22.1 INTRODUCTION

This chapter summarizes unavoidable significant adverse impacts resulting from the Proposed Action. According to the *CEQR Technical Manual*, unavoidable significant adverse impacts are those that would occur if a proposed project or action is implemented regardless of the mitigation employed, or if mitigation is impossible. As described in Chapter 19, "Mitigation," unavoidable significant adverse impacts resulting from the Proposed Action have been identified with respect to shadows, historic and cultural resources, transportation (traffic and pedestrians), and construction (traffic and noise).

22.2 SHADOWS

As discussed in Chapter 5, "Shadows," the Proposed Action would result in significant adverse shadows impacts on three historic architectural resources, namely St. Bartholomew's Church and Community House, the Lady Chapel of St. Patrick's Cathedral, and Christ Church United Methodist.

The sunlight-sensitive stained-glass windows of St. Bartholomew's Church and Community House would experience significant adverse shadows impacts on the May 6th and June 21st analysis days due to incremental shadows cast by Potential Development Site 14 and Projected Development Site 12. The sunlight-sensitive windows of the Lady Chapel of St. Patrick's Cathedral would experience a significant adverse shadows impact on the March 21st analysis day from Projected Site 12. The sunlight-sensitive stained-glass windows of the Christ Church United Methodist building would experience a significant adverse shadows impact on the December 21st analysis day due to incremental shadow cast by Projected Development Site 18. The incremental shadows that would be cast on these three historic architectural resources would result in a substantial reduction in sunlight available for the enjoyment or appreciation of the buildings' sunlight-sensitive features, and thus the incremental shadows are being considered significant adverse shadows impacts.

As discussed in Chapter 19, "Mitigation," the Proposed Action was assessed for possible mitigation measures in accordance with CEQR guidelines. Several ways in which shadows impacts on architectural resources can be mitigated were identified by the Department of City Planning (DCP), including:

- Redesigning and/or relocating the action (i.e., avoiding the incremental shadows cast on the sunlightsensitive features altogether by moving the proposed development sites away from the features), as analyzed in Chapter 20, "Alternatives."
- Providing indirectly mounted artificial lighting on St. Bartholomew's Church and Community House, the Lady Chapel of St. Patrick's Cathedral, and Christ Church United Methodist.

Redesigning or relocating the Proposed Action so that it does not cast an incremental shadow on these historic resources (e.g., by removing portions of the projected and potential development sites from the rezoning proposal) is not a practical solution from a zoning standpoint. Furthermore, removal of the entirety of the development sites would be inconsistent with the overall purpose and need of the Proposed Action, and is considered infeasible and impracticable. Between the Draft and Final EIS, DCP explored whether changes to the bulk regulations governing Projected Development Site 12, Potential Development Site 14, and Projected Development Site 18 would reduce or eliminate the incremental shadow that causes the impact were feasible. The building massing used for analysis purposes assumed these sites would maximize their building floorplate sizes under the existing height and setback regulations so as to develop commercially-viable buildings. If the height and setback regulations were modified on these sites to permit larger building floorplates that would in turn allow for the permitted floor area to be accommodated in buildings at lower heights, the resulting building form would conflict with the underlying intent of Midtown height and setback regulations which are designed to ensure pedestrian access to light and air. Further, the reduction in the permitted FAR on these sites that would be required to reduce or eliminate the shadow impacts would make development under the Proposed Action infeasible, and thus not be consistent with the goals and purposes of the proposed action to encourage the development of new commercial buildings in the area.

Another measure would be to provide for <u>measures</u> that would serve as a substitute for the <u>direct</u> sunlight on these sunlight-sensitive features. In order to adopt <u>such</u> measures in the absence of a site-specific approval, such as a Special Permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation. <u>In consultation with staff of the New York City Landmarks Preservation Commission</u>, DCP, as lead agency, explore<u>d</u> the viability of this mitigation measure between Draft EIS and Final EIS. <u>It was determined that techniques exist</u> for artificial lighting, as well as for the reflection of natural light through architectural features or reflective panels, that could potentially serve as a partial substitute for the loss of direct sunlight.

