Chapter 5: Open Space

A. INTRODUCTION

This chapter assesses the potential impacts of the proposed Lenox Hill Hospital (LHH) Redevelopment project (the Proposed Project) on open space resources. Open space is defined in the 2021 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect and enhance the natural environment. According to CEQR guidance, an open space assessment should be conducted if a project would have a direct effect on open space, such as eliminating or altering a publicly accessible open space, or an indirect effect, such as when an increase in population could overtax the capacity of an area's existing open spaces to serve the future population. Direct effects could also include a proposed action's effects on open spaces due to increased noise, air pollutant emissions, odor, or shadows.

As described in Chapter 1, "Project Description," Lenox Hill Hospital (the Applicant) is requesting a series of discretionary actions from the City Planning Commission (CPC) to facilitate the enlargement and modernization of the existing LHH on Block 1411, Lots 1 and 113 (Projected Development Site 1), bounded by Park and Lexington Avenues and East 76th and East 77th Streets in Manhattan. The Proposed Project would include a new building fronting on Lexington Avenue, as well as additions and modifications to portions of the existing hospital complex on Projected Development Site 1 and connections between the new hospital building and the renovated buildings. Two building envelopes are proposed, each of which would accommodate the Proposed Project's program. Envelope 1 would include a new approximately 771,000-gross-square-foot (gsf) building on Lexington Avenue and 56,000 gsf of additions to the existing hospital. Envelope 2 would include a new approximately 867,000-gsf building and 8,000 gsf of additions to the existing hospital. With the existing buildings to remain, the overall gross floor area of the Proposed Project on Projected Development Site 1 would be approximately 1.4 million gsf with either envelope. The program, project population (staff, patients, visitors), site access, zoning actions, and construction duration would be the same for both Envelope 1 and Envelope 2.

This Environmental Impact Statement (EIS) also considers the as-of-right development of a building with hospital support functions at 111-115 East 77th Street between Lexington and Park Avenues (Block 1412, Lots 9, 10, and 11) (Projected Development Site 1a) as part of the Proposed Project. It would be connected to Projected Development Site 1 by a utility tunnel under East 77th Street. In addition, the Applicant proposes to provide improvements to the 77th Street subway station of the Lexington Avenue (No. 6) line, providing Americans with Disabilities Act (ADA) access to the downtown platform and improving sidewalk conditions in the immediate area.

The *CEQR Technical Manual* recommends performing an open space assessment if a project would have a direct effect on an area of open space or an indirect effect through increased population. As described in Chapter 1, "Project Description," the Proposed Project would result in a daily net increment of 339 employees, 17 patients, and 45 visitors as compared to the No Action condition. The Proposed Project would not exceed 200 residents or 500 nonresidents, the CEQR thresholds

requiring a detailed assessment of indirect impacts to open space due to increased population. However, as described in Chapter 4, "Shadows," the Proposed Project with either Envelope 1 or Envelope 2 would result in incremental shadow impacts to the publicly accessible church garden at 103 East 77th Street (the Eighth Church of Christ, Scientist). In accordance with *CEQR Technical Manual* guidance, a direct effect open space assessment was conducted to determine whether the Proposed Project would result in a significant adverse open space impact.

B. PRINCIPAL CONCLUSIONS

The Proposed Project with either Envelope 1 or Envelope 2 would not result in significant adverse impacts to open space by directly affecting open space resources. According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if: a) a proposed project results in a significant physical effect on existing open space by increasing shadows, noise, air pollutant emissions, or odors compared to the future No Action condition (e.g., a significant impact may occur if a project causes a significant incremental shadow on a park facility, such as a spray shower at a playground or a lawn area used for sunbathing, because the facilities may not be able to be used as intended as the conditions may greatly detract park users from utilizing the park facilities); or b) if a proposed project does not affect quantitative open space needs, but causes a qualitative impact compared to the No Action condition, such as when the overall open space ratio is adequate, but a specific user group (such as young children or bocce players) would be adversely affected by changes to or elimination of park features they use, or there would be conflicts in the utilization of open space as a result of the proposed project (e.g., open space planned for a large-scale development may include more passive open space than active, which may not provide an appropriate mix of active and passive recreational facilities typically necessary for a residential population).

