

20. Alternatives

20.1 INTRODUCTION

As described in the *CEQR Technical Manual*, alternatives selected for consideration in an environmental impact statement are generally those which are feasible and have the potential to reduce, eliminate, or avoid adverse impacts of a proposed action while meeting some or all of the goals and objectives of this action. As described in Chapter 1, “Project Description,” the New York City Department of City Planning (DCP) is proposing zoning map and zoning text amendments that would collectively affect approximately 70 blocks in East Midtown, in Manhattan Community Districts 5 and 6, and a potential City Map amendment to reflect a “Public Place” designation on portions of Vanderbilt Avenue (collectively, the “Proposed Action”). In response to comments received since the Draft Scope of Work for this EIS was issued on August 27, 2012, DCP modified the Proposed Action to remove the midblock areas east of Third Avenue between East 43rd and 45th Streets. The Proposed Action would establish the East Midtown Subdistrict within the existing Special Midtown District, and would comprise three subareas—the Grand Central Subarea, Park Avenue Subarea, and Other Areas—within which the maximum as-of-right floor area ratio (FAR) would increase to 24.0 FAR, 21.6 FAR, and 14.4 /18.0 FAR, respectively. The goal of the Proposed Action is to maintain East Midtown as one of the world’s premier business districts, encourage the creation of new office space to ensure the area remains a key job center for the City and region, capitalize on the area’s existing and expanding transportation network, and improve and add to the area’s existing iconic pedestrian and built environments.

This chapter considers in detail the following four alternatives to the Proposed Action:

- A No-Action Alternative, which is mandated by CEQR and SEQRA, and is intended to provide the lead and involved agencies with an assessment of the expected environmental impacts of no action on their part (i.e., no zoning changes).
- A No Unmitigated Significant Adverse Impact Alternative, which considers a development scenario that would not result in any identified significant, unmitigated adverse impacts.
- A Smaller Rezoning Area/Lesser Density Alternative, in which the proposed East Midtown Subdistrict would only include the area of the proposed Grand Central Subarea, reducing the number of projected and potential development sites from 39 to 23. The same proposed rules would apply to the Grand Central Subarea in the Smaller Rezoning Area/Lesser Density Alternative as would apply in the Proposed Action.

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- A Modified Proposal Alternative,¹ based on proposed modifications to the original zoning text amendment proposal by DCP in response to recommendations made during the public review process for the Proposed Action. Per the modifications, the proposed text amendment would both expand and restrict the allowable uses for buildings utilizing the District Improvement Bonus (DIB), permit greater opportunities for floor area transfers from area landmarks, modify height and setback controls along Park Avenue, allow limited modification of the Qualifying Site requirements through discretionary action, and make a series of other updates, corrections and clarifications to the original proposal. The proposed modified zoning text amendment would also include additional provisions for special permits or authorizations—including requests for use modifications, exceptions to the Qualifying Site frontage requirements, requests for transfers of development rights from landmarks within a new Northern Subarea]—that would be subject to public review at the time a specific application is made to the City Planning Commission (CPC). As it is not possible to predict whether a discretionary action would be pursued on any one site in the future, a Modified Proposal Alternative conceptual analysis is also included in this chapter to generically assess the potential environmental impacts that could result from use of these additional provisions for special permits and/or other discretionary actions, which would themselves be subject to additional public and environmental review.

20.2 PRINCIPAL CONCLUSIONS

20.2.1 No-Action Alternative

The No-Action Alternative examines future conditions without the Proposed Action. This includes no amendments to the zoning map, no new zoning text amendments to establish the proposed East Midtown Subdistrict of the Special Midtown District, and no City Map amendment to reflect a Public Place designation along portions of Vanderbilt Avenue. Under the No-Action Alternative, it is anticipated that new development would occur on 10 of the Proposed Action’s 19 projected development sites. In total, on the 19 projected development sites, there would be approximately 776 dwelling units (DUs), 529,328 gross square feet (gsf) of retail, 6,519,633 gsf of commercial office, and 2,010,947 gsf of hotel space.

The technical chapters of this EIS have described the No-Action Alternative as “the Future Without the Proposed Action.” The significant adverse impacts anticipated for the Proposed Action would not occur with the No-Action Alternative. However, the No-Action Alternative would not achieve the goals of the Proposed Action, and the benefits expected to result from the Proposed Action—including protecting, promoting, and strengthening East Midtown as a premier business district; directing higher densities to areas that can accommodate future growth; and improving the area’s pedestrian network—would not be realized under the No-Action Alternative. Without the Proposed Action, the trend toward the conversion

¹This alternative is new to the FEIS.

of East Midtown's existing office buildings to other uses would continue, and the percentage of the area's square footage devoted to office uses under the No-Action Alternative would be lower compared to existing conditions. As a result, the area's distinction as one of the world's premier business addresses and key job centers for the City and the region would be at risk under this alternative.

20.2.2 No Unmitigated Significant Adverse Impact Alternative

The No Unmitigated Significant Adverse Impacts Alternative considers an alternative to the Proposed Action whereby new development would not result in any unmitigated significant adverse impacts that could not be fully mitigated. There is the potential for the Proposed Action to result in a number of significant adverse impacts for which no practicable mitigation has been identified to fully mitigate the impacts. Specifically, unmitigated impacts were identified with respect to shadows, historic and cultural resources (architectural resources only), transportation (traffic and pedestrians), and construction.

The Proposed Action could result in significant adverse shadows impacts for which there are no feasible or practicable mitigation measures that can be implemented to mitigate the impacts on the sunlight-sensitive features of St. Bartholomew's Church and Community House, the Lady Chapel of St. Patrick's Cathedral, and the Christ Church United Methodist building. Based on shadow modeling, it was determined that the heights of new developments on Projected Development Site 12 and Potential Development Site 14 would need to be limited to the heights of the existing buildings on these sites (approximately 300 feet tall and 410 feet tall, respectively) in order to eliminate the unmitigated significant adverse shadows impacts on St. Bartholomew's Church and Community House. Furthermore, in order to eliminate the significant adverse shadows impact on Christ Church United Methodist, the height of a new development on Projected Development Site 18 would need to be limited to approximately 530 feet tall. The imposition of height restrictions on future developments at these sites would require capping the allowable FAR below that which would be permissible under the Proposed Action on these sites. Reductions in the allowable FAR on these sites, below that which would be permissible under the Proposed Action, would be inconsistent with the overall purpose and need of the Proposed Action and is considered infeasible and impracticable.

The Proposed Action could result in unmitigated direct and construction-related significant adverse impacts on eligible historic architectural resources. In order to entirely avoid the potential unmitigated impacts, this alternative would require that Projected Development Sites 3, 6, 7, 9, 10, 12, and 16 and Potential Development Sites 2-7, 9, 12, 13, 19, and 20 be eliminated from the rezoning proposal. However, this would be inconsistent with the Proposed Action's goal to introduce new office buildings to the rezoning area in order to protect and strengthen East Midtown as a premier commercial district.

With respect to transportation, small increases in incremental project-generated traffic volumes at some of the congested intersection approach movements would result in significant adverse impacts that could

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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. Furthermore, small incremental increases in project-generated pedestrian volumes at some of the congested crosswalks and corners 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 pedestrian impacts. Therefore, no reasonable alternative could be developed to completely avoid such traffic impacts, as well as pedestrian impacts, without substantially compromising the Proposed Action's stated goals. Similarly, no reasonable alternative could be developed

Overall, in order to eliminate all unmitigated significant adverse impacts, the Proposed Action would have to be modified to a point where its principal goals and objectives would not be realized.

20.2.3 Smaller Rezoning Area/Lesser Density Alternative

The Smaller Rezoning Area/Lesser Density (SRA/LD) Alternative was developed for the purpose of assessing whether reducing the affected area of the proposed rezoning to the Grand Central Subarea would eliminate or reduce the significant adverse impacts of the Proposed Action while also meeting the goals and objectives of the Proposed Action. As under the Proposed Action, a new East Midtown Subdistrict would be mapped within the existing Special Midtown District. However, in the SRA/LD Alternative, the Park Avenue Subarea and Other Areas would not be included in the rezoning area, in effect reducing the affected rezoning area to the approximately 35-block area generally bounded by East 39th Street to the south, East 49th Street to the north, a line approximately 150 feet east of Fifth Avenue to the west, and a line a line approximately 125 feet west of Third Avenue to the east. As such, the RWCDs for the SRA/LD Alternative would be limited to the 14 of the 19 projected development sites and the 9 of the 20 potential development sites located within the proposed Grand Central Subarea.

The SRA/LD Alternative would result in an equivalent amount of residential development as the Proposed Action, and would reduce the amount of commercial development, including office, retail and hotel uses, in the study area as compared to the Proposed Action. Overall, the SRA/LD Alternative would represent an approximate 11.8 percent reduction in the increment of commercial space over the No-Action condition, compared to the Proposed Action.

The same development mechanisms would apply in the SRA/LD Alternative, including the ability for Qualifying Sites to utilize the new District Improvement Bonus (DIB) and as-of-right landmark transfer mechanism, the ability for buildings with non-complying floor area that meet certain site criteria to be rebuilt to their existing density through a discounted DIB contribution, and the ability to transfer 1.0 FAR from Landmarks to Non-Qualifying sites. The SRA/LD Alternative would result in a lower overall contribution to the District Improvement Fund (DIF) of approximately 27 percent below what would be realized under the RWCDs for the Proposed Action. However, it would continue to be sufficient to fund

the City-priority improvements to the pedestrian network, both above and below grade, for the Grand Central subway station and Vanderbilt Avenue.

As with the Proposed Action, the SRA/LD Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; noise; public health; and neighborhood character. Unlike the Proposed Action, which would result in significant adverse shadows impacts on the sunlight-sensitive features of St. Bartholomew’s Church and Community House, the Lady Chapel of St. Patrick’s Cathedral, and Christ United Methodist Church, the SRA/LD Alternative would not result in any significant adverse shadows impacts. Compared to the Proposed Action, the SRA/LD Alternative would reduce but not entirely eliminate the significant adverse impacts related to historic resources, transportation, and construction.

The SRA/LD Alternative would support, to a lesser degree, the Proposed Action’s intent of focusing future development around Grand Central Terminal (given its access to regional rail and large concentration of aging office stock) and preserving and promoting office uses in East Midtown. However, by reducing the area of the proposed East Midtown Subdistrict, the benefits of protecting and strengthening East Midtown as one of the world’s premier business addresses would be limited to a smaller 35-block area.

20.2.4 Modified Proposal Alternative

The Modified Proposal Alternative was developed in response to recommendations made during the public review process for the Proposed Action. Under the Modified Proposal Alternative, as with the Proposed Action, a new East Midtown Subdistrict would be mapped within the existing Special Midtown District, but there would be a number of modifications to the proposed zoning text, including the following:

a. Permitted Uses for Buildings Utilizing the District Improvement Bonus

The original proposal set forth requirements that any development that utilizes the District Improvement Bonus (DIB) be restricted to commercial uses—basically office, hotel, retail and other related uses. During the public review process, DCP received recommendations that residential use be permitted in new developments to support a mixed-use character for the area. In addition, DCP received recommendations that hotel uses be restricted on sites that utilize the DIB so that the resulting developments contain predominantly office uses.

While East Midtown has experienced a great deal of non-office development over the last decade and conversion of existing aging office buildings to residential is likely to continue, DCP believes limited mixed use on the DIB sites could improve the 24-hour character of the area while continuing to meet the proposal’s overall goal of encouraging new office space in the East Midtown area. Furthermore, DCP

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believes that sites that utilize the DIB should primarily be devoted to office uses. The modified proposal addresses these issues by, on the one hand, allowing limited amounts of residential use as-of-right on sites that utilize the DIB, and, on the other hand, by restricting the amount of hotel use that would be allowed as-of-right on these sites.

Under the original proposal, on sites utilizing the DIB, there would be no limits on the amount of floor area allocated to hotel use, and residential use would not be permitted. Under the modified proposal, up to 20 percent of the floor area of a new building that utilizes the DIB would be permitted to be utilized for hotel or residential use as-of-right, with the remaining portion of the building required to be allocated for office, retail and other related commercial uses. The modified proposal would also allow additional hotel and residential use beyond the amount permitted as-of-right through a new special permit, subject to full ULURP review. This change would apply to all sites that use the DIB, including both development on Qualifying Sites and redevelopment of overbuilt buildings. The 20 percent allocation reflects the mix of uses in other high-density mixed-use buildings in Manhattan, including Random House Tower and 1 Beacon Court (Bloomberg Building), which both devote approximately 20 percent of their floor area to non-office use.

The modified proposal also recognizes the importance of existing large full service hotels to the area. Those sites occupied by existing large hotels with square footage totals that would exceed the 20 percent limit in a new as-of-right development would be permitted to build back their full existing hotel square footage on the site as-of-right.

Developments seeking greater amounts of residential (up to 40 percent maximum) or hotel and other uses permitted by the underlying commercial zoning (up to 100 percent) would only be permitted through a new special permit with findings focused on how the new development relates to its surroundings and the area's overall status as a predominantly-office district.

The DIB rate of \$250 per square foot was established under the original proposal for commercial uses based on an appraisal of commercial development rights in Midtown, and the modified proposal provides for a different rate for residential uses. This rate will be set through an appraisal of residential development rights in Midtown, to be conducted prior to adoption of the text, subject to adjustment in the same manner as the rate for commercial uses. The modified proposal also requires that the contribution rate for a development be based on its ratio of residential and commercial use.

In addition, the modified proposal modifies the “stacking” rules for sites which utilize the DIB in response to recommendations regarding the development of restaurants and observation decks to enliven the tops of buildings. Under the existing “stacking” rules, non-residential uses are not permitted above or on the same story as residential uses in new developments, limiting the ability to develop such uses in mixed-use buildings with residential uses. In order to permit these active uses, the modified proposal would allow

restaurants, observation decks and other similar uses to be developed above residential uses as-of-right, provided that the residential and non-residential uses above are not accessible to each other on floors above the ground level. Further modification would be permitted through the new special permit described above.

b. Northern Area Landmark Transfers

DCP received recommendations that landmarks in the northern portion of the proposed East Midtown Subdistrict be given broader opportunities for floor area transfers, similar to the provisions afforded landmarks in the Grand Central Subarea. Under existing regulations, floor area transfers are only permitted to adjacent sites—those on an abutting zoning lot or across a street—via a special permit.

Given the great concentration of iconic landmark buildings in the northern portion of the East Midtown Subdistrict (including St. Patrick’s, St. Bartholomew’s, Lever House, and Central Synagogue) and the significant contribution they make to that area’s overall character, the modified proposal includes a new Northern Subarea in which landmark buildings with unused floor area would have new opportunities to transfer to development sites beyond ‘adjacent’ sites as defined under Zoning Section 74-79 which governs landmark transfers. The northern Subarea would adjoin the border of the Grand Central Subarea along East 48th and East 49th streets, and run east from Third Avenue to the Subdistrict’s western boundary east of Fifth Avenue. Two options would be available for transfer, reflecting a similar framework to the existing and proposed Grand Central Subarea.

First, beginning in 2019 (effectively five years from expected approval of the proposal), transfers of development rights from subarea landmarks could be made to Qualifying Sites within the Northern Subarea above a minimum required DIB contribution as described below.

- For sites on Park Avenue in the Northern Subarea, that under the certified proposal would be able to increase from 15 FAR to 21.6 FAR through the DIB, a minimum of 3.0 FAR would be required to come from the DIB, with the increase from 18.0 FAR to 21.6 FAR available from the DIB or by landmark transfer.
- For sites that under the certified proposal would be permitted to increase their FAR by 20 percent to achieve an increase from 15.0 to 18.0 FAR or 12.0 FAR to 14.4 FAR through the DIB, the first 10 percent increase would be required to come from DIB (1.5 and 1.2 FAR, respectively), with the remaining portion available from the DIB or by landmark transfer.

These landmark transfers would be permitted as-of-right (by certification), as in the Grand Central Subarea.

Additionally, development rights from subarea landmarks would be permitted to transfer to sites within the Northern Subarea that do not meet the Qualifying Site size and frontage requirements. These transfers

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would be allowed by discretionary action subject to public review. Effective upon adoption of the proposal, a City Planning Commission Authorization process would allow for transfers to achieve an increase of up to 20 percent above the base FAR on receiving sites in the Subarea that do not meet the Qualifying Site size and frontage requirements. On Park Avenue, such receiving sites could increase their FAR up to 21.6 FAR through transfer of landmark development rights by special permit.

DCP believes that this proposal appropriately addresses the concentration of significant landmark buildings in the northern portion of the Subdistrict by giving them greater opportunities and flexibility for transfer to a broader area beyond ‘adjacent’ sites, consistent with the transfer mechanisms in the Grand Central Subarea, while continuing to meet the overall goals of the East Midtown proposal.

c. Modification of Qualifying Site Requirements Through Discretionary Review

The original proposal required that only sites with a minimum of 200 feet of frontage along a wide street and a minimum total of 25,000 square feet be permitted to utilize the DIB. DCP received recommendations that such requirements could be overly stringent under certain circumstances and would thereby unduly limit the applicability of the new regulations. While DCP continues to believe the minimum 25,000-square-foot site requirement is necessary for the development of substantial office buildings, some flexibility in the minimum 200-foot frontage requirement may be appropriate to account for unforeseen conditions where lots necessary to meet the requirement may not be available for development.

The modified proposal would allow for use of the DIB on sites that meet the 25,000-square-foot site requirement and satisfy a minimum of 75 percent of the 200-foot frontage requirement. An authorization would permit use of the DIB for sites that meet these requirements and can accommodate a viable office development utilizing the existing height and setback controls. The FAR for the proposed site would be determined within the maximum as-of-right FARs permitted for sites utilizing the DIB, based on findings by the City Planning Commission focused on the proposed footprint, overall massing, and relationship to surrounding buildings and spaces.

d. Park Avenue height and setback controls

The original proposal contains limited modifications to the underlying Special Midtown District height and setback controls in the Grand Central Subarea reflecting the high street walls and unique block configurations found there. Upon further analysis, DCP has determined that the height and setback controls effective along Park Avenue should be modified to better reflect the street’s overall width—at 140 feet, it is the widest street in Midtown.

The underlying Midtown height and setback regulations—which are focused on the pedestrian’s access to daylight on surrounding streets—require calculations based on the street widths that a zoning lot fronts upon. However, compliance can only be measured on three possible street widths: 60-foot-, 80-foot- and

100-foot-wide streets. Today, calculations for sites on Park Avenue use the 100-foot-wide street requirements, but do not reflect the actual width of the street. DCP has continued to study the Park Avenue corridor and believes this requirement causes developments on the relatively-small sites found on Park Avenue to be taller, narrower and less economically viable than if the street's full width were taken into account. In order to allow the development of modern office buildings on the street while maintaining the overall Midtown district's standards of access to light and air, the proposed modification permits Qualifying Site developments on Park Avenue in the East Midtown Subdistrict to calculate their compliance with the existing height and setback controls taking into account the full 140-foot width of the street.

e. East Midtown DIF Committee prioritization

The original proposal included a series of considerations for the DIF Committee when determining the prioritization of DIF projects, including that priority be given to improvements to the Grand Central Subway Station and the pedestrian network in the immediate vicinity of the Terminal, given these areas exhibited the greatest needs in the Subdistrict today.

Improvements to the Lexington Avenue/53rd Street and 51st Street station complex may be needed in the future if as-of-right development based on the modified use provisions occurs in the surrounding area, reflecting an overall similar level of development but with a different mix of uses. These improvements have been highlighted by the MTA in the past, with recognition that further study of the station should be undertaken once the East Side Access station is operational. In order to account for this condition, the modified proposal adds the Lexington/53rd and 51st Street station complex to the list of priority areas in order to provide for implementation of improvements to this station as East Side Access opens and development occurs in the long term.

f. Other Corrections and Clarifications

The modified proposal also includes a number of clarifications and corrections designed to make the overall intent of the proposal clearer.

In particular, the modified proposal provides further clarification as to the applicability of the regulations for sites located on or divided by the Subdistrict's boundaries, as well as its Subareas. In addition, the proposal clarifies that Qualifying Sites can continue to include existing buildings to remain as long as the minimum cleared site requirements are achieved, and that Qualifying Sites can maintain the bonus floor area from existing bonus plazas without proportional contribution into the DIB as long as such spaces are maintained as part of a new development. Finally, it clarifies that the underlying Damage or Destruction provisions of Zoning Section 54-40 continue to apply in the Subdistrict.

The modifications included in the Modified Proposal Alternative would result in differences in the as-of-right development that could be realized from that analyzed for the Proposed Action. For the Modified

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Proposal Alternative, a modified RWCDs has been created to account for the various modifications being proposed. Compared to the Proposed Action, the Modified Proposal Alternative would result in less office space and hotel space, and more residential space, compared to the No-Action condition. The net incremental increase in retail space would be the same under both the Proposed Action and the Modified Proposal Alternative.

As with the Proposed Action, the Modified Proposal Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; noise; public health; and neighborhood character. As with the Proposed Action, the Modified Proposal Alternative would result in the significant adverse shadows impacts (on the sunlight-sensitive features of St. Bartholomew’s Church and Community House, the Lady Chapel of St. Patrick’s Cathedral, and Christ United Methodist Church), and would have the same potential for significant adverse impacts related to historic and cultural resources and construction. The same partial mitigation measured for shadows, historic and cultural resources and construction being considered by the CPC for the Proposed Action would be available for the Modified Proposal Alternative.

With respect to transportation, the Modified Proposal Alternative would, in general, result in the same significant adverse impacts and the same unmitigated significant adverse impacts as the Proposed Action, although in a few instances the affected intersections and time periods would be different. As in the case of the Proposed Action, standard mitigation measures—such as signal timing and daylighting for traffic; and crosswalk widening and bulbouts for corners for pedestrians—could mitigate impacts. With respect to traffic, the Modified Proposal Alternative would have a net increase of two intersections with significant adverse traffic impacts during the AM peak hour, a net decrease of two intersections with significant adverse traffic impacts during the Midday peak hour, and a net increase of four intersections with significant adverse traffic impacts during the PM peak hour. Compared to the Proposed Action, the Modified Proposal Alternative would result in unmitigated impacts at one additional intersection, during the PM peak hour. With respect to pedestrian impacts, the Modified Proposal Alternative would have unmitigated significant adverse impacts at one additional crosswalk in the AM and PM peaks hours, and one additional corner area during the AM peak hour.

20.2.4.2 Modified Proposal Alternative Conceptual Analysis

The proposed modified zoning text amendment under the Modified Proposal Alternative would include additional provisions for special permits or authorizations that would be subject to public review at the time a specific application is made to the CPC. Developments seeking greater amounts of residential or hotel and other uses than permitted by the underlying commercial zoning would be permitted through a new All Use Modification Special Permit. Development rights from landmarks within the Northern

Subarea would also be permitted to transfer to sites within that area that do not meet the Qualifying Site frontage requirements by discretionary action. The modified proposal, through an authorization, would allow for use of the DIB on sites that meet the 25,000-square-foot site requirement and satisfy a minimum of 75 percent of the 200-foot frontage requirement. As it is not possible to predict whether a discretionary action would be pursued on any one site in the future, a conceptual analysis is included in this chapter to generically assess the potential environmental impacts that could result from this Modified Proposal Alternative Special Permit scenario.

While it is not known which sites may be developed utilizing a special permit or authorization, for the purposes of this conceptual analysis, it is assumed that the following development sites would utilize a special permit—including the Superior Development Special Permit evaluated in Chapter 21, “Conceptual Analysis”—or authorization: Projected Development Sites 4, 9, 12, 13, and 17; a portion of Potential Development Sites 7 and 20; and the No-Action development sites at 12-16 East 52nd Street/7-11 East 51st Street and 19 East 54th Street/532-538 Madison Avenue (Figure 20-5). The Modified Proposal Alternative Special Permit scenario would result in more office, retail, hotel and residential space, compared to the No Action condition (Table 20-25).

As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; noise; public health; and neighborhood character. Unlike the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Conceptual Analysis scenario warrants an indirect effects analysis of public schools because of the projected increase in residential population compared to the No-Action condition; based on this analysis, the Modified Proposal Alternative Conceptual Analysis scenario would not result in any significant adverse impacts to community facilities and services, as with the Proposed Action and the Modified Proposal Alternative. The Modified Proposal Alternative Conceptual Analysis scenario is expected to result in the same significant adverse impacts compared with the Proposed Action and the Modified Proposal Alternative with respect to shadows and historic and cultural resources. The Modified Proposal Alternative Conceptual Analysis scenario is also expected to result in the same significant adverse construction-related impacts compared with the Proposed Action and the Modified Proposal Alternative.

With respect to transportation, compared with the Proposed Action, the Modified Proposal Alternative Conceptual Analysis scenario would have significant adverse traffic and transit impacts at additional locations. The Modified Proposal Alternative Conceptual Analysis scenario would have unmitigated significant adverse traffic impacts at one additional intersection during the AM peak hour, and would also have two, one, and two additional intersections with significant adverse traffic impacts during the AM,

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Midday, and PM peak hours, respectively. Additionally, the Modified Proposal Conceptual Analysis scenario would have one additional significant adverse impact to a local bus route direction during the PM peak hour, compared to the Proposed Action. All other significant adverse impacts related to transportation resulting from the Modified Proposal Alternative Conceptual Analysis scenario would be the same as those resulting from the Proposed Action.

20.3 OTHER SUGGESTED ALTERNATIVES

DCP considered a number of possible alternatives and modifications to the Proposed Action which were proposed by members of the public in response to the Draft Scope of Work (DSOW) and concluded that they would not meet the Proposed Action’s goals and objectives described in Chapter 1, “Project Description,” or would not have the potential to reduce, eliminate or avoid adverse impacts of the Proposed Action. These are addressed in the Response to DSOW Comments document. Several of these are also discussed more fully below.

20.3.1 Hotel Special Permit

This suggested alternative would require a special permit for new Use Group 5 transient hotel uses in the East Midtown Subdistrict, which may be developed today on an as-of-right basis without discretionary review (see DSOW Comments B1.15 and B21.1). As is the case today, hotels are a key component of the vibrant business district envisioned under the Proposed Action. Hotels provide accommodations for visitors, space for meetings, conferences and entertainment, foot traffic for businesses in the area and jobs for New Yorkers. East Midtown is, in fact, an ideal location for hotels—it is centrally located with excellent access to mass transit, and is home to some of the City’s best business, landmark and tourist destinations. From the opening of Grand Central Station’s predecessor terminal in 1871, the area has been characterized by the presence of hotels. Indeed, East Midtown’s office cluster grew along with and amidst the addition of new hotels. Today, there are over 25 hotels in East Midtown. Hotels in East Midtown are key to the continuing growth of New York City’s tourism industry, and they continue to be integral to Midtown’s identity and commercial success.

Special permits are utilized under the Zoning Resolution where a use should be permitted only where it meets findings and conditions necessary to avoid potential land use impacts which have been identified as associated with the use. There are no potential adverse land use impacts which have been identified with existing hotels in Midtown and no land-use based rationale for making this as-of-right use subject to a special permit has been documented or proffered. Non-land use considerations are not a legitimate basis for requiring a special permit. Further, requiring a lengthy and costly special permit process for the development of hotels could serve to discourage the development of hotels, contrary to the goals and objectives of the Proposed Action.

For all of the foregoing reasons, analysis of this special permit alternative is therefore not warranted.

20.3.2 Permit Smaller Sites to Meet the Qualifying Site Definition

This suggested alternative would reduce the size of a “Qualifying Site” (see DSOW Comment B21.13). As discussed in Chapter 1, “Project Description,” the site “Qualifying Site” requirements are designed to promote the goals and objectives of the rezoning, which are to encourage the development a handful of large, new commercial buildings in the area over the long term. DCP believes the requirements (a minimum of 25,000 square feet of lot area and full avenue frontage) are appropriate to the development of significant contemporary commercial buildings at the proposed densities, taking into account the practical needs of commercial design, as well as the height and setback regulations of the Special Midtown District. A reduction in the minimum size or requirement for avenue frontage for a “Qualifying Site” would result in sites with floor area allowances that could not be accommodated under the as-of-right height and setback controls in the Special Midtown District, which would likely result in the need for variances from the Board of Standards and Appeals, creating a conflict with one of the District’s General Purposes of “providing freedom of architectural design within limit... without the need for special development permissions.” Permitting Qualifying Sites on midblock locations would also result in higher densities in the midblock areas which would conflict with one of the District’s General Purposes of continuing “the historic pattern of relatively low building bulk in midblock locations compared to avenue frontages.” A proposal to allow for a reduction in the extent of the avenue frontage requirement, subject to discretionary approval, is included in the Modified Proposal Alternative discussed above.

For all of the foregoing reasons, analysis of this alternative is therefore not warranted.

20.3.3 Different Sunrise Triggers

These suggested alternatives would make the “sunrise” occur at earlier or later dates (see DSOW Comments B1.19, B1.20 and 21.20). As described in Chapter 1, “Project Description,” the 2017 effective date—or “sunrise”—for the new regulations is designed to provide sufficient time for initial development to proceed in both Lower Manhattan and Hudson Yards, in order to lay the groundwork for the continued success of the City’s plans for these areas. A significantly shorter sunrise period would not be consistent with this objective. Significantly longer sunrise provisions, such as 10 or 15 years, would have the effect of making the Proposed Action ineffective in meeting the objective of spurring the development of modern office space in East Midtown over future real estate cycles, and would exacerbate the risk of long-term decline for the area. This length of time is also not considered, necessary for Lower Manhattan and Hudson Yards, given the scheduled opening of the Number 7 Line in 2014 and the opening of 1 and 4 World Trade Center buildings in Late 2013.

For all of the foregoing reasons, analysis of this alternative is therefore not warranted.

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At the public hearing held on August 7, 2013, proposals were made to narrow the scope of the “sunrise” to exclude buildings on Qualified Sites with smaller footprints and to allow for below-grade work on large buildings subject to the Superior Development Special Permit to commence prior to 2017, in view of the complexity and length of construction of these developments and in order to advance completion of the major improvements to the transit and pedestrian network under such permits. As of the date of this FEIS, these proposals are under discussion at the CPC. In order to be adopted by the CPC at the time of its vote, preparation of a Technical Memorandum demonstrating that these proposals would not result in any new or different significant adverse impacts than those analyzed in the FEIS would be required.

20.4 NO-ACTION ALTERNATIVE

The No-Action Alternative assumes that the proposed zoning map and text changes of the East Midtown rezoning proposal are not implemented. This includes no amendments to the zoning map, no new zoning text amendments to establish the proposed East Midtown Subdistrict of the Special Midtown District, and no City Map amendment to reflect a Public Place designation along portions of Vanderbilt Avenue. Conditions under this alternative are similar to the “Future Without the Proposed Action” described in the preceding chapters, which are compared in the following sections to conditions under the Proposed Action.

Under the No-Action Alternative, it is anticipated that new development would occur on 10 of the Proposed Action’s 19 projected development sites. In total, on the 19 projected development sites, there would be approximately 776 dwelling units (DUs), 529,328 gsf of retail, 6,519,633 gsf of commercial office, and 2,010,947 gsf of hotel space.

The effects of the No-Action Alternative in comparison to those of the Proposed Action are provided below.

20.4.1 Land Use, Zoning, and Public Policy

Like the Proposed Action, the No-Action Alternative would not result in any significant adverse impacts to land use, zoning, or public policy. However, without the Proposed Action, the trend toward the conversion of East Midtown’s existing office buildings to other uses would continue, and the percentage of the area’s square footage devoted to office uses under the No-Action Alternative would be lower compared to existing conditions. As a result, the area’s distinction as one of the world’s premier business addresses and key job centers for the City and the region would be at risk under this alternative.

In the No-Action Alternative, based on existing zoning and land use trends and general development patterns, it is anticipated that the rezoning area would experience limited overall growth, most of it concentrated in non-office uses including hotels and residential buildings. In addition, as office space in

the area becomes less economically viable, it is possible that a number of existing office buildings would convert to other uses, predominantly residential. However, consistent with current development trends, office buildings closer to Grand Central Terminal are expected to convert to hotel use. Outside of Grand Central Terminal's immediate vicinity, existing buildings are expected to remain in their current predominantly office uses, but would likely be of lower quality since the overall area is expected to become less desirable as an office district as office stock continues to age. In comparison to the future with the Proposed Action, under the No-Action Alternative there would be more residential uses and fewer office, retail, and hotel uses.

As with the Proposed Action, three transportation projects planned for the area (East Side Access, Pershing Square pedestrian plaza, and a pedestrian plaza on the portion of Vanderbilt Avenue between East 42nd and East 43rd Streets) would occur. These planned transportation projects would increase pedestrian activity in the area, particularly around Grand Central Terminal. However, the pedestrian network improvements facilitated by the District Improvement Fund (DIF) under the Proposed Action would not occur under the No-Action Alternative. The Special UN District would be expanded to include the western portion of Robert Moses Playground, which is the site of the proposed UNDC project. No other changes to zoning or public policy would occur.

Neither the No-Action Alternative nor the Proposed Action would result in significant adverse impacts to land use, zoning, or public policy. However, the benefits expected to result from the Proposed Action—including protecting, promoting, and strengthening East Midtown as a premier business district; directing higher densities to areas that can accommodate future growth; and improving the area's pedestrian network—would not be realized under the No-Action Alternative.

20.4.2 Socioeconomic Conditions

Like the Proposed Action, the No-Action Alternative would not result in any significant adverse impacts to socioeconomic conditions.

Absent the Proposed Action, it is anticipated that new development would only occur on 10 of the Proposed Action's 19 projected development sites. In total, on the 19 projected development sites, there would be approximately 776 dwelling units (DU), 529,328 gsf of retail, 6,519,633 gsf of commercial office, and 2,010,947 gsf of hotel space. The following summarizes the potential socioeconomic effects of the No-Action Alternative as compared to those of the Proposed Action for the five issues of socioeconomic concern under CEQR.

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20.4.2.1 Direct Residential Displacement

As with the Proposed Action, no direct residential displacement would occur with the No-Action Alternative. Therefore, the No-Action Alternative would not result in significant adverse impacts to direct residential displacement.

20.4.2.2 Indirect Residential Displacement

Neither the Proposed Action nor the No-Action Alternative would result in significant adverse impacts due to indirect residential displacement. Unlike the Proposed Action, which would forestall conversion of office to residential space, the No-Action Alternative would result in portions of 6 of the 19 projected development sites being redeveloped with predominantly residential buildings with ground floor retail, which would introduce 654 new housing units. Under the No-Action Alternative, approximately 776 DU would be located on the projected development sites, housing a population that would be well below the *CEQR Technical Manual* threshold of 5 percent of the existing study area population, indicating that the development would not be large enough to substantially alter the study area's socioeconomic character and demographic composition or real estate market conditions.

20.4.2.3 Direct Business and Institutional Displacement

Neither the Proposed Action nor the No-Action Alternative would result in significant adverse impacts due to direct business displacement. Both the Proposed Action and the No-Action Alternative would result in some direct business and institutional displacement. The No-Action Alternative could result in the direct displacement of approximately 449 business firms/institutions affecting an estimated 5,572 workers in the retail, office, and other commercial sectors. Similar to the businesses directly displaced as a result of the Proposed Action, the businesses displaced due to the No-Action Alternative conduct a variety of business activities and do not provide products or services essential to the local economy that would otherwise be unavailable, nor are they the subject of regulations or publicly adopted plans aimed at preserving, enhancing, or otherwise protecting them in their current location. The businesses are not unique to the ¼-mile study area, nor do they serve a user base that is dependent on their location within the study area. It is expected that the potentially displaced businesses would be able to find comparable space within the study area or elsewhere within the city.

20.4.2.4 Indirect Business and Institutional Displacement

Neither the Proposed Action nor the No-Action Alternative would be expected to have a significant adverse indirect business displacement impact. Similar to the Proposed Action, the No-Action Alternative would not introduce new economic activities that would alter existing economic patterns in the study area nor would it alter the land use character of the rezoning area. Compared to the Proposed Action, the No-Action Alternative would result in less commercial development and an increase in residential development than would otherwise occur with the implementation of the Proposed Action. There would be comparably fewer new jobs under the No-Action Alternative.

Under the No-Action Alternative, the percent of the proposed rezoning area's square footage devoted to office stock uses would be lower compared to existing conditions and the range of office space more limited. As the bulk of the office stock in the area continues to age with little to no replacement stock added, the dynamism of the East Midtown office market and Central Business District is anticipated to diminish under the No-Action Alternative. In addition, the anticipated socioeconomic benefits of the Proposed Action, including creating new opportunities for existing businesses to expand, attracting employers to the City, and providing support for the overall continued long-term health of the area as an integrated and dynamic office district, would not be realized under this alternative.

20.4.2.5 Adverse Effects on Specific Industries

Neither the Proposed Action nor the No-Action Alternative would result in significant adverse impacts on specific industries. A significant adverse impact on a specific industry would generally occur only in the case of a regulatory change affecting the city as a whole or in the case of a local action that affects an area in which a substantial portion of that sector is concentrated, relative to the city as a whole. Like the Proposed Action, the No-Action Alternative would not significantly affect business conditions in any industry or any category of business within or outside the study area.

20.4.3 Open Space

As with the Proposed Action, there would be no significant adverse impacts on open space as a result of the No-Action Alternative.

In the No-Action Alternative, the expected redevelopment of three of the projected development sites would add new publicly accessible open space resources within the open space study area that would not be created with the Proposed Action. Using the plaza bonus currently available in the Zoning Resolution, the No-Action Alternative would include a 0.06-acre public plaza on Projected Development Site 11, a 0.05-acre public plaza on Projected Development Site 15, and a 0.17-acre plaza on a portion of Projected Development Site 17. Similar to the Proposed Action, the No-Action Alternative would include three planned private developments on non-reasonable worst-case development scenario (RWCDs) sites that would provide on-site, publicly accessible plazas within the study area, as well as two planned New York City Department of Transportation (DOT) open space resource projects within the study area. However, under the Proposed Action, the portions of Vanderbilt Avenue from East 42nd Street to East 43rd Street and from East 44th Street to East 47th Street would be dedicated to pedestrian use, whereas, under the No-Action Alternative, only the portion from East 42nd Street to East 43rd Street would be dedicated to pedestrian use.

The total passive open space acreage within the study area in the No-Action Alternative would be 40.25 acres, compared to 40.80 acres with the Proposed Action. Furthermore, in the No-Action Alternative, the total study area population would be an estimated 553,127 non-residents and 620,822 combined non-

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residents and residents, compared to 569,169 and 635,961, respectively, with the Proposed Action. The passive open space ratios in the No-Action Alternative would be 0.073 acres per 1,000 non-residents and 0.065 acres per 1,000 non-residents and residents, compared to ratios of 0.072 and 0.064, respectively, with the Proposed Action.

As with the Proposed Action, the No-Action Alternative would not result in significant adverse open space impacts. The open space ratios in the No-Action Alternative would be lower than the benchmarks established in the *CEQR Technical Manual* (i.e., 0.15 for the non-residential population and 0.188 for the combined non-residential and residential population), but would be slightly higher than or equal to those with the Proposed Action. While the acreage of passive open space resources in the study area is and would continue to be deficient in comparison to the CEQR benchmark, the deficiency would not be exacerbated in the No-Action Alternative. Furthermore, as with the Proposed Action, the No-Action Alternative would not result in the direct displacement of any existing publicly accessible open space resources, nor would it result in significant adverse impacts on any open spaces due to construction, shadows, noise, or air quality.

20.4.4 Shadows

Unlike the Proposed Action, the No-Action Alternative would not result in any significant adverse shadows impacts.

In the No-Action Alternative, incremental shadows identified with the Proposed Action would not be cast on publicly accessible open spaces and sunlight-sensitive historic resources. As such, the No-Action Alternative would not result in the significant adverse shadows impacts on the sunlight-sensitive features of St. Bartholomew's Church and Community House, the Lady Chapel of St. Patrick's Church, and Christ United Methodist Church that would occur with the Proposed Action. Furthermore, similar to the Proposed Action, no other publicly accessible open spaces or sunlight-sensitive historic resources would be significantly affected by shadows in the No-Action Alternative.

20.4.5 Historic and Cultural Resources

As with the Proposed Action, the No-Action Alternative would not result in any significant adverse impacts to archaeological resources or any indirect impacts to architectural resources. Unlike the Proposed Action, the No-Action Alternative would not result in direct or construction-related significant adverse impacts to architectural resources.

The No-Action Alternative assumes that new development would only occur on 10 of the Proposed Action's 19 projected development sites, and none of the 20 potential development sites, in accordance with existing zoning. The New York City Landmarks Preservation Commission (LPC) reviewed the identified projected development sites that could experience new/additional in-ground disturbance and

concluded that none of the lots comprising those sites have any archaeological significance. Neither the Proposed Action nor the No-Action Alternative would result in significant adverse impacts to archaeological resources.

Furthermore, as with the Proposed Action, the development sites included in the No-Action Alternative are not located within any historic districts, and they do not contain any landmark buildings or structures. Therefore, neither the Proposed Action nor the No-Action Alternative would result in direct adverse impacts to historic districts or individual landmark buildings and structures.

The No-Action Alternative would not result in significant adverse direct impacts to the following 14 eligible historic resources that could occur with the Proposed Action: the NYCL-eligible buildings at 16, 18-20, and 22-24 East 41st Street; the NYCL- and S/NR-eligible Pershing Square building at 100 East 42nd Street; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the S/NR-eligible Barclay Hotel at 111 East 48th Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL-eligible Shelton Club Hotel at 525 Lexington Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; the NYCL-eligible Girl Scout Building at 830 Third Avenue; the NYCL-eligible Yale Club at 50 Vanderbilt Avenue; the S/NR-eligible 346 Madison Avenue Building; and the S/NR-eligible Vanderbilt Concourse Building at 52 Vanderbilt Avenue.