To allow for the potential installation of such features, the City Planning Commission is currently considering a modification to the zoning text amendment that would require, prior to the issuance of a New Building Permit for development of Projected Development Sites 12 and 18, and Potential Development Site 14, that the developer provide the Department of City Planning with a shadow analysis identifying the incremental shadows cast by the proposed building on the affected resource, and that the Chairperson of the Commission, acting in consultation with the Chair of the Landmarks Preservation Commission, certify to the Commissioner of Buildings either: a) that a plan for such features has been developed and will be implemented; or, b) that such a plan is not feasible or is impracticable, would negatively affect the character or integrity of the historic resource, or has not been accepted by the owner of the resource.

In the event that a plan for artificial lighting or reflection of natural light were developed and implemented pursuant to this provision, significant adverse shadows impacts under the Proposed Action would be partially mitigated. Absent such a plan, the Proposed Action's significant adverse shadows impacts would be wholly unmitigated.

22.3 HISTORIC AND CULTURAL RESOURCES

22.3.1 Architectural Resources

22.3.1.1 Direct Impacts

As described in Chapter 6, "Historic and Cultural Resources," the Proposed Action could result in significant adverse impacts due to potential partial or complete demolition of 14 (New York City Landmarks-) NYCL- and/or (State/National Registers of Historic Places-) S/NR-eligible historic resources located on Projected Development Sites 6, 7, 9, and 16 and Potential Development Sites 2, 5, 9, 12, 13, and 19. As the RWCDS for the Proposed Action anticipates that the existing structures on these sites would be demolished, either partially or entirely, as a consequence of the Proposed Action, this would result in significant adverse direct impacts to these NYCL- and S/NR-eligible resources.

As discussed in Chapter 19, "Mitigation," the *CEQR Technical Manual* identifies several ways in which impacts on architectural 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; or a construction protection plan to protect historic resources that may be affected by construction activities related to a proposed action. Redesigning or relocating the Proposed Action so that it does not disturb the eligible resources located on Projected Development Sites 6, 7, 9, and 16 and Potential Development Sites 2, 5, 9, 12, 13, and 19 (e.g., by eliminating these development sites from the rezoning proposal) would be inconsistent with the overall purpose and need of the Proposed Action and therefore is considered infeasible and impracticable. Contextual redesign, adaptive reuse, and the use of a construction protection plan are not available as mitigation measures, given the nature of the Proposed Action as an area-wide rezoning.

Other mitigation measures identified in the *CEQR Technical Manual* that could minimize or reduce these impacts include photographically documenting the eligible structures in accordance with Historic American Buildings Survey (HABS) level II, as per National Park Service standards. With implementation of the HABS documentation measure, and the related measure to create an interpretive exhibit within the lobby of new construction, the identified significant adverse direct impacts to historic architectural resources would be partially mitigated, but would not be completely eliminated,

and thus would constitute unavoidable significant adverse impacts. In order to adopt these partial mitigation measures in the absence of a site-specific approval, such as a Special Permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance since it is not known and cannot be assumed that owners of these properties would voluntarily implement this partial mitigation. DCP, as lead agency, explored the viability of these mitigation measures between the Draft EIS and Final EIS. <u>The City Planning Commission is currently considering a modification to the zoning text amendment that would require, prior to any demolition of an eligible structure, which has not been calendared or designated by the Landmarks Preservation Commission, as part of development undertaken under the Proposed Action, that the developer conduct and complete HABS recordation in a manner acceptable to the Landmarks Preservation Commission. In the event this modification is adopted, significant adverse impacts resulting from the demolition of eligible resources not calendared or designated by the Landmarks Preservation Commission would be partially mitigated.</u>

For those structures that are NYCL-eligible—which include all but the Barclay Hotel, the 346 Madison Avenue Building, and the 52 Vanderbilt Avenue Building—the New York City Landmarks Preservation Commission (LPC) may elect to calendar, and then conduct a hearing and designate the structures, either in whole or in part, as landmark buildings. Should the New York City Department of Buildings (DOB) issue a notice of pending demolition to LPC with respect to a calendared building, LPC would have 40 days to decide whether to designate. During this period, the owners of the property may work with LPC to modify their plans to make them appropriate. In the event that landmark designation is approved, LPC approval would be required for any alteration or demolition of the designated structures. Designation would avoid the potential for impacts to the eligible resources. However, as the potential for use and results of any designation process cannot be assumed or predicted, designation is not considered a mitigation measure herein.

