Office of Environmental Remediation
100 Gold Street – 2nd Floor
New York, New York 10038

Shaminder Chawla
Director
Tel: (212) 788-8841

Notice to Proceed
DOB NOW Number B01209356-I1

October 16, 2025

Re: 590 Union Street
Brooklyn Block 441, Lot 18
Hazardous Materials and Noise "E" Designation
E-601: Gowanus Neighborhood Plan - CEQR 19DCP157K - 11/23/2021
OER Project Number 25EH-N149K / 26CVCP005K

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(s). This correspondence is provided pursuant to OER's responsibilities as established in Subchapter 7 of Chapter 14 of Title 43 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 and Noise 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 §43-1474 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 William Quinones at 212-788-2773.

Sincerely,

Zach Schreiber, Ph.D.
Assistant Director

cc: Paul Skema, Trifecta Equities – pskema@trifectaequities.com
Stephen Conte, StudiosC Architecture PLLC - sc@studiosc.net
Alexander Soskin, A&D Engineering, PLLC – ad@adnyeng.com
Ariel Czemerinski, AMC Engineering, PLLC – ariel@amc-engineering.com
Kevin Brussee, Brussee Environmental Corp. - kevinbrussee@hotmail.com
Jessica Bock, Brussee Environmental Corp. - jbock@brusseecorp.com
Patrick Recio, Brussee Environmental Corp. - precio@brusseecorp.com
Chawinie Reilly, Brussee Environmental Corp. - creilly@brusseecorp.com
Shaminder Chawla, Maurizio Bertini, Michelle Sarro, OER
William Quinones, OER

Office of Environmental Remediation
100 Gold Street – 2nd Floor
New York, New York 10038

Shaminder Chawla
Director
Tel: (212) 788-8841

Decision Document
NYC VCP, E-Designation Remedial Action Work Plan Approval

October 16, 2025

Re: 590 Union Street
Brooklyn Block 441, Lots 18
Hazardous Materials, Noise E Designation
E-601: Gowanus Neighborhood Plan - CEQR 19DCP157K - 11/23/2021
OER Project Number 25EH-N149K / 26CVCP005K

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated August 2025, with Stipulation Letter dated June 8, 2025 and the Remedial Action Plan for Noise dated October 2025 for the above-referenced project.

These Plans were submitted to OER under the NYC Voluntary Cleanup Program and E-Designation Program.

The RAWP was released for public comment for 30 days as required by program rule. That comment period ended on 09/05/2025. There were no public comments.

Project Description
The Site will be redeveloped with a new 11-story residential building with a full cellar occupying the first 65 ft of the Site. A 25 ft by 12 ft cellar level lightwell will be constructed behind the cellar and the rest of the 1,138 SF rear courtyard will be capped with concrete. The cellar will consist of two mechanical rooms, a trash compactor room, storage closets, and a residential accessory space for the 1st floor apartment above. The 1st floor will consist of a residential entrance/lobby, a residential amenity space fronting Union Street, and a rear residential apartment. The 2nd through 11th floors will consist of residential apartments. The current building will be demolished before redevelopment. The water table may be encountered during excavation.

Statement of Purpose and Basis
This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as “590 Union Street” pursuant to Title 43 of the Rules of the City of New York Chapter 14, Subchapter 1 and the Zoning Resolution and §43-1474 of the Rules of the City of New York.

Description of Selected Remedy for Hazardous Materials
The remedial action selected for the 590 Union Street site is protective of public health and the environment. The proposed remedial action will consist of:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan;
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds;
3. Establishment of Track 4 Site-Specific Soil Cleanup Objectives (SCOs);
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and

marking, and staking excavation areas;

5. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility. A Waste Characterization Report documenting sample procedures, locations, and analytical results shall be submitted to NYCOER prior to start of remedial action;
6. Excavation to a minimum depth of 10 ft will be required for first 75 ft of the lot for the cellar and lightwell/stairs with additional deeper excavation to 12 ft for footings/grade beams and 15 ft for the elevator pit. The top 2 ft of soil will be removed from the rear courtyard and then local excavation to a depth of approximately 8 ft will be performed to install drywells in the rear courtyard. Two hotspot excavations to remove SVOC, lead, and mercury exceedances above NYSDEC Part 375 RRSCOs.
    - Remedial excavation of a 10 ft by 10 ft SVOC hotspot area will be performed to a depth of approximately 15 ft below grade to remove the SB2 SVOC hotspot.
    - Remedial excavation of a 10 ft by 10 ft lead and mercury hotspot area will be performed to a depth of approximately 15 ft below grade to remove the SB1 lead and mercury hotspot.