In both the No-Action Alternative and the future with the Proposed Action, any development that would be located within 90 feet of a designated/listed historic resource—where new development has the potential to cause damage due to ground-borne construction vibrations—would be subject to the procedures of the New York City Department of Building’s (DOB)’s Technical Policy and Procedure Notice (TPPN) #10/88, which governs the protection of adjacent historic properties from accidental construction damage. However, for development within 90 feet of eligible historic resources, the protective measures under DOB TPPN #10/88 would apply only if they become designated/listed. Unlike the Proposed Action, the No-Action Alternative would not result in construction-related impacts to the following 24 eligible historic resources that could occur with the Proposed Action: the NYCL- and S/NR-eligible Chemist Club building at 50-52 East 41st Street; the S/NR-eligible Vanderbilt Avenue Building at 51 East 42nd Street; the S/NR-eligible East 45th Street Bridges; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the NYCL-eligible Mercantile Library at 17 East 47th Street; the S/NR-eligible Barclay Hotel at 111 East 48th Street; the NYCL- and S/NR-eligible building at 39 East 51st Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL-eligible Shelton Club Hotel at 525 Lexington Avenue; the NYCL-eligible building at 299 Madison Avenue; the NYCL-eligible building at 400 Madison Avenue; the NYCL-eligible ITT-American building at 437 Madison Avenue; the NYCL-eligible MetLife Building at 200 Park Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; the NYCL-eligible

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Union Carbide Building at 270 Park Avenue; the NYCL-eligible Girl Scout Building at 830 Third Avenue; the NYCL-eligible Citicorp Center building at 884 Third Avenue; the NYCL-eligible Yale Club at 50 Vanderbilt Avenue; the S/NR-eligible building at 59 East 54th Street; the S/NR-eligible Lefcourt Colonial Building at 295 Madison Avenue; the S/NR-eligible building at 346 Madison Avenue; the S/NR-eligible Bankers Trust Building at 280 Park Avenue; and the S/NR-eligible Vanderbilt Concourse Building at 52 Vanderbilt Avenue. The CPC is currently considering a proposed modification to the zoning text amendment which would require, prior to excavation or demolition on a Projected or Potential Development Site located within 90 feet of an eligible resource, that the Commissioner of Buildings have approved a construction monitoring protocol of similar scope and purpose to the provisions of TPPN #10/88. In the event this modification is adopted, significant adverse construction-related impacts on eligible resources would be fully mitigated, and the No-Action Alternative would be no different than the Proposed Action, or Modified Development Alternative, in this respect.

Neither the No-Action Alternative nor the Proposed Action would have significant adverse indirect impacts on existing historic resources. The developments resulting from both the No-Action Alternative and the Proposed Action would not alter the context or visual prominence of any historic resources. Unlike the Proposed Action, the No-Action Alternative would not result in the significant adverse shadows impacts on the sunlight-sensitive features of St. Bartholomew’s Church and Community House, the Lady Chapel of St. Patrick’s Cathedral, and Christ United Methodist Church that would occur with the Proposed Action. Overall, a number of significant adverse direct, construction-related, and shadows impacts to historic resources that would occur with the Proposed Action would not occur with the No-Action Alternative.

20.4.6 Urban Design and Visual Resources

As with the Proposed Action, the No-Action Alternative is not expected to result in any adverse impacts to urban design or visual resources.

In the No-Action Alternative, the portion of Vanderbilt Avenue that would be dedicated to pedestrian use would be limited to the area between East 42nd and East 43rd Streets, excluding the areas between East 44th and East 47th Streets that would be included with the Proposed Action; as such, there would be a smaller increase in the apportionment of street space available to pedestrians in the No-Action Alternative, compared to the Proposed Action. The No-Action Alternative assumes that new development would only occur on 10 of the Proposed Action’s 19 projected development sites, and none of the potential development sites, in accordance with existing zoning.

The developments anticipated to be completed in the No-Action Alternative comprise a range of building heights and bulk. As with the Proposed Action, the East Midtown area in the No-Action Alternative would continue to be defined by high-density commercial development characterized predominantly by

mid- and high-rise office buildings, with relatively low building bulk in midblock locations compared to avenue frontages. The building bulk of the developments that are expected with both the No-Action Alternative and the Proposed Action would not change the built environment's arrangement, appearance, or functionality, and the introduction of new buildings would not affect a pedestrian's experience of public space in the East Midtown area. Furthermore, similar to the Proposed Action, existing iconic views of visual resources within or from the proposed rezoning area would generally remain unchanged in the No-Action Alternative. In both scenarios, views of important visual resources from certain vantage points—for instance, views of the Waldorf-Astoria Hotel from the east along East 49th and East 50th Streets—would be partially obstructed by new buildings, but other views would of those visual resources would remain available.

20.4.7 Hazardous Materials

Compared to the Proposed Action, the No-Action Alternative would result in less soil disturbance, but such soil disturbance would not necessarily be conducted in accordance with the testing and remediation requirements that would be undertaken with the Proposed Action, as no (E) designations would be placed on the projected development sites in the No-Action Alternative.

The No-Action Alternative would result in less construction than the Proposed Action. However, any construction involving soil disturbance could potentially create or increase pathways for human exposure to any subsurface hazardous materials present. Since no (E) designations—which require the owner of a property to assess potential hazardous material impacts prior to construction—would be placed on the projected development sites that would be redeveloped under the No-Action Alternative, such soil disturbance would not necessarily be conducted in accordance with the procedures that would be undertaken with the Proposed Action (e.g., conducting testing before commencing excavation and implementation of health and safety plans during construction). However, the New York State Department of Environmental Conservation (NYSDEC) regulatory requirements pertaining to any identified petroleum tanks and/or spills, disturbance and handling of suspect lead-based paint and asbestos-containing materials, and off-site disposal of soil/fill, would need to be followed. As such, in the No-Action Alternative, the amount of soil disturbance would be less, but potentially the controls on its performance would not be as stringent as under the Proposed Action.

20.4.8 Water and Sewer Infrastructure

Neither the Proposed Action nor the No-Action Alternative would result in any significant adverse impacts on the City's water supply, wastewater treatment or stormwater conveyance infrastructure.

Compared with the Proposed Action, the No-Action Alternative would generate less demand on New York City's water supply and wastewater treatment infrastructure. Similar to the Proposed Action, incorporation of selected best management practices (BMPs) would be required as a part of the New York

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City Department of Environmental Protection (DEP) site connection application process for new buildings.

20.4.9 Solid Waste and Sanitation Services

Neither the Proposed Action nor the No-Action Alternative would adversely affect solid waste and sanitation services, or place a significant burden on the City's solid waste management system.

While solid waste generated by the projected development sites would increase under both the No-Action Alternative and the Proposed Action, due to the substantial increase in residential units under the No-Action Alternative, this increase in solid waste generation would result in a greater strain on the New York City Department of Sanitation's (DSNY) handling capacity. However, this increase in solid waste would be equivalent to 1.2 additional DSNY collection trucks, and similar to the Proposed Action, would therefore not result in a significant adverse impact on solid waste and sanitation services.

20.4.10 Energy

Neither the Proposed Action nor the No-Action Alternative would result in significant adverse impacts with respect to the transmission or generation of energy.

Like the Proposed Action, the No-Action Alternative would generate increased demands on New York City's energy services, but the demand generated by the No-Action Alternative would be considerably less than for the Proposed Action. However, under both the Proposed Action and No-Action Alternatives, the annual increase in demand would represent a negligible amount of the City's forecast annual energy requirements for 2033.

The Proposed Action would require buildings that utilize the District Improvement Bonus to comply with a higher performance-oriented energy standard than is currently required for such buildings under the New York City Energy Conservation Code. The No-Action Alternative would have no such requirement for future development within East Midtown.

20.4.11 Transportation

As discussed below, unlike the Proposed Action, the No-Action Alternative would not result in any significant adverse impacts with respect to transportation. Unlike the Proposed Action, the No-Action Alternative would not result in significant adverse traffic impacts to 42, 31, and 33 intersections in the weekday AM, Midday, and PM peak hours, respectively. The Proposed Action's significant adverse impacts to eastbound M42 bus service in the AM peak hour and westbound M42 service in the PM peak hour would not occur under the No-Action Alternative. Furthermore, the Proposed Action's significant adverse impacts to 2 sidewalks, 25 crosswalks, and 8 corner areas in one or more peak hours would not

occur under the No-Action Alternative. Like the Proposed Action, no parking shortfall would be expected under the No-Action Alternative.

In the No-Action Alternative, traffic, parking, transit, and pedestrian demand in the study area would increase as a result of background growth, development that could occur pursuant to existing zoning (i.e., as-of-right-development), and other development projects likely to occur within and in the vicinity of the study area.

20.4.11.1 Traffic

Independent of the Proposed Action, traffic levels of services at many locations in the study area would experience congested conditions in the future. As shown in Table 20-1, in the No-Action Alternative, 172 approach movements at signalized intersections would operate at LOS E or worse, compared to 206 approach movements in the Proposed Action. Specifically, in the weekday AM peak hour, 26 movements would operate at LOS E and 50 movements would operate at LOS F in the No-Action Alternative. This compares with 24 movements at LOS E and 61 movements at LOS F with the Proposed Action. In the weekday Midday peak hour, 27 movements would operate at LOS E and 17 movements would operate at LOS F in the No-Action Alternative. This compares with 22 movements at LOS E and 33 movements at LOS F with the Proposed Action. Lastly, in the weekday PM peak hour, 19 movements would operate at LOS E and 33 movements would operate at LOS F in the No-Action Alternative. This compares with 23 movements at LOS E and 43 movements at LOS F with the Proposed Action. Table 20-1 also shows that the No-Action Alternative would have 240 movements operating at a v/c ratio of 0.90 or more, as compared to 275 with the Proposed Action.

TABLE 20-1: SUMMARY OF LEVEL OF SERVICE BY MOVEMENT – NO-ACTION ALTERNATIVE VS. PROPOSED ACTION

Level of Service (LOS)	No-Action Alternative				Proposed Action			
	Peak Hour				Peak Hour			
	AM	Midday	PM	Total	AM	Midday	PM	Total
Signalized Intersections								
Movements at LOS A/B/C	192	212	220	624	182	193	199	574
Movements at LOS D	57	58	54	169	54	62	57	173
Movements at LOS E	26	27	19	72	24	22	23	69
Movements at LOS F	50	17	33	100	61	33	43	137
TOTAL	325	314	326	965	321	310	322	953
Movements at v/c >= 0.90	91	71	78	240	101	84	90	275
Unsignalized Intersections								
Movements at LOS A/B/C	6	6	7	19	3	3	3	9
Movements at LOS D	0	0	0	0	0	0	1	1
Movements at LOS E	0	0	0	0	0	0	0	0
Movements at LOS F	1	1	0	2	1	1	0	2
TOTAL	7	7	7	21	4	4	4	12
Movements at v/c >= 0.90	1	1	0	2	1	1	0	2

Source: Parsons Brinckerhoff, Inc., 2013

Note: This table has been revised for the FEIS.

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Unlike the Proposed Action, the No-Action Alternative would not result in significant adverse impacts to 42, 31, and 33 intersections in the weekday AM, Midday, and PM peak hours, respectively. Of these, only 16 intersections could not be mitigated in the Proposed Action in the weekday AM peak hour, 9 intersections could not be mitigated in the Proposed Action in the weekday Midday peak hour, and 15 intersections could not be mitigated in the Proposed Action in the weekday PM peak hour.

20.4.11.2 Transit

a. Subway

Under the No-Action Alternative, subway facilities in the proposed rezoning area would experience an increase in demand as a result of background growth and future developments anticipated throughout the study area. AM and PM peak-hour conditions at analyzed subway station elements under the No-Action Alternative are discussed below.

Grand Central-42nd Street

Stairs

Under the No-Action Alternative, nineteen (19) and sixteen (16) of the forty four (44) analyzed stairs at the Grand Central-42nd Street subway station complex are expected to operate at LOS D or worse in the AM and PM peak hours, respectively. Under the Proposed Action, twenty one (21) and sixteen (16) of the forty four (44) analyzed stairs are expected to operate at LOS D or worse in the AM and PM peak hours, respectively. During the AM peak hour, Stairs P10N and P18 are expected to operate at LOS D, both deteriorated from LOS C under the No-Action Scenario.

Escalators

Under both the No-Action Alternative and the Proposed Action, six (6) and five (5) of the ten (10) analyzed escalators at the Grand Central-42nd Street subway station complex are expected to operate at LOS D or worse in the AM and PM peak hours, respectively.

Passageway areas

Under both the No-Action Alternative and the Proposed Action, one (1) and one (1) of the three (3) analyzed passageway areas at the Grand Central-42nd Street subway station complex are expected to operate at LOS D or worse in the AM and PM peak hours, respectively.

Fare Array areas

Under both the No-Action Alternative and the Proposed Action, one (1) of the ten (10) analyzed fare array areas at the Grand Central-42nd Street subway station complex are expected to operate at LOS D or worse in the AM peak hour.

42nd St-Bryant Park Subway Station

Under both the No-Action Alternative and the Proposed Action, three of the eleven analyzed stairs at the 42nd Street-Bryant Park subway station are expected to operate at LOS D or worse in at least one peak

hour. These include one stair operating at LOS F in the AM and PM peak hours, one stair operating at LOS D in the AM and one stair operating at LOS D in the PM. All analyzed fare arrays at the 42nd Street-Bryant Park subway station are expected to operate at an acceptable LOS C or better in both the AM and PM peak hours under both the No-Action Alternative and the Proposed Action.

Fifth Avenue Subway Station

All analyzed stairs and fare arrays at the Fifth Avenue subway station are expected to operate at an acceptable LOS C or better in both the AM and PM peak hours under both the No-Action Alternative and the Proposed Action.

47th – 50th Streets-Rockefeller Center Subway Station

Under both the No-Action Alternative and the Proposed Action, six of the nine analyzed stairs at the 47th-50th Streets-Rockefeller Center subway station are expected to operate at LOS D or worse in at least one peak hour. There would be one stair operating at LOS D, three at LOS E and two at LOS F in the AM peak hour, and four at LOS D and one at LOS E in the PM peak hour under both the No-Action Alternative and the Proposed Action. Analyzed fare array N501 at the 47th-50th Streets-Rockefeller Center subway station is expected to operate at an acceptable LOS A or B in the AM and PM peak hours under both the No-Action Alternative and the Proposed Action.

51st Street Subway Station

Under both the No-Action Alternative and the Proposed Action, two of the eight analyzed stairs and both of the analyzed escalators at the 51st Street subway station would operate at LOS D or worse in at least one peak hour. There would be one stair operating at LOS D and one at LOS F in the AM peak hour, and one at LOS F in the PM under both the No-Action Alternative and the Proposed Action. There would also be one escalator operating at LOS F in the AM peak hour under both the No-Action Alternative and the Proposed Action. Analyzed fare arrays R242A and R243 at the 51st Street subway station and the analyzed passageway connecting this station to the Lexington Avenue-53rd Street subway station are all expected to operate at an acceptable LOS B or better in the AM and PM peak hours under both the No-Action Alternative and the Proposed Action.

Lexington Avenue-53rd Street Subway Station

Under both the No-Action Alternative and the Proposed Action, both analyzed stairs and analyzed fare array N305 at the Lexington Avenue-53rd Street subway station are expected to operate at LOS A in the AM and PM peak hours, whereas all four analyzed escalators are expected to operate above their practical capacities (LOS D or worse) in one or both peak hours. There would be one escalator operating at LOS D and three at LOS E in the AM peak hour, and two operating at LOS E in the PM peak hour under both the No-Action Alternative and the Proposed Action.

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b. Bus

Under the No-Action Alternative, demands on the local bus services operating in the vicinity of the rezoning area are expected to increase compared to existing ridership as a result of background growth as well as demand from new development. Existing levels of local bus service would not be sufficient to provide adequate supply to meet projected demand under the No-Action Alternative on the eastbound and westbound M42 route in both the AM and PM peak hours. This route would require additional capacity, which could be provided by either increasing the number of standard buses or converting the M42 route to articulated bus service. Based on a loading guideline of 54 passengers per standard bus, an additional 15 standard buses per hour would need to be added in the eastbound direction in the AM peak hour and one in the PM peak hour to accommodate projected demand under the No-Action Alternative. In the westbound direction, 4 buses would need to be added in the AM and 21 buses would be added in the PM. The Proposed Action's significant adverse impacts to eastbound M42 service in the AM peak hour and westbound M42 service in the PM would not occur under the No-Action Alternative.

20.4.11.3 Pedestrians

Under the No-Action Alternative, pedestrian volumes along analyzed sidewalks, crosswalks and corner areas are expected to increase compared to existing levels as a result of background growth as well as demand from new development. In addition to changes in pedestrian demand, it is also anticipated that substantial new pedestrian spaces would be created in East Midtown under the No-Action Alternative as a result of the permanent closure of Pershing Square East, Pershing Square West, and Vanderbilt Avenue between East 42nd Street and East 43rd Streets to vehicular traffic. The permanent closure of Vanderbilt Avenue to vehicular traffic from East 44th Street to East 47th Street that would occur under the Proposed Action would not occur under the No-Action Alternative. Similarly, the Proposed Action's zoning regulations mandating that (1) new buildings with full-block frontages along Madison and Lexington Avenues between East 39th and East 49th Streets be set back to provide 20-foot-wide sidewalks, and (2) that new buildings with full-block frontages along crosstown streets between Vanderbilt and Madison Avenues from East 43rd Street to East 46th Street, inclusive be set-back to provide 15-foot-wide sidewalks, would also not occur under the No-Action Alternative.

a. Sidewalks

Under the No-Action Alternative, 9 of the 27 analyzed sidewalks are expected to operate at a congested LOS D, E, or F in the weekday AM peak hour, 4 in the Midday, and 11 in the PM peak hour. This compares to 10, 6, and 13 congested locations during these same periods, respectively, under the Proposed Action. The Proposed Action's significant adverse impacts to two sidewalks in both the AM and PM peak hours would not occur under the No-Action Alternative.

b. Crosswalks

Under the No-Action Alternative, 31 of the 76 crosswalks analyzed are expected to operate at a congested LOS D, E, or F in the weekday AM peak hour, 26 in the midday and 40 in the PM peak hour. This

compares to 36, 34, and 52 congested locations during these same periods, respectively, under the Proposed Action. The Proposed Action's significant adverse impacts to 25 crosswalks in one or more peak hours would not occur under the No-Action Alternative.

c. Corners

Under the No-Action Alternative, 10 of the 62 corner areas analyzed are expected to operate at a congested LOS D, E, or F in the weekday AM peak hour, 6 in the Midday and 12 in the PM peak hour. This compares to 11, 8, and 12 congested locations during these same periods, respectively, under the Proposed Action. The Proposed Action's significant adverse impacts to 8 corner areas in one or more peak hours would not occur under the No-Action Alternative.

20.4.11.4 Parking

Like the Proposed Action, no parking shortfall would be expected under the No-Action Alternative.

20.4.12 Air Quality

The No-Action Alternative would result in considerably less development contributing to vehicular trips than that of the Proposed Action. Therefore, similar to the Proposed Action, the No-Action Alternative would not result in significant adverse impacts from mobile source emissions.

Under the No-Action Alternative, as-of-right development would occur on 10 of the Proposed Action's 19 projected development sites. As-of-right development under the No-Action condition would not have an environmental assessment of air quality exposure as conducted for the Proposed Action and thus such development would not be subject to any air quality (E) designations. Specifically, they would not have the restrictions specified under the Proposed Action and outlined in Chapter 13, "Air Quality" for the control of emissions for fossil fuel-fired heating, ventilation and air conditioning (HVAC) systems, which would be designed to ensure there would be no significant adverse air quality impacts at nearby sensitive receptor locations.

20.4.13 Greenhouse Gas (GHG) Analysis

With less development than the Proposed Action, the No-Action Alternative would have less energy use, and would therefore result in fewer carbon dioxide equivalent (CO₂e) emissions per year. Neither the Proposed Action nor the No-Action Alternative would result in any significant GHG emission or climate change impacts.

20.4.14 Noise

Like the Proposed Action, the No-Action Alternative would not generate sufficient traffic to have the potential to cause a significant adverse noise impact.

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Under the No-Action Alternative, as-of-right development would occur on 10 of the Proposed Action's 19 projected development sites. Unlike the Proposed Action, the up to 33 dBA of building attenuation that would be required for development sites would not be implemented under the No-Action Alternative, as these requirements would not be ensured through (E) designations.

20.4.15 Public Health

As with the Proposed Action, the No-Action Alternative would not result in any unmitigated significant adverse impacts related to hazardous materials, air quality, noise, or construction, and thus there would be no significant adverse public health impacts associated with the construction or operation of the new development on any development sites.

20.4.16 Neighborhood Character

As with the Proposed Action, the No-Action Alternative would not result in significant adverse impacts on neighborhood character.

The East Midtown area has a varied neighborhood context, and its defining features are the dominance of commercial land uses, the interspersing of older buildings with modern construction, high levels of pedestrian and vehicular activity and associated noise, a primarily high-density built context, and the presence of a number of iconic historic resources, including Grand Central Terminal, the Helmsley Building, the Chrysler Building, St. Bartholomew's Church and Community House, St. Patrick's Cathedral, the Seagram Building, and Lever House. In the No-Action Alternative, as with the Proposed Action, the East Midtown area would continue to be defined by this combination of features, although the No-Action Alternative would not achieve the goals of the Proposed Action, which are to protect and strengthen East Midtown as a premier commercial district by facilitating the construction of modern commercial buildings in targeted locations, as well as improving the area's pedestrian and built environment.

Under the No-Action Alternative, based on current land use trends and general development patterns, it is anticipated that the rezoning area would experience limited overall growth, most of it concentrated in non-office uses, including hotels and residential buildings. In addition, it is possible that a number of existing office buildings will convert to other uses. The predominant share of building conversions would be to residential uses. However, consistent with current development trends, office buildings closer to Grand Central Terminal are expected to convert to hotel use. Outside of Grand Central Terminal's immediate vicinity, existing buildings are expected to remain in their current, predominantly office, uses, but would likely be of lower quality since the overall area is expected to become less desirable as an office district as office stock continues to age.

Of the relevant technical areas specified in the *CEQR Technical Manual*, both the No-Action Alternative and the Proposed Action would not cause significant adverse impacts regarding land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; or noise. In the No-Action Alternative, as with the Proposed Action, the potential significant adverse impacts on transportation would not affect neighborhood character; while there would be increased activity, the resulting conditions would not be out of character with the East Midtown area, and thus the incremental changes would not constitute significant impacts on neighborhood character. Unlike the Proposed Action, the No-Action Alternative would not result in significant adverse impacts related to shadows or historic resources.

Under both the No-Action Alternative and the Proposed Action, just as potential significant adverse impacts in the relevant technical areas would not affect any defining feature of neighborhood character, no moderate adverse effects that would affect such defining features—either singularly or in combination—have been identified.

20.4.17 Construction

Unlike the Proposed Action, the No-Action Alternative would not result in significant adverse construction-related impacts.

The amount of new construction in the No-Action Alternative would be less than that with the Proposed Action, and thus the No-Action Alternative would generate fewer disruptive construction-related effects. The No-Action Alternative would result in less construction-related noise and traffic than the Proposed Action and would result in less potential construction-related effects to NYCL- and/or S/NR-eligible historic resources. Neither the Proposed Action nor the No-Action Alternative would result in significant adverse construction impacts with respect to air quality, noise, land use and neighborhood character, socioeconomic conditions, open space, or hazardous materials. Unlike the Proposed Action, the No-Action Alternative would not result in any construction-related traffic impacts warranting mitigation.

20.5 NO UNMITIGATED SIGNIFICANT ADVERSE IMPACT ALTERNATIVE

Based on the analyses presented in other chapters of this DEIS, there is the potential for the Proposed Action to result in a number of significant adverse impacts for which no practicable mitigation has been identified to fully mitigate the impacts. Specifically, unmitigated impacts were identified with respect to shadows, historic and cultural resources (architectural resources only), transportation (traffic and pedestrians), and construction. This alternative considers development that would not result in any significant adverse impacts that could not be fully mitigated. However, to eliminate all unmitigated significant adverse impacts, the Proposed Action would have to be modified to a point where its principal goals and objectives would not be realized.

20.5.1 Shadows

As discussed in Chapter 5, “Shadows,” the Proposed Action would have the potential to result in unmitigated significant adverse shadows impacts on three historic architectural resources, namely St. Bartholomew’s Church, the Lady Chapel at St. Patrick’s Cathedral, and Community House and Christ Church United Methodist. The sunlight-sensitive stained-glass windows of St. Bartholomew’s Church and Community House would experience significant adverse shadows impacts on the May 6th and June 21st analysis days due to incremental shadows cast by Potential Development Site 14 and Projected Development Site 12. The sunlight-sensitive stained-glass windows of the Lady Chapel would experience a significant adverse shadows impact on the March 21st analysis day due to incremental shadow cast by Projected Development Site 12. The sunlight-sensitive stained-glass windows of the Christ Church United Methodist building would experience a significant adverse shadows impact on the December 21st analysis day due to incremental shadow cast by Projected Development Site 18. The incremental shadows that would be cast on these two historic architectural resources would result in a substantial reduction in sunlight available for the enjoyment or appreciation of the buildings’ sunlight-sensitive features, and thus the incremental shadows are being considered significant adverse shadows impacts.

A mitigating measure would be to provide for measures that would serve as a substitute for the direct sunlight on these sun-sensitive features. In order to adopt such measures in the absence of a site-specific approval, such as a Special Permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation. In consultation with staff of the New York City Landmarks Preservation Commission (LPC), DCP, as lead agency, explored the viability of this mitigation and other mitigation measures between Draft EIS and Final EIS. It was determined that techniques exist for artificial lighting, as well as for the reflection of natural light through architectural features or reflective panels, that could potentially serve as a partial substitute for the loss of direct sunlight.

To allow for the potential installation of such features, the CPC is currently considering a modification to the zoning text amendment that would require, prior to the issuance of a New Building Permit for development of Projected Development Sites 12 and 18, and Potential Development Site 14, that the developer provide DCP with a shadow analysis identifying the incremental shadows cast by the proposed building on the affected resource, and that the CPC Chairperson, acting in consultation with the LPC Chair, certify to the Commissioner of Buildings either: a) that a plan for such features has been developed and will be implemented; or, b) that such a plan is not feasible or is impracticable, would negatively affect the character or integrity of the historic resource, or has not been accepted by the owner of the resource.

In the event that a plan for artificial lighting or reflection of natural light were developed and implemented pursuant to this provision, significant adverse shadows impacts under the Proposed Action

would be partially mitigated. Absent such a plan, the Proposed Action's significant adverse shadows impacts would be wholly unmitigated.

20.5.2 Historic and Cultural Resources

20.5.2.1 Architectural Resources

As described in Chapter 6, “Historic and Cultural Resources,” the Proposed Action could result in significant adverse impacts due to potential partial or complete demolition of 14 NYCL- and/or S/NR-eligible historic resources located on Projected Development Sites 6, 7, 9, and 16 and Potential Development Sites 2, 5, 9, 12, 13, and 19. As the RWCDs for the Proposed Action anticipates that the existing structures on these sites would be demolished, either partially or entirely, as a consequence of the Proposed Action, this would result in significant adverse direct impacts to these NYCL- and S/NR-eligible resources.

As discussed in Chapter 19, “Mitigation,” the *CEQR Technical Manual* identifies several ways in which impacts on architectural resources can be mitigated, but no practicable mitigation has been identified to fully mitigate the impacts to the 14 eligible historic resources. Contextual redesign, adaptive reuse, and the use of a construction protection plan are not available as mitigation measures, given the nature of the Proposed Action as an area-wide rezoning.

A mitigation measure identified in the *CEQR Technical Manual* is to photographically document the eligible structures in accordance with Historic American Buildings Survey (HABS) level II, as per National Park Service standards. The CPC is currently considering a modification to the zoning text amendment that would require, prior to any demolition of an eligible structure as part of development undertaken under the Proposed Action, that the developer conduct and complete HABS recordation in a manner acceptable to the LPC. In the event this modification is adopted, significant adverse impacts resulting from the demolition of eligible resources would be partially mitigated.

For those structures that are NYCL-eligible, LPC could elect to conduct a hearing and designate the structures, either in whole or in part, as landmark buildings. In the event that landmark designation was approved, LPC approval would be required for any alteration or demolition of the designated structures. As the potential for use and results of any designation process cannot be assumed or predicted with certainty, the availability of designation is considered herein as a partial mitigation only.

Furthermore, those structures that are S/NR-eligible are given a measure of protection under Section 106 of the National Historic Preservation Act from the impacts of projects sponsored, assisted, or approved by federal agencies. The New York State Office of Parks, Recreation and Historic Preservation could elect to designate these structures as S/NR-listed properties, which would also protect the resources against impacts resulting from projects sponsored, assisted, or approved by state agencies under the State Historic

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Preservation Act. However, private owners of properties eligible for, or even listed on, the Registers using private funds can alter or demolish their properties without such a review process. Under the Proposed Action, since redevelopment of those sites containing S/NR-eligible structures is expected to be privately sponsored, S/NR designation would not serve as potential mitigation for these historic resources.

Accordingly, as the potential for these impacts would not be completely eliminated, they would constitute unavoidable significant adverse impacts on these historic resources as a result of the Proposed Action.

In order to entirely avoid the potential unmitigated adverse direct impacts specified above, this alternative would require that Projected Development Sites 6, 7, 9, and 16 and Potential Development Sites 2, 5, 9, 12, 13, and 19 be eliminated from the rezoning proposal. However, this would be inconsistent with the Proposed Action's goal to introduce new office buildings to the rezoning area in order to protect and strengthen East Midtown as a premier commercial district.

20.5.3 Transportation

20.5.3.1 Traffic

As discussed in Chapter 19, "Mitigation," the Proposed Action would result in significant adverse traffic impacts at intersections within the study area that cannot be fully mitigated. Most of the unmitigated intersection approach movements would operate at LOS F under the No-Action Alternative. According to the *CEQR Technical Manual*, for a lane group that would operate at LOS F in the No-Action condition, a projected increase in delay of 3.0 or more seconds is considered a significant impact. As such, small increases in incremental project-generated 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. Therefore, no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Proposed Action's stated goals.

20.5.3.2 Pedestrians

As discussed in Chapter 19, "Mitigation," the Proposed Action would result in significant adverse pedestrian impacts to analyzed crosswalks and corners that cannot be fully mitigated. Pedestrian mitigation measures at some locations, such as curb bulb outs at corners, are not feasible or practical due to their effects on traffic flow or curbside bus lanes, and would result in unmitigated significant adverse traffic impacts. Conversely, some of the unmitigated significant adverse pedestrian impacts were created as a result of signal timing changes recommended as traffic mitigation measures.

As the rezoning area is located in East Midtown and encompasses Grand Central Terminal, many of the unmitigated pedestrian impact locations have substantial levels of existing pedestrian activity and would

become more congested under No-Action conditions, particularly with the opening of the East Side Access project. For this reason, small incremental increases in project-generated pedestrian volumes at some of the congested crosswalks and corners 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 pedestrian impacts. Therefore, no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Proposed Action's stated goals.

20.5.4 Construction

20.5.4.1 Historic and Cultural Resources

As described in Chapter 6, "Historic and Cultural Resources," development under the Proposed Action—specifically, on Projected Development Sites 3, 6, 9, 10, 12, and 16, and Potential Development Sites 2-7, 12, 13, 15, and 20—could result in inadvertent construction-related damage to 24 NYCL- and/or S/NR-eligible historic resources, as they are located within 90 feet of projected and/or potential development sites.

As discussed in Chapter 19, "Mitigation," the New York City Building Code, under section C26-112.4, provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. For designated NYC Landmarks and S/NR-listed historic buildings located within 90 feet of a proposed construction site, additional protective measures under the New York City Department of Buildings (DOB) Technical Policy and Procedure Notice (TPPN) #10/88 supplement the procedures of C26-112.4 by requiring a monitoring program to reduce the likelihood of construction damage and to detect at an early stage the beginnings of damage so that construction procedures can be changed. However, for the 24 non-designated resources that are within 90 feet of one or more projected and/or potential development sites, construction under the Proposed Action could potentially result in construction-related impacts to the resources, and the protective measures under TPPN 10/88 would only apply if the resources become designated. The CPC is currently considering a proposed modification to the zoning text amendment which would require, prior to excavation or demolition on a Projected or Potential Development Site located within 90 feet of an eligible resource, that the Commissioner of Buildings have approved a construction monitoring protocol of similar scope and purpose to the provisions of TPPN #10/88. In the event this modification is adopted, significant adverse construction-related impacts on eligible resources would be fully mitigated.

In order to entirely avoid the potential unmitigated adverse construction-related impacts, this alternative would require that Projected Development Sites 3, 6, 9, 10, 12, and 16, and Potential Development Sites 2-7, 12, 13, 15, and 20 be eliminated from the rezoning proposal. However, this would be inconsistent with

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the Proposed Action's goal to introduce new office buildings to the rezoning area in order to protect and strengthen East Midtown as a premier commercial district.

20.6 SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE

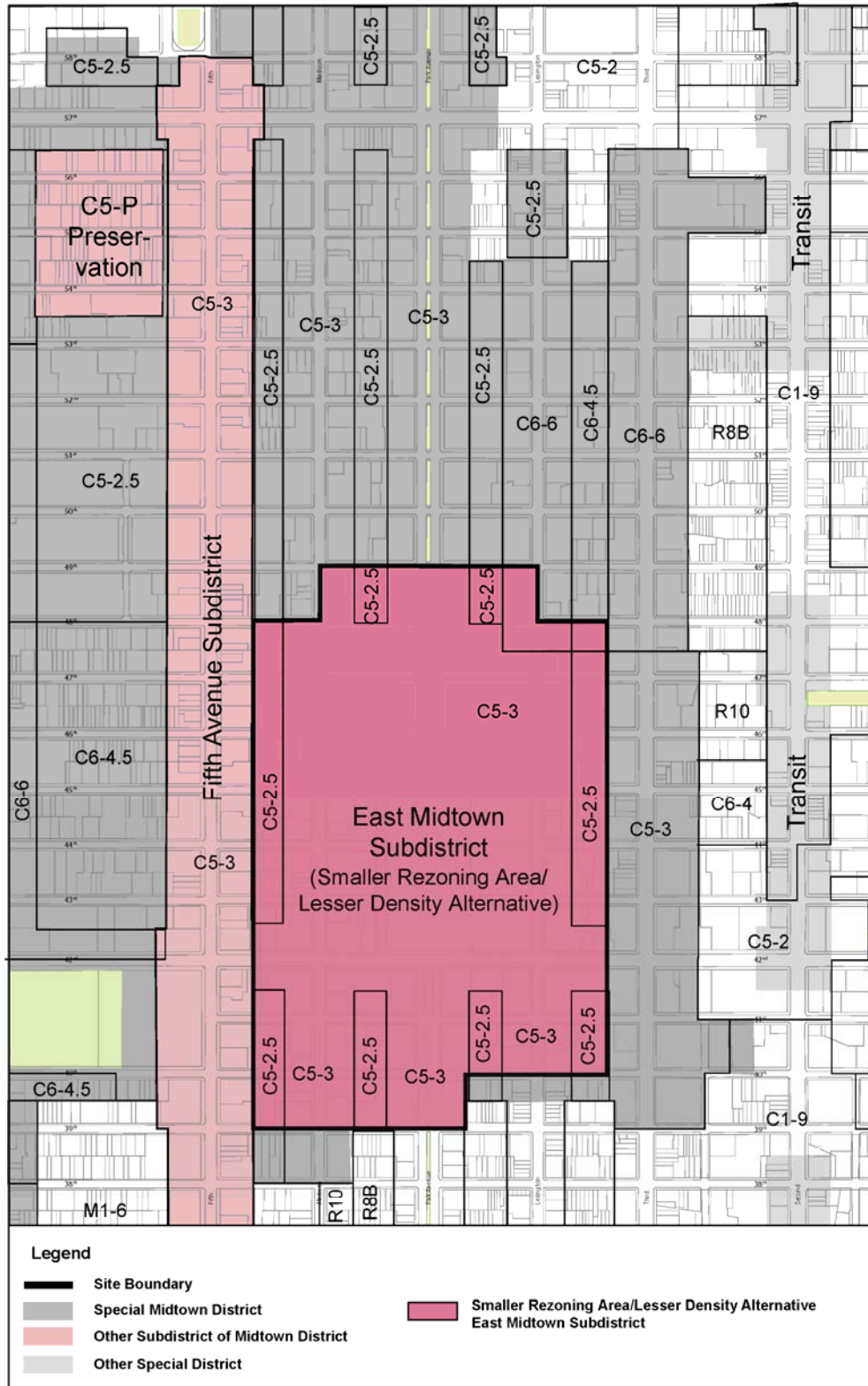
The Smaller Rezoning Area/Lesser Density (SRA/LD) Alternative was developed for the purpose of assessing whether reducing the affected area of the proposed rezoning to the Grand Central Subarea would eliminate or reduce the significant adverse impacts of the Proposed Action while also meeting the goals and objectives of the Proposed Action. As under the Proposed Action, a new East Midtown Subdistrict would be mapped within the existing Special Midtown District. However, in the SRA/LD Alternative, the Park Avenue Subarea and Other Areas would not be included in the rezoning area, in effect reducing the affected rezoning area to the approximately 35-block area generally bounded by East 39th Street to the south, East 49th Street to the north, a line approximately 150 feet east of Fifth Avenue to the west, and a line a line approximately 125 feet west of Third Avenue to the east (to Figure 20-1). As such, the RWCDS for the SRA/LD Alternative would be limited to the 14 of the 19 projected development sites and 9 of the 20 potential development sites located within the proposed Grand Central Subarea, as illustrated in Figure 20-2.

The same development mechanisms would apply in the SRA/LD Alternative, including the ability for Qualifying Sites to utilize the new District Improvement Bonus (DIB) and as-of-right landmark transfer mechanism, the ability for buildings with non-complying floor area that meet certain site criteria to be rebuilt to their existing density through a discounted DIB contribution, and the ability to transfer 1.0 FAR from Landmarks to Non-Qualifying sites. The special permit for superior development would continue to apply to sites in the Grand Central Core (i.e., the area directly around the Terminal) or along Park Avenue between East 46th and East 49th Streets. In addition, under the SRA/LD Alternative, the proposed zoning map amendment on portions of the midblock areas between East 42nd and East 43rd Streets and Second and Third Avenue would not occur. The existing C5-2 designations in these areas would remain (Figure 20-1).

The SRA/LD Alternative would be compatible with the Proposed Action's intent of focusing future development around Grand Central Terminal, given its access to regional rail and large concentration of aging office stock. However, by reducing the area of the proposed East Midtown Subdistrict, the benefits of protecting and strengthening East Midtown as one of the world's premier business addresses would be limited to a smaller 35-block area.

The SRA/LD Alternative would result in a lower overall contribution to the District Improvement Fund (DIF) of approximately 27 percent below what would be realized under the RWCDS for the Proposed Action. However, it would continue to be sufficient to fund the City-priority improvements to the pedestrian network, both above and below grade, for the Grand Central subway station and Vanderbilt Avenue.

FIGURE 20-1: PROPOSED ZONING UNDER SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE



Source: DCP

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FIGURE 20-2: PROJECTED AND POTENTIAL DEVELOPMENT SITES UNDER THE SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE



Source: DCP

As noted above, under the SRA/LD Alternative, there would be 23 projected and potential development sites (14 projected sites and 9 potential sites), as compared to 39 projected and potential development sites (19 projected sites and 20 potential sites) under the Proposed Action. As shown in Table 20-2 the SRA/LD Alternative would result in the construction of approximately 7.4 million gsf of office space, approximately 436,386 gsf of retail uses, 1.3 million gsf of hotel uses (1,945 rooms), approximately 400 parking spaces, and 208 residential units.

TABLE 20-2: SUMMARY OF SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE DEVELOPMENT SCENARIO

Use	No-Action Condition	Smaller Rezoning Area/ Lesser Density Alternative	Increment
Residential	772,705 gsf (776 DU)	207,029 gsf (208 DU)	-565,675 gsf (568 DU)
Office	3,912,625 gsf	7,430,478 gsf	3,517,854 gsf
Retail	380,136 gsf	436,386 gsf	56,250 gsf
Hotel ¹	1,254,848 gsf (1,931 rooms)	1,263,552 gsf (1,944 rooms)	8,704 gsf (13 rooms)
Parking ²	0 gsf (0 spaces)	80,000 gsf (400 spaces)	80,000 gsf 400 spaces

Note: Under the Smaller Rezoning Area/Lesser Density Alternative, development would occur on 14 development site. Projected Development Sites 12, 13, 17, 18, and 19 are eliminated from the RWCDs.

¹ Assumes 650 sf per hotel room

² Assumes 200 sf per parking space

As shown in Table 20-3, the SRA/LD Alternative would introduce a total of approximately 331 residents and 31,775 workers on the 14 projected development sites.

TABLE 20-3: SUMMARY OF SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE POPULATION AND EMPLOYMENT

Population/Employment¹	No-Action Condition	Smaller Rezoning Area/ Lesser Density Alternative	Increment
Residents	1,234	331	-903
Workers	17,545	31,775	14,230

¹ Assumes 1.59 persons per DU (based on 2010 Census data for the rezoning area), 1 employee per 250 sf of office, 3 employees per 1,000 sf of retail, 1 hotel employee per 2.67 hotel rooms, 1 residential building employee per 25 DU, and 1 employee per 10,000 sf of parking floor area.

Compared to the Proposed Action, the SRA/LD Alternative would result in approximately 303,485 gsf less of office space, 63,412 gsf less of retail space, 114,582 gsf less of hotel space (176 fewer hotel rooms), and 154 fewer parking spaces, compared to the No-Action condition. The net incremental decrease in

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residential units would be the same under both the Proposed Action and the SRA/LD Alternative (Table 20-4).

