Chapter 22: Mitigation

A. INTRODUCTION

This chapter considers mitigation measures to address significant adverse impacts resulting from the Proposed Project. Potential impacts were identified in the areas of transportation (traffic, transit, and pedestrians), air quality, noise, and construction noise. Potential mitigation measures for each of these technical areas are discussed below.

B. TRANSPORTATION

As detailed in Chapter 13, "Transportation," the analysis of potential effects to transportation elements concludes that the Proposed Project would result in potential significant adverse operational-period impacts to traffic, transit (subway station elements and subway line-haul), and pedestrians. Potential measures to mitigate these impacts to the extent practicable are described below. Between Draft and Final EIS, additional refinements and detailed analyses of the potential mitigation measures will be undertaken in coordination with the lead agency, the New York City Department of Transportation (DOT), and New York City Transit (NYCT). It is expected that some of the impacts identified in this DEIS as unmitigated could change and may be revised with the implementation of approved mitigation measures, thereby resulting in fewer unmitigated impacts. However, refinements to the analysis that will be conducted between Draft and Final EIS could also identify other impacts for traffic, transit, and pedestrians that may or may not be mitigatable, thereby yielding additional unmitigated impacts.

TRAFFIC

Traffic conditions were evaluated at 31 intersections for the 4 conventional operational peak hours—weekday AM, midday, and PM and Saturday midday/afternoon. An additional 11 intersections (for a total of 42 intersections) were also analyzed for the weekday and Saturday evening event peak hour conditions. Significant adverse traffic impacts were identified at 11 intersections in the weekday AM peak hour, 6 in the weekday midday peak hour, 10 in the weekday PM peak hour, 23 in the weekday evening peak hour, 9 in the Saturday midday/afternoon peak hour, and 20 in the Saturday evening peak hour. In total, significant adverse traffic impacts during one or more analysis peak hours were identified at 25 study area intersections.

Measures, such as signal phasing and timing changes, new signals, lane re-striping, and parking regulation changes, will be explored between Draft and Final EIS to mitigate the projected significant adverse traffic impacts to the extent practicable. The implementation of these standard traffic mitigation measures would be subject to review and approval of DOT. Additionally, an event day transportation management plan is under development to either be incorporated as part of the Proposed Project or as mitigation to address congested conditions resulting from peak weekday and Saturday evening event activities. Potential strategies could include the use of traffic cones or other means to delineate

traffic lanes, deployment of Traffic Enforcement Agents (TEAs) to regulate traffic and pedestrian circulation, and temporary installation of Variable Message Signs (VMSs) at critical decision points. Coordination with the New York City Police Department (NYPD) will be undertaken to preliminarily plan out these event day strategies, which may be refined over time based on actual conditions upon the operation of the Proposed Project. The Applicant will be responsible for costs associated with DOT-approved mitigation measures and the deployment of TEAs and VMSs by the NYPD on event days.

The anticipated effects of implementing the above mitigation measures/strategies will be presented in the Final EIS. For this Draft EIS, the impacts identified for the 25 study area intersections are all considered to be potentially unmitigated.

TRANSIT

As discussed in Chapter 13, "Transportation," the Proposed Project is not expected to result significant adverse transit impacts during the conventional operational peak hours that are typically studied for transit operations—weekday AM and PM. The analysis of the weekday and Saturday evening event peak hours, however, concluded the potential for significant adverse impacts at one of the stairways serving the Kingsbridge Road (No. 4) Station. Additionally, between Draft and Final EIS analysis of line-haul conditions on the No. 4 and/or B/D subway lines during these evening event peak hours may conclude significant adverse line-haul impacts.

