Chapter 24: Unavoidable Adverse Impacts

A. INTRODUCTION

According to the 2012 *City Environmental Quality Review (CEQR) Technical Manual*, unavoidable significant adverse impacts are defined as those that meet the following two criteria:

- There are no reasonably practicable mitigation measures to eliminate the proposed project's impacts; and
- There are no reasonable alternatives to the proposed project that would meet its purpose and need, eliminate its impacts, and not cause other or similar significant adverse impacts.

As described in Chapter 22, "Mitigation," the proposed project would result in significant adverse impacts with respect to community facilities (public elementary schools and publicly funded child care centers), open space, transportation (traffic, transit, and pedestrians), and construction impacts related to traffic, transit, and noise.

To the extent practicable, mitigation has been proposed for these identified significant adverse impacts. However, in some instances no practicable mitigation was identified to fully mitigate significant adverse impacts, and there are no reasonable alternatives to the proposed project that would meet its purpose and need, eliminate its 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 would not be eliminated. The following is a summary of those "Unavoidable Adverse Impacts."

B. COMMUNITY FACILITIES

PUBLIC SCHOOLS

As discussed in Chapter 5, "Community Facilities," the proposed project would result in a potential significant adverse impact to public elementary schools. By 2022, it is anticipated that the proposed project would result in the development of up to 2,644 residential units on the building sites, including 240 units in Building 8, which would be developed pursuant to a future request for proposals (RFP) by the New York City Housing Authority (NYCHA). Based on the public school student generation rates provided in the *CEQR Technical Manual*, the proposed project would introduce 740 public elementary students, 317 public intermediate school students, and 370 high school students to the study area. Of these, approximately 67 elementary students, 29 intermediate students, and 34 high school students would be introduced by the development of Building 8. The proposed project would not result in any potential significant adverse impacts on intermediate or high school seats.

Preliminary discussions have been held among the Applicant, NYCHA, the New York City Department of City Planning (DCP), and the School Construction Authority (SCA), and are expected to continue between the Draft and Final Environmental Impact Statement (EIS), with

regard to the potential development of a new school building that could accommodate students in kindergarten through grade 8 on a site located within the NYCHA Astoria Houses Campus, even though the proposed project would not result in a significant adverse impact to public intermediate schools. Based on preliminary discussions, it is expected that this school building would be approximately 130,000 square feet (sf) and would accommodate 1,057 elementary and intermediate school students. Development of the public school would be subject to a determination by SCA to proceed with design and construction pursuant to funding in the Department of Education's Five-Year Schools Facilities Capital Plan. The disposition of the property within the NYCHA Astoria Houses Campus to the SCA to facilitate the construction of the future school would be subject to approval by the U.S. Department of Housing and Urban Development (HUD) under Section 18 of the National Housing Act of 1937. Similar to the disposition of property for Buildings 6 through 8, the New York City Department of Housing Preservation and Development (HPD) would act as Responsible Entity for NYCHA's environmental review of the school sites disposition pursuant to 24 CFR Part 58. While funding for design and construction of the public school would be included in the Capital Plan, the SCA has stated that in order to proceed the site acquisition cost would be required to be for a nominal amount. As such, a Memorandum of Understanding (MOU) will be entered into between Applicant, NYCHA, and the SCA that sets forth the cost, timing and duration of the disposition of the school site from NYCHA to SCA, among other activities.

No further mitigation measures are proposed in the event that NYCHA is unable to dispose of the proposed school site to SCA for a nominal fee or the SCA were to otherwise decline to develop the proposed public school due to the absence of city capital funding or for other reasons. In the event that the SCA is unable to obtain sufficient capital funding to develop a school of the size proposed above, the SCA could develop a smaller school potentially containing only elementary school seats that would also fully mitigate the significant adverse impact on public elementary schools. In addition, other options to address school seat demand in the future if the SCA were to decline to develop any public school will also be explored in consultation with DOE between the DEIS and FEIS. These options would include standard measures utilized by DOE/SCA to address school capacity such as redistricting, the provision of off-site capacity, or other administrative measures. Such measures could wholly or partially mitigate the significant adverse impact on public elementary schools. Absent the construction of a new school building or the implementation of other measures by SCA, the proposed project would result in an unavoidable adverse impact on public elementary schools.

