EAST MIDTOWN REZONING AND RELATED ACTIONS

DRAFT SCOPE OF WORK FOR AN ENVIRONMENTAL IMPACT STATEMENT

CEQR NO. <u>13DCP011M</u> ULURP NOS. <u>Pending</u>

August 27, 2012

A. INTRODUCTION

This Draft Scope of Work (Draft Scope) outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the East Midtown Rezoning and Related Actions project consisting of zoning map amendments, zoning text amendments and City Map changes (collectively, the "Proposed Action") affecting an approximately 70 block area within the East Midtown neighborhood of Manhattan Community Districts 5 and 6. The affected area is generally bounded by East 39th Street to the south, East 57th Street to the north, Second and Third avenues to the east and Fifth Avenue to the west (see Figure 1). The affected area is currently zoned predominantly as high density commercial (zoning districts C5 and C6). This document provides a description of the Proposed Action and resultant proposed development, and includes task categories for all technical areas to be analyzed in the EIS.

The New York City Planning Commission (CPC) has determined that an EIS for the Proposed Action will be prepared pursuant to New York City Environmental Quality Review (CEQR) with the Department of City Planning (DCP) acting on behalf of the CPC as the lead agency. The environmental analyses in the EIS will assume a development period of twenty years for the reasonable worst-case development scenario (RWCDS) for the Proposed Action (i.e., analysis year of 2033), and identify the cumulative impacts of other projects in areas affected by the Proposed Action. DCP will conduct a coordinated review of the proposed action among the involved and interested agencies and the public.

B. REQUIRED APPROVALS AND REVIEW PROCEDURES

The Proposed Action encompasses several discretionary actions that are subject to review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter and the City Environmental Quality Review (CEQR) process. The discretionary actions include:

(1) Zoning text amendment

Establish an East Midtown Subdistrict within the Special Midtown District, superseding the existing Grand Central Subdistrict

(2) Zoning map amendment

Replace existing C5-2 and C6-4 designations in portions of the midblock areas between East 42nd and

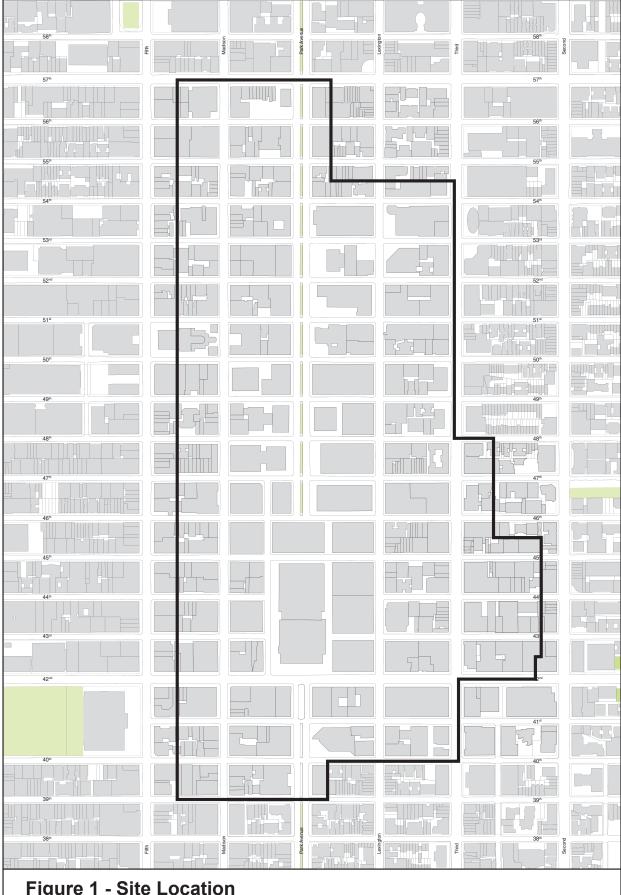


Figure 1 - Site Location

Site Boundary

East Midtown Rezoning and Related Actions

East 46th streets, and Second and Third avenues with C5-3, C5-2.5, C5-2 and C1-9 districts. The C5-3 and C5-2.5 districts will be mapped within the Special Midtown District.

(3) City Map amendment

Subject to further analysis and public consultation, the City may amend the City map to reflect a 'Public Place' designation over portions of Vanderbilt Avenue between East 42nd and East 47th streets.

City Environmental Quality Review (CEQR) and Scoping

The Proposed Action is a Type 1 action subject to environmental review under the CEQR procedures. An Environmental Assessment Statement (EAS) was completed on August 17, 2012. Pursuant to a Positive Declaration, issued on August 17, 2012, it has been determined that the Proposed Action would have the potential for significant adverse impacts, thus requiring that an Environmental Impact Statement (EIS) be prepared.

The CEQR scoping process is intended to focus the EIS on those issues that are most pertinent to the Proposed Action. The process at the same time allows other agencies and the public a voice in framing the scope of the EIS. The scoping document sets forth the analyses and methodologies which will be utilized to prepare the EIS. During the period for scoping, those interested in reviewing the Draft Scope may do so and give their comments to the lead agency. The public, interested agencies, Manhattan Community Boards 5 and 6, and elected officials, are invited to comment on the Draft Scope, either in writing or orally, at a public scoping meeting to be held on Thursday, September 27, 2012 in the Manhattan Municipal Building, Mezzanine level, 1 Centre Street, New York, New York, 10007; access through the North Entrance. The meeting will be held in two sessions with the first session starting at 2:00 pm and the second starting at 6:00 pm. Comments received during the Draft Scope's public meeting, and written comments received up to Tuesday, October 9, 2012, will be considered and incorporated as appropriate into a Final Scope of Work (Final Scope). The lead agency will oversee preparation of the Final Scope, which will incorporate all relevant comments made on the Draft Scope and revise the extent or methodologies of the studies, as appropriate, in response to comments made during scoping. The Draft EIS (DEIS) will be prepared in accordance with the Final Scope.

Once the lead agency is satisfied that the DEIS is complete, the document will be made available for public review and comment. The DEIS will accompany the land use applications through the public hearings at the Community Board and CPC. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for 10 days after the public hearing to allow additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared that will incorporate all substantive comments made on the DEIS, along with any revisions to the technical analysis necessary to respond to those comments. The FEIS will then be used by the decision makers to evaluate CEQR findings, which address project impacts and proposed mitigation measures, in deciding whether to approve the requested discretionary actions, with or without modifications.

C. DESCRIPTION OF PROPOSED ACTION

Background and Existing Conditions

The East Midtown office district is one of the largest job centers in New York City and, arguably, the best business address in the world. The rezoning area between Second and Fifth avenues, and East 39th to East 57th streets contains more than 70 million square feet of office space, more than 200,000 jobs and numerous Fortune 500 Companies.

This area is centered on Grand Central Terminal, one of the City's major transportation hubs and famous civic spaces. Around the Terminal and to the north, some of the city's most iconic office buildings, such as Lever House and the Chrysler Building line the major avenues - Park, Madison and Lexington – along with a mix of other landmarks, civic structures, office buildings and hotels.

The area's transportation network is currently being expanded through two major public infrastructure projects: East Side Access and the Second Avenue subway. East Side Access will, for the first time, permit Long Island commuters one-seat access to East Midtown through the construction of a new below-grade station adjacent to Grand Central. This will also reduce the volume of Long Island Rail Road commuters using the E train to travel to East Midtown employment sites. Construction is expected to be completed in 2019. Additionally, the Second Avenue subway - whose first phase (from 63rd to 96th streets) is currently under construction - is expected to alleviate congestion on the Lexington Avenue subway line which runs through the East Midtown office district. Construction is expected to be complete in 2016.

Current Status and Recent Trends

The area today continues to be one of the most sought-after office markets in the New York region. The area straddles two Midtown office submarkets – Grand Central and the Plaza districts. The Grand Central district is typically considered an older submarket, with a higher vacancy rate and lower rents than the overall Midtown market. The Plaza district, centered on the upper reaches of Park and Madison Avenues is one of the most expensive submarkets in the country, generally has more-recent construction. One of the key strengths of the area has been the wide variety of office space that can be found there – with buildings of different sizes and ages allowing the area to meet the needs of a wide range of tenants at varying price points. This range of spaces makes for an integrated and dynamic office market.

Overall, the area's tenants have historically been financial institutions and law firms, with some of the country's largest banks headquartered here. Recent trends have both reinforced and altered this role. First, the area has become home to the City's hedge fund and private equity cluster because of the area's cachet and easy access to the Metro-North commuter shed. Given this, rents for high-quality space in the area's top buildings have greatly increased as this industry competes for these spaces. Conversely, since the economic recession beginning in 2008, the area has developed a more-diverse roster of tenants, as rents dropped with the economic downturn, allowing tenants who were previously priced out access to the East Midtown office market to move in. This trend, whereby new firms, including technology and media companies have been able to move into the East Midtown, has led to a more diverse and economically-balanced office market. Both trends have helped the area recover from the 2008 recession, with vacancy rates beginning to fall to traditionally-accepted numbers. These accepted numbers (around 7 to 8% percent), allow the office market to maintain its flexibility and dynamism. This allows tenants to both seek and relocate to different spaces in the area based on lease

length, economic conditions, or changing space needs. In response, the office buildings themselves are under near-continuous renovation to maintain their desirability in the area's office market.

Purpose and Need for Proposed Action

While this area continues to perform strongly today as an office district, in terms of overall cachet, rents and vacancy rates – the City has identified a number of long-term challenges that must be addressed in order for East Midtown to remain one of the region's premier job centers and, arguably, the best business address in the world. Primarily, this is in relation to the area's office building stock, which the City is concerned may not – over time - be able to offer the kinds of spaces and amenities that new construction offers, that are desired by tenants, and that are crucial to competing on a world stage. Given that, the City is concerned that the area's importance as a premier office district could diminish over time and the large investment in transit infrastructure (including the currently-underway East Side Access and Second Avenue subway projects) will fail to generate its full potential to create jobs and tax revenue for the City and region. These long-term challenges include:

- Aging office building stock
- Limited recent office development
- Pedestrian Network Challenges
- Challenges of current zoning
- Competitor cities doing more to modernize their office cores

These challenges are described below.

Aging office building stock

The East Midtown rezoning area contains approximately 400 buildings, of which more than 300 are over 50 years old. For an office district competing for tenants regionally and globally, this is a relatively old age. For example, buildings in London's City district, a comparable historic office core, have an average age of around 40 years.

This high average age makes it more likely that the space in the area's office buildings is or may become outdated in relation to tenant needs. Today, this is seen in the area with office buildings more than 50 years old having noticeably higher vacancy rates and achieving lower rents. Reasons for this include limited ability to provide up-to-date technology infrastructure and other amenities through renovations of the buildings. Some issues, particularly low floor-to-floor heights and interior columns, cannot be addressed at all through renovation. Prior to 1961, when the zoning in the East Midtown area was characterized by a restrictive height and setback control, but no specified floor area ratio, the design strategy for developers to maximize floor area was to build to the limits of the zoning "envelope", while squeezing in as many floors as possible. The buildings that resulted provide low-ceilinged spaces both on the retail ground floor and the upper office floors, as well as a dense column grid. Today, these spaces are increasingly unattractive to the highest rent-paying tenants.

Tenants looking for office space in Midtown today desire large expanses of column-free space in order to have flexibility in creating office layouts, which are trending toward more open organization. Columns and low floor-to-floor heights do not work well with these open layouts and thus buildings with them are less desired by tenants today. With such a large amount of the office stock having these outdated

features, the City is concerned this area's buildings will not be able to offer the kinds of space and amenities that new construction offers and that are crucial to competing on a world stage. As a result, the City believes that in the long term the area's outdated office buildings may begin to convert to other uses – particularly becoming residential buildings or hotels. To this point, aging office buildings in and around the area have begun to convert to other uses. These include hotel conversions such as the Library Hotel at 299 Madison Avenue and the Marriott Courtyard at 866 Third Avenue, as well as residential conversions such as the 5 condo at 5 East 44th Street.

Given the area's concentration of existing regional rail infrastructure and the current expansion of this network already underway, a pronounced trend in this direction would not be desirable from the City's economic development perspective. While the City has undertaken many initiatives over the last decade to accommodate new office construction in the City, including at Hudson Yards, Downtown Brooklyn, and Long Island City, all of these were predicated on the East Midtown area remaining a center for office jobs and none contemplated the diminution of this area as the City's premier business district.

Limited recent office development

With much of the area's existing office stock aging, the area has also seen little recent development of new office stock which could act as a replacement. Since 2001, only two office buildings have been constructed in the area, a significant drop from preceding decades. Whereas the area had an overall annual space growth rate of 1% between 1982 and 1991, the area's growth rate began to drop off in the next decade – with an annual growth rate of 0.14%. Over the last decade, this has continued to fall, with the time between 2002 and 2011 seeing an annual growth rate of only 0.06%. In this time, the area's average age of buildings increased from 52 years in 1982 to 73 years today.

The area's existing high density is an impediment to construction of new office stock. As a whole, the area contains approximately 2.3 million square feet more than what is permitted under today's zoning (the area-wide permitted floor area ratio (FAR) is 14.1 and the built FAR is approximately 14.3 FAR). This is particularly an issue for buildings in East Midtown that were built before 1961 (when floor area ratios were first instituted) and contain more floor area than would be permitted today. Many of these buildings contain outdated features, but the lower amount of square footage that could be constructed in a new building on the site creates a large disincentive to new construction. Under current zoning, up to 75 percent of the floor area could be removed and reconstructed as modern office space, but this still leaves a building with 25 percent of floor space below contemporary standards.

The area also contains few remaining development sites by the Department's typical criteria, i.e., sites where built FAR is less than half permitted base FAR. Of the possible development sites that do exist, few would accommodate a major new office building. Current plans for development in the area bear this out. Of the sites currently cleared for new development, none are planned for office construction, as the sites are considered too small to hold a new office building. One assembled site for a new Class A office building has been reported in the media (the site controlled by SL Green at 317 Madison Avenue) but this site has not yet been cleared. Another announced development site, at 425 Park Avenue, would retain 25 percent of the existing floor area and rebuild the remainder, in order to retain its current density.

Beyond the difficulty of assembling appropriately-sized sites, there are a number of other challenges to new development. These include the need to vacate existing tenants which, depending on existing leases, can become a long multi-year process that is economically unviable for many property owners. Large existing buildings must then be demolished, further extending the period in which the property produces no revenue. These issues have led to very limited new office construction in the area and

many owners attempting instead to renovate their buildings, often on a piecemeal basis, to compete in the overall market.

Pedestrian Network Challenges

The area contains some of the City's most iconic public and civic spaces, including the Seagram Building Plaza, Park Avenue itself and Grand Central Terminal's main hall. It also contains a below-grade pedestrian network which connects the Terminal building to the Grand Central subway station at 42nd Street and to surrounding buildings, allowing for a more-efficient distribution of pedestrians in the area. Along with the additional subway stations to the north, the area is one of the most transit-rich locations in the City and this overall pedestrian network, both above- and below-grade, is one of the area's unique assets. However, the area faces a number of challenges to creating a pedestrian network fully matching the area's role as one of the premier office districts in the world. These include:

The Grand Central subway station - a transfer point for regional rail and the 4, 5, 6, 7 and 42nd street shuttle subway lines - is one of the busiest in the entire subway system with nearly half a million daily users. The station, however, has numerous pedestrian circulation issues and, due to platform crowding, long dwell times for the Lexington line (4, 5, and 6) which limits train through-put that make the station one of the bottlenecks of the subway system. Additional issues affecting transfers and platform access exist in the subway stations to the north.

Above-grade, the sidewalks of Madison and Lexington avenues are quite narrow (12-13 feet wide) given the scale of pedestrian use they handle. The effective widths of these sidewalks are even narrower when subway grates and other sidewalk furniture are included.

The area has a limited selection of publicly-accessible open spaces. Further, while the area contains a number of privately-owned public spaces, it contains no significant publicly-controlled open spaces unlike other commercial areas of the City.

Additionally, Vanderbilt Avenue, once the major taxi access point to Grand Central Terminal has seen its use drop as taxis have been moved away from the building due to security concerns. The street does not match its iconic location next to the Terminal in terms of public amenity and prestige.

Challenges of current zoning

The City is concerned that existing zoning regulations are not appropriate for the area's current needs and may impede the area's continued status as a premier office district.

In 1961, when the current Zoning Resolution was enacted, the entirety of the area was zoned with a mix of 15.0 FAR districts. Floor area bonuses for public plazas increased the permitted FAR to increase to 18.0 as-of-right. The 1961 zoning removed the incentive to keep ceilings low (although building practices adjusted gradually) and facilitated the development of many signature corporate towers in the area. However, the height and setback control, which permitted a tower covering a maximum of 40 percent of its lot, and required the tower to be set back from the surrounding streets, worked best on large sites (over 40,000 sf) and, as such sites became harder to assemble, the City Planning Commission permitted towers to be built, by special permit, that covered a higher percentage of the lot and were located closer to the street or even at the street line. Planners and civic groups were dissatisfied with some of the buildings that resulted from these waivers and, by the early-1980s, the City decided that more flexible, as-of-right height and setback rules were necessary. At the same time, the City concluded that development in Midtown should be encouraged to the west beyond Sixth Avenue. In 1982, the Special Midtown District was created to accomplish these goals, amongst a series of others including an

improved pedestrian realm. As part of this project, East Midtown was proposed as an area for 'Stabilization' while the area west of Sixth Avenue was marked for 'Growth'. To accomplish this parts of the East Midtown area were downzoned. This included many of the midblock areas which were lowered from 15.0 to 12.0 FAR. Additionally, the area around Lexington Avenue in the mid-50s was rezoned to a mix of 10.0 and 12.0 FAR. This plan has been quite successful as approximately 75% of the new development which has occurred throughout the Special Midtown District since 1982 has happened outside of the East Midtown area, with particular concentration around Times Square.

Since 1982, the major change to the zoning regulations of the area was the creation of the Grand Central Subdistrict of the Special Midtown District which was created in 1992 in order to continue the City's long-standing commitment to the landmark Grand Central Terminal by encouraging the transfer of development rights from Grand Central and other area landmarks to surrounding development sites and the creation of an improved pedestrian realm in the area. The borders of the subdistrict were generally drawn around the area where Grand Central Terminal's below-grade pedestrian network exists. In the Core area of the subdistrict (between Madison and Lexington avenues, from East 41st to East 48th streets) the maximum permitted FAR by using the transfer is 21.6 FAR and requires a zoning special permit from the City Planning Commission that finds that a significant pedestrian improvement is being provided as part of the project. However, only one building (383 Madison Avenue) has taken advantage of this provision since its adoption and more than 1.2 million square feet of development rights remains unused on the Grand Central lot. (Additionally, 1.0 FAR transfers are permitted through a certification process in the Core and a larger area which includes the other sides of Madison and Lexington avenues. This provision has been used three times but because of the small size of the transfer, has not significantly diminished the supply of unused Grand Central development rights.) Concerns have been raised about the complexity of the process required to achieve the full 21.6 maximum FAR, which includes lengthy case-by-case negotiation with the MTA over the scope of the pedestrian network improvements. Additionally, the limited size of the subdistrict's core has limited transfer opportunities to possible development sites.

Beyond this transfer mechanism, three methods exist to obtain higher floor area ratios. First, subway station improvement bonuses are permitted for sites directly adjacent to subway entrances (up to 20% more than the permitted base FAR) through the provision of an improvement to the subway network. Existing City landmarks can transfer their remaining development rights to sites that are adjacent or across streets, with no limit to the FAR permitted on the receiving site. Both of these bonuses are only permitted through special permits granted by the City Planning Commission. Finally, in the portions of the area not within the Grand Central Subdistrict, small bonuses of 1.0 FAR are permitted through the provision of public plazas.

