



**OFFICE OF ENVIRONMENTAL REMEDIATION**

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**DECISION DOCUMENT**  
**E-Designation Remedial Action Plan Approval**

August 22, 2018

Re: 107-67 Merrick Boulevard  
Queens Block 10244, Lot 211 (former Lot 215)  
Hazardous Materials and Noise “E” Designation  
E-175: Downtown Jamaica Redevelopment - CEQR 05DCP081Q - 9/10/2007  
OER Project Number 17EH-N039Q

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Plan (RAP) dated June 15, 2018 with Stipulation Letter dated August 21, 2018 and the Remedial Action Plan for Noise dated July 31, 2018 for the above-referenced project.

These Plans were submitted to OER under the E-Designation Program.

**Project Description**

The site is currently vacant with no structures or dwellings. The proposed future use of the Site will consist of a new 2-story commercial building. The new building will have six retail spaces on the first floor (gross 6058.61-square feet) and one retail/office space (gross 5503.78-square feet) with an outdoor roof area on the second floor. The building will have an 18-foot setback from the sidewalk along Merrick Boulevard which will be utilized for parking in which no excavation is currently proposed. Stormwater infrastructure plans will be presented to OER prior to start of construction. The existing asphalt covered area of the proposed parking area will be graded and repaved. Building footings are planned to be set at 5 feet below grade (estimated elevation of 24.40 feet). The entire building footprint will be excavated to approximately 5 feet below grade. Approximately 1,122 cubic yards (~1,685 tons) of soil are slated for removal during development within the building footprint. There will be no landscaped areas as the parking lot and building will encompass the entire site footprint.

**Statement of Purpose and Basis**

This document presents the remedial action for the E-Designation Program project known as “107-67 Merrick Boulevard” pursuant to the Zoning Resolution and §24 - 07 of the Rules of the City of New York.

**Description of Selected Remedy for Hazardous Materials**

The remedial action selected for the 107-67 Merrick Boulevard site is protective of public health and the environment. The elements of the selected remedy are as follows:

1. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
2. Selection of Unrestricted Use Soil Cleanup Objectives (SCOs).
3. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
4. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility(s).
5. Excavation and removal of soil/fill exceeding Unrestricted Use SCOs.
6. The building will have an 18-foot setback from the sidewalk along Merrick Boulevard which will be

utilized for parking in which no excavation is proposed. The existing asphalt covered area of the proposed parking area will be graded and repaved. Building footings are planned to be set at 5 feet below grade (estimated elevation of 24.40 feet). Approximately 1,122 cubic yards (~1,685 tons) of soil are slated for removal during development within the building footprint. There will be no landscaped areas as the parking lot and building will encompass the entire site footprint. There will be no cellar, basement or sub-grade areas. The building will have an 18-foot setback from the sidewalk along Merrick Boulevard which will be utilized for parking. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media on-Site.

7. Management of excavated materials including temporary stockpiling and segregation in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials.
8. Removal of all USTs (if encountered) during soil/fill removal actions. Registration of tanks and reporting of any petroleum spills associated with USTs and appropriate closure of these petroleum spills in compliance with applicable local, State and Federal laws and regulations.
9. Transportation and off-Site disposal of all soil/fill material at licensed or permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media on-Site.
10. Collection and analysis of five end-point samples to determine the performance of the remedy with respect to attainment of Unrestricted Use SCOs.
11. Import of materials (if any) to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
12. Performance of all activities required for the remedial action, including acquisition of required permits and attainment of pretreatment requirements, in compliance with applicable laws and regulations.
13. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
14. Construction and maintenance of an engineered composite cover consisting of 4-inch concrete building slab, concrete or otherwise paved parking area (anticipated to be minimum three inches thick).
15. Installation of a vapor barrier system beneath the new building slab. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier will be Stego Wrap 20-mil manufactured by Stego Industries.
16. Installation of an active sub-slab depressurization system (SSDS) consisting of a network of horizontal pipe set in the middle of a gas permeable layer immediately beneath the building slab and vapor barrier system. The horizontal piping will consist of fabric wrapped, perforated schedule 40 4-inch PVC pipe connected to a 4-inch steel riser pipe that penetrates the slab and travels through the building to the roof. Manifolded zones, each with a dedicated blower and appurtenances, are planned for each of the six retail spaces. The gas permeable layer will consist of a 6-inch thick layer of AASHTO #57 stone. The pipe will be finished at the roof line with a screened, tee vent cap to prevent insect and rain infiltration. Vent will terminate 3 feet above the roof and 10 ft clear radius from HVAC equipment. The active SSDS will be hardwired and will include a Radon Away Model RP145 blower installed on the roof line and a pressure gauge and alarm located in an accessible area in the building. The active SSDS is an Engineering Control for the remedial action. The remedial engineer will certify in the RCR that the active SSDS was designed and properly installed to establish a vacuum in the gas permeable layer and a negative (decreasing outward) pressure gradient across the building slab to prevent vapor migration into the building.
17. Submission of a Remedial Closure Report (RCR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and lists any changes from this RAP.

