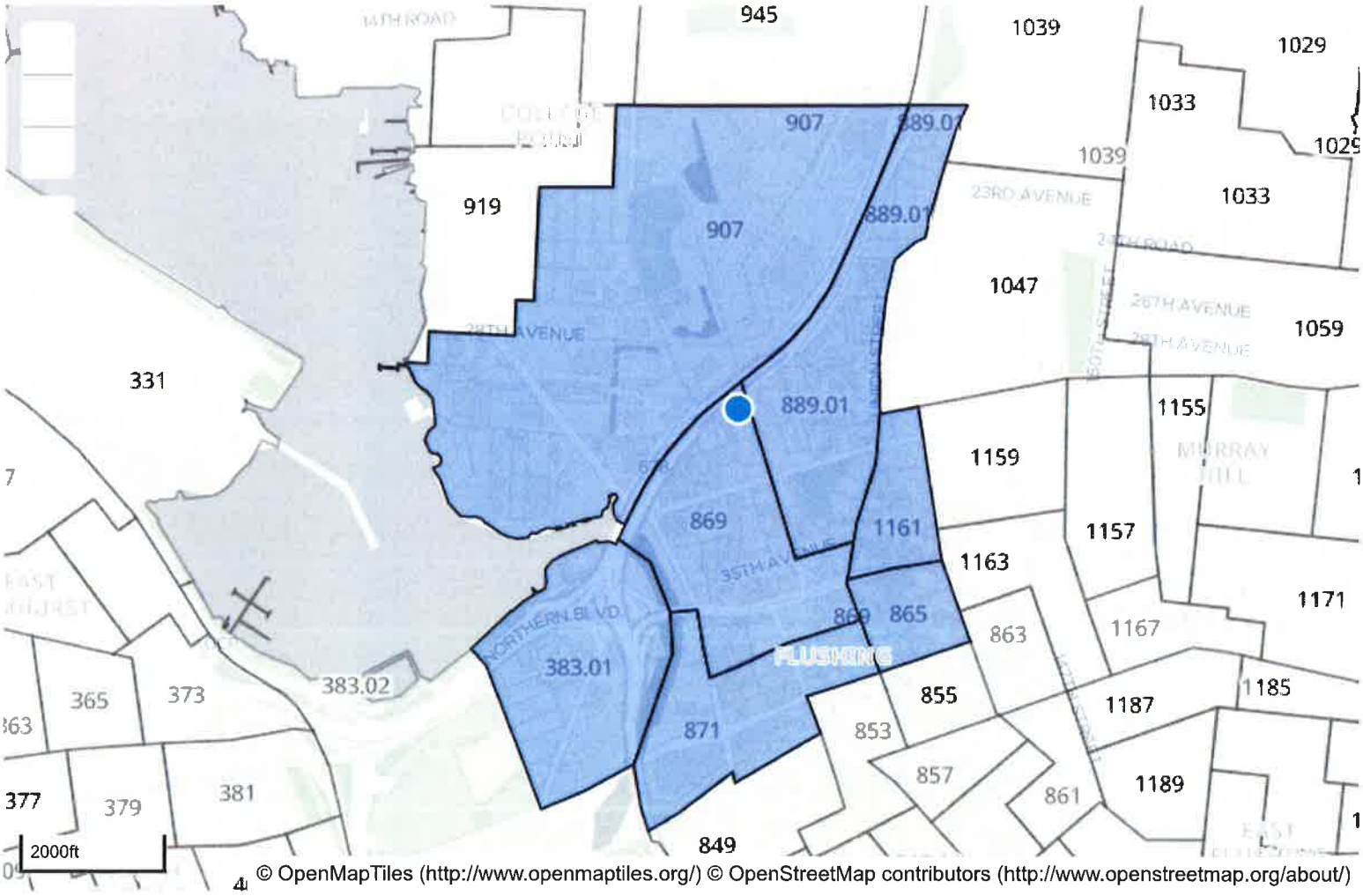
CELLAR FLOOR PLAN (PARKING)

| | |
|---|---|
| DATE: 01/24/2023 | DWG No: |
| PROJECT No: 21612 | Z-113(b) |
| PROJECT MANAGER: R.C. | |
| DRAWING BY: J.C. | |
| CAD FILE No: 30-05 FARRINGTON STREET QUEENS, NEW YORK | |

# Attachment D
# Transportation Appendix

# NYC PLANNING (http://www1.nyc.gov/site/planning/index.page) Population FactFinder (/)

Census Block | Census Tract | Neighborhood (NTA) | PUMA




Draw

Select individual census tracts to add them to the profile.

Polygon Radius

## View Profile

**7 Tracts**

Advanced Options

Clear Selection

# Exhibit 1

Modal Split Data

**2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 383.01, 865, 869, 871, 889.01, 907 and 1161 in Queens, NY**

***30-05 Farrington St, Queens NY***

***2015-2019 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 | Bicycle | Walked | Other Means | Worked @ Home | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **383.01** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **865** | 2303 | 181 | 375 | 403 | 0 | 809 | 0 | 0 | 0 | 0 | 0 | 465 | 0 | 70 | 2,303 |
| **869** | 826 | 90 | 205 | 72 | 0 | 257 | 5 | 0 | 0 | 0 | 0 | 177 | 10 | 10 | 826 |
| **871** | 1260 | 232 | 158 | 182 | 0 | 447 | 39 | 0 | 0 | 0 | 0 | 188 | 14 | 0 | 1,260 |
| **889.01** | 4489 | 1204 | 336 | 635 | 0 | 1470 | 0 | 0 | 0 | 0 | 0 | 762 | 0 | 82 | 4,489 |
| **907** | 562 | 347 | 21 | 75 | 0 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 562 |
| **1161** | 1478 | 362 | 142 | 160 | 0 | 478 | 9 | 0 | 0 | 0 | 7 | 267 | 30 | 23 | 1,478 |
| Total | 10,918 | 2,416 | 1,237 | 1,527 | 0 | 3,580 | 53 | 0 | 0 | 0 | 7 | 1,859 | 54 | 185 | 10,918 |
| | | ***0.221*** | ***0.113*** | ***0.140*** | ***0.00*** | ***0.328*** | ***0.005*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.170*** | ***0.00*** | ***0.017*** | ***1.00*** |

# Exhibit 2

Auto Occupancy Rate Data

**2015-2019 ACS 5-YEAR Journey-to-Work (JTW) for Census Tract numbers 383.01, 865, 869, 871, 889.01, 907 and 1161 in Queens, NY**

2015-2019 ACS-5 Year (JTW), Auto Occupancy Rate:

| Census Tract | Total | Drove alone | Total carpool | 2person carpool | 3 Person carpool | 4 Person carpool | 5 or 6 Person carpool | 7 or more Person carpool | Total |
|---|---|---|---|---|---|---|---|---|---|
| **383.01** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **865** | 556 | 181 | 375 | 31 | 59 | 7 | 248 | 30 | 375 |
| **869** | 295 | 90 | 205 | 52 | 11 | 49 | 74 | 19 | 205 |
| **871** | 390 | 232 | 158 | 38 | 0 | 26 | 44 | 50 | 158 |
| **889.01** | 1540 | 1204 | 336 | 193 | 52 | 0 | 60 | 31 | 336 |
| **907** | 368 | 347 | 21 | 0 | 12 | 9 | 0 | 0 | 21 |
| **1161** | 504 | 362 | 142 | 72 | 61 | 9 | 0 | 0 | 142 |
| persons | 3,653 | 2,416 | 1,237 | 386 | 195 | 100 | 426 | 130 | 1,237 |
| cars | | 2416 | | 193 | 65 | 25 | 77 | 19 | 2,795 |

**Modal Split Data summary**

| | |
|---|---|
| **Auto** | **0.335** |
| **Taxi** | **0.000** |
| **Bus** | **0.140** |
| **Subway** | **0.333** |
| **Walk** | **0.170** |
| **Other** | **0.023** |
| **Total** | **1.00** |
| **Vehicle Occupancy =** | **1.31** |

# Exhibit 3

Modal Split Data

**2012-2016 ACS 5-YEAR Reverse-Journey-to-Work (RJTW) for Census Tract #'s 383.01, 865, 869, 871, 889.01, 907 and 1161 in Queens NY**

***30-05 Farrington Street, Queens New York***

***2012-2016 ACS 5-Year, Reverse-Journey-to-Work:***

| Census Tract | Total Workers | Car or Van Drive-Alone | Carpool | Bus | Street Car | Subway | R.R. | Ferry | Bicycle | walk | taxi | motor cycle | Other Means | Worked @ Home | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **383.01** | 1169 | 760 | 114 | 80 | 0 | 150 | 0 | 0 | 0 | 55 | 0 | 0 | 10 | 0 | 1,169 |
| **865** | 689 | 340 | 50 | 90 | 0 | 125 | 0 | 0 | 0 | 80 | 4 | 0 | 0 | 0 | 689 |
| **869** | 3680 | 1555 | 490 | 475 | 0 | 535 | 0 | 0 | 10 | 525 | 10 | 0 | 25 | 55 | 3,680 |
| **871** | 5374 | 1585 | 614 | 1105 | 0 | 1090 | 55 | 0 | 40 | 865 | 20 | 0 | 0 | 0 | 5,374 |
| **889.01** | 1753 | 835 | 104 | 215 | 0 | 215 | 30 | 4 | 10 | 150 | 25 | 0 | 0 | 165 | 1,753 |
| **907** | 4145 | 3175 | 300 | 185 | 0 | 125 | 25 | 0 | 100 | 150 | 15 | 0 | 50 | 20 | 4,145 |
| **1161** | 959 | 425 | 145 | 230 | 0 | 65 | 4 | 0 | 0 | 40 | 0 | 0 | 0 | 50 | 959 |
| Total | 17,769 | 8,675 | 1,817 | 2,380 | 0 | 2,305 | 114 | 4 | 160 | 1,865 | 74 | 0 | 85 | 290 | 17,769 |
| % Mode of Travel | | ***0.488*** | ***0.102*** | ***0.134*** | ***0.00*** | ***0.130*** | ***0.006*** | ***0.00*** | ***0.01*** | ***0.10*** | ***0.00*** | ***0.000*** | ***0.00*** | ***0.016*** | ***1.00*** |

# Exhibit 4

Vehicle Occupancy Rate Data

**2012-2016 ACS 5-YEAR Reverse-Journey-to-Work (RJTW) for Census Tract #'s 383.01, 865, 869, 871, 889.01, 907 and 1161 in Queens NY**

2012-2016 ACS-5 Year (RJTW), Vehicle Occupancy Rate:

| Census Tract | Total Drove Alone & Car Pool | Drove alone | Total car pool | 2person carpool | 3 Person carpool | 4 Person carpool | 5 or 6 Persor carpool | 7 or more Person carpool | Total |
|---|---|---|---|---|---|---|---|---|---|
| **383.01** | 874 | 760 | 114 | 110 | 4 | 0 | 0 | 0 | 114 |
| **865** | 390 | 340 | 50 | 50 | 0 | 0 | 0 | 0 | 50 |
| **869** | 2045 | 1555 | 490 | 410 | 55 | 15 | 10 | 0 | 490 |
| **871** | 2199 | 1585 | 614 | 510 | 85 | 4 | 15 | 0 | 614 |
| **889.01** | 939 | 835 | 104 | 100 | 4 | 0 | 0 | 0 | 104 |
| **907** | 3475 | 3175 | 300 | 195 | 60 | 35 | 0 | 10 | 300 |
| **1161** | 570 | 425 | 145 | 80 | 0 | 65 | 0 | 0 | 145 |
| Persons | 10,492 | 8,675 | 1,817 | 1,455 | 208 | 119 | 25 | 10 | 1,817 |
| Cars | | 8675 | | 728 | 69 | 30 | 5 | 1 | 9,508 |

Modal Split summary

| | |
|---|---|
| Auto | **0.590** |
| Taxi | **0.004** |
| Bus | **0.134** |
| Subway | **0.136** |
| Walk | **0.105** |
| Other | **0.030** |
| Total | **1.00** |