Overall, the City believes these bonus mechanisms do not provide enough incentive to replace existing outdated buildings with new construction. Most of these mechanisms require complex review procedures and negotiations which limit the desire of property owners to undertake them. The problem is exacerbated for those buildings built before 1961 which do not comply with today's current permitted FAR, since they cannot reconstruct and maintain their existing floor area, except by retaining 25 percent of the existing structure, a result which does not allow for optimal new construction.

Competitor cities doing more to modernize their office cores

The City has looked at competitor cities with traditional office cores to get a better sense of how East Midtown compares on the world stage. These included London (and its traditional office core in The City), Tokyo (the Marunouchi area around Tokyo Station), and Chicago (the Loop). While East Midtown must also compete against brand new office districts like Pudong in Shanghai, the more relevant

comparison is to cities with traditional large office cores that have faced similar challenges of needing to upgrade their office space and meet new market demands.

In comparison to these office cores, East Midtown is not performing well in regard to the provision of up-to-date office space. Office buildings in the core area of these competitor cities are significantly less old on average than in East Midtown. Many of these competitor cities has made it a major policy focus to encourage new office construction in their traditional office cores in order to replace outdated office space and better compete on the world stage. Comparison with The City and Marunouchi shows that a significant amount of new development has occurred in these two districts over the last decade as compared to the relatively minor level of new construction in East Midtown. In both cases, outdated office buildings (particularly from the 1950s and 1960s) were replaced with new construction.

In comparison to these places, one particularly unique challenge for East Midtown is the existing high density already found there. Where London has replaced outdated office buildings of less than 10 stories with a mix of similarly-sized buildings with larger footprints and 30 to 40-story skyscrapers, and Tokyo has replaced smaller (10-15 story) office buildings with much larger structures, East Midtown's existing high density makes replacement especially challenging.

Long Term Consequences of Current Challenges

The City believes that the long-term consequences of failing to address the aging of the existing office stock and lack of replacement office development in East Midtown would be a breakdown in the integrated and dynamic office market in East Midtown, and that entire range of tenant needs the area serves today would begin to go unmet. In particular, the top Class A tenants who have been attracted to the area in the past would begin to look elsewhere for space. The movement of top Class A tenants to other locations, both within the city and elsewhere, could diminish Midtown East's cachet as well. This would likely not only affect the top of the market, but also the Class B and C space which exists in East Midtown today, since tenants in these buildings would lose proximity to other important businesses that would seek space elsewhere. As a result, these Class B and C buildings would begin to become more valuable conversion opportunities to other uses. In total, with a less dynamic office market, the area would become less desirable as a business district. Additionally, the pedestrian realm challenges that affect the area today would still remain and the huge public investment in the area's infrastructure would fail to generate the full potential of jobs and tax revenues for the City.

The Proposed Action

City's vision for East Midtown

The City's vision for East Midtown is that the area continues to be a strong and dynamic commercial district. Most of the area would remain as is, with most buildings remaining in their current commercial office uses, and only a small amount of conversion to residential and hotel use occurring. A handful of new office buildings would add to the area's cachet and market dynamism, just as in previous eras, and provide support for the overall continued health of the area as a premier business district. The area's pedestrian network would be improved, befitting its status as the world's best business address.

Goals of the Proposed Action

The City is proposing the Proposed Action with the following goals:

- Protect and strengthen East Midtown as one of the world's premier business addresses and key job center for the City and region
- Seed the area with new modern and sustainable office buildings to maintain its preeminence as a premier office district.

- Improve the area's pedestrian and built environments to make East Midtown a better place to work and visit
- Complement ongoing office development in Hudson Yards and Lower Manhattan to facilitate the long-term expansion of the City's overall stock of office space

To accomplish these goals, the City is proposing a zoning text amendment, a zoning map amendment, and a City Map amendment. Each of these actions is described separately below. Table 1 summarizes the Blocks and Lots which would be affected by the Proposed Action.

TABLE 1
List of Blocks and Lots Affected by Proposed Action

Block	Lot			
	16, 20, 22, 24, 25, 26, 27, 34, 49, 54, 58, 61, 64, 66, 74(p),			
869	7501(p)			
895	1(p), 7501(p)			
	6(p), 8, 11, 12, 14, 16, 23, 27, 44, 50, 59, 60, 61, 63, 64, 66(p),			
1275	143			
1276	1(p), 22, 23, 24, 33, 42, 51, 58, 65, 66, 999			
1277	6(p), 8, 14, 20, 27, 46, 52, 67(p)			
1278	1(p), 8, 14, 15, 17, 20, 62, 63, 64, 65			
1279	6(p), 9, 17, 23, 24, 25, 28, 45, 48, 57, 63, 65, 7501			
1280	all lots			
1281	1(p), 9, 21, 30, 56, 59, 61, 62, 64, 65, 66(p), 7501			
1282	1(p), 17, 21, 30, 34, 64, 7501(p)			
1283	7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 21, 58, 61, 62, 63, 64			
	6(p), 7, 12, 13, 14, 17, 21, 26, 33, 52, 55, 56, 59, 60, 152,			
1284	7501(p)			
1285	13, 15, 21, 36, 46, 59, 7501(p)			
1286	1(p), 21, 30, 35, 43, 53			
1287	8, 9, 10, 14, 21, 27, 28, 33, 52, 58, 61, 62, 63, 7501(p)			
1288	6(p), 7(p), 10, 11, 21, 24, 27, 33, 51, 56, 57, 59, 61, 62, 63			
1289	6(p), 8, 14, 21, 23, 24, 28, 36, 45, 52, 59, 65, 67(p), 107, 149			
	6(p), 14, 15, 16, 17, 21, 27, 28, 31, 36, 37, 44, 50, 52, 56, 61,			
1290	62, 115, 127, 7501, 7502(p)			
1291	1(p), 10, 21, 28, 38, 45, 47, 51, 127, 7501(p)			
1292	8, 15, 33, 37, 41, 42, 43, 45, 46, 47, 48, 52, 64, 66(p), 7501(p)			
1295	all lots			
1296	all lots			
1297	all lots			
1298	all lots			
1299	all lots			
1300	all lots			
1301	all lots			
1302	all lots			
1303	all lots			
1304	all lots			

TABLE 1
List of Blocks and Lots Affected by Proposed Action

Block	Lot
1305	all lots
1306	all lots
1307	all lots
1308	all lots
1309	1, 5, 6, 7, 8, 23, 32(p), 50(p), 66(p), 69, 72, 107, 7502
1310	1(p)
1311	1, 5(p), 65(p)
1316	1, 5, 12, 23(p)
1317	1, 7, 9, 11, 15, 19, 20(p), 30
1318	1, 11, 14, 15, 17, 19, 31, 33, 38, 43, 44, 143
1319	1, 2, 3, 5, 7, 8, 11, 12, 16, 47(p), 103, 104
1320	46, 7503, 7506(p)
1321	1(p), 42(p), 47

Note: Lot #(p) indicates that the lot is only partially within the proposed rezoning area.

Proposed Zoning Text Amendment

The proposed zoning text amendment would establish an East Midtown Subdistrict (the "Subdistrict") within the Special Midtown District. This new Subdistrict would supersede and subsume the existing Grand Central Subdistrict. The amendment would focus new commercial development with the greatest as-of-right densities on large sites with full block frontage on avenues around Grand Central Terminal, with slightly lower densities allowed along the Park Avenue corridor and elsewhere. It is intended to encourage limited and targeted as-of-right commercial development in appropriate locations. The amendment would also streamline the system for landmark transfers within Grand Central and generate funding for area-wide pedestrian network improvements

Main Subdistrict Mechanisms

The Subdistrict would have two new as-of-right zoning mechanisms to permit increases above the base FAR for sites which meet certain site criteria that can accommodate substantial new commercial buildings. Sites within the Subdistrict with full avenue frontage, a minimum site size of 25,000 square feet, and that provide all their floor area as commercial use would be considered Qualifying Sites. These Qualifying Sites would be able to utilize the following zoning mechanisms to permit increases above the applicable base maximum FAR:

- District Improvement Bonus (DIB): Increases in FARs above the as-of-right maximum would be permitted through contribution to a fund dedicated to area-wide pedestrian network improvements. The additional floor area would be granted by chair certification, similar to the existing Hudson Yards District Improvement Bonus. The District Improvement Bonus is described more fully in the Public Improvement Funded by DIB section below.
- Landmark Transfer: Increases in FARs above the as-of-right maximum would also be permitted in the Grand Central area through floor area transfers from landmark buildings. The additional floor area would also be granted by chair certification. The Landmark Transfer is described more fully in the Grand Central Subarea section below.

Subareas in the East Midtown Subdistrict

In order to encourage appropriate development in different areas of the new Subdistrict, it would be divided into three subareas (with boundaries as shown in Figure 2), each described more specifically below. These include:

- Grand Central Subarea
- Park Avenue Subarea
- Other areas

Grand Central Subarea

The City believes that, over the long term, most new development in East Midtown should be around Grand Central Terminal. Given its access to regional rail, the area has the best transportation access in East Midtown and also the largest concentration of its aging office stock.

To accomplish this, the rezoning would redefine the existing Grand Central Subdistrict as a new Grand Central subarea within the East Midtown Subdistrict. The boundaries would be expanded to accommodate additional portions of the Grand Central neighborhood, which are connected to the Terminal by the existing below-grade transportation network or within a short walk of the building. The subarea would be generally expanded one block north to East 49th Street, fully across Lexington and Madison avenues, and south to East 39th Street. Additionally, a Grand Central Core would be included within the subarea representing the area directly around the Terminal, bounded by East 42nd and 46th streets, and Lexington and Madison avenues.

For Qualifying Sites (see Main Subdistrict Mechanisms above for description) within the Grand Central Core, floor area increases would be permitted up to 24.0 FAR from the existing base maximum FAR of 15.0 FAR. Use of the District Improvement Bonus would be required in order to increase FAR from 15.0 to 18.0; contributions to the District Improvement Fund would be used to ensure that development in the area is accompanied by pedestrian network improvements that will address both any effects of growth as well as upgrade the pedestrian and transit systems. Above 18.0 FAR, Qualifying sites could reach the maximum 24.0 FAR through utilization of either or both the District Improvement Bonus or the new Landmark Transfer mechanism.

For Qualifying Sites within the rest of the Grand Central subarea, floor area increases would be permitted up to 21.6 FAR from the existing base maximum FAR of 15.0/12.0 FAR. To achieve this maximum FAR would require utilization of the District Improvement Bonus for the first 3.0 FAR (from 15.0 to 18.0 FAR or from 12.0 to 15.0 FAR respectively). Above the first 3.0 FAR, Qualifying Sites could reach the maximum 21.6 FAR through additional utilization of either or both the District Improvement Bonus or the new Landmark Transfer mechanism.

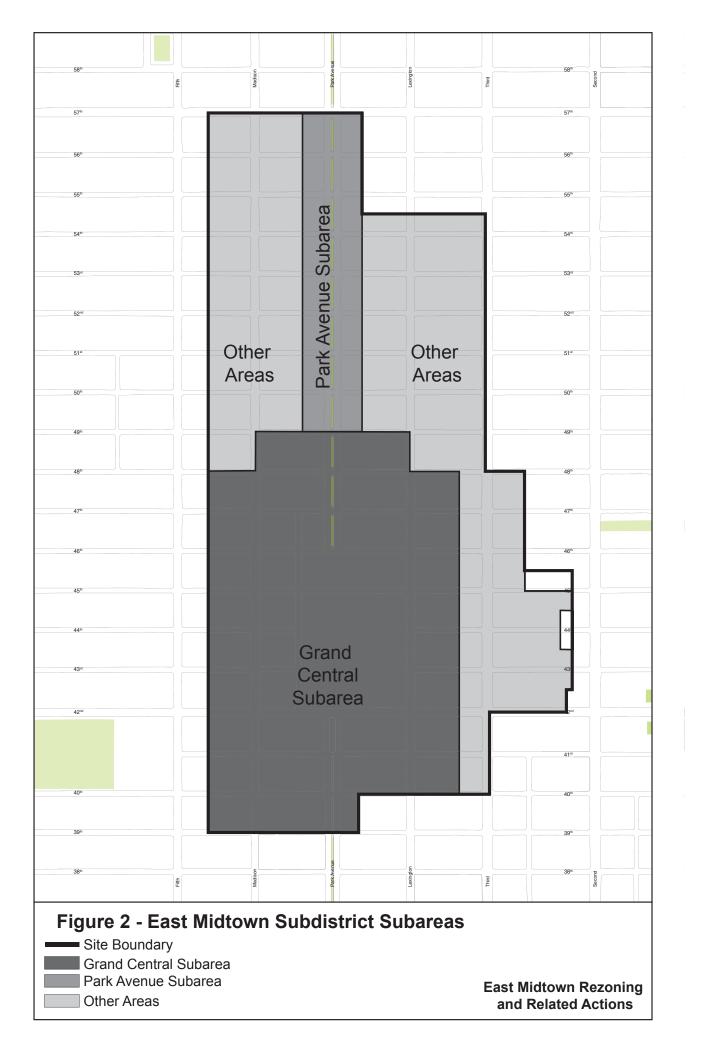
Additional Subarea mechanisms and requirements

The existing Grand Central Subdistrict contains a number of additional zoning mechanisms and requirements, most of which would be maintained or amended in the new Grand Central subarea. These include:

1.0 FAR as-of-right Landmark transfer

The existing Grand Central subdistrict permits 1.0 FAR as-of-right transfers from the subdistrict's landmark buildings via chair certification. This mechanism would be continued within the expanded subarea to allow opportunity for landmark transfers to sites which are not Qualifying Sites.

Height and setback modification via special permit



The existing Grand Central Subdistrict permits modification of height and setback requirements as part of the special permit for landmark transfers. The permit would be modified to permit modification of height and setback requirements through special permit for sites which utilize the new Landmark Transfer mechanism.

Other Zoning Controls

As in other existing subdistricts in the Special Midtown District, the existing Grand Central Subdistrict contains a series of bulk and urban design requirements tailored to the unique conditions of the subdistrict. These include special street wall, pedestrian circulation space and loading requirements. These requirements may be modified to ensure appropriate as-of-right development, such as requirements for sidewalk widening for Qualifying Sites developed along Madison and Lexington Avenues.

District Improvement Bonus and Landmark Transfer applications

The current Grand Central Subdistrict regulations require sites that utilize landmark floor area (either via the 1.0 FAR as-of-right transfer or the existing special permit) to provide as part of their application an LPC report that there exists a harmonious relationship between the new development and the landmark. Under the proposal, this requirement would continue to apply for sites that utilize the new Landmark Transfer mechanism. The requirement would, under certain circumstances, also apply for sites in the Grand Central Subarea which only utilize the District Improvement Bonus mechanism.

Program for Continuing Maintenance

As under the current Grand Central Subdistrict zoning text, any transfer of development rights under the proposal must include a program for continuing maintenance of the landmark. For Grand Central Terminal, this requirement has been met through an agreement by the owner of the unused development rights to set aside five percent of proceeds for continuing maintenance of the terminal.

Park Avenue Subarea

The City believes that, over the long term, limited new development in East Midtown should occur on Qualifying Sites that have full block frontage along Park Avenue. The avenue's role as New York's mosticonic business address, as well as its overall width – it is the widest avenue in Midtown – make it an appropriate location for high-density development.

To accomplish this, the East Midtown Subdistrict would include a Park Avenue Subarea, which would encompass the frontage along Park Avenue between East 46th and 57th streets, for the area within 125 feet of Park Avenue (reflecting the existing 15.0 FAR C5-3 zoning designation).

For Qualifying Sites or portions thereof within the Park Avenue Subarea, floor area increases would be permitted up to 21.6 FAR from the existing base maximum FAR of 15.0 FAR. To achieve this maximum FAR would require utilization of the District Improvement Bonus.

Other Zoning Controls

To ensure as-of-right development is in keeping with the unique conditions along Park Avenue, modifications to the underlying Special Midtown District controls would be implemented including changes to streetwall requirements.

Other Areas

The City believes that, over the long term, more limited development in East Midtown should occur

along northern Madison and Lexington avenues, as well as along portions of Third Avenue, as these areas contain most of East Midtown's more-recent office construction. Because the buildings in these areas are more modern on average, fewer property owners will be willing to undertake the costly multiyear process of emptying, demolishing and reconstructing office buildings.

For Qualifying Sites or portions thereof within these areas, floor area increases would be permitted up to 20 percent higher than the existing maximum base FAR of 15.0 or 12.0 FAR (18.0 FAR and 14.4 FAR respectively). For the portion of the area proposed to be included within the Special Midtown District as part of the Proposed Zoning Map Changes described below, these base maximum FARs are based on the proposed new zoning designations. To achieve this maximum FAR would require utilization of the District Improvement Bonus.

Other Zoning Controls

To ensure as-of-right development is in keeping with the unique conditions along these streets, modifications to the underlying Special Midtown District controls would also be implemented.

Other Subdistrict-wide mechanisms

Special Permit

The Proposed Action would create a zoning framework which would allow for additional development on an as-of-right basis, but only to the extent that as-of-right bulk regulations can successfully address the orientation and massing of buildings, both at the ground level and above. In this regard, The City believes the existing Special Midtown District's bulk regulations — intended to permit design flexibility for high-density development while limiting the impact of buildings on access of light and air to the streets — can, with limited modifications only, reasonably accommodate contemporary office buildings of up to 24.0 FAR for sites around Grand Central and 21.6 FAR along Park Avenue without triggering the need for case-by-case scrutiny by the Planning Commission.

However, given its extraordinarily transit-rich location, the City believe that East Midtown can in fact accommodate greater densities than the proposed as-of-right maximums and that allowing this would further the City's objective of seeding the district with major new buildings that will help make the area continue to function as the City's premier office district. However, densities above the proposed as-of-right maximums cannot be easily accommodated within the framework of as-of-right bulk regulations.

Given this, the City believes it is appropriate that developers who seek to build more than the Proposed Action's as-of-right maximums FARs be required to undergo a public review process to demonstrate that the building massing, orientation and other features successfully accommodate the FAR and do not have undue negative impacts on the existing built environment, the skyline and provide improvements to the public realm.

The East Midtown Subdistrict would therefore include a special permit that would allow an increase in the maximum FAR above that permitted as-of-right in the Grand Central Core (24.0 FAR) up to 30.0 FAR, and an increase in the maximum FAR above that permitted as-of-right along the Park Avenue frontage (21.6) up to 24.0 FAR. Additionally, the special permit would allow for the modification of bulk and urban design regulations.

The City believes that the modification of bulk and urban design regulations must not only be done in a way that minimizes negative effects to the maximum extent possible, but that the development must provide a significant public benefit. These benefits should take the form of a development that demonstrates 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 major 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.

There would also be significant prerequisites to apply for the special permit. Sites would have to meet the Qualifying Site requirements, however in the Grand Central Core the minimum site size would be 40,000 sf. Additionally, all floor area above the maximum permitted as-of-right levels (24.0 / 21.6 respectively) would have to be earned by contributions to the District Improvement Fund or transfers from landmarks in Grand Central Subarea.

Public Improvement through the DIB

The District Improvement Bonus mechanism would permit as-of-right higher maximum FARs through contribution to a District Improvement Fund (DIF) dedicated to area-wide pedestrian network improvements. The DIF would provide the flexibility to fund improvements where they are needed throughout the area as development occurs in East Midtown, rather than being tied to specific development sites. The DIF would be focused on City-priority improvements to the pedestrian network, both above- and below-grade. The zoning text would describe the governance mechanisms for the Fund and the required contribution per square foot.

