Environmental Assessment Statement
and
Supplemental Report

for

147-40 15th Avenue Commercial Overlay Rezoning

Whitestone, NY

Prepared by:

Compliance Solutions Services, LLC
348 West 57th Street
New York, NY 10019

August 2019

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* 147-40 15th Avenue Commercial Overlay Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) 19DCP141Q	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) 190029ZMQ	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA) P2017Q0352

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY NYC Department of City Planning			NAME OF APPLICANT 8850 Management LLC		
NAME OF LEAD AGENCY CONTACT PERSON Olga Abinader			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON John J. Strauss, Compliance Solutions Services, LLC		
ADDRESS 120 Broadway, 31st floor			ADDRESS 348 West 57th Street, #214		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10019
TELEPHONE 212-720-3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE 212-741-3432	EMAIL jstrauss.css@gmail.com	

5. *Project Description*

The Applicant, 8850 Management LLC, is seeking a Zoning Map Amendment to map a C1-2 commercial district overlay over an existing R3A residential district in the Affected Area (Queens Block 4646, Lots 8, 11, 12, and 14), located in the Whitestone neighborhood of Queens, Community District 7. The Proposed Action would facilitate the alignment of the zoning of the Applicant property (Block 4646, Lot 8) with the existing commercial uses on the parcel. Pursuant to their respective Certificates of Occupancy, Lots 8 and 10 are considered to be a single zoning lot. However, the Proposed Action would not include Lot 10. The proposed rezoning would serve to allow legally conforming commercial uses within the Affected Area where residential and community facility uses are currently permitted as of right. It would also allow an increase in commercial floor area on the parcels within the Affected Area to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. See attached Project Description.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 7	STREET ADDRESS 147-40 15th Avenue
TAX BLOCK(S) AND LOT(S) Block 4646, Lots 8, 10, 11, 12, 14		ZIP CODE 11357
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS 15th Avenue between 148th and 149th Streets		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R3A		ZONING SECTIONAL MAP NUMBER 7d

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

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

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

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

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

☐ VARIANCE (use)

☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

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

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 17,915
Waterbody area (sq. ft) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 17,915
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): +7,098 gsf office; +7,803 gsf retail; -2,256 gsf CF; -1,680 gsf automotive
NUMBER OF BUILDINGS: 4
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 2,257; 4,778; 4,204; 7,262
HEIGHT OF EACH BUILDING (ft.): 30; 30; 35; 35
NUMBER OF STORIES OF EACH BUILDING: 2; 2; 2.5; 3

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: 2,365
The total square feet not owned or controlled by the applicant: 15,550

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: 12,432 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 12,432 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.)	2,460 (Sites 2 & 3)	2,257 (Site 1); 3,638 (Site 2); 2,884 (Site 3); 7,261 (Site 4)	0	0
Type (*e.g.,* retail, office, school)	4 units	commercial offices; restaurant; retail	0	0

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 0 NUMBER OF ADDITIONAL WORKERS: 36
Provide a brief explanation of how these numbers were determined: + 28 office workers @ 4/1,000 gsf; + 23 retail workers @ 3/1,000 gsf; - 9 CF workers @ 4/1,000 gsf; - 6 auto workers based on existing operations

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

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

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly: Absent the rezoning, Projected Development Site 1 (Block 4646, Lot 8) would consist of the existing building square footage as the Site is currently developed close to the maximum FAR of 1.0 permitted for a community facility use (the existing 2,061 zsf on the 2,365 square foot lot represents an FAR of 0.87). However, as a commercial office use is not allowed, it is assumed that the existing building would be converted to a community facility use. It is assumed that the No-Action development would consist of the existing uses and building square footages on Projected Development Sites 2, 3, and 4 (Block 4646, Lots 11, 12, & 14) which consist of a mixture of legal residential uses and legal non-conforming commercial uses.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2021

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 24

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: New development could occur on Projected Development Sites 2, 3, and 4 and is projected to occur on each Site individually over a 24 month period. No new development would occur on Projected Development Site 1.

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

☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: automotive, community facility, parking, vacant

Part II: TECHNICAL ANALYSIS

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

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

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

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

	YES	NO
involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?		
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 117		
○ 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): 488,189		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See attached report.	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		

	YES	NO
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☐	☒
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	☐	☒
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
o The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
o Closure of a community facility or disruption in its services?	☐	☒
o Activities within 400 feet of a historic or cultural resource?	☐	☒
o Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
o Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.		

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
John J. Strauss, Compliance Solutions Services, LLC	August 23, 2019

SIGNATURE

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

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

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

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

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

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

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

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

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

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

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

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME: Olga Abinader	DATE: 8/23/2019
SIGNATURE: Olga Abinader	

NEGATIVE DECLARATION (Use of this form is optional)

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

1. Hazardous Materials and Air Quality

An (E) designation (E-546) for hazardous materials and air quality has been incorporated into the proposed actions. Refer to Appendix 1: (E) Designation", attached to this Determination of Significance, for a list of sites affectedby the (E) designation and applicable (E) designation requirements. The analyses conducted for hazardous materials and air quality conclude that with the (E) Designation requirements in place, the proposed actions would not result in significant adverse impacts to hazardous materials or air quality.

2. Land Use, Zoning, and Public Policy

The EAS includes a Land Use, Zoning, and Public Policy section. The proposed rezoning from R3-A to R3-A/C1-2 district would legalize existing, non-conforming commercial uses on Block 4646, Lots 8 and 11 and allow for a change in use on Block 4646, Lots 12 and 14 by facilitating commercial uses. The existing affected area currently permits residential and community facility uses but prohibits commercial uses. The analysis concludes that no significant adverse impacts related to Land Use, Zoning, and Public Policy would result from the proposed actions.

3. Shadows

The EAS includes a Tier 3 Shadows Analysis. The analysis showed that projected development within the Affected Area would reach an approximately 9 square foot area of McKee Triangle for approximately 2 minutes on December 21st. Due to the small area of this open space resource that would be affected and the short duration of the new shadow outside of the growing season, it is concluded that the Proposed Action would not result in any significant adverse shadows impacts to open space resources.

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	DATE
Olga Abinader	8/23/2019
SIGNATURE	

TITLE	
Chair, Department of City Planning	
NAME	DATE
Marisa Lago	8/26/2019
SIGNATURE	

Determination of Significance Appendix: (E) Designation

An (E) Designation **(E-546)** related to hazardous materials and air quality will be assigned to Projected Development Site 1 (Block 4646, Lot 8 (hazardous materials only)) and Projected Development Sites 2, 3, and 4 (Block 4646, Lots 11, 12, and 14) in order to preclude significant adverse impacts, as noted below.

Hazardous Materials:

The (E) Designation requirements for hazardous materials are 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.

Air Quality:

The (E) Designation requirements for air quality are as follows:

Block 4646, Lot 11 (Projected Development Site 2):
Any new residential/commercial development or enlargement on the above-referenced property must ensure that the HVAC stack is located at the highest tier or at least 23 feet above grade, and is at least 24 feet from the northern lot line facing 15th Avenue and at least 30 feet from the western lot line facing 147th Street to avoid any potential significant adverse air quality impacts.

Block 4646, Lot 12 (Projected Development Site 3):
Any new residential/commercial development or enlargement on the above-referenced property must ensure that the HVAC stack is located at the highest tier or at least 29 feet above grade to avoid any potential significant adverse air quality impacts.

Block 4646, Lot 14 (Projected Development Site 4):
Any new commercial development or enlargement on the above-referenced property must ensure that the HVAC stack is located at the highest tier or at least 31 feet above grade to avoid any potential significant adverse air quality impacts.

PROJECT DESCRIPTION

147-40 15th Avenue Commercial Overlay Project Description

Introduction

The Applicant, 8850 Management LLC, is seeking a Zoning Map Amendment to map a C1-2 commercial district overlay over an existing R3A residential district in the Affected Area (Queens Block 4646, Lots 8, 11, 12, and 14), located in the Whitestone neighborhood of Queens, Community District 7. Pursuant to their respective Certificates of Occupancy, Lots 8 and 10 are considered to be a single zoning lot (hereafter, the "Development Site"). However, the Proposed Action would not include Lot 10. The proposed zoning map amendment is sought to facilitate the legal use of a commercial building on Block 4646, Tax Lot 8, which contains 2,061 square feet (0.87 FAR) of commercial office space (Use Group 6) in two stories. The Proposed Action would facilitate the alignment of the zoning of the Applicant property (Block 4646, Lot 8) with the existing commercial uses on the parcel. The proposed rezoning would serve to allow legally conforming commercial uses within the Affected Area where residential and community facility uses are currently permitted as of right. It would also allow an increase in commercial floor area on the parcels within the Affected Area to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses.

Commercial uses are not permitted in R3A districts. The proposed C1-2 commercial overlay would allow commercial uses up to an FAR of 1.0 subject to certain limitations described further in this document. Once the C1-2 zoning is in effect, the owners of the four properties in the Affected Area will have the flexibility to change existing uses to any use permitted as-of-right in C1 districts and will not be limited to changing to Use Group 6 as when subject to the non-conforming use provisions of ZR 52-34 (Commercial Uses in Residence Districts).

Existing Conditions

The existing conditions on the Applicant controlled and the non-Applicant held sites in the Affected Area are described below. Table 1 presents a detailed breakdown of square footage by use on each of these sites.

Applicant Controlled Proposed Development Site (Projected Development Site 1)

The Applicant controlled Proposed Development Site (Projected Development Site 1), Block 4646, Lot 8, contains 2,365 square feet of lot area and is improved with a two-story and cellar office building containing 2,257 gross square feet (gsf) [2,061 zoning square feet (zsf); 0.87 FAR]. The parcel contains a single curb cut with one off-street unenclosed parking space. The office uses in the building are nonconforming.

Pursuant to their respective Certificates of Occupancy, Block 4646, Lots 8 and 10 are considered to be a single zoning lot (hereafter, the "Development Site"). However, the Proposed Action would not include Lot 10. Block 4646, Lot 10, consists of a 2,785 square foot lot improved with a two-story, two-family, residential building containing approximately 2,184 gsf/zsf of floor area (0.78 FAR).

Non-Applicant Controlled Sites

Projected Development Site 2, Block 4646, Lot 11, consists of a 4,500 square foot lot improved with a two-story and cellar mixed-use building that contains 2,280 gsf of floor area (2,075 zsf; 0.46 FAR). The ground floor of the building contains an active eating and drinking

establishment including approximately 1,140 gsf of floor area (1,038 zsf; 0.23 FAR). The second floor of the building contains two residential units containing approximately 1,140 gsf of floor area (1,037 zsf; 0.23 FAR). Commercial uses have existed in the building since its construction in the 1930s, rendering these uses legally nonconforming. The parcel contains a single curb cut with two off-street unenclosed parking spaces.

Projected Development Site 3, Block 4646, Lot 12, consists of a 4,000 square foot lot currently under construction with a two and a half-story and cellar two-family residence to contain 1,320 gsf of floor area (1,200 zsf; 0.3 FAR). The parcel also contains a one car garage.

Projected Development Site 4, Block 4646, Lot 14, consists of a 7,050 square foot corner lot improved with an automotive use (currently a Mobile fuel station) that contains an approximately 15-foot tall service building with 1,680 gsf/zsf of floor area (0.24 FAR). The parcel contains a 95-foot curb cut along 15th Avenue. This nonconforming use was granted by the BSA (BZ 568/39).

Table 1

Existing Uses in the Affected Area

Proj Develop Site	Lot	Lot Size (sf)	Total GSF	No. of DUs	Resid GSF	Com'l GSF	Com Facil GSF	Manuf GSF
1	8	2,365	2,257	0	0	2,257	0	0
2	11	4,500	2,280	2	1,140	1,140	0	0
3	12	4,000	1,320	2	1,320	0	0	0
4	14	7,050	1,680	0	0	0	0	1,680
	Total	**17,915**	**7,537**	**4**	**2,460**	**3,397**	**0**	**1,680**

Description of the Proposed Development

The Proposed Action would map a C1-2 commercial overlay over the Affected Area which is zoned R3A. Although no new development or enlargement is proposed in connection with this land use action, additional development could occur on the four Projected Development Sites as further discussed below. The Proposed Action would allow commercial floor area on the parcels within the Affected Area up to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. In addition, once the C1-2 zoning is in effect, the owners of the four properties in the Affected Area will have the flexibility to change existing uses to any use permitted as-of-right in C1 districts and will not be limited to changing to Use Group 6 as when subject to the non-conforming use provisions of ZR 52-34 (Commercial Uses in Residence Districts).

The proposed rezoning of the Applicant controlled Proposed Development Site (Projected Development Site 1) from R3A to R3A/C1-2 would facilitate the legal use of the Development Site as a commercial office use. The Site would remain developed as a two-story and cellar 2,257 gsf/2,061 zsf commercial building with 0.87 FAR where 1.0 FAR would be permitted. No additional development is proposed by the Applicant or anticipated for Lot 8 since it is already

developed to an FAR of 0.87 where a maximum of 1.0 would be permitted under the rezoning. The increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area. With that small of an increment, additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria. The intended commercial use would consist of office space. Due to the pre-existing status of the building, no accessory off-street parking spaces would be required with a single unenclosed space provided on the property. The single pre-existing curb cut on the property would remain.

The proposed rezoning of Projected Development Site 2 from R3A to R3A/C1-2 would allow additional commercial development on the Site. It is assumed that the commercial use on the Site would be enlarged to include 2,498 gsf (2,423 zsf) of additional floor area for a total commercial floor area of 3,638 gsf (3,461 zsf; 0.77 FAR). The residential floor area on the Site would remain at 1,140 gsf (1,037 zsf; 0.23 FAR). The floor area on the Site would total 4,778 gsf (4,500 zsf; 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

The proposed rezoning of Projected Development Site 3 from R3A to R3A/C1-2 would allow commercial development on the Site. It is assumed that 2,884 gsf of commercial use would be developed on the Site (2,800 zsf; 0.7 FAR). The residential floor area on the Site would remain at 1,320 gsf (1,200 zsf; 0.30 FAR). The floor area on the Site would total 4,204 gsf (4,000 zsf, 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

The proposed rezoning of Projected Development Site 4 from R3A to R3A/C1-2 would allow additional commercial development on the Site. It is assumed that the existing 1,680 gsf automotive use would be removed and the Site would be developed with a new 7,262 gsf commercial office/retail building for a net increase of 5,582 gsf of new commercial floor area on the Site (7,050 zsf; 1.0 FAR). 23 accessory parking spaces would be required.

Build Year

The Project Build Year is 2021. It is assumed that the proposed rezoning would be approved by 2019. No new construction would occur on the Applicant's Projected Development Site 1 as it is developed close to the maximum proposed FAR of 1.0. Potential new development could occur on the non-Applicant controlled Projected Development Sites 2, 3, and 4 and it is assumed that this would occur over a 24-month construction period with a Build Year of 2021.

Purpose and Need of the Proposed Action

Commercial uses are not permitted in R3A districts. The proposed rezoning would map a C1-2 commercial overlay over the entire Affected Area, which would allow the Applicant to align the zoning of the Applicant property (Projected Development Site 1) with the existing commercial uses on the parcel. The Proposed Development Site was purchased by the Applicant in 2015 to be utilized as a commercial office space. Prior to that date, the property was utilized by a kitchen design firm, a day care facility (in the basement), and a painting center. The DOB padlock division issued a use violation (Complaint No. 4634311) in October of 2015, immediately prior to the Applicant utilizing the facility as a commercial use. The padlock violation was subsequently dismissed in April of 2017, as a result of this application with the Applicant seeking to utilize the building as a legal commercial office use. No new development is anticipated to occur on this Site under the proposed rezoning from R3A to R3A/C1-2. The

proposed rezoning would not result in the addition of any floor area and the Site would remain developed as a two-story 2,257 gsf commercial building with 0.87 FAR where 1.0 FAR would be permitted. No additional development is proposed by the Applicant or anticipated for Lot 8 since it is already developed to an FAR of 0.87 where a maximum of 1.0 would be permitted under the rezoning. The increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area. With that small of an increment, additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria.

The Affected Area was included in the Whitestone Rezoning of December 2005 (060055 ZMQ). The Whitestone Rezoning affected a 310-block area by mapping lower density and contextual zoning districts to preserve the existing scale of the neighborhood, while also preventing new development that was inconsistent with the low-rise detached character of the area. This resulted in the Affected Area being modified from an R3-1 district to an R3A district, which exists today. In addition, C1-2, C1-3, and C2-2 commercial overlays were mapped along commercial thoroughfares in the rezoning area to recognize pre-existing commercial uses and reinforce future commercial and mixed-use developments along these corridors. Despite the mapping of new commercial overlays and the presence of some commercial uses within the Affected Area, no commercial districts were mapped in the Area.

The proposed zoning change from R3A to R3A/C1-2 for Projected Development Sites 2, 3, and 4 would serve to allow legally conforming commercial uses on these Sites where residential and community facility uses are currently permitted. It would also allow an increase in commercial floor area on these Sites to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. The 1,140 gsf legally nonconforming commercial use on Projected Development Site 2 would be made conforming and up to 2,498 gsf of additional commercial floor area could be developed on this Site. The proposed rezoning of Projected Development Site 3 would allow up to 2,884 gsf of commercial use to be developed on this Site. The legally nonconforming commercial use on Projected Development Site 4 would be made conforming and up to 5,582 gsf of additional commercial floor area could be developed on the Site.

Future No-Action Scenario

In the future without the action, the Reasonable Worst Case Development Scenario (RWCDS) would reflect the following assumptions:

Without the Proposed Action, it is assumed that the Affected Area's existing R3A zoning would remain and the proposed C1-2 commercial overlay would not be mapped over the Affected Area. No new development would occur on the four lots within the Affected Area. It is assumed that the No-Action development on Projected Development Site 1 would consist of the existing building square footage as the Site is currently developed close to the maximum FAR of 1.0 permitted for a community facility use (the existing 2,061 zsf on the 2,365 square foot lot represents an FAR of 0.87). However, as a commercial office use is not allowed, it is assumed that the existing building would be converted to a community facility use. It is assumed that the No-Action development would consist of the existing uses and building square footages on Projected Development Sites 2, 3, and 4.

The following assumptions would apply to the four lots within the Affected Area:

Projected Development Site 1 – The No-Action Scenario has been determined based on the R3A zoning provisions which permit a maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. Commercial uses are not allowed.

Projected Development Site 2 – The No-Action Scenario has been determined based on the legally nonconforming status of the existing commercial uses on the Site, which would remain but cannot be enlarged, and the maximum permitted FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses and total development on the Site. Commercial uses would be allowed to remain as commercial uses have existed in the building since its construction in the 1930s, rendering these uses legally nonconforming. The Site is currently developed to a residential FAR of 0.23 and a total FAR of 0.46. No additional residential development would be anticipated since 649 gsf (630 zsf) would be allowed under the maximum permitted residential FAR of 0.6 with the attic allowance. Although up to 2,503 gsf (2,430 zsf) of community facility floor area could be developed on the Site, due to the presence of an active commercial use on the ground floor (restaurant) and residential uses on the second floor of the building, it is not anticipated that community facility uses would be compatible.

Projected Development Site 3 – The No-Action Scenario has been determined based on the R3A zoning provisions which permit a maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. Although additional residential floor area (up to 1,236 gsf/1,200 zsf for a total residential FAR of 0.6) and new community floor area (1,648 gsf/1,600 zsf for an FAR of 0.4) could be developed on this Site, construction of the new residential building on the Site has just been completed and it is therefore not anticipated that it would enlarged under No-Action conditions by the Project Build Year.

Projected Development Site 4 – This Site is currently developed at an FAR of 0.24 with a nonconforming automotive use granted by BSA. Although this Site is developed to less than 50% of the permitted residential FAR of 0.6 with the attic allowance and the community facility FAR of 1.0 and could be considered to be a soft site, it is assumed that no new development would occur on the Site. It is not likely that the existing use would be removed in order to develop a residential use or a community facility due to potential clean-up costs associated with the removal of a gasoline service station. It is not likely that the rate of return for these uses (as compared to a commercial use) would compensate for the clean-up costs on the Site.

Table 2 presents a detailed breakdown of square footage by use on each of these sites under the Future No-Action scenario.

Table 2

Future No-Action Uses in the Affected Area

Proj Develop Site	Lot	Lot Size (sf)	Total GSF	No. of DUs	Resid GSF	Com'l GSF	Com Facil GSF	Manuf GSF
1	8	2,365	2,257	0	0	0	2,257	0
2	11	4,500	2,280	2	1,140	1,140	0	0
3	12	4,000	1,320	2	1,320	0	0	0

4	14	7,050	1,680	0	0	0	0	1,680
	Total	**17,915**	**7,537**	**4**	**2,460**	**1,140**	**2,257**	**1,680**

Future With-Action Scenario

In the future with the action, the RWCDS would reflect the following assumptions:

Under the With-Action Scenario, the Affected Area would be rezoned from R3A to R3A/C1-2. The R3A/C1-2 zoning district would permit a residential FAR of 0.5 (0.6 with the attic allowance), a community facility FAR of 1.0, and a commercial and total FAR of 1.0 on the four Projected Development Sites. However, no new development or enlargement is proposed in connection with this land use action. The projected development on each Site is discussed below.

Projected Development Site 1 - The proposed rezoning of Projected Development Site 1 from R3A to R3A/C1-2 would facilitate the legal use of the Development Site as a commercial office use. The With-Action Scenario for the Applicant property has been determined based on the provisions of the C1-2 commercial overlay as mapped on the existing R3A zoning of the property, the limited amount of additional commercial floor area that would be permitted (approximately 307 square feet), and the Applicant's stated intentions to maintain the existing condition on Projected Development Site 1. The proposed rezoning would allow the addition of floor area on the Site but the Applicant does not intend to utilize this additional floor area and the Site would remain developed as a two-story and cellar 2,257 gsf/2,061 zsf commercial building with 0.87 FAR where 1.0 FAR would be permitted. No additional development is proposed by the Applicant or anticipated for Lot 8 since it is already developed to an FAR of 0.87 where a maximum of 1.0 would be permitted under the rezoning. The increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area. With that small of an increment, additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria. The intended commercial use would consist of office space. Due to the pre-existing status of the building, no accessory off-street parking spaces would be required with a single unenclosed space provided on the property. The single pre-existing curb cut on the property would remain.

Although there are currently no plans for any development on Projected Development Sites 2, 3, or 4, it is assumed that the existing development on these Sites would be enlarged with new commercial space up to a maximum commercial and total FAR of 1.0 as permitted by the C1-2 commercial overlay and further discussed below.

Projected Development Site 2 - The proposed rezoning of Projected Development Site 2 from R3A to R3A/C1-2 would allow additional commercial development on the Site. This Site is currently developed to about 46% of the permitted FAR of 1.0. It is assumed that the commercial use on the Site would be enlarged to include 2,498 gsf (2,423 zsf) of additional floor area for a total commercial floor area of 3,638 gsf (3,461 zsf; 0.77 FAR). The residential floor area on the Site would remain at 1,140 gsf (1,037 zsf; 0.23 FAR). The floor area on the Site would total 4,778 gsf (4,500 zsf; 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

Projected Development Site 3 - The proposed rezoning of Projected Development Site 3 from R3A to R3A/C1-2 would allow commercial development on the Site. This Site is currently developed to about 30% of the permitted FAR of 1.0. It is assumed that 2,884 gsf of commercial use would be developed on the ground floor of an enlarged building on the Site (2,800 zsf; 0.7 FAR). The residential floor area on the Site would remain at 1,320 square feet (1,200 zsf; 0.3 FAR) and would be moved to the upper floors of the structure. The floor area on the Site would total 4,204 gsf (4,000 zsf, 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

Projected Development Site 4 - The proposed rezoning of Projected Development Site 4 from R3A to R3A/C1-2 would allow additional commercial development on the Site. It is assumed that the existing 1,680 gsf automotive use would be removed and the Site would be developed with a new 3-story, 7,262 gsf commercial office/retail building (2,421 gsf retail, 4,841 gsf office) for a net increase of 5,582 gsf of new commercial floor area on the Site (7,050 zsf; 1.0 FAR). It is assumed that the rate of return for a commercial office/retail building would exceed that of the existing automotive service station. 23 accessory parking spaces would be required at a ratio of 1 space per 300 square feet of general retail or service use floor area.

Table 3 presents a detailed breakdown of square footage by use on each of these sites under the Future With-Action scenario.

Table 3

Future With-Action Uses in the Affected Area

Proj Develop Site	Lot	Lot Size (sf)	Total GSF	No. of DUs	Resid GSF	Com'l GSF	Com Facil GSF	Manuf GSF
1	8	2,365	2,257	0	0	2,257	0	0
2	11	4,500	4,778	2	1,140	3,638	0	0
3	12	4,000	4,204	2	1,320	2,884	0	0
4	14	7,050	7,262	0	0	7,261	0	0
	Total	**17,915**	**18,501**	**4**	**2,460**	**16,040**	**0**	**0**

Incremental Development

As described above, the Future No-Action development in the Affected Area would include 4 dwelling units (2,460 square feet), 1,140 square feet of restaurant space, 2,257 square feet of community facility space, and a 1,680 square foot automotive service station. The Future With-Action development in the Affected Area would include 4 dwelling units (2,460 square feet), 7,098 square feet of office space, 1,140 square feet of restaurant space, and 7,803 square feet of retail space. The increment between the Future No-Action and the Future With-Action developments would be an increase of 7,098 square feet of office space and 7,803 square feet of retail space. There would also be a decrease of 2,257 square feet of community facility space and the removal of an 1,680 square foot automotive service station.

Table 4 presents a detailed breakdown of square footage by use on each of the four Projected Development Sites under the Future No-Action scenario, the Future With-Action scenario, and Incremental Change.

