A. INTRODUCTION

The goal of the hazardous materials assessment is to determine whether a Proposed Action would lead to a potential increased exposure of hazardous materials to people or the environment or whether the increased exposure would lead to significant public health impacts or environmental damage. As described in the *CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi volatile organic compounds, methane, polychlorinated biphenyls and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic).

According to the *CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when hazardous materials exist on a site; and an action would increase pathways to their exposure; or an action would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased.

B. PRINCIPAL CONCLUSIONS

The Proposed Action would potentially result in significant adverse hazardous materials impacts. In accordance with the methodology outlined in the *CEQR Technical Manual*, hazardous materials assessment was conducted. The assessment concluded that the Proposed Action could result in additional in-ground disturbance that could occur on sites where hazardous materials exist.

However, the extent of the potential impact is expected to be limited. The Proposed Action itself is not expected to induce development on sites where development would not have otherwise been possible (with the exception of one component allowing as-of-right development over certain existing parking lots for affordable senior housing, as discussed in Chapter 11), thereby limiting the potential for additional in-ground disturbance.

The provision to allow future buildings to be located closer to the street line would create potential for additional or deeper in-ground disturbance. In the future with the Proposed Action, developments on shallow lots would be permitted to reduce the depth of the required rear yard. Since shallow lots and shallow through lots are found consistently across all neighborhoods in all five boroughs, it impossible to disregard the possibility of additional in-ground disturbance.

The proposal to reduce minimum distance between buildings could enable infill development on sites with lot and floor area allowances, and potentially cause additional in-ground disturbance. The elimination or reduction of existing and future parking requirements for affordable housing is also likely to facilitate additional development resulting in potential new in-ground disturbance. In the future with the Proposed Action, Long Term Care Facilities and Affordable Independent Residences for Seniors would be given additional FAR, and potentially result in greater in-ground disturbance. While the potential impacts of the provisions described above are expected to be limited, it is not possible to predict where and to what extent additional in-ground disturbance might occur and if any of the development sites with potential in-ground disturbance would contain any hazardous materials. Therefore, the Proposed Action has the potential to result in hazardous materials impacts. These potential impacts would be unmitigated.

C. SCREENING ANALYSIS

The Proposed Action would modify and replace existing text, add new text, and reorganize and renumber various sections of the *Zoning Resolution* regarding definitions, use, bulk, parking, special permits and special districts as described in *Chapter 1, "Project Description."* The Proposed Action would not change any of the existing zoning

designations; however, it would affect zoning regulations on a citywide basis and would result in changes to the height, bulk, and parking regulations for multi-family residential, inclusionary housing, affordable senior housing and long term care facilities. The Proposed Action itself is not expected to induce development on sites where development would not have otherwise been possible (with the exception of one component allowing as-of-right development over certain existing parking lots for affordable senior housing, and is discussed in this document), however, more development is expected to occur as a result citywide which has the potential to result in additional in-ground disturbance. Hazardous materials usually need to be assessed for actions that would result in any inground disturbance. In-ground disturbance is any disturbance to an area not previously excavated and includes new excavation deeper and/or wider than previous excavations on the same site. Therefore, the Proposed Action has the potential to result in hazardous materials impacts and, in accordance with the *CEQR Technical Manual*, further assessment is provided.

D. HAZARDOUS MATERIALS ASSESSMENT

As mentioned above, hazardous materials usually need to be assessed for actions that would result in any in-ground disturbance. The following components of the Proposed Action is expected to result in increased or new in-ground disturbance:

- Remove unnecessary corner lot coverage restrictions
- Match street wall line-up provision requirements to intent
- Provide improved yard and coverage regulations for shallow lots
- Update outdated distance between buildings regulations
- Reduce parking requirements where appropriate for affordable housing
- Eliminate parking requirements for qualifying affordable housing within the Transit Zone
- Create new lower-density bulk envelope for Long Term Care Facilities

If such in-ground disturbance occurs on sites where hazardous materials exist, significant adverse impacts could occur. Consequently, additional assessment of the potential for these provisions of the Proposed Action to result in impacts to archaeological resources has been conducted.

Remove unnecessary corner lot coverage restrictions

The removal of the maximum corner coverage requirement would allow future developments on undeveloped corner lots to wrap the corner with the building massing and create a more-traditional corner building. One of effects of this provision would be that the floor area may be allocated over a larger building footprint which increases the potential for additional in-ground disturbance in the future with the Proposed Action.

This provision would effect R6-R10 zoning districts citywide. Undeveloped corner lots that might be developed are widely scattered across Manhattan, the Bronx, Queens, and Brooklyn, and a small number are in northern Staten Island. The location of development would remain unchanged under the future with Proposed Action scenario; however, the potential for floor area to be allocated over a larger building footprint cannot be eliminated.

Match street wall line-up provision requirements to intent

This provision would allow future developments to set back 10 feet from the street wall regardless of the setback of the adjacent buildings instead of 15 feet from the street line as it currently is applied. Since the future buildings can be located closer to the street line, there is potential for additional or deeper in-ground disturbance.