The City has identified certain priority improvements in the area now which it believes have the greatest potential to both address the needs created by new development in the area as well as provide enhanced amenity to office workers, visitors and residents; the City is also encouraging the public to provide additional ideas for improvements in East Midtown.

The City is also considering a 'payment-in-kind' provision which would permit property developers to construct improvements, and receive credit for their expenditure, in lieu of payment into the DIF.

Priority improvements which, would be implemented in relation to the pace and the level of future development, could include:

Improvements to the Grand Central subway station

As described above, the Grand Central subway station is one of the busiest in the entire system and also has numerous pedestrian circulation issues. In this station, the DIF could be used to construct new connections between the commuter rail facilities and the subway station, a reconfigured mezzanine level as well as additional, relocated or reconstructed stair, ramp and escalator connections to the subway platforms of the Lexington line and the Flushing line (7) from the mezzanine.

Improvements to other East Midtown subway stations

Over the longer term, improvements to the other subway stations in the area (53rd and Fifth Avenue, 53rd and Lexington Avenue / Lexington and 51st street) could be funded by the DIF to improve transfers between lines, as well as access between platforms and street level.

Improvements to Vanderbilt Avenue

In its analysis of the area, the City noted that Vanderbilt Avenue is a relatively underused and bleak corridor, not befitting its location adjacent to one of New York City's most iconic buildings — Grand Central Terminal. The City has also noted the lack of available public space in the area and believes that the transformation of Vanderbilt Avenue could improve this situation. The DIF could be used to transform Vanderbilt Avenue into an elegant and distinguished signature pedestrian gateway while still allowing for uninterrupted cross town traffic, vehicular access to surrounding buildings and the

Terminal, and unrestricted movement for emergency vehicles.

Other Improvements

Other improvements under study include improvements, where feasible, to the sidewalks along Lexington and Madison Avenues to facilitate pedestrian movement. Additional potential improvements may be identified in the course of environmental and public review or in response to changing conditions in the future.

Existing Non-complying buildings

As discussed above, there are a number of pre- and post-1961 office buildings in East Midtown that do not comply with current zoning regulations, particularly in regard to the amount of floor area permitted. As these buildings age and become outdated, their 'overbuilt' floor area presents a challenge as current zoning offers a strong disincentive to the replacement of the outdated building.

To account for this, the East Midtown Subdistrict would permit pre-1961 non-complying buildings that are part of a Qualifying Site to maintain their existing floor area (above the as-of-right maximum base FAR) in the new development through a discounted District Improvement Bonus required contribution amount, still to be determined by the City. The non-complying floor area would be permitted by chair certification.

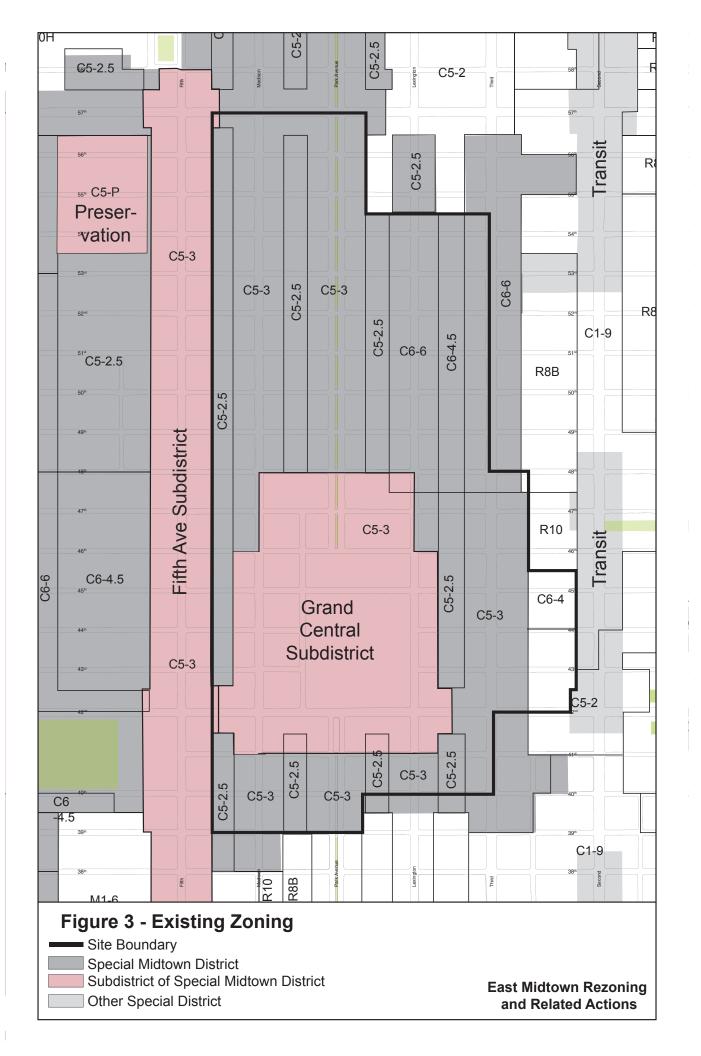
Additionally, to permit the opportunity for limited redevelopment for non-complying buildings that are not part of a Qualifying Site, the Subdistrict would permit all non-complying buildings with avenue frontage and minimum site size of 20,000 sf to maintain their existing floor area (above the as-of-right maximum base FAR) through a discounted District Improvement Bonus required contribution amount, still to be determined by the City. However, such sites would not be able to obtain additional DIB or landmark floor area (in the Grand Central Subarea) to achieve a higher FAR. The non-complying floor area in the new development would be granted by chair certification, and it would have to comply with as-of-right height and setback requirements.

"Sunrise" provision

The Hudson Yards Plan, approved in 2005 and 2009, will achieve an important implementation milestone in 2014 with the completion of the extension of the #7 subway extension and opening of the Hudson Park and Boulevard, both of which are expected to facilitate the development of the area's first major office buildings. In order to allow sequencing of development consistent with planning objectives in the entirety of Midtown including Hudson Yards, the East Midtown Subdistrict would include a "sunrise" provision under which building permits could not be issued under the new zoning mechanisms (DIB, new Landmark Transfer, and new Special Permit) until July 1, 2017. Until that point, permits could be issued under the existing zoning mechanisms which would remain in place. The "sunrise" provision would allow developers to begin the long process of assembling sites, emptying buildings and beginning to plan for new construction.

Proposed Zoning Map Changes

The rezoning area, as seen in Figure 3, is currently zoned predominantly as high density commercial (zoning districts C5 and C6) within the Special Midtown District. The midblock areas between East 42nd and East 46th Streets, and Second and Third Avenues, are predominantly commercial in character, with a number of existing office buildings and parking structures, as well as hotels under construction. The Special Midtown District generally follows the boundary of Midtown's commercial areas and thus this area would more appropriately be located in the Midtown District, and additionally as part of the East Midtown Subdistrict. By incorporating the area into Midtown, the Special District regulations, including



height and setback and streetscape requirements, would become applicable. These are more tailored to the needs of the area than the generic 1961 high-density commercial zoning provisions that now apply.

In order to do this, the rezoning would replace the existing C5-2 and C6-4 designations in portions of the midblock areas between East 42nd and East 46th Streets, and Second and Third Avenues with C5-3, C5-2.5, C5-2 and C1-9 districts. The C5-3 and C5-2.5 districts will be mapped within the Special Midtown District (see Figure 4).

The C5-3 designation would be mapped along the 42nd Street frontage, which is a wide street and reflects the typical wide street zoning pattern in Midtown. Midblock areas along East 43rd, 44th and the south side of 45th Streets would be mapped to C5-2.5, reflecting the typical midblock Midtown zoning pattern. The north side of East 45th Street would maintain its 10.0 FAR designation and remain out of the Special Midtown District, but be amended to C5-2 to reflect its existing built character. Finally, a portion of the midblock along East 44th Street closer to Second Avenue would be rezoned to C1-9, remaining outside the special district, to reflect its existing residential character.

Proposed City Map Changes

Subject to further analysis and public consultation, the City may amend the City map to reflect a 'Public Place' designation over portions of Vanderbilt Avenue. Such action would allow for the permanent development of a partially-pedestrianized Vanderbilt Avenue.

These portions could include the non-intersection portions of the street between East 42nd and 43rd Streets, East 44th and East 45th Streets, East 45th and 46th Streets, and East 46th and 47th Streets and any such designation would be structured to allow for phased development of improvements as funding is made available from the DIF and as surrounding conditions permit.

D. ANALYSIS FRAMEWORK

Reasonable Worst-Case Development Scenario (RWCDS)

In order to assess the possible effects of the Proposed Action, a reasonable worst-case development scenario (RWCDS) was established for conditions under both the current zoning (No-Action) and proposed zoning (With-Action) projected to the analysis year of 2033. As described below, the level of development projected for the 2033 analysis year is based on long-term projections of the area's potential to capture a proportionate share of the City's new office development over the next 30 years taking into account the area's existing built-up character, and thus examines development likely to occur beyond 2033 but which will be conservatively assessed the EIS as occurring by 2033. The incremental difference between the future No-Action and future With-Action conditions will be the basis of the impact category analyses conducted for the EIS. To determine the With-Action and No-Action conditions, standard methodologies have been used following the *CEQR Technical Manual* guidelines employing reasonable assumptions. These methodologies have been used to identify the amount and location of future development, as discussed below.

Development Site Criteria

In projecting the amount and location of new development, several factors have been considered in identifying likely development sites. These include known development proposals, past development trends, and the development site criteria described below. Generally, for area-wide rezonings, new



development can be expected to occur on selected, rather than all, sites within the rezoning area. The first step in establishing the development scenario was to identify those sites where new development or conversion could reasonably occur. The following site criteria were used to assess different aspects of the proposal and long-term trends in the area.

Qualifying Site Identification

Given the challenges for new development in East Midtown, considering its existing density and built-character, the typical development site criteria utilized for development scenarios in other contexts would not be practical in East Midtown. For example, limiting development sites to only those which are built to less than 50 percent of permitted FAR would produce few development sites in East Midtown given its existing built character. Instead, site criteria more reflective of existing area conditions and development history were developed. To identify sites within the East Midtown rezoning area that could utilize the new zoning mechanisms of the Proposed Action an assessment of all existing buildings in the area was undertaken. All the following were then excluded from the analysis:

- NYC landmarks
- Condominiums, co-ops, or residential buildings that contain 6+ rent-stabilized units
- Post-1982 buildings (given their recent construction)
- All buildings constructed between 1961 and 1982 built to maximum permitted bulk (given their recent construction)
- All other buildings over 1 million square feet or that contained a tower of more than +35 stories (given their size and the difficulties inherent in emptying and demolishing the structure)

All remaining buildings were then assessed to see if, on their own or through merger with other adjacent remaining buildings, they could meet the Qualifying Site requirements – i.e., full avenue frontage and minimum site size of 25,000 sf.

The sites were also assessed, conservatively, to see whether the existing built FAR was less than 85 percent of what could be constructed based on the proposed maximum as-of-right FAR permitted by the new Subdistrict. Sites where the existing built FAR is higher than 85 percent were removed from consideration as potential Qualifying Sites.

Non-complying Building Rebuild Identification

The Proposed Action would permit non-complying pre-1961 buildings that meet certain site criteria (avenue frontage and 20,000 sf site size) to maintain their non-complying floor area through a discounted DIB contribution. Sites where such a mechanism could be utilized were identified. All of the following were excluded from the analysis:

- Post-1961 buildings
- All pre-1961 buildings that contain less than their permitted as-of-right FAR
- NYC Landmarks
- Buildings with more than 1 million sf of floor area or +35 stories (given the difficulties in emptying and demolishing such a large building)

Other Possible Site Identification

Given contemporary development patterns in East Midtown, where most recent construction has been on smaller underbuilt sites (particularly in midblock areas), it was expected that some of this development would continue to occur. To identify possible locations for this development, which would occur under the existing as-of-right zoning in the area, an assessment of all existing buildings in the area was again undertaken. In this case, the following were excluded from the analysis:

- NYC landmarks
- Condominiums, co-ops, or residential buildings that contain 6 or more rent-stabilized units
- Sites built to more than 75 percent of the existing as-of-right maximum FAR, with the 1.0 FAR plaza bonus or existing Grand Central Subdistrict transfer assumed. (While typical soft-site analyses look at site with less than 50 percent of maximum as-of-right FAR, recent area practice shows that sites with higher built-to-max FAR ratios are viable development sites in the East Midtown area.)
- Known merged lots (where floor area has already been transferred to adjacent development site)
- Lots that on their own or aggregated with other lots would not amount to a development site of at least 5,000 sf were also removed from consideration.

Additionally, given the difficulty of site assemblage in the area, it was assumed that individual development sites would be made up of a maximum of 6 existing lots. Once sites were identified, each was assessed as to whether they could meet the requirements to provide a public plaza and achieve an as-of-right 1.0 FAR bonus.

New Construction Development Assumptions

To produce a reasonable conservative estimate of future growth with and without the Proposed Action (With-Action and No-Action conditions, respectively) and based on recent trends, the RWCDS assumes that sites would develop to the maximum developable square footage pursuant to zoning in the future with the Proposed Action. The development sites are distributed throughout the rezoning area.

Retail - New developments and conversions would provide 1.0 FAR as ground-floor retail. Further, for the Projected Qualifying Sites developed as office buildings, this retail is assumed to be a mix of 50 percent neighborhood retail and 50 percent destination retail. For all other sites, the retail is all assumed to be neighborhood retail. This pattern is in keeping with the existing retail pattern in the area where most retail is focused on serving area workers or visitors.

Parking – It is conservatively assumed that Qualifying Sites and other large development sites that are not located atop rail infrastructure would provide parking up to the maximum permitted by the underlying Manhattan core parking regulations. Based on recent survey work as part of the City's Manhattan Core Parking Study, this parking is conservatively assumed to be used by the general public as well as by building tenants and visitors.

Mechanical Space – All numbers used in the RWCDS are in gross square feet. For all non-office uses, this number is arrived at by increasing the permitted zoning square footage by 5 percent. For office uses, this number is arrived at by increasing the permitted zoning square feet by 15 percent, to account for the larger amount of mechanical space in contemporary office buildings. Since, this additional 10 percent office mechanical space would be unusable by building occupants, the density-related impact analyses would not reflect this additional space.

Height and Massing - All buildings would be developed pursuant to Special Midtown District height and

setback regulations, as amended by the Proposed Action. It is assumed that developments would attempt to maximize floorplate size as has been the practice for recent office construction in the City.

Definition of Projected and Potential Development

To produce a reasonable, conservative estimate of future growth, the development sites were further divided into two categories - projected development sites and potential development sites. The projected development sites are considered more likely to be developed within the analysis period for the Proposed Action (i.e., year 2033) while potential sites are considered less likely to be developed over the same period. The process utilized to determine which development sites were projected versus potential is discussed below.

Qualifying Sites

For Qualifying Sites, those where most new development would be concentrated, the possible sites were assessed and ranked based on a variety of categories in order to determine which would be most likely to develop – and hence be projected development sites. These were:

- Age of existing buildings (older buildings were considered more likely to be development sites)
- Ratio of existing built FAR to proposed maximum as-of-right FAR (sites with lower built-to-max ratios were considered more likely development sites)
- Number of lots (sites made up of fewer lots were considered more likely development sites)

Sites that exhibited the strongest combination of these factors were considered those most likely to utilize the new proposed new zoning mechanisms.

To assess how many of the development sites would be developed within the analysis period, the City reviewed projections prepared by Cushman and Wakefield in connection with the 2011 Hudson Yards bond financing. The study projects a need for more than 70 million square feet of new office space in Midtown Manhattan over the next 30 years (The definition of Midtown used in the analysis includes Manhattan CD 2, 3, 4, 5 and 6)¹. The main source of this demand is growth in the number of people working in office space in Manhattan, most of whom would be New York City residents, as the city's population is expected to grow past 9 million during this timeframe. The study expects that 25 million sf of this new construction will occur in Hudson Yards, and even with other expected projects outside of East Midtown, the study projects a long-term shortfall of more than 36 million square feet of new office space construction in Midtown Manhattan over that period, with no areas or sites identified in the study for development of this space.

The City has identified a number of challenges facing new development in East Midtown including the area's built-up character, difficulties of site assemblage, and the cost of emptying existing buildings and demolition. The RWCDS nevertheless conservatively assumes that the proposed action would result in

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¹ The Cushman and Wakefield study projects the gross square footage of new office construction it does not take into account the possible conversion of existing office buildings to other uses in the long term, or identify the increment between existing office space on development sites and future development on those sites. The square footage of future construction expected in East Midtown as described in this section similarly represents the gross square footage of new construction. Consistent with SEQRA/CEQR, the environmental analysis of the Proposed Action will analyze the increment between the No-Action and With-Action conditions, as described more fully in the Future With the Proposed Action section below.

East Midtown accommodating a significant share of the identified unmet demand for new office construction in Midtown Manhattan described in the Cushman and Wakefield study. While the East Midtown area currently has less than a quarter of all the office space in Midtown Manhattan, and less than 15 percent of Midtown Manhattan's new office construction over the last 20 years has taken place in East Midtown, the RWCDS assumes that approximately 30 percent of the total identified unmet demand for new office construction will occur in East Midtown – or about 11 million gross square feet of new office construction. The RWCDS further conservatively assumes that this development will occur over the next 20 years, instead of the 30-year timeframe of the Cushman and Wakefield study. During that 20-year timeframe, the Cushman and Wakefield study identifies an unmet demand for approximately 21 million square feet of the 36 million square feet needed over the 30-year period. In those two decades, East Midtown's assumed 11 million square feet of new office construction would represent more than half the identified unmet demand for new office construction expected in Midtown Manhattan in the Cushman and Wakefield study.

To reflect this development, the RWCDS assumes that 12 projected development sites would meet the Qualifying Site criteria and be developed to their full allowable FAR. Ten of the sites would be developed as office buildings, with two being constructed as hotels given their location adjacent to other hotels along Lexington Avenue. The ten projected office sites, together with the two non-complying office buildings that are expected to be rebuilt as new office buildings as described below would, in total, add up to the 11 million gross square feet of new office construction. The remaining possible Qualifying Sites were included as potential development sites.

Non-complying Building Rebuild Identification

To analyze the provisions of the proposed actions which permit non-complying pre-1961 buildings to be rebuilt to their existing FAR as long as they meet certain site criteria (avenue frontage and 20,000 s.f. minimum site size), the City assessed the buildings which meet this criteria to ascertain the likelihood of its use. The City expects this provision to be used infrequently given the difficulties of emptying and replacing an existing office building to replace it with the same FAR. In the area, 320 Park Avenue was rebuilt (maintaining 25 percent of the existing building) nearly 20 years ago and recently 425 Park Avenue has been announced as a possible rebuild site.

Given this history, the RWCDS assumes two (2) projected development sites would utilize this provision and be rebuilt to their existing FAR as new office buildings. The remaining possible non-complying buildings were included as potential development sites. Since development on these sites would build back the same square footage that existed in the earlier building, these sites would produce no increase in density.

Other Possible Sites

To analyze other provisions of the Proposed Action, specifically the zoning map change and the expansion of the 1.0 FAR as-of-right Landmark transfer, the City assessed a limited amount of development to occur in those areas that could take advantage of these changes, commensurate with recent development patterns there. Five projected development sites would be affected by the Proposed Action in the Grand Central Subarea, by either or both a change in use or overall development size (given the 1.0 FAR transfer). One of the projected development sites would be affected by the zoning map change in the midblock area east of Third Avenue.