Table 4

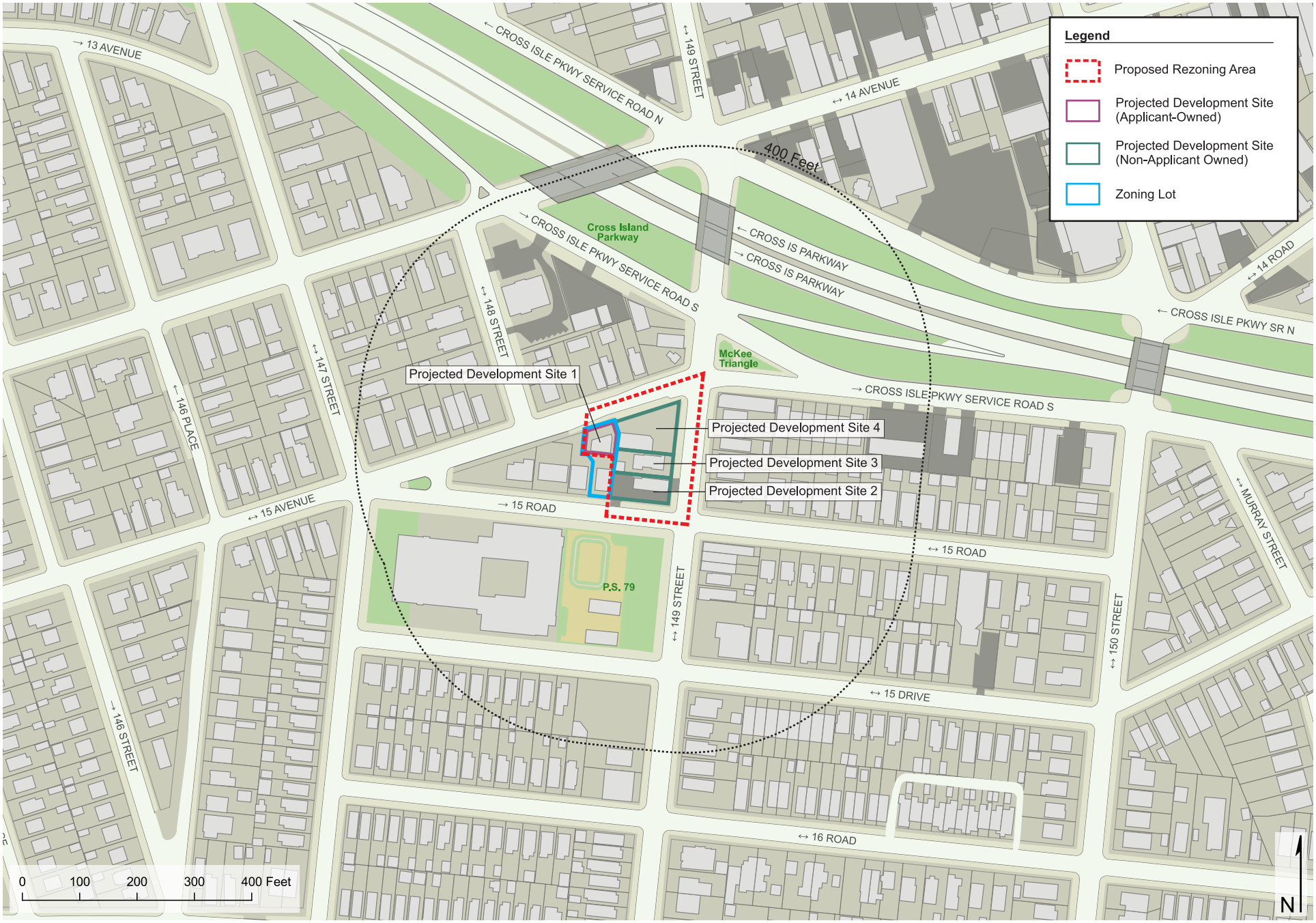
Future No-Action, Future With-Action, and Incremental Uses and SF in the Affected Area

Proj Develop Site	Lot	No-Action				With-Action				Increment			
		Tot GSF	Com GSF	CF GSF	Man GSF	Tot GSF	Com GSF	CF GSF	Man GSF	Tot GSF	Com GSF	CF GSF	Man GSF
1	8	2,257	0	2,257	0	2,257	2,257	0	0	0	+2,257	-2,257	0
2	11	2,280	1,140	0	0	4,778	3,638	0	0	+2,498	+2,498	0	0
3	12	1,320	0	0	0	4,204	2,884	0	0	+2,884	+2,884	0	0
4	14	1,680	0	0	1,680	7,262	7,261	0	0	+5,582	+7,261	0	-1,680
	Total	**7,537**	**1,140**	**2,257**	**1,680**	**18,501**	**16,040**	**0**	**0**	**+10,964**	**+14,900**	**-2,257**	**-1,680**

Note: Due to space limitations in the table above the following residential information has not been included:

- 2,460 gsf of residential floor area (4 dwelling units) would remain under both the No-Action and With-Action Scenarios (1,140 gsf & 2 DUs on Lot 11 and 1,320 gsf & 2 DUs on Lot 12); therefore, there is no incremental change to residential uses or floor area in the Affected Area.

FIGURES & PHOTOGRAPHS


Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Zoning Lot
400 Feet
Projected Development Site 1
Projected Development Site 4
Projected Development Site 3
Projected Development Site 2
Cross Island Parkway
McKee Triangle
P.S. 79
13 AVENUE
CROSS ISLE PKWY SERVICE ROAD N
149 STREET
14 AVENUE
CROSS IS PARKWAY
CROSS ISLE PKWY SERVICE ROAD S
148 STREET
14 ROAD
CROSS ISLE PKWY SR N
146 PLACE
147 STREET
15 AVENUE
15 ROAD
MURRAY STREET
149 STREET
150 STREET
15 DRIVE
146 STREET
16 ROAD
0 100 200 300 400 Feet
N

1. View of the Site facing east from the intersection of 15th Avenue and 148th Street.

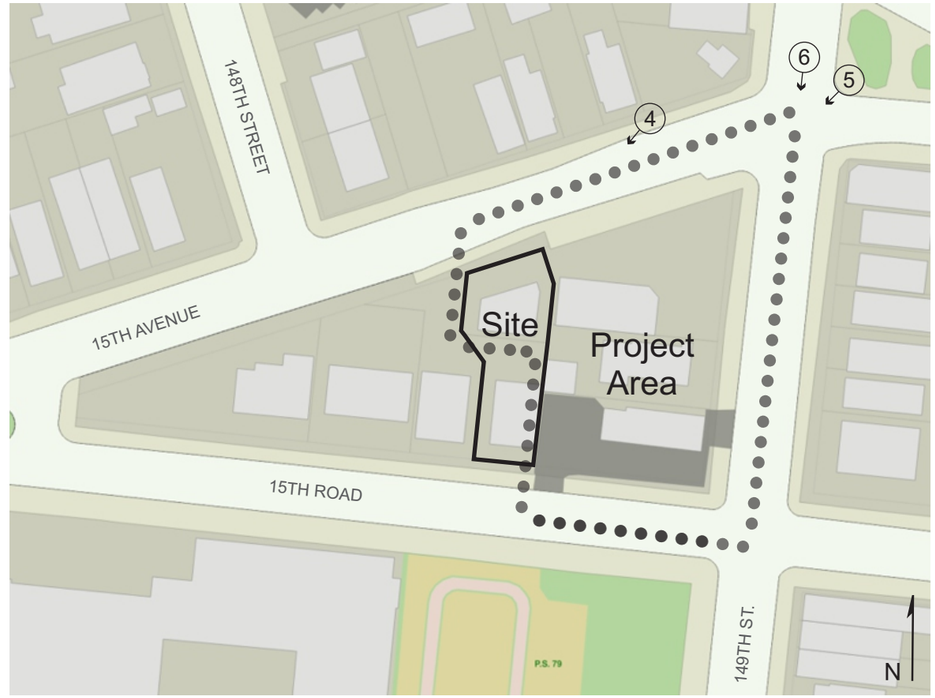
2. View of 15th Avenue facing northeast from 148th Street (Site ahead,at right).

3. View of the Site facing southeast from 15th Avenue.

4. View of the Site facing southwest from 15th Avenue.

5. View of the Project Area facing southwest from the intersection of 15th Avenue and 149th Street (Site ahead, at right).

6. View of 149th Street facing south from 15th Avenue.



7. View of 15th Avenue facing southwest from 149th Street (Site ahead, at left).

8. View of the west side of 149th Street between 15th Avenue and 15th Road facing southwest.*

9. View of the west side of 149th Street between 15th Avenue and 15th Road facing west.*

10. View of the intersection of 15th Avenue and 148th Street facing northwest.

11. View of 15th Road facing west from 149th Street.

12. View of the north side of 15th Road between 147th Street and 149th Street facing northwest.

13. View of the north side of 15th Road between 147th Street and 149th Street facing north.

14. View of the north side of 15th Road between 147th Street and 149th Street facing northeast.

15. View of 15th Road facing east toward 149th Street.

16. View of the sidewalk along the north side of 15th Road facing east toward 149th Street.

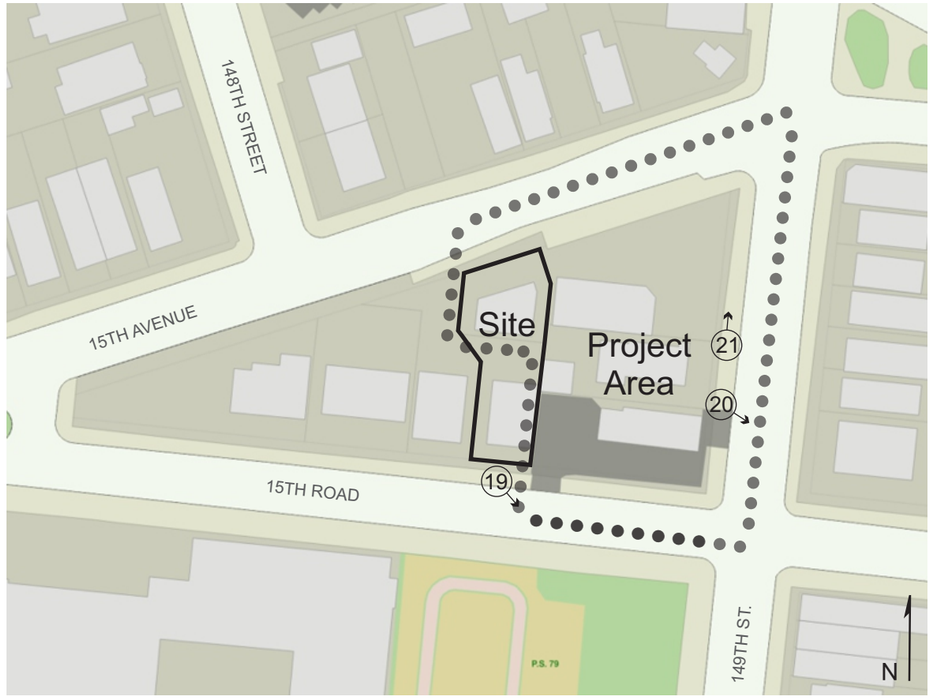
17. View of the south side of 15th Road between 147th Street and 149th Street facing southwest.

18. View of the sidewalk along the north side of 15th Road facing west toward 147th Street.

19. View of the south side of 15th Road between 147th Street and 149th Street facing southeast from the Site.

20. View of the east side of 149th Street between 15th Avenue and 15th Road facing southeast.

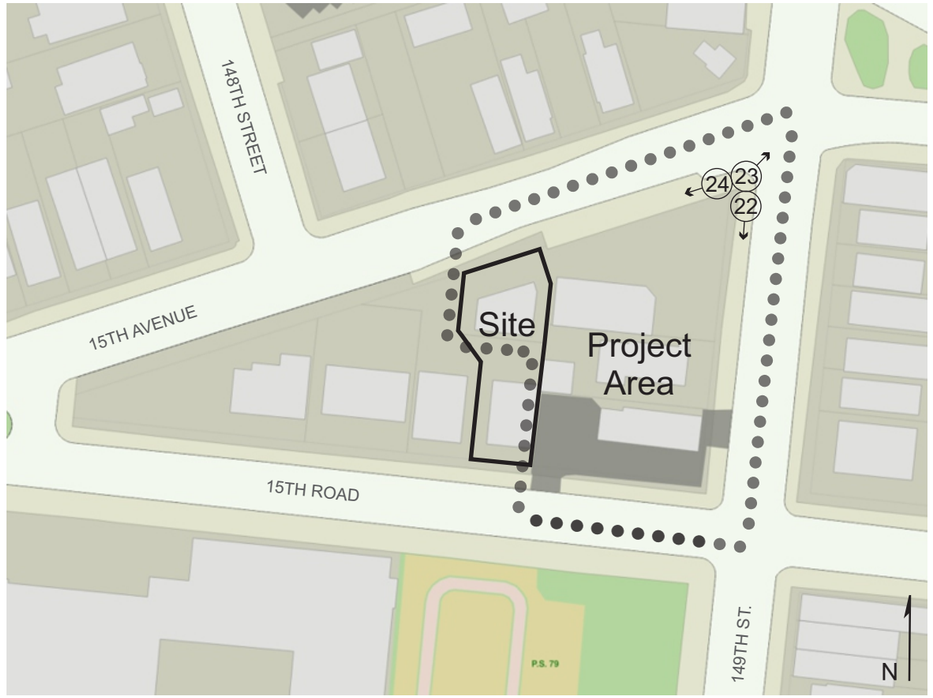
21. View of the sidewalk along the west side of 149th Street facing north toward 15th Avenue.



22. View of the sidewalk along the west side of 149th Street facing south from 15th Avenue.

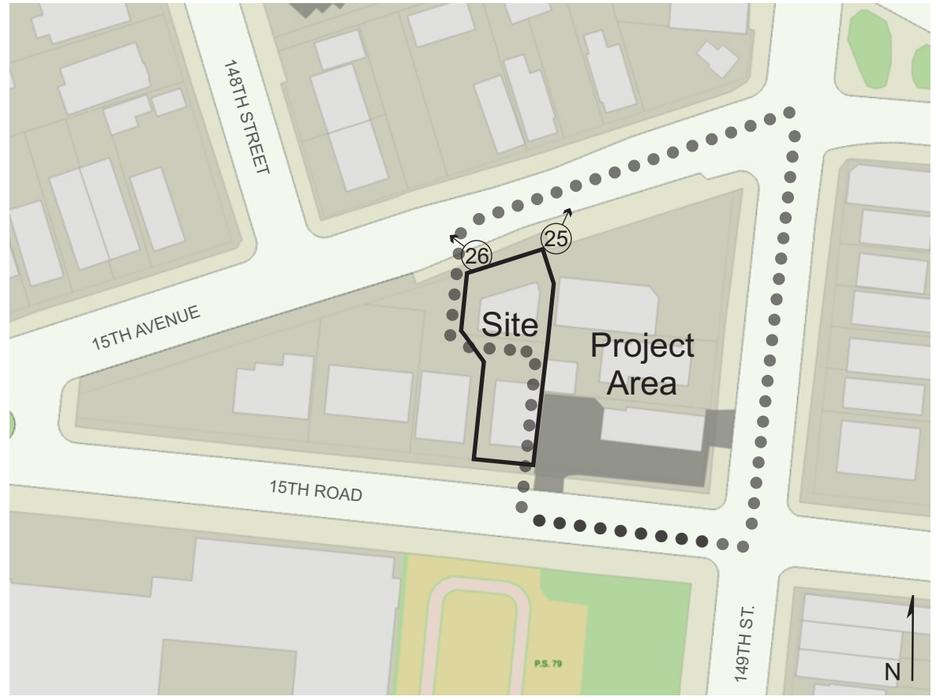
23. View of the intersection of 15th Avenue and 149th Street facing northeast.

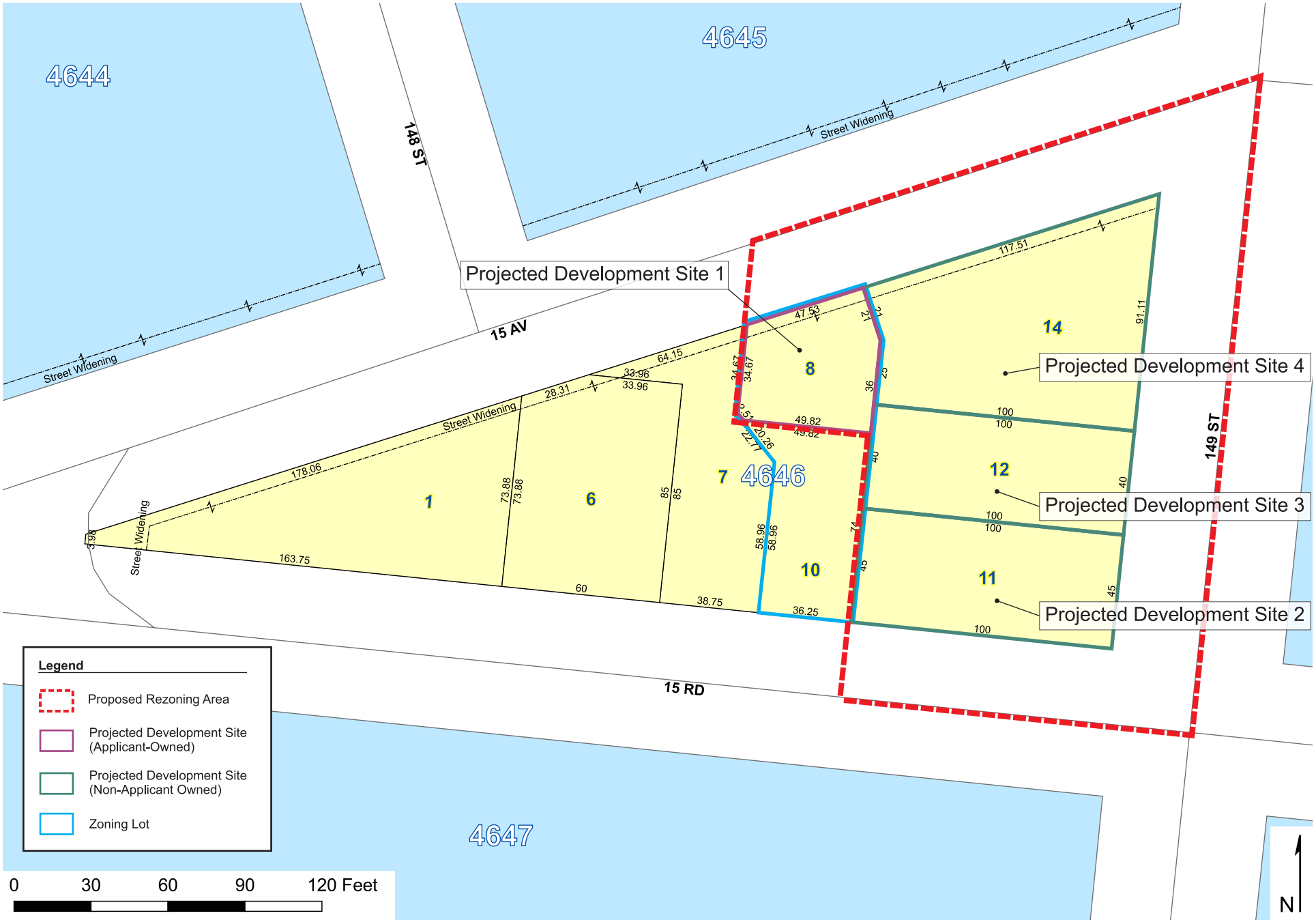
24. View of the sidewalk along the south side of 15th Avenue facing southwest from 149th Street.

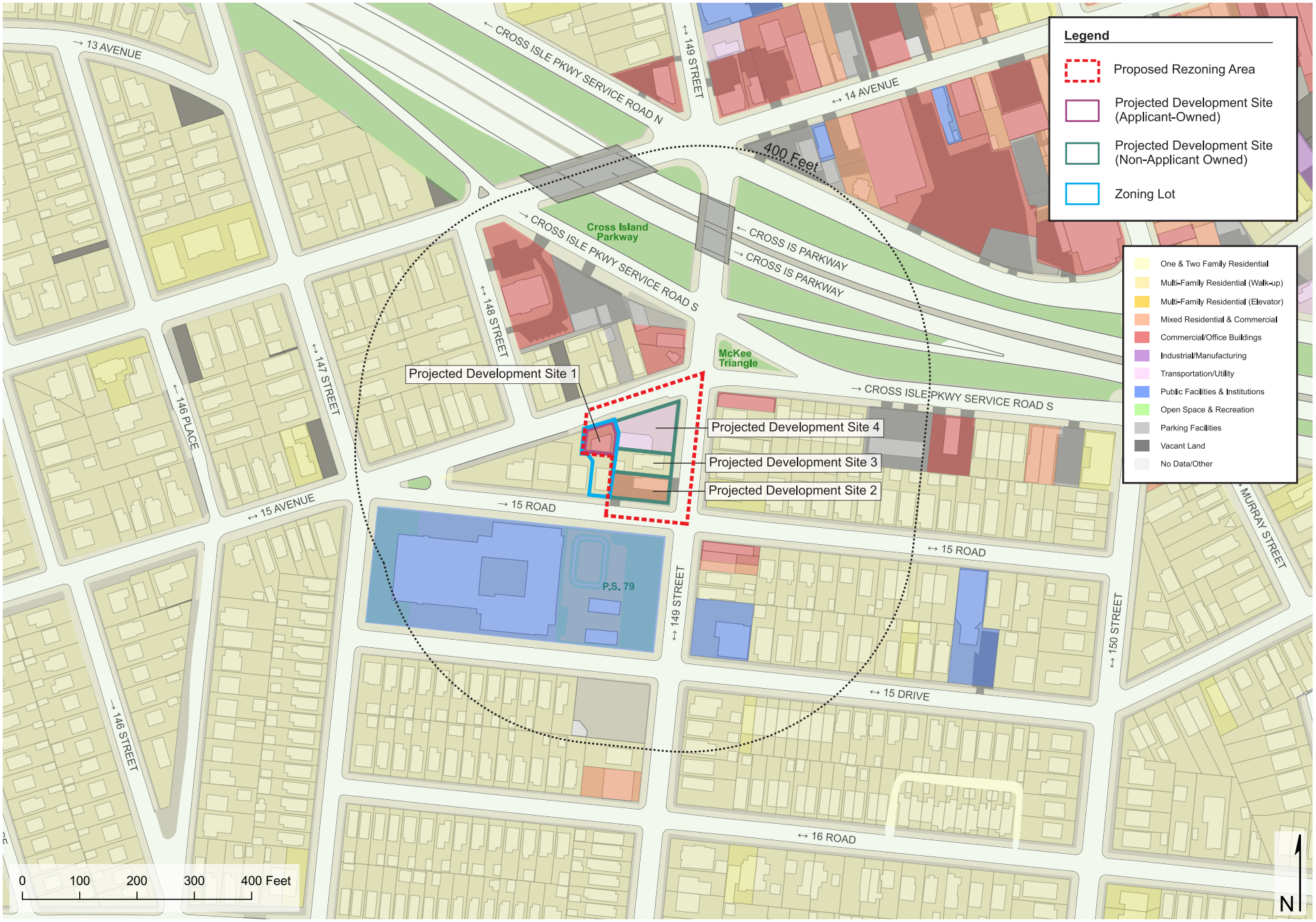


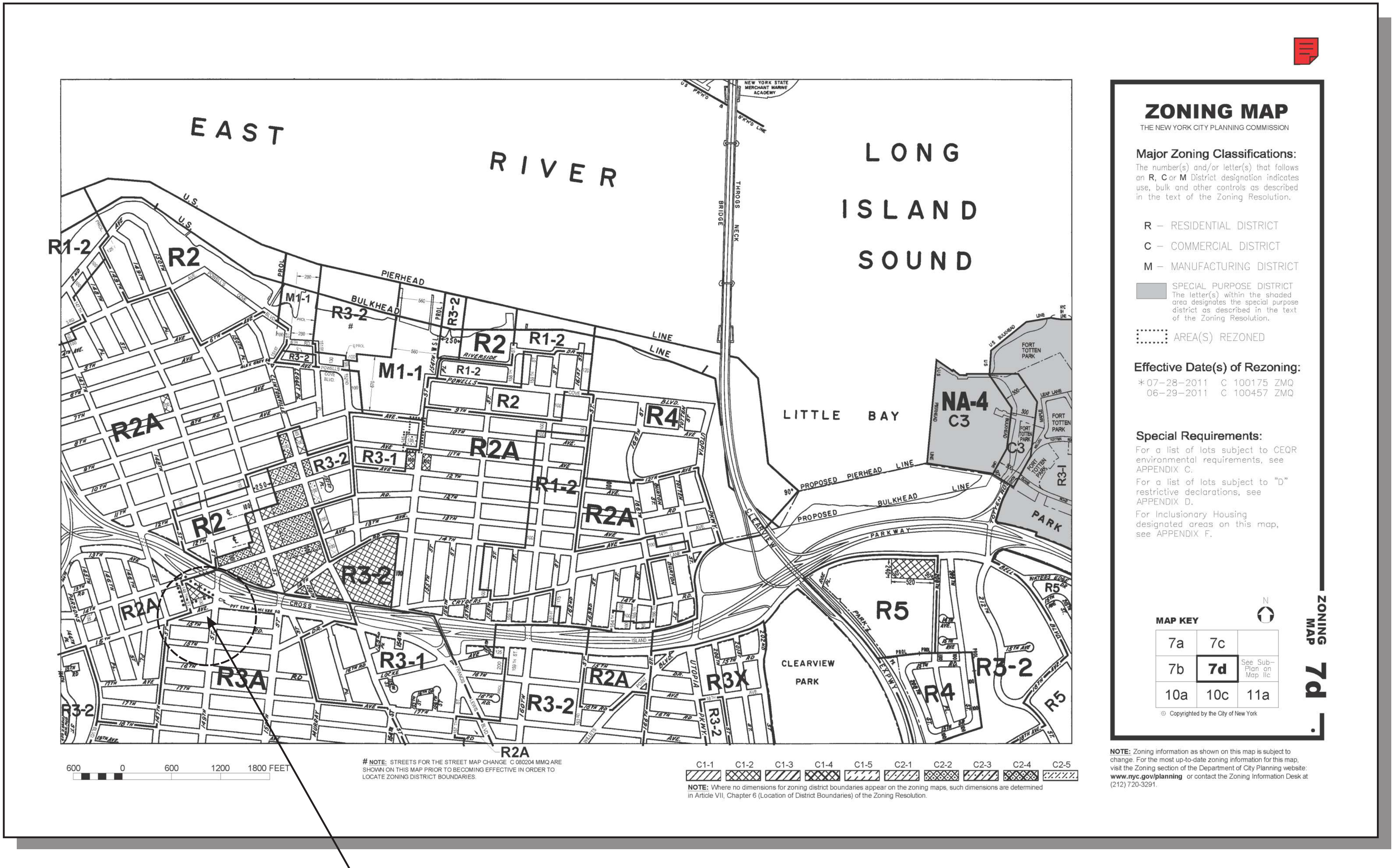
25. View of the north side of 15th Avenue facing northeast from the Site.

