A. INTRODUCTION

This chapter summarizes unavoidable significant adverse impacts that may result from the Proposed Actions. According to the ~~2020~~2021 *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 impracticable.

As described in Chapter 20, "Mitigation," the Proposed Actions are expected to result in significant adverse impacts related to community facilities and services (publicly financed early childhood programs and libraries), open space, shadows, transportation (traffic, transit, and pedestrian conditions), ~~air quality (mobile source analysis, related to annual average particulate matter [$PM_{2.5}$] incremental concentrations at two intersections)~~ and construction (traffic and noise).[1] 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 the significant adverse impacts, and there are no reasonable alternatives to the Proposed Actions that would meet the purpose and need of the Proposed Actions, eliminate potential impacts, and not cause other or similar significant adverse impacts.

B. COMMUNITY FACILITIES—PUBLICLY FINANCED EARLY CHILDHOOD PROGRAMS

As detailed in Chapter 4, "Community Facilities," in both the No Action and With Action scenarios, publicly financed early childhood programs in the study area are predicted to operate over capacity. In the With Action condition, with additional children under the age of five who would be eligible for publicly funded early childhood programs, the predicted increase in the utilization rate would exceed 5 percentage points. With the addition of these children, early childhood programs in the study area would operate at 170.8 percent utilization with a deficit of 242 slots. Total enrollment in the study area would increase to 584 children, compared with a capacity of 342 slots, which represents an increase in the utilization rate of approximately 37 percentage points over the No Action condition. Therefore, the Proposed Actions would result in a significant adverse impact on early childhood programs. With the assumption of 914 affordable DUs at 80 percent AMI, the Proposed Actions would generate 128 eligible children, and the addition of 79 child care slots would be required to result in an increase in utilization in the study area of less than 5 percent.

[1] The DEIS identified significant adverse air quality impacts related to mobile source emissions. However, as discussed in Chapter 14, "Air Quality," additional review and evaluation was performed for the FEIS which determined that the identified impacts related to the mobile source Annual $PM_{2.5}$ increments were avoided, without the need for mitigation measures.

~~Possible~~ Mitigation measures for this significant adverse impact ~~will be~~ have been developed in consultation with the New York City Department of Education (DOE). The Restrictive Declaration for the Proposed Development will require the Applicant to work with DOE to consider the need for and the implementation of one or more measures to provide additional capacity, if required, to mitigate the significant adverse impact to publicly funded child care facilities within the 1.5-mile study area or within Queens Community District 1.~~, and~~ Possible mitigation measures for this significant adverse impact may include the provision of suitable space on-site for a child care center within the Proposed Development, provision of a suitable location off-site and within a reasonable distance (at a rate affordable to DOE providers), funding or making program or physical improvements to support adding capacity to existing facilities if determined feasible through consultation with DOE's Division of Early Childhood Education, or providing new early childhood programs within or near the Project Area. The Applicant would coordinate with DOE to determine the required mitigation at the time that 53 affordable units are developed in the Project Area (which may include development in the Additional Affected Area on sites that are not controlled by the Applicant). As the Proposed Development may include senior housing units, the determination of mitigation will only consider the need generated by affordable units that would be expected to generate children eligible for publicly financed early childhood programs. However, absent the implementation of such mitigation measures, if needed, ~~if no mitigation is identified, for the purposes of this DEIS,~~ the significant adverse impact on publicly funded early childhood programs would be an unavoidable adverse impact.

C. COMMUNITY FACILITIES—LIBRARIES

As detailed in Chapter 4, "Community Facilities," the With Action scenario population would represent an increase of 4.48 percent over the No Action scenario population at the Broadway Branch of the Queens Public Library and an increase of 5.94 percent at the Long Island City Branch of the Queens Public Library. The increase at the Long Island City Branch is greater than the 5 percent increase that CEQR defines as the threshold for a potential significant adverse impact. Therefore, the Proposed Actions would result in a significant adverse impact on library services in the study area.