Summary

In total, 38 development sites (20 projected and 18 potential) have been identified in the rezoning area. Figure 5 shows these projected and potential development sites, and Tables A1-1 and A1-2 in Appendix 1 to this document identify the uses expected to occur on each of those sites under future No-Action and future With-Action conditions. Table 2 below provides a summary of the RWCDS for the projected development sites.

The EIS will assess both density-related and site specific potential impacts from development on all projected development sites. Density-related impacts are dependent on the amount and type of development projected on a site and the resulting impacts on traffic, air quality, community facilities, and open space.

Site specific impacts relate to individual site conditions and are not dependent on the density of projected development. Site specific impacts include potential noise impacts from development, the effects on historic resources, and the possible presence of hazardous materials. Development is not anticipated on the potential development sites within the foreseeable future; therefore, these sites have not been included in the density-related impact assessments. However, specific review of site specific impacts for these sites will be conducted in order to ensure a conservative analysis.

The Future Without the Proposed Action (No-Action Condition)

In the future without the Proposed Action (No-Action), given the existing zoning and land use trends in the area, it is anticipated that the rezoning area would experience limited overall growth, most of it being in non-office uses including hotels and residential buildings over the analysis period. Additionally, 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. It is not possible to identify specifically which buildings might experience conversion, but achievable office rents, greater age, small floorplate size, relatively low floor-to-ceiling heights, and a larger number of facades with windows will all influence property owners' decisions to convert. Other portions of development sites would remain in their current, predominantly office, uses but would likely be of lower quality as the overall area would become less desirable as an office district.

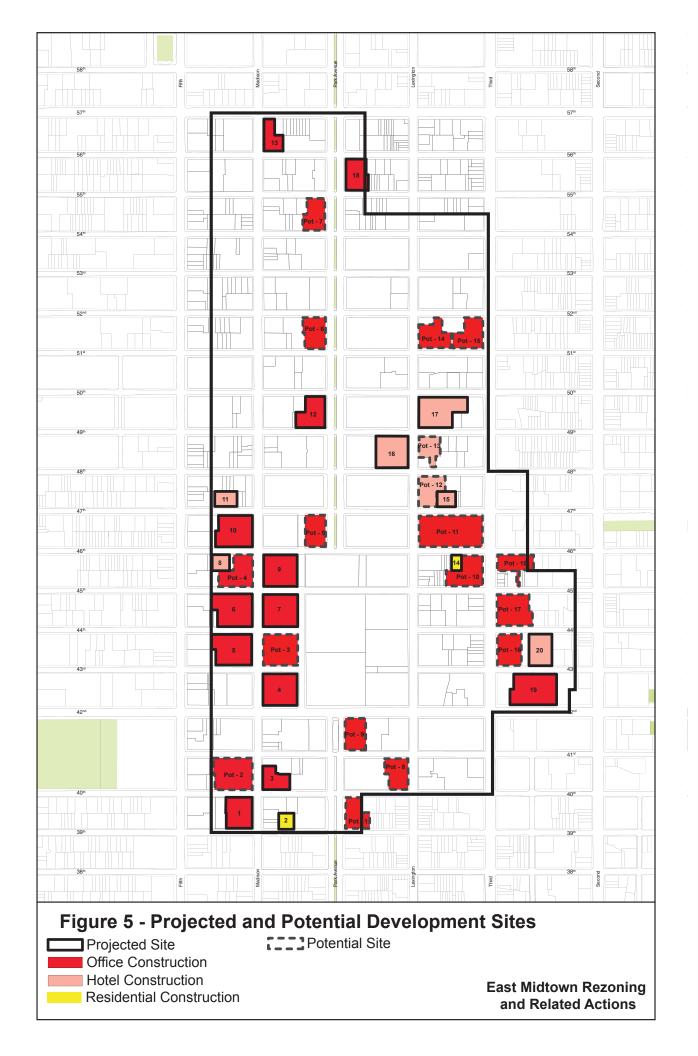
This would be coupled with the known and expected development on non-RWCDS sites within the rezoning area which would occur regardless in either the future without the Proposed Action or the future with the Proposed Action; and, would predominantly consist of non-office uses. With this development included, the rezoning area would have less office space than it does today.

As shown in Table 2 below, it is anticipated that, in the future without the Proposed Action, there would be a total of approximately 6.1 million gsf of office space, 0.6 million gsf of retail, 2.0 million gsf of hotel space, and 1,126 residential units on the 20 projected development sites.

The Future With the Proposed Action (With-Action Condition)

In the future with the Proposed Action, higher density commercial development is expected to occur in the rezoning area on Qualifying Sites, particularly as new office development concentrated around Grand Central Terminal and along Park Avenue.

Development that occurred in the No-Action condition on the sites which do not meet the Qualifying Site criteria (described as Other Possible Sites above) would continue to occur in the With-Action condition but be slightly modified since sites in the Grand Central subarea would be able to utilize the 1.0 FAR as-of-right landmark transfer, increasing their developed FAR. Also, because the overall area would contain new office development that maintains the areas as a premier office district, it is



expected that some of this development would change from residential to hotel use (i.e., not office, given the limited size of the footprints). Additionally, a limited number of existing buildings would utilize the provisions for non-complying buildings and construct replacement office space that would be of newer and higher quality than the existing buildings.

The total development expected to occur on the 20 projected development sites under the With-Action conditions would consist of approximately 10.0 million gross square feet of office space, 0.7 million gsf of retail, 2.5 million gsf of hotel, and approximately 208 dwelling units. The projected incremental (net) change between the No-Action and With-Action conditions that would result from the Proposed Action would be an increase of approximately 3.9 million gsf of office space, 0.1 million gsf of retail, 0.5 million gsf of hotel, and a decrease of residential space (918 units). The total difference between the built square footage in the No Action and With Action conditions is approximately 4.4 million gsf.

The projected development sites, with projected no-build and build development, are summarized in Table 2, and also presented in Appendix 1.

TABLE 2
RWCDS and Population Summary for Projected Development Sites

USE	Existing Conditions (GSF)	Future No-Action Condition (GSF)	Future with Action Condition (GSF)	No-Action to With-Action Increment (GSF)
Office	6,439,724	6,154,164	10,031,278	3,877,114
Retail	463,644	553,133	661,542	108,409
Hotel	1,750,258	2,010,947	2,515,315	504,368
Hotel Rooms	2,693	3,094	3,870	776
Residential	10,725	1,122,155	207,029	(915,525)
Residential Units	22	1,126	208	(918)
Parking	179,060	43,400	140,200	96,800
Parking Spaces	895	217	701	484
POPULATION/EMPLOYMENT (1)	Existing Conditions (GSF)	Future No-Action Condition (GSF)	Future with Action Condition (GSF)	No-Action to With-Action Increment
Residents	35	1,790	331	(1,459)
Workers	28,158	27,435	43,559	16,124

(1) Assumes 1.59 persons per DU (based on 2010 census data for rezoning area), 200 SF per parking space, 650 SF per hotel room, 1 employee per 250 SF of office, 3 employees per 1000 SF of retail, 1 employee per 2.67 hotel rooms, 1 employee per 25 DUs, and 1 employee per 10,000 SF of parking floor area.

A total of 18 sites were considered less likely to be developed within the foreseeable future, and were thus considered potential development sites (see Table A1-2 in Appendix 1). The potential sites are deemed less likely to be developed because they did not closely meet the criteria listed above. However, as discussed above, the analysis recognizes that a number of potential sites could be developed under the Proposed Action in lieu of one or more of the projected development sites in accommodating the development anticipated in the RWCDS. The potential sites are therefore also analyzed in the EIS for site-specific effects.

As such, the EIS will analyze the projected developments for all technical areas of concern and also evaluate the effects of the potential developments for site-specific effects such as archaeology, shadows, hazardous materials, stationary air quality, and noise.

Public Improvement through the DIB

The District Improvement Bonus mechanism would generate funding for City-priority improvements to the pedestrian realm network, both above- and below-grade. The With-Action analysis will take these into account, including improvements to the Grand Central subway station as well as other stations, improvements to Vanderbilt Avenue and other improvements, as described above in the Project Description.

As described in Task 19 below, the DEIS will evaluate how and to what extent the public improvements avoid pedestrian and transit impacts resulting from the development by treating them as mitigation measures for analysis purposes. This analysis approach will provide the decision-makers with important information concerning the environmental benefits of the improvements and allow for adjustments to be made in order to improve their use as project components related to the environment. By identifying the ability of improvements to address the effects of development in the area based on capacity measures, the analysis will also support the potential for future implementation of other alternative improvements which have the same mitigation and improvement potential, creating future flexibility to adapt and adjust the menu of improvements as development proceeds in East Midtown.

Conceptual Analysis of the Special Permit

The Proposed Action, as discussed above, would create a special permit to allow an increase in the maximum FAR above that permitted as-of-right in the Grand Central Core (24.0 FAR) up to 30.0 FAR, and an increase in the maximum FAR above that permitted as-of-right along the Park Avenue frontage (21.6) up to 24.0 FAR. Because it is not possible to predict whether a special permit would be pursued on any one site in the future, the RWCDS does not include specific development sites that would achieve the higher maximum FAR. Therefore, a conceptual analysis will be provided to generically assess the potential environmental impacts that could result from development at higher FARs pursuant to the Special Permit.

E. PROPOSED SCOPE OF WORK FOR THE EIS

As the Proposed Action would affect various areas of environmental concern has been found to have the potential for significant adverse impacts an EIS will be prepared for the Proposed Action. The EIS will analyze the RWCDS associated with the Proposed Action for all technical areas of concern.

The EIS will be prepared in conformance with all applicable laws and regulations, including SEQRA (Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91 of 1977, as amended, and the Rules of Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York.

The EIS, following the guidance of the CEQR Technical Manual, will contain:

- A description of the Proposed Action and its environmental setting;
- A statement of the environmental impacts of the Proposed Action, including its short- and long-term effects and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the Proposed Action is implemented;
- A discussion of reasonable alternatives to the Proposed Action;
- An identification of irreversible and irretrievable commitments of resources that would be involved in the Proposed Action should it be implemented; and

 A description of mitigation proposed to eliminate or minimize any significant adverse environmental impacts.

The EIS will analyze the projected development sites for all technical areas of concern and also evaluate the effects of the potential development sites for site-specific effects such as archaeology, shadows, hazardous materials, air quality, and noise. Based on the preliminary screening assessments as outlined in the CEQR Technical Manual and detailed in the EAS for the Proposed Action, there is no potential for significant adverse impacts to Community Facilities and Services or Natural Resources due to the Proposed Action and, as the result, analysis for these environmental areas would not be required in the EIS. The specific technical areas to be included in the EIS, as well as their respective tasks and methodologies, are described below.

TASK 1. PROJECT DESCRIPTION

The first chapter of the EIS introduces the reader to the Proposed Action and sets the context in which to assess impacts. The chapter contains a description of the Proposed Action: its location; the background and/or history of the project; a statement of the purpose and need; key planning considerations that have shaped the current proposal; a detailed description of the Proposed Action; and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the Proposed Action and its impact, and gives the public and decision-makers a base from which to evaluate the Proposed Action.

In addition, the project description chapter will present the planning background and rationale for the actions being proposed and summarize the reasonable worst-case development scenario for analysis in the EIS. The section on approval procedures will explain the Uniform Land Use Review Procedure (ULURP), zoning text amendment and City map amendment processes, their timing, and hearings before the Community Board, the Borough President's Office, the New York City Planning Commission (CPC), and the New York City Council. The role of the EIS as a full-disclosure document to aid in decision-making will be identified and its relationship to the discretionary approvals and the public hearings described.

TASK 2. LAND USE, ZONING, AND PUBLIC POLICY

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed action, and determines whether a proposed action is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the action's compliance with, and effect on, the area's zoning and other applicable public policies. This chapter will analyze the potential impacts of the Proposed Action on land use, zoning, and public policy, pursuant to the methodologies presented in the *CEQR Technical Manual*. The primary land use study area will consist of the rezoning area, where the potential effects of the Proposed Action will be directly experienced (reflecting the proposed rezoning and resultant RWCDS). The secondary land use study area would include the neighboring areas within a ¼-mile boundary from the rezoning area, which could experience indirect impacts. Subtasks will include the following:

- Provide a brief development history of the primary (i.e., rezoning area) and secondary study areas.
- Provide a description of land use, zoning, and public policy in the study areas discussed above (a more detailed analysis will be conducted for the rezoning area). This task will be closely coordinated with Task 3, "Socioeconomic Conditions," which will provide an analysis of the project's effect on

businesses and employment in the rezoning area. Recent trends in the rezoning area will be noted. Other public policies that apply to the study area will also be described, including the City's sustainability/PlaNYC policies. The directly affected area is not located within the boundaries of the City's Coastal Zone. Therefore, an assessment of the Proposed Action's consistency with the City's Waterfront Revitalization Program is not required.

- Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns for the balance of the study areas. Describe recent land use trends in the study areas and identify major factors influencing land use trends.
- Describe and map existing zoning and recent zoning actions in the study areas.
- Prepare a list of future development projects in the study areas that are expected to be constructed by the 2033 analysis year and may influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study areas. Based on these planned projects and initiatives, assess future land use and zoning conditions without the Proposed Action (No-Action condition).
- Describe proposed zoning changes, and the potential land use changes based on the Proposed Action's RWCDS (With-Action condition).
- Discuss the Proposed Action's potential effects related to issues of compatibility with surrounding land use, the consistency with zoning and other public policies, and the effect of the Proposed Action on ongoing development trends and conditions in the study areas.

TASK 3. SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. This chapter will assess the Proposed Action's potential effects on the socioeconomic character of the study area. Pursuant to Section 310 of Chapter 5 of the CEQR Technical Manual, the socioeconomic study area boundaries are expected to be similar to those of the land use study area. Therefore, the study area for this analysis would include the areas within a ¼-mile boundary from the rezoning area..

As the Proposed Action would affect a large area comprising approximately 70 blocks of East Midtown, it may be appropriate to create subareas for analysis if the action affects different portions of the study area in different ways. For example, if an action concentrates development opportunities in one portion of the study area, and would result in higher increases in population in that portion, it may be appropriate to analyze the subarea most likely to be affected by the concentrated development. Distinct sub-areas will be based on recognizable neighborhoods or communities in an effort to disclose whether the Proposed Action may have disparate effects on distinct populations that would otherwise be masked or overlooked within the larger study area.

Pursuant to the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business and institutional displacement; and (5) adverse effects on specific industries. As detailed below, the Proposed Action warrants an assessment of socioeconomic conditions with respect to the principal issues of concern related to businesses and institutions, but not

to those related to residential displacement (direct or indirect). According to the *CEQR Technical Manual*, direct displacement of fewer than 500 residents would not typically be expected to alter the socioeconomic characteristics of a neighborhood. No direct residential displacement would occur under the Proposed Action, and, therefore, the Proposed Action would not result in significant adverse impacts due to direct residential displacement. As to indirect residential displacement, the Proposed Action would forestall conversion of office to residential space resulting in a net reduction of residential units compared to No-Action conditions, and would therefore not induce a trend that could potential result in changing socioeconomic conditions for the residents within the rezoning area. Therefore, an assessment of indirect residential displacement would not be warranted for the Proposed Action.

In conformance with the CEQR Technical Manual guidelines, the assessment of the three remaining areas of concern will begin with a preliminary assessment to determine whether a detailed analysis is necessary. Detailed analyses will be conducted for those areas in which the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. The detailed assessments will be framed in the context of existing conditions and evaluations of the future No-Action and With-Action conditions in 2033 including any population and employment changes anticipated to take place by the analysis year of the Proposed Action.

Direct Business Displacement

For direct business displacement, the type and extent of businesses and workers to be directly displaced by the RWCDS associated with the Proposed Action will be disclosed. According to the CEQR Technical Manual, if a project would directly displace more than 100 employees, a preliminary assessment of direct business displacement is appropriate. It is expected that the Proposed Action would exceed the CEQR Technical Manual analysis threshold of 100 displaced employees, and therefore, a preliminary assessment pursuant to CEQR guidelines will be provided in the EIS.

The analysis of direct business and institutional displacement will estimate the number of employees and the number and types of businesses that would be displaced by the Proposed Action, and characterize the economic profile of the study area using current employment and business data from the New York State Department of Labor or U.S. Census Bureau. This information will be used in addressing the following CEQR criteria for determining the potential for significant adverse impacts: (1) whether the businesses to be displaced provide products or services essential to the local economy that would no longer be available in its "trade area" to local residents or businesses due to the difficulty of either relocating the businesses or establishing new, comparable businesses; and (2) whether a category of businesses is the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it.

Indirect Business Displacement

The indirect business displacement analysis is to determine whether the Proposed Action may introduce trends that make it difficult for those businesses that provide products or services essential to the local economy or those subject to regulations or publicly adopted plans to preserve, enhance, or otherwise protect them to remain in the area. The purpose of the preliminary assessment is to determine whether a proposed action has potential to introduce such a trend. The Proposed Action would introduce over 200,000 square feet of new commercial uses to the area, which is the CEQR threshold for "substantial"

new development warranting a preliminary assessment. The preliminary assessment will entail the following subtasks:

- Identify and characterize conditions and trends in employment and businesses within the study area. This analysis will be based on field surveys, employment data from the New York State Department of Labor and/or Census, and discussions with real estate brokers.
- Determine whether the Proposed Action would introduce enough of a new economic activity to alter existing economic patterns.
- Determine whether the Proposed Action would add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns.
- Determine whether the Proposed Action would directly displace uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses.
- Determine whether the Proposed Action would directly or indirect displace residents, workers, or visitors who form the customer base of existing businesses in the area.

If the preliminary assessment determines that the Proposed Action could introduce trends that make it difficult for businesses that are essential to the local economy to remain in the area, a detailed analysis will be conducted. The detailed analysis would follow the *CEQR Technical Manual* guidelines to determine whether the Proposed Action would increase property values and thus increase rents for a potentially vulnerable category of business and whether relocation opportunities exist for those businesses.

Adverse Effects on Specific Industries

The analyses of direct business displacement will provide sufficient information to determine whether the Proposed Action could have any adverse effects on a specific industry, compared with the future without the Proposed Action. The analysis will determine:

- Whether the Proposed Action would significantly affect business conditions in any industry or category of businesses within or outside the study area.
- Whether the Proposed Action would substantially reduce employment or impair viability in a specific industry or category of businesses.

TASK 4. OPEN SPACE

Open space is defined as publicly or privately owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment. An analysis of open space is conducted to determine whether or not a proposed action would have direct effects resulting from the elimination or alteration of open space, and/or an indirect effects resulting from overtaxing available open space.

The Proposed Action would not have a direct effect on any open space resource; therefore, the analysis will be limited to its indirect effects on open space. The Proposed Action's directly affected area is not located within an underserved or well-served area and, as such, the threshold for when an open space assessment is required is when an action would generate more than 200 residents and 500 employees. The Proposed Action would generate more than 500 employees; therefore, a non-residential open space

assessment would be warranted. The increment between the future without the Proposed Action and the future with the Proposed Action would be a net decrease of 1,459 residents within the directly affected area. Therefore, a residential open space assessment would not be necessary for the Proposed Action.

As the Proposed Action would introduce workers in excess of the CEQR threshold, the open space analysis will assess open space resources and calculate open space ratios within a non-residential (¼-mile radius) study area. As recommended in the CEQR Technical Manual, the study area comprises all census tracts that have 50 percent of their area located within a ¼- mile radius of the rezoning area. The detailed open space analysis in the EIS will include the following sub-tasks.

