



**OFFICE OF ENVIRONMENTAL REMEDIATION**

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

**Daniel Walsh, Ph.D.**

**Director**

Tel: (212) 788-8841

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

February 5, 2016

**Re: One Vanderbilt: 10 Vanderbilt Avenue  
33-57 East 42<sup>nd</sup> Street; 32-54 East 43<sup>rd</sup> Street; 2-18 Vanderbilt Avenue; 317-331 Madison Avenue  
Manhattan Block 1277, Lots 20, 27, 46 & 52 (future Lot 27)  
Hazardous Materials, Air Quality and Noise “E” Designation  
E-357: 5/27/2015 One Vanderbilt Corridor Rezoning - CEQR 14 DCP 188M  
OER Project Number 16EHAN049M / VCP 16CVCP053M**

The New York City Office of Environmental Remediation (OER) has completed its review of Remedial Action Work Plan (RAWP) dated January 2016 with Stipulation Letter dated February 2, 2016 and the Remedial Action Plan for Air Quality and Noise dated February 2016 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 will end on February 15, 2016. Any public comments that require changes to the RAWP will be addressed prior to commencement of the remedial action.

**Project Description**

The Site is located in the Midtown section of Manhattan, New York and is identified as Block 1277 and Lots 20, 27, 46 and 52 on the New York City Tax Map. The Site consists of four adjacent lots encompassing approximately 43,313 square feet, improved with a total of four (4) structures that occupy the entire property footprint. The four (4) on-site buildings consist of 317 Madison Avenue (Lot 20) which is a 22-story building located at the corner of Madison Avenue and East 42nd Street, 331 Madison Avenue (Lot 52) which is a 14-story building at the corner of East 43rd Street and Madison Avenue, 48 East 43rd Street (Lot 46) which is a 7-story building located toward the middle of the block along East 43rd Street and 51 East 42nd Street (Lot 27) which is a 17-story building located on the eastern side of the block structure. The on-site buildings are currently vacant and undergoing interior demolition. The structures were previously occupied by commercial office space with first floor commercial retail space. All structures have at least on basement level with portions of the buildings having lower sub-basements. The Site is bounded by E. 43rd Street, to the north, by E. 42nd Street, to the south, by Vanderbilt Avenue to the east, and by Madison Avenue to the west.

The planned redevelopment includes the demolition of the four (4) existing structures and construction of a mixed use 68-story tower with four subterranean basement levels (B-1 through B-4) encompassing the entire property footprint with the exception of a small angled pull back of the building's frontage on the eastern edge at 42nd street, which will be included in the pedestrian sidewalk. The redevelopment will include at-grade uses including retail space, transit access, loading dock elevator, and office lobbies; below grade will include pedestrian connections into adjacent NYCTA spaces, back-of-house space, observation deck ticketing and retail space, space, loading docks and truck turnarounds. The first and second floor will contain commercial retail space, floors 3 through 60 will consist of office space, floors 61 through 63 will be used as an observation deck and floor 64 will house the building's mechanical equipment.

Basement levels will be excavated into bedrock and no site soil will remain within the limits of the property. The proposed building will occupy and approximately 43,313-square foot footprint. The foundation excavation is anticipated to extend to a depth of approximately 60-feet bgs into bedrock. The water table is present at approximately 32 feet bgs; and groundwater is expected to be encountered during basement level B-2, B-3, B-4 and foundation excavations and therefore, dewatering is anticipated during redevelopment. Approximately 20,000 tons of soil and 45,000 tons of bedrock will be excavated and removed from the site. The current zoning designation is C5-3. Special Permits have increased the allowable density to 30 FAR.

### **Statement of Purpose and Basis**

This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as “One Vanderbilt” pursuant to Title 43 of the Rules of the City of New York Chapter 14, Subchapter 1 and 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 One Vanderbilt 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. Selection of Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs).
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & 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(s).
6. Excavation and removal of soil/fill exceeding Unrestricted Use (Track 1) SCOs. For development purposes, the property will be excavated to a depth of approximately 60-feet bgs into bedrock for construction of the building’s cellars and foundation system. Excavation will extend into the bedrock throughout the entire property and no soil is to remain. Approximately 20,000 tons of soil and 45,000 tons of bedrock will be excavated and removed from the site and properly disposed 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. Appropriate segregation of excavated media on-Site.
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 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.
10. 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.
11. Collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of Track 1 SCOs. Since excavation will extend into bedrock and groundwater, end-point samples will be taken where any soil remains including the eastern edge of the Site (proposed pedestrian sidewalk).
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. 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.
14. Dewatering 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.

15. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
16. 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 lists any changes from this RAWP.
17. As part of development, construction of an engineered composite cover consisting of a minimum thickness 6-inch thick concrete building slab underlain by the buildings foundations with an approximate minimum 6-inch clean granular sub-base beneath all building areas.
18. As part of development, installation of a vapor barrier system consisting of waterproofing beneath the building slab and outside of sub-grade foundation sidewalls to mitigate soil vapor migration into the building. The vapor barrier system will consist of a 46-mil Grace Waterproofing Systems PREPRUFE 300R vapor barrier below the slab throughout the full building area and a 56-mil Grace Waterproofing Systems BITUTHENE 4000 outside all sub-grade foundation sidewalls. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration.
19. As part of new development, levels below grade will contain pedestrian connections into adjacent NYCTA spaces, back-of-house space, observation deck ticketing and retail space, loading docks and truck turnarounds with high volume air exchange in conformance with the NYC Building Code.
20. If Track 1 SCOs are not achieved, submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for inspection and reporting of Engineering and Institutional Controls and reporting at a specified frequency.
21. If Track 1 SCOs are not achieved, the property will continue to be registered with an E-designation at the NYC Buildings Department. Establishment of ECs and ICs in this RAWP and a requirement that management of these controls must be in compliance with the approved Site Management Plan (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 New York City Office of Environmental Remediation (NYC OER) approval.

