22.0 Unavoidable, Significant, Adverse Impacts

A. 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 21, "Mitigation," the Proposed Actions would result in significant adverse impacts to Open Space (indirect and direct impacts from incremental shadows), Shadows, Historic and Cultural Resources (architectural), Transportation, Air Quality and Construction. Additionally, due to the non-site-specific nature of DCPs model for residential conversions as a result of the Proposed Actions, significant adverse Hazardous Materials, Air Quality, and Noise impacts cannot be precluded for the residential conversion area. 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.

B. 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 and direct significant adverse impacts attributed to incremental shadows on one open space resource.

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, the Department of City Planning (DCP), and the New York City Department of Parks and Recreation and will be refined between the DEIS and FEIS.

As discussed in Chapter 25, "Conceptual Analysis," as part of the Proposed Actions, a zoning text amendment is proposed that would allow for all developments in the Rezoning Area to access the Zoning Resolution's existing special permit for a floor area bonus for covered pedestrian space (CPS) (ZR 74-87). Access to the bonus would encourage the creation of spaces that reflect the mixed-use character of the area and serve an important function to provide public space for passive use.

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

C. Shadows

Approval of the Proposed Actions would result in significant adverse shadow impacts to five sunlight-sensitive resources: 1185 Broadway POPS, Marble Collegiate Church, St. John the Baptist Roman Catholic Church, St. Francis of Assisi Roman Catholic Church, and Trinity Chapel Complex. The analysis determined that the POPS at 1185 Broadway 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 and the public's enjoyment of 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 Marble Collegiate Church, St. John the Baptist Roman Catholic Church, St. Francis of Assisi Roman Catholic Church, Trinity Chapel Complex, 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; replacing plantings in the affected area with similar but more shade-tolerant plantings; 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 1185 Broadway POPS, Marble Collegiate Church, St. John the Baptist Roman Catholic Church, St. Francis of Assisi Roman Catholic Church, and Trinity Chapel Complex.

D. Historic Resources

Architectural Resources

The Proposed Actions would result in direct (demolition, shadows, and adjacent construction) and indirect (contextual) significant adverse impact to architectural resources).

Direct Impacts

The Proposed Actions would result in the redevelopment of 15 properties in the S/NR-Listed Garment Center Historic District. Twelve of these properties contain contributing resources that are S/NR-Listed that would be directly impacted by demolition and redevelopment under the Proposed Actions. This impact as a result of demolition would be unavoidable, as these 12 properties are privately owned and could be demolished to allow for development as-of-right under the Proposed Actions.

As described above, incremental shadow cast as a result of the Proposed Actions would reduce direct sunlight to sunlight-sensitive features (i.e., stained-glass windows) at Marble Collegiate Church, St. John the Baptist Roman Catholic Church, and St. Francis of Assisi Roman Catholic Church, and the Trinity Chapel Complex. This incremental shadow may have the potential to affect the public's enjoyment of sunlight-sensitive features. Measures to reduce or eliminate the significant adverse shadow impact will be explored between the DEIS and FEIS.

Development at two potential and fifteen projected sites under the Proposed Actions could potentially result in construction-related impacts to 16 individual historic resources located within 90 feet of the projected/potential development sites. These 16 non-Designated Designated (i.e., LPC-eligible and S/NR-eligible) resources would be afforded limited protection under DOB regulations applicable to all buildings located adjacent to construction sites; however, they are not afforded the added special protections under DOB's TPPN #10/88 because they are not S/NR-listed or NYCL-designated. Additional protective measures under DOB's TPPN #10/88 would only become applicable if the eligible resources are designated in the future prior to the initiation of construction. If the eligible resources listed above are not designated, however, they would not be subject to TPPN #10/88 and may therefore be adversely impacted by the adjacent developments resulting from the Proposed Actions. Since there would be no mechanism to require commitment to the CPP on sites within 90 feet of the eligible resources noted above, there would not be feasible strategies to fully mitigate the potential for significant adverse impacts, which may result in an unavoidable impact to architectural resources. Mitigation measures will continue to be explored by DCP and LPC between the DEIS and the FEIS.