TABLE 20-4: SUMMARY OF NO-ACTION TO WITH-ACTION INCREMENTAL DEVELOPMENT – PROPOSED ACTION VS. SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE

Use	No-Action to With-Action Increment		Difference
	Proposed Action	Smaller Rezoning Area/ Lesser Density Alternative	
Residential	-565,675 gsf (568 DU)	-565,675 gsf (568 DU)	0
Office	3,821,339 gsf	3,517,854 gsf	-303,485 gsf
Retail	119,662 gsf	56,250 gsf	-63,412 gsf
Hotel	123,286 gsf (190 rooms)	8,704 gsf (13 rooms)	-114,582 gsf (-176 rooms)
Parking	110,900 gsf (554 spaces)	80,000 gsf (400 spaces)	-30,900 gsf (-154 spaces)

Notes: The No-Action to With-Action increment for the Proposed Action looks at the 19 projected development sites, whereas the No-Action to With-Action increment for the Smaller Rezoning Area/Lesser Density Alternative looks at the 14 projected sites on which development would occur.

20.6.1 Land Use, Zoning, and Public Policy

Similar to the Proposed Action, this alternative would not result in any significant adverse impacts on land use, zoning, or public policy.

Both the Proposed Action and the SRA/LD Alternative would include a zoning text change to establish the East Midtown Subdistrict within the existing Special Midtown District; the affected area under the SRA/LD Alternative would be significantly smaller. Zoning map amendment on portions of the midblock areas between East 42nd and East 43rd Streets and Second and Third Avenues (part of the Proposed Action) would not occur.

Comparing development on the RWCDS projected development sites, both the Proposed Action and the SRA/LD Alternative would result in a decrease in residential uses and an increase in commercial office space compared to No-Action conditions; however the increase in commercial office uses under the SRA/LD Alternative would be approximately 8 percent less than the increment resulting from the Proposed Action. In addition, the incremental increase in retail uses would be approximately 53 percent less than the increment resulting from the Proposed Action. The most significant difference in land use under the SRA/LD Alternative, as seen in Table 20-4 above, would be the 93 percent reduction in net incremental hotel uses compared to the increment resulting from the Proposed Action (compared to No-Action conditions).

The SRA/LD Alternative would support, to a lesser degree, the Proposed Action's intent of focusing future development around Grand Central Terminal (given its access to regional rail and large concentration of aging office stock) and preserving and promoting office uses in East Midtown. However, due to the smaller size of the East Midtown Subdistrict under the SRA/LD Alternative, the areas falling outside of its bounds, including Park Avenue and other areas comprising East Midtown would be left unprotected from the trend toward the conversion of existing office buildings to other uses. As a result, the beneficial effects of the Proposed Action would not be as great under this alternative.

20.6.2 Socioeconomic Conditions

Like the Proposed Action, the SRA/LD Alternative would not result in any significant adverse impacts on socioeconomic conditions.

As discussed above, the reduction in the size of the proposed rezoning area under the SRA/LD Alternative would eliminate projected development sites from the Park Avenue Subarea and Other Areas included in the Proposed Action.² An equivalent amount of development would occur on the remaining 14 projected development sites located within the Grand Central Subarea under the SRA/LD Alternative, as under the Proposed Action.³

Under the SRA/LD Alternative, it is anticipated that development would occur on 14 projected development sites, and would include approximately 208 DU, 7,430,478 gsf of office space, 436,386 gsf of retail uses, and 1,263,552 gsf of hotel uses. The SRA/LD Alternative would result in an equivalent amount of residential development as the Proposed Action. Since the SRA/LD Alternative would reduce the amount of commercial development, including office, retail and hotel uses, in the study area as compared to the Proposed Action, the SRA/LD Alternative is expected to generate fewer employment opportunities in the study area. While an incremental net increase of approximately 3,821,339 gsf of office, 123,286 gsf of retail, and 123,286 gsf of hotel use over the No-Action condition is expected to occur under the Proposed Action, the SRA/LD Alternative would be expected to generate approximately 3,517,854 gsf of office, 56,250 gsf of retail, and 8,704 gsf of hotel use (Table 20-4). This would represent an approximate 11.8 percent reduction in the increment of commercial space over the No-Action condition. In addition, there would be an approximately 29 percent reduction in the total number of jobs generated by the SRA/LD Alternative as compared to the Proposed Action (see Table 20-3).

Neither the Proposed Action nor the SRA/LD Alternative would result in any direct residential displacement. In addition, similar to the Proposed Action, the SRA/LD Alternative would forestall

² Projected Development Sites 12, 13, 17, 18, and 19 are eliminated from the RWCDs under the Smaller Rezoning Area/Lesser Density Alternative.

³ The RWCDs for the Smaller Rezoning Area/Lesser Density Alternative assumes the same development program for Projected Development Sites 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, and 16 as under the Proposed Action.

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conversion of office to residential space, and would therefore not induce a trend that could potentially result in changing socioeconomic conditions for the residents within the East Midtown rezoning area.

As the SRA/LD Alternative would affect fewer projected development sites, it would result in less direct business/institutional displacement than the Proposed Action. The SRA/LD Alternative could result in the potential direct displacement of approximately 490 business establishments/institutions affecting an estimated 15,588 workers that conduct a variety of business activities including: retail and wholesale establishments; restaurants and personal service establishments; hotels; professional, scientific, and technical services; finance, insurance, and real estate firms; management companies; health care, social, and educational services establishments and administrative and support services, among others. As with the Proposed Action, the displacement of these uses would not constitute a significant adverse impact because the displaced uses do not provide products or services essential to the local economy that would otherwise be unavailable nor are they the subject of regulations in the publicly adopted plans to preserve, enhance, or otherwise project them.

Similar to the Proposed Action, the new commercial development resulting from the SRA/LD Alternative would not constitute new economic activities in the study area, nor would it alter or accelerate commercial market trends in the study area, and therefore would not result in significant adverse impacts due to indirect business/institutional displacement. In addition, like the Proposed Action, the SRA/LD Alternative would not result in any significant adverse impacts on specific industries. Like the Proposed Action, the SRA/LD Alternative would facilitate the construction of a limited and targeted amount of higher-density commercial office, retail, and hotel development that would be concentrated near Grand Central Terminal, in a high-density, transit-rich area that is already predominantly commercial and recognized as one of the most sought-after office markets in the New York City Region. This increase in office stock would add to the dynamism of the City's office market and meet the needs of tenants seeking high-quality space with extensive amenities/technologies/services. However, given the smaller size of the East Midtown Subdistrict under the SRA/LD Alternative (compared to the Proposed Action), the anticipated benefits of the Proposed Action, including creating new opportunities for existing businesses to expand and providing support for the overall continued long-term health of the area as an integrated and dynamic office district, would be realized to a slightly lesser extent under this alternative since only two projected development sites instead five under the Proposed Action would be developed in the Park Avenue Subarea and Other Areas.

20.6.3 Open Space

As with the Proposed Action, there would be no significant adverse impacts on open space as a result of the SRA/LD Alternative.

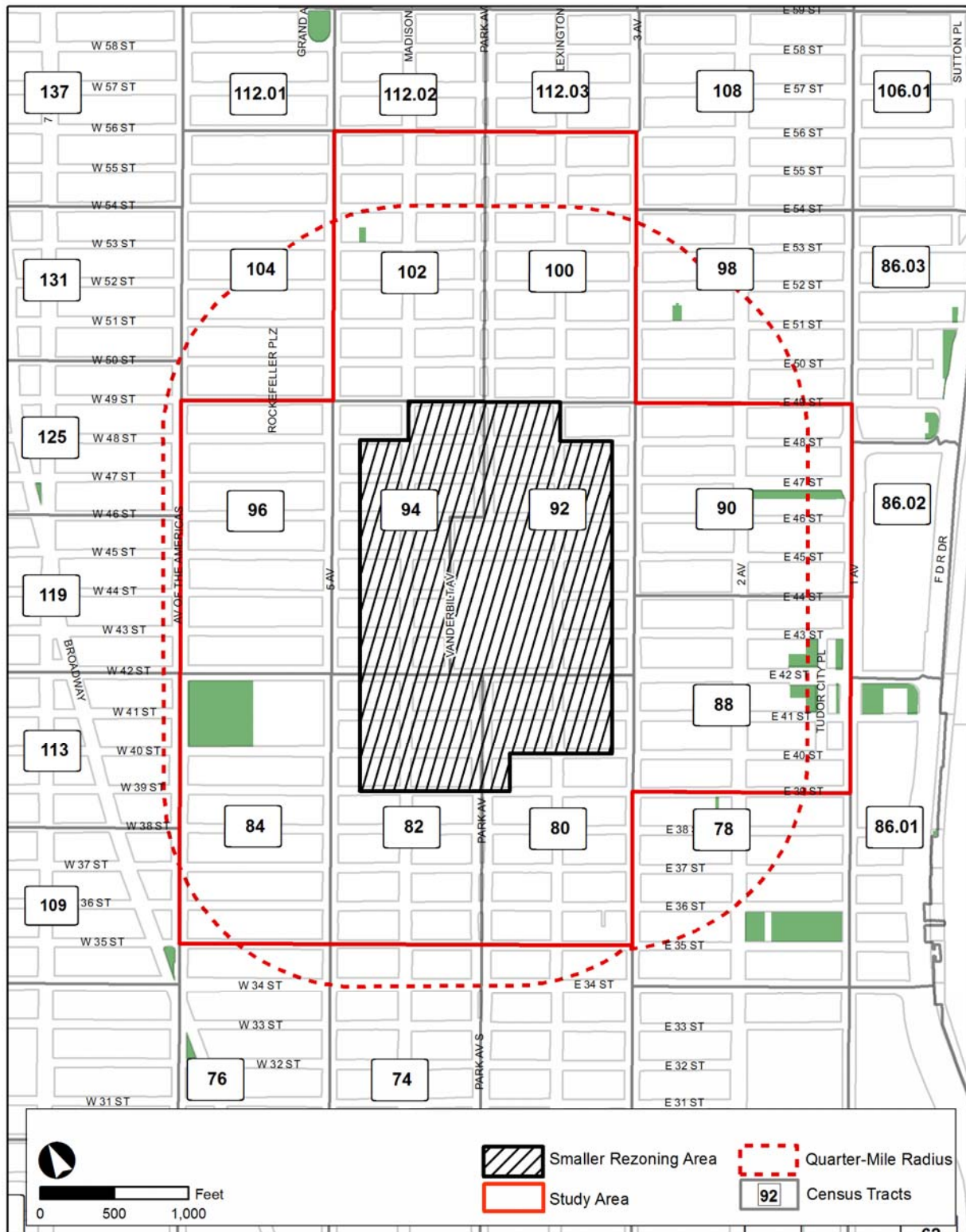
As discussed previously, the SRA/LD Alternative would reduce the affected area of the proposed rezoning to the Grand Central Subarea. Therefore, in the open space analysis for the SRA/LD Alternative, the study area was revised—pursuant to CEQR guidelines—to include only those census tracts that have at least 50 percent of their area within a ¼-mile distance of the smaller rezoning area. As shown in Figure 20-3, the open space study area includes Census Tracts 80, 82, 84, 88, 90, 92, 94, 96, 100, and 102; unlike the study area for the Proposed Action, the study area for the SRA/LD Alternative omits Census Tracts 78, 86.02, 98, 104, 108, 112.01, 112.02, 112.03, 114.01, and 114.02, which have less than 50 percent of their area within a ¼-mile distance of the smaller rezoning area. The quantitative open space analysis for the SRA/LD Alternative was based on population and open space data within the smaller rezoning area for the existing, No-Action, and With-Action conditions (see Appendix 6).

As shown in Table 20-5, the resultant passive open space ratio with the SRA/LD Alternative would be 0.049 acres per 1,000 non-residents, which is lower than that with the Proposed Action (0.072); the passive open space ratio with the SRA/LD Alternative would be 3.92 percent lower than that in the No-Action condition for this alternative (0.051), whereas the ratio with the Proposed Action would be 1.37 percent lower than that in the No-Action condition for the Proposed Action (0.073). The combined open space ratio with the SRA/LD Alternative would be 0.045 acres per 1,000 non-residents and residents, which is lower than that with the Proposed Action (0.064); the passive open space ratio with the SRA/LD Alternative would be 4.26 percent lower than that in the No-Action condition for this alternative (0.047), whereas the ratio with the Proposed Action would be 1.54 percent lower than that in the No-Action condition for the Proposed Action (0.065).

As with the Proposed Action, the SRA/LD Alternative would not result in significant adverse open space impacts. While the acreage of passive open space resources in the study area is and would continue to be deficient in comparison to the CEQR benchmark (i.e., 0.15 for the non-residential population and 0.173 for the combined non-residential and residential population), the deficiency would not be substantially exacerbated with the SRA/LD Alternative, as the percentage change in the open space ratios from the No-Action to With-Action conditions for this alternative would be less than 5 percent, which is used as a threshold for identifying significant adverse impacts because the study area is neither well- nor underserved by open space resources. Therefore, as with the Proposed Action, the SRA/LD Alternative would not result in significant adverse indirect open space impacts. Furthermore, as with the Proposed Action, the SRA/LD Alternative would not result in the direct displacement of any existing publicly accessible open space resources, nor would it result in significant adverse impacts on any open spaces due to construction, shadows, noise, or air quality.

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FIGURE 20-3: OPEN SPACE STUDY AREA FOR THE SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE



Sources: DCP; U.S. Census 2010

TABLE 20-5: PASSIVE OPEN SPACE RATIOS – COMPARISON OF PROPOSED ACTION TO SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE

Ratio	CEQR Open Space Ratio Benchmark	Open Space Ratios Per 1,000 People				Percent Change from No-Action to With-Action	
		Proposed Action		Smaller Rezoning Area/Lesser Density Alternative		Proposed Action	Smaller Rezoning Area/Lesser Density Alternative
		No-Action	With-Action	No-Action	With-Action		
Non-Residents	0.15	0.073	0.072	0.051	0.049	-1.37%	-3.92%
Combined Non-Residents and Residents	Weighted ⁽¹⁾ Proposed Action: 0.188/0.187; Smaller Rezoning Area/Lesser Density Alternative: 0.175/0.173	0.065	0.064	0.047	0.045	-1.54%	-4.26%

(1) Based on a target open space ratio established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents. Since this benchmark depends on the proportion of non-residents and residents in the study area's population, it is different for each analysis condition. Each of these ratios is listed in this table.

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20.6.4 Shadows

As with the Proposed Action, the SRA/LD Alternative would not result in any significant adverse shadows impacts to open spaces. Unlike the Proposed Action, the SRA/LD Alternative would not result in any significant adverse shadows impacts to sunlight-sensitive features of historic resources.

As mentioned previously, the Park Avenue Subarea and Other Areas would not be included in the rezoning area in the SRA/LD Alternative, and thus the affected area of the proposed rezoning would be limited to the Grand Central Subarea. As such, the RWCDs for the SRA/LD Alternative would be limited to the 14 of the 19 projected development sites and the 9 of the 20 potential development sites within the approximately 35-block area bounded by East 39th Street to the south, East 49th Street to the north, Fifth Avenue to the west, and Third Avenue to the east. Projected and potential development sites located north and east of these boundaries are not included in the RWCDs for the SRA/LD Alternative. Therefore, the incremental shadows that would be cast by these sites in the Proposed Action would be eliminated in the SRA/LD Alternative. Since Projected Development Sites 12 and 18, and Potential Development Site 14, are not included in the RWCDs for the SRA/LD Alternative, this alternative would not result in the significant adverse shadows impacts on the sunlight-sensitive features of St. Bartholomew's Church and Community House, the Lady Chapel of St. Patrick's Cathedral, and Christ United Methodist Church that would occur with the Proposed Action. Furthermore, similar to the Proposed Action, no other publicly accessible open spaces or sunlight-sensitive historic resources would be significantly affected by shadows in the SRA/LD Alternative.

20.6.5 Historic and Cultural Resources

As with the Proposed Action, the SRA/LD Alternative would not result in any significant adverse impacts to archaeological resources or any indirect impacts to architectural resources. The SRA/LD Alternative would result in fewer direct and construction-related significant adverse impacts to architectural resources as compared with the Proposed Action.

In the SRA/LD Alternative, development could occur on 23 of 39 development sites identified in the Proposed Action. The LPC reviewed the identified projected and potential development sites that could experience new/additional in-ground disturbance and concluded that none of the lots comprising those sites have any archaeological significance. Neither the Proposed Action nor the SRA/LD Alternative would result in significant adverse impacts to archaeological resources.

Furthermore, as with the Proposed Action, the development sites included in the SRA/LD Alternative are not located within any historic districts, and they do not contain any landmark buildings or structures. Therefore, neither the Proposed Action nor the SRA/LD Alternative would result in direct adverse impacts to historic districts or individual landmark buildings and structures.

Twelve eligible historic resources would experience direct adverse impacts under both the SRA/LD Alternative and the Proposed Action, and the Proposed Action would result in direct adverse impacts to an additional two eligible historic resources compared to the future with the SRA/LD Alternative. The SRA/LD Alternative and the Proposed Action would both result in direct adverse impacts to the following 12 eligible historic resources: the NYCL-eligible buildings at 16, 18-20, and 22-24 East 41st Street; the NYCL- and S/NR-eligible Pershing Square building at 100 East 42nd Street; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the S/NR-eligible Barclay Hotel at 111 East 48th Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; the NYCL-eligible Yale Club at 50 Vanderbilt Avenue; the S/NR-eligible 346 Madison Avenue Building; and the S/NR-eligible Vanderbilt Concourse Building at 52 Vanderbilt Avenue. However, the SRA/LD Alternative would not result in significant adverse direct impacts to the NYCL-eligible Shelton Club Hotel/Halloran House at 525 Lexington Avenue and the NYCL-eligible Girl Scout Building at 830 Third Avenue that would occur with the Proposed Action. The CPC is currently considering a modification to the zoning text amendment that would require, prior to any demolition of an eligible structure as part of development undertaken on Projected Development Sites 6, 7, 9 and 16 and Potential Development Sites 2, 5, 9, 12, 13 and 19 that the developer conduct and complete HABS recordation in a manner acceptable to the LPC. In the event this modification is adopted, significant adverse impacts resulting from the demolition of eligible resources would be partially mitigated.

In both the SRA/LD Alternative and the future with the Proposed Action, any development that would be located within 90 feet of a designated/listed historic resource would be subject to the procedures of the DOB TPPN #10/88 to protect the historic properties from accidental construction damage. However, for development within 90 feet of eligible historic resources, the protective measures under DOB TPPN #10/88 would apply only if they become designated/listed. Eighteen eligible historic resources could experience construction-related impacts under both the SRA/LD Alternative and the Proposed Action, and the Proposed Action could result in construction-related impacts to an additional six eligible historic resources compared to the future with the SRA/LD Alternative. The SRA/LD Alternative and the Proposed Action could both result in construction-related impacts to the following 18 eligible resources: the NYCL- and S/NR-eligible Chemist Club building at 50-52 East 41st Street; the S/NR-eligible Vanderbilt Avenue Building at 51 East 42nd Street; the S/NR-eligible East 45th Street Bridges; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the NYCL-eligible Mercantile Library at 17 East 47th Street; the S/NR-eligible Barclay Hotel at 111 East 48th Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL-eligible Shelton Club Hotel at 525 Lexington Avenue; the NYCL-eligible building at 299 Madison Avenue; the NYCL-eligible building at 400 Madison Avenue; the NYCL-eligible MetLife Building at 200 Park Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; the NYCL-eligible Union Carbide Building at 270 Park Avenue; the NYCL-eligible Yale Club at 50

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Vanderbilt Avenue; the S/NR-eligible Lefcourt Colonial Building at 295 Madison Avenue; the S/NR-eligible building at 346 Madison Avenue; and the S/NR-eligible Vanderbilt Concourse Building at 52 Vanderbilt Avenue. However, the SRA/LD Alternative would not result in construction-related impacts to the following six eligible historic resources that could occur with the Proposed Action: the NYCL- and S/NR-eligible building at 39 East 51st Street; the NYCL-eligible ITT-American building at 437 Madison Avenue; the NYCL-eligible Girl Scout Building at 830 Third Avenue; the NYCL-eligible Citicorp Center building at 884 Third Avenue; the S/NR-eligible building at 59 East 54th Street; and the S/NR-eligible Bankers Trust Building at 280 Park Avenue. The CPC is currently considering a proposed modification to the zoning text amendment which would require, prior to excavation or demolition on a Projected or Potential Development Site located within 90 feet of an eligible resource, that the Commissioner of Buildings have approved a construction monitoring protocol of similar scope and purpose to the provisions of TPPN #10/88. In the event this modification is adopted, significant adverse construction-related impacts on eligible resources would be fully mitigated.

Neither the SRA/LD Alternative nor the Proposed Action would have significant adverse indirect impacts on existing historic resources. The developments resulting from both the SRA/LD Alternative and the Proposed Action would not alter the context or visual prominence of any historic resources. Unlike the Proposed Action, the SRA/LD Alternative would not result in the significant adverse shadows impacts on the sunlight-sensitive features of St. Bartholomew’s Church and Community House, the Lady Chapel of St. Patrick’s Cathedral, and Christ United Methodist Church that would occur with the Proposed Action. Overall, compared to the Proposed Action, the SRA/LD Alternative would result in fewer significant adverse impacts to historic resources.

20.6.6 Urban Design and Visual Resources

As with the Proposed Action, the SRA/LD Alternative is not expected to result in any adverse impacts to urban design or visual resources.

Both the Proposed Action and the SRA/LD Alternative would affect the urban design of the East Midtown area by converting a three-block area along Vanderbilt Avenue—between East 44th and East 47th Streets—to pedestrian space, supplementing the area between East 42nd and East 43rd Streets that would be dedicated to pedestrian use in both the future without or with the Proposed Action. As with the Proposed Action, this change in the SRA/LD Alternative would increase the amount of street space available to pedestrians and would thereby enhance the urban design of the East Midtown area by transforming the stretch of roadway into a signature pedestrian gateway, befitting its location next to Grand Central Terminal.

In the SRA/LD Alternative, development could occur on 23 of 39 development sites identified in the Proposed Action. Nevertheless, in both the SRA/LD Alternative and the Proposed Action, the projected

and potential developments would primarily comprise high-density commercial uses, which would conform to the built context of the East Midtown area. The building bulk of the developments that are expected with both the SRA/LD Alternative and the Proposed Action would not change the built environment's arrangement, appearance, or functionality, and the height of new buildings would generally be consistent with that of other high-rise buildings in the East Midtown area. The introduction of new buildings with either the SRA/LD Alternative or the Proposed Action would not affect a pedestrian's experience of public space in the East Midtown area. As a result of the projected and potential developments in both the SRA/LD Alternative and the Proposed Action, some iconic views of visual resources within or from the East Midtown area would be modified by the addition of new buildings along the view corridors; other iconic views in both scenarios would be obstructed from certain vantage points, but similarly iconic views would continue to be widely available from many other locations.

20.6.7 Hazardous Materials

The effects of the SRA/LD Alternative with respect to hazardous materials are expected to be similar to those of the Proposed Action.

As with the Proposed Action, all of the projected and potential development sites would receive an (E) designation under the SRA/LD Alternative, although there are fewer projected and potential development sites (23 total) in this alternative than with the Proposed Action (39 total). In both the SRA/LD Alternative and the Proposed Action, the placement of (E) designations would reduce or avoid the potential for significant adverse impacts related to hazardous materials to occur as a result of the projected and potential developments. However, under the SRA/LD Alternative, two sites located outside of the Grand Central Subarea are anticipated to be developed as-of-right under the existing zoning in the future. Where under the Proposed Action, these two sites would receive hazardous materials (E) designations; under the SRA/LD Alternative the sites would not receive such designation. Therefore, only NYSDEC regulatory requirements would need to be followed and consequently soil disturbance would not necessarily be conducted in accordance with the procedures that would be undertaken with the Proposed Action.

20.6.8 Water and Sewer Infrastructure

Under this alternative, demands on water and sewer infrastructure on the projected development sites would be somewhat less than under the Proposed Action. However, neither this alternative nor the Proposed Action would cause significant adverse impacts to water and sewer infrastructure.

20.6.8.1 Water Supply

The additional water usage as a result of this SRA/LD Alternative is expected to total approximately 2,899,611 gallons per day (gpd), resulting in an incremental increase of 887,183 gpd on the 14 projected development sites compared to No-Action conditions. In comparison, the Proposed Action would result

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in an incremental increase of approximately 1,057,071 gpd on the Proposed Action's 19 projected development sites. As with the Proposed Action, the incremental water demand under this alternative would be less than 1 percent of the City's water supply demand, and changes of this magnitude would not be large enough to have significant adverse impacts on the City's water system.

20.6.8.2 Wastewater Treatment

Based on the rates provided in the *CEQR Technical Manual*, the SRA/LD Alternative has the potential to result in an incremental sanitary sewage discharge of approximately 278,105 gpd over No-Action conditions (compared to approximately 366,141 gpd of incremental sanitary sewage discharge under the Proposed Action). As with the Proposed Action, the incremental increase in sanitary flows would not result in significant adverse impacts to the sewage system within the subcatchment areas or to the Newtown Creek Water Pollution Control Plant (WPCP).

20.6.8.3 Stormwater and Drainage Management

Under both the SRA/LD Alternative and the Proposed Action, new flows would be introduced to the combined sewer system, although flows would be slightly less under this alternative due to the lower incremental sanitary sewage discharge. With the decrease in projected development sites from 19 with the Proposed Action to 14 under the SRA/LD Alternative, the number of affected Newtown Creek WPCP subcatchment areas would also change. Only Subcatchment area NCM-036 and NCM-037 would be affected; Subcatchment area NCM-017, within which the Proposed Action's projected development site 19 is located, would not be affected under the SRA/LD Alternative. Therefore, the new increased volumes and flows under the SRA/LD Alternative would be conveyed to the Newtown Creek WPCP via these two affected subcatchment areas.

As with the Proposed Action, due to DEP's new stormwater management requirements established in July 2012, stormwater runoff from new developments under the SRA/LD Alternative is expected to substantially decrease as compared to existing conditions. Pursuant to the new guidelines, developers would be required to incorporate stormwater detention and retention measures to handle stormwater runoff from developed sites.

Therefore, neither the Proposed Action nor the SRA/LD Alternative would result in significant adverse impacts on water supply, wastewater or stormwater conveyance and treatment infrastructure.

20.6.9 Solid Waste and Sanitation Services

Solid waste generation would increase under both the Proposed Action and SRA/LD Alternative, with a slightly lower incremental increase under the SRA/LD Alternative (compared to No-Action conditions). However, neither this alternative nor the Proposed Action would cause significant adverse impacts to the City's solid waste and sanitation services.

Development on the SRA/LD Alternative's 14 projected development sites would generate approximately 276.5 tons of solid waste per week, an incremental increase of 66.1 tons per week over the No-Action condition (compared to an incremental increase of 104.6 tons per week with the Proposed Action). Under both the SRA/LD Alternative and the Proposed Action, the majority of the solid waste would be generated by commercial uses, which would be collected by private commercial carters; approximately 4.3 tons of weekly solid waste would be generated by residential uses and collected by DSNY trucks in both the Proposed Action and SRA/LD Alternative future conditions.

Changes of this magnitude would be a minimal addition to the City's solid waste stream and would represent less than 1 percent of future commercial waste generation for the City as projected in the City's Solid Waste Management Plan (SWMP). Therefore, neither the Proposed Action nor the SRA/LD Alternative would result in significant adverse impacts on solid waste and sanitation services.

20.6.10 Energy

While neither the Proposed Action nor the SRA/LD Alternative would result in significant adverse energy impacts, the SRA/LD Alternative would result in a slightly lower incremental increase in energy usage compared to the No-Action condition.

Future uses on the 14 projected development sites under the SRA/LD Alternative would use approximately 2.29 trillion British thermal units (BTU) annually, which would represent an approximately 722,477 million BTU increase over the No-Action condition per year. In comparison, development on the Proposed Action's 19 projected development sites would result in an incremental annual increase of approximately 831,400 million BTU, compared to the No-Action condition.

The incremental increase in annual energy consumption under both the Proposed Action and the SRA/LD Alternative would represent less than 0.4 percent of the City's forecasted annual energy requirement of 59,118 GWh for 2022. As such, neither the Proposed Action nor the SRA/LD Alternative would result in a significant adverse impact on energy systems.

20.6.11 Transportation

As discussed below, compared with the Proposed Action, the SRA/LD Alternative would result in fewer significant adverse impacts with respect to transportation. The SRA/LD Alternative would require the same mitigation measures as the Proposed Action, as applicable, for the identified significant adverse impacts.

With fewer projected development sites and a reduction in overall floor area, the SRA/LD Alternative would generate fewer trips compared to the Proposed Action. Travel demand forecasts were prepared for the SRA/LD Alternative based on the transportation planning factors summarized in Chapter 12,

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“Transportation.” Table 20-6 presents a comparison of the total peak-hour person trips that would be generated by the SRA/LD Alternative and Proposed Action during the weekday AM, Midday, and PM peak hours. As shown in the table, the SRA/LD Alternative would result in 1,081, 2,906, and 1,951 fewer person trips during the weekday AM, Midday, and PM peak hours, respectively, which represents an approximate 13-23 percent reduction compared to the Proposed Action. Table 20-7 presents a similar comparison of the total peak-hour vehicle trips and shows that the SRA/LD Alternative would result in 109, 172, and 150 fewer vehicle trips during the weekday AM, Midday, and PM peak hours, respectively.

TABLE 20-6: NET DIFFERENCE IN PERSON TRIPS BETWEEN THE SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Bus		Subway		Railroad		Walk/Other		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour															
SRA/LD Alternative	441	-3	219	-10	1,068	23	3,501	59	1,386	46	692	-158	7,307	-43	7,264
Proposed Action	485	8	252	11	1,170	38	3,823	99	1,506	51	898	4	8,134	211	8,345
Difference	-44	-11	-33	-21	-102	-15	-322	-40	-120	-5	-206	-162	-827	-254	-1,081
Midday Peak Hour															
SRA/LD Alternative	104	108	138	147	279	298	288	301	-4	-4	3,765	4,051	4,570	4,901	9,471
Proposed Action	141	143	197	204	361	382	383	396	-4	-4	4,938	5,240	6,016	6,361	12,377
Difference	-37	-35	-59	-57	-82	-84	-95	-95	0	0	-1,173	-1,189	-1,446	-1,460	-2,906
PM Peak Hour															
SRA/LD Alternative	22	516	3	254	56	1,236	176	4,056	76	1,600	-88	789	245	8,451	8,696
Proposed Action	46	575	43	303	95	1,373	257	4,451	83	1,738	385	1,298	909	9,738	10,647
Difference	-24	-59	-40	-49	-39	-137	-81	-395	-7	-138	-473	-509	-664	-1,287	-1,951

Source: Parsons Brinckerhoff, Inc., 2013

TABLE 20-7: NET DIFFERENCE IN VEHICLE TRIPS BETWEEN THE SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Truck		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour									
SRA/LD Alternative	365	-4	179	179	55	55	599	230	829
Proposed Action	402	6	203	203	62	62	667	271	938
Difference	-37	-10	-24	-24	-7	-7	-68	-41	-109
Midday Peak Hour									
SRA/LD Alternative	79	82	125	125	61	61	265	268	533
Proposed Action	105	108	178	178	68	68	351	354	705
Difference	-26	-26	-53	-53	-7	-7	-86	-86	-172
PM Peak Hour									
SRA/LD Alternative	12	422	183	183	11	11	206	616	822
Proposed Action	29	469	225	225	12	12	266	706	972
Difference	-17	-47	-42	-42	-1	-1	-60	-90	-150

Source: Parsons Brinckerhoff, Inc., 2013

20.6.11.1 Traffic

As the SRA/LD Alternative would generate fewer trips compared to the Proposed Action, for study area intersections where no significant adverse traffic impacts were identified in the With-Action condition, the same conclusion of no potential impacts were made. All other study area intersections were evaluated quantitatively to determine if the SRA/LD Alternative would result in significant impacts and if the impacts could be mitigated. Table 20-8 presents a comparison of the number of approach movements and intersections that would have significant adverse impacts and unmitigated significant adverse impacts for the SRA/LD Alternative and Proposed Action. Overall, the total number of intersections with unmitigated significant adverse impacts under the SRA/LD Alternative would be the same as the Proposed Action, except that the intersection of Third Avenue and East 42nd Street would not be impacted in the weekday PM peak hour and therefore would not have unmitigated significant adverse impacts. However, three more approach movements would be unmitigated with the Proposed Action in the weekday AM peak hour and four more approach movements would be unmitigated with the Proposed Action in the PM peak hour.

TABLE 20-8: NUMBER OF INTERSECTIONS AND APPROACHES WITH SIGNIFICANT ADVERSE TRAFFIC IMPACTS – COMPARISON OF SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE AND PROPOSED ACTION

Peak Hour	Development Scenario	Movements/ Intersections Analyzed	Movements/ Intersections With No Significant Impacts	Movements/ Intersections With Significant Impacts	Mitigated Movements/ Intersections	Unmitigated Movements/ Intersections
AM	SRA/LD Alternative	325/90	274/49	51/41	31/25	20/16
	Proposed Action	325/90	270/48	55/42	32/26	23/16
Midday	SRA/LD Alternative	314/90	282/66	32/24	19/15	13/9
	Proposed Action	314/90	273/59	41/31	28/22	13/9
PM	SRA/LD Alternative	326/90	286/60	40/30	21/16	19/14
	Proposed Action	326/90	280/57	46/33	23/18	23/15

Source: Parsons Brinckerhoff, Inc., 2013

Note: This table has been revised for the FEIS.

20.6.11.2 Transit

a. Subway

As shown in Table 20-7, the SRA/LD Alternative would generate 362 fewer trips by subway in the AM peak hour and 376 fewer subway trips in the PM compared to the Proposed Action. As noted above, the SRA/LD Alternative would result in a lower overall contribution to the District Improvement Fund (DIF) as compared with the Proposed Action. However, it would continue to be sufficient to fund the City-

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priority improvements including those for the Grand Central subway station. The Proposed Action will result less in crowding in the Grand Central subway station with most station elements experiencing improved conditions. Furthermore, the Proposed Action would have no significant adverse impacts to at the 42nd Street-Bryant Park/5th Avenue, 47-50 Streets-Rockefeller Center and 51st Street/Lexington Avenue-53rd Street subway stations. With fewer subway trips, the SRA/LD Alternative would have the same or similar results to that experienced under the Proposed Action.

As the level of new subway demand projected to occur under the Proposed Action would not result in significant adverse subway line haul impacts, the smaller numbers of new trips projected under the SRA/LD Alternative are also not expected to result in significant subway line haul impacts.

b. Bus

As shown in Table 20-7, the SRA/LD Alternative would generate 117 fewer bus trips (local and express combined) in the AM peak hour and 176 fewer in the PM compared to the Proposed Action. Although there would be fewer trips on the M42 local bus service under the SRA/LD Alternative, the Proposed Action's significant adverse impacts to the M42 local bus in the eastbound direction in the AM and westbound direction in the PM would still occur under this alternative. These impacts could be mitigated by the addition of up to two eastbound M42 buses in the AM peak hour and one westbound bus in the PM peak hour, compared to two eastbound buses in the AM and two westbound buses in the PM under the Proposed Action.

20.6.11.3 Pedestrians

Compared to the Proposed Action, the SRA/LD Alternative would generate an estimated 1,027 fewer pedestrian trips in the AM peak hour, 2,790 fewer in the Midday, and 1,862 fewer in the PM peak hour. (These would include fewer walk-only trips as well as fewer pedestrian trips en route to and from area transit services and parking garages.) As the SRA/LD Alternative would generate fewer pedestrian trips compared to the Proposed Action, for analyzed pedestrian elements (sidewalks, crosswalks and corner areas) where no significant adverse impacts were identified in the With-Action condition, the same conclusion of no potential impacts can be made. All other analyzed pedestrian elements in proximity to projected development sites 12, 13, 17, 18, and 19 were evaluated quantitatively to determine if the SRA/LD Alternative would result in significant adverse impacts and if the impacts could be mitigated. Table 20-9 presents a comparison of the number of sidewalks, crosswalks and corner areas that would have significant impacts and unmitigated significant impacts for the SRA/LD Alternative and Proposed Action.

TABLE 20-9: NUMBER OF LOCATIONS WITH SIGNIFICANT ADVERSE PEDESTRIAN IMPACTS – COMPARISON OF SMALLER REZONING AREA/LESSER DENSITY ALTERNATIVE AND PROPOSED ACTION

Peak Hour	Significant Impacts		Unmitigated Significant Impacts ¹	
	Proposed Action	SRA/LD Alternative	Proposed Action	SRA/LD Alternative
Sidewalks				
AM	2	2	0	0
Midday	0	0	0	0
PM	2	2	0	0
Crosswalks				
AM	13	12	<u>2</u>	<u>2</u>
Midday	16	13	<u>0</u>	<u>0</u>
PM	<u>16</u>	15	1	1
Corner Areas				
AM	5	2	3	2
Midday	5	<u>5</u>	1	1
PM	6	<u>5</u>	2	<u>1</u>

¹Includes unmitigated significant impacts due to traffic or corner mitigation measures.

As shown in Table 20-9, under the SRA/LD Alternative there would be two crosswalks with unmitigated significant impacts in the AM peak hour, none in the Midday and one in the PM peak hour, unchanged from the Proposed Action. There would also be two, one and one corner areas with unmitigated impacts in the AM, Midday and PM peak hours, respectively, one fewer in the AM and PM than under the Proposed Action. There would not be any unmitigated sidewalk impacts under either the Proposed Action or the SRA/LD Alternative.

20.6.11.4 Parking

The hourly net increase in parking demand for the SRA/LD Alternative is summarized in Appendix 6. The SRA/LD Alternative would have a lower demand for off-street parking compared to the Proposed Action. Although it would provide fewer new off-street parking spaces compared to the Proposed Action, it would also displace fewer existing parking facilities. Compared to the SRA/LD Alternative, the Proposed Action would generate a parking demand for 57 more spaces during the weekday Midday period and provide a net increase of 17 net spaces in parking capacity. As with the Proposed Action, no parking shortfall would be expected under the SRA/LD Alternative.

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20.6.12 Air Quality

20.6.12.1 Mobile Source Analysis

The SRA/LD Alternative would result in less development contributing to vehicular trips than that of the Proposed Action. Therefore, similar to the Proposed Action, the SRA/LD Alternative would not result in significant adverse impacts from mobile source emissions.

20.6.12.2 Stationary Source Analysis

Unlike the Proposed Action, the SRA/LD Alternative could result in adverse air quality impacts at sensitive receptor locations near two sites that are anticipated to be developed as-of-right under the existing zoning in the future, whereas the potential impacts could be avoided under the Proposed Action because the sites would receive air quality (E) designations.

Under the Proposed Action, the stationary source air quality impacts would not be significant. This result was as the consequence of placing air quality (E) designations; specifically, they would have restrictions specified for the control of emissions for fossil fuel-fired heating, ventilation and air conditioning (HVAC) systems, which would be designed to ensure there would be no significant adverse air quality impacts at nearby sensitive receptor locations. As the buildings included under the SRA/LD Alternative would be the same and they would have the same floor areas and heights as under the Proposed Action, the potential air quality impacts of these buildings would be the same as under the Proposed Action. As such, with the same (E) designations that were applied to each of these buildings under the Proposed Action, the potential stationary source impacts of development under the SRA/LD Alternative would not be significant. However, under the SRA/LD Alternative, two sites located outside of the Grand Central Subarea are anticipated to be developed as-of-right under the existing zoning in the future. Where under the Proposed Action, these two sites would receive air quality (E) designations; under the SRA/LD Alternative, the sites would not receive such designation.

20.6.13 Greenhouse Gas Analysis (GHG)

With less development than the Proposed Action, the SRA/LD Alternative would have less energy use, and would therefore result in fewer carbon dioxide equivalent (CO₂e) emissions per year. Neither the Proposed Action nor the SRA/LD Alternative would result in any significant GHG emission or climate change impacts.

20.6.14 Noise

Like the Proposed Action, the SRA/LD Alternative would not generate sufficient traffic to have the potential to cause a significant adverse noise impact given the fewer generated traffic trips projected to occur under this Alternative.

The elimination of development sites as compared to the Proposed Action under the SRA/LD Alternative, fewer generated traffic trips are projected to occur, resulting in slightly lower noise levels (few tenths of a

decibel) near the areas where these sites are located. These reduced traffic trips would be confined largely to the northern portion of the East Midtown Rezoning area north of West 49th Street. Traffic trip-generation volumes and corresponding noise levels under the Lesser Density Alternative and the Proposed Action are approximately the same south of West 49th Street to West 39th Street. Therefore, the estimated traffic noise exposure, impact assessment and window-wall noise attenuation requirements for the Proposed Action (see Chapter 15, “Noise” for details) and the SRA/LD Alternative are essentially the same within this common development area. However, under the SRA/LD Alternative, two sites located outside of the Grand Central Subarea are anticipated to be developed as-of-right under the existing zoning in the future. Where under the Proposed Action, these two sites would receive noise (E) designations; under the SRA/LD Alternative, the sites would not receive such designation.

20.6.15 Public Health

As with the Proposed Action, the SRA/LD Alternative would not result in significant adverse public health impacts.

Both the Proposed Action and the SRA/LD Alternative would not result in any unmitigated significant adverse impacts related to air quality, water quality, or hazardous materials. While during some periods of construction, the SRA/LD Alternative as with the Proposed Action could potentially result in significant adverse impacts related to noise as defined by CEQR thresholds, the predicted overall changes to noise levels would not be large enough to significantly affect public health. As to operational noise, the SRA/LD Alternative could have a potential for adverse noise impacts as two sites that would receive noise (E) designations under the Proposed Action would not under the SRA/LD Alternative. However, the overall changes to noise levels would not be large enough to significantly affect public health.

20.6.16 Neighborhood Character

As with the Proposed Action, the SRA/LD Alternative would not result in significant adverse impacts on neighborhood character.

The East Midtown area has a varied neighborhood context, and its defining features are the dominance of commercial land uses, the interspersing of older buildings with modern construction, high levels of pedestrian and vehicular activity and associated noise, a primarily high-density built context, and the presence of a number of iconic historic resources, including Grand Central Terminal, the Helmsley Building, the Chrysler Building, St. Bartholomew’s Church and Community House, St. Patrick’s Cathedral, the Seagram Building, and Lever House. In the SRA/LD Alternative, as with the Proposed Action, the East Midtown area would continue to be defined by this combination of features, although under the SRA/LD Alternative, the benefits of protecting and strengthening East Midtown as one of the world’s premier business addresses would be limited to a smaller 35-block area because of the reduced area of the proposed East Midtown Subdistrict.

