A. INTRODUCTION

The preceding chapters of this environmental impact statement (EIS) examine the potential for significant adverse impacts as a result of the Proposed Action. Where such potential impacts have been identified in accordance with the *CEQR Technical Manual* guidelines – in the areas of historic architectural resources and hazardous materials – measures are examined to minimize or eliminate the anticipated impacts. These mitigation measures are discussed below. Significant adverse impacts that cannot be fully mitigated through reasonably practicable measures are also identified and discussed in Chapter 14, "Unavoidable Adverse Impacts."

B. SHADOWS

As discussed in Chapter 4, "shadows," the Proposed Action would cast shadows on segments of Highbridge Park during the plant growing season which, depending on the specific nature of the vegetation in those areas of the park, may have the potential to result in a significant adverse shadows impact. The specific nature of the vegetation of the shadowed areas will be explored further between the Draft and Final Environmental Impact Statement (EIS) in consultation with the NYC Department of Parks and Recreation (NYCDPR).

Mitigation measures for this potential significant adverse impact will be explored by the lead agency in consultation with the NYCDPR between the Draft and Final EIS. Absent the identification and implementation of such measures, the Proposed Action could have an unmitigated significant adverse shadows impact on a segment of Highbridge Park.

C. HISTORIC ARCHITECTURAL RESOURCES

As discussed in Chapter 5, "Historic Resources," the Proposed Action would cause significant adverse direct impacts to historic architectural resources. The existing 2-story garage building on the Proposed Development Site, which is identified as a contributing structure in the S/NR-listed Sugar Hill Historic District, would be demolished to facilitate construction of the Proposed Development. This would constitute a significant adverse impact.

The Proposed Action was assessed for possible mitigation measures in accordance with CEQR guidelines. The *CEQR Technical Manual* identifies several ways in which impacts on potential archaeological resources can be mitigated, including:

- Redesigning the action so that it does not disturb the resource;

- Relocating the action to avoid the resource altogether;
- Contextual redesign of a project that does not actually physically affect an architectural resource but would alter its setting;
- Adaptive reuse to incorporate the resource into the project rather than demolishing it;
- A construction protection plan to protect historic resources that may be affected by construction activities related to a proposed action;
- Data recovery or recordation of historic structures that would be significantly altered or demolished; and
- Relocating architectural resources.

As part of the design process for the Proposed Development, measures to preserve or document the contributing building on the site prior to demolition have been considered, in consultation with the State Historic Preservation Office (SHPO) of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), in order to avoid any potential adverse impacts. In evaluating the possibility of reusing the existing structure, the project architects, SLCE Architects, retained a structural engineering firm Ysrael A. Seinuk, P.C., to undertake a visual inspection of the existing parking structure. The visual inspection, performed in March of 2009 by Ysrael A. Seinuk, P.C. (Seinuk report is included in Appendix A to this EIS), found that portions of the structural slabs of the building are in a state of disrepair, and concluded that reuse of the existing structure is not economically viable. The inspection indicated that exposed reinforcement showed different states of deterioration due to rusting, an occurrence that is not uncommon in structures where water and deicing salts, brought in by the cars, penetrate the slabs' concrete. Some exposed portions of the structural steel beams also exhibited rusting. The Seinuk report therefore indicated that keeping the present use of the building is possible, although achieving a proper long lasting repair would be costly, and concluded that the intended use of the site conflicts with the wisdom of such repair due to the following:

- A 28 foot easement dedicated to NYCDEP at the southern portion of the site will require carrying vehicular traffic, not only NYCDEP trucks, but also fire engines. The loading requirement cannot be accommodated by the present structure. This part of the existing structure would have to be removed up to the first column line, which is approximately 45 feet north of the south property line, and substituted with a bona fide elevated road design.
- The new residential structure requires a distribution of columns that deny the utilization of the rest of the parking structure. Preliminary studies indicate that at least 35 columns and 3 shear walls would be needed to support the new addition above.
- Neither the existing garage columns, nor their respective footings can be used to carry a structure above them. They were not designed for the heavy loads coming from a 12-story structure above.