CHILD CARE CENTERS

Following *CEQR Technical Manual* methodology, the proposed project would result in a significant adverse impact to publicly funded child care facilities. As discussed in Chapter 22, "Mitigation," possible mitigation measures for this significant adverse impact include adding capacity to existing facilities if determined feasible through consultation with the New York City Administration for Children's Services (ACS), or providing a new child care facility within or near the project site. ACS is also working to create public/private partnerships to facilitate the development of new child care facilities where there is an area of need. At this point, however, it is not possible to know exactly which type of mitigation would be most appropriate or when its implementation would be necessary, because the demand for publicly funded child care depends not only on the amount of residential development in the area but on the proportion of new residents who are children of low-income families (not all children meet the social and income eligibility criteria). Furthermore, several factors may limit the number of children in need of publicly funded child care

slots in ACS-contracted day care facilities, including the potential for future residents to make use of family-based child care facilities and private child care facilities.

The Restrictive Declaration for the proposed project will require the Applicant to work with ACS to consider the need for and the implementation of measures to provide additional capacity, if required, to mitigate the significant adverse impact to publicly funded child care facilities within the 1½-mile study area or within Community Board 1. Absent the implementation of such needed mitigation measures, the proposed project could result in an unavoidable adverse impact on publicly funded child care facilities.

C. OPEN SPACE

As discussed in Chapter 6, "Open Space," given the anticipated decrease in the total and active open space ratios in the residential study area and the fact these open space ratios would remain below the city guideline ratios, the proposed project would result in a significant adverse impact to total and active open space resources in the study area. Mitigation measures for this significant adverse impact will be explored by the Applicant in consultation with the lead agency, DCP, and the New York City Department of Parks and Recreation (DPR) between the DEIS and FEIS. Absent the implementation of such measures, the proposed project would result in an unavoidable significant adverse impact on open space.

D. TRANSPORTATION

As discussed in Chapter 15, "Transportation," the transportation analyses were prepared based on a slightly smaller version of the development program than the proposed project (71 fewer dwelling units and 25 fewer parking spaces), because the programming changes occurred shortly prior to certification of the DEIS, after substantial transportation-related analysis work had been completed and reviewed. Correspondingly, the transportation mitigation analyses presented in Chapter 22, "Mitigation," are based on the impact findings from the analysis of the smaller development program. Between the DEIS and FEIS, the transportation and transportation-related analyses will be updated to reflect the proposed project's programming changes, as well as background changes associated with other projects and the addition of new study area traffic intersections. These changes could result in new, different, or worsened significant adverse impacts, all of which will be further detailed in the FEIS. For mitigation, it is expected that the same menu of improvement options will be used to address these impacts. However, if the updated analyses identify new, different, or worsened impacts that could not be fully mitigated, they will be identified as unmitigated in the FEIS.

TRAFFIC

As discussed in Chapter 15, "Transportation," and Chapter 22, "Mitigation," the proposed project would result in potential significant adverse traffic impacts at several locations within the traffic study area. Many of these significantly impacted locations could be mitigated using standard traffic improvements, such as installation of new traffic signals, signal timing and phasing changes, parking regulation changes to gain a travel lane at key intersections, and lane restriping. However, as described below, in some cases, impacts from the proposed project would not be fully mitigated.

