Chapter 26: Potential Modifications under Consideration by the CPC[1]

A. INTRODUCTION

This chapter describes certain Potential Modifications that were under consideration by the City Planning Commission (CPC) as of the time of preparation of this FEIS. The Potential CPC Modifications would eliminate the temporary gymnasium building, reduce the size of two of the Project Buildings, eliminate the proposed hotel and conference center use in the Zipper Building, change the order of construction on the North Block (so that the LaGuardia Building is built before the Mercer Building), eliminate below-grade development below the mapped rights-of-way of Mercer Street and LaGuardia Place on the North Block, eliminate the proposed rezoning in the Commercial Overlay Area, and make certain related design changes. This chapter examines whether the Proposed Actions with the Potential CPC Modifications would result in significant adverse environmental impacts for each technical area of the Final Environmental Impact Statement (FEIS).

PRINCIPAL CONCLUSIONS

As with the Proposed Actions, the Potential CPC Modifications would not result in significant adverse impacts in the areas of land use, zoning and public policy, socioeconomic conditions, community facilities and services, open space, urban design, natural resources, hazardous materials, water and sewer infrastructure, solid waste and sanitation services, energy, air quality, greenhouse gas emissions, noise, public health, neighborhood character, and construction-related air quality, historic and cultural resources, hazardous materials, natural resources, socioeconomic conditions, community facilities, and land use and neighborhood character.

As with the Proposed Actions, the Potential CPC Modifications would result in significant adverse impacts in the areas of shadows, historic and cultural resources, transportation, and construction-related transportation, noise and open space.

In Phase 1, the Potential CPC Modifications would result in similar significant adverse impacts as the Proposed Actions with respect to shadows on the LaGuardia Corner Gardens from the proposed Bleecker Building. With the Potential CPC Modifications, measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions. However, with the elimination of the proposed NYU dormitory (above the proposed public school in the Bleecker Building), the cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by the City of New York, rather than NYU, if the Bleecker Building is constructed as a public school with below grade NYU academic facilities in Phase 1. If a public school is not constructed and NYU builds academic space instead, the cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by NYU, as under the Proposed Actions.

[1] This chapter is new to the FEIS.

In Phase 2, shadowing from the proposed Bleecker Building with the Potential CPC modifications would not constitute a significant adverse shadows impact under CEQR methodologies, because the future no-build building (which could occur as of 2021 upon expiration of the HPD deed restrictions, as described in Chapter 1, "Project Description", with the redevelopment of the Morton Williams supermarket), would be taller than the Bleecker Building with the Potential CPC Modifications, and therefore no shadow mitigation would be required. Nonetheless, if the Bleecker Building under the Potential CPC Modifications were to be constructed in Phase 2, and should NYU academic space be constructed instead of a public school, NYU has agreed to implement the same measures proposed as partial mitigation measures for the Proposed Actions in Chapter 21, "Mitigation."

With respect to historic and cultural resources, measures to minimize or partially mitigate the identified significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions. Unlike the Proposed Actions, with the Potential CPC Modifications there would be no potential for significant adverse impacts to the S/NR-eligible Potential NoHo Historic District Expansion from retail development on the ground floors of the four buildings within the Commercial Overlay Area. Therefore, the proposed mitigation measures for the Commercial Overlay Area outlined in Chapter 21, "Mitigation" would not be required.

As with the Proposed Actions, mitigation measures for the Potential CPC Modifications have been identified that would fully mitigate the significant adverse impacts with respect to transportation (construction and operational).

With respect to construction-related noise, the Potential CPC Modifications would result in significant adverse impacts at the same locations as with the Proposed Actions. In general, the Potential CPC Modifications would result in a slight decrease in the duration of impacts compared to the results with the Proposed Actions. There would, however, be some select locations where there would be increase in the duration of impacts. Measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions.

With respect to the temporary significant adverse direct construction open space impact on the LaGuardia Corner Gardens, measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions. However, if the Bleecker Building were to be constructed in Phase 1, the utility of the temporary relocation site within the North Block, east of the LaGuardia retail building (identified in Chapter 21) as a mitigation measure would be reduced under the Potential CPC Modifications, given the shorter period of time that the temporary relocation space would be available to the LaGuardia Corner Gardens. If the Bleecker Building were to be constructed in Phase 2, the temporary relocation site within the North Block, east of the LaGuardia retail building, would not be available, as construction on that site would commence at the beginning of Phase 2. The cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by the City of New York, rather than NYU, if the Bleecker Building is constructed as a public school with below grade NYU academic facilities. If a public school is not constructed and NYU builds academic space instead, the cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by NYU, as under the Proposed Actions.

With respect to the temporary significant adverse construction-period indirect open space impact, it has been determined that it would be feasible to partially mitigate this temporary impact through a financial contribution by NYU equal to the installation costs attributable to

Adrienne's Garden, the play area that would be displaced during the LaGuardia Building construction period. These funds would be applied by DPR to improvements at the Mercer Street Playground and/or Washington Square Park playgrounds prior to commencement of the proposed LaGuardia Building's construction. In addition, NYU would commit to funding the stationing of a DPR seasonal playground associate at Washington Square Park for six months of the year, during the duration of the period in which the LaGuardia Building construction would result in a significant adverse open space impact. This playground associate would be available for facilitating play activities, as well as clean-up. NYU has committed to implement the foregoing mitigation, and this commitment would be incorporated into the Restrictive Declaration.

B. BACKGROUND

As described and analyzed in the previous chapters of this document, NYU is seeking a number of discretionary actions in connection with a proposed expansion of NYU facilities at its academic core near Washington Square. The project site for the Proposed Actions includes: a "Proposed Development Area," located on two superblocks; a "Commercial Overlay Area" in the loft blocks, where a proposed rezoning is expected to result in a limited amount of additional ground-floor retail use is expected; and the "Mercer Plaza Area," where no new development is proposed, but where NYU seeks to acquire the property that contains its 251 Mercer Street cogeneration facility below-grade. This chapter focuses on the effects of the Potential CPC Modifications on the development proposed in the Proposed Development Area.

The CPC issued a Notice of Completion for the Draft Environmental Impact Statement (DEIS) on December 30, 2011, and circulated the DEIS for public review.

On April 25, 2012, the CPC held its public hearing on the Proposed Actions and the DEIS. In response to the recommendations made by the Manhattan Borough President on April 11, 2012, as well as testimony presented at the public hearing, the CPC was considering as of the time of preparation of this FEIS a number of modifications to the Proposed Actions, including a number of those recommended by the Manhattan Borough President, as well as others. The additional modifications under consideration include elimination of the potential hotel use and associated conference space in the Zipper Building and elimination of the proposed zoning change in the Commercial Overlay Area. This reduced-scope project is referred to in this chapter and elsewhere in the FEIS as the "Potential CPC Modifications."

C. DESCRIPTION OF POTENTIAL CPC MODIFICATIONS

While the site plan for the proposed project (including the number of proposed buildings, their use and locations) would generally remain as described in the previous chapters of the FEIS and above, the Potential CPC Modifications would reduce floor area, building heights and bulk, and change the construction sequencing on the North Block, thus requiring a change to the location of the proposed below-grade parking facility on the North Block. The Potential CPC Modifications are different from the Proposed Actions, as follows:

- Elimination of the temporary gymnasium;

- Bleecker Building—elimination of the proposed dormitory above the proposed public school,[1] and elimination of one level of below-grade academic and mechanical space;
- Mercer Building—reduction in floor area and building height;
- Elimination of below-grade academic space beneath the mapped rights-of-way of Mercer Street and LaGuardia Place on the North Block;
- Relocation of proposed below-grade accessory parking facility from the north-east to south-west area of the North Block, and the relocation of its entrance from West 3rd Street to Bleecker Street;
- Modifications of the design of the North Block open space plan as a result of the relocation of the garage entrance;
- Change in construction phasing on North Block, with construction generally proceeding west to east rather than east to west (i.e., LaGuardia Building below- and above-grade and central below-grade and open space construction would occur prior to construction of below- and above-grade of Mercer Building);
- Elimination of proposed hotel use; and
- Elimination of Commercial Overlay Area.

These Potential CPC Modifications are described in more detail in the sections below.

DENSITY AND FLOOR AREA

The Potential CPC Modifications would affect the minimum and maximum density by use proposed to be developed in the Proposed Development Area by 2031. **Table 26-1** provides a comparison of the minimum and maximum densities for the Proposed Actions and the Potential CPC Modifications.

Table 26-1
Minimum and Maximum Density of New Development in the Proposed Development Area

Use	Minimum Amount[1] (gsf)		Maximum Amount[1] (gsf)	
	Proposed Actions	Potential CPC Modifications	Proposed Actions	Potential CPC Modifications
Academic	982,985	775,495	1,636,583	1,435,583
Student Housing (Dormitory)	180,000	117,100	525,000	470,000
Faculty Housing	0	0	220,000	220,000
Athletic Center	146,000	146,000	200,000	200,000
Retail	49,312	49,312	94,000	94,000
Hotel	0	0	180,000	0
Academic/Conference Space	0	0	85,000	0
Public School (PS/IS)	0	0	100,000	100,000
Replacement Parking	76,000	76,000	115,000	115,000
Mechanical/Service Areas	376,814	291,814	376,814	291,814

Note: [1.] The minimum and maximum gsf of new development anticipated for the Proposed Development Area are not calculated by summing the minimum and maximum anticipated gsf for each use, as maximizing certain uses would require minimizing other uses. Therefore, the total development planned under all development scenarios is less than the total of maximum amounts by use, because the overall square footage would not allow for maximizing all proposed uses.
Source: New York University

[1] If by 2025 SCA does not exercise its option to build the public school, NYU would build and utilize the 100,000-square-foot space for its own academic purposes.

The Potential CPC Modifications include density and floor area reductions totaling approximately 341,000 gross square feet (gsf) of floor area. This would be achieved by reductions in academic and dormitory space, lowered building heights and reductions in building bulk. The following describes these changes on a building-by-building basis.

SOUTH BLOCK

Zipper Building

The Potential CPC Modifications would eliminate hotel use (and associated conference space) within the Zipper Building (approximately 165,000 gsf), which, in the Illustrative Program for the project, would be replaced with faculty housing (115,000 gsf) and academic use (50,000 gsf).

Bleecker Building

With the Potential CPC Modifications, the Bleecker Building would be constructed with one fewer below-grade level than the Proposed Actions (i.e., three levels instead of four). This would result in a reduction of approximately 6,000 gsf of academic space and approximately 10,000 gsf of mechanical/service area space. The dormitory space above the proposed public school (or NYU academic space, if SCA, by 2025 does not exercise its option to build the public school) would also be eliminated, resulting in a reduction of approximately 55,000 gsf of dormitory use.

NORTH BLOCK[1]

Mercer Building

The Potential CPC Modifications would reduce the height of the Mercer Building by approximately 56 feet. This would result in a reduction of approximately 60,000 gsf of academic space.

NORTH BLOCK BELOW GRADE

The Proposed Actions include an application requesting a change to the City Map, demapping four areas within the mapped rights-of-way of Mercer Street, LaGuardia Place, West 3rd Street and West 4th Street, and the subsequent disposition of portions of those demapped areas along with easements in other portions to NYU, and the mapping of portions of the two demapped areas on the North Block as a public park. With respect to the North Block, this action would facilitate the development of below-grade academic space below the mapped rights-of-way on along both Mercer Street and LaGuardia Place. With the Potential CPC Modifications, the two areas within the mapped rights-of-way of Mercer Street and LaGuardia Place on the North Block would not be disposed to NYU, and below-grade academic space would not be developed below these mapped-rights-of-way. This would result in a reduction of approximately 110,000 gsf of academic uses and 75,000 gsf of mechanical/service area space.

[1] Since the issuance of the DEIS, and through discussions with the Manhattan Borough President, an overestimation in the DEIS of approximately 25,000 gsf was identified with respect to the proposed floor area of the LaGuardia Building. This discrepancy has been accounted for in this chapter (i.e., for the purposes of analysis, the illustrative program and reasonable worst case development scenarios [RWCDS] due to the Potential CPC Modifications includes a reduction of approximately 25,000 gsf in academic use from the LaGuardia Building).

Table 26-2 provides the illustrative program for the Proposed Actions (as shown in Table 1-2 of Chapter 1, "Project Description"), and in comparison, **Table 26-3** provides the illustrative program with the Potential CPC Modifications.

BUILDING HEIGHTS AND BULK

As mentioned above, the site plan for the proposed project (including the number of proposed buildings, their use and locations) would generally remain as described in the previous chapters of the FEIS (see **Figure 26-1**). However, the Potential CPC Modifications would reduce building heights and alter the bulk of the proposed buildings (see **Figure 26-2**). The following provides a description of these building height and bulk changes under the Potential CPC Modifications.

Table 26-2
Proposed Actions—Illustrative Program
for New Development in the Proposed Development Area (as shown in Table 1-2 of Chapter 1)

Use (gsf)	Zipper Building	Bleecker Building	North Block Below-Grade	Mercer Building	LaGuardia Building	Washington Square Village Apartments	TOTAL GSF
Academic	135,000	38,000	484,000	250,000	160,000	4,583	**1,071,583**
Student Housing (Dormitory)	315,000	55,000	0	0	0	0	**370,000**
Faculty Housing	105,000	0	0	0	0	0	**105,000**
Athletic Center	146,000	0	0	0	0	0	**146,000**
Retail	55,000	0	0	0	0	9,312	**64,312**
Hotel	115,000	0	0	0	0	0	**115,000**
Academic/Conference Space	50,000	0	0	0	0	0	**50,000**
Public School (PS/IS)	0	100,000	0	0	0	0	**100,000**
Replacement Parking	0	0	76,000	0	0	0	**76,000**
Mechanical/Service Areas	129,000	32,000	210,000	0	0	5,814	**376,814**
TOTAL GSF	**1,050,000**	**225,000**	**770,000**	**250,000**	**160,000**	**19,709**	**2,474,709**

Source: New York University

Table 26-3
Potential CPC Modifications—Illustrative Program
for New Development in the Proposed Development Area

Use (gsf)	Zipper Building	Bleecker Building	North Block Below-Grade	Mercer Building	LaGuardia Building	Washington Square Village Apartments	TOTAL GSF
Academic	*185,000*	*32,000*	*374,000*	*190,000*	*135,000*	4,583	**920,583**
Student Housing (Dormitory)	315,000	*0*	0	0	0	0	**315,000**
Faculty Housing	*220,000*	0	0	0	0	0	***220,000***
Athletic Center	146,000	0	0	0	0	0	**146,000**
Retail	55,000	0	0	0	0	9,312	**64,312**
Hotel	*0*	0	0	0	0	0	***0***
Academic/Conference Space	*0*	0	0	0	0	0	***0***
Public School (PS/IS)	0	100,000	0	0	0	0	**100,000**
Replacement Parking	0	0	76,000	0	0	0	**76,000**
Mechanical/Service Areas	129,000	*22,000*	*135,000*	0	0	5,814	***291,814***
TOTAL GSF	***1,050,000***	***154,000***	***585,000***	***190,000***	***135,000***	**19,709**	***2,133,709***

Notes:
1. Floor Area changes due to the Potential CPC Modifications are shown in *italics*.

Source: New York University

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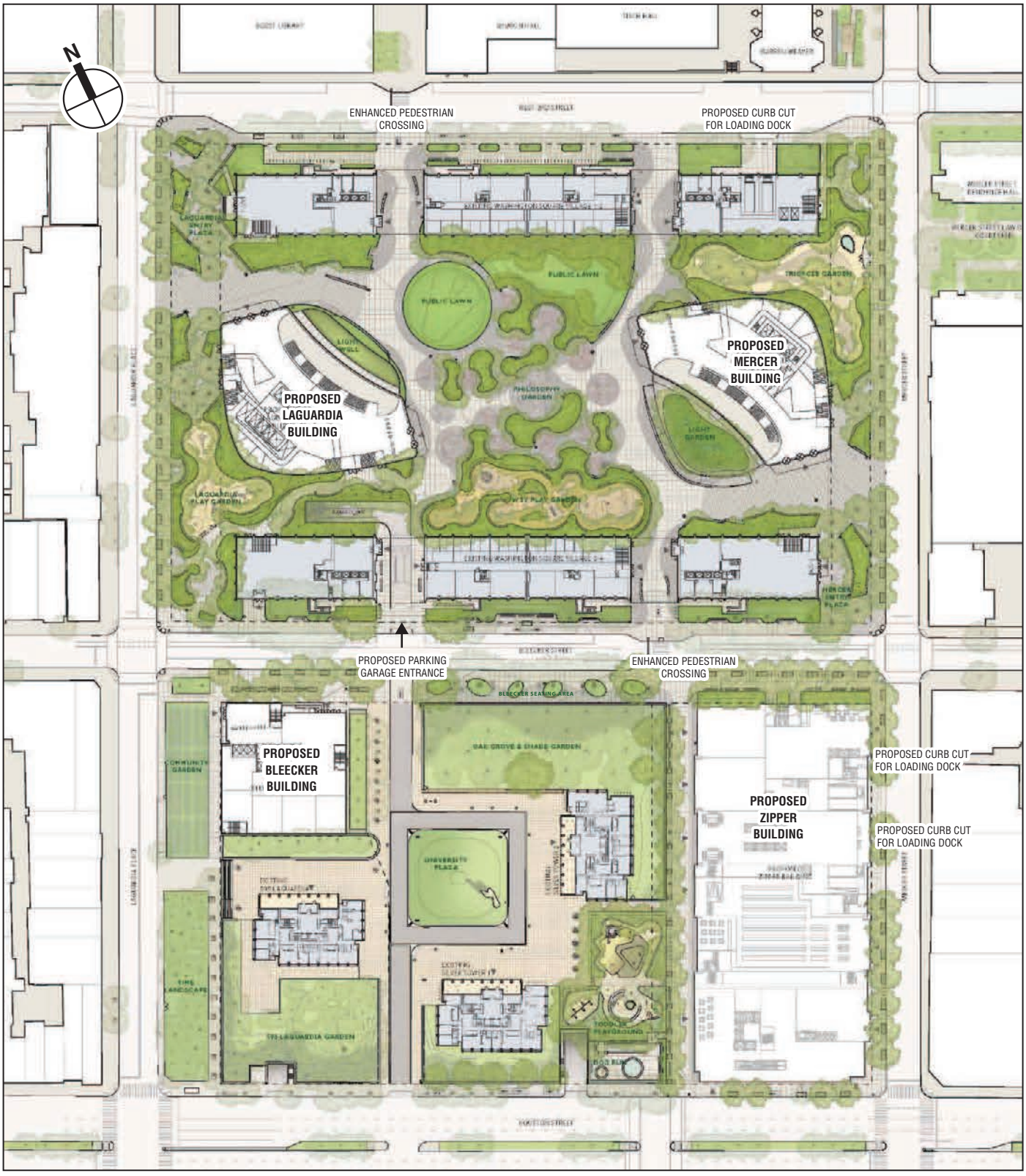

Potential CPC Modifications—
2031 Site Plan for Proposed Development Area

Figure 26-1

NYU Core

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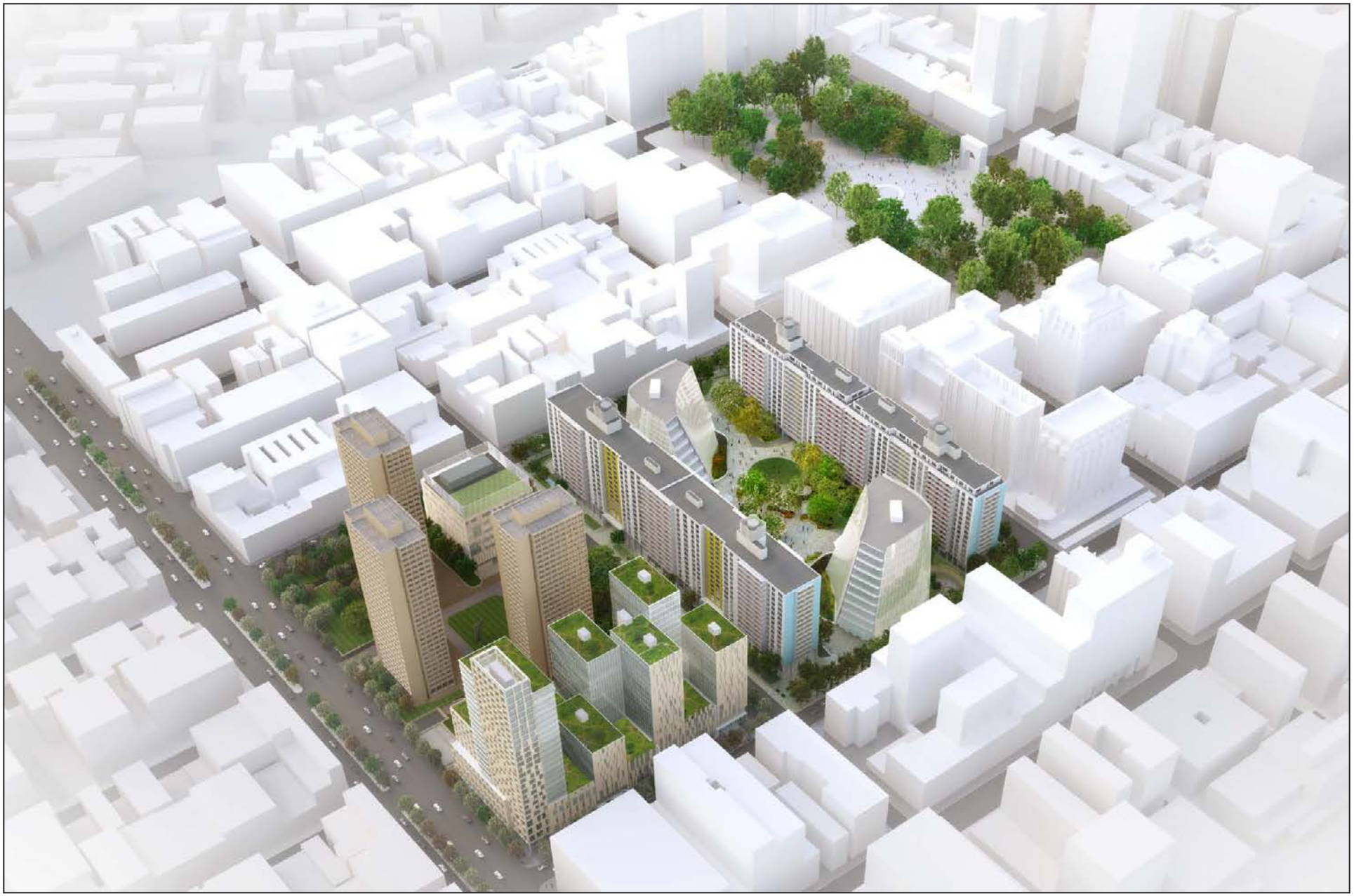

Source: NYU

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Potential CPC Modifications—Aerial View of Proposed Development Area

Figure 26-2

SOUTH BLOCK

Bleecker Building

With the Potential CPC Modifications, the dormitory space above the proposed public school (or NYU academic space, if SCA, by 2025 does not exercise its option to build the public school) would be eliminated, resulting in a building height reduction of approximately 70 feet (from 208 feet to 138 feet, based on the maximum height of the mechanical bulkhead), equivalent to a reduction of seven stories (from 14 stories to 7 stories). **Figure 26-3** illustrates the maximum building envelope for the proposed Bleecker Building under the Potential CPC Modifications.

NORTH BLOCK

Mercer Building

The Potential CPC Modifications would reduce the height of the Mercer Building by approximately 56 feet (from 248 feet to 192 feet, based on the maximum height of the mechanical bulkhead), equivalent to a reduction of three floors (from 14 stories to 11 stories). **Figure 26-4** illustrates the maximum building envelope for the proposed Mercer Building under the Potential CPC Modifications.

Figures 26-5 through **26-7** illustrate elevation views of the proposed buildings with the Potential CPC Modifications. **Figure 26-8** provides and illustrative axonometric of the Proposed Development Area with the Potential CPC Modifications.

OTHER ELEMENTS OF THE POTENTIAL CPC MODIFICATIONS

The Potential CPC Modifications would also alter elements of the Proposed Action that do not affect density, bulk or building heights.

ELIMINATION OF TEMPORARY GYMNASIUM

The Proposed Actions include the construction of an approximately 30,000-gsf temporary gymnasium, which would be constructed on the North Block and which would operate until the opening of the proposed new athletic center in the Zipper Building on the South Block.

The Potential CPC Modifications would eliminate the development of the temporary gymnasium, avoiding the need to temporarily relocate the private playground located on the site of the temporary gymnasium. The landscaping improvements on the linear Mercer Street Strip, which are proposed in connection with the construction of the temporary gymnasium, would not occur under the Potential CPC Modifications. Therefore, the only development activity occurring on the North Block by 2021 would be the construction of Adrienne's Garden (a No Build project) on the northern portion of the LaGuardia Place Strip and the development of the Temporary LaGuardia Play Area on the southern portion of that strip.

RELOCATION OF BELOW GRADE PARKING FACILITY

With the Potential CPC Modifications, the proposed below-grade accessory parking facility and at-grade parking facility entrance would be relocated from West 3rd Street near the north-east corner to Bleecker Street near the south-west corner on the North Block. The size of the relocated parking garage would remain the same. The change in location would be necessitated by the change of construction sequence described below. The proposed new entrance to the

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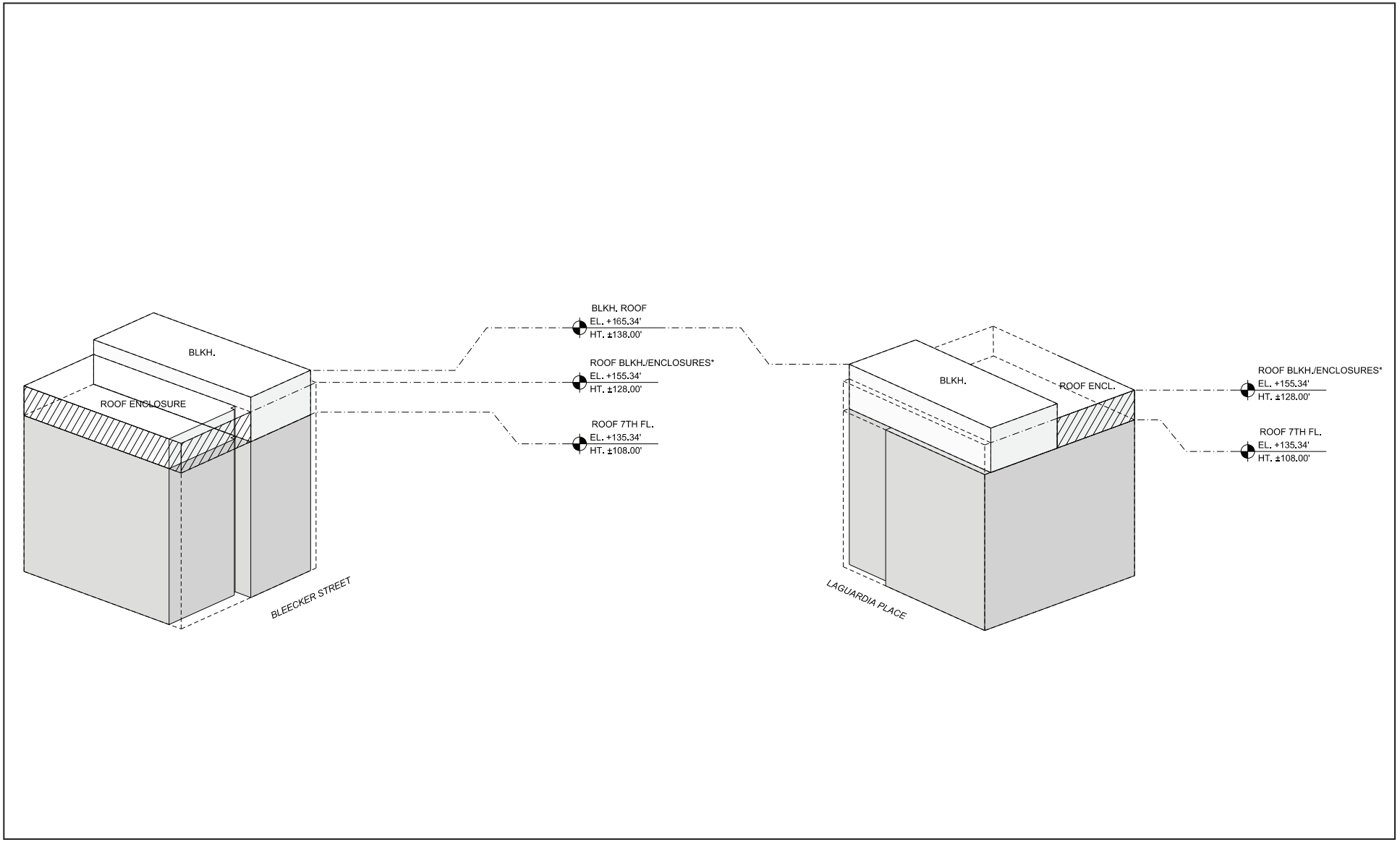

Maximum Building Envelope

Illustrative Building Line

Roof Enclosure

Potential CPC Modifications—
Proposed Bleecker Building - Maximum Building Envelope
Figure 26-3

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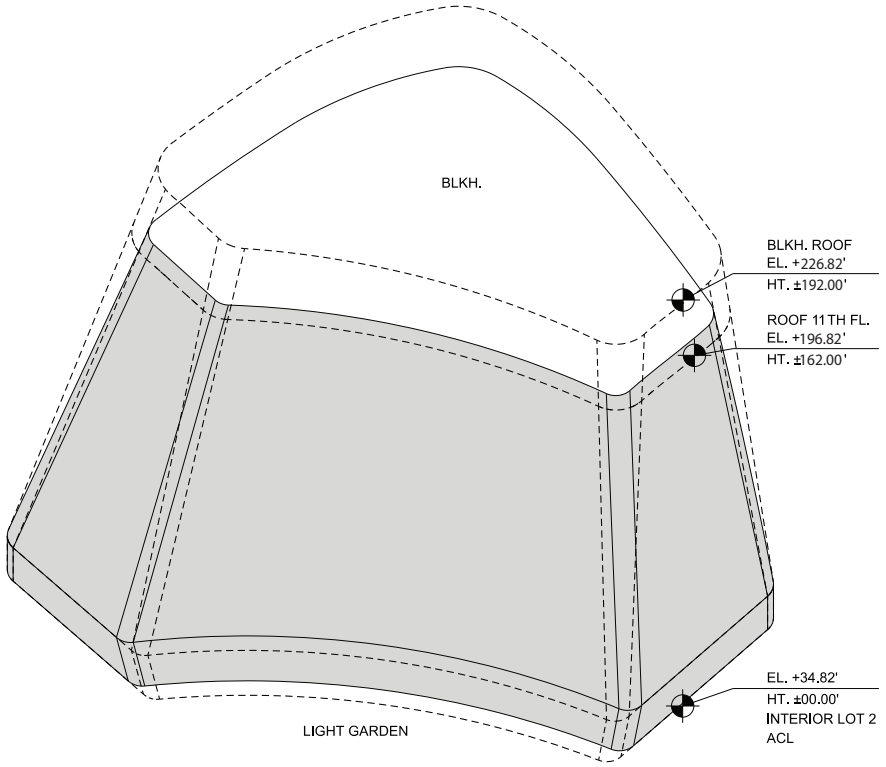
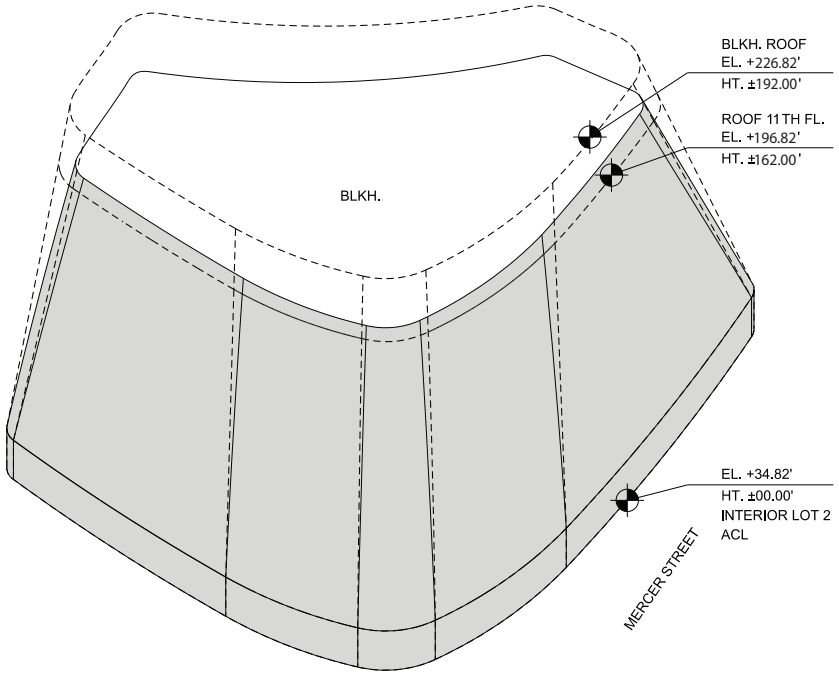
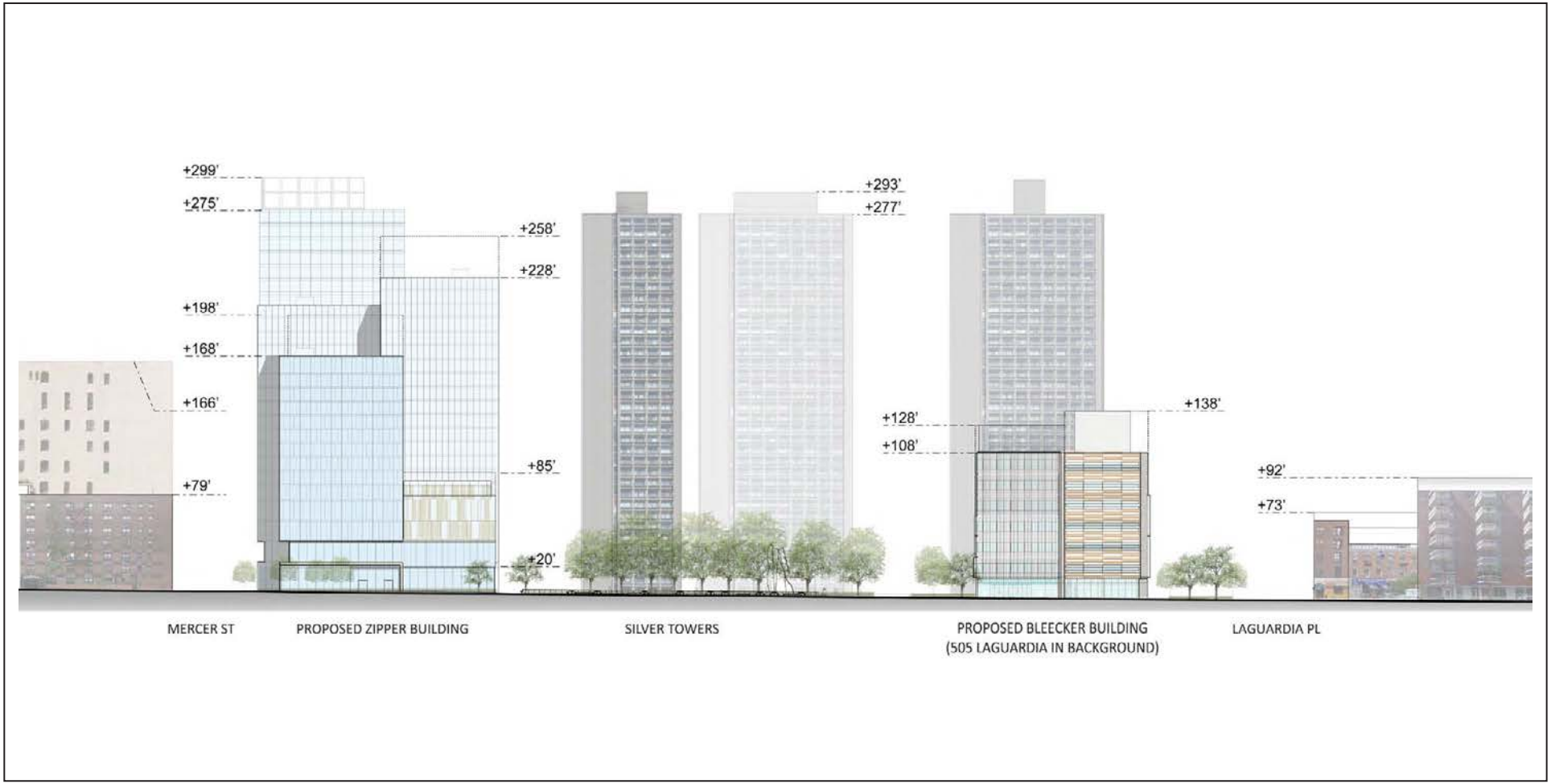




