



**OFFICE OF ENVIRONMENTAL REMEDIATION**

100 Gold Street – 2<sup>nd</sup> Floor  
New York, New York 10038

**Mark P. McIntyre, Esq.**  
**Director**

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**NOTICE TO PROCEED**  
**DOB Job Number NB 321386059**

July 27, 2020

Re: 573 Emerald Street; 318 – 336 Amber Street  
Brooklyn Block 4496, Lot 15 (Former Lots 32 (partial), 33 (partial), 35 (partial), 39, 42, 43, 44, 45, 47, 48 (partial), 56)  
Hazardous Materials, Air Quality, and Noise “E” Designation  
E-432: Linden Boulevard Rezoning - CEQR 17DCP155K - 10/31/2017  
OER Project Number 18EHAN410K

Dear Brooklyn Borough Commissioner:

The New York City Office of Environmental Remediation (OER) hereby issues a Notice to Proceed for the above-referenced Department of Buildings Job Number. This correspondence is provided pursuant to OER’s responsibilities as established in Chapter 24 of Title 15 of the Rules of the City of New York and Section 11-15 of the Zoning Resolution of the City of New York. The Applicant has filed a Hazardous Materials remedial action work plan, Noise remedial action plan, and Air Quality remedial action plan that are acceptable to this Office and has prepared a Construction Health and Safety Plan for implementation on this project. OER’s Decision Document that defines the remedial actions required for this project has been prepared and filed and is available on request.

At the conclusion of remedial activities required under this action, the Zoning Resolution and §24-07 of the Rules of the City of New York requires that OER issue a Notice of Satisfaction signifying that all remedial action requirements established for this project have been satisfied prior to issuance of the Certificate of Occupancy or Temporary Certificate of Occupancy by Department of Buildings.

If you have any questions or comments, please feel free to contact Samantha Catalanotto at 212-788-2676.

Sincerely,

Shaminder Chawla  
Deputy Director

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

July 27, 2020

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Brooklyn Block 4496, Lot 15 (Former Lots 32 (partial), 33 (partial), 35 (partial), 39, 42, 43, 44, 45, 47, 48 (partial), 56)  
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The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated May 2020 with Stipulation Letter dated July 21, 2020 and the Remedial Action Plan for Air Quality and Noise dated April 2020 for the above-referenced project.

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

**Project Description**

The applicant is proposing to build a new 8-story building. The building will be used for residential on floors 1 through 8 as well as residential amenity spaces on floor 1. The building will rise to a height of 96’-8” (inclusive of bulkhead). The building will have no cellar. The ground floor will include 29,346-sf of screened parking; the spaces directly adjoining the parking are either mechanical rooms or storage and do not have fenestration. The second floor will include two terraces for residential recreation use; the north terrace includes approximately 2,600-sf of recreation space, and the south terrace includes approximately 3,700-sf of recreation space.

**Statement of Purpose and Basis**

This document presents the remedial action for the E-Designation Program project known as “573 Emerald Street - Linden Boulevard Phase II, Building 2” 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 573 Emerald Street - Linden Boulevard Phase II, Building 2 site is protective of public health and the environment. The elements of the selected remedy are as follows:

The proposed remedial action will consist of:

1. Performance of a Community Air Monitoring Program (CAMP) for particulates and VOCs.
2. Establishment of Track 4 Site-specific 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 were collected at a frequency dictated by disposal facility(s). Waste Characterization samples were collected in accordance with Clean Earth’s requirements for their Carteret and Prospect Park (PPark) disposal facilities. A representative from Clean Earth obtained the samples from five test pits excavated at the site.

5. Excavation and removal of soil/fill exceeding Track 4 Site Specific SCOs.
  - a. The proposed development for Building 3 calls for a 6,000 sq. ft. partial cellar. The cellar will be excavated to a depth of 10 ft. bgs. The remaining building area will remain unexcavated and will be slab on grade. A small portion of property will be excavated to the depths of approximately 5 feet below grade for the elevator pit(s).
  - b. Building 2 is slab-on-grade and does not require any excavation. The mechanical room for the elevators will be roof-top mechanical rooms.
6. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
7. Management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials.
8. Removal of all USTs that are encountered during soil/fill removal actions. Registration of tanks and reporting of any petroleum spills associated with UST's 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 a total of eight (8) end-point samples [four (4) end-point samples for each building] to determine the performance of the remedy with respect to attainment of SCOs.
11. Demarcation of residual soil/fill in landscaped areas.
12. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
13. Construction of an engineered composite cover consisting of the building slabs, surrounding adjacent concrete paved areas, the cellar, and at-grade parking area(s). The cover type will be 6-inch thick concrete building slab with an 8-inch clean granular sub-base beneath all building and parking areas.
14. Installation of a vapor barrier system consisting of vapor barrier beneath the building slab and outside of sub-grade foundation sidewalls to meet grade to mitigate soil vapor migration into the building. The vapor barrier system will consist of a 20-mil Grace PREPRUFE®; 120R & 160R membrane (or OER-approved equivalent) below the slab-at-grade and outside all sub-grade foundation sidewalls throughout the full building area. Grace FLORPRUFE®; 300R membrane (or OER-approved equivalent) will be used beneath the cellar floor slab. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier system is an Engineering Control (EC) for the remedial action. The remedial engineer will certify in the RCR that the vapor barrier system was designed and properly installed to mitigate soil vapor migration into the building.
15. 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.
16. Dewatering will be performed in compliance with city, state, and federal laws and regulations. Extracted groundwater will either be containerized for off-site licensed or permitted disposal or will be treated under a permit from New York City Department of Environmental Protection (NYCDEP) to meet pretreatment requirements prior to discharge to the sewer system.
17. Implementation of stormwater pollution prevention measures in compliance with applicable laws and regulations.
18. Submission of a RCR that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, lists any changes from this RAP, and describes all Engineering and Institutional Controls to be implemented at the Site.
19. Submission of an approved Site Management Plan (SMP) in the Remedial Closure Report (RCR) for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.
20. The property will continue to be registered with an E-Designation at the NYC Buildings Department. Establishment of ECs and Institutional Controls (ICs) in this RAP and a requirement that management of these controls must be in compliance with an approved SMP. ICs will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it

safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

#### **Description of Selected Remedy for Air Quality**

The elements of the remedial action selected for Air Quality for the 573 Emerald Street - Linden Boulevard Phase II, Building 2 site are as follows:

In order to satisfy the requirements of the E-designation, electric will be utilized at the site for space heating, hot water, and HVAC systems. Heating and cooling will be through a variable refrigerant flow (VRF) multi split system by LG. Each apartment bedroom and living room will be provided with one wall mounted air handler each. Apartments will be grouped into multiple zones. Each zone will be provided through an LG Hydro Kit. The hydro kit utilizes HVAC waste heat to pre-heat domestic water through an integrated energy recovery heat exchanger. Common space HVAC will be provided through the VRF system utilizing ceiling mounted cassette style air handlers. The HVAC system for all apartment zones will also be provided with heat recovery. Domestic water heating will be provided by multiple methods consisting of geothermal heat pump by Nyle model C250W (1), air cooled electric heat pump by Ice Air model IA-G60B (2), and a solar thermal array by Sunman model VHP30. Six thousand gallons of btu water storage will be provided using three separate cement lined tanks.

#### **Description of Selected Remedy for Noise**

The elements of the remedial action selected for Noise for the 573 Emerald Street - Linden Boulevard Phase II, Building 2 site are as follows:

In order to meet the requirements of the E-Designation, the following window/wall attenuation requirement(s) will be achieved at the locations described below:

1. 33 dBA for the western façade (Emerald Street); and
2. 31 dBA for the northern, southern, and eastern facades.

The following windows will be installed:

<b>Façade Floor Range</b>	<b>OITC Rating</b>	<b>OITC Certification</b>	<b>Manufacturer and Model</b>	<b>Glazing</b>
Western, Southern Facades  Floors 1 through 8  Residential Use (W1, W1A W2, W2A, W3A, W4, W4A W5, W5A)	33 dBA	See ASTM E-90 acoustical Lab Test Report # I6989.01- 113-11-R1, Option # I6989.01I for the exact window and glazing in Appendix G	Intus Polymer Steel Reinforced Supera System Casement	33.38 mm (1- 9/16") IG (10 mm [3/8"] annealed exterior, 20 mm [7/8"] argon, 8.38 mm [5/16"] laminated interior)
Eastern, Northern Façades  Floors 1 through 8  Residential Use (W1, W1A W2, W2A, W3A, W4, W4A W5, W5A)	31 dBA	See ASTM E-90 acoustical Lab Test Report # I6989.01- 113-11-R1, Option # I6989.01H for the exact window and glazing in Appendix G	Intus Polymer Steel Reinforced Supera System Casement	32.98 mm (1-1/4") IG (4mm [5/32"] annealed exterior, 20 mm [25/32"] argon, 8.38 mm [5/16"] laminated interior)

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
South (Courtyard Wing), North (Courtyard Wing), Partial North at Property, Partial South (Courtyard Wing)  Floors 6 through 8  Residential Use (W3, W3A)	33 dBA	See ASTM E-90 Lab Test Report # I6989.01-113-11-R1, Option # I6989.01I for the exact window and glazing in Appendix G	Intus Polymer Steel Reinforced Supera System Casement	33.38 mm (1-9/16") IG (10 mm [3/8"] annealed exterior, 20 mm [7/8"] argon, 8.38 mm [5/16"] laminated interior)
Western Façade  Floors 1 through 8  Communal Use (SF-101, SF-207, SF-301, SF-401, SF-501, SF-601, SF-701, SF-801)	33 dBA	See ASTM E-90 acoustical report for the exact window and glazing in Appendix G	Kawneer Trifab 601/601T/601 UT Framing System	1" insulated clear tempered cardinal Low-E 366 glass, 1/4" clear tempered Low-E 366 glass, 1/2" air space, 1/4" clear tempered glass

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. **Trickle Vents:** Installing Brookvent – SM1000 trickle vents manufactured by Intus in all residential spaces on floors one through eight. Fresh air will be provided to all bedrooms and living rooms by the trickle vents. Heating and cooling will be provided to residential spaces receiving fresh air via trickle vents through a VRF split system, with wall-mounted fan units at each bedroom and living room, ceiling mounted units in the common spaces, and rooftop condensing units.
2. **Compliance with Mechanical Code:** Providing outside air to commercial spaces and common areas such as lobbies and corridors in accordance with the 2014 NYC Mechanical Code.

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

7/27/2020

Date



Samantha Catalanotto  
Project Manager

7/27/2020

Date



Shaminder Chawla  
Deputy Director – Hazardous Materials

7/27/2020



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Date

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Maurizio Bertini, Ph.D.  
Assistant Director – Air Quality and Noise

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