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Of the relevant technical areas specified in the *CEQR Technical Manual*, both the SRA/LD Alternative and the Proposed Action would not cause significant adverse impacts regarding land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; or noise. As described in Section 20.6.4, significant adverse impact related to shadows would not occur. In the SRA/LD Alternative, as with the Proposed Action, the potential significant adverse impacts on transportation would not affect neighborhood character; while there would be increased activity, the resulting conditions would not be out of character with the East Midtown area, and thus the incremental changes would not constitute significant impacts on neighborhood character.

Under both the SRA/LD Alternative and the Proposed Action, potential significant adverse impacts on historic resources would not result in a significant adverse impact on neighborhood character because they would not alter the overall character of East Midtown as an area characterized by a varied context of older buildings interspersed with modern construction. In addition, the iconic historic structures that are defining features of neighborhood character—Grand Central Terminal, the Helmsley Building, St. Patrick’s Cathedral, St. Bartholomew’s Church and Community House, the Chrysler Building, the Seagram Building, and Lever House—would not be displaced with either the SRA/LD Alternative or the Proposed Action.

Under both the SRA/LD Alternative and the Proposed Action, just as potential significant adverse impacts in the relevant technical areas would not affect any defining feature of neighborhood character, no moderate adverse effects that would affect such defining features—either singularly or in combination—have been identified.

20.6.17 Construction

The SRA/LD Alternative would result in fewer construction-related impacts than would the Proposed Action. The SRA/LD Alternative would require the same mitigation measures as the Proposed Action, as applicable, for the identified construction-related impacts.

The SRA/LD Alternative would be constructed on 14 of the 19 projected development sites identified for the Proposed Action. Development on these 14 sites would be expected to follow the same reasonable worst case construction schedule as that assumed for the Proposed Action. For the cluster of Projected Development Sites 5, 6, 7, 8, and 11 located between Vanderbilt and Fifth Avenues and East 43rd and East 48th Streets, the same sequencing and duration of construction would be expected to occur under both the Proposed Action and the SRA/LD Alternative. Unlike the Proposed Action, under the SRA/LD Alternative, the peak construction time period (i.e., the second quarter of 2022) would not include construction on Projected Development Site 19.

Overall, the amount of new construction in the SRA/LD Alternative would be less than that with the Proposed Action, and thus the SRA/LD Alternative would generate fewer disruptive construction-related effects. The SRA/LD Alternative would result in less construction-related noise and traffic than the

Proposed Action, and would also result in fewer potential construction-related effects to NYCL- and/or S/NR-eligible historic resources, as described in Section 20.6.5, “Historic and Cultural Resources.” As with the Proposed Action, the SRA/LD Alternative would not result in significant adverse construction impacts with respect to air quality, noise, land use and neighborhood character, socioeconomic conditions, open space, or hazardous materials. The SRA/LD Alternative would still be expected to result in significant adverse construction impacts related to transportation (traffic and pedestrians), although possibly at fewer locations than the Proposed Action. As with the Proposed Action, if the peak construction scenario conservatively assumed for simultaneous construction on Projected Development Sites 5, 6 and 7 for the purposes of this analysis is realized, this alternative would result in a significant adverse construction noise impact.

Partial mitigation for construction noise impacts could include, in addition to the requirements under the New York City Noise Control Code, noise barriers, use of low noise emission equipment, locating stationary equipment as far as feasible away from receptors, enclosing areas, limiting the duration of activities, specifying quiet equipment, scheduling of activities to minimize impacts (either time of day or seasonal considerations), and locating noisy equipment near natural or existing barriers that would shield sensitive receptors. The CPC is currently considering a modification to the proposed zoning text amendment which would provide that no demolition or excavation work may be issued for development of Projected Sites 5, 6, or 7 as qualified sites under the rezoning unless the Chairperson of the CPC has certified either: a) that the simultaneous construction of Projected Sites 5, 6 and 7 conservatively analyzed in the EIS is not anticipated to occur; or, b) that a restrictive declaration has been executed and recorded providing for implementation during construction of the noise path and control measures described above, except to the extent determined by the Chair to be infeasible or impracticable due to site-specific conditions. This provision, if adopted by the CPC, would partially mitigate the potential for significant adverse noise impacts during construction.

20.7 MODIFIED PROPOSAL ALTERNATIVE⁴

In response to recommendations made during the public review process for the Proposed Action, DCP is proposing a series of modifications to the original zoning text amendment proposal, pursuant to ULURP No. 130247(A) ZRM. Per the modifications, the proposed text amendment would both expand and restrict the allowable uses for buildings utilizing the DIB, permit greater opportunities for floor area transfers from area landmarks, modify height and setback controls along Park Avenue, allow limited modification of the Qualifying Site frontage requirements through discretionary action, and make a series of other updates, corrections and clarifications to the original proposal. The proposed modifications are analyzed herein as the Modified Proposal Alternative.

⁴ This alternative is new to the FEIS.

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During the public review process for the DEIS, DCP received recommendations that residential use be permitted in new developments to support a mixed-use character for the area. In addition, DCP received recommendations that hotel uses be restricted on sites which utilize the DIB so that the resulting developments contain predominantly office uses. While East Midtown has experienced a great deal of non-office development over the last decade and conversion of existing aging office buildings to residential is likely to continue, DCP believes limited mixed use on the sites could improve the 24-hour character of the area while continuing to meet the proposal's overall goal of encouraging new office space in the East Midtown area. The Modified Proposal Alternative addresses these issues, on the one hand by allowing limited amounts of residential use as-of-right on sites that utilize the DIB, and, on the other hand, by restricting the amount of hotel use that would be allowed as-of-right on these sites.

DCP received recommendations that landmarks in the northern portion of the proposed East Midtown Subdistrict be given broader opportunities for floor area transfers, similar to the allowances afforded landmarks in the Grand Central Subarea. Given the great concentration of iconic landmark buildings in the northern portion of the East Midtown Subdistrict (including St. Patrick's, St. Bartholomew's, Lever House, and Central Synagogue) and the significant contribution they make to that area's overall character, the Modified Proposal Alternative includes a new Northern Subarea in which landmark buildings with unused floor area would have new opportunities to transfer to development sites beyond 'adjacent' sites as currently allowed under the City's Zoning Resolution. DCP believes that this proposal appropriately addresses the concentration of significant landmark buildings in the northern portion of the Subdistrict by giving them greater opportunities for transfer to a broader area beyond 'adjacent' sites, while continuing to meet the overall goals of the Proposed Action.

The proposed modified zoning text amendment in the Modified Proposal Alternative includes modifications to the height and setback controls effective along Park Avenue to better reflect the street's overall width; at 140 feet, it is the widest street in Midtown. The underlying Midtown height and setback regulations, which are focused on the pedestrian's access to daylight on surrounding streets, require calculations based on the widths of the street(s) upon which a zoning lot has frontage. Currently, calculations for sites on Park Avenue use an artificial street width of 100 feet versus its actual width. DCP has continued to study the Park Avenue corridor and believes this causes developments on the relatively-small sites found on Park Avenue to be taller, narrower and less economically viable than would be required if the street's full width were taken into account. In order to allow the development of modern office buildings on the street while maintaining the overall Midtown district's standards of access to light and air, the proposed modification permits Qualifying Site developments on Park Avenue in the East Midtown Subdistrict to calculate their compliance with the existing height and setback controls taking into account the full width of the street. This modification would allow the tower floorplates of Qualifying Site buildings on Park Avenue to each be slightly larger and more efficient than under the existing regulations.

The proposed modified zoning text amendment would also include additional provisions for special permits and/or other discretionary actions that would be subject to public review at the time a specific application is made to the CPC (see Section 20.7.18). In addition, the Modified Proposal Alternative

would include the subway improvements at 51st Street/Lexington Avenue-53rd Street subway stations as described in section 20.7.11.2, Transit.

The modifications included in the Modified Proposal Alternative would result in differences in the as-of-right development that could be realized from that analyzed for the Proposed Action. For the Modified Proposal Alternative, a modified RWCDS has been created to account for the various modifications being proposed (Figure 20-4).

- Two projected development sites (Sites 16 & 17), which were full hotels in the original RWCDS, would become mixed office/hotel buildings.
- Three projected development sites (Sites 5, 7 & 13), which were full office buildings in the original RWCDS, would become mixed office/hotel buildings, with 20 percent of their floor area being developed as hotel.
- Three projected development sites (Sites 1, 3 & 10), which were full office buildings in the original RWCDS, would become mixed office/residential buildings, with 20 percent of their floor area being developed as residential use.
- Five potential development sites would also see changes under the modified RWCDS. One potential development site (Site 12) would become a full office building instead of a full hotel building; another two (Sites 13 & 19) would be mixed office/hotel buildings instead of full hotel buildings; and lastly, two (Sites 16 & 18) would be mixed office/residential buildings instead of full office buildings.

Overall, as shown in Table 20-10, the Modified Proposal Alternative RWCDS would result in the construction of approximately 10,122,812 gsf of office space, 648,990 gsf of retail space, 1,913,410 gsf of hotel space (2,946 hotel rooms), 609 parking spaces, and 643,701 gsf of residential space (646 residential units). The projected incremental (net) change between the future without and future with the Modified Proposal Alternative would be an increase of approximately 3,603,179 gsf of office space, 119,662 gsf of retail space, and 462 parking spaces, and a decrease of approximately 97,537 gsf of hotel space (148 hotel rooms) and 129,004 gsf of residential space (130 residential units).

As shown in Table 20-11, the Modified Proposal Alternative would introduce a total of approximately 1,028 residents and 43,580 workers on the 19 projected development sites. The projected incremental (net) change between the future without and future with the Modified Proposal Alternative would be an increase of approximately 14,720 workers and a decrease of approximately 206 residents.

Compared to the Proposed Action, the Modified Proposal Alternative would result in approximately 218,160 gsf less of office space, 220,823 gsf less of hotel space (338 fewer hotel rooms), 92 fewer parking spaces, and 436,671 gsf more of residential space (438 additional residential units), compared to the No-Action condition. The net incremental increase in retail space would be the same under both the Proposed Action and the Modified Proposal Alternative (Table 20-12).

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FIGURE 20-4: PROJECTED AND POTENTIAL DEVELOPMENT SITES UNDER THE MODIFIED PROPOSAL ALTERNATIVE



Source: DCP

TABLE 20-10: SUMMARY OF MODIFIED PROPOSAL ALTERNATIVE DEVELOPMENT SCENARIO

Use	No-Action Condition	Modified Proposal Alternative	Increment
Residential	772,705 gsf (776 DU)	643,701 gsf (646 DU)	-129,004 gsf (-130 DU)
Office	6,519,633 gsf	10,122,812 gsf	3,603,179 gsf
Retail	529,328 gsf	648,990 gsf	119,662 gsf
Hotel ¹	2,010,947 gsf (3,094 rooms)	1,913,410 gsf (2,946 rooms)	-97,537 gsf (-148 rooms)
Parking ²	29,400 gsf (147 spaces)	121,800 gsf (609 spaces)	92,400 gsf (462 spaces)

¹ Assumes 650 sf per hotel room² Assumes 200 sf per parking space**TABLE 20-11: SUMMARY OF MODIFIED PROPOSAL ALTERNATIVE POPULATION AND EMPLOYMENT**

Population/Employment ¹	No-Action Condition	Modified Proposal Alternative	Increment
Residents	1,234	1,028	-206
Workers	28,860	43,580	14,720

¹ Assumes 1.59 persons per DU (based on 2010 Census data for the rezoning area), 1 employee per 250 sf of office, 3 employees per 1,000 sf of retail, 1 hotel employee per 2.67 hotel rooms, 1 residential building employee per 25 DU, and 1 employee per 10,000 sf of parking floor area.

TABLE 20-12: SUMMARY OF NO-ACTION TO WITH-ACTION INCREMENTAL DEVELOPMENT – PROPOSED ACTION VS. MODIFIED PROPOSAL ALTERNATIVE

Use	No-Action to With-Action Increment		Difference
	Proposed Action	Modified Proposal Alternative	
Residential	-565,675 gsf (-568 DU)	-129,004 gsf (-130 DU)	436,671 gsf (438 DU)
Office	3,821,339 gsf	3,603,179 gsf	-218,160 gsf
Retail	119,662 gsf	119,662 gsf	0
Hotel	123,286 gsf (190 rooms)	-97,537 gsf (-148 rooms)	-220,823 gsf (-338 rooms)
Parking	110,800 gsf (554 spaces)	92,400 gsf (462 spaces)	-18,400 gsf (-92 spaces)

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20.7.1 Land Use, Zoning, and Public Policy

Similar to the Proposed Action, this alternative would not result in any significant adverse impacts on land use, zoning, or public policy.

Both the Proposed Action and the Modified Proposal Alternative would include a zoning text change to establish the East Midtown Subdistrict within the existing Special Midtown District; the Modified Proposal Alternative's East Midtown Subdistrict would include a new Northern Subarea in which landmark buildings with unused floor area would have new opportunities to transfer development rights beyond 'adjacent' sites as currently allowed under the City's Zoning Resolution. In addition, the modified text amendment in the Modified Proposal Alternative would permit Qualifying Site developments on Park Avenue in the East Midtown Subdistrict to calculate their compliance with the existing height and setback controls taking into account the full width of the street (140 feet) rather than the artificial street width of 100 feet.

The Modified Proposal Alternative is intended to support a mixed-use character for the area by allowing limited amounts of residential uses as-of-right on sites that utilize the DIB. In addition, under the Modified Proposal Alternative, hotel uses would be restricted on sites which utilize the DIB so that the resulting developments contain predominantly office uses. Comparing development on the RWCDs projected development sites, both the Proposed Action and the Modified Proposal Alternative would result in a decrease in residential uses and an increase in commercial office space compared to No-Action conditions; however the increase in commercial office uses under the Modified Proposal Alternative would be approximately 6 percent less than the increment resulting from the Proposed Action and the decrease in residential uses would be approximately 77 percent less than the increment resulting from the Proposed Action. In addition, whereas the Proposed Action would result in an incremental increase in hotel uses, development under the Modified Proposal Alternative would result in a net decrease in hotel uses compared to No-Action conditions. The incremental increase in retail uses would be the same (119,662 gsf) under both the Proposed Action and the Modified Proposal Alternative.

The Modified Proposal Alternative would support the Proposed Action's overall goal of encouraging new office space in the East Midtown area while improving the 24-hour character of the area. In addition, the Modified Proposal Alternative would provide greater opportunities for the transfer of development rights to a broader area beyond 'adjacent' sites in the northern portion of the East Midtown Subdistrict as well as allowing the development of modern office buildings along Park Avenue while maintaining the overall Midtown district's standards of access to light and air. As under the Proposed Action, the Modified Proposal Amendment would not result in a significant adverse impact to land use, zoning, and public policy.

20.7.2 Socioeconomic Conditions

Like the Proposed Action, the Modified Proposal Alternative would not result in any significant adverse impacts on socioeconomic conditions.

Under the Modified Proposal Alternative, it is anticipated that development would occur on 19 projected development sites, and would include approximately 646 dwelling units, 10,122,812 gsf of office space, 648,990 gsf of retail uses, and 1,913,410 gsf of hotel uses. While the Proposed Action would result in a net decrease of approximately 568 dwelling units, or approximately 1.3 percent of the study area residential population, the Modified Proposal Alternative would result in a net decrease of approximately 130 dwelling units (see Table 20-12), or approximately 0.3 percent of the study area residential population.

Both the Proposed Action and the Modified Proposal Alternative would result in a net increase in the total number of study area jobs, compared to the No-Action condition. However, the net increase under the Modified Proposal Alternative (14,720 jobs) would be less than under the Proposed Action (15,703 jobs). This is because the Modified Proposal Alternative would generate somewhat less commercial/office and hotel floor area than the Proposed Action.

Neither the Proposed Action nor the Modified Proposal Alternative would result in any direct residential displacement. In addition, neither the Proposed Action nor the Modified Proposal Alternative would induce trends that could potentially result in changing socioeconomic conditions for the residents within the East Midtown rezoning area.

As the Modified Proposal Alternative would affect the same projected development sites as under the Proposed Action, the anticipated direct business/institutional displacement would be the same under both scenarios. As with the Proposed Action, the displacement of these uses would not constitute a significant adverse impact because the displaced uses do not provide products or services essential to the local economy that would otherwise be unavailable nor are they the subject of regulations in the publicly adopted plans to preserve, enhance, or otherwise project them.

Similar to the Proposed Action, the new commercial development resulting from the Modified Proposal Alternative would not constitute new economic activities in the study area, nor would it alter or accelerate commercial market trends in the study area, and therefore would not result in significant adverse impacts due to indirect business/institutional displacement. In addition, like the Proposed Action, the Modified Proposal Alternative would not result in any significant adverse impacts on specific industries. Like the Proposed Action, the Modified Proposal Alternative would facilitate the construction of a limited and targeted amount of higher-density predominantly commercial office space with limited amounts of residential and hotel development and ground floor retail that would be concentrated near Grand Central Terminal, in a high-density, transit-rich area that is already predominantly commercial and recognized as one of the most sought-after office markets in the New York City Region. As with the Proposed Action,

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the increase in office stock under the Modified Proposal Alternative would add to the dynamism of the City's office market and meet the needs of tenants seeking high-quality space with extensive amenities/technologies/services.

20.7.3 Open Space

As with the Proposed Action, there would be no significant adverse impacts on open space as a result of the Modified Proposal Alternative.

Compared to the Proposed Action, the Modified Proposal Alternative would result in a smaller increase in the population of both non-residents and combined non-residents and residents in the open space study area, compared to the No-Action condition. Specifically, whereas the Proposed Action would result in an increase of 16,042 non-residents and 15,139 combined non-residents and residents over the No-Action condition, the Modified Proposal Alternative would result in an increase of 14,456 non-residents and 14,250 combined non-residents and residents over the No-Action condition. The open space acreage in the future with the Modified Proposal Alternative would be the same as that in the future with the Proposed Action.

As shown in Table 20-13, the resultant passive open space ratio with the Modified Proposal Alternative—rounded to the nearest thousandth—would be 0.072 acres per 1,000 non-residents, which is the same as that with the Proposed Action; the passive open space ratio with both the Modified Proposal Alternative and the Proposed Action would be 1.37 percent lower than that in the No-Action condition (0.073). The combined open space ratio with the Modified Proposal Alternative would be 0.064 acres per 1,000 non-residents and residents, which is the same as that with the Proposed Action; the passive open space ratio with both the Modified Proposal Alternative and the Proposed Action would be 1.54 percent lower than that in the No-Action condition (0.065).

As with the Proposed Action, the Modified Proposal Alternative would not result in significant adverse open space impacts. While the acreage of passive open space resources in the study area is and would continue to be deficient in comparison to the CEQR benchmark (i.e., 0.15 for the non-residential population and 0.187 for the combined non-residential and residential population), the deficiency would not be substantially exacerbated with the Modified Proposal Alternative, as the percentage change in the open space ratios from the No-Action to With-Action conditions for this alternative would be less than 5 percent, which is used as a threshold for identifying significant adverse impacts because the study area is neither well-served nor underserved by open space resources. Therefore, as with the Proposed Action, the Modified Proposal Alternative would not result in significant adverse indirect open space impacts. Furthermore, as with the Proposed Action, the Modified Proposal Alternative would not result in the direct displacement of any existing publicly accessible open space resources, nor would it result in significant adverse impacts on any open spaces due to construction, shadows, noise, or air quality.

TABLE 20-13: PASSIVE OPEN SPACE RATIOS – COMPARISON OF PROPOSED ACTION TO MODIFIED PROPOSAL ALTERNATIVE

Ratio	CEQR Open Space Ratio Benchmark	Open Space Ratios Per 1,000 People				Percentage Change from No-Action to With-Action	
		Proposed Action		Modified Proposal Alternative		Proposed Action	Modified Proposal Alternative
		No-Action	With-Action	No-Action	With-Action		
Non-Residents	0.15	0.073	0.072	0.073	0.072	-1.37%	-1.37%
Combined Non-Residents and Residents	Weighted ⁽¹⁾ 0.188/0.187 (No-Action/With-Action)	0.065	0.064	0.065	0.064	-1.54%	-1.54%

(1) Based on a target open space ratio established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents. Since this benchmark depends on the proportion of non-residents and residents in the study area's population, it is different for each analysis condition. Each of these ratios is listed in this table.

20.7.4 Shadows

As with the Proposed Action, the Modified Proposal Alternative would not result in any significant adverse shadows impacts on open spaces, but would result in significant adverse impacts to three architectural resources with sunlight-sensitive features. Although there would be an increase in the extent and/or duration of incremental shadows cast by Potential Development Sites 12 and 19, and Projected Development Sites 16 and 17, on several open spaces with the Modified Proposal Alternative compared to the Proposed Action—due to the increased building heights and modified distribution of building bulk for the two potential and two projected development sites, respectively, under this alternative, as discussed below—those shadows would not result in significant adverse impacts on these open spaces, nor would the shadows affect any open spaces other than those already identified under the Proposed Action. Furthermore, under the Modified Proposal Alternative, the incremental shadows cast by the projected and potential development sites on the sunlight-sensitive features of St. Bartholomew’s Church and Community House, the Lady Chapel of St. Patrick’s Cathedral, and the Christ Church United Methodist building, would be identical to the incremental shadows under the Proposed Action, and thus this alternative would not exacerbate the significant adverse impacts to these three architectural resources.

Based on the Modified Proposal Alternative RWCDS, the estimated building height for Potential Development Site 12 would increase from 460 feet under the Proposed Action RWCDS to 590 feet under this alternative, and the estimated building height for Potential Development Site 19 would increase from 355 feet to 390 feet since the predominant use of the buildings would be office use. While office uses generally maximize floorplate size, office buildings on these two small sites most likely could not accommodate larger tower floorplates than were assumed in the RWCDS for the Proposed Action. This

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factor, when combined with the higher floor-to-floor height and greater mechanical space generally assumed for office uses compared to hotel use would result in an increased height relative to the hotel use analyzed in the RWCDs for the Proposed Action. Additionally, under the Modified Proposal Alternative, Projected Development Sites 16 and 17 would decrease slightly in height since, on these larger sites, the office uses introduced into the buildings could be accommodated on expanded floorplates compared to the massing in the Proposed Action, with the floor area of the building being fully utilized on fewer floors. The shadows analysis conducted for the Modified Proposal Alternative evaluated the extent and duration of incremental shadows on sunlight-sensitive resources cast by the projected and potential development sites under this alternative, compared to the Proposed Action.

20.7.4.1 Open Spaces

As with the Proposed Action, the Modified Proposal Alternative would not result in any significant adverse shadows impacts on open spaces. As the Modified Proposal Alternative would only result in increased height of Potential Development Sites 12 and 19, and modifications to the distribution of building bulk of Projected Development Sites 16 and 17, the results of the shadows analysis conducted for the Proposed Action would remain the same for the vast majority of the identified sunlight-sensitive resources. The only resources that would experience an increase in extent and/or duration of incremental shadows are discussed below and are identified in Table 20-14, which lists the incremental shadow enter/exit times and duration for the Modified Proposal Alternative compared to the Proposed Action. To complement the information contained in Table 20-14, The "Incremental Shadows on Resources of Concern" figure in Appendix 6 depicts the additional incremental shadows as cast on the affected sunlight-sensitive resources under the Modified Proposal Alternative.

TABLE 20-14: COMPARISON OF SHADOW DURATION ON RESOURCES OF CONCERN – PROPOSED ACTION RWCDs AND MODIFIED PROPOSAL ALTERNATIVE RWCDs

Site Number: Resource Scenario		ANALYSIS DAY			
		March 21/ September 21 Time Frame Window 7:27 a.m. – 4:37 p.m.	May 6/August 6 Time Frame Window 6:18 a.m. – 5:25 p.m.	June 21 Time Frame Window 5:55 a.m. – 5:58 p.m.	December 21 Time Frame Window 8:47 a.m. – 3:00 p.m.
38: 875 Third Avenue					
Proposed Action RWCDs	Shadow enter-exit time	2:15 p.m. – 3:09 p.m.	1:42 p.m. – 3:01 p.m.	1:42 p.m. – 4:09 p.m.	No New Shadow
	Incremental shadow duration	0 hrs. 54 mins.	1 hr. 19 mins.	2 hrs. 27 mins.	
Modified Proposal Alternative RWCDs	Shadow enter-exit time	2:09 p.m. – 3:09 p.m.	1:42 p.m. – 3:01 p.m.	1:42 p.m. – 4:09 p.m.	No New Shadow
	Incremental shadow duration	1 hr. 0 mins.	1 hr. 19 mins.	2 hrs. 27 mins.	
43: Greenacre Park, 217 East 51st Street					
Proposed Action RWCDs	Shadow enter-exit time	No New Shadow	3:38 p.m. – 4:23 p.m.	4:04 p.m. – 4:43 p.m. 5:07 p.m. – 5:16 p.m.	No New Shadow
	Incremental shadow duration		0 hrs. 45 mins.	0 hrs. 48 mins.	
Modified Proposal Alternative RWCDs	Shadow enter-exit time	No New Shadow	3:38 p.m. – 4:23 p.m.	3:18 p.m. – 4:43 p.m. 5:07 p.m. – 5:16 p.m.	No New Shadow
	Incremental shadow duration		0 hrs. 45 mins.	1 hr. 34 mins.	
49: 800 Third Avenue					
Proposed Action RWCDs	Shadow enter-exit time	1:25 p.m. – 2:22 p.m.	No New Shadow	2:37 p.m. – 3:40 p.m.	12:13 p.m. – 12:24 p.m. 12:53 p.m. – 1:22 p.m.
	Incremental shadow duration	0 hrs. 57 mins.		1 hr. 3 mins.	0 hrs. 40 mins.
Modified Proposal Alternative RWCDs	Shadow enter-exit time	1:25 p.m. – 2:22 p.m.	2:00 p.m. – 2:38 p.m.	2:37 p.m. – 3:40 p.m.	12:13 p.m. – 12:24 p.m. 12:53 p.m. – 1:22 p.m.
	Incremental shadow duration	0 hrs. 57 mins.	0 hrs. 38 mins.	1 hr. 3 mins.	0 hrs. 40 mins.

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TABLE 20-14: COMPARISON OF SHADOW DURATION ON RESOURCES OF CONCERN – PROPOSED ACTION RWCDs AND MODIFIED PROPOSAL ALTERNATIVE RWCDs (CONTINUED)

Site Number: Resource Scenario		ANALYSIS DAY			
		March 21/ September 21 Time Frame Window 7:27 a.m. – 4:37 p.m.	May 6/August 6 Time Frame Window 6:18 a.m. – 5:25 p.m.	June 21 Time Frame Window 5:55 a.m. – 5:58 p.m.	December 21 Time Frame Window 8:47 a.m. – 3:00 p.m.
53: 280 Park Avenue					
Proposed Action RWCDs	Shadow enter-exit time	8:03 a.m. – 8:19 a.m.	2:00 p.m. – 3:43 p.m.	8:32 a.m. – 8:58 a.m.	No New Shadow
		8:33 a.m. – 8:39 a.m.		2:08 p.m. – 3:51 p.m.	
		8:51 a.m. – 9:04 a.m.			
		1:27 p.m. – 1:45 p.m.			
	Incremental shadow duration	0 hrs. 53 mins.	1 hr. 43 mins.	2 hrs. 9 mins.	
Modified Proposal Alternative RWCDs	Shadow enter-exit time	8:03 a.m. – 8:19 a.m.	2:00 p.m. – 3:43 p.m.	8:32 a.m. – 8:58 a.m.	No New Shadow
		8:33 a.m. – 8:39 a.m.		2:08 p.m. – 3:51 p.m.	
		8:51 a.m. – 9:04 a.m.			
		9:15 a.m. – 9:39 a.m.			
	1:27 p.m. – 1:45 p.m.				
Incremental shadow duration	1 hr. 17 mins.	1 hr. 43 mins.	2 hrs. 9 mins.		
54: 299 Park Avenue					
Proposed Action RWCDs	Shadow enter-exit time	9:22 a.m. – 10:39 a.m.	8:07 a.m. – 8:49 a.m.	8:34 a.m. – 8:44 a.m.	No New Shadow
		2:09 p.m. – 3:24 p.m.	9:01 a.m. – 9:31 a.m.	8:49 a.m. – 9:12 a.m.	
			9:41 a.m. – 10:21 a.m.	9:20 a.m. – 10:04 a.m.	
			1:55 p.m. – 3:01 p.m.	5:05 p.m. – 5:19 p.m.	
	Incremental shadow duration	2 hrs. 32 mins.	3 hrs. 15 mins.	1 hr. 31 mins.	
Modified Proposal Alternative RWCDs	Shadow enter-exit time	9:19 a.m. – 10:45 a.m.	8:07 a.m. – 8:49 a.m.	8:34 a.m. – 8:44 a.m.	No New Shadow
		2:09 p.m. – 3:24 p.m.	9:01 a.m. – 9:31 a.m.	8:49 a.m. – 9:12 a.m.	
			9:41 a.m. – 10:21 a.m.	9:20 a.m. – 10:04 a.m.	
			1:55 p.m. – 3:01 p.m.	5:05 p.m. – 5:19 p.m.	
	Incremental shadow duration	2 hrs. 41 mins.	3 hrs. 15 mins.	1 hr. 31 mins.	

TABLE 20-14: COMPARISON OF SHADOW DURATION ON RESOURCES OF CONCERN – PROPOSED ACTION RWCDs AND MODIFIED PROPOSAL ALTERNATIVE RWCDs (CONTINUED)

Site Number: Resource Scenario		ANALYSIS DAY			
		March 21/ September 21 Time Frame Window 7:27 a.m. – 4:37 p.m.	May 6/August 6 Time Frame Window 6:18 a.m. – 5:25 p.m.	June 21 Time Frame Window 5:55 a.m. – 5:58 p.m.	December 21 Time Frame Window 8:47 a.m. – 3:00 p.m.
55: Cosmopolitan Condominiums, 141 East 48th Street					
Proposed Action RWCDs	Shadow enter-exit time	12:08 p.m. – 12:41 p.m.	11:46 a.m. – 1:12 p.m.	11:53 a.m. – 2:11 p.m. 3:23 p.m. – 3:53 p.m.	No New Shadow
	Incremental shadow duration	0 hrs. 33 mins.	1 hr. 26 mins.	2 hrs. 48 mins.	
Modified Proposal Alternative RWCDs	Shadow enter-exit time	11:42 a.m. – 12:41 p.m.	11:46 a.m. – 1:12 p.m.	11:53 a.m. – 2:11 p.m. 3:23 p.m. – 3:55 p.m.	No New Shadow
	Incremental shadow duration	0 hrs. 59 mins.	1 hr. 26 mins.	2 hrs. 50 mins.	
56: 780 Third Avenue					
Proposed Action RWCDs	Shadow enter-exit time	1:46 p.m. – 2:20 p.m.	1:02 p.m. – 3:06 p.m.	2:15 p.m. – 3:28 p.m.	12:07 p.m. – 12:24 p.m. 12:40 p.m. – 1:24 p.m.
	Incremental shadow duration	0 hrs. 34 mins.	2 hrs. 4 mins.	1 hr. 13 mins.	1 hr 1 min.
Modified Proposal Alternative RWCDs	Shadow enter-exit time	1:46 p.m. – 2:20 p.m.	1:02 p.m. – 3:06 p.m.	2:15 p.m. – 3:28 p.m.	12:07 p.m. – 12:24 p.m. 12:40 p.m. – 1:24 p.m.
	Incremental shadow duration	0 hrs. 34 mins.	2 hrs. 4 mins.	1 hr. 13 mins.	1 hr 1 min.
57: 777 Third Avenue					
Proposed Action RWCDs	Shadow enter-exit time	2:15 p.m. – 3:30 p.m.	1:44 p.m. – 3:34 p.m.	2:20 p.m. – 4:14 p.m.	1:43 p.m. – 1:48 p.m.
	Incremental shadow duration	1 hr. 15 mins.	1 hr. 50 mins.	1 hr. 54 mins.	0 hrs. 5 mins.
Modified Proposal Alternative RWCDs	Shadow enter-exit time	2:15 p.m. – 3:30 p.m.	1:44 p.m. – 3:34 p.m.	2:20 p.m. – 4:14 p.m.	1:43 p.m. – 1:48 p.m.
	Incremental shadow duration	1 hr. 15 mins.	1 hr. 50 mins.	1 hr. 54 mins.	0 hrs. 5 mins.

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TABLE 20-14: COMPARISON OF SHADOW DURATION ON RESOURCES OF CONCERN – PROPOSED ACTION RWCDs AND MODIFIED PROPOSAL ALTERNATIVE RWCDs (CONTINUED)

Site Number: Resource Scenario		ANALYSIS DAY			
		March 21/ September 21 Time Frame Window 7:27 a.m. – 4:37 p.m.	May 6/August 6 Time Frame Window 6:18 a.m. – 5:25 p.m.	June 21 Time Frame Window 5:55 a.m. – 5:58 p.m.	December 21 Time Frame Window 8:47 a.m. – 3:00 p.m.
64: 245 Park Avenue					
Proposed Action RWCDs	Shadow enter-exit time	9:22 a.m. – 11:19 a.m.	7:16 a.m. – 8:48 a.m.	7:24 a.m. – 9:59 a.m.	No New Shadow
		3:05 p.m. – 3:12 p.m.	9:07 a.m. – 9:28 a.m.	10:18 a.m. – 11:44 a.m.	
			2:15 p.m. – 4:16 p.m.	2:18 p.m. – 4:52 p.m.	
	Incremental shadow duration	2 hrs. 4 mins.	3 hrs. 54 mins.	6 hrs. 35 mins.	
Modified Proposal Alternative RWCDs	Shadow enter-exit time	7:47 a.m. – 7:54 a.m.	7:16 a.m. – 8:58 a.m.	7:24 a.m. – 9:59 a.m.	No New Shadow
		9:22 a.m. – 11:19 a.m.	9:07 a.m. – 9:28 a.m.	10:18 a.m. – 11:44 a.m.	
		3:05 p.m. – 3:12 p.m.	2:15 p.m. – 4:16 p.m.	2:18 p.m. – 4:52 p.m.	
	Incremental shadow duration	2 hrs. 11 mins.	4 hrs. 4 mins.	6 hrs. 35 mins.	
110: Park Avenue Malls					
Proposed Action RWCDs	Shadow enter-exit time	1:46 p.m. – 2:48 p.m.	1:20 p.m. – 3:00 p.m.	1:15 p.m. – 4:19 p.m.	2:05 p.m. – 2:29 p.m.
	Incremental shadow duration	1 hr. 2 mins.	1 hr. 40 mins.	3 hrs. 4 mins.	0 hrs. 24 mins.
Modified Proposal Alternative RWCDs	Shadow enter-exit time	1:46 p.m. – 2:48 p.m.	1:20 p.m. – 3:00 p.m.	1:15 p.m. – 4:19 p.m.	2:05 p.m. – 2:29 p.m.
	Incremental shadow duration	1 hr. 2 mins.	1 hr. 40 mins.	3 hrs. 4 mins.	0 hrs. 24 mins.

Note: Daylight savings time not used.

38: 875 Third Avenue

As with the Proposed Action, incremental shadows would reach this plaza on three of the analysis days under the Modified Proposal Alternative; there would be no incremental shadows on the December 21st analysis day. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be approximately 6 minutes longer in duration (i.e., 1 hour as opposed to 54 minutes), and somewhat larger in extent for most of the duration, during the March 21st analysis day. As with the Proposed Action, the incremental shadows under the Modified Proposal Alternative would sweep across the planter that has a seating ledge along the frontage of Third Avenue, but would not affect the publicly accessible tables and movable chairs located at this plaza, and there would be no anticipated effects to the usability of this passive open space resource. Under both the Proposed Action and the Modified Proposal Alternative, during the March 21st analysis day—when the usability of seating areas is reliant upon exposure to sunlight—the incremental shadow would occur after the peak period, and thus utilization is not likely to be affected. The extent and duration of incremental shadows cast on this resource on the May 6th and June 21st analysis days would be the same under the Modified Proposal Alternative as under the Proposed Action. On all three analysis days under both the Proposed Action and the Modified Proposal Alternative, the planter that would be covered by the incremental shadow receives less than 4–6 hours of direct sunlight exposure under existing conditions, and thus the vegetation is assumed to shade tolerant. Therefore, as with the Proposed Action, the incremental shadows are not expected to create any significant adverse impacts to this plaza under the Modified Proposal Alternative.

43: Greenacre Park, 217 East 51st Street

As with the Proposed Action, this park would experience incremental shadows during the May 6th and June 21st analysis days under the Modified Proposal Alternative. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be approximately 46 minutes longer in duration (i.e., 1 hour and 34 minutes as opposed to 48 minutes) during the June 21st analysis day. As with the Proposed Action, the incremental shadows under the Modified Proposal Alternative would be cast along the southern portion of the park—which contains trees, planters, and benches—in the late afternoon on the June 21st analysis day. The extent and duration of incremental shadows cast on this resource on the May 6th analysis day would be the same under the Modified Proposal Alternative as under the Proposed Action. On both of these analysis days, which fall within the growing season for vegetation, there would continue to be sufficient sunlight of 4 to 6 hours to allow for vegetation growth under both the Modified Proposal Alternative and the Proposed Action. Additionally, the incremental shadows would not be expected to substantially affect utilization of the plaza under either the Modified Proposal Alternative or the Proposed Action, as the usability of seating areas is not reliant upon exposure to sunlight in the warm-weather months. Therefore, as with the Proposed Action, the incremental shadows under the Modified Proposal Alternative would not result in a significant adverse impact to this resource.

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49: 800 Third Avenue

As with the Proposed Action, this public plaza would experience incremental shadows with durations of 57 minutes, 1 hour and 3 minutes, and 40 minutes, during the March 21st, June 21st, and December 21st analysis days, respectively, under the Modified Proposal Alternative. Whereas there would be no incremental shadows on this plaza during the May 6th analysis day under the Proposed Action, there would be an incremental shadow with a duration of 38 minutes—from 2:00 p.m. to 2:38 p.m.—on this analysis day under the Modified Proposal Alternative. The incremental shadow on the May 6th analysis day under the Modified Proposal Alternative would be cast only on the southern portion of this plaza, where there are no open space features. The planters with seating ledges are located on the northern side of the plaza, which would be unaffected by the incremental shadow. Therefore, as with the Proposed Action, the incremental shadows under the Modified Proposal Alternative are not expected to reduce vegetation growth or usability of this plaza, and there would be no significant adverse impacts.

53: 280 Park Avenue

As with the Proposed Action, the incremental shadows resulting from the Modified Proposal Alternative would reach this resource on three of the four analysis days; no incremental shadow would be cast on the December 21st analysis day. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be approximately 24 minutes longer in duration (i.e., 1 hour and 17 minutes as opposed to 53 minutes) during the March 21st analysis day. The additional 24 minutes of incremental shadow would cover planters and benches between 9:15 a.m. and 9:39 a.m. during the March 21st analysis day. It is not anticipated that the additional incremental shadow in the morning would affect usability of the plaza, as the peak hours of usage for passive open space resources in commercial areas are generally between noon and 2:00 p.m. Additionally, under existing conditions on the March 21st analysis day, this resource receives less than 4–6 hours of direct sunlight exposure, and thus the planters at this resource are assumed to be well suited for shaded areas. The extent and duration of incremental shadows cast on this resource on the May 6th and June 21st analysis days would be the same under the Modified Proposal Alternative as under the Proposed Action. Therefore, as with the Proposed Action, no significant adverse impacts to this open space resource are anticipated as a result of the incremental shadows under the Modified Proposal Alternative.

54: 299 Park Avenue

As with the Proposed Action, the incremental shadows resulting from the Modified Proposal Alternative would reach this resource on three of the four analysis days; no incremental shadow would be cast on the December 21st analysis day. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be approximately 9 minutes longer in duration (i.e., 2 hours and 41 minutes as opposed to 2 hours and 32 minutes), and somewhat larger in extent for about half of the duration, during the March 21st analysis day. The additional incremental shadow would cover the southern portion of the plaza, where there are several planters, some of which with seating ledges. Under existing conditions on this analysis day, this resource receives less than 4–

6 hours of direct sunlight exposure, and thus the planters are assumed to be well suited for shaded areas. Additionally, there would be no incremental shadows cast between noon and 2:00 p.m., which generally corresponds to the peak hours of usage for passive open space resources in commercial areas, and the areas covered by the incremental shadows would experience direct sunlight exposure during portions of the peak period. The extent and duration of incremental shadows cast on this resource on the May 6th and June 21st analysis days would be the same under the Modified Proposal Alternative as under the Proposed Action. Therefore, as with the Proposed Action, the incremental shadows under the Modified Proposal Alternative are not expected to adversely affect either vegetation growth or usability of this plaza.

55: Cosmopolitan Condominiums, 141 East 48th Street

As with the Proposed Action, the incremental shadows resulting from the Modified Proposal Alternative would reach this open space resource on three of the four analysis days; no incremental shadow would be cast on the December 21st analysis day. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be approximately 26 minutes longer in duration (i.e., 59 minutes as opposed to 33 minutes) during the March 21st analysis day, very slightly larger in extent—with no change in duration—during the May 6th analysis day, and two minutes longer in duration (i.e., 2 hours and 50 minutes as opposed to 2 hours and 48 minutes)—and somewhat larger in extent for most of the duration—during the June 21st analysis day. Under both the Proposed Action and the Modified Proposal Alternative, on the March 21st analysis day, a small incremental shadow would cover several planters with seating ledges in this plaza. Under existing conditions, this resource receives less than 4–6 hours of direct sunlight exposure, and thus the plantings are assumed to be well suited for shaded areas. Additionally, most of the space, including the seating ledge, is covered by shadows for the majority of the day under existing conditions, and thus the incremental shadows, which are limited in extent, are not expected to affect utilization of the resource under either Proposed Action or the Modified Proposal Alternative. On the May 6th and June 21st analysis days under both the Proposed Action and the Modified Proposal Alternative, the incremental shadows are not anticipated to substantially reduce utilization of the resource; despite the extended duration of the incremental shadows, the usability of seating areas is not reliant upon exposure to sunlight in the warm-weather months. Therefore, as with the Proposed Action, no significant adverse impacts on this plaza are anticipated due to incremental shadows under the Modified Proposal Alternative.

