22.0 Unavoidable, Significant, Adverse Impacts

Introduction

According to the 2021 *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 infeasible.

As described in **Chapter 20, Mitigation**, the Proposed Actions would result in significant adverse impacts to Open Space (indirect), Shadows, Historic and Cultural Resources, Transportation, Construction. 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 significant adverse impacts, and there are no reasonable alternatives to the Proposed Actions that would meet the Proposed Actions' purpose and need, eliminate potential 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 may not be eliminated.

Open Space

Approval of the Proposed Actions would result in significant adverse indirect impacts to open space (total, active, and passive) in the residential ½-mile study area.

Possible measures that could mitigate the Proposed Actions' indirect significant adverse impact to open space in the resident study area may include: expanding existing parks, creating new open space on publicly owned land, encourage owners of privately-owned sites to create new open space as part of their redevelopment, making playgrounds accessible to the community after school hours through the Schoolyards to Playgrounds program, establishing new pedestrian plazas in streets through the City's Plaza program, and/or improving existing parks to allow for more diverse programming. These potential mitigation measures are currently being explored in coordination with the lead agency, Department of City Planning (DCP), and the New York City Department of Parks and Recreation and will be refined between the Draft Environmental Impact Statement (DEIS) and Final Environmental Impact Statement (FEIS).

As discussed in **Chapter 25, Conceptual Analysis**, as part of the Proposed Actions, a zoning text amendment is proposed which would create a zoning authorization that would allow for the bonus of floor area and height modification with the provision of publicly accessible open space on zoning lots zoned R9 larger than 25,000 square feet (sf).

Though these potential mitigation measures may increase publicly accessible open space in the residential ½-mile study area, opportunities to create new open space in sufficient amounts to fully mitigate an indirect impact (approximately three acres) are limited. Therefore, the indirect significant adverse impact would not be fully mitigated, and an unavoidable significant adverse indirect open space impact would occur.

Shadows

Approval of the Proposed Actions would result in significant adverse shadow impacts to two sunlight-sensitive resource: St. Bartholomew's Episcopal Church and Lefferts Place Block Association Garden. The analysis determined that a portion of Lefferts Place Block Association Garden would not receive adequate sunlight during the growing season (at least the six-to-eight-hour minimum specified in the 2021 *CEQR Technical Manual*) as a result of incremental shadow coverage, and vegetation at this resource could be significantly impacted. Additionally, the analysis determined that incremental shadow coverage would result in a reduction in direct sunlight exposure for sunlight-sensitive features at St. Bartholomew's Episcopal Church, which could affect the public's enjoyment or appreciation of those features.

According to the 2021 *CEQR Technical Manual*, possible measures that could mitigate significant adverse shadow impacts on open spaces may include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating, replacing, or monitoring vegetation for a set period of time; undertaking additional maintenance to reduce the likelihood of species loss; or providing for replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space to provide for replacement facilities, vegetation, or other features. The 2021 *CEQR Technical Manual* guidance also discusses strategies to reduce or eliminate shadow impacts, including modifications to the height, shape, size, or orientation of a proposed development that creates the significant adverse shadow impact. Measures to reduce or eliminate the significant adverse shadow impact will be explored between the DEIS and FEIS. Absent the implementation of mitigation measures, the Proposed Actions would result in unmitigated significant adverse impacts on St. Bartholomew's Episcopal Church and the Lefferts Place Block Association Garden.

Historic Resources

Architectural Resources

The Proposed Actions would result in a significant adverse impact to architectural resources as a result of demolition, shadows, and adjacent construction. The Proposed Actions would result in significant adverse direct impacts to the State/National Registers of Historic Places

(S/NR)-eligible Olivet Church. This impact as a result of demolition would be unavoidable, as the building is privately owned and could be demolished to allow for development as-of-right under the Proposed Actions.

Development at nine projected and potential development sites under the Proposed Actions could potentially result in construction-related impacts to five S/NR- and LPC-eligible historic resources, one of which is a historic district. These resources are located within 90 feet of projected and potential development sites. These resources could experience construction-related damage, as neither the district nor the individual landmark are S/NR-listed or designated NYCL and would therefore not be afforded the protections under NYC DOB's TPPN #10/88, which may result in an unavoidable impact.

