



**OFFICE OF ENVIRONMENTAL REMEDIATION**

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

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

Tel: (212) 788-8841

**DECISION DOCUMENT**  
**NYC VCP, E-Designation**  
**Remedial Action Work Plan Approval**

May 20, 2022

Re: 689 East 223rd Street  
Bronx Block 4825, Lot 12  
Hazardous Materials and Noise E Designation  
E-279: Williamsbridge/ Baychester Rezoning - CEQR 11DCP148X - 10/5/2011  
OER Project Number 21EH-N219X / 22CVCP025X

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated April 2022, with Stipulation Letter dated April 25, 2022, and the Remedial Action Plan for Noise dated April 2022 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 12/19/2021. There were no public comments.

**Project Description**

The redevelopment project consists of constructing a new 7-story residential building. No cellar level is planned for this project. The 1<sup>st</sup> floor footprint will be 656 SF (approximately 22% of the lot) and will occupy the first 42'-3 1/2" of the lot. An 8'-2" wide concrete driveway will be constructed along the west side of the building to access an open-air parking, which extends onto adjacent Lot 13. Zoning lots 12 and 13 will be merged, however tax lots will remain separate.

The 1<sup>st</sup> floor will consist of the residential lobby/entrance, electric meter closet, sprinkler room, and stairs and elevator. The 2<sup>nd</sup> through 7<sup>th</sup> floors will be comprised of multiple residential apartments.

To facilitate construction of the new building and parking area, the entire Site will be excavated to a depth of approximately 1.5 ft. Additional deeper excavation to a depth of approximately 4 ft will be performed for footings and grade beams, and approximately 7 ft for the elevator pit. The total amount of soil anticipated for removal is approximately 500 cubic yards (750 tons). The water table was encountered at 8.3 ft - 12.02 ft below grade surface (bgs) and likely represents perched water atop bedrock.

**Statement of Purpose and Basis**

This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as "689 East 223rd Street" pursuant to Subchapter 7 of Chapter 14 of Title 43 of the Rules of the City of New York 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 689 East 223rd Street site is protective of public health and the environment. The elements of the selected remedy are as follows:

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 Site-Specific (Track 4) Soil Cleanup Objectives (SCOs);
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. A Waste Characterization Report documenting sample procedures, location and analytical results shall be submitted to NYCOER prior to start of Remedial Action;
5. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas;
6. Excavation and removal of soil/fill exceeding Track 4 Site-Specific SCOs. For development purposes, the entire Site will be excavated to a depth of approximately 1.5 ft. Additional deeper excavation to a depth of approximately 4 ft will be performed for footings and grade beams, and approximately 7 ft for the elevator pit. An estimated 500 cubic yards (750 tons) of soil/fill will be removed from the Site and properly disposed of at an appropriately licensed or permitted facility;
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 USTs, if 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;
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 the RAWP. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media on-Site;
11. Collection and analysis of five post-excavation soil samples to determine the performance of the remedy with respect to attainment of Track 4 Site-Specific SCOs. Samples will be analyzed for VOCs, SVOCs, PCBs, pesticides, and metals;
12. Import of materials to be used for backfill and cover in compliance with the RAWP and in accordance with applicable laws and regulations;
13. Installation of an active sub-slab depressurization system (SSDS). The active SSDS will consist of a single zone installed below the building slab. The SSDS zone will consist of a loop of horizontal perforated PVC pipe set in the middle of a gas permeable layer immediately beneath the building slab and vapor barrier system. The SSDS loop will consist of fabric wrapped, perforated 4-inch PVC pipe connected to a 4-inch cast iron riser pipe that penetrates the slab and travels through the building to the roof. The gas permeable layer will consist of a minimum 6-inch layer of ASTM 5. The SSDS will be hardwired and will include a blower installed above the roof line and a separate set of a pressure gauge and alarm installed in a protective case located in an accessible area in the building. The active SSDS will be designed to maintain a negative pressure of -0.02 inches of water beneath the building slab. A total of two permanent monitoring points will be installed to evaluate vacuum pressure. The SSDS exhaust location will be on the roof level and at least 10 feet from any operable window, operable doors, intakes or operable hatches. The SSDS is an Engineering Control for the Remedial Action. The remedial engineer will certify in the closure report 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;
14. A Soil Vapor Intrusion (SVI) study will be performed after the building is completed. The SVI will include sampling for sub slab, indoor air and outdoor air. Based on SVI, the SSDS will be evaluated to determine if an active fan/blower is necessary;
15. Prior to OER sign-off at project close out, the SSDS drawings will be filed with DOB, as required. Documentation of filing with DOB, for example, as a post-approval amendment (PAA) to the new building filing, will be presented to OER;
16. Installation of a vapor barrier system consisting of vapor barrier beneath the building slab, elevator pit, and outside of sub-grade foundation sidewalls up to grade to mitigate soil vapor migration into the building. The vapor barrier system will consist of Stego Industries® Stego® Wrap 20-mil Vapor Barrier system (or OER approved equivalent system) installed below the slab throughout the building area, and

below/around the elevator pit. 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 closure that the vapor barrier system was designed and properly installed to mitigate soil vapor migration into the building;