56: 780 Third Avenue

As with the Proposed Action, this plaza would experience incremental shadows on all four analysis days under the Modified Proposal Alternative. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be larger in extent—with no change in duration—during the June 21st analysis day. As with the Proposed Action, incremental shadows on the June 21st analysis day under the Modified Proposal Alternative would pass over the southeastern portion of the plaza where there are no publicly accessible seating options, for a duration of 1 hour and 13 minutes. The incremental shadows would not affect the usability of this passive open space resource, and

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there is no vegetation at this plaza. The extent and duration of incremental shadows cast on this resource on the March 21st, May 6th, and December 21st analysis days would be the same under the Modified Proposal Alternative as under the Proposed Action. Therefore, as with the Proposed Action, no adverse shadows impacts are anticipated under the Modified Proposal Alternative.

57: 777 Third Avenue

As with the Proposed Action, this open space resource would experience incremental shadows on all four analysis days under the Modified Proposal Alternative. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be larger in extent—with no change in duration—during the May 6th and June 21st analysis days. As with the Proposed Action, on the May 6th and June 21st analysis days, incremental shadows under the Modified Proposal Alternative would be cast along the western and southern sections of the plaza for durations of 1 hour and 50 minutes and 1 hour and 54 minutes, respectively, at times covering planters and benches located on Third Avenue. The incremental shadows cast during these analysis days would not be expected to reduce the utilization of the open space resource, as the usability of seating areas is not reliant upon exposure to sunlight in the warm-weather months. Additionally, since the plaza receives less than 4-6 hours of direct sunlight exposure under existing conditions for these analysis days, it is assumed that vegetation at this plaza is shade tolerant. The extent and duration of incremental shadows cast on this resource on the March 21st and December 21st analysis days would be the same under the Modified Proposal Alternative as under the Proposed Action. Therefore, as with the Proposed Action, no adverse shadows impacts are anticipated at this plaza under the Modified Proposal Alternative.

64: 245 Park Avenue

As with the Proposed Action, the incremental shadows resulting from the Modified Proposal Alternative would reach this open space resource on three of the four analysis days; no incremental shadow would be cast on the December 21st analysis day. Compared to the Proposed Action, incremental shadows cast on this open space resource under the Modified Proposal Alternative would be approximately 7 minutes longer in duration (i.e., 2 hours and 11 minutes as opposed to 2 hours and 4 minutes) during the March 21st analysis day, approximately 10 minutes longer in duration (i.e., 4 hours and 4 minutes as opposed to 3 hours and 54 minutes) during the May 6th analysis day, and larger in extent—with no change in duration—during the June 21st analysis day. As with the Proposed Action, despite the extended durations of the incremental shadows under the Modified Proposal Alternative on the March 21st, May 6th, and June 21st analysis days, they are not likely to result in any significant adverse impacts. Much of the plaza space is covered by the building overhang, and the majority of the space does not have any open space features. The limited planters and wall seating located along the building's frontage on East 46th and East 47th Streets are already covered in shade for most of the day under existing conditions during all three of the analysis days; therefore, the planters are assumed to be shade tolerant, and the incremental shadows would not be anticipated to affect usability of the resource under either the Proposed Action or the Modified Proposal Alternative. Therefore, as with the Proposed Action, incremental shadows cast by the

Modified Proposal Alternative are not expected to result in a significant adverse impact to the plaza at 245 Park Avenue.

110: Park Avenue Malls, Park Avenue median between East 34th and East 39th Streets, and between East 46th and East 65th Streets

As with the Proposed Action, the Park Avenue Malls north of East 46th Street would experience incremental shadows on all four analysis days under the Modified Proposal Alternative, and the portion of the open space resource between East 34th and East 39th Streets would not experience incremental shadows on any of the four analysis days. Under both the Proposed Action and the Modified Proposal Alternative, incremental shadows would be cast intermittently throughout much of the day, covering small portions of the vast Park Avenue Malls for limited durations. Compared to the Proposed Action, incremental shadows cast on this resource under the Modified Proposal Alternative would be slightly larger in extent between 9:15 a.m. and 10:03 a.m. on the March 21st analysis day and between 8:05 a.m. and 8:40 a.m. on the May 6th analysis day, but the time of the greatest incremental shadow extent and duration would continue to occur in the early afternoon on these two analysis days. Additionally, the extent and duration of incremental shadows cast on this resource on the June 21st and December 21st analysis days would be the same under the Modified Proposal Alternative as under the Proposed Action. During all four analysis days, this resource remains largely shaded for much of the day under existing conditions, and receives less than 4–6 hours of direct sunlight exposure. Therefore, it is assumed that the existing vegetation within the Park Avenue Malls is shade tolerant. Additionally, since this resource does not provide usable open space for passive recreation, the incremental shadows would not affect utilization of the resource. Therefore, as with the Proposed Action, the incremental shadows would not be expected to result in a significant adverse impact under the Modified Proposal Alternative.

20.7.4.2 Historic Resources

As with the Proposed Action, the Modified Proposal Alternative would result in significant adverse impacts to three architectural resources with sunlight-sensitive features. No historic resources would experience a change in extent and/or duration of incremental shadows under the Modified Proposal Alternative when compared to the Proposed Action. Under the Modified Proposal Alternative, the incremental shadows cast by the projected and potential development sites on the sunlight-sensitive features of St. Bartholomew's Church and Community House, the Lady Chapel of St. Patrick's Cathedral, and the Christ Church United Methodist building, would be identical to the incremental shadows under the Proposed Action, and thus this alternative would not exacerbate the significant adverse impacts to these three architectural resources. The following discussion summarizes the significant adverse shadow impacts to these three historic resources that would occur under both the Proposed Action and the Modified Proposal Alternative. Partial mitigation of significant adverse shadow impacts on historic resources due to the Modified Proposal Alternative, as with the Proposed Action, is discussed in Chapter 19, "Mitigation." This includes provision of measures that would serve as a substitute for the direct sunlight on these sun-sensitive features. In order to adopt such measures in the absence of a site-specific

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approval, such as a Special Permit with an accompanying restrictive declaration, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement this mitigation. In consultation with LPC staff, DCP, as lead agency, explored the viability of this mitigation measure between Draft EIS and Final EIS. It was determined that techniques exist for artificial lighting, as well as for the reflection of natural light through architectural features or reflective panels, that could potentially serve as a partial substitute for the loss of direct sunlight.

To allow for the potential installation of such features, the CPC is currently considering a modification to the zoning text amendment that would require, prior to the issuance of a New Building Permit for development of Projected Development Sites 12 and 18, and Potential Development Site 14, that the developer provide the DCP with a shadow analysis identifying the incremental shadows cast by the proposed building on the affected resource, and that the Chairperson of the CPC, acting in consultation with the Chair of the LPC, certify to the Commissioner of Buildings either: a) that a plan for such features has been developed and will be implemented; or, b) that such a plan is not feasible or is impracticable, would negatively affect the character or integrity of the historic resource, or has not been accepted by the owner of the resource.

In the event that a plan for artificial lighting or reflection of natural light were developed and implemented pursuant to this provision, significant adverse shadows impacts under the Proposed Action would be partially mitigated. Absent such a plan, the Proposed Action's significant adverse shadows impacts would be wholly unmitigated.

St. Bartholomew's Church and Community House

As with the Proposed Action, the sunlight-sensitive stained-glass windows of St. Bartholomew's Church and Community House would experience significant adverse shadows impacts on the May 6th and June 21st analysis days under the Modified Proposal Alternative. Since the stained-glass windows are all experienced within a single large interior space, as opposed to multiple spaces where each individual space experiences only a portion of the windows, the assessment of the potential impact caused by the incremental shadows considered the cumulative effect on all of the windows together. On the May 6th analysis day, between 8:02 a.m. and 8:40 a.m., the effect of the incremental shadows—cast by Projected Development Site 12 and Potential Development Site 14 on the building's northern and southern façades, respectively—would be to completely eliminate all direct sunlight on the building's stained-glass windows under both the Proposed Action and the Modified Proposal Alternative. Incremental shadows from these sites would also affect stained-glass windows between 3:05 p.m. to 4:14 p.m., again eliminating all direct sunlight on the building's stained-glass windows. On the June 21st analysis day, between 3:23 p.m. and 3:55 p.m., the effect of the incremental shadows—cast by Projected Development Site 12—would be to completely eliminate all direct sunlight on the building's stained-glass windows. The incremental shadows that would be cast on these two analysis days under both the Proposed Action and the Modified Proposal

Alternative would result in a reduction in sunlight available for the enjoyment or appreciation of the building's stained-glass windows, and thus the incremental shadows are being considered significant adverse shadows impacts.

St. Patrick's Cathedral

As with the Proposed Action, the stained-glass windows of the Lady Chapel of St. Patrick's Cathedral, which is experienced as a distinct space within the Cathedral, would experience significant adverse shadows impacts on the March 21st analysis day under the Modified Proposal Alternative. During this analysis day, Projected Development Site 12 would remove sunlight from the windows on the southern and eastern façades starting at 10:07 a.m. until 10:58 a.m., thereby removing all remaining sunlight for this period under both the Proposed Action and the Modified Proposal Alternative. Lady Chapel would continue to experience sunlight at other times of the day—from 11:58 a.m. to 1:24 p.m., and from 1:28 p.m. to 2:40 p.m.; a total of two hours and 38 minutes. Given that the incremental shadow from Projected Development Site 12 would eliminate remaining sunlight on the resource during the morning, and that the incremental shadow would remove nearly a quarter of the sunlight on this analysis day as a whole, this incremental shadow would be considered a significant adverse impact under both the Proposed Action and the Modified Proposal Alternative.

Christ Church United Methodist

As with the Proposed Action, the stained-glass windows of the Christ Church United Methodist building would experience a significant adverse shadows impact on the December 21st analysis day under the Modified Proposal Alternative. During this analysis day, the incremental shadow would be cast by Projected Development Site 18 on the eastern façade of Christ Church United Methodist for approximately 21 minutes from 12:59 p.m. to 1:20 p.m., covering the stained-glass windows along the building's Park Avenue frontage, under both the Proposed Action and the Modified Proposal Alternative. Between 1:04 p.m. and 1:18 p.m., all of the building's stained-glass windows would be completely covered by shadow. Since the incremental shadow under both the Proposed Action and the Modified Proposal Alternative would completely eliminate all direct sunlight on the sunlight-sensitive features of this resource, albeit for a brief duration of approximately 14 minutes, it could have the potential to affect the public's enjoyment of these features. As with the Proposed Action, the limited duration of the incremental shadow under the Modified Proposal Alternative is considered substantial in this case because in the No-Action condition the building's sunlight-sensitive features would only be exposed to sunlight for approximately 53 minutes, from 12:55 p.m. to 1:48 p.m.; thus the incremental shadow would result in a substantial reduction of available sunlight. Therefore, as with the Proposed Action, the incremental shadow under the Modified Proposal Alternative is being considered a significant adverse shadows impact.

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20.7.5 Historic and Cultural Resources

As with the Proposed Action, the Modified Proposal Alternative would not result in any significant adverse impacts to archaeological resources, historic districts, or individually designated historic resources, but has the potential to result in significant adverse direct and construction-related impacts to eligible historic resources. Overall, the Modified Proposal Alternative would result in the same significant adverse impacts compared with the Proposed Action.

In the Modified Proposal Alternative, development could occur on the same 19 projected development sites and 20 potential development sites identified in the Proposed Action. The LPC reviewed all of the projected and potential development sites that could experience new/additional in-ground disturbance and concluded that none of the lots comprising those sites have any archaeological significance, and thus neither the Proposed Action nor the Modified Proposal Alternative would result in any significant adverse impacts to archaeological resources. Additionally, the projected and potential development sites under both the Proposed Action and the Modified Proposal Alternative are not located within any historic districts, nor do they contain any individually designated historic resources. Under both the Proposed Action and the Modified Proposal Alternative, any development that would be located within 90 feet of a designated/listed historic resource—where new development has the potential to cause damage due to ground-borne construction vibrations—would be subject to the procedures of the New York City Department of Buildings (DOB) Technical Policy and Procedure Notice (TPPN) #10/88, which governs the protection of adjacent historic properties from accidental construction damage. Therefore, as with the Proposed Action, the Modified Proposal Alternative is not expected to result in any direct or construction-related impacts to historic districts or individually designated historic resources.

Both the Proposed Action and the Modified Proposal Alternative have the potential to result in direct impacts to resources that are eligible for designation as a New York City Landmark (NYCL) or listing on the State/National Registers of Historic Places (S/NR). Due to their location on projected or potential development sites, the following 11 eligible historic resources could be demolished, either partially or entirely, as a consequence of the Modified Proposal Alternative, as with the Proposed Action: the NYCL-eligible buildings at 16, 18-20, and 22-24 East 41st Street; the NYCL- and S/NR-eligible Pershing Square building at 100 East 42nd Street; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the S/NR-eligible Barclay Hotel at 111 East 48th Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL-eligible Shelton Club Hotel at 525 Lexington Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; and the NYCL-eligible Girl Scout Building at 830 Third Avenue. Partial mitigation of significant adverse impacts on historic resources due to the Modified Proposal Alternative, as with the Proposed Action, is discussed in Chapter 19, “Mitigation.” This includes consideration by the CPC of a modification to the zoning text amendment that would require—prior to any demolition of an eligible structure as part of development undertaken on Projected Development Sites 6, 7, 9 and 16 and Potential

Development Sites 2,5,9,12,13 and 19 pursuant to the Modified Proposal Alternative—that the developer conduct and complete HABS recordation in a manner acceptable to the LPC. In the event this modification is adopted, significant adverse impacts resulting from the demolition of eligible resources would be partially mitigated.

Additionally, both the Proposed Action and the Modified Proposal Alternative have the potential to result in construction-related impacts to eligible historic resources, which would not be afforded the protections of TPPN #10/88 unless they become designated/listed. Due to their location within 90 feet of a projected and/or potential development site, the following 24 eligible resources could experience construction-related impacts as a result of the Modified Proposal Alternative, as with the Proposed Action: the NYCL- and S/NR-eligible Chemist Club at 50-52 East 41st Street; the S/NR-eligible Vanderbilt Avenue building at 51 East 42nd Street; the S/NR-eligible East 45th Street Bridges; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the NYCL-eligible Mercantile Library at 17 East 47th Street; the S/NR eligible Barclay Hotel/Hotel Inter-Continental at 111 East 48th Street; the NYCL- and S/NR-eligible townhouse at 39 East 51st Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL-eligible Shelton Club Hotel at 525 Lexington Avenue; the NYCL-eligible building at 299 Madison Avenue; the NYCL-eligible building at 400 Madison Avenue; the NYCL-eligible building at 437 Madison Avenue; the NYCL-eligible Pan Am/Met Life Building at 200 Park Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; the NYCL-eligible Union Carbide Building at 270 Park Avenue; the NYCL-eligible Girl Scout Building at 830 Third Avenue; the NYCL-eligible Citicorp Center at 884 Third Avenue; the NYCL-eligible Yale Club at 50 Vanderbilt Avenue; the S/NR-eligible building at 59 East 54th Street; the S/NR-eligible Lefcourt Colonial Building at 295 Madison Avenue; the S/NR-eligible building at 346 Madison Avenue; the S/NR-eligible Bankers Trust Building at 280 Park Avenue; and the S/NR-eligible Vanderbilt Concourse Building at 52 Vanderbilt Avenue. The CPC is currently considering a proposed modification to the zoning text amendment which would require—prior to excavation or demolition pursuant to the Modified Proposal Development, as with the Proposed Action, on a Projected or Potential Development Site located within 90 feet of an eligible resource—that the Commissioner of Buildings have approved a construction monitoring protocol of similar scope and purpose to the provisions of TPPN #10/88. In the event this modification is adopted, the potential for significant adverse construction-related impacts on eligible resources would be fully mitigated.

Neither the Proposed Action nor the Modified Proposal Alternative would have significant adverse indirect impacts on existing historic resources. The developments resulting from both the Modified Proposal Alternative and the Proposed Action would not alter the context or visual prominence of any historic resources. As with the Proposed Action, the Modified Proposal Alternative would result in significant adverse shadows impacts on the sunlight-sensitive features of St. Bartholomew’s Church and Community House, the Lady Chapel of St. Patrick’s Cathedral, and Christ United Methodist Church.

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Overall, the significant adverse direct, construction-related, and shadows impacts to historic resources under the Modified Proposal Alternative scenario would be the same as those under the Proposed Action, and the availability of mitigation measures discussed in Chapter 18 “Mitigation” would also be the same as under the Proposed Action. The Modified Proposal Alternative would not result in any significant adverse impacts to historic and cultural resources not already identified for the Proposed Action.

20.7.6 Urban Design and Visual Resources

As with the Proposed Action, the Modified Proposal Alternative is not expected to result in any adverse impacts to urban design or visual resources.

Both the Proposed Action and the Modified Proposal Alternative would affect the urban design of the East Midtown area by converting a three-block area along Vanderbilt Avenue—between East 44th and East 47th Streets—to pedestrian space, supplementing the area between East 42nd and East 43rd Streets that would be dedicated to pedestrian use in both the future without or with the Proposed Action. As with the Proposed Action, this change to Vanderbilt Avenue in the Modified Proposal Alternative would increase the amount of street space available to pedestrians and would thereby enhance the urban design of the East Midtown area by transforming the stretch of roadway into a signature pedestrian gateway, befitting its location next to Grand Central Terminal.

In the Modified Proposal Alternative, development could occur on the same 19 projected development sites and 20 potential development sites identified in the Proposed Action. Compared to the Proposed Action, the Modified Proposal Alternative would allow limited amounts of residential use as-of-right on sites that utilize the DIB, and would restrict the amount of hotel use that would be allowed as-of-right on these sites. Nevertheless, under both the Modified Proposal Alternative and the Proposed Action, the projected and potential developments would primarily comprise high-density commercial uses, which would conform to the built context of the East Midtown area. Overall, the building forms and massings that could be realized under the Modified Proposal Alternative would not be substantially different from those resulting from the Proposed Action. Although the total heights of some of the buildings may differ, only two buildings (Potential Development Sites 12 and 19) would have any sizable increase in height when compared to the Proposed Action; the estimated building height for Potential Development Site 12 could increase from 460 feet under the Proposed Action RWCDs to 590 feet under the Modified Proposal Alternative RWCDs, and the estimated building height for Potential Development Site 19 could increase from 355 feet to 390 feet. Additionally, the proposed modified zoning text amendment in the Modified Proposal Alternative includes modifications to the height and setback controls effective along Park Avenue to better reflect the street’s overall width of 140 feet, thereby permitting the tower floorplates of Qualifying Site buildings on Park Avenue to each be slightly larger and more efficient than under the existing regulations, while maintaining the standards of access to light and air. Furthermore, under the Modified Proposal Alternative, the building bulk of several projected and potential development sites

could be distributed differently throughout the respective buildings, when compared to the Proposed Action.

The building bulk of the developments that are expected with both the Modified Proposal Alternative and the Proposed Action would not change the built environment's arrangement, appearance, or functionality, and the height of new buildings would generally be consistent with that of other high-rise buildings in the East Midtown area. The introduction of new buildings with either the Modified Proposal Alternative or the Proposed Action would not affect a pedestrian's experience of public space in the East Midtown area. "Visual Resources along Extended View Corridors" figure in Appendix 6 shows illustrative renderings of views of visual resources along extended view corridors that would be modified under the Modified Proposal Alternative compared to the Proposed Action. As with the Proposed Action, it is assumed that the development under the Modified Proposal Alternative would attempt to maximize floorplate sizes, as has been the practice for recent commercial construction in the City, and thus the heights of streetwalls and buildings in the illustrative renderings present a reasonably conservative estimate of the development potential of the Modified Proposal Alternative. Compared to the Proposed Action, most views from the pedestrian level under the Modified Proposal Alternative would either remain unchanged or the change would be imperceptible. As a result of the projected and potential developments in both the Modified Proposal Alternative and the Proposed Action, some iconic views of visual resources within or from the East Midtown area would be modified by the addition of new buildings along the view corridors; other iconic views in both scenarios would be obstructed from certain vantage points, but similarly iconic views would continue to be widely available from many other locations.

20.7.7 Hazardous Materials

As with the Proposed Action, there would be no significant adverse impacts with respect to hazardous materials as a result of the Modified Proposal Alternative.

Under both the Proposed Action and the Modified Proposal Alternative, the placement of (E) designations would reduce or avoid the potential for significant adverse impacts related to hazardous materials to occur as a result of the projected and potential developments. In the Modified Proposal Alternative, development could occur on the same 19 projected development sites and 20 potential development sites identified in the Proposed Action. As with the Proposed Action, all of the projected and potential development sites would receive an (E) designation under the Modified Proposal Alternative. Therefore, the effects of development on these sites under the Modified Proposal Alternative would be the same as with the Proposed Action with respect to hazardous materials, and would not result in significant adverse impacts.

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20.7.8 Water and Sewer Infrastructure

Under the Modified Proposal Alternative, demands on water and sewer infrastructure on the projected development sites would be somewhat less than under the Proposed Action. However, neither this alternative nor the Proposed Action would cause significant adverse impacts to water and sewer infrastructure.

20.7.8.1 Water Supply

The additional water usage as a result of the Modified Proposal Alternative is expected to total approximately 4,134,279 gallons per day (gpd), resulting in an incremental increase of 949,148 gpd on the 19 projected development sites compared to No-Action conditions. In comparison, the Proposed Action would result in an incremental increase of approximately 1,057,071 gpd on the Proposed Action's 19 projected development sites. As with the Proposed Action, the incremental water demand under this alternative would be less than 1 percent of the City's water supply demand, and changes of this magnitude would not be large enough to have significant adverse impacts on the City's water system.

20.7.8.2 Wastewater Treatment

Based on the rates provided in the *CEQR Technical Manual*, the Modified Proposal Alternative has the potential to result in an incremental sanitary sewage discharge of approximately 332,847 million gpd over No-Action conditions (compared to approximately 366,141 gpd of incremental sanitary sewage discharge under the Proposed Action). As with the Proposed Action, the incremental increase in sanitary flows would not result in significant adverse impacts to the sewage system within the subcatchment areas or to the Newtown Creek Water Pollution Control Plant (WPCP).

20.7.8.3 Stormwater and Drainage Management

Under both the Modified Proposal Alternative and the Proposed Action, new flows would be introduced to the combined sewer system, although flows would be slightly less under this alternative due to the lower incremental sanitary sewage discharge. As the Modified Proposal Alternative would include the same 19 projected development sites as with the Proposed Action, the number of affected Newtown Creek WPCP subcatchment areas would remain the same. Therefore, as with the Proposed Action, the new increased volumes and flows under the Modified Proposal Alternative would be conveyed to the Newtown Creek WPCP via Subcatchment areas NCM-017, NCM-036, and NCM-037.

As with the Proposed Action, due to DEP's new stormwater management requirements established in July 2012, stormwater runoff from new developments under the Modified Proposal Alternative would be expected to substantially decrease as compared to existing conditions. Pursuant to the new guidelines, developers would be required to incorporate stormwater detention and retention measures to handle stormwater runoff from developed sites.

Therefore, neither the Proposed Action nor the Modified Proposal Alternative would result in significant adverse impacts on water supply, wastewater or stormwater conveyance and treatment infrastructure.

20.7.9 Solid Waste and Sanitation Services

Solid waste generation would increase under both the Proposed Action and Modified Proposal Alternative, with a slightly lower incremental increase under the Modified Proposal Alternative (compared to No-Action conditions). However, neither this alternative nor the Proposed Action would cause significant adverse impacts to the City's solid waste and sanitation services.

Under both the Modified Proposal Alternative and the Proposed Action, the majority of the solid waste would be generated by commercial uses, which would be collected by private commercial carters. Due to the Modified Proposal Alternative's increased residential development (compared to residential development with the Proposed Action) approximately 13.2 tons of weekly solid waste would be generated by residential uses and collected by DSNY trucks under this alternative, compared to approximately 4.3 tons of weekly solid waste generated by residential uses with the Proposed Action. However, with an estimated 15.9 tons of weekly solid waste generated by residential uses under No-Action conditions, as with the Proposed Action, the residential solid waste generated under the Modified Proposal Alternative would represent a net decrease, and therefore would not have the potential to affect DSNY's handling capacity due to residential development under this alternative.

In total, development on the 19 projected development sites under the Modified Proposal Alternative would generate approximately 369.1 tons of solid waste per week, an incremental increase of 77.5 tons per week over the No-Action condition (compared to an incremental increase of 104.6 tons per week with the Proposed Action). Changes of this magnitude would be a minimal addition to the City's solid waste stream and would represent less than 1 percent of future commercial waste generation for the City as projected in the City's Solid Waste Management Plan (SWMP). Therefore, neither the Proposed Action nor the Modified Proposal Alternative would result in significant adverse impacts on solid waste and sanitation services.

20.7.10 Energy

While neither the Proposed Action nor the Modified Proposal Alternative would result in significant adverse energy impacts, the Modified Proposal Alternative would result in a slightly lower incremental increase in energy usage compared to the No-Action condition.

Future uses on the 19 projected development sites under the Modified Proposal Alternative would use approximately 3.27 trillion British thermal units (BTU) annually, which would represent an approximately 766,697 million BTU increase over the No-Action condition per year. In comparison, development on the 19 projected development sites under the Proposed Action would result in an

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incremental annual increase of approximately 831,400 million BTU, compared to the No-Action condition.

The incremental increase in annual energy consumption under both the Proposed Action and the Modified Proposal Alternative would represent less than 0.4 percent of the City’s forecasted annual energy requirement of 59,118 GWh for 2022. As such, neither the Proposed Action nor the Modified Proposal Alternative would result in a significant adverse impact on energy systems.

20.7.11 Transportation

As discussed below, compared with the Proposed Action, the Modified Proposal Alternative would generate fewer trips compared to the Proposed Action. With respect to traffic, the Modified Proposal Alternative would have the same number of intersections with unmitigated significant adverse impacts during the AM and Midday peak hours and one additional intersection with unmitigated significant adverse impacts during the PM peak hour compared to the Proposed Action. The Modified Proposal Alternative would also have a net increase of two intersections with significant adverse impacts during the AM peak hour, a net decrease of two intersections with significant adverse impacts during the Midday peak hour, and a net increase of four intersections with significant adverse impacts during the PM peak hour. With respect to transit, with the development of improvements to the Grand Central subway station and the Lexington Avenue/51st Street and 53rd Street station through the DIF, no significant adverse impacts are anticipated to subway line haul or to any analyzed subway station or station complex in both the Modified Proposal Alternative and the Proposed Action. The Modified Proposal Alternative would have similar impacts to local bus routes during the AM and PM peak hours compared to the Proposed Action. With respect to pedestrians, there would not be any sidewalks with unmitigated significant adverse impacts under either the Modified Proposal Alternative or the Proposed Action. The Modified Proposal Alternative would have unmitigated significant adverse impacts at one additional crosswalk in the AM and PM peak hours and the same number of unmitigated significant adverse impacts to crosswalks in the Midday peak hour compared to the Proposed Action. The Modified Proposal Alternative would have an unmitigated significant adverse impact at one additional corner area during the AM peak hour and the same number of unmitigated significant adverse impacts to corner areas during the Midday and PM peak hours. With respect to parking, compared to the Proposed Action there would be a slightly higher demand for parking under the Modified Proposal Alternative and fewer new parking spaces would be provided. As with the Proposed Action, the Modified Proposal Alternative would not result in a shortfall of parking spaces within a ¼-mile radius of the rezoning area.

Travel demand forecasts were prepared for the Modified Proposal Alternative based on the transportation planning factors summarized in Chapter 12, “Transportation.” Table 20-15 presents a comparison of the total peak-hour person trips that would be generated by the Modified Proposal Alternative and Proposed Action during the weekday AM, Midday, and PM peak hours. As shown in the table, the Modified

Proposal Alternative would result in 373, 857, and 569 fewer person trips during the weekday AM, Middyay, and PM peak hours, respectively, which represents an approximate 4-7 percent reduction compared to the Proposed Action. Table 20-16 presents a similar comparison of the total peak-hour vehicle trips and shows that the Modified Proposal Alternative would result in 82, 76, and 72 fewer vehicle trips during the weekday AM, Middyay, and PM peak hours, respectively.

TABLE 20-15: NET DIFFERENCE IN PERSON TRIPS BETWEEN THE MODIFIED PROPOSAL ALTERNATIVE AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Bus		Subway		Railroad		Walk/Other		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour															
Modified Proposal Alternative	453	14	223	-2	1,104	49	3,597	133	1,421	57	837	86	7,635	337	7,972
Proposed Action	485	8	252	11	1,170	38	3,823	99	1,506	51	898	4	8,134	211	8,345
Difference	-32	6	-29	-13	-66	11	-226	34	-85	6	-61	82	-499	126	-373
Middyay Peak Hour															
Modified Proposal Alternative	122	127	157	170	342	363	357	374	-1	-1	4,603	4,907	5,580	5,940	11,520
Proposed Action	141	143	197	204	361	382	383	396	-4	-4	4,938	5,240	6,016	6,361	12,377
Difference	-19	-16	-40	-34	-19	-19	-26	-22	3	3	-335	-333	-436	-421	-857
PM Peak Hour															
Modified Proposal Alternative	38	540	10	268	99	1,300	251	4,198	87	1,643	400	1,244	885	9,193	10,078
Proposed Action	46	575	43	303	95	1,373	257	4,451	83	1,738	385	1,298	909	9,738	10,647
Difference	-8	-35	-33	-35	4	-73	-6	-253	4	-95	15	-54	-24	-545	-569

Source: Parsons Brinckerhoff, Inc., 2013

TABLE 20-16: NET DIFFERENCE IN VEHICLE TRIPS BETWEEN THE MODIFIED PROPOSAL ALTERNATIVE AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Truck		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour									
Modified Proposal Alternative	376	12	175	175	59	59	610	246	856
Proposed Action	402	6	203	203	62	62	667	271	938
Difference	-26	6	-28	-28	-3	-3	-57	-25	-82
Middyay Peak Hour									
Modified Proposal Alternative	92	97	155	155	65	65	312	317	629
Proposed Action	105	108	178	178	68	68	351	354	705
Difference	-13	-11	-23	-23	-3	-3	-39	-37	-76
PM Peak Hour									
Modified Proposal Alternative	25	441	205	205	12	12	242	658	900
Proposed Action	29	469	225	225	12	12	266	706	972
Difference	-4	-28	-20	-20	0	0	-24	-48	-72

Source: Parsons Brinckerhoff, Inc., 2013

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20.7.11.1 Traffic

All study area intersections were evaluated quantitatively to determine if the Modified Proposal Alternative would result in significant impacts and if the impacts could be mitigated. Table 20-17 presents a comparison of the number of approach movements and intersections that would have significant adverse impacts and unmitigated significant adverse impacts for the Modified Proposal Alternative and Proposed Action. Table 20-21 summarizes intersections and approach movements that would have differences in significant adverse traffic impacts and differences in impacted intersections that would be fully mitigated for the Modified Proposal Alternative compared to the Proposed Action. (Additional data for all intersections analyzed under the Modified Proposal Alternative are provided in Appendix 6.) The results of the analysis are summarized below:

- For the weekday AM peak hour, the Modified Proposal Alternative would have the same number of intersections with unmitigated significant impacts compared to the Proposed Action. The Modified Proposal Alternative would also have a net increase of three approach movements with significant impacts; there would be additional approach movements with significant impacts at two intersections that were not impacted by the Proposed Action (Second Avenue at East 46th Street, and Second Avenue at East 53rd Street), there would be additional approach movements with significant impacts at two intersections that were impacted by the Proposed Action (Second Avenue at East 42nd Street, and Third Avenue at East 42nd Street), and there would be fewer approach movements with a significant impact at one intersection that was also impacted by the Proposed Action (Madison Avenue at East 40th Street).
- For the weekday Midday peak hour, the Modified Proposal Alternative would have the same number of intersections with unmitigated significant impacts compared to the Proposed Action. Under the Modified Proposal Alternative, there would be a net decrease of one approach movement with significant impacts; there would no longer be approach movements with significant impacts at two intersections that were impacted by the Proposed Action (Second Avenue at East 57th Street and Lexington Avenue at East 51st Street) while there would be an additional approach movement with a significant impact at one intersection that was not impacted by the Proposed Action (Fifth Avenue at 45th Street).
- For the weekday PM peak hour, the Modified Proposal Alternative would have one additional intersection (Park Avenue at East 51st Street) with unmitigated significant impacts compared to the Proposed Action. The Modified Proposal Alternative would also have a net increase of three approach movements with significant impacts; there would be additional approach movements with significant impacts at four intersections that were not impacted by the Proposed Action (Second Avenue at East 52nd Street, Lexington Avenue at East 39th Street, Lexington Avenue at East 51st Street, and Madison Avenue at East 43rd Street), there would be an additional approach movement with a significant impact at one intersection that was impacted by the Proposed Action (Fifth Avenue at 47th Street),

and there would be fewer approach movements with a significant impact at two intersections that were also impacted by the Proposed Action (Park Avenue at East 39th Street, and Park Avenue at East 49th Street).

TABLE 20-17: NUMBER OF INTERSECTIONS AND APPROACHES WITH SIGNIFICANT ADVERSE TRAFFIC IMPACTS – COMPARISON OF MODIFIED PROPOSAL ALTERNATIVE AND PROPOSED ACTION

Peak Hour	Development Scenario	Movements/ Intersections Analyzed	Movements/ Intersections With No Significant Impacts	Movements/ Intersections With Significant Impacts	Mitigated Movements/ Intersections	Unmitigated Movements/ Intersections
AM	Modified Proposal Alternative	325/90	267/46	58/44	34/28	24/16
	Proposed Action	325/90	270/48	55/42	32/26	23/16
Midday	Modified Proposal Alternative	314/90	274/60	40/30	25/21	15/9
	Proposed Action	314/90	273/59	41/31	28/22	13/9
PM	Modified Proposal Alternative	326/90	277/53	49/37	26/21	23/16
	Proposed Action	326/90	280/57	46/33	23/18	23/15

Source: Parsons Brinckerhoff, Inc., 2013

TABLE 20-18: SUMMARY OF LOCATIONS WITH DIFFERENT SIGNIFICANT ADVERSE TRAFFIC IMPACTS – COMPARISON OF MODIFIED PROPOSAL ALTERNATIVE AND PROPOSED ACTION

Intersection	AM Peak Hour				Midday Peak Hour				PM Peak Hour			
	Proposed Action		Modified Proposal Alternative		Proposed Action		Modified Proposal Alternative		Proposed Action		Modified Proposal Alternative	
	Impact(s)	Mitigation	Impact (s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation
Second Ave. @ E. 42nd St.	EB-R, WB-LT	No	EB-R, WB-LT, SB-L	No								
Second Ave. @ E. 46th St.			EB-R	Yes								
Second Ave. @ E. 52nd St.											EB-TR	Yes
Second Ave. @ E. 53rd St.			WB-LT	Yes								
Second Ave. @ E. 57th St.					SB-TR	Yes						
Third Ave. @ E. 42nd St.	WB-T, WB-R, NB-R	No	EB-L, WB-T, WB-R, NB-R	No								
Lexington Ave. @ E. 39th St.											WB-T	Yes
Lexington Ave. @ E. 51st St.					WB-L	Yes					WB-T	Yes
Park Ave. @ E. 39th St.									WB-LTR, SB-TR	Yes	WB-LTR	Yes
Park Ave. @ E. 49th St.									WB-LT, NB-T	No	NB-T	No
Park Ave. @ E. 51st St.									NB-T	Yes	NB-T	No
Madison Ave. @ E. 40th St.	EB-L, EB-T	Yes	EB-L	Yes								
Madison Ave. @ E. 43rd St.											NB-L	Yes
Fifth Ave. @ 45th St.							SB-T	Yes				
Fifth Ave. @ 47th St.									WB-L	No	WB-L, SB-R	No

Notes: NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; L = Left-Turn; T = Through; R = Right-Turn; Mitigation = Mitigation Provided; Unmitigatable impacts are highlighted

Source: Parsons Brinckerhoff, Inc., 2013

The approach movements that were mitigated for the Modified Proposal Alternative used the same types of mitigation measures as the Proposed Action (i.e., signal timing changes or modifications to curbside parking regulations). Table 20-19 summarizes the recommended mitigation measures for each of the intersections that would have different significant adverse traffic impacts for the Modified Proposal Alternative compared to the Proposed Action during the AM, Midday, and PM peak hours. Table 20-20 provides a comparison of the v/c ratios, delays, and levels of service (LOS) at these impacted intersections

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with implementation of these mitigation measures to No-Action and Modified Proposal Alternative conditions for the AM, Midday, and PM peak hours. (Additional data for all intersections analyzed under the Modified Proposal Alternative are provided in Appendix 6.)

TABLE 20-19: SUMMARY OF PROPOSED TRAFFIC MITIGATION MEASURES – MODIFIED PROPOSAL ALTERNATIVE

Intersection	Movement	No-Action	With-Action	Change	Proposed Mitigation
AM Peak Hour					
Second Avenue @ East 42nd Street					Impacts cannot be fully mitigated in this time period.
Second Avenue @ East 46th Street	EB TR: G= SB LT: G=	27 53	27 53	1 -1	28 52
Second Avenue @ East 53rd Street	EB / WB Ped Crossing: G= WB LT: G= SB TR: G=	7 28 45	7 28 45	0 1 -1	7 29 44
Third Avenue @ East 42nd Street					Impacts cannot be fully mitigated in this time period.
Madison Avenue @ East 40th Street	EB T: G= EB L & T: G= NB: G=	23 13 44	23 13 44	 1 -1	23 14 43
Midday Peak Hour					
Fifth Avenue @ 45th Street	WB LT: G= SB TR: G=	35 45	35 45	-1 1	34 46
PM Peak Hour					
Second Avenue @ East 52nd Street	EB TR: G= SB LTR: G=	31 49	31 49	1 -1	32 48
Lexington Avenue @ East 39th Street	WB T: G= WB LT: G= SB TR: G=	23 13 44	23 13 44	1 0 -1	24 13 43
Lexington Avenue @ East 51st Street	WB LT: G= EB/WB Ped Crossing: G= SB TR: G=	23 14 43	23 14 43	3 0 -3	26 14 40
Park Avenue @ East 39th Street	WB:	1 LTR (12.5')	1 LTR (12.5')	Daylighting	1 LT (10'), 1 TR (11') Implement No Standing 7am- 7pm Mon-Fri for 100 feet along the north curb of 39th Street westbound approach. This would result in the elimination of up to 3 commercial parking spaces.
Park Avenue @ East 49th Street					Impacts cannot be fully mitigated in this time period.
Park Avenue @ East 51st Street					Impacts cannot be fully mitigated in this time period.
Madison Avenue @ East 43rd Street	EB TR: G= NB LT: G=	35 45	35 45	-1 1	34 46
Fifth Avenue @ 47th Street					Impacts cannot be fully mitigated in this time period.

Note:

"G" indicates amount of green phase time, in seconds.

NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = Left-Turn; T = Through; R = Right-Turn

Source: Parsons Brinckerhoff, Inc., 2013

TABLE 20-20: LEVEL OF SERVICE ANALYSIS WITH AND WITHOUT PROPOSED MITIGATION – MODIFIED PROPOSAL ALTERNATIVE

Signalized Intersection	Approach	2033 No-Action				Modified Proposal Alternative				Modified Proposal Alternative w/ Mitigation			
		Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS
AM Peak Hour													
Second Avenue @ East 42nd Street	EB	T	0.58	26.2	C	T	0.58	26.2	C	T	0.58	26.2	C
		R	1.84	425.3	F	R	1.86	434.1	F	R	1.86	434.1	F
	WB	LT	1.14	111.3	F	LT	1.19	130.2	F	LT	1.19	130.2	F
		L	1.36	195.6	F	L	1.36	196.3	F	L	1.36	196.3	F
	SB	T	0.84	21.9	C	T	0.84	21.9	C	T	0.84	21.9	C
		R	0.77	30.4	C	R	0.80	32.6	C	R	0.80	32.6	C
INTERSECTION			93.0	F			97.2	F			97.2	F	
Second Avenue @ East 46th Street	EB	T	0.43	28.2	C	T	0.48	29.2	C	T	0.47	28.1	C
		R	1.16	138.6	F	R	1.18	147.8	F	R	1.13	127.3	F
	SB	LT	0.91	14.5	B	LT	0.92	15.1	B	LT	0.94	17.3	B
		INTERSECTION			24.6	C			26.0	C			26.3
Second Avenue @ East 53rd Street	WB	LT	1.13	105.5	F	LT	1.15	114.8	F	LT	1.11	97.2	F
		T	0.86	18.6	B	T	0.88	19.4	B	T	0.90	21.3	C
	SB	R	0.50	15.9	B	R	0.51	16.0	B	R	0.52	17.2	B
		INTERSECTION			38.7	D			41.4	D			38.8
Third Avenue @ East 42nd Street	EB	L	1.14	137.5	F	L	1.20	156.4	F	L	1.20	156.4	F
		T	1.19	127.9	F	T	1.20	129.2	F	T	1.20	129.2	F
	WB	T	1.21	145.2	F	T	1.23	150.5	F	T	1.23	150.5	F
		R	1.10	138.2	F	R	1.14	149.4	F	R	1.14	149.4	F
	NB	LT	0.89	29.1	C	LT	0.91	30.8	C	LT	0.91	30.8	C
		R	1.39	237.3	F	R	1.41	245.5	F	R	1.41	245.5	F
INTERSECTION			90.0	F			91.6	F			91.6	F	
Madison Avenue @ East 40th Street	EB	L	0.62	52.2	D	L	0.74	61.9	E	L	0.69	55.1	E
		T	0.87	43.7	D	T	0.92	50.9	D	T	0.90	46.0	D
	NB	TR	0.90	24.5	C	TR	0.94	29.1	C	TR	0.97	33.7	C
		INTERSECTION			29.9	C			35.4	D			37.4
Midday Peak Hour													
Fifth Avenue @ 45th Street	WB	LT	0.44	21.6	C	LT	0.47	22.2	C	LT	0.49	23.1	C
		T	0.91	23.5	C	T	1.03	45.8	D	T	1.01	38.5	D
	SB	R	0.32	12.6	B	R	0.42	14.6	B	R	0.41	13.5	B
INTERSECTION			22.6	C			39.9	D			34.4	C	
PM Peak Hour													
Second Avenue @ East 52nd Street	EB	TR	1.17	134.5	F	TR	1.21	149.5	F	TR	1.17	131.2	F
		LT	0.70	11.6	B	LT	0.71	11.7	B	LT	0.72	12.7	B
	INTERSECTION			28.4	C			31.0	C			29.2	C
Lexington Avenue @ East 39th Street	WB	L	0.48	43.1	D	L	0.48	43.1	D	L	0.48	43.1	D
		T	0.91	48.5	D	T	0.95	54.8	D	T	0.92	49.0	D
	SB	TR	0.67	15.2	B	TR	0.68	15.4	B	TR	0.70	16.5	B
INTERSECTION			23.9	C			25.6	C			25.0	C	
Lexington Avenue @ East 51st Street	WB	L	0.56	34.8	C	L	0.62	36.8	D	L	0.55	31.8	C
		T	1.02	87.5	F	T	1.16	134.5	F	T	1.03	86.0	F
	SB	T	0.75	18.0	B	T	0.77	18.6	B	T	0.82	23.1	C
		R	0.42	17.9	B	R	0.42	17.9	B	R	0.48	23.1	C
INTERSECTION			31.8	C			42.2	D			35.9	D	
Park Avenue @ East 39th Street	WB	LTR	1.18	124.6	F	LTR	1.23	145.9	F	LTR	0.64	24.1	C
		L++	-	40.0	D	L++	-	40.0	D	L++	-	40.0	D
	NB	LT	0.47	15.9	B	LT	0.47	15.9	B	LT	0.47	15.9	B
		TR	0.93	33.9	C	TR	0.98	42.1	D	TR	0.98	42.1	D
INTERSECTION			51.5	D			61.2	E			30.8	C	
Park Avenue @ East 49th Street	WB	LT	0.92	51.4	D	LT	0.94	55.0	D	LT	0.94	55.0	D
		R	0.50	25.3	C	R	0.53	26.2	C	R	0.53	26.2	C
	NB	L++	-	37.7	D	L++	-	37.8	D	L++	-	37.8	D
		T	1.00	47.9	D	T	1.04	59.0	E	T	1.04	59.0	E
SB	TR	0.77	22.3	C	TR	0.77	22.5	C	TR	0.77	22.5	C	
INTERSECTION			36.2	D			41.3	D			41.3	D	
Park Avenue @ East 51st Street	WB	LT	0.63	28.9	C	LT	0.66	30.2	C	LT	0.66	30.2	C
		R	0.56	31.7	C	R	0.70	40.3	D	R	0.70	40.3	D
	NB	L++	-	39.0	D	L++	-	39.1	D	L++	-	39.1	D
		T	1.02	52.4	D	T	1.07	66.4	E	T	1.07	66.4	E
SB	TR	0.79	21.9	C	TR	0.79	22.0	C	TR	0.79	22.0	C	
INTERSECTION			36.0	D			42.5	D			42.5	D	
Madison Avenue @ East 43rd Street	WB	T	0.37	21.7	C	T	0.46	23.5	C	T	0.48	24.5	C
		R	0.27	21.2	C	R	0.21	20.1	C	R	0.22	21.0	C
	NB	L	0.61	23.7	C	L	0.83	45.3	D	L	0.79	38.5	D
		T	0.85	22.4	C	T	0.89	24.9	C	T	0.87	22.5	C
INTERSECTION			22.4	C			26.6	C			24.4	C	
Fifth Avenue @ 47th Street	WB	L	0.76	56.0	E	L	1.64	342.5	F	L	1.64	342.5	F
		T	0.57	23.4	C	T	0.62	25.0	C	T	0.62	25.0	C
	SB	T	0.96	33.7	C	T	1.01	44.6	D	T	1.01	44.6	D
		R	1.05	115.6	F	R	1.07	121.5	F	R	1.07	121.5	F
INTERSECTION			38.6	D			89.8	F			89.8	F	

Notes:

++To mimic actual conditions for NB/SB left turning vehicles on Park Avenue, the sum of two delays were accounted for: (1) delay from making the left turn; and (2) delay from waiting at the red light after the left turn

Source: Parsons Brinckerhoff, Inc., 2013

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20.7.11.2 Transit

a. Subway

As shown in Table 20-15, the Modified Proposal Alternative would generate 192 fewer trips by subway in the AM peak hour and 259 fewer trips in the PM compared to the Proposed Action.

The original proposal included a series of considerations for the DIF Committee when determining the prioritization of DIF projects, including that priority be given to improvements to the Grand Central Subway Station and the pedestrian network in the immediate vicinity of the Terminal, given these areas exhibited the greatest needs in the Subdistrict today. The Modified Proposal Alternative adds the Lexington/53rd and 51st Street station complex to the list of priority areas in order to provide for implementation of improvements to this station as East Side Access opens and development occurs in the long term. Thus, the Modified Proposal Alternative includes both the City-priority improvements at the Grand Central-42nd Street subway station complex and stair and escalator improvements at the 51st Street/Lexington Avenue-53rd Street stations. The Proposed Action would result in less crowding in the Grand Central-42nd Street subway station, with most station elements experiencing improved conditions. Furthermore, the Proposed Action would not result in any significant adverse impacts at the 42nd Street-Bryant Park/5th Avenue, 47-50 Streets-Rockefeller Center and 51st Street/Lexington Avenue-53rd Street subway stations.

It should be noted that potential transit improvements funded under the DIF at the 51st Street/Lexington Avenue-53rd Street station may include the replacement of existing 4-foot-wide stair U1 and escalator E252 at the north end of the southbound platform with a new 15-foot-wide stair and also 24-inch-wide escalator E254X with a new 40-inch-wide escalator that would operate in the up direction in both the AM and PM peak hours. The potential improvements may also include operating this escalator and all other analyzed escalators at a higher speed (100 feet per minute versus 90 feet per minute). It is therefore anticipated that pedestrian flow patterns would change at all four analyzed escalators as a result of the additional capacity, as well as the change in direction (from down to up) in the PM peak hour at escalator E254X.

Compared to the Proposed Action, the Modified Proposal Alternative would generate a smaller total number of subway trips in each peak hour, although the numbers of trips occurring at the 51st Street/Lexington Avenue-53rd Street subway stations would be somewhat greater due to their proximity to Sites 16 and 17 which would be developed with a mix of office and hotel uses under the Modified Proposal Alternative compared to only hotel uses under the Proposed Action. In general, however, conditions under the Modified Proposal Alternative would be the same or similar to those under the Proposed Action, and no significant adverse impacts are anticipated at any analyzed subway station or station complex under this alternative. As the level of new subway demand projected to occur under the Proposed Action would not result in significant adverse subway line haul impacts, the smaller overall

numbers of new trips projected under the Modified Proposal Alternative are also not expected to result in new significant subway line haul impacts. (Tables showing the levels of service at analyzed subway station elements and subway line haul conditions under the Modified Proposal Alternative are provided in Appendix 6.)

b. Bus

As shown in Table 20-15, the Modified Proposal Alternative would generate 55 fewer bus trips (local and express combined) in the AM peak hour and 69 fewer in the PM compared to the Proposed Action. Although there would be fewer trips on the M42 local bus service under the Modified Proposal Alternative, the Proposed Action's significant adverse impacts to the M42 local bus in the eastbound direction in the AM and westbound direction in the PM would still occur under this alternative. These impacts could be mitigated by the addition of one eastbound M42 bus in the AM peak hour and one westbound bus in the PM peak hour, compared to two eastbound buses in the AM and two westbound buses in the PM under the Proposed Action. (A table showing local bus conditions at the maximum load points on each analyzed route under the Modified Proposal Alternative is provided in Appendix 6.)

20.7.11.3 Pedestrians

Compared to the Proposed Action, the Modified Proposal Alternative would generate an estimated 331 fewer pedestrian trips in the AM peak hour, 783 fewer in the Midday, and 501 fewer in the PM peak hour. (These would include fewer walk-only trips as well as fewer pedestrians en route to and from area transit services and parking garages.) However, there would likely be increased numbers of trips along some pedestrian elements (sidewalks, crosswalks and corner areas) in proximity to projected development sites where there would potentially be more office development under the Modified Proposal Alternative (primarily Sites 16 and 17, which would be developed with a mix of office and hotel uses under the Modified Proposal Alternative compared to only hotel uses under the Proposed Action). Table 20-21 presents a comparison of the number of sidewalks, corner areas and crosswalks that would have significant adverse impacts and unmitigated significant adverse impacts for the Modified Proposal Alternative and the Proposed Action.

As shown in Table 20-21, under the Modified Proposal Alternative there would be three crosswalks with unmitigated significant adverse impacts in the AM peak hour, none in the Midday and two in the PM, compared to two in the AM, none in the Midday and one in the PM for the Proposed Action. There would also be four, one and two corner areas with unmitigated impacts in the AM, Midday and PM peak hours, respectively, compared to three, one and two under the Proposed Action. There would not be any unmitigated sidewalk impacts under either the Proposed Action or the Modified Proposal Alternative. Table 20-22 and Table 20-23 show levels of service and proposed mitigation at analyzed crosswalks and corner areas that would be impacted under the Modified Proposal Alternative. (Additional data for all analyzed pedestrian elements under the Modified Proposal Alternative are provided in Appendix 6.)

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TABLE 20-21: NUMBER OF LOCATIONS WITH SIGNIFICANT ADVERSE PEDESTRIAN IMPACTS – COMPARISON OF MODIFIED PROPOSAL ALTERNATIVE AND PROPOSED ACTION

Peak Hour	Significant Impacts		Unmitigated Significant Impacts ¹	
	Proposed Action	Modified Proposal Alternative	Proposed Action	Modified Proposal Alternative
Sidewalks				
AM	2	1	0	0
Midday	0	0	0	0
PM	2	1	0	0
Crosswalks				
AM	13	15	2	3
Midday	16	15	0	0
PM	16	14	1	2
Corner Areas				
AM	5	7	3	4
Midday	5	5	1	1
PM	6	7	2	2

¹Includes unmitigated significant impacts due to traffic or corner mitigation measures.

TABLE 20-22: LEVELS OF SERVICE AND MITIGATION MEASURES AT ANALYZED CROSSWALKS IMPACTED UNDER THE MODIFIED PROPOSAL ALTERNATIVE

Intersection	Crosswalk	No-Action			Modified Proposal Alternative			Modified Proposal Alternative-With-Mitigation				See Note
		Width	Pedestrian Space (SFP)	LOS	Width	Pedestrian Space (SFP)	LOS	Width	Pedestrian Space (SFP)	LOS	Mitigation Measures	
AM Peak Period												
(6) Lexington Ave @ East 50th St.	North	11.83	16.2	D	11.83	14.6	E	12.83	15.4	D	Mitigated through 1-foot widening (versus 0.5-foot under Action-With-Mitigation condition).	2
	East	11.83	13.7	E	11.83	10.9	E	13.83	13.3	E	Mitigated through 2-foot widening (versus 1-foot for Midday and PM impacts under Proposed Action).	
	West	15.75	20.6	D	15.75	18.3	D	15.75	16.8	D	Unmitigated (versus mitigated under the Action-With-Mitigation condition).	2
(7) Lexington Ave @ East 49th St.	West	10.50	19.1	D	10.50	13.1	E	14.00	18.7	D	Mitigated through 3.5-foot widening (versus 2-foot under Action-With-Mitigation condition).	
MD Peak Period												
(4) Third Ave @ East 49th St.	North	15.25	22.8	D	15.25	16.9	D	17.75	19.8	D	Mitigated through 2.5-foot widening (versus 1-foot under Action-With-Mitigation condition).	
	West	16.25	21.0	D	16.25	18.3	D	17.25	19.7	D	Mitigated through 1-foot widening.	1
(5) Third Ave @ East 42nd St.	North	19.83	21.2	D	19.83	17.1	D	22.33	21.2	D	Mitigated through 2.5-foot widening (same as Action-With-Mitigation condition) plus traffic mitigation.	
(6) Lexington Ave @ East 50th St.	East	11.83	12.5	E	11.83	10.7	E	13.83	13.1	E	Mitigated through 2-foot widening (versus 1-foot under Action-With-Mitigation condition).	
(8) Lexington Ave @ East 48th St.	South	13.50	23.6	D	13.50	17.6	D	15.00	19.8	D	Mitigated through 1.5-foot widening (versus 0.5-foot under Action-With-Mitigation condition).	
PM Peak Period												
(6) Lexington Ave @ East 50th St.	East	11.83	10.6	E	11.83	8.0	F	13.83	9.8	E	Mitigated through 2-foot widening (versus 1-foot for Midday impact under Proposed Action).	
(7) Lexington Ave @ East 49th St.	West	10.50	23.6	D	10.50	14.0	E	14.00	19.9	D	Mitigated through 3.5-foot widening (versus 2-foot under Action-With-Mitigation condition).	
(17) Madison Ave @ East 43rd St.	North	13.00	11.9	E	13.00	11.1	E	14.50	12.1	E	Mitigated through 1.5-foot widening (same as Action-With-Mitigation condition).	3
	West	12.17	21.3	D	12.17	18.1	D	12.67	19.6	D	Mitigated through 0.5-foot widening (same as Action-With-Mitigation condition) plus traffic mitigation.	
(23) Fifth Ave @ East 44th St.	North	15.17	22.4	D	15.17	21.9	D	15.67	19.7	D	Mitigated through 0.5-foot widening.	1,3
	South	18.50	10.5	E	18.50	10.2	E	20.00	9.3	E	Unmitigated (same as Action-With-Mitigation condition). Conditions improved by 1.5-foot widened.	1,3
Notes:												
SFP - Square feet per pedestrian.												
1. No significant adverse impact for the Proposed Action condition.												
2. No significant adverse impact for the Proposed Action condition. Significant adverse impact is due to corner mitigation measures associated with the Proposed Action.												
3. No significant adverse impact for the Modified Proposal Alternative condition. Significant adverse impact is due to traffic mitigation measures.												

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TABLE 20-23: LEVELS OF SERVICE AND MITIGATION MEASURES AT ANALYZED CORNER AREAS IMPACTED UNDER THE MODIFIED PROPOSAL ALTERNATIVE

Intersection	Corner	No-Action				Modified Proposal Alternative				Modified Proposal Alternative With Mitigation				Mitigation Measures	See Note
		Major Width	Minor Width	Pedestrian Space (SFP)	LOS	Major Width	Minor Width	Pedestrian Space (SFP)	LOS	Major Width	Minor Width	Pedestrian Space (SFP)	LOS		
AM Peak Period															
(6) Lexington Ave @ East 50th St.	North west	12.5	13.0	14.8	E	12.5	13.0	12.0	E	12.5	13.0	12.0	E	Unmitigated. Adjacent plaza provides additional queuing space therefore no mitigation proposed.	1
	South west	11.3	12.5	14.8	E	11.3	12.5	12.4	E	11.3	18.5	26.7	C	Mitigated through bulb out. (Same mitigation as proposed for Mdday and PM impacts under the Proposed Action.	1
(18) Madison Ave @ East 42nd St.	North west	12.8	20.5	13.4	E	12.8	20.5	11.3	E	12.8	20.5	11.4	E	Mitigated through sign relocation. Impact remains unmitigated under the Proposed Action.	
PM Peak Period															
(17) Madison Ave @ East 43rd St.	Northeast	13.3	10.3	16.4	D	13.3	10.3	14.9	E	13.3	10.3	14.9	E	Unmitigated.	1
(18) Madison Ave @ East 42nd St.	North west	12.8	20.5	11.7	E	12.8	20.5	10.6	E	12.8	20.5	10.7	E	Mitigated through sign relocation. Impact remains unmitigated under the Proposed Action.	
Notes:															
SFP - square feet per pedestrian.															
1. No significant adverse impact for the Proposed Action.															

20.7.11.4 Parking

The hourly net increase in parking demand for the Modified Proposal Alternative is summarized in Appendix 6. The Modified Proposal Alternative would have a higher demand for off-street parking compared to the Proposed Action and would provide fewer new off-street parking spaces compared to the Proposed Action. Table 20-24 provides a comparison of the off-street parking supply and demand for the Modified Proposal Alternative and Proposed Action for the weekday Midday period. As shown in Table 20-24, compared to the Proposed Action, the Modified Proposal Alternative would generate a parking demand for 17 more spaces during the weekday Midday period and provide 92 fewer spaces in new parking capacity. As with the Proposed Action, no parking shortfall would be expected under the Modified Proposal Alternative.

TABLE 20-24: OFF-STREET PARKING CAPACITY, DEMAND, AND UTILIZATION – COMPARISON OF MODIFIED PROPOSAL ALTERNATIVE AND PROPOSED ACTION

Development Scenario	Total Capacity	Demand	Utilization Rate	Available Spaces
Modified Proposal Alternative	18,376	16,104	88%	2,272
Proposed Action	18,468	16,087	87%	2,381

Source: Parsons Brinckerhoff, 2013.

20.7.12 Air Quality

An air quality analysis was conducted to determine whether the Modified Proposal Alternative would result in significant adverse air quality impact not identified under the Proposed Action. Both mobile sources and stationary sources were considered.

20.7.12.1 Mobile Sources Analysis

Traffic changes associated with the Modified Proposal Alternative resulted in increased volumes at several intersections analyzed under the Proposed Action. A CO mobile source analysis was conducted for the three intersections, with the highest increases using the same procedures as described in the Chapter 13, Air Quality. The maximum estimated 8-hour CO concentrations with the Modified Proposal Alternative (3.55 ppm) would be below the National Ambient Air Quality Standards (NAAQS) of 9 ppm. Table 20-25 compares the highest estimated concentrations at the intersections analyzed under the Modified Proposal Alternative and the Proposed Action.

The results of the particulate matter analysis under the Modified Proposal Alternative remain unchanged from the Proposed Action. The number of proposed parking spaces at the site analyzed under the Proposed Action would decrease under Modified Proposal Alternative along with the total number of parking spaces under this alternative compared with the Proposed Action. Potential air quality impacts of the proposed below-grade parking garages under the Modified Proposal Alternative would therefore be

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smaller than the impacts under the Proposed Action. Since the results of the garage analysis under the Proposed Action demonstrated that the maximum estimated 8-hour CO concentrations would be below the 8-hour CO NAAQS, the resultant levels under the Modified Proposal Alternative would also be below the NAAQS.

As with the Proposed Action, mobile-source impacts under the Modified Proposal Alternative would not significantly affect local air quality levels.

TABLE 20-25: MAXIMUM ESTIMATED FUTURE (2033) 8-HOUR CO LEVELS WITH THE PROPOSED ACTION AND THE MODIFIED PROPOSAL ALTERNATIVE

Analysis Site	8-hour CO Proposed Action Level (ppm)	8-hour CO Modified Proposal Alternative Levels (ppm)	8-hour CO Increment (ppm)
Madison Avenue & East 46th Street	2.86	2.93	0.07
Madison Avenue & East 42nd Street	2.86	3.55	0.69
Second Avenue & East 53rd Street	3.32	3.32	0.00

Note: All values are the maximum estimated concentrations under all time periods considered and include an 8-hour background concentration of 1.7 ppm.

Persistence Factor = 0.77

NAAQS: CO = 9 ppm

20.7.12.2 20.7.12.2 Stationary Sources Analysis

Of all the changes to the projected and potential sites under the Modified Proposal Alternative, only increases in the floor area and height of the Potential Development Sites 12 and 19 have the potential to affect the results of the air quality analysis conducted for the Proposed Action. Table 20-26 presents the changes compared with the Proposed Action.

TABLE 20-26: CHANGES IN THE SITE SIZES COMPARED WITH THE PROPOSED ACTION

Site Number	Total Building Area (gsf)		Height (ft)		Use	
	Proposed Action	Modified Proposal Alternative	Proposed Action	Modified Proposal Alternative	Proposed Action	Modified Proposal Alternative
Pot-12	670,920	732,000	460	590	Hotel	Office
Pot-19	479,788	515,380	355	390	Hotel	Hotel/Office

These two potential development sites failed the PM_{2.5} prototypical analysis under the Proposed Action. Under the Proposed Action both sites will require special restrictions on HVAC systems (i.e., the use of the utility steam from Con Edison). Comparison of the Modified Proposal Alternative site parameters (emission rate, distance to nearest site of similar or greater height) with the parameters used in the

analysis conducted for these two sites under Proposed Action reveals that despite the increases in building height, the result of the analysis remains the same. Both sites also fail the prototypical PM_{2.5} analysis under the Modified Proposal Alternative and must therefore ensure via (E) designation that utility steam from Con Edison is used to meet the building’s heat and hot water demands to avoid any potential significant air quality impacts.

The results of other air quality analyses conducted for stationary sources—impacts from large existing emission sources, cluster analysis, and analysis of toxic air emissions from existing industrial sources—remain unchanged under this alternative.

20.7.13 Greenhouse Gas (GHG) Analysis

The estimated GHG emissions from the Modified Proposal Alternative would be approximately 33,613 metric tons of GHG emissions from its operations and 30,919 metric tons of GHG emissions from mobile sources—for an annual total of approximately 64,532 metric tons of GHG emissions, which is 3 percent below the GHG emissions for the Proposed Action.

Table 20-27 displays the estimated GHG emissions associated with the operation emissions of the Proposed Action and the Modified Proposal Alternative for year 2033 once all development sites are assumed to be operational. As shown, operational GHG emissions are estimated to be approximately 34,248 metric tons of carbon dioxide equivalents for the Proposed Action, and 33,613 for the Modified Proposal Alternative.

TABLE 20-27: OPERATIONAL EMISSIONS

Building Type	Carbon Dioxide Equivalent (CO ₂ e) kg/sf/year	Floor Area (square ft)		CO ₂ e (metric tons/year)	
		Proposed Action	Modified Proposal Alternative	Proposed Action	Modified Proposal Alternative
Commercial	9.43	3,941,001	3,722,842	37,164	35,106
Large Residential	6.59	-442,389	-226,541	-2,915	-1,493
		Total		34,248	33,613

As shown in Table 20-28, annual mobile source emissions related to the Proposed Action would result in approximately 32,612 metric tons of carbon dioxide equivalents, and the Modified Proposal Alternative in 30,919 metric tons of CO₂e.

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TABLE 20-28: MOBILE SOURCE EMISSIONS

Carbon Dioxide Equivalent (CO ₂ e) Emissions (metric tons/year)								
Road Type	Passenger Vehicles		Taxis		Trucks		TOTAL	
	Proposed Action	Modified Proposal Alt.	Proposed Action	Modified Proposal Alt.	Proposed Action	Modified Proposal Alt.	Proposed Action	Modified Proposal Alt.
Local	936	889	124	94	9,874	9,382	10,934	10,366
Arterial	1,243	1,181	163	124	13,290	12,628	14,696	13,933
Interstate/ Expressway	548	521	71	54	6,363	6,046	6,982	6,621
Total	2,727	2,590	359	273	29,526		32,612	30,919

The total projected GHG emissions from the Proposed Action and Modified Proposal Alternative are shown in Table 20-29. The estimated total for the Proposed Action is 66,860 metric tons of GHG emissions, which is about 0.13 percent of New York City’s 2011 annual total of 53.36 million metric tons. The estimated emissions from the Modified Proposal Alternative would be approximately 64,532 metric tons of GHG emissions, which is 3 percent below the GHG emissions for the Proposed Action.

TABLE 20-29: TOTAL EMISSIONS

Emissions Source	CO ₂ e Emissions (metric tons)	
	Proposed Action	Modified Proposal Alternative
Operations	34,248	33,613
Mobile Sources	32,612	30,919
TOTAL	66,860	64,532

The construction GHG emissions for the Modified Proposal Alternative would be expected to be similar to the emissions from the Proposed Action.

20.7.14 Noise

As with the Proposed Action, the Modified Proposal Alternative would not generate sufficient traffic to result in a significant adverse noise impact given the fewer generated traffic trips projected to occur under this alternative.

The Modified Proposal Alternative noise assessment was based on the traffic data created for this alternative at all 10 noise receptors for the three peak hours (AM/MD/PM) using the noise PCE methodology as described in Chapter 15, “Noise.” The changes in L10 values at the Modified Proposal Alternative when compared with the Proposed Action were a 0.1 dBA delta at seven out of the thirty peak hours. Therefore, the estimated traffic noise exposure, impact assessment and window-wall noise

attenuation requirements for the Proposed Action (see Chapter 15, “Noise” for details and Appendix 10 for (E) designation requirements) and the Modified Proposal Alternative are essentially the same.

20.7.15 Public Health

As with the Proposed Action, the Modified Proposal Alternative would not result in significant adverse public health impacts.

Both the Proposed Action and the Modified Proposal Alternative would not result in any unmitigated significant adverse impacts related to air quality, water quality, hazardous materials, or operational noise. During some periods of construction, the Modified Proposal Alternative—as with the Proposed Action—could result in significant adverse impacts related to noise as defined by CEQR thresholds. The predicted overall changes to noise levels would not be large enough to significantly affect public health. Therefore, neither the Proposed Action nor the Modified Proposal Alternative would result in significant adverse public health impacts.

20.7.16 Neighborhood Character

As with the Proposed Action, the Modified Proposal Alternative would not result in significant adverse impacts on neighborhood character.

The East Midtown area has a varied neighborhood context, and its defining features are the dominance of commercial land uses, the interspersing of older buildings with modern construction, high levels of pedestrian and vehicular activity and associated noise, a primarily high-density built context, and the presence of a number of iconic historic resources, including Grand Central Terminal, the Helmsley Building, the Chrysler Building, St. Bartholomew’s Church and Community House, St. Patrick’s Cathedral, the Seagram Building, and Lever House. In the Modified Proposal Alternative, as with the Proposed Action, the East Midtown area would continue to be defined by this combination of features. Compared to the Proposed Action, the Modified Proposal Alternative would include additional mixed-use buildings while continuing to meet the proposal’s overall goal of encouraging new office space in the East Midtown area, which is consistent with the area’s existing neighborhood character.

Of the relevant technical areas specified in the *CEQR Technical Manual*, both the Modified Proposal Alternative and the Proposed Action would not cause significant adverse impacts regarding land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; or noise. In the Modified Proposal Alternative, as with the Proposed Action, the potential significant adverse impacts on transportation would not affect neighborhood character; while there would be increased activity, the resulting conditions would not be out of character with the East Midtown area, and thus the incremental changes would not constitute significant impacts on neighborhood character.

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Under both the Modified Proposal Alternative and the Proposed Action, potential significant adverse impacts on historic resources would not result in a significant adverse impact on neighborhood character because they would not alter the overall character of East Midtown as an area characterized by a varied context of older buildings interspersed with modern construction. In addition, the iconic historic structures that are defining features of neighborhood character—Grand Central Terminal, the Helmsley Building, St. Patrick’s Cathedral, St. Bartholomew’s Church and Community House, the Chrysler Building, the Seagram Building, and Lever House—would not be displaced with either the Modified Proposal Alternative or the Proposed Action. Under both the Modified Proposal Alternative and the Proposed Action, the potential significant adverse shadow impacts on stained glass windows at St. Bartholomew’s Church and Community House, and the Lady Chapel of St. Patrick’s Cathedral, would not affect the characteristics of those structures, including their architecture, setting and cultural significance, which make them defining features of neighborhood character.

Under both the Modified Proposal Alternative and the Proposed Action, just as potential significant adverse impacts in the relevant technical areas would not affect any defining feature of neighborhood character, no moderate adverse effects that would affect such defining features—either singularly or in combination—have been identified.

20.7.17 Construction

The Modified Proposal Alternative is expected to result in the same significant adverse construction-related impacts compared with the Proposed Action. The Modified Proposal Alternative would require the same mitigation measures as the Proposed Action for the identified construction-related impacts.

The Modified Proposal Alternative would be constructed on the same 19 projected development sites identified in the Proposed Action. The analysis assumptions for the construction analyses under the Modified Proposal Alternative would not change in any material respect from those of the Proposed Action, as the number of projected development sites would remain unchanged, no individual development site would realize a sizable change in total square footage being constructed, and the change in the mix of uses on individual development sites would not alter the length or type of construction methods. Development on the projected development sites under the Modified Proposal Alternative would be expected to follow the same reasonable worst case construction schedule as that assumed for the Proposed Action. For the cluster of Projected Development Sites 5, 6, 7, 8, and 11 located between Vanderbilt and Fifth Avenues and East 43rd and East 48th Streets, the same sequencing and duration of construction would be expected to occur under both the Proposed Action and the Modified Proposal Alternative.

Overall, it is expected that the Modified Proposal Alternative would result in the same significant adverse construction-related impacts compared with the Proposed Action. As with the Proposed Action, the

Modified Proposal Alternative is expected to result in significant adverse construction-related traffic impacts to the following nine intersections during the 6:00 – 7:00 a.m. peak hour: Second Avenue at East 44th Street; Second Avenue at East 46th Street; Second Avenue at East 49th Street; Third Avenue at East 39th Street; Third Avenue at East 42nd Street; Park Avenue at East 39th Street; Madison Avenue at East 44th Street; Fifth Avenue at 43rd Street; and Fifth Avenue at 47th Street. Additionally, as discussed in Section 20.7.5, the Modified Proposal Alternative would result in the same potential construction-related effects to NYCL- and/or S/NR-eligible historic resources as would the Proposed Action. As with the Proposed Action, the Modified Proposal Alternative would not result in significant adverse construction impacts with respect to air quality, noise, land use and neighborhood character, socioeconomic conditions, or hazardous materials. It is anticipated that any incremental changes to the amount, type, and/or duration of construction activity associated with the Modified Proposal Alternative would not result in additional significant adverse impacts.

As with the Proposed Action, if the peak construction scenario conservatively assumed for simultaneous construction on Projected Development Sites 5, 6 and 7 for the purposes of this analysis is realized, the Modified Proposal Alternative would result in a significant adverse construction noise impact. Partial mitigation for construction noise impacts could include, in addition to the requirements under the New York City Noise Control Code, noise barriers, use of low noise emission equipment, locating stationary equipment as far as feasible away from receptors, enclosing areas, limiting the duration of activities, specifying quiet equipment, scheduling of activities to minimize impacts (either time of day or seasonal considerations), and locating noisy equipment near natural or existing barriers that would shield sensitive receptors. The CPC is currently considering a modification to the proposed zoning text amendment which would provide that no demolition or excavation work may be issued for development of Projected Sites 5, 6, or 7 as qualified sites under the rezoning unless the Chairperson of the CPC has certified either: a) that the simultaneous construction of Projected Sites 5, 6 and 7 conservatively analyzed in the EIS is not anticipated to occur; or, b) that a restrictive declaration has been executed and recorded providing for implementation during construction of the noise path and control measures described above, except to the extent determined by the Chair to be infeasible or impracticable due to site-specific conditions. This provision, if adopted by the CPC, would partially mitigate the potential for significant adverse noise impacts during construction.

20.7.18 Conceptual Analysis

The proposed modified zoning text amendment under the Modified Proposal Alternative would also include additional provisions for special permits and authorizations that would be subject to public review at the time a specific application is made to the CPC. Developments seeking greater amounts of residential or hotel and other uses than permitted by the underlying commercial zoning would be permitted through a new All Use Modification Special Permit. Development rights from landmarks within the Northern Subarea would also be permitted to transfer to sites within that area that do not meet

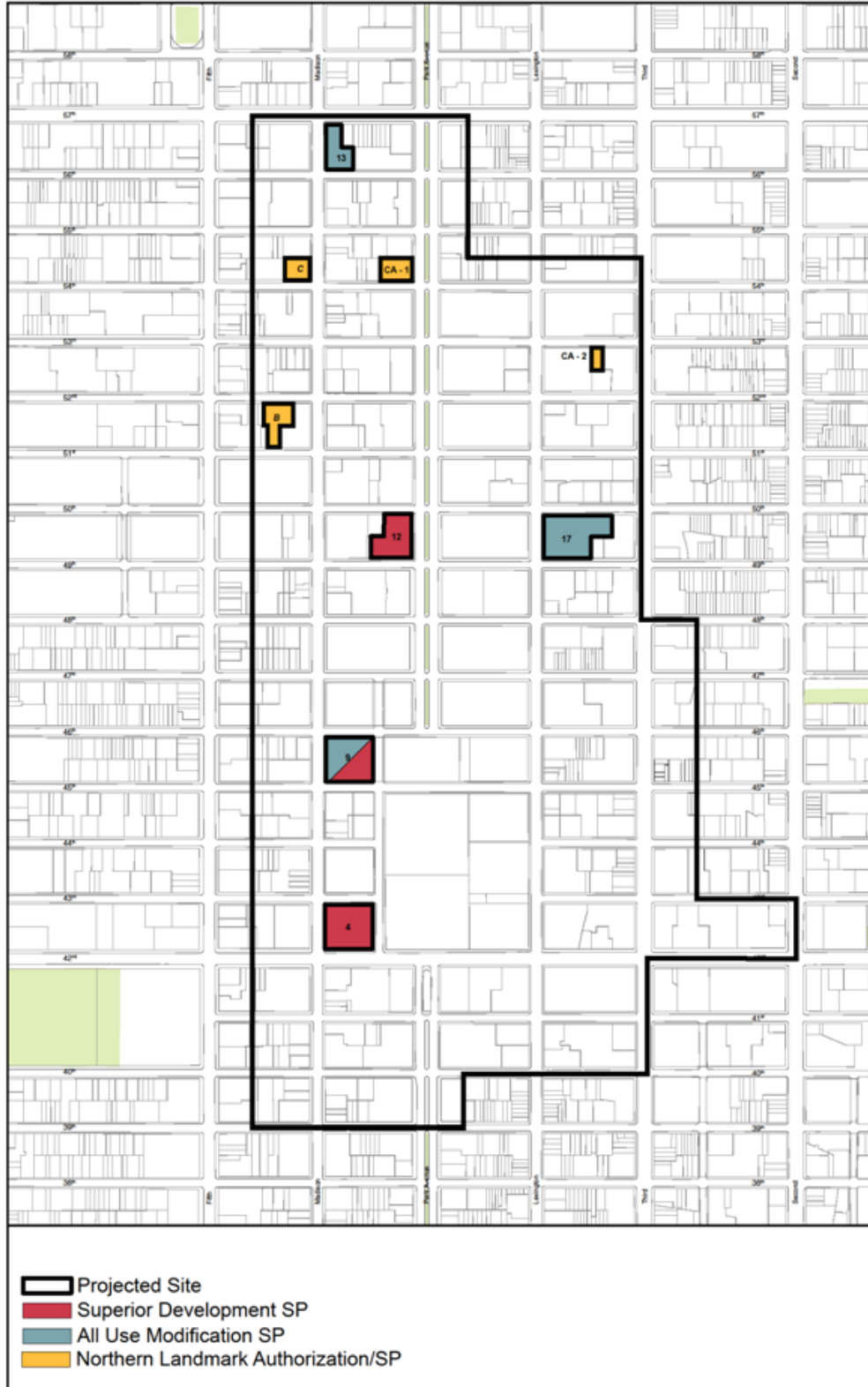
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the Qualifying Site size and frontage requirements by special permit or authorization, depending on location. Lastly, based on recommendations received by DCP, flexibility in the minimum 200-foot frontage requirement for Qualifying Sites would be allowed by authorization. As it is not possible to predict whether a discretionary action would be pursued on any one site in the future, a conceptual analysis is included in the following sections to generically assess the potential environmental impacts that could result from these additional provisions for special permits and authorizations, which would themselves be subject to additional public review. The scenario analyzed as part of the conceptual analysis is hereafter referenced as the Modified Proposal Conceptual Analysis scenario. This scenario also includes potential use of the Superior Development Special Permit, as under the conceptual analysis for the Proposed Action provided in Chapter 21.

While it is not known which sites may be developed utilizing a special permit and/or another discretionary action, for the purposes of this conceptual analysis, it is assumed that the development sites identified below would utilize a special permit and/or authorization (Figure 20-5). While it is reasonable to assume that most development under the Modified Proposal would be as-of-right, it is assumed a limited number of sites would undertake discretionary reviews for modifications. Sites were chosen to represent a conservative mix of discretionary and as-of-right development. It was assumed three sites would use the Superior Development special permit, three would use the use modification special permit, one would use the landmark transfer special permit in the new Northern Subarea, and three would use the landmark transfer authorization in the new Northern Subarea. For analysis purposes, no sites were assumed to use the authorization to modify the frontage requirements. Use of this authorization is not expected to produce any new additional development sites, but rather to allow development to proceed on sites in the event that assemblage does not occur as assumed in the RWCDs and the avenue frontage requirement for Qualified Sites is not met as a result. Use of the provision would result in less development since buildings using the provision would be smaller than developments on those same sites under the Modified Proposal alternative.

- **Projected Development Site 4** (Block 1277, Lots 20, 27, 46, 52). Under the conceptual analysis for the Modified Proposal Alternative Special Permit scenario, it is assumed that this site would develop as an office building pursuant to a Superior Development Special Permit. As this site is located within the Grand Central Core, it could be developed to a maximum commercial FAR of 30.0 under the Modified Proposal Alternative Special Permit scenario, including up to 1,320,376 gsf of usable office space and 43,291 gsf of retail space. As compared with the RWCDs for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 272,733 gsf of usable office space.

FIGURE 20-5: MODIFIED PROPOSAL ALTERNATIVE CONCEPTUAL ANALYSIS



Source: DCP

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- **Projected Development Site 9** (Block 1281, Lot 21). Under the conceptual analysis for the Modified Proposal Alternative Special Permit scenario , it is assumed that this site would develop as a mixed office/residential building pursuant to a Superior Development Special Permit and an All Use Modification Special Permit. As this site is located within the Grand Central Core, it could be developed to a maximum commercial FAR of 30.0 with a Superior Development Special Permit. In conjunction with an All Use Modification Special Permit, this site could be developed with up to 911,739 gsf of usable office space, 43,313 gsf of retail space, and 409,308 gsf of residential space (409 residential units) under the Modified Proposal Alternative Special Permit scenario. As compared with the RWCDS for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 409,308 gsf of residential space (409 residential units) and a net decrease of up to 136,436 gsf of usable office space.
- **Projected Development Site 12** (Block 1285, Lot 36). Under the conceptual analysis for the Modified Proposal Alternative Special Permit scenario , it is assumed that this site would develop as an office building pursuant to a Superior Development Special Permit. As this site is located along the Park Avenue frontage, it could be developed to a maximum commercial FAR of 24.0 under the Modified Proposal Alternative Special Permit scenario, including up to 758,490 gsf of usable office space and 34,050 gsf of retail space. As compared with the RWCDS for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 69,426 gsf of usable office space.
- **Projected Development Site 13** (Block 1292, Lot 52). Under the conceptual analysis for the Modified Proposal Alternative Special Permit scenario , it is assumed that this site would develop as a hotel building pursuant to an All Use Modification Special Permit, with up to 365,272 gsf of hotel space (562 hotel rooms) and 20,075 gsf of retail space. As compared with the RWCDS for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 299,400 gsf of hotel space (461 hotel rooms) and a net decrease of up to 299,400 gsf of usable office space.
- **Projected Development Site 17** (Block 1304, Lots 20, 25-26, 28, 41, 45). Under the conceptual analysis for the Modified Proposal Alternative Special Permit scenario , it is assumed that this site would develop as a hotel building pursuant to an All Use Modification Special Permit, with up to 870,682 gsf of hotel space (1,340 hotel rooms), 54,211 gsf of retail space, and 109 parking spaces. As compared with the RWCDS for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 398,290 gsf of hotel space (613 hotel rooms) and a net decrease of up to 395,978 gsf of usable office space.
- **A Portion of Potential Development Site 7** (Site CA-1, Figure 20-5) (Block 1290, Lots 31, 36). Under the conceptual analysis for the Modified Proposal Alternative Special Permit scenario , it is assumed that this site would develop as a hotel building pursuant to a landmark special permit, with up to

317,850 gsf of hotel space (489 hotel rooms) and 14,661 gsf of retail space. As compared with the RWCDs for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 317,850 gsf of hotel space (489 hotel rooms) and a net decrease of up to 147,007 gsf of usable office space, 54,310 gsf of retail space, and 6,343 gsf of residential space (6 residential units).

- **A Portion of Potential Development Site 20** (Site CA-2, Figure 20-5) (Block 1307, Lot 43). Under the Modified Proposal Alternative Special Permit scenario for the conceptual analysis, it is assumed that this site would develop as a residential building pursuant to a landmark authorization, with up to 70,882 gsf of residential space (71 residential units) and 5,020 gsf of retail space. As compared with the RWCDs for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 70,882 gsf of residential space (71 residential units) and 5,020 gsf of retail space.
- **No-Action Development Site at 12-16 East 52nd Street/7-11 East 51st Street** (Site B, Figure 20-5) (Block 1287, Lots 9-10, 58, 61-62). Under the Modified Proposal Alternative Special Permit scenario for the conceptual analysis, it is assumed that this site would develop as a larger mixed residential/hotel building pursuant to a landmark authorization with up to 268,146 gsf of residential space (269 residential units), 33,148 gsf of hotel space (51 hotel rooms), and 19,322 gsf of retail space. As compared with the RWCDs for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 33,148 gsf of hotel space (51 hotel rooms).
- **No-Action Development Site at 19 East 54th Street/532-538 Madison Avenue** (Site C, Figure 20-5) (Block 1290, Lots 14-17, 115). Under the Modified Proposal Alternative Special Permit scenario for the conceptual analysis, it is assumed that this site would develop as a larger hotel building pursuant to a landmark authorization, with up to 199,871 gsf of hotel space (307 hotel rooms) and 11,166 gsf of retail space. As compared with the RWCDs for the Modified Proposal Alternative, this development under the Modified Proposal Alternative Special Permit scenario would result in a net increase in the With-Action condition of up to 35,173 gsf of hotel space (54 hotel rooms).