- Determine characteristics of the open space user group. The number of workers and other daytime users in the study area will be calculated based on reverse journey-to-work census data and other appropriate data sources. If warranted for the analysis, the number of residents in the study area will be based on 2010 census data compiled for census tracts comprising the open space study area.
- Inventory existing open spaces within the open space study area. The condition and usage of existing facilities will be described based on the inventory and field visits. Jurisdiction, features, user groups, quality/condition, factors affecting usage, hours of operation, and access will be included in the description of facilities. Acreage of these facilities will be determined and total study area acreage calculated. The percentage of active and passive open space will also be calculated. A map showing the locations of open spaces keyed to the inventory will be provided.
- Based on the inventory of facilities and study area population, open space ratios will be calculated for the daytime populations, and compared to City guidelines to assess adequacy. As per the CEQR Technical Manual, open space ratios are expressed as the amount of open space acreage per 1,000 user population.
- Assess expected changes in future levels of open space supply and demand in the 2033 analysis year, based on other planned development projects within the open space study area. Any new open space or recreational facilities that are anticipated to be operational by the analysis year will also be accounted for. Open space ratios will be calculated for future No-Action conditions and compared with existing ratios to determine changes in future levels of adequacy.
- Assess the effects on open space supply and demand resulting from increased worker populations added by the RWCDS. The assessment of the Proposed Action's impacts will be based on a comparison of open space ratios for the future No-Action versus future With-Action conditions. In addition to the quantitative analysis, qualitative analysis will be performed to determine if the changes resulting from the Proposed Action constitute a substantial change (positive or negative) or an adverse effect to open space conditions. The qualitative analysis will assess whether or not the study area is sufficiently served by open spaces, given the type, capacity, condition, and distribution of open space, and the profile of the study area population.

TASK 5. SHADOWS

A shadows analysis assesses whether new structures resulting from a proposed action would cast shadows on sunlight sensitive publicly accessible resources or other resources of concern such as natural resources, and to assess the significance of their impact. This chapter will examine the Proposed Action's potential for significant and adverse shadow impacts pursuant to *CEQR Technical Manual* criteria. Generally, the potential for shadow impacts exists if an action would result in new structures, or additions to buildings resulting in structures, over 50 feet in height that could cast shadows on important natural features, publicly accessible open space, or on historic features that are dependent on

sunlight. In addition, new construction or building additions resulting in incremental height changes of less than 50 feet can also potentially result in shadow impacts if they are located adjacent to, or across the street from, a sunlight-sensitive resource.

The Proposed Action would permit development of buildings of greater than 50 feet in height, and therefore has the potential to result in shadow impacts in the areas to be rezoned. The EIS will assess the RWCDS on a site-specific basis for potential shadowing effects of new developments or enlargements at both the projected and potential development sites on light-sensitive uses, and disclose the range of shadow impacts, if any, which are likely to result from the Proposed Action. The shadows analysis in the EIS will include the following sub-tasks:

- The EIS will provide a preliminary shadows screening assessment to ascertain whether the projected and potential developments' shadows may potentially reach any sunlight-sensitive resources at any time of year.
 - Pursuant to CEQR, a Tier 1 Screening Assessment will be conducted to determine the longest shadow study area for the projected and potential developments, which is defined as 4.3 times the height of any new structures including building enlargements (the longest shadow that would occur on December 21, the winter solstice). A base map that illustrates the locations of the projected and potential developments in relation to the sunlight-sensitive resources will be developed.
 - A Tier 2 Screening Assessment will be conducted if any portion of a sunlight-sensitive resource lies within the longest shadow study area. The Tier 2 assessment will determine the triangular area that cannot be shaded by the projected and potential developments, which in New York City is the area that lies between -108 and +108 degrees from true north.
 - If any portion of a sunlight-sensitive resource is within the area that could be potentially shaded by the projected or potential developments, a Tier 3 Screening Assessment will be conducted. The Tier 3 Screening Assessment will determine if shadows resulting from the projected and potential developments can reach a sunlight-sensitive resource through the use of three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns. The model will include a three-dimensional representation of the sunlight-sensitive resource(s), a three dimensional representation of the projected and potential development sites identified in the RWCDS, and a three-dimensional representation of the topographical information within the area being analyzed. Shadow analyses will be conducted for four representative days of the year to determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Action.
- If the screening analysis does not rule out the possibility that action-generated shadows would reach any sunlight-sensitive resources, a detailed analysis of potential shadow impacts on publicly-accessible open spaces or sunlight-sensitive historic resources resulting from new construction or enlargement identified in the RWCDS (both projected and potential development sites) will be provided in the EIS. The detailed shadow analysis will establish a baseline condition (No-Action) which will be compared to the future condition resulting from the Proposed Action (With-Action) to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow cast by the projected and potential developments. The detailed analysis will include the following tasks:
 - Document the analysis with graphics comparing shadows resulting from the No-Action condition with shadows resulting from the Proposed Action, with incremental shadow highlighted in a contrasting color.

- Provide a summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource.
- Assess the significance of any shadow impacts on sunlight-sensitive resources.

TASK 6. HISTORIC AND CULTURAL RESOURCES

The CEQR Technical Manual identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated NYC Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Register of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing; properties recommended by the NY State Board for listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet their eligibility requirements. Because the Proposed Action would induce development that could result in new inground disturbance and construction of a building type(s) that could compromise the historic context of the affected area, it has the potential to result in impacts to archaeological and architectural resources.

Impacts on historic resources are considered on the affected sites and in the area surrounding identified development sites. The historic resources study area is therefore defined as the directly affected area plus a 400-foot radius, as per the guidance provided in the *CEQR Technical Manual*. Archaeological resources are considered only in those areas where new in-ground disturbance is likely to occur; these are limited to sites that may be developed in the rezoning area, and include projected as well as potential development sites that would entail additional in-ground disturbance compared to No-Action conditions. This chapter will include an overview of the study area's history and land development. Subtasks will include:

- Research and describe history of land use.
- In consultation with LPC, identify those areas thought to be potentially archaeologically sensitive.
- Identify projected and potential development sites where new in-ground disturbance is expected to occur as a result of the Proposed Action.
- If there are projected or potential development sites identified as archaeologically sensitive, prepare a Phase IA Archaeological Documentary Report.
 - The Phase 1A will document the site history both horizontally and vertically, its development and uses, and the potential for the site to host significant archaeological resources. The EIS will summarize the results of the Phase IA analyses. The full Phase IA report will be submitted to LPC for review.
- In consultation with LPC, identify, map, and describe known and eligible architectural resources.
- In coordination with the land use task, assess probable impacts of development resulting from the Proposed Action on architectural resources. The assessment would address the following:
 - Would there be a physical change to the property?
 - Would there be a physical change to its setting, such as context or visual prominence (also known as indirect impacts)?
 - If so, is the change likely to alter or eliminate the significant characteristics of the resource that make it important?

Impacts to historic resources may result from both temporary (e.g., related to the construction process) and permanent (e.g., related to the long-term or permanent result of the proposed project or construction project) activities.

TASK 7. URBAN DESIGN AND VISUAL RESOURCES

Urban design is the totality of components that may affect a pedestrian's experience of public space. An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. When an action would potentially obstruct view corridors, compete with icons in the skyline, or would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings, a more detailed analysis of urban design and visual resources would be appropriate.

As the Proposed Action would rezone some areas to allow higher density and create new zoning districts to be mapped with the study area, a preliminary assessment of urban design and visual resources will be provided in the EIS.

As defined in the *CEQR Technical Manual*, the urban design study area will be the same as that used for the land use analysis (delineated by a ¼-mile radius from the proposed rezoning area boundary). For visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. The preliminary assessment will be based on *CEQR Technical Manual* methodologies and include the following:

- Based on field visits, describe the urban design and visual resources of the directly affected area and adjacent study area, using text, photographs and other graphic material as necessary to identify critical features, use, bulk, form, and scale.
- Discuss specific relationships between the directly affected area and adjacent areas regarding light, air, and views.
- In coordination with the land use task, describe the changes expected in the urban design and visual character of the study area due to known development projects in the future without the Proposed Action (No-Action condition).
- Describe the potential changes that could occur in the urban design character of the study area as a result of the Proposed Action (With-Action condition).
 - For the projected and potential development sites, the analysis will focus on general building types for the sites that are assumed for development as well as elements such as street wall height, setback, and building envelope. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources, including views of/to resources of visual or historic significance (landmark structures, historic districts, parks, etc.).
- A detailed analysis will be prepared if warranted based on the preliminary assessment. As described in the CEQR Technical Manual, examples of actions that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstruct view corridors, or compete with icons in the skyline.
 - The detailed analysis would describe, in both narrative and graphical form, the projected and potential development sites and the urban design and visual resources of the surrounding area.

The analysis would describe, in both narrative and graphical form, the potential changes that could occur to urban design and visual resources in the future with the proposed action condition, in comparison to the future without the proposed action condition, focusing on the changes that could negatively affect a pedestrian's experience of the area.

TASK 8. HAZARDOUS MATERIALS

A hazardous materials assessment determines whether a proposed action may increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. The potential for significant impacts related to hazardous materials can occur when: a) elevated levels of hazardous materials exist on a site and the project would increase pathways to human or environmental exposure; b) a project would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased; or c) the project would introduce a population to potential human or environmental exposure from off-site sources.

The hazardous materials assessment will determine which, if any, of the Proposed Action's projected and potential development sites may have been adversely affected by present or historical uses at or adjacent to the sites. As per the *CEQR Technical Manual*, for some proposed projects (e.g., area-wide rezonings), portions of the typical scope for a Phase I Environmental Site Assessment, such as site inspections, may not be possible. The Proposed Action is an area-wide rezoning, and none of the identified projected and potential development sites are in City ownership. As such, pursuant to the *CEQR Technical Manual*, Section 11-15 (Environmental Requirements) of the Zoning Resolution of the City of New York, and Chapter 24 of Title 15 of the Rules of the City of New York governing the placement of (E) designations², a preliminary screening assessment will be conducted for the projected and potential development sites to determine which sites warrant an (E) designation.

The hazardous materials assessment will include the following tasks:

- Review existing information sources such as Sanborn Fire Insurance Maps and City directories for the projected and potential development sites, adjacent properties, and properties within 400 feet of each projected and potential development site, to develop a profile on the historical uses of properties.
- In conjunction with the historic resources assessment, identify projected and potential development sites where new in-ground disturbance is expected to occur as a result of the Proposed Action.
- Review and evaluate relevant existing data to assess the potential for environmental concerns at the subject sites.
- A summary of findings and conclusions will be prepared for inclusion in the EIS to determine where
 (E) designations may be appropriate.
 - Coordinate with the New York City Department of Environmental Protection (DEP) to confirm the appropriateness of placing (E) designations on the Proposed Action's development sites.

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² As described in the *CEQR Technical Manual*, a hazardous materials (E) designation is an institutional control that can be placed as a result of the CEQR review of a zoning map or text amendment or action pursuant to the Zoning Resolution. It provides a mechanism to ensure that testing for and mitigation and/or remediation of hazardous materials, if necessary, are completed prior to, or as part of, future development of an affected site, thereby eliminating the potential for a hazardous materials impact

TASK 9. WATER AND SEWER INFRASTRUCTURE

A water and sewer infrastructure assessment determines whether a proposed action may adversely affect the City's water distribution or sewer system and, if so, assess the effects of such actions to determine whether their impact is significant. The *CEQR Technical Manual* outlines thresholds for analysis of an action's water demand and its generation of wastewater and stormwater. For the Proposed Action, an analysis of water supply is warranted as the RWCDS associated with the Proposed Action is expected to result in a demand of more than one million gallons per day (gpd) compared to No-Action conditions. A preliminary assessment of the Proposed Action's effects on wastewater and stormwater infrastructure is also warranted because the RWCDS for the Proposed Action would result in the development of more than 250,000 gsf of commercial space in Manhattan. Therefore, this chapter will analyze the Proposed Action's potential effects on the water, wastewater and stormwater infrastructure. The water and sewer infrastructure analysis will consider the potential for significant adverse impacts resulting from the RWCDS for the Proposed Action. DEP will be consulted during the preparation of the assessment.

Water Supply

- The existing water distribution system serving the rezoning area will be described based on information obtained from the DEP's Bureau of Water Supply and Wastewater Collection.
- Water demand generated by the projected development sites identified in the RWCDS will be projected.
- The effects of the incremental demand on the City's water supply system will be assessed to determine if there would be impacts to water supply or pressure. The incremental water demand will be the difference between the water demand of the projected development sites in the With-Action condition and the demand in the No-Action condition.

Wastewater and Stormwater Infrastructure

The Proposed Action's directly affected area is mostly located within the service area of the Newtown Creek Wastewater Treatment Plant (WWTP) along with a portion of North River WWTP service area. As such, the analysis will be conducted separately for each WWTP service area.

- Establish the appropriate study area for the assessment in accordance with the guidance of the CEQR Technical Manual and in consultation with DEP.
- The existing stormwater drainage system and surfaces (pervious or impervious) on the projected development sites will be described, and the amount of stormwater generated on those sites will be estimated using DEP's volume calculation worksheet. Drainage areas with direct discharges and overland flow will be presented.
- The existing sewer system serving the rezoning area will be described based on records obtained from DEP. Records obtained will include sewer network maps, drainage plans, capacity information for sewer infrastructure components, and other information as warranted. The existing flows to the Newtown Creek and North River WWTPs that serve the directed affected area will be obtained for the latest 12-month period, and the average dry weather monthly flow will be presented.

- Any changes to the stormwater drainage system and surface area expected in the future without the Proposed Action will be described. Any changes to the sewer system that are expected to occur in the future without the Proposed Action will be described based on information provided by DEP.
- Assess future stormwater generation from the projected development sites and assess the Proposed Action's potential to create impacts. Changes to the projected development sites' proposed surface area (pervious or impervious) will be described, and runoff coefficients and runoff for each surface type/area will be presented. Volume and peak discharge rates of stormwater from the sites will be determined based on the DEP volume calculation worksheet.
- Sanitary sewage generation for the projected development sites identified in the RWCDS will be estimated. The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the two WWTPs.
- Based on the assessment of future stormwater and wastewater generation, the change in flows and volumes to the combined sewer system and/or waterbodies due to the Proposed Action will be determined.

A more detailed assessment may be required if increased sanitary or stormwater discharges from the Proposed Action are predicted to affect the capacity of the existing sewer system, exacerbate Combined Sewer Overflow (CSO) volumes/frequencies or contribute greater pollutant loadings in stormwater discharged to receiving water bodies. The scope of a more detailed analysis, if necessary, will be developed based on conclusions from the preliminary infrastructure assessment and coordination with DEP.

TASK 10. SOLID WASTE AND SANITATION SERVICES

A solid waste assessment determines whether an action has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the City's Solid Waste Management Plan or with state policy related to the City's integrated solid waste management system. The Proposed Action would induce new development that would require sanitation services. According to the CEQR Technical Manual, if a project's generation of solid waste in the With-Action condition would not exceed 50 tons per week, it may be assumed that there would be sufficient public or private carting and transfer station capacity in the metropolitan area to absorb the increment, and further analysis generally would not be required. As the Proposed Action is expected to result in a net increase of more than 50 tons per week, compared to No-Action conditions, an assessment of solid waste and sanitation services is warranted. This chapter will provide an estimate of the additional solid waste expected to be generated by the projected developments and assess its effects on the City's solid waste and sanitation services. This assessment will:

- Describe existing and future New York City solid waste disposal practices.
- Estimate solid waste generation under existing conditions and in the Future No-Action condition.
- Forecast solid waste generation by the projected developments induced by the Proposed Action based on CEQR guidelines.
- Assess the impacts of the Proposed Action's solid waste generation (projected developments) on the City's collection needs and disposal capacity. The Proposed Action's consistency with the City's Solid Waste Management Plan will also be assessed.

TASK 11. ENERGY

According to the CEQR Technical Manual, an EIS must include a discussion of the effects of the proposed action on the use and conservation of energy, if applicable and significant. In most cases, an action does not need a detailed energy assessment, but its operational energy is projected. A detailed energy assessment is limited to actions that may significantly affect the transmission or generation of energy. For other actions, in lieu of a detailed assessment, the CEQR Technical Manual recommends disclosure of the estimated amount of energy that would be consumed annually as a result of the day-to-day operation of the buildings and uses resulting from an action.

Although significant adverse energy impacts are not anticipated for the Proposed Action, the EIS will disclose the projected amount of energy consumption during long-term operation resulting from the Proposed Action. The projected amount of energy consumption during long-term operation will be estimated based on the average annual whole-building energy use rates for New York City (per Table 15-1 of the CEQR Technical Manual). The assessment will also describe any planned "green measures" to reduce energy consumption that may be realized with the Proposed Action.

TASK 12. TRANSPORTATION

The objective of a transportation analyses is to determine whether a proposed action may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists and vehicles), on- and off-street parking, or goods movement. The Proposed Action is expected to induce primarily new commercial (office, retail, and hotel) development plus a relatively small amount of residential development which would generate additional vehicular travel as well as additional subway and bus riders and pedestrian traffic. These new trips have the potential to affect the area's transportation systems. Therefore, the transportation analyses will be a critical focus of the EIS.

Traffic

The EIS will provide a detailed traffic analysis focusing on those peak hours and street network intersections where the highest concentrations of action-generated demand would occur. The peak hours for analysis will be selected, and the specific intersections to be included in the traffic study area will be determined based upon the proposed traffic assignment patterns and the *CEQR Technical Manual* analysis threshold of 50 additional vehicle trips per hour.

The RWCDS exceeds the minimum development density screening thresholds specified in Table 16-1 of the *CEQR Technical Manual*. Therefore, a trip generation forecast is required to determine if the Proposed Action would generate 50 or more vehicle trips in any peak hour. The Proposed Action is expected to generate more than 50 additional vehicular trips in the weekday AM, midday, and PM peak hours. The following outlines the anticipated scope of work for conducting a traffic impact analysis for the Proposed Action's RWCDS:

- Select peak hours for analysis and define a traffic study area consisting of intersections to be analyzed within the rezoning area and along major routes leading to and from the area.
- Conduct a count program for traffic analysis locations that includes a mix of automatic traffic recorder (ATR) machine counts and manual intersection turning movement counts, along with vehicle classification counts and travel time studies (speed runs) as support data for air quality and

noise analyses. The manual turning movement counts will be supplemented by nine days of automatic traffic recorder (ATR) counts, and vehicle classification counts that will be conducted on one weekday. The manual turning movement, vehicle classification counts and travel time studies will be conducted concurrently with the ATR counts. Where applicable, available information from recent studies in the vicinity of the study area will be compiled, including data from such agencies as the New York City Department of Transportation (DOT) and DCP.