~~Possible m~~Mitigation measures for this significant adverse impact ~~will be~~have been developed in consultation with the Queens Public Library (QPL). The Applicant ~~is in active conversations~~has coordinated with the Queens Public Library concerning a partnership with the Proposed Development~~,~~ and potential mitigation. Between DEIS and FEIS, the Applicant refined possible mitigation measures in coordination with QPL and DCP. The Restrictive Declaration for the Proposed Development will require the Applicant to coordinate with QPL and to commit to one of, or some combination of, the following mitigation measures, which will be implemented before the Temporary Certificate of Occupancy is issued for the final building in the Proposed Development. Potential mitigation measures include funding or provision of improvements and maintenance to the QPL Broadway branch facility that would support the branch's programming and services year-round, such as improvements to the branch's garden to provide space for public gatherings and community enjoyment; provision of space within the Proposed Development for the library, the size and location of which would be determined in coordination with QPL; and/or support for QPL for the continued operation of a space for the Library within the Proposed Development. ~~may include provision of space within the Proposed Development for the library; funding for improvements to the Broadway branch; and/or programmatic funding to QPL to support the start-up of the space in the Proposed Development and the sustainability of future programming. These mitigation measures for the libraries impact are being explored by the~~

~~Applicant in consultation with DCP and the Queens Public Library and will be refined between the DEIS and FEIS.~~ However, ~~for the purposes of this DEIS,~~ if ~~no mitigation is identified~~ measures to fully mitigate the significant adverse impact are not implemented or full mitigation is determined to be impracticable or infeasible, the significant adverse impact on libraries would be an unavoidable adverse impact.

D. OPEN SPACE

As detailed in Chapter 5, "Open Space," the Proposed Actions would introduce a substantial new residential population, plus 1.94 acres of publicly accessible open space, which would be primarily passive space. In the future with and without the proposed projects, the total, active, and passive open space ratios in the residential study area would remain below the City's planning goals. While the approximately 1.94 acres of dedicated publicly accessible open space that would be developed with the Proposed Actions would reduce the significant adverse open space impacts, it is not sufficient to fully avoid significant adverse open space impacts as determined by *CEQR Technical Manual* guidelines. Specifically, with the Proposed Actions (including the new publicly accessible open space to be constructed in the Project Area), the study area's total open space ratio would increase by approximately 30 percent; the active open space ratio would decrease by approximately 15 percent; and the passive open space ratio would increase by approximately 221 percent. As the Proposed Actions would result in a decrease in the active open space ratio exceeding the *CEQR Technical Manual* threshold of 1 percent in an area lacking in open space, the reductions in the active open space ratio would result in a significant adverse open space impact based on quantitative analysis of indirect effects, as set forth in the *CEQR Technical Manual*.

Potential mitigation measures for the open space impacts ~~are being~~have been explored by the Applicant in consultation with DCP and NYC Parks a~~nd will be refined between the DEIS and FEIS~~. In particular, the Proposed Development would include an approximately 10,000 sf area at the southern end of Block A (along 36th Avenue) that ~~may~~ would be additional publicly accessible open space. This ~~potential~~ publicly accessible open space ~~may~~ would include active uses to provide ~~partial~~ mitigation for the significant adverse impact to active open space by providing an additional resource for active recreation for residents of the study area, where there is limited active open space. In addition, the Applicant has developed a modified site plan and building massing for the Proposed Development that provides for additional space at the southern end of Block A to allow for a larger Public Access Area (PAA) with active uses. Under the alternative, the PAA would include approximately 22,000 sf (0.50 acres) of active uses as mitigation for the Proposed Actions' significant adverse active open space impact. This alternative (the Proposed Modified Application Alternative) is assessed in Chapter 21, "Alternatives." ~~Additional potential mitigation measures include, but are not limited to, creating new open space within the study area; funding for improvements, renovation, or maintenance at existing local parks; or improving existing open spaces to increase their utility or capacity to meet identified open space needs in the area, such as through the provision of additional active open space facilities.~~ However, ~~if no mitigation is identified, or~~ if the significant adverse impacts on open space would not be fully mitigated~~, for the purposes of this DEIS~~, the significant adverse impact on active open space would be an unavoidable adverse impact.

E. SHADOWS

As detailed in Chapter 6, "Shadows," development resulting from the Proposed Actions would cast new shadows that would have a significant adverse impact on Playground Thirty Five XXXV. In particular, development resulting from the Proposed Actions would cast new shadows on Playground Thirty Five XXXV throughout the day in all seasons, covering large areas of the playground at times, eliminating much or all of the remaining sunlight in the park at times—particularly in the fall, winter, and early spring—and causing significant adverse impacts to the user experience in all seasons. Trees and plantings in the park would continue to receive adequate direct sunlight through the May to August heart of the growing seasons, but those in the southern part of the park would receive up to an hour less than generally required in the March and September "shoulders" of the growing season, potentially impacting the health of those trees or plantings.