Maximum Building Envelope

Illustrative Building Line

Potential CPC Modifications—
Proposed Mercer Building - Maximum Building Envelope
Figure 26-4

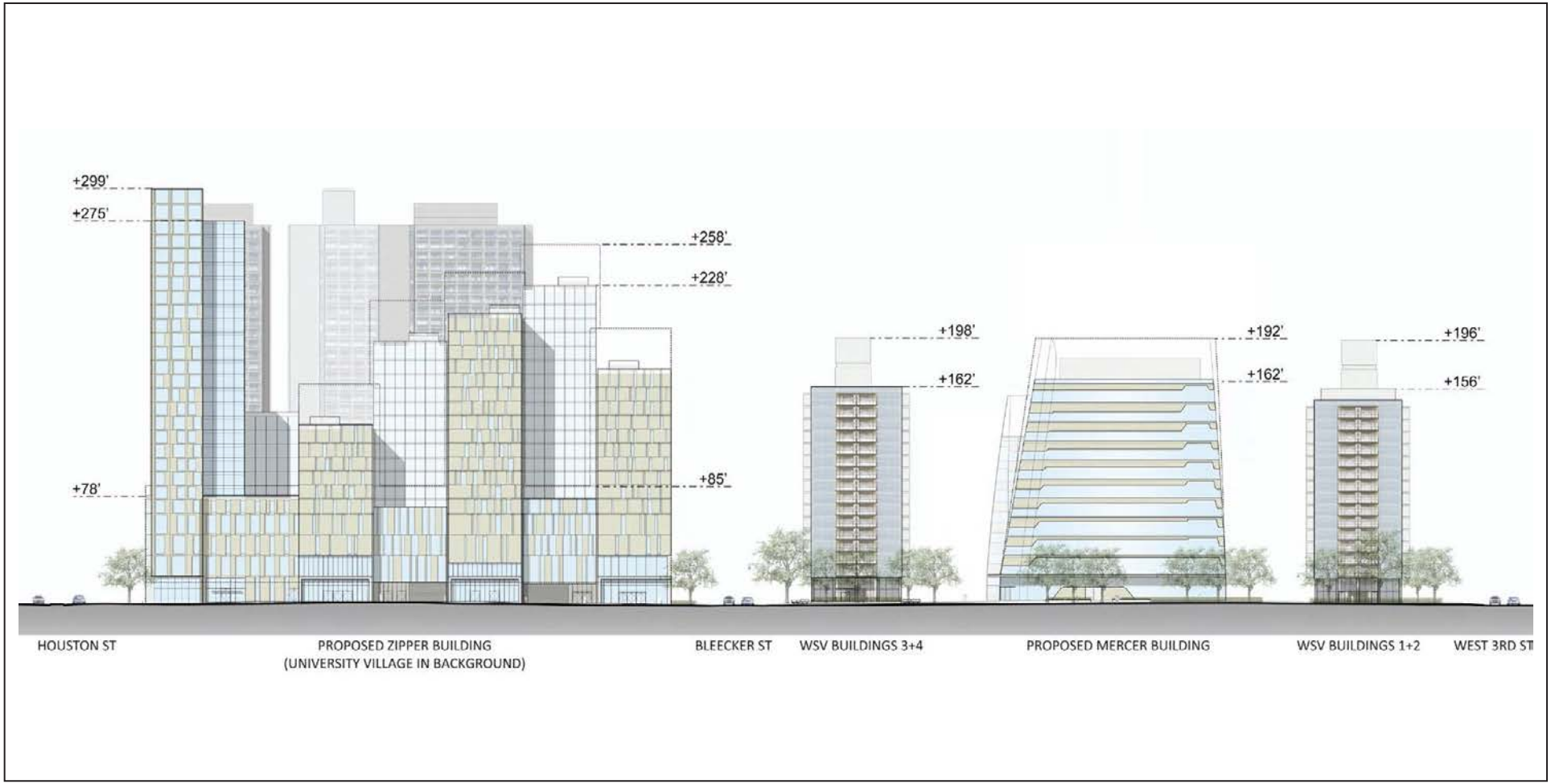


Source: NYU

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Potential CPC Modifications—
Bleecker Street - South Elevation

Figure 26-5

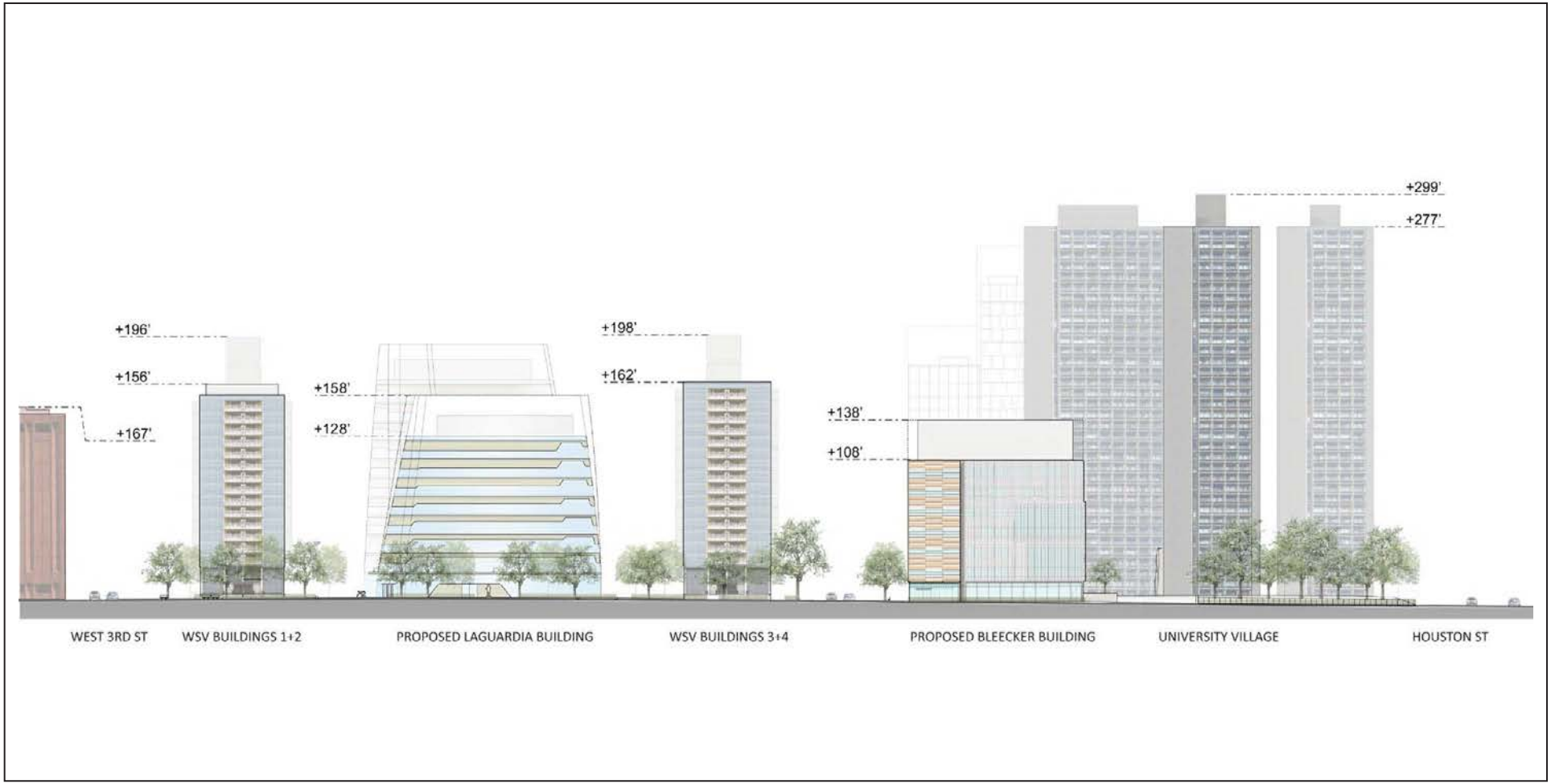


Source: NYU

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Potential CPC Modifications—
Mercer Street - West Elevation

Figure 26-6



Source: NYU

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Potential CPC Modifications—
LaGuardia Place - East Elevation

Figure 26-7

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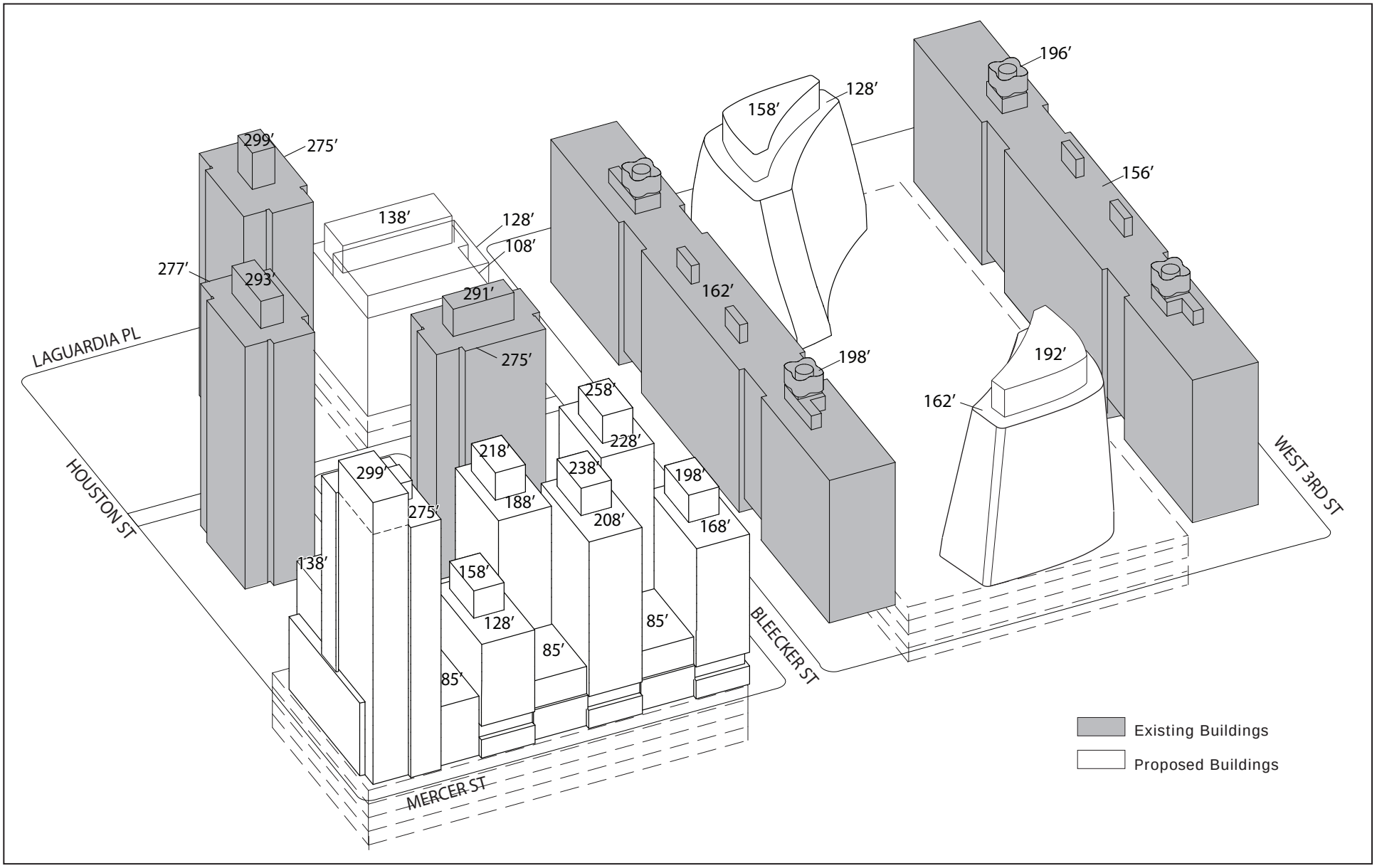

Note: Building form and bulkhead depictions are for illustrative purposes only

Potential CPC Modifications—
Illustrative Axonometric of Proposed Development Area
Future with the Proposed Actions Phase 2 (2031)
Figure 26-8

NYU Core

relocated parking facility on the North Block would be the existing western driveway on Bleecker Street to the existing parking facility on the North Block (see **Figure 26-1**). The proposed curb cut for a loading dock on West 3rd Street would not change from that proposed under the Proposed Actions.

CHANGE IN NORTH BLOCK CONSTRUCTION PHASING

The Potential CPC Modifications would result in a change in construction phasing on the North Block, with construction generally proceeding west to east rather than east to west (i.e., LaGuardia Building below- and above-grade and central below-grade and open space construction would occur prior to construction of below- and above-grade of Mercer Building).

ELIMINATION OF COMMERCIAL OVERLAY AREA

As described in Chapter 1, "Project Description," the project site for the Proposed Actions would include a "Commercial Overlay Area," bounded by Washington Square East and University Place to the west, Mercer Street to the east, West 4th Street to the south, and the northern boundary of the existing R7-2 zoning district near East Eighth Street to the north, where the Proposed Actions would permit greater flexibility in ground-floor retail uses, and are expected to result in limited conversion of ground-floor uses in existing buildings to retail use. Under the Proposed Actions, this area would be rezoned from R7-2 to R7-2/C1-5. Within the Commercial Overlay Area, it is anticipated that NYU would develop up to approximately 24,000 gsf of neighborhood retail uses in the ground floors of six NYU buildings.

With the Potential CPC Modifications, the Commercial Overlay Area would not be rezoned, and therefore would be eliminated from the project site (see **Figure 26-9**).

POTENTIAL CHANGES IN DISCRETIONARY ACTIONS

No additional discretionary actions would be needed pursuant to the Potential CPC Modifications. Rather, fewer discretionary actions than that needed for the Proposed Actions would be required under the Potential CPC Modifications.

As with the Proposed Actions, the discretionary actions required to facilitate the Potential CPC Modifications would continue to include the same zoning map changes, except the Commercial Overlay Area would no longer be mapped and rezoned from R7-2 to R7-2/C1-5.

The Potential CPC Modifications would continue to include the same zoning text amendments to Sections 74-742 and 74-743, the elimination of New York City Department of Housing Preservation and Development (HPD) Deed Restrictions on Blocks 524 and 533, potential funding or financing approvals from the Dormitory Authority of the State of New York (DASNY), Site Selection by the New York City School Construction Authority and New York City Department of Transportation revocable consent for utility lines beneath City streets (see Chapter 1, "Project Description").

With respect to the proposed LSGD Special Permit (ZR Section 74-74), the Potential CPC Modifications would no longer require the transfer of 19,214 sf of zoning floor area between zoning lots on the South Block, and the height and setback waivers requested for two of the four proposed buildings would be reduced.

The concurrent NYU City Map Change Application, which is an element of the Proposed Actions, would also be modified to eliminate references to upper and lower limiting planes with respect to

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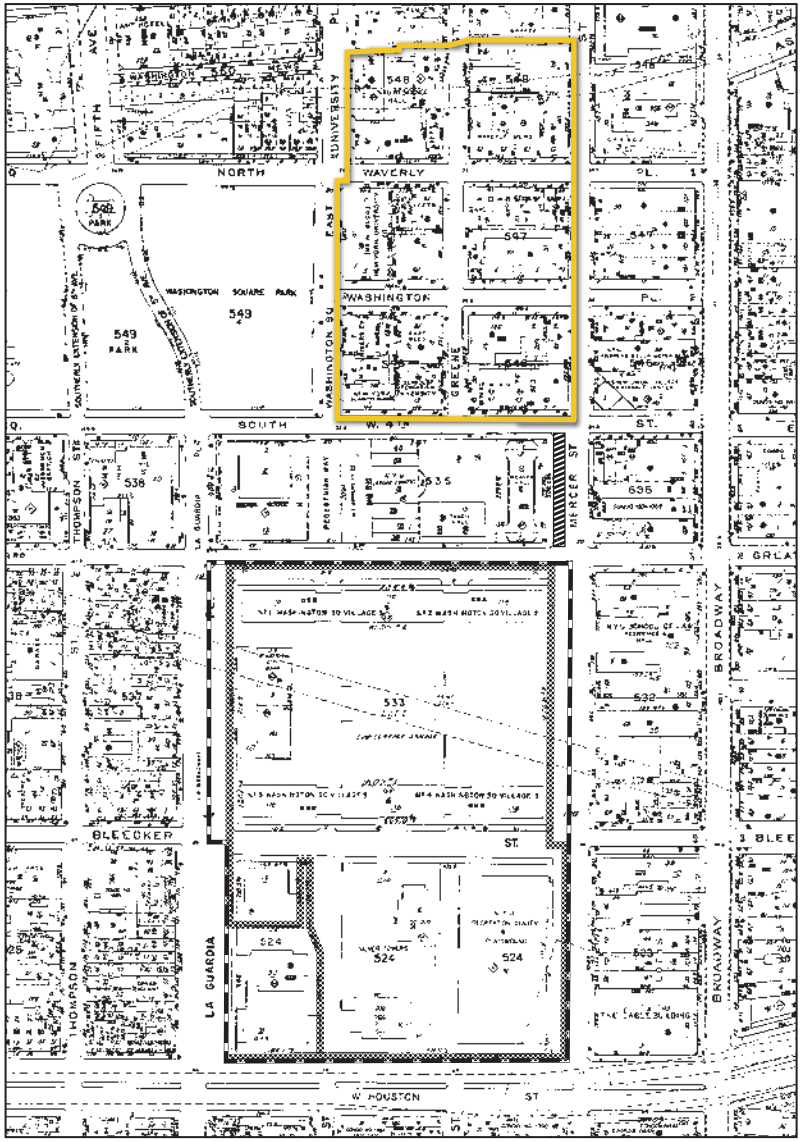
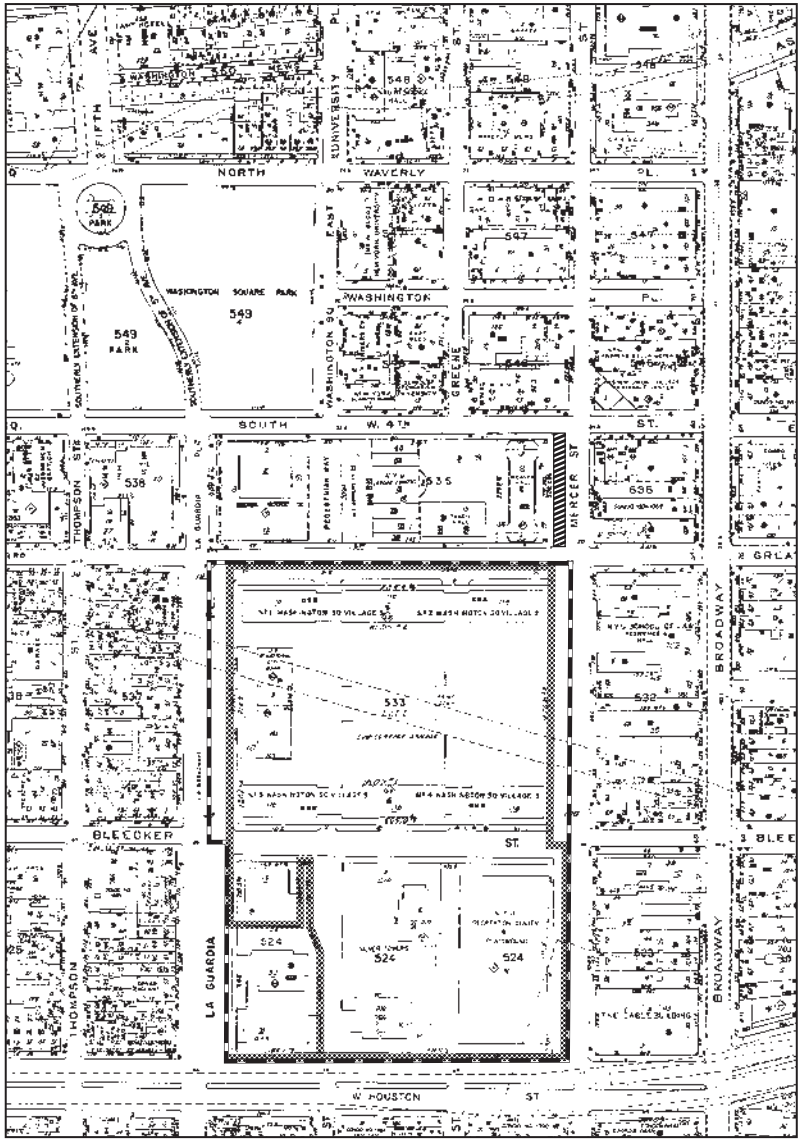


Proposed Actions - With Commercial Overlay Area



Potential CPC Modifications - Without Commercial Overlay Area

Proposed Development Area Boundary

Commercial Overlay Area Boundary

Mercer Plaza Area

Proposed Large Scale General Development (LSGD)

0 500 FEET

SCALE

NYU Core

Project Site
Figure 26-9

the mapping actions associated with the Mercer Street Strip and LaGuardia Place Strip between Bleecker Street and West 3rd Streets, because NYU would no longer acquire or develop below grade space below these areas. These strips would be mapped as public parks, subject to NYU easements for utilities, access and construction, in their entirety, not just above a limiting plane.

D. ANALYSES

As with the Proposed Actions, the LSGD special permit approvals under the Potential CPC Modifications would continue to specify a range of floor areas by land use for the Proposed Development Area. Given these potential variations with respect to the overall programming, the analyses for certain technical areas are based on "reasonable worst-case development scenarios" (RWCDS) drawn from this range of potential building program development scenarios. Each RWCDS is formulated to represent the scenario that could result in the maximum potential impacts from the proposed project in the affected technical area. Several categories of technical analysis in the EIS are analyzed using this approach, where such a RWCDS would result in potential impacts greater than those generated by the Illustrative Program. The total development for each RWCDS would be limited to the total approximately 2.1 million gsf that would be permitted by the LSGD special permit approvals if the Potential CPC Modifications were adopted. **Tables 26-4 and 26-5** present the Illustrative Program and the RWCDS for the Potential CPC Modifications. For those technical areas where potential project impacts are not dependent on the floor area of each use, the Illustrative Program is assumed.

Table 26-4
Potential CPC Modifications—Illustrative Program and RWCDS for the Proposed Development Area Phase 1 (2021 Analysis Year)

Use (gsf)	Illustrative Program	RWCDS 1	RWCDS 2	RWCDS 3
Academic	217,000	732,000	277,000	227,000
Student Housing (Dormitory)	315,000	125,000	470,000	340,000
Faculty Housing	220,000	0	0	180,000
Athletic Center	146,000	156,000	146,000	146,000
Retail	55,000	40,000	60,000	60,000
Hotel	0	0	0	0
Academic/Conference Space	0	0	0	0
Public School (PS/IS)	100,000	0	100,000	100,000
Parking	0	0	0	0
Mechanical/Service Areas	151,000	151,000	151,000	151,000
TOTAL GSF	**1,204,000**	**1,204,000**	**1,204,000**	**1,204,000**

Sources: New York University and AKRF

With the Potential CPC Modifications, the Commercial Overlay Area would not be rezoned, and therefore would be eliminated from the project site. Therefore, the analyses presented below focus on the potential impacts from the Proposed Actions on the Proposed Development Area only.

As described above the Potential CPC Modifications would develop the Proposed Development Area with the same uses on the project site as the Proposed Actions, with one exception—the hotel use and related conference space would be eliminated from the development program. In addition, the size of the project would be reduced from approximately 2.47 million gsf to approximately 2.13 million gsf (a reduction of approximately 14 percent), and building heights on two of the four proposed buildings would be lowered. The same proposed zoning map changes and zoning text amendments would be required.

Table 26-5
Potential CPC Modifications—Illustrative Program and RWCDS for the Proposed Development Area
Full Build (by 2031)

Use	Illustrative Program	RWCDS 1	RWCDS 2	RWCDS 3
Academic	**920,583**	1,435,583	955,895	905,895
Student Housing (Dormitory)	**315,000**	125,000	470,000	340,000
Faculty Housing	**220,000**	0	0	180,000
Athletic Center	**146,000**	156,000	146,000	146,000
Retail	**64,312**	49,312	94,000	94,000
Hotel	**0**	0	0	0
Academic/ Conference Space	**0**	0	0	0
Community Facility (Public Elementary School)	**100,000**	0	100,000	100,000
Parking	**76,000**	76,000	76,000	76,000
Mechanical/ Service Areas	**291,814**	291,814	291,814	291,814
TOTAL GSF	**2,133,709**	**2,133,709**	**2,133,709**	**2,133,709**

Sources: New York University and AKRF, Inc.

Since the Potential CPC Modifications would not affect the overall proposed land uses (with the exception of the elimination of the hotel use and related conference space), or building configuration within the Proposed Development Area, the findings of the FEIS would not change with respect to land use, zoning and public policy. Neither the Proposed Actions nor the Potential CPC Modifications would result in significant adverse land use and zoning impacts, and both would be consistent with applicable public policies.

The Potential CPC Modifications could introduce up to 259 faculty housing units by 2031. According to *CEQR Technical Manual* guidelines, in Manhattan the 50-student threshold for analysis of elementary/middle school capacity is achieved if a project introduces at least 310 residential units (not including dormitory rooms); the threshold for analysis of high school capacity is 2,492 residential units. Like the Proposed Actions, the Potential CPC Modifications would result in fewer than 310 residential units (not including dormitory rooms). Therefore, a detailed analysis of schools is not warranted, and neither the Potential CPC Modifications nor the Proposed Actions would result in significant adverse school impacts.

With respect to public libraries, the Potential CPC Modifications would introduce fewer new residents than the Max Dormitory RWCDS analyzed for the Proposed Actions. Given that the Max Dormitory RWCDS did not result in significant adverse impacts, and the Potential CPC Modifications would generate fewer residents, there would be no significant adverse impacts to libraries under the Potential CPC Modifications. As with the Proposed Actions, these new residents would not be expected to impair the delivery of library services in the study area.

The decreased density associated with the Potential CPC Modifications would result in less demand on water and sewer infrastructure, solid waste and sanitation services, and energy, and would also result in a reduction in overall greenhouse gas (GHG) emissions associated with the development in the Proposed Development Area. Therefore, the findings of the FEIS with respect to these technical analysis areas would not be altered with the Potential CPC Modifications. Neither the Proposed Actions nor the Potential CPC Modifications would result in significant adverse impacts in these areas. In addition, the reduction in overall density with the Potential CPC Modifications would not substantively affect socioeconomic conditions in the relevant study areas compared to the Proposed Actions, and would therefore not alter the conclusions that the proposed project would not result in significant adverse impacts due to direct or indirect displacement of residents and business.

With the Potential CPC Modifications, development would occur on the same two superblocks of the Proposed Development Area, with the same proposed building footprints and proposed open spaces as the Proposed Actions. As such, there would be no change to the findings presented in the previous chapters of this FEIS in the areas of natural resources or hazardous materials.

The Potential CPC Modifications would not affect the findings presented in Chapter 20, "Construction," with respect to historic and cultural resources, hazardous materials, natural resources, socioeconomic conditions, community facilities, land use and neighborhood character. Therefore, the construction-related analyses presented below for the Potential CPC Modifications focus on the potential for significant adverse impacts in the areas of transportation, air quality, noise and vibration, open space and tree replacement.

The potential for environmental effects of the Potential CPC Modifications are analyzed below—in the areas of open space, shadows, historic and cultural resources, urban design and visual resources, transportation, air quality, noise, public health, neighborhood character, and construction-related transportation, air quality, noise and vibration, open space—to determine whether there would be any new or different environmental effects not already identified in the preceding chapters of the FEIS.

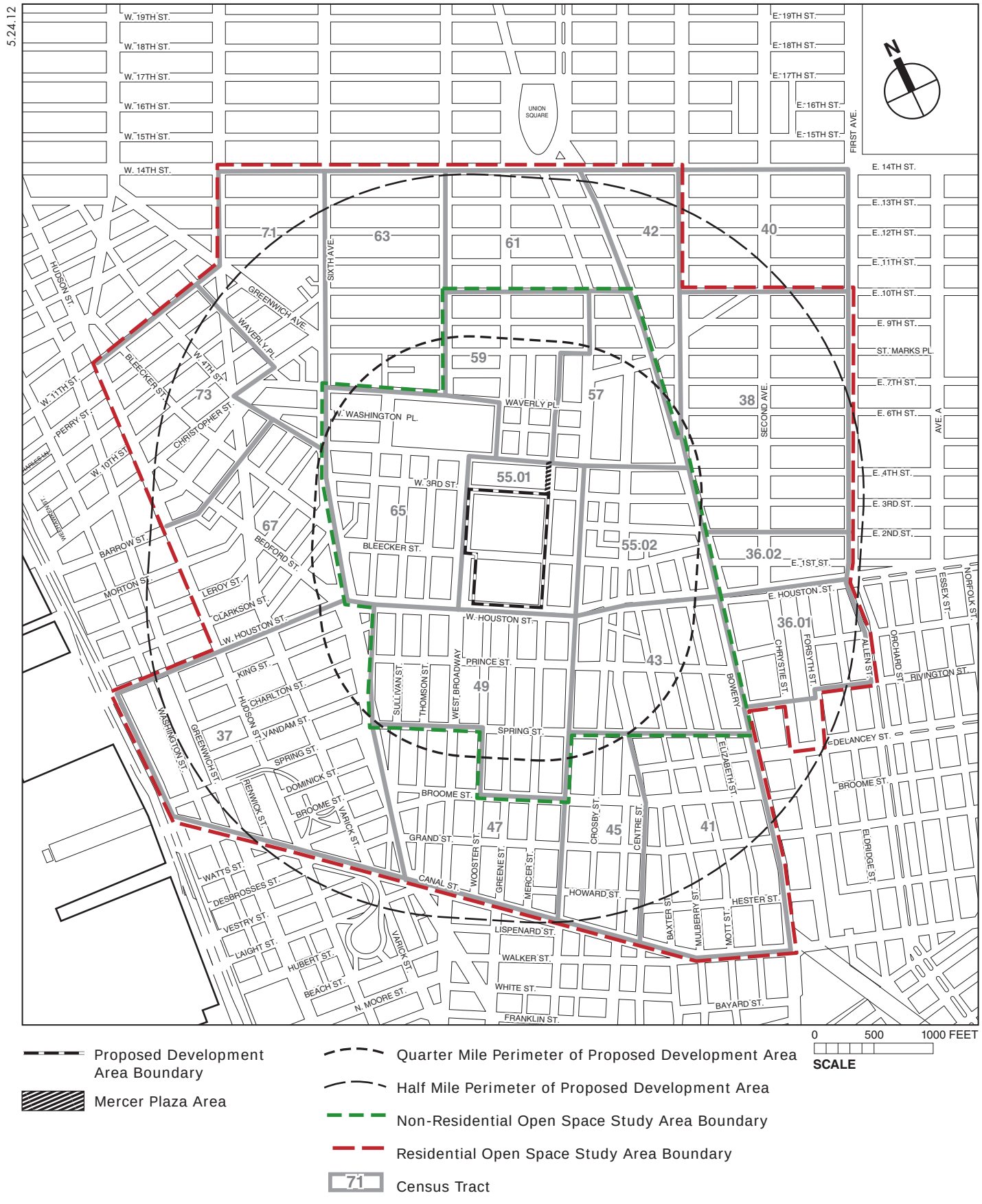
OPEN SPACE

This section examines the effects of the Potential CPC Modifications on open space resources. "Open space" is defined by the *CEQR Technical Manual* 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 open space analysis focuses on officially designated existing or planned public open spaces, and is conducted to determine whether or not a proposed project would have a direct impact resulting from the elimination or alteration of open space, or an indirect impact resulting from overtaxing available open space.

The analysis in this section considers the potential for significant adverse open space impacts for the 2021 (Phase 1) analysis year, and for full operations of the Potential CPC Modifications in 2031 (Phase 2). The "Construction" section, below, assesses the availability and adequacy of open space resources during the construction periods for the Potential CPC Modifications, including consideration of the potential direct and indirect effects of construction activities on the study areas' open space resources.

METHODOLOGY

This section follows *CEQR Technical Manual* guidelines, applying the same analytical assumptions as Chapter 5, "Open Space." Given that the Potential CPC Modifications do not include a rezoning of the Commercial Overlay Area, the radius of the ¼-mile non-residential study area has been adjusted for this analysis, and is shown in **Figure 26-10**. However, the adjustment in the ¼-mile radius did not alter the estimated populations and open space inventory associated with the ¼-mile area; therefore, the existing conditions and future without the Potential CPC Modifications conditions (or "No Build Condition") for this assessment are the same as the existing conditions and Future without the Proposed Actions conditions presented in Chapter 5, "Open Space."



Potential CPC Modifications—Open Space Study Areas

Figure 26-10

NYU Core

FUTURE WITH THE POTENTIAL CPC MODIFICATIONS – 2021 PHASE 1

Study Area Population

Non-residential Study Area

The future project-generated populations for the non-residential study area analysis are based on RWCDS 1 for the Potential CPC Modifications (the Maximum Academic Scenario), which maximizes the number of workers that would be introduced by the Potential CPC Modifications.

By 2021 RWCDS 1 would introduce approximately 1.2 million gsf of new uses to the Proposed Development Area, including NYU academic space, student dormitories, a new athletic facility, and retail space (see **Table 26-4**). There would be no population increases in the Mercer Plaza Area, and unlike the Proposed Actions, there would be no non-residential population increase in the Commercial Overlay Area. With the Potential CPC Modifications the new uses in the Proposed Development Area would introduce to the non-residential study area an estimated total of 2,225 workers and up to approximately 417 residents, who would include NYU students living in new dormitories. The 2021 combined residential and non-residential population in the ¼-mile study area is projected to be 128,600 people.

Residential Study Area

The future project-generated populations for the residential study area analysis are based on RWCDS 2 for the Potential CPC Modifications (the Maximum Dormitory Scenario), which maximizes the number of residents that would be introduced by the Potential CPC Modifications.

By 2021 RWCDS 2 would introduce approximately 1.2 million gsf of new uses to the Proposed Development Area, including NYU academic space, student dormitories, an athletic facility, a public school, and retail space (see **Table 26-4**). There would be no population increases in the Mercer Plaza Area. With the Potential CPC Modifications the new uses in the Proposed Development Area would introduce to the Residential Study Area an estimated total of up to 1,567 residents, who would include NYU students living in the proposed dormitories, and possibly NYU faculty and their families in faculty housing. With the Potential CPC Modifications the residential study area would contain an estimated 103,119 residents by 2021. **Table 26-6** estimates the age distribution of the residential study area population. As compared to the No Build conditions, the study area population would be even more heavily weighted toward the young adult (15- to 19-year-old) and adult (20- to 64-year-old) age brackets, given the project's introduction of student residents.

Table 26-6
Residential Study Area Population Age Distribution
Future With the Proposed Project with Modifications 2021

	Residential (1/2-Mile) Study Area		Manhattan in 2010		New York City in 2010	
Age Category	**Persons**	**Percent**	**Persons**	**Percent**	**Persons**	**Percent**
4 and younger	3,008	2.9	76,579	4.8	517,724	6.3
5 to 9	2,168	2.1	61,323	3.9	473,159	5.8
10 to 14	1,787	1.7	58,229	3.7	468,154	5.7
15 to 19	7,073	6.9	77,462	4.9	535,833	6.6
20 to 64	76,846	74.5	1,098,127	69.2	5,187,105	63.4
65 and over	12,212	11.8	214,153	13.5	993,158	12.1
Total	103,119	100.0	1,585,863	100	8,175,133	100

Sources: Based on U.S. Census 2010, grown to reflect planned projects and the proposed project with modifications, and the expected age distribution for those projects.