26. View of the north side of 15th Avenue facing northwest from the Site.

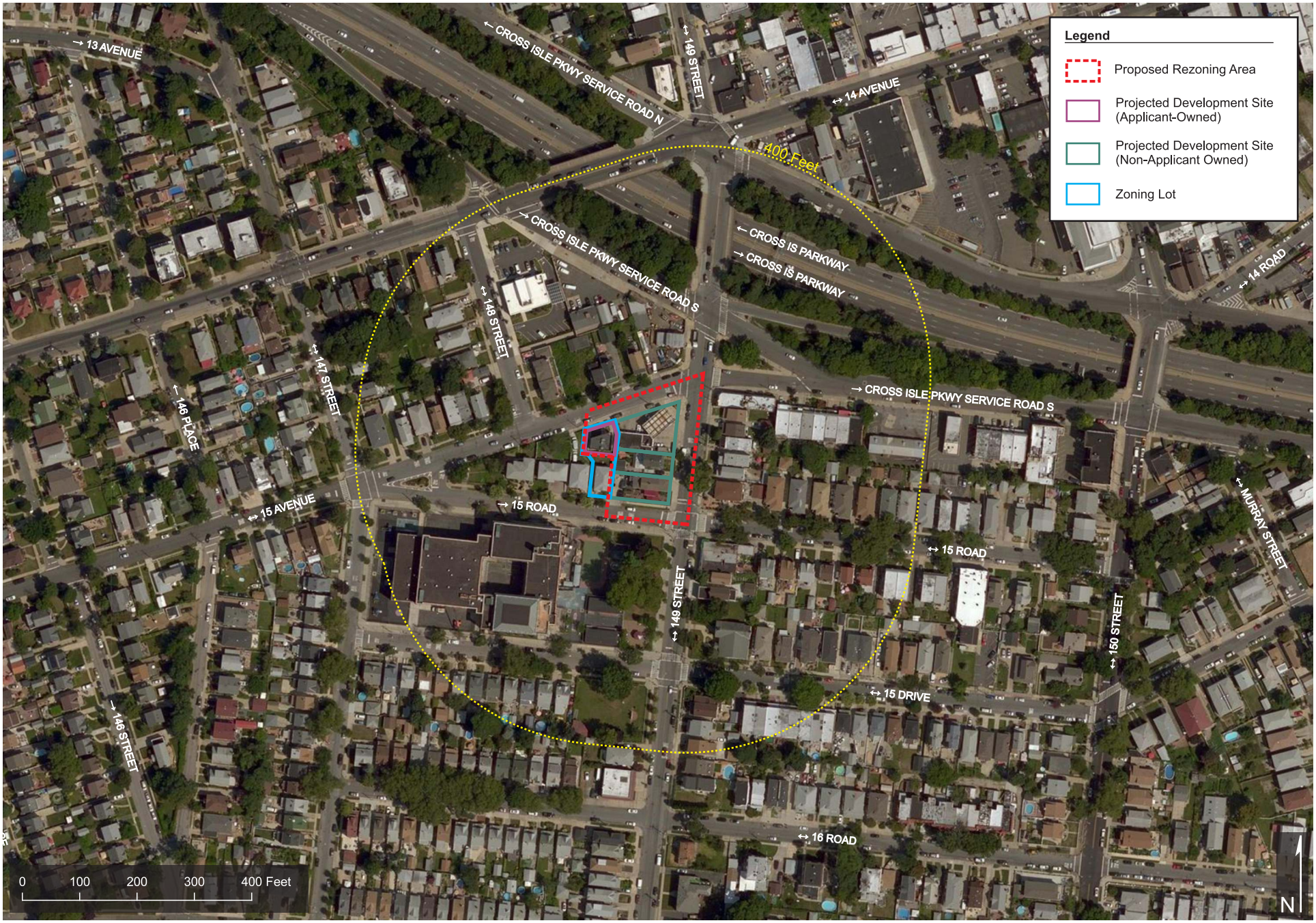



4644
4645
4646
4647
148 ST
149 ST
15 AV
15 RD
Street Widening
Projected Development Site 1
Projected Development Site 2
Projected Development Site 3
Projected Development Site 4
1
6
7
8
10
11
12
14
Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Zoning Lot
0
30
60
90
120 Feet
N

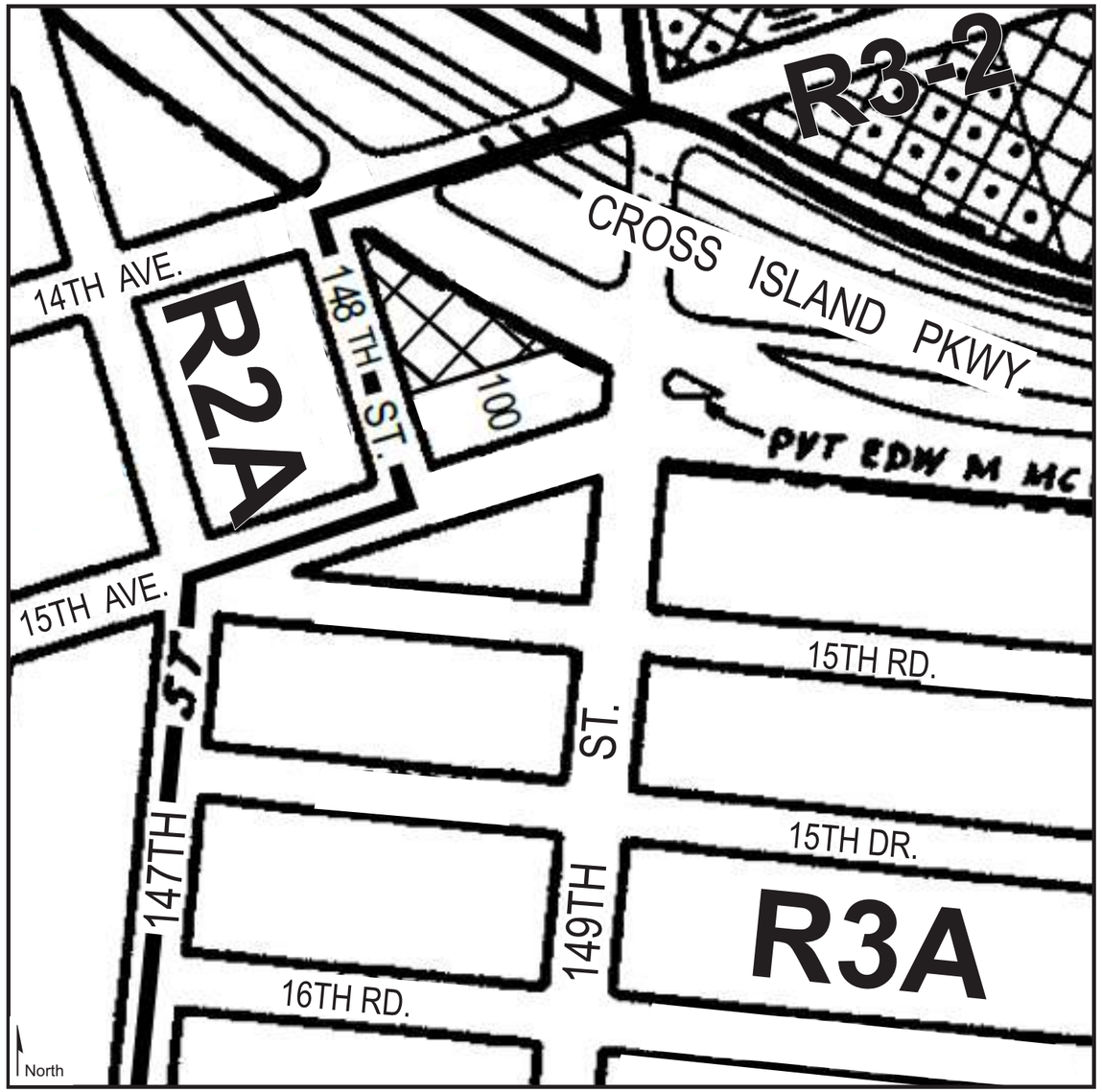

Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Zoning Lot
One & Two Family Residential
Multi-Family Residential (Walk-up)
Multi-Family Residential (Elevator)
Mixed Residential & Commercial
Commercial/Office Buildings
Industrial/Manufacturing
Transportation/Utility
Public Facilities & Institutions
Open Space & Recreation
Parking Facilities
Vacant Land
No Data/Other
400 Feet
Projected Development Site 1
Projected Development Site 4
Projected Development Site 3
Projected Development Site 2
Cross Island Parkway
McKee Triangle
P.S. 79
13 AVENUE
CROSS ISLE PKWY SERVICE ROAD N
149 STREET
14 AVENUE
CROSS ISLE PKWY SERVICE ROAD S
CROSS IS PARKWAY
148 STREET
147 STREET
146 PLACE
15 AVENUE
15 ROAD
149 STREET
150 STREET
MURRAY STREET
15 DRIVE
146 STREET
16 ROAD
0 100 200 300 400 Feet
N


EAST RIVER
LONG ISLAND SOUND
LITTLE BAY
CLEARVIEW PARK
R1-2
R2
R2A
R3-2
R3-1
M1-1
R1-2
R4
NA-4
C3
R3-1
R5
R3A
R3X
R4
R5
ZONING MAP
THE NEW YORK CITY PLANNING COMMISSION
Major Zoning Classifications:
The number(s) and/or letter(s) that follows an R, C or M District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.
R – RESIDENTIAL DISTRICT
C – COMMERCIAL DISTRICT
M – MANUFACTURING DISTRICT
SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.
AREA(S) REZONED
Effective Date(s) of Rezoning:
*07-28-2011 C 100175 ZMQ
06-29-2011 C 100457 ZMQ
Special Requirements:
For a list of lots subject to CEQR environmental requirements, see APPENDIX C.
For a list of lots subject to "D" restrictive declarations, see APPENDIX D.
For Inclusionary Housing designated areas on this map, see APPENDIX F.
MAP KEY
7a 7c
7b 7d See Sub-Plan on Map 11c
10a 10c 11a
© Copyrighted by the City of New York
ZONING MAP 7d
600 0 600 1200 1800 FEET
NOTE: STREETS FOR THE STREET MAP CHANGE C 080204 MMQ ARE SHOWN ON THIS MAP PRIOR TO BECOMING EFFECTIVE IN ORDER TO LOCATE ZONING DISTRICT BOUNDARIES.
C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5
NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.
NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: www.nyc.gov/planning or contact the Zoning Information Desk at (212) 720-3291.

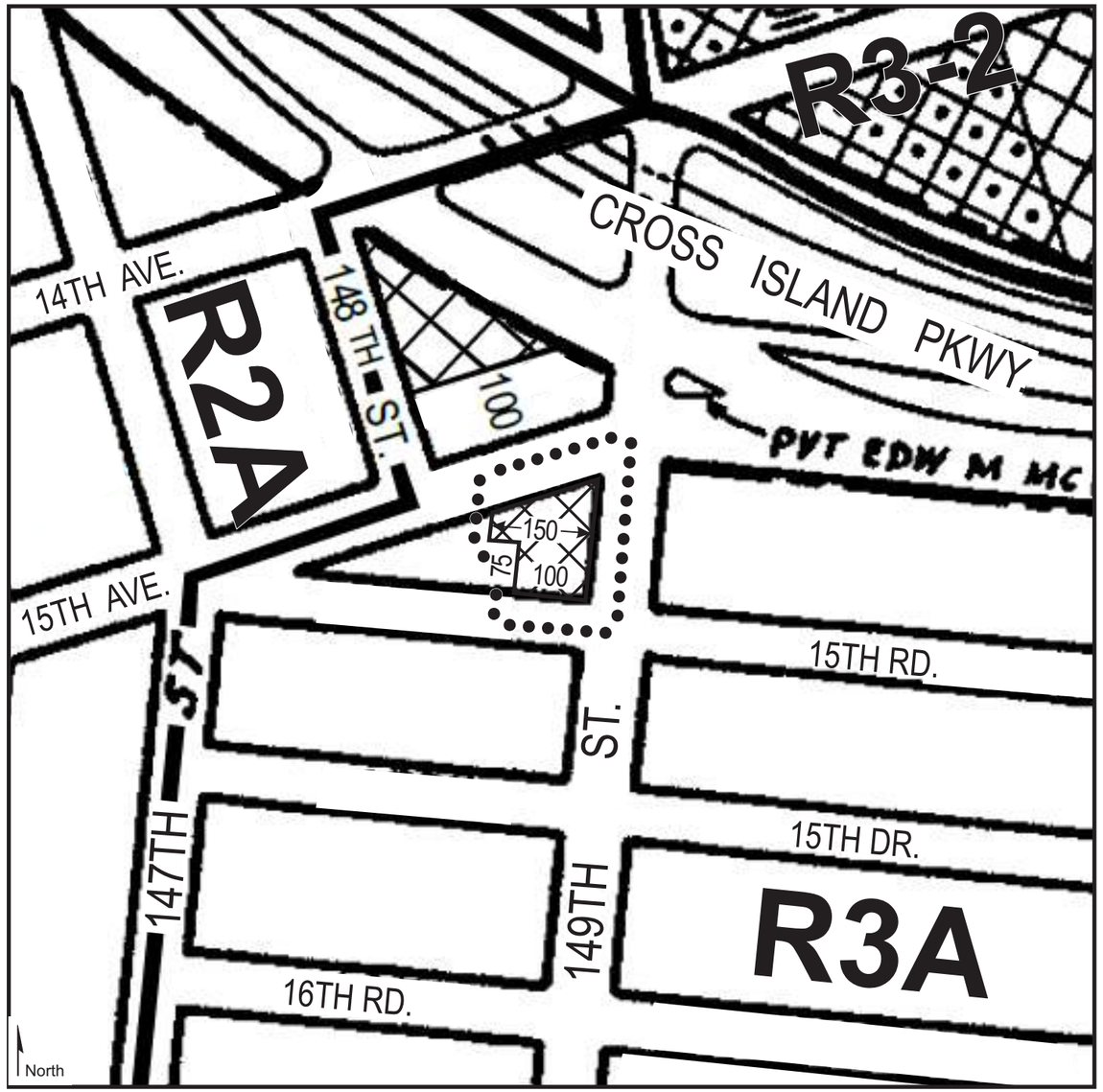
Site


Legend
Proposed Rezoning Area
Projected Development Site (Applicant-Owned)
Projected Development Site (Non-Applicant Owned)
Zoning Lot
400 Feet
13 AVENUE
CROSS ISLE PKWY SERVICE ROAD N
149 STREET
14 AVENUE
CROSS ISLE PKWY SERVICE ROAD S
CROSS IS PARKWAY
CROSS IS PARKWAY
14 ROAD
148 STREET
147 STREET
146 PLACE
CROSS ISLE PKWY SERVICE ROAD S
15 AVENUE
15 ROAD
15 ROAD
MURRAY STREET
149 STREET
150 STREET
15 DRIVE
146 STREET
16 ROAD
0 100 200 300 400 Feet
N

Zoning Change Map



Current Zoning Map (7d)



Proposed Zoning Map (7d) - Area being rezoned is outlined with dotted lines

Rezoning from R3A to R3A/C1-2

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

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

SUPPLEMENTAL REPORT

EAS NARRATIVE ATTACHMENT

147-40 15TH AVENUE COMMERCIAL OVERLAY

ENVIRONMENTAL ASSESSMENT STATEMENT

INTRODUCTION

Based on the analysis and the screens contained in the Environmental Assessment Statement Form, the analysis areas that require further explanation include land use, zoning, and public policy, shadows, historic and cultural resources, urban design and visual resources, hazardous materials, air quality, and noise as further detailed below. Transportation is also addressed below to provide information about the potential of the Proposed Action to affect this area of concern. The section numbers below correspond to the relevant chapters of the 2014 *CEQR Technical Manual.*

4. LAND USE, ZONING, AND PUBLIC POLICY

EXISTING CONDITIONS

Land Use

Affected Area

The proposed Affected Area (the area subject to the proposed Zoning Map Amendment) is located on Tax Block 4646, Lots 8, 11, 12, and 14 in the Whitestone neighborhood of Queens, Community District 7. Pursuant to their respective Certificates of Occupancy, Lots 8 and 10 are considered to be a single zoning lot (hereafter, the "Development Site"). However, Lot 10 is not included in the Rezoning Area and would not be impacted by the Proposed Action.

The existing conditions on the Applicant controlled and the non-Applicant held sites in the Affected Area are described below. Table 4-1 presents a detailed breakdown of square footage by use on each of these sites.

Applicant Controlled Proposed Development Site (Projected Development Site 1)

The Applicant controlled Proposed Development Site (Projected Development Site 1), Block 4646, Lot 8, contains 2,365 square feet of lot area and is improved with a two-story and cellar office building containing 2,257 gross square feet (gsf) [2,061 zoning square feet (zsf); 0.87 FAR]. The parcel contains a single curb cut with one off-street unenclosed parking space. The office uses in the building are nonconforming.

As stated above, pursuant to their respective Certificates of Occupancy, Block 4646, Lots 8 and 10 are considered to be a single zoning lot (hereafter, the "Development Site"). However, the Proposed Action would not include Lot 10. Block 4646, Lot 10, consists of a 2,785 square foot lot improved with a two-story, two-family, residential building containing approximately 2,184 gsf/zsf of floor area (0.78 FAR).

The Proposed Development Site was purchased by the Applicant in 2015 to be utilized as a commercial office space. Prior to that date, the property was utilized by a kitchen design firm, a day care facility (in the basement), and a painting center. The DOB padlock division issued a

use violation (Complaint No. 4634311) in October of 2015, immediately prior to the Applicant utilizing the facility as a commercial use. The padlock violation was subsequently dismissed in April of 2017, as a result of this application with the Applicant seeking to utilize the building as a legal commercial office use.

Non-Applicant Controlled Sites

Projected Development Site 2, Block 4646, Lot 11, consists of a 4,500 square foot lot improved with a two-story and cellar mixed-use building that contains 2,280 gsf of floor area (2,075 zsf; 0.46 FAR). The ground floor of the building contains an active eating and drinking establishment including approximately 1,140 gsf of floor area (1,038 zsf; 0.23 FAR). The second floor of the building contains two residential units containing approximately 1,140 gsf of floor area (1,037 zsf; 0.23 FAR). Commercial uses have existed in the building since its construction in the 1930s, rendering these uses legally nonconforming. The parcel contains a single curb cut with two off-street unenclosed parking spaces.

Projected Development Site 3, Block 4646, Lot 12, consists of a 4,000 square foot lot currently under construction with a two and a half-story and cellar two-family residence to contain 1,320 gsf of floor area (1,200 zsf; 0.3 FAR). The parcel also contains a one car garage.

Projected Development Site 4, Block 4646, Lot 14, consists of a 7,050 square foot corner lot improved with an automotive use (currently a Mobile fuel station) that contains an approximately 15-foot tall service building with 1,680 gsf/zsf of floor area (0.24 FAR). The parcel contains a 95-foot curb cut along 15th Avenue. This nonconforming use was granted by the BSA (BZ 568/39).

Table 4-1

Existing Uses in the Affected Area

Proj Develop Site	Lot	Lot Size (sf)	Total GSF	No. of DUs	Resid GSF	Com'l GSF	Com Facil GSF	Manuf GSF
1	8	2,365	2,257	0	0	2,257	0	0
2	11	4,500	2,280	2	1,140	1,140	0	0
3	12	4,000	1,320	2	1,320	0	0	0
4	14	7,050	1,680	0	0	0	0	1,680
	Total	**17,915**	**7,537**	**4**	**2,460**	**3,397**	**0**	**1,680**

Study Area

The primary study area extends approximately 400 feet in all directions from the boundaries of the Affected Area. The study area is roughly bounded on the north by the Cross Island Parkway, on the south by an area between 15th Drive and 16th Road, on the east by an area between 149th and 150th Streets, and on the west by 146th Place. Information was obtained from the NYC PLUTO database.

The area surrounding the Affected Area is primarily characterized by one- to three-story, one- and two-family dwellings. The Affected Area is bordered by 15th Avenue to the north, 15th Road

to the south, 149th Street to the east, and a two-story, two-family dwelling to the west. The other uses on Block 4646 include 2 two-story, two-family dwellings. Other uses within the 400-foot radius project study area include P. S. 79, an elementary school occupying the entire block south of the Affected Area, several scattered one- and two-story commercial buildings on the block to the north and the blocks to the east of the Affected Area, a church, and several scattered parking facilities and vacant parcels.

Zoning

Affected Area

The Affected Area was included in the Whitestone Rezoning of December 2005 (ULURP No: 060055 ZMQ; CEQR No: 06DCP011Q). The Whitestone Rezoning affected a 310-block area by mapping lower density and contextual zoning districts to preserve the existing scale of the neighborhood, while also preventing new development that was inconsistent with the low-rise detached character of the area. This resulted in the Affected Area being modified from an R3-1 district to an R3A district, which exists today. In addition, C1-2, C1-3, and C2-2 commercial overlays were mapped along commercial thoroughfares in the rezoning area to recognize pre-existing commercial uses and reinforce future commercial and mixed-use developments along these corridors. Despite the mapping of new commercial overlays and the presence of some commercial uses within the Affected Area, no commercial districts were mapped in the Area.

The Affected Area is zoned as an R3A residence district. The R3A zoning district allows detached one- and two-family dwellings and community facility uses. Characteristic of many of the city's older neighborhoods, R3A contextual districts feature modest single- and two-family detached residences on zoning lots as narrow as 25 feet in width. The amount of required open space on residential lots in R3A districts is governed by yard requirements. New detached homes must have two side yards totaling at least eight feet, but there is no minimum width requirement for either one. R3A districts also permit zero lot line buildings which are set along a side lot line and have one side yard at least eight feet wide. The front yard of a new home must be at least 10 feet deep and, to promote a unified streetscape, it must be as deep as an adjacent front yard but need not exceed a depth of 20 feet. The maximum floor area ratio (FAR) of 0.5 may be increased up to 20% by an attic allowance for the inclusion of space beneath a pitched roof. The perimeter wall may rise to 21 feet before sloping or being set back to a maximum building height of 35 feet. Parking is in the side or rear yard but an in-house garage is allowed if the lot is 35 feet or wider, provided the driveway is at least 18 feet deep. One off-street parking space is required for each dwelling unit.

Study Area

Most of the area within 400 feet of the Affected Area is similarly zoned R3A which is described above. An R2A district is mapped west of 147th and 148th Streets and a C1-2 commercial overlay is mapped over the northern half of Block 4545 across 15th Avenue from the Affected Area.

The R2A zoning district allows the development of single-family detached residences and community facility uses and is a contextual district intended to preserve low-rise neighborhoods characterized by single-family detached homes on lots with a minimum width of 40 feet. The FAR of 0.5 in R2A districts includes all space within a building, including basement and usable attic space, resulting in smaller homes than those found in other districts with similar floor area ratios. Garages are exempt from floor area calculations, up to a

maximum of 300 square feet. Lot coverage of the house and any separate garage is limited to 30% of the zoning lot. As in R2 districts, the width of the two required side yards must total a minimum of 13 feet, each at least five feet wide. The front yard must be at least 15 feet deep; unlike other R2 districts, however, it must be at least as deep as an adjacent front yard, but need not exceed 20 feet. The maximum building height is fixed at 35 feet and the perimeter wall may rise no higher than 21 feet. One off-street parking space is required for each dwelling unit.

C1 districts accommodate the retail and personal service shops needed in residential neighborhoods, and C1-2 districts are mapped as commercial overlays within residence districts, generally along major avenues. The maximum commercial FAR of the C1-2 overlay mapped in lower density residential districts such as the R3A district is 1.0. Residential uses are permitted within these overlays with residential bulk being governed by the provisions of the surrounding residential zone. Parking requirements vary by use within the C1-2 zone with one parking space required for each 300 square feet of general retail and ambulatory diagnostic floor area. No loading spaces are required for the first 8,000 square feet of floor area, and one loading berth is required for the next 17,000 square feet of commercial retail floor area.

Public Policy

Affected Area/Study Area

The Affected Area and the 400-foot radius project study area are not located within the City's Coastal Zone Boundary and are therefore not subject to the provisions of the New York City Waterfront Revitalization Program. The Areas are not covered by any 197-a or other community plans, and are not within an urban renewal area and are therefore not subject to the provisions of an urban renewal plan. Therefore, no public policies would apply to the Affected Area or the Study Area and further analysis is not necessary.

THE FUTURE WITHOUT THE PROJECT

Land Use, Zoning and Public Policy

Affected Area

In the future without the Proposed Action, the Reasonable Worst Case Development Scenario (RWCDS) would reflect the following assumptions:

Without the Proposed Action, it is assumed the Affected Area's existing R3A zoning would remain and the proposed C1-2 commercial overlay would not be mapped over the Affected Area. No new development would occur on the four lots within the Affected Area. It is assumed that the No-Action development on Projected Development Site 1 would consist of the existing building square footage as the Site is currently developed close to the maximum FAR of 1.0 permitted for a community facility use (the existing 2,061 zsf on the 2,365 square foot lot represents an FAR of 0.87). However, as a commercial office use is not allowed, it is assumed that the existing building would be converted to a community facility use. It is assumed that the No-Action development would consist of the existing uses and building square footages on Projected Development Sites 2, 3, and 4.

The following assumptions would apply to the four lots within the Affected Area:

Projected Development Site 1 – The No-Action Scenario has been determined based on the R3A zoning provisions which permit a maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. Commercial uses are not allowed.

Projected Development Site 2 – The No-Action Scenario has been determined based on the legally nonconforming status of the existing commercial uses on the Site, which would remain but cannot be enlarged, and the maximum permitted FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses and total development on the Site. Commercial uses would be allowed to remain as commercial uses have existed in the building since its construction in the 1930s, rendering these uses legally nonconforming The Site is currently developed to a residential FAR of 0.23 and a total FAR of 0.46. No additional residential development would be anticipated since 649 gsf (630 zsf) would be allowed under the maximum permitted residential FAR of 0.6 with the attic allowance. Although up to 2,503 gsf (2,430 zsf) of community facility floor area could be developed on the Site, due to the presence of an active commercial use on the ground floor (restaurant) and residential uses on the second floor of the building, it is not anticipated that community facility uses would be compatible.

Projected Development Site 3 – The No-Action Scenario has been determined based on the R3A zoning provisions which permit a maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. Although additional residential floor area (up to 1,236 gsf/1,200 zsf for a total residential FAR of 0.6) and new community floor area (1,648 gsf/1,600 zsf for an FAR of 0.4) could be developed on this Site, construction of the new residential building on the Site was recently completed in 2018 and it is therefore not anticipated that it would enlarged under No-Action conditions by the Project Build Year.

Projected Development Site 4 – This Site is currently developed at an FAR of 0.24 with a nonconforming automotive use granted by BSA. Although this Site is developed to less than 50% of the permitted residential FAR of 0.6 with the attic allowance and the community facility FAR of 1.0 and could be considered to be a soft site, it is assumed that no new development would occur on the Site. It is not likely that the existing use would be removed in order to develop a residential use or a community facility due to potential clean-up costs associated with the removal of a gasoline service station. It is not likely that the rate of return for these uses (as compared to a commercial use) would compensate for the clean-up costs on the Site.