Specifically, 10 of the 25 study locations would have significant adverse traffic impacts that could not be fully mitigated in at least one peak hour, including:

- 27th Avenue and 8th Street (partially mitigated during all three peak hours).
- Vernon Boulevard/Main Avenue and 8th Street/Welling Court (partially mitigated during the weekday AM peak hour and unmitigated during the weekday PM peak hour).
- Astoria Boulevard and 21st Street (partially mitigated during the weekday AM peak hour).
- Astoria Boulevard and 23rd Street (unmitigated during the weekday AM peak hour).
- Astoria Boulevard and Crescent Street (unmitigated during all three peak hours)
- Hoyt Avenue South/Astoria Boulevard and 33rd Street (unmitigated during the weekday AM peak hour).
- Hoyt Avenue North and 21st Street (unmitigated during the weekday AM peak hour and partially mitigated during the weekday PM peak hour).
- Hoyt Avenue North and 32nd Street (unmitigated during all three peak hours).
- Broadway and Vernon Boulevard/11th Street (partially mitigated during the weekday AM peak hour).
- Broadway and 21st Street (unmitigated during the weekday AM and PM peak hours).

At the partially mitigated locations, significant impacts could be mitigated for at least one traffic movement that is significantly impacted, but not for all traffic movements that are significantly impacted. Because these impacts would be partially, not fully, mitigated, they are considered unavoidable adverse impacts. Moreover, at certain locations the proposed mitigation involves the installation of a traffic signal. As discussed in Chapter 22, "Mitigation," a preliminary analysis shows that these intersections would meet the peak hour criteria of the Manual of Uniform Traffic Control Devices' (MUTCD) signal warrant analysis. Should this analysis indicate that a traffic signal is not warranted, other mitigation measures would need to be identified or the significant impacts may only be partially mitigated or remain unmitigated.

Additional review of potential mitigation measures that may fully or partially mitigate other significant impact locations that are identified as unmitigatable in the DEIS will be undertaken for the FEIS. Also, additional analysis would be performed between the DEIS and FEIS along the Astoria Boulevard and 27th Avenue corridors. This analysis may lead to the modification of traffic improvements proposed in the DEIS and may result in new or additional mitigation for locations identified as partially mitigated or unmitigated in this DEIS.

As noted in Chapter 15, "Transportation", other analysis modifications will be done for the FEIS that could affect the findings presented. Analysis assumptions made for the proposed Astoria Cove project and analysis findings documented in the *Cornell NYC Tech FEIS* may change and such changes, when available, may affect the mitigation measures and findings in this (Halletts Point) project's FEIS. This may result in either fewer impacts or greater impacts and could potentially result in one or more additional unmitigated impacts.

E. CONSTRUCTION

TRAFFIC

As discussed in Chapter 20, "Construction," all but two of the seven intersections analyzed for peak construction period conditions would either not be significantly impacted or could be mitigated using standard traffic improvements, such as installation of new traffic signals, signal timing and phasing changes, parking regulation changes to gain a travel lane at key intersections,

and lane restriping. The intersection of 27th Avenue and 8th Street would be unmitigated during the weekday AM peak hour and the intersection of Astoria Boulevard and 21st Street would be partially mitigated during the PM peak hour. Partially mitigated means that significant impacts could be mitigated for at least one traffic movement that is significantly impacted, but not for all traffic movements that are significantly impacted. Because the impacts would be partially, not fully, mitigated, they are considered unavoidable adverse impacts. The two locations that could not be fully mitigated during the construction conditions could also not be fully mitigated in the Build conditions. As noted in Section D, "Transportation," above, other analysis modifications will be done for the FEIS that could affect the traffic findings. This may result in either fewer impacts or greater impacts for the peak construction period and could potentially result in one or more additional unmitigated impacts.

NOISE

As described in Chapter 20, "Construction," with regard to the locations where construction noise impacts are predicted to occur, with the exception of six existing residential buildings and two open space locations, all residential and institutional buildings have double-glazed windows and have some form of alternative ventilation (i.e., central air conditioning, packaged terminal air conditioner [PTAC] units, through-wall air conditioners, or window air conditioners). Consequently, even during warm weather conditions, interior noise levels would be approximately 20-30 dBA less than exterior noise levels. The double-glazed windows and alternative ventilation at these residential structures would provide a significant amount of sound attenuation, and would result in interior noise levels during much of the time that are below 45 dBA L_{10} (the CEQR acceptable interior noise level criteria). Given the building attenuation provided by these existing structures, additional receptor controls would be unlikely to fully mitigate the temporary construction noise impacts. Although these structures have double-glazed windows and alternate ventilation, during some limited time periods construction activities may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for these uses.