DIRECT EFFECTS

In the With Action condition, the Proposed Project with either Envelope 1 or Envelope 2 would cast shadows on the publicly accessible garden at 103 East 77th Street belonging to the Eighth Church of Christ, Scientist, which is considered a direct effect on open space. The garden is located across the street from Projected Development Site 1 and abuts Projected Development Site 1a. As detailed in Chapter 4, "Shadows," the Proposed Project with both Envelopes 1 and 2 would both cast new shadows on the church garden and allow new areas of sunlight to the rear of the garden (see Figures 4-3 to 4-21) in the spring, summer, and fall. The increase in shadows on the vegetation is considered a significant adverse shadow impact to the vegetation in the garden. However, this would not constitute a significant adverse open space impact because the additional shadow would not significantly affect the use of the garden and there would be no displacement or alteration of the open space.

C. METHODOLOGY

Public open space is defined in the *CEQR Technical Manual* as "open space that is accessible to the public on a constant and regular basis for active and passive recreation, including for designated daily periods…and may include…Church yards (with seating) or cemeteries, if publicly accessible on a constant and regular basis for passive recreation such as strolling." As described in greater detail below, the Proposed Project with either Envelope 1 or Envelope 2 would cast shadows on the publicly accessible church garden at 103 East 77th Street (the Eighth Church of Christ, Scientist). However, there would be no difference in population between Envelope 1

and Envelope 2 and the increase in the user population due to the Proposed Project would not exceed the threshold requiring an analysis indirect effects on open space.

DIRECT EFFECTS

According to the *CEQR Technical Manual*, a project directly affects open space conditions if it would result in a physical loss of public open space (by encroaching on or displacing open space); change the use of an open space so that it no longer serves the same user population (e.g., elimination of playground equipment); limit public access to an open space (e.g., the closing of a park entrance, thereby reducing access points); or cause increased noise, air pollutants, odors, or shadows on public open space that would affect its function, usability, or enjoyment, whether on a permanent or temporary basis. According to the *CEQR Technical Manual*, for projects that would have a direct effect on a specific type of open space without introducing a significant new user population, the open space analysis may be targeted toward those open spaces that are similar to the space that would be eliminated or altered by the project. This chapter considers information from Chapters 4, "Shadows"; 11, "Air Quality"; and 13, "Noise" to determine whether the Proposed Project would have the potential to directly affect the church garden at 103 East 77th Street. Potential construction period impacts are considered in Chapter 16, "Construction."

INDIRECT EFFECTS

Following the methodology of the *CEQR Technical Manual*, indirect open space effects may occur when a project would add enough of a population, either residents or workers, to noticeably diminish the ability of an area's open space to serve the future population. Typically, an assessment of indirect effects is conducted when a project would introduce 200 or more residents or 500 or more workers to an area. Neither of these thresholds are met under Envelope 1 or Envelope 2, which have the same projected population; therefore, an indirect effects analysis is not required, and the Proposed Project with either Envelope 1 or Envelope 2 would not result in any significant adverse indirect open space impacts.

D. DIRECT EFFECTS

EXISTING CONDITIONS

The garden space owned and operated by the Eighth Church of Christ, Scientist occupies a narrow lot between the church building and Proposed Development Site 1a. In accordance with CEQR, open space that is used for relaxation, such as sitting or strolling, is classified as "passive open space." When its gates are open, the garden is accessible to the public. This occurs more frequently in warm weather but there is no posted schedule. There is a total of nine small benches accommodating one or two people located at intervals along the outer perimeter against or adjacent to the walls of the garden. The maximum number of seated users is estimated to be 18, and the number observed on clement days was closer to five.

There are several trees planted at intervals down the center of the space, front to back, in tree pits with additional plantings. Two narrow paths of paving stones run from the entrance toward the back on either side of the tree pits and between the trees. Given the narrowness of the lot and the adjacent buildings, the space is generally shady, as shown in Figures 4-3 to 4-21, and the tree canopy provides additional shade during the warmer months.