Overall, as shown in Table 20-30, the Modified Proposal Alternative Special Permit scenario would result in the construction of approximately 9,486,151 gsf of office space, 599,700 gsf of retail space, 2,997,271 gsf of hotel space (4,613 hotel rooms), 609 parking spaces, and 1,117,548 gsf of residential space (1,126 residential units). The projected incremental (net) change between the future without and future with the Modified Proposal Alternative Special Permit scenario would be an increase of approximately 2,966,518 gsf of office space, 70,372 gsf of retail space, 986,324 gsf of hotel space (1,519 hotel rooms), 462 parking spaces, and 344,843 gsf of residential space (350 residential units).

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In addition, the Modified Proposal Alternative Special Permit scenario would include the subway improvements at 51st Street/Lexington Avenue-53rd Street subway stations, as described in Section 20.7.18.12, “Transit.”

TABLE 20-30: SUMMARY OF MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT DEVELOPMENT SCENARIO FOR CONCEPTUAL ANALYSIS

Use	No-Action Condition	Modified Proposal Alternative Special Permit Scenario	Increment
Residential	1,047,194 gsf (1,051 DU)	1,392,037 gsf (1,401 DU)	344,843 gsf (350 DU)
Office	6,666,640 gsf	9,633,158 gsf	2,966,518 gsf
Retail	628,787 gsf	699,159 gsf	70,372 gsf
Hotel ¹	2,175,646 gsf (3,347 rooms)	3,161,970 gsf (4,866 rooms)	986,324 gsf (1,519 rooms)
Parking ²	68,002 gsf (340 spaces)	160,402 gsf (802 spaces)	92,400 gsf (462 spaces)

Note: Under the Modified Proposal Alternative Special Permit scenario, development would occur on the 19 projected sites as well as Sites B, C, CA-1, and CA-2 (Figure 20-5).

¹ Assumes 650 sf per hotel room

² Assumes 200 sf per parking space

As shown in Table 20-31, the Modified Proposal Alternative Special Permit scenario would introduce a total of approximately 1,790 residents and 41,529 workers within the proposed rezoning area. The projected incremental (net) change between the future without and future with the Modified Proposal Alternative Special Permit Scenario would be an increase of approximately 556 residents and 12,669 workers.

TABLE 20-31: SUMMARY OF MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO POPULATION AND EMPLOYMENT FOR CONCEPTUAL ANALYSIS

Population/ Employment ¹	No-Action Condition	Modified Proposal Alternative Special Permit Scenario	Increment
Residents	1,672	2,228	556
Workers	29,856	42,525	12,669

¹ Assumes 1.59 persons per DU (based on 2010 Census data for the rezoning area), 1 employee per 250 sf of office, 3 employees per 1,000 sf of retail, 1 hotel employee per 2.67 hotel rooms, 1 residential building employee per 25 DU, and 1 employee per 10,000 sf of parking floor area.

Compared to the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would result in approximately 636,661 gsf less of office space, 49,290 gsf less of retail space, 1,083,861 gsf more of hotel space (1,667 additional hotel rooms), and 473,847 gsf more of residential space (480 additional residential units), compared to the No-Action condition. The net incremental increase in

the number of parking spaces would be the same under both the Modified Proposal Alternative and the Modified Proposal Alternative Special Permit scenario (Table 20-32).

TABLE 20-32: SUMMARY OF NO-ACTION TO WITH-ACTION INCREMENTAL DEVELOPMENT – MODIFIED PROPOSAL ALTERNATIVE VS. MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO FOR CONCEPTUAL ANALYSIS

Use	No-Action to With-Action Increment		Difference
	Modified Proposal Alternative	Modified Proposal Alternative Special Permit Scenario	
Residential	-129,004 gsf (-130 DU)	344,843 gsf (350 DU)	473,847 gsf (480 DU)
Office	3,603,179 gsf	2,966,518 gsf	-636,661 gsf
Retail	119,662 gsf	70,372 gsf	-49,290 gsf
Hotel	-97,537 gsf (-148 rooms)	986,324 gsf (1,519 rooms)	1,083,861 gsf (1,667 rooms)
Parking	92,400 gsf (462 spaces)	92,400 gsf (462 spaces)	0

Notes: The No-Action to With-Action increment for the Modified Proposal Alternative looks at the 19 projected development sites, whereas the No-Action to With-Action increment for the Modified Proposal Alternative Special Permit scenario looks at the 19 projected sites as well as Sites B, C, CA-1, and CA-2 (Figure 20-5).

20.7.18.1 Land Use, Zoning, and Public Policy

Similar to the future condition with the Proposed Action analyzed in Chapter 2, “Land Use, Zoning, and Public Policy,” development under the Modified Proposal Alternative Special Permit scenario would not result in a significant adverse impact on land use, zoning and public policy.

No new land uses would be introduced under the Modified Proposal Alternative Special Permit scenario. The combined increment associated with higher FAR development by special permit or authorization under the Modified Proposal Alternative Special Permit scenario on Projected Development Sites 4, 9, 12, 13, and 17, as well as portions of Potential Development Sites 7 and 20 and No-Action Development Sites B and C as compared with the Proposed Action is a net increase of up to 869,445 gsf (excluding parking) distributed on nine sites. Similar to the conclusions of the analysis of the Proposed Action, the Modified Proposal Alternative Special Permit scenario would not directly displace any land use; nor would it generate new land uses that would be incompatible with surrounding land uses, or conflict with existing zoning or public policy.

Given the area’s transit-rich location, the City believes that East Midtown can accommodate greater densities than the proposed as-of-right maximums, and that allowing limited additional development of residential or hotel and other uses would further the City’s objective of seeding the district with major new buildings that would improve the 24-hour character of the area while continuing to meet the proposal’s overall goal of sustaining the area as the City’s premier office district. The Special Permit and

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Authorization provisions under the Modified Proposal Alternative Special Permit scenario, which would upon discretionary approval: (1) allow greater amounts of residential or hotel and other uses than permitted by the underlying commercial zoning through a new All Use Modification Special Permit; (2) allow the transfer of development rights from landmarks within the Northern Subarea to sites within that area that do not meet the Qualifying Site size and frontage requirements; and (3) allow flexibility in the minimum 200-foot frontage requirement for Qualifying Sites; would be consistent with applicable public policies including *PlaNYC*'s goals of pursuing transit-oriented development and promoting walkable destinations and mass transit and CB 6's goals of implementing land use policies consistent with historic trends in the area.

As such, the Modified Proposal Alternative Special Permit scenario would not result in any significant adverse impacts to land use, zoning, and public policy.

20.7.18.2 Socioeconomic Conditions

Like the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in any significant adverse impacts on socioeconomic conditions. The Modified Proposal Alternative Special Permit scenario would not result in significant adverse direct or indirect residential displacement, or induce a trend that could potentially result in changing socioeconomic conditions for the residents within the East Midtown rezoning area. Furthermore, the Modified Proposal Alternative Special Permit scenario would not result in any additional direct or indirect business/institutional displacement. In addition, like the Proposed Action, the Modified Proposal Alternative Special Permit scenario would not result in any significant adverse impacts on specific industries.

Under the Modified Proposal Alternative Special Permit scenario, development would occur on the same 19 RWCDs projected development sites as under the Proposed Action and Modified Proposal Alternative, as well as an additional four sites (discussed in detail in Section 20.7.18):

- A portion of Potential Development Site 7
- A portion of Potential Development Site 20
- No-Action development site at 12-16 East 52nd Street/7-11 East 51st Street
- No-Action development site at 19 East 54th Street/532-538 Madison Avenue

Under the Modified Proposal Alternative Special Permit scenario, it is anticipated that the development which would occur on these 23 development sites would result in a net additional 350 dwelling units, 2,966,518 gsf of office space, 70,372 gsf of retail uses, and 986,324 gsf of hotel uses over the No-Action condition and would result in incremental increases in residents and workers in the study area. In comparison to the Modified Proposal Alternative and the Proposed Action, the Modified Proposal Alternative Special Permit scenario would result in an increase of residential uses and a decrease in office

and retail uses; the Modified Proposal Alternative Special Permit scenario would result in more hotel development than under the Modified Proposal Alternative, and less hotel development than with the Proposed Action.

According to the *CEQR Technical Manual*, direct displacement of fewer than 500 residents would not typically be expected to alter socioeconomic characteristics of a neighborhood. Some of the residential space located on project development sites could be displaced by future development under the Modified Proposal Special Alternative Permit scenario, which would not be displaced under the Proposed Action or the Modified Proposal Alternative. However, as the Modified Proposal Alternative Special Permit scenario would result in a net increase in residential development and study area residents as compared to both the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in an overall decrease in the study area residential population, as would occur under the Proposed Action and Modified Proposal Alternative. In addition, as the Modified Proposal Alternative Special Permit scenario would result in a minor net increase in the development of residential units over No-Action conditions (introducing approximately 350 dwelling units), it would not induce a trend that could potentially result in changing socioeconomic conditions for the residents within the East Midtown rezoning area.

As with the Proposed Action and Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario could potentially displace commercial uses in the study area. However, as with the Proposed Action and Modified Proposal Alternative, displacement of these commercial uses would not constitute a significant adverse impact because the displaced uses do not provide products or services essential to the local economy that would otherwise be unavailable nor are they the subject of regulations in the publicly adopted plans to preserve, enhance, or otherwise protect them. In addition, the Modified Proposal Alternative Special Permit scenario would result in a net increase of office and retail space compared to the No-Action condition (although the amount of this increase would be less than conditions under both the Proposed Action and the Modified Proposal Alternative).

The Proposed Action, Modified Proposal Alternative, and Modified Proposal Alternative Special Permit scenario would all result in an incremental increase in the total number of study area jobs, compared to the No-Action condition. The Proposed Action would generate approximately 15,703 additional jobs over the No-Action condition, the Modified Proposal Alternative would generate approximately 14,720 additional jobs over the No-Action condition, and the Modified Proposal Alternative Special Permit scenario would generate approximately 12,669 additional jobs over the No-Action condition.

Similar to the Proposed Action and Modified Proposal Alternative, the new development resulting from the Modified Proposal Alternative Special Permit scenario would not constitute new economic activities in the study area, nor would it alter or accelerate commercial market trends in the study area, and therefore would not result in significant adverse impacts due to indirect business/institutional displacement. Additionally, like the Proposed Action and Modified Proposal Alternative, the Modified

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Proposal Alternative Special Permit scenario would not result in any significant adverse impacts on specific industries. Like the Proposed Action and Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would facilitate the construction of a limited and targeted amount of higher-density development that would be concentrated near Grand Central Terminal, a high-density, transit-rich area, and development under the Modified Proposal Alternative Special Permit would represent a similar mix of office, hotel, retail, and residential uses as under No-Action conditions. As such, the Modified Proposal Alternative Special Permit Scenario would not constitute new economic activities in the study area.

Though there would be additional office development as compared with the No-Action condition, East Midtown is one of the most sought-after dynamic office markets and central business districts (CBD) in the New York region that is largely defined by a wide variety of office space, and the Modified Proposal Alternative Special Permit scenario would result in less incremental office development than under the Proposed Action. Therefore, as under the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in any significant adverse impacts due to direct or indirect business/institutional displacement.

20.7.18.3 Community Facilities and Services

As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in any significant adverse impacts to community facilities and services. Similar to the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not physically alter or result in the direct displacement of any existing community facilities or services. With respect to the potential for indirect effects on service delivery, the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, would not warrant an assessment of libraries, child care centers, health care facilities, or fire and police services. Unlike the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would result in a net increase in residential units compared to the No-Action condition, and the increase would exceed the CEQR threshold for requiring an analysis of public schools. As discussed below, the projected increases in school utilization for elementary and intermediate schools under the Modified Proposal Alternative Special Permit scenario, compared to the No-Action condition, are respectively less than five percent and therefore are not significant.

As discussed in the Environmental Assessment Statement (EAS), the Proposed Action would not warrant an assessment of community facilities and services as it would not have the potential for significant adverse direct or indirect impacts on existing community facilities or services. Similar to the Proposed Action, the Modified Proposal Alternative would not warrant an assessment of community facilities and services. Unlike the Proposed Action and the Modified Proposal Alternative, the Modified Proposal

Alternative Special Permit scenario warrants an indirect effects analysis of public schools because of the projected increase in residential population compared to the No-Action condition.

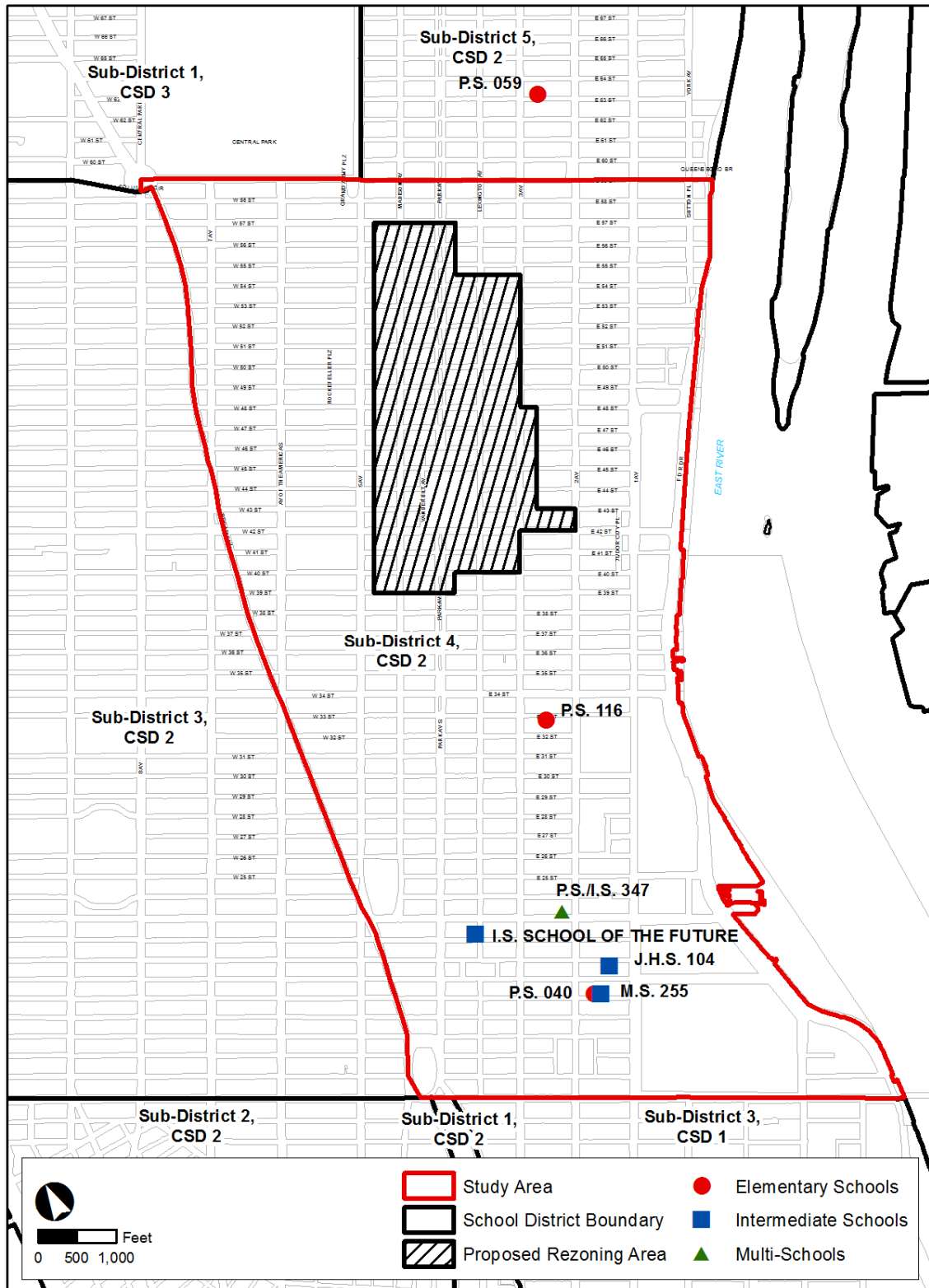
Whereas the Proposed Action and the Modified Proposal Alternative would both result in net decreases in the number of residential units compared to the No-Action condition, the Modified Proposal Alternative Special Permit scenario would result in a net increase of 350 dwelling units compared to the No-Action condition. According to the *CEQR Technical Manual*, new population resulting from a project would use existing services, which may result in potential indirect effects on service delivery. Residential units resulting from the Modified Proposal Alternative Special Permit scenario are not anticipated to comprise subsidized low- to moderate-income family housing units, and therefore are not expected to generate demand for child care slots at publicly funded group child care and Head Start centers. Furthermore, the projected net increase of 350 residential units under the Modified Proposal Alternative Special Permit scenario over the No-Action condition is less than the 901-unit minimum threshold for an analysis of libraries in Manhattan. Therefore, the Modified Proposal Alternative Special Permit scenario does not warrant an assessment of child care centers or libraries. However, the projected net increase of 350 residential units triggers an analysis of public schools for the Modified Proposal Alternative Special Permit scenario.

Based on the multipliers in Table 6-1a of the *CEQR Technical Manual*, the projected net increase of 350 residential units with the Modified Proposal Alternative Special Permit scenario would result in a net increase of 42 new elementary school students and 14 new middle school students, compared to the No-Action condition. The Modified Proposal Alternative Special Permit scenario also would add an estimated 21 high school students, which is below the CEQR threshold for an analysis of high schools. Therefore, the following analysis focuses only on the elementary and middle school levels.

The *CEQR Technical Manual* states that the school district’s “sub-district” in which the projected residential development sites are located is the study area for the analysis. The proposed rezoning area is located entirely within sub-district 4 of New York City Community School District 2. As shown in Figure 20-6, there are four schools that serve elementary school students who reside in the sub-district, including P.S. 59, P.S. 40, P.S. 116, and the PS component of P.S. 347. Within the sub-district boundary there are 4 intermediate schools that serve the middle school population, including I.S. 104, I.S. 255, the I.S. component of P.S. 347, and the I.S. component of School of the Future.

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FIGURE 20-6: ELEMENTARY AND INTERMEDIATE SCHOOLS IN THE STUDY AREA FOR THE MODIFIED PROPOSAL ALTERNATIVE CONCEPTUAL ANALYSIS



Source: DCP

Following the methodology in the *CEQR Technical Manual*, the analysis used the most recent capacity, enrollment, and utilization rates for elementary and intermediate schools in the study area. Future No-Action conditions were estimated based on enrollment projections and No-Action development projects, using the student generation rates listed in Table 6-1a of the *CEQR Technical Manual*. Future conditions under the Modified Proposal Alternative Special Permit scenario were estimated by applying the aforementioned student generation rates to the net increase in residential units compared to the No-Action condition. Future utilization rates for elementary and intermediate schools in the study area in the No-Action condition and under the Modified Proposal Alternative Special Permit scenario were estimated by comparing projected enrollment with projected capacity.

As shown in Table 20-33, the Modified Proposal Alternative Special Permit scenario would result in an increase in school utilization of approximately 1.8% for elementary schools and 0.6% for intermediate schools, compared to the No-Action condition. These increases are less than five percent and therefore are not significant. Consequently, as with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in any significant adverse impacts related to community facilities and services.

TABLE 20-33: ESTIMATED PUBLIC ELEMENTARY AND INTERMEDIATE SCHOOL CAPACITY, ENROLLMENT, AND UTILIZATION IN THE STUDY AREA: 2033 FUTURE WITH THE MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO VS. THE NO-ACTION CONDITION

Program Capacity	2033 No-Action Projected Enrollment (with Pre-K)	No-Action Program Utilization	Net Increase in Students Resulting from Modified Proposal Alternative Special Permit Scenario	2033 Projected Enrollment with Modified Proposal Alternative Special Permit Scenario	Program Utilization with Modified Proposal Alternative Special Permit Scenario	Difference in Program Utilization between No-Action Condition and Modified Proposal Alternative Special Permit Scenario
Elementary						
2,392	2,983	124.7%	42	3,025	126.5%	1.8%
Intermediate						
2,259	2,772	122.7%	14	2,786	123.3%	0.6%

Sources: DCP; Enrollment Projections: *Grier Actual 2011, Projected 2012-2021*. 2021 Projections used for 2033 Future Year.

20.7.18.4 Open Space

As with the Proposed Action and the Modified Proposal Alternative, there would be no significant adverse impacts on open space as a result of the Modified Proposal Alternative Special Permit scenario.

As discussed previously, compared to the No-Action condition, the Modified Proposal Alternative Special Permit RWCDs would result in an increase of 556 residents and 12,669 workers within the proposed

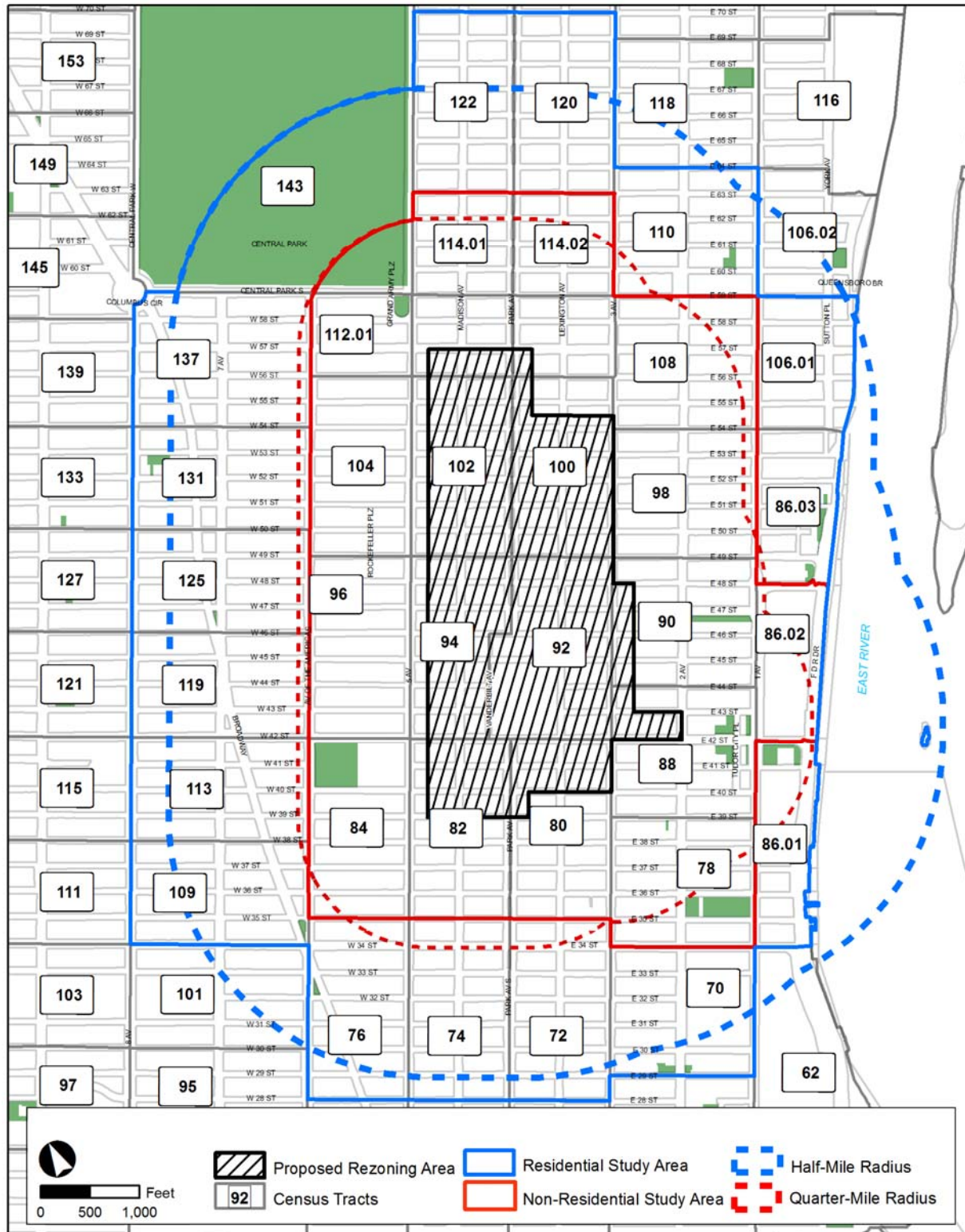
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rezoning area. These increases in the residential and worker populations exceed the *CEQR Technical Manual* thresholds (i.e., 200 residents and 500 employees, respectively, for an area that is neither well served nor underserved by open space) for requiring residential and non-residential open spaces analyses, respectively. The non-residential open space analysis for the Modified Proposal Alternative Special Permit scenario was conducted using the same methodology and study area as for the Proposed Action and the Modified Proposal Alternative.

In the residential open space analysis for the Modified Proposal Alternative Special Permit scenario, a residential study area was defined—pursuant to CEQR guidelines—to include all census tracts that have at least 50 percent of their area located within a ½-mile distance of the proposed rezoning area. As shown in Figure 20-7, the residential study area includes the following census tracts in addition to those included in the non-residential study area: Census Tracts 70, 72, 74, 76, 86.01, 86.03, 106.01, 109, 110, 113, 119, 120, 122, 125, 131, and 137. For purposes of the quantitative open space analysis, the residential study area was also adjusted to include the portion of Central Park that falls within the ½-mile distance of the proposed rezoning area, and the inventory of open space resources was expanded to include the additional plazas and parks within the residential study area boundaries. The residential open space analysis for the Modified Proposal Alternative Special Permit scenario was based on population and open space data within the residential study area for the existing, No-Action, and With-Action conditions (see Appendix 6).

The resultant open space ratios for the non-residential and residential study areas are shown in Table 20-34. For the non-residential study area, the passive open space ratio with the Modified Proposal Alternative Special Permit scenario would be 0.072 acres per 1,000 non-residents, which is the same as that with the Proposed Action and the Modified Proposal Alternative; the passive open space ratio with the Modified Proposal Alternative Special Permit scenario, the Modified Proposal Alternative, and the Proposed Action would be 1.37 percent lower than that in the No-Action condition (0.073). The combined open space ratio with the Modified Proposal Alternative Special Permit scenario would be 0.064 acres per 1,000 non-residents and residents, which is the same as that with the Proposed Action and the Modified Proposal Alternative; the passive open space ratio with the Modified Proposal Alternative Special Permit scenario, the Modified Proposal Alternative, and the Proposed Action would be 1.54 percent lower than that in the No-Action condition (0.065).

FIGURE 20-7: OPEN SPACE STUDY AREAS FOR THE MODIFIED PROPOSAL ALTERNATIVE CONCEPTUAL ANALYSIS



Sources: DCP; U.S. Census 2010

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TABLE 20-34: 2033 FUTURE WITH THE MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO: OPEN SPACE RATIOS SUMMARY

Ratio	CEQR Open Space Ratio Benchmark	Open Space Ratios Per 1,000 People			Change from No-Action to With-Action	
		Existing	No-Action	With-Action	Absolute Change	Percent Change
Non-Residential Study Area						
Passive Open Space - Non-Residents	0.15	0.070	0.073	0.072	-0.001	-1.37%
Passive Open Space - Combined Non-Residents and Residents	Weighted 0.186 / 0.188 / 0.188 (Existing / No-Action / With-Action) ⁽¹⁾	0.063	0.065	0.064	-0.001	-1.54%
Residential Study Area						
Total Open Space - Residents	2.50	1.022	0.989	0.989	0.000	0.00%
Passive Open Space - Residents	0.50	0.705	0.690	0.691	0.001	0.14%
Passive Open Space - Combined Non-Residents and Residents	Weighted 0.191 / 0.193 / 0.192 (Existing / No-Action / With-Action) ⁽¹⁾	0.083	0.084	0.083	-0.001	-1.19%
Active Open Space - Residents	2.00	0.318	0.299	0.298	-0.001	-0.33%

(1) Based on a target open space ratio established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents. Since this benchmark depends on the proportion of non-residents and residents in the study area's population, it is different for existing, No-Action, and With-Action conditions for both the non-residential and residential study areas. Each of these ratios is listed in this table.

For the residential study area, the total open space ratio with the Modified Proposal Alternative Special Permit scenario would be 0.989 acres per 1,000 residents, which is the same as that with the No-Action condition. The passive open space ratio with the Modified Proposal Alternative Special Permit scenario would be 0.691 acres per 1,000 residents, which is 0.14 percent lower than that in the No-Action condition (0.690). The passive open space ratio for the combined non-residential and residential population with the Modified Proposal Alternative Special Permit scenario would be 0.083 acres per 1,000 non-residents and residents, which is 1.19 percent lower than that in the No-Action condition (0.084). The active open space ratio with the Modified Proposal Alternative Special Permit scenario would be 0.298 acres per 1,000 residents, which is 0.33 percent lower than that in the No-Action condition (0.299). Neither the Proposed Action nor the Modified Proposal Alternative required a residential open space analysis, as neither scenario would result in an increase in residential population when compared to the No-Action condition.

As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in significant adverse open space impacts. For both the non-residential and residential study areas, while the acreage of open space resources is and would continue to be deficient in comparison to the CEQR benchmarks (Table 20-34), the deficiency would not be substantially exacerbated with the Modified Proposal Alternative Special Permit scenario, as the percentage change in the open space ratios from the No-Action to With-Action conditions for this alternative would be less than 5 percent, which is used as a threshold for identifying significant adverse impacts because the study area is neither well- nor underserved by open space resources. Therefore, as with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in significant adverse indirect open space impacts. Furthermore, as with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in the direct displacement of any existing publicly accessible open space resources, nor would it result in significant adverse impacts on any open spaces due to construction, shadows, noise, or air quality.

20.7.18.5 Shadows

Site-specific analyses of the effects of potential incremental shadows resulting from the Modified Proposal Alternative Special Permit scenario for the sites that utilize the Superior Development special permit cannot be provided because the specific bulk modifications that may be sought in connection with the special permit are not known.

The other discretionary actions analyzed in the Modified Proposal Alternative Special Permit scenario allow differing use configurations or greater amounts of bulk on sites, but do not permit modifications to height and setback controls as part of the discretionary action. The Use modification special permit is not expected to result in greatly different building configurations than what was analyzed in the Proposed Action or Modified Proposal alternative scenarios, and would likely result in shorter buildings since the floor-to-floor to heights of hotel and residential uses facilitated under this permit are generally lower than for office uses, and contain less associated mechanical space.

Of the four sites that are expected to utilize the landmark transfer authorization or special permit, two (Portion of Potential Development Site 7 [Site CA-1, Figure 20-5] and Portion of Potential Development Site 20 [Site CA-2]) consist of portions of potential sites which were analyzed under the Modified Proposal Alternative at the same densities as permitted by the landmark authorization or special permit and, therefore, would not be expected to result in greatly different building configurations on those portions than previously analyzed under the Shadows analysis for the Modified Proposal alternative.

The two no-action sites (No-Action Development Site at 12-16 East 52nd Street/7-11 East 51st Street [Site B, Figure 20-5] and No-Action Development Site at 19 East 54th Street/532-538 Madison Avenue [Site C]) which are assumed to achieve additional FAR through use of the landmark transfer authorization would

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be expected to increase their overall building height with the authorization by less than 50 feet each. This incremental change in height by less than 50 feet would not be expected to alter the results of the previous shadow analyses, in conformance to the *CEQR Technical Manual*.

Given the above, it is likely that shadows impacts identified with the Proposed Action and the Modified Proposal Alternative—on sunlight-sensitive windows at St. Bartholomew’s Church and Community House, the Lady Chapel of St. Patrick’s Cathedral, and Christ Church United Methodist—would continue to occur with the Modified Proposal Alternative Special Permit scenario, and there is the potential for additional incremental shadows because the use of the Superior Development special permit in the Modified Proposal Alternative Special Permit scenario could result in taller buildings. Development on Projected Development Site 12, pursuant to the Superior Development Special Permit, could potentially exacerbate the impacts on St. Bartholomew’s Church and Community House and the Lady Chapel of St. Patrick’s Cathedral. However, a conceptual analysis of future use of a special permit that involves bulk modifications cannot predict with any precision how the modifications would be utilized. Therefore, it is unclear whether and to what extent the incremental shadows that would be cast in the Modified Proposal Alternative Special Permit scenario would differ from those with the Modified Proposal Alternative or the Proposed Action. Additionally, it is not known which, if any, of the sites in the proposed rezoning area would apply for the Superior Development Special Permit. Consequently, a site-specific analysis cannot be provided at this time. For the shadows technical area, analysis at a level consistent with the methodologies in the *CEQR Technical Manual* would only be possible at the time that a site-specific application is made for a special permit and/or authorization.

20.7.18.6 Historic and Cultural Resources

As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in any significant adverse impacts to archaeological resources, historic districts, or individually designated historic resources, but has the potential to result in significant adverse direct and construction-related impacts to eligible historic resources. Site-specific analyses, including a determination of possible indirect (visual/contextual) impacts on historic resources, cannot be provided for the use of the Superior Development special permit in the Modified Proposal Alternative Special Permit scenario because the specific bulk form of the buildings is not known. However, as with the Proposed Action and the Modified Proposal Alternative, development pursuant to the special permit and/or another discretionary action is not expected to alter the visual relationship of architectural resources to their setting within the East Midtown street grid. Overall, the Modified Proposal Alternative Special Permit scenario is expected to result in the same significant adverse impacts compared with the Proposed Action and the Modified Proposal Alternative.

Any potential effects to archaeological resources, historic districts, individually designated historic resources, or eligible historic resources resulting from the development of No-Action Sites B and C

(Figure 20-5) would not be consequences of the Modified Proposal Alternative Special Permit scenario, as these sites would also be developed absent the Modified Proposal Alternative Special Permit scenario. Therefore, the assessment of significant adverse impacts to historic and cultural resources for the Modified Proposal Alternative Special Permit scenario is limited to the projected and potential development sites.

The LPC reviewed all of the projected and potential development sites that could experience new/additional in-ground disturbance and concluded that none of the lots comprising those sites have any archaeological significance, and thus the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, would not result in any significant adverse impacts to archaeological resources. Additionally, the projected and potential development sites under the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, are not located within any historic districts, nor do they contain any individually designated historic resources. Under the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, any development that would be located within 90 feet of a designated/listed historic resource—where new development has the potential to cause damage due to ground-borne construction vibrations—would be subject to the procedures of the DOB’s TPPN #10/88, which governs the protection of adjacent historic properties from accidental construction damage. Therefore, as with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario is not expected to result in any direct or construction-related impacts to historic districts or individually designated historic resources.

The Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, has the potential to result in direct impacts to resources that are eligible for designation as a New York City Landmark (NYCL) or listing on the State/National Registers of Historic Places (S/NR). Due to their location on projected or potential development sites, the following 11 eligible historic resources could be demolished, either partially or entirely, as a consequence of the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative: the NYCL-eligible buildings at 16, 18-20, and 22-24 East 41st Street; the NYCL- and S/NR-eligible Pershing Square building at 100 East 42nd Street; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the S/NR-eligible Barclay Hotel at 111 East 48th Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL-eligible Shelton Club Hotel at 525 Lexington Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; and the NYCL-eligible Girl Scout Building at 830 Third Avenue. The CPC is currently considering a modification to the zoning text amendment that would require—prior to any demolition of an eligible structure as part of development undertaken on Projected Development Sites 6, 7, 9 and 16 and Potential Development Sites 2, 5, 9, 12, 13 and 19 pursuant to the Modified Proposal Alternative Special Permit scenario, as with the Modified Proposal Alternative—

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that the developer conduct and complete HABS recordation in a manner acceptable to the LPC. In the event this modification is adopted, significant adverse impacts resulting from the demolition of eligible resources would be partially mitigated.

Additionally, the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, has the potential to result in construction-related impacts to eligible historic resources, which would not be afforded the protections of TPPN #10/88 unless they become designated/listed. Due to their location within 90 feet of a projected and/or potential development site, the following 24 eligible resources could experience construction-related impacts as a result of the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative: the NYCL- and S/NR-eligible Chemist Club at 50-52 East 41st Street; the S/NR-eligible Vanderbilt Avenue building at 51 East 42nd Street; the S/NR-eligible East 45th Street Bridges; the NYCL-eligible Title Guarantee and Trust Company building at 6 East 45th Street; the NYCL- and S/NR-eligible Roosevelt Hotel at 45 East 45th Street; the NYCL-eligible Mercantile Library at 17 East 47th Street; the S/NR eligible Barclay Hotel/Hotel Inter-Continental at 111 East 48th Street; the NYCL- and S/NR-eligible townhouse at 39 East 51st Street; the NYCL-eligible Lexington Hotel at 509-511 Lexington Avenue; the NYCL-eligible Shelton Club Hotel at 525 Lexington Avenue; the NYCL-eligible building at 299 Madison Avenue; the NYCL-eligible building at 400 Madison Avenue; the NYCL-eligible building at 437 Madison Avenue; the NYCL-eligible Pan Am/Met Life Building at 200 Park Avenue; the NYCL- and S/NR-eligible Postum Building at 250 Park Avenue; the NYCL-eligible Union Carbide Building at 270 Park Avenue; the NYCL-eligible Girl Scout Building at 830 Third Avenue; the NYCL-eligible Citicorp Center at 884 Third Avenue; the NYCL-eligible Yale Club at 50 Vanderbilt Avenue; the S/NR-eligible building at 59 East 54th Street; the S/NR-eligible Lefcourt Colonial Building at 295 Madison Avenue; the S/NR-eligible building at 346 Madison Avenue; the S/NR-eligible Bankers Trust Building at 280 Park Avenue; and the S/NR-eligible Vanderbilt Concourse Building at 52 Vanderbilt Avenue. The CPC is currently considering a proposed modification to the zoning text amendment which would require—prior to excavation or demolition pursuant to the Modified Proposal Alternative Special Permit scenario, as with the Modified Proposal Alternative, on a Projected or Potential Development Site located within 90 feet of an eligible resource—that the Commissioner of Buildings have approved a construction monitoring protocol of similar scope and purpose to the provisions of TPPN #10/88. In the event this modification is adopted, the potential for significant adverse construction-related impacts on eligible resources would be fully mitigated.

Overall, the direct and construction-related impacts to historic resources under the Modified Proposal Alternative Special Permit scenario would be the same as those under the Proposed Action and the Modified Proposal Alternative.

As discussed above, similar to the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario is not expected to significantly alter the context of historic resources. The sites which would utilize the discretionary actions were, in whole or in part, identified for development in the Proposed Action and Modified Proposal scenarios. As described in the shadow section, the utilization of the Use Modification, and landmark transfer authorization or special permit would not greatly affect building form from what has been previously analyzed in the Proposed Action and the Modified Proposal alternative or, in the case of No Action Sites B and C, from what would otherwise occur in the No Action scenario. Thus, it is not expected that use of these provisions would alter the context of historic resources. It is not known which, if any, of the sites in the proposed rezoning area would apply for a Superior Development special permit, or the nature and extent of any bulk modifications that would be requested as part of such an application. Consequently, a site-specific analysis—including a determination of possible indirect (visual/contextual) impacts on historic resources—cannot be provided at this time for these sites.

However, any development application for a discretionary action would require a separate environmental review, and any significant adverse impacts on historic resources that could result from such development would be assessed and disclosed to the public under and pursuant to a separate environmental review.

20.7.18.7 Urban Design and Visual Resources

Similar to the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario is not expected to significantly alter the results of the previous analyses of urban design and visual resources. The sites which would utilize the discretionary actions were, in whole or in part, identified for development in the Proposed Action and Modified Proposal scenarios. As described in the shadow section, the utilization of the Use Modification, and landmark transfer authorization or special permit would not greatly affect building form from what was previously analyzed in those other scenarios.

A site-specific analysis of the effects of the use of the Superior Development special permit in the Modified Proposal Alternative Special Permit scenario on urban design and visual resources cannot be provided because the specific bulk modifications that may be sought in connection with the special permit are not known. Any application for the special permit within the proposed East Midtown Subdistrict would likely include bulk modifications, along with the request for additional floor area and/or the use of other provisions included in the proposed modified zoning text amendment that are subject to a discretionary action. Special permit developments that include the modification of bulk and urban design regulations would be expected to demonstrate superior qualities in terms of overall design, relationship to the street and function at street level, the size and caliber of on-site public amenities such as new public space (indoor and/or outdoor), and, in the case of sites within the Grand Central Subdistrict, the size and generosity of connections to the underground pedestrian network.

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As mentioned previously, a conceptual analysis of future use of the special permit that involves bulk modifications cannot predict with any precision how the modifications would be utilized. Consequently, a site-specific analysis—including a determination of possible impacts to visual resources—cannot be provided at this time. However, any development application for a discretionary action would require a separate environmental review, and any adverse impacts on urban design and visual resources that could result from the development would be assessed and disclosed to the public under and pursuant to that environmental review.

20.7.18.8 Hazardous Materials

As with the Proposed Action and the Modified Proposal Alternative, there would be no significant adverse impacts with respect to hazardous materials as a result of the Modified Proposal Alternative Special Permit scenario.

Under the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, the placement of (E) designations would reduce or avoid the potential for significant adverse impacts related to hazardous materials to occur as a result of the projected and potential developments. As with the Proposed Action and the Modified Proposal Alternative, all of the projected and potential development sites would receive an (E) designation under the Modified Proposal Alternative Special Permit scenario. While no (E) designations would be placed on No-Action Sites B and C (Figure 20-5), these sites would also be redeveloped absent the Modified Proposal Alternative Special Permit scenario, and thus any soil disturbance on these two sites would not be a consequence of the Modified Proposal Alternative Special Permit scenario. Therefore, the effects of development under the Modified Proposal Alternative Special Permit scenario would be the same as with the Proposed Action with respect to hazardous materials, and would not result in significant adverse impacts.