The proposed uses also would introduce an estimated 1,193 workers to the residential study area. The 2021 combined residential and non-residential population in the residential study area is projected to be 287,756 people.

Study Area Open Spaces

By 2021 there would be several open space changes resulting from the Potential CPC Modifications, and some of the changes would differ from the open space changes in the future with the Proposed Actions. The changes are illustrated in **Figure 26-11**, and are described below.

With the Potential CPC Modifications, unlike the Proposed Actions, there would not be the construction of the temporary gym on the North Block, nor would there be the open space displacement associated with the temporary gym. With the Potential CPC Modifications, the southern portion of the Mercer Playground and the Washington Square Village Playground would not be displaced by 2021, and the Washington Square Village Elevated Garden would not be reprogrammed to accommodate a relocated Washington Square Village Playground.

As with the Proposed Actions, on the North Block, by 2021 the Potential CPC Modifications would develop the same approximately 10,300-square-foot (0.24-acre) temporary publicly accessible play area along LaGuardia Place, displacing the southern half of the existing LaGuardia Landscape. The Temporary LaGuardia Play Area would later be displaced at the start of construction of the proposed LaGuardia Building. Upon completion of the LaGuardia Building, NYU would construct a new, permanent play area at the same location by 2031.

As with the Proposed Actions, on the South Block, Coles Gymnasium would be demolished, to be replaced by a new athletic facility of comparable size within the proposed Zipper Building. As with the Proposed Actions, the development of the Zipper building would require the displacement of three open space resources: Coles Plaza and Coles Playground (both publicly accessible open spaces); and the Mercer-Houston Dog Run (a private open space). As with the Proposed Actions, the dog run would be relocated to a comparably-sized site along West Houston Street on the South Block. The Potential CPC Modifications would not change the design or operation of the new dog run or Greene Street Walk.

The Potential CPC Modifications would modify the same landscaping elements of the University Village complex and would make the same improvements that would occur with the Proposed Actions.

Also on the South Block, the approximately 0.6-acre Silver Tower Seating Area would be renovated and expanded to create the same approximately 0.25-acre publicly accessible Toddler Playground that would be created with the Proposed Actions. As with the Proposed Actions, other proposed open space changes to the South Block would be along the Bleecker Street Strip, where there would be new trees, low plantings, and benches as part of the proposed Bleecker Seating Area, a passive open space located immediately north of the Oak Grove along Bleecker Street (as with the Proposed Actions, final design changes to the Bleecker Street Strip would require DPR and Public Design Commission approval). As with the Proposed Actions, no landscaping changes are proposed as part of the project to the site around 505 LaGuardia Place, the Time Landscape, or the LaGuardia Corner Gardens.

As with the Proposed Actions, with the Potential CPC Modifications, all of the privately-owned, publicly accessible open spaces described above would be maintained by NYU.

As with the Proposed Actions, with the Potential CPC Modifications, the proposed Bleecker Building would contain an approximately 7,680-square-foot play area on the rooftop above the

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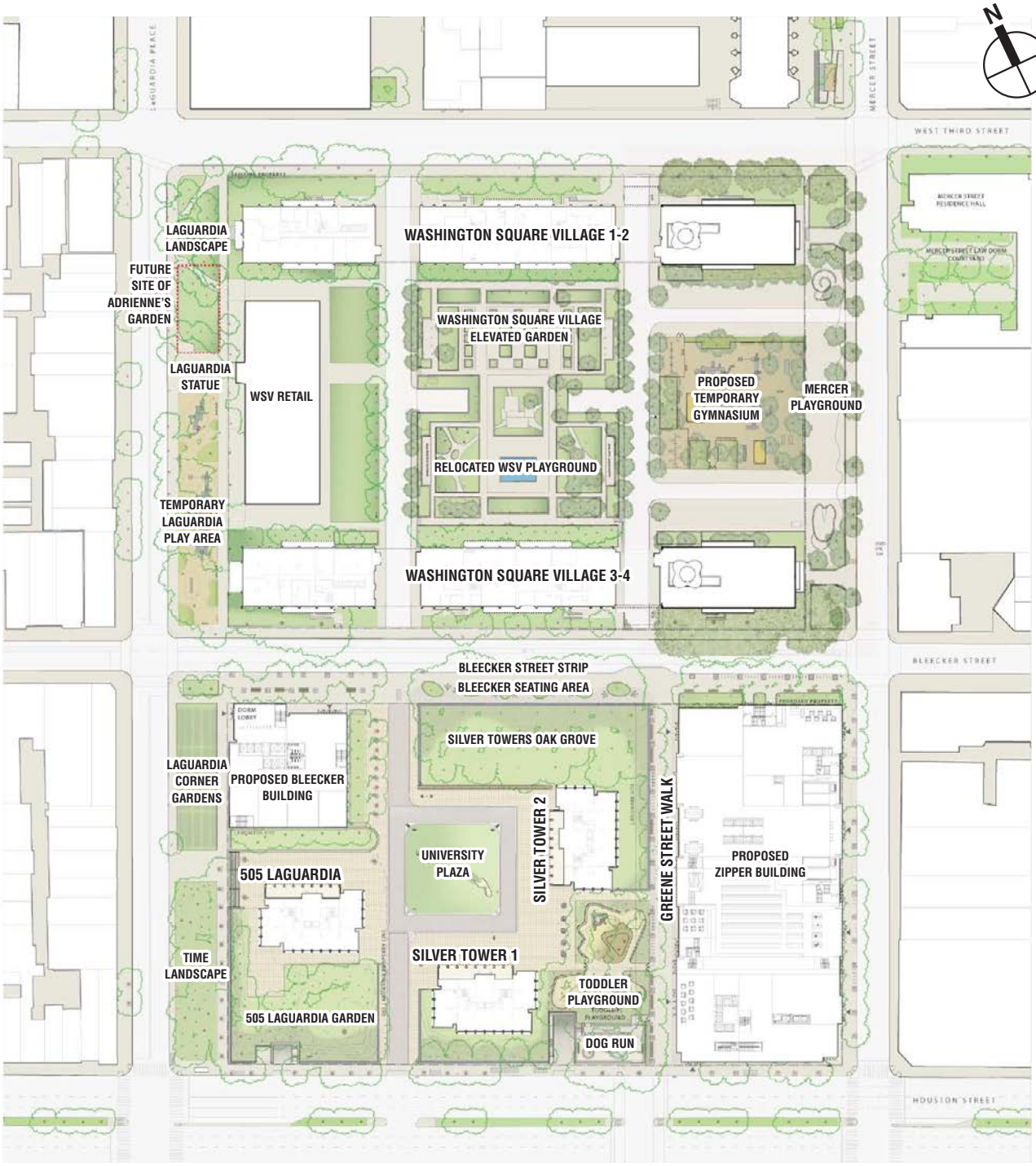

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SCALE

2021 Potential CPC Modifications—Open Space Programming

Figure 26-11

NYU Core

seven-story public school. This play area would include an approximately 3,000-square-foot early childhood playground (for pre-K and kindergarten students), with the remaining approximately 4,680-square-foot area for other students of the public school. Both areas would be utilized exclusively by the students of the public school. The SCA would operate and maintain the rooftop play area.

Overall, by 2021 the Potential CPC Modifications would displace approximately 0.25 acres of publicly accessible open space (0.09 acres passive, 0.16 acres active), and would introduce approximately 0.82 acres of publicly accessible open space (0.39 acres passive, 0.43 acres active), for a net gain of approximately 0.57 acres of publicly accessible open space (a 0.30-acre increase in passive open space, and a 0.27-acre increase in active space). **Table 26-7** identifies the changes to publicly accessible open spaces resulting from Potential CPC Modifications by 2021. The overall increase in publicly accessible open space would be partially due to a reduction in the amount of private open space in the Proposed Development Area. Although the Mercer-Houston Dog Run would be relocated to comparably-sized site, the area identified for its relocation contains the Silver Tower Playground, a private open space resource that would be displaced.

Table 26-7
Publicly Accessible Open Space Changes
in the Proposed Development Area
Future With the Potential CPC Modifications 2021

Displaced Publicly Accessible Open Space	Estimated Acreage
Coles Plaza (South Block)	0.09
Coles Playground (South Block)	0.16
TOTAL DISPLACED:	**0.25**
Project-Generated Publicly Accessible Open Space	
Temporary LaGuardia Play Area (North Block)	0.24
Toddler Playground (South Block)	0.25
Greene Street Walk (South Block)	0.18
Bleecker Seating Area (South Block)	0.14
TOTAL CREATED:	**0.81**

Notes: Calculations do not include changes to non-publicly-accessible open spaces.
Source: New York University, AKRF, Inc. field surveys, November 2010, May and June 2011.

Adequacy of Open Spaces – Direct Effects Analysis

The following identifies each open space resource—public and private—that would be directly affected by the Potential CPC Modifications by 2021, describes the nature of the direct effects, and compares the future conditions with respect to the quantity and quality of the replacement resource and its intended user base. The determination of the potential for significant adverse impacts resulting from these direct effects is provided under "Qualitative Impact Determination," below.

Publicly Accessible Open Spaces Directly Affected by Potential CPC Modifications

- **Coles Plaza –** As with the Proposed Actions, with the Potential CPC Modifications, Coles Plaza would be displaced by the proposed Zipper Building. The Potential CPC Modifications would provide new passive open space as part of the Greene Street Walk, and

there would also be a new seating area with benches and plantings along the south side of Bleecker Street, mid-block between LaGuardia Place as part of the Bleecker Seating Area. These project-generated resources would offer similar amenities as the displaced Coles Plaza.

- **Coles Playground** – As with the Proposed Actions, Coles Playground also would be displaced by the proposed Zipper Building with the Potential CPC Modifications. The Potential CPC Modifications would provide replacement space for this resource west of the Zipper Building, adjacent to the proposed Greene Street Walk.

Private Open Spaces Directly Affected by Potential CPC Modifications

- **LaGuardia Corner Gardens** – As detailed in the "Shadows" section of this chapter, as compared to the Proposed Actions, under the Potential CPC Modifications the proposed Bleecker Building would result in less shadows on the adjacent LaGuardia Corner Gardens during the May 6/August 6 and June 21 analysis periods, and similar shadows on the March 21/September 21 and December 21 analysis periods. While the shadowing would, at times, be less than the Proposed Actions, as with the Proposed Actions there would be a significant adverse shadows impact on this resource by 2021.
- **Mercer-Houston Dog Run** – As with the Proposed Actions, with the Potential CPC Modifications the 3,175-square-foot Mercer-Houston Dog Run would be displaced by the Zipper Building. The Potential CPC Modifications would provide for a similarly-sized replacement space (3,195 square feet) with similar amenities, and would be located along West Houston Street, adjacent to the Greene Street Walk. While its existing location (near the corner of West Houston and Mercer Streets) makes it a neighborhood gathering place for dog owners and dog lovers alike, its new location is expected to provide similar visibility and pedestrian traffic.
- **Silver Tower Seating (and grassed area to the north)** – As with the Proposed Actions, approximately 0.6-acre Silver Tower Seating area and the grassed area to the north of the seating area would be displaced to create an approximately 0.25-acre publicly accessible toddler playground that would be operational by 2021.
- **Silver Tower Playground** – This playground is a private open space that would be displaced due to the project's relocation of the dog run (described above).
- **Coles Gymnasium** – This NYU-owned and operated athletic facility would be displaced to accommodate construction of the proposed Zipper Building.

Adequacy of Open Spaces – Quantified Indirect Effects Analysis

Non-residential Study Area

Under the Potential CPC Modifications RWCDS 1, the number of non-residents in the non-residential study area is forecast to increase to 98,066 and the total amount of publicly accessible open space is expected to increase to 14.32 acres. As shown in **Table 26-8**, by 2021 the ratio of passive open space per 1,000 non-residents would be 0.097, which is below the City's guideline of 0.15 acres, and would be virtually the same as the 0.097 ratio in the No Build condition by 2021. For the combined residential and non-residential population, the passive open space ratio would be 0.074 acres per 1,000 people, which is much lower than the recommended weighted average ratio of 0.23 acres per 1,000 residents and workers, but would be slightly higher than the 0.073 ratio for the No Build Condition by 2021.

Table 26-8
2021 Future With the Potential CPC Modifications
Adequacy of Open Space Resources

Total Population		Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
		Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Non-Residential Study Area										
Non-residents	98,066	14.32	4.77	9.55	N/A	N/A	0.097	N/A	N/A	0.15
Combined non-residents and residents	128,600				N/A	N/A	0.074	N/A	N/A	0.23*
Residential Study Area										
Residents	103,119	23.81	10.43	13.38	0.231	0.101	0.130	2.5	2.0	0.50
Combined non-residents and residents	287,756				N/A	N/A	0.046	N/A	N/A	0.27*

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Residential Study Area

The combined residential and non-residential passive open space ratio within the residential study area would be 0.046 acres per 1,000 residents and non-residents, which is much lower than the recommended weighted average ratio of 0.28 acres per 1,000 residents and workers, but would be virtually the same as the 0.046 ratio in the No Build condition. The active open space ratio would be 0.101 acres per 1,000 residents, which is notably less than the City's planning guideline of 2.0 acres per 1,000 residents, but is slightly greater than the 0.100 ratio in the No Build condition. The total open space ratio would be 0.231 acres per 1,000 residents, which is well below the City's planning guideline of 2.5 acres per 1,000 residents, but would be a slight improvement as compared to the total open space ratio in the No Build condition by 2021.

Quantified Impact Determination

As with the Proposed Actions, with or without the Potential CPC Modifications, all open space ratios in the study areas would be below, and in many cases severely below, the levels recommended by DCP. However, it is generally recognized that these goals are not feasible for many areas of the City, and they are not considered impact thresholds for the determination of impacts under CEQR. Rather, quantified impact thresholds are based on percentage changes in the open space ratios. According to the *CEQR Technical Manual*, in areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant, as they may result in overburdening existing facilities or further exacerbating a deficiency in open space.

As shown in **Table 26-9**, even when accounting for the increased demands associated with the Potential CPC Modifications, all open space ratios would be nearly the same as future conditions without the Proposed Actions. Therefore, by 2021 the Potential CPC Modifications would not result in any quantified significant adverse open space impacts. Without the passive open space offered by the Temporary Mercer Entry Plaza in 2021, the Potential CPC Modifications would increase passive open space ratios by approximately one percent within the non-residential (1/4-mile) study area (compared with the approximate five percent increase for the Proposed Actions). However, unlike the Proposed Actions, the Potential CPC Modifications would not displace a portion of the Mercer Playground by 2021, and the Potential CPC Modifications would not introduce a residential (dormitory) population within the proposed Bleecker Building.

Therefore, with the Potential CPC Modifications the improvement in the active open space ratio in 2021 would be greater than with the Proposed Actions.

Table 26-9
2021 Open Space Ratios Summary
Future with the Potential CPC Modifications

Ratio	DCP Guideline	Existing Ratio	No Build Ratio	Future With the Potential CPC Modifications Ratio	Percent Change (Future With Potential CPC Modifications vs. No Build)	Future With the Proposed Actions Ratio/Percent Change vs. No Build
Non-Residential Study Area						
Passive/non-residents	0.15	0.101	0.097	0.097	0.9%	0.101/5.1%
Passive/total population	0.24*	0.076	0.073	0.074	1.1%	0.077/5.0%
Residential Study Area						
Total/residents	2.5	0.243	0.229	0.231	0.9%	0.233/2.0%
Passive/residents	0.5	0.138	0.129	0.130	0.7%	0.133/3.6%
Active/residents	2.0	0.106	0.100	0.101	1.1%	0.100/-0.1%
Passive/total population	0.27*	0.048	0.046	0.046	1.3%	0.048/4.3%

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Adequacy of Open Spaces – Qualitative Analysis

From a qualitative perspective, the 2021 open space conditions would be improved with the Potential CPC Modifications as compared to the Proposed Actions. The elimination of the temporary gymnasium with the Potential CPC Modifications could result in some additional demand on the area's active open space resources if a comparable facility were not provided elsewhere to compensate for loss of Coles Gymnasium and the absence of an NYU student athletic facility during the construction of the proposed Zipper Building. However, without the Proposed Actions' temporary gymnasium on the North Block, and with the shifting of construction sequencing on the North Block, with the Potential CPC Modifications the displacement of the private Washington Square Village (Key) Playground from its existing location on the North Block would be delayed from 2013 to 2025. In addition, the Proposed Actions' relocation of the Washington Square Village Playground to the southern portion of the Washington Square Village Elevated (Sasaki) Garden would not be necessary with the Potential CPC Modifications. Therefore, unlike the Proposed Actions, with the Potential CPC Modifications the Washington Square Village Elevated Garden would remain in its existing state (i.e., would not be reprogrammed with active playground space) until 2024.

As detailed in the "Shadows" section below, like the Proposed Actions, by 2021 there would be a significant adverse shadows impact on LaGuardia Corner Gardens due to project-generated shadows cast on the garden, although the duration and extent of shadowing would be less with the Potential CPC Modifications. While the garden is a private resource, it is clearly visible to pedestrians along LaGuardia Place, and this significant adverse shadows impact would reduce the overall quality of the resource.

Qualitative Impact Determination

As with the Proposed Actions, with the Potential CPC Modifications there would be no significant adverse qualitative impacts on open space resources by 2021. The replacement playground areas for the displaced Coles Playground are expected to be of a higher quality, and are expected to be more heavily utilized by the public. The proposed Toddler Playground and LaGuardia Temporary Play Area

would receive more sunlight than both the existing Coles and Mercer Street Playgrounds during the spring, fall, and winter, and would receive a comparable amount of sun in the summer. The proposed Temporary LaGuardia Entry Plaza would receive a comparable amount of sunlight to the existing Coles Plaza throughout the year. Although the Greene Street Walk would receive less sunlight than Coles Playground and Coles Plaza throughout the year, it would receive full or partial sun during the afternoon throughout the year. The shadow impact to the LaGuardia Corner Gardens is an impact on an open space with limited public accessibility, and therefore is not a significant adverse impact to public open space resources.

FUTURE WITH THE POTENTIAL CPC MODIFICATIONS: 2031 PHASE 2

Study Area Population

Non-residential Study Area

By 2031 the Potential CPC Modifications RWCDS 1 would introduce approximately 2.1 million gsf of new uses to the Proposed Development Area, including NYU academic space, student dormitories, a new athletic facility, and retail space (see **Table 26-5**). There would be no population increases in the Mercer Plaza Area, and unlike the Proposed Actions, there would be no population increases in the Commercial Overlay Area as a result of the Potential CPC Modifications. By 2031 the new uses in the Proposed Development Area would introduce to the non-residential study area an estimated total of 4,252 workers and up to approximately 417 residents. With the proposed project with modifications, the 2031 combined residential and worker population in the non-residential study area is projected to be 133,427 people.

Residential Study Area

By 2031 the Potential CPC Modifications RWCDS 2 would introduce approximately 2.1 million gsf of new uses to the Proposed Development Area, including NYU academic space, student dormitories, an athletic facility, a public school, and retail space (see **Table 26-5**). There would be no population increases in the Mercer Plaza Area. The new uses in the Proposed Development Area would introduce to the Residential Study Area an estimated total of up to 1,567 residents, who would include under this scenario NYU students living in the proposed dormitories. With the proposed project with modifications, the residential study area would contain an estimated 103,119 residents by 2031. **Table 26-10** estimates the age distribution of the residential study area population. As compared to the No Build conditions, the study area population would be even more heavily weighted toward the young adult (15- to 19-year-old) and adult (20- to 64-year-old) age brackets, given the project's introduction of student residents.

Table 26-10
Residential Study Area Population Age Distribution
Future With the Proposed Project with Modifications 2031

	Residential (1/2-Mile) Study Area		Manhattan in 2010		New York City in 2010	
Age Category	**Persons**	**Percent**	**Persons**	**Percent**	**Persons**	**Percent**
4 and younger	3,008	2.9	76,579	4.8	517,724	6.3
5 to 9	2,168	2.1	61,323	3.9	473,159	5.8
10 to 14	1,787	1.7	58,229	3.7	468,154	5.7
15 to 19	7,073	6.9	77,462	4.9	535,833	6.6
20 to 64	76,846	74.5	1,098,127	69.2	5,187,105	63.4
65 and over	12,212	11.8	214,153	13.5	993,158	12.1
Total	103,119	100.0	1,585,863	100	8,175,133	100

Sources: Based on U.S. Census 2010, grown to reflect planned projects and the proposed project with modifications, and the expected age distribution for those projects.

The proposed uses also would introduce an estimated 3,180 workers to the residential study area. The 2031 combined residential and worker population in the residential study area is projected to be 290,815 people.

Study Area Open Spaces

By 2031 as with the Proposed Actions, with the Potential CPC Modifications there would be no additional open space changes to the South Block separate from those described above for the 2021 future condition. However, there would be substantial open space changes on the North Block, including the mapping as parkland of both the LaGuardia Place and Mercer Street Strips. Unlike the Proposed Actions, with the Potential CPC Modifications the space beneath the strips would not be disposed of to NYU (with the exception that NYU would be granted utility easements across the strips for the benefit of the LaGuardia and Mercer Buildings), and there would be no academic uses under the LaGuardia Place and Mercer Street Strips on the North Block with the Potential CPC Modifications. The Potential CPC Modifications' changes are illustrated in **Figure 26-12**, and are described below.

Adjacent to the proposed Mercer Building, as with the Proposed Actions, by 2031 the Potential CPC Modifications would create two publicly accessible active play areas: the 15,200-square-foot Tricycle Garden located to the north and east of the Mercer Building; and the 15,000-square-foot Washington Square Village Play Garden, to be located southwest of the Mercer Building. As with the Proposed Actions, the central area of the North Block would be transformed from a space designed primarily for private use and passage into a destination for both visitors and everyday users, with pockets of space defined for particular uses within larger, more flexibly programmed spaces (see **Figure 5-9**).

As with the Proposed Actions, with the Potential CPC Modifications all of the privately-owned, publicly accessible open spaces described above would be maintained by NYU.

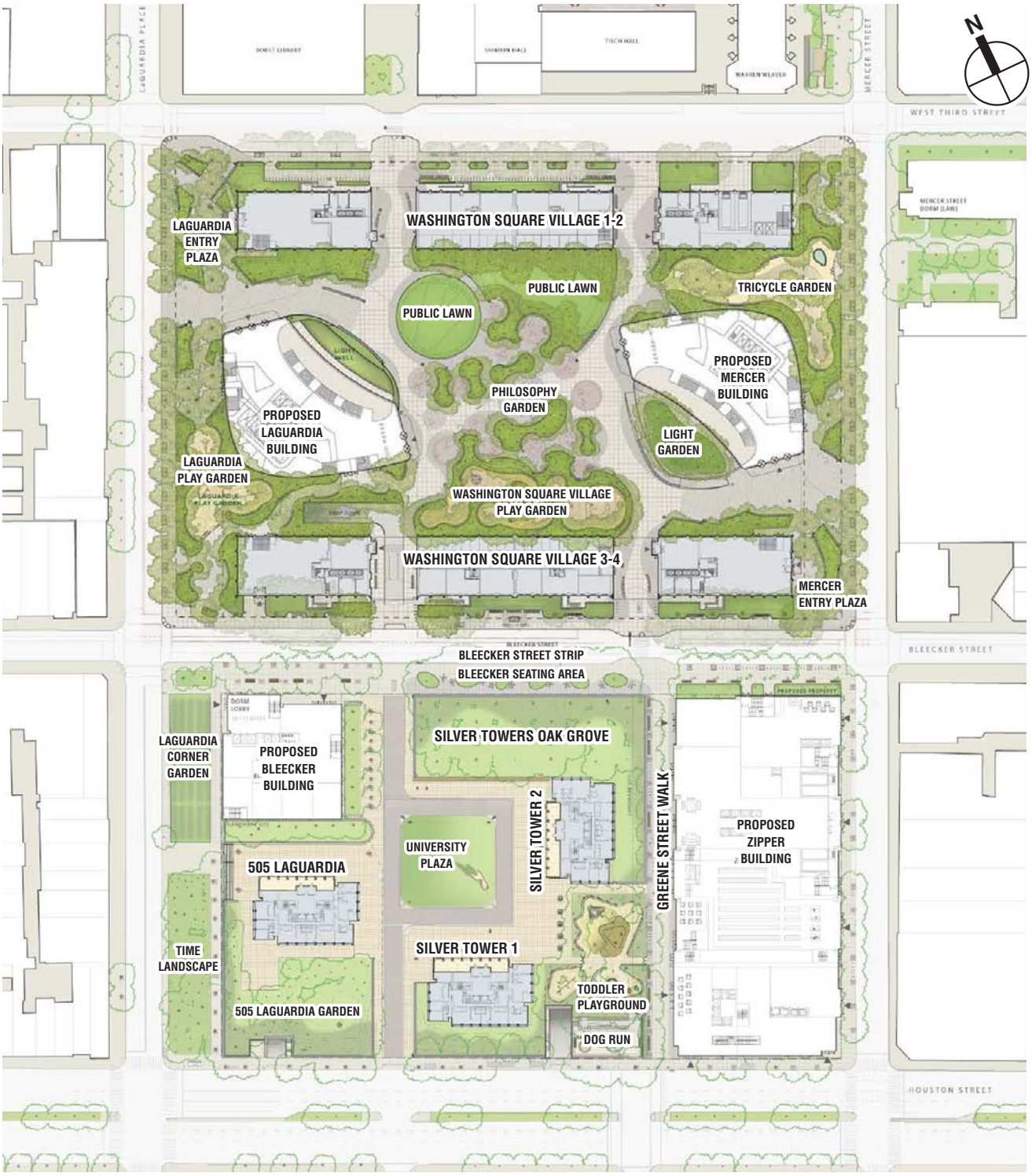
As with the Proposed Actions, on the western portion of the North Block, the planned Adrienne's Garden—which will be built by 2021 in the No Build condition and which will be located on the LaGuardia Place Strip on the North Block—would be relocated to the southern portion of the strip, displacing the LaGuardia Temporary Play Area and replacing it with an approximately 13,100-square-foot LaGuardia Play Garden (see **Figure 5-10**). As with the Proposed Actions, the northern portion of the strip (the former location for Adrienne's Garden) would be redesigned to introduce a clearer network of pathways and seating.

As with the Proposed Actions, there would also be the same streetscape improvements along West 3rd and Bleecker Streets.

As with the Proposed Actions, Phase 1 and Phase 2 construction activities associated with the Potential CPC Modifications would require the removal of street trees, which are under the jurisdiction of NYCDPR. Under Chapter 5 of Title 56 of the Rules of the City of New York and under Title 18 of the Administrative Code of the City of New York, NYU would be required to obtain a permit to remove existing street trees. If such approvals were obtained, NYU would be required to post a bond with NYCDPR to insure that within thirty days after completion of construction all trees removed, destroyed or severely damaged would be replaced at the expense of NYU.

The changes in publicly accessible open spaces resulting from the Potential CPC Modifications by 2031 are the same as with the Proposed Actions; see **Table 5-15** in Chapter 5, "Open Space."

5.24.12



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SCALE

2031 Potential CPC Modifications—Open Space Programming

Figure 26-12

NYU Core

Adequacy of Open Spaces – Direct Effects Analysis

The direct effects analysis for the full build condition with the Potential CPC Modifications would be the same as the 2031 direct effects analysis for the Proposed Actions, with the following exception:

- **LaGuardia Corner Gardens** – As detailed in the "Shadows" section below, as compared to the Proposed Actions, under the Potential CPC Modifications the proposed Bleecker Building would result in less shadows on the adjacent LaGuardia Corner Gardens during the May 6/August 6 and June 21 analysis periods, and similar shadows on the March 21/September 21 and December 21 analysis periods. While the shadowing would, at times, be less than the Proposed Actions, as with the Proposed Actions there would be a significant adverse shadows impact on this resource.

Adequacy of Open spaces – Quantified Indirect Effects Analysis

Non-residential Study Area

Under the Potential CPC Modifications RWCDS 1, by 2031 the number of non-residents in the non-residential study area is forecast to increase to 102,892 persons, and the total amount of publicly accessible open space is expected to increase to 17.03 acres, of which approximately 5.15 acres would be active and 11.88 acres would be passive. In 2031, the ratio of passive open space per 1,000 non-residents would be approximately 0.115, substantially improving on conditions as compared to the No Build conditions, but still falling below the City's guideline of 0.15 acres (see **Table 26-11**). For the combined residential and non-residential population, the passive open space ratio would be 0.089 acres per 1,000 people, which is also a substantial improvement as compared to future conditions without the Potential CPC Modifications, but would still fall below the recommended weighted average ratio of 0.23 acres per 1,000 residents and workers.

Table 26-11

2031 Future With the Potential CPC Modifications: Adequacy of Open Space Resources

		Open Space Acreage			Open Space Ratios per 1,000 People			DCP Open Space Guidelines		
Total Population		**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**
Non-Residential Study Area										
Non-residents	102,892	17.03	5.15	11.88	N/A	N/A	0.115	N/A	N/A	0.15
Combined non-residents and residents	134,427				N/A	N/A	0.089	N/A	N/A	0.23*
Residential Study Area										
Residents	103,093	26.52	10.81	15.71	0.257	0.105	0.152	2.5	2.0	0.50
Combined non-residents and residents	290,815				N/A	N/A	0.054	N/A	N/A	0.27*

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Residential Study Area

With the Potential CPC Modifications the combined residential and non-residential passive open space ratio within the residential study area would be 0.054 acres per 1,000 residents and non-residents, which is a substantial improvement as compared to No Build conditions, but would

still fall below the recommended weighted average ratio of 0.27 acres per 1,000 residents and workers. The active open space ratio would be 0.105 acres per 1,000 residents, which is notably less than the City's planning guideline of 2.0 acres per 1,000 residents, but an improvement for the study area as compared to conditions in 2031 without the Potential CPC Modifications.

Quantified Impact Determination

As shown in **Table 26-12**, as with the Proposed Actions, by 2031 all of the open space ratios would improve as compared to future conditions without the Potential CPC Modifications, and some of the improvements would be substantial; most notable are the approximately 23 to 24 percent increases in the open space ratios within the ¼-mile non-residential study area. The Potential CPC Modifications would provide the same open spaces as the Proposed Actions by 2031, but the project-generated population would be less with the Potential CPC Modifications, given the recommended reductions in density. Therefore, with the Potential CPC Modifications all open space ratios would be slightly better than the ratios in the future with the Proposed Actions.

Table 26-12
2031 Open Space Ratios Summary
Proposed Project with Modifications

Ratio	DCP Guideline	Existing Ratio	No Build Ratio	Future With the Potential CPC Modifications Ratio	Percent Change (Future With Potential CPC Modifications vs. No Build)	Future With the Proposed Actions Ratio/Percent Change vs. No Build
Non-Residential Study Area						
Passive/non-residents	0.15	0.101	0.094	0.115	23.1%	0.115/22.4%
Passive/total population	0.24*	0.076	0.072	0.089	23.9%	0.089/23.2%
Residential Study Area						
Total/residents	2.5	0.243	0.229	0.257	12.4%	0.257/12.2%
Passive/residents	0.5	0.138	0.129	0.152	18.3%	0.152/18.0%
Active/residents	2.0	0.106	0.100	0.105	4.8%	0.105/4.6%
Passive/total population	0.27*	0.048	0.045	0.054	18.8%	0.054/17.8%

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Adequacy of Open Spaces – Qualitative Analysis

From a qualitative perspective, the 2031 open space conditions with the Potential CPC Modifications would be similar to the 2031 condition with the Proposed Actions, and no significant adverse impacts would result. As described in the 2021 assessment above and as further detailed in the "Construction" section, below, as compared to the Proposed Actions the qualitative advantages of the Potential CPC Modifications as compared to the Proposed Actions would be in delays in open space displacements. While the elimination of the temporary gymnasium with the Potential CPC Modifications could result in some additional demand on the area's active open space resources, without the temporary gymnasium on the North Block, and with the shifting of construction sequencing on the North Block, the displacement of the private Washington Square Village (Key) Playground from its existing location on the North Block would be delayed from 2013 to 2025. In addition, the Proposed Actions' relocation of the

Washington Square Village Playground to the southern portion of the Washington Square Village Elevated (Sasaki) Garden would not be necessary with the Potential CPC Modifications. Therefore, unlike the Proposed Actions, with the Potential CPC Modifications the Washington Square Village Elevated Garden would remain in its existing state (i.e., would not be reprogrammed with active playground space) until 2024.

As detailed in the "Shadows" section below, by 2031 there would be a significant adverse shadows impact on LaGuardia Corner Garden due to project-generated shadows cast on the garden during growing seasons. Although this is not considered an open space impact because the garden is considered a private resource due to its limited public accessibility, it is clearly visible to pedestrians along LaGuardia Place, and this significant adverse shadows impact would reduce the overall quality of the resource. Potential mitigation measures for the significant adverse shadows impact with the Potential CPC Modifications are described under "Mitigation," below.

SHADOWS

The Potential CPC Modifications would not alter the conclusions of the shadows analysis presented in Chapter 6, "Shadows." As with the Proposed Actions, the Potential CPC Modifications would result in a significant adverse shadow impact on LaGuardia Corner Gardens, a community garden adjacent to the proposed Bleecker Building. Overall, compared with the Proposed Actions, the Potential CPC Modifications would result in the same or slightly reduced shadows on the existing, future no-action and future with-action sunlight-sensitive resources in the study area.

BLEECKER BUILDING

Phase 1

On the South Block, the dormitory component of the Bleecker Building would be eliminated under the Potential CPC Modifications, which would result in a height reduction of approximately 70 feet. While the reduction in height would not change the duration of incremental shadows on the adjacent LaGuardia Corner Gardens during any of the four analysis periods, it would result in shadows on a slightly smaller area of the gardens during portions of the May 6/August 6 and June 21 analysis periods, and similar shadows on the March 21/September 21 and December 21 analysis periods.

Specifically, on the May 6/August 6 analysis period, there would be similar shadows with the Potential CPC Modifications on the LaGuardia Corner Gardens from the start of the analysis day until 11:15 AM.[1] Then, for the next hour there would be a smaller shadow on the garden with the Potential CPC Modifications (see **Figure 26-13** showing 11:45 AM). On the June 21 analysis period, shadows on the LaGuardia Corner Gardens with the Potential CPC Modifications would be similar to those with the Proposed Actions, until about 11:00 AM. From 11:00 AM to 12:20 PM there would be a smaller shadow on the LaGuardia Corner Gardens with the Potential CPC Modifications. On the March 21/September 21 and December 21 analysis days, shadows are longer than in the late spring and summer, and shadow from the Bleecker

[1] All times Eastern Standard Time; Daylight Saving Time not used.

5.24.12

Proposed Actions

Potential CPC Modifications

Proposed Bleecker Building
Looking Northeast
May 6/August 6 Analysis Period - 11:45 AM EST
Figure 26-13

Building would fall across and beyond the LaGuardia Corner Gardens with both the Potential CPC Modifications and the Proposed Actions.

Therefore, similar to the Proposed Actions, the proposed Bleecker Building under the Potential CPC Modifications would cast approximately four to five-and-a-half hours of new shadow on the LaGuardia Corner Gardens during morning hours throughout the growing season, adversely affecting the viability of shade-intolerant species. While the remaining sunlight could support shade-tolerant species, the garden would experience significant adverse shadow impacts with the Potential CPC Modifications in the spring, summer, and fall.

Compared with the Proposed Actions, shadows cast by the proposed Bleecker Building on the Time Landscape would be similar with the Potential CPC Modifications on all analysis days. The Bleecker Building would cast smaller shadows on the North Block's LaGuardia Landscape (in Phase 1) and the proposed LaGuardia Play Garden (in Phase 2) on the March 21/September 21 analysis day; and shadows would be the same with both the Proposed Actions and the Potential CPC Modifications on all other analysis days.