Indirect Impacts

Development on projected development site 40 is anticipated to cause alterations to the setting and visual context of a historic resource, the Trinity Chapel Complex (NYCL, S/NR). Only projected development site 40 could eliminate or substantially obstruct significant public views of the Trinity Chapel Complex. As such, the Proposed Actions are expected to result in only one adverse indirect or contextual impact on a historic architectural resource. Measures to reduce or eliminate the significant adverse impact will be explored between the DEIS and FEIS.

Absent the implementation of any mitigation measures, approval of the Proposed Actions would result in in significant unavoidable adverse impacts to the 12 S/NR-listed properties in the Garment Center Historic District, the resources affected by incremental shadow described above, the 16 resources affected by construction of the projected and potential development sites, and the Trinity Chapel Complex.

E. Hazardous Materials

The Proposed Actions are anticipated to have no significant adverse impacts related to hazardous materials on projected and potential development sites. However, significant adverse hazardous materials impacts cannot be precluded for the conversion area. Significant adverse impacts from hazardous materials cannot be precluded for the 1,093,808 gsf of non-residential area modeled for residential conversion. For this area, the extent of hazardous materials are unknown because of the non-site specific nature of DCP's conversion model and because it is not possible to determine exactly where and to what extent additional in-ground disturbance may occur for each residential conversion. Since there are no specific development sites among the 1,093,808 gsf RWCDS residential conversion area, the absence of hazardous materials cannot be definitively demonstrated and the possibility of impacts cannot be eliminated. To mitigate potential residential exposure to soil vapor intrusion, newly developed residential buildings would need soil vapor barriers installed on the ground and sub-ground levels. Since development resulting from the Proposed Actions would be as-of-right, there would only be a mechanism for the City to require a hazardous materials assessment, or to mandate the remediation of such materials, on select parcels among the modeled residential conversion area that have already been (E) designated because of prior zoning actions. Therefore, there are no mitigation measures that can be implemented at individual development sites that would reduce or eliminate the potential for significant adverse impacts and the impact would remain unmitigated.

F. Transportation

As described in Chapter 13, "Transportation," the Proposed Actions would result in significant adverse impacts at 28 intersections and pedestrian elements at 19 sidewalks, three corners, and six crosswalks.

Traffic

As described in Chapter 13, Transportation, the Proposed Actions would result in significant adverse traffic impacts at 28 study area intersections (all signalized) during one or more analyzed peak hours; specifically, 15 lane groups at 14 intersections during the weekday AM peak hour, 12 lane groups at 11 intersections in the midday peak hour, 26 lane groups at 20 intersections in the PM peak hour, and 24 lane groups at 20 intersections during the Saturday peak hour.

- As demonstrated below, many of these impacts could be mitigated through the implementation of traffic engineering improvements, includingModification of existing traffic signal phasing and/or timing, and

- Modifications of curbside parking regulations.

The types of mitigation measures proposed herein are standard measures that are routinely identified by the City and considered feasible for implementation. These proposed traffic engineering improvements are subject to final review and approval by the New York City Department of Transportation (DOT). If DOT determines that an identified traffic engineering improvement is infeasible, and no alternative and equivalent measure is identified, then that impact would remain unmitigated and would constitute an unavoidable adverse impact.

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 21-1** and **21-2** show that significant adverse impacts would be fully mitigated, using the mitigation measures proposed in Chapter 21, "Mitigation," at 11 lane groups in the weekday AM peak hour, nine lane groups in the midday, 16 lane groups in the PM, and 16 lane groups in the Saturday peak hour. Intersections where all impacts would be fully mitigated would total 10, 8, 13, and 13 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 11 intersections. The intersections that would have unmitigated significant adverse impacts are listed below and in **Table 21-2**.

