



OFFICE OF ENVIRONMENTAL REMEDIATION

100 Gold Street – 2nd Floor
New York, New York 10038

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Director

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NOTICE TO PROCEED
DOB Job Number NB 321593888

November 19, 2021

Re: 583 Emerald Street; Linden Boulevard Phase III – Building 3
Brooklyn Block 4496, Lot 1 (Former Lots 27, 29, 23, 33, 35 (partial))
Hazardous Materials, Air Quality, and Noise “E” Designation
E-432: Linden Boulevard Rezoning - CEQR 17DCP155K - 10/31/2017
OER Project Number 18EHAN409K

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

November 19, 2021

Re: 583 Emerald Street; Linden Boulevard Phase III – Building 3
Brooklyn Block 4496, Lot 1 (Former Lots 27, 29, 23, 33, 35 (partial))
Hazardous Materials, Air Quality, and Noise “E” Designation
E-432: Linden Boulevard Rezoning - CEQR 17DCP155K - 10/31/2017
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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 November 1, 2021 and the Remedial Action Plan for Air Quality and/or Noise dated November 2021 for the above-referenced project.

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

Project Description

Building 3 will consist of an 8-story residential building with 144,858 gsf. The building will be developed with 135,081 sf of residential floor area with 154 dwelling units and 9,777 gsf of ground floor area for parking. The partial cellar will be 10 ft. bgs and approximately 6,000 sf.

Statement of Purpose and Basis

This document presents the remedial action for the E-Designation Program project known as “583 Emerald Street - Linden Boulevard Phase III; Building 3” 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 583 Emerald Street - Linden Boulevard Phase III; Building 3 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 583 Emerald Street - Linden Boulevard Phase III; Building 3 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. Apartments units heating and cooling systems will utilize electric heat pump VRF

multi split units (LG MULTI V™ S Heat Pump). Apartment ventilation will utilize unitized energy recovery ventilation (REWEW AIR, GR90). Domestic hot water heaters and storage tanks are electrically powered (ICE AIRE CCHPW550-S(X2)). Common spaces will utilize electric heat pump VRF split units, wall mounted, ducted, and cassette style air handles, (LG MULTI V™ S Heat Pump). Common spaces ventilation will utilize energy recovery ventilation (RENEW AIR, GR90). Electric heaters will be provided in corridors and utility/mechanical rooms.

As the space heating, hot water, and HVAC systems are powered electrically, there is no exhaust stack associated with the proposed development.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the 583 Emerald Street - Linden Boulevard Phase III; Building 3 site are as follows:

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

1. 31 dBA for the façades facing Amber Street (east); and
2. 33 dBA for the façades facing Emerald Street (west).

The following windows will be installed:

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
Amber Street Façade (East) Floors 1-8 Residential	31 dB(A) (required 31)	See ASTM E-90 acoustical report for exact window and glazing in Appendix F. Report # I6989.01-113-11-R1, Option # I6989.01H	Intus Windows Polymer Street Reinforced SUPRA System Casement Windows	1-1/4" IG (5/32" annealed exterior, 25/32" argon, 5/16" laminated interior)
Amber Street Façade (East) Floors 1-8 Residential	31 dB(A) (required 31)	See ASTM E-90 acoustical report for exact window and glazing in Appendix F. Report # I6988.01-113-11-R0, Option # I6988.01I	Intus Windows Polymer Street Reinforced SUPRA System Fixed CW/AW Windows	1-11/32" IG (3/8" annealed exterior, 21/32" argon, 5/16" annealed interior)
Emerald Street Façade (West) Floors 1-8 Residential	33 dB(A) (required 33)	See ASTM E-90 acoustical report for exact window and glazing in Appendix F. Report # I6989.01-113-11-R1, Option # I6989.01I	Intus Windows Polymer Street Reinforced SUPRA System Casement Windows	1-11/32" IG (3/8" annealed exterior, 21/32" argon, 5/16" annealed interior)
Emerald Street Façade (West) Floors 1-8 Residential	33 dB(A) (required 33)	See ASTM E-90 acoustical report for exact window and glazing in Appendix F. Report # I6988.01-113-11-R0, Option # I6988.01K	Intus Windows Polymer Street Reinforced SUPRA System Fixed CW/AW Windows	1-1/2" IG (3/8" annealed exterior, 13/16" argon, 5/16" laminated interior)
Emerald Street Façade (West) Floors 1 Residential Entry	33 dB(A) (no requirement)	See ASTM E-90 acoustical report for exact window and glazing in Appendix F. Report # A1020.01-113-11, ATI Data File # A1020.01	Kawneer IR501UT Fixed Storefront System	1-1/4" IG (1/4" tempered exterior, 1/2" argon, 1/2" laminated interior)

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. **VRF System:** The building will be heated and cooled by Variable Refrigeration Flow (CRF) systems (manufacturer: LG) for apartments and amenity spaces. The VRF systems are a heat pump system which provides both heating and cooling with air distributed by wall mounted indoor fan coil units for apartments and ceiling concealed ducted units for amenity spaces. An active heat recovery ventilation system is provided for each system individually and will provide 15 cfm per person in each apartment, while exhausting the kitchens and bathrooms. In all cases, the rate of outside air (cfm) delivered to each habitable space (bedrooms and living spaces) will meet or exceed that specified in the 2014 New York City Mechanical Code table 403.3. These rates will be the greater of 0.35 air changes per hour or 15 cfm per person, representing the outdoor ventilation otherwise provided by the operable windows.
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.

11/19/2021	
Date	Samantha Catalanotto Project Manager
11/19/2021	
Date	Maurizio Bertini, Ph.D. Assistant Director – Air Quality and Noise
11/19/2021	
Date	Shaminder Chawla Deputy Director – Hazardous Materials

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