Chapter 23: Unavoidable Adverse Impacts

A. INTRODUCTION

This chapter summarizes unavoidable significant adverse impacts that may result from the Proposed Actions. According to the 2020 *City Environmental Quality Review (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 infeasible.

As described in Chapter 21, "Mitigation," the Proposed Actions would result in significant adverse impacts with respect to open space, shadows, historic and cultural resources, transportation, and construction. To the extent practicable, mitigation has been proposed for these identified significant adverse impacts. However, in some instances no practicable mitigation has been identified to fully mitigate significant adverse impacts, and there are no reasonable alternatives to the Proposed Actions that would meet the Proposed Actions' purpose and need, eliminate potential impacts, and not cause other or similar significant adverse impacts. In other cases mitigation has been proposed, but absent a commitment to implement the mitigation, the impacts may not be eliminated.

B. OPEN SPACE

The Proposed Actions would result in indirect significant adverse impacts related to the total, active, and passive open space ratios, and direct significant adverse impacts attributed to incremental shadows on two open space resources. The direct impacts related to shadows on the open space resources is discussed below under "Shadows."

Measures being considered to mitigate the significant adverse open space impacts include improvements to existing parks to allow for expanded programming and enhanced usability. Because these measures would only partially mitigate the significant adverse impact, even with the implementation of these measures, the impact would not be fully mitigated. These measures will be explored by the New York City Department of City Planning (DCP) in consultation with the New York City Department of Parks and Recreation (NYC Parks) between the Draft Environmental Impact Statement (DEIS) and Final Environmental Impact Statement (FEIS). As noted above, the study area exhibits a very low open space ratio under existing conditions. Creating less project-generated demand for open space by reducing the amount of housing to eliminate the impact would not meet the goals and objectives of the Proposed Actions, which call for the provision of housing, including a substantial amount of needed affordable housing. In the absence of mitigation measures, the significant adverse open space impact would remain unmitigated and would constitute an unavoidable adverse impact of the Proposed Actions.

C. SHADOWS

The significant adverse shadow impacts that would result from the Proposed Actions are summarized below. As described in Chapter 21 "Mitigation," DCP would continue to explore potential mitigation measures for these impacts with LPC and NYC Parks between the DEIS and the FEIS. If feasible mitigation is identified, the impacts would be considered partially or fully

mitigated. In the absence of mitigation, the impact to these resources would be an unavoidable adverse impact of the Proposed Actions.

MOST PRECIOUS BLOOD CHURCH

This church, listed on the State and National Registers of Historic Places (S/NR-listed), has large stained-glass windows on its front (west), Baxter Street façade and a row of stained-glass windows on its south façade, both of which face projected development sites, primarily Projected Development Site 27. The stained-glass windows would not be subject to any new shadows in winter but would receive an hour and a half of new shadow on March 21 and September 21 afternoons and 3 to 3 ½ hours of new shadow on late spring and summer afternoons. The new shadow would cover large portions of the windows at times and would eliminate the remaining sun on the windows for 50 minutes to an hour in the late afternoons of the spring, summer, and fall months. Potential mitigation measures could include the provision of artificial lighting to simulate the effect of direct sunlight or implementing some other mutually agreed-upon measure to improve the clarity of the sunlight and ambient light reaching the interior sanctuary. In the absence of feasible mitigation, the significant adverse impact would be considered unavoidable.

MERCHANT'S HOUSE MUSEUM REAR GARDEN

The Merchants House and Museum Garden is both a New York City and a National Historic Landmark, and the rear yard garden has lush plantings, flower beds, marble benches, and is enclosed by high walls. The walls and the townhouse itself cast shadows on the garden; however, in the No Action condition, the garden receives sun in the late morning and early afternoon, particularly in the spring, summer, and fall. With the Proposed Actions, the west-adjacent Potential Development Site J would cast new shadow on the garden during these times throughout the year, for approximately an hour up to an hour and 45 minutes, depending on the season, eliminating all the sunlight for most of these periods. Potential mitigation measures could include a modification of the height or bulk configuration of Potential Development Site J to reduce or avoid incremental shadow; evaluating the feasibility of relocating sensitive plantings or uses to locations within the garden less affected or unaffected by incremental shadow; modifying the layout of the garden to minimize the effects of the incremental shadow on sensitive plantings or uses; and replacing plantings in the affected area with similar but more shade-tolerant plantings. In the absence of feasible mitigation, the significant adverse impact would be considered unavoidable.

GRAND CANAL COURT

Grand Canal Court is a full-size basketball court with benches, trees, and a high chain-link fence around the perimeter. The Proposed Actions would result in new shadows, primarily from Projected Development Sites 5 and 6, lasting for three to four hours in the morning in every season. In fall, winter, and early spring, incremental shadow from Projected Development Site 6 would fall to the north and shadow areas of the court at times and in winter would eliminate remaining sun for nearly two hours. In late spring and summer months, incremental shadow from Projected Development Site 5 would fall to the southwest across the space early in the early morning for two to three hours, at times eliminating most or all the remaining sun until about 8:00 AM (9:00 AM EDT). Potential mitigation measures could include modifying the height, shape, size, or orientation of Projected Development Sites 5 and 6 to eliminate or reduce the extent and duration of incremental shadow on the court; relocating the affected features or uses to another location unaffected by the new shadows within the open space or to another nearby location or replacement facility, if feasible; and providing improvements that would enhance the usability, condition, or

attractiveness of the open space. In the absence of feasible mitigation, the significant adverse impact would be considered unavoidable.