As noted in Chapter 21, Mitigation,

- The westbound through-right lane group at Madison Avenue and East 29th Street during the Saturday peak hour;

- The southbound through-right movement at Fifth Avenue and West 30th Street during the weekday PM peak hour;

- The westbound left-through lane group at Broadway and West 29th Street during the weekday PM and Saturday peak hours;

- The eastbound left-through lane group at Sixth Avenue and West 30th Street during the weekday midday peak hour;

- Two lane groups at Sixth Avenue and West 29th Street, including:

    - The northbound left movement during the weekday AM, weekday PM, and Saturday peak hours and

    - The westbound through lane group during the weekday PM peak hour

- The eastbound left-through lane group at Sixth Avenue and West 23rd Street during the weekday PM peak hour;

- The northbound right movement at Sixth Avenue and West 23rd Street during the weekday AM peak hour;

- Two lane groups at Seventh Avenue and West 30th Street, including:
    - The southbound left lane group during the weekday midday and PM peak hours and
    - The eastbound right lane group during the weekday PM and Saturday peak hours
- Two lane groups at Seventh Avenue and West 29th Street, including:
    - The westbound through lane group during the weekday PM and Saturday peak hours and
    - The southbound right lane group during the weekday PM peak hour
- The westbound through-right lane group at Eighth Avenue and West 29th Street during all analyzed peak hours; and
- The westbound through lane group at Ninth Avenue and West 29th Street during the weekday AM and Saturday peak hours.

Pedestrians

The Proposed Actions would significantly adversely impact 19 sidewalks, three corners, and six crosswalks in one or more peak hours under the With-Action condition. The potential mitigation measures presented in Chapter 21, "Mitigation," generally consist of the relocation/removal of impediments to sidewalk and corner flow along with crosswalk widening.

Sidewalks

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

- South sidewalk along West 38th Street between Fifth Avenue and Sixth Avenue in the AM, PM, and Saturday peak hours;
- East sidewalk along Sixth Avenue between West 34th Street & West 35th Street in the Saturday peak hour;
- West sidewalk along Sixth Avenue between West 33rd Street & West 34th Street in the Saturday peak hour;
- West sidewalk along Sixth Avenue between West 30th Street & West 31st Street in the AM, PM, and Saturday peak hours;
- South sidewalk along West 31st Street between Sixth Avenue and 7 Avenue in all analyzed peak hours;
- West sidewalk along Sixth Avenue between West 28th Street & West 29th Street in the PM

peak hour;
- West sidewalk along Sixth Avenue between West 27th Street & West 28th Street in the PM peak hour;
- East sidewalk along Seventh Avenue between West 28th Street & West 29th Street in the PM peak hour;
- East sidewalk along Broadway between West 31st Street and West 32nd Street in all analyzed peak hours;
- North sidewalk along West 29th Street between Fifth Avenue and Broadway in the PM peak hour; and
- South sidewalk along West 28th Street between Sixth Avenue and Broadway in all analyzed peak hours.

Crosswalks

Six crosswalks would be significantly impacted by incremental demand generated under the With-Action condition. As discussed in Chapter 21, "Mitigation," implementation of the crosswalk widening would fully mitigate the impacts to all six impacted crosswalks and would be subjected 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.

Corners

Three corners would be significantly impacted by incremental demand generated by the Proposed Actions. As discussed in Chapter 21, "Mitigation," no practicable mitigation measures were identified for two corners under the With-Action condition. These would include the southwest corner of Seventh Avenue at West 31st Street during the weekday PM peak hour and the northwest corner of Sixth Avenue at West 33rd Street during the Saturday peak hour. Therefore, the impacts to the following corners would remain unmitigated.

As discussed above, the proposed improvements are subject to final review and approval by the New York City Department of Transportation (DOT). If DOT determines that an identified improvement is infeasible, and no alternative and equivalent measure is identified, then that impact would remain unmitigated and would constitute an unavoidable adverse impact.

G. Air Quality

As presented in Chapter 14, "Air Quality," the air quality impact analysis has demonstrated exceedance of 1-hour NO_2 NAAQS and exceedance of Cadmium annual guideline concentration (AGC) standard in the study area. Because of the non-site specific nature of DCP's model for future residential conversions, the possible exceedance of 1-hour NO_2 NAAQS or exceedance of Cadmium AGC cannot be precluded and potential for adverse air quality impacts cannot be ruled out. There are no mitigation measures can be required to non-specific future conversion development sites via the proposed land use actions. Any

significant adverse air quality impacts to the conversion development sites, would remain unmitigated.

