

material concerns identified in the Phase I ESA, the potential for significant adverse impacts would be avoided by the measures identified below.

As with the No-Action condition, all demolition would be conducted in accordance with applicable requirements for disturbance, handling, and disposal of suspect LBP, ACM, and PCB-containing equipment and/or lighting fixtures and legal requirements regarding maintenance and/or closure of petroleum storage tanks, spill reporting if spills are identified, and off-site disposal of soil/fill.

In addition, as the Phase I ESA identified potential hazardous material concerns on the project site, including historical uses of the site are the presence of USTs, ASTs, and fill materials of unknown origin that have the potential to contain ACM, LBP, and PCBs, the proposed zoning map actions include assigning a hazardous materials (E) designation (E-343) on the lots affected by the Proposed Actions (Block 906, Lots 1 and 5, Block 907, Lots 1 and 8, Block 908, Lot 12, and Block 909, Lot 35). The (E) designation that would be placed on the project site would generally require that further investigation be performed to determine the presence and nature of contaminants of concern and the proper remedial and/or health and safety measures that would be employed during construction.

As the subject lots are currently leased to occupants using the properties in connection with their business operations, the necessary additional sampling would not be feasible prior to project approval. DEP (or OER) will be notified at least one week prior to the start of investigative activities on the project site. Such obligations will be made binding through the Restrictive Declaration tied to the project site (which will outline the timing for all obligations), and will be conducted in accordance with the Phase II Work Plan and HASP reviewed and approved by DEP (see Appendix G).

In addition, by assigning an (E) designation on the project site (where there is a known or suspect environmental concern), the potential for an adverse impact to human health and the environment resulting from the Proposed Action would be reduced or avoided. The (E) designation provides the impetus to identify and address environmental conditions so that significant adverse impacts during site development would be reduced, with OER providing the regulatory oversight of the environmental investigation and remediation during the process. Building permits are not issued by DOB without prior OER approval of the investigation and/or remediation pursuant to the provisions of Section 11-15 of the New York City Zoning Resolution (Environmental Requirements).

The text of the hazardous materials (E) designations (E-343) for the project site (Block 906, Lots 1 and 5, Block 907, Lots 1 and 8, Block 908, Lot 12, and Block 909, Lot 35) would be as follows:

Task 1: Sampling Protocol

Prior to construction, the Applicant must submit to the New York City Mayor's Office of Environmental Remediation (OER), for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.

No sampling should begin until written approval of a protocol is received by OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2: Remediation Determination and Protocol

A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated for the test results, a proposed remedial action plan (RAP) must be submitted by OER for review and approval. The Applicant must complete such remediation as determined necessary by OER. The Applicant should then provide proper documentation that the work has been satisfactorily completed.

An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

Furthermore, per SCA review of the Phase II Work Plan, additional sampling locations and analysis parameters would be carried out on the school site to be consistent with typical SCA Phase II ESIs. The school site additions to the Phase II Work Plan sampling methods are included in their entirety in Appendix G and are summarized as follows:

- Two additional soil borings will be installed on the parcel (for a total of five soil borings, including at least four borings within the proposed school building footprint);
- Four additional soil vapor samples will be collected (for a total of five soil vapor samples, including at least four within the proposed school building footprint). TO-15 analysis of the soil vapor samples will be conducted;
- One additional temporary monitoring well will be installed (for a total of two). At least one groundwater sample will be analyzed for NYCDEP sewer discharge parameters;
- All soil samples will be analyzed for cyanide and hexavalent chromium;
- Soil samples to be analyzed for VOCs will be field preserved using Encore samplers or other appropriate method;
- Subsurface soil samples (i.e., from 0 to 6 inches below grade) will be collected from at least two of the soil borings and analyzed for the full suite of parameters to evaluate potential contamination associated with former stack emissions; and
- If analytical results for any soil sample(s) indicate concentrations that are indicative of potential characteristic hazardous waste, the corresponding samples will be additionally analyzed for appropriate parameters using the toxicity characteristic leaching procedure.

It is anticipated that the Applicant will begin Phase II investigative work for the future school site subsequent to issuance of this FEIS, and that all Phase II investigative work on the future school site will be completed by the time the City Council will be required to act upon the Proposed Action. All Phase II investigative work of the future school site will be in conformance with the DEP-approved Phase II Work Plan and the above-described additional SCA supplemental Phase II testing requirements prior to project approval. Phase II investigative work on the remaining project site lots would be carried out subsequent to approval of the Proposed Action, but prior to issuance of any permits for the proposed project.

Air Quality (E) Designations

The analysis determined that all sites would require (E) designations that would specify the type of fuel to be used and the height and/or location of the boiler stack. The proposed (E) designations for the project site with respect to HVAC systems are presented below.

The (E) designations for the development sites are based on the proposed site plan, as shown in Figure 14-1. Any changes to the heights or configurations of the buildings or tiers may necessitate revisions to the (E) designations.

Building 1: Block 907, Lots 8 and p/o 1: Any new residential and/or commercial development on the above-referenced properties must use natural gas with low NO_x boilers and flue recirculation for HVAC systems and ensure that the heating, ventilating and air conditioning stack is located at the highest tier or at least 298 feet high and at least 228 feet from 4th Street to avoid any potential significant adverse air quality impacts.

Building 2: Block 907, Lots 1 and p/o 8: Any new residential and/or commercial development on the above-referenced properties must use natural gas for HVAC systems and ensure that the heating, ventilating and air conditioning stack is located at the highest tier or at least 323 feet high to avoid any potential significant adverse air quality impacts.

Building 3: Block 906, Lots 1 and 5: Any new residential and/or commercial development on the above-referenced properties must use natural gas with low NO_x boilers and flue recirculation for HVAC systems and ensure that the heating, ventilating and air conditioning stack is located at the highest tier or at least 282 feet high and is at least 139 feet from 9th Street and 177 feet from 26th Avenue to avoid any potential significant adverse air quality impacts.

Building 4: Block 909, Lot 35: Any new residential and/or commercial development on the above-referenced properties must use natural gas for HVAC systems and ensure that the heating, ventilating and air conditioning stack is located at the highest tier or at least 83 feet high and at least 27 feet from t 26th Avenue and 278 feet from 9th Street to avoid any potential significant adverse air quality impacts.

Building 5 (Residential): Block 908, Lot 12: Any new residential and/or commercial development on the above-referenced properties must use natural gas with low NO_x boilers and flue recirculation for HVAC systems and ensure that the heating, ventilating and air conditioning stack is located at least 70 feet high and at least 162 feet from 9th Street and 140 feet from 26th Avenue to avoid any potential significant adverse air quality impacts.

Building 5 (School): Block 908, Lot 12: Any new residential, commercial, and/or institutional development on the above-referenced properties must use natural gas for HVAC systems and ensure that the heating, ventilating and air conditioning stack is located at the highest tier or at least 93 feet high to avoid any potential significant adverse air quality impacts.

With (E) designation E-343, the potential impacts from the project site building's heating systems would not exceed the applicable NAAQS or *de minimis* criteria and would therefore not have potential significant adverse environmental impacts on air quality.