Table 4-2 presents a detailed breakdown of square footage by use on each of these sites under the Future No-Action scenario.

Table 4-2

Future No-Action Uses in the Affected Area

Proj Develop Site	Lot	Lot Size (sf)	Total GSF	No. of DUs	Resid GSF	Com'l GSF	Com Facil GSF	Manuf GSF
1	8	2,365	2,257	0	0	0	2,257	0
2	11	4,500	2,280	2	1,140	1,140	0	0
3	12	4,000	1,320	2	1,320	0	0	0
4	14	7,050	1,680	0	0	0	0	1,680
	Total	**17,915**	**7,537**	**4**	**2,460**	**1,140**	**2,257**	**1,680**

Study Area

No development plans or zoning applications are known to exist for the 400-foot radius project study area by the project build year of 2021 (other than the subject application). No new development projects or rezonings have been identified for the 400-foot radius project study area based on a review of the NYC Department of City Planning's (DCP) Zoning and Land Use Applications (ZAP Search) as shown on the DCP website for Queens Community District 7. In addition, the DCP website does not indicate any proposed changes to the zoning districts and zoning regulations or to any public policy documents relating to the Affected Area or the surrounding study area in the near future.

THE FUTURE WITH THE PROJECT

Land Use

In the future with the Proposed Action, the RWCDS would reflect the following assumptions:

Under the With-Action Scenario, the Affected Area would be rezoned from R3A to R3A/C1-2. The R3A/C1-2 zoning district would permit a residential FAR of 0.5 (0.6 with the attic allowance), a community facility FAR of 1.0, and a commercial and total FAR of 1.0 on the four Projected Development Sites. However, the Applicant does not intend to develop or enlarge the property as a result of this application. The projected development on each Site is discussed below.

Projected Development Site 1 - The proposed rezoning of Projected Development Site 1 from R3A to R3A/C1-2 would facilitate the legal use of the Development Site as a commercial office use. The With-Action Scenario for the Applicant property has been determined based on the provisions of the C1-2 commercial overlay as mapped on the existing R3A zoning of the property, the limited amount of additional commercial floor area that would be permitted (approximately 307 square feet), and the Applicant's stated intentions to maintain the existing condition on Projected Development Site 1. The proposed rezoning would allow the addition of floor area on the Site but the Applicant does not intend to utilize this additional floor area and the Site would remain developed as a two-story and cellar 2,257 gsf/2,061 zsf commercial building with 0.87 FAR where 1.0 FAR would be permitted. No additional development is proposed by the Applicant or anticipated for Lot 8 since it is already developed to an FAR of 0.87 where a maximum of 1.0 would be permitted under the rezoning. The increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area.

Additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria due to the level of increment. The intended commercial use would consist of office space. Due to the pre-existing status of the building, no accessory off-street parking spaces would be required with a single unenclosed space provided on the property. The single pre-existing curb cut on the property would remain.

Although there are currently no plans for any development on Projected Development Sites 2, 3, or 4, it is assumed that the existing development on these Sites would be enlarged with new commercial space up to a maximum commercial and total FAR of 1.0 as permitted by the C1-2 commercial overlay and further discussed below.

Projected Development Site 2 - The proposed rezoning of Projected Development Site 2 from R3A to R3A/C1-2 would allow additional commercial development on the Site. This Site is currently developed to about 46% of the permitted FAR of 1.0. It is assumed that the commercial use on the Site would be enlarged to include 2,498 gsf (2,423 zsf) of additional floor area for a total commercial floor area of 3,638 gsf (3,461 zsf; 0.77 FAR). The residential floor area on the Site would remain at 1,140 gsf (1,037 zsf; 0.23 FAR). The floor area on the Site would total 4,778 gsf (4,500 zsf; 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

Projected Development Site 3 - The proposed rezoning of Projected Development Site 3 from R3A to R3A/C1-2 would allow commercial development on the Site. This Site is currently developed to about 30% of the permitted FAR of 1.0. It is assumed that 2,884 gsf of commercial use would be developed on the ground floor of an enlarged building on the Site (2,800 zsf; 0.7 FAR). The residential floor area on the Site would remain at 1,320 square feet (1,200 zsf; 0.3 FAR) and would be moved to the upper floors of the structure. The floor area on the Site would total 4,204 gsf (4,000 zsf, 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

Projected Development Site 4 - The proposed rezoning of Projected Development Site 4 from R3A to R3A/C1-2 would allow additional commercial development on the Site. It is assumed that the existing 1,680 gsf automotive use would be removed and the Site would be developed with a new 3-story, 7,262 gsf commercial office/retail building (2,421 gsf retail, 4,841 gsf office) for a net increase of 5,582 gsf of new commercial floor area on the Site (7,050 zsf; 1.0 FAR). It is assumed that the rate of return for a commercial office/retail building would exceed that of the existing automotive service station. 23 accessory parking spaces would be required at a ratio of 1 space per 300 square feet of general retail or service use floor area.

Table 4-3 presents a detailed breakdown of square footage by use on each of these sites under the Future With-Action scenario.

The Project Build Year is 2021. It is assumed that the proposed rezoning would be approved by 2019. No new construction is proposed on the Applicant's Projected Development Site 1 as it is developed close to the maximum proposed FAR of 1.0. Potential new development could occur on the non-Applicant controlled Projected Development Sites 2, 3, and 4 and it is assumed that this would occur over a 24-month construction period with a Build Year of 2021.

Table 4-3

Future With-Action Uses in the Affected Area

Proj Develop Site	Lot	Lot Size (sf)	Total GSF	No. of DUs	Resid GSF	Com'l GSF	Com Facil GSF	Manuf GSF
1	8	2,365	2,257	0	0	2,257[1]	0	0
2	11	4,500	4,778	2	1,140	3,638	0	0
3	12	4,000	4,204	2	1,320	2,884	0	0
4	14	7,050	7,262	0	0	7,261	0	0
	Total	**17,915**	**18,501**	**4**	**2,460**	**16,040**	**0**	**0**

As detailed above, the existing/proposed mixed residential and commercial uses are similar to and compatible with the existing uses located in the surrounding area. No adverse impact to land use patterns in the area is expected to arise as a result of the Proposed Action, and further assessment of land use is not warranted.

Table 4-4 presents a detailed breakdown of square footage by use on each of the four Projected Development Sites under the Future No-Action scenario, the Future With-Action scenario, and Incremental Change.

Table 4-4

Future No-Action, Future With-Action, and Incremental Uses and SF in the Affected Area

Proj Develop Site	Lot	No-Action				With-Action				Increment			
		Tot GSF	Com GSF	CF GSF	Man GSF	Tot GSF	Com GSF	CF GSF	Man GSF	Tot GSF	Com GSF	CF GSF	Man GSF
1	8	2,257	0	2,257	0	2,257	2,257	0	0	0	+2,257	-2,257	0
2	11	2,280	1,140	0	0	4,778	3,638	0	0	+2,498	+2,498	0	0
3	12	1,320	0	0	0	4,204	2,884	0	0	+2,884	+2,884	0	0
4	14	1,680	0	0	1,680	7,262	7,261	0	0	+5,582	+7,261	0	-1,680
	Total	**7,537**	**1,140**	**2,257**	**1,680**	**18,501**	**16,040**	**0**	**0**	**+10,964**	**+14,900**	**-2,257**	**-1,680**

Note: Due to space limitations in the table above the following residential information has not been included:

- 2,460 gsf of residential floor area (4 dwelling units) would remain under both the No-Action and With-Action Scenarios (1,140 gsf & 2 DUs on Lot 11 and 1,320 gsf & 2 DUs on Lot 12); therefore, there is no incremental change to residential uses or floor area in the Affected Area.

[1] Office space

ZONING

The Proposed Action includes a Zoning Map Amendment to Sectional Map # 7d to map a C1-2 commercial district overlay over an existing R3A residential district in the Affected Area (Queens Block 4646, Lots 8, 11, 12, and 14), located in the Whitestone neighborhood of Queens, Community District 7. Commercial uses are not permitted in R3A districts. No new development or enlargement is proposed in connection with this land use action. The Proposed Action would facilitate the alignment of the zoning of the Applicant property (Block 4646, Lot 8) with the existing commercial uses on the parcel. The proposed rezoning would serve to allow legally conforming commercial uses within the Affected Area where residential and community facility uses are currently permitted as of right. It would also allow an increase in commercial floor area on the parcels within the Affected Area to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses.

The proposed C1-2 commercial overlay would allow commercial uses up to an FAR of 1.0. Once the C1-2 zoning is in effect, the owners of the four properties in the Affected Area will have the flexibility to change existing uses to any use permitted as-of-right in C1 districts and will not be limited to changing to Use Group 6 as when subject to the non-conforming use provisions of ZR 52-34 (Commercial Uses in Residence Districts).

The intent of the Proposed Action is to align the zoning of the Applicant property (Projected Development Site 1) with the existing commercial uses on the parcel. No new development is proposed to occur on this Site by the Applicant under the proposed rezoning from R3A to R3A/C1-2. The proposed rezoning would allow the addition of floor area on the Site but the Applicant does not intend to utilize this additional floor area and the Site would remain developed as a two-story and cellar 2,257 gsf/2,061 zsf commercial building with 0.87 FAR where 1.0 FAR would be permitted. The increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area. With that level of increment, additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria. The proposed zoning change from R3A to R3A/C1-2 for Projected Development Sites 2, 3, and 4 would serve to allow legally conforming commercial uses on these Sites where residential and community facility uses are currently permitted. It would also allow an increase in commercial floor area on these Sites to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses. The legally nonconforming commercial use on Projected Development Site 2 would be made conforming and up to 2,498 gsf of additional commercial floor area could be developed on this Site. The proposed rezoning of Projected Development Site 3 would allow up to 2,884 gsf of commercial use to be developed on this Site. The legally nonconforming commercial use on Projected Development Site 4 would be made conforming and up to 5,582 gsf of additional commercial floor area could be developed on the Site.

The Affected Area was included in the Whitestone Rezoning of December 2005 (060055 ZMQ). The Whitestone Rezoning affected a 310-block area by mapping lower density and contextual zoning districts to preserve the existing scale of the neighborhood, while also preventing new development that was inconsistent with the low-rise detached character of the area. This resulted in the Affected Area being modified from an R3-1 district to an R3A district, which exists today. In addition, C1-2, C1-3, and C2-2 commercial overlays were mapped along

commercial thoroughfares in the rezoning area to recognize pre-existing commercial uses and reinforce future commercial and mixed-use developments along these corridors. Despite the mapping of new commercial overlays and the presence of some commercial uses within the Affected Area, no commercial districts were mapped in the Area.

The Applicant believes the mapping of a C1-2 commercial overlay over the Affected Area would be consistent with the existing commercial overlays in the surrounding area. Specifically, there is a C1-2 commercial overlay mapped over the northern half of Block 4545 across 15th Avenue from the Affected Area. The Applicant believes the proposed commercial overlay is appropriate in this location because it will reflect the existing commercial or mixed-use character of three of the four parcels within the Affected Area. This was also a stated goal of the 2005 Rezoning which mapped commercial overlays along commercial thoroughfares in the Rezoning Area to recognize pre-existing commercial uses and reinforce future commercial and mixed-use developments along these corridors. The C1-2 overlay was selected to match the nearest commercial overlay mapped one block north of the Affected Area.

The Proposed Action would not result in significant adverse zoning impacts. The Proposed Action would not have a significant impact on the extent of conformity with the current zoning in the surrounding area, and it would not adversely affect the viability of conforming uses on nearby properties.

Potentially significant adverse impacts related to zoning are not expected to occur as a result of the Proposed Action, and further assessment of zoning is not warranted.

Public Policy

No adverse impacts to public policies would occur as a result of the Proposed Action. As explained above, no public policies pertain to the Affected Area.

No potentially significant adverse impacts related to public policy are anticipated to occur as a result of the Proposed Action, and further assessment of public policy is not warranted.

8. SHADOWS

Introduction

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

According to the *CEQR Technical Manual*, a shadows assessment is not required unless the project would include a structure or an addition to a structure at least 50 feet in height or if it would contain shorter structures that might cast substantial new shadows on an adjacent park, historic resource, or an important natural resource. A shadows analysis is required for this project because the Proposed Action could result in the construction of additional floor area in the Affected Area including a new building within close proximity to two open space resources. There are no historic resources within the maximum shadows radius of the Affected Area.

Potential Shadow Sensitive Resources

The Proposed Action could potentially cast new shadows on the surrounding area. The anticipated Future With-Action development on Projected Development Site 4 would result in the construction of a new 3-story structure which would measure approximately 35 feet to the top of bulkhead on the roof of the building. Based on 2014 *CEQR Technical Manual* criteria, the longest shadow that any building or structure would cast during the year (except within an hour and a half of sunrise or sunset which is not deemed to be of concern) is 4.3 times its height. Applying the 4.3 factor to the proposed building height to the top of the roof bulkhead of approximately 35 feet would result in a maximum shadow distance of 150.5 feet.

There are two potentially sunlight-sensitive open space resources located within 150.5 feet of the Affected Area. McKee Triangle, located across 15th Avenue from the Affected Area, is a 0.06-acre triangle/plaza located between the Cross Island Parkway, 149th Street, and 15th Avenue. The school yard for P. S. 79, located across 15th Road from the Affected Area, is bordered by 15th Road and 149th Street.

See attached shadows drawings which are further discussed below.

Preliminary Screening Assessment

Tier 1 Screening Assessment

As stated above, there are two potentially sunlight-sensitive open space resources located in proximity to the Affected Area. McKee Triangle, located across 15th Avenue from the Affected Area, is a 0.06-acre triangle/plaza located between the Cross Island Parkway, 149th Street, and 15th Avenue. McKee Triangle is labeled "1" on the attached Figure 8-1, Tier 1 Screening

Assessment diagram. The school yard for P. S. 79, located across 15th Road from the Affected Area, is bordered by 15th Road and 149th Street. The P. S. 79 schoolyard is labeled "2" on the attached Figure 8-1, Tier 1 Screening Assessment diagram.

The longest shadow of 150.5 feet on the Tier 1 shadow assessment figure was calculated as 4.3 times the maximum projected building height with bulkhead of 35 feet for the potential new development on Projected Development Site 4.

Due to the proximity of the Affected Area to the above listed resources, potential shadow impacts could occur from projected development in the future and a Tier 2 Screening Assessment is required.

Tier 2 Screening Assessment

Based on the Tier 1 assessment, which showed the potential for the longest shadow to reach sunlight sensitive resources, a Tier 2 assessment was generated. A Tier 2 assessment locates the area south of a building that cannot be cast in shadow. Because of the path that the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. This area in New York City lies between -108 and +108 degrees from true north.

The attached Figure 8-2, Tier 2 Screening Assessment diagram shows the area south of the Affected Area that cannot be shaded by any projected development within the Area. As illustrated on the figure, nearly the entire P. S. 79 school site lies within the area that cannot be shaded by any projected development within the Affected Area. However, McKee Triangle is not located within the area that cannot be shaded by the project. Therefore, this resource could still experience new shadows from projected development within the Affected Area and further assessment is required.

Tier 3 Screening Assessment

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

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

A Tier 3 screening assessment has been performed as McKee Triangle lies within the area that could be shaded by projected development within the Affected Area.

As shown on the attached Figure 8-3, Tier 3 Screening Assessment diagram, Figure 8-7, Tier 3 Incremental Impact diagram, and Table 8-1, shadows from the projected development within the Affected Area could reach an area along the southwestern edge of McKee Triangle on the December 21st analysis day. This area would measure approximately 9 square feet with

dimensions of a maximum of 2 feet in width by approximately 5 feet in length. The shadow would occur for approximately 2 minutes between 2:51 and 2:53 PM.

Table 8-1

Incremental Shadows

Analysis Day	**December 21**	**March 21/ September 21**	**May 6 / August 6**	**June 21**
Timeframe Window				
1				
Shadow enter - exit times	2:51-2:53 PM	--	--	--
Incremental shadow duration	2 minutes	--	--	--
2				
Shadow enter - exit times	--	--	--	--
Incremental shadow duration	--	--	--	--
Note: Daylight savings time not used.				

Conclusion

Projected development within the Affected Area would reach an approximately 9 square foot area of McKee Triangle for approximately 2 minutes on December 21st. Due to the small area of this open space resource that would be affected and the short duration of the new shadow outside of the growing season, it is concluded that the Proposed Action would not result in any significant adverse shadows impacts to open space resources, and no further assessment would be needed for the Proposed Action.