GREENSTREET BETWEEN THOMPSON STREET AND CANAL STREET

This triangular of sidewalk—where Canal Street, Sixth Avenue, and Thompson Street meet—contains several trees in tree pits. There are no benches or other amenities. In the spring, summer, and fall, incremental shadow primarily from Projected Development Site 6 would fall on the space for four to five hours throughout the morning, covering much or all of the space at times, particularly in the March to May and July to September periods. In addition, Projected Development Site 7 would contribute substantial incremental shadow on the March 21/September 21 analysis day. Given the sun requirements of these trees and the generally stressed nature of this location, in small pits surrounded by traffic, the new shadows would likely cause significant adverse impacts to the health of these trees. Potential mitigation measures could include modifying the height or bulk configuration of Projected Development Sites 6 and 7 to reduce incremental shadow on the space; relocating or replacing the plantings; or undertaking additional maintenance to reduce the likelihood of species loss. In the absence of feasible mitigation, the significant adverse impact would be considered unavoidable.

PETROSINO SQUARE

This small but heavily used City park at Centre and Spring Streets is a passive space with as seating benches, water fountains, trees, and landscaping. In the late spring and summer, shadow primarily from Projected Development Site 28, and to a lesser degree from Potential Development Site GG, would enter the northern part of the park at about 2:30 PM (3:30 PM EDT) and move eastward. This incremental shadow would eliminate the remaining sun on the northern third of the park from 4:00 PM to 5:00 PM on May 6/August 6 (5:00 PM to 6:00 PM EDT) and on June 21 from 4:30 PM to about 6:00 PM (5:30 PM to 7:00 PM EDT). Total duration of incremental shadow on these dates would be 2½ to 3½ hours, depending on the month, and for nearly half of that period the incremental shadow would eliminate the remaining sunlit area on the north side of the park. Potential mitigation measures could include relocating or replacing the bench seating in the affected area to another location in the park; providing improvements to enhance the attractiveness or condition of the bench seating or other passive amenities in the park; relocating or replacing plantings; or undertaking additional maintenance to reduce the likelihood of species loss. In the absence of feasible mitigation, the significant adverse impact would be considered unavoidable.

BOWERY & EAST 4TH STREET PLANNED OPEN SPACE

A new publicly accessible open space is proposed by DEP on East 4th Street between Lafayette Street and Bowery (east-adjacent to the Merchant's House Museum and Garden. This space will be mostly paved with a small turf oval in the center, and planted buffers and benches around the west, north, and east perimeters. Incremental shadow would fall on this space in all seasons. In the fall, winter, and early spring, incremental shadow primarily from Projected Development Site 13 would fall on the space in the late morning and midday hours. Incremental shadow from Projected Development Site 2 would fall on the space in the late afternoon for 90 minutes in the fall and early spring. In the late spring and summer months, incremental shadow from Potential Development Site J would fall on the space in the mid-to late afternoons. Potential mitigation measure could include modifying the height or bulk configuration of Projected Development Sites 13, 1, and 2; planting shade-tolerant plantings in the sections of the space affected by incremental shadow occurring during the growing season (represented by the May 6/August 6, June 21, and to a lesser extent March 21/September 21 analysis days); locating the bench seating in the areas of

the space least affected by incremental shadow; or providing improvements to enhance the attractiveness or condition of the bench seating or other passive amenities in the park. In the absence of feasible mitigation, the significant adverse impact would be considered unavoidable.

D. HISTORIC AND CULTURAL RESOURCES

ARCHAEOLOGICAL RESOURCES

The Proposed Actions have the potential to result in an unmitigated significant adverse archaeology impact associated with all or portions of 17 potential and projected development sites. Since none of the 21 lots on the 17 projected and potential development sites identified as archaeologically sensitive are under the City's control, future development on these properties could occur on an as-of-right basis. There are no mechanisms in place to require that such development undertake archaeological analysis to determine the presence of archaeological resources. Because there is no mechanism to avoid or mitigate potential impacts at these sites, the significant adverse impact would be unmitigated and this would result in an unavoidable adverse impact.

