

Chapter 22: CUMULATIVE EFFECTS

22.1 Introduction

Cumulative effects may result when effects of one action occur all together or when the effects of an action occur in combination with effects of other recent, ongoing, and reasonably foreseeable future actions. Cumulative effects may be undetectable when considered specifically in the context of one action, and may result from effects that do not, in themselves, constitute significant adverse impacts; however, combined effects may eventually lead to measurable environmental change.

The proposed action does not involve two or more related actions undertaken, funded, or approved by an agency (such as series of projects on various sites). However, per the guidance of the *CEQR Technical Manual*, when applicable and significant, a lead agency (ESD) should, for the technical areas outlined in the Final Scope of Work (see Appendix B) analyze and disclose cumulative impacts of a project. Thus, all potential environmental effects associated with the proposed action, as described in the respective technical analyses presented in this EIS, including those effects that do not, themselves, represent significant adverse impacts, are considered together for their potential to lead to significant adverse cumulative impacts.

This chapter also provides a summary of past, present, and reasonably foreseeable future actions that may affect the same environs as the proposed action. The potential for combined effects, associated with these actions and the proposed action, considered for those technical areas wherein potential effects are expected with the proposed action, specifically include: transportation, air quality, noise, and community facilities (public elementary and intermediate schools and child care centers). In addition, potential construction-period effects expected with the proposed action are also considered in the context of construction associated with other actions in the vicinity.

Finally, certain technical areas, such as open space, natural resources, and neighborhood character, as reported in the respective chapters of this EIS, consider the findings of other technical analyses in a cumulative manner in order to determine whether any potential for increased traffic or changes to pedestrian safety, noise, and air quality may affect the use of public parks and open spaces, or may generally affect the character of the neighborhood. The potential for cumulative effects associated with the proposed action in this manner are discussed in Chapter 5, “Open Space,” and Chapter 19, “Neighborhood Character.” In addition, Chapter 9, “Natural Resources,” also considers the potential for cumulative effects to water resources, in particular, given the location of the project site within the

Jamaica Bay Watershed. The cumulative findings of these three analyses are summarized in this chapter, as well.