**Vehicle Occupancy = 1.10**

# Table 2 : Transportation Planning Factors
## *30-05 Farrington Street , Queens NY*

| Land Use: | Residential | Destination Retail |
|---|---|---|
| | d.u. | gsf |
| Size/Units: | 431 | -39,996 |
| | **(1)** | **(1)** |
| Trip Generation: | | |
| Weekday | 8.18 | 78.2 |
| Saturday | 9.08 | 92.5 |
| | per d.u. | per 1,000 gsf |
| Linked-Trip: | 0% | 0% |
| Temporal Distribution: | **(1)** | **(1)** |
| AM Peak Hour | 9.3% | 3% |
| MD Peak Hour | 5.6% | 9% |
| PM Peak Hour | 8.5% | 9% |
| Saturday Midday Peak Hour | 8.4% | 11% |
| | **(2)** | **(4)** |
| Modal Split : | all periods | all periods |
| Auto | 33.5% | 59.0% |
| Taxi | 0.0% | 0.4% |
| Subway/Rail | 33.3% | 13.6% |
| Bus | 14.0% | 13.4% |
| Walk & Other | 19.2% | 13.5% |
| Total | 100% | 100% |
| | **(1)** | **(1)** |
| In/Out Splits: | In/Out | In/Out |
| AM Peak Hour | 22/78 | 63/37 |
| MD Peak Hour | 50/50 | 53/47 |
| PM Peak Hour | 62/38 | 49/51 |
| Saturday Midday Peak Hour | 55/45 | 52/48 |
| Vehicle Occupancy: | **(2&3)** | **(4&3)** |
| Auto | 1.31 | 1.1 |
| Taxi | 1.3 | 2 |
| Truck Trip Generation: | **(1)** | **(3)** |
| Weekday | 0.06 | 0.35 |
| Saturday | 0.02 | 0.02 |
| | per d.u. | per 1,000 s.f. |
| | **(1)** | **(3)** |
| AM Peak Hour | 12% | 7.7% |
| MD Peak Hour | 9% | 11.0% |
| PM Peak Hour | 2% | 1.0% |
| Saturday Midday Peak Hour | 9% | 11.0% |
| AM/MD/PM/Saturday Midday | 50/50 | 50/50 |

*Sources:*

*(1)-2021 CEQR Technical Manual, Table 16-2.*

*(2)-2015-2019 (ACS)-Joumey-to-Work CTTW) Census Tract #'s 383.01, 865, 869, 871, 889.01, 907 and 1161 in Queens N.Y.*

*(3)- Gowanus Neighborhood Rezoning and Related Actions DEIS, Table 14-8*

*(4)-2012-2016 (ACS)-Reverse-Journey-to-Work (RJTW)Census Tract #'s 383.01, 865, 869, 871, 889.01, 907 and 1161 in Queens N.Y.*

# Table 3 : Estimated Person Trips-Revised

## *30-05 Farrington Street , Queens NY*

| Land Use: | Residential | Destination Retail | Total Net | Subway/Bus |
|---|---|---|---|---|
| | d.u. | gsf | Demand | Walk/Other |
| Size/Units: | 431 | -39,996 | | Total |
| Peak hour Trips | | | | |
| AM Peak Hour | 328 | -94 | 234 | |
| Midday Peak Hour | 197 | -281 | -84 | |
| PM Peak Hour | 300 | -281 | 18 | |
| Saturday Midday Peak Hour | 329 | -407 | -78 | |
| **Person Trips:** | | | | |
| ***AM Peak Hour*** | | | | |
| Auto | 110 | -55 | 54 | |
| Taxi | 0 | 0 | 0 | |
| Subway/Rail | 109 | -13 | 96 | 96 |
| Bus | 46 | -13 | 33 | 33 |
| Walk & Other | 63 | -13 | 50 | 50 |
| Total | 328 | -94 | 234 | 180 |
| ***Midday Peak Hour*** | | | | |
| Auto | 66 | -166 | -100 | |
| Taxi | 0 | -1 | -1 | |
| Subway/Rail | 66 | -38 | 27 | 27 |
| Bus | 28 | -38 | -10 | -10 |
| Walk & Other | 38 | -38 | 0 | 0 |
| Total | 197 | -281 | -84 | 17 |
| ***PM Peak Hour*** | | | | |
| Auto | 100 | -166 | -66 | |
| Taxi | 0 | -1 | -1 | |
| Subway/Rail | 100 | -38 | 62 | 62 |
| Bus | 42 | -38 | 4 | 4 |
| Walk & Other | 58 | -38 | 20 | 20 |
| Total | 299 | -281 | 18 | 85 |
| ***Saturday Midday Peak Hour*** | | | | |
| Auto | 110 | -240 | -130 | |
| Taxi | 0 | -2 | -2 | |
| Subway/Rail | 109 | -55 | 54 | 54 |
| Bus | 46 | -55 | -9 | -9 |
| Walk & Other | 63 | -55 | 8 | 8 |
| Total | 329 | -407 | -78 | 54 |

# Table 4 : Estimated Vehicular Trips

## *30-05 Farrington Street , Queens NY*

| Land Use: | Residential | Destination Retail | |
|---|---|---|---|
| | d.u. | gsf | Total |
| Size/Units: | 431 | -39,996 | |
| AM Peak Hour | | | |
| Auto (Total) | 84 | -50 | 34 |
| Taxi | 0 | 0 | 0 |
| Taxi (Balanced) | 0 | 0 | 0 |
| Truck | 3 | -1 | 2 |
| Truck(Balanced) | 4 | 0 | 4 |
| Total | 88 | -50 | 38 |
| *(In/Out)* | *(20/68)* | *(-30/-20)* | *(-10/48)* |
| Midday Peak Hour | | | |
| Auto (Total) | 50 | -151 | -101 |
| Taxi | 0 | -1 | -1 |
| Taxi (Balanced) | 0 | 0 | 0 |
| Truck | 2 | -2 | 1 |
| Truck(Balanced) | 4 | 0 | 4 |
| Total | 54 | -151 | -97 |
| PM Peak Hour | | | |
| Auto (Total) | 76 | -151 | -75 |
| Taxi | 0 | -1 | -1 |
| Taxi (Balanced) | 0 | 0 | 0 |
| Truck | 1 | 0 | 1 |
| Truck(Balanced) | 2 | 0 | 2 |
| Total | 78 | -151 | -73 |
| Saturday Midday Peak Hour | | | |
| Auto (Total) | 84 | -218 | -134 |
| Taxi | 0 | -1 | -1 |
| Taxi (Balanced) | 0 | 0 | 0 |
| Truck | 1 | 0 | 1 |
| Truck(Balanced) | 2 | 0 | 2 |
| Total | 86 | -218 | -132 |

## Table 14-8
## Transportation Planning Factors

| Land Use: | Local Retail | | Office | | Residential | | Destination Retail | | Restaurant | | Supermarket | | Auto Repair | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Trip Generation:** | (1) | | (1) | | (1) | | (1) | | (9) | | (1) | | (3) | |
| Weekday | 205.0 | | 18.0 | | 8.075 | | 78.2 | | 179.5 | | 175.0 | | 19.42 | |
| Saturday | 240.0 | | 3.9 | | 9.6 | | 92.5 | | 195.8 | | 231.0 | | 19.42 | |
| | per 1,000 sf | | per 1,000 sf | | per DU | | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | |
| **Temporal Distribution:** | (1) | | (1) | | (1) | | (1) | | (9) | | (1) | | (3) | |
| AM | 3.0% | | 12.0% | | 10.0% | | 3.0% | | 3.0% | | 5.0% | | 13.2% | |
| MD | 19.0% | | 15.0% | | 5.0% | | 9.0% | | 13.0% | | 6.0% | | 11.0% | |
| PM | 10.0% | | 14.0% | | 11.0% | | 9.0% | | 10.0% | | 10.0% | | 14.2% | |
| SAT | 10.0% | | 17.0% | | 8.0% | | 11.0% | | 9.0% | | 9.0% | | 10.7% | |
| **Modal Splits:** | (2) | | (24) | (4) | (5) | | (20) | | (3) | | (2) | | (3) | |
| | All Periods | | AM/PM/SAT | MD | All Periods | | AM/MD/PM | SAT | All Periods | | AM/MD/PM | SAT | All Periods | |
| Auto | 11.0% | | 28.7% | 2.0% | 10.8% | | 59.0% | 59.0% | 30.0% | | 21.0% | 14.0% | 85.0% | |
| Taxi | 0.0% | | 4.9% | 1.0% | 0.4% | | 3.0% | 5.0% | 5.0% | | 3.0% | 5.0% | 5.0% | |
| Subway/Railroad | 3.0% | | 32.1% | 7.0% | 74.8% | | 18.0% | 18.0% | 15.0% | | 14.0% | 8.0% | 1.0% | |
| Bus | 2.0% | | 12.7% | 7.0% | 2.1% | | 15.0% | 13.0% | 15.0% | | 4.0% | 6.0% | 1.0% | |
| School Bus | 0.0% | | 0.0% | 0.0% | 0.0% | | 0.0% | 0.0% | 0.0% | | 0.0% | 0.0% | 0.0% | |
| Walk/Other | 84.0% | | 21.6% | 83.0% | 11.9% | | 5.0% | 5.0% | 35.0% | | 58.0% | 67.0% | 8.0% | |
| Total | 100.0% | | 100.0% | 100.0% | 100.0% | | 100.0% | 100.0% | 100.0% | | 100.0% | 100.0% | 100.0% | |
| **In/Out Splits:** | (3) | | (4) | | (6) | | (8) | | (10) | | (11,12) | | (3) | |
| | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out |
| AM | 50% | 50% | 94% | 6% | 24% | 76% | 61% | 39% | 50% | 50% | 57% | 43% | 65% | 35% |
| MD | 50% | 50% | 39% | 61% | 50% | 50% | 55% | 45% | 50% | 50% | 46% | 54% | 50% | 50% |
| PM | 50% | 50% | 5% | 95% | 61% | 39% | 47% | 53% | 67% | 33% | 47% | 53% | 50% | 50% |
| SAT | 55% | 45% | 60% | 40% | 45% | 55% | 55% | 45% | 50% | 50% | 51% | 49% | 50% | 50% |
| **Vehicle Occupancy:** | (3) | | (4) | | (3,5,7) | | (8) | | (10) | | (2) | | (3) | |
| | | | | | AM/PM | MD/SAT | AM/MD/PM | SAT | | | AM/MD/PM | SAT | | |
| Auto | 2.00 | | 1.26 | | 1.12 | 1.57 | 2.00 | 2.70 | 2.20 | | 1.58 | 1.90 | 1.30 | |
| Taxi | 2.00 | | 1.26 | | 1.30 | 1.82 | 2.00 | 2.80 | 2.30 | | 1.58 | 1.90 | 1.30 | |
| School Bus | | | | | | | | | | | | | | |
| **Truck Trip Generation:** | (1) | | (1) | | (1) | | (8) | | (10) | | (11) | | (3) | |
| Weekday | 0.35 | | 0.32 | | 0.06 | | 0.35 | | 3.60 | | 0.35 | | 0.89 | |
| Saturday | 0.04 | | 0.01 | | 0.02 | | 0.02 | | 3.60 | | 0.04 | | 0.89 | |
| | per 1,000 sf | | per 1,000 sf | | per DU | | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | |
| **Truck Temporal Distribution:** | (1) | | (1) | | (1) | | (8) | | (10) | | (11,12) | | (3) | |
| AM | 8.0% | | 10.0% | | 12.0% | | 7.7% | | 0.0% | | 8.0% | | 14.0% | |
| MD | 11.0% | | 11.0% | | 9.0% | | 11.0% | | 6.0% | | 11.0% | | 9.0% | |
| PM | 2.0% | | 2.0% | | 2.0% | | 1.0% | | 1.0% | | 2.0% | | 1.0% | |
| SAT | 11.0% | | 11.0% | | 9.0% | | 11.0% | | 0.0% | | 11.0% | | 0.0% | |
| **Truck In/Out Splits:** | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out |
| All Periods | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% |