THE FUTURE WITHOUT THE PROPOSED PROJECT (NO ACTION CONDITION)

As described in Chapter 1, "Project Description," for the purpose of a conservative analysis, the Reasonable Worst Case Development Scenario (RWCDS) for the EIS considers the as-of-right development of 111-115 East 77th Street between Lexington and Park Avenues (Block 1412, Lots 9, 10, and 11) (Projected Development Site 1a) as part of the Proposed Project. For the purpose of this analysis, it is assumed that in the No Action condition, both Projected Development Site 1 and Projected Development Site 1a will not be redeveloped. Therefore, there will be no new shadows and no direct effects on the church garden. In addition, there will not be the potential for direct effects on open space related to air quality, noise, or construction impacts.

THE FUTURE WITH THE PROPOSED PROJECT (WITH ACTION CONDITION)

According to the *CEQR Technical Manual*, if a proposed project results in a significant physical effect on existing open space by increasing shadows, noise, air pollutant emissions, or odors compared to the future No Action condition, then there may be a significant impact requiring mitigation. As described in Chapter 4, "Shadows," the Proposed Project would result in a significant adverse shadow impact due to incremental shadows cast on the vegetation in the church garden; however, with regard to use of the open space, the shadows analysis found the following:

MARCH 21/SEPTEMBER 21 ANALYSIS DAY

- Only one to two of the nine benches would be affected by the incremental shadow, which would mean potentially up to four people at any given moment. The other seven to eight benches would be in shadow in both the existing/No Action and With Action conditions (i.e., would be unchanged in terms of sunlight/shadow conditions). With Envelope 2, there would be no difference in incremental shadow duration or extent when compared to Envelope 1. In a neighborhood of thousands of residents and workers, and with Central Park three blocks away, affecting up to two out of nine small benches is not considered significant.
- With Envelope 2, there would be a little less incremental shadow during the period 11:15 PM to 12:30 PM [12:15 PM to 1:30 PM Eastern Daylight Time (EDT)]. From 12:00 PM to 12:15 PM (1:00 PM to 1:15 PM EDT), the incremental shadow from Envelope 2 would not eliminate all the sunlight, as would be the case with Envelope 1, and the bench at the rear of the garden would be in sun for that 15-minute period, unlike with Envelope 1.

MAY 6/AUGUST 6 ANALYSIS DAY

- As noted for March 21 and September 21, given the small size of the space and limited number and size of the benches, the potential number of users that would be affected is limited. Multiple site visits showed approximately five people in the space around midday.
- As noted for March 21 and September 21, Central Park is three blocks away and contains many sunlit areas during the midday affected period.

JUNE 21 ANALYSIS DAY

- On June 21, when shadows are shortest, the incremental shadow would be smaller than on May 6 and August 6 and there would always be sunlit areas, including one or more benches throughout the period when incremental shadow would occur.

- With Envelope 2, the incremental shadow duration would be the same as Envelope 1 and the coverage would be similar but a little smaller between 11:05 AM and 12:20 PM (12:05 PM to 1:20 PM EDT).
- June 21 tends to be a hot day and benches in the shade are more desirable to the garden's users, as observed on site visits in the summer months.
- As noted for the other spring, summer, and fall dates, given the small size of the space and limited number and size of the benches, the potential number of users that would be affected is limited. Multiple site visits showed approximately five people in the space around midday.
- As noted for the other spring, summer, and fall dates, Central Park is three blocks away and contains many sunlit areas during the midday affected period.

Overall, with Envelope 2, there would be less incremental shadow coverage in the spring and summer months as compared to Envelope 1. However, the assessment concluded that the project-generated incremental shadow would not cause a significant adverse impact to the recreational use of the garden on any of these analysis days, and the garden could continue to be used as intended for quiet relaxation and contemplation. Therefore, the Proposed Project with either Envelope 1 or Envelope 2 would not result in a significant adverse open space impact.

Disruptions and noise added to this open space during construction are discussed in Chapter 16, "Construction." In addition, as noted in Chapter 11, "Air Quality" and Chapter 13, "Noise," the Proposed Project would not result in any significant adverse air quality and noise impacts that would result in significant adverse impacts to open space. ✷