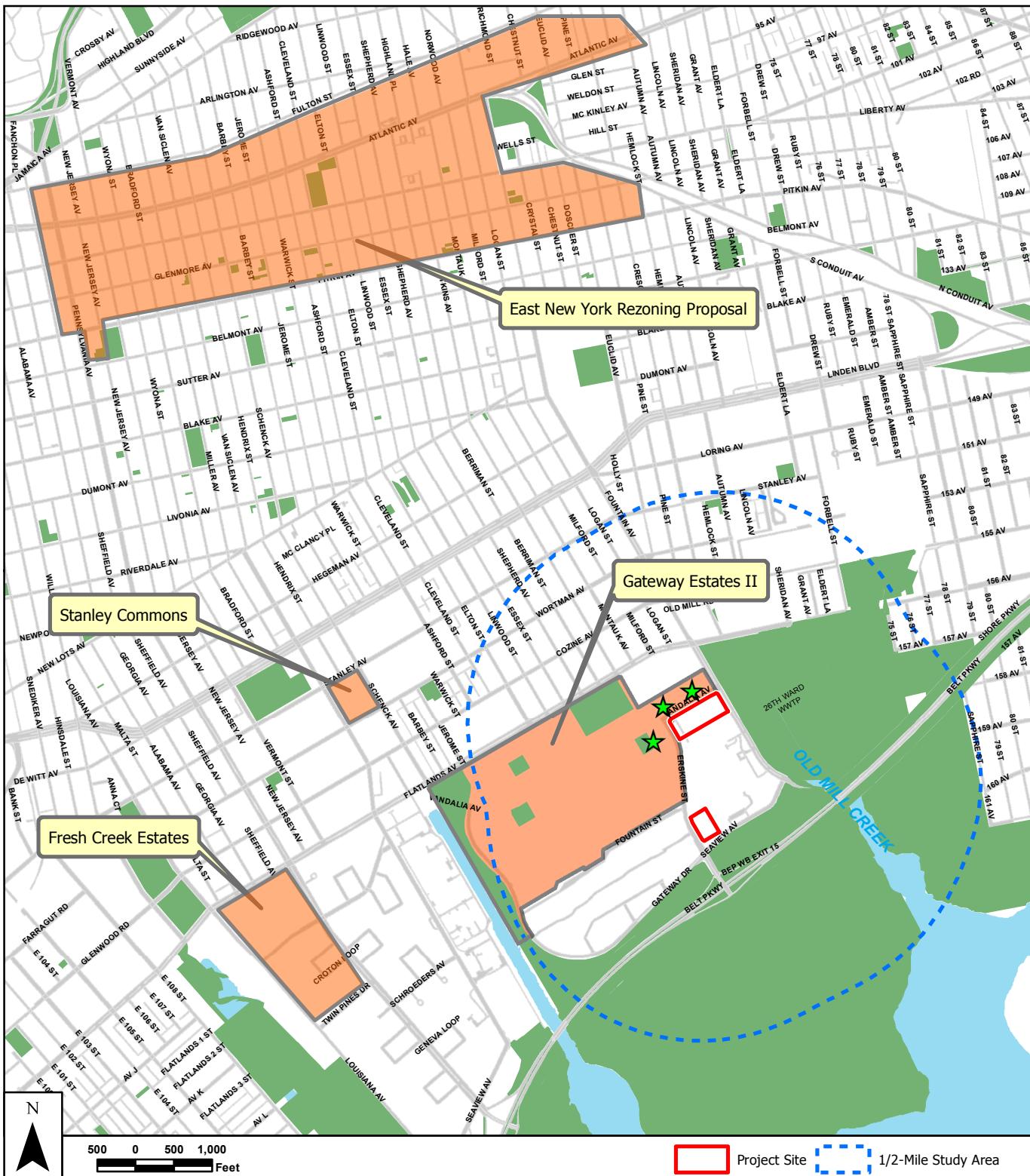
22.2 Summary of Cumulative Effects

OTHER DEVELOPMENT ACTIONS IN VICINITY

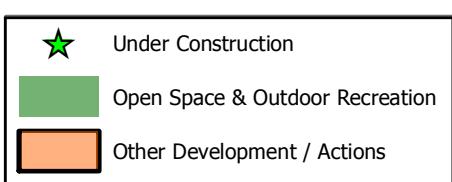
Four development projects or land use proposals are either currently under construction or are expected to be under construction in the future in the vicinity of the project site, based on Land Use and CEQR Application Tracking System (“LUCATS”) data. Given the results of other technical analyses presented in this EIS, other developments and actions that are located within approximately ½-mile of the project site may have the potential to affect the same study areas as the proposed action. However, as certain projects affecting relatively large areas have been proposed in East New York, including the East New York Rezoning proposal, all projects and actions within one-mile of the project site have been identified for consideration in the analysis of cumulative effects.

Of four development projects or land use proposals identified within one-mile of the project site, only the Gateway Estates development, which is currently under construction, is located within ½-mile of the project site; the other projects are located up to approximately one-mile away from the project site (see Figure 22-1, “Other Development / Actions in Vicinity”). (Please refer to Chapter 2, “Land Use, Zoning, and Public Policy,” for a discussion of the existing and No Action conditions of the Gateway Estates development.)

The following inventory of development actions in the vicinity is inclusive of all current and future No Action projects identified within one-mile of the project site; as described following, all of these actions have been assumed throughout all applicable analyses prepared for this EIS as component to existing or future No Action conditions, as appropriate.



OTHER DEVELOPMENT / ACTIONS IN VICINITY



**Fountain Avenue Land Use
Improvement and Residential Project**



**Empire State
Development**



Gateway Estates / Fresh Creek Urban Renewal Plan Implementation

As described in Chapter 2, “Land Use, Zoning, and Public Policy,” the Fresh Creek Urban Renewal Area (“FCURA”) includes the project site. The FCURA extends from Fountain Avenue (the eastern boundary of the project site), west to Schenck Avenue, approximately $\frac{1}{2}$ -mile west of the project site, between Flatlands Avenue to the north and Shore Parkway to the south. The Gateway Estates development will culminate the full implementation of the Fresh Creek Urban Renewal Plan (“FCURP”).¹ It is currently under construction and is expected to be complete by 2018, and portions of the project are currently under construction within the $\frac{1}{2}$ -mile study area; please refer to Chapter 2, “Land Use, Zoning, and Public Policy,” Figure 2-5, “No Action Developments.”

As described in all the respective sections of this EIS, and summarized in this chapter, the Gateway Estates development is fully considered in the existing conditions and No Action conditions of all technical analyses. It is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses. Further, because it directly affects lands within the proposed action’s study areas for land use, zoning, and public policy, socioeconomic conditions, community facilities, and open space, it is specifically considered in the existing and No Action conditions of those analyses.

Therefore, the potential for cumulative effects associated with the Gateway Estates development is fully considered in all technical analyses prepared for this EIS, and to the extent that potential effects to transportation, air quality, noise, and indirect effects to community facilities are predicted in other analyses prepared for this EIS and summarized in this chapter, cumulative effects related to the Gateway Estates development are fully evaluated.

East New York Rezoning Proposal

New York City Department of City Planning (“NYCDCP”) and New York City Department of Housing Preservation and Development (“NYCHPD”) have proposed the East New York Rezoning proposal for an approximately 190-block area of East New York, Cypress Hills, and Ocean Hill neighborhoods of Brooklyn, north of the project site; this action has been approved by the New York City Planning Commission and awaits a vote by the New York City Council in spring 2016.² At its nearest point, the East New York rezoning area extends to within approximately 1.25-miles of the project site. Within the boundaries of the rezoning area, the East New York Rezoning proposal is projected to result in a possible increase of approximately 6,312 residential units, 859,431 sf of retail/supermarket/restaurant and office space, 457,870 sf of community facility space, and net decreases of 27,035 sf of industrial space,

¹ *Gateway Estates II FEIS*; New York City Department of Housing Preservation and Development, Lead Agency, February 4, 2009.