While the Applicant has stated that, at this time, there is no massing alternative to remove the impact and be financially feasible, potential mitigation measures are being explored by the Applicant in consultation with DCP and NYC Parks, and ~~will be~~have been refined between the DEIS and FEIS. In particular, the ~~potential~~ additional 10,000-sf active publicly accessible open space at the southern end of Block A ~~(discussed above)~~ would ~~also~~ provide partial mitigation for the significant adverse shadows impact to Playground Thirty Five XXXV by providing an additional active resource, which may include children's active play space, in an area that would receive less shadow. This additional publicly accessible resource would serve residents of the study area seeking sunny active space. ~~Other potential mitigation measures may include replacing vegetation and additional maintenance of the features at Playground Thirty Five XXXV, or dedicated funding for improvements or enhanced maintenance at another existing open space in the vicinity of the Project Area.~~ However, ~~in the absence of feasible mitigation~~ as no feasible and practicable mitigation has been identified to fully mitigate the significant adverse shadows impact, ~~if no mitigation is identified,~~ the increase in shadows on Playground Thirty Five XXXV would be an unavoidable adverse impact.

F. TRANSPORTATION

TRAFFIC

The Proposed Actions would result in significant adverse traffic impacts at 23~~4~~ study area intersections (all signalized) during one or more analyzed peak hours; specifically, 31~~3~~ lane groups at ~~20~~ 19 intersections during the weekday AM peak hour, 21~~4~~ lane groups at 13~~6~~ intersections during the weekday midday peak hour, ~~32~~ 29 lane groups at 18~~9~~ intersections during the weekday PM peak hour, and 25 lane groups at 16 intersections during the Saturday peak hour. Implementation of traffic engineering improvements, such as signal timing changes and modifications to lane striping and curbside parking regulations, would mitigate a number of the projected traffic impacts. Specifically, assuming all the proposed mitigation measures are implemented, the significant adverse impacts would be fully mitigated at 11~~3~~, 8, and 12 lane groups in ~~each of~~ the weekday AM, midday, and PM peak hours, respectively, and 7~~11~~ lane groups in the Saturday peak hour. Intersections where all impacts would be fully mitigated would total ~~9~~7, ~~11~~6, 8, ~~10~~ and ~~9~~ 5 during these same periods, respectively. In total, impacts to one or more lane groups would remain unmitigated in one or more peak hours at 15~~2~~ intersections.

Because of existing congestion at a number of these intersections, especially those along Northern Boulevard, even a minimal increase in traffic would result in unmitigated impacts. Specifically,

in the No Action Condition, a total of 27 intersections (all signalized) would have at least one congested lane group in one or more peak hours, and a total of 15~~6~~, 13~~4~~, 16~~7~~, and 15 intersections would have one or more lane groups operating at or over capacity in the weekday AM, midday and PM, and Saturday peak hours, respectively. According to the *CEQR Technical Manual*, for a lane group that would operate at LOS F in the No Action Condition, a projected delay of ~~three~~ four or more seconds is considered a significant impact. As such, even small increases in incremental With Action traffic volumes at some of the congested intersection approach movements would result in significant adverse impacts that could not be fully mitigated during one or more analysis peak hours, and almost any new development in the rezoning area could result in unmitigated traffic impacts. Consequently, the Proposed Actions would result in unavoidable adverse traffic impacts.

TRANSIT

In the 2032 future with the Proposed Actions, southbound N/W trains are expected to be operating over capacity in the AM peak hour, and the Proposed Actions would increase this demand by an average of approximately 5.25~~56~~ passengers per car. Fully mitigating this significant adverse impact would require the addition of ~~two~~ one southbound N/W train~~s~~ during the AM peak hour. As standard practice, NYCT routinely conducts periodic ridership counts and adjusts subway frequency to meet its service criteria, within fiscal and operating constraints. ~~However, NYCT has indicated that increasing N/W service in the AM period by more than one train per hour is not operationally feasible at present. (Implementation of communications-based train control (CBTC) on the Astoria Line would facilitate the addition of two southbound AM peak hour trains, but this improvement is not currently programmed or funded.) Therefore~~ Due to operating constraints where the N/W trains share tracks with the R train, adding one train to AM peak N/W southbound service would mean subtracting one train from AM peak R southbound service, which would result in longer wait times and higher average ridership loads on the remaining R trains. In the absence of this recommended mitigation, the significant adverse line haul impact to southbound N/W trains in the AM peak hour would remain unmitigated, and the Proposed Actions would result in ~~be considered~~ an unavoidable adverse impact.

