



OFFICE OF ENVIRONMENTAL REMEDIATION

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Director

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NOTICE TO PROCEED
DOB Job Number NB 321385498

September 23, 2019

Re: 1-3 Bell Slip - Greenpoint Landing Parcel H3
Brooklyn Block 2472, Lots 475, 200, p/o 55, (former p/o Lot 100)
Hazardous Materials, Air Quality, and Noise "E" Designation
E-138: Greenpoint - Williamsburg Rezoning - CEQR 04DCP003K HazMat - 5/11/2005
E-317: Greenpoint Landing - CEQR 14DCP004K - 12/10/2013
OER Project Number 18EHAN464K / 19CVCP043K

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. 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 Taylor Hard at 212-788-7426.

Sincerely,

Zach Schreiber, Ph D.
Assistant Director

cc: Dan Berger, BOP Greenpoint H-3 LLC - dan.berger@brookfield.com
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DECISION DOCUMENT

NYC VCP, E-Designation Remedial Action Work Plan Approval

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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 February 27, 2019 with Stipulation Letter dated February 27, 2019 and the Remedial Action Plan for Air Quality and Noise dated September 9, 2019 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 12/30/2018. There were no public comments.

Project Description

The proposed development at Parcel H3 includes the construction of a 31-story residential tower atop a 2-story podium with a cellar footprint of about 35,500 square feet and a waterfront park that will be transferred to the New York City Department of Parks and Recreation (NYCDPR).

Building H3 will include 286 market-rate, 103 inclusionary, and 21 affordable housing units with a gross building area of about 390,000 square feet. The cellar will extend into the groundwater table and will be used for parking and storage, amenity space, and building systems. The ground floor will contain housing units, amenity space, building systems, and a retail component. An outdoor, landscaped terrace for residents and a sloped landscaped area will be located on the eastern side of the site adjacent to the NYC transit authority parking lot. An about 12,000 square foot portion of Bell Slip on Lot 100 (previously remediated as part of Parcel G1) will be reapportioned to the tax lots comprising the Parcel H3 development. The shoreline at the boundary of Block 2472 Lot 55 and Lot 475 was stabilized with a new steel sheet pile wall and rip-rap revetment and an adjoining 13-foot wide concrete slab-on-grade walkway was constructed on Lot 475 in accordance with New York State Department of Environmental Conservation (NYSDEC), United States Army Corps of Engineers (USACOE), and New York City Small Business Services (NYCSBS) permits; this construction work was completed in 2016-2017.

The site will be excavated in areas of the proposed building, in landscaped areas to remove soil/fill material hot spots and install clean cover soil (along the eastern site boundary only), and in the area of Bell Slip to accommodate various new utility connections to existing infrastructure. About 11,400 tons (7,600 cubic yards [CY]) of soil/fill material will be excavated from Parcel H3 to accommodate the proposed building and will be disposed off-site in accordance with local, state, and federal laws and regulations. Imported clean fill was previously used to backfill utility trenches within Bell Slip and raise overall land elevations as part of the Parcel G1 redevelopment. Utility connections from Parcel H3 will tie to the existing utilities under Bell Slip; therefore excavated materials in Bell Slip will include both previously imported clean fill and some underlying historic fill. About 600 tons (400 CY) of historic fill and 375 tons (250 CY) of previously imported clean fill will be

excavated within Bell Slip to accommodate utility installations. Dewatering is anticipated during construction because excavations for foundation components (including the pressure slab, building core mat slab, pile caps, elevator pit, and auto lift pit) will extend into the groundwater table.

The site lies in a Federal Emergency Management Agency (FEMA)-designated flood plain; therefore, the development will require importing soil/fill material to raise site grade in areas outside of the building footprint. Top of cellar slab will be at about el. 4.45 feet and the top of ground floor slab elevation will be at about el. 17.45 feet. Areas surrounding the building footprint will be raised about 3 to 7 feet above existing grades to achieve final development grades consistent with the Soil/Materials Management Plan (SMMP), NYSDEC laws and regulations, and regulations of any other agency with jurisdiction over the site and/or project. About 1,850 CY of soil/fill material will be imported to achieve the final development grades.