² *East New York Rezoning Proposal FEIS*; New York City Planning Commission, Lead Agency; February 12, 2016.

128,365 sf of auto-related space, 97,551 square feet of hotel space, 73,170 sf of warehouse/storage space, and 3,055 sf of garage space by 2030.

The East New York Rezoning proposal is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses. Located just over one-mile north of the project site, the East New York Rezoning proposal area would not directly or indirectly affect any study areas related to land use, zoning, and public policy, socioeconomic conditions, or open space; however, as described in Chapter 4, “Community Facilities and Services,” and in this chapter, the East New York Rezoning proposal could potentially result in significant adverse impacts to child care facilities that serve the project site. Therefore, the potential for cumulative impacts to child care facilities is discussed in that chapter, as well as in Chapter 23, “Mitigation Measures.”

Therefore, the potential for cumulative effects associated with the East New York Rezoning proposal is fully considered in all technical analyses prepared for this EIS, and to the extent that potential effects to transportation, air quality, noise, and indirect effects to community facilities are predicted in other analyses prepared for this EIS and summarized in this chapter, cumulative effects related to East New York Rezoning are fully disclosed.

Fresh Creek Estates

Fresh Creek Estates is being advanced by NYCDCP and the New York City Housing Development Corporation (“NYCHDC”) and would involve the rezoning of approximately four blocks in Starrett City, approximately $\frac{3}{4}$ -mile west of the project site. The Fresh Creek Estates project site, currently zoned R3-2, would be rezoned to C4-2 in order to allow for the establishment of a regional retail shopping center and 250 units of mixed income housing; a completion year is not currently available, but it is assumed to be complete by the proposed action analysis year (2028).

Located over $\frac{1}{2}$ -mile west of the project site, the Fresh Creek Estates project would not directly or indirectly affect any study areas related to land use, zoning, and public policy, socioeconomic conditions, or open space; however, the Fresh Creek Estates project is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses.

Therefore, the potential for cumulative effects associated with the Fresh Creek Estates project is fully considered in all technical analyses prepared for this EIS, and to the extent that potential effects to transportation, air quality, noise are predicted in other analyses prepared for this EIS and summarized in this chapter, cumulative effects related to the Fresh Creek Estates project are fully disclosed.

Stanley Commons

Stanley Commons, as proposed, would consist of 240 residential DUs and 19,500 sf of community facility uses on the block bordered by Stanley, Schenck, Wortham, and Van Siclen avenues. Located over $\frac{1}{2}$ -mile northwest of the project site, the Stanley Commons project would not directly or indirectly affect any study areas related to land use, zoning, and public policy, socioeconomic conditions, or open space; however, the Stanley Commons project is included as a No Action condition considered within transportation analyses, and thus also as a No Action condition for mobile-source air quality and noise analyses.

Therefore, the potential for cumulative effects associated with the Stanley Commons project is fully considered in all technical analyses prepared for this EIS, and to the extent that potential effects to transportation, air quality, and noise are predicted in other analyses prepared for this EIS and summarized in this chapter, cumulative effects related to the Stanley Commons project are fully disclosed.

POTENTIAL EFFECTS ATTRIBUTABLE TO THE PROPOSED ACTION

The following represents a summary of analyses presented in detail in the respective chapters of this EIS for which impacts or effects have been identified, in order to facilitate consideration of these findings in the context of the other projects in the vicinity.

Transportation

Traffic

As described in Chapter 14, “Transportation,” traffic conditions were evaluated for the weekday 8-9 AM, 1-2 PM, 4-5 PM, and Saturday 1-2 PM peak hours at ten intersections in the traffic study area where additional traffic resulting from the proposed action would be most heavily concentrated.

As described in Chapter 14, “Transportation,” the new roadway network associated with the Gateway Estates development will include reconfiguring the intersection of Flatlands Avenue and Jerome Street. In the future without the proposed action, Gateway Drive, which currently connects to Flatlands Avenue at the intersection of Jerome Street as the fourth leg (new northbound approach) of this intersection, will be reconfigured in order to accommodate the heavy shift in traffic that is expected with the Gateway Estates development. In addition, Jerome Street is expected to be reconfigured as a one-way northbound street north of Flatlands Avenue.