At the six residential locations with the potential to experience construction noise impacts and that lack receptor noise control measures such as double-glazed windows and an alternate means of ventilation, typical attenuation provided by the building facade would be 5 dBA for an open window condition. This level of attenuation would not be expected to result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria).

Some potential receptor controls that could be used to mitigate the impacts at residential locations where interior L_{10} values would be expected to exceed the value considered acceptable by CEQR criteria could include the provision of air-conditioning so that the impacted structures can maintain a closed-window condition, the installation of operable storm windows, and/or improvements in the sealing of existing windows. As noted above, many receptor locations already have double-glazed windows and an alternate means of ventilation, and additional receptor controls would be unlikely to fully mitigate the construction noise impacts. Such mitigation measures may affect the ability to achieve project goals with regard to the development of affordable housing; however, further exploration of the measures will be conducted between DEIS and FEIS to determine the practicability and feasibility of implementing these measures to minimize or avoid the potential significant adverse impacts, taking into account the practicability relative to project goals. Should it be determined that there are no practicable mitigation measures, taking into account project goals, and should the proposed project be developed and constructed as conservatively presented in this

conceptual construction schedule, up to 51 existing locations would be expected to experience an unmitigated significant adverse impact at various times.

Additionally, because of very high levels of construction noise from construction on buildings attached to them, Buildings 6A/6B and 7A/7B would have the potential to experience significant adverse noise impacts during construction if either segment of either building is occupied during the construction of the other segment of the building. These buildings would be required to provide at least 20 dBA of window/wall attenuation and an alternate means of ventilation.

It should be noted that these projected noise levels and corresponding significant adverse construction noise impacts are based on a conservative analysis of the construction procedures, including peak quarterly (i.e., three month) levels assumed to represent each year of construction, a maximum amount of construction equipment assumed to be operational on each development site and at locations closest to nearby receptors, peak hour construction equipment and truck delivery operations occurring simultaneously, and a conservative conceptual construction schedule that has been developed in consultation with an experienced New York City construction manager, which includes a reasonable worst-case assumption for the number of development sites that would be expected to be under construction simultaneously.

Between the DEIS and FEIS, a refined construction noise analysis will be undertaken to more precisely determine the magnitude and duration of the elevated noise levels resulting from construction at the receptors predicted to experience significant noise level increases for an extended period of time. The refined analysis will examine the practicability and feasibility of relocating some equipment within the construction sites to add distance and/or shielding between the equipment and the adjacent receptors. It will also analyze in detail additional time periods throughout the construction period to determine whether the analysis results in the DEIS are conservatively overstated as a result of representing each year during the construction period based on peak construction quarters that include the greatest amount of construction activity according to the conceptual construction schedule.

Overall, although the presence of double-glazed windows and alternative ventilation at affected buildings would result in interior noise levels during much of the time that are below 45 dBA L_{10} (the CEQR acceptable interior noise level criteria), during some limited time periods construction activities may result in interior noise levels that would be above the CEQR acceptable interior noise level criteria for these uses, and additional receptor controls would be unlikely to fully mitigate the temporary construction noise impacts. Therefore, these significant adverse construction noise impacts would constitute unavoidable significant adverse impacts.

Lastly, with regard to the open space areas adjacent to the project site where temporary significant adverse noise impacts are predicted to occur during construction—Whitey Ford Field and Hallet's Cove Playground—there are no feasible or practicable measures that could be implemented to mitigate the impacts. Consequently, these temporary significant adverse impacts during construction would constitute unavoidable significant adverse impacts. ✷