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

The elements of the remedial action selected for Air Quality for the One Vanderbilt site are as follows:

In order to satisfy the requirements of the E-designation, natural gas will be utilized at the site for the boiler system and possibly a cogeneration plant. The boiler plant would consist of ten (10) condensing boilers each rated at 180 horsepower, equipped with low NO<sub>x</sub> (< 30 ppm) emission burners. The potential cogeneration plant would consist of six (6) natural gas-fired microturbines each rated at 0.2 megawatts. The boiler plant will consist of ten (10) 180 BHP condensing boilers similar to Aerco BMK utilizing natural gas from Con Edison.

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

The elements of the remedial action selected for Noise for the One Vanderbilt site are as follows:

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

1. 26 dBA in the commercial spaces on the north and east façades between an elevation of 0 to 100 feet above street-level;
2. 30 dBA in the commercial spaces on the south façade between an elevation of 0 to 100 feet above street-level;
3. 34 dBA in the commercial spaces on the west façade between an elevation of 0 to 100 feet above street-level;
4. 23 dBA in the commercial spaces on the north and east façades for windows between an elevation of 101 to 200 feet above street-level;
5. 26 dBA in the commercial spaces on the south façade for windows between an elevation of 101 to 200 feet above street-level;
6. 30 dBA in the commercial spaces on the west façade for windows between an elevation of 101 to 200 feet above street-level;

7. The maximum level  $L_{10}$  values are below 70 dBA on the north and east façades from an elevation of 201 feet above street-level to the top of the structure. The CEQR Technical Manual does not address noise levels this low, therefore there is no minimum attenuation guidance.
8. 23 dBA in the commercial spaces on the south façade for windows between an elevation of 201 to 400 feet above street-level;
9. 28 dBA in the commercial spaces on the west façade for windows 201 to 400 feet above street-level;
10. The maximum level  $L_{10}$  values are below 70 dBA on the south façade from an elevation of 401 feet above street-level to the top of the structure. The CEQR Technical Manual does not address noise levels this low, therefore there is no minimum attenuation guidance.
11. 26 dBA in the commercial spaces on the west façade for windows 401 to 800 feet above street-level;
12. 23 dBA in the commercial spaces on the west façade for windows 801 feet above street-level to the top of the structure;
13. Residential or community facility uses would require 5 dBA more.

The following window will be installed:

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
All facades All floors Commercial	37	See ASTM E-90 Lab Acoustical Report RAL-TL14-010 for glazing in Appendix H.	Curtain Wall by Viracon	1-7/16" insulated laminated (3/8" outboard glass ply HS – 1/2" air space – 1/4" glass ply HS – 0.060 PVB – 1/4" glass ply HS)

The acoustical reports described above are representative of the acoustical performance of all proposed windows/doors/curtain walls. The OITC rating and the resulting interior noise level were estimated based on the STC reports provided in Appendix H of the Noise RAP. A lab test report of the actual curtain wall chosen for this project will be submitted to OER prior to installation for approval and to ensure compliance with the E-designation requirements.

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. **Compliance with Mechanical Code:** Outside air will be provided to all floors of the commercial spaces (office space) via air handling units connected to louvers on the side of the façade. Louvers will be located in areas that meet the 2014 NYC Mechanical Code and an air re-entrainment study will be provided to confirm the outside air is not contaminated by exhausts from the building. Additionally, all air handling units will be equipped with filtration for increased quality of outside air delivered to the building. The air handlers will then distribute the outside air to all occupiable spaces in accordance with ventilation rates required in accordance with the 2014 NYC Mechanical Code. This system also provides outside air to all occupied spaces and common areas such as lobbies and corridors. A certified letter from the mechanical engineer stating that the alternate means of ventilation requirements will be met in accordance with NYC Mechanical Code is provided in Appendix J of the Noise RAP.

The remedies for Hazardous Materials, Air Quality, and Noise 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.

February 5, 2016

Date



Sarah Pong  
Project Manager

February 5, 2016

Date



Shaminder Chawla  
Deputy Director

February 5, 2016

Date



Maurizio Bertini, Ph.D.  
Assistant Director

cc: Ryan LeVasseur, Hines – [ryan.levasseur@hines.com](mailto:ryan.levasseur@hines.com)  
Harry Olsen, SL Green Realty Corp – [harry.olsen@slgreen.com](mailto:harry.olsen@slgreen.com)  
Jim Blaney, WCD Group, LLC – [jblaney@wcdgroup.com](mailto:jblaney@wcdgroup.com)  
Daniel Walsh, Shaminder Chawla, Zach Schreiber, Maurizio Bertini, Hannah Moore  
Sarah Pong, PMA-OER