PEDESTRIANS

Incremental demand from the Proposed Actions would significantly adversely impact three sidewalks and two crosswalks in one or more analyzed peak hours. There would be no significant impacts to any corner area in any period. Pedestrian flow along the three impacted sidewalks is constrained by the presence of outdoor dining areas. These sidewalks are outside the boundaries of the LSGD and are not under the control of the applicant. Therefore, the significant adverse sidewalk impacts would remain unmitigated. The applicant is fully committed to working with the affected restaurants on a cooperative basis to explore relocation or reconfiguration of these restaurants in the future. Recommended mitigation measures for the two crosswalk impacts would consist of the widening of crosswalks~~adjustments to traffic signal timings that are also proposed for traffic mitigation purposes~~. Implementation of the ~~recommended signal timing adjustments~~ widening of crosswalk, which would fully mitigate the impacts to both crosswalks, would be subject to review and approval by DOT. If these measures are deemed infeasible and no additional feasible mitigation measures can be identified, then significant adverse pedestrian crosswalk impacts would remain unmitigated, and the Proposed Actions would result in unavoidable adverse pedestrian impacts.

~~G. AIR QUALITY~~

~~As described in Chapter 14, "Air Quality," compared with the No Action condition, $PM_{2.5}$ impacts with the Proposed Actions would exceed the *de minimis* criterion of 0.1 $\mu g/m^3$ for the annual averaging period for Analysis Site 2, at 35th Avenue and 41st Street, and Analysis Site 3, at Northern Boulevard and 43rdStreet/42nd Place. As discussed in Chapter 20, "Mitigation," traffic mitigation measures were developed at these affected intersections to reduce congestion and increase speeds along corridors in the affected area. For Site 2, the modeling analysis of the potential mitigation indicates that the annual incremental concentration of $PM_{2.5}$ with the prescribed traffic mitigation measures would be lower than the With Action condition and would not exceed the *de minimis* criteria for $PM_{2.5}$. Therefore, the incorporation of the traffic mitigation measures would mitigate the significant adverse air quality impact at this location.~~

~~Regarding traffic mitigation measures to address the predicted air quality impacts, NYCDOT would require developers for the Projected Development Sites to undertake a future traffic monitoring plan (TMP) to evaluate actual project-generated demand and background conditions during various stages of project development and occupancy and would consider adjusting the identified mitigation strategies as appropriate to address traffic issues at those points in time.~~

~~Implementation of proposed traffic mitigation measures would be subject to approval by the NYCDOT prior to installation. Should there be delays in implementing certain traffic mitigation measures because a development site has not been constructed, then the projected air quality impacts would be unmitigated until the development site is constructed and the corresponding mitigation measures implemented.~~

~~In the event the proposed mitigation measures to address the predicted $PM_{2.5}$ impacts at 35th Avenue and 41st Street are deemed infeasible by NYCDOT, and no other alternative mitigation measures can be identified, the air quality impact would be considered an unavoidable adverse impact. For Site 3, the prescribed mitigation measures would not fully mitigate the air quality impact. The magnitude of the $PM_{2.5}$ incremental concentration at Site 3 would require a substantial reduction in project-generated traffic to eliminate the predicted impact. Therefore, at this location, the significant adverse air quality impact would be considered an unavoidable adverse impact.~~

~~Between the Draft and Final EIS, additional review and evaluation will be performed which is expected todetermine that the identified impacts related to the mobile source Annual $PM_{2.5}$ increments will be avoided. This may include use of updated travel demand factors reflecting the 2021 *CEQR Technical Manual* guidance, the use of newer vehicle registration data provided by NYSDECor other updated information or guidance, as applicable. If warranted by the guidance in the *CEQR Technical Manual* following these revisions, additional modeling of $PM_{2.5}$ concentrations (Grid Analysis) may be performed using more refined orcomprehensive analysis procedures to determine the magnitude and extent of neighborhood-scale $PM_{2.5}$ impacts from mobile sources. It is anticipated that these additional measures will reduce $PM_{2.5}$ concentrations below the Annual *de minimis* Criterion threshold.~~