- Inventory physical data at each of the analysis intersections, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, bicycle routes and parking regulations. Signal phasing and timing data for each signalized intersection included in the analysis will be obtained from DOT.
- Determine existing traffic operating characteristics at each analysis intersection including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per traffic movement, per intersection approach, and per overall intersection. This analysis will be conducted using the 2000 Highway Capacity Manual (HCM) methodology with the latest approved Highway Capacity Software (HCS).
- Based on available sources, Census data and standard references including the CEQR Technical Manual, estimate the travel demand for projected development sites in the future without the Proposed Action (the No-Action condition), as well as the demand from other significant development sites planned in the vicinity of the study area by the 2033 analysis year. This will include daily and hourly person trips, and a modal distribution to estimate trips by auto, taxi, and other modes. A truck trip generation forecast will also be prepared based on data from the CEQR Technical Manual and previous studies conducted in this area of Manhattan. Mitigation measures accepted for all No-Action projects and other DOT initiatives will be included in the future No-Action network, as applicable.
- Compute the future 2033 No-Build traffic volumes based on an approved background traffic growth rate for the study area (0.25 percent per year for years one through five, 0.125 percent per year for years six through ten, and 0.0625 percent per year for subsequent years) and demand from any other significant development projects expected to be completed in the future without the Proposed Action. Incorporate any planned changes to the roadway system anticipated by 2033, and determine the No-Action intersection v/c ratios, delays and levels of service.
- Based on available sources, Census data, and standard references including the CEQR Technical Manual, develop a travel demand forecast for projected development sites based on the net change in uses compared to the No-Action condition as defined in the RWCDS. Determine the net change in vehicle trips expected to be generated by projected development sites under the Proposed Action as described in the Transportation Planning Factors (TPF) technical memorandum and approved by DCP in consultation with DOT, assign that volume of traffic in each analysis period to the approach and departure routes likely to be used, and prepare traffic volume networks for the 2033 future with the Proposed Action condition for each analyzed peak hour. Determine the resulting v/c ratios, delays, and LOS at analyzed intersections for the With-Action condition, and identify significant adverse traffic impacts in accordance with CEQR Technical Manual criteria.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual*, detailed transit analyses are generally not required if a Proposed Action is projected to result in fewer than 200 peak hour rail or bus transit trips. If a proposed action would result in 50 or more bus trips being assigned to a single bus line (in one direction), or if it

would result in an increase of 200 or more trips at a single subway station or on a single subway line, a detailed bus or subway analysis would be warranted. The Proposed Action's RWCDS is expected to generate a net increase of more than 200 additional subway trips and bus trips in one or more peak hours, and would therefore require detailed transit analyses based on *CEQR Technical Manual* criteria.

Subway

There are several subway stations located in the rezoning area or within close proximity. Transit analyses typically focus on the weekday AM and PM commuter peak hours when overall demand on the subway and bus systems is usually highest. The detailed transit analysis will include the following subtasks:

- Analysis of subway station stairways and entrance control areas will be conducted at the affected stations in the weekday AM and PM peak hours.
- The analysis will be based on counts conducted at those control areas and/or pedestrian circulation elements that would be traversed by significant concentrations of project-generated trips.
- Conditions and volumes in the future without the Proposed Action will be determined using background growth rates specified in the CEQR Technical Manual and accounting for any trips expected to be generated by No-Build developments.
- Conditions and volumes in the future with the Proposed Action will be determined based on the assignment of project-generated subway trips.
- Any potential significant adverse impacts at station stairways and entrance control areas will be identified using CEQR Technical Manual impact criteria.

Bus

The area of the Proposed Action is served by approximately 15 NYC Transit bus routes and Select Bus Service (SBS) on the 34th Street corridor that connect the area with other parts of Manhattan.

According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, a detailed analysis of bus conditions is generally not required if a Proposed Action is projected to result in fewer than 50 peak hour trips being assigned to a single bus line (in one direction). However, the Proposed Action could exceed that threshold and potentially result in significant adverse impacts to bus transit services based on *CEQR Technical Manual* criteria; therefore a detailed bus analysis would be warranted. The EIS will include a quantitative analysis of the bus services operating in proximity to the rezoning area.

Pedestrians

Pedestrian Level of Service Analyses

According to CEQR Technical Manual criteria, projected pedestrian volume increases of less than 200 persons per hour at any pedestrian element (sidewalks, corner areas and crosswalks) would not typically be considered a significant impact, since that level of increase would not generally be noticeable and therefore would not require further analysis. Although the new pedestrian trips generated by the RWCDS would be dispersed throughout the rezoning area, some concentrations of new pedestrian trips are expected during peak periods along corridors connecting clusters of projected development sites to area subway stations. Based on the level of new pedestrian demand generated by the RWCDS, it is anticipated that project-generated pedestrian trips would potentially exceed the 200-trip CEQR Technical Manual analysis threshold at one or more locations along the corridors in one or

more peak hours. It is therefore anticipated that the EIS will include a quantitative pedestrian impact analysis focusing on those sidewalks, corner areas and crosswalks along corridors that would experience more than 200 additional pedestrian trips as well as exceed impact thresholds in the *CEQR Technical Manual*. Pedestrian counts will be conducted at each of these locations, and levels of service determined for the existing, No-Action and With-Action conditions. The specific pedestrian facilities to be analyzed will be determined once the assignment of project-generated pedestrian trips has been finalized.

Vehicular and Pedestrian Safety

Traffic accidents involving pedestrians as well as bicycles at key study area intersections will be researched and documented. The potential for the Proposed Action to have significant pedestrian and/or bicycle impacts will be identified and possible remedies and/or improvements will be proposed for DOT consideration.

Parking

Parking demand from commercial uses typically peaks in the midday period and declines during the afternoon and evening. By contrast, residential demand typically peaks in the overnight period. The parking analyses will document changes in off-street parking utilization in the No-Action and With-Action conditions within ¼-mile of projected development sites during the weekday midday period. Onstreet parking conditions (existing curbside regulations and parking utilization) in the vicinity of projected development sites will also be documented for this period.

Parking demand generated by new residential development will be forecast based on the most recently available Census auto ownership data by income group for the proposed rezoning area. Parking demand from retail and other commercial uses will be derived from the forecasts of daily auto trips from these uses. The forecast of new parking supply will be based on the net change in parking spaces on projected sites, consistent with the RWCDS.

Based on the above assumptions, an assessment will be provided to determine whether there would be excess parking demand, and whether there are a sufficient number of other parking spaces available in the study area to accommodate that excess demand.

TASK 13. AIR QUALITY

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. An air quality assessment determines both a proposed action's effects on ambient air quality as well as the effects of ambient air quality on the action. The Proposed Action, under the RWCDS, would affect 20 projected and 18 potential development sites, and include new buildings, building conversions, and assemblages. Air quality analyses will be conducted, following the procedures outlined in the *CEQR Technical Manual*, to determine whether the proposed action under the RWCDS would result in exceedances of ambient air quality standards or health-related guideline values. The air quality studies for the Proposed Action will include both mobile and stationary source analyses. The methodologies and procedures utilized in these analyses are described below.

The key issues that would be addressed are:

- The potential for changes in vehicular travel associated with proposed development activities to result in significant mobile source (vehicular related) air quality impacts;
- The potential impact from the exhaust of parking garages associated with the proposed developments;
- The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development buildings to significantly impact other proposed development buildings (project-on-project impacts);
- The potential for emissions from the HVAC systems of the proposed development buildings to significantly impact existing land uses (project-on-existing impacts);
- The potential combined impacts from clusters of HVAC emissions (i.e., HVAC emissions from proposed development buildings of approximately the same height that are located in close proximity to one another) to significantly impact existing land uses and other proposed development sites;
- The potential for significant air quality impacts from the HVAC systems of existing "major" emission sources with 20 or more millions Btu/hr heat input or any "large" combustion source (e.g., power plants) on the proposed developments; and
- The potential for significant air quality impacts on the proposed development sites from air toxic emissions generated by nearby existing industrial sources.

Mobile Source Analysis

The increased traffic associated with the RWCDS projected development sites as well as the diversion of traffic would have the potential to affect local air quality levels. Emissions generated by the increased traffic at congested intersections have the potential to significantly increase air quality levels at nearby sensitive land uses. The primary air quality issue related to the Proposed Action that will need to be addressed in the EIS is whether the traffic associated with the RWCDS during peak traffic periods will cause or exacerbate a violation of the 8-hour ambient air quality standard for carbon monoxide (CO) or exceed the DEP de minimis criteria near any of these locations. A determination would also be made as to whether the number of project-generated vehicles exceeds the DEP Interim PM_{2.5} Guidance criteria.

Screening Analysis

If the number of project-generated vehicle trips exceeds the *CEQR Technical Manual* screening thresholds, detailed analyses of mobile source emissions of CO and particulate matter (PM) on ambient pollutant levels in the study will be performed. For the Proposed Action, the threshold for conducting an analysis of CO emissions corresponds to 140 project-generated vehicles at a given intersection in the peak hour. The need for conducting an analysis of PM emissions is based on the number of project-generated peak hour heavy-duty diesel vehicles (or its equivalent in vehicular PM_{2.5} emissions) as determined using the worksheet provided in the *CEQR Technical Manual*.

Detailed Analysis

For those intersections where the CEQR volume threshold would be exceeded a detailed CO and/or $PM_{2.5}$ analysis will be conducted as detailed below.

CO Dispersion Analysis

A detailed microscale mobile source analysis using CEQR procedures will be conducted to estimate potential impacts near congested locations. This analysis will employ the US Environmental Protection Agency (EPA) CAL3QHC (Version 2) dispersion model and the latest EPA emission factor algorithm (currently MOBILE 6). Intersection geometries will be developed for each analysis site. Worst-case meteorological conditions will be utilized and modeling inputs appropriate for the study area, as well as background levels, will be obtained from the New York State Department of Environmental Conservation (NYSDEC) and DEP. CO levels will be estimated at each of the analysis sites. No-Action and With-Action conditions will be considered for the 2033 analysis year. Maximum one- and eight-hour CO concentrations will be calculated for each condition.

Estimated eight-hour CO levels will be compared with federal National Ambient Air Quality Standards (NAAQS) and project-generated impacts will be compared with the DEP de minimis levels. The possibility of attaining ambient air quality standards at sites where exceedances are estimated by incorporating mitigation measures will be examined. Should this occur, the possibility of using the CAL3QHR program with actual, as opposed to worst-case, meteorological data will be considered. Analyses will be conducted, where necessary, using mitigation measures to identify the potential effectiveness of ameliorative measures designed to minimize any potential significant adverse impacts of the proposed project.

PM_{2.5} Dispersion Modeling Analysis

Following DEP's Interim PM_{2.5} Guidance as detailed in the *CEQR Technical Manual*, a PM_{2.5} equivalency analysis would be conducted at the affected intersections in the study area.

Garage Analysis

Analyses will be conducted to estimate potential air quality impacts of proposed or expanded garages if the incremental increase in the number of spaces (i.e., the difference in the number of spaces between With-Action and No-Action conditions) in a garage is more than 60.

Because the garages would be used almost exclusively by gasoline-powered automobiles and not diesel-fueled trucks, CO will be the only pollutant considered for this analysis. The analysis will follow *CEQR Technical Manual* guidelines for a mechanically ventilated, enclosed garage. CO concentrations will be estimated near the exhaust vents of the facilities at receptors located at 5 and 50 feet from the exhaust vents as well as at nearby windows, if applicable. Contributions from emissions generated by street traffic will be added to project-generated impacts and appropriate background levels to estimate the total concentration. The maximum total 8-hour CO concentration (i.e., including garage impact, street traffic contributions, and background concentration) will be estimated and compared to the CO NAAQS of 9.0 ppm.

Stationary Source Analysis

HVAC Analysis

Emissions from the HVAC systems of the projected and potential developments may affect air quality levels at nearby existing land uses as well as the other affected developments. The impacts of these emissions would be a function of fuel type, stack height, building size (gross floor area), and location of each emission source relative to a nearby sensitive receptor site. The CEQR Technical Manual includes a

screening methodology to estimate the potential impacts of HVAC system emissions from a single building that is at least 30 feet from the nearest building of similar or greater height. A detailed dispersion analysis is required for buildings that are less than 30 feet from a taller building. However, when a building-on-building analysis involves multiple buildings, situations may occur where one (or more) of the buildings is located less than 30 feet from a nearby building but more than 30 feet from another nearby building. In these cases, each building's impact on each nearby building will be estimated individually—using either screening level or detailed analysis, as appropriate. For projected and potential sites that are more than 30 feet apart from a taller building. The CEQR Technical Manual screening methodology will be used to estimate the potential impacts of these buildings. For those projected and potential sites that are closer than 30 feet from a taller building, a detailed dispersion analysis will be used to estimate the potential impacts of these buildings.

Screening-Level Analysis

A screening analysis will be conducted using CEQR Technical Manual nomographs, to determine whether the HVAC emissions of any of the projected and potential development sites would have the potential to significantly affect air quality levels at any of the other nearby projected and potential development sites (i.e., project-on-project impacts). Each projected and potential development site will be evaluated and all nearby projected or potential developments of similar or greater height were considered as potential sensitive receptor sites. If more than one taller building is located near a shorter building, the potential impacts from the HVAC emissions of the shorter building on the closest taller building will be considered. If the distance from a projected and/or potential development to the nearest development of similar or greater height is less than the threshold distance provided in the CEQR Technical Manual nomographs, the potential exists for significant air quality impacts, and a detailed dispersion modeling analysis will be conducted. Otherwise, the development site passes the screening, and no further analysis is required.

The same screening-level analysis will also be conducted, using *CEQR Technical Manual* nomographs, to determine the potential impacts of the HVAC emissions of any of the projected and potential development sites on existing sensitive land uses. A survey of existing land uses within 400 feet of the proposed development sites will be conducted using the New York City Open Accessible Space Information System (OASIS) and GIS shape files to identify residential land uses and other sensitive receptor sites and determine the heights of the existing buildings.

Detailed Dispersion Analyses

Detailed analysis will be conducted for those locations that did not pass the screening analysis. The analysis will examine whether the HVAC emissions of any of the projected and potential development sites would have the potential to significantly affect air quality levels at any of the other nearby projected and potential development sites (i.e., project-on-project impacts) and on other existing or planned sensitive uses within the surrounding area. Nitrogen dioxide (NO2), sulfur dioxide (SO2) and particulate matter (PM₁₀ and PM_{2.5}) emissions will be analyzed. The analysis will be performed using the EPA-developed AERMOD model, based on the latest appropriate EPA guidance, and will consider plume impingement conditions (i.e., when the wind blows from the stacks toward buildings) and wake effects (i.e., when the wind blows from buildings toward the stacks). The recent five years of meteorological data will be used for these simulation analyses. Project on existing and project-on-project impacts will be determined. Predicted values will be compared with NAAQS for NO₂, SO₂, PM_{2.5} and PM₁₀, and the City's interim guidance criteria for PM_{2.5}.

Cluster Analysis

The proposed action could result in developments that are located in close proximity to one another

and have the same (or approximately the same) heights. Therefore, in addition to estimating the potential impacts of the HVAC emissions of these development sites individually, detailed dispersion analyses of the HVAC emissions from the identified clusters would be conducted to estimate the potential impacts of these emissions on the other development sites as well as on nearby existing land uses. Clusters will be selected based on the sizes of the buildings that comprise the cluster, proximity of the cluster buildings to each other, and the difference in stack heights no more than 10 to 15 feet with no city street in between.

To estimate maximum concentrations, receptors would be located on all facades of each nearby affected building -- at heights that would most likely to be impacted by the HVAC emissions. This analysis would be performed in the same manner for estimating the potential impacts of each individual building, except that analysis will be conducted using a single representative stack located in the approximate geographic center of each cluster as the emission source.

Impacts from "Major" Existing Emission Sources

Following CEQR Technical Manual guidelines, a survey of land uses and building heights will be conducted to determine whether there are any existing "major" sources of boiler emissions (i.e., emissions from boiler facilities with heat inputs 20 million Btu per hour or greater) located within 400 feet of the proposed development sites or any "large" combustion emission source (e.g., power plant, co-generation facility, etc) located within 1,000 feet of the proposed development sites. Potential cumulative impacts of emissions from these emission sources would be estimated if needed. If such sources are identified, a detailed analysis would be conducted using EPA's AERMOD dispersion model using methodology described above. Predicted pollutant concentrations will be compared with NAAQS for NO₂, SO₂ and PM₁₀, and the City's interim guidance criteria for PM_{2.5}.

Industrial Source (Air Toxics) Analysis

An analysis of uses within and in proximity of the Proposed Action's directly affected area will be conducted to determine the potential for impacts from industrial emissions. A field survey will be performed to determine if there are any manufacturing or processing facilities in or within 400 feet of the directly affected area. In addition, a search of federal and state air permits, and the DEP's Bureau of Environmental Compliance (BEC) files will be performed to determine if there are permits for any sources of toxic air compounds from industrial processes. Based on this information, a determination will be made as to whether a detailed analysis of industrial stationary source air quality issues is necessary.

If manufacturing or processing facilities are identified within 400 feet of any of the development sites, or if any emissions from processing or manufacturing facilities within 400 feet of the development projects site are on file with DEP or NYSDEC, an industrial stationary source air quality analysis as detailed in the *CEQR Technical Manual* will be performed. The *CEQR Technical Manual*'s industrial source screening procedures will be used to estimate the short-term and annual concentrations of critical pollutants at sensitive receptor sites. Predicted worst-case impacts on the development sites will be compared with the short-term guideline concentrations (SGC) and annual guideline concentrations (AGC) reported in NYSDEC's DAR-1 AGC/SGC Tables guidance document to determine the potential for significant impacts. In the event that exceedances of guidance concentrations are predicted, more refined dispersion modeling (using EPA's AERMOD dispersion model) may be employed as a separate task, or measures to reduce pollutants to within guidance levels will be examined.

TASK 14. GREENHOUSE GAS ANALYSIS (GHG)

Increased greenhouse gas (GHG) emissions are changing the global climate, which is predicted to lead to wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. As the Proposed Action has development sites that exceed the 350,000 sf development threshold, and in accordance with the CEQR Technical Manual, GHG emissions generated by the Proposed Action will be quantified and an assessment of consistency with the City's established GHG reduction goal will be performed as part of the EIS. The assessment will examine GHG emissions from the Proposed Action's operations, mobile source, and construction as outlined below.

- Sources of GHG from the development projected as part of the Proposed Action will be identified. The pollutants for analysis will be discussed, as well as the various city, state, and federal goals, policy, regulations, standards and benchmarks for GHG emissions.
- Fuel consumption will be estimated for the proposed buildings based on the calculations of energy use estimated for the project
- GHG emissions associated with action-related traffic will be estimated for the Proposed Action using data from the transportation analysis. A calculation of Vehicle Miles Traveled (VMT) will be prepared.
- The types of construction materials and equipment proposed will be discussed along with opportunities for alternative approaches that may serve to reduce GHG emissions associated with construction.
- A qualitative discussion of stationary and mobile sources of GHG emissions will be provided in conjunction with a discussion of goals for reducing GHG emissions to determine if the Proposed Action is consistent with GHG reduction goals, including building efficient buildings, use of clean power, transit-oriented development and sustainable transportation, reduction of construction operations emissions, and use of building materials with low carbon intensity.

TASK 15. NOISE

Relative to noise, the goal of CEQR is to determine both a proposed action's potential effects on sensitive noise receptors, including the effects on the level of noise inside residential, commercial, and institutional facilities (if applicable); and, the effects of ambient noise levels on new sensitive uses introduced by a proposed action. If significant adverse impacts are identified, CEQR requires such impacts to be mitigated or avoided to the greatest extent practicable. The Proposed Action would result in primarily new commercial (office, retail, and hotel) development plus a relatively small amount of residential development, and also alter transportation conditions in the directly affected area. Noise, which is a general term used to describe unwanted sound, will likely be affected by these development changes.

The Proposed Action will generate vehicular trips, but given the background conditions and the anticipated action-generated traffic, it is not expected that action-generated traffic would be likely to result in significant noise impacts. It is assumed that outdoor mechanical equipment would be designed to meet applicable regulations and no detailed analysis of potential noise impacts due to outdoor mechanical equipment will be performed. Consequently, the noise analysis will examine the level of building attenuation necessary to meet CEQR interior noise levels requirements. The building

attenuation study will be an assessment of noise levels in the surrounding area associated primarily with traffic and nearby uses and their potential effect on the proposed project.