ARCHITECTURAL RESOURCES

The Proposed Actions would result in direct significant adverse impacts to the portion of the S/NR-listed SoHo Historic District (which is not within the boundaries of the NYCHD SoHo-Cast Iron Historic District; the S/NR-listed Bowery Historic District; and the S/NR-listed Chinatown and Little Italy Historic District as a result of the demolition of contributing resources to these historic districts. These significant adverse impacts would be unavoidable, as the demolition of buildings within the S/NR-listed historic districts are not protected under the New York City Landmarks Law. The Proposed Actions could result in indirect significant adverse impacts to the S/NR-listed Bowery Historic District, the Samuel Tredwell Skidmore House (S/NR-listed, NYCL) and the Old Merchant's House (NHL, S/NR-listed, NYCL, NYCL Interior) by changing the setting of contributing resources in the Bowery Historic District and by constructing taller buildings that may not be similar to the existing built character of the architectural resources' settings. Because there is no mechanism to avoid or fully mitigate potential impacts at these sites, the significant adverse impact would be unmitigated and would constitute an unavoidable adverse impact of the Proposed Actions.

E. TRANSPORTATION

TRANSIT

Under the Proposed Actions, street stair S6/M8 at the Canal Street (A/C/E) subway station on the Eighth Avenue Line would experience a significant adverse impact due to project-generated demand in both the AM and PM peak hours. Stairway widening is the most common form of mitigation for significant stairway impacts, provided that New York City Transit (NYCT) deems it practicable (i.e., that it is worthwhile to disrupt service on an existing stairway to widen it and that a given platform and sidewalk affected by such mitigation are wide enough to accommodate the stairway widening). Another potential mitigation measure would be to add vertical capacity (i.e., adding an elevator, escalator, or additional stairway) in the vicinity of the impacted stairway. In the absence of practicable mitigation measures, the significant adverse impact to the street stairs at the Canal Street (A/C/E) subway station in the AM and PM peak hours would remain unmitigated. DCP, as lead agency, will explore potential mitigation measures in coordination with NYCT between publication of the DEIS and FEIS. Absent the identification and implementation

of feasible mitigation measures that would mitigate the subway stair to the greatest extent practicable, the Proposed Actions would result in unavoidable significant adverse subway station impacts.

PEDESTRIANS

The Proposed Actions would result in a significant adverse impact to the north sidewalk on Canal Street between Lafayette and Centre Streets during the Saturday peak hour. This impact would occur at a point where pedestrian flow is constrained by the presence of a subway station elevator located on the sidewalk adjacent to the curb.

Standard mitigation for projected significant adverse sidewalk impacts typically include relocating or removing street furniture or other impediments to pedestrian flow, and sidewalk widening. While relocation of the subway station elevator is not practicable, DCP, as lead agency, will further explore potential mitigation measures in coordination with DOT between publication of the DEIS and FEIS. Absent the identification and implementation of feasible mitigation measures, the significant adverse impact to the north sidewalk on Canal Street between Lafayette and Centre Streets during the Saturday peak hour would remain unmitigated, and this would constitute an unavoidable adverse pedestrian impact.

F. CONSTRUCTION

NOISE

Construction activities would be required to the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) for construction noise control measures. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the New York City Noise Control Code. These measures could include a variety of source and path controls. In terms of source controls (i.e., reducing noise levels at the source or during the most sensitive time periods), the following measures would be implemented in accordance with the New York City Noise Control Code:

- Equipment that meets the sound level standards specified in Subchapter 5 of the New York City Noise Control Code would be utilized from the start of construction.
- As early in the construction period as logistics would allow, diesel- or gas-powered equipment would be replaced with electrical-powered equipment such as welders, water pumps, bench saws, and table saws (i.e., early electrification) to the extent feasible and practicable.
- Where feasible and practicable, construction sites would be configured to minimize back-up alarm noise. In addition, all trucks would not be allowed to idle more than three minutes at the construction site based upon Title 24, Chapter 1, Subchapter 7, Section 24-163 of the New York City Administrative Code.
- Contractors and subcontractors would be required to properly maintain their equipment and mufflers.

In terms of path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors), the following measures for construction would be implemented to the extent feasible and practicable:

- Where logistics allow, noisy equipment, such as cranes, concrete pumps, concrete trucks, and delivery trucks, would be located away from and shielded from sensitive receptor locations.

- Noise barriers constructed from plywood or other materials would be erected to provide shielding; and
- Path noise control measures (i.e., portable noise barriers, panels, enclosures, and acoustical tents, where feasible) for certain dominant noise equipment would be employed to the extent feasible and practical based on the results of the construction noise calculations.

Construction activity is expected to follow the requirements of the New York City Noise Control Code. However, the implementation of these measures would not eliminate the identified significant adverse construction noise impacts predicted to occur during hours when the loudest pieces of construction equipment are in use. In order to completely avoid significant adverse construction noise impacts, project-generated construction would have to be restricted in such a manner so as to not occur on the same block as, or within one to two blocks from, existing sensitive receptors, which would require elimination of the proposed Project Area in the vicinity of these sensitive receptors. This would severely limit achievable development density and the Proposed Actions' goals and objectives. Because there is no mechanism to fully avoid or mitigate potential impacts while still accomplishing the Proposed Actions' goals, the significant adverse construction noise impact would be unmitigated and this would result in an unavoidable adverse impact. ✷