Statement of Purpose and Basis

This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as “Greenpoint Landing H3” 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 Greenpoint Landing H3 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 required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan;
2. Implementation of a community air monitoring plan (CAMP) for particulates and VOCs;
3. Establishment of Track 4 Site-Specific SCOs for contaminants of concern;
4. Site mobilization involving site security setup, equipment mobilization, utility mark outs and marking excavation areas;
5. Completion of additional waste characterization study prior to excavation activities as directed by disposal facilities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility(s);
6. Implementation of stormwater and soil erosion and control measures in compliance with applicable laws and regulations;
7. Excavation and removal of soil/fill exceeding Track 4 Site-Specific SCOs. Excavation to the following development elevations/depths:
 - a. In the area of the proposed building:
 - i. About el. 2.78 feet (between 5.98 to 8.05 feet bgs) to accommodate the foundation slab;
 - ii. About el. -0.55 feet (10.23 to 10.59 feet bgs) to accommodate the building core mat slab;
 - iii. About el. -5.55 feet (15.37 feet bgs) to accommodate the elevator pit;
 - iv. About el. -3.22 feet (14.05 feet bgs) to accommodate the auto lift pit; and
 - v. Between about el. 0.95 and el. -6.72 feet (7.75 and 17.55 feet bgs) to accommodate the pile caps.
 - b. In landscaped areas:
 - i. About el. 6.8 feet to el. 8.5 feet (about 2 feet bgs) for clean cover soil installation along the eastern site boundary.
 - c. In the area of Bell Slip:
 - i. Between about el. -0.20 feet and 11.50 feet (about 2.5 to 13.33 feet bgs) to accommodate various new utility connections to existing infrastructure.
8. Screening of excavated soil/fill during intrusive work for indications of contamination by visual and olfactory observation and monitoring with a photoionization detector (PID);
9. Excavation and off-site disposal of soil/fill material exceeding the Track 4 Site-Specific SCOs removed for remedial purposes and excavation and off-site disposal of soil/fill material for construction purposes;

10. Collection and analysis of 15 post-excavation endpoint samples to determine the performance of the remedy with respect to attainment of Track 4 Site-Specific SCOs.
11. Management of excavated materials, including screening of construction and demolition (C&D) debris, as defined by 6 NYCRR Part 360-2(b)(61), and temporary stockpiling and segregation of materials to prevent commingling of contaminated materials and noncontaminated materials in compliance with applicable laws and regulations and with any special conditions established by the NYSDEC. No mechanical screening on-site will occur without first presenting the means and methods to the OER and obtaining agency approval;
12. Transportation and off-site disposal of excavated soil and fill material at permitted facilities in accordance with this plan and applicable laws and regulations for handling, transport, and disposal. Sampling and analysis of soil and fill material designated for off-site disposal was completed; additional sampling and analysis will be completed as required by disposal facilities. Excavated materials will be segregated based on the waste characterization results;
13. Off-site recycling or disposal of uncontaminated C&D debris at a registered or permitted Part 360-15 C&D debris handling or recovery facility or permitted C&D landfill in accordance with applicable laws and regulations for handling, transport, and disposal, this plan, and with any special conditions established by the NYSDEC;
14. Dewatering and disposal of water through discharge to Newtown Creek in accordance with applicable laws and regulations, including any State Pollutant Discharge Elimination System (SPDES) permits and pretreatment requirements;
15. Removal of USTs (if encountered during excavation), registration of tanks, and closure of petroleum spills in compliance with applicable local, state and federal laws and regulations;
16. Import of materials for backfilling excavations, raising land elevations, and for clean cover material in compliance with this RAWP and in accordance with applicable laws and regulations;
17. Demarcation of residual (existing) soil and fill material outside of the proposed building footprint by demarcation barrier and/or survey in accordance with the SMMP;
18. Construction and maintenance of an engineered composite cover system consisting of concrete or asphalt, a 20-inch-thick concrete building slab, or at least 2 feet of clean soil (meeting the lower of 6 NYCRR Part 375 Restricted Use Residential (RUR) and Protection of Groundwater (PGW) Soil Cleanup Objectives [SCOs]) imported from an OER-approved source to prevent human exposure to residual soil/fill remaining at the site;
19. Installation of a waterproofing/vapor barrier system (with a minimum thickness of 20 mils) as per manufacturer's specifications, consisting of Grace Preprufe® 300R and Bituthene® 4000 (or approved equivalent) beneath the new building slab (including elevator pit, auto lift pit and pile caps), and Grace Preprufe® 160R (or approved equivalent) extending along all subsurface walls of the foundation from the base of the excavation to the surface grade level. 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;
20. Submission of a RAR that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the site boundaries, describes all Engineering and Institutional Controls implemented at the site, and lists any changes from this RAWP;
21. Inclusion of a Site Management Plan (SMP) in the 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; and
22. Continuation of the E-Designation requiring ongoing site management, establishment of engineering controls and institutional controls, including a requirement that management of engineering and institutional controls must be in compliance with the approved SMP.