Measures to mitigate potential transit impacts will be developed between Draft and Final EIS in coordination with New York City Transit (NYCT). Because the identified impacts would occur only during evening event peak hours for high-attendance events at the Project Site, permanent physical improvements may not be warranted. Rather, event day management strategies could be adopted to address peak ridership surges and high usage of nearby subway stations. These strategies could include NYCT deploying extra trains on event days corresponding with peak event activity time periods and the Applicants, in coordination with NYCT, providing staff at ground level and/or station mezzanines, where appropriate, to disperse pedestrian flow to stairways that are less used.

The anticipated effects of implementing the above mitigation measures/strategies will be presented in the Final EIS. For this Draft EIS, the impacts identified for the one stairway at the Kingsbridge Road (No. 4) Station and those possibly for the No. 4 and/or B/D subway lines are all considered to be potentially unmitigated.

PEDESTRIANS

Pedestrian conditions were evaluated at 18 sidewalks, 17 corners, and 8 crosswalks for the weekday AM, midday, and PM and Saturday midday/afternoon peak hours. For the weekday and Saturday evening event peak hours, additional analysis locations were included to assess conditions along paths event attendees would likely traverse to/from potential off-site parking locations, resulting in total 25 sidewalks, 19 corners, and 12 crosswalks analyzed for these study time periods. Significant adverse pedestrian impacts were identified at 1 pedestrian element (i.e., sidewalk, corner, or crosswalk) in the weekday PM peak hour, 12 in the weekday evening peak hour, 1 in the Saturday midday/afternoon peak hour, and 11 in the Saturday evening peak hour. In total, significant adverse pedestrian impacts during one or more analysis peak hours were identified at six study area sidewalks, one corner, and seven crosswalks.

Measures, such as sidewalk clear width improvements, corner bulbouts, signal timing changes, and crosswalk widenings, will be explored between Draft and Final EIS to mitigate the projected significant adverse pedestrian impacts to the extent practicable. As with traffic, the implementation of these standard pedestrian mitigation measures would be subject to review and approval of DOT. Strategies developed through the event day transportation management plan may further enhance pedestrian operations during peak event day periods. The anticipated effects of implementing these measures/strategies will be presented in the Final EIS. For this Draft EIS, the impacts identified for the six study area sidewalks, one corner, and seven crosswalks are all considered to be potentially unmitigated.

C. AIR QUALITY

As described in Chapter 14, "Air Quality," the mobile source air quality analysis determined that compared to the No Action condition, the maximum annual incremental particulate matter ($PM_{2.5}$) concentration is predicted to potentially exceed the annual *de minimis* criterion at West Kingsbridge Road and Reservoir Avenue, and at West 195th Street and Reservoir Avenue.

As discussed in Section B, "Transportation," traffic mitigation measures will be explored between Draft and Final EIS to mitigate the projected significant adverse traffic impacts to the extent practicable. Therefore, since air quality mitigation measures have not been identified for the DEIS, at these locations, the significant adverse air quality impact is deemed as unavoidable, as discussed in Chapter 23, "Unavoidable Adverse Impacts."

Between the DEIS and FEIS, in consultation with DEP, additional review and evaluation will be performed which is expected to determine that the identified impacts related to mobile source annual average $PM_{2.5}$ increments will be avoided. The additional review is expected to include a more refined microscale analysis which incorporates all of the traffic peak periods and accounts for the relative frequency of events that would take place. If required, additional modeling of $PM_{2.5}$ concentrations (Grid Analysis) will be performed using more refined or comprehensive analysis procedures to determine the magnitude and extent of neighborhood-scale $PM_{2.5}$ impacts from mobile sources. Other updates may include the use of newer vehicle emissions model data and projections. It is anticipated that these additional measures will reduce $PM_{2.5}$ concentrations below the annual *de minimis* criterion threshold.