As summarized in Table 14-7, “2028 With Action Conditions,” of Chapter 14, “Transportation,” which incorporates consideration of the effects of all four other development actions described previously as part of the No Action condition, the traffic impact analysis indicates the potential for significant adverse

impacts at four intersections during one or more analyzed peak hours. At the five-legged intersection of Linden Boulevard and Fountain/Loring avenues, the southbound left-turn movement on Fountain Avenue would deteriorate within level of service (“LOS”) D during the weekday AM peak hour, with an increase in delay of 6.6 seconds, and within LOS F during the weekday PM peak hour, and within LOS E during the Saturday midday peak hour. The northbound Fountain Avenue movement at this intersection would deteriorate within LOS D during the weekday PM peak hour with an increase in delay of 5.8 seconds. At the intersection of Seaview Avenue and Erskine Street, the westbound left-turn on Seaview Avenue would deteriorate from LOS D to LOS E during the weekday midday peak hour. At the unsignalized intersection of Vandalia Avenue and Erskine Street, the northbound left- and right-turn movement on Erskine Street would worsen within LOS F conditions during the PM peak hour, from LOS D to LOS F during the weekday PM peak hour, and within LOS D (increase in delay of 7.6 seconds) during the Saturday midday peak hour. At the intersection of Vandalia and Fountain avenues, the southbound approach would deteriorate within LOS F during the Saturday midday peak hour. At the intersection of Vandalia Avenue and Erskine Street, the westbound de-facto left-turn lane would deteriorate from LOS D to E during the Saturday midday peak hour. Potential mitigation measures to address these significant adverse impacts are discussed in Chapter 23, “Mitigation Measures,” and include the modification of traffic signal phasing and/or timing. With these mitigation measures in place, traffic-related effects would not contribute to significant adverse cumulative effects.

Transit

As described in Chapter 14, “Transportation,” the project site study area is served by a total of four Metropolitan Transportation Authority (“MTA”) local bus routes—the B13, B83, and B84, operated by New York City Transit (“NYCT”), and the Q8, operated by MTA Bus. The proposed action would generate a total of approximately 756 and 1,001 incremental bus trips on these routes during the weekday AM and PM peak hours, respectively. Based on projected levels of bus service in the No Action conditions (which incorporates consideration of the effects of all four other development actions described previously, as well as the addition of bus service to mitigate service shortfalls identified as potentially resulting from the Gateway Estates development and the East New York Rezoning), in combination with bus trips that the proposed action is expected to generate in the future with the proposed action, there would be a capacity shortfall of 83 passenger spaces on the northbound B13 service, 131 passenger spaces on the northbound B83 service, and 17 passengers on the eastbound Q8 service in the AM peak hour. The PM peak hour would experience a capacity shortfall of 517 passenger spaces on the southbound B83 service. Therefore, the northbound B13 and B83 routes and eastbound Q8 route in the AM peak hour, and the southbound B83 route in the PM peak hour, would be significantly impacted based on *CEQR Technical Manual* criteria. As discussed in Chapter 23, “Mitigation Measures,” the significant adverse impact to these bus services could be mitigated by increasing the number of buses in the peak hours. The general policy of the MTA is to provide additional bus service where demand

warrants, taking into account financial and operational constraints. With these mitigation measures in place, transit-related effects would not contribute to significant adverse cumulative effects.

Pedestrians

As described in Chapter 14, “Transportation,” the proposed action is expected to generate a net total of approximately 472 walk trips in the weekday AM peak hour, 2,166 in the midday peak hour, 1,289 in the PM peak hour, and 1,392 in the Saturday midday peak hour. Persons en route to and from bus stops would add approximately 756, 718, 1,001 and 915 additional pedestrian trips to area sidewalks and crosswalks during these same periods, respectively. These pedestrian volumes are added to the projected No Action volumes to generate the With Action pedestrian volumes for analysis. The No Action conditions for all transportation analyses incorporate consideration of the effects of all four other development actions described previously as part of the No Action condition, though the Gateway Estates development is the nearest action with the greatest potential for combined pedestrian effects. As reported in Chapter 14, there are no pedestrian elements that would be significantly adversely impacted by the proposed action, based on *CEQR Technical Manual* criteria. Further, as described in Chapter 14, “Transportation,” none of the individual study area intersections are high-crash locations. Therefore, there would be no potential for pedestrian-related effects to contribute to significant adverse cumulative effects.

Parking

As described in Chapter 14, “Transportation,” based on existing curbside parking regulations, and taking into account curb space obstructed by curb cuts, fire hydrants, and other impediments, there are approximately 1,282 legal on-street parking spaces within a reasonable walking distance of the project site on days when no alternate-side regulations are in effect. This supply for on-street parking spaces has an available capacity of 619 spaces on those days (48 percent of capacity). On the most restrictive regulation days, the number of legal on-street parking spaces is reduced to 1,020, resulting in an available capacity of 349 spaces (about 34 percent of existing curb parking capacity).

A total of 475 parking spaces would be provided on the project site under the proposed action. Parcels A and B would have on-site parking lots with 221 and 254 parking spaces, respectively. Parcel A would designate 118 parking spaces for residential use and 103 parking spaces for general use; parking spaces on Parcel B would be for residential use only.