In addition, those structures that are S/NR-eligible are given a measure of protection under Section 106 of the National Historic Preservation Act from the impacts of projects sponsored, assisted, or approved by federal agencies. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. Additionally, the Office of Parks, Recreation and Historic Preservation (OPRHP) could elect to designate these structures as S/NR-listed properties. Properties listed on the Registers are similarly protected against impacts resulting from projects sponsored, assisted, or approved by state agencies under the State Historic Preservation Act. However, private owners of properties eligible for, or even listed on, the Registers using private funds can alter or demolish their properties without such a review process. Redevelopment under the Proposed Action of the sites containing S/NR-eligible structures is expected to be privately sponsored. Further, the potential for use and results of any designation process cannot be assumed or predicted, and S/NR designation is therefore not considered a mitigation measure herein.

The <u>proposed modifications to the zoning text amendment discussed above are</u> considered partial mitigation<u>s only</u>. Consequentially, these impacts would not be completely eliminated and they would constitute unavoidable significant adverse impacts on these historic resources as a result of the Proposed Action.

22.4 TRANSPORTATION

22.4.1 Traffic

As described in Chapter 12, "Transportation," the Proposed Action would result in significant adverse traffic impacts at <u>57</u> study area intersections during one or more analyzed peak hours. Most of these impacts could be mitigated through the implementation of traffic engineering improvements, including modification of traffic signal phasing and/or timing; elimination of on-street parking within <u>100</u> feet of intersections to add a limited travel lane, known as "daylighting"; and channelization and lane designation changes to make more efficient use of available street widths.

However, <u>23</u> approach movements at <u>16</u> intersections would have unmitigated significant adverse impacts during the AM peak hour, <u>14</u> approach movements at <u>9</u> intersections would have unmitigated significant adverse impacts during the Midday peak hour, and <u>23</u> approach movements at <u>15</u> intersections would have unmitigated significant adverse impacts during the PM peak hour. <u>In consultation with the New York City Department of Transportation, DCP, as lead agency, explored the viability of mitigation measures to address the identified unmitigated significant adverse traffic impacts between Draft EIS and Final EIS; no practicable mitigation was identified for these impacted intersections and impacts in <u>one or more peak hours at these locations would remain unmitigated.</u> Consequently, unavoidable significant adverse traffic impacts would occur due to the Proposed Action.</u>

22.4.2 Pedestrians

As described in Chapter 12, "Transportation," the Proposed Action would result in significant adverse impacts on pedestrian conditions at a total of two sidewalks, <u>25</u> crosswalks, and eight corner areas in one or more analyzed peak hours. Most of these impacts could be mitigated through the proposed mitigation measures, including relocation or removal of obstacles on sidewalks, construction of wider sidewalks and corners, crosswalk widening, and signal timing adjustments. However, no practicable mitigation was identified for impacts at a total of <u>two</u> crosswalks and four corner areas, and impacts in one or more peak hours at these locations would remain unmitigated; no unmitigated significant adverse sidewalk impacts would remain upon incorporation of the recommended mitigation measures. <u>In consultation with the New York City Department of Transportation, DCP, as lead agency, explored the viability of mitigation measures to address the identified unmitigated significant adverse pedestrian impacts</u>

between Draft EIS and Final EIS; no practicable mitigation was identified for these impacted intersections and impacts in one or more peak hours at these locations would remain unmitigated. Therefore, unavoidable significant adverse impacts on pedestrian conditions would occur due to the Proposed Action.

22.5 CONSTRUCTION

22.5.1 Historic and Cultural Resources

As described in Chapter 18, "Construction," development under the Proposed Action—specifically, on Projected Development Sites 3, 6, 9, 10, 12, and 16, and Potential Development Sites 2-7, 12, 13, 15, and 20—could result in inadvertent construction-related damage to 24 NYCL- and/or S/NR-eligible historic resources, as they are located within 90 feet of projected and/or potential development sites.