    The total amount of soil anticipated for removal is approximately 1,500 cubic yards (2,250 tons);
7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID;
8. 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;
9. Removal of all underground storage tanks (USTs) 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;
10. Transportation and off-Site disposal of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan.
11. Collection and analysis of six site-wide end-point samples to determine the performance of the remedy with respect to attainment of Track 4 Site-Specific SCOs. A total of ten (10) hot spot end points will be collected; five from the area of SB1 and five from the area of SB2. Samples from the SB1 area will be analyzed for lead and mercury. Samples from the SB2 area will be analyzed for SVOCs.
12. Import of materials to be used for backfill, to raise grade, and to construct a site cover in compliance with this plan and in accordance with applicable laws and regulations;
13. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
14. Installation of a waterproofing membrane/vapor barrier system below the entire cellar slab, below/around footings/grade beams, behind all cellar walls to grade, and around/below the elevator pit to mitigate soil vapor migration into the building. The waterproofing membrane/vapor barrier system will consist of GCP Preprufe 300R Plus waterproofing membrane or OER-approved equivalent system. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier system is an Engineering Control for the Remedial Action. The remedial engineer will certify in the Remedial Action Report (RAR) that the vapor barrier system was designed and properly installed to mitigate soil vapor migration into the building;
15. Construction and maintenance of an engineered composite cover consisting of the following to prevent human exposure to residual soil/fill remaining at the Site:
    - Cellar Slab: Area of building will be capped with an 8-inch-thick concrete slab underlain with GCP Preprufe 300R Plus waterproofing membrane, and a layer of ¾" bluestone over residual and/or imported soil,
    - Elevator Pit Footing: Elevator pit footing to consist of a 24-inch-thick concrete mat slab underlain with GCP Preprufe 300R Plus waterproofing membrane over residual soil; and
    - Rear Courtyard: To be capped with a 4-inch-thick concrete slab underlain with residual soil and/or imported soil.
16. Performance of all activities required for the remedial action, including permitting requirements

and pretreatment requirements, in compliance with applicable laws and regulations;
17. Dewatering may be required during elevator pit and hot spot excavation, and if needed 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.
18. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations;
19. Submission of an approved Site Management Plan (SMP) in the Remedial Action Report (RAR) 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. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP; and
21. The property will continue to be registered with an E-Designation at the NYC Buildings Department. Establishment of Engineering Controls and Institutional Controls in this RAWP and a requirement that management of these controls must be in compliance with an approved SMP.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the 590 Union Street site are as follows:

The following windows and doors will be installed:

Window/Door Types	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
Residential Operable Windows - Red Union Street/South Facade Floors 1-7 - O-200.00 Rear/North Facade Floors Cellar-8 - O-200.00 Side/West Facade Floors 2-8 - O-202.00	28 (assumed framing loss 3 dBA) Full Assembly 28 required	Full assembly rating based on glass only OITC 31 manufacturer data from Saflex in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Glass manufactured by Saflex or OER approved equivalent	Triple Glazing – 1-3/4" – (1/4" – 1/2" AS – 1/4" – 1/2" AS – 1/4")
Residential Fixed Windows - Blue Union Street/South Facade Floors 1-8 - O-200.00 Rear/North Facade Floors Cellar-8 - O-200.00 Side/East Facade Floor 8 - O-201.00 Side/West Facade Floors 2-8 - O-202.00	28 (assumed framing loss 3 dBA) Full Assembly 28 required	Full assembly rating based on glass only OITC 31 manufacturer data from Saflex in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Glass manufactured by Saflex or OER approved equivalent	Triple Glazing – 1-3/4" – (1/4" – 1/2" AS – 1/4" – 1/2" AS – 1/4")