# Table 14-8 (cont'd)
# Transportation Planning Factors

| Land Use: | Innovation Economy | | Light Industrial | | Warehouse | | Medical Office | | School (Grade K-5 Students) | | School Staff | | Parents (Grades K-5 Students) | | Community Center | | Waterfront Park | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Trip Generation:** | (13) | | (3) | | (15) | | (16) | | (21) (22) | | (21) | | (22) | | (1) | | (1) | (1) |
| Weekday | 18.0 | | 14.7 | | 10.4 | | See note (16) | | 2.0 | | 2.0 | | 4.0 | | 44.7 | | 44.0 | 139.0 |
| Saturday | 3.9 | | 2.2 | | 3.6 | | 39.0 | | 0.0 | | 0.0 | | 0.0 | | 26.1 | | 62.0 | 196.0 |
| | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | | per Student | | per Staff | | per Parents | | per 1,000 sf | | per acre | per acre |
| **Temporal Distribution:** | (13) | | (3) | | (15) | | (16) | | (21) | | (21) | | (21) | | (1) | | (1) | (1) |
| AM | 12.0% | | 13.2% | | 13.2% | | 11.0% | | 50.0% | | 50.0% | | 50.0% | | 4.0% | | 3.0% | 3.0% |
| MD | 15.0% | | 11.0% | | 11.0% | | 13.0% | | 0.0% | | 0.0% | | 0.0% | | 9.0% | | 5.0% | 5.0% |
| PM | 14.0% | | 14.2% | | 14.1% | | 9.0% | | 5.0% | | 50.0% | | 5.0% | | 6.0% | | 6.0% | 6.0% |
| SAT | 17.0% | | 10.7% | | 11.0% | | 17.0% | | 0.0% | | 0.0% | | 0.0% | | 9.0% | | 6.0% | 6.0% |
| **Modal Splits:** | (13) | | (14) | (4) | (14) | | (16) | | (23) | | (14) | | (23) | | (17) | | (18) | (18) |
| | AM/PM/SAT | MD | AM/PM/SAT | MD | All Periods | | All Periods | | AM/MD/SAT | PM | All Periods | | All Periods | | All Periods | | All Periods | All Periods |
| Auto | 28.7% | 2.0% | 32.2% | 2.0% | 32.2% | | 24.0% | | 21.7% | 21.7% | 32.2% | | 0.0% | | 5.0% | | 20.0% | 20.0% |
| Taxi | 4.9% | 1.0% | 0.8% | 1.0% | 0.8% | | 6.0% | | 0.0% | 0.0% | 0.8% | | 0.0% | | 1.0% | | 1.0% | 1.0% |
| Subway/Railroad | 32.1% | 7.0% | 40.3% | 7.0% | 40.3% | | 59.0% | | 5.7% | 5.7% | 40.3% | | 8.0% | | 3.0% | | 12.0% | 12.0% |
| Bus | 12.7% | 7.0% | 8.8% | 7.0% | 8.8% | | 9.0% | | 2.1% | 2.1% | 8.8% | | 3.0% | | 6.0% | | 11.0% | 11.0% |
| School Bus | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% | | 2.0% | 2.0% | 0.0% | | 0.0% | | 0.0% | | 0.0% | 0.0% |
| Walk/Other | 21.6% | 83.0% | 17.9% | 83.0% | 17.9% | | 2.0% | | 68.5% | 68.5% | 17.9% | | 89.0% | | 85.0% | | 56.0% | 56.0% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | | 100.0% | | 100.0% | 100.0% | 100.0% | | 100.0% | | 100.0% | | 100.0% | 100.0% |
| **In/Out Splits:** | (13) | | (3) | | (15) | | (16) | | (21) | | (21) | | (21) | | (17) | | (18,19) | (18,19) |
| | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out |
| AM | 94.0% | 6% | 88% | 12% | 88% | 12% | 62% | 38% | 100% | 0% | 100% | 0% | 50% | 50% | 61% | 39% | 55% | 45% | 55% | 45% |
| MD | 39.0% | 61% | 50% | 50% | 50% | 50% | 47% | 53% | 100% | 0% | 100% | 0% | 50% | 0% | 55% | 45% | 50% | 50% | 50% | 50% |
| PM | 5.0% | 95% | 12% | 88% | 12% | 88% | 35% | 65% | 0% | 100% | 0% | 100% | 50% | 50% | 29% | 71% | 45% | 55% | 45% | 55% |
| SAT | 60.0% | 40% | 47% | 53% | 50% | 50% | 49% | 51% | 100% | 0% | 100% | 0% | 50% | 0% | 49% | 51% | 50% | 50% | 50% | 50% |
| **Vehicle Occupancy:** | (13) | | (3) | | (15) | | (16) | | (21) | | (21) | | | | (17) | | (18) | (18) |
| Auto | 1.26 | | 1.20 | | 1.30 | | 1.50 | | 1.30 | | 1.20 | | N/A | | 1.65 | | 2.90 | 2.90 |
| Taxi | 1.26 | | 1.20 | | 1.30 | | 1.50 | | 1.30 | | 1.20 | | N/A | | 1.40 | | 3.00 | 3.00 |
| School Bus | | | | | | | | | 35.0 | | | | | | | | | |
| **Truck Trip Generation:** | (13) | | (3) | | (15) | | (3) | | (21) | | | | | | (17) | | (18,19) | (18,19) |
| Weekday | 0.32 | | 0.67 | | 0.67 | | 0.29 | | 0.03 | | N/A | | N/A | | 0.29 | | 0.01 | 0.01 |
| Saturday | 0.01 | | 0.67 | | 0.02 | | 0.29 | | 0.03 | | N/A | | N/A | | 0.29 | | 0.01 | 0.01 |
| | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | | per 1,000 sf | | | | | | per 1,000 sf | | per 1,000 sf | per 1,000 sf |
| **Truck Temporal Distribution:** | (13) | | (3) | | (15) | | (3) | | (21) | | | | | | (17) | | (18,19) | (18,19) |
| AM | 10.0% | | 14.0% | | 14.0% | | 3.0% | | 9.6% | | N/A | | N/A | | 9.6% | | 6.0% | 6.0% |
| MD | 11.0% | | 9.0% | | 9.0% | | 11.0% | | 11.0% | | N/A | | N/A | | 11.0% | | 6.0% | 6.0% |
| PM | 2.0% | | 1.0% | | 1.0% | | 1.0% | | 1.0% | | N/A | | N/A | | 1.0% | | 1.0% | 1.0% |
| SAT | 11.0% | | 0.0% | | 9.0% | | 0.0% | | 0.0% | | N/A | | N/A | | 0.0% | | 6.0% | 6.0% |
| **Truck In/Out Splits:** | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out | In | Out |
| All Periods | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50% | 50% | 50.0% | 50.0% | N/A | N/A | N/A | N/A | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% |

**Notes:**

(1) Based on data from the 2020 *City Environmental Quality Review* (CEQR) *Technical Manual*.

(2) Based on NYCDOT mode split and vehicle occupancy survey data.

(3) Based on data from the 2015 *East New York Rezoning Proposal FEIS*.

(4) Based on data from the 2016 *25 Kent Avenue EAS*.

(5) Based on American Community Survey journey-to-work 5-Year (2013-2017) data for Brooklyn Census Tracts 39, 71, 75, 77, 117, 119, 121, 129.01, 131, 133, 135, 137, 139 141.

(6) Based on NYCDOT citywide residential survey data.

(7) Midday and Saturday vehicle occupancy determined by applying a multiplier (1.4) to the AM/PM rate.

(8) Based on data from the 2017 *East Harlem Rezoning FEIS*.

(9) Based on data from *ITE Trip Generation Manual, 10th Edition*, Land Use Code 932 (High-Turnover Restaurant). Person trip rate= ITE Trip Rate x 1.52/0.95.

(10) Based on data from the 2015 *Vanderbilt Corridor and One Vanderbilt FEIS*.

(11) Based on data from the 2017 Boulevard at Hylan Plaza Proposal FEIS.

(12) AM data is based on data from the 2014 *Astoria Cove Development FEIS*.

(13) Factors assumed to be similar to those used for the office use.

(14) Based on AASHTO CTPP reverse journey-to-work 5-Year (2012-2016) data for Brooklyn Census Tracts 39, 71, 75, 77, 117, 119, 121, 129.01, 131, 133, 135, 137, 139 and 14.

(15) Based on data from the 2010 *Domino Sugar Rezoning FEIS*.

(16) Based on NYCDOT medical office trip generation and mode choice data. Weekday daily trip estimate based on following equation: 141.77 + 66.626 x gross SF (in thousand

(17) Based on data from the 2007 *Jamaica Plan Rezoning FGEIS*.

(18) Based on data from the 2005 *Brooklyn Bridge Park FEIS*.

(19) Assumes Saturday person in/out splits; and truck trip generation rates and temporal distributions are similar to does applied to the weekday midday.

(20) Based on data from the 2017 Industry City Redevelopment FEIS.

(21) Based on data from the 2011 *Brownsville Ascend Charter School Assessment*.

(22) Assumes 5% absentee rate, and a student to parent ratio of 1 to 0.7 based on data from a November 2012 survey conducted at PS 35 in Queens.

(23) Based on data provided by NYCDOT.

(24) Based on NYCDCP ZED mode choice survey data.

# Attachment E
# DEP Volume Calculation Matrix

# NYC DEP Volume Calculation Matrix

These instructions are to assist in the completion of the DEP Volume Calculation Matrix. Following this tab, there are two worksheets (WS1 and WS2) and a Summary Table. The worksheets must be completed first in order to provide the information necessary to complete the Summary Table. With-Action Scenario information entered in each worksheet and the Summary Table should include the project and No-Action Scenario for that site. Additional instructions for each tab in this spreadsheet are listed below.

## SUMMARY TABLE: Comparison of Existing and With-Action Volume

Using the information from worksheets (WS1 and WS2), enter the information below in the summary table as follows:

**Step 1:** Enter in the CSO subcatchment area info for the proposed project above the table. If the proposed project crosses over several different CSO sub-catchment areas, a summary table should be completed for each CSO sub-catchment area.

**Step 2:** In the **Existing** table, enter in the area of the proposed project in square feet and in acres (1 acre = 43,560 sq. ft.).

**Step 3:** Enter the area of the proposed project at the top of the With-Action table in square feet and in acres and complete in the same way as the **Existing** table.

**Step 4:** The information for columns in this table should be taken from the completed Surfaces Calculations and Volume Calculations Worksheets. RUNOFF

**Step 5:** The **Existing** and **With-Action** summary tables should be directly inserted into CEQR Infrastructure chapters.

**Note:** The applicant should only input information in the fields highlighted in yellow.

## WORKSHEET 1 (WS1): Surfaces Calculations

WS1 calculates the weighted runoff coefficients to be used in WS2 based on the types of surfaces associated with the existing site and those that will be associated with the proposed site. If the existing and/or planned site is comprised of two discrete or phased sites, use the additional cells provided (labeled Site B) in WS1. In addition, if there are more than two sites, copy and paste the cells to provide for the entire proposed project.

**Step 1:** In the **Existing** table, enter the total areas for each surface type in the corresponding column (i.e., roof, pavement & walks, other, and grass/softscape). The total surface area and percentages of the total site those areas represent should auto-caculate. If they do not automatically calculate, click on the cell and press the F9 key. This should activate the calculation. Runoff coefficients for each surface area are provided in the worksheet and the total or weighted runoff coefficient will be auto-calculated (or press the F9 key).

**Step 2:** Repeat for **With-Action** table using information for the entire area for the With-Action scenario (project + No-Action scenario).

**Step 3:** The "TOTAL" columns have the formulas in place to calculate total percent, surface area, and weighted runoff coefficient. If they do not automatically compute, click on the cell and ensure the correct cells are highlighted, then press enter. This should activate the computation.

**Step 4:** Use the Runoff Coefficient in "TOTAL" column (or the Weighted Runoff Coefficient) for the Rational Method calculations in WS2, Volume Calculations, tables.

**Step 5:** The **Existing** and **With-Action** surfaces calculations tables should be directly inserted into CEQR Infrastructure chapters.

**Note:** The applicant should only input information in the fields highlighted in yellow.

## WORKSHEET 2 (WS2): Volume Calculations

Worksheet 2 calculates the discharge volume (in millions of gallons - MG) from the existing and proposed site to the CSS as well as stormwater volumes to separate storm sewers or direct discharges to surface waterbodies. Identify the CSO subcatchment area or recieving water body, and complete a separate table for each, *i.e.* ,

**Step 1:** Enter the CSO subcatchment area for the site at the top of the **Existing** table.

**Step 2:** In **Existing** table, reference WS1 and enter the total area of the site's runoff being directed to combined or separate storm sewers or direct discharge. Square feet will need to be converted to acres for this worksheet (1 Acre = 43,560 sq. ft.). WS1 will provide the areas for each discharge type. The area entered will be the same for each row of storm volume and duration.

**Step 3:** Enter the Weighted Runoff Coefficient for that area in the corresponding column. Use the weighted runoff coefficients for entire proposed project from WS1.

**Step 4:** in column H, enter the total sanitary flow (*i.e.* , sewage generation) calculated for the existing site per the guidance in the CEQR Technical Manual. The worksheet will calculate the volume associated with sanitary flows during specific storm events using the durations provided in the table (in column I).