This provision would affect Quality Housing buildings in R6-R10 zoning districts citywide. Even though, the amount and location of development would remain unchanged under the future with Proposed Action scenario, the potential for increased in-ground disturbance cannot be eliminated.

Provide improved yard and coverage regulations for shallow lots

In the future without the Proposed Action, buildings on shallow lots between 70' and 95' depth would be required to provide the full rear yard depending on the underlying zoning district. On shallow through lots with a depth between 140' and 190', the same problem presents itself when two buildings are developed on opposite street

frontages. There are relatively few development sites meeting these conditions, however, in the future without the Proposed Action, those that do would be expected to develop a sub-standard building in order to fit their permitted FAR; others would be expected to obtain variances to facilitate more efficient buildings on these lots as a result of their constraints.

In the future with the Proposed Action, the developments on shallow lots would be permitted to reduce the depth of the required rear yard and would be able to set the build off the property line and provide a variety of building articulation options which would result in additional in-ground disturbance over the future without the Proposed Action.

This provision would effect R6-R10 zoning districts citywide. Shallow lots and shallow through lots are found consistently across all neighborhoods in all five boroughs, making it impossible to conclude where and to what extent such additional in-ground disturbance might occur.

Update outdated distance between buildings regulations

In the future without the Proposed Action, developments on zoning lots with multiple buildings would be required to comply with the existing distance between building requirements. On zoning lots where two buildings have an average height of 50 or more feet, the minimum distance between legally required windows in the two buildings is 60 feet. This exceeds the requirements of the state Multiple Dwelling Law and makes infill development more difficult to undertake, or makes buildings taller as their footprint is limited to small areas of the zoning lot.

In the future with the Proposed Action, the minimum distance between buildings between 25 and 125 feet tall would be reduced from 60 feet, to 40 feet, to bring zoning regulations in line with the Multiple Dwelling Law. This provision would extend to buildings 125 feet tall or higher when their aggregate lot coverage does not exceed 40 percent. This may enable infill development on sites with lot and floor area allowances, and may enable modest horizontal enlargements of existing buildings on lots with multiple buildings.

The number and location of zoning lots with available floor area and sufficient area to construct a new building is limited in medium- and high-density districts (R6-R10) in the city. However, since it is not possible to conclude where and to what extent such additional development might occur, the possibility of additional in-ground disturbance cannot be eliminated.

Reduce parking requirements where appropriate for Affordable Housing

In the future without the Proposed Action, current parking requirements for affordable housing remain the same and any new affordable housing units would continue to provide the required parking.

In the future with the Proposed Action, elimination or reduction of existing and future parking requirements for affordable housing is likely to enable the development of sites that were previously too difficult or costly to build, or enable the development of a larger building with more units. In the future with the Proposed Action, this provision would also allow for the redevelopment of existing senior housing parking lots which is likely to result in additional and/or deeper in-ground disturbance. The number and location of existing senior housing parking lots with parking lots large enough to facilitate additional development is limited within the proposed Transit Zone. Also, as described in Chapter 2, Analytical Framework the LiveOn study identified 39 sites across the Transit Zone where such redevelopment may be possible, but it is not possible to determine which sites would be expected to proceed with redevelopment. Since it is not possible to conclude where and to what extent additional development might occur, the possibility of additional in-ground disturbance cannot be eliminated.

Create new lower-density bulk envelope and for Long Term Care Facilities

In the future with the Proposed Action, Long Term Care Facilities would be given additional FAR which would result in additional development. While Long Term Care Facilities would be getting more FAR, the height requirements would be more restricted compared to the No Action scenario. Since, the height would be more restricted, developments are likely to cover a larger footprint which would increase the potential for in-ground disturbance. This provision would effect R3-2, R4 and R5 zoning district without letter or number suffix (R3A, R3X, R3-1, R4A, R4B, R4-1, R5A, and R5D).

Conclusion

If development were to occur in areas with no potential hazardous materials contamination, there would be no potential for impacts. However, if development were to occur in potentially contaminated areas, depending on a variety of factors - such as the location of any in-ground hazardous materials on the site, the depth and location of building foundations, the extent and location of grading activities - the following effects could occur:

• Development may occur within contaminated portions of a site, but may not result in grading or foundation work that would result in ground disturbance in areas that might be characterized by hazardous materials contamination. In addition, if only portions of a site contain hazardous materials, development may occur on those portion which do not contain such materials. In addition, development may act as a barrier, the effect of which would be to cap-off, or contain existing hazardous materials in place and prevent migration.

• Development may disturb hazardous materials on the site, resulting in a significant adverse impact. Since development resulting from the Proposed Action would be as-of- right, there would be no mechanism for the city to conduct or require a program to test for hazardous materials contamination, or to mandate the remediation of such materials. Therefore, any such impact would remain unmitigated.

• Inaddition, development may disturb hazardous materials on the site, resulting in a significant adverse impact to construction workers. Since development resulting from the Proposed Action would be as-of-right, there would be no mechanism for the city to require a worker health and safety plan (HASP) for removal or treatment of such materials. Therefore, any such impact would remain unmitigated.