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

January 4, 2017

Re: 85-89 Jane Street
Manhattan Block 642, Lots 70 and 72
Hazardous Materials and Noise E Designation
E-149: Far West Village Rezoning - CEQR 06DCP001M
OER Project Number 16EH-N313M / 17CVCP036M


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 12/28/2016. There were no public comments. NYSDEC and NYC DOHMH was briefed on this project in October 2016.

Project Description
The development project consists of an alteration that involves the conversion of a single-story commercial use building (89 Jane Street, Lot 72) and two-story industrial use building (85 Jane Street, Lot 70) into a single-family residence. As part of development, the referenced lots are expected to be merged into a single lot; the lot number is to be determined. The redevelopment encompasses the entire Site.

The current zoning designation at the 85 Jane Street Property is R6, Residential use. The current zoning designation at the 89 Jane Street Property is C4-4A/R7A and R6, Residential and Commercial use. The planned redevelopment consists of a three-story residential unit. The first story of the property will consist of a garage and home gym with a natatorium. In addition, approximately 15 geothermal wells may be installed within the garage; the geothermal wells will be a closed loop system that does not extract or introduce water into the subsurface. The second and third stories will consist of residential quarters. The proposed use is consistent with existing zoning for the Site.

Both of the existing buildings have slab on grade construction with the exception of a crawl space in the southwest corner of Lot 72. An under-slab vapor barrier will be installed across the entire site beneath a newly constructed 12" concrete slab. As part of the building development, excavation is planned along the eastern and northern borders of Lot 70 and a northern portion of Lot 72; the excavation along the eastern property border is associated with an indoor pool installation. Excavation will proceed to six feet below grade surface (bgs) and approximately 405 cubic yards of soil will be excavated. Should the redevelopment plan change, all additional excavated materials will be handled in accordance with this RAWP. The water table elevation varies across the Site and was observed between 13 to 15 feet bgs; excavation is not anticipated beneath the groundwater table. Bedrock was not encountered during the RI.

Statement of Purpose and Basis
This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program
project known as “85-89 Jane Street” 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 85-89 Jane Street site is protective of public health and the environment. The elements of the selected remedy are as follows:

- **The preferred remedial action alternative is the Track 4 remedial action.** The proposed remedial action achieves protection of public health and the environment for the intended use of the Site. The proposed remedial action achieves all of the remedial action objectives established for the project and addresses applicable standards, criterion, and guidance; is effective in both the short-term and long-term and reduces mobility, toxicity, and volume of contaminants; is cost effective and implementable; and uses standards methods that are well established in the industry.

The proposed remedial action will consist of:

1. Establishment of Track 4 Site-specific Soil Cleanup Objectives (SCOs) (NYSDEC Part 375 RRSCOs for all parameters except total SVOCs [100 mg/kg], arsenic [23 mg/kg], lead [1,000 mg/kg], mercury [1.5 mg/kg], and total PCBs [1 mg/kg]).
2. Preparation of a Community Protection Statement and performance of all required NYCVCP citizen participation activities according to an approved Citizen Participation Plan (CPP).
3. Performance of all activities required for the remedial action, including acquisition of required permits and attainment of pretreatment requirements, if required, in compliance with applicable laws and regulations.
4. Site mobilization involving Site security set up, equipment mobilization, utility mark outs, and marking and staking excavation areas.
5. Performance of a Community Air Monitoring Plan (CAMP) for particulates and VOCs.
6. 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).
7. Excavation and removal of soil/fill exceeding Track 4 Site-specific SCOs at the Site, which was only observed at soil boring B-2. Approximately 1,824 square feet of the footprint of the building area (about 19% of the property), including the area surrounding soil boring B-2, will be excavated to a depth of approximately 6 feet bgs for development purposes. Approximately 608 tons of soil/fill will be excavated. Should the redevelopment plan change, all additional excavated materials will be handled in accordance with this RAWP. Soil within the hotspot surrounding B-2 will not be reused on-Site.
8. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a Photo Ionization Detector.
9. 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.
10. Removal of all potential USTs that are encountered during soil/fill removal actions. Registration of tanks (if encountered) 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.
11. Transportation and off-Site disposal of all soil/fill material surrounding soil boring B-2 and all soil fill material that are not reused for Site development purposes at licensed or permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this RAWP. Sampling and analysis of excavated media as required by disposal facilities.
12. Collection and analysis of four end-point samples to determine the performance of the remedy with respect to attainment of Track 4 Site-specific SCOs.
13. Import of materials to be used for backfill and composite cover in compliance with this RAWP and in accordance with applicable laws and regulations.
14. Dewatering, if required, 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 to meet pretreatment requirements prior to discharge to the sewer system.
15. Removal of the current building slab and construction of an engineered composite cover consisting of a 12-inch thick concrete building slab with a 4-inch clean aggregate sub-base (gravel, crushed stone, dense graded aggregate [DGA] or recycled concrete aggregate [RCA]) across the entire the Site.
16. Installation of a vapor barrier system at the Site. An under-slab vapor barrier membrane will be installed across the entire site prior to construction of the engineered composite cover; this vapor barrier system will be comprised of the 20-mil product Stego Industries LLC Stego-Wrap, or a Professional Engineer (PE) approved equivalent. A Grace Preprufe 300R Plus or 160R Plus waterproofing membrane vapor barrier will be installed beneath the indoor pool development. 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 RAR that the vapor barrier system was designed and properly installed to mitigate soil vapor migration into the building.

17. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, lists any changes from this RAWP, describes all Engineering and Institutional Controls to be implemented at the Site, and describes all Engineering and Institutional Controls to be implemented at the Site.

18. Submission of an approved Site Management Plan (SMP) in the Remedial Action Plan (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.

19. 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; (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 Noise**

The elements of the remedial action selected for Noise for the 85-89 Jane 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. 31 dBA on the southern façade;
2. 31 dBA on the eastern façade for the first 50 feet from the southern façade;
3. 31 dBA on the western façade for the first 50 feet from the southern façade;

The following windows will be installed:

<table>
<thead>
<tr>
<th>Façade Floor Range</th>
<th>OITC Rating</th>
<th>OITC Certification</th>
<th>Manufacturer and Model</th>
<th>Glazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>South, East and West Facade (Floors 1, 2 and 3)</td>
<td>31*</td>
<td>Rating based on glass only (See ASTM E-90 Lab Test Report in Appendix H). Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation</td>
<td>T.B.D</td>
<td>1/4&quot; glass – 1/2&quot; air space – 1/4&quot; laminated glass</td>
</tr>
<tr>
<td>South, East, and West Facade (Floor 4)</td>
<td>34</td>
<td>Rating based on glass only (see ASTM E-90 Lab Test Report in Appendix H). Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation</td>
<td>T.B.D</td>
<td>1/2&quot; laminated glass - 1/2&quot; air space - 1/4&quot; glass</td>
</tr>
</tbody>
</table>

*OITC rating is calculated based on STC rating per manufacturer, as OITC rating was not included in test at time of testing
The acoustical reports described above are representative of the acoustical performance of all proposed windows/doors/curtain walls.

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. **Combination of Dedicated Fresh Air/ HVAC System.** Installing two energy recovery ventilator units manufactured by Mitsubishi (LGH-F300RX5) located in the penthouse (top floor) and on the 2nd floor. These ERV’s will provide fresh air to fan coil units that serve habitable rooms. 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 4033. These rates will be the greater of .35 air changes per hour or 15 cfm per person, representing the outdoor ventilation otherwise provided by the operable windows. P.E./R.A. certified mechanical drawings depicting the AMV system and how fresh air is delivered into each of the living spaces are provided in Appendix K. A letter from the engineer who designed the dedicated fresh air/ HVAC system describing the system, the equipment involved (stating the manufacturer and model information), and how fresh air is delivered into each of the living spaces is attached as Appendix L.

The remedies for the Hazardous Materials and Noise E Designations 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.

1/4/2017
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