



OFFICE OF ENVIRONMENTAL REMEDIATION

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

Mark P. McIntyre, Esq.
Director

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NOTICE TO PROCEED
DOB Job Number NB-121205454

November 1, 2019

Re: 451 Tenth Avenue: 451-459 Tenth Avenue & 501-509 West 35th Street
Manhattan Block 707, Lot 31
Hazardous Materials, Air Quality, and Noise “E” Designation
E-137: Hudson Yards Rezoning - CEQR 03DCP031M - 1/19/2005
OER Project Number 19EHAN346M

Dear Manhattan 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 Numbers. 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 Colin Sullivan at 212-341-2082.

Sincerely,

Maurizio Bertini, Ph.D.
Assistant Director

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DECISION DOCUMENT

E-Designation Remedial Action Work Plan Approval

November 1, 2019

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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 September 13, 2019 with Stipulation Letter dated October 7, 2019 and the Remedial Action Plan for Air Quality and Noise dated October 21, 2019 for the above-referenced project.

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

Project Description

The proposed redevelopment consists of a 44-story mixed-use building with a full cellar extending to a depths ranging from about 21 to 27 feet below grade, with localized deeper excavation to accommodate elevator pits, the core mat, and ejector pits. The total quantity of soil/fill expected to be excavated and disposed off-site is 6,000 tons. Groundwater is expected to be encountered in bedrock at about 6 to 9 feet below grade surface (bgs). The building's first floor will occupy the entire site. The cellar will be used for retail storage, information technology (IT) storage, and utility storage areas. The first and second floors will contain a restaurant and residential and commercial lobby. Floors 3 and 4 will contain retail space and senior amenities. Floors 5-13 will contain a long-term care facility, floor 14 will contain mechanical rooms, and floors 15 through 41 will contain residential units.

Statement of Purpose and Basis

This document presents the remedial action for the E-Designation Program project known as “451 Tenth Avenue” 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 451 Tenth Avenue 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 VOCs while soil-intrusive activities are ongoing
2. Selection of NYSDEC Part 375 Unrestricted Use (Track 1) SCOs
3. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas
4. A Waste Characterization Study was completed at the site and soil samples were collected using a methodology compatible with general disposal facility requirements based on previous experience.
5. Excavation and removal of all soil on site - The proposed development will extend into bedrock. General excavation will cover the entire footprint of the site to depths ranging from

approximately 21 to 27 feet below grade to accommodate foundation components for the cellar with a top of slab at el. 24.5. About 6,000 tons of soil/fill will be removed from the Site and properly disposed at an appropriately licensed or permitted facility.

6. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID – Site media will be appropriately segregated by material type.
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 underground storage tanks (UST) (if present) and closure of petroleum spills in compliance with applicable local, state and federal laws and regulations - 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 will be completed.
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 will be completed.
10. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations
11. 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
12. Excavations extends below groundwater table and dewatering is required. 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.
13. Implementation of stormwater pollution prevention measures in compliance with applicable laws and regulations
14. Submission of a Remedial Action Report that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and lists any changes from this RAWP

If Track 1 Unrestricted Use SCOs are not achieved, the following construction elements implemented as part of new development will constitute Engineering and Institutional Controls:

15. As part of development, construction of a composite cover system (a remedial engineering control) over any residual (remaining contamination) soil/fill at the site following development - The composite cover system will consist of a 6-inch-thick building slab.
16. As part of development, a waterproofing/vapor barrier system will be installed per manufacturer's specifications beneath the concrete building slab and along the subsurface walls. The barriers chosen for this project are Bituthene® 4000 and Preprufe® 160R, 160R Plus, 200, 300R, and 300R Plus, with ADCOR® waterstop. The waterproofing/vapor barrier system is manufactured by GCP Applied Technologies. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration.
17. Development of a Site Management Plan (SMP) to cover long-term management of residual contamination, including plans for maintenance, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency
18. 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.

Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming in residual site soil; (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 451 Tenth Avenue site are as follows:

To satisfy the requirements of the E-designation, natural gas will be utilized at the site for space heating, hot water, community space laundry, amenity and retail kitchens, amenity fireplace, or HVAC systems. Remaining systems, including residential laundry and kitchen and community space kitchen, will be powered electrically. A backup emergency electrical power generator will be fueled by fuel oil in the event of a power failure.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the 451 Tenth Avenue site are as follows:

To meet the requirements of the E-Designation, the following window/wall attenuation(s) will be achieved:

1. 28 dBA in the commercial spaces based on an allowed reduction of 5 dBA from the attenuation requirement outlined in the E-Designation;
2. 33 dBA for windows less than 100 feet above street level;
3. 31 dBA for windows from 101 - 200 feet above street level based on a reduction of 3 dBA from the projected street-level L₁₀ value of 76.7;
4. 28 dBA for windows from 201 - 400 feet above street level based on a reduction of 6 dBA from the projected street-level L₁₀ value of 76.7.

The following windows will be installed:

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
All Facades 0 to 100' above street level	35 Glass (assuming 5 dB framing loss; 30 Window)	Rating based on glass only. Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation	TBD	1/4" – 1/2" airspace – 3/8 laminated"
All Facades Between 101 to 200' above street level (Residential)	33 Glass (assuming 5 dB framing loss; 25 Window)	Rating based on glass only. Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation	TBD	1/4" – 1/2" air space – 5/16"
All Facades 200' + above street level (Residential)	30 Glass (assuming 5 dB framing loss; 25 Window)	Rating based on glass only. Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation	TBD	1/4" – 1/2" air space – 1/4"




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 Trimvent® 90 trickle vents manufactured by Titon on every window for Floors

5 to 12 and 15 to 41 to serve the I1, I2, and R2 occupancies. 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 by vertical hybrid heat pumps (units will be equipped with hot water coils and will not operate in the reverse refrigeration cycle) located within each apartment.

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, 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.

<u>11/1/2019</u> Date	 _____ Colin Sullivan Project Manager
<u>11/1/2019</u> Date	 _____ Maurizio Bertini, Ph.D. Assistant Director
<u>11/1/2019</u> Date	 _____ Shaminder Chawla Deputy Director

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