**Step 5:** If necessary, repeat tables for areas of the site that discharge to separate storm sewers or direct discharge/overland flow. Also, repeat all tables if proposed project crosses over several different CSO subcatchment areas or if proposed project includes a phased implementation plan or discrete sites.

**Step 6:** Repeat for the **With-Action** tables using information from the proposed project's site plan. See instructions above referring to completion of a separate table for each discharge point, catchment area or phase associated with the proposed project.

**Step 7:** The formulas are in place for summing the **"TOTAL"** tables on the right side of the worksheet. Use these totals in the Summary Table. Note: any direct discharge volumes to adjacent waterbodies will be needed for the Summary Table for the "RUNOFF TO RIVER" column.

**Note:** The applicant should only input information in the fields highlighted in yellow.

**Reference:**

| | |
|---|---|
| MG | millions of gallons |
| GPD | gallons per day |
| in | inches |
| hr | hour |
| A | area |
| SF | square feet |
| I | intensity |
| C | runoff coefficient |
| CSS | combined sewer system |
| CSO | combined sewer overflow |
| CEQR | City Environmental Quality Review |

## COMPARISON OF EXISTING AND WITH-ACTION VOLUME

**CSO SUBCATCHMENT AREA:**[1]

**EXISTING**

| | | Area = 80,389 SF (1.845 ACRES) | | | | Area = XX,XXX SF (XX.XX ACRES) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SITE A | | | | SITE B[2] | | | | SITE A & B |
| 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 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 |
| 0.40 | 3.80 | 0.02 | 0.02 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 |
| 1.20 | 11.30 | 0.06 | 0.06 | 0.02 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 |
| 2.50 | 19.50 | 0.12 | 0.12 | 0.02 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 |

**With-Action**

| | | Area = 80,389 SF (1.845 ACRES) | | | | Area = XX,XXX SF (XX.XX ACRES) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | SITE A | | | | SITE B[2] | | | | SITE A & B |
| 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 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |
| 0.40 | 3.80 | 0.02 | 0.00 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |
| 1.20 | 11.30 | 0.05 | 0.00 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |
| 2.50 | 19.50 | 0.11 | 0.00 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |

[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.

**SURFACE CALCULATIONS**

CSO SUBCATHMENT OR RECEIVING WATERBODY FOR STORM SEWER OR DIRECT DISCHARGE TALLMAN ISLAND

| | EXISTING | | | | | |
|---|---|---|---|---|---|---|
| | WEIGHTED RUNOFF COEFFICIENT, C | | | | | |
| | SURFACE TYPE[1] | ROOF[2] | PAVT & WALKS | OTHER[3] | GRASS & SOFT SCAPE | TOTAL |
| SITE A | AREA, % | 47% | 53% | 0% | 0% | 100% |
| | SURFACE AREA, SF | 37520 | 42896 | 0 | 0 | 80416 |
| | RUNOFF COEFFICIENT | 1.00 | 0.85 | 0.85 | 0.20 | **0.92** |
| | | | | | | |
| SITE B | AREA, % | #VALUE! | #VALUE! | #VALUE! | #VALUE! | #VALUE! |
| | SURFACE AREA, SF | N/A | N/A | N/A | N/A | 0 |
| | RUNOFF COEFFICIENT | 1.00 | 0.85 | 0.85 | 0.20 | **#VALUE!** |

**NOTES:**

1 Runoff coefficients for each surface type are as per DEP.

2 Total roof areas onsite.

3 Identify any other surfaces onsite and obtain runoff coefficients from DEP.

CSO SUBCATHMENT OR RECEIVING WATERBODY FOR STORM SEWER OR DIRECT DISCHARGE FLUSHING CREEK

| | WITH-ACTION SCENARIO (PROJECT + NO-ACTION SCENARIO) | | | | | |
|---|---|---|---|---|---|---|
| | WEIGHTED RUNOFF COEFFICIENT, C | | | | | |
| | SURFACE TYPE[1] | ROOF[2] | PAVT & WALKS | OTHER[3] | GRASS & SOFT SCAPE | TOTAL |
| SITE A | AREA, % | 54% | 32% | 0% | 14% | 100% |
| | SURFACE AREA, SF | 43556 | 25784 | 0 | 11049 | 80389 |
| | RUNOFF COEFFICIENT | 1.00 | 0.85 | 0.85 | 0.20 | **0.84** |
| | | | | | | |
| SITE B | AREA, % | #VALUE! | #VALUE! | #VALUE! | #VALUE! | #VALUE! |
| | SURFACE AREA, SF | N/A | N/A | N/A | N/A | 0 |
| | RUNOFF COEFFICIENT | 1.00 | 0.85 | 0.85 | 0.20 | **#VALUE!** |

**NOTES:**

1 Runoff coefficients for each surface type are as per NYCDEP.

2 Total roof areas onsite.

3 Identify any other surfaces onsite and obtain runoff coefficients from NYCDEP.

**EXISTING:**

**CSO SUBCATCHMENT AREA:** TALLMAN ISLAND

| Rainfall, in | Duration, hr | Total Area (A), acre | Weighted Runoff Coefficient (C) | Stormwater to CSS, MG | Daily Sanitary Sewage Generation per CEQR TM, MGD | Sanitary to CSS , MG |
|---|---|---|---|---|---|---|
| 0.00 | 3.80 | 1.845 | 0.92 | 0.00 | 0.02 | 0.003 |
| 0.40 | 3.80 | 1.845 | 0.92 | 0.02 | 0.02 | 0.003 |
| 1.20 | 11.30 | 1.845 | 0.92 | 0.06 | 0.02 | 0.009 |
| 2.50 | 19.50 | 1.845 | 0.92 | 0.12 | 0.02 | 0.016 |

**RECEIVING WATERBODY FOR STORM SEWER OR DIRECT DISCHARGE:** FLUSHING CREEK

| Rainfall, in | Duration, hr | Total Area (A), acre | Weighted Runoff Coefficient (C) | Stormwater Runoff, MG | Daily Sanitary Sewage Generation per CEQR TM, MGD | Sanitary to CSS, MG | TOTAL Sanitary to CSS, MG | TOTAL TO CSS, MG |
|---|---|---|---|---|---|---|---|---|
| 0.00 | 3.80 | 1.845 | 0.92 | 0.00 | 0.02 | 0.003 | 0.006 | 0.01 |
| 0.40 | 3.80 | 1.845 | 0.92 | 0.02 | 0.02 | 0.003 | 0.006 | 0.02 |
| 1.20 | 11.30 | 1.845 | 0.92 | 0.06 | 0.02 | 0.009 | 0.019 | 0.07 |
| 2.50 | 19.50 | 1.845 | 0.92 | 0.12 | 0.02 | 0.016 | 0.033 | 0.15 |

**WITH-ACTION SCENARIO (PROPOSED PROJECT + WITHOUT ACTION SCENARIO):**

**CSO SUBCATCHMENT AREA:** TALLMAN ISLAND

| Rainfall (I), in | Duration, hr | Total Area (A), acre | Weighted Runoff Coefficient (C) | Stormwater to CSS, MG | Daily Sanitary Sewage Generation per CEQR TM, MGD | Sanitary to CSS , MG |
|---|---|---|---|---|---|---|
| 0.00 | 3.80 | 1.845 | 0.84 | 0.00 | 0.11 | 0.017 |
| 0.40 | 3.80 | 1.845 | 0.84 | 0.02 | 0.11 | 0.017 |
| 1.20 | 11.30 | 1.845 | 0.84 | 0.05 | 0.11 | 0.052 |
| 2.50 | 19.50 | 1.845 | 0.84 | 0.11 | 0.11 | 0.089 |

**RECEIVING WATERBODY FOR STORM SEWER OR DIRECT DISCHARGE:**

| Rainfall (I), in | Duration, hr | Total Area (A), acre | Weighted Runoff Coefficient (C) | Stormwater Runoff, MG | Daily Sanitary Sewage Generation per CEQR TM, MGD | Sanitary to CSS, MG | TOTAL Sanitary to CSS , MG | TOTAL TO CSS, MG |
|---|---|---|---|---|---|---|---|---|
| 0.00 | 3.80 | 1.845 | 0.84 | 0.00 | 0.11 | 0.017 | 0.035 | 0.03 |
| 0.40 | 3.80 | 1.845 | 0.84 | 0.02 | 0.11 | 0.017 | 0.035 | 0.05 |
| 1.20 | 11.30 | 1.845 | 0.84 | 0.05 | 0.11 | 0.052 | 0.104 | 0.15 |
| 2.50 | 19.50 | 1.845 | 0.84 | 0.11 | 0.11 | 0.089 | 0.179 | 0.28 |

# Attachment F
# Construction Appendix

# Exhibit A

**Modal Split Data**

**2000 Census Reverse Journey-to-Work Means of Transportation for Construction Workers in Census Tract #'s 383.01, 865, 871, 889.01, 907, and 1161 in Queens NY 30-05 Farrington Street, Queens New York**

| Census Tract | Total Workers | Car or Van Drive-Alone | Carpool | Bus or Trolly Bus | Subway, Streetcar or Trolley Car | Railroad or Ferryboat | Bicycle or Walked | Taxi, Motorcycle or Other Means | Worked at Home | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **383.01** | 180 | 55 | 24 | 25 | 60 | 0 | 10 | 10 | 0 | 184 |
| **865** | 20 | 0 | 0 | 0 | 15 | 0 | 4 | 0 | 0 | 19 |
| **871** | 30 | 10 | 0 | 4 | 10 | 0 | 4 | 0 | 0 | 28 |
| **889.01** | 25 | 25 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 29 |
| **907** | 670 | 375 | 165 | 10 | 110 | 4 | 10 | 0 | 0 | 674 |
| **1161** | 70 | 65 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 69 |
| Total | 995 | 530 | 189 | 39 | 195 | 8 | 32 | 10 | 0 | 1,003 |
| **% Mode of Travel** | | ***0.528*** | ***0.188*** | ***0.039*** | ***0.194*** | ***0.008*** | ***0.032*** | ***0.010*** | ***0.000*** | ***1.00*** |

# Exhibit B

**Auto Occupancy Rate Data**

**2000 Census Reverse Journey-to-Work Means of Transportation for Construction Worker in Census Tract #'s 383.01, 865, 871, 889.01, 907, and 1161 in Queens NY 30-05 Farrington Street, Queens New York**

| Census Tract | Total Drove Alone & Car Pool | Drove Alone | Total Carpool | Carpool 2 Person | Carpool 3 Person | Carpool 4 or more Person | Total |
|---|---|---|---|---|---|---|---|
| **383.01** | 79 | 55 | 24 | 20 | 0 | 4 | 24 |
| **865** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **871** | 10 | 10 | 0 | 0 | 0 | 0 | 0 |
| **889.01** | 25 | 25 | 0 | 0 | 0 | 0 | 0 |
| **907** | 540 | 375 | 165 | 125 | 25 | 15 | 165 |
| **1161** | 65 | 65 | 0 | 0 | 0 | 0 | 0 |
| **Persons** | 719 | 530 | 189 | 145 | 25 | 19 | 189 |
| **Cars** | | 530 | | 73 | 8 | 5 | 616 |

| **Modal Split Summary** | | | |
|---|---|---|---|
| **Auto** | **0.717** | | |
| **Taxi** | **0.010** | | |
| **Bus** | **0.039** | **Public Transit** | **0.241** |
| **Subway** | **0.202** | | |
| **Walk** | **0.032** | | |
| | | | |
| **Total** | **1.00** | | |