The Gateway Estates development is expected to be complete by 2018 and therefore is fully accounted for in the Phase 1 parking study condition, when Parcel A has been fully developed (2020). The remaining three developments are assumed to be complete by the Phase II parking study condition (With Action condition, 2028), and they are considered in traffic No Action conditions, and therefore the parking study; however, given their distance from the project site, parking effects are not likely to combine cumulatively.

During the Phase I 2020 condition, Parcel A would create an estimated peak parking demand of 113 spaces for residential uses and 36 spaces for commercial uses, which would be accommodated within the Parcel A on-site parking supply. During the Phase II 2028 condition, Parcel B would create a parking demand of 285 spaces for residential uses, of which 254 spaces can be accommodated on-site. The remaining demand for about 31 parking spaces could park on-street. Additionally, the maximum hourly demand from the Parcel B commercial land uses would be 36 parking spaces, which would also be expected to park on-street. The parking analyses conservatively assume that Parcel B residents and commercial users would not utilize the available Parcel A parking spaces.

Development of Parcel A would not eliminate any existing Brooklyn Developmental Center (“BDC”) parking. The currently closed Erskine Street driveway would be opened to provide access to the parking area of the northernmost BDC building. Development of Parcel B would eliminate approximately 47 of the existing 386 parking spaces available to BDC workers. Specifically, 47 of the available 74 parking spaces in the northernmost BDC parking lot would be removed. The remaining Lot 300 parking capacity of 331 spaces (386-47) would sufficiently accommodate the peak parking demand of 231 spaces; therefore, there would be no significant adverse impact to parking at the BDC as a result of the proposed action, considering the other actions in the No Action condition. Therefore, there would be no potential for parking-related effects to contribute to significant adverse cumulative effects.

Air Quality

As described in Chapter 15, “Air Quality,” increases in mobile source emissions of carbon monoxide (“CO”), particulate matter less than 2.5 microns in diameter (“PM_{2.5}”) and particulate matter less than 10 microns in diameter (“PM₁₀”) related to project-induced traffic changes would not result in any exceedances of the National Ambient Air Quality Standards (“NAAQS”) or the New York City Department of Environmental Protection / New York State Department of Environmental Conservation (“NYCDEP/NYSDEC”) *de minimis* impact criteria at existing or future project-related sensitive receptors. In addition, the cumulative effect of emissions from project-induced traffic and parking facilities associated with the proposed action would not result in any significant adverse air quality impacts. As described previously, the traffic and parking analyses incorporate consideration of the effects of all four other development actions described previously as part of the No Action condition and, consequently, the With Action results. Therefore, the air quality analyses, which rely on the findings of the traffic and parking analyses, also consider the potential cumulative effects associated with the proposed action in combination with all four other development actions in the vicinity.

Applying stack placement restrictions that would be required in the Restrictive Declaration for the proposed action, pollutant emissions of nitrogen dioxide (“NO₂”), sulfur dioxide (“SO₂”), PM_{2.5} and PM₁₀ related to the use of No. 2 fuel oil for the heating, ventilation, and air conditioning (“HVAC”) systems of the proposed action would not result in any violations of applicable NAAQS or exceed the NYCDEP/NYSDEC *de minimis* impact criteria. This analysis accounts for the combined conditions of the

proposed action, and to the extent there would be effects, the neighboring Gateway Estates development and the other three, more distant developments. Therefore, as all air quality analyses account for the potential for combined effects that may be attributable to the proposed action and the other four development actions, and no significant adverse impacts to air quality would result with the proposed action, there would be no potential for cumulative effects associated with air quality.

Noise

As described in Chapter 17, “Noise,” the proposed action would not result in significant adverse impacts related to mobile or stationary source noise. As described previously, the traffic analyses incorporate consideration of the effects of all four other development actions described previously as part of the No Action condition and, consequently, the With Action results. Therefore, the noise analyses, which rely on the findings of the traffic analyses, also consider the potential cumulative effects associated with the proposed action in combination with all four other development actions in the vicinity. None of the studied locations would experience perceptible increases to exterior noise levels related to a doubling of traffic volumes. Therefore, no significant adverse cumulative impacts related to noise would occur with the proposed action.

Construction

As described in Chapter 20, “Construction,” construction activities associated with the proposed action could result in significant adverse impacts related to noise at neighboring Gateway Estates buildings. However, while significant adverse impacts could occur, the main source of construction noise (pile driving) would migrate throughout the construction areas, such that the effects of construction noise on any particular sensitive receiver would change depending on the location of the noise source and the height of the receiver. Once pile driving activities are completed, noise levels from other construction activities and equipment would decrease significantly. In addition, noise control measures that would partially mitigate significant adverse construction noise impacts, would be included as a requirement in the Restrictive Declaration. Potential significant adverse impacts to interior noise levels in Parcel B project buildings that would be occupied during construction of other buildings on Parcel B would be avoided by a requirement in the Restrictive Declaration that such buildings use double-glazed windows and have an alternate source of ventilation. To the extent that construction may be expected to result in air quality effects, such as dust or noise associated with construction equipment operations, certain measures required by code and best management practices would be employed to minimize or avoid the potential for significant adverse impact. Further, construction-period effects would be limited primarily to the project site, and various construction activities would occur for limited durations and would occur at times allowable according to appropriate construction activity codes and regulations, described in Chapter 20.