D. NOISE

Chapter 16, "Noise," identifies the potential for traffic generated by the Proposed Project to result in a significant adverse noise impact at residential buildings along Reservoir Avenue between West 195th Street and West Kingsbridge Road during the Saturday Evening time period (i.e., 6 PM to 8 PM) on event days. At these receptors during this time period, vehicular traffic associated with the Proposed Project would result in a 4.4 dBA noise level increase; however, the total noise exposure at the residences would be in the "marginally acceptable" range and interior noise levels at buildings with standard façade construction would be expected to experience interior noise levels less than 45 dBA L_{10}, which would be considered acceptable according to 2021 *City Environmental Quality Review (CEQR) Technical Manual* noise exposure guidance. Possible mitigation measures would be explored by the Applicants in more detail between the DEIS and FEIS, in consultation with the lead agency, but could include an offer of receptor control

measures (i.e., building façade improvement) for affected façades. These mitigation measures could be implemented prior to operation of the live event venue. Building façades with insulated glass windows or storm windows and alternative ventilation would provide sound attenuation such that even during warm weather conditions, interior noise levels would be approximately 28 to 30 dBA less than exterior noise levels. As such, with mitigation measures in place, the predicted operational noise impact would be completely mitigated. However, if the residences were to decline the offer of mitigation, the predicted impact would be considered unmitigated.

E. CONSTRUCTION NOISE

Chapter 19, "Construction," identifies the potential for construction of the Proposed Project to result in significant adverse construction noise impacts at six receptors near the Project Site, including school buildings on West 195th Street between Jerome Avenue and Reservoir Avenue, residential buildings along Reservoir Avenue between West 195th Street and West Kingsbridge Road, residential building at 2755 Reservoir Avenue, residential buildings along Reservoir Avenue between West 195th Street and West Kingsbridge Road, 2700 Jerome Avenue, 1 East Kingsbridge Road, residential buildings at 2614 to 2755 Grand Avenue and 2611 to 2650 Davidson Avenue, and commercial office buildings at 2 to 50 West Kingsbridge Road. At these receptors, construction would produce noise level increases that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities; however, the predicted maximum levels would not persist throughout construction, and the noise levels would fluctuate over the course of the construction period. While the greatest levels of construction noise would not persist throughout construction, these locations would experience construction noise levels whose magnitude and duration could constitute significant adverse impacts, as shown in Figure 19-4.

However, construction would comply with New York City Noise Control Code regulations. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the New York City Noise Control Code. These measures would include a variety of source and path controls. The results of the construction noise analysis presented in Chapter 19, "Construction," assume that each of the measures described below would be implemented.

Mitigation measures to control noise at the receptors predicted to experience impacts could also be offered during construction of the Proposed Project. As described in Chapter 19, "Construction," school buildings on West 195th Street between Jerome Avenue and Reservoir Avenue, residential buildings along Reservoir Avenue between West 195th Street and West Kingsbridge Road, residential building at 2755 Reservoir Avenue, residential buildings along Reservoir Avenue between West 195th Street and West Kingsbridge Road, 2700 Jerome Avenue, 1 East Kingsbridge Road, residential buildings at 2614 to 2755 Grand Avenue and 2611 to 2650 Davidson Avenue, and commercial office buildings at 2 to 50 West Kingsbridge Road are predicted to experience a temporary significant adverse construction noise impact. Possible mitigation measures would be explored by the Applicants in more detail between the DEIS and FEIS, in consultation with the lead agency, but could include an offer of receptor control measures (i.e., building façade improvement) for affected façades. These mitigation measures could be implemented prior to the start of construction. Building façades with insulated glass windows or storm windows and alternative ventilation would provide sound

attenuation such that even during warm weather conditions, interior noise levels would be approximately 28 to 30 dBA less than exterior noise levels. However, the most noise-intensive construction activity nearest the receptors experiencing significant adverse impacts would result in interior noise levels up to 59 dBA L_{10}, which is 14 dBA greater than the level considered acceptable according to *CEQR Technical Manual* noise exposure guidelines. Consequently, the temporary significant adverse noise impacts predicted to occur at the above-mentioned receptors would be only partially mitigated and thus unavoidable as discussed in Chapter 23, "Unavoidable Adverse Impacts." ✶