20.7.18.9 Water and Sewer Infrastructure

As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in significant adverse impacts to water and sewer infrastructure.

a. Water Supply

The Modified Proposal Alternative Special Permit scenario would result in greater incremental water demand and sanitary sewage flows compared to the Proposed Action analyzed in Chapter 9, “Water and Sewer Infrastructure.” The incremental water demand generated under the Modified Proposal Alternative Special Permit scenario would be approximately 1.4 million gallons per day (mgd) over the No-Action condition. This incremental water demand represents a 0.3 mgd increase over the incremental increase in water demand with the Proposed Action (1.1 mgd) and a 0.5 mgd increase over the incremental increase in water demand under the Modified Proposal Alternative (0.9 mgd). As with the Proposed Action, the incremental water demand under this alternative would be less than 1 percent of the City’s water supply

demand, and changes of this magnitude would not be large enough to have significant adverse impacts on the City's water system.

b. Wastewater Treatment

As previously stated development under the Modified Proposal Alternative Special Permit scenario would occur on the same projected development site as analyzed for the Proposed Action and the Modified Proposal Alternative, in addition to portions of potential development sites 7 and 20 and No-Action development sites B and C. The total incremental wastewater generation under the Modified Proposal Alternative Special Permit scenario would be approximately 733,751 gpd compared to an incremental increase of 366,141 under the Proposed Action and 332,846 gpd under the Modified Proposal Alternative. As all four additional development sites under the Modified Proposal Alternative Special Permit scenario are located within Subcatchment area NCM-036, the additional wastewater generated on potential development sites 7 and 20 and No-Action development Sites B and C would flow to the Newtown Creek WPCP via this subcatchment area. While development under the Modified Proposal Alternative Special Permit scenario would generate additional wastewater compared to the Proposed Action and the Modified Proposal Alternative, pursuant to CEQR methodology, as the projected increase in sanitary sewage would not cause the Newtown Creek WPCP to exceed its operational capacity or its SPDES-permitted capacity, the Modified Proposal Alternative Special Permit scenario would not result in significant adverse impacts to sanitary sewage conveyance and treatment.

c. Stormwater and Drainage Management

While development under the Modified Proposal Alternative Special Permit scenario would occur on a greater number of sites than under the Proposed Action and the Modified Proposal Alternative, given the existing and No-Action built condition of the rezoning area, the additional development would not be expected to result in any change to impervious surfaces as compared with the Proposed Action. However, as the Modified Proposal Alternative Special Permit scenario would generate more sanitary flow volumes compared to the Proposed Action, flows to the Newtown Creek combined sewer system would increase accordingly. The incremental volume to the combined sewer system under the Modified Proposal Alternative Special Permit scenario would be conveyed to the Newtown Creek WPCP via subcatchment areas NCM-017, NCM-036, and NCM-037, as with the Proposed Action and the Modified Proposal Alternative.

As discussed in Chapter 9, due to DEP's new stormwater management requirements established in July 2012, stormwater runoff from new development under the Modified Proposal Alternative Special Permit scenario (as under the Proposed Action and the Modified Proposal Alternative) is expected to substantially decrease as compared to existing conditions. With the incorporation of BMPs on each projected development site by their respective developer, it is concluded that the Modified Proposal Alternative Special Permit scenario would not result in significant adverse impacts on stormwater conveyance and treatment infrastructure.

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20.7.18.10 Solid Waste and Sanitation Services

The incremental solid waste generated under the Modified Proposal Alternative Special Permit scenario would be less than with the Proposed Action (as analyzed in Chapter 10, “Solid Waste and Sanitation Services”) and therefore development under this scenario would not result in a significant adverse impact on solid waste and sanitation services.

As the Modified Proposal Alternative Special Permit scenario would result in the development of more residential uses than under both the Modified Proposal Alternative and the Proposed Action, the incremental residential solid waste generation compared to the No-Action condition would be greater under the Modified Proposal Alternative Special Permit scenario. The incremental solid waste generated by residential uses under the Modified Proposal Alternative Special Permit scenario would be an additional 7.2 tons per week, compared to a net reduction of 11.6 tons per week with the Proposed Action. With an average DSNY collection truck capacity of 12.5 tons, this incremental increase in solid waste would be equivalent to less than one additional truck load per day over the No-Action condition, and therefore would not have a significant adverse impact on DSNY’s waste management system.

Compared to the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would result in a greater amount of commercial development (including office, retail, and hotel development). However, this scenario would represent a reduction in incremental commercial development compared to the Proposed Action. As such, the incremental weekly commercial solid waste generated under the Modified Proposal Alternative Special Permit scenario compared to the No-Action condition would be less than with the Proposed Action. Commercial uses (including office, retail, and hotel development) under the Modified Proposal Alternative Special Permit scenario would generate approximately 106.8 tons of weekly solid waste over the No-Action condition, an 8.1 percent decrease over the incremental increase in weekly commercial solid waste generated with the Proposed Action (116.2 tons/week). As with the Proposed Action and the Modified Proposal Alternative, the incremental increase in weekly solid waste handled by private carters would not overburden the City’s waste management system.

20.7.18.11 Energy

Development under the Modified Proposal Alternative Special Permit scenario would result in a minimal increase in incremental energy demand compared to the future with the Proposed Action and the future under the Modified Proposal Alternative. However, this incremental increase in demand would not result in a significant adverse impact on energy systems.

The Modified Proposal Alternative Special Permit scenario would result in a decrease in incremental commercial development (including office, retail, and hotel development) compared to the Proposed Action as well as an increase in incremental residential development compared to the Proposed Action. However, due to the lower energy consumption rates associated with residential uses, the Modified

Proposal Alternative Special Permit scenario would result in an incremental increase in annual energy consumption of only 933,899 million Btu over the No-Action condition, compared to the incremental increase of 831,400 million Btu over the No-Action condition with the Proposed Action. As such, under the Modified Proposal Alternative Special Permit scenario, as under the Proposed Action and the Modified Proposal Alternative, this increase in annual energy demand is not expected to result in a significant adverse impact on energy systems.

20.7.18.12 Transportation

As discussed below, compared with the total trip generation associated with the Proposed Action, the Modified Proposal Alternative Special Permit scenario would result in increases in the number of vehicles and parking demand and would result in decreases in pedestrian trips within the rezoning area during the AM, Midday, and PM peak hours. There would also be a decrease in transit trips during the AM and PM peak hours and an increase in transit trips during the Midday peak hour. With respect to traffic, the Modified Proposal Special Permit scenario would have one additional intersection with unmitigated significant adverse impacts during the AM peak hour and the same number of intersections with unmitigated significant adverse impacts during the Midday and PM peak hours compared to the Proposed Action RWCDS. The Modified Proposal Special Permit scenario would also have two, one, and two additional intersections with significant adverse impacts during the AM, Midday, and PM peak hours, respectively. With respect to transit, no significant adverse impacts are anticipated to subway line haul or to any analyzed subway station or station complex in both the Modified Proposal Special Permit scenario and the Proposed Action RWCDS. The Modified Proposal Special Permit scenario would have one additional significant adverse impact to a local bus route direction during the PM peak hour compared to the Proposed Action RWCDS. With respect to pedestrians, the Modified Proposal Special Permit scenario is not anticipated to have any additional significant adverse impacts compared to the Proposed Action RWCDS. With respect to parking, compared to the Proposed Action there would be a slightly higher demand for parking under the Modified Proposal Alternative Special Permit scenario, fewer new parking spaces would be provided, and one additional public parking facility would be displaced. As with the Proposed Action, the Modified Proposal Alternative Special Permit scenario would not result in a shortfall of parking spaces within a ¼-mile radius of the rezoning area.

Compared to the Proposed Action, the Modified Proposal Alternative Special Permit scenario would have a net increase of 1,329 hotel rooms, a net increase of 918 residential dwelling units, a net decrease of 854,821 gsf office space, and a net decrease of 98,580 gsf retail space. Travel demand forecasts were prepared for the Modified Proposal Alternative Special Permit scenario based on the transportation planning factors summarized in Chapter 12, “Transportation.” Table 20-36 presents a comparison of the total peak-hour person trips that would be generated by the Modified Proposal Alternative Special Permit scenario and the Proposed Action during the weekday AM, Midday, and PM peak hours. As shown in the table, the Modified Proposal Alternative Special Permit scenario would result in 333, 1,634, and 472 fewer

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overall person trips during the weekday AM, Midday, and PM peak hours, respectively, which represents an approximate 4-13 percent reduction compared to the Proposed Action. Table 20-36 presents a similar comparison of the total peak-hour vehicle trips and shows that the Modified Proposal Alternative Special Permit scenario would result in 155, 165, and 195 additional vehicle trips during the weekday AM, Midday, and PM peak hours, respectively. Tables comparing the net difference in person and vehicle trips between the Modified Proposal Alternative RWCDs and the Modified Proposal Alternative Special Permit scenario are provided in Appendix 6.

TABLE 20-35: NET DIFFERENCE IN PERSON TRIPS BETWEEN THE MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Bus		Subway		Railroad		Walk/Other		Total		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour															
Modified Proposal Special Permit	420	101	271	149	923	78	3,090	371	1,172	58	871	508	6,747	1,265	8,012
Proposed Action	485	8	252	11	1,170	38	3,823	99	1,506	51	898	4	8,134	211	8,345
Difference	-65	93	19	138	-247	40	-733	272	-334	7	-27	504	-1,387	1,054	-333
Midday Peak Hour															
Modified Proposal Special Permit	193	183	293	277	291	302	443	433	2	2	4,092	4,232	5,314	5,429	10,743
Proposed Action	141	143	197	204	361	382	383	396	-4	-4	4,938	5,240	6,016	6,361	12,377
Difference	52	40	96	73	-70	-80	60	37	6	6	-846	-1,008	-702	-932	-1,634
PM Peak Hour															
Modified Proposal Special Permit	165	514	251	346	123	1,083	586	3,650	82	1,357	840	1,178	2,047	8,128	10,175
Proposed Action	46	575	43	303	95	1,373	257	4,451	83	1,738	385	1,298	909	9,738	10,647
Difference	119	-61	208	43	28	-290	329	-801	-1	-381	455	-120	1,138	-1,610	-472

Source: Parsons Brinckerhoff, 2013

TABLE 20-36: NET DIFFERENCE IN VEHICLE TRIPS BETWEEN THE MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO AND THE PROPOSED ACTION

Development Scenario	Auto		Taxi		Truck		Total		
	In	Out	In	Out	In	Out	In	Out	Total
AM Peak Hour									
Modified Proposal Special Permit	343	76	281	281	56	56	680	413	1,093
Proposed Action	402	6	203	203	62	62	667	271	938
Difference	-59	70	78	78	-6	-6	13	142	155
Midday Peak Hour									
Modified Proposal Special Permit	143	137	236	236	59	59	438	432	870
Proposed Action	105	108	178	178	68	68	351	354	705
Difference	38	29	58	58	-9	-9	87	78	165
PM Peak Hour									
Modified Proposal Special Permit	118	413	307	307	11	11	436	731	1,167
Proposed Action	29	469	225	225	12	12	266	706	972
Difference	89	-56	82	82	-1	-1	170	25	195

Source: Parsons Brinckerhoff, 2013

a. Traffic

As the Modified Proposal Alternative Special Permit scenario would generate additional trips compared to the Proposed Action, for study area intersections where unmitigatable significant adverse traffic impacts were identified in the With-Action condition, the same conclusion of unmitigatable significant adverse impacts were made. A targeted level of service analysis was conducted at 25 study area intersections in proximity to the development sites that were assumed to utilize a special permit and/or another discretionary action where additional traffic resulting with the Modified Proposal Alternative Special Permit scenario would be most heavily concentrated. The intersections selected for quantified traffic analysis included a combination of intersections where significant impacts were identified in the Proposed Action With-Action condition but were mitigatable (i.e., to determine if there would be additional intersections with unmitigatable significant impacts under the Modified Proposal Alternative Special Permit scenario) and intersections where no significant impacts were identified in the Proposed Action With-Action condition (i.e., to determine if there would be additional intersections with significant impacts under the Modified Proposal Alternative Special Permit scenario and if these could be mitigated).

Table 20-37 presents a comparison of the number of approach movements and intersections that would have significant adverse impacts and unmitigated significant adverse impacts for the Modified Proposal Alternative Special Permit scenario and Proposed Action (the results shown for the Proposed Action in Table 20-37 refer to only those intersections located within the targeted area and are common to those analyzed for the Modified Proposal Alternative Special Permit scenario). Table 20-38 summarizes intersections and approach movements that would have differences in significant adverse traffic impacts and differences in impacted intersections that would be fully mitigated for the Modified Proposal Alternative Special Permit scenario compared to the Proposed Action. The results of the targeted analysis are summarized below:

- For the weekday AM peak hour, the Modified Proposal Alternative Special Permit scenario would have one additional intersection (Park Avenue at East 40th Street) with unmitigated significant impacts compared to the RWCDs for the Proposed Action. The Modified Proposal Alternative Special Permit scenario would also have additional approach movements with significant impacts at two intersections that were not affected by the RWCDs for the Proposed Action (Park Avenue at East 40th Street, and Park Avenue at East 50th Street).
- For the weekday Midday peak hour, the Modified Proposal Alternative Special Permit scenario would have the same number of intersections with unmitigated significant impacts compared to the RWCDs for the Proposed Action. Under the Modified Proposal Alternative Special Permit scenario, there would be a net increase of two additional approach movements with significant impacts; one of which is at an intersection that was not affected by the RWCDs for the Proposed Action (Fifth Avenue at

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51st Street) and one of which is at an intersection that was also impacted by the RWCDs for the Proposed Action (Madison Avenue at East 47th Street).

- For the weekday PM peak hour, the Modified Proposal Alternative Special Permit scenario would have the same number of intersections with unmitigated significant impacts compared to the RWCDs for the Proposed Action. The Modified Proposal Alternative Special Permit scenario would also have additional approach movements with significant impacts at two intersections that were not affected by the RWCDs for the Proposed Action (Lexington Avenue at East 51st Street, Fifth Avenue at East 51st Street).

TABLE 20-37: NUMBER OF INTERSECTIONS AND APPROACHES WITH SIGNIFICANT ADVERSE TRAFFIC IMPACTS – COMPARISON OF MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO AND PROPOSED ACTION

Peak Hour	Development Scenario	Movements/ Intersections Analyzed	Movements/ Intersections With No Significant Impacts	Movements/ Intersections With Significant Impacts	Mitigated Movements/ Intersections	Unmitigated Movements/ Intersections
AM	Modified Proposal Special Permit	97/25	80/10	17/15	13/11	4/4
	Proposed Action	97/25	82/12	15/13	12/10	3/3
Midday	Modified Proposal Special Permit	95/25	84/16	11/9	9/7	2/2
	Proposed Action	95/25	86/17	9/8	7/6	2/2
PM	Modified Proposal Special Permit	97/25	84/15	13/10	8/7	5/3
	Proposed Action	97/25	86/17	11/8	6/5	5/3

Source: Parsons Brinckerhoff, 2013

TABLE 20-38: SUMMARY OF LOCATIONS WITH DIFFERENT SIGNIFICANT ADVERSE TRAFFIC IMPACTS – COMPARISON OF MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO AND PROPOSED ACTION

Intersection	AM Peak Hour				Midday Peak Hour				PM Peak Hour			
	Proposed Action		Modified Proposal Alternative Special Permit		Proposed Action		Modified Proposal Alternative Special Permit		Proposed Action		Modified Proposal Alternative Special Permit	
	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation	Impact(s)	Mitigation
Lexington Ave. @ E. 51st St.											WB-T	Yes
Park Ave. @ E. 40th St.			SBT-Viaduct Exit	No								
Park Ave. @ E. 50th St.			SB-T	Yes								
Madison Ave. @ E. 47th St.					WB-T, NB-L	Yes	WB-T, NB-L, NB-T	Yes				
Fifth Ave. @ 51st St.							SB-R	Yes			SB-R	Yes

Notes: NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; L = Left-Turn; T = Through; R = Right-Turn; Mitigation = Mitigation Provided; Unmitigatable Impacts are highlighted

Source: Parsons Brinckerhoff, Inc., 2013

The additional approach movements that were mitigated for the Modified Proposal Alternative Special Permit scenario used the same types of mitigation measures as the Proposed Action (i.e., signal timing changes or modifications to curbside parking regulations). Table 20-39 summarizes the recommended mitigation measures for each of the intersections that would have different significant adverse traffic impacts for the Modified Proposal Alternative Special Permit scenario compared to the Proposed Action during the AM, Midday, and PM peak hours. Table 20-40 provides a comparison of the v/c ratios, delays, and levels of service (LOS) at these impacted intersections with implementation of these mitigation measures to No-Action and Modified Proposal Alternative Special Permit scenario conditions for the AM, Midday, and PM peak hours. (Additional data for all intersections analyzed under the Modified Proposal Alternative Special Permit scenario are provided in Appendix 6.)

TABLE 20-39: SUMMARY OF PROPOSED TRAFFIC MITIGATION MEASURES – MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO

Intersection	Movement	No-Action	With-Action	Change	Proposed Mitigation
AM Peak Hour					
Park Avenue @ East 40th Street					Impacts cannot be fully mitigated in this time period.
Park Avenue @ East 50th Street	EB: G=	35	35	-1	34
	NB/SB: G=	44	44	1	45
Midday Peak Hour					
Madison Avenue @ East 47th Street	WB	1 T (9.6'), 1 R (9.6')	1 T (9.6'), 1 R (9.6')	Daylighting	2 T (10.1'), 1 R (10.1')
	WB T: G =	23	23	0	23
	WB TR: G =	14	14	-1	13
	NB LT: G =	43	43	1	44
Fifth Avenue @ 51st Street	WB T: G =	24	24	-1	23
	WB LT: G =	15	15	0	15
	SB TR: G =	41	41	1	42
PM Peak Hour					
Lexington Avenue @ East 51st Street	WB LT: G=	23	23	3	26
	Ped Crossing: G =	14	14	0	14
	SB TR: G =	43	43	-3	40
Fifth Avenue @ 51st Street	WB T: G =	24	24	-1	23
	WB LT: G =	15	15	0	15
	SB TR: G =	41	41	1	42

Note:

"G" indicates amount of green phase time, in seconds.

NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = Left-Turn; T = Through; R = Right-Turn

Source: Parsons Brinckerhoff, Inc., 2013

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TABLE 20-40: LEVEL OF SERVICE ANALYSIS WITH AND WITHOUT PROPOSED MITIGATION – MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO

Signalized Intersection	Approach	2033 No-Action				Modified Proposal Special Permit				Modified Proposal Special Permit w/ Mitigation			
		Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS	Movt.	V/C Ratio	Delay Sec/Veh	LOS
AM Peak Hour													
Park Avenue @ East 40th Street	EB	LT	0.74	35.8	D	LT	0.78	38.9	D	LT	0.78	38.9	D
		R	0.74	42.0	D	R	0.79	46.8	D	R	0.79	46.8	D
	NB	T (Tunnel Exit)	0.84	27.6	C	T (Tunnel Exit)	0.84	27.9	C	T (Tunnel Exit)	0.84	27.9	C
		T (SR onto Viaduct)	0.60	17.6	B	T (SR onto Viaduct)	0.62	18.0	B	T (SR onto Viaduct)	0.62	18.0	B
	SB	TR	0.52	16.7	B	TR	0.53	16.7	B	TR	0.53	16.7	B
		T	0.08	10.5	B	T	0.08	10.5	B	T	0.08	10.5	B
	T (Viaduct Exit)	1.14	95.5	F	T (Viaduct Exit)	1.15	101.1	F	T (Viaduct Exit)	1.15	101.1	F	
	INTERSECTION		48.4	D			51.0	D			51.0	D	
Park Avenue @ East 50th Street	EB	LTR	0.45	22.1	C	LTR	0.48	22.6	C	LTR	0.50	23.6	C
	NB	TR	0.72	20.4	C	TR	0.74	20.9	C	TR	0.72	19.9	B
	SB	L++	-	40.8	D	L++	-	40.8	D	L++	-	40.8	D
		T	1.06	64.4	E	T	1.07	69.3	E	T	1.05	60.4	E
		INTERSECTION		40.4	D			42.5	D			38.5	D
Midday Peak Hour													
Madison Avenue @ East 47th Street	WB	T	0.92	48.7	D	T	1.21	138.3	F	T	0.59	23.6	C
		R	0.22	35.8	D	R	0.24	36.4	D	R	0.26	37.7	D
	NB	L	0.52	24.9	C	L	1.50	283.1	F	L	0.52	17.9	B
		T	1.06	62.1	E	T	1.08	68.3	E	T	1.06	58.8	E
	INTERSECTION		56.9	E			103.6	F			45.6	D	
Fifth Avenue @ 51st Street	WB	L	0.69	50.1	D	L	0.72	52.0	D	L	0.72	52.0	D
		T	0.53	22.4	C	T	0.55	22.8	C	T	0.56	23.9	C
	SB	T	0.93	28.8	C	T	0.96	32.9	C	T	0.94	28.8	C
		R	1.28	201.6	F	R	1.30	209.1	F	R	1.18	161.4	F
	INTERSECTION		30.0	C			42.6	D			37.1	D	
PM Peak Hour													
Lexington Avenue @ East 51st Street	WB	L	0.56	34.8	C	L	0.61	36.5	D	L	0.54	31.6	C
		T	1.02	87.5	F	T	1.13	123.8	F	T	1.01	79.1	E
	SB	T	0.75	18.0	B	T	0.78	18.9	B	T	0.83	23.6	C
		R	0.42	17.9	B	R	0.42	17.9	B	R	0.48	23.1	C
	INTERSECTION		31.8	C			39.8	D			34.6	C	
Fifth Avenue @ 51st Street	WB	L	0.71	51.7	D	L	0.73	53.0	D	L	0.73	53.0	D
		T	0.65	25.6	C	T	0.67	26.6	C	T	0.69	28.1	C
	SB	T	0.87	24.7	C	T	0.90	26.9	C	T	0.88	24.3	C
		R	1.19	174.6	F	R	1.20	178.6	F	R	1.17	167.6	F
	INTERSECTION		34.2	C			36.0	D			34.0	C	

Notes:

††To mimic actual conditions for NB/SB left turning vehicles on Park Avenue, the sum of two delays were accounted for: (1) delay from making the left turn; and (2) delay from waiting at the red light after the left turn

Source: Parsons Brinckerhoff, Inc., 2013

b. Transit

Subway

As shown in Table 20-26, the Modified Proposal Alternative Special Permit scenario would generate 461 fewer trips by subway in the AM peak hour and 472 fewer trips in the PM compared to the Proposed Action. The Proposed Action would result in less crowding in the Grand Central-42nd Street subway station, with most station elements experiencing improved conditions. Furthermore, the Proposed Action would not result in any significant adverse impacts at the 42nd Street-Bryant Park/5th Avenue, 47-50 Streets-Rockefeller Center and 51st Street/Lexington Avenue-53rd Street subway stations.

It should be noted, however, that potential transit improvements funded under the DIF may include the replacement of existing 4-foot-wide stair U1 and escalator E252 at the north end of the southbound platform with a new 15-foot-wide stair and also 24-inch-wide escalator E254X with a new 40-inch-wide

escalator that would operate in the up direction in both the AM and PM peak hours. The potential improvements may also include operating this escalator and all other analyzed escalators at a higher speed (100 feet per minute versus 90 feet per minute). It is therefore anticipated that pedestrian flow patterns would change at all four analyzed escalators as a result of the additional capacity, as well as the change in direction (from down to up) in the PM peak hour at escalator E254X.

Compared to the Proposed Action, the Modified Proposal Alternative Special Permit scenario would generate fewer total subway trips in each peak hour, although the numbers of trips occurring at the 51st Street/Lexington Avenue-53rd Street subway stations would be somewhat greater due to their proximity to Site 16 which would be developed with a mix of office and hotel uses under the Modified Proposal Alternative Special Permit scenario compared to only hotel uses under the Proposed Action. In general, however, conditions under the Modified Proposal Alternative Special Permit scenario would be the same or similar to those under the Proposed Action, and no significant adverse impacts are anticipated at any analyzed subway station or station complex under this alternative. As the level of new subway demand projected to occur under the Proposed Action would not result in significant adverse subway line haul impacts, the smaller numbers of new trips projected under the Modified Proposal Alternative Special Permit scenario are also not expected to result in new significant subway line haul impacts. (Tables showing the levels of service at analyzed subway station elements and subway line haul conditions under the Modified Proposal Alternative Special Permit scenario are provided in Appendix 6.)

Bus

As shown in Table 20-26, overall, the Modified Proposal Alternative Special Permit scenario would generate 207 fewer bus trips (local and express combined) in the AM peak hour and 262 fewer in the PM compared to the Proposed Action. Although there would be fewer trips on the M42 local bus service under the Modified Proposal Alternative Special Permit scenario, the Proposed Action's significant adverse impacts to the M42 local bus in the eastbound direction in the AM and westbound direction in the PM would still occur under this scenario. These impacts could be mitigated by the addition of one eastbound M42 bus in the AM peak hour and one westbound bus in the PM peak hour, compared to two eastbound buses in the AM and two westbound in the PM under the Proposed Action. In addition, as shown in Table 20-41, there would also be a new impact to the M42 local bus in the eastbound direction in the PM peak hour. (This would be due to a change in the directional distribution of bus trips under the Modified Proposal Alternative Special Permit scenario compared to the Proposed Action.) The new impact to the eastbound M42 in the PM peak hour under the Modified Proposal Alternative Special Permit scenario could be mitigated by the addition of one eastbound M42 bus during this period.

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TABLE 20-41: FUTURE LOCAL BUS CONDITIONS UNDER THE MODIFIED PROPOSAL SPECIAL PERMIT SCENARIO

Peak Hour	Route	Direction	Proposed Action			Modified Proposal Alternative Special Permit Scenario		
			Available Capacity	Additional Peak-Hour Buses Needed to Accommodate Project-Generated Demand	Available Capacity w/ Mitigation	Available Capacity	Additional Peak-Hour Buses Needed to Accommodate Project-Generated Demand	Available Capacity w/ Mitigation
AM	M42	EB	-64	2	44	-47	1	7
PM	M42	EB	1	-	—	-2	1	52
		WB	-56	2	52	-45	1	9

Notes:

- (1) Peak Hours: 8:00-9:00 a.m. and 5:00-6:00 p.m.
- (2) Assumes service levels adjusted to address capacity shortfalls in the No-Action condition.
- (3) Available capacity based on MTA NYCT loading guideline of 54 passengers per standard bus.

c. Pedestrians

Compared to the Proposed Action, the Modified Proposal Alternative Special Permit scenario would generate an estimated 490 fewer pedestrian trips in the AM peak hour, 1,803 fewer in the Midday, and 723 fewer in the PM peak hour. (These would include fewer walk-only trips as well as fewer pedestrians en route to and from area transit services and parking garages.) However, there would likely be increased numbers of trips along some pedestrian elements (sidewalks, crosswalks, and corner areas) in proximity to projected development sites where there would potentially be more office development under the Modified Proposal Alternative Special Permit scenario. (Site 16, for example would be developed with a mix of office and hotel uses under the Modified Proposal Alternative Special Permit scenario compared to only hotel uses under the Proposed Action.)

As was the case for the Proposed Action Special Permit scenario, each action requiring a Special Permit under the Modified Proposal Alternative would be subject to separate discretionary approval, and any environmental impacts associated with such actions would be assessed and disclosed pursuant to a separate environmental review, beyond what is analyzed in this chapter on a conceptual and generic basis. A targeted level of service analysis was therefore conducted at one analyzed sidewalk—the north sidewalk along East 42nd Street between Vanderbilt and Madison avenues—where it is expected that the Modified Proposal Alternative Special Permit scenario would result in an incremental increase in pedestrian demand of 200 or more trips in one or more peak hours compared to demand under the Modified Proposal Alternative. (Incremental demand from the Modified Proposal Alternative Special Permit scenario on analyzed crosswalks and corner areas is expected to total less than 200 additional trips compared to the Modified Proposal Alternative in all peak hours.)

As shown in the analyses in Chapter 12, “Transportation,” incremental demand from the Proposed Action would not significantly adversely affect the north sidewalk along East 42nd Street between Vanderbilt and Madison avenues in any analyzed peak hour. Similarly, the additional pedestrian demand that would be generated under the Modified Proposal Alternative Special Permit scenario is also not expected to result in any new significant adverse impacts at this location in any analyzed peak hour. (Tables showing levels of service at the sidewalk analyzed for the Modified Proposal Alternative Special Permit scenario are provided in Appendix 6.) Use of the authorization to permit the use of DIB on sites that satisfy a minimum of 75 percent of the 200-foot frontage requirement could affect sidewalk widths since a full sidewalk widening along the full avenue frontage would not be achieved. The effects on pedestrians would need to be evaluated in a separate environmental review at the time of application for that authorization since the specific sites utilizing that authorization cannot be identified at this time.

d. Parking

With the additional development in the Modified Proposal Alternative Special Permit scenario, there would be a higher demand for parking compared to the RWCDs for the Proposed Action, although no additional off-street parking would be provided on the nine sites analyzed under the Modified Proposal Alternative Special Permit scenario and one additional public parking facility (with 149 spaces) would be displaced. Table 20-42 provides a comparison of the off-street parking supply and demand under the Modified Proposal Alternative Special Permit scenario and RWCDs for the Proposed Action for the weekday Midday period. As with the RWCDs for the Proposed Action, the Modified Proposal Alternative Special Permit scenario would not result in a shortfall of parking spaces within a ¼-mile radius of the rezoning area.

TABLE 20-42: OFF-STREET PARKING CAPACITY, DEMAND, AND UTILIZATION – COMPARISON OF MODIFIED PROPOSAL ALTERNATIVE SPECIAL PERMIT SCENARIO AND PROPOSED ACTION

Development Scenario	Total Capacity	Demand	Utilization Rate	Available Spaces
Modified Proposal Special Permit	18,227	16,108	88%	2,119
Proposed Action	18,468	16,087	87%	2,381

Source: Parsons Brinckerhoff, 2013

20.7.18.13 Air Quality

As with the Proposed Action and Modified Proposal Alternative, no significant air quality impacts are anticipated under the Modified Proposal Alternative Special Permit scenario.

Traffic associated with the additional development pursuant to the Modified Proposal Alternative Special Permit scenario is estimated to be greater than under the Proposed Action by 16.5 percent in the AM peak hour, 23.4 percent in the Midday peak hour, and 20.1 percent in the PM peak hour. These increases,

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which would be spread over the traffic study area, are not expected to cause a violation of NAAQS as the estimated mobile source concentrations under the Proposed Action would be well below the NAAQS and CEQR threshold.

Potential stationary source impacts under the Modified Proposal Alternative Special Permit scenario would not be significant because the HVAC systems for 35 of the 39 development sites would use, pursuant to (E) Designations incorporated as part of the Proposed Action, Con Edison steam (which has no local impacts), and the potential impacts of the other four sites (Projected Development Sites 12 and 19 and Potential Development Sites 6 and 11) were not anticipated to be significant because they were below the CEQR screen thresholds and would not decrease in height under the Modified Proposal Alternative Special Permit scenario. Development sites B and C, which would be developed pursuant to the Northern Landmark Transfer Authorization, are expected to be similar in height and square footage to Projected Development Site 11 and Potential Development Site 13, which were analyzed under the Proposed Action for HVAC systems with screening and detailed analysis. Therefore, it is likely that development sites B and C would require (E) designations for Con Edison steam as is the case of Projected Development Site 11 and Potential Development Site 13 under the Proposed Action; the need for (E) designations would be considered further in any future environmental review of a proposed use of the Northern Landmark Transfer Authorization on these sites.

20.7.18.14 Greenhouse Gas (GHG) Analysis

Increases in GHG emissions under the Modified Proposal Alternative Special Permit scenario are anticipated to be 1.5 percent greater than under the Proposed Action but still would be only a very small fraction of regional emissions. As with the Proposed Action, construction and operation of buildings developed pursuant to the Modified Proposal Alternative Special Permit scenario would be consistent with goals of *PlaNYC*.

The estimated GHG emissions from the Modified Proposal Alternative Special Permit alternative would be approximately 37,410 metric tons of GHG emissions from its operations and 37,410 metric tons of GHG emissions from mobile sources—for an annual total of approximately 67,825 metric tons of GHG emissions, which is 1.5 percent above the GHG emissions for the Proposed Action.

Table 20-43 displays the estimated GHG emissions associated with the operation emissions of the Proposed Action and the Modified Proposal Alternative Special Permit scenario for year 2033 once all development sites are assumed to be operational. As shown, operational GHG emissions are estimated to be approximately 34,248 metric tons of carbon dioxide equivalents for the Proposed Action, and 37,410 for the Modified Proposal Alternative Special Permit alternative.

TABLE 20-43: OPERATIONAL EMISSIONS

Building Type	Carbon Dioxide Equivalent (CO ₂ e) (kg/sf/year)	Floor Area (square ft)		CO ₂ e (metric tons/year)	
		Proposed Action	Modified Proposal Alternative Special Permit	Proposed Action	Modified Proposal Alternative Special Permit
Commercial	9.43	3,941,001	3,036,890	37,164	28,638
Large Residential	6.59	-442,389	1,331,167	-2,915	8,772
Total				34,248	37,410

As shown Table 20-44, annual mobile source emissions related to the Proposed Action would result in approximately 32,612 metric tons of carbon dioxide equivalents, and the Modified Proposal Alternative Special Permit scenario in 30,415 metric tons of CO₂e.

TABLE 20-44: MOBILE SOURCE EMISSIONS

Carbon Dioxide Equivalent (CO ₂ e) Emissions (metric tons/year)								
Road type	Passenger Vehicles		Taxis		Trucks		TOTAL	
	Proposed Action	Modified Proposal Alt. Special Permit	Proposed Action	Modified Proposal Alt. Special Permit	Proposed Action	Modified Proposal Alt. Special Permit	Proposed Action	Modified Proposal Alt. Special Permit
Local	936	1,213	124	283	9,874	8,716	10,934	10,212
Arterial	1,243	1,611	163	372	13,290	11,731	14,696	13,714
Interstate/ Expressway	548	710	71	162	6,363	5,616	6,982	6,489
Total	2,727	3,534	359	818	29,526	26,063	32,612	30,415

The total projected GHG emissions from the Proposed Action and Modified Proposal Alternative Special Permit scenario are shown in Table 20-45. The estimated total for the Proposed Action is 66,860 metric tons of GHG emissions which is about 0.13 percent of New York City’s 2011 annual total of 53.36 million metric tons. The estimated emissions from the Modified Proposal Alternative Special Permit alternative would be approximately 67,825 metric tons of GHG emissions, which is 1.5 % above the GHG emissions for the Proposed Action.

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TABLE 20-45: TOTAL EMISSIONS

Emissions Source	CO2e Emissions (metric tons)	
	Proposed Action	Modified Proposal Alternative Special Permit
Operations	34,248	37,410
Mobile Sources	32,612	30,415
Total	66,860	67,825

The construction GHG emissions for the Modified Proposal Alternative would be expected to be similar to the emissions from the Proposed Action.

20.7.18.15 Noise

As with the Proposed Action, the Modified Proposal Alternative Special Permit Scenario would not generate sufficient traffic to result in a significant adverse noise impact given the fewer generated traffic trips projected to occur under this scenario.

The estimated traffic noise exposure, impact assessment and window-wall noise attenuation requirements for the Proposed Action (see Chapter 15, “Noise” for details) and the Modified Proposal Alternative Special Permit Scenario are essentially the same.

20.7.18.16 Public Health

As with the Proposed Action and the Modified Proposal Alternative, no significant adverse impacts are anticipated with respect to public health as a result of the Modified Proposal Alternative Special Permit scenario.

As discussed in other sections of this chapter, the Modified Proposal Alternative Special Permit scenario is not expected to result in any unmitigated significant adverse impacts related to hazardous materials, air quality, or noise. Site-specific analyses of the construction-related impacts resulting from the Modified Proposal Alternative Special Permit scenario cannot be provided because the specific features of the buildings that may be constructed in connection with a special permit and/or authorization are not known. Any development application for a discretionary action would require a separate environmental review, and any adverse impacts on public health that could result from such development would be assessed and disclosed to the public under and pursuant to that environmental review.

20.7.18.17 Neighborhood Character

As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would not result in significant adverse impacts on neighborhood character.

The East Midtown area has a varied neighborhood context, and its defining features are the dominance of commercial land uses, the interspersing of older buildings with modern construction, high levels of pedestrian and vehicular activity and associated noise, a primarily high-density built context, and the presence of a number of iconic historic resources, including Grand Central Terminal, the Helmsley Building, the Chrysler Building, St. Bartholomew's Church and Community House, St. Patrick's Cathedral, the Seagram Building, and Lever House. In the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, the East Midtown area would continue to be defined by this combination of features. Compared to the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario would include less office and retail space, and additional residential units and hotel space, while continuing to meet the proposal's overall goal of encouraging new office space in the East Midtown area, which is consistent with the area's existing neighborhood character.

Of the relevant technical areas specified in the *CEQR Technical Manual*, the Modified Proposal Alternative Special Permit scenario—as with the Proposed Action and the Modified Proposal Alternative—would not cause significant adverse impacts regarding land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; or noise. In the Modified Proposal Alternative Special Permit scenario, as with the Proposed Action and the Modified Proposal Alternative, the potential significant adverse impacts on transportation would not affect neighborhood character; while there would be increased activity, the resulting conditions would not be out of character with the East Midtown area, and thus the incremental changes would not constitute significant impacts on neighborhood character.

Under the Modified Proposal Alternative Special Permit scenario, as with the Modified Proposal Alternative and the Proposed Action, potential significant adverse impacts on historic resources would not result in a significant adverse impact on neighborhood character because they would not alter the overall character of East Midtown as an area characterized by a varied context of older buildings interspersed with modern construction. In addition, the iconic historic structures that are defining features of neighborhood character—Grand Central Terminal, the Helmsley Building, St. Patrick's Cathedral, St. Bartholomew's Church and Community House, the Chrysler Building, the Seagram Building, and Lever House—would not be displaced with the Modified Proposal Alternative Special Permit scenario, similar to the Modified Proposal Alternative and the Proposed Action. Under the Modified Proposal Alternative Special Permit scenario, as with the Modified Proposal Alternative and the Proposed Action, the potential significant adverse shadow impacts on stained glass windows at St. Bartholomew's Church and Community House, and the Lady Chapel of St. Patrick's Cathedral, would not affect the characteristics of those structures, including their architecture, setting and cultural significance, which make them defining features of neighborhood character.

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Under the Modified Proposal Alternative Special Permit scenario, as with the Modified Proposal Alternative and the Proposed Action, just as potential significant adverse impacts in the relevant technical areas would not affect any defining feature of neighborhood character, no moderate adverse effects that would affect such defining features—either singularly or in combination—have been identified.

20.7.18.18 Construction

The Modified Proposal Alternative Special Permit scenario is expected to result in the same significant adverse construction-related impacts compared with the Proposed Action and the Modified Proposal Alternative. The Modified Proposal Alternative Special Permit scenario would require the same mitigation measures as both the Proposed Action and the Modified Proposal Alternative for the identified construction-related impacts.

Any potential construction-related effects resulting from the development of No-Action Sites B and C (Figure 20-5) would not be consequences of the Modified Proposal Alternative Special Permit scenario, as these sites would also be developed absent the Modified Proposal Alternative Special Permit scenario. Therefore, the assessment of significant adverse construction-related impacts for the Modified Proposal Alternative Special Permit scenario is limited to the projected and potential development sites.

The Modified Proposal Alternative Special Permit scenario would be constructed on the same projected development sites identified in the Proposed Action and the Modified Proposal Alternative. Development on the projected development sites under the Modified Proposal Alternative Special Permit scenario would be expected to follow the same reasonable worst case construction schedule as that assumed for the Proposed Action and the Modified Proposal Alternative. For the cluster of Projected Development Sites 5, 6, 7, 8, and 11 located between Vanderbilt and Fifth Avenues and East 43rd and East 48th Streets, the same sequencing and duration of construction would be expected to occur under the Modified Proposal Alternative Special Permit scenario, the Modified Proposal Alternative, and the Proposed Action.

Overall, it is expected that the Modified Proposal Alternative Special Permit scenario would result in the same significant adverse construction-related impacts compared with the Proposed Action and the Modified Proposal Alternative. As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario is expected to result in significant adverse construction-related traffic impacts to the following nine intersections during the 6:00 – 7:00 a.m. peak hour: Second Avenue at East 44th Street; Second Avenue at East 46th Street; Second Avenue at East 49th Street; Third Avenue at East 39th Street; Third Avenue at East 42nd Street; Park Avenue at East 39th Street; Madison Avenue at East 44th Street; Fifth Avenue at 43rd Street; and Fifth Avenue at 47th Street. Additionally, as discussed in Section 20.7.18.6, the Modified Proposal Alternative Special Permit scenario would result in the same potential construction-related effects to NYCL- and/or S/NR-eligible historic resources as would the Proposed Action and the Modified Proposal Alternative. As with the Proposed Action and the Modified Proposal Alternative, the Modified Proposal Alternative Special Permit scenario

would not be expected to result in significant adverse construction impacts with respect to air quality, land use and neighborhood character, socioeconomic conditions, or hazardous materials; however, site-specific analyses of the construction-related impacts resulting from the Modified Proposal Alternative Special Permit scenario cannot be provided because the specific features of the buildings that may be constructed in connection with a special permit and/or another discretionary action are not known. It is anticipated that any incremental changes to the amount, type, and/or duration of construction activity associated with the Modified Proposal Alternative Special Permit scenario would not result in additional significant adverse impacts. Moreover, any development application for a discretionary action would require a separate environmental review, and any construction-related impacts that could result from such development would be assessed and disclosed to the public under and pursuant to that environmental review.

The same mitigation measures would be available for development pursuant to the Modified Proposal Alternative Special Permit scenario as under the Proposed Action and Modified Alternative Proposal, as described in Chapter 19, “Mitigation.”