With the Potential CPC Modifications, the Bleecker Building would cast similar shadows on the willow oaks in the Oak Grove on the May 6/August 6 analysis period, and a smaller shadow on the June 21 analysis period, compared with the Proposed Actions. There would be no difference between the Proposed Actions and the Potential CPC Modifications in the shadows cast on a small portion the north façade of 505 LaGuardia Place in the late spring and summer analysis periods.

Phase 2

In Phase 2, shadows from the proposed Bleecker Building would be compared to the 2031 future without the Potential CPC Modifications, when an as-of-right redevelopment of the Morton Williams site could occur (the No Build building, which could be constructed upon expiration of the HPD deed restrictions in 2021, as described in Chapter 1, "Project Description"). The as-of-right building would be approximately 32 feet taller than the proposed Bleecker Building under the Potential CPC Modifications. Therefore, there would be no incremental shadows due to the proposed Bleecker Building, and there would be no significant adverse shadows impact.

THE NORTH BLOCK

With the Potential CPC Modifications, the height of the proposed Mercer Building would be reduced by approximately 56 feet. Unlike with the Proposed Actions, the Mercer Building with the Potential CPC Modifications would not cast 30 minutes of incremental shadow on Mercer Plaza on March 21/September 21 analysis period. However, the Mercer Building with the Potential CPC Modifications would cast similar shadows on Mercer Plaza on the other analysis periods, compared with the Proposed Actions. The Mercer Building would generally cast smaller shadows on the surrounding project-generated open spaces with the Potential CPC Modifications for much of the day in the March 21/September 21, May 6/August 6 and June 21 analysis periods. In the December 21 analysis period shadows are very long, and there would be no appreciable difference in the proposed Mercer Building's shadows on the surrounding project-generated open spaces between the Proposed Actions and the Potential CPC Modifications.

The shaded rows of **Tables 26-13** and **26-14** indicate where the durations of incremental shadows would be different with the Potential CPC Modifications compared with the Proposed Actions.

Table 26-13
Incremental Shadow Durations – Phase 1 (2021)

	December 21 8:51 AM-2:53 PM	March 21 / Sept. 21 7:36 AM-4:29 PM	May 6 / August 6 6:27 AM-5:18 PM	June 21 5:57 AM-6:01 PM
PUBLICLY ACCESSIBLE OPEN SPACES				
South Block/Bleecker St. landscaped areas	9:20 AM–2:53 PM Total: 5 hr 33 min	9:00 AM–4:29 PM Total: 7 hr 29 min	10:00 AM–5:18 PM Total: 7 hr 18 min	10:30 AM–6:01 PM Total: 7 hr 31 min
LaGuardia Landscape *with Proposed Actions*	8:51 AM–9:40 AM 10:30 AM–11:20 AM 1:30 PM–1:50 PM Total: 1 hr 59 min	11:20 AM–1:10 PM Total: 1 hr 50 min	—	—
LaGuardia Landscape *with Potential CPC Modifications*	8:51 AM–9:40 AM 10:30 AM–11:20 AM 1:30 PM–1:50 PM Total: 1 hr 59 min	11:40 AM–1:10 PM Total: 1 hr 30 min	—	—
Mercer Playground *with Proposed Actions*	1:00 PM–2:53 PM Total: 1 hr 53 min	12:30 PM–3:50 PM Total: 3 hr 20 min	12:20 PM–3:10 PM Total: 2 hr 50 min	1:10 PM –3:20 PM 5:40 PM–6:01 PM Total: 2 hr 31 min
Mercer Playground *with Potential CPC Modifications*	1:00 PM–2:53 PM Total: 1 hr 53 min	12:45 PM–3:50 PM Total: 3 hr 5 min	12:30 PM–3:10 PM Total: 2 hr 40 min	1:10 PM –3:20 PM 5:40 PM–6:01 PM Total: 2 hr 31 min
Mercer Plaza	2:20 PM–2:40 PM Total: 20 min	—	—	—
GREENSTREETS				
Time Landscape	—	7:36 AM–8:10 AM Total: 34 min	6:27 AM–8:20 AM Total: 1 hr 53 min	6:20 AM–8:40 AM Total: 2 hr 20 min
COMMUNITY GARDENS				
LaGuardia Corner Gardens	8:51 AM–10:30 AM 1:20 PM–1:30 PM Total: 1 hr 49 min	7:36 AM–11:50 AM Total: 4 hr 14 min	6:50 AM–12:20 PM Total: 5 hr 30 min	6:50 AM–12:00 PM Total: 5 hr 10 min
IMPORTANT NATURAL FEATURES				
Oak Grove willow oaks	9:00 AM–1:30 PM Total: 4 hr 30 min	7:36 AM–12:10 PM Total: 4 hr 34 min	8:10 AM–11:20 AM 4:10 PM–5:18 PM Total: 4 hr 18 min	9:30 AM–11:00 AM 4:00 PM–6:01 PM Total: 3 hr 1 min
HISTORIC RESOURCES				
University Village – 100 Bleecker St./ Silver Tower II	8:51 AM–1:00 PM Total: 4 hr 9 min	7:36 AM–12:00 PM Total: 4 hr 24 min	6:27 AM–11:20 AM Total:4 hr 53 min	5:57 AM–11:00 AM Total:5 hr 3 min
University Village – 110 Bleecker St./ Silver Tower I	8:51 AM–9:50 AM Total: 59 min	7:36 AM–10:20 AM Total: 2 hr 44 min	6:27 AM–9:30 AM Total: 3 hr 3 min	5:57 AM–8:50 AM Total: 2 hr 53 min
University Village – 505 LaGuardia Pl.	8:51 AM–9:30 AM Total: 39 min	7:36 AM–8:50 AM Total: 1 hr 14 min	6:27 AM–7:20 AM Total: 53 min	5:57 AM–8:10 AM Total: 2 hr 13 min

Notes:
Table indicates entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.
Daylight saving time is not used.

Table 26-14
Incremental Shadow Durations – Phase 2 (2031)

	December 21 8:51 AM-2:53 PM	March 21 / Sept. 21 7:36 AM-4:29 PM	May 6 / August 6 6:27 AM-5:18 PM	June 21 5:57 AM-6:01 PM
PUBLICLY ACCESSIBLE OPEN SPACES				
South Block/Bleecker St. landscaped areas	9:20 AM–2:53 PM Total: 5 hr 33 min	9:00 AM–4:10 PM Total: 7 hr 10 min	10:00 AM–5:18 PM Total: 7 hr 18 min	10:30 AM–6:01 PM Total: 7 hr 31 min
Mercer Plaza *with Proposed Actions*	2:10 PM–2:40 PM Total: 30 min	1:50 PM–2:20 PM Total: 30 min	—	—
Mercer Plaza *with Potential CPC Modifications*	2:10 PM–2:40 PM Total: 30 min	—	—	—
GREENSTREETS				
Time Landscape	—	7:36 AM–8:10 AM Total: 34 min	6:40 AM–8:20 AM Total: 1 hr 40 min	7:30 AM–8:30 AM Total: 1 hr
COMMUNITY GARDENS				
LaGuardia Corner Gardens	8:51 AM–9:20 AM Total: 29 min	9:10 AM–9:30 AM 10:00 AM–10:30 AM Total: 50 min	8:20 AM–12:20 PM Total: 4 hr	7:40 AM–12:10 PM Total: 4 hr 30 min
IMPORTANT NATURAL FEATURES				
Oak Grove willow oaks	9:00 AM–1:30 PM Total: 4 hr 30 min	7:36 AM–12:10 PM Total: 4 hr 34 min	8:10 AM–11:20 AM 4:10 PM–5:18 PM Total: 4 hr 18 min	9:30 AM–11:00 AM 4:00 PM–6:01 PM Total: 3 hr 1 min
HISTORIC RESOURCES				
University Village – 100 Bleecker St./ Silver Tower II	8:51 AM–1:00 PM Total: 4 hr 9 min	7:36 AM–12:00 PM Total: 4 hr 24 min	6:27 AM–11:20 AM Total:4 hr 53 min	5:57 AM–11:00 AM Total:5 hr 3 min
University Village – 110 Bleecker St./ Silver Tower I	8:51 AM–9:50 AM Total: 59 min	7:36 AM–10:20 AM Total: 2 hr 44 min	6:27 AM–9:30 AM Total: 3 hr 3 min	5:57 AM–8:50 AM Total: 2 hr 53 min
University Village – 505 LaGuardia Pl.	8:51 AM–9:30 AM Total: 39 min	7:36 AM–8:50 AM Total: 1 hr 14 min	6:27 AM–7:20 AM Total: 53 min	5:57 AM–8:10 AM Total: 2 hr 13 min

Notes:
Table indicates entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource. Daylight saving time is not used.

HISTORIC AND CULTURAL RESOURCES

WASHINGTON SQUARE VILLAGE

As detailed in Chapter 7, "Historic and Cultural Resources," Washington Square Village has been determined eligible for listing on the State and National Registers of Historic Places (S/NR). The proposed project would result in alterations to the Washington Square Village complex—including the proposed development of two new buildings and landscaping, which require the elimination of the LaGuardia Retail building and the elevated garden, as well as limited alterations to the Washington Square Village buildings themselves. These alterations to the Washington Square Village complex would remove elements of this architectural resource that contribute to its significance. Therefore, the Proposed Actions would have a significant adverse impact on this architectural resource. The Potential CPC Modifications would result in the same alterations to the Washington Square Village complex as the Proposed Actions. However, based on a modified construction schedule under the Potential CPC Modifications, the timing of the alterations affecting the various elements that contribute to this resource's significance would be different under the Potential CPC Modifications. Most notably, under the Proposed Actions, the Washington Square Village Elevated Garden would be reprogrammed early in Phase 1, and would be eliminated early in Phase 2, whereas with the Potential CPC

Modifications the Washington Square Village Elevated Garden would be retained in its existing state until the later stages of Phase 2. With the Proposed Actions the elimination of the LaGuardia Retail building would occur towards the end of Phase 2 construction, whereas under the Potential CPC Modifications this alteration would occur at the beginning of Phase 2 construction. With the Potential CPC Modifications, measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions.

UNIVERSITY VILLAGE

As described in Chapter 7, "Historic and Cultural Resources," University Village is S/NR-eligible and is also a New York City Landmark (NYCL). With the Proposed Actions, a new, tall building—the Bleecker Building—would be built on the northwest portion of the South Block on the site of the Morton Williams grocery store. Although the Bleecker Building would change the context of University Village (with a taller building than the existing Morton Williams grocery store if built in Phase 1, or a shorter building than the as-of-right building if built in Phase 2), built adjacent to the landmarked site, the new building would not affect the pinwheel configuration of the three University Village towers and the University Village towers would continue to be viewed as a unified building complex. With the Potential CPC Modifications, the Bleecker Building would be shorter than with the Proposed Actions as it would not have a tower portion. However, with both the Proposed Actions and the Potential CPC Modifications a new building (taller than the existing Morton Williams grocery store if built in Phase 1, or shorter than the as-of-right building if built in Phase 2),would be located on the site of the Morton Williams grocery store. With either the Proposed Actions or the Potential CPC Modifications, the new Bleecker Building would not be expected to adversely affect University Village because this site does not have a meaningful historic or contextual relationship with University Village. Further, as described in Chapter 7, "Historic and Cultural Resources," the University Village towers already exist in an area containing a mix of older and newer buildings of shorter and taller heights—including the buildings in the historic districts south and west of the Bleecker Building site on the South Block. Therefore, neither the Proposed Actions nor the Potential CPC Modifications would adversely affect University Village or architectural resources in the study area.

POTENTIAL NOHO HISTORIC DISTRICT EXPANSION

As detailed in Chapter 7, "Historic and Cultural Resources," four of the six buildings in the Commercial Overlay Area that would be modified with ground floor alterations as a result of the Proposed Actions are contributing to the S/NR-eligible Potential NoHo Historic District Expansion. Depending on the extent of alterations and intact historic material to be removed, future alterations to the ground floors of these architectural resources could in some cases result in significant adverse impacts. With the Potential CPC Modifications, the proposed C1-5 commercial overlay zoning designation in the Commercial Overlay Area would not be adopted by CPC, and the ground floor alterations with retail uses in the six buildings within this area would not be implemented. Therefore, with the Potential CPC Modifications, there would be no potential for significant adverse impacts from retail development on the ground floors of the four buildings that could potentially be significantly impacted by the Proposed Actions, and the proposed mitigation measures outlined in Chapter 21, "Mitigation" would not be required.

URBAN DESIGN AND VISUAL RESOURCES

Overall, the Potential CPC Modifications would not alter the conclusions of the urban design and visual resources analysis presented in Chapter 8, "Urban Design and Visual Resources" and there would be no significant adverse impacts on the urban design and visual resources of the Proposed Development Area and study areas. For the most part, changes to the urban design of the Development Area and study areas and to the pedestrian's experience of public space would be the same with the Potential CPC Modifications as with the Proposed Actions.

On the North Block, the reduction in height of the Mercer Building from 218 feet at the roof parapet to 162 feet (and from 248 feet at the mechanical bulkhead to 192 feet) would create a more consistent roofline along the block than under the Proposed Actions, as the modified Mercer Building would be approximately the same height as the adjacent Washington Square Village buildings (see **Figure 26-8**). In addition, reducing the roof parapet height and the bulkhead height of the Mercer Building by 56 feet would make it more in keeping with the heights of the tall loft and academic buildings found along Mercer Street and Broadway (**see Figure 26-14**). Views across the North Block through the portals in the Washington Square Village residential buildings would be similar under the Proposed Actions and the Potential CPC Modifications.

Also on the North Block, under the Potential CPC Modifications, the vehicular access to a new, below-grade parking garage would be moved from the existing eastern driveway entrance on West 3rd Street (as proposed under the Proposed Actions), to the existing western driveway entrance on Bleecker Street. This modification would align the new garage entrance with the existing driveway that extends north-south through the University Village complex, and it would separate the proposed garage entrance from the proposed loading dock on West 3rd Street. In addition, there would be curb cuts on both West 3rd Street and Bleecker Street instead of just at the northeast corner of the block on West 3rd Street. Effects on the streetscape from the location of the proposed garage entrance would be similar under both the Potential CPC Modifications and the Proposed Actions.

The Potential CPC Modifications would also eliminate the temporary gymnasium that would be constructed on the North Block in the 2021 Phase 1 of the Proposed Actions. Therefore, there would be no effects to the streetscape from the temporary gymnasium. No significant adverse impacts, however, on urban design and visual resources were identified from the temporary gymnasium under the Proposed Actions.

On the South Block, the dormitory component of the Bleecker Building would be eliminated under the Potential CPC Modifications, which would result in a height reduction of approximately 70 feet (from 178 feet at the roof parapet to 108 feet and from 208 feet at the top of the mechanical bulkhead to 138 feet). Under the Potential CPC Modifications, the proposed Bleecker Building would be shorter than the Washington Square Village buildings, instead of taller by approximately 20 feet. It would also be more in keeping with the heights of buildings across LaGuardia Place. Further, the Bleecker Building with the Potential CPC Modifications would be less of an obstruction in views south along LaGuardia Place of the University Village towers. If the construction of the proposed Bleecker Building were to be delayed to Phase 2, it would be compared against a condition without the Proposed Actions in which the as-of-right building would be built on the South Block by 2031, instead of comparing the impacts of the proposed Bleecker Building against a No Build condition that includes the existing Morton-Williams supermarket. Under the Potential CPC Modifications, the Bleecker Building would be

Proposed Actions View

Potential CPC Modifications View

Comparative Views - Mercer Street View North from Bleecker Street

Figure 26-14

shorter than the as-of-right building by 32 feet as measured at both the roof parapet and the maximum height of the mechanical bulkhead.

With the Proposed Actions, it is anticipated that ground floor alterations would be made to six buildings in the Commercial Overlay Area to add new ground-floor retail spaces. This would have beneficial streetscape effects through the creation of enlivened ground floors and increased pedestrian activity. With the Potential CPC Modifications, the proposed C1-5 commercial overlay zoning designation in the Commercial Overlay Area would not be adopted by CPC, and the ground floor alterations to six buildings within this area would not be implemented. Therefore, the Potential CPC Modifications would not realize the benefits of the Proposed Actions with respect to an improved streetscape through the creation of enlivened ground floors and increased pedestrian activity.

With respect to pedestrian winds, under the Proposed Actions, the analysis found that the elevated wind condition identified under existing conditions would be eliminated, and that there would be no potential for pedestrian wind conditions exceeding safety criteria at any other location. With the Potential CPC Modifications, no significant adverse urban design impacts would be anticipated since the modifications would not exacerbate downwashing or channeling of winds at the project site. Therefore, like the Proposed Actions, no significant adverse urban design impacts would result from potential pedestrian wind conditions with the Potential CPC Modifications.

TRANSPORTATION

As described above, the Potential CPC Modifications would eliminate the potential for hotel and conference center uses within the Proposed Development Area and the retail development within the Commercial Overlay Area would also be eliminated. Contrary to the analyses presented in Chapter 14, "Transportation," with the elimination of, in particular, the hotel and conference center uses, Reasonable Worst Case Development Scenario (RWCDS) 2 would become the overall worst-case transportation scenario and is analyzed herein for traffic, transit, pedestrians, and parking conditions, and because RWCDS 1 would still yield notably more subway trips, it is also being analyzed for subway conditions only. Under RWCDS 2, the Potential CPC Modifications would, when compared to RWCDS 3 for the Proposed Actions, result in the elimination of the 300-room hotel and 85,000 square feet conference center space, 66,000 square feet (SF) less in academic space, 75,000 SF more in student housing, and the removal of the 24,000 SF retail space in the Commercial Overlay Area. **Table 27-15** provides a comparison of the Potential CPC Modifications (under RWCDS 2) and the Proposed Actions (under RWCDS 3).

In addition to the above differences in RWCDS programming, the Potential CPC Modifications would result in the need to relocate the proposed 389-space accessory parking garage from the northeast to the southwest portion of the North Block and its access from West 3rd Street to Bleecker Street. Also, with no hotel uses in the Zipper Building, the relocation of the existing M21 bus stop on West Houston Street to a location half a block east across Mercer Street would not be implemented.

Table 27-15
Reasonable Worst-Case Transportation Scenario Development Program

Use	Analysis Scenarios	Phase 1 – 2021		Phase 2 Increment		Phase 2 – 2031	
Academic Space	*PA RWCDS 3*	148,000 SF		873,895 SF		1,021,895 SF	
	PM RWCDS 2	**277,000 SF**		**678,895 SF**		**955,895 SF**	
	Diff.	+129,000 SF		-195,000 SF		-66,000 SF	
Student Housing	*PA RWCDS 3*	1,316 beds	395,000 SF	--	--	1,316 beds	395,000 SF
	PM RWCDS 2	**1,566 beds**	**470,000 SF**	**--**	**--**	**1,566 beds**	**470,000 SF**
	Diff.	+250 beds	+75,000 SF	--	--	+250 beds	+75,000 SF
Hotel	*PA RWCDS 3*	300 rooms	180,000 SF	--	--	300 rooms	180,000 SF
	PM RWCDS 2	**0 rooms**	**0 SF**	**--**	**--**	**0 rooms**	**0 SF**
	Diff.	-300 rooms	-180,000 SF	--	--	-300 rooms	-180,000 SF
Conference Center	*PA RWCDS 3*	85,000 SF		--		85,000 SF	
	PM RWCDS 2	**0 SF**		**--**		**0 SF**	
	Diff.	-85,000 SF		--		-85,000 SF	
Local Retail	*PA = **PM***	60,000 SF		34,000 SF		94,000 SF	
School (SCA PS/IS)	*PA = **PM***	800 seats	100,000 SF	--	--	800 seats	100,000 SF
		73 staff		--		73 staff	
Additional Local Retail NE of Development	*PA RWCDS 3*	24,000 SF		--		24,000 SF	
	PM RWCDS 2	**0 SF**		**--**		**0 SF**	
	Diff.	-24,000 SF		--		-24,000 SF	

Note: The above compares the project components between RWCDS 3 analyzed for the Proposed Actions and RWCDS 2 analyzed for the Potential CPC Modifications.
PA = Proposed Actions; PM = Potential CPC Modifications

CHANGES IN TRIP GENERATION ESTIMATES

The transportation planning assumptions presented in Chapter 14, "Transportation," for the most part, remain the same with the Potential CPC Modifications, with the exception of those related to the academic space. Because the trip generation rates for the proposed project's academic use is population density based (i.e., NYU student/faculty/staff population vs. total academic space in the Washington Square Village area), a reduction in the amount of academic space, while keeping the overall population constant, would yield higher trip generation rates for this use, although the total amount of incremental trips with the reduced space would be less. **Table 26-16** compares the academic trip rates used for the Proposed Actions and those for the Potential CPC Modifications under RWCDS 2.

Applying the above changes, trip generation estimates for RWCDS 2 were developed for the Potential CPC Modifications Phase 1–2021 Completion and Phase 2–2031 Full Build-Out scenarios, as presented in **Tables 26-17** to **26-20**. Overall, the Potential CPC Modifications for RWCDS 2 would generate up to 40 percent fewer peak hour person trips and up to 66 percent fewer peak hour vehicle trips in 2021 and up to 34 percent fewer peak hour person trips and up to 62 percent fewer peak hour vehicle trips in 2031 than the Proposed Actions.

Table 26-16
NYU Core Academic Space Daily Trip Generation Factors

Population Group	Population Density (Person/1,000 gsf)	Avg. Trips/Day	Daily Person Trips/1,000 gsf	
RWCDS 3 Under the Proposed Actions				
Undergraduate Students	3.55	3.62	12.9	12.9
Graduate/Professional Students	3.12	2.83	8.8	9.2
Non-Credit Students	1.79	0.25	0.4	
Faculty/Staff	1.81	3.15	5.7	5.7
Total			27.8	27.8
RWCDS 2 Under the Potential CPC Modifications				
Undergraduate Students	3.58	3.62	13.0	13.0
Graduate/Professional Students	3.15	2.83	8.9	9.4
Non-Credit Students	1.81	0.25	0.5	
Faculty/Staff	1.83	3.15	5.8	5.8
Total			28.2	28.2

Table 26-17
Potential CPC Modifications Phase 1: 2021 Completion Person Trips by Mode

	Auto		Taxi		Subway		Bus		Shuttle Bus		School Bus		Walk Only		Total		Total
Program	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In+Out
AM Peak Hour																	
Academic Space	14	0	5	0	450	3	18	0	149	1	0	0	425	5	1061	9	**1070**
Student Housing	1	2	4	8	49	88	10	18	5	10	0	0	37	66	106	192	**298**
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	1	1	2	2	4	4	4	4	0	0	0	0	61	61	72	72	**144**
SCA PS/IS Student	50	0	14	0	0	0	0	0	0	0	31	0	705	0	800	0	**800**
SCA PS/IS Staff	1	0	0	0	4	0	0	0	0	0	0	0	2	0	7	0	**7**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**67**	**3**	**25**	**10**	**507**	**95**	**32**	**22**	**154**	**11**	**31**	**0**	**1230**	**132**	**2046**	**273**	**2319**
Midday Peak Hour																	
Academic Space	3	0	1	0	124	55	4	1	40	34	0	0	107	92	279	182	**461**
Student Housing	2	2	9	9	104	102	21	21	11	11	0	0	78	76	225	221	**446**
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	9	9	14	14	27	27	27	27	0	0	0	0	376	376	453	453	**906**
SCA PS/IS Student	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SCA PS/IS Staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**14**	**11**	**24**	**23**	**255**	**184**	**52**	**49**	**51**	**45**	**0**	**0**	**561**	**544**	**957**	**856**	**1813**
PM Peak Hour																	
Academic Space	2	14	1	4	140	355	3	16	21	69	0	0	62	220	229	678	**907**
Student Housing	4	4	18	16	197	179	41	37	21	19	0	0	148	134	429	389	**818**
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	5	5	7	7	14	14	14	14	0	0	0	0	199	199	239	239	**478**
SCA PS/IS Student	0	2	0	1	0	0	0	0	0	0	0	2	0	35	0	40	**40**
SCA PS/IS Staff	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	4	**4**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**11**	**26**	**26**	**28**	**351**	**550**	**58**	**67**	**42**	**88**	**0**	**2**	**409**	**589**	**897**	**1350**	**2247**

Table 26-18
Potential CPC Modifications Phase 1: 2021 Completion Vehicle Trips by Mode

Program	Auto		Taxi		Delivery		Shuttle Bus		School Bus		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In+Out
AM Peak Hour											
Academic Space	12	0	4	4	1	1	3	3	0	0	**28**
Student Housing	1	2	7	7	2	2	0	0	0	0	**21**
Hotel	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	1	1	1	1	1	1	0	0	0	0	**6**
SCA PS/IS Student	29	29	8	8	1	1	0	0	2	2	**80**
SCA PS/IS Staff	1	0	0	0	0	0	0	0	0	0	**1**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	**0**
Total	**44**	**32**	**20**	**20**	**5**	**5**	**3**	**3**	**2**	**2**	**136**
Midday Peak Hour											
Academic Space	3	0	1	1	1	1	1	1	0	0	**9**
Student Housing	2	2	10	10	2	2	0	0	0	0	**28**
Hotel	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	5	5	15	15	1	1	0	0	0	0	**42**
SCA PS/IS Student	0	0	0	0	1	1	0	0	0	0	**2**
SCA PS/IS Staff	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	**0**
Total	**10**	**7**	**26**	**26**	**5**	**5**	**1**	**1**	**0**	**0**	**81**
PM Peak Hour											
Academic Space	2	12	4	4	1	1	2	2	0	0	**28**
Student Housing	4	4	20	20	1	1	0	0	0	0	**50**
Hotel	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	3	3	8	8	0	0	0	0	0	0	**22**
SCA PS/IS Student	1	1	1	1	0	0	0	0	1	1	**6**
SCA PS/IS Staff	0	1	0	0	0	0	0	0	0	0	**1**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	**0**
Total	**10**	**21**	**33**	**33**	**2**	**2**	**2**	**2**	**1**	**1**	**107**

Table 26-19
Potential CPC Modifications Phase 2: 2031 Full Build-Out Person Trips by Mode

Program	Auto		Taxi		Subway		Bus		Shuttle Bus		School Bus		Walk Only		Total		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In+Out
AM Peak Hour																	
Academic Space	49	0	16	0	1550	10	62	0	516	4	0	0	1467	15	3660	29	**3689**
Student Housing	1	2	4	8	49	88	10	18	5	10	0	0	37	66	106	192	**298**
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center- Employee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	1	1	2	2	4	4	4	4	0	0	0	0	61	61	72	72	**144**
SCA PS/IS Student	50	0	14	0	0	0	0	0	0	0	31	0	705	0	800	0	**800**
SCA PS/IS Staff	1	0	0	0	4	0	0	0	0	0	0	0	2	0	7	0	**7**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**102**	**3**	**36**	**10**	**1607**	**102**	**76**	**22**	**521**	**14**	**31**	**0**	**2272**	**142**	**4645**	**293**	**4938**
Midday Peak Hour																	
Academic Space	9	3	3	1	425	189	12	5	137	119	0	0	374	311	960	628	**1588**
Student Housing	2	2	9	9	104	102	21	21	11	11	0	0	78	76	225	221	**446**
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center- Employee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	9	9	14	14	27	27	27	27	0	0	0	0	376	376	453	453	**906**
SCA PS/IS Student	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SCA PS/IS Staff	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**20**	**14**	**26**	**24**	**556**	**318**	**60**	**53**	**148**	**130**	**0**	**0**	**828**	**763**	**1638**	**1302**	**2940**
PM Peak Hour																	
Academic Space	9	49	3	14	483	1227	11	55	71	236	0	0	212	757	789	2338	**3127**
Student Housing	4	4	18	16	197	179	41	37	21	19	0	0	148	134	429	389	**818**
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Patron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center- Employee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	5	5	7	7	14	14	14	14	0	0	0	0	199	199	239	239	**478**
SCA PS/IS Student	0	2	0	1	0	0	0	0	0	0	0	2	0	35	0	40	**40**
SCA PS/IS Staff	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	4	**4**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**18**	**61**	**28**	**38**	**694**	**1422**	**66**	**106**	**92**	**255**	**0**	**2**	**559**	**1126**	**1457**	**3010**	**4467**

Table 26-20
Potential CPC Modifications Phase 2: 2031 Full Build-Out Vehicle Trips by Mode

Program	Auto		Taxi		Delivery		Shuttle Bus		School Bus		Total
	In	Out	In	Out	In	Out	In	Out	In	Out	In+Out
AM Peak Hour											
Academic Space	42	0	13	13	3	3	11	11	0	0	**96**
Student Housing	1	2	7	7	2	2	0	0	0	0	**21**
Hotel	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	1	1	1	1	1	1	0	0	0	0	**6**
SCA PS/IS Student	29	29	8	8	1	1	0	0	2	2	**80**
SCA PS/IS Staff	1	0	0	0	0	0	0	0	0	0	**1**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	**0**
Total	**74**	**32**	**29**	**29**	**7**	**7**	**11**	**11**	**2**	**2**	**204**
Midday Peak Hour											
Academic Space	9	3	3	3	3	3	3	3	0	0	**30**
Student Housing	2	2	10	10	2	2	0	0	0	0	**28**
Hotel	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	5	5	15	15	1	1	0	0	0	0	**42**
SCA PS/IS Student	0	0	0	0	1	1	0	0	0	0	**2**
SCA PS/IS Staff	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	**0**
Total	**16**	**10**	**28**	**28**	**7**	**7**	**3**	**3**	**0**	**0**	**102**
PM Peak Hour											
Academic Space	8	42	14	14	3	3	5	5	0	0	**94**
Student Housing	4	4	20	20	1	1	0	0	0	0	**50**
Hotel	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center	0	0	0	0	0	0	0	0	0	0	**0**
Conference Center-Employee	0	0	0	0	0	0	0	0	0	0	**0**
Local Retail	3	3	8	8	0	0	0	0	0	0	**22**
SCA PS/IS Student	1	1	1	1	0	0	0	0	1	1	**6**
SCA PS/IS Staff	0	1	0	0	0	0	0	0	0	0	**1**
Local Retail NE	0	0	0	0	0	0	0	0	0	0	**0**
Total	**16**	**51**	**43**	**43**	**4**	**4**	**5**	**5**	**1**	**1**	**173**

Similar to Chapter 14, "Transportation," for the Proposed Actions, trip estimates for the Potential CPC Modifications Phase 2–2031 Full Build-Out scenario were also developed for the Illustrative Program, RWCDS 1, and RWCDS 3. And as illustrated in **Table 26-21**, RWCDS 2 would generally yield more trip-making than other development scenarios and therefore was analyzed as the overall worst-case development scenario for the evaluation of potential transportation-related impacts. However, because RWCDS 1 would yield notably more subway trips but lower or comparable trip-making for other modes of transportation to RWCDS 2, conditions pertained to traffic, pedestrians, and parking were evaluated using projections developed for RWCDS 2, whereas conditions pertained to subway were analyzed for both RWCDS 1 and RWCDS 2.

Table 26-21
Potential CPC Modifications Phase 2: 2031 Full Build-Out—Comparison of Total Person and Vehicle Trips for Different Development Scenarios

Peak Hour Person Trips by Mode																	
	Auto		Taxi		Subway		Bus		Shuttle Bus		School Bus		Walk Only		Total		Total
Program	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In + Out
AM Peak Hour																	
Illustrative Program	100	7	33	8	1544	114	68	16	501	10	31	0	2156	88	4433	243	4676
RWCDS 1	67	1	23	1	2173	36	86	4	721	9	0	0	2037	10	5107	61	5168
RWCDS 2	**102**	**3**	**36**	**10**	**1607**	**102**	**76**	**22**	**521**	**14**	**31**	**0**	**2272**	**142**	**4645**	**293**	**4938**
RWCDS 3	101	7	35	11	1528	114	71	20	496	11	31	0	2200	142	4462	305	4767
Midday Peak Hour																	
Illustrative Program	12	7	10	8	497	264	28	21	140	121	0	0	438	377	1125	798	1923
RWCDS 1	9	3	1	-2	608	279	10	2	194	167	0	0	376	287	1198	736	1934
RWCDS 2	**20**	**14**	**26**	**24**	**556**	**318**	**60**	**53**	**148**	**130**	**0**	**0**	**828**	**763**	**1638**	**1302**	**2940**
RWCDS 3	20	16	26	23	519	291	55	48	137	121	0	0	798	734	1555	1233	2788
PM Peak Hour																	
Illustrative Program	17	55	18	28	644	1332	42	81	84	239	0	2	335	873	1140	2610	3750
RWCDS 1	12	67	7	18	720	1754	22	81	106	334	0	0	241	1006	1108	3260	4368
RWCDS 2	**18**	**61**	**28**	**38**	**694**	**1422**	**66**	**106**	**92**	**255**	**0**	**2**	**559**	**1126**	**1457**	**3010**	**4467**
RWCDS 3	21	59	25	35	650	1331	58	94	83	238	0	2	528	1063	1365	2822	4187

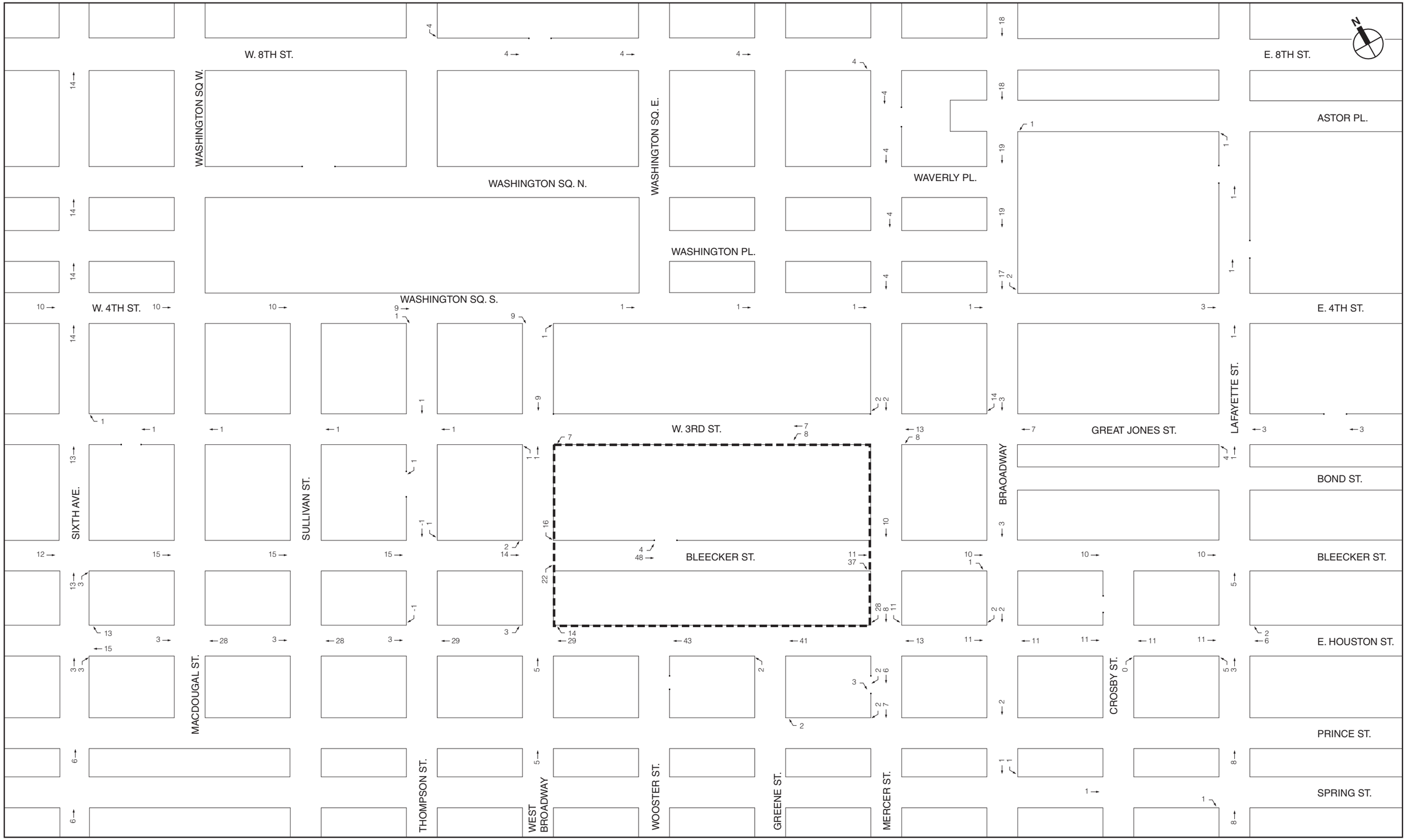
Peak Hour Vehicle Trips by Mode											
	Auto		Taxi		Delivery		Shuttle Bus		School Bus		Total
Program	In	Out	In	Out	In	Out	In	Out	In	Out	In + Out
AM Peak Hour											
Illustrative Program	73	36	27	27	9	9	10	10	2	2	205
RWCDS 1	58	1	20	20	7	7	14	14	0	0	141
RWCDS 2	**74**	**32**	**29**	**29**	**7**	**7**	**11**	**11**	**2**	2	**204**
RWCDS 3	74	36	28	28	8	8	10	10	2	2	206
Midday Peak Hour											
Illustrative Program	12	7	17	17	7	7	3	3	0	0	73
RWCDS 1	11	5	6	6	5	5	4	4	0	0	46
RWCDS 2	**16**	**10**	**28**	**28**	**7**	**7**	**3**	**3**	0	0	**102**
RWCDS 3	16	12	27	27	7	7	3	3	0	0	102
PM Peak Hour											
Illustrative Program	17	48	34	34	4	4	5	5	1	1	153
RWCDS 1	12	59	21	21	3	3	7	7	0	0	133
RWCDS 2	**16**	**51**	**43**	**43**	**4**	**4**	**5**	**5**	**1**	1	**173**
RWCDS 3	19	49	40	40	4	4	5	5	1	1	168

The projected trips associated with the Potential CPC Modifications were assigned to the transportation network to determine its potential impacts and how they compare to those determined for the Proposed Actions. The 2021 and 2031 AM, midday, and PM peak hour incremental vehicle trip assignments are shown in **Figures 26-15** to **26-17** and **26-18** to **26-20**, respectively. The corresponding peak hour incremental pedestrian trip assignments are shown in **Figures 26-21** to **26-23** and **26-24** to **26-26**, respectively.