Figure 8-1: Tier 1 Screening Assessment

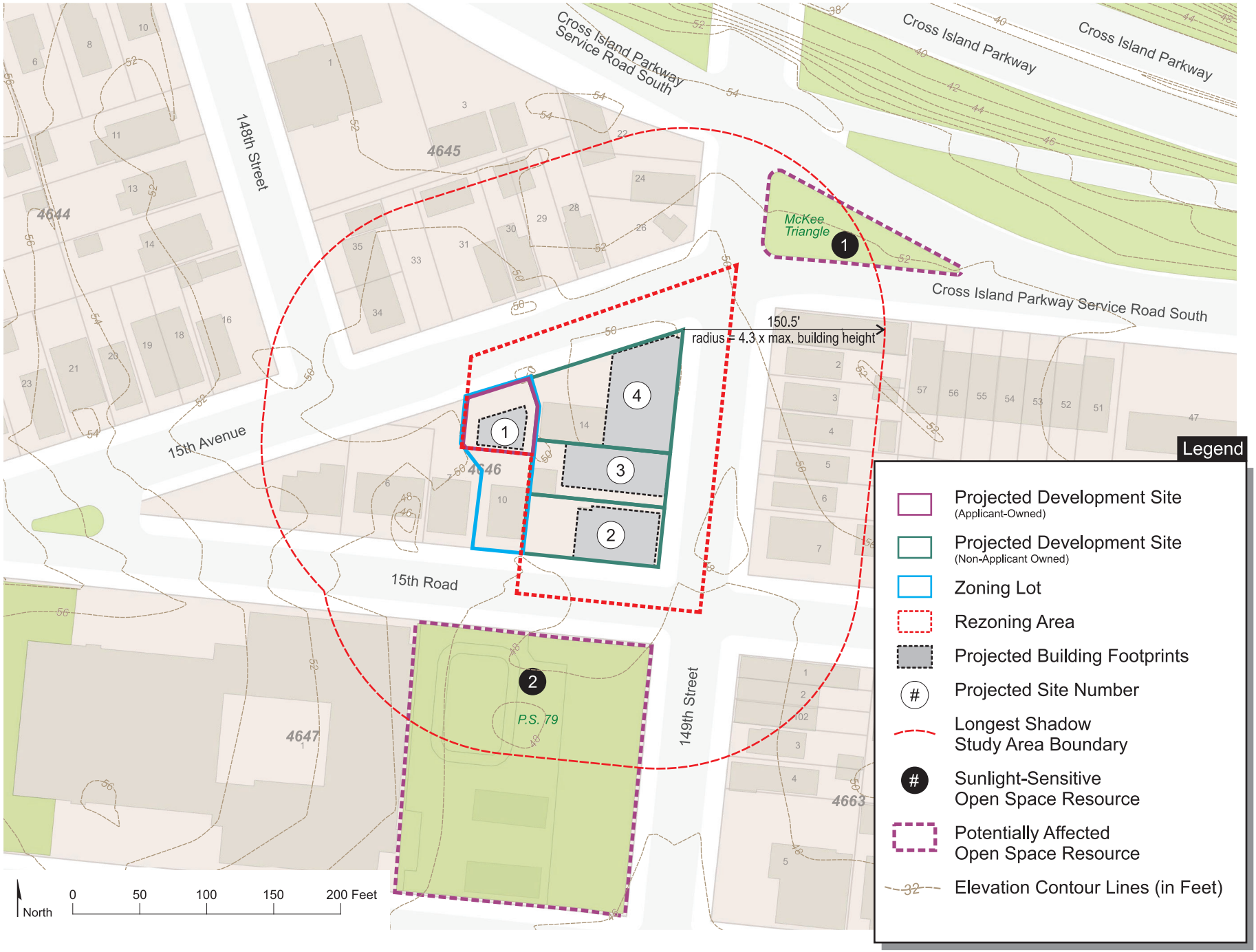


Figure 8-2: Tier 2 Screening Assessment

Figure 8-3: Tier 3 Screening Assessment for the December 21 Analysis Day

Figure 8-4: Tier 3 Screening Assessment for the March 21 Analysis Day

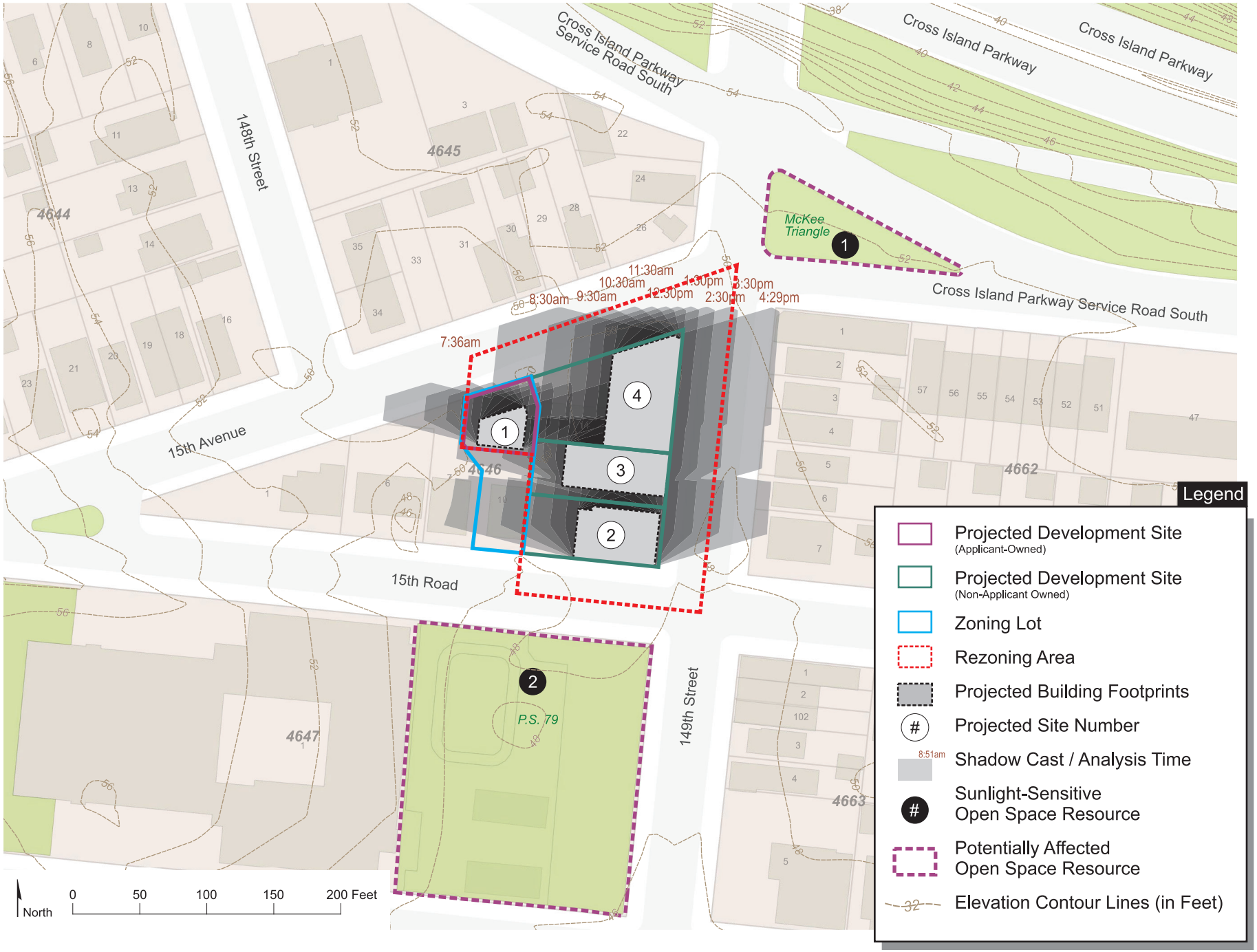


Figure 8-5: Tier 3 Screening Assessment for the May 6 Analysis Day

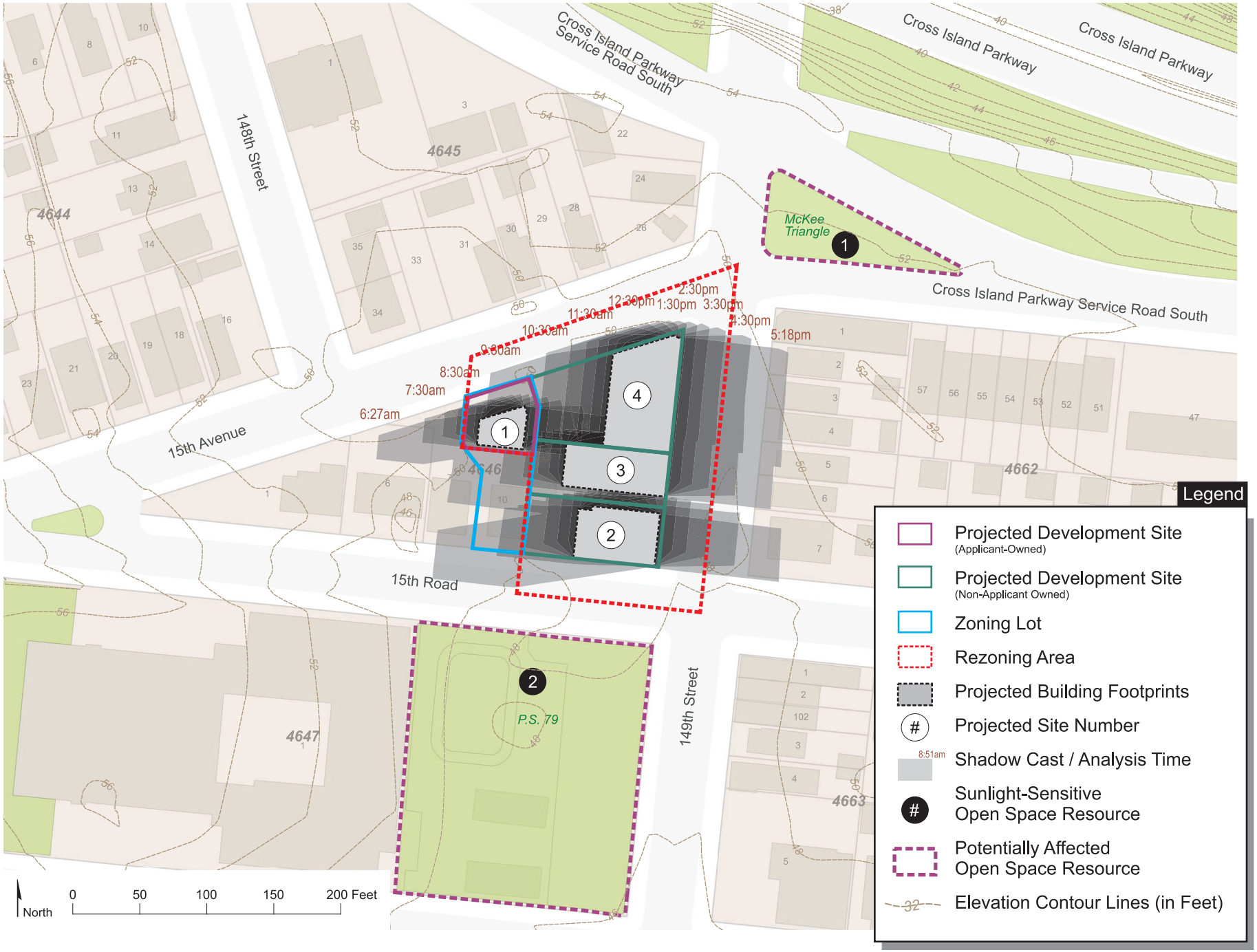


Figure 8-6: Tier 3 Screening Assessment for the June 21 Analysis Day

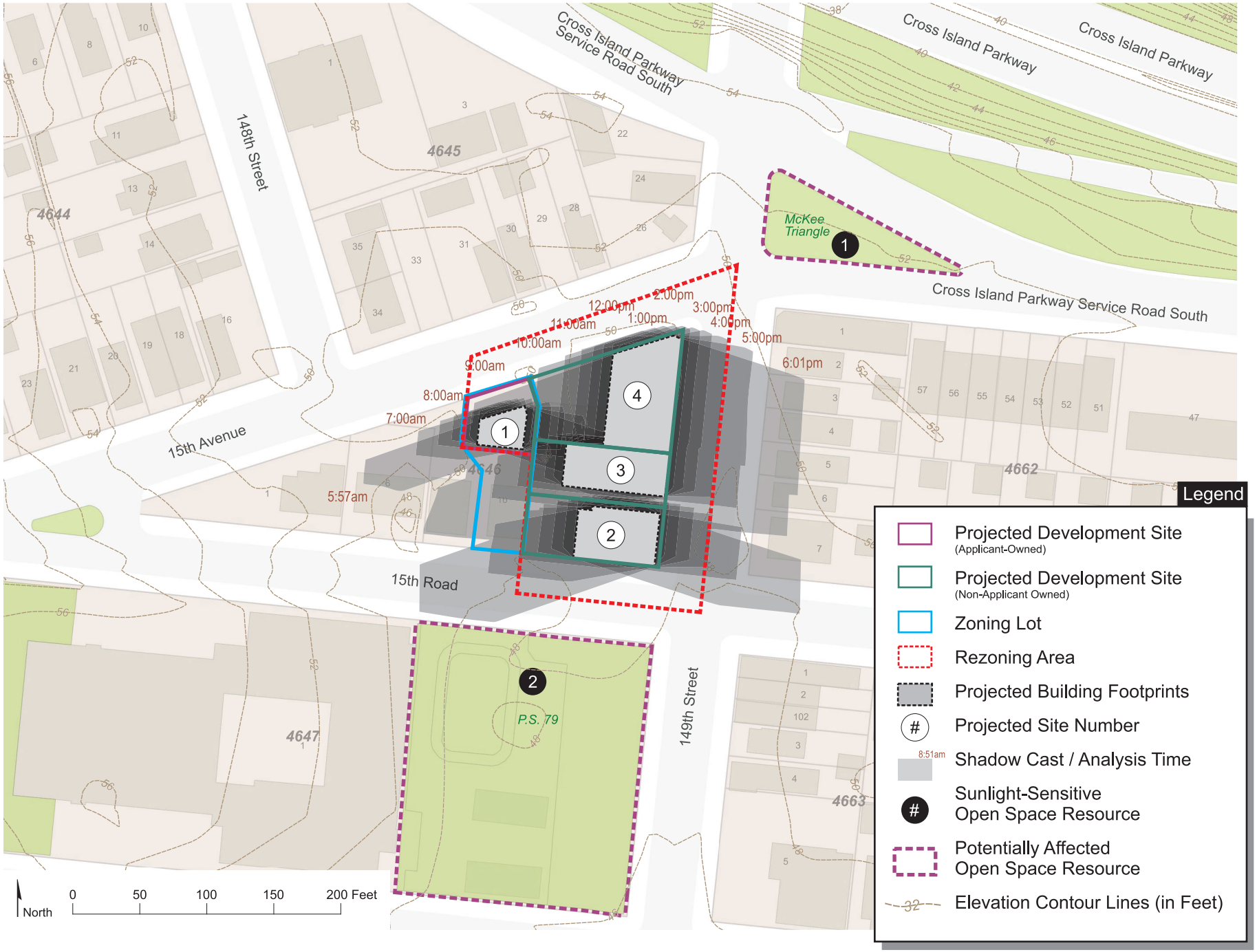


Figure 8-7: Tier 3 Incremental Impact for the December 21 Analysis Day

9. HISTORIC AND CULTURAL RESOURCES

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

The Affected Area and the 400-foot radius project study area are not a Federal, State, or New York City designated Historic District and do not contain any individually designated historic resources. As such, a historic architectural analysis is not warranted for the Proposed Action.

Under the Proposed Action, potential new development could occur on Projected Development Sites 2, 3, and 4 resulting in new soils disturbance to areas that may not have previously been excavated. No new soils disturbance is proposed or projected to occur on Projected Development Site 1 at this time, due to the Applicant's intent to keep the current structure as is.

By letter dated 12/3/18, the New York City Landmarks Preservation Commission (LPC) has determined that the Projected Development Sites do not have any historic or archaeological significance (see letter in Historic and Archaeological Resources Appendix). Therefore, the Proposed Action would not result in any significant adverse effects to historic or archaeological resources.

10. URBAN DESIGN AND VISUAL RESOURCES

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

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

2. Projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed project.

The proposed development does not request the modification of yard, height, and setback requirements. The Proposed Action would result in an increase in built commercial floor area beyond what would be allowed 'as-of-right' or in the future without the proposed project as further discussed below.

No new development or enlargement is proposed in connection with this land use action and the existing uses in the Affected Area are expected to remain. The Proposed Action solely seeks to map a C1-2 commercial district overlay over the existing R3A residential district mapped over the Affected Area. The intent of the Proposed Action is to align the zoning of the Applicant property (Block 4646, Lot 8) with the existing commercial uses on the parcel. The proposed rezoning would serve to allow legally conforming commercial uses within the Affected Area where residential and community facility uses are currently permitted as of right. It would also allow an increase in commercial floor area on the parcels within the Affected Area to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses.

The rezoning would not induce new development within the Affected Area in excess of the 1.0 FAR currently permitted on all four parcels as further discussed below. However, the Proposed Action would result in an increase in built commercial floor area beyond what would be allowed 'as-of-right'. The development of any additional square footage in the Affected Area would be constructed in conformance with yard, height, and setback requirements pursuant to the existing R3A zoning.

- The proposed rezoning of the Applicant controlled Proposed Development Site (Projected Development Site 1) from R3A to R3A/C1-2 would facilitate the legal use of the Development Site as a commercial office use. The proposed rezoning would allow the addition of floor area on the Site but the Applicant does not intend to utilize this additional floor area and the Site would remain developed as a two-story and cellar 2,257 gsf/2,061 zsf commercial building with 0.87 FAR where 1.0 FAR would be permitted. No additional development is proposed by the Applicant and the increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area. With that level of increment, additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria. The intended commercial use would consist of office space. Due to the pre-existing status of the building, no accessory off-street parking spaces would be required with a single unenclosed space provided on the property. The single pre-existing curb cut on the property would remain.

- The proposed rezoning of Projected Development Site 2 from R3A to R3A/C1-2 would allow

additional commercial development on the Site. It is assumed that the commercial use on the Site would be enlarged to include 2,498 gsf (2,423 zsf) of additional floor area for a total commercial floor area of 3,638 gsf (3,461 zsf; 0.77 FAR). The residential floor area on the Site would remain at 1,140 gsf (1,037 zsf; 0.23 FAR). The floor area on the Site would total 4,778 gsf (4,500 zsf; 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

- The proposed rezoning of Projected Development Site 3 from R3A to R3A/C1-2 would allow commercial development on the Site. It is assumed that 2,884 gsf of commercial use would be developed on the Site (2,800 zsf; 0.7 FAR). The residential floor area on the Site would remain at 1,320 gsf (1,200 zsf; 0.30 FAR). The floor area on the Site would total 4,204 gsf (4,000 zsf, 1.0 FAR). No additional parking would be required as the number of spaces required would be waived pursuant to the provisions of ZR Section 36-231.

- The proposed rezoning of Projected Development Site 4 from R3A to R3A/C1-2 would allow additional commercial development on the Site. It is assumed that the existing 1,680 gsf automotive use would be removed and the Site would be developed with a new 7,262 gsf commercial office/retail building for a net increase of 5,582 gsf of new commercial floor area on the Site (7,050 zsf; 1.0 FAR). 23 accessory parking spaces would be required.

As shown on Figure 3, Land Use Map, there are two visual resources in the vicinity of the Affected Area. McKee Triangle, located across 15th Avenue from the Affected Area, is a 0.06-acre triangle/plaza located between the Cross Island Parkway, 149th Street, and 15th Avenue. The school yard for P. S. 79, bordered by 15th Road and 149th Street, is located across 15th Road from the Affected Area. The change in permitted uses on any of the four properties in the Affected Area facilitated by the proposed mapping of the C1-2 commercial overlay would not constitute an impact relative to urban design or visual resources. As stated above, the development of any additional square footage in the Affected Area would be constructed in conformance with yard, height, and setback requirements pursuant to zoning. Proposed Action would not result in the obstruction of any publicly accessible views to visual resources.

See the Urban Design Figures 10-1, 10-2, and 10-2 attached to the end of this chapter of the EAS.

Conclusion

Under the Proposed Action, there would be no potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning relative to yard, height, and setback requirements as well as total permitted floor area. Based on the above, an urban design assessment would not be required and the Proposed Action would not result in significant adverse impacts to urban design or visual resources and further analysis is not needed.

1. View of the Site facing east from the intersection of 15th Avenue and 148th Street.

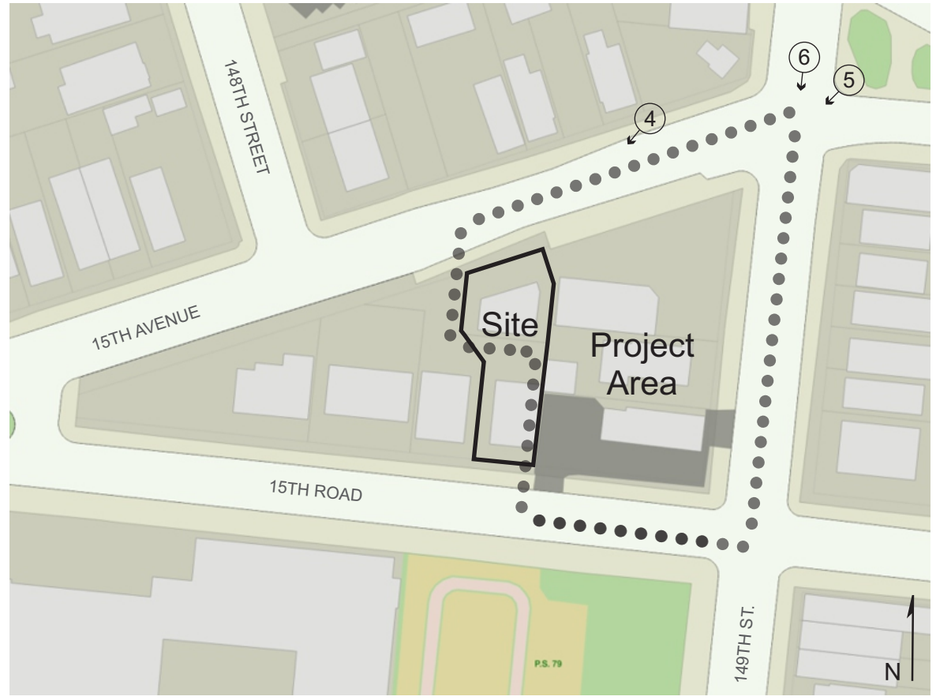
2. View of 15th Avenue facing northeast from 148th Street (Site ahead,at right).

3. View of the Site facing southeast from 15th Avenue.

4. View of the Site facing southwest from 15th Avenue.

5. View of the Project Area facing southwest from the intersection of 15th Avenue and 149th Street (Site ahead, at right).

6. View of 149th Street facing south from 15th Avenue.



7. View of 15th Avenue facing southwest from 149th Street (Site ahead, at left).

8. View of the west side of 149th Street between 15th Avenue and 15th Road facing southwest.*

9. View of the west side of 149th Street between 15th Avenue and 15th Road facing west.*

10. View of the intersection of 15th Avenue and 148th Street facing northwest.

11. View of 15th Road facing west from 149th Street.

12. View of the north side of 15th Road between 147th Street and 149th Street facing northwest.

13. View of the north side of 15th Road between 147th Street and 149th Street facing north.

14. View of the north side of 15th Road between 147th Street and 149th Street facing northeast.

15. View of 15th Road facing east toward 149th Street.

16. View of the sidewalk along the north side of 15th Road facing east toward 149th Street.

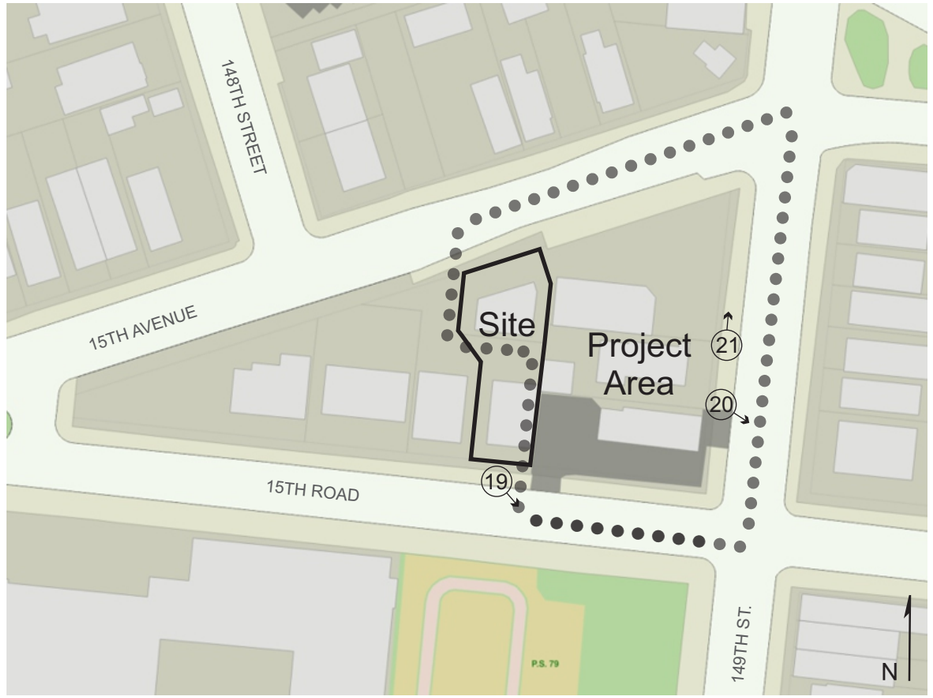
17. View of the south side of 15th Road between 147th Street and 149th Street facing southwest.

18. View of the sidewalk along the north side of 15th Road facing west toward 147th Street.

19. View of the south side of 15th Road between 147th Street and 149th Street facing southeast from the Site.

20. View of the east side of 149th Street between 15th Avenue and 15th Road facing southeast.

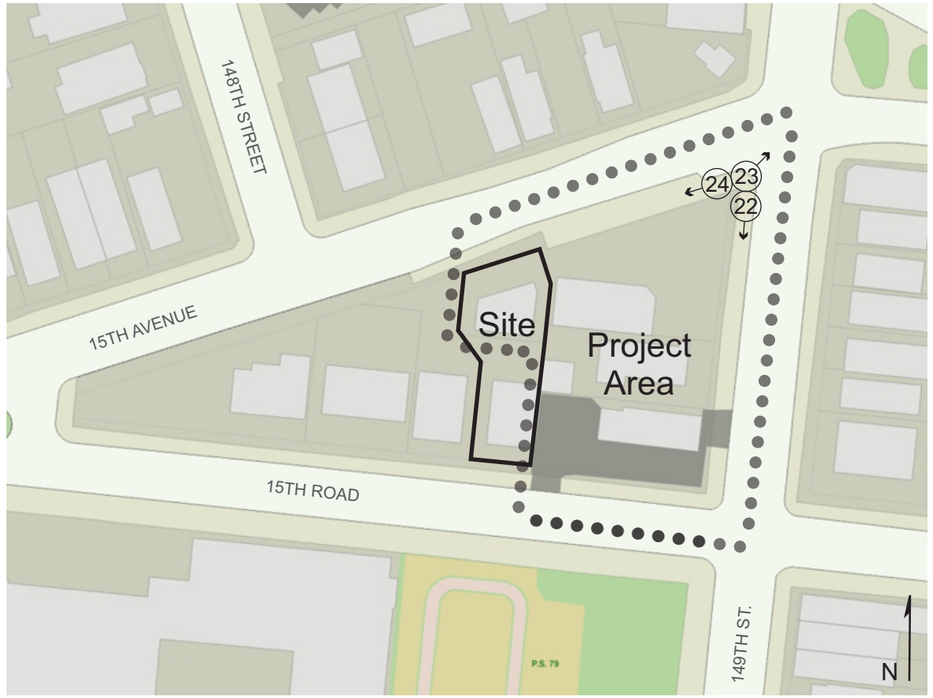
21. View of the sidewalk along the west side of 149th Street facing north toward 15th Avenue.



22. View of the sidewalk along the west side of 149th Street facing south from 15th Avenue.

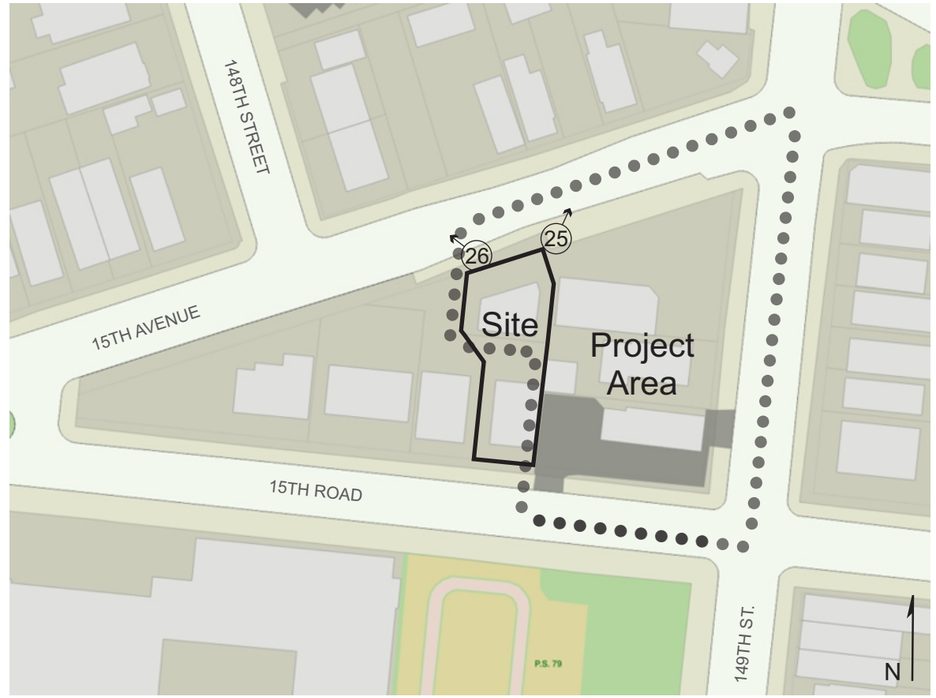
23. View of the intersection of 15th Avenue and 149th Street facing northeast.

24. View of the sidewalk along the south side of 15th Avenue facing southwest from 149th Street.



25. View of the north side of 15th Avenue facing northeast from the Site.

26. View of the north side of 15th Avenue facing northwest from the Site.



149th Street facing south from 15th Avenue (Projected Sites at right)

No-Action Scenario

149th Street facing south from 15th Avenue (Projected Sites at right)

With-Action Scenario

③ Projected Development Site #
Maximum Commercial Building Height (30')
Projected Building Heights

15th Road facing west (Projected Sites at right)

No-Action Scenario

15th Road facing west (Projected Sites at right)

With-Action Scenario

③ Projected Development Site #
Maximum Commercial Building Height (30')
Projected Building Heights

15th Avenue facing east (Projected Sites at right)

No-Action Scenario

15th Avenue facing east (Projected Sites at right)

With-Action Scenario

③ Projected Development Site #
Maximum Commercial Building Height (30')
Projected Building Heights

12. HAZARDOUS MATERIALS

Introduction

A hazardous materials assessment is required for the Proposed Action per the *CEQR Technical Manual* as follows:

- Development within close proximity to a manufacturing zone or existing facilities (including nonconforming uses) listed in the Hazardous Materials Appendix ("the Appendix").
- Development on an underutilized site if there is a reason to suspect contamination or historic/urban fill.
- Development where underground and/or aboveground storage tanks (USTs or ASTs) are (or were) located on or near the site.

Projected Development Site 1

As described above, the proposed rezoning of Projected Development Site 1 from R3A to R3A/C1-2 would facilitate the legal use of the Development Site as a commercial office use. The proposed rezoning would allow the addition of floor area on the Site but the Applicant does not intend to utilize this additional floor area and the Site would remain developed as a two-story and cellar 2,257 gsf/2,061 zsf commercial building with 0.87 FAR where 1.0 FAR would be permitted. No additional development is proposed by the Applicant or anticipated for Lot 8 and the increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area. With that level of increment, additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria. The intended commercial use would consist of office space. As the Proposed Action would not result in any new development on this parcel at this time, no new soils disturbance would occur and no hazardous materials concerns would result. Since the proposed rezoning could potentially make way for a larger building footprint in the future, a hazardous materials analysis is necessary.

Phase I Environmental Site Assessment

Introduction

A Phase I Environmental Site Assessment (ESA) was performed of the subject property located at 147-40 15th Avenue, 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).

The Standard Practice E 1527-13 defines good commercial and customary practice for conducting an environmental site assessment (ESA) of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. As such, the Practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability (referred to as landowner liability protections or LLPs); that is,

the practice that constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice.

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

The Practice also defines two additional *RECs*; *Controlled Recognized Environmental Conditions* and *Historical Recognized Environmental Conditions*. The term *Controlled Recognized Environmental Conditions* means a *Recognized Environmental Condition* resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

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

Recognized Environmental Conditions are identified through a review of pertinent records for the project site and nearby properties, a site reconnaissance and interviews. The records review includes a review of *Standard Historical Sources* of information to determine the history of the property. Such sources include historical aerial photographs, fire insurance maps such as those published by the Sanborn Map Company, reverse telephone directories, building department records such as Certificates of Occupancy, building and demolition permits, etc., property tax records, recorded land title records, previous environmental reports and others. The records review also includes regulatory agency lists and databases of documented hazardous waste sites, spill incidents, registered storage tanks and others.

The non-invasive site reconnaissance is performed to identify potential sources of contamination at the project site and in the immediate vicinity of the site. Such potential sources of contamination include operations involving the storage or use of hazardous substances or petroleum products, the presence of petroleum storage tanks, drainage structures, chemical/oil staining, dead or dying vegetation and others.

Interviews are conducted, whenever possible, with site owners, operators, tenants, local government officials, and others with knowledge of the site and information regarding potential RECs at a property. Finally, several ASTM "Non-Scope" items including asbestos-containing materials, lead- based paints, and radon are also discussed.

Summary of Findings

The subject property at 147-40 15th Avenue, Queens, N.Y., consists of a 2,300+/- square foot, irregularly-shaped lot that contains a 2-story (plus basement), commercial office building. At the time of the site visit, the building was occupied by Maxim Service Group, Inc. and Hoplite Security Group, Inc., both of which are security companies. The building contains offices, conference rooms and general storage area. Heat for the building is provided by a gas-fired HVAC system located on the roof of the building. Exterior portions of the site consist of a concrete-paved driveway and a small grass area on the north side of the lot, and a narrow, rear yard with a concrete stairway that leads to a basement entrance on the south side of the lot.

Research into the history of the project site shows that the property was undeveloped, vacant land in 1903. Given the residential and rural nature of the area in the early 1900s, it is considered unlikely that the project site would have contained a business or operation that stored or used hazardous materials or petroleum products prior to 1903. From at least 1916 to 1941, the project site contained a small, 1-story structure such as a shed or a 1-car garage. This structure was demolished sometime between 1941 and 1951. From at least 1951 to 2005, the project site was part of a larger residential parcel containing a single-family dwelling, and the area that is currently the project site then contained a detached garage for this dwelling. This garage was demolished in 2005, and the existing commercial office building was constructed at the site in 2006. The identified uses in the subject building include an afterschool program, a kitchen design firm, a sunroom contracting company (Four Seasons Sunrooms of NY), and professional office uses. There were not any operations that typically involve the storage or use of hazardous substances or petroleum products identified at the project site in the information reviewed for this report.

Typical lavatory drainage structures such as sinks and toilets were present in the building. In addition, there is a storm drain located at the bottom of the basement entrance stairs at the rear of the building. The drainage destination of these structures is not known; however, it is likely that they discharge to the municipal sewer system. No staining or other indications of past spills, releases or discharges of hazardous substances or petroleum products were observed around any of the drainage structures at the project site.

No aboveground storage tanks, or visible indications of the presence of underground storage tanks, such as tank fillports or tank vent lines, associated mechanical equipment, etc., were observed during the site visit. The property does not appear in the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) database, which lists all registered facilities with a total combined petroleum storage capacity in excess of 1,100 gallons. In addition, there are not any Oil Burner Applications on file in the New York City Department of Buildings records reviewed for the project site.

Given the age of the building (constructed in 2006), it is unlikely to contain asbestos building materials or lead-based paints. No suspected asbestos-containing materials were observed in the building during the site visit.