17. Installation of an engineered composite cover system. The composite cover system consists of the following:
  - Building Footprint: 6-inch concrete slab underlain with Stego Industries® Stego® Wrap 20-mil Vapor Barrier and minimum 6-inch layer of ASTM 5;
  - Parking Lot: 6-inch concrete slab underlain with 2-to-6-inch layer of ¾" stone.
18. Dewatering is not anticipated, but 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;
19. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations;
20. Performance of all activities required for the Remedial Action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
21. 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;
22. Submission of a RAR that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, lists any changes from the RAWP, and describes all Engineering and Institutional Controls to be implemented at the Site; and
23. A deed restriction will be placed on the property to document the installation and continued operation of the SSDS.

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

The elements of the remedial action selected for Noise for the 689 East 223rd Street site are as follows:

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

1. 33 dB(A) for all facades.

The following windows and doors will be installed:



<b>Window/Door Types</b>	<b>OITC Rating</b>	<b>OITC Certification</b>	<b>Manufacturer and Model</b>	<b>Glazing</b>
Residential Windows  All Facades Floors 2-7 and roof	36  33 Required	See ASTM E90 Sound Transmission Loss Test Report No. J2953.01-113-11-R0 Report Date: 06/28/19 Data File No. J2953.01B1 for the exact window and glazing	Zephyr Windows, Inc. Series/Model Super 82 UPVC Fixed Window	34 mm IG (10 mm annealed exterior, 16 mm argon, 8 mm laminated interior)
Residential Windows  All Facades Floors 2-7 and roof	34  33 required	See ASTM E90 Sound Transmission Loss Test Report No. L1561.01-113-11-R0 Report Date: 08/27/20 Data File No. L1561.01E for the tilt-turn window. Manufacturer letter and window profiles for tilt-turn and casement windows provided	Zephyr Windows, Inc. Series/Model Super 82 UPVC Casement Window	36.8 mm IG (8.8 mm laminated exterior, 22 mm argon, 6 mm annealed interior)

Window/Door Types	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
Exterior Door 1 <sup>st</sup> Floor Lobby/Entrance  7 <sup>th</sup> Floor Hallway	33  33 required	See ASTM E90 Sound Transmission Loss Test Report No. E4499.01-113-11 Report Date: 01/28/14 Data File No. E4499.01B for the exact door and glazing	Reynaers Aluminum Systems, Series CS77HID Door	1 5/16" IG (1/4" annealed exterior, 3/4" air space, 5/16" annealed 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. **Trickle Vents:** Alternate means of ventilation (AMV) will be provided by installing EXR 306 ventilators manufactured by Higo® in each bedroom and living room at a minimum rate of one EXR 306 ventilator per room. Fresh air will be provided to all bedrooms and living rooms by the EXR 306 ventilators.
2. **HVAC System:** Residential apartments will be provided cooling and heating by package terminal heat pump units (PTHP) manufactured by GE, models AZ65E09DAB and AZ65H15DAB.
3. **Compliance with 2014 NYC Mechanical Code:** Providing outside air to residential common areas such as the lobbies, corridors, and amenity spaces in accordance with the 2014 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 takes into consideration OER guidance, as appropriate.

<p>05/20/2022</p> <hr/> <p>Date</p>	 <hr/> <p>William Quinones Project Manager</p>
<p>05/20/2022</p> <hr/> <p>Date</p>	 <hr/> <p>Sarah Pong Assistant Director</p>

cc: Joel Wagschal, Willbrooks Design - [jw@willbrooksdesign.com](mailto:jw@willbrooksdesign.com)  
Paul Marino, P.E., Engineering Consulting Services – [proecs.llc@gmail.com](mailto:proecs.llc@gmail.com)  
Shimon Greenfeld, 689 E SJ LLC - [shimon@sgnyrealtyinc.com](mailto:shimon@sgnyrealtyinc.com)  
Kevin Brussee, Environmental Business Consultants - [kbrussee@ebcincny.com](mailto:kbrussee@ebcincny.com)  
Chawinie Reilly, Environmental Business Consultants - [creilly@ebcincny.com](mailto:creilly@ebcincny.com)  
Mark McIntyre, Shaminder Chawla, Zach Schreiber, Maurizio Bertini  
William Quinones, PMA-OER