TRANSPORTATION IMPACT ASSESSMENT

As discussed above and presented in **Table 26-16**, the reduction in academic space would result in higher trip rates for that use. Since NYU will undertake other development projects in the area independent of the Proposed Actions or the Potential CPC Modifications and provide additional academic space that contribute to the University's total academic space inventory, the aforementioned changes in trip rates would also result in slight changes to trip-making

5.24.12



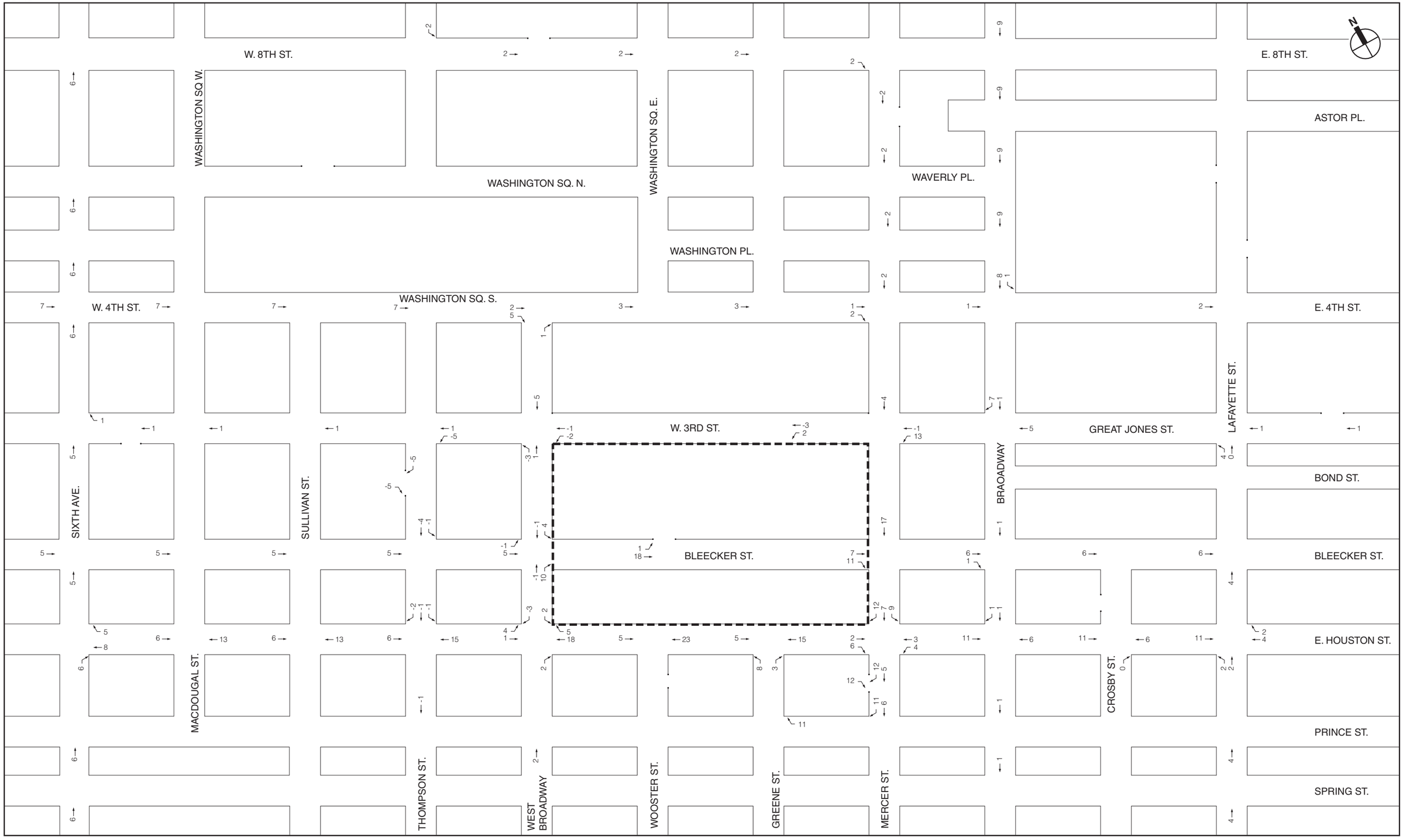
NOT TO SCALE

Project Area Boundary

NOTE: Garage Entrance/Exit on West 3rd Street and Bleecker Street

Potential CPC Modifications—2021 Net Incremental Vehicle Trips
Weekday AM Peak Hour
Figure 26-15

5.24.12



NOT TO SCALE

Project Area Boundary

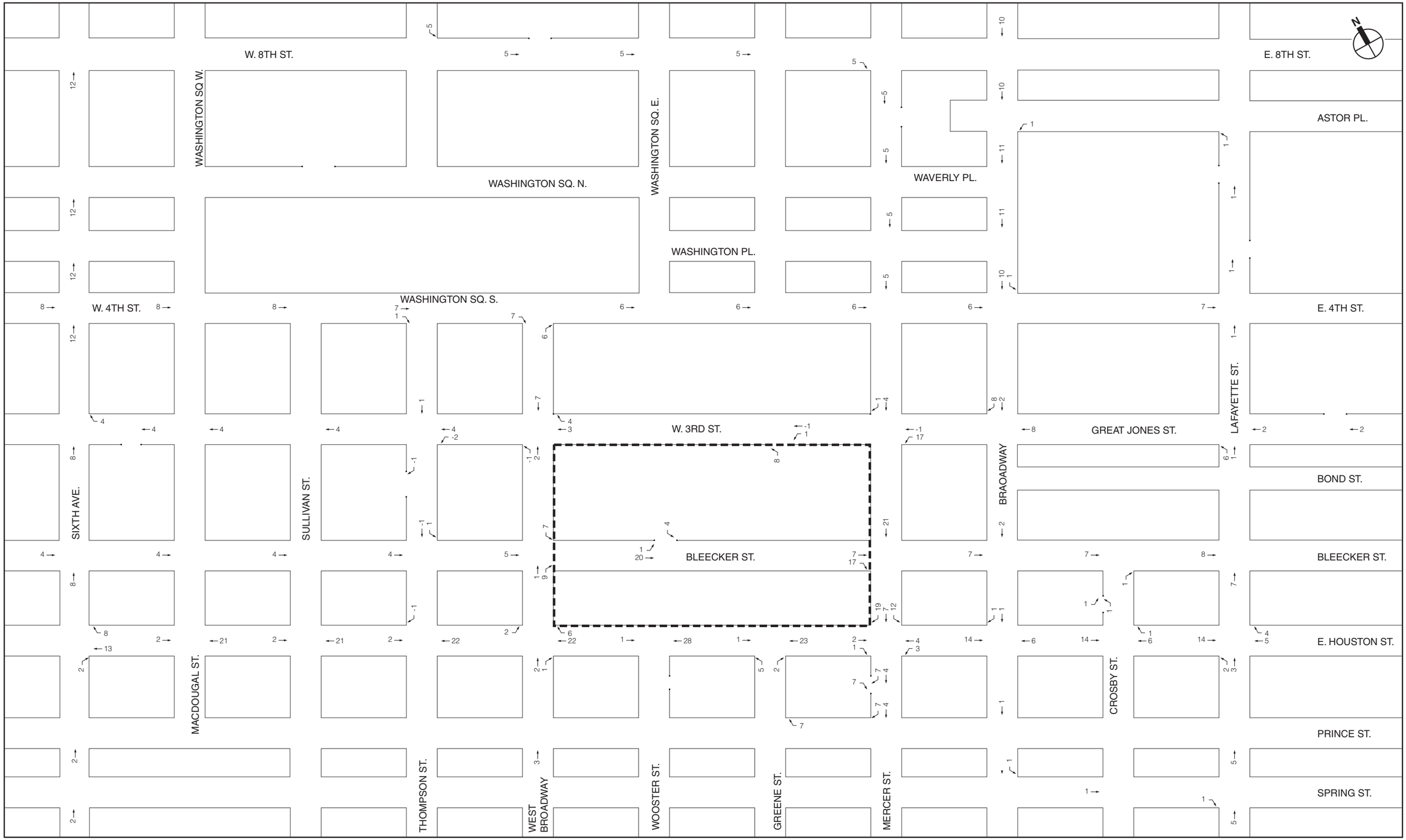
NOTE: Garage Entrance/Exit on West 3rd Street and Bleecker Street

Potential CPC Modifications—2021 Net Incremental Vehicle Trips
Weekday Midday Peak Hour

Figure 26-16

NYU Core

5.24.12



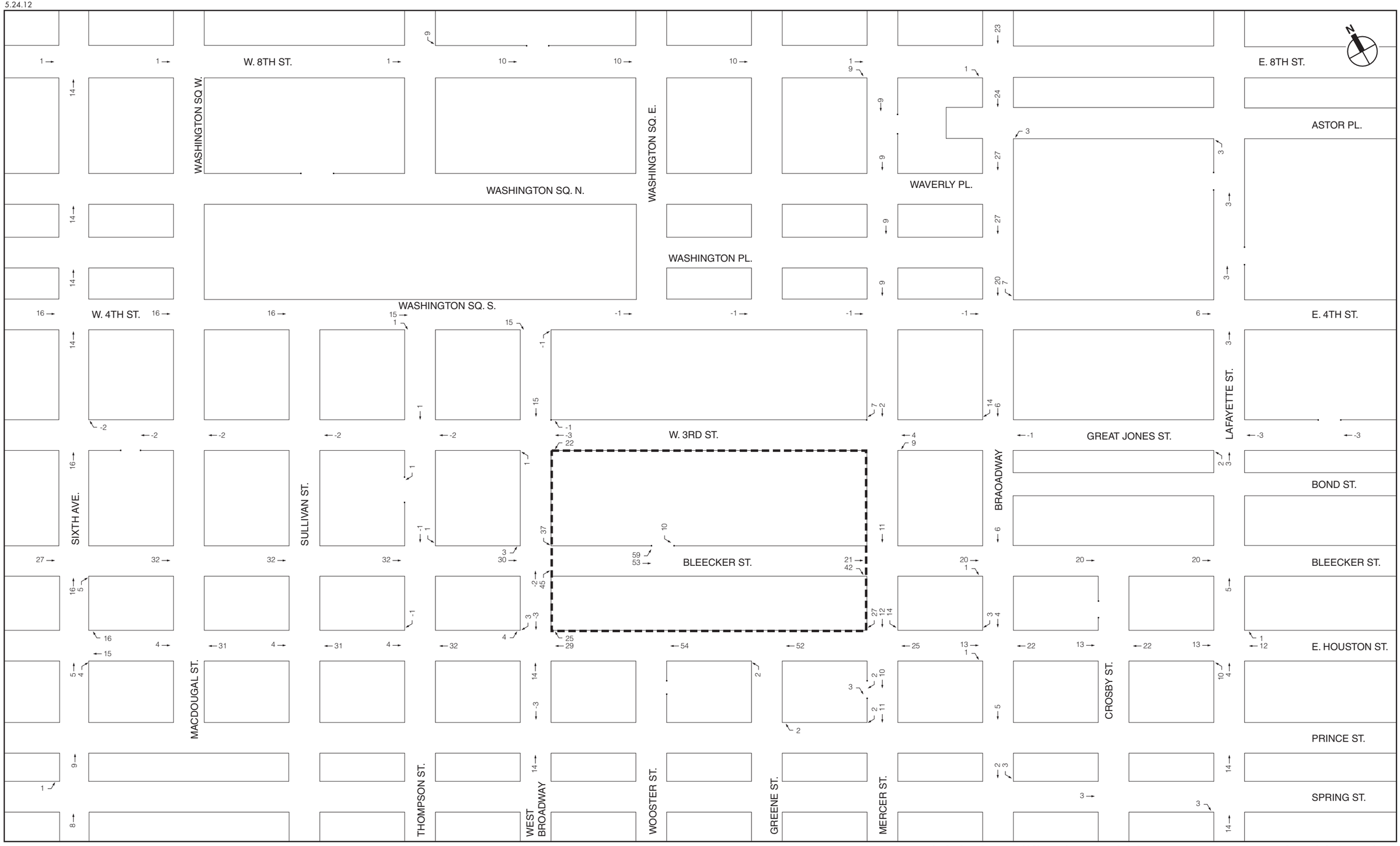
NOT TO SCALE

Project Area Boundary

NOTE: Garage Entrance/Exit on West 3rd Street and Bleecker Street

Potential CPC Modifications—2021 Net Incremental Vehicle Trips
Weekday PM Peak Hour
Figure 26-17

5.24.12



NOT TO SCALE

Project Area Boundary

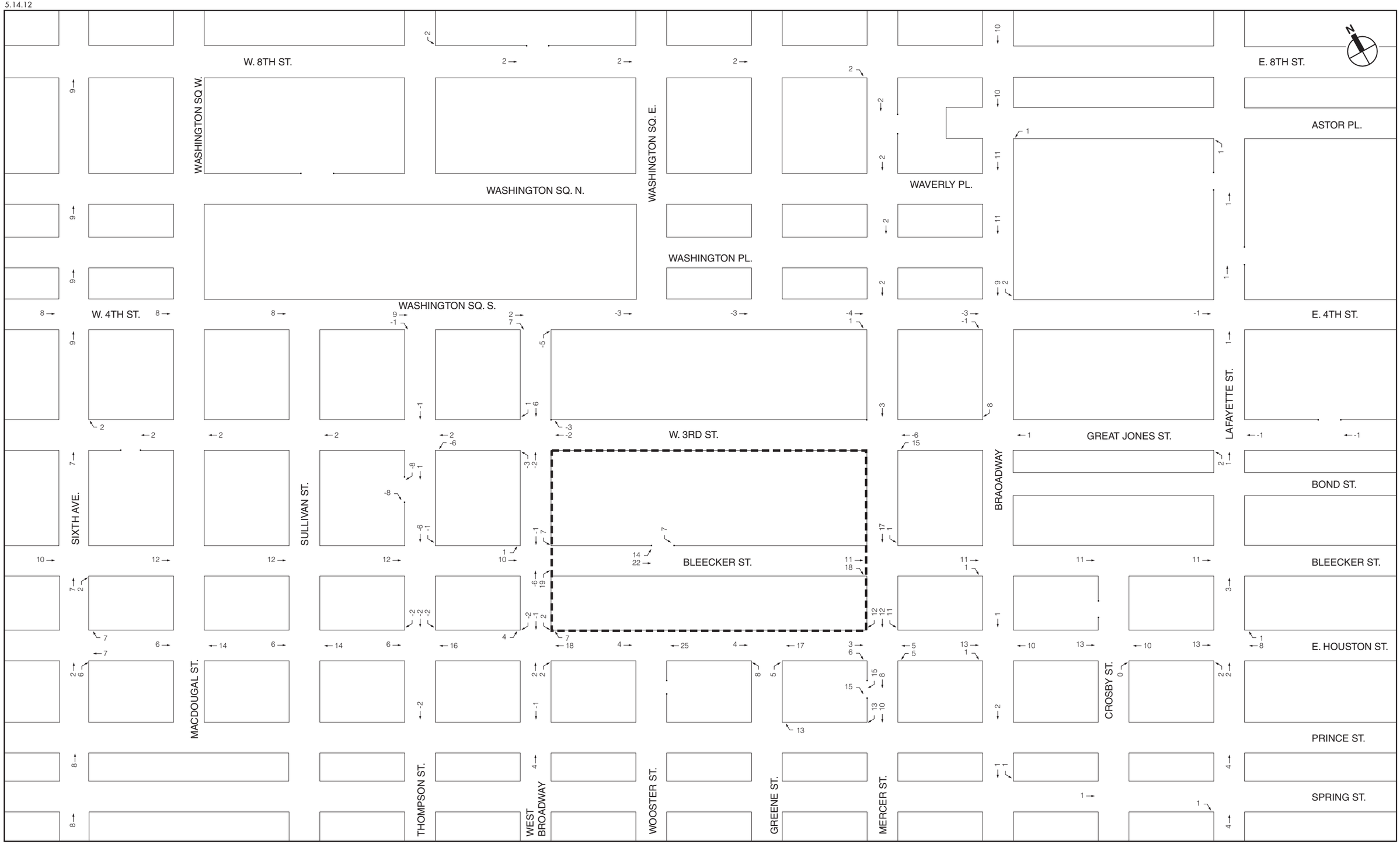
NOTE: Garage Entrance/Exit on Bleecker Street Only

Potential CPC Modifications—2031 Net Incremental Vehicle Trips
Weekday AM Peak Hour

Figure 26-18

NYU Core

5.14.12



NOT TO SCALE

Project Area Boundary

NOTE: Garage Entrance/Exit on Bleecker Street Only

Potential CPC Modifications—2031 Net Incremental Vehicle Trips
Weekday Midday Peak Hour
Figure 26-19

5.24.12

W. 8TH ST.

E. 8TH ST.

WASHINGTON SQ. W.

WASHINGTON SQ. E.

WASHINGTON SQ. N.

WAVERLY PL.

ASTOR PL.

WASHINGTON PL.

WASHINGTON SQ. S.

W. 4TH ST.

E. 4TH ST.

LAFAYETTE ST.

W. 3RD ST.

GREAT JONES ST.

BROADWAY

BOND ST.

SIXTH AVE.

SULLIVAN ST.

BLEECKER ST.

E. HOUSTON ST.

MACDOUGAL ST.

CROSBY ST.

PRINCE ST.

THOMPSON ST.

WEST BROADWAY

WOOSTER ST.

GREENE ST.

MERCER ST.

SPRING ST.

NOT TO SCALE

Project Area Boundary

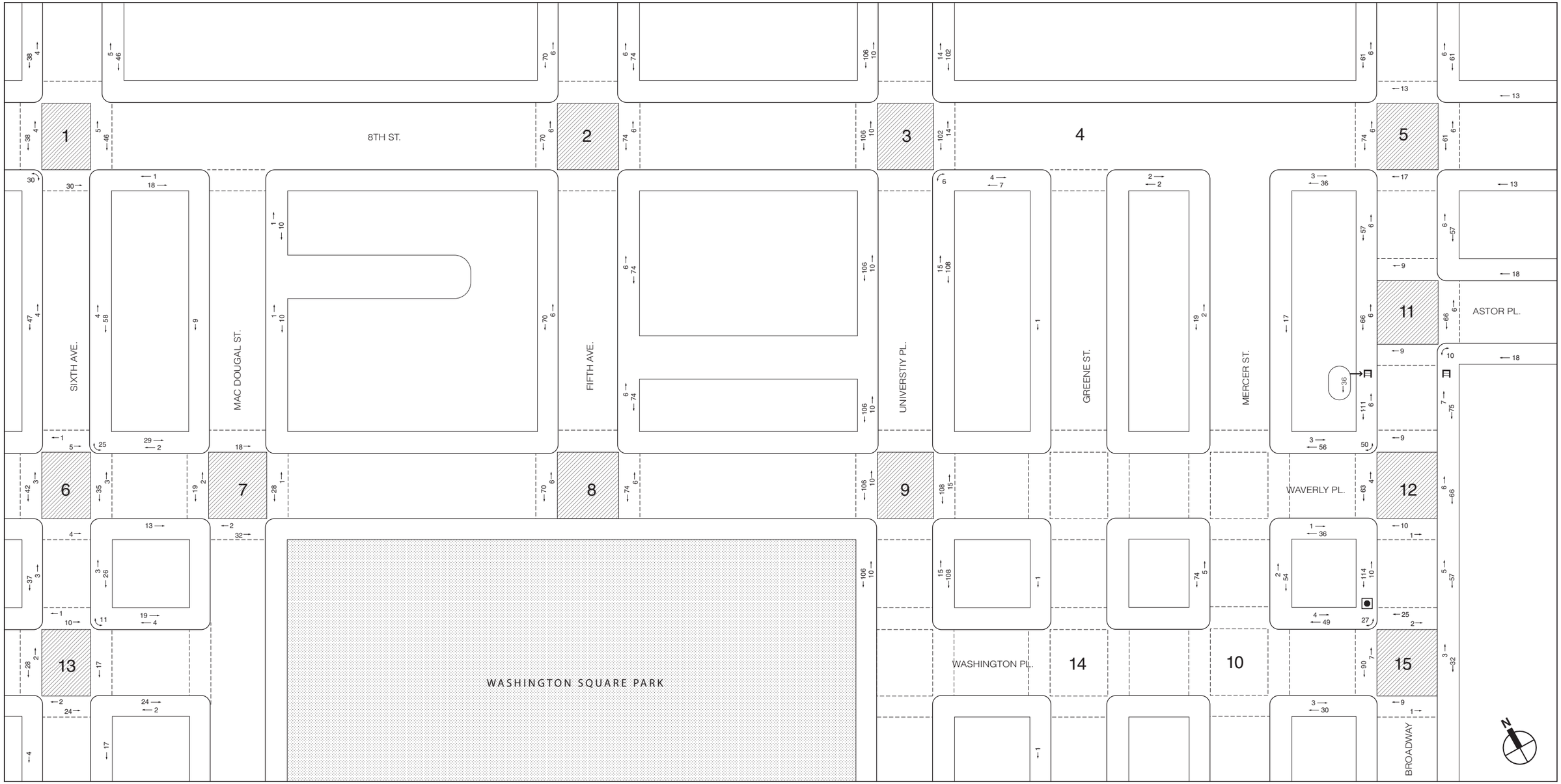
NOTE: Garage Entrance/Exit on Bleecker Street Only

Potential CPC Modifications—2031 Net Incremental Vehicle Trips
Weekday PM Peak Hour

Figure 26-20

NYU Core

5.24.12



Subway Stairs

Existing NYU Shuttle Stop

Signalized Intersection

NOT TO SCALE

NYU Core

2021 Potential CPC Modifications—Net Incremental Pedestrian Volumes
Weekday AM Peak Hour
Figure 26-21A

5.24.12

WASHINGTON SQUARE PARK

16 W. 4TH ST. 17 18 19 20 21 E. 4TH ST.

22 W. 3RD ST. 23 24 25 26 27 28 GREAT JONES ST.

29 BOND ST.

30 BLEECKER ST. 31 32 33 34 35 36 BLEECKER ST.

37 W. HOUSTON ST. 38 39 40 41 42 43 44 E. HOUSTON ST.

45 46 PRINCE ST.