In short, accommodating the existing garage into the Proposed Development was deemed to be infeasible, as it would require demolition of the rear portion of the existing building, removal of the roof and floor plates, and removal of a large portion of the modified exterior. Therefore, the Seinuk report concluded that there is no logical economical alternative to removing the existing structure in order to provide for the requirements of the proposed 12-story building.

In a letter dated February 10, 2010 (provided in Appendix A to this EIS), the OPRHP concurred that there are no prudent and feasible alternatives to demolition of the existing garage structure that will meet the project's requirements, and recommended that the following mitigation measures be incorporated as part of the project:

- Photographically documenting the historic building in accordance with the standards of the Historic American Buildings Survey (HABS). The documentation would be submitted to OPRHP for approval prior to any demolition. Two copies would be submitted to OPRHP, one of which would be for archival storage in the New York State Archives and the other for retention in OPRHP files, and a third copy of the documentation would also be provided to the Museum of the City of New York.
- A survey of the decorative exterior terra cotta elements on the existing building will be conducted and OPRHP would be consulted to determine if any of these elements can be removed and incorporated into the design of the Proposed Development or utilized in the interior public spaces of the new building.
- The applicant would consult with OPRHP regarding the design of the new building, as well as regarding the incorporation of references to the Old Croton Aqueduct in the design of the entrance plaza to the new building.
- A Construction Protection Plan (CPP) would be prepared in coordination with a licensed professional engineer for historic buildings within 90 feet of the Proposed Development Site. The CPP would meet the requirements specified in the New York City Department of Buildings (NYCDOB) Technical Policy Procedure Notice #10/88 concerning procedures for avoidance of damage to historic structures resulting from adjacent construction. This plan would be submitted to OPRHP for review and approval prior to implementation. It should also be noted that the Proposed Development would occur adjacent to a building that is located within a NYCLPC historic district, and its construction would therefore be subject to implementing the same standard construction protection measures required for buildings designated as landmarks, as described further under the "Construction" section below.

NYCLPC, upon review of the OPRHP evaluation, has also concurred that the above measures should be incorporated. With implementation of the above measures, the identified significant adverse direct impact to historic architectural resources would be partially mitigated. However, despite these measures, this impact would not be completely eliminated. Therefore, it would constitute an unavoidable significant adverse impact on this historic resource as a result of the Proposed Action (refer to Chapter 14, "Unavoidable Adverse Impacts").

D. HAZARDOUS MATERIALS

As discussed in Chapter 8, "Hazardous Materials," the Proposed Development Site has been identified as having recognized environmental conditions that could affect the property. These include the current and historical use of the Proposed Development Site for auto related operations, use of the eastern adjacent property as a gasoline filling station and auto repair shop and the southwestern adjacent property as a garage; suspect petroleum staining on the floor; and the potential presence of underground storage tanks at the site.

In order to avoid significant adverse impacts with respect to hazardous materials, the applicant has agreed to enter into a restrictive declaration with the New York City Department of Environmental Protection (NYCDEP), which requires that the applicant (and any future owner) undertake a testing and sampling protocol to remediate any hazardous materials to the satisfaction of the NYCDEP prior to the issuance of any building permit. Should the testing identify any significant hazardous materials issues requiring remediation, the restrictive declaration would obligate the

applicant to perform the remediation work recommended by NYCDEP. The scope of the investigation will be subject to NYCDEP approval, as will the need for any subsequent measures to address potential contamination. The applicant would also commit to a site specific Health and Safety Plan on the portion of Lot 26 to be used as the entrance plaza in the Reciprocal Easement Agreement with the City.

Accordingly, with the implementation of the preventative and remedial measures for the Proposed Development Site (through the use of a restrictive declaration), no significant adverse impacts related to hazardous materials would result from the Proposed Action and resultant construction activities on the Proposed Development Site. Following construction, there would be no potential for the Proposed Development to have significant adverse impacts.