**Vehicle Occupancy =** **1.17**

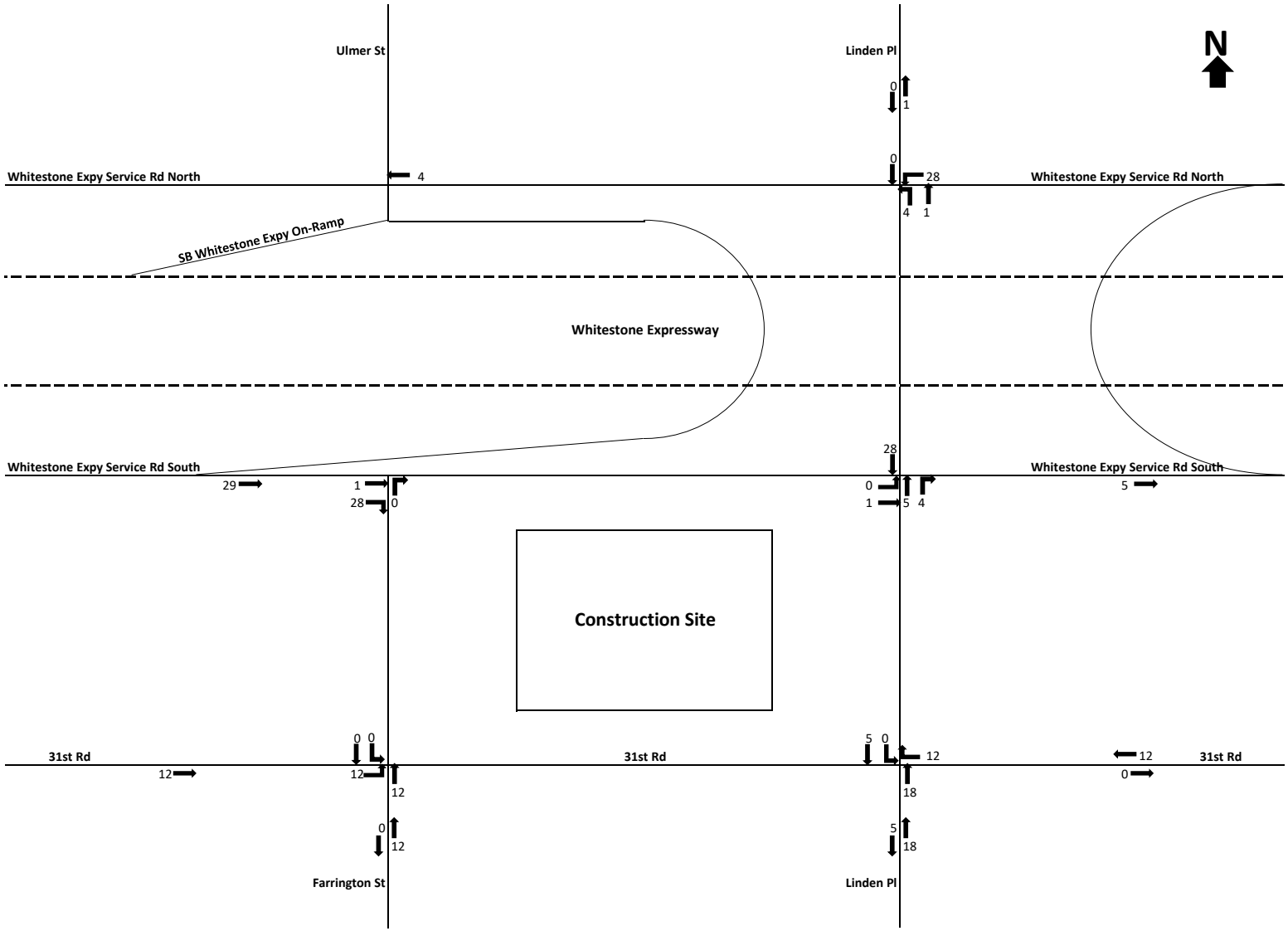
| | Truck Trips | Worker IN Trips | Worker OUT Trips |
|---|---|---|---|
| 6-7AM | 25.0% | 80% | 0% |
| 7-8AM | 10.0% | 20% | 0% |
| 8-9AM | 10.0% | 0% | 0% |
| 9-10AM | 10.0% | 0% | 0% |
| 10-11AM | 10.0% | 0% | 0% |
| LAM-12PM | 10.0% | 0% | 0% |
| 12-1PM | 10.0% | 0% | 0% |
| 1-2PM | 5.0% | 0% | 0% |
| 2-3PM | 5.0% | 0% | 5% |
| 3-4PM | 2.5% | 0% | 80% |
| 4-5PM | 2.5% | 0% | 15% |
| 5-6PM | 0.0% | 0% | 0% |

| 2023 | Q1 | | | | | | | | | | Q2 | | | | | | | | | | Q3 | | | | | | | | | | Q4 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total |
| | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | |
| 6-7AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 18 | 26 | 0 | 26 | 1 | 1 | 2 | 46 |
| 7-8AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 8 | 6 | 0 | 6 | 0 | 0 | 0 | 14 |
| 8-9AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9-10AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 10-11AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| LAM-12PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 12-1PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 1-2PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2-3PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| 3-4PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 26 | 26 | 0 | 0 | 0 | 28 |
| 4-5PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 4 |
| Daily Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 36 | 72 | 32 | 32 | 64 | 1 | 1 | 2 | 138 |
| *Check:* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* |

| 2024 | Q1 | | | | | | | | | | Q2 | | | | | | | | | | Q3 | | | | | | | | | | Q4 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total |
| | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | |
| 6-7AM | 9 | 9 | 18 | 26 | 0 | 26 | 1 | 1 | 2 | 46 | 9 | 9 | 18 | 26 | 0 | 26 | 1 | 1 | 2 | 46 | 13 | 13 | 26 | 96 | 0 | 96 | 2 | 2 | 4 | 126 | 13 | 13 | 26 | 96 | 0 | 96 | 2 | 2 | 4 | 126 |
| 7-8AM | 4 | 4 | 8 | 6 | 0 | 6 | 0 | 0 | 0 | 14 | 4 | 4 | 8 | 6 | 0 | 6 | 0 | 0 | 0 | 14 | 5 | 5 | 10 | 24 | 0 | 24 | 0 | 0 | 0 | 34 | 5 | 5 | 10 | 24 | 0 | 24 | 0 | 0 | 0 | 34 |
| 8-9AM | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 9-10AM | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 10-11AM | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| LAM-12PM | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 12-1PM | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 1-2PM | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2-3PM | 1 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 4 | 1 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 4 | 3 | 3 | 6 | 0 | 6 | 6 | 0 | 0 | 0 | 12 | 3 | 3 | 6 | 0 | 6 | 6 | 0 | 0 | 0 | 12 |
| 3-4PM | 1 | 1 | 2 | 0 | 26 | 26 | 0 | 0 | 0 | 28 | 1 | 1 | 2 | 0 | 26 | 26 | 0 | 0 | 0 | 28 | 1 | 1 | 2 | 0 | 96 | 96 | 2 | 2 | 4 | 102 | 1 | 1 | 2 | 0 | 96 | 96 | 2 | 2 | 4 | 102 |
| 4-5PM | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 18 |
| Daily Total | 36 | 36 | 72 | 32 | 32 | 64 | 1 | 1 | 2 | 138 | 36 | 36 | 72 | 32 | 32 | 64 | 1 | 1 | 2 | 138 | 50 | 50 | 100 | 120 | 120 | 240 | 4 | 4 | 8 | 348 | 50 | 50 | 100 | 120 | 120 | 240 | 4 | 4 | 8 | 348 |
| *Check:* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* |

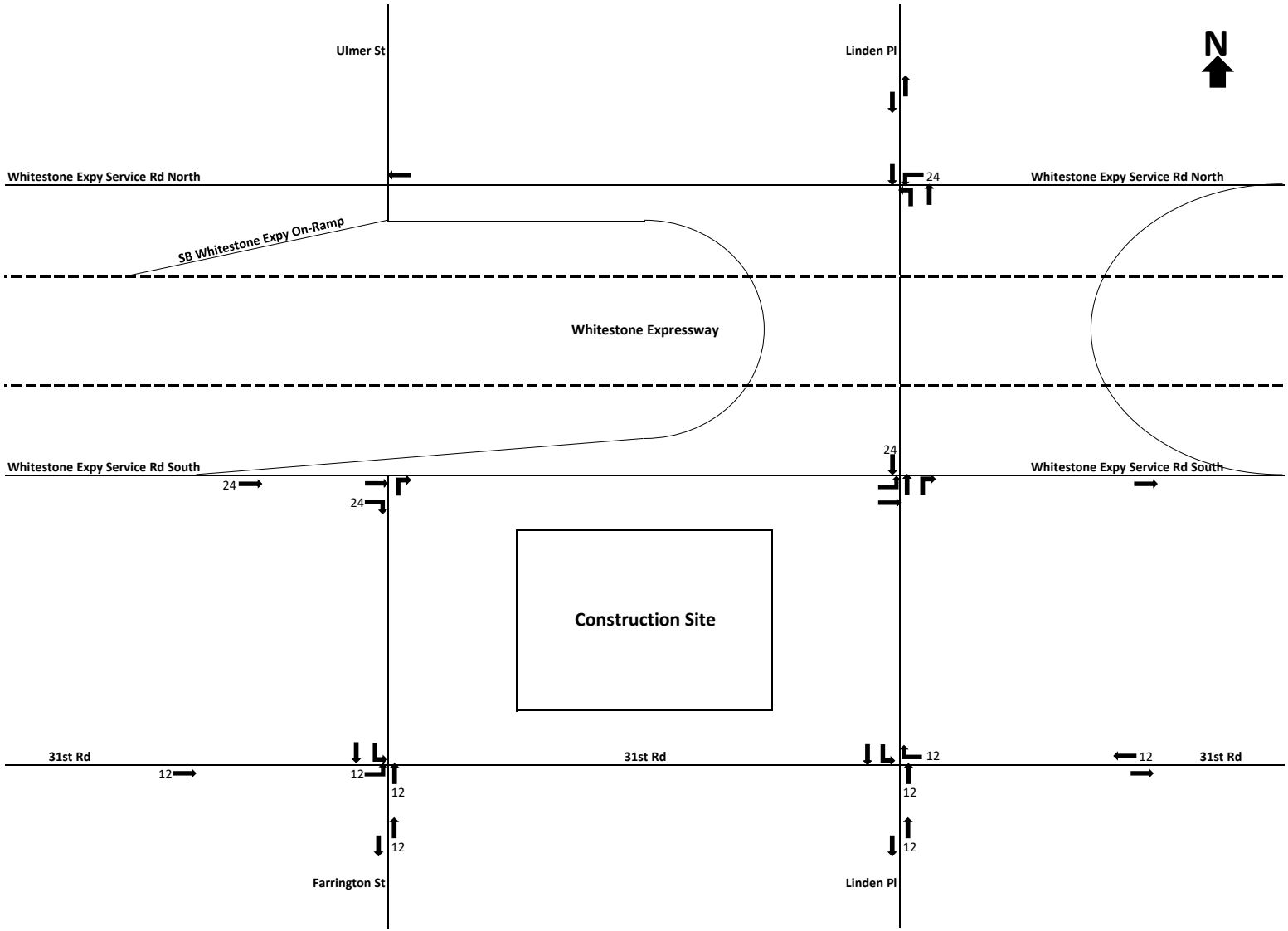
| 2025 | Q1 | | | | | | | | | | Q2 | | | | | | | | | | Q3 | | | | | | | | | | Q4 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total |
| | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | |
| 6-7AM | 13 | 13 | 26 | 96 | 0 | 96 | 2 | 2 | 4 | 126 | 13 | 13 | 26 | 96 | 0 | 96 | 2 | 2 | 4 | 126 | 13 | 13 | 26 | 96 | 0 | 96 | 2 | 2 | 4 | 126 | 10 | 10 | 20 | 87 | 0 | 87 | 1 | 1 | 2 | 109 |
| 7-8AM | 5 | 5 | 10 | 24 | 0 | 24 | 0 | 0 | 0 | 34 | 5 | 5 | 10 | 24 | 0 | 24 | 0 | 0 | 0 | 34 | 5 | 5 | 10 | 24 | 0 | 24 | 0 | 0 | 0 | 34 | 4 | 4 | 8 | 22 | 0 | 22 | 1 | 1 | 2 | 32 |
| 8-9AM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9-10AM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 10-11AM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| LAM-12PM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 12-1PM | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 1-2PM | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 2-3PM | 3 | 3 | 6 | 0 | 6 | 6 | 0 | 0 | 0 | 12 | 3 | 3 | 6 | 0 | 6 | 6 | 0 | 0 | 0 | 12 | 3 | 3 | 6 | 0 | 6 | 6 | 0 | 0 | 0 | 12 | 2 | 2 | 4 | 0 | 5 | 5 | 0 | 0 | 0 | 9 |
| 3-4PM | 1 | 1 | 2 | 0 | 96 | 96 | 2 | 2 | 4 | 102 | 1 | 1 | 2 | 0 | 96 | 96 | 2 | 2 | 4 | 102 | 1 | 1 | 2 | 0 | 96 | 96 | 2 | 2 | 4 | 102 | 1 | 1 | 2 | 0 | 87 | 87 | 1 | 1 | 2 | 91 |
| 4-5PM | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 0 | 18 | 1 | 1 | 2 | 0 | 17 | 17 | 0 | 0 | 0 | 19 |
| Daily Total | 50 | 50 | 100 | 120 | 120 | 240 | 4 | 4 | 8 | 348 | 50 | 50 | 100 | 120 | 120 | 240 | 4 | 4 | 8 | 348 | 50 | 50 | 100 | 120 | 120 | 240 | 4 | 4 | 8 | 348 | 40 | 40 | 80 | 109 | 109 | 218 | 3 | 3 | 6 | 304 |
| *Check:* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* |