SIXTH AVE. MAC DOUGAL ST. SULLIVAN ST. THOMPSON ST. LAGUARDIA ST. WOOSTER ST. GREENE ST. MERCER ST. BROADWAY

N

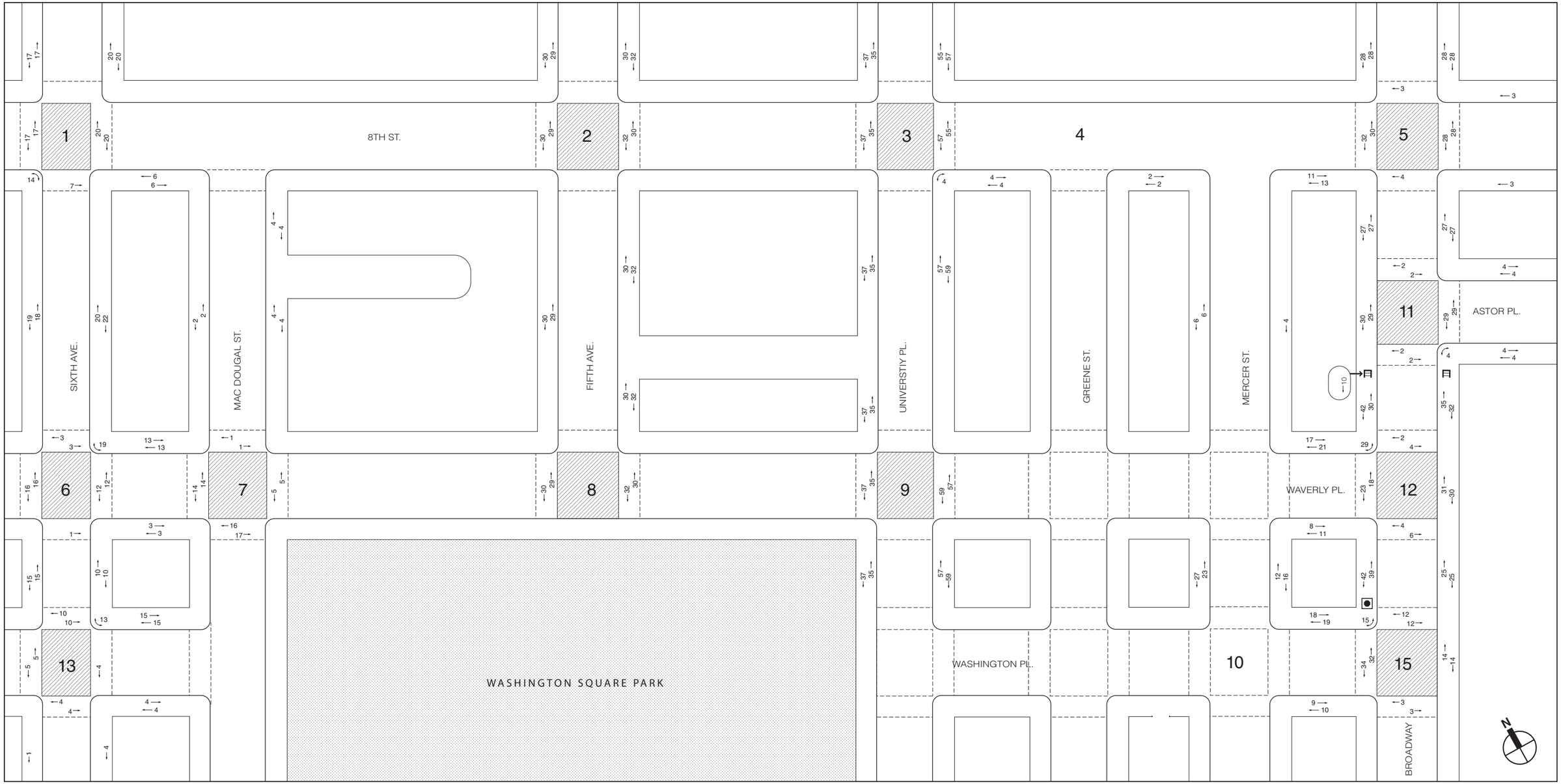
NOT TO SCALE

Project Area Boundary Subway Stairs Signalized Intersection

2021 Potential CPC Modifications—Net Incremental Pedestrian Volumes
Weekday AM Peak Hour
Figure 26-21B

NYU Core

5.24.12



Subway Stairs

Existing NYU Shuttle Stop

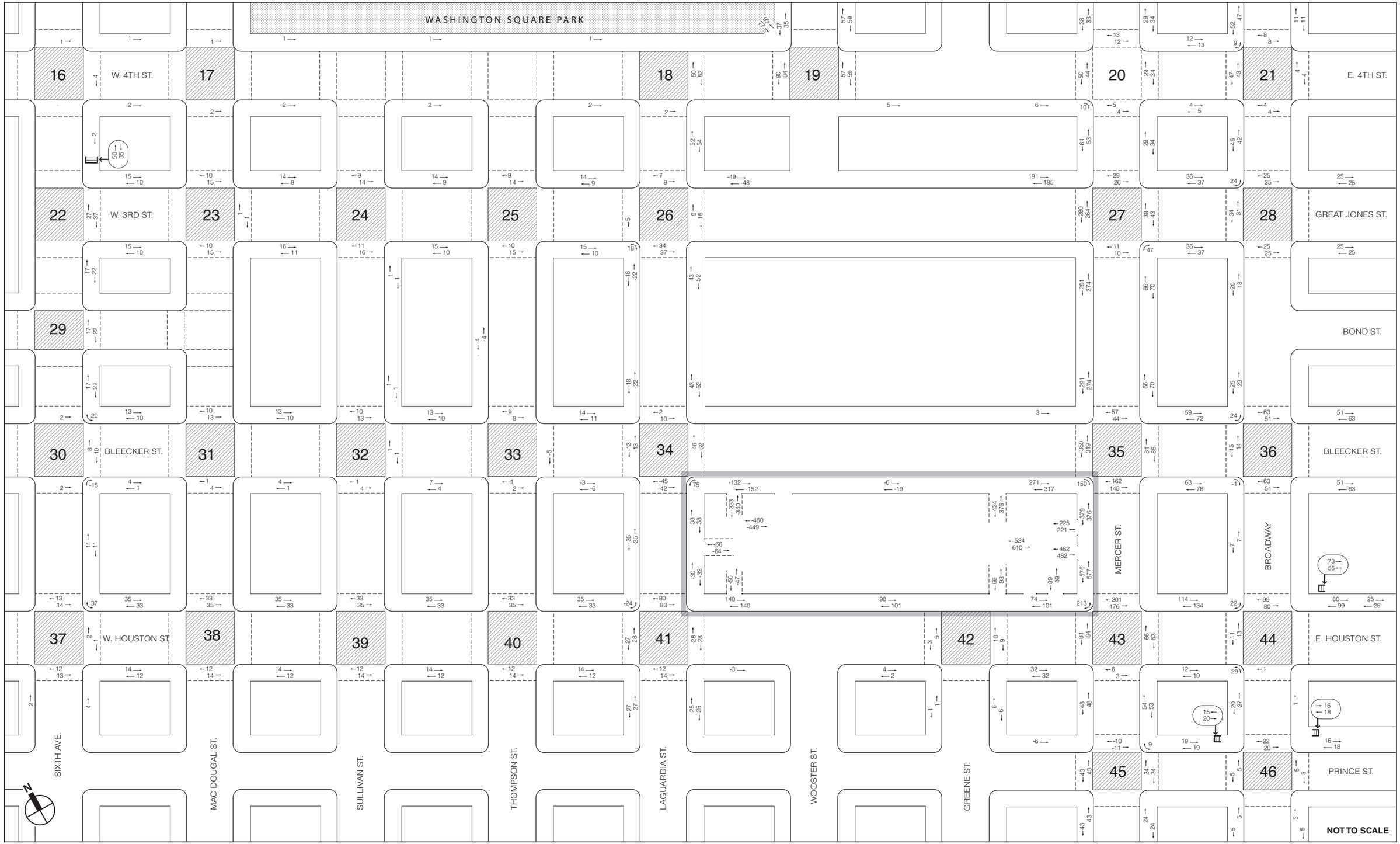
Signalized Intersection

NOT TO SCALE

NYU Core

2021 Potential CPC Modifications—Net Incremental Pedestrian Volumes
Weekday MD Peak Hour
Figure 26-22A

5.24.12

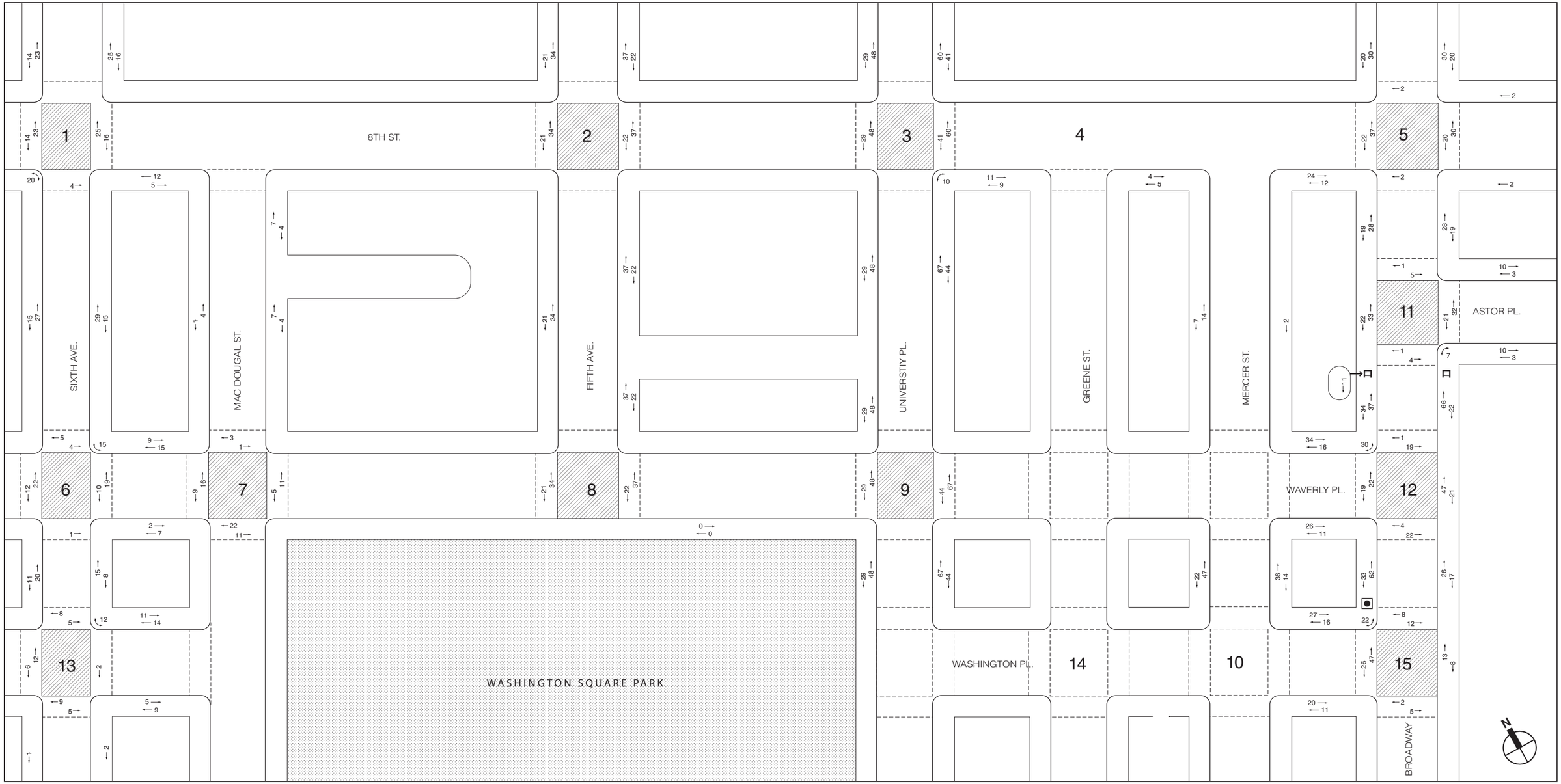


Project Area Boundary Subway Stairs Signalized Intersection

2021 Potential CPC Modifications—Net Incremental Pedestrian Volumes
Weekday MD Peak Hour
Figure 26-22B

NYU Core

5.24.12



Subway Stairs

Existing NYU Shuttle Stop

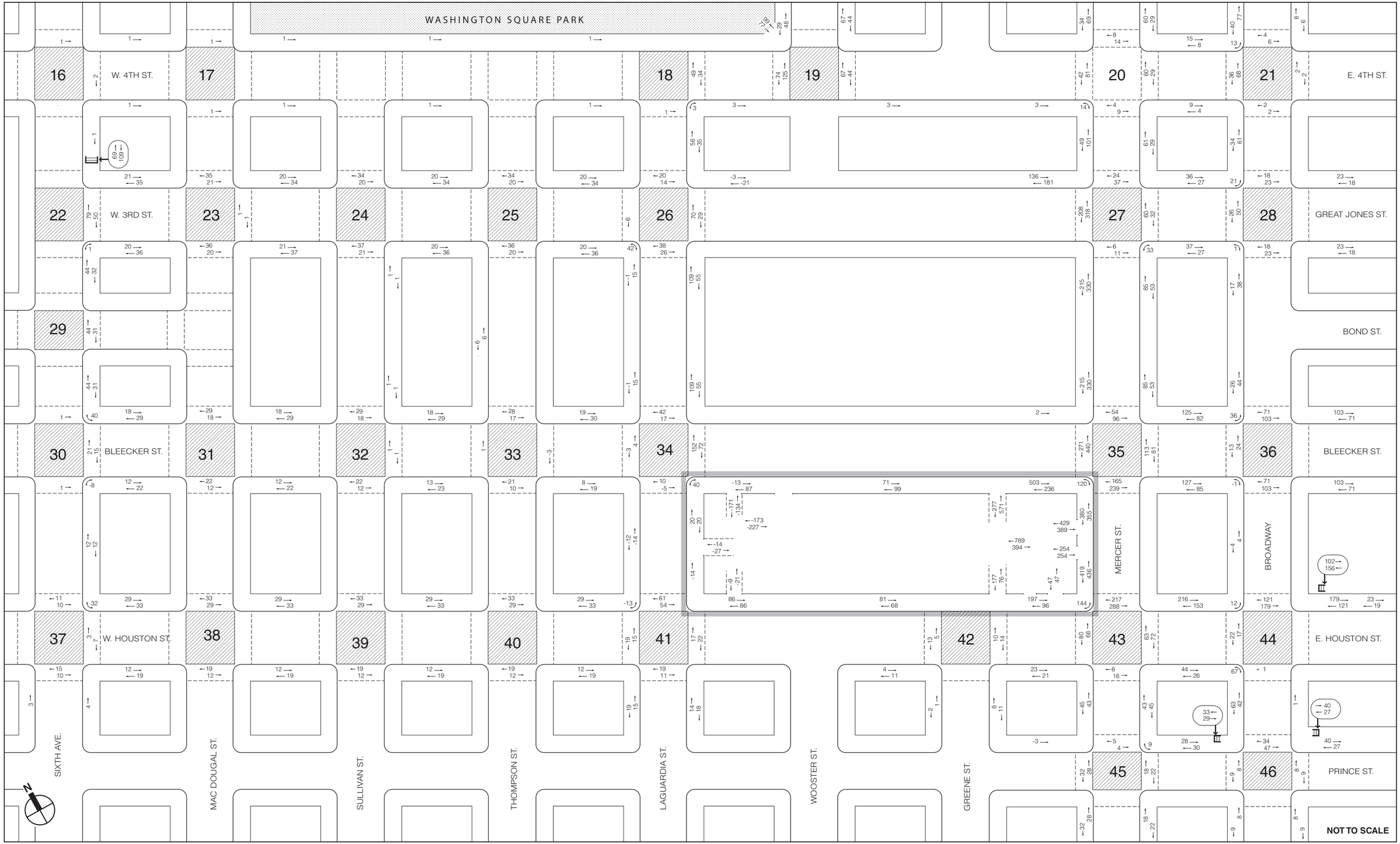
Signalized Intersection

NOT TO SCALE

2021 Potential CPC Modifications—Net Incremental Pedestrian Volumes
Weekday PM Peak Hour
Figure 26-23A

NYU Core

5.24.12

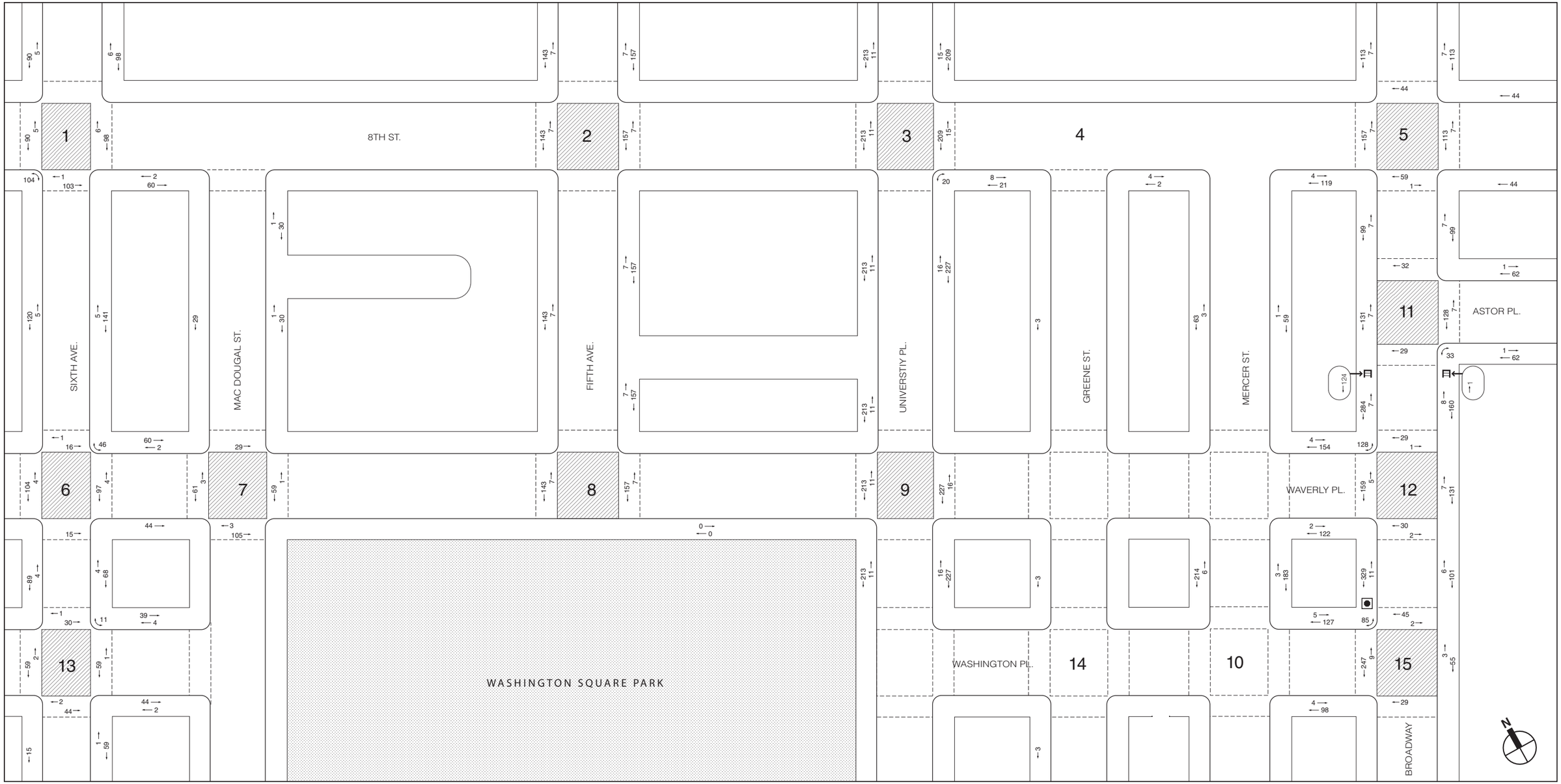


Project Area Boundary Subway Stairs Signalized Intersection

2021 Potential CPC Modifications—Net Incremental Pedestrian Volumes
Weekday PM Peak Hour
Figure 26-23B

NYU Core

5.24.12



Subway Stairs

Existing NYU Shuttle Stop

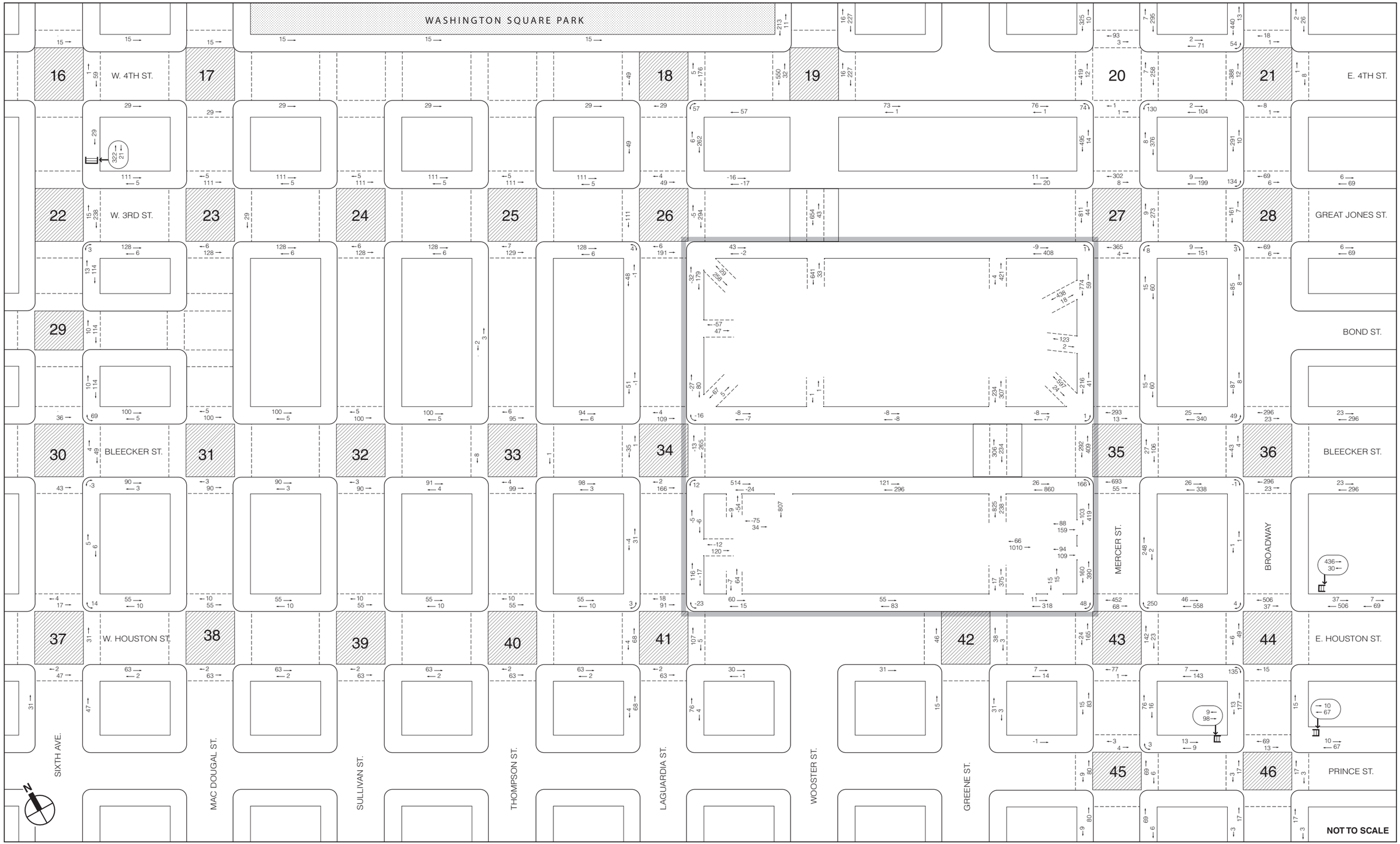
Signalized Intersection

NOT TO SCALE

Potential CPC Modifications—2031 Net Incremental Pedestrian Volumes
Weekday AM Peak Hour
Figure 26-24A

NYU Core

5.24.12

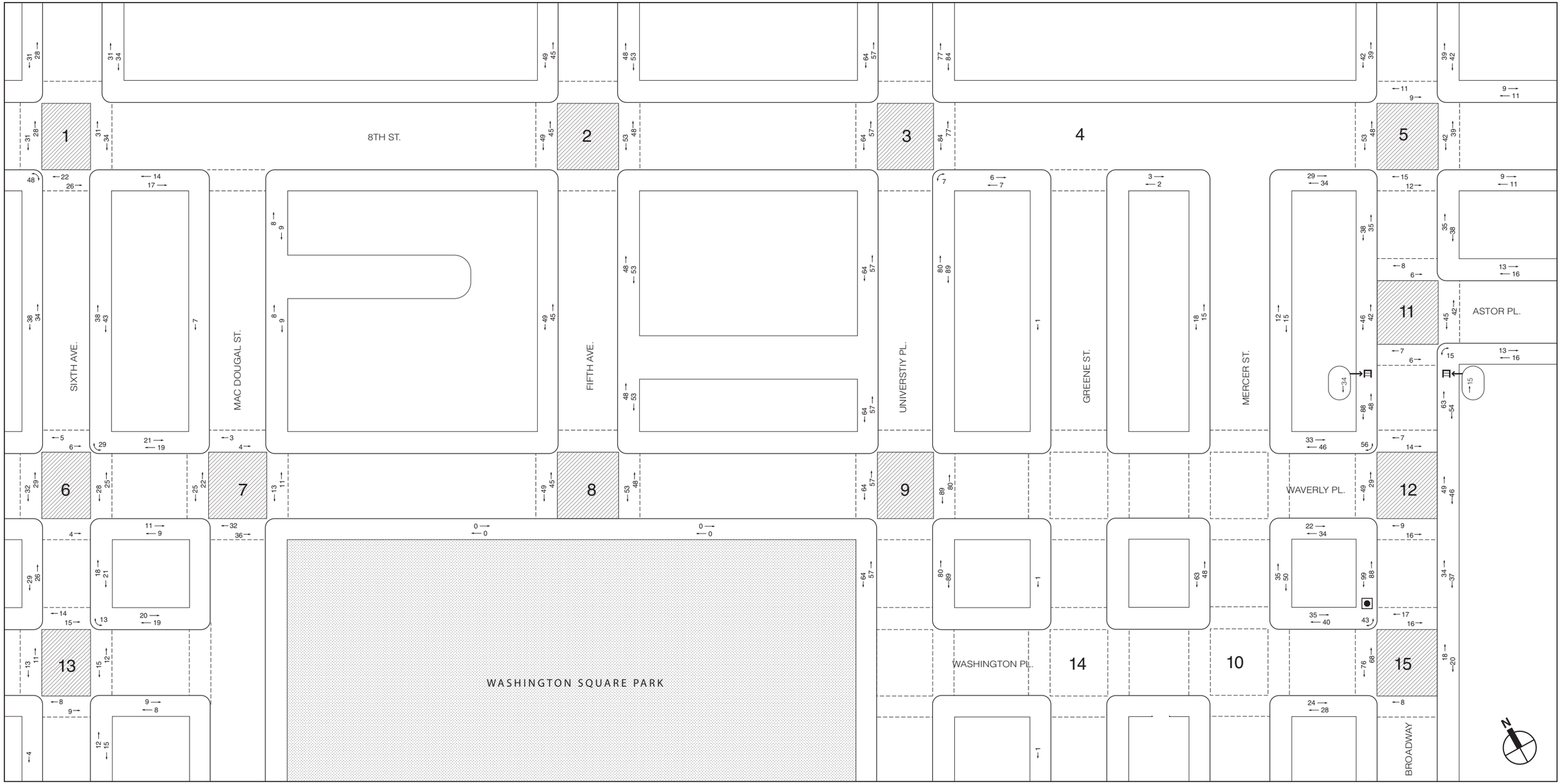


Project Area Boundary Subway Stairs Signalized Intersection

NYU Core

Potential CPC Modifications—2031 Net Incremental Pedestrian Volumes
Weekday AM Peak Hour
Figure 26-24B

5.24.12



Subway Stairs

Existing NYU Shuttle Stop

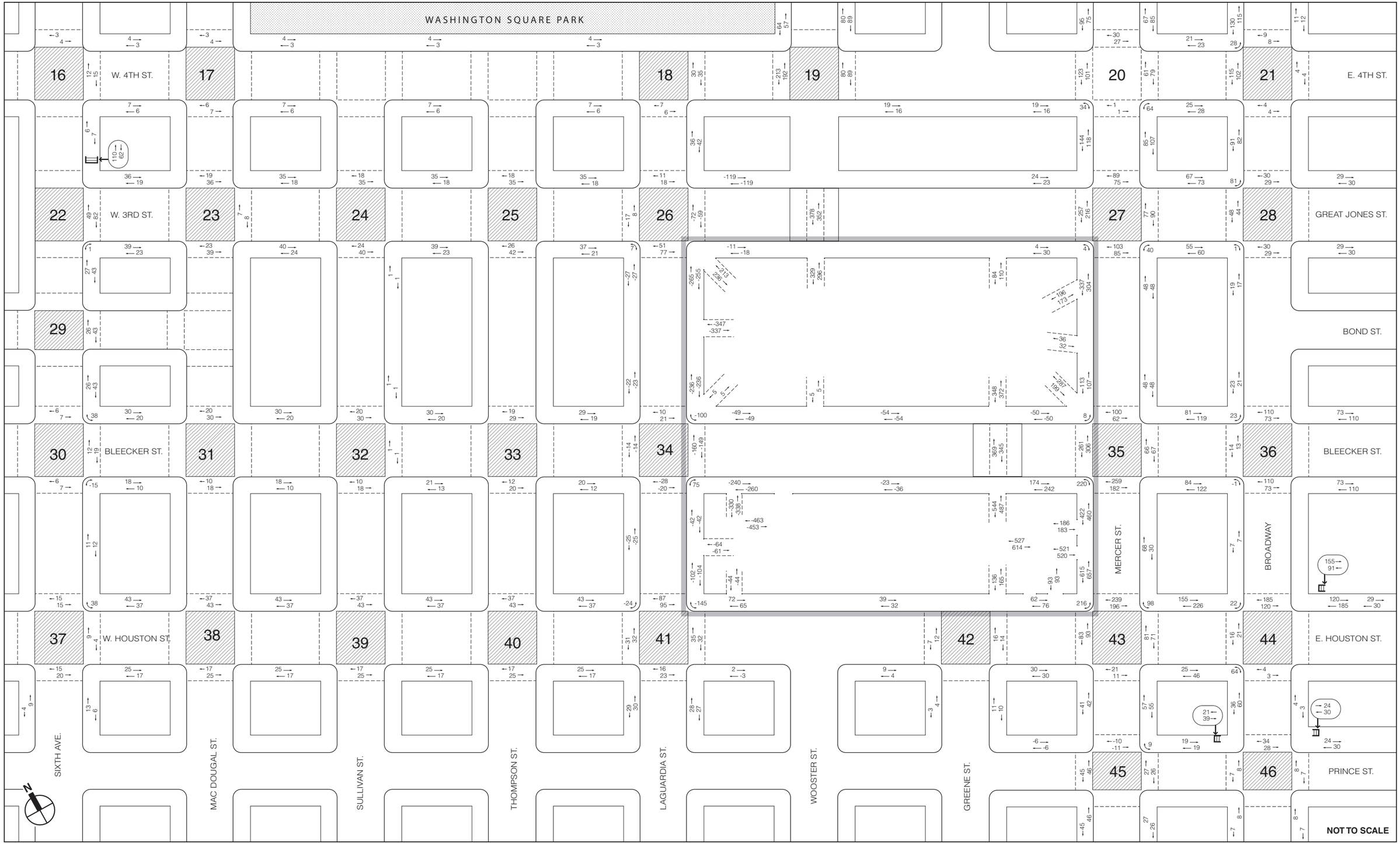
Signalized Intersection

NOT TO SCALE

Potential CPC Modifications—2031 Net Incremental Pedestrian Volumes
Weekday MD Peak Hour
Figure 26-25A

NYU Core

5.24.12

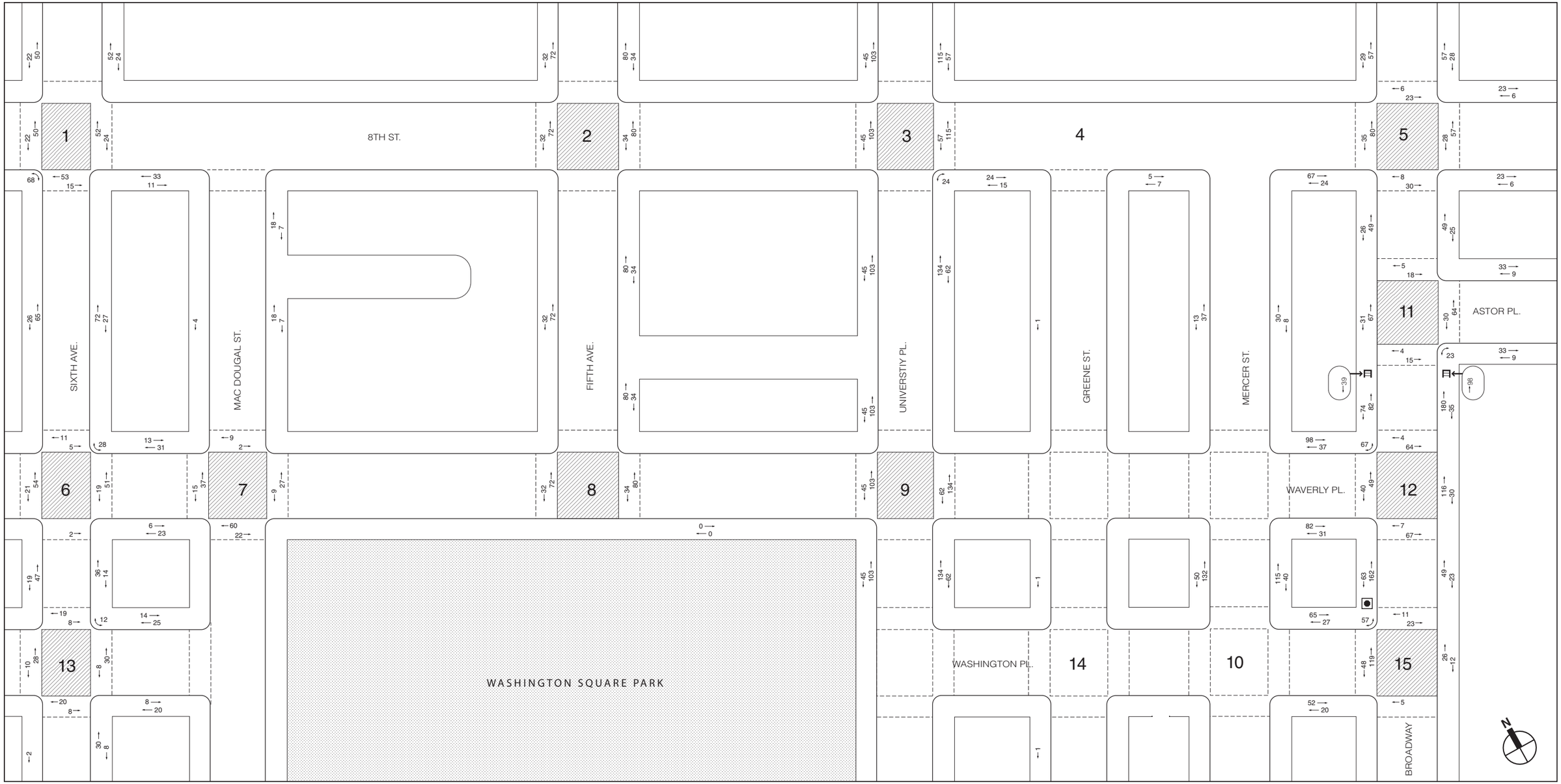


Project Area Boundary Subway Stairs Signalized Intersection

NYU Core

Potential CPC Modifications—2031 Net Incremental Pedestrian Volumes
Weekday MD Peak Hour
Figure 26-25B

5.24.12



Subway Stairs

Existing NYU Shuttle Stop

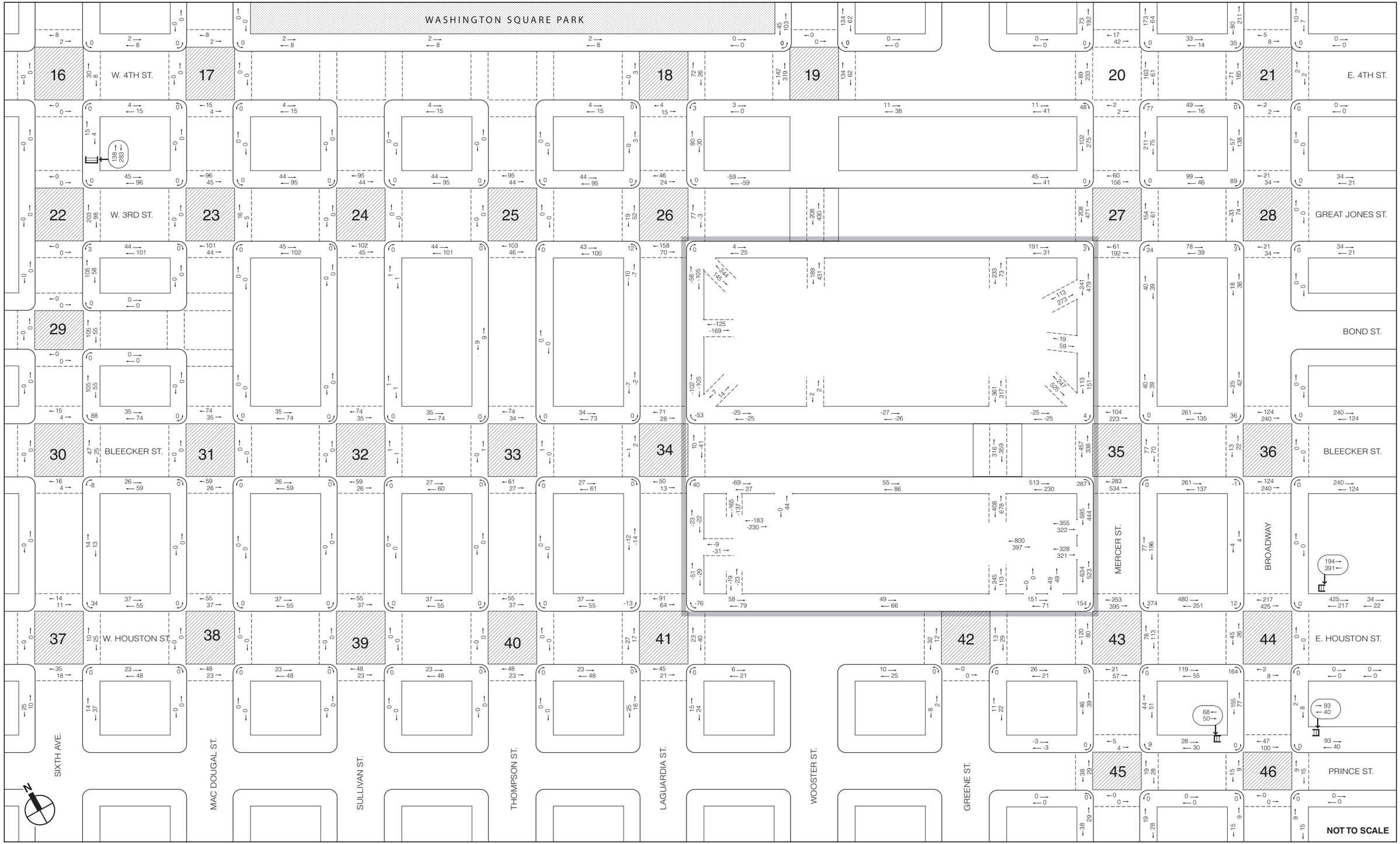
Signalized Intersection

NOT TO SCALE

NYU Core

Potential CPC Modifications—2031 Net Incremental Pedestrian Volumes
Weekday PM Peak Hour
Figure 26-26A

5.24.12



NYU Core

Potential CPC Modifications—2031 Net Incremental Pedestrian Volumes
Weekday PM Peak Hour
Figure 26-26B

associated with academic space under the future 2021 and 2031 No Build conditions. The analyses presented below account for these changes for both the No Build and Build conditions. In addition, because of the need to relocate the 389-space accessory garage access location from West 3rd Street to Bleecker Street, there would be some changes to the circulation of traffic using this on-site garage. Other trip-making patterns would be the same as those described for the Proposed Actions in Chapter 14, "Transportation." Overall, since the Potential CPC Modifications would generate smaller trip increments as compared to the Proposed Actions, its transportation-related potential impacts would generally be comparable or less than the Proposed Actions. As such, the impact assessment for the Potential CPC Modifications entails an examination of only the impacted locations identified for the Proposed Actions and of those locations, if any, incurring a greater amount of incremental trips (i.e., attributed to the change in access location to the 389-space accessory garage on the North Block).

Traffic

Comparison of 2021 Potential CPC Modifications No Build and Build Conditions

The 2021 Potential CPC Modifications No Build and Build AM, midday, and PM peak hour traffic volumes are presented in **Figures 26-27** to **26-29** and **Figures 26-30** to **26-32**, respectively. Since the 2021 overall incremental traffic at the analyzed study area intersections would be lower with the Potential CPC Modifications as compared to the Proposed Actions, only intersections identified to incur significant adverse impacts from the Proposed Actions were analyzed for the Potential CPC Modifications, as presented in **Table 26-22** and discussed below.

With the Potential CPC Modifications, significant adverse traffic impacts were identified at two approaches/lane groups (of two intersections). These impact findings show that there would be one and two fewer impacted intersections during the weekday AM and PM peak hours, respectively, than those determined for the Proposed Actions. Potential measures that can be implemented to mitigate these significant adverse traffic impacts are discussed in "Mitigation" below.

- The northbound right-turn at the signalized intersection of West Houston Street/LaGuardia Place/West Broadway would deteriorate from LOS D (v/c ratio of 0.82 and 49.1 spv of delay) to LOS E (v/c ratio of 0.89 and 59.4 spv of delay), an increase in delay of more than five seconds, during the midday peak hour. This projected increase in delay constitutes a significant adverse impact.
- The eastbound approach at the signalized intersection of Bleecker Street/Mercer Street would deteriorate from LOS C (v/c ratio of 0.78 and 32.2 spv of delay) to LOS D (v/c ratio of 0.95 and 54.9 spv of delay), from LOS E (v/c ratio of 1.00 and 66.4 spv of delay) to LOS F (v/c ratio of 1.07 and 87.8 spv of delay), and within LOS F (from a v/c ratio of 1.08 and 89.5 spv of delay to a v/c ratio of 1.20 and 132.5 spv of delay), increases in delay of more than five, four, and three seconds, during the AM, midday, and PM peak hours, respectively. These projected increases in delay constitute significant adverse impacts.