Residential Doors - Yellow Union Street/South Facade Floors 4-7 - O-200.00 Rear/North Facade Floors Cellar, 1, and 3-8 - O-200.00 Side Facade Floor 8 - O-300.00	28 (assumed framing loss 3 dBA) Full Assembly 28 required	Full assembly rating based on glass only OITC 31 manufacturer data from Saflex in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Glass manufactured by Saflex or OER approved equivalent	Triple Glazing – 1-3/4" – (1/4" – 1/2" AS – 1/4" – 1/2" AS – 1/4")

The applicant commits to demonstrating that the selected manufacturer's window products achieve the minimum OITC requirement outlined in the table above. If the selected manufacturer does not have ASTM E90 test on file for the specific window assemblies to be installed, a mockup will be laboratory tested as per ASTM E90 to demonstrate compliance with the minimum OITC requirement.

The glazing-only OITC ratings presented in the table may reduce substantially once noise transmission through the window frames is evaluated. The glazing presented above may need to be reevaluated if the attenuation losses due to framing elements render the window attenuation performance inadequate to satisfy the requirements. The labeled window schedule attached in Appendix A2 show the locations of the window/door types and glazing thicknesses.

Alternate Means of Ventilation

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:** Alternate means of ventilation (AMV) will be provided by installing Brookvent, model Airvent SM HY in each bedroom and living room at a minimum rate of one Brookvent, model Airvent SM HY per room. Fresh air will be provided to all bedrooms and living rooms by the Brookvent, model Airvent SM HY. Floor plans and elevation drawings showing the installation location of the Brookvent, model Airvent SM HY are included within Appendix A1. Specifications for the Brookvent, model Airvent SM HY are provided in Appendix H.
    - **HVAC System:** The cooling and heating in every residential unit will be provided via multi type electrical heat pump systems with a total of twenty-four (24) LG outdoor condensers, models ARUN024GSS4, ARUN038GSS4 and ARUN048GSS4 installed on the bulkhead level. Each condenser will be connected to the ducted air handlers, installed in each living /bedroom space. The cooling capacities of air handlers vary from 7.5 MBH to 19.1 MBH and depend on the cooling load of particular space inside the apartments. The heating capacities vary from 8.5 MBH to 21.5 MBH and depend on the heating load of particular space inside the apartments. Air handling units are manufactured by LG Model No.: ARNU073L1G4 (200 CFM), ARNU123L2G4 (400 CFM), ARNU183M1A4 (600 CFM), ARNU243M1A4 (800 CFM).
    - 150 CFM fresh air will be provided to the main lobby on the 1st floor will be provided by Energy Recovery Ventilator ERV-1 by rate as required by section 403 of NYC MC 2022.
    - 100 CFM fresh air will be provided to the Fitness Room in the cellar from the facade on Union Street via F.A.I. louver.
    - The ventilation in the residential corridors will be achieved via Energy Recovery Ventilator ERV-1, located on the main roof, model #HE07RT, manufactured by RENEWAIRE, providing 50 CFM corridor supply to the cellar and 2nd through 8th floors.
2. **Compliance with 2022 NYC Mechanical Code:** Providing outside air to residential common areas such as the lobbies, corridors, and amenity spaces in accordance with the 2022 NYC Mechanical Code.

The remedies for Hazardous Materials, 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.

William Quinones
Project Manager

Zach Schreiber, Ph.D.
Assistant Director

cc: Paul Skema, Trifecta Equities – pskema@trifectaequities.com
Stephen Conte, StudiosC Architecture PLLC - sc@studiosc.net
Alexander Soskin, A&D Engineering, PLLC – ad@adnyeng.com
Ariel Czemerinski, AMC Engineering, PLLC – ariel@amc-engineering.com
Kevin Brussee, Brussee Environmental Corp. - kevinbrussee@hotmail.com
Jessica Bock, Brussee Environmental Corp. - jbock@brusseecorp.com
Patrick Recio, Brussee Environmental Corp. - precio@brusseecorp.com
Chawinie Reilly, Brussee Environmental Corp. - creilly@brusseecorp.com
Shaminder Chawla, Maurizio Bertini, Michelle Sarro, OER
William Quinones, OER