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

The project site is adjoined to the north by 15th Avenue, beyond which are residential dwellings and an undeveloped lot. Adjacent and to the south and west of the site are residential dwellings. Adjacent and to the east is a gasoline filling station at 15-04 149th Street. Land uses in the immediate vicinity of the property (i.e., within approximately 500 feet of the site) are comprised of a mix of residential uses, a public school, commercial/retail uses, and auto-related uses (e.g., filling stations, repair garages, parking lots, etc.).

A review of Sanborn maps shows that land uses in the immediate area of the subject property have been comprised of a mix of residential uses, a public school, commercial/retail businesses, and auto- related uses since at least the early 1940s. The property located adjacent and to the east of the project site (15-04 149th Street) has been occupied by a gasoline filling station since at least 1941. The property at 148-20 Cross Island Parkway Service Road South, which is located approximately 160 feet north of the project site, contained a gasoline filling station from 1956 to circa 2001. The property at 149-30 Cross Island Parkway, which is located approximately 450 feet east of the site, contained a gasoline filling station from at least 1942 to circa 1989. Finally, there was a gasoline filling station located at 149-10 14th Avenue from at least 1950 to circa 2006. This site is located approximately 550 feet northeast of the project site.

There are at least nine reported spill incidents identified at the adjacent gasoline station at 15-04 149th Street. Of these spill incidents, eight have been either closed, or administratively closed and consolidated into Spill Number 9007553, which is the "open" spill number for the on- going investigation and remediation activities at the site.

According to the spill report for Spill Number 9007553, impacts to the soil and groundwater at the filling station, and impacts to off-site groundwater, have been confirmed. The Spill Report does not specify the direction of groundwater flow, nor does it identify the downgradient area impacted by the contamination. The remediation system for this spill incident was activated in 2017, and the investigation and remediation of this spill incident is on-going by the responsible party under the regulatory oversight of the New York State Department of Environmental Conservation.

At the time of the site visit, three groundwater monitoring/remediation system wells were located in the sidewalk in front of the subject building, and at least five additional wells were observed along 15th Avenue to the west/southwest of the filling station. It is not known if any or all of these wells were installed as part of the investigation of Spill Number 9007553. However, and given the number and concentration of wells located in the immediate vicinity of the project site, it is considered likely that the groundwater in the immediate vicinity of the project site has been impacted.

In addition to the spills identified at the filling station at 15-04 149th Street, there is an "open" spill incident identified at 149-10 14th Avenue, which is located approximately 550 feet

northeast of the project site. This site formerly contained a gasoline filling station, and impacts to soil and groundwater at the station, and to off-site groundwater, have been confirmed. The direction of groundwater flow has been determined to be to the southwest, towards the project site. Investigation and remediation activities have been on-going at this location since at least the early 1990s. The report also indicates that off-site wells installed along the Cross Island Parkway, southwest of the station, had been impacted. However, the extent of the off-site contamination from this spill incident is not included in the report. Given the location of this spill incident, and the information reviewed for this spill, it is considered possible that it has contributed to groundwater contamination in the immediate vicinity of the project site.

Conclusions

A Phase I Environmental Site Assessment was performed in conformance with the scope and limitations of ASTM Practice E 1527-13 of 147-40 15th Avenue, Queens, N.Y., the property. 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 of *Recognized Environmental Conditions* in connection with the property, with the following exception:

- The potential for contamination at the project site, including the potential for the encroachment of vapors to the subject building, from identified off-site sources of contamination in the immediate vicinity of the subject property.

Additional investigation would be required to determine if the project site has been impacted by the *Recognized Environmental Conditions* identified.

Projected Development Sites 2, 3, and 4

The Proposed Action would potentially result in the development of new floor area on Projected Development Sites 2, 3, and 4. Although the Affected Area is zoned R3A, Projected Development Site 4 is developed with an automotive use (currently a Mobile fuel station) that contains underground storage tanks (USTs). Due to the possibility of subsurface leaks or contamination from these USTs, soils disturbance to accommodate the development of new floor area on Projected Development Sites 2, 3, and 4 could result in hazardous materials concerns.

Conclusions

An "E" designation for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for Projected Development Site 1. The "E" designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on the property. The Applicant will be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Projected Development Sites 2, 3, and 4 are not under the control or ownership of the Applicant. In order to prevent any hazardous materials impacts from the Proposed Action, an "E" designation for hazardous materials will be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The "E" designation will

ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance on these properties. These applicant(s) should be directed to coordinate further hazardous materials assessments through the Mayor's Office of Environmental Remediation.

Therefore, in order to avoid any potential impacts associated with hazardous materials, an (E) designation (E-546) will be assigned for hazardous materials on the following properties:

Block 4646, Lots 8, 11, 12, and 14

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

> **Task 1-Sampling Protocol**
>
> **The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.**
>
> **Task 2-Remediation Determination and Protocol**
>
> **A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.**
>
> **If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.**
>
> **A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.**

With the above (E) designation in place on Projected Development Sites 1, 2, 3, or 4, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted. Therefore, there is no potential for the Proposed Action to result in significant adverse impacts related to hazardous materials in the Affected Area, and further assessment of hazardous materials is not warranted.

16. TRANSPORTATION

Based on Table 16-1 of the Transportation chapter of the *CEQR Technical Manual,* the Affected Area is located in Zone 5 ("all other areas") where 10,000 gsf of additional local retail space and 40,000 gsf of additional office space would typically trigger the need for a transportation assessment.

As described above, the Future No-Action development in the Affected Area would include 4 dwelling units, 1,140 square feet of restaurant space, 2,257 square feet of community facility space, and a 1,680 square foot automotive service station. The Future With-Action development in the Affected Area would include 4 dwelling units, 7,098 square feet of office space, 1,140 square feet of restaurant space, and 7,803 square feet of retail space. The increment between the Future No-Action and the Future With-Action developments would be an increase of 7,098 square feet of office space and 7,803 square feet of retail space. There would also be a decrease of 2,257 square feet of community facility space and the removal of the 1,680 square foot automotive service station.

Based on the factors shown for Zone 5 in Table 16-1 of the Transportation chapter of the *CEQR Technical Manual,* the incremental development would result in the following weighted average with 1.0 signifying 50 peak hour trips.

- + 7,098 square feet office = +0.177 (+9 peak hour trips)
- + 7,803 square feet retail = +0.78 (+39 peak hour trips)
- - 2,257 square feet community facility = -0.15 (-8 peak hour trips)
- -1,680 square foot automotive service station = not known

  NET INCREASE = +0.807 (without credit for removal of automotive service station) = +40 peak hour trips

As shown above, the Proposed Action would result in a weighted average increase of a maximum of 0.807 or 40 additional peak hour trips without taking any credit for the removal of the 1,680 square foot automotive service station. As this weighted average of 0.807 is less than 1.0 (with 1.0 signifying 50 peak hour trips), the net increase in peak hour vehicle trip would fall below the City's threshold level of concern of 50 or more peak hour vehicle trips. This falls below the City's threshold level of concern as it would not be expected to generate 50 or more peak hour vehicle trips. based on Table 16-1 of the Transportation chapter of the *CEQR Technical Manual*. Therefore, it is not anticipated that the Proposed Action would have any significant impacts on transportation and a transportation analysis would not be required.

17. AIR QUALITY

Introduction

Under CEQR, two potential types of air quality impacts are examined. These are mobile and stationary source impacts. Potential mobile source impacts are those which could result from an increase in or a redistribution of traffic in the area, resulting in higher levels of carbon monoxide (CO) and particulate matter (PM). Potential stationary source impacts are those that could occur from sources of air pollution, such as the heat and hot water boiler of a proposed development which could adversely affect other buildings in proximity to the proposed project.

Mobile Source

Considering that the With-Action scenario would not generate enough new traffic to warrant a traffic Level I screening analysis (project-generated traffic or off-street parking space thresholds), no significant adverse air quality impact would be expected from mobile sources. Therefore, no intersection or parking facility detailed air quality analyses were required. In addition, there is no existing mobile source of pollution near the Project Area. As such, no significant adverse air quality impact is predicted from mobile source.

Mobile Source Screen

Project-Generated Traffic

Per the *CEQR Technical Manual*, localized increases in CO and $PM_{2.5}$ levels may result from increased vehicular traffic volumes and changes to traffic patterns in the study area as a consequence of the proposed project. For this area of the City, the threshold volume for a detailed analysis of CO concentration, using MOVES2014 and CAL3QHC or AERMOD, is an increment of 170 vehicles. $PM_{2.5}$ threshold criterion is an increment of the applied heavy-duty diesel vehicles (HDDVs) screen. According to the *CEQR Technical Manual*, a $PM_{2.5}$ detailed analysis is required if a threshold criterion, determined by project-generated peak hour HDDVs traffic or its equivalent in vehicular emission, is exceeded. The threshold criteria depend on the type of road and the incremental vehicular traffic as follows:

- 12 or more HDDV for paved roads with 5,000 vehicles;
- 19 or more HDDV for collector roads;
- 23 or more HDDV for principal and minor arterials; or
- 23 or more HDDV for expressways and limited access roads.

As explained in the Transportation section above, the Proposed Action would result in a weighted average increase of a maximum of 0.807 or 40 additional trips without taking any credit for the removal of the 1,680 square foot automotive service station on Projected Development Site 4 within the Affected Area. As this weighted average of 0.807 is less than 1.0 (with 1.0 signifying 50 peak hour trips), the net increase in peak hour vehicle trip would fall below the City's threshold level of concern of 50 or more peak hour vehicle trips. Therefore, the Proposed Action would generate fewer than 170 additional vehicular trips in any given hour and would not exceed the HDDV thresholds for a $PM_{2.5}$ analysis noted above.

Considering that Level I traffic screening analysis is not required for the proposed development, it is not expected to have significant adverse air quality impacts from project

generated mobile sources. It is therefore concluded that no significant adverse mobile source impacts would be generated by the Proposed Action.

Stationary Source

HVAC SYSTEM ANALYSIS

Introduction

Per *CEQR Technical manual*, the HVAC analysis considers the potential for emissions from the HVAC systems of the proposed development to significantly impact existing land uses (project-on-existing), and the potential of the Proposed Action to significantly impact each other (project-on-project). This section details the analysis associated with emission from the burning of fossil fuels in the heating, ventilation and air conditioning (HVAC) equipment of the projected developments. The analysis framework, as mandated by the State Environmental Review Act, follows the *New York City Environmental Quality Review 2014 Technical Manual.*

The Proposed Project

The Affected Area is located in the Whitestone neighborhood of Queens, Community District 7, comprises of four lots on a single block. The Proposed Action would facilitate the alignment of the zoning of the Applicant property (Block 4646, Lot 8) with the existing commercial uses on the parcel. The proposed rezoning would serve to allow legally conforming commercial uses within the Affected Area where only residential and community facility uses are currently permitted as of right. It would also allow an increase in commercial floor area on the parcels within the Affected Area to a maximum commercial and total FAR of 1.0 from the current maximum FAR of 0.5 (0.6 with attic allowance) for residential uses and 1.0 for community facility uses.

Projected Development Site 1

The Proposed Action would primarily introduce a change in use on Projected Development Site 1 from permitted community facility space under the No-Action scenario to commercial office use in the With-Action scenario. The currently existing 2,257 gsf of office space on the Site would essentially be legalized. No additional development is proposed by the Applicant or anticipated since the Site is already developed to an FAR of 0.87 where a maximum of 1.0 would be permitted under the rezoning. The increase in permitted FAR of 0.13 would allow the development of an additional 307 zoning square feet of floor area. With that small of an increment, additional development is typically not considered likely per the *CEQR Technical Manual* soft site criteria.

The energy intensity of a boiler serving a community facility use building is greater than or equal to the energy intensity of a boiler serving a commercial use building. As such, the energy consumption of Site 1 HVAC system (With-Action) would not increase. As the HVAC system of Projected Development Site 1 would not increase, no impact analysis was performed (or required) for this site.

Projected Development Site 2

The Proposed Action could result in the potential development of up to 2,498 gsf of new commercial retail space on the ground floor of the 2-story building on Projected Development Site 2 for a total commercial floor area of 3,638 gsf. The residential floor area on the Site would

remain at 1,140 gsf. The total floor area on the Site under the Proposed Action would be 4,778 gsf, an increase of 2,498 gsf over the No-Action floor area of 2,280 gsf. The height of the building to the roof line would not increase and would remain at 20 feet.

Projected Development Site 3

The Proposed Action could result in the potential development of up to 2,884 gsf of commercial retail space on the ground floor of the building on Projected Development Site 3. The residential floor area on the Site would remain at 1,320 square feet and would be moved to the upper floors of the 2 ½-story structure. The total floor area on the Site under the Proposed Action would be 4,204 gsf, an increase of 2,884 gsf over the No-Action floor area of 1,320 gsf. The height of the building to the roof line would not increase and would remain at 26 feet.

Projected Development Site 4

The Proposed Action would allow additional commercial development on the Site. It is assumed that the existing 1,680 gsf automotive use would be removed and the Site would be developed with a new 3-story, 7,262 gsf commercial office/retail building (2,421 gsf retail, 4,841 gsf office) for a net increase of 5,582 gsf of new commercial floor area on the Site. The height of the building to the roof line would be approximately 28 feet.

Air Pollutants and Applicable Standards and Guidelines

Criteria Pollutants

The EPA has identified six pollutants, known as criteria pollutants and established threshold concentrations for these pollutants. As required by the Clean Air Act, the National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by the EPA, and New York State has adopted the NAAQS as the State ambient air quality standards.

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply a $PM_{2.5}$ and 8-hour CO averaging time significant impact criteria (based on concentration increments). These criteria, referred to as *de minimis*, are more stringent than the NAAQS and the state standards, as the criteria set maximum increase of pollutants concentrations that are below the national standard. If the predicted impacts of a proposed project are less than the *de minimis* criteria, the impacts are not considered to be significant. $PM_{2.5}$ significant impact concentrations relevant to stationary sources are shown here:

- 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 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

To determine compliance with the NAAQS, the predicted impact concentrations are added to the background concentrations. Per the *CEQR Technical manual*, the background concentrations are obtained from the nearest New York State Department of Environmental Conservation (NYSDEC) monitoring station(s). Table 17-1 shows the background concentrations at the nearest NYSDEC monitoring stations and the NAAQS.

Table 17-1: The NAAQS and Background Concentrations at the Nearest NYSDEC Monitoring Stations

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO_2	1-Hour	188 µg/m^3	112.2 µg/m^3	Queens College
	Annual	100 µg/m^3	32.4 µg/m^3	
SO_2	1-Hour	196 µg/m^3	18.1 µg/m^3	Queens College
	Annual(1)	80 µg/m^3	2.0 µg/m^3	
$PM_{2.5}$	24-Hour	35 µg/m^3	18.9 µg/m^3	Queens College
	Annual	12 µg/m^3	7.3 µg/m^3	

1. 6 CRR-NY 257-2.3 for annual SO_2 standard: "During any 12 consecutive months, the annual average of the 24-hour average concentrations shall not exceed 0.03 ppm.

The concentrations' increments, *de minimis*, for stationary source $PM_{2.5}$, the pollutant for which detailed analyses were required are presented below:

- 24-hour $PM_{2.5}$ 8.05 µg/m^3
- Annual $PM_{2.5}$ 0.3 µg/m^3 (for stationary source)

NO_2 NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source). For determining compliance with the 1-hour NO_2 standard, the EPA has developed a three-tiered modeling approach: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's PVMRM module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model. Per the *CEQR Technical Manual*, a Tier 1 approach is initially applied, followed by a Tier 2 application. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO_2 NAAQS were estimated.

For the Tier 3 approach, 2014-2018 Ozone hourly background concentrations were obtained from the NYSDEC Queens College monitoring station. The maximum ozone hourly concentration was filled for missing values. 2016-2018 NO_2 hourly background concentrations were obtained from the NYSDEC for Queens College monitoring station. The 3-year of data was compiled, and a 5-year of hourly background concentrations file created following the methodology in the EPA March 2011 Memorandum[2].

[2] https://www.epa.gov/sites/production/files/2015-07/documents/appwno2_2.pdf

Project HVAC Systems Analysis

Introduction

Per the *CEQR Technical Manual*, the HVAC analysis considers the potential for emissions from the HVAC system of the proposed project to significantly impact existing land uses (project-on-existing), and the potential of the proposed project to significantly impact each other (project-on-project). Based on CEQR guidelines, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system boiler emissions can be significant. The screening analysis determines the threshold of development size below which the action would not have a significant impact. This CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

Screening Analysis

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

Screening analysis is only applicable to a single smokestack. However, for purpose of a cumulative analysis, emissions from multiple stacks could be combined in a single stack situated as close as possible to a receiving building. In addition, and per *CEQR Technical Manual*, the distance to nearest building of similar or greater height was assumed to be 400 feet if the actual distance is greater.

A review of the Affected Area and the buildings surrounding the Affected Area shows that the residential building located at 147-37 15 Road (Block 4646, Lot 10) is adjacent to the Projected Development Sites 2 and 3 and is 26 feet high. As such, a detailed analysis was required for potential impact to this existing building.

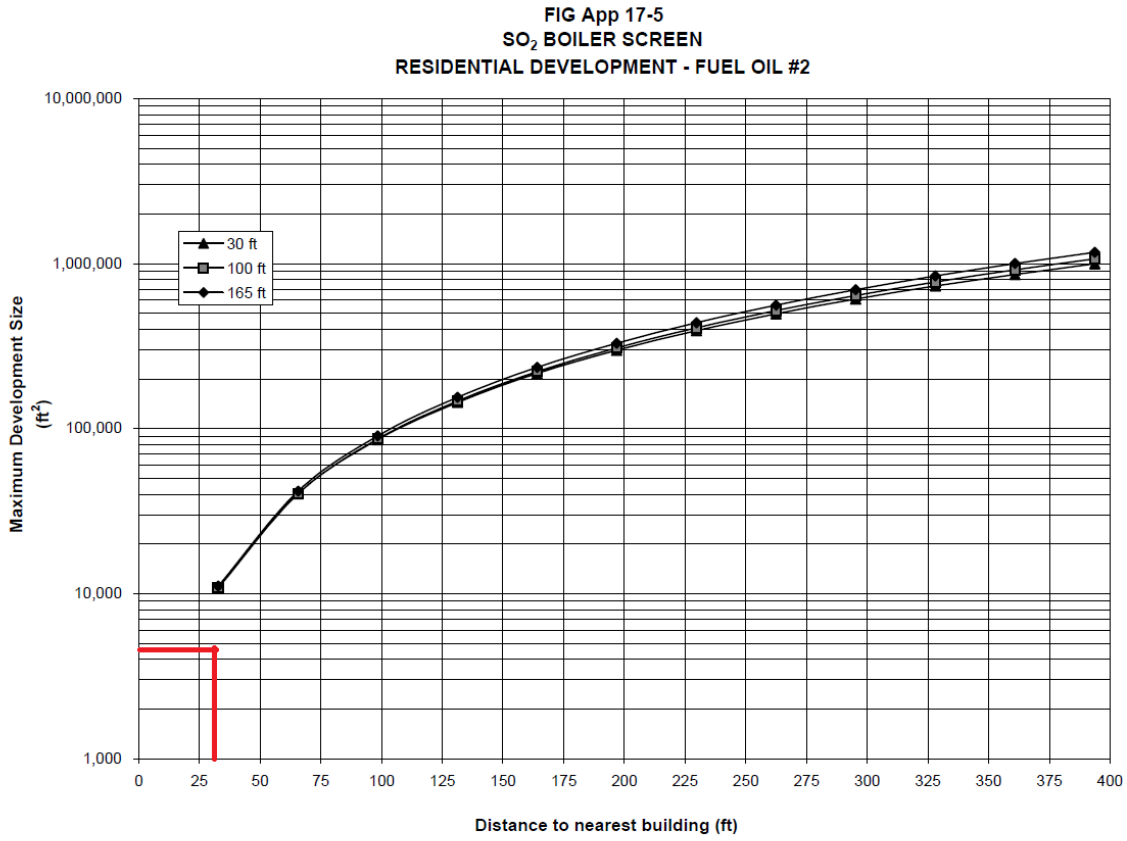
The review of the Affected Area shows that the building on the projected Development Site 1 is 21 feet high. The distance between the Projected Development Site 2 and the existing building on the Projected Development Site 1 is 34 feet, and the Projected Development Site 1 building is higher than the Projected Development Site 2. Therefore, a screening analysis was performed to determine if a detailed analysis would be required. The Projected Development Site 3 and 4 are higher than the Projected Development Site 1; therefore, no impact would be predicted from these buildings' HVAC equipment.

The Projected Development Site 2 is adjacent to the Projected Development Site 3, and the Projected Development Site3 is adjacent to the Projected Development Site 4. Therefore, the screening analysis is not applicable, and a detailed analysis was required.

Per the *CEQR Technical Manual*, the CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendices* was used. This stationary source screen is a generic screen that

considers the type of fuel used and the residential or nonresidential use of the building. According to 15 RCNY 2-15, no new boiler or burner installations may use No. 6 or No. 4 fuel oils. Therefore, the highest-emitting fuel that could be used is a No. 2 fuel oil. The CEQR nomograph depict the size of the development versus distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. Figures 17-1 (using Figure 17-5 of the *CEQR Technical Manual Appendices)* shows the screening analysis nomograph of the Projected Development Site 2.

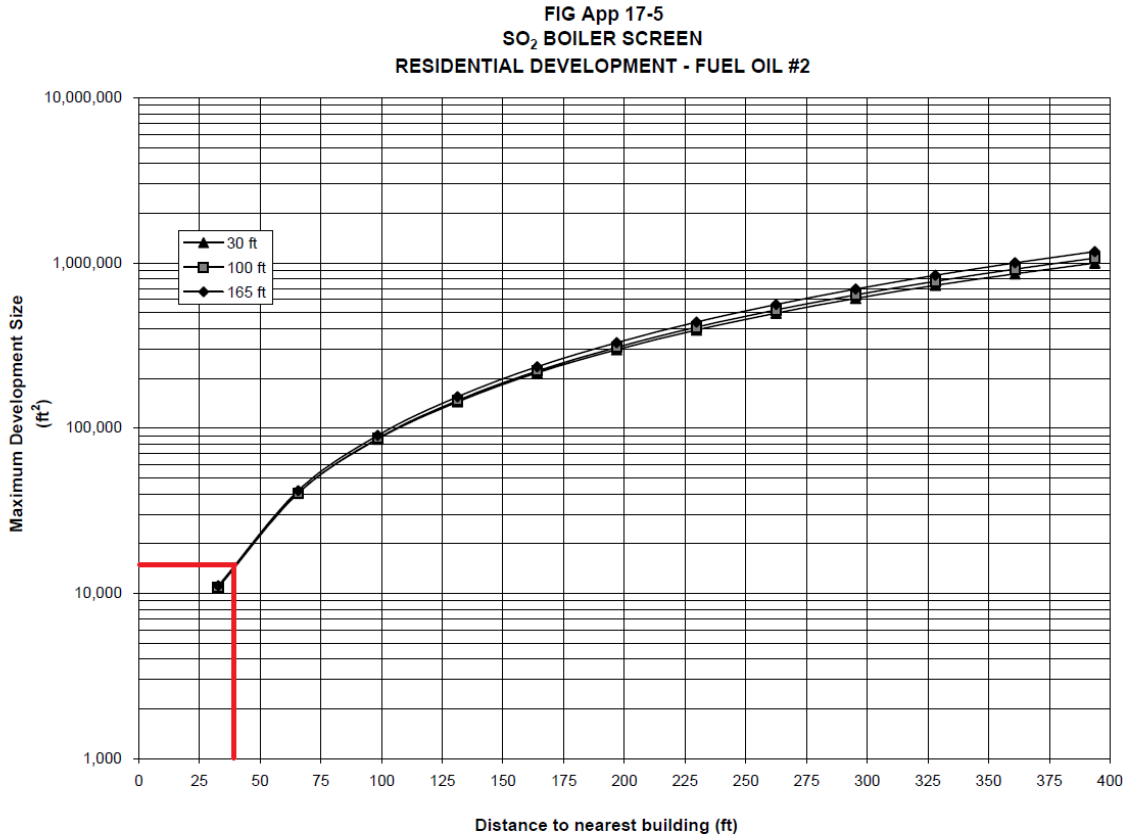
Figure 17-1: The Projected Development Site 2 - Screening Analysis Minimum Distance Threshold Distance



As seen in **Figure 17-1**, (Figure 17-5 as it is known in the *CEQR Technical Manual Appendices*), a detailed analysis would be required for any existing building or Projected Development Site that is at a distance of less than 30 feet from the Projected Development Site 2 and is higher than 20 feet.

Figures 17-2 (using Figure 17-5 of the *CEQR Technical Manual Appendices)* shows the cumulative screening analysis nomograph of the Projected Development Site 2, 3, and 4 on existing land uses.

Figure 17-2: The Projected Development Site 2, 3, and 4 - Screening Analysis Minimum Distance Threshold Distance.



As seen in **Figure 17-2**, (Figure 17-5 as it is known in the *CEQR Technical Manual Appendices*), a detailed analysis would be required for any existing building (or Projected Development Site) that is at a distance of less than 40 feet from the Projected Development Site 2, 3, or 4 and is higher than 26 feet.

Figure 17-3 shows the area within 30 feet of the Projected Development Site 2 and the area within 40 feet of the Projected Development Sites 2, 3, and 4 plotted on the NYC Building Footprint map, where the buildings' roof heights indicted in red colored font. This geo metadata was obtained from the NYC Open Data Building Footprints shapefile.[3]

[3] https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh/data.