The New York City Building Code, under section C26-112.4, provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. For designated NYC Landmarks and S/NR-listed historic buildings located within 90 feet of a proposed construction site, additional protective measures under the DOB Technical Policy and Procedure Notice (TPPN) #10/88 supplement the procedures of C26-112.4 by requiring a monitoring program to reduce the likelihood of construction damage and to detect at an early stage the beginnings of damage so that construction procedures can be changed. For the 24 non-designated resources that are within 90 feet of one or more projected and/or potential development sites, construction under the Proposed Action could potentially result in construction-related impacts to the resources, and the protective measures under TPPN #10/88 would only apply if the resources become designated. Without the protective measures described above, significant adverse construction-related impacts would not be mitigated.

In order to make TPPN #10/88 <u>or similar measures applicable to eligible historic resources in the absence</u> of a site-specific approval, such as a Special Permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance. Since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation, DCP, as lead agency, explore<u>d</u> the viability of this mitigation measure between Draft EIS and Final EIS.

The City Planning Commission is currently considering a proposed modification to the zoning text amendment which would require, prior to excavation or demolition pursuant to the Proposed Action on a Projected or Potential Development Site located within 90 feet of an eligible resource, that the Commissioner of Buildings have approved a construction monitoring protocol of similar scope and purpose to the provisions of TPPN #10/88. In the event this modification is adopted, significant adverse historic resources impacts resulting from construction activities under the Proposed Action would be fully mitigated.

22.5.2 <u>Construction Traffic</u>

As discussed in Chapter 18, "Construction," construction activities associated with the Proposed Action would result in significant adverse traffic impacts at nine study area intersections during the construction AM peak hour (6:00–7:00 a.m.). Most of these impacts could be mitigated through the implementation of traffic engineering improvements including the modification of traffic signal phasing and/or timing. However, no practicable mitigation was identified for two intersections and, as the result, would have unmitigated significant adverse impacts. Consequently, unavoidable significant adverse traffic impacts would occur due to the Proposed Action.

22.5.3 Construction Noise

As discussed in Chapter 18, "Construction," construction activities associated with the Proposed Action would occur on multiple development sites within the same geographic area and, as the result, has the potential to increase interior noise levels of existing adjacent commercial buildings. <u>In particular, simultaneous construction at Projected Development Sites 5, 6 and 7, would likely result in increases that would approach or marginally exceed the impact threshold for short periods of time and has the potential <u>to do so during other construction quarters bordering the peak construction period. Therefore, if the peak construction scenario conservatively assumed for the purposes of this analysis with regard to <u>simultaneous construction on Projected Development Sites 5, 6 and 7 is realized, the Proposed Action would result in a significant adverse construction noise impact.</u></u></u>

<u>Partial</u> mitigation for construction noise impacts <u>could</u> include, in addition to the requirements under the <u>New York City Noise Control Code</u>, noise barriers, use of low noise emission equipment, locating stationary equipment as far as feasible away from receptors, enclosing areas, limiting the duration of activities, specifying quiet equipment, scheduling of activities to minimize impacts (either time of day or seasonal considerations), and locating noisy equipment near natural or existing barriers that would shield sensitive receptors.

The City Planning Commission is currently considering a modification to the proposed zoning text amendment which would provide that no demolition or excavation work may be issued for development of Projected Sites 5, 6, or 7 as qualifying sites under the rezoning unless the Chairperson of the City Planning Commission has certified either: a) that the simultaneous construction of Projected Sites 5, 6 and 7 conservatively analyzed in the EIS is not anticipated to occur; or, b) that a restrictive declaration has been executed and recorded providing for implementation during construction of the noise path and control measures described above, except to the extent determined by the Chair to be infeasible or

impracticable due to site specific conditions. This provision, if adopted by the City Planning Commission, would partially mitigate the potential for significant adverse noise impacts during construction.

<u>The proposed modifications to the zoning text amendment discussed above are considered partial</u> <u>mitigations only. Consequently, these impacts would not be completely eliminated and they would</u> <u>constitute</u> an unmitigated significant adverse construction noise impact.