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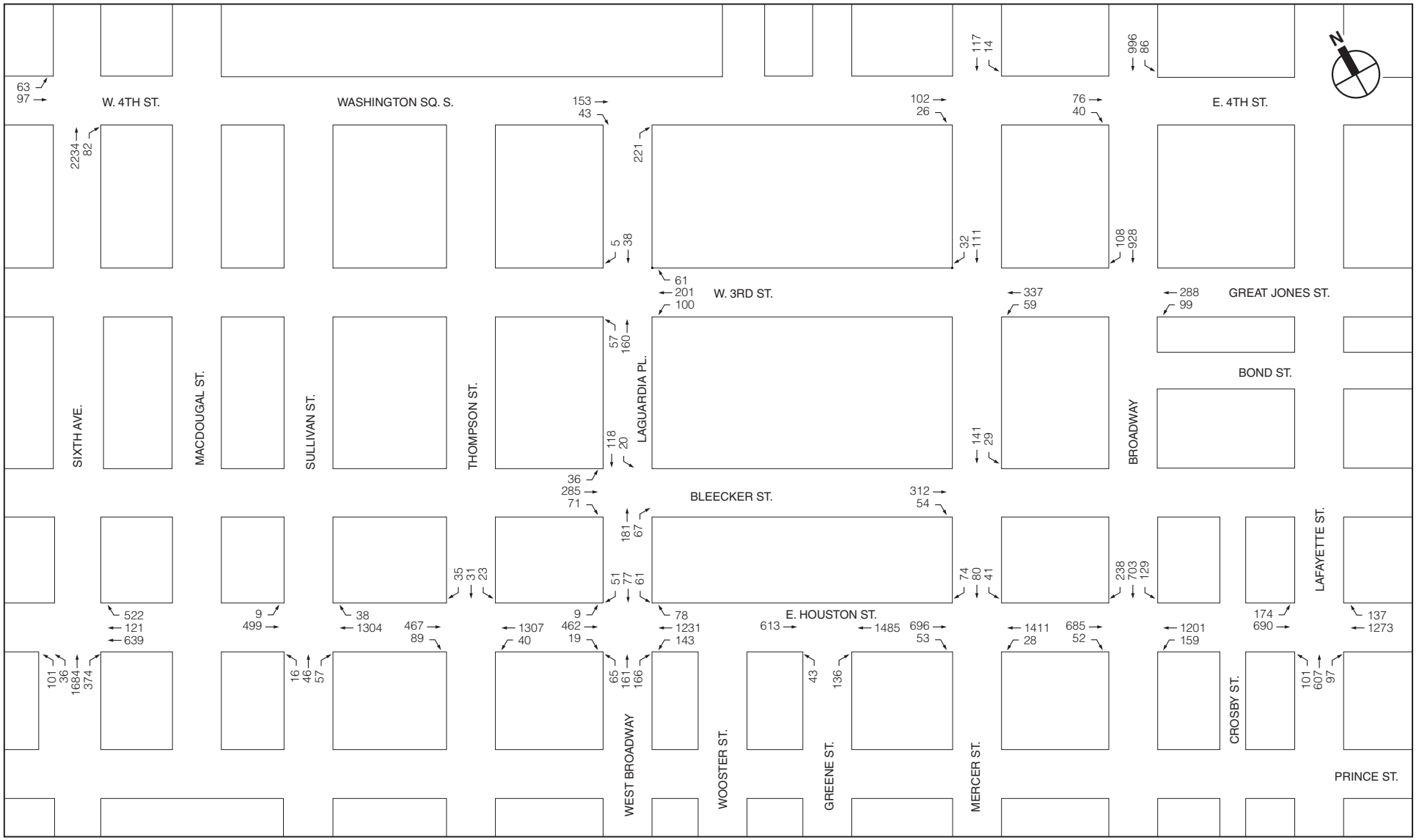


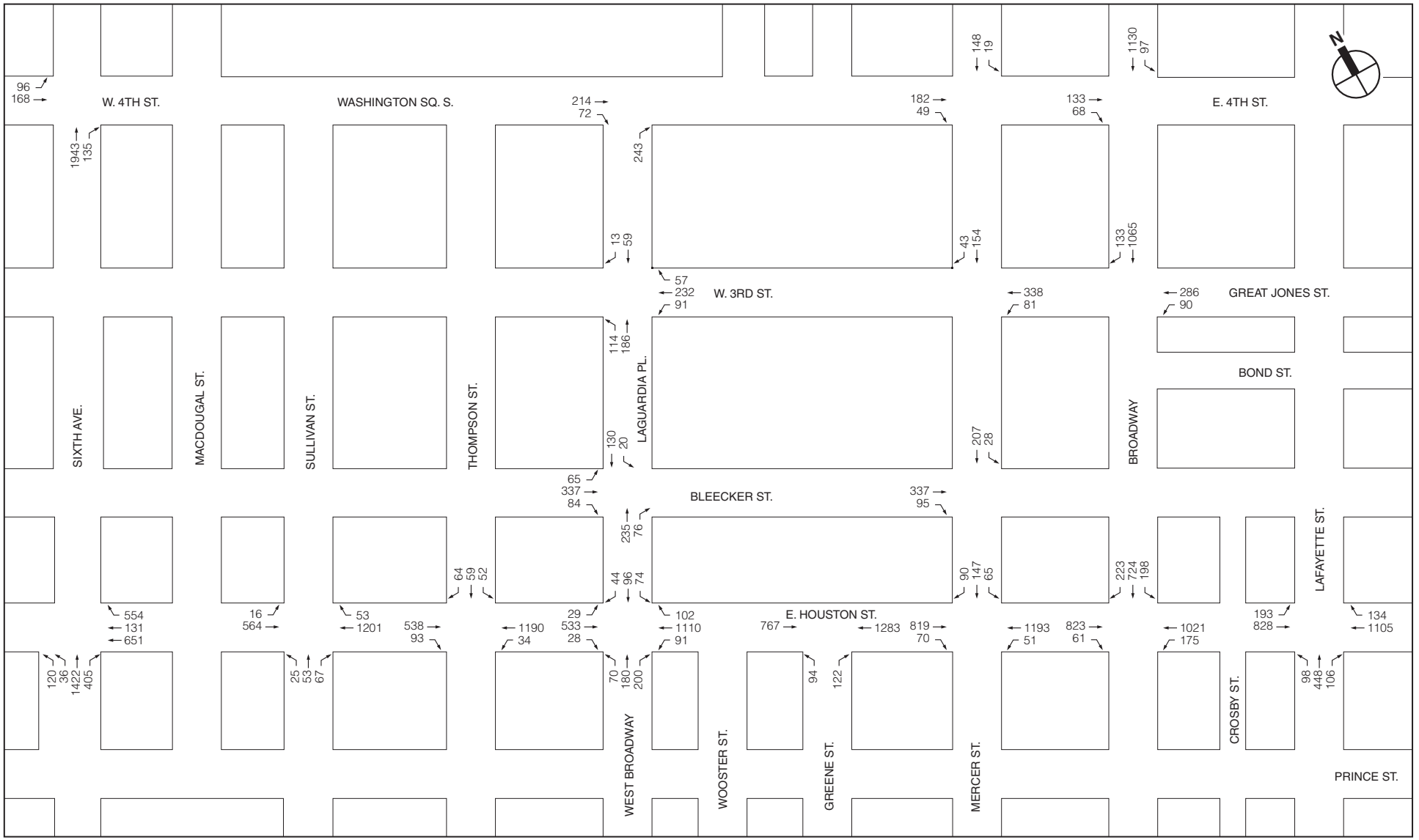
NOT TO SCALE

Potential CPC Modifications—2021 No Build Traffic Volumes
Weekday AM Peak Hour

NYU Core

Figure 26-27

5.24.12

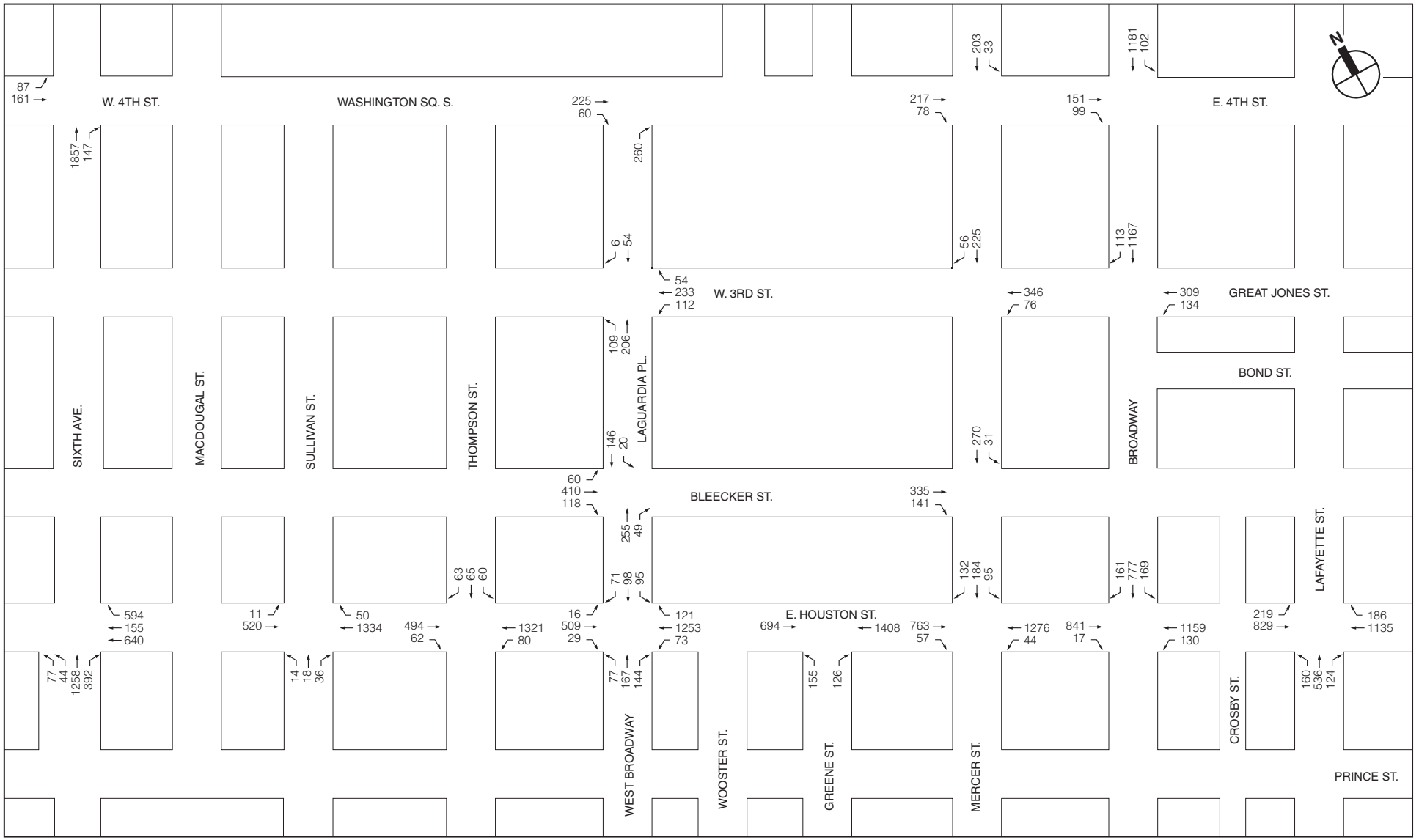


NOT TO SCALE

Potential CPC Modifications—2021 No Build Traffic Volumes
Weekday Midday Peak Hour
Figure 26-28

NYU Core

5.24.12

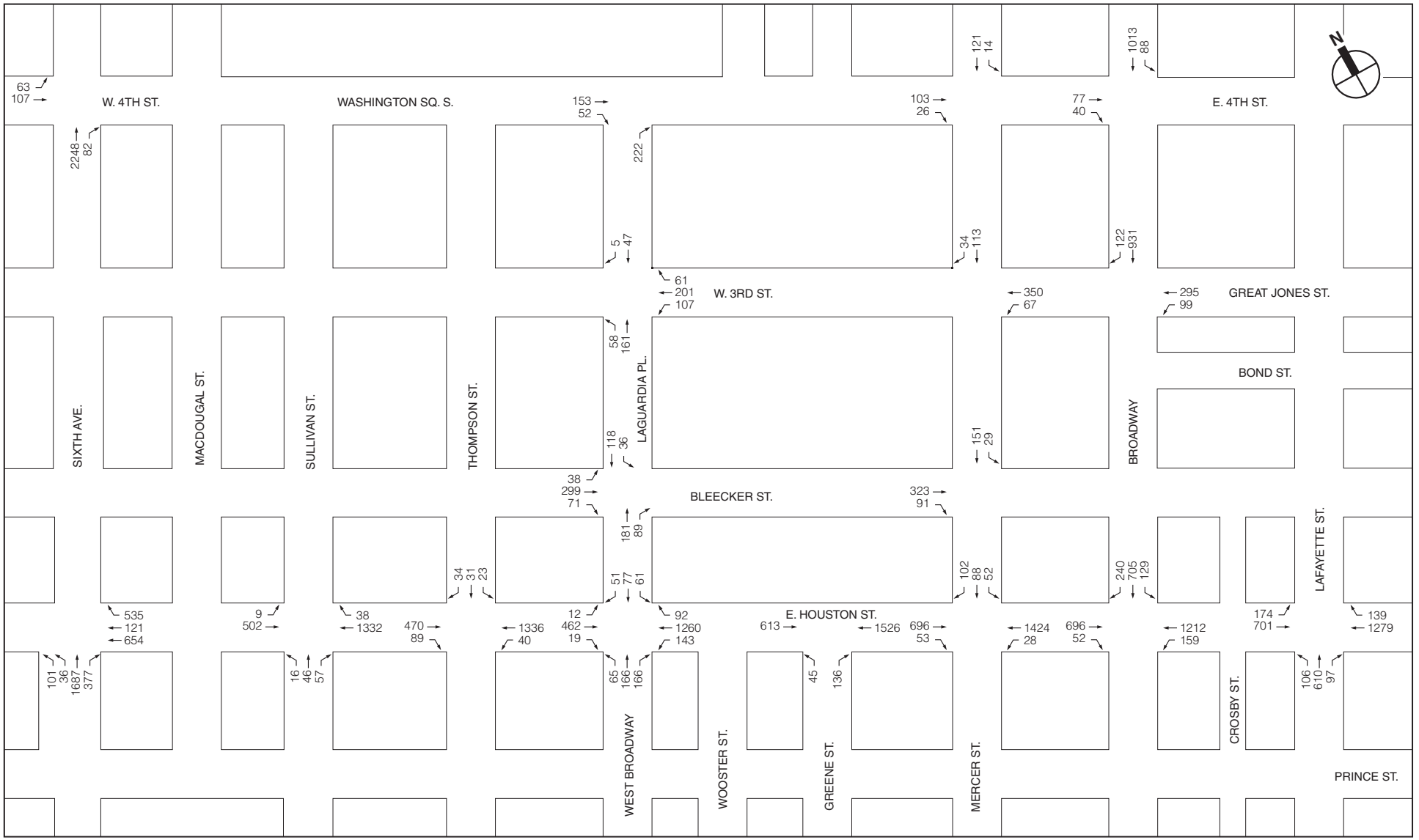


NOT TO SCALE

Potential CPC Modifications—2021 No Build Traffic Volumes
Weekday PM Peak Hour
Figure 26-29

NYU Core

5.24.12

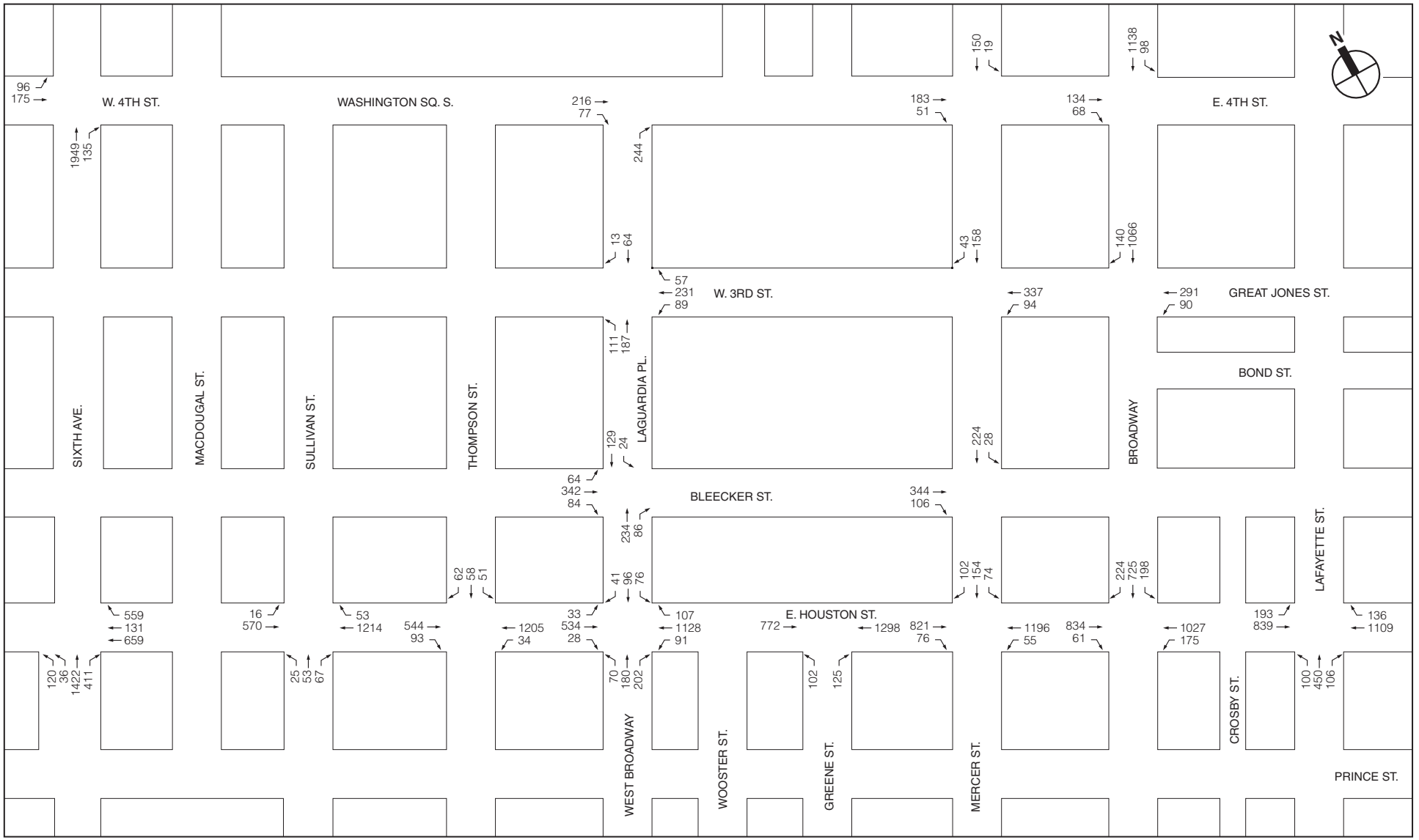


NOT TO SCALE

Potential CPC Modifications—2021 Build Traffic Volumes
Weekday AM Peak Hour
Figure 26-30

NYU Core

5.24.12



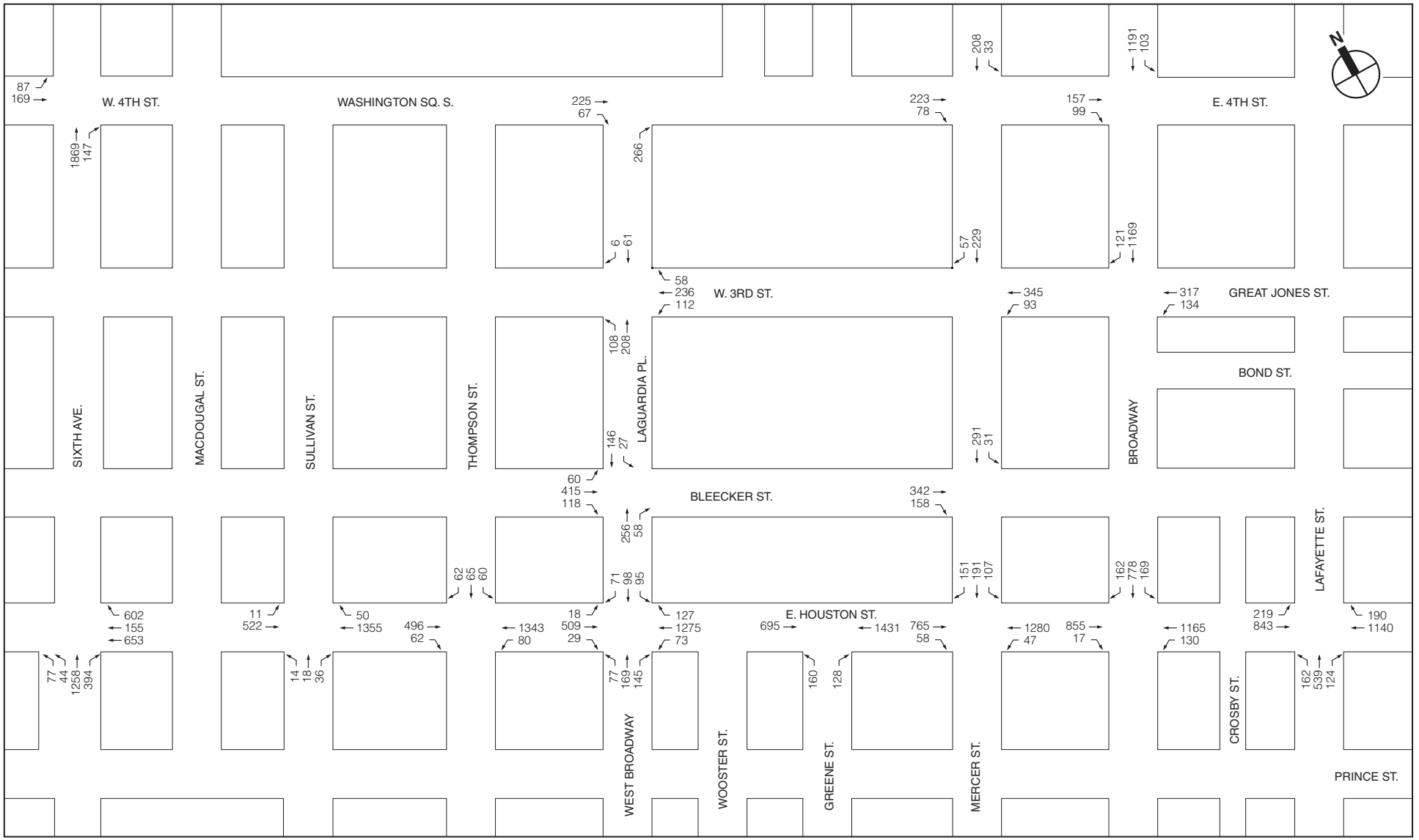
NOT TO SCALE

Potential CPC Modifications—2021 Build Traffic Volumes
Weekday Midday Peak Hour

NYU Core

Figure 26-31

5.24.12



NOT TO SCALE

Potential CPC Modifications—2021 Build Traffic Volumes
Weekday PM Peak Hour
Figure 26-32

NYU Core

Table 26-22
2021 Potential CPC Modifications No Build and Build Conditions Level of Service Analysis
Signalized Intersections

	AM									Midday									PM								
	2021 No Build				2021 Build					2021 No Build				2021 Build					2021 No Build				2021 Build				
Intersection	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS		Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS		Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	
West Houston Street and Sixth Avenue																											
Westbound	T	0.69	25.7	C	T	0.72	26.1	C		T	0.69	25.7	C	T	0.70	25.8	C		T	0.67	25.0	C	T	0.68	25.3	C	
	R	0.73	28.7	C	R	0.76	30.0	C		R	0.92	46.5	D	R	0.94	48.8	D		R	0.96	53.4	D	R	0.98	57.4	E	
Northbound	LTR	1.11	81.7	F	LTR	1.12	83.6	F		LTR	0.97	37.0	D	LTR	0.97	38.0	D		LTR	0.93	31.3	C	LTR	0.93	31.6	C	
	Intersection		60.3	E	Intersection		61.5	E		Intersection		35.8	D	Intersection		36.9	D		Intersection		33.9	C	Intersection		34.9	C	
West Houston Street and LaGuardia Place/West Broadway																											
Eastbound	LTR	0.64	27.0	C	LTR	0.67	27.7	C		LTR	0.78	32.3	C	LTR	0.81	34.3	C		LTR	0.62	26.5	C	LTR	0.63	26.8	C	
Westbound	L	0.88	79.2	E	L	0.88	79.2	E		L	0.53	46.8	D	L	0.53	46.8	D		L	0.39	41.5	D	L	0.39	41.5	D	
	TR	0.67	15.7	B	TR	0.69	16.2	B		TR	0.60	14.5	B	TR	0.62	14.9	B		TR	0.63	15.1	B	TR	0.65	15.4	B	
Northbound	LT	0.69	35.5	D	LT	0.71	36.6	D		LT	0.78	41.0	D	LT	0.78	41.3	D		LT	0.83	46.4	D	LT	0.83	46.6	D	
	R	0.62	33.9	C	R	0.68	38.0	D		R	0.82	49.1	D	R	0.89	59.4	E	+	R	0.64	36.1	D	R	0.65	36.8	D	
Southbound	LT	0.53	30.4	C	LT	0.55	31.3	C		LT	0.69	39.8	D	LT	0.72	42.0	D		LT	0.83	53.6	D	LT	0.84	54.6	D	
	R	0.19	22.6	C	R	0.20	22.9	C		R	0.19	22.9	C	R	0.18	22.8	C		R	0.28	24.4	C	R	0.28	24.5	C	
	Intersection		25.5	C	Intersection		26.2	C		Intersection		27.4	C	Intersection		29.0	C		Intersection		25.9	C	Intersection		26.2	C	
Bleecker Street and Mercer Street																											
Eastbound	TR	0.78	32.2	C	TR	0.95	54.9	D	+	TR	1.00	66.4	E	TR	1.07	87.8	F	+	TR	1.08	89.5	F	TR	1.20	132.5	F	+
Southbound	LT	0.31	17.4	B	LT	0.33	17.8	B		LT	0.41	18.9	B	LT	0.43	19.4	B		LT	0.56	21.7	C	LT	0.60	22.7	C	
	Intersection		27.4	C	Intersection		43.6	D		Intersection		49.9	D	Intersection		63.6	E		Intersection		62.1	E	Intersection		87.6	F	
West Houston Street and Mercer Street																											
Eastbound	TR	0.43	14.9	B	TR	0.43	14.9	B		TR	0.50	15.9	B	TR	0.50	16.0	B		TR	0.46	15.3	B	TR	0.46	15.3	B	
Westbound	L	0.18	14.5	B	L	0.18	14.6	B		L	0.37	20.5	C	L	0.41	22.1	C		L	0.33	18.9	B	L	0.35	19.6	B	
	T	0.78	21.5	C	T	0.79	21.7	C		T	0.65	18.3	B	T	0.65	18.3	B		T	0.76	20.9	C	T	0.76	20.9	C	
Southbound	LTR	0.40	21.9	C	LTR	0.54	25.0	C		LTR	0.62	26.8	C	LTR	0.72	31.1	C		LTR	0.73	31.2	C	LTR	0.84	39.1	D	
	Intersection		19.4	B	Intersection		19.9	B		Intersection		18.6	B	Intersection		19.4	B		Intersection		20.6	C	Intersection		22.1	C	

Notes: L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn; LOS = Level of Service
+ Denotes a significant adverse traffic impact

Comparison of 2031 Potential CPC Modifications No Build and Build Conditions

The 2031 Potential CPC Modifications No Build and Build AM, midday, and PM peak hour traffic volumes are presented in **Figures 26-33** to **26-35** and **Figures 26-36** to **26-38**, respectively. The 2031 overall incremental traffic would be lower with the Potential CPC Modifications as compared to the Proposed Actions. However, due to the relocation of the 389-space accessory garage access location from West 3rd Street to Bleecker Street with the Potential CPC Modifications, changes to the circulation of traffic using this on-site garage resulted in increases at some of the analyzed intersections (specifically at the Bleecker Street intersections of LaGuardia Place and Mercer Street) as compared to the Proposed Actions. Therefore, these intersections together with those identified to incur significant adverse impacts from the Proposed Actions were analyzed for the Potential CPC Modifications, as presented in **Table 26-23** and discussed below.

With the Potential CPC Modifications, significant adverse traffic impacts were identified at five approaches/lane groups (of five intersections). These impact findings show that there would be one to four fewer impacted intersections during the three analyzed peak hours than those determined for the Proposed Actions. The analysis results also show that the change in access location to the accessory garage on the North Block from West 3rd Street to Bleecker Street, in combination with the reduced development program, would not yield conditions worse than those described for the Proposed Actions. The relocated garage access location would essentially function similarly to the current access and egress on Bleecker Street to the existing public parking garage on the North Block. Potential measures that can be implemented to mitigate the above significant adverse traffic impacts are discussed in "Mitigation" below.

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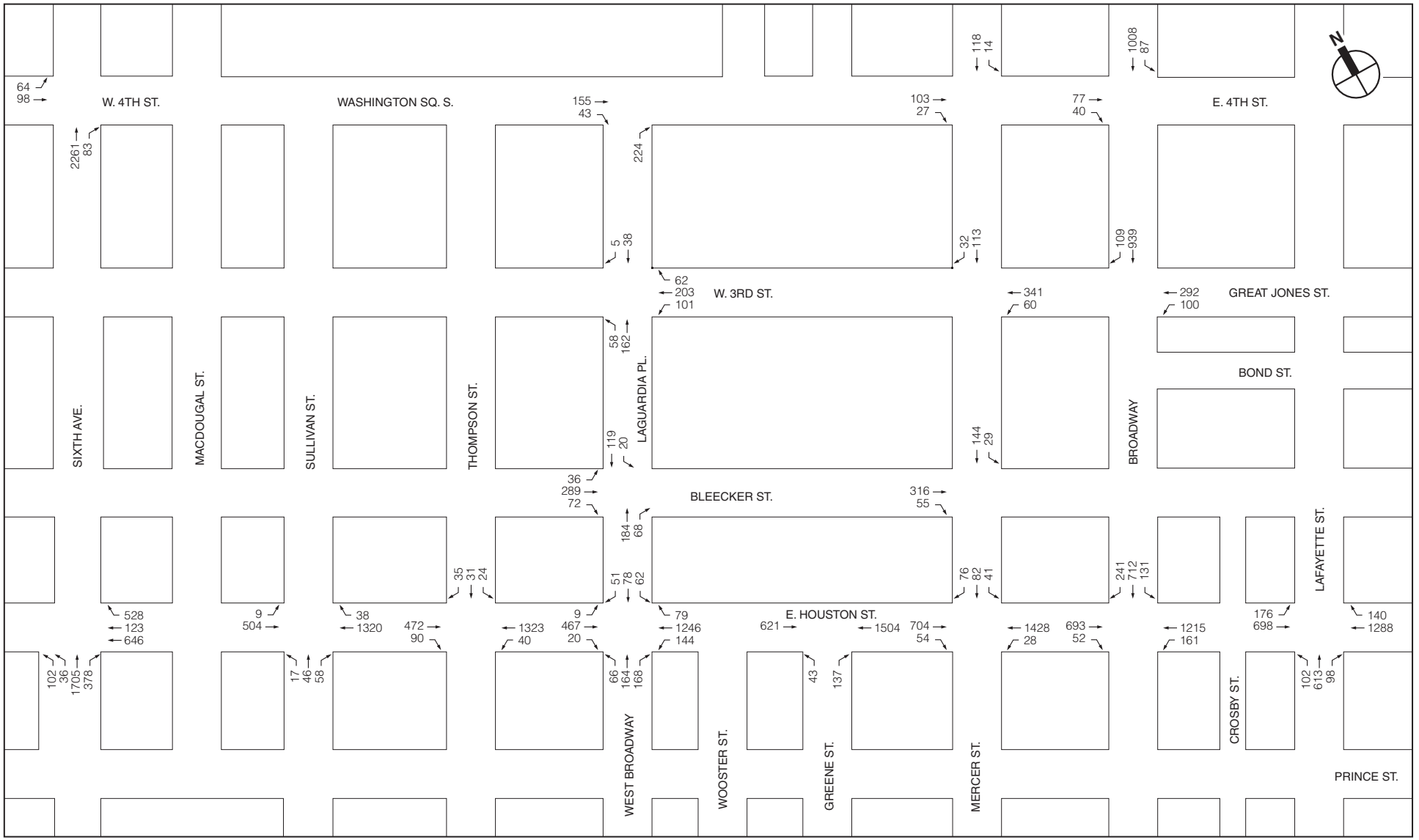
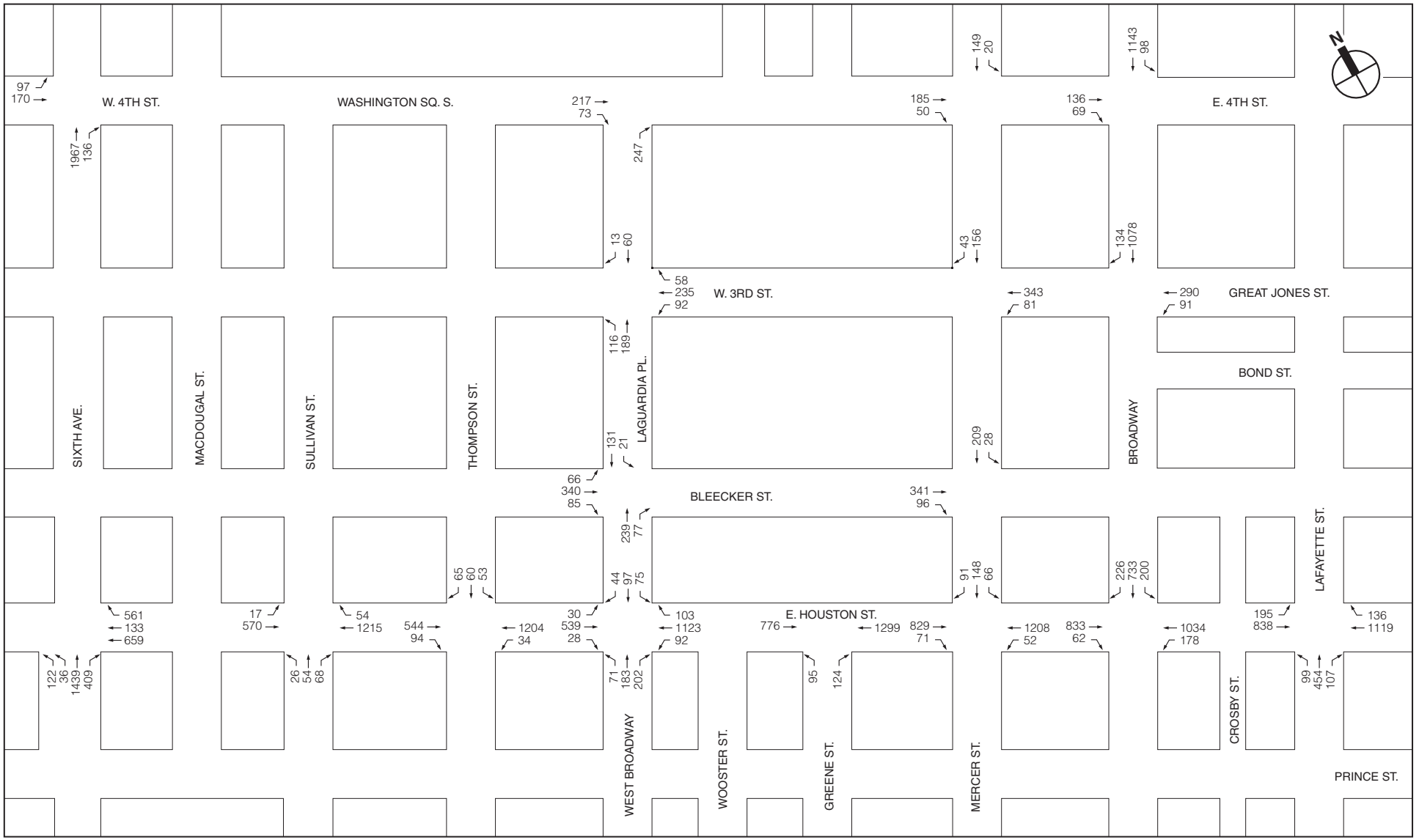


NOT TO SCALE

Potential CPC Modifications—2031 No Build Traffic Volumes
Weekday AM Peak Hour
Figure 26-33

NYU Core

5.24.12



NOT TO SCALE

Potential CPC Modifications—2031 No Build Traffic Volumes
Weekday Midday Peak Hour
Figure 26-34

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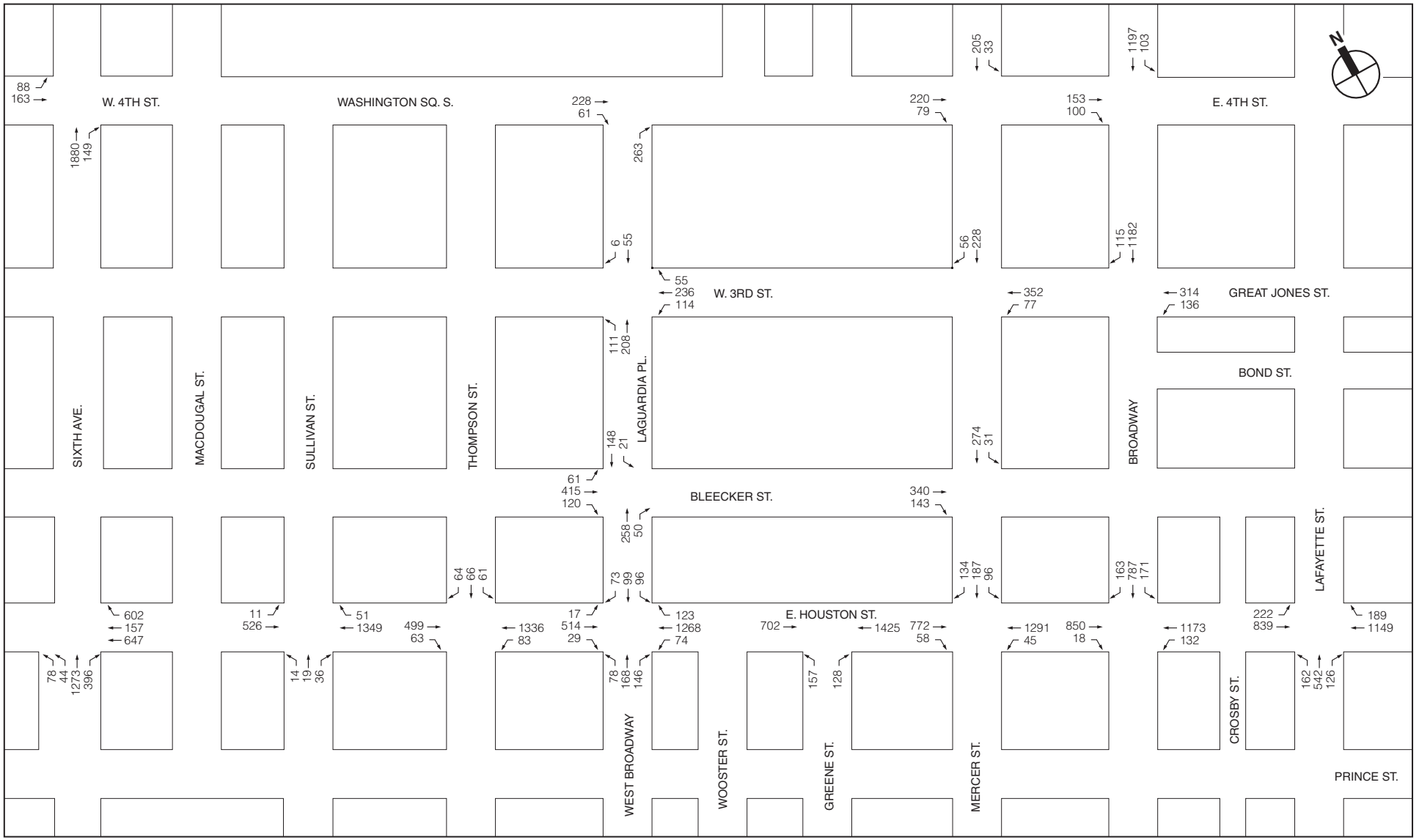

NOT TO SCALE

Potential CPC Modifications—2031 No Build Traffic Volumes
Weekday PM Peak Hour
Figure 26-35