Specifically, the noise analysis program will include the following subtasks:

- Noise measurement sites will be selected at representative noise locations (estimated at no more than ten sites). Sites will be selected to provide adequate geographic coverage within the rezoning area and to ensure enough locations are selected to determine ambient noise levels over the large and diverse study area.
- Appropriate noise descriptors to describe the existing noise environment will be selected in accordance with the CEQR Technical Manual. The Leq and L10 levels will be the primary noise descriptors used for the EIS analysis.
- Based on the traffic studies, perform a screening analysis to determine whether there are any locations where there is the potential for the Proposed Action to result in significant noise impacts (doubling of traffic volume) due to action-generated traffic.
- Noise measurements will coincide with weekday peak traffic hour AM, Midday, and PM plus Saturday midday time periods. Noise measurements will be recorded in conformance with procedures contained in the CEQR Technical Manual.
- At each noise measurement site, noise levels will be measured in units of "A" weighted decibel scale (dBA), for duration of 20 minutes per time period and include noise descriptors such as equivalent noise level (Leq) and statistical percentile levels Lmax, Lmin, L1, L10, L50, L90.
- A summary table of existing measured noise levels for all time periods will be provided as part of the EIS.
- At each of the noise measurement sites a PCE noise analysis, in accordance with CEQR requirements, will be completed to determine noise levels under future No Action and Proposed Action conditions. All projections will be made with Leq noise descriptor.
- Estimated window-wall attenuation requirements under future Proposed Action conditions will be determined based on the highest L10 noise level estimated at each monitoring site.
- Window wall attenuation requirements will be based on the proposed use of each of the potential and projected development site based on CEQR interior noise exposure level limits.
- A summary of the noise measurement findings and window wall attenuation requirements will be summarized in a tabular format in the EIS.
- If the results of the screening analysis indicate that a doubling of traffic would occur, a mobile source noise analysis would be performed using either proportional modeling or the Traffic Noise Model (TNM), where appropriate.
- If appropriate, an assessment for reduction of noise levels based on building heights may be conducted for certain development sites due to high street level noise values (i.e., noise adjustment due to height).

TASK 16. PUBLIC HEALTH

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a proposed project, and if so, to identify

measures to mitigate such effects.

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified in any of these technical areas and the lead agency determines that a public health assessment is warranted, an analysis will be provided for the specific technical area or areas.

TASK 17. NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns, noise etc. The Proposed Action directly affected area is composed of primarily high-density commercial office buildings. Additionally, the area contains a number of hotels, located primarily along Lexington Avenue, and small pockets of residential buildings on side streets. The area also contains a series of civic buildings and private clubs.

The proposed development has the potential to alter certain constituent elements of the affected area's neighborhood character, including land use patterns, socioeconomic conditions, traffic and noise levels, and therefore an analysis will be provided in the EIS. As suggested by the CEQR Technical Manual, the study area for neighborhood character will be coterminous with the ¼-mile land use study area. The chapter will summarize changes that can be expected in the character of the neighborhood in the future without the Proposed Action (No-Action condition) as well as describing the Proposed Action's impacts on neighborhood character. Subtasks will include:

- Based on the other EIS chapters, describe the predominant factors that contribute to defining the character of the neighborhood, including land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; transportation; and noise.
- Summarize changes in the character of the neighborhood that can be expected in the future No-Action condition based on planned development projects, public policy initiatives, and planned public improvements, as applicable.
- Summarize changes in the character of the neighborhood that can be expected in the future With-Action condition, based on the RWCDS, and compare to the future No-Action condition. A qualitative assessment will be presented, which will include a description of the potential effects of the Proposed Action on neighborhood character.

TASK 18. CONSTRUCTION

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. Construction impacts are usually important when construction activity has the potential to affect transportation conditions, archaeological resources and the integrity of historic resources, community noise patterns, air quality conditions, and mitigation of hazardous materials. According to the CEQR Technical Manual, multi-sited projects with overall construction periods lasting longer than two years and which are near to sensitive receptors should undergo a preliminary impact assessment. This chapter of the EIS will provide a preliminary impact assessment following the guidelines in the CEQR Technical Manual. The preliminary assessment will evaluate the duration and severity of the disruption or inconvenience to nearby sensitive receptors.

If the preliminary assessments indicate the potential for a significant impact during construction, a detailed construction impact analysis will be undertaken and reported in the EIS in accordance with guidelines contained in the *CEQR Technical Manual*. Technical areas to be assessed include the following:

- Transportation Systems. This assessment will qualitatively consider losses in lanes, sidewalks, and other transportation services on the adjacent streets during the various phases of construction, and identify the increase in vehicle trips from construction workers and equipment. If warranted under CEQR guidelines, a travel demand forecast for the RWCDS' construction period will be prepared.
- Air Quality. The construction air quality impact section will contain a qualitative discussion of both mobile air source emissions from construction equipment and worker and delivery vehicles, and fugitive dust emissions. It will discuss measures to reduce impacts.
- Noise Impacts. The construction noise impact section will contain a qualitative discussion of noise from construction activity.
- Hazardous Materials. In coordination with the work performed for hazardous materials, above, summarize actions to be taken during project construction to limit exposure of construction workers to potential contaminants.
- Socioeconomic Conditions. The EIS will consider whether construction conditions as a result of the Proposed Action and associated RWCDS would affect access to existing businesses, the potential consequences concerning their continued viability, and the potential effects of their loss, if any, on the character of the area.
- Historic and Cultural Resources: In coordination with the work performed for historic resources above, identify the potential for construction-period impacts, and summarize actions to be taken during project construction to protect adjacent historic resources from potential construction impacts.
- Neighborhood Character. This assessment will consider potential impacts during the construction period to the character of the surrounding neighborhood.
- Other Technical Areas. As appropriate, discuss the other areas of environmental assessment, including Land Use, Zoning and Public Policy, Open Space, Socioeconomic Conditions, Community Facilities, and Infrastructure, for potential construction-related impacts.

TASK 19. MITIGATION

Where significant adverse project impacts have been identified in Tasks 2 through 17, measures to mitigate those impacts will be described. The chapter will also consider when mitigation measures will need to be implemented. These measures will be developed and coordinated with the responsible City/State agencies as necessary, including LPC, DOT, and DEP. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

As noted earlier in this document, the District Improvement Bonus mechanism would generate funding for City-priority improvements to the pedestrian realm network, both above- and below-grade. The EIS will evaluate how and to what extent the public improvements avoid pedestrian and transit impacts resulting from the development by treating them as mitigation measures for analysis purposes. This analysis approach will provide the decision-makers with important information concerning the environmental benefits of the improvements and allow for adjustments to be made in order to improve their use as project components related to the environment. By identifying the ability of improvements

to address the effects of development in the area based on capacity measures, the analysis will also support the potential for future implementation of other alternative improvements which have the same mitigation and improvement potential, creating future flexibility to adapt and adjust the menu of improvements as development proceeds in East Midtown.

TASK 20. ALTERNATIVES

The purpose of an alternatives section in an EIS is to examine development options that would tend to reduce action-related impacts. The alternatives will be defined once the full extent of the Proposed Action's impacts has been identified. Typically for area-wide actions such as the Proposed Action, the alternatives will include a No Build Alternative, a no impact or no significant impact alternative, and a lesser density alternative. A lesser density alternative would be pursued only if it is found to have the potential to reduce the impacts of an action while, to some extent, still meeting the action's stated purpose and need. The alternatives analysis will be qualitative, except where significant adverse impacts of the Proposed Action have been identified. The level of analysis provided will depend on an assessment of project impacts determined by the analysis connected with the appropriate tasks.

TASK 21. CONCEPTUAL ANALYSIS

As noted above, the Proposed Action could result in the development on sites within areas where the proposed special permit to allow higher maximum FARs and modification to height and setback controls could be used. Because it is not possible to predict whether a special permit would be pursued on any one site in the future, the RWCDS does not include specific development sites that would achieve the higher maximum FAR above that permitted as-of-right under the With-Action condition.

Therefore, a conceptual analysis will be provided to generically assess the potential environmental impacts that could result from the development of such higher maximum FARs within the rezoning area. The conceptual analysis will include the following development scenarios: 1) a scenario that includes the development of two office buildings in the Grand Central core to the maximum permitted FAR (30.0); and 2) a scenario that includes the development of an office building on Park Avenue to the maximum permitted FAR (24.0). The conceptual analysis will consider the potential effects of establishing this new special permit and the potential environmental effects as compared to those described for the Proposed Action.

TASK 22. SUMMARY EIS CHAPTERS

In accordance with CEQR guidelines, the EIS will include the following three summary chapters, where appropriate to the Proposed Action:

- Unavoidable Adverse Impacts which summarizes any significant adverse impacts that are unavoidable if the Proposed Action is implemented regardless of the mitigation employed (or if mitigation is not feasible).
- Growth-Inducing Aspects of the Proposed Action which generally refer to "secondary" impacts of a Proposed Action that trigger further development.
- Irreversible and Irretrievable Commitments of Resources which summarizes the Proposed Action and its impacts in terms of the loss of environmental resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.

TASK 23. EXECUTIVE SUMMARY

The executive summary will utilize relevant material from the body of the EIS to describe the Proposed Action, its environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Action. The executive summary will be written in enough detail to facilitate drafting of a notice of completion by the lead agency.

Appendix A RWCDS Tables for Projected and Potential Development Sites

East Midtown - RWCDS - Projected Sites

	tion Developm			,																												
	Site I				Existing Cond	dition							No Action Co	ndition							With Acti	ion scenario							- In	ncrement		
				Commercial						Building Area	Commercial		Office Area gsf			Office	Building Area	Commercial						Office			Building Area	Commercial		Office Area gsf		
			Building Area	Area gsf (Office Retail and	Residential		al Retail	Dw	mber of velling	office F	Area gsf (Office, Retail and	Residential	(usable; see note #3	Total Retail	Number of Dwelling		gsf (including office	Area gsf (Office, Retail and	Residential		Total Retail		Number of Dwelling		Neighborhood	Destination Retail	gsf (including office	Area gsf (Office, Retail and	Residential Area			Number of Dwelling
	Block Lot	Lot Area sf	gsf	Hotel)	Area gsf Office Ar	ea gsf Area	a gsf Hote	el Area gsf Uni	its	mechanical)	Hotel)	Area gsf	below)	Area gsf H	otel Area gsf Units	below)	mechanical)	Hotel)	Area gsf	note #3 below)	Area gsf	Hotel Area gsf	Units	below)	Retail Area gsf	Area gsf	mechanical)	Hotel)	gsf	below) Area gsf	Hotel Area gsf	Units
	869	16 14,220	217,31	7 217,317	- 205	,317	12,000	-	-	217,317	217,317	-	205,317	12,000		-																
	869	58 5,370	91,212	91,212	85	,212	6,000	_	_	91,212	91,212	_	85,212	6,000		_																
Site 1	003	30 3,370	31,21	31,212		,212	0,000			31,212	31,212			0,000																		
	869	61 6,480	74,186	74,186	- 68	,186	6,000	-	-	74,186	74,186	-	68,186	6,000		-																
	869	64 7,400	89,423				7,000	-	-	89,423	472,138		82,423	7,000		-	831,39			725,630			-	72,295	33,470	-						
	TOTAL	33,470	472,138	472,138	- 441	,138	31,000	-	-	472,138	472,138	-	441,138	31,000		-	831,39	759,100	-	725,630	33,470	-	-	72,295	33,470	-	359,257	286,962		284,492 2,47	0 -	
	1277	20 23,025	417,659				20,000	-	-																							
Site 4	1277 1277	27 10,250 46 3,350	160,482 22,502				16,600 3,215	4,887	-																							
	1277 TOTAL	52 6,666 43,291	87,845 688,48 8				4,675 44,490	4,887	-	796,554 796,554	727,289 727,289	-	683,998 683,998	43,291 43,291		69,266 69,266	1,194,833 1,194,833			1,047,642 1,047,642	43,291 43,291	-	-	103,898 103,898	21,646 21,646	21,646	398,277	363,644		363,644 -		
	IUIAL	43,291	688,488	5 688,488	5 - 639	,111	44,490	4,887		796,554	727,289	-		43,291	- -	69,266	1,194,83	2 1,090,933		1,047,642	43,291	-	-	103,898	21,646	21,646	398,277	363,644	-	363,644 -	-	
	1278 1278	8 5,690 14 27,750	36,616 486,874			,616 ,874	20,000	-	-	36,616 486,874	36,616 486,874		36,616 466,874	20,000		-																
	1278	15 2,375	35,625	35,625	- 33	,325	2,300	-	-	35,625	35,625	-	33,325	2,300		-																
Site 5	1278 1278	17 2,375 62 2,513	35,625 11,550				2,300 4,750	-	-	35,625	35,625	-	33,325	2,300		-																
	1278	63 2,513 64 2,513	17,668 16,629				4,800 3,300	-	-	94,991	7.520	07.453		7.520	,	20																
	1278 1278	65 5,020	62,918			,329	-	62,918	-	62,918	7,539 62,918		-	7,539	62,918 -	-	1,260,60			1,100,238	50,749	-	-	109,618	25,375	25,375						
	TOTAL	50,749	703,50	703,505	- 601	,737	37,450	62,918		752,649	665,197	87,452	570,140	32,139	62,918	- 38	1,260,60	1,150,987	-	1,100,238	50,749	-	-	109,618	25,375	25,375	507,956	485,790	(87,452)	530,098 18,61	(62,918) (88)
	1279	9 8,133	110,999	110,999	- 104	,999	6,000	-	-	110,999	110,999	-	104,999	6,000		-																
	1279	17 13,125	122,600				72,275	-	-	122,600	122,600		50,325	72,275		-																
Site 6	1279 1279	57 18,800 63 4,522	380,766 15,023				36,284 15,023	-	-	380,766 15,023	380,766 15,023		344,482	36,284 15,023		-																
																	11															
	1279 TOTAL	65 5,020 49,600	79,280 708,66 8			,280 , 086 1	5,000 1 34,582	-	-	79,280 708,668	79,280 708,668	-	74,280 574,086	5,000 134,582		-	1,232,06	4 1,124,928 4 1,124,928		1,075,328 1,075,328	49,600 49,600		-	107,136 107,136	24,800 24,800	24,800 24,800	523,396	416,260	-	501,242 (84,98	2) -	+
	1279	23 5,000	69,086	69,086	. 65	,386	3,700) 					1										$\overline{}$
	1279	24 2,541	50,840	50,840	- 50	,840	-	-	-																							
	1279 1279	25 2,510 48 15,000	11,250 231,94				2,250 5,000	-	-	460,938	420,857	_	409,907	10,950		40,082																
Site 7	1279	28 9,105	174,89				8,824	166,071	-	174,895	174,895		-	8,824	166,071 -	-																
	1279	45 9,105	162,330	162,330	- 152	,830	9,500	-	-	162,330	162,330	-	152,830	9,500		_	1,194,00	4 1,090,177	-	1,046,916	43,261	-	-	103,826	21,631	21,631						
	TOTAL	43,261	700,346	700,346	- 505	,001	29,274	166,071	-	798,163	758,082	-	562,737	29,274	166,071 -	40,082	1,194,00	1,090,177	-	1,046,916	43,261	-	-	103,826	21,631	21,631	395,840	332,095	-	484,179 13,98	7 (166,071	.) -
-																																T
Site 9	1281 TOTAL	21 43,313 43,313				-		598,248 598,248	-	598,248 598,248	598,248 598,248		-	-	598,248 - 598,248 -	-	1,195,43			1,048,175 1,048,175	43,313 43,313	-	-	103,951 103,951	21,657 21,657	21,657 21,657	597,191	493,240		1,048,175 43,31	3 (598,248	8) -
													677.674	24 222) <u> </u>	1	1		1	1			, , , , , , , , , , , , , , , , , , , ,	,		1	1	, , ,	1	
Site 10	1282 1282	17 38,150 64 8,033	698,990 29,000				21,322 12,200	-	-	698,996 29,000	698,996 29,000		677,674 16,800	21,322 12,200		-	1,147,18	6 1,047,430	-	1,001,247	46,183	-	-	99,755	23,092	23,092						
	TOTAL	46,183	727,99	727,996	- 694	,474	33,522	-	-	727,996	727,996	-	694,474	33,522		-	1,147,18	1,047,430	-	1,001,247	46,183	-	-	99,755	23,092	23,092	419,190	319,434	-	306,773 12,66	1 -	_
Site 12	1285	36 34,050	645,483	645,483	- 613	,397	32,086	-	-	645,483	645,483	-	613,397	32,086		-	791,98	2 723,114	-	689,064	34,050	-	-	68,868	34,050	-						
	TOTAL	34,050	645,483	645,483	- 613	,397	32,086	-	-	645,483	645,483	-	613,397	32,086		-	791,98	723,114	-	689,064	34,050	-	-	68,868	34,050	-	146,499	77,631	-	75,667 1,96	4 -	
Site 16																																
	1303 TOTAL	14 41,170 41,170				-		427,611 427,611	-	427,611	427,611 427,611		-	-	427,611 -		805,41	9 805,419 9 805,419		-	41,170	764,249 764,249		-	41,170 41,170	-	277 000	377,808	_	- 41,17	226 626	
										427,011	427,011				427,011		803,41	803,413			41,170	704,243			41,170		377,808	377,808		41,17	330,030	
		20 24,725 25 1,882	317,496 4,875				1,940 2,775	315,556	- 2									1														
6:: 4-	1304	26 5,682	37,37	1 37,371	-	-	-	37,371	-																							
Site 17	1304	28 1,840 45 10,041	58,300	58,300	-	,015 300	-	-	- -	680,804	680,804			44,170	636,634 -			1														
	1304 TOTAL	41 10,041 54,211			5,145 1	.315		119,465 472.392	- 8	119,465 800.269	119,465 800,269		-	44,170	119,465 - 756,099 -	-	924,893 924.89 3	924,893 924,893		-	54,211 54.211	870,682 870,682		-	54,211 54,211	-	124 624	124,624	-	- 10,04	1 114 583	+
	TOTAL	37,211		330,047	, 5,275 1	,	3,000	., =,032		000,203	550,205		·	,270	. 50,055 -	1	1	1 224,033			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.0,002		-	J7,211		124,024	1 227,024	1	1 10,04	1 117,300	
																																1
Site 18																																1
	1310	1 27,950					25,663	-	-	621,361	567,330		539,380	27,950		54,031	694,27			605,956			-	60,372		-	_					<u> </u>
	TOTAL	27,950	567,330	567,330	- 541	,667	25,663	-		621,361	567,330	-	539,380	27,950		54,031	694,27	633,906	-	605,956	27,950	-	_	60,372	27,950	-	72,917	66,576	-	66,576 -	-	
Site 19	1316 1316	5 27,615 12 31,130				,681	24,400	-	-	442,081 300,000			417,681 300,000	24,400		-	1,094,41	9 999,252		940,507	58,745			95,167	58,745							
JAC 19	TOTAL	58,745						-	-		742,081			24,400		-		999,252			58,745		-	95,167 95,167		-	352,338	257,171	-	222,826 34,34	5 -	+ -