Description of Selected Remedy for Air Quality

The elements of the remedial action selected for Air Quality for the Greenpoint Landing H3 site are as follows:

To satisfy the requirements of the E-designation, natural gas will be utilized at the site for space heating, emergency power generation, and residential gas stoves. The remaining mechanical systems, including space heating, domestic hot water, or heating, ventilation, and air conditioning (HVAC systems), will be powered by electricity. For residential space heating, the hot water generated natural gas-fired Lochinvar® Crest model boilers will be directly injected into the building's condenser water loop to allow for electric Climatemaster® Model TY and TC heat pumps to efficiently provide heat to the apartments. Hot water will also be supplied to hot water heating coils to provide heat to amenity spaces and back of-house spaces. Supplemental heating will be provided (where needed) using Berko® model BDBSL electric baseboard heaters. Natural gas will be used to power the building's generator. The generator, Cummings® Model C300N6, will provide the building with emergency and standby power. Domestic hot water will be provided using PVI® EZ plate storage heaters. This water to water heater will utilize mechanical hot water from the Lochinvar® Crest model boilers in a water-to-water heat exchange process that will provide domestic hot water to the building. The selected PVI® EZ Plate Storage heaters indirectly utilize hot water from the natural gas-fired Lochinvar® boilers.

To satisfy the requirements of the E-Designation, one exhaust stack will be located on the roof at a height of 337 feet above grade (or 354 feet NAVD88). The stack will be located 123 feet from the north line of Lot 200, 62 feet from the east line of Lot 200, 71 feet from the south line of Lot 200, and 114 feet from the west line of Lot 200. The east lot line is closest to Commercial Street and the south lot line is closest to Bell Slip.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the Greenpoint Landing H3 site are as follows:

To meet the requirements of the E-Designation, the following window/wall attenuations will be achieved at the locations described below:

1. 28 dB(A) in residential spaces
2. 23 dB(A) for commercial spaces

The following windows will be installed:

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
<u>North, East, and West and South Façades</u> Residential Units (Floors 1 and 2) Non-Residential and/or Commercial Units/Spaces (Floors 1 and 2)	31	ASTM E-90 Lab Test Report (See Appendix M) Test Reference # H2041.01- 113-11	Shuco® AWS 75.SI Operable In-Swing Casement Window within Kawneer 1600 Framing System	1 1/8-inch IGU 1/4-inch tempered glass 9/16-inch air space 5/16-inch tempered glass

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
<u>North, East, and West and South Façades</u> Residential Units (Floors 1 and 2) Non-Residential and/or Commercial Units/Spaces (Floors 1 and 2)	30	ASTM E-90 Lab Test Reports (See Appendix M) Test Reference # 63088.01- 113-11	Kawneer® 1600 S1 Series Curtain Wall	1 -inch IGU 1/4-inch laminated glass 1/2-inch air space 1/4-inch laminated glass
<u>North, East Façades</u> Residential Units (Floors 1 and 2)	28	Rating based on Viracon Acoustic Performance Data Tables only (see in Appendix M). Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation.	Kawneer 2000T Terrace Door	1 1/16-inch IGU 1/4-inch glass 1/2-inch air space 5/16-inch glass
<u>North, East, West and South Façades</u> Residential Units (F1 2-29) Non-Residential and/or Commercial Units/Spaces (Floors 3, 30 and 31)	32	ASTM E-90 Lab Test Reports (See Appendix M) Test Reference # G3178.01D	Mannix® 7800 In-Swing Casement Window	1 1/4-inch IGU 1/4-inch glass 11/16-inch air space 5/16-inch glass
<u>North, East, West and South Façades</u> Residential Units (F1 2-29) Non-Residential and/or Commercial Units/Spaces (Floors 3, 30 and 31)	33	ASTM E-90 Lab Test Reports (See Appendix M) Test Reference # H0368.01A	Mannix® 3800 IB Fixed Window	1 1/4-inch IGU 1/4-inch glass 11/16-inch air space 5/16-inch glass

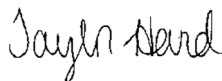
Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
<u>North, East, West and South Façades</u> Residential Units (FI 2-29)	28	Rating based on Viracon Acoustic Performance Data Tables only (see in Appendix M). Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation.	Mannix 9309 IB Outswing Door	1 1/16-inch IGU 1/4-inch glass 1/2-inch air space 5/16-inch glass

The acoustical reports and data enclosed in this RAP are representative of the acoustical performance of the proposed windows/doors/curtain walls included in the table above. The applicant will inform the NYCOER of any changes to the window assemblies/glazings described in the table above.

Alternate window and residential door assemblies/glazings and/or façade elements will be tested as necessary in an accredited lab to ASTM E-90 standards and acoustical test reports of the final selected window and door assemblies/glazings will be submitted to the NYCOER before they are installed. Additive acoustical attenuation elements, including mass loaded vinyl (MLV) mullion inserts, MLV sleeves, and/or laminated acoustical sashes, may be used to achieve attenuation requirements. If so, window tests representative of these configurations will be presented to OER for review/approval.

The remedies for Hazardous Materials, Air Quality, 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.

09/23/19



Date

Taylor Hard
Project Manager

09/23/19



Date

Zach Schreiber
Assistant Director

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