NYU Core

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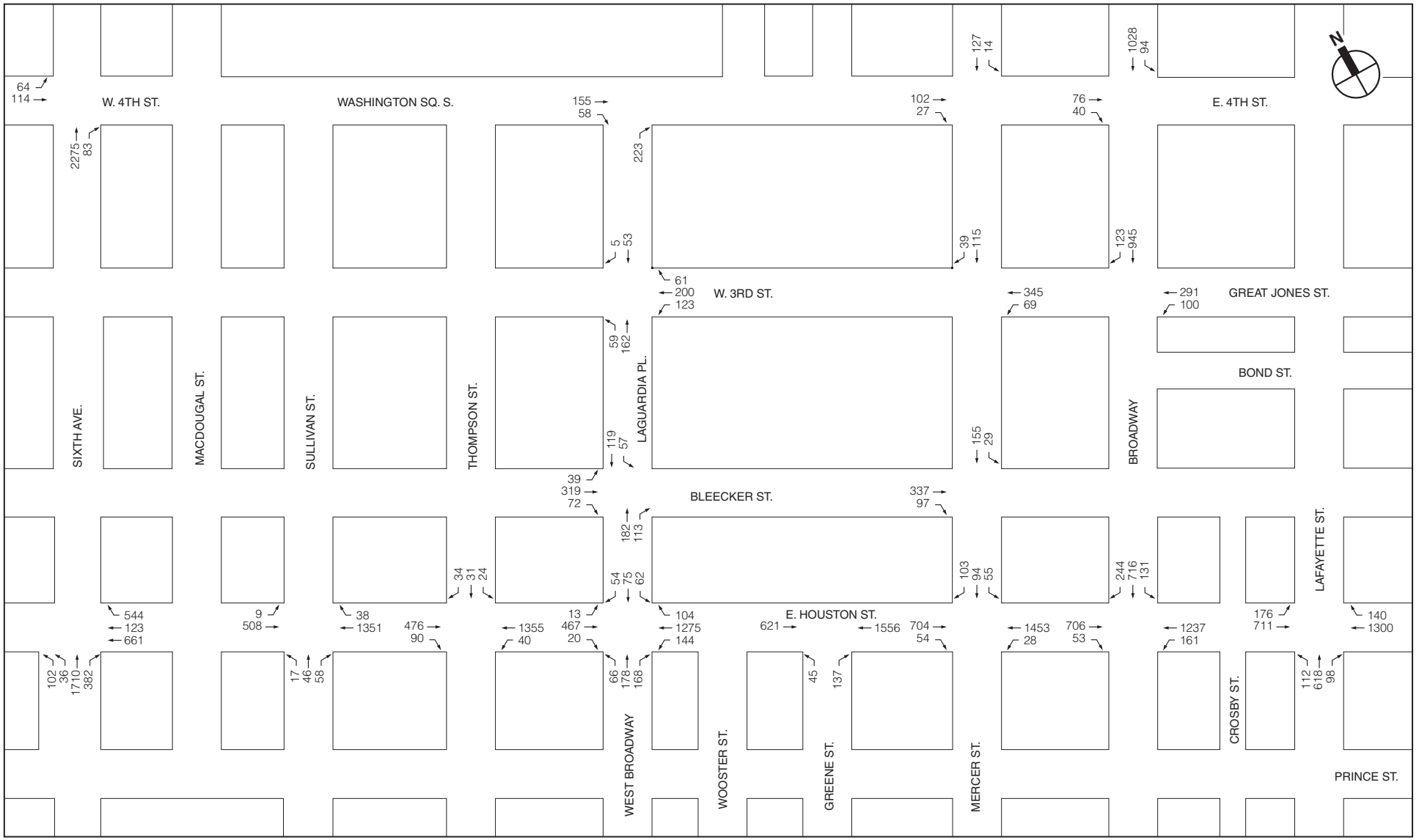

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Potential CPC Modifications—2031 Build Traffic Volumes
Weekday AM Peak Hour
Figure 26-36

NYU Core

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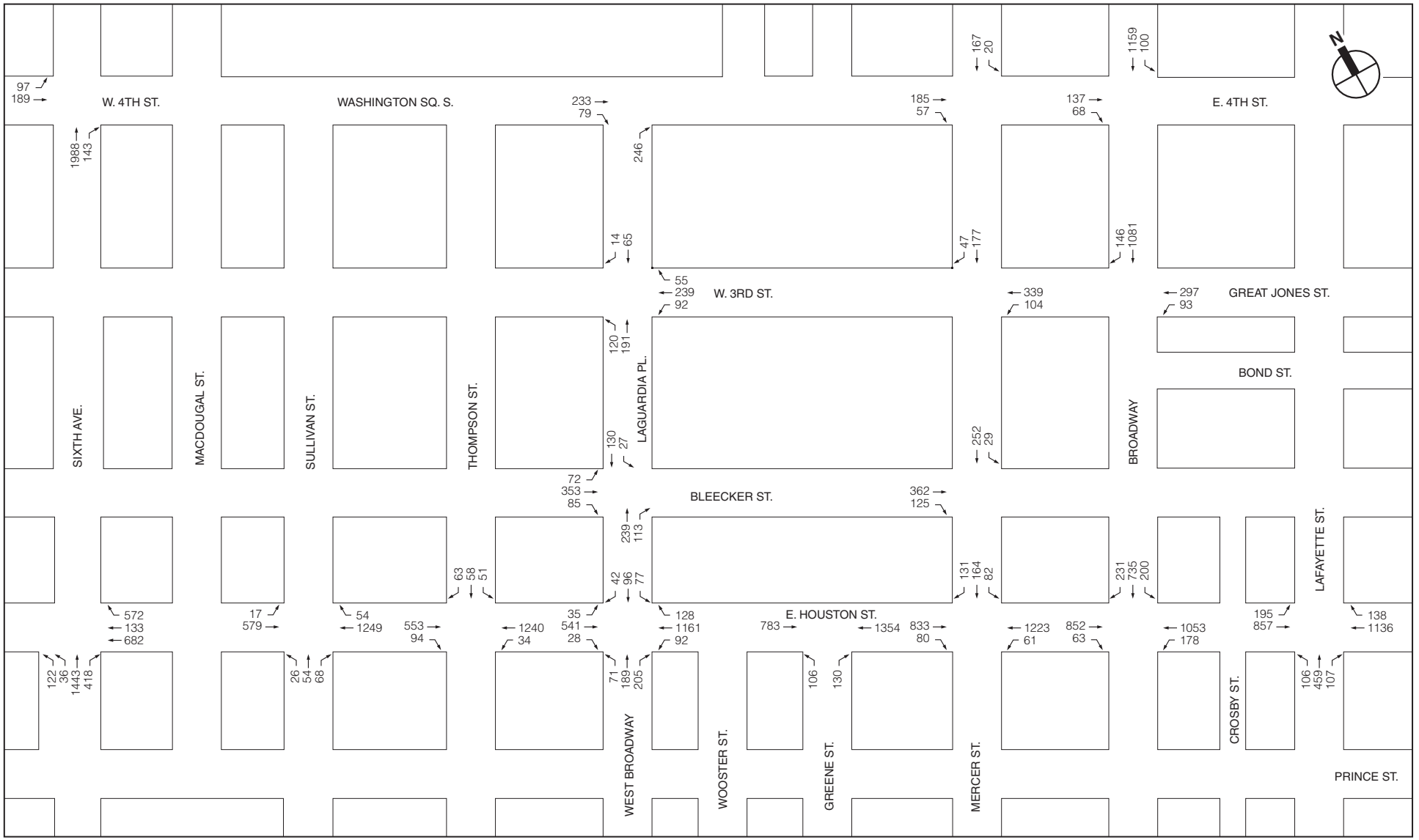


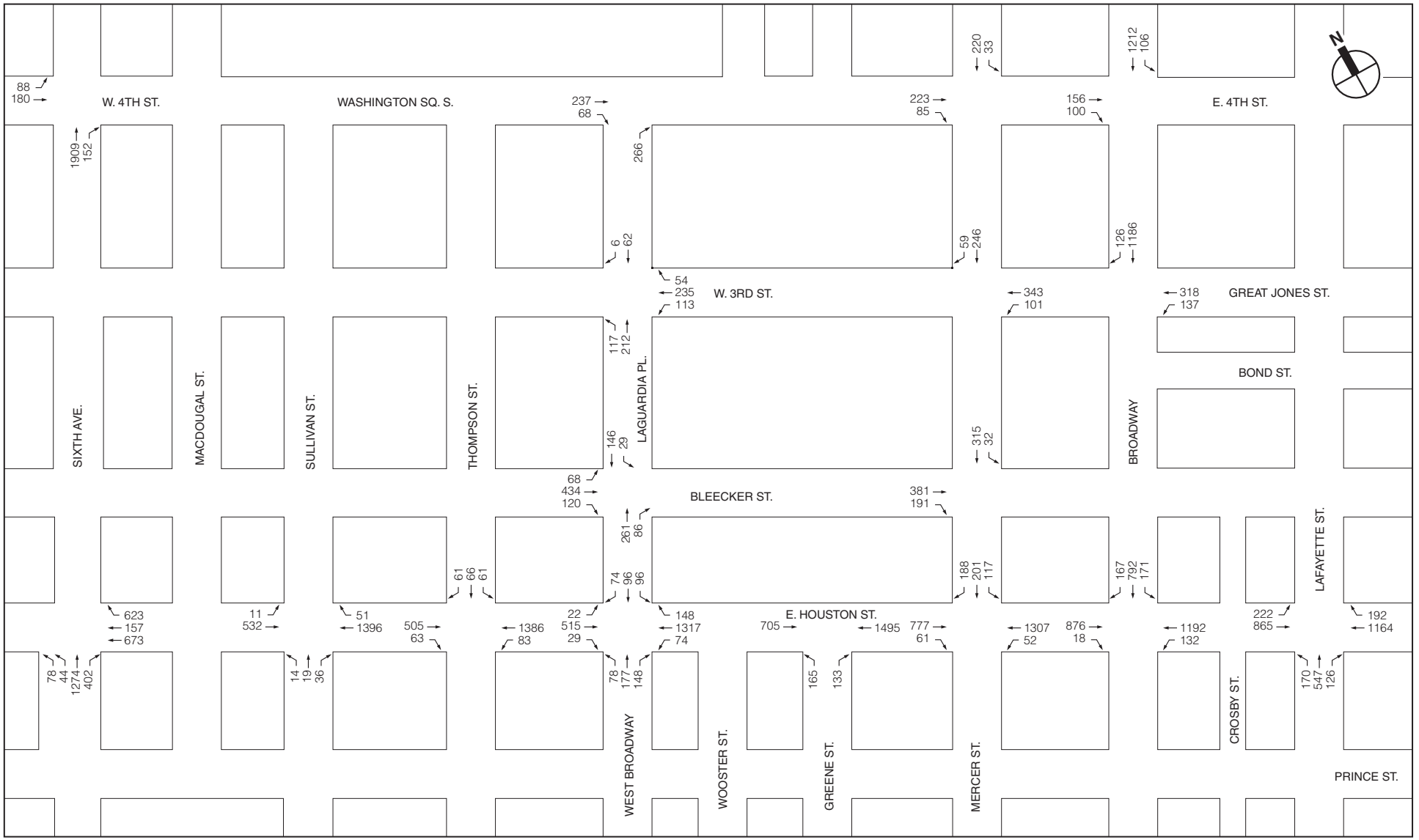
NOT TO SCALE

Potential CPC Modifications—2031 Build Traffic Volumes
Weekday Midday Peak Hour

NYU Core

Figure 26-37

5.24.12



NOT TO SCALE

Potential CPC Modifications—2031 Build Traffic Volumes
Weekday PM Peak Hour
Figure 26-38

NYU Core

Table 26-23
2031 Potential CPC Modifications No Build and Build Conditions Level of Service Analysis
Signalized Intersections

	AM									Midday									PM								
	2031 No Build				2031 Build					2031 No Build				2031 Build					2031 No Build				2031 Build				
Intersection	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS		Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS		Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	
West Houston Street and Sixth Avenue																											
Westbound	T	0.74	28.6	C	T	0.76	29.2	C		T	0.70	25.9	C	T	0.71	26.1	C		T	0.68	25.2	C	T	0.69	25.6	C	
	R	0.79	33.2	C	R	0.83	36.0	D		R	0.93	48.5	D	R	0.95	51.9	D		R	0.98	56.7	E	R	1.01	65.2	E	+
Northbound	LTR	1.07	62.1	E	LTR	1.07	64.4	E		LTR	0.98	39.2	D	LTR	0.99	40.6	D		LTR	0.94	32.5	C	LTR	0.94	33.1	C	
	Intersection		49.7	D	Intersection		51.6	D		Intersection		37.5	D	Intersection		39.0	D		Intersection		35.3	D	Intersection		37.4	D	
West 4th Street and LaGuardia Place																											
Eastbound	TR	0.45	23.6	C	TR	0.51	25.0	C		TR	0.71	31.9	C	TR	0.74	34.0	C		TR	0.56	26.1	C	TR	0.60	27.3	C	
Northbound	R	0.52	22.8	C	R	0.69	31.4	C		R	0.68	29.0	C	R	0.74	33.6	C		R	0.67	28.2	C	R	0.79	37.8	D	
	Intersection		23.2	C	Intersection		28.0	C		Intersection		30.6	C	Intersection		33.8	C		Intersection		27.1	C	Intersection		32.3	C	
West 3rd Street and LaGuardia Place																											
Westbound	LTR	0.39	17.8	B	LTR	0.50	19.9	B		LTR	0.36	17.4	B	LTR	0.42	18.4	B		LTR	0.39	17.8	B	LTR	0.45	18.9	B	
Northbound	LT	0.59	24.2	C	LT	0.61	25.0	C		LT	0.87	42.7	D	LT	0.86	42.2	D		LT	0.73	30.3	C	LT	0.74	30.6	C	
Southbound	TR	0.07	14.5	B	TR	0.10	14.8	B		TR	0.13	15.1	B	TR	0.14	15.3	B		TR	0.09	14.7	B	TR	0.10	14.8	B	
	Intersection		20.0-	B	Intersection		21.2	C		Intersection		28.2	C	Intersection		28.3	C		Intersection		22.6	C	Intersection		23.2	C	
Bleecker Street and LaGuardia Place																											
Eastbound	LTR	0.85	37.2	D	LTR	0.96	53.7	D	+	LTR	0.98	59.0	E	LTR	0.99	61.6	E		LTR	0.93	45.0	D	LTR	0.96	49.8	D	
Northbound	TR	0.55	22.8	C	TR	0.76	33.1	C		TR	0.67	26.8	C	TR	0.65	25.6	C		TR	0.65	25.7	C	TR	0.72	28.8	C	
Southbound	LT	0.30	17.3	B	LT	0.48	21.3	C		LT	0.34	18.0	B	LT	0.36	18.3	B		LT	0.29	17.1	B	LT	0.32	17.6	B	
	Intersection		29.3	C	Intersection		40.7	D		Intersection		41.1	D	Intersection		41.9	D		Intersection		34.8	C	Intersection		38.3	D	
West Houston Street and LaGuardia Place/West Broadway																											
Eastbound	LTR	0.65	27.3	C	LTR	0.68	28.2	C		LTR	0.79	33.1	C	LTR	0.83	35.3	D		LTR	0.63	26.8	C	LTR	0.65	27.3	C	
Westbound	L	0.89	80.1	F	L	0.89	80.1	F		L	0.54	47.1	D	L	0.54	47.1	D		L	0.40	41.8	D	L	0.40	41.8	D	
	TR	0.67	15.9	B	TR	0.71	16.7	B		TR	0.61	14.7	B	TR	0.63	15.0	B		TR	0.64	15.3	B	TR	0.67	15.7	B	
Northbound	LT	0.70	36.4	D	LT	0.75	39.2	D		LT	0.80	43.0	D	LT	0.81	43.7	D		LT	0.84	47.5	D	LT	0.85	48.4	D	
	R	0.63	34.2	C	R	0.71	40.2	D		R	0.83	50.3	D	R	0.91	63.8	E	+	R	0.65	36.5	D	R	0.67	37.8	D	
Southbound	LT	0.55	31.3	C	LT	0.58	33.0	C		LT	0.71	41.5	D	LT	0.74	44.7	D		LT	0.85	56.3	E	LT	0.85	57.4	E	
	R	0.19	22.7	C	R	0.22	23.3	C		R	0.19	22.9	C	R	0.18	22.9	C		R	0.28	24.6	C	R	0.30	24.9	C	
	Intersection		25.9	C	Intersection		27.1	C		Intersection		28.1	C	Intersection		30.1	C		Intersection		26.4	C	Intersection		26.9	C	
Bleecker Street and Mercer Street																											
Eastbound	TR	0.79	33.0	C	TR	1.02	71.9	E	+	TR	1.01	69.0	E	TR	1.13	107.2	F	+	TR	1.10	94.2	F	TR	1.41	223.4	F	+
Southbound	LT	0.31	17.5	B	LT	0.34	17.9	B		LT	0.41	18.9	B	LT	0.44	19.5	B		LT	0.56	21.9	C	LT	0.61	23.1	C	
	Intersection		28.0	C	Intersection		55.7	E		Intersection		51.6	D	Intersection		76.6	E		Intersection		64.9	E	Intersection		145.8	F	
West Houston Street and Mercer Street																											
Eastbound	TR	0.43	15.0	B	TR	0.43	15.0	B		TR	0.50	15.9	B	TR	0.51	16.1	B		TR	0.46	15.4	B	TR	0.46	15.4	B	
Westbound	L	0.18	14.6	B	L	0.18	14.6	B		L	0.38	21.0	C	L	0.43	22.9	C		L	0.34	19.3	B	L	0.38	20.6	C	
	T	0.79	21.8	C	T	0.80	22.2	C		T	0.66	18.4	B	T	0.66	18.5	B		T	0.77	21.1	C	T	0.77	21.3	C	
Southbound	LTR	0.41	22.1	C	LTR	0.58	26.2	C		LTR	0.63	27.1	C	LTR	0.75	32.5	C		LTR	0.75	31.9	C	LTR	0.91	47.6	D	+
	Intersection		19.6	B	Intersection		20.4	C		Intersection		18.8	B	Intersection		19.8	B		Intersection		20.9	C	Intersection		23.9	C	
West 4th Street and Broadway																											
Eastbound	TR	0.29	24.3	C	TR	0.29	24.3	C		TR	0.48	28.0	C	TR	0.48	27.9	C		TR	0.58	30.2	C	TR	0.58	30.2	C	
Southbound	LT	0.91	27.9	C	LT	0.93	30.8	C		LT	1.02	48.7	D	LT	1.03	51.6	D		LT	0.99	40.7	D	LT	1.00	43.8	D	
	Intersection		27.5	C	Intersection		30.2	C		Intersection		45.9	D	Intersection		48.4	D		Intersection		38.9	D	Intersection		41.4	D	
West 3rd Street and Broadway																											
Westbound	L	0.35	26.3	C	L	0.38	27.3	C		L	0.40	28.2	C	L	0.41	28.5	C		L	0.53	31.5	C	L	0.54	31.8	C	
	T	0.68	33.9	C	T	0.68	33.8	C		T	0.69	34.0	C	T	0.69	34.1	C		T	0.80	41.6	D	T	0.81	42.3	D	
Southbound	T	0.66	15.8	B	T	0.66	15.9	B		T	0.79	19.8	B	T	0.79	19.8	B		T	0.86	23.2	C	T	0.86	23.4	C	
	R	0.33	13.0	B	R	0.40	14.7	B		R	0.55	20.3	C	R	0.61	23.6	C		R	0.49	18.3	B	R	0.56	21.3	C	
	Intersection		20.3	C	Intersection		20.5	C		Intersection		23.1	C	Intersection		23.4	C		Intersection		27.0	C	Intersection		27.5	C	
Bleecker Street Midblock Crosswalk between LaGuardia Place and Mercer Street																											
Eastbound	--				T	0.74	24.6	C		--				T	0.81	28.9	C		--				T	0.93	41.6	D	
					Intersection		24.6	C						Intersection		28.9	C						Intersection		41.6	D	

Notes: L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn; LOS = Level of Service
+ Denotes a significant adverse traffic impact

- The westbound right-turn at the signalized intersection of West Houston Street/Sixth Avenue would deteriorate within LOS E (from a v/c ratio of 0.98 and 56.7 spv of delay to a v/c ratio of 1.01 and 65.2 spv of delay), an increase in delay of more than four seconds, during the PM peak hours. This projected increase in delay constitutes a significant adverse impact.
- The eastbound approach at the signalized intersection of Bleecker Street/LaGuardia Place would deteriorate within LOS D (from a v/c ratio of 0.85 and 37.2 spv of delay to a v/c ratio of 0.96 and 53.7 spv of delay), an increase in delay of more than five seconds, during the AM peak hour. This projected increase in delay constitutes a significant adverse impact.
- The northbound right at the signalized intersection of West Houston Street/LaGuardia Place/West Broadway would deteriorate from LOS D (v/c ratio of 0.83 and 50.3 spv of

delay) to LOS E (v/c ratio of 0.91 and 63.8 spv of delay), an increase in delay of more than five seconds, during the midday peak hour. This projected increase in delay constitutes a significant adverse impact.

- The eastbound approach at the signalized intersection of Bleecker Street/Mercer Street would deteriorate from LOS C (v/c ratio of 0.79 and 33.0 spv of delay) to LOS E (v/c ratio of 1.02 and 71.9 spv of delay), from LOS E (v/c ratio of 1.01 and 69.0 spv of delay) to LOS F (v/c ratio of 1.13 and 107.2 spv of delay), and within LOS F (from a v/c ratio of 1.10 and 94.2 spv of delay to a v/c ratio of 1.41 and 223.4 spv of delay), increases in delay of more than five, four, and three seconds, during the AM, midday, and PM peak hours, respectively. These projected increases in delay constitute significant adverse impacts.
- The southbound approach at the signalized intersection of West Houston Street/Mercer Street would deteriorate from LOS C (v/c ratio of 0.75 and 31.9 spv of delay) to LOS D (v/c ratio of 0.91 and 47.6 spv of delay), an increase in delay of more than five seconds, during the PM peak hour. This projected increase in delay constitutes a significant adverse impact.

Transit

Comparison of 2021 Potential CPC Modifications No Build and Build Conditions

Under RWCDS 3 in 2021, the Proposed Actions would not result in any significant adverse transit impacts. Hence, with comparative lower incremental trip generation under RWCDS 2, the Potential CPC Modifications would similarly not result in any significant adverse transit impacts. With RWCDS 1 in 2021, the Proposed Actions were projected to result in a significant adverse impact for the Broadway/Lafayette Station's northeast stairway (S9) during the weekday PM peak period. As shown in **Table 26-24**, even with lower incremental trip generation, the Potential CPC Modifications would still result in the significant adverse stairway impact at this stairway under RWCDS 1.

Table 26-24
2021 Potential CPC Modifications RWCDS 1 No Build and Build Conditions
Subway Stairway Analysis

Stairway	Width (ft.)	Effective Width (ft.)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
			Down	Up				
2021 Potential CPC Modifications No Build Condition – Weekday PM Peak 15 Minutes								
Broadway – Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	4.8	3.8	306	247	0.95	0.90	1.10	D
2021 Potential CPC Modifications Build Condition – Weekday PM Peak 15 Minutes								
Broadway – Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	4.8	3.8	368	274	0.95	0.90	1.28	D+

Notes:
+ Denotes a significant stairway impact
Capacities were calculated based on rates presented in the 2012 *CEQR Technical Manual*.
Surging factors are only applied to the exiting pedestrian volume (2012 *CEQR Technical Manual*).
V/C = [Vin / (150 * We * Sf * Ff)]+ [Vx/ (150 * We * Sf * Ff)]
Where
Vin = Peak 15-minute entering passenger volume
Vx = Peak 15-minute exiting passenger volume
We = Effective width of stairs
Sf = Surging factor (if applicable)
Ff = Friction factor (if applicable)

Comparison of 2031 Potential CPC Modifications No Build and Build Conditions

Under RWCDS 3 in 2031, the Proposed Actions would result in significant adverse transit impacts at the Broadway/Lafayette Station's northeast stairway (S9) and at the West 4th Street Station's northeast stairway (S2A/B) during the weekday PM peak period. With comparative lower incremental trip generation under RWCDS 2, however, the Potential CPC Modifications would only result in a significant adverse transit impact at the Broadway/Lafayette Station's northeast stairway (S9), as shown in **Table 26-25**. With RWCDS 1 in 2031, the Proposed Actions were projected to result in significant adverse impacts for the Broadway/Lafayette Station's northeast stairway (S9) and at the West 4th Street Station's northeast stairway (S2A/B) during the weekday PM peak period. As shown in **Table 26-26**, even with lower incremental trip generation, the Potential CPC Modifications would still result in the significant adverse stairway impacts at these stairways. Potential measures that can be implemented to mitigate these significant adverse transit impacts are discussed in "Mitigation" below.

Table 26-25
2031 Potential CPC Modifications RWCDS 2 No Build and Build Conditions
Subway Stairway Analysis

Stairway	Width (ft.)	Effective Width (ft.)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
			Down	Up				
2031 Potential CPC Modifications No Build Condition – Weekday PM Peak 15 Minutes								
Broadway – Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	4.8	3.8	310	251	0.95	0.90	1.12	D
West 4th Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	7.8	6.6	409	422	0.95	0.90	0.96	C
2031 Potential CPC Modifications Build Condition – Weekday PM Peak 15 Minutes								
Broadway – Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	4.8	3.8	418	304	0.95	0.90	1.44	E+
West 4th Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	7.8	6.6	488	461	0.95	0.90	1.09	D

Notes:
+ Denotes a significant stairway impact
Capacities were calculated based on rates presented in the 2012 *CEQR Technical Manual*.
Surging factors are only applied to the exiting pedestrian volume (2012 *CEQR Technical Manual*).
V/C = [Vin / (150 * We * Sf * Ff)]+ [Vx/ (150 * We * Sf * Ff)]
Where
Vin = Peak 15-minute entering passenger volume
Vx = Peak 15-minute exiting passenger volume
We = Effective width of stairs
Sf = Surging factor (if applicable)
Ff = Friction factor (if applicable)

Table 26-26
2031 Potential CPC Modifications RWCDS 1 No Build and Build Conditions
Subway Stairway Analysis

Stairway	Width (ft.)	Effective Width (ft.)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
			Down	Up				
2031 Potential CPC Modifications No Build Condition – Weekday PM Peak 15 Minutes								
Broadway – Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	4.8	3.8	310	251	0.95	0.90	1.12	D
West 4th Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	7.8	6.6	409	422	0.95	0.90	0.96	C
2031 Potential CPC Modifications Build Condition – Weekday PM Peak 15 Minutes								
Broadway – Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	4.8	3.8	442	305	0.95	0.90	1.49	E+
West 4th Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	7.8	6.6	507	463	0.95	0.90	1.12	D+

Notes:
+ Denotes a significant stairway impact
Capacities were calculated based on rates presented in the 2012 *CEQR Technical Manual*.
Surging factors are only applied to the exiting pedestrian volume (2012 *CEQR Technical Manual*).
V/C = [Vin / (150 * We * Sf * Ff)]+ [Vx/ (150 * We * Sf * Ff)]
Where
Vin = Peak 15-minute entering passenger volume
Vx = Peak 15-minute exiting passenger volume
We = Effective width of stairs
Sf = Surging factor (if applicable)
Ff = Friction factor (if applicable)

Pedestrians

Comparison of 2021 Potential CPC Modifications No Build and Build Conditions

The 2021 Potential CPC Modifications No Build and Build AM, midday, and PM peak 15-minute pedestrian volumes are presented in **Figures 26-39** to **26-41** and **Figures 26-42** to **26-44**, respectively. The Proposed Actions were projected to result in a significant adverse impact in 2021 at the southeast corner of University Place and Waverly Place during the weekday midday peak period. With lower incremental trip generation, the Potential CPC Modifications are expected to result in equal or lesser impacts than the Proposed Actions at all study area locations. As shown in **Table 26-27**, the above corner impact would not occur with the Potential CPC Modifications.

Table 26-27
2021 Potential CPC Modifications No Build and Build Conditions Corner Analysis

Intersection No.	Location	Corner	2021 Potential CPC Modifications No Build Condition – Weekday Midday Peak Period		2021 Potential CPC Modifications Build Condition – Weekday Midday Peak Period	
			SFP	LOS	SFP	LOS
11	University Place and Waverly Place	Southeast	12.5	E	12.0	E

Note: SFP = square feet per pedestrian
+ Denotes a significant adverse pedestrian impact

Comparison of 2031 Potential CPC Modifications No Build and Build Conditions

The 2031 Potential CPC Modifications No Build and Build AM, midday, and PM peak 15 minute pedestrian volumes are presented in **Figures 26-45** to **26-47** and **Figures 26-48** to **26-50**,

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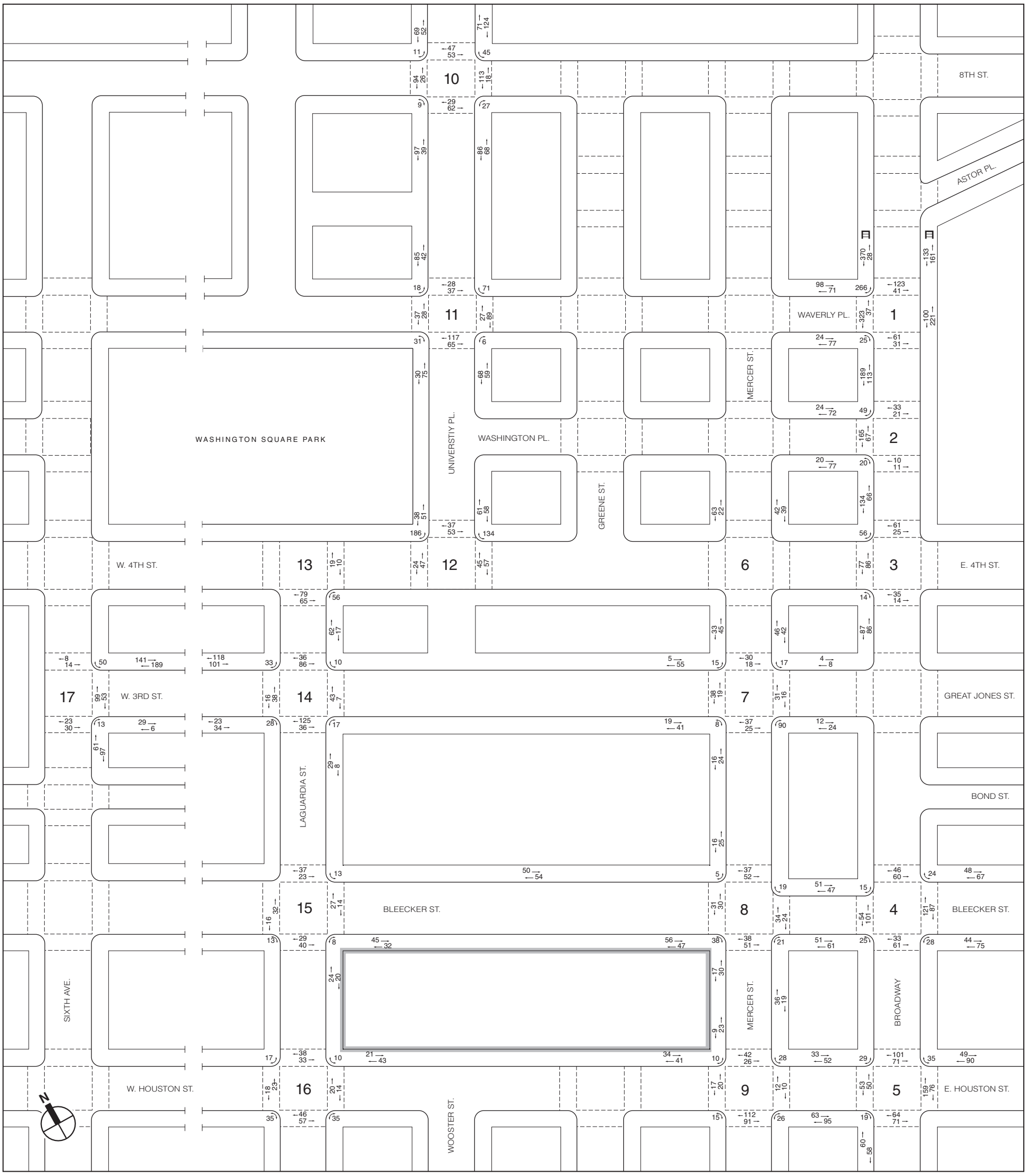

NOT TO SCALE

Subway Stairs

Potential CPC Modifications—2021 No Build Pedestrian Volume
Weekday AM Peak 15 Minutes
Figure 26-39

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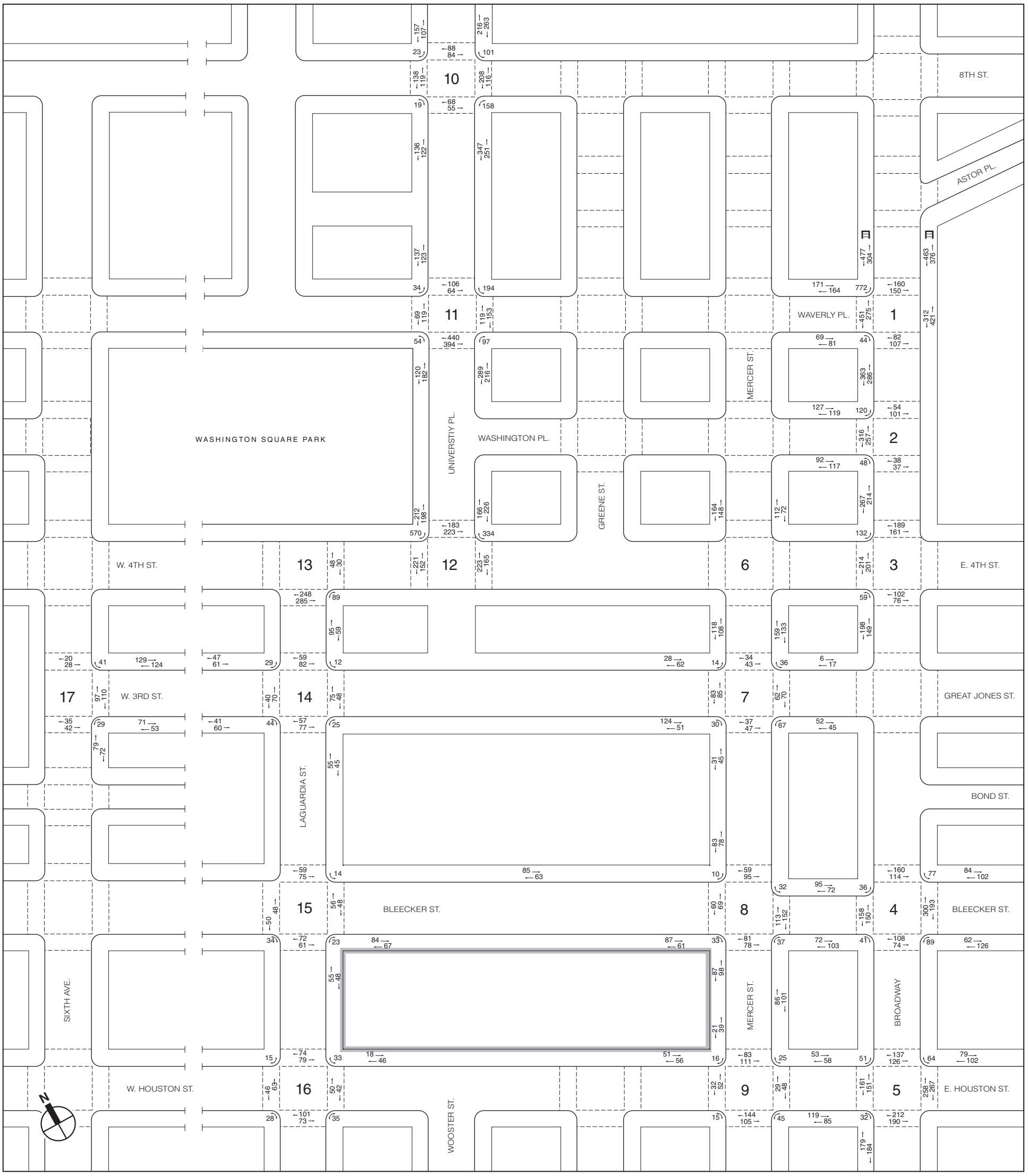