Archaeological Resources

The Proposed Actions would result in construction activity on sites that the Phase 1A Archaeological Study concluded was potentially sensitive for 19th century and early 20th century historic archaeological resources. In order to mitigate significant adverse impacts on archaeological resources, additional archaeological analysis would be required on the site before it is redeveloped. While there are no mechanisms currently in place to ensure that this archaeological analysis would occur on the privately owned sites subsequent to the Proposed Actions, if redevelopment would involve either federal or state funding or permitting, then further environmental review could be required, and historic resource issues could be addressed. Environmental review could necessitate Phase 1B archaeological testing and possibly mitigation for identified significant resources through avoidance or data recovery. If future development does not entail federal or state funding and occurs as-of-right, the Proposed Actions would result in significant adverse impacts on archaeological resources and there would be no mechanism available to require archaeological analysis to determine the presence of archaeological resources; therefore, these impacts would be unmitigated.

Transportation

As described in **Chapter 13, Transportation**, the Proposed Actions would result in significant adverse impacts at 27 intersections, subway line haul conditions on northbound C trains in the AM peak hour and southbound C trains in the PM peak hour, and pedestrian elements at 12 sidewalks four corners, and four crosswalks.

Traffic

As described in **Chapter 13, Transportation**, the Proposed Actions would result in significant adverse traffic impacts at 27 study area intersections (24 signalized and three unsignalized) during one or more analyzed peak hours; specifically, 41 lane groups at 21 intersections during the weekday AM peak hour, 26 lane groups at 21 intersections in the midday peak hour, 44 lane groups at 25 intersections in the PM peak hour, and 46 lane groups at 25 intersections during the Saturday peak hour.

As demonstrated below, many of these impacts could be mitigated through the implementation of traffic engineering improvements, including:

- Modification of existing traffic signal phasing and/or timing,
- Installation of new traffic signals or all-way stop control,
- Elimination of on-street parking to add a travel lane, and
- Modifications to lane striping.

The types of mitigation measures proposed herein are standard measures that are routinely identified by the City and considered feasible for implementation. Implementation of the recommended traffic engineering improvements is subject to review and approval by DOT. In the absence of the application of mitigation measures, the impacts would remain unmitigated. **Tables 20-5** through **20-8** show that significant adverse impacts would be fully mitigated at 13 lane groups in the weekday AM peak hour, 13 lane groups in the midday, 12 lane groups in the PM, and 11 lane groups in the Saturday peak hour. Intersections where all impacts would be fully mitigated would total 6, 22, 9, and 6 during these same periods, respectively. In total, impacts to one or more lane group(s) would remain unmitigated in one or more peak hours at 22 intersections.

Transit

Subway Line Haul

Northbound and southbound C trains in the AM and PM peak hours, respectively, would be considered significantly adversely impacted by the Proposed Actions based on 2021 *CEQR Technical Manual* criteria. The addition of two northbound C trains during the AM peak hour (increasing average frequency from 7.1 to 9.1 trains per hour) would result in below-capacity conditions (i.e., a volume-to-capacity [v/c] ratio of 0.94), mitigating the potential impact. Similarly, with the addition of two southbound C trains during the PM peak hour (increasing average frequency from 6.1 to 8.1 trains per hour) would result in below-capacity conditions (i.e., a v/c ration of 0.88), mitigating the potential impact. In the absence of the additional frequencies or other mitigation measures, the impact to northbound and southbound C services during the AM and PM peak hours, respectively, would remain unmitigated.

Pedestrians

The Proposed Actions would significantly adversely impact 12 sidewalks, four corners, and four crosswalks in one or more peak hours under the With-Action condition. The potential mitigation measures presented in **Chapter 20, Mitigation**, generally consist of the relocation/removal of impediments to sidewalk flow along with crosswalk widening.

Sidewalks

Practicable mitigation measures could not be identified for significant adverse impacts in one or more peak hours at seven sidewalks, and these impacts would therefore remain unmitigated. These unmitigated sidewalks include:

- East sidewalk along Franklin Avenue between Fulton Street and Brevoort Place (AM, MD, PM, SAT MD).
- East sidewalk along Franklin Avenue between Brevoort Place and Atlantic Avenue (AM, MD, PM, SAT MD).
- West sidewalk along Franklin Avenue between Lefferts Place and Atlantic Avenue (AM, MD, PM, SAT MD).
- East sidewalk along Bedford Avenue between Fulton Street and Herkimer Street (AM, PM, SAT MD).
- North sidewalk along Atlantic Avenue between Bedford Place and Bedford Avenue (AM, MD, PM, SAT MD).
- North sidewalk along Atlantic Avenue between Franklin Avenue and Bedford Place (MD, PM, SAT MD).
- West sidewalk along Franklin Avenue between Atlantic Avenue and Pacific Street (PM).