Figure 17-3: Existing Building Heights Surrounding the Affected Area

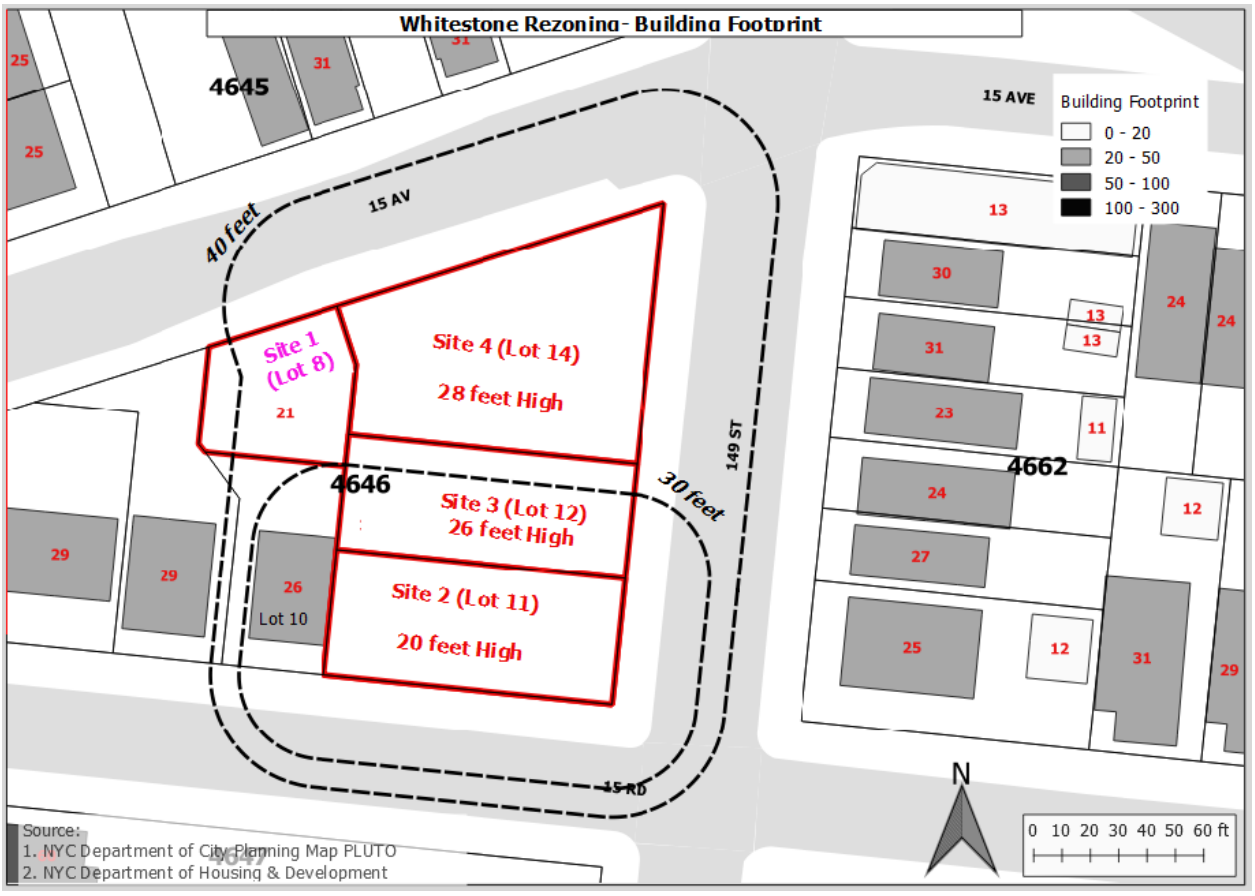


Table 17-2 shows the screening analysis framework and results, where "Fail" indicate that a detailed analysis using AERMOD dispersion analysis is required.

Table 17-2: Screening Analysis Results

Source Building Site ID	Heated Area (sq. ft.)	Screen Distance (ft.)	Receiving Building (Site ID or Block/Lot)	Receiving Building Distance (ft.)	Pass/ Fail
Project-on-Project					
Projected Development Site 2	4,778	30	Projected Development Site 1	34	Pass
		N.A. (<30)	Projected Development Site 3	0	Fail
Projected Development Site 2 and 3	8,982	N.A. (< 30)	Projected Development Site 4	0	Fail
Project-on-Existing					
Projected Development Site 2 and 3 (Cumulative)	16,244	40	147-37 15 Road (Block 4646, Lot 10)	0	Fail

Projected Development Site 2, 3, and 4 (Cumulative)	16,244	40	147-35 15 Road (Block 4646, Lot 7)	43	Pass

Detailed Analysis

The EPA's AERMOD modeling system version 18081 was used to predict pollutants' concentrations. In accordance with CEQR guidance, this analysis was conducted assuming stack tip downwash and elimination of calms. Models specified flat terrain, urban dispersion surface roughness, and population of 2,000,000. The Building Profile Input Program (BPIP) was run with the downwash effect enabled.

All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from LGA Airport and upper air data was obtained from Brookhaven station, New York. The meteorology data, processed by Lakes Environmental Software, was processed using AERMET version 18081, AERMINUTE version 15272, and AERSURFACE version 13016. No data filling was conducted as the raw data quality was more than sufficient for the modeling purposes (99.47 percent of raw data). These meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Meteorological data were combined to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs and Anemometer height of 9.4 meters was specified per Lakes Environmental Software.

The pollutants of concern for oil #2 fueled boilers are SO_2, $PM_{2.5}$, and NO_2. The Projected Development Sites 2 and 3 boilers' energy intensities were calculated from the annual fuel usage, the developments' gross floor area, and the assumption that the developments' fuel usage would resemble that of residential buildings. Pertinent values were obtained from the *CEQR Technical Manual Appendices* for residential buildings, and the assumption that all fuel would be consumed during the 100-day (or 2,400 hour) heating season. **Table 17-3** shows the calculated emission rates, both short-term and annual.

Table 17-3: The Projected Development Sites 2 and 3 Estimated Short-term and Annual Emission Rates

Site ID	Fuel	Pollutant	Averaging Time	Emission Rate (g/s)
Projected Development Site 2	Fuel Oil #2	NO_2	1-hour	1.91E-03
			Annual	5.22E-04
		$PM_{2.5}$	24-hour	2.03E-04
			Annual	5.56E-05
		SO_2	1-hour	2.03E-05
			Annual	5.56E-06
Projected Development Site 3	Fuel Oil #2	NO_2	1-hour	1.68E-03
			Annual	4.60E-04
		$PM_{2.5}$	24-hour	1.79E-04
			Annual	4.89E-05
		SO_2	1-hour	1.79E-05
			Annual	4.89E-06

The diameters of the stacks and the exhausts' exit velocities were assumed to be 0.0 feet and 0.001 meter per second, respectively, based on values obtained from the *CEQR Technical Manual*. The stacks exit temperatures were assumed to be 300°F (423°K), which is appropriate for boilers.

The New York City Building Code (Building Code) requires that a rooftop stack should be at least 10 feet away from the edge of the roof and at least 3 feet higher than the roofline. As such, the stack of a source building was initially situated 3 feet above the roofline and 10 feet from the edge of the building closest to the receiving building. A stack setback distance was then specified if impact was predicted, and this stack setback distance was applied in the other models.

The Projected Development Sites 2, 3, and 4 were modeled as buildings that cover the entire lot and rise to their maximum height. Other buildings in the surrounding area that might affect the plume dispersion were input into the models. These buildings footprint geo metadata were obtained from the NYC Open Data Building Footprints shapefile.

Receptors on a receiving building were placed all around the receiving building envelope, at 10 feet increments and at all floor levels. Ground floor receptors were placed at a height of 6 feet above grade and top floor receptors were placed 3 feet below the roof line.

The SO_2 and $PM_{2.5}$ analyses were modeled with generic emissions of 1 gram per second emission rates and first highest output concentrations. The NO_2 1-hour cumulative impact on the Projected Development Site 4 was modeled with generic 1 gram per second emission rates and Tier 2 approach, applying an ambient NOx/NO_2 ratio of 80% to the $NO2_x$ estimated concentrations. All other 1-hour NO_2 models were run with the calculated emission rates. The Projected Development Site 2 impact on the Projected Development Site 3 was modeled with a Tier 3 approach. The Projected Development Site 2 and 3 cumulative impact on the existing building on Lot 10 was modeled with a Tier 2 approach.

Results of Dispersion Analyses

The NO_2 and SO_2 impact concentrations were compared with the NAAQS. The $PM_{2.5}$ 24-hour and annual averaging times modeled concentrations were compared with the NYC Guidelines threshold criterions. The reported concentrations are the maximum predicted concentrations of the building wake effects abled/disabled scenarios. Result of the HVAC dispersion NO_2, $PM_{2.5}$, and SO_2 analyses are shown in **Table 17-4**.

Table 17-4: HVAC Dispersion Analyses Results

Pollutant and Averaging Time	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Projected Development Site 2 – on - Projected Development Site 3					
1-hour NO_2	154.4[(2)]		**154**	**188**	NAAQS
Annual NO_2	2.6	32.4	**35.0**	**100**	NAAQS
24-hour $PM_{2.5}$	7.00	N.A.	**7.00**	**8.05**	*de minimis*
Annual $PM_{2.5}$	0.28	N.A.	**0.28**	**0.3**	*de minimis*

1-hour SO_2	1.3	18.1	**19.4**	**196**	NAAQS
Annual SO_2	0.03	2.0	**2.0**	**80**	NYS
Projected Development Sites 2 & 3 – on - Projected Development Site 4					
1-hour NO_2	45.3[(1)]	112.2	**157.5**	**188**	NAAQS
Annual NO_2	0.69	32.4	**33.1**	**100**	NAAQS
24-hour $PM_{2.5}$	2.23	N.A.	**2.23**	**8.05**	*de minimis*
Annual $PM_{2.5}$	0.07	N.A.	**0.07**	**0.3**	*de minimis*
1-hour SO_2	1.0	18.1	**19.1**	**196**	NAAQS
Annual SO_2	0.01	2.0	**2.0**	**80**	NYS
Projected Development Sites 2 & 3 – on - 147-37 15 Road (Block 4646, Lot 10)					
1-hour NO_2	67.6[(1)]	112.2	**180**	**188**	NAAQS
Annual NO_2	1.64	32.4	**34.0**	**100**	NAAQS
24-hour $PM_{2.5}$	4.21	N.A.	**4.21**	**8.05**	*de minimis*
Annual $PM_{2.5}$	0.17	N.A.	**0.17**	**0.3**	*de minimis*
1-hour SO_2	1.53	18.1	**19.6**	**196**	NAAQS
Annual SO_2	0.02	2.0	**2.0**	**80**	NYS

1. Concentration predicted with a Tier 1 approach.
2. Concentration predicted with a Tier 3 approach.

As seen in **Table 17-4**, the NO_2 and SO_2 predicted concentrations do not exceed the NAAQS and NYS Standard and the $PM_{2.5}$ concentrations do not exceed the *de minimis*. Therefore, with (E) Designations in place, the HVAC emissions would not significantly impact other Projected Developments or existing land uses.

(E) Designation (E-546)

Block 4646, Lot 11 (Projected Development Site 2):

Any new residential/commercial development or enlargement on the above-referenced property must ensure that the HVAC stack is located at the highest tier or at least 23 feet above grade, and is at least 24 feet from the northern lot line facing 15th Avenue and at least 30 feet from the western lot line facing 147th Street to avoid any potential significant adverse air quality impacts.

Block 4646, Lot 12 (Projected Development Site 3):

Any new residential/commercial development or enlargement on the above-referenced property must ensure that the HVAC stack is located at the highest tier or at least 29 feet above grade to avoid any potential significant adverse air quality impacts.

Block 4646, Lot 14 (Projected Development Site 4):

Any new commercial development or enlargement on the above-referenced property must ensure that the HVAC stack is located at the highest tier or at least 31 feet above grade to avoid any potential significant adverse air quality impacts.

Conclusion

Emissions from project-related heating, ventilation, and air conditioning systems (HVACs) would not cause significant air quality impacts to receptors at the local scale with (E) - Designations in place and further analysis is not necessary.

19. NOISE

Introduction

Two types of potential noise impacts are considered under CEQR. These are potential mobile source and stationary source noise impacts. Mobile source impacts are those which could result from a proposed project adding a substantial amount of traffic to an area. Potential stationary source noise impacts are considered when a Proposed Action would cause a stationary noise source to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor, if the project would include unenclosed mechanical equipment for building ventilation purposes, or if the project would introduce receptors into an area with high ambient noise levels.

Mobile Source

Relative to mobile source impacts, a noise analysis would be required if a proposed project would at least double existing passenger car equivalent (PCE) traffic volumes along a street on which a sensitive noise receptor (such as a residence, a park, a school, etc.) was located. Residential uses are located along all the streets providing vehicular access to the Affected Area including 15th Avenue, 15th Road, and 149th Street. A school and related open space are located along 15th Road across from the Affected Area, and an open space facility is located along 149th Street across from the Affected Area. Traffic generated by the Proposed Action along 15th Avenue, 15th Road, and 149th Street would therefore be of concern relative to mobile source noise impacts.

A detailed mobile source analysis is typically conducted when PCE values are at least doubled between the No-Action and the With-Action conditions during the peak hour at receptors most likely to be affected by the Proposed Action. The Proposed Action isn't expected to double PCEs compared to the No-Action scenario. As explained in the Transportation section above, the Proposed Action would generate a net increase of a maximum of 40 peak hour vehicle trips without taking any credit for the loss of peak hour trips that would result from the removal of the automotive service station on Projected Development Site 4 within the Affected Area. These trips would be divided between 15th Avenue, 15th Road, and 149th Street which are lined with numerous one- and two-family residences as well as community facility and commercial uses. It would therefore not be possible for the Proposed Action to double PCE volumes on any streets within the Affected Area relative to the No-Action condition, and a detailed mobile source analysis is therefore not warranted

No significant adverse mobile source noise impacts would be generated by the Proposed Action.

Stationary Source

The Proposed Action would introduce a change in uses on Projected Development Site 1 from permitted community facility space under the No-Action scenario to commercial office space in the With-Action scenario. The Proposed Action would also potentially result in the development of up to 2,498 gsf of new commercial retail space on Projected Development Site 2 and up to 2,884 gsf of commercial retail space on Projected Development Site 3. Finally, the Proposed Action could result in the removal of the existing automotive service station on Projected Development Site 4 and the development of a new 7,262 gsf commercial office/retail

building (2,421 gsf retail, 4,841 gsf office) on the Site. Commercial uses with a substantial square footage addition are considered sensitive receptors. Therefore, the following noise analysis was conducted.

Noise Analysis – 147-40 15th Avenue

Introduction

Equity Environmental Engineering, LLC (Equity) conducted noise monitoring on Thursday, June 13th, 2019. The Project Area includes two through lots with frontage on 15th Avenue and 15th Road; one midblock lot with frontage along 15th Avenue; and one corner lot with frontage on 15th Avenue and 149th Street.

The Project Area is identified as Block 4646, Lots 6, 7, 8, and 14 within Queens Community District 7. The Project Area is situated between 15th Avenue to the north, 149th Street to the east, 15th Road to the south, and 147th Street to the west. 15th Avenue is a two-way street with one moving lane in each direction and curbside parking. 149th Street is a two-way road with one moving lane in each direction and curbside parking. 15th Road is a one-way street with one moving lane of traffic and curbside parking. 147th Street is a two-way street with one moving lane in each direction and curbside parking. Local intersections are controlled by traffic signals and stop signs. An open road cut for the Cross Island Parkway is approximately 250 feet to the north of the Project Area.

The Proposed Action would allow a new noise-sensitive commercial use within a zoning district where such use is not permitted as-of-right. The main source of ambient noise is vehicular traffic. Because the Proposed Action would allow for development of a noise-sensitive land use, an assessment of the potential for adverse effects on project occupants from ambient noise is warranted. The proposed development would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. Therefore, this noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development.

Framework of Noise Analysis

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

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

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 19-1: Noise Levels of Common Sources

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

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

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

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

- Leq is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity,

  level. High noise levels during a measurement period will have a greater effect on the 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.

- Lmax is the highest SPL measured during a given period of time. It is useful in evaluating Leqs for time periods that have an especially wide range of noise levels.
- Leq(24) is the continuous equivalent sound level over a 24-hour time period.

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

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

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 19-2 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 buildings are designed to maintain interior noise levels of 45 dBA (L_{10} or Ldn, depending on the source) or below.

Table 19-2: 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	Ldn < 60 dBA		Ldn < 60 dBA		Ldn < 60 dBA		Ldn < 75 dBA
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		$55<L_{10}\leq 65$ dBA		$65<L_{10}\leq 80$ dBA		$L_{10}>80$dBA	
3. Residence, residential hotel or motel	7 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	$L10\leq 55$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	

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

Notes:

(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;

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

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

3 One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.

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

Table 19-3 CEQR TM: Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise Level with Proposed Project	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[1]	(i) 28 dB(A)	(ii) 31 dB(A)	(iii) 33 dB(A)	(iv) 35 dB(A)	$36 + (L_{10} - 80)^2$ dB(A)

Source: New York City of Environmental Protection

Notes:

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

2 Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.

Measurement Location and Equipment

Because the predominant noise sources in the area of the proposed project consist of vehicular movements, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM). Pursuant to *CEQR Technical Manual* methodology, measurements were conducted for a 20-minute period during each of the peak periods at one monitoring location at the Project Area: Location One (1) was at ground level on the corner of 15th Avenue and 149th Street, as shown in Figure 19-1 and Photo 19-1 below.

Noise monitoring was conducted using a Type 1 Casella CEL-633C sound meter with wind screen. The monitor was placed on a tripod at a height of approximately three feet above the ground, away from any other 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. Noise meter calibration certification and back up data are provided in the Noise Appendix to this document.

Photo 19-1: *Noise Monitoring Location One (1)*

Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Thursday, June 13th, 2019. The weather was dry and wind speeds were mild 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.

Table 19-4 below contains the results for the measurements taken at the Project Site:

Table 19-4 *Noise Levels (dB) at Location 1*			
Thursday, June 13, 2019			
Time	**7:32 am – 7:52 am**	**12:01 pm – 12:21 pm**	**4:31 pm – 4:51 pm**
L_{max}	100.0	82.0	84.4
L_{10}	67.5	67.5	64.5
L_{eq}	**76.7**	64.7	61.7
L_{50}	61.0	61.5	59.0
L_{90}	56.5	58.5	55.0
L_{min}	52.4	55.8	51.9

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the *CEQR Technical Manual.*

Table 19-5 below contains the traffic counts and vehicle classifications during each monitoring period for 20 minutes:

Table 19-5 ***Location 1:*** *Traffic volumes and vehicle classification at Location 1*			
	7:32 am – 7:52 am	**12:01 pm – 12:21 pm**	**4:31 pm – 4:51 pm**
Car/ Taxi	59	39	44
Van/Light Truck/SUV	92	44	51
Medium Truck	1	2	2
Heavy Truck	3	3	0
Bus	5	0	1
Train	0	0	0

Determination of Impacts/Building Attenuation Requirements

The 2014 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a commercial use such as would occur under the proposed action, an L10 of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L10 of between 70 and 75 dB(A) is identified as marginally unacceptable general external exposure. The highest recorded L10 at Location One (1) of the subject property was 67.5 dB during the morning and midday monitoring periods.

The highest recorded Leq at Location One (1) of the subject property was 76.7 dB during the morning monitoring period, and is directly attributable to the operation of a garbage

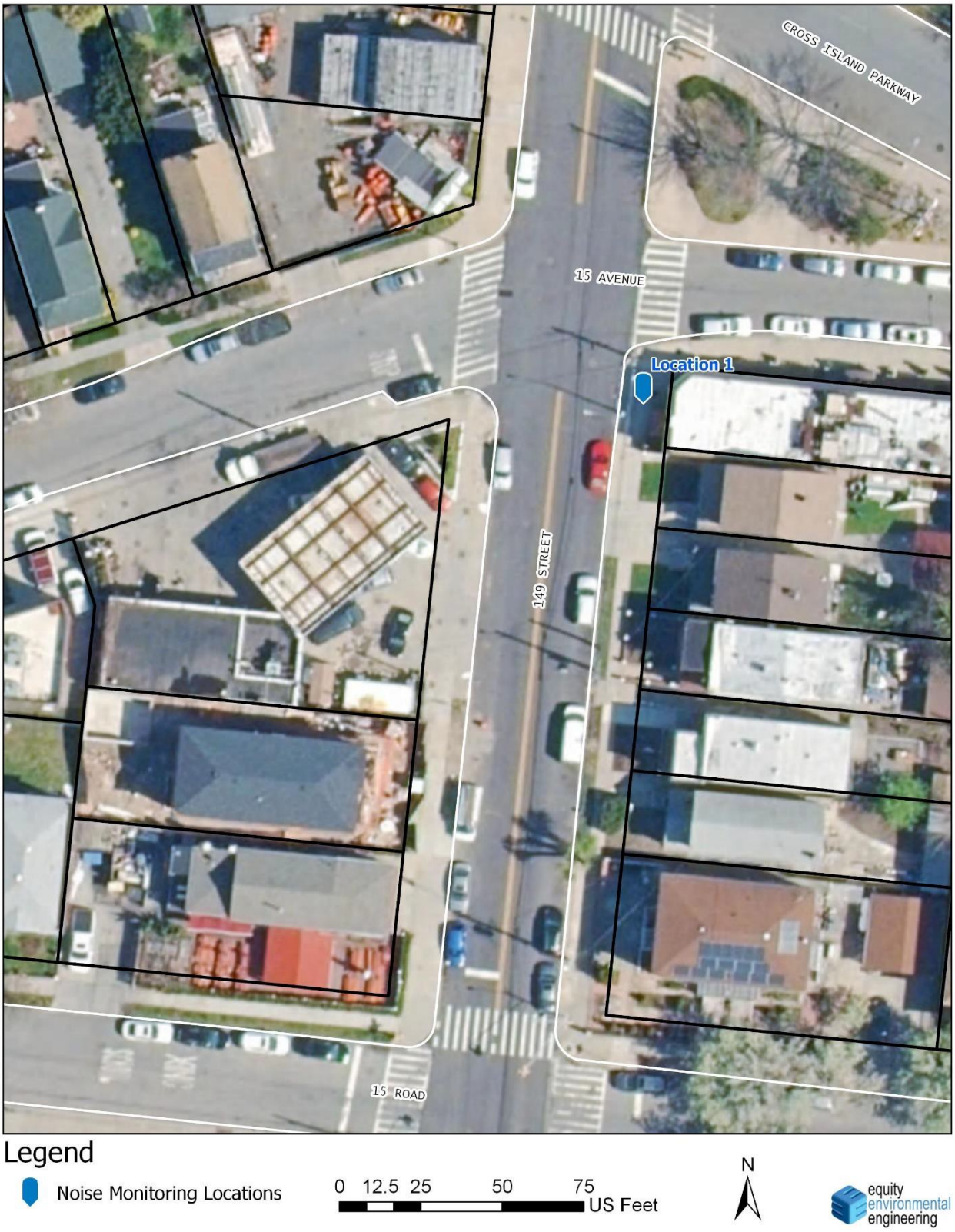
truck immediately adjacent to the noise monitor between approximately 7:48am and 7:50am. As indicated in Table 19-4 above, an Lmax of 100.0 far exceeded the Lmax from the midday and pm monitoring periods, and as shown in the noise graph in the Noise Appendix, the Leq increased significantly between 7:48am and 7:50am, resulting in a higher Leq reading for the monitoring period.

Based on the results of the noise monitoring, a window-wall attenuation will not be required for any building facades. There would be no potential for adverse impacts related to ambient noise.

Conclusion

The Proposed Action would not introduce significant mobile or stationary source noise into the surrounding area. In addition, the Proposed Action would not result in any adverse ambient noise impacts on Projected Development Sites 1 through 4. The development would not have any potentially significant adverse mobile or stationary source noise impacts, and further assessment is not warranted.

Figure 19-1: Noise Monitoring Location



APPENDIX

HISTORIC AND CULTURAL RESOURCES APPENDIX

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 / 77DCP484Q
Project: 147-40 15 AVENUE
Date received: 11/28/2018

Properties with no Architectural or Archaeological significance:

1) ADDRESS: 147-40 15 Avenue, BBL: 4046460008
2) ADDRESS: 15-16 149 Street, BBL: 4046460011
3) ADDRESS: 15-12 149 Street, BBL: 4046460012
4) ADDRESS: 15-06 149 Street, BBL: 4046460014

12/3/2018

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 33841_FSO_DNP_12032018.doc

HAZARDOUS MATERIALS APPENDIX

NYC Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

February 27, 2019

Laura Kenny
Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 147-40 15th Avenue Rezoning
Block 4646, Lots 8, 11, 12, and 14
CEQR # 19DCP141Q

Dear Ms. Kenny:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the February 2019 Environmental Assessment Statement (EAS) prepared by Compliance Solutions Services, LLC and the January 2019 Phase I Environmental Site Assessment (Phase I) prepared by Environmental Studies Corporation on behalf of 8850 Management LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning (DCP) to map a C1-2 commercial district overlay over an existing R3A residential district in the Affected Area (Block 4646, Lots 8, 11, 12, and 14), located in the Whitestone neighborhood of Queens Community District 7. The Proposed Action would facilitate the applicant's desire to align the zoning of the applicant property (Block 4646, Lot 8) (Projected Development Site 1) with the existing commercial uses on the parcel. The proposed rezoning would serve to allow legally conforming commercial uses within the Affected Area where only residential and community facility uses are currently permitted as of right. It would also allow an increase in commercial floor area on the parcels within the Affected Area. Potential new development could occur on Projected Development Sites 2, 3, and 4 (Block 4646, Lots 11, 12, and 14) which are not controlled by the applicant.

Block 4646, Lot 8

The January 2019 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including an office building, a garage, dwellings, a daycare, a kitchen design firm, a sunroom contracting company, a school, filling stations, repair garages, parking lots, dry cleaning, a church, a coal yard, lumber storage, beverage storage, smelting, etc. There are open New York State Department of Environmental Conservation spills at the adjacent filling station at 15-04 149th Street (Spill # 9007553) and at the former filling station at 149-10 14th Avenue (Spill # 9213668), approximately 550 feet northeast of the subject property.

Regulatory databases identified 7 spills within 1/8 mile; 7 underground storage tank sites and 7 aboveground storage tank sites within 1/4 mile; and 21 leaking storage tank sites within 1/2 mile of the subject property.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

Projected Development Site 1: Block 4646, Lot 8 (Site under the control or ownership of the applicant) and Projected Development Sites 2, 3, and 4: Block 4646, Lots 11, 12, and 14 (Sites not under the control or ownership of the applicant)

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

Future correspondence and submittals related to this project should include the following CEQR # **19DCP141Q**. If you have any questions, you may contact Mohammad Khaja-Moinuddin at (718) 595-4445.