The only identified construction activity near the project site, and not associated with the proposed action, would be the completion of construction at Gateway Estates development, in the areas north and northwest of Parcel B. Gateway Estates development construction is expected to be complete by 2018. As described in Chapter 20, “Construction,” the proposed action construction would begin in 2017 on Parcel A, which is the portion of the project site located furthest from the Gateway Estates development. As a result, cumulative construction-related impacts due to noise and air quality are unlikely, as on-site construction activities for the two projects would be located far enough away from one another as not to have a significant effect on any sensitive resources, such as residences or schools, which could potentially be occupied at that time. In addition, it is anticipated that by the time construction begins on Parcel B, major construction activities for the Gateway Estates development will have ended. Further, as described in Chapter 20, construction activities on the project site are not expected to result in substantial off-site truck activity. Therefore, it is not anticipated that significant increases in mobile source off-site pollutant emissions or vehicular noise would occur.

As described in Chapter 5, “Open Space,” the portion of Spring Creek Park to the south of Parcel A may be improved as part of Gateway Estates development; as this park area has not yet been improved in existing conditions, there is the potential that landscaping activities may be occurring as Parcel A is under construction. As the park is expected to be improved with new landscaping, benches, and other park furniture, there would not likely be substantial grading activities or intensive use of on-site equipment, and only minimal construction-related traffic, as necessary, to deliver these materials over the course of a few days. Park redevelopment of this sort would likely be complete in less than one month, given size and existing, relatively even grade of the park. Consequently, the improvement of the park area would not result in substantial air quality, noise or construction effects. Therefore, even with the potential for concurrent construction activity in the vicinity of the Spring Creek Park south of the project site, there is limited potential for the effects of construction-period activities to combine with construction-period effects associated with the Gateway Estates development; given the brevity of concurrent construction that could occur, no significant adverse impact would result.

Community Facilities and Services

Public Schools

As described in Chapter 4, “Community Facilities and Services,” the proposed action would add 282 elementary, 117 intermediate, and 136 high school students compared to the future without the proposed action. With a surplus of 440 elementary school seats, the enrollment of Community School District (“CSD”) 19, Sub-District 3 elementary schools would be under capacity in the future with the proposed action; compared to conditions in the future without the proposed action, utilization of CSD 19, Sub-District 3 elementary schools would increase from approximately 80.8 percent to approximately 88.3 percent with the proposed action. With a surplus of 17 intermediate school seats, the enrollment

of CSD 19, Sub-District 3 middle schools would be under capacity in the future with the proposed action; compared to conditions in the future without the proposed action, utilization of CSD 19, Sub-District 3 intermediate schools would increase from approximately 93.9 percent to approximately 99.2 percent with the proposed action.

Per the guidance of the *CEQR Technical Manual*, CSD 19, Sub-District 3 elementary and intermediate school utilization rates would increase with the proposed action, but the respective increases would not result in significant adverse impacts either to elementary or intermediate schools. CSD, Sub-District 3 school data provided by NYCDCP account for the children that have recently been and will continue to be introduced to CSD 19, Sub-District 3 through full build-out of the Gateway Estates development, which was most recently reviewed in the 2009 Final Environmental Impact Statement (“FEIS”) prepared for the full implementation of the FCURP.³

Based on the findings of the *East New York Rezoning Proposal FEIS*,⁴ the East New York Rezoning proposal, which would apply to an area that is more than one-mile north of the project site, would also introduce elementary and intermediate school students to its respective study area comprising CSD 19 Sub-District 1 and Sub-District 2, both of which are north of the study area for the proposed action, which is CSD 19, Sub-District 3. As described in the *East New York Rezoning Proposal FEIS*, the East New York Rezoning proposal would result in significant adverse impacts to elementary schools and intermediate schools in CSD 19, Sub-District 2, which is directly north of and adjacent to CSD 19, Sub-District 3. As described in the *East New York Rezoning Proposal FEIS*, the enrollment in CSD 19, Sub-District 2 would be monitored, as mitigation measures, and if a need for additional capacity to address increased enrollment is identified, then New York City Department of Education (“NYCDOE”) would evaluate the appropriate timing and mix of measures that would meet demand; such measures could include restructuring or reprogramming existing school space, constructing new school(s), building or leasing additional capacity. In coordination with New York City School Construction Authority (“NYCSCA”), if additional school construction is warranted, and if funding is available, it would be identified in the Five Year Capital Plan that covers the period in which the capacity would be needed. The *East New York Rezoning Proposal FEIS* does not present the significant adverse impacts to public schools as potentially unavoidable adverse impacts.