| 2026 | Q1 | | | | | | | | | | Q2 | | | | | | | | | | Q3 | | | | | | | | | | Q4 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total | Trucks (PCEs) | | | Workers | | | Taxi | | | Total |
| 2026 | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | | In | Out | Total | In | Out | Total | In | Out | Total | |
| 6-7AM | 4 | 4 | 8 | 70 | 0 | 70 | 1 | 1 | 2 | 80 | 4 | 4 | 8 | 70 | 0 | 70 | 1 | 1 | 2 | 80 | 4 | 4 | 8 | 70 | 0 | 70 | 1 | 1 | 2 | 80 | | | | | | | | | | |
| 7-8AM | 2 | 2 | 4 | 17 | 0 | 17 | 1 | 1 | 2 | 23 | 2 | 2 | 4 | 17 | 0 | 17 | 1 | 1 | 2 | 23 | 2 | 2 | 4 | 17 | 0 | 17 | 1 | 1 | 2 | 23 | | | | | | | | | | |
| 8-9AM | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | | | | | | | | | | |
| 9-10AM | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | | | | | | | | | | |
| 10-11AM | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | | | | | | | | | | |
| LAM-12PM | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | | | | | | | | | | |
| 12-1PM | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | | | | | | | | | | |
| 1-2PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| 2-3PM | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 4 | | | | | | | | | | |
| 3-4PM | 0 | 0 | 0 | 0 | 70 | 70 | 1 | 1 | 2 | 72 | 0 | 0 | 0 | 0 | 70 | 70 | 1 | 1 | 2 | 72 | 0 | 0 | 0 | 0 | 70 | 70 | 1 | 1 | 2 | 72 | | | | | | | | | | |
| 4-5PM | 0 | 0 | 0 | 13 | 13 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 13 | 13 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 13 | 13 | 0 | 0 | 0 | 13 | | | | | | | | | | |
| Daily Total | 16 | 16 | 32 | 87 | 87 | 174 | 3 | 3 | 6 | 212 | 16 | 16 | 32 | 87 | 87 | 174 | 3 | 3 | 6 | 212 | 16 | 16 | 32 | 87 | 87 | 174 | 3 | 3 | 6 | 212 | | | | | | | | | | |
| *Check:* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | | | | | | | | | | |



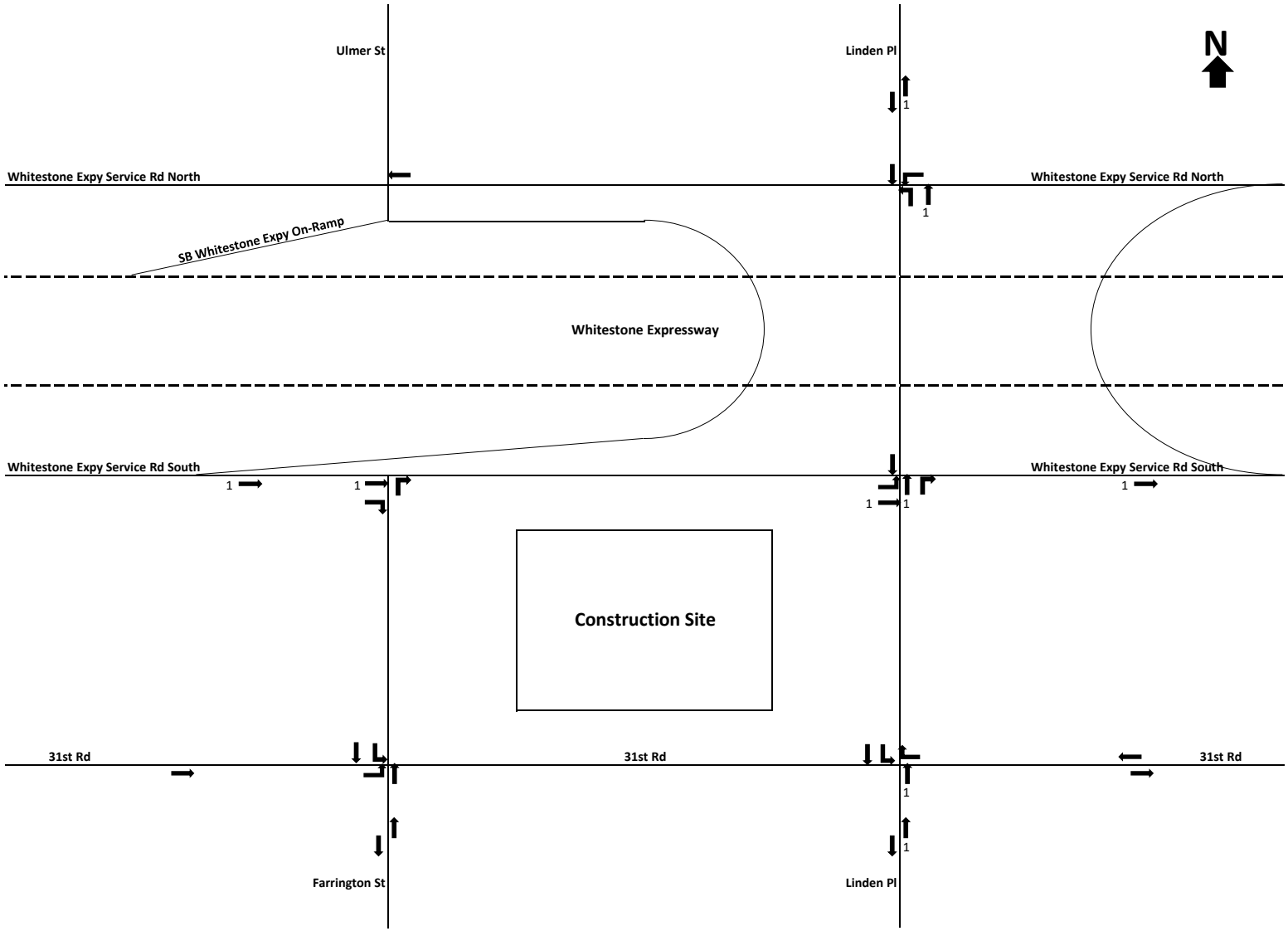

| | in | out | Total |
|---|---|---|---|
| Total Vehicle Trips | 111 | 15 | 126 |