H. ~~-~~CONSTRUCTION

TRAFFIC

The construction traffic impact analysis identified the potential for significant adverse impacts to 1~~2~~4 study area intersections in the analyzed AM and/or PM construction peak hours. Specifically, there would be impacts to ~~11~~ 9 lane groups at ~~8~~ 7 intersections in the weekday AM construction

peak hour, and 16~~9~~ lane groups at ~~11~~ 9 intersections in the weekday PM construction peak hour. Implementation of recommended traffic engineering improvements including modifications to signal timing and phasing, modifications to lane restriping and changes to curbside parking regulations, would fully mitigate the significant adverse impacts to ~~four~~ two lane groups in the construction AM peak hour and ~~nine~~ seven lane groups in the construction PM peak hour. Intersections where all impacts would be fully mitigated would total ~~three~~ two and ~~seven~~three, during these same periods, respectively. Impacts to seven lane groups in the construction AM peak hour and ~~ten~~ 12 lane groups in the construction PM peak hour would remain unmitigated at a total of ~~six~~ eight intersections.

Because of existing congestion at study area intersections, especially those along Northern Boulevard (a designated truck route), even a minimal increase in construction-related traffic would result in significant adverse impacts that could not be fully mitigated during one or both construction peak hours. Consequently, the Proposed Actions' unmitigated construction traffic impacts would be considered unavoidable adverse impacts.

NOISE

As described in Chapter 19, "Construction," and Chapter 20, "Mitigation," the construction noise analysis determined that construction of the Proposed Actions has the potential to result in temporary significant adverse impacts related to construction noise at various receptors within the Study Area.

At existing building façades that are predicted to experience significant adverse impacts, the Applicant would offer to make available at no cost the installation of storm windows for façades that do not already have insulated glass windows and/or one window air conditioner per living room, bedroom, classroom, office space, or other noise sensitive spaces on impacted façades that do not already have alternative means of ventilation. Any mitigation measures identified would be implemented prior to the start of construction. With the provision of these measures, the façades of buildings would be expected to provide approximately 25 dBA window/wall attenuation. As described in Chapter 16, "Noise," residential dwelling units to be constructed at Projected Development Sites A, B, C, D, E, F, I, and J would be required to provide at least 35 dBA window/wall attenuation; whereas community facility and office development would be expected to provide at least ~~25~~ 30 dBA attenuation assumed for newly constructed modern buildings. Even with these measures, interior $L_{10(1)}$ noise levels at buildings predicted to experience construction noise impacts would at times during the construction period exceed the 45 dBA guideline recommended for residential and community spaces according to CEQR noise exposure guidelines by up to approximately ~~21~~ 19 dBA. Because interior noise levels could still exceed the acceptable threshold even with the provision of receptor noise mitigation, the significant adverse construction noise impacts identified in Chapter 19, "Construction," would be only partially mitigated. In addition, some building owners may not accept the offer of storm windows and/or alternative means of ventilation; at these locations, the significant adverse construction noise impacts would be unmitigated. Because these impacts cannot be fully mitigated, the impacts would constitute an unavoidable adverse impact.

For outdoor residential balconies and newly introduced publicly accessible open space areas that would be completed and occupied while construction under the Proposed Actions is ongoing, noise levels from construction activities at adjacent Projected Development Sites would increase above the construction noise impact criteria and would result in significant adverse noise impacts. While construction of the Proposed Action would follow the noise control measures required by

Code and specific noise control measures (including measures beyond what are required by the New York City Noise Code) as discussed in Chapter 20, "Mitigation," no practical and feasible mitigation measures have been identified that could be implemented to reduce noise levels below the construction noise impact criteria at these outdoor locations. Consequently, construction activities would result in noise levels at these outdoor locations that would constitute a significant adverse noise impact. Therefore, at these outdoor locations, the significant adverse construction noise impacts would be unavoidable. However, as construction would not regularly occur during evening or weekend hours, the balconies and open spaces would be free of construction noise during these times. ✷