Although these effects associated with the East New York Rezoning proposal would be predicted for a different CSD 19 Sub-District, they are summarized here for their proximity to CSD 19, Sub-District 3 that, based on the analyses presented in Chapter 4, “Community Facilities and Services,” would be expected to accommodate the new elementary and intermediate school students resulting with the proposed action. Therefore, given the distinction in service area (different CSD 19 Sub-Districts), no significant adverse cumulative impacts to schools would result with the proposed action.

³ *Gateway Estates II FEIS*; New York City Department of Housing Preservation and Development, Lead Agency, February 4, 2009.

⁴ *East New York Rezoning Proposal FEIS*; New York City Planning Commission, Lead Agency; February 12, 2016.

Child Care Centers

As described in Chapter 4, “Community Facilities and Services,” the proposed action would generate approximately 173 children under age six who would be eligible for publicly funded child care services. Based on the most current data available from New York City Administration for Children’s Services (“NYCACS”), these 173 children would further overcome the number of available slots in the future without the proposed action, and result in a total shortfall of 282 slots in the study area, and the collective demand for study area child care slots would increase from approximately 109 percent of available slots under the No Action scenario to approximately 123.2 percent in the With Action scenario, a 14.2 percent change from the No Action utilization rate. Therefore, as described in Chapter 4, a significant adverse impact to publicly-funded group child care and Head Start centers in the study area would result with the proposed action.

NYCACS continually monitors the demand for child care services throughout the City, and so these current NYCACS data utilized in this EIS account for child care demand that may be attributable to the Gateway Estates development, which was most recently reviewed in the 2009 FEIS prepared for the full implementation of the FCURP.⁵ However, as noted in Chapter 4, “Community Facilities and Services,” it is reasonable to assume that the demand for publicly funded child care in the study area in the future No Action condition may be higher than currently projected, given the recent publication of the *East New York Rezoning Proposal FEIS* findings.⁶ Based on the findings of the *East New York Rezoning Proposal FEIS*, the East New York Rezoning proposal, which would apply to an area that is more than one-mile north of the project site, would be expected to result in a significant adverse impact to some of the child care centers that serve the project site. Further, as described in that FEIS, the significant adverse impacts to child care centers that would be expected as a result of the East New York Rezoning proposal may represent an unavoidable significant adverse impact.

As discussed in Chapter 1, “Project Description,” and Chapter 23, “Mitigation Measures,” the proposed action would include space that could be used for child care facilities within Parcel B building area designated for commercial use. The Restrictive Declaration governing the use of the project site would require that the developer, prior to the occupancy of Phase 1, consult with NYCACS with respect to appropriate mitigation for this potential significant adverse impact, which could include (1) funding a number of vouchers equal to the number of children projected to occupy the project site (or a portion thereof) eligible for day care; and/or (2) providing commercial space within Parcel B to a NYCACS contractor or other day care provider accepting vouchers sufficient to serve the eligible children projected to occupy the project site, or a portion thereof.

As noted previously, parents of eligible children are not restricted to enrolling their children in child care facilities in a specific geographic area but could use the NYCACS voucher system to make use of public

⁵ *Gateway Estates II FEIS*; New York City Department of Housing Preservation and Development, Lead Agency, February 4, 2009.

⁶ *East New York Rezoning Proposal FEIS*; New York City Planning Commission, Lead Agency; February 12, 2016.

and private child care providers beyond the study area. In addition, several factors may limit the number of children in need of publicly-funded group child care and Head Start slots in NYCACS-contracted child care facilities. For example, families in the study area could make use of alternatives; there are slots at homes licensed to provide family child care that families of eligible children could elect to use instead of publicly-funded group child care and Head Start centers. Parents of eligible children may also use NYCACS vouchers to finance care at private child care centers in the study area. Finally, the voucher system could spur the development of new child care facilities to meet the needs of eligible children that would result from the increase in the low-income and low- to moderate income housing units in the area in the future With Action conditions.

As described in Chapter 24, “Unavoidable Adverse Impacts,” were mitigation not fully effective in addressing the significant adverse impact to child care centers, for example if there were insufficient space in private day care centers in the study area accepting NYCACS vouchers or if a contractor could not be identified to occupy available commercial space on Parcel B, then there may be a potentially unavoidable adverse impact, which could represent a potential contribution to a significant adverse cumulative impact on child care centers. While the mitigation measures outlined in Chapter 23, “Mitigation Measures,” could potentially fully mitigate the significant adverse impact on publicly funded child care facilities that would result with the proposed action, there is no precise program delineating the mitigation measures; rather, the mitigation measures rely upon the direction of NYCACS and the ongoing monitoring that NYCACS must undertake to determine the appropriate mitigation measures as it is to be effectuated by the conditionally designated developer, pursuant to the terms of the Restrictive Declaration. Therefore, given the lack of a formal commitment from NYCACS at the time of this EIS, there remains the potential for unavoidable significant adverse cumulative indirect impacts to child care centers with the proposed action.