**Construction Generated Vehicle Trips**
**Weekday AM Peak Hour**
**Figure 14-1**



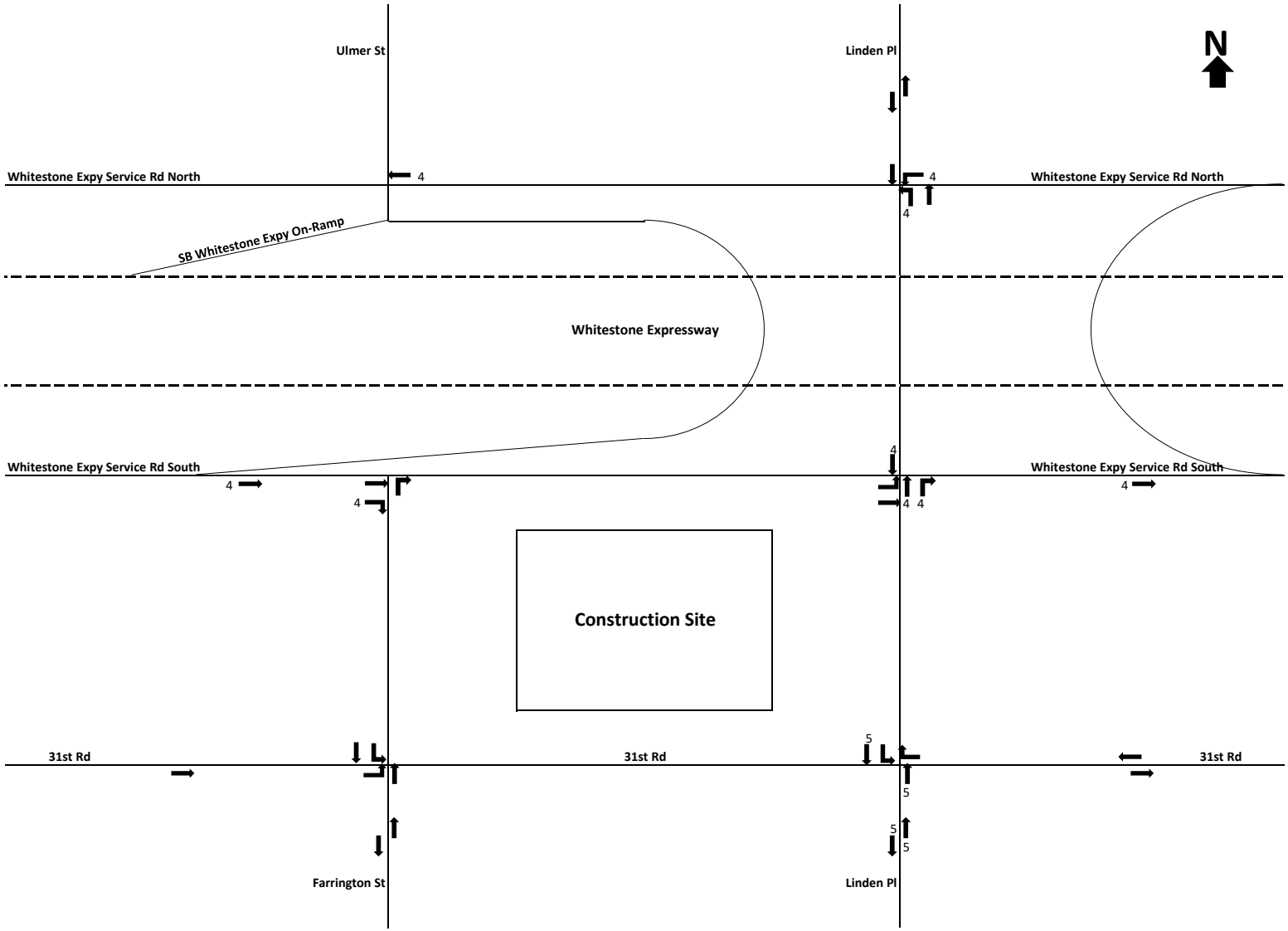

| | in | out |
|---|---|---|
| Total Auto Trips | 96 | 0 |

**Construction Generated Auto Trips**
**Weekday AM Peak Hour**
**Figure 14-1a**



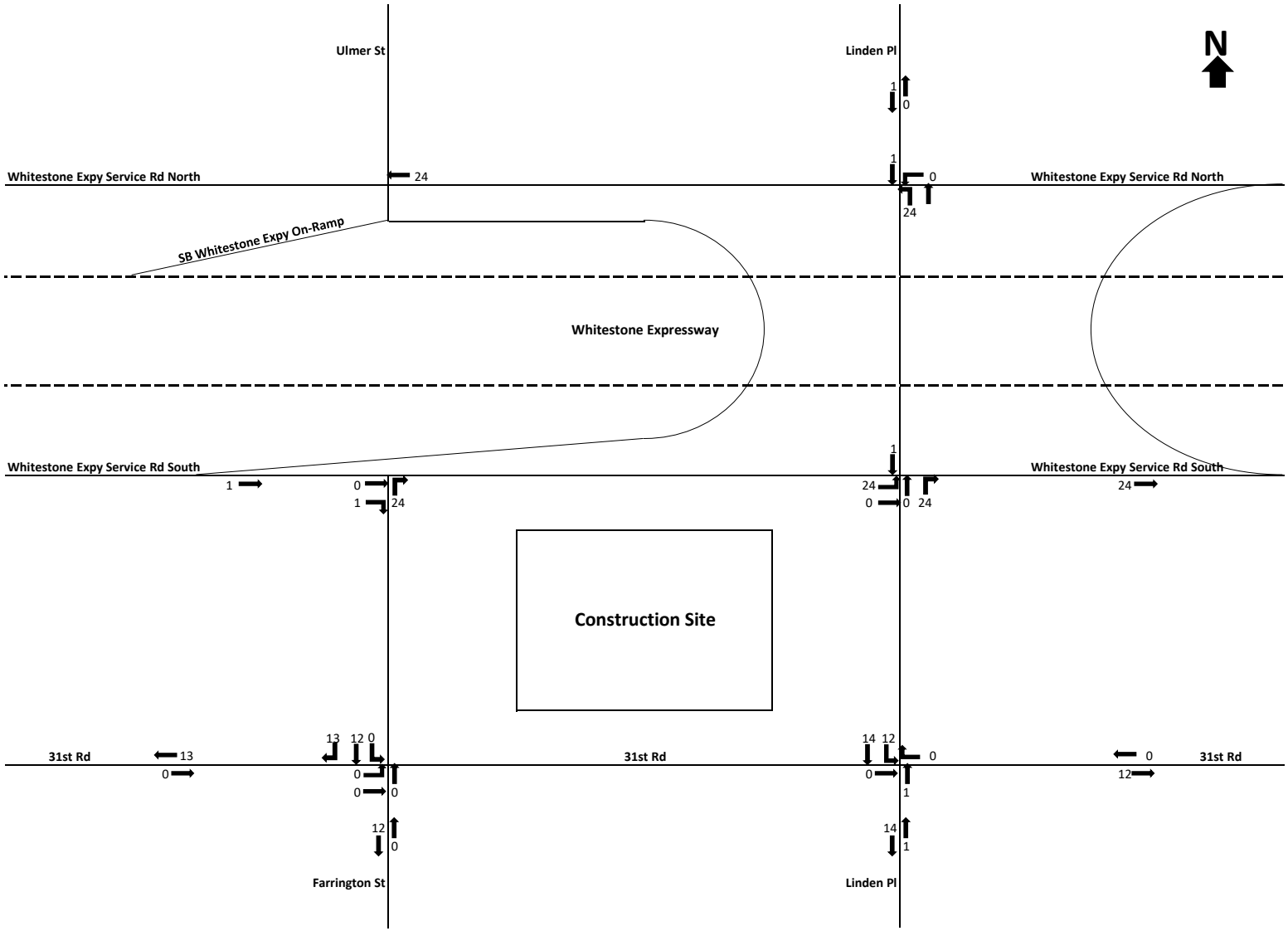

| | in | out |
|---|---|---|
| Total Taxi Trips | 2 | 2 |

**Construction Generated Taxi Trips**
**Weekday AM Peak Hour**
**Figure 14-1b**



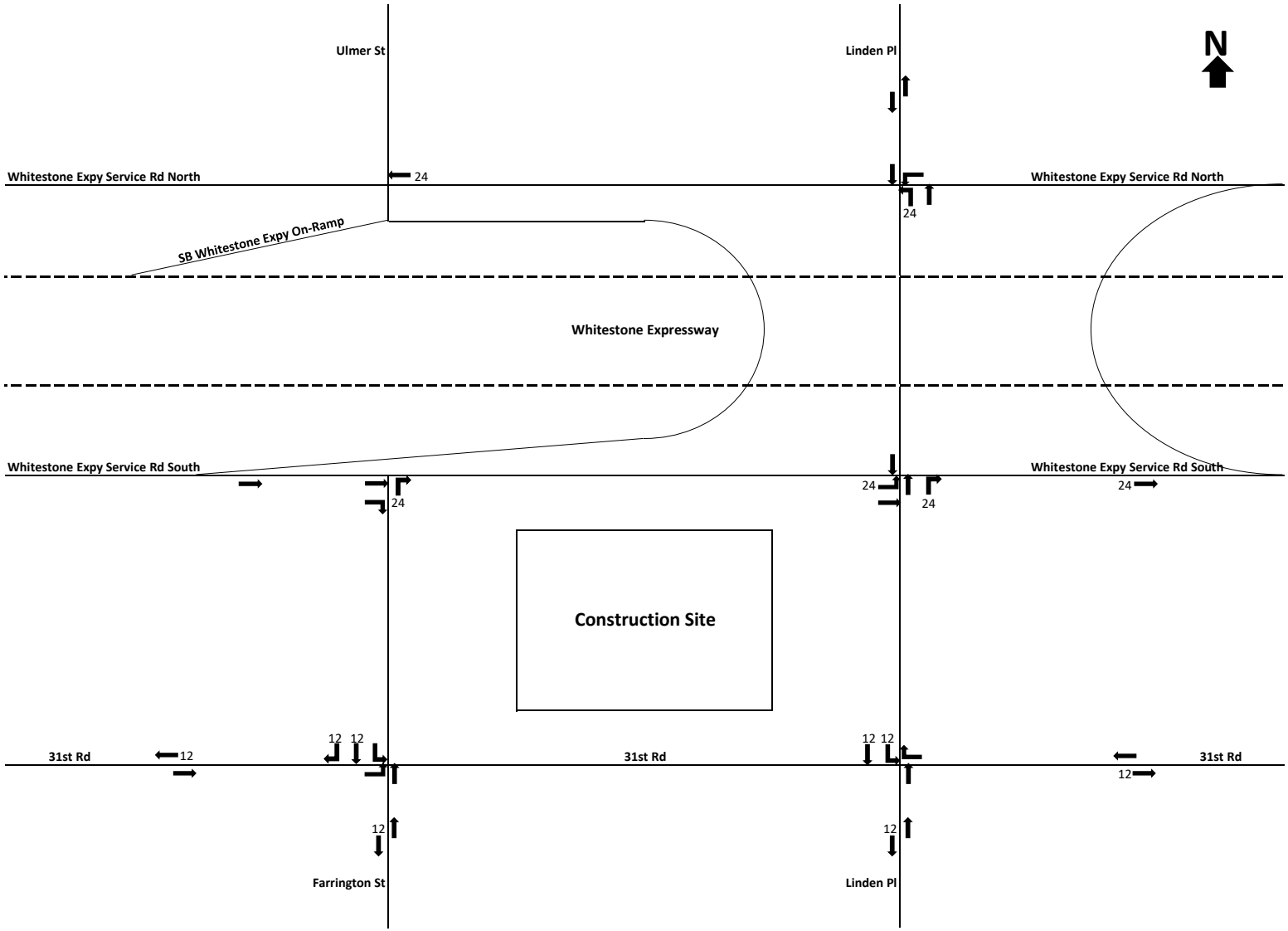

| | in | out |
|---|---|---|
| Total Truck PCE Trips | 13 | 13 |

**Construction Generated Truck Trips**
**Weekday AM Peak Hour**
**Figure 14-1c**



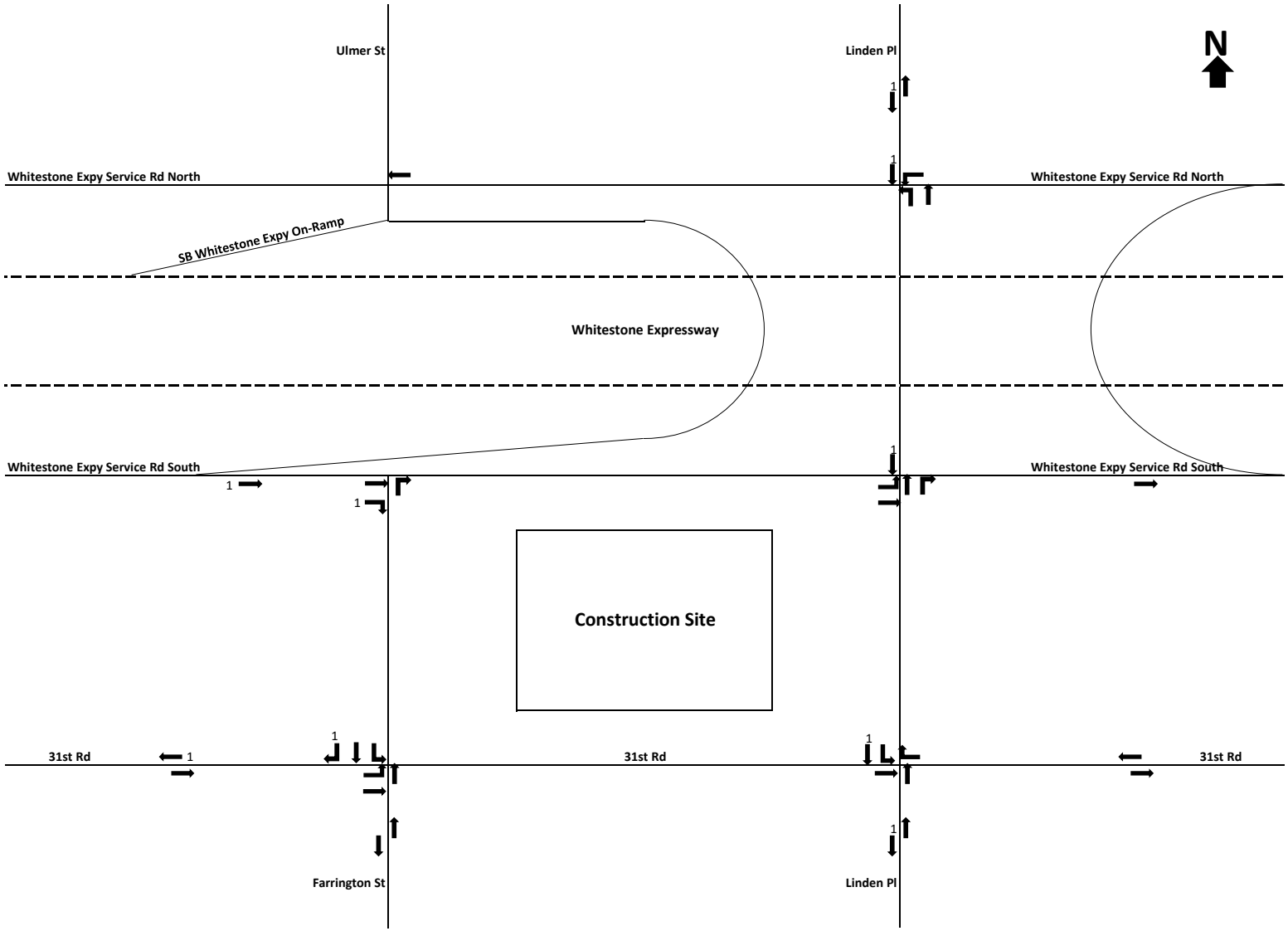

| | in | out | Total |
|---|---|---|---|
| Total Vehicle Trips | 3 | 99 | 102 |

**Construction Generated Vehicle Trips**
**Weekday PM Peak Hour**
**Figure 14-2**



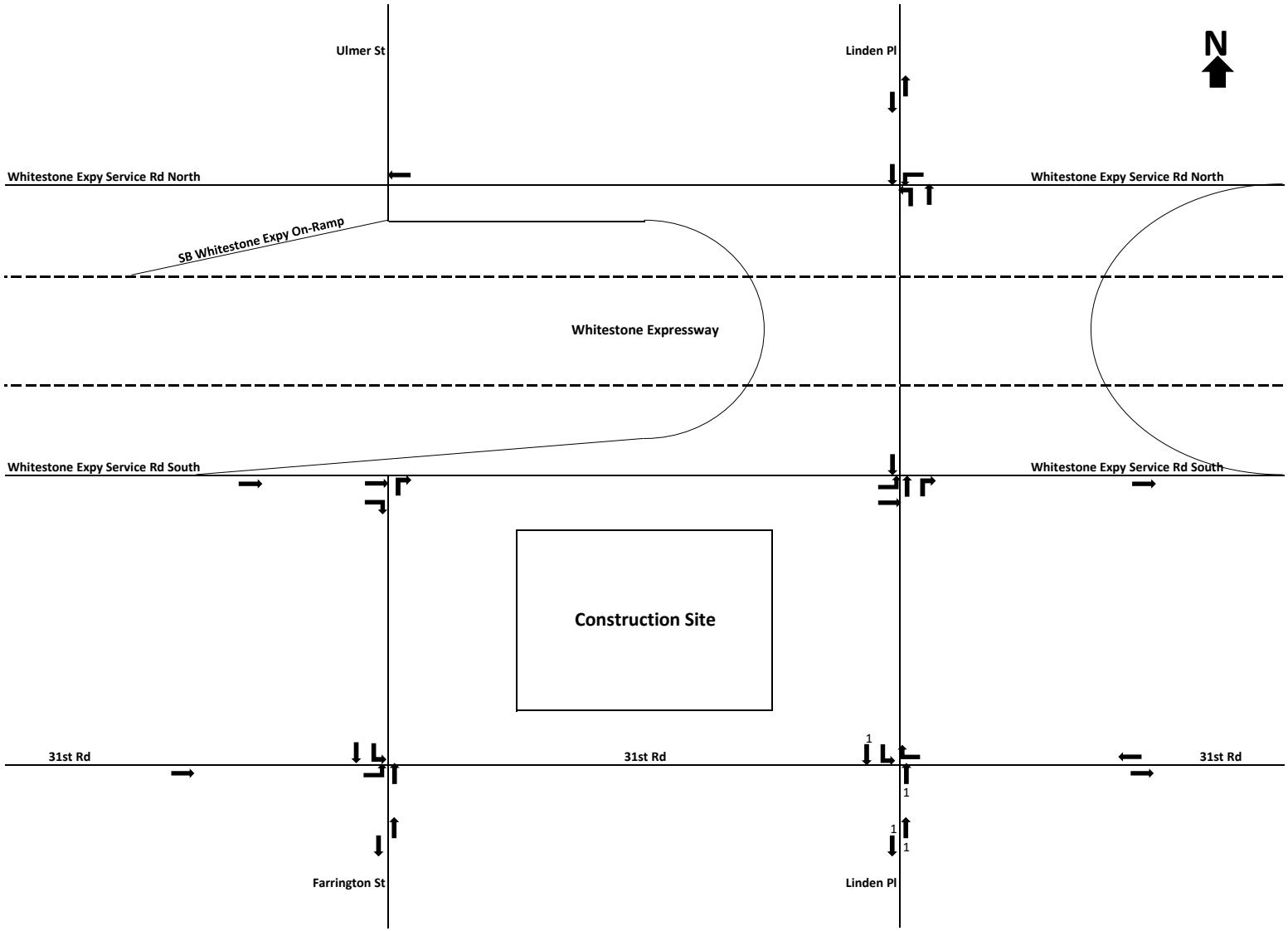

| | in | out |
|---|---|---|
| Total Auto Trips | 0 | 96 |

**Construction Generated Auto Trips**
**Weekday PM Peak Hour**
**Figure 14-2a**




| | in | out |
|---|---|---|
| Total Taxi Trips | 2 | 2 |

**Construction Generated Taxi Trips**
**Weekday PM Peak Hour**
**Figure 14-2b**




| | in | out |
|---|---|---|
| Total Truck PCE Trips | 1 | 1 |

**Construction Generated Truck Trips**
**Weekday PM Peak Hour**
**Figure 14-2c**

| Time | Existing Conditions | | | | |
|---|---|---|---|---|---|
| | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus |
| AM Peak Hour (6:00 AM - 7:00 AM)* | 192 | 522 | 9 | 3 | 42 |
| PM Peak Hour (3:00 PM - 4:00 PM)* | 240 | 579 | 15 | 3 | 36 |

*Existing 20-minute vehicle counts multiplied by 3 to reflect 1 hour periods

** Referencing to Noise Monitoring Location 1

***All numbers rounded to the nearest whole

| Peak Hour | Existing | No Action | With Action | Increment | % Increase |
|---|---|---|---|---|---|
| AM Noise PCE | 1728 | 1754 | 2014 | 260 | 14.82% |
| PM Noise PCE | 1803 | 1830 | 1902 | 72 | 3.93% |

## NSR 1 Noise PCE Screen

| | No-Action Conditions | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv |
| 1728 | 195 | 530 | 9 | 3 | 43 | 1754 | 220 | 530 |
| 1803 | 244 | 588 | 15 | 3 | 37 | 1830 | 269 | 588 |

| With-Action Conditions | | | |
|---|---|---|---|
| Medium Truck | Heavy Truck | Bus | Total Noise PCEs |
| 9 | 8 | 43 | 2014 |
| 15 | 4 | 37 | 1902 |

| Time | Existing Conditions | | | |
|---|---|---|---|---|
| | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck |
| AM Peak Hour (6:00 AM - 7:00 AM)* | 192 | 522 | 9 | 3 |
| PM Peak Hour (3:00 PM - 4:00 PM)* | 240 | 579 | 15 | 3 |

*Existing 20-minute vehicle counts multiplied by 3 to reflect 1 hour periods

** Referencing to Noise Monitoring Location 1

***All numbers rounded to the nearest whole

| Peak Hour | Existing | No Action | With Action | Increment |
|---|---|---|---|---|
| AM Noise PCE | 1728 | 1754 | 2062 | 308 |
| PM Noise PCE | 1803 | 1830 | 1879 | 49 |

## NSR 2 Noise PCE Screen

| | | No-Action Conditions | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi |
| 42 | 1728 | 195 | 530 | 9 | 3 | 43 | 1754 | 221 |
| 36 | 1803 | 244 | 588 | 15 | 3 | 37 | 1830 | 293 |

| % Increase |
|---|
| 17.56% |
| 2.68% |

| With-Action Conditions | | | | |
|---|---|---|---|---|
| Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs |
| 530 | 9 | 9 | 43 | 2062 |
| 588 | 15 | 3 | 37 | 1879 |

| Time | Existing Conditions | | | |
|---|---|---|---|---|
| | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck |
| AM Peak Hour (6:00 AM - 7:00 AM)* | 192 | 522 | 9 | 3 |
| PM Peak Hour (3:00 PM - 4:00 PM)* | 240 | 579 | 15 | 3 |

*Existing 20-minute vehicle counts multiplied by 3 to reflect 1 hour periods

** Referencing to Noise Monitoring Location 1

***All numbers rounded to the nearest whole

| Peak Hour | Existing | No Action | With Action | Increment |
|---|---|---|---|---|
| AM Noise PCE | 1728 | 1754 | 2014 | 260 |
| PM Noise PCE | 1803 | 1830 | 1902 | 72 |

## NSR 3 Noise PCE Screen

| | | No-Action Conditions | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Bus | Total Noise PCEs | Car/Taxi | Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs | Car/Taxi |
| 42 | 1728 | 195 | 530 | 9 | 3 | 43 | 1754 | 220 |
| 36 | 1803 | 244 | 588 | 15 | 3 | 37 | 1830 | 269 |