Crosswalks

Four crosswalks would be significantly impacted by incremental demand generated by the Proposed Actions. As discussed in **Chapter 20, Mitigation,** implementation of the crosswalk widening would fully mitigate the impacts to three of the four impacted crosswalks and would be subjected to review and approval by DOT. If this mitigation measure is not implemented, the impacts to these crosswalks would be unmitigated. No potential mitigation measures have been identified for the east crosswalk at Atlantic Avenue and Classon Avenue for impacts during the PM and SAT MD peak hours. Therefore, the impact to this crosswalk would be unmitigated. 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.

Corners

Four corners would be significantly impacted by incremental demand generated by the Proposed Actions. As discussed in **Chapter 20, Mitigation,** no practicable mitigation measures were identified. Therefore, the impacts to the following corners would remain unmitigated:

- NE corner of Franklin Avenue and Atlantic Avenue (PM, SAT MD)
- SW corner of Franklin Avenue and Atlantic Avenue (PM, SAT MD)
- NW corner of Franklin Avenue and Atlantic Avenue (PM, SAT MD)
- NE corner of Bedford Avenue and Atlantic Avenue (PM, SAT MD)

Construction

As presented in Chapter 19, Construction, it is expected that potential significant adverse traffic and pedestrian impact could occur during construction. The mitigation measures identified in Chapter 20, Mitigation, for 2034 operational traffic and pedestrian impacts would also be similarly effective at mitigating any potential impacts from construction traffic during the peak-construction activity expected with the Proposed Actions. If these measures are deemed infeasible and no additional feasible mitigation measures can be identified, then potential significant adverse impacts would remain unmitigated, and the Proposed Actions would result in potential unavoidable adverse construction transportation (traffic and pedestrian) impact.

As presented in Chapter 19, Construction, PM2.5 would be below its NAAQS for all analyzed Sites and would exceed annual de minimis threshold at projected development sites 10 and 14. The exceedance of the de minimis threshold would be considered a significant adverse air quality impact. Between the DEIS and FEIS, additional review and evaluation will be performed to determine whether the identified impacts related to Annual PM2.5 increments will be avoided. This may include use of more refined assumptions in terms of construction equipment usage, and the use of newer construction equipment with lower particulate emissions, as applicable .At this time, no practicable mitigation measures have been identified. Between the Draft and Final EIS, mitigation measures will be explored. In the event practicable mitigation measures are not identified, the Proposed Actions would result in an unavoidable adverse construction air quality impact.

As shown in **Chapter 19, Construction**, noise level increases exceeding the construction noise impact criteria would occur at several locations throughout the Project Area (refer to **Figure 19-3**) and the Proposed Actions would result in significant adverse construction noise impacts. Two representative construction sites were selected for analysis. One of the largest projected development site (Projected Development Site 14) and a typical projected development site with long-term construction duration (Projected Development Site 22) were selected to be analyzed for each phase of construction: Demolition/Excavation/Foundation; Building Superstructure/Exterior; and Interior Fit-Out. Projected Development Site 14 was selected to represent Projected Development Sites 15, 54, and 55, and Projected Development Site 22 was selected to represent all other projected development sites with construction duration of 24 months or more (i.e., Projected Development Sites 6, 9, 10, 20, and 45). No significant adverse construction noise impacts are expected from construction of development sites whose construction duration would be considered short-term (less than 24 months). Based on the construction stage predicted to occur at each development site according to the conceptual construction schedule during each of the selected analysis periods, each receptor expected to experience an exceedance of the construction noise impact threshold was determined. The analysis is based on RWCDS conceptual site plans and construction schedules, with the possibility that the actual construction may be of less magnitude in which case construction noise would be less than the analysis predicts.

Construction activities would follow the requirements of the NYC Noise Control Code for construction noise control measures. Specific noise control measures would be utilized in noise mitigation plans required under the NYC Noise Control Code. These mitigations will be further explored between the DEIS and FEIS. If no practicable or feasible mitigation is identified, these impacts would constitute unavoidable significant adverse traffic noise impacts as a result of the Proposed Actions.