OTHER TECHNICAL AREAS

The following represents a summary of analyses presented in detail in the respective chapters of this EIS that inherently consider the potential for cumulative impacts that result from the interrelated effects that are analyzed in other EIS technical areas.

Open Space

As described in Chapter 5, “Open Space,” the preliminary open space assessment finds that the proposed action would result in a combined open space ratio of 2.84 acres per 1,000 residents in the study area, measuring above New York City’s planning guideline of 2.5 acres of open space per 1,000 residents. At 1.23 acres of passive open space to 1,000 residents in the future with the proposed action, the passive open space ratio would exceed the respective planning goal ratio of 0.5 acres of passive open space per 1,000 residents, as well. However, the active open space ratio in the future with the proposed action would be 1.61 acres per 1,000 residents, which is less than the planning goal of 2.0

acres passive open space per 1,000 residents. The proposed action would result in an overall open space ratio of 2.84, which is notably higher than the City's median ratio of 1.5, and even the active open space ratio with the proposed action, at 1.61, would slightly exceed the City median ratio for both active and passive combined. Therefore, the proposed action would not cause a significant adverse impact to open space.

This consideration of indirect effects to open space resources with the proposed action accounts for the future utilization of open spaces within approximately ½-mile of the project site, per the study area defined in Chapter 5, "Open Space," and illustrated on Figure 5-1, "Open Space Resources." As explained in Chapter 5, the No Action conditions assume that Gateway Estates development is complete and fully occupied and, as such, the open space ratios include consideration of the combined effects of Gateway Estates development, as well as general population increases expected in the study area. With no significant adverse impact predicted, therefore, no cumulative indirect effects to open space attributable to the combined effects of the Gateway Estates development and the proposed action would be expected.

Further, none of the other three development actions would be located in the open space study area for the proposed action; notably, there is no overlap in open space study areas between the proposed action and the East New York Rezoning proposal, and so there would be no cumulative effects associated with this rezoning action.⁷

Finally, the air quality and noise analyses do not predict significant adverse impacts, and so the effects of the proposed action with regard to air quality and noise would not affect the use of open space in the study area or on the project site. To the extent that temporary construction-period significant adverse noise and vibration impacts would be expected at Schroeders Walk, it is expected that Schroeders Walk would not be accessible while pile driving and site preparation (as described in Chapter 20, "Construction") would be underway.

Natural Resources

As described in Chapter 9, "Natural Resources," no natural resources are present on the project site, which comprises maintained lawn, driveways and surface parking areas. The proposed action, which is limited to the project site, would not result in direct impacts to natural resources, either during construction or occupancy. The proposed action would be consistent with applicable federal, state, and City policies with regard to the management of wetlands, water bodies, and natural resources, and the proposed action would not result in significant adverse impacts to any natural resources, including water quality, wetlands, aquatic and terrestrial resources, or threatened, endangered, or special concern species.

⁷ *East New York Rezoning Proposal FEIS*; New York City Planning Commission, Lead Agency; February 12, 2016.

Specifically related to the consideration of cumulative effects, as described in Chapter 9, “Natural Resources,” and Chapter 11, “Water and Sewer Infrastructure,” the project site is located within the Jamaica Bay Watershed, and so the proposed action would be undertaken in accordance with an approved NYCDEP Master Plan for the sanitary and stormwater management. Further, as documented in the Jamaica Bay Watershed Protection Plan Project Tracking Form, which provides for the combined consideration of construction and occupancy, and ongoing City oversight of development activities that occur, cumulatively, in the watershed, the proposed action would not result in activities that would cause significant adverse impacts to the watershed; namely, no natural habitat would be directly affected with the proposed action, and sanitary sewers and stormwater management would be undertaken in accordance with the approved NYCDEP Master Plan. Therefore, as there are no other effects to natural resources identified in Chapter 9, and no significant adverse impacts identified in other technical areas for locations in proximity to natural resources, no significant adverse cumulative impacts to natural resources would be expected with the proposed action.

Neighborhood Character

As described in Chapter 19, “Neighborhood Character,” the proposed action would result in no unmitigated significant adverse impacts associated with the proposed action, including no significant adverse impacts related to key components of neighborhood character, including land use and open space, urban design and visual resources, historic and cultural resources, socioeconomic conditions, pedestrian safety or noise. The consideration of potential impacts to neighborhood character is the consideration how a proposed action may, based on the results of the other technical analyses conducted for this EIS, be expected to affect the amalgam of various elements that give neighborhoods their distinctive character. Such elements considered in Chapter 19, include land use, open space, urban design and visual resources, historic and cultural resources, socioeconomic conditions, traffic, transit, pedestrian safety, and noise. As described in each of these respective chapters and summarized in Chapter 19, the proposed action would not result in effects that would combine to result in a significant adverse impact to neighborhood character; further, as described previously in this chapter, the potential for effects predicted in this EIS for these technical areas account for combined effects that would be attributable to the proposed action in combination with other development actions in the vicinity. Therefore, the proposed action would not result in any significant adverse cumulative impacts to neighborhood character.