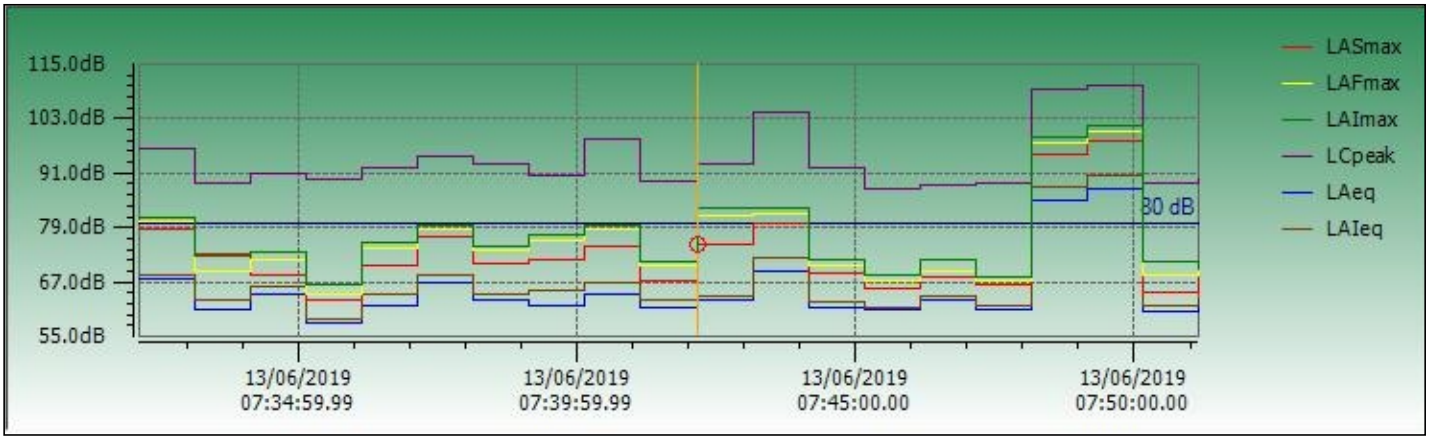
Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
M. Khaja-Moinuddin
T. Estesen
M. Wimbish
O. Abinader – DCP
M. Bertini – OER

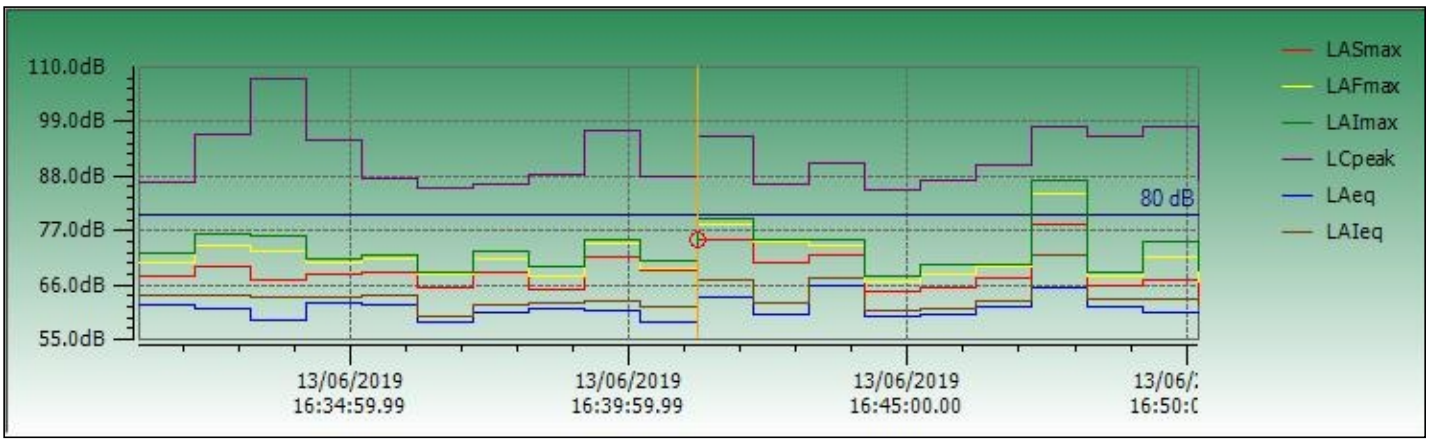
NOISE
APPENDIX

Instrument Model	CEL-633C		
LAeq	76.7 dB	Battery Low	Yes
LCpeak with Time	110.2 dB (6/13/2019 7:49:23 AM)	Duration	00:20:00 HH:MM:SS
Lepd(Projected)	76.7 dB	End Date & Time	6/13/2019 7:52:09 AM
Lex8h(Projected)	76.7 dB	Overload	No
LAFmax with Time	100.0 dB (6/13/2019 7:49:22 AM)	Pause Duration	00:00:00 HH:MM:SS
LAImax with Time	101.3 dB (6/13/2019 7:49:21 AM)	Response	Random
LAFmin with Time	52.4 dB (6/13/2019 7:34:04 AM)	Run Number	150
LAImin with Time	53.2 dB (6/13/2019 7:34:05 AM)	Serial Number	1274486
LZeq	79.9 dB	Start Date & Time	6/13/2019 7:32:09 AM
LCeq	78.8 dB	Site	Unallocated
LCeq-LAeq	2.1 dB	Location	Unallocated
LAIeq	79.5 dB	Person	Unallocated
LAE	107.5 dB	Process	Unallocated
Calibration (Before) Date	6/13/2019 7:18:47 AM	Result	Cumulative
Calibration (Before) SPL	114 dB	LAF 50%	61 dB
Calibration (After) Date	6/13/2019 12:01:02 PM	LAF 90%	56.5 dB
Calibration Drift	0.2 dB	LAF 95%	55.5 dB
LAF 10%	67.5 dB		
Notes			



Instrument Model	CEL-633C		
LAeq	61.7 dB	Battery Low	Yes
LCpeak with Time	107.6 dB (6/13/2019 4:33:50 PM)	Duration	00:20:00 HH:MM:SS
Lepd(Projected)	61.7 dB	End Date & Time	6/13/2019 4:51:13 PM
Lex8h(Projected)	61.7 dB	Overload	No
LAFmax with Time	84.4 dB (6/13/2019 4:47:26 PM)	Pause Duration	00:00:00 HH:MM:SS
LAImax with Time	87.1 dB (6/13/2019 4:47:26 PM)	Response	Random
LAFmin with Time	51.9 dB (6/13/2019 4:34:04 PM)	Run Number	154

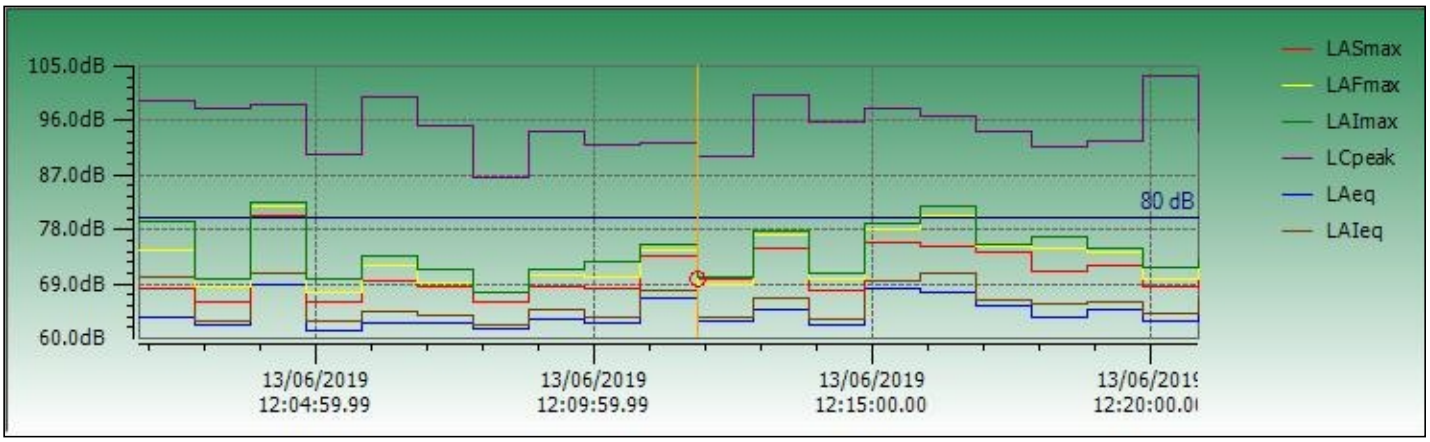
LAImin with Time	52.7 dB (6/13/2019 4:31:42 PM)	Serial Number	1274486
LZeq	77.2 dB	Start Date & Time	6/13/2019 4:31:13 PM
LCeq	73.4 dB	Site	Unallocated
LCeq-LAeq	11.7 dB	Location	Unallocated
LAleq	64.7 dB	Person	Unallocated
LAE	92.5 dB	Process	Unallocated
Calibration (Before) Date	6/13/2019 4:30:07 PM	Result	Cumulative
Calibration (Before) SPL	114 dB	LAF 50%	59 dB
Calibration (After) Date		LAF 90%	55 dB
Calibration Drift	-0.6 dB	LAF 95%	54.5 dB
LAF 10%	64.5 dB		
Notes			



Instrument Model	**CEL-633C**		
LAeq	64.7 dB	Battery Low	Yes
LCpeak with Time	103.3 dB (6/13/2019 12:20:22 PM)	Duration	00:20:00 HH:MM:SS
Lepd(Projected)	64.7 dB	End Date & Time	6/13/2019 12:21:50 PM
Lex8h(Projected)	64.7 dB	Overload	No
LAFmax with Time	82.0 dB (6/13/2019 12:04:20 PM)	Pause Duration	00:00:00 HH:MM:SS
LAImax with Time	82.4 dB (6/13/2019 12:04:20 PM)	Response	Random
LAFmin with Time	55.8 dB (6/13/2019 12:06:00 PM)	Run Number	152
LAImin with Time	56.1 dB (6/13/2019 12:06:00 PM)	Serial Number	1274486
LZeq	80.1 dB	Start Date & Time	6/13/2019 12:01:50 PM
LCeq	75.2 dB	Site	Unallocated
LCeq-LAeq	10.5 dB	Location	Unallocated
LAleq	66.7 dB	Person	Unallocated
LAE	95.5 dB	Process	Unallocated
Calibration (Before) Date	6/13/2019 12:01:02 PM	Result	Cumulative
Calibration (Before) SPL	114 dB	LAF 50%	61.5 dB
Calibration (After) Date	6/13/2019 4:30:07 PM	LAF 90%	58.5 dB

Calibration Drift	-0.1 dB	LAF 95%	58 dB
LAF 10%	67.5 dB		

Notes



Certificate of Conformity and Calibration

Instrument Type:-	**CEL-633C**		
Serial Number	2670911		
Firmware revision	V006-03		
Microphone Type:-	CEL-251	Preamplifier Type:-	CEL-495
Serial Number	02540	Serial Number	004208
Instrument Class/Type:-	1		

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	19.8 °C	**Test Engineer:-**	Stephen Potten
	51.2 %RH	**Date of Issue:-**	November 26, 2018
	1020.2 mBar		

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

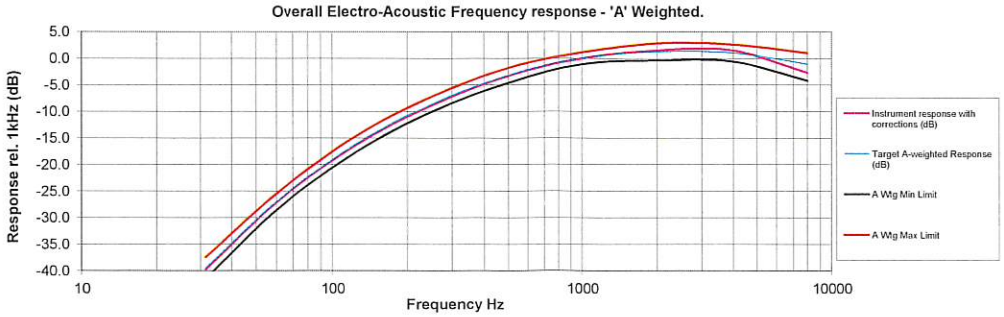
Test Summary:-

Self Generated Noise Test	**All Tests Pass**
Electrical Signal Test Of Frequency Weightings	**All Tests Pass**
Frequency & Time Weightings At 1 kHz	**All Tests Pass**
Level Linearity On The Reference Level Range	**All Tests Pass**
Toneburst Response Test	**All Tests Pass**
C-peak Sound Levels	**All Tests Pass**
Overload Indication	**All Tests Pass**
Acoustic Tests	**All Tests Pass**

Combined Electro-Acoustic Frequency Response - *A Weighted*

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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Web: www.casellausa.com

CASELLA CEL

Certificate of
Conformance and Calibration for

CEL-120 Acoustic Calibrator

Applicable Standards :-IEC 60942: 2003 & ANSI S1.40: 2006

CEL-120/1 Class 1 ☑

CEL-120/2 Class 2 ☐

Serial No: 2383995

Firmware: 04

Temperature: 19 °C Pressure: 1013 mb %RH 48

Frequency = 1.00kHz ± 2Hz T.H.D. = < 1%	Calibration Level	
SPL @ 114.0dB Setting	114.01	dB
SPL @ 94.0dB Setting (CEL-120/1 only)	93.98	dB/N.A

Engineer :- Date :- 17 OCT 2018

Company test equipment and acoustic working standards, used for conformance testing, are subject to periodic calibration, traceable to UK national standards, in accordance with the company's ISO9001 Quality System.

DECLARATION OF CONFORMITY

This certificate confirms that the instrument specified above has been produced and tested to comply with the manufacturer's published specifications and the relevant European Community CE directives.

Casella CEL (U.K.),
Regent House, Wolseley Road, Kempston, Bedford, MK42 7JY
Phone: +44 (0) 1234 844100 Fax: +44 (0) 1234 841490
E-mail: info@casellacel.com
Web: www.casellameasurement.com

1980132A-01

CASELLA CEL

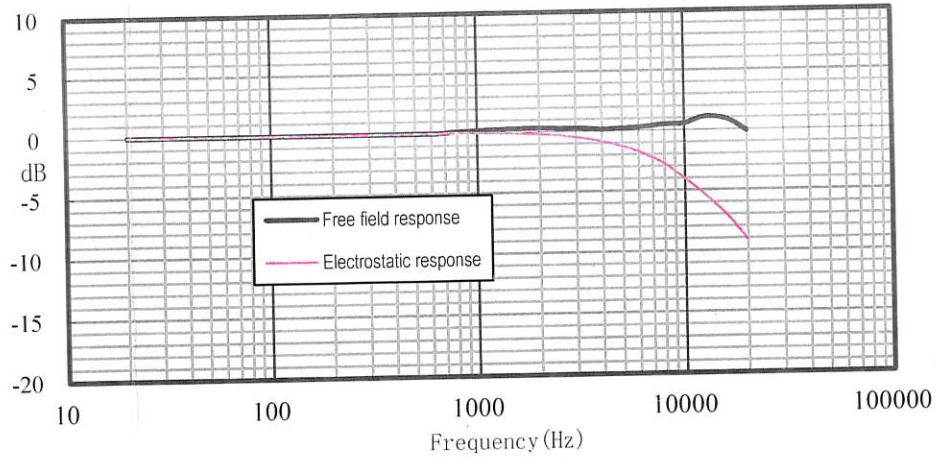
Calibration Chart for 1/2" Prepolarized Condenser Microphone Type CEL 251

Serial No: 02540

Open Circuit Sensitivity Level:
-26.3 dB re 1 V/Pa
or 48.4 mV/Pa

Conditions of Test:
Frequency: 250 Hz
Barometric Pressure: 101.3 kPa
Relative Humidity: 50 %
Temperature: 23 ℃
Signature: Qiao
Date: 06/11/2018

Specifications:
Outside Diameter:
13.2mm with protecting grid
12.7mm without protecting grid
Mounting Thread:
11.7 mm. 60 UNS 2
Capacitance: 16.0 pF(nominal)
Ambient Pressure:
-0.02 to +0.02 dB/kPa for ±10% pressure change at 250 Hz
Temperature Coefficient:
-10℃ to +50℃
Approx. –0.015 dB/K at 250 Hz
Dynamic Range: SPL below which the total harmonic distortion remains less than 3%: 146dB



CASELLA CEL

Certificate of
Conformance and Calibration for

CEL-120 Acoustic Calibrator

Applicable Standards :-IEC 60942: 2003 & ANSI S1.40: 2006

CEL-120/1 Class 1 [✓]

CEL-120/2 Class 2 [ ]

Serial No: 3574248

Firmware: 04

Temperature: 22.8 °C Pressure: 1004.8 mb %RH 62.7

Frequency = 1.00kHz ± 2Hz T.H.D. = < 1%	Calibration Level	
SPL @ 114.0dB Setting	114.02	dB
SPL @ 94.0dB Setting (CEL-120/1 only)	93.94	dB/N.A

Engineer :- L. Cole Date :- 30 JUL 2018

Company test equipment and acoustic working standards, used for conformance testing, are subject to periodic calibration, traceable to UK national standards, in accordance with the company's ISO9001 Quality System.

DECLARATION OF CONFORMITY

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Web: www.casellameasurement.com

198032A-01

Certificate of Conformity and Calibration

Instrument Type:- CEL-633C

Serial Number 1488256
Firmware revision V006-02

Microphone Type:- CEL-251
Serial Number 02803

Preamplifier Type:- CEL-495
Serial Number 003987

Instrument Class/Type:- 1

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:- 29 °C, 45 %RH, 1006 mBar

Test Engineer:- Stephen Potten
Date of Issue:- August 3, 2018

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

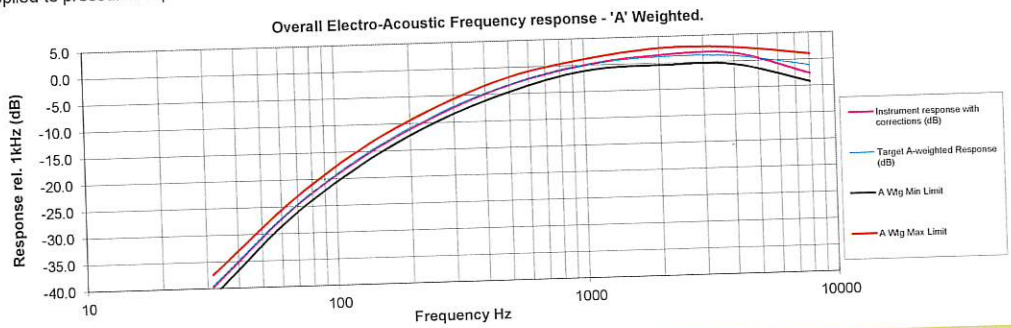
Test Summary:-

Self Generated Noise Test	All Tests Pass
Electrical Signal Test Of Frequency Weightings	All Tests Pass
Frequency & Time Weightings At 1 kHz	All Tests Pass
Level Linearity On The Reference Level Range	All Tests Pass
Toneburst Response Test	All Tests Pass
C-peak Sound Levels	All Tests Pass
Overload Indication	All Tests Pass
Acoustic Tests	All Tests Pass

Combined Electro-Acoustic Frequency Response - *A Weighted*

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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E-mail: info@casellausa.com
Web: www.casellausa.com

Certificate of Conformity and Calibration

Instrument Type:-	**CEL-633C**
Serial Number	4278006
Firmware revision	V006-01
Microphone Type:-	**CEL-251**
Serial Number	02467
Preamplifier Type:-	**CEL-495**
Serial Number	003570
Instrument Class/Type:-	1

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	26 °C	**Test Engineer:-**	Stephen Potten
	42 %RH	**Date of Issue:-**	January 22, 2018
	1011 mBar		

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

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Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

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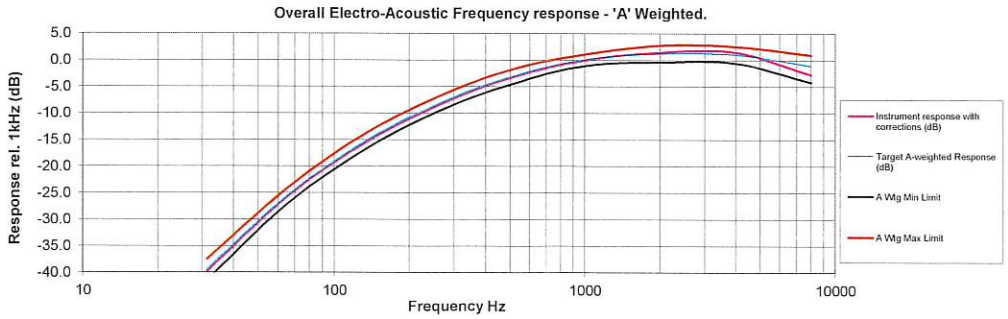

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Certificate of Conformity and Calibration

Instrument Type:-	**CEL-633C**
Serial Number	4278006
Firmware revision	V006-01
Microphone Type:-	CEL-251
Serial Number	02470
Preamplifier Type:-	CEL-495
Serial Number	003570
Instrument Class/Type:-	1

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	26 °C	**Test Engineer:-**	Stephen Potten
	42 %RH	**Date of Issue:-**	January 22, 2018
	1011 mBar		

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

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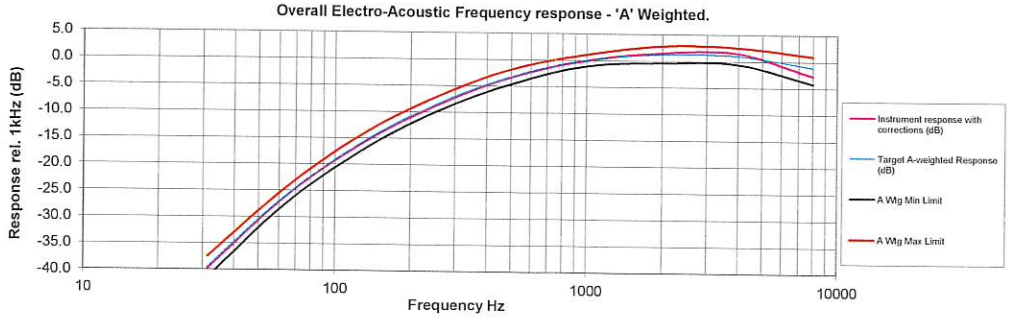

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Tested to CEL-63X test sheet TP444 revision 01-00

Casella CEL, Inc.
415 Lawrence Bell Dr., Unit #4
Buffalo, NY 14221

Tel: (800) 366-2966
Fax: (716) 276-3040
info@casellausa.com

CASELLA CEL - SERVICE RETURN SHEET

CUSTOMER INFORMATION

DATE RECEIVED: July 25, 2018

OUR SERVICE JOB #: 13282

COMPANY NAME: Equity Environmental Engineering
500 International Drive, Suite 150
Mount Olive, NJ 07828

CONTACT NAME: Amber Kartalyan
amber.kartalyan@equityenvironmental.com

LIST OF INSTRUMENTS RETURNED

MODEL:	S/N
120/2	4667874
633C	1274486

ENVIRONMENTAL CONDITIONS

TEMPERATURE :	24	°C
HUMIDITY :	79.9	%RH
AIR PRESSURE :	1020.3	mbar
OFFSET CORRECTION :	0.06	dB

SERVICE REQ.: Calibration

DESC. OF FAULT: Calibration

ACTION TAKEN: CEL-120/2 S/N: 4667874: & CEL-633.C1 S/N: 1274486: Both pass calibration.

SERVICE ENGINEER : Ken Umbeer

DATE FINISHED: July 30, 2018

Certificate of Conformity and Calibration

CASELLA CEL

Instrument Model: CEL-120/2 Acoustic Calibrator **Certificate #:** 68667

Serial Number: 4667874

Calibration References:

Casella CEL hereby certifies that the above listed sound measuring instrument has been tested according to the manufacturer's specifications and meets the requirements of the relevant American National Standards Institute (ANSI) Standard for Sound Calibrators S1.40 - 1983 (R1997). This instrument was calibrated against standards which are either traceable to the National Institute of Standards and Technology (NIST) or they have been derived by approved ratio techniques.

Test Conditions:

23.5	°C	**Date of Issue:-**	July 30, 2018
79.9	%RH	**Due Date:-**	July 30, 2019
1020.3	mBar	**Service Engineer:-**	Ken Umbeer

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards. This product is certified as being compliant to the requirements of the CE Directive. Test accuracy ratio (TAR) ≥1.

Summary:

The data represents the response of the sound level meter calibrator to the reference source corrected for atmospheric conditions at the time of calibration.

	Nominal Value	Tolerance	As Received	As Adjusted
Frequency (Hz)	1000.0	±5.0	1000.0	1000.0
Level (dB)	114.0	±0.3	114.1	114.0

Standards Used in Calibration:		Serial Number	Calibration Due Date	Certificate Number
Sound Level Meter:	CEL-620.A1	5130002	1/30/2019	28473-2
Multimeter:	Fluke 45	4995184	1/16/2019	1626798

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CASELLA

Certificate of Conformity and Calibration

Instrument Model:-	**CEL-633C**	**Preamplifier Type:-**	**CEL-495**
Serial Number	1274486	Serial Number	3409
Firmware revision	V006-01		
Microphone Type:-	**CEL-251**	As Received:-	114.7
Serial Number	1710	As Adjusted:-	114.0
Instrument Class/Type:-	1		

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- *The test sequences performed in this report are in accordance with the current Sound level meter Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	23.5 °C	Test Engineer:-	Ken Umbeer
	79.9 %RH	Date of Issue:-	July 30, 2018
	1020.3 mBar	Date Due:-	July 30, 2019

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to NIST. This product is certified as being compliant to the requirements of the CE Directive.

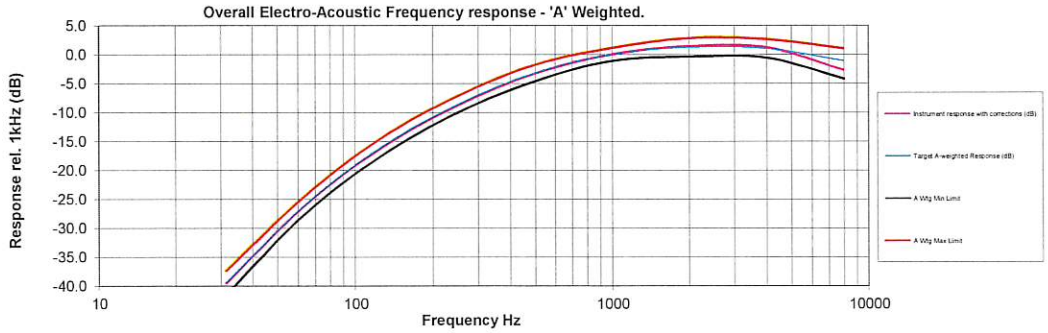
Test Summary:-

Self Generated Noise Test	**All Tests Pass**
Electrical Signal Test Of Frequency Weightings	**All Tests Pass**
Frequency & Time Weightings At 1 kHz	**All Tests Pass**
Level Linearity On The Reference Level Range	**All Tests Pass**
Toneburst Response Test	**All Tests Pass**
C-peak Sound Levels	**All Tests Pass**
Overload Indication	**All Tests Pass**
Acoustic Tests	**All Tests Pass**

Combined Electro-Acoustic Frequency Response - *A Weighted*

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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