| % Increase |
|---|
| 14.82% |
| 3.93% |

| With-Action Conditions | | | | |
|---|---|---|---|---|
| Van/Light Truck/Suv | Medium Truck | Heavy Truck | Bus | Total Noise PCEs |
| 530 | 9 | 8 | 43 | 2014 |
| 588 | 15 | 4 | 37 | 1902 |

**Project:** Whitestone Lanes Construction Noise
**Job No:** 2023047
**Date:** 31 May 2023
**Notes:** Source Data

| Equipment Type | Qty | Usage Factor | dB(A) | Dist | Data Source |
|---|---|---|---|---|---|
| Concrete Pump | 1.0 | 0.20 | 72 | 50 | DCP |
| Crane | 1.0 | 0.16 | 75 | 50 | DCP |
| Excavator | 2.0 | 0.40 | 77 | 50 | DCP |
| Forklift | 1.0 | 0.50 | 64 | 50 | DCP |
| Front End Loader | 1.0 | 0.40 | 80 | 50 | CEQR |
| Generator | 2.0 | 0.50 | 70 | 50 | DCP |
| Pile driver | 1.0 | 0.20 | 85 | 50 | DCP |
| Troweling Machine 1 | 1.0 | 0.30 | 70 | 50 | DCP |
| Troweling Machine 2 | 2.0 | 0.30 | 70 | 50 | DCP |

| LwA | SP LwA Input | |
|---|---|---|
| 104 | 97 | |
| 107 | 99 | |
| 109 | 108 | |
| 96 | 93 | |
| 112 | 108 | |
| 102 | 102 | |
| 117 | 110 | |
| 102 | 96 | DCP Usage |
| 102 | 99 | DCP Usage |

**Project:** Whitestone Lanes Construction Noise
**Job No:** 2023047
**Date:** 31 May 2023
**Notes:** All levels in overall dB(A)
8ft Tall Fence plus 3ft 45° Angled Top Section
Modeling with 3 reflection orders and 0 dB Building Façade Loss

| | | | Ambient Leq (1) | 70.3 |
|---|---|---|---|---|
| | | | Ambient Leq (2) | 71.0 |
| | | | Ambient Leq (3) | 69.7 |
| | | | Ambient Leq (4) | 67.0 |
| | | | Ambient Leq (5) | 69.8 |

| | | Source | 10/23 | 11/23-2/24 | 3/24-4/24 | 5/24-6/24 | 7/24-3/25 |
|---|---|---|---|---|---|---|---|
| **NSR 1** | **4.FL** | concrete pump | 0 | 0 | 59 | 59 | 59 |
| | | crane | 0 | 0 | 61 | 61 | 61 |
| | | excavator | 70 | 70 | 70 | 70 | 0 |
| | | forklift | 0 | 0 | 0 | 0 | 0 |
| | | front end loader | 70 | 70 | 70 | 70 | 0 |
| | | generator | 63 | 63 | 63 | 63 | 63 |
| | | pile driver | 0 | 72 | 72 | 0 | 0 |
| | | troweling machine 1 | 0 | 0 | 57 | 57 | 0 |
| | | troweling machine 2 | 0 | 0 | 0 | 0 | 60 |
| | | **Total** | **73** | **76** | **76** | **74** | **67** |
| | | **Total + Ambient** | **74** | **76** | **76** | **75** | **70** |
| *Ambient Leq (4)* | *67* | *Limit (Ambient +15)* | *82* | *82* | *82* | *82* | *82* |
| | | Attenuation Needed | 0 | 0 | 0 | 0 | 0 |
| **NSR 2** | **5.FL** | concrete pump | 0 | 0 | 55 | 55 | 55 |
| | | crane | 0 | 0 | 57 | 57 | 57 |
| | | excavator | 66 | 66 | 66 | 66 | 0 |
| | | forklift | 0 | 0 | 0 | 0 | 0 |
| | | front end loader | 66 | 66 | 66 | 66 | 0 |
| | | generator | 60 | 60 | 60 | 60 | 60 |
| | | pile driver | 0 | 68 | 68 | 0 | 0 |
| | | troweling machine 1 | 0 | 0 | 53 | 53 | 0 |
| | | troweling machine 2 | 0 | 0 | 0 | 0 | 56 |
| | | **Total** | **69** | **72** | **72** | **70** | **63** |
| | | **Total + Ambient** | **71** | **73** | **73** | **72** | **68** |
| *Ambient Leq (4)* | *67* | *Limit (Ambient +15)* | *82* | *82* | *82* | *82* | *82* |
| | | Attenuation Needed | 0 | 0 | 0 | 0 | 0 |
| **NSR 3** | **3.FL** | concrete pump | 0 | 0 | 56 | 56 | 56 |
| | | crane | 0 | 0 | 58 | 58 | 58 |
| | | excavator | 67 | 67 | 67 | 67 | 0 |
| | | forklift | 0 | 0 | 0 | 0 | 0 |
| | | front end loader | 67 | 67 | 67 | 67 | 0 |
| | | generator | 60 | 60 | 60 | 60 | 60 |
| | | pile driver | 0 | 69 | 69 | 0 | 0 |
| | | troweling machine 1 | 0 | 0 | 53 | 53 | 0 |
| | | troweling machine 2 | 0 | 0 | 0 | 0 | 56 |
| | | **Total** | **71** | **73** | **73** | **71** | **64** |
| | | **Total + Ambient** | **72** | **74** | **74** | **73** | **69** |
| *Ambient Leq (4)* | *67* | *Limit (Ambient +15)* | *82* | *82* | *82* | *82* | *82* |
| | | Attenuation Needed | 0 | 0 | 0 | 0 | 0 |

Limit = Ambient + 15

| 4/25-12/25 | 1/26-9/26 |
|---|---|
| 0 | 0 |
| 61 | 61 |
| 0 | 0 |
| 0 | 55 |
| 0 | 0 |
| 63 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| **65** | **62** |
| **69** | **68** |
| *82* | *82* |
| 0 | 0 |
| | |
| 0 | 0 |
| 57 | 57 |
| 0 | 0 |
| 0 | 51 |
| 0 | 0 |
| 60 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| **61** | **58** |
| **68** | **67** |
| *82* | *82* |
| 0 | 0 |
| | |
| 0 | 0 |
| 58 | 58 |
| 0 | 0 |
| 0 | 52 |
| 0 | 0 |
| 60 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| **62** | **59** |
| **68** | **68** |
| *82* | *82* |
| 0 | 0 |