As discussed in Chapter 21 "Mitigation," mitigation measures would prevent cancer risk at Potential Development Site G but exceedance of Cadmium AGC cannot be completely avoided at the site. At this time, no additional practicable mitigation measures have been identified. Between the DEIS and FEIS, further mitigation measures will be explored. In the event practicable mitigation measures are not identified, the Proposed Actions would result in an unavoidable adverse air quality impact for Potential Development Site G.

H. Noise

Since the RWCDS conversion model is not site-specific, if located outside of the Special Mixed Use District, residential conversion area could be located in areas with high ambient noise level and without appropriate attenuation measures to maintain CEQR interior noise target levels. Therefore, significant adverse noise impacts cannot be precluded for the residential conversion area. Due to the non-site specific nature of this aspect of the Proposed Actions, no practicable mitigation measures were identified that would reduce or eliminate these impacts and, therefore, the Proposed Action would result in the potential for unavoidable adverse noise impacts.

I. Construction

As presented in Chapter 19, "Construction," it is expected that potential significant adverse traffic and pedestrian impact could occur during construction and that these impacts would be within the range of impacts identified Chapter 13, "Transportation" for the 2034 With-Action conditions. The mitigation measures identified in Chapter 21, "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 indicated above, regardless of any proposed mitigation measures, impacts to one or more lane group(s) would remain unmitigated in one or more peak hours at 11 intersections and at eleven sidewalks and two corners in one or more peak hours in the 2034 With Action condition. Consequently, these impacts could also constitute unavoidable significant adverse traffic impacts in the 2028 construction peak as a result of the Proposed Actions.

As presented in Chapter 19, "Construction," $PM_{2.5}$ would be below its NAAQS for both evaluated scenarios (cumulative impacts from projected development sites 46 & 49 and 51 & 52) but it would exceed the annual and 24-hour *de minimis* threshold. The exceedance of the de minimis threshold would be considered a significant adverse construction 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 additional practicable mitigation measures have been identified. Between the DEIS and FEIS, further 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 discussed in "Chapter 19, Construction," noise level increases exceeding the construction noise impact criteria would occur at several locations throughout the Affected Area (refer to **Figure 19-5 and Figure19-6**) and the Proposed Actions would result in significant adverse construction noise impacts. Four representative construction sites were selected for analysis. The selected representative development sites include Site 49, one of the largest projected development sites, Site 52, a relatively large projected development site, Site 46, an average projected development site, and Site 35, one of the smallest projected development sites with a 24-month or greater construction duration. 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. Significant impacts are expected to occur at projected development sites 3, 7, 15, 16, 18, 19, 25, 31, 32, 33, 35 36, 40, 41, 42, 43, 46, 47, 48, 49, 51, 52 53, 55, and 62.

Development at 17 projected and potential sites under the Proposed Actions could potentially result in construction-related impacts to 16 non-designated (IE LPC-eligible and S/NR eligible) historic resources located within 90 feet of the projected/potential development sites. These 16 non-designated resources would be afforded limited protection under the New York City Department of Buildings (DOB) regulations that are applicable to all buildings located adjacent to construction sites; however, they are not afforded the added special protections under the DOB's TPPN #10/88 because they are not S/NR-listed or NYCL-designated. If the eligible resources listed above are not designated, however, they would not be subject to TPPN #10/88 and may therefore be adversely impacted by the adjacent developments resulting from the Proposed Actions. Since there would be no mechanism to require commitment to the CPP on sites within 90 feet of the eligible resources noted above, there would not be feasible strategies to fully mitigate the potential for significant adverse impacts, which may result in an unavoidable impact to architectural resources. Mitigation measures will continue to be explored by DCP and LPC between the DEIS and the FEIS. If no practicable or feasible mitigation is identified, these impacts would constitute unavoidable significant adverse construction noise impacts as a result of the Proposed Actions.

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 mitigation measures will be further explored between the DEIS and FEIS. If no practicable or feasible mitigation is identified, these impacts would constitute unavoidable significant adverse construction noise impacts as a result of the Proposed Actions.