	S	te Data				Exist	ing Condition							No Action C	Condition								With Act	on scenario					1			Increment			
					Commercial						Building Area	Commercial		Office Area gsf				Office	Building Area	Commercial						Office			Building Area	Commercial		Office Area	esf		
					Area gsf (Office,	,				Number of	gsf (including	Area gsf (Office,		(usable; see				mechanical gsf	gsf (including	Area gsf (Office,		Office Area gsf			Number of	mechanical gsf			gsf (including	Area gsf (Office		(usable; see			Number of
	Block Lot		Lot Area sf	Building Area	Retail and Hotel)	Residential Area gsf	Office Area gsf	Total Retail Area gsf H	Hotel Area gsf	Dwelling Units	office (mechanical)	Retail and Hotel)	Residential Area gsf	note #3 below)	Total Retail Area gsf	D Hotel Area gsf U	welling nits	(see note #3 helow)	office mechanical)	Retail and Hotel)	Residential Area gsf	(usable; see note #3 below)	Total Retail Area gsf	Hotel Area gsf	Dwelling Units	(see note #3 helow)	Neighborhood Retail Area gsf	Destination Retai Area gsf	office mechanical)	Retail and Hotel)	Residential Are	ea note #3 below)	Total Retail Area gsf	Hotel Area gsf	Dwelling Units
Other P	ossible Sites		LOC ALEB 31	831	riotely	r ii cu gar	Omee raca gar	74104 831	loter / ii eu gar	Onnes	meenameary	iotely	711.00 831	belowy	711 CU 531	noter rated gar 10	····cɔ	DC:OH)	meenameary	notely	7 II CU 531	note as below,	711 CG 851	noter raca gar	Onics	belowy	netaii / ii eu gai	711 CO 831	incendinedia	riotely	851	belowy	74104 831	noter / ir ed gar	Omics
-	869	25	2,469	8,755	7,755	1,000	7,755	-	-	7																		1	1						
C:4- 2	869	26	2,472	12,200	12,200		12,200	-	-	-																									
Site 2	869	27	4,937	15,000	15,000		15,000	-	-	-	132,240	9,878		-	9,878	-	123	-	142,612	18,149	124,463	-	18,149	-	125	-	18,149	-							
	TOTAL		9,878	35,955	34,955	1,000	34,955	-	-	7	132,240	9,878	122,362	-	9,878	-	123	-	142,612	18,149	124,463	-	18,149	-	125	-	18,149	-	10,37	2 8,27	2,10	1 -	8,271	-	2
	1281	62	5,020	37,265	37,265	T -	33,265	4,000	_	_													1						1						
	1281	64	2,445	11,738	11,738		11,738	-	-	-																									
Site 8	1281	65	4,083	22,350	22,350	-	18,750	3,600	-	-	145,505	11,548	133,957	-	11,548	-	134	-	157,630	157,630	-	-	11,548	146,082	-	-	11,548	-							
	TOTAL		11,548	71,353	71,353	-	63,753	7,600	-	-	145,505	11,548	133,957	-	11,548	-	134	-	157,630	157,630	-	-	11,548	146,082	-	-	11,548	-	12,12	146,08	(133,95	7) -	-	146,082	(134)
	1283	او	2,510	12,000	12,000		8,000	4.000			Г		1	1				1						l	1		l	1	1	1	1	1			
	1283	9	2,510	8,458	8,458		6,766		-	-																									
	1283	10	2,510	12,660	12,660	<u> </u>	10,550	2,110	-	-																									
Site 11	1283	11	2,510	9,398	9,398		7,518	1,880	-	-																									
	1283	12	2,500	12,600	12,600		12,600	-	-	-																									
	1283 TOTAI	13	2,500 15,040	17,131 72,247	17,131 72,247		45,434	9,682	17,131 17,131	-	213,171 213,171	15,040 15,040	198,131 198,131		15,040 15,040	-	199 199	-	213,171 213,171	213,171 213,171	-	-	15,040 15,040	198,131 198,131	-		15,040 15,040	-	 	198,13	1 (198,13	1) -		100 121	(199)
	IOIA	·	13,040	12,241	12,241		43,434	3,082	17,131		213,171	13,040	130,131	-	13,040	_	199		213,171	213,171		_	13,040	130,131	_		13,040	-		130,13	(198,13	-/ -	-	198,131	(199)
	1300	12	3,314	6,632	6,632			6,632	_																										
Site 14		42	·					0,032	_	_																									
	1300 TOTAI	44	3,213 6,527	18,810 25,442	18,810 25,442		18,810 18,810	6.632	-	-	82,240 82,240	6,527 6,527	75,713 75,713	-	6,527 6,527	-	76 76	-	89,094 89,094	6,527 6,527	82,567 82,567	-	6,527 6,527	-	83 83	-	6,527 6,527		6,85	2	6,85	,			7
	IUIAI		0,327	25,442	23,442		10,010	0,032		-	82,240	0,327	/5,/13		0,327		76	-	69,094	0,327	62,567	_	0,327		03		0,327		0,03	-	0,03	, -	-		
	1302	25	5,522	55,940	55,940	-	-	-	-	-																									
	1302	27	1,674	3,526	1,326		-	1,326	-	4																									
Site 15	1302	127	1,688	3,526	2,646			,	-	1																									
	1302 1302	28 29	1,688 1,688	3,500 3,576	2,000 3,576		1,576	1,000 2,000	1,000	2	167,349	12,260	155,089		12,260		156		167,349	167,349			12,260	155,089			12,260								
	TOTAL		12,260	70,068					1,000	7	167,349		155,089	-	12,260		156	-	167,349		-	-	12,260				12,260	-	 	155,089	9 (155,08	9) -	-	155,089	(156)
						,			,			,	,	1						,				, , , , , , , , , , , , , , , , , , , ,			, , , , ,	1			, , , , , , ,	/1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , ,
	1317	9	7,531	50,120	50,120	_	_	_	-	_																									
Site 20	1317	11	22,594	202,576	202,576		187.576				379,575	30,125	349,450		30,125		350		411,206	411,206			30,125	381,081			30,125								
	TOTAL	. 11	30,125	252,696			187,576		-	-	379,575 379,575		349,450	-	30,125	-	350	-	411,206	411,206	-	-	30,125		-		30,125	-	31,63	1 381,08	1 (349,450	0) -	-	381.081	(350)
						1								1	**,===		-		,	,				,				1	1 -,		(0.0).0	-71		,	(000)
Non-co	nplying Bui	ding Re	ebuild Site	es			1						1	1	1 .		-	,		ı		ı		1			T.	1		1	1	1	1 .		
Site 3	1275	22	21,825	407,127	407,127		386.052	21,075			407,127	407,127		386.052	21,075		385		445,901	407,127		385,302	21,825			38,774	21,825								
Site 5	TOTAL	. 23	21,825	407,127			386,052		-	-	407,127	407,127	-	386,052		-	385	-	445,901	407,127	-	385,302		-	-	38,774	21,825	-	38,77	4 -	-	(75	50) 750		(385)
						<u> </u>							•	,	, , , , ,					. ,		,					, , , , , , , , , , , , , , , , , , , ,						.,		, /
	I			***																	-	****													
Site 13	1292 TOTA I	52	20,075 20,075	385,347 385,347	385,347 385,347		371,081 371,081	14,266 14,266	-	-	385,347 385,347	385,347 385,347	-	371,081 371,081	14,266 14,266	-	-	-	422,047 422,047	385,347 385,347	-	365,272 365,272		-	-	36,700 36,700	20,075 20,075	-	36,70	10	1	(5,80	9) 5,809		
	IUIAI		20,073	303,347	303,347		3/1,061	17,200	-	-	303,34/	303,347		3/1,081	14,400	-	-		422,047	303,347		303,272	20,075			30,700	20,075		30,70	<u> </u>		(3,80	و0,009	-	
TOTA	ALS			8.845.321	0.024.500	10.725	6,439,724	462.646	1,750,258	22	10,003,777	0.740.244	1 122 1	6 454 464	552 422	2 010 047	1,126	163,379	14 445 535	12 200 125	207.020	10 021 272	664 542	2 545 245	300	1 000 251	523,344	120 100		4 400 00	/015 13	2 077 44	14 108,409	504.368	(010)
. • .,				8,845,321	8,834,596	10,725	0,439,724	403,044	1,/50,258	22	10,003,777	0,/18,244	1,122,155	0,154,164	553,133	2,010,947	1,126	103,3/9	14,415,525	13,208,135	207,029	10,031,278	001,542	2,515,315	208	1,000,361	523,344	138,199	4,411,74	4,489,89	(915,12	3,8//,11	108,409	504,368	(319)

NOTES
1. Projected Development sites are divided into development site criteria subgroups (see Draft Scope of Work for full descriptions).
2. For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

^{3.} For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zoning floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.

					Commercial Area gsf (Office,					Number of	Building Area	Commercial Area gsf (Office		Office Area gs (usable; see	f		Number of	Office mechanical gsf	Building Area	Commercial Area gsf (Office,		Office Area gst	f		Number of	Office mechanical gsf			Building Area	Commercial Area gsf (Office		Office Area gsf (usable; see		Number of
	Block	Lot	Lot Area	Building Area	Retail and	Residential Area gsf	Office Area gsf	Total Retail Area gsf			office	Retail and Hotel)	Residential Area gsf	note #3 below)	Total Retail Area gsf	Hotel Area gsf	Dwelling	(see note #3 below)	office mechanical)	Retail and	Residential Area gsf	note #3 below)	Total Retail Area gsf	Hotel Area gsf	Dwelling	(see note #3	Neighborhood Retail Area gsf	Destination Retail Area gsf		Retail and Hotel)	Residential Area gsf	note #3 below)	Total Retail Area gsf	Hotel Area Dwelling gsf Units
Potential Site 1	89	OTAL	25675 25,675	530,900 530,900	530,900 530,900	-	488,245 488,245		-	-	530,900 530,900	530,900 530,90 0		488,245 488,245				-	581,462 581,462	530,900 530,900		505,225 505,225		_	_	50,562 50,562	25,675 25,675	-	50,562	_		16,980	5,150	
Potential Site 2	127 127 127 127 127 127 127 127 127 127	75 8 75 11 75 12 75 14 75 16 75 59 75 60 75 61	3 7,406 2,450 2 5,100 4 4,735 5 4,750 9 9,250 0 2,479 1 4,950 3 2,469	79,738 11,951 57,643 102,079 36,681 170,230 7,255 92,939 9,200 83,247 650,963	79,738 11,951 57,643 102,079 36,681 170,230 7,255 92,939 9,200 83,247		73,188 11,951 51,292 102,079 30,111 164,420 3,855 89,439 7,200 72,149 605,684	6,550 - 6,351 - 6,570 5,810 3,400 3,500 2,000 11,098			79,738 11,951 57,643 102,079 36,681 170,230 7,255 92,939 9,200 83,247 650,963	79,738 11,951 57,643 102,079 36,681 170,230 7,255 92,939 9,200 83,247 650,963		73,188 11,951 51,292 102,079 30,111 164,420 3,855 89,439 7,200 72,149 605,684	6,550 - 6,351 - 6,570 5,810 3,400 3,500 2,000 11,098		- - - - - - - - -		1,239,864 1,239,864	1,132,050	-	1,082,136		-	-	107,814 107,814	24,957	24,957		481,087	77			
Potential Site 3	127	78 20 OTAL	43,313 43,313	874,734 874,734	874,734 874,734	-	850,729 850,729	24,005 24,005	-	-	874,734 874,734	874,734 874,73 4		850,729 850,729		; -	-	-	1,195,439 1,195,439	1,091,488 1,091,488	-	1,048,175 1,048,175		-	-	103,951 103,951	21,657 21,657	21,657 21,657	320,705	216,754	1 -	197,446	19,308	
Potential Site 4	1281 1281 1281 1281 1281	59	2,513 6,025 6,025 19,581 34,144	18,933 84,518 87,016 323,029 513,496	18,933 84,518 87,016 323,029 513,496	- - - -	14,833 78,589 77,716 318,943 490,081	9,300	- - - 4,086 4,086		18,933 84,518 87,016 323,029 513,496	18,933 84,518 87,016 323,029 513,49 6	- i -	14,833 78,589 77,716 318,943 490,081	5,929 9,300	- 0 - 4,086	- - -		848,137 848,137			740,242 740,242			-	73,751 73,751	34,144 34,144	<u>-</u>	334,641	260,890	0 -	250,161	14,815	(4,086) -
Potential Site 5	128	32 34 OTAL	1 24970 24,970	444,628 444,628	444,628 444,628	-	434,628 434,628		-	-	444,628 444,628	444,628 444,62 8		434,628 434,628			-	-	486,974 486,974	444,628 444,628		419,658 419,658		-	-	42,346 42,346	24,970 24,970	-	42,346	-	-	(14,970)	14,970	
Potential Site 6	128 T(37 33 OTAL	27,925 27,925	535,700 535,700	535,700 535,700	-	517,700 517,700		-	-	535,700 535,700	-	-	-	-	-	<u>-</u>	-	693,657 693,657	633,339 633,339		605,414 605,414	27,925 27,925	-	-	60,318 60,318	27,925 27,925	-	157,957	633,339	9 -	605,414	27,925	
Potential Site 7	129	00 36		236,665 214,392 7,929 458,986	236,665 214,392 1,586 452,643	- 6,343 6,343		67,385 1,586	- - -	- - 6 6	236,665 214,392 7,929 458,986	236,665 214,392 1,586 452,643	6,343		67,385 1,586	i -	- - 6	- - -	655,180 655,180	598,208 598,208	-	571,832 571,832		-	-	56,972 56,972	26,376 26,376	-	196,194	145,565	6 (6,343	196,160	(50,595)	- (6)
Potential Site 8	1295 1295 To		12,359 14,812 27,171	238,274 246,585 484,859	238,274 246,585 484,859	- -	228,274 233,287 461,561	10,000 13,298 23,298	- - -		238,274 246,585 484,859	238,274 246,585 484,85 9	-	228,274 233,287 461,561	13,298	3 -		- - -	674,928 674,928			589,067 589,067	27,171 27,171		-	58,689 58,689	27,171 27,171	-	190,069	131,379) -	127,506	3,873	
Potential Site 9	129 T(06 1	24786 24,786	518,582 518,582	518,582 518,582	-	497,582 497,582	21,000 21,000	-	-	518,582 518,582	518,582 518,582		497,582 497,582) -) -	-	-	567,971 567,971	518,582 518,582	-	493,796 493,79 6		-	-	49,389 49,389	24,786 24,786	-	49,389	-	-	(3,786)	3,786	
Potential Site 10	130	00 33 OTAL	38,168 38,168	596,500 596,500	596,500 596,500	-	567,000 567,000	29,500 29,500	-	-	596,500 596,500	596,500 596,50 0		567,000 567,000			-	-	735,562 735,562			633,432 633,432	38,168 38,168		-	63,962 63,962	38,168 38,168	-	139,062	75,100) -	66,432	8,668	
Potential Site 11	130 130		3 46,125 3 38,225 84,350	743,779 761,057 1,504,836			674,979 734,837 1,409,816	26,220	- - -	-	743,779 761,057 1,504,836	743,779 761,057 1,504,83 6	-	674,979 734,837 1,409,816	26,220	-	- - -	-	1,991,324 1,991,324	1,818,166 1,818,166		1,733,816 1,733,81 6	84,350 84,350		-	173,159 173,159	42,175 42,175	42,175 42,175	486,488	313,330) -	324,000	32,498	
Potential Site 12	130 130 130	02 51 02 21 02 22 02 23 02 24	1,280 1,7,522 1,6,050 2,1,360 3,1,360 4,2,010 29,582	3,864 3,813 7,121	3,600 314,568 92,501 1,200 1,938 4,747 418,554	2,664 1,875 2,374	938 1,187	16,974 - 1,200 1,000	92,501	3 2 4	3,600 314,568 92,501 3,864 3,813 7,121 425,467	3,600 314,568 92,501 1,200 1,938 4,747 418,554	2,664 1,875 2,374	938 1,187	1,200 1,000 3,560	92,501 0 -	- - 3 2 4	-	670,920 670,920			- -	29,582 29,582	641,338 641,338	-	-	29,582 29,582	-	245,453	252,366	6 (6,913	s) (2,125)	5,948	248,543 (9)
Potential Site 13	130	03 53 OTAL	22425 22,425	406,261 406,261	406,261 406,261	-	-	-	406,261 406,261	-	406,261 406,261	406,261 406,261		-	-	406,261 406,261	- -	-	406,261 406,261	406,261 406,261	-	-	22,425 22,425	383,836 383,83 6	-	-	22,425 22,425	-	-	-	-	-	22,425	(22,425) -
Potential Site 14	130	06 23 OTAL	3 32625 32,625	584,429 584,429	584,429 584,429	-	564,429 564,429		-	-	584,429 584,429	584,429 584,42 9		564,429 564,429			-	- -	640,089 640,089			551,804 551,804			-	55,660 55,660	32,625 32,625	-	55,660	-	-	(12,625)	12,625	
Potential Site 15	130	06 33 OTAL	31,625 31,625	488,366 488,366	488,366 488,366	-	472,366 472,366	16,000 16,000	-	-	488,366 488,366	488,366 488,3 66		472,366 472,366			-	-	627,210 627,210			541,045 541,045	31,625 31,625		-	54,540 54,540	31,625 31,625	-	138,844	84,304	1 -	68,679	15,625	

	Block	Lot	Lot Area	Building Area gsf	Commercial Area gsf (Office, Retail and Hotel)	Residential Area gsf	Office Area gsf	Total Retail Area gsf		Number of Dwelling Units	Building Area (gsf (including Area office fmechanical)	Area gsf (Office, Retail and	Residential Area gsf	Office Area gsf (usable; see note #3 below)	Total Retail Area gsf	Hotel Area		Office mechanical gsf (see note #3 below)		Area gsf (Office,	Residential Area gsf	Office Area gsf (usable; see note #3 below)	Total Retail Area gsf	Hotel Area gsf		Office mechanical gsf (see note #3 below)	Neighborhood Retail Area gsf	Destination Retai Area gsf		Commercial Area gsf (Office Retail and Hotel)	,	Office Area gsf (usable; see note #3 below)	Total Retail Area gsf	Hotel Area	Number of Dwelling Units
Potentia		1317	1 31,129	559,755	559,755	-	533,565	26,190	-	-	559,755	559,755	-	533,565	26,190	-	-	-	644,370	588,338	-	557,209	31,129	-	-	56,032	31,129	-							
Site 16	'	TOTAL	31,129	559,755	559,755	-	533,565	26,190	-	-	559,755	559,755	-	533,565	26,190	-	-	-	644,370	588,338	-	557,209	31,129	-	-	56,032	31,129	-	84,615	28,583	-	23,644	4,939	-	-
		1210	43 4 674	4.674	4.674			4.674			4.674	4.674			4.674			1	_			1					1	ı			,	1			
	-	1318	43 1,674	1,674	1,674 544,150	-	478,500	1,674	-	-	1,674	1,674 544,150	-	478,500	1,674	-													11						1
Potentia	al	1318	1 38,666 44 1,672	544,150	544,150	-	478,500	23,853		-	544,150	544,150	-	478,500	23,853	-		-											11						1
Site 17	' 	1318	143 1,672	3,028	758	2.270		758		- 6	3.028	758	2.270		758		- 6		889.007	889,007	_	845,323	43.684	_		77.305	43.684		11						1
	TOTA		43,684	548,852	546,582	-,		26,285		6	548,852	546,582	2,270	478,500	26,285	- 1	6	-	889,007	,	-	845,323	43,684	-	-	77,305	-,	-	340,155	342,425	(2,270)	366,823	17,399	-	(6)
	1		10,00	,	,		,							,	,	1		1	,		l	5 10,020	,		l.	11,000	,	1			(-)	,,		l .	
Potentia Site 18		1319	47 25768	405399	405399		378170	27229	_	-	405,399	405,399	_	378,170	27,229	-	_	-	444,008	405,399		379,631	25,768			38,609	25,768								
		TOTAL	25,768	405,399	405,399	-	378,170	27,229	-	-	405,399	405,399	-	378,170	27,229	-	-	-	444,008	405,399	-	379,631	25,768	-	-	38,609	25,768	-	38,609	-	-	1,461	(1,461)	-	-

- NOTES

 1. Projected Development sites are divided into development site criteria subgroups (see Draft Scope of Work for full descriptions).

 2. For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

 3. For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zoning floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.