The property will continue to be registered with an E-Designation at the NYC Buildings Department.

**Description of Selected Remedy for Noise**

The elements of the remedial action selected for Noise for the 107-67 Merrick Boulevard site are as follows:  
In order to meet the requirements of the E Designation, the following window/wall attenuation(s) will be achieved at the locations described below:

1. 33 dBA for all facades;
2. 28 dBA in the commercial space based on an allowed reduction of 5 dBA from the attenuation requirement outlined in the E-Designation.
3. 33 dBA with the masonry/ wall elements using window/wall composite calculations

The following window will be installed:

<b>Façade Floor Range</b>	<b>OITC Rating</b>	<b>OITC Certification</b>	<b>Manufacturer and Model</b>	<b>Glazing</b>
First Floor Storefront-Merrick Blvd and 108 <sup>th</sup> Ave (windows 4 and 5)	29	See ASTM E-90 acoustical report for the exact window and glazing in Appendix F.  Additional framing report included as Appendix F.	EFCO 403X Storefront	1" overall -1/4" glass, 7/16" airspace, 5/16" glass
Second floor office space (window 1)	29	See ASTM E-90 acoustical report for the exact window and glazing in Appendix F.	EFCO 403X	1" overall -1/4" glass, 7/16" airspace, 5/16" glass
Second floor office space – Merrick Blvd (windows 2, 3)	29	See ASTM E-90 acoustical report for the exact window and glazing in Appendix F.	EFCO 403X 2"X4-12"	1" overall -1/4" glass, 7/16" airspace, 5/16" glass
Second floor office space – Merrick Blvd (windows 2, 3)	28	See ASTM E-90 acoustical report for the exact window and glazing in Appendix F.	EFCO 450XPO 2"X4-12"	1" overall -1/4" glass, 7/16" airspace, 5/16" glass
Second floor office space- 108 <sup>th</sup> Ave (window 6)	29	See ASTM E-90 acoustical report for the exact window and glazing in Appendix F.  .	EFCO 403X 2"X4-12"	1" overall -1/4" glass, 7/16" airspace, 5/16" glass

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
Second floor office space- 108 <sup>th</sup> Ave (window 6)	28	See ASTM E-90 acoustical report for the exact window and glazing in Appendix F.	EFCO 450XPO 2"X4-12"	1" overall -1/4" glass, 7/16" airspace, 5/16" glass

Based on window-wall composite calculations, the windows proposed for the 2<sup>nd</sup> floor and proposed masonry would achieve the residential attenuation requirement resulting in a 45 dB(A) interior noise condition. The calculations assume use as a single, open layout space. If the proposed future use of the space is as a daycare / school tenant and requires partitioning into smaller spaces, however, the applicant will need to reevaluate the window/wall attenuation accomplished in each space in order to maintain the residential attenuation standard.

In order to satisfy the requirements of the E Designation, Alternate Means of Ventilation (AMV) will be installed in order to maintain a closed window condition. AMV for this project will be achieved by:

1. Central System: Installing Lennox EL280H090XP48B, EL280H090XP36B and EL280H090XP36A model split systems with condensing systems (Lennox TSA048S4, and TSA036S4) manufactured by Lennox on the roof. Fresh air intakes are located on the roof and air handling units and associated ducting will provide fresh air to each retail space. R.A. certified mechanical drawings depicting the AMV system and the pathway of fresh air delivery into each retail space are provided in Appendix I. A letter from the engineer who designed the HVAC system that describes the system, the equipment involved (stating the manufacturer and model information), and how fresh air is delivered into each of the retail spaces is attached as Appendix J.
2. Compliance with Mechanical Code: Providing outside air to commercial spaces and common areas such as lobbies and corridors in accordance with the NYC Mechanical Code.

The remedies for Hazardous Materials and Noise E Designation described above conform to the promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and take into consideration OER guidance, as appropriate.

August 22, 2018

Date



Noel Anderson  
Project Manager

August 22, 2018

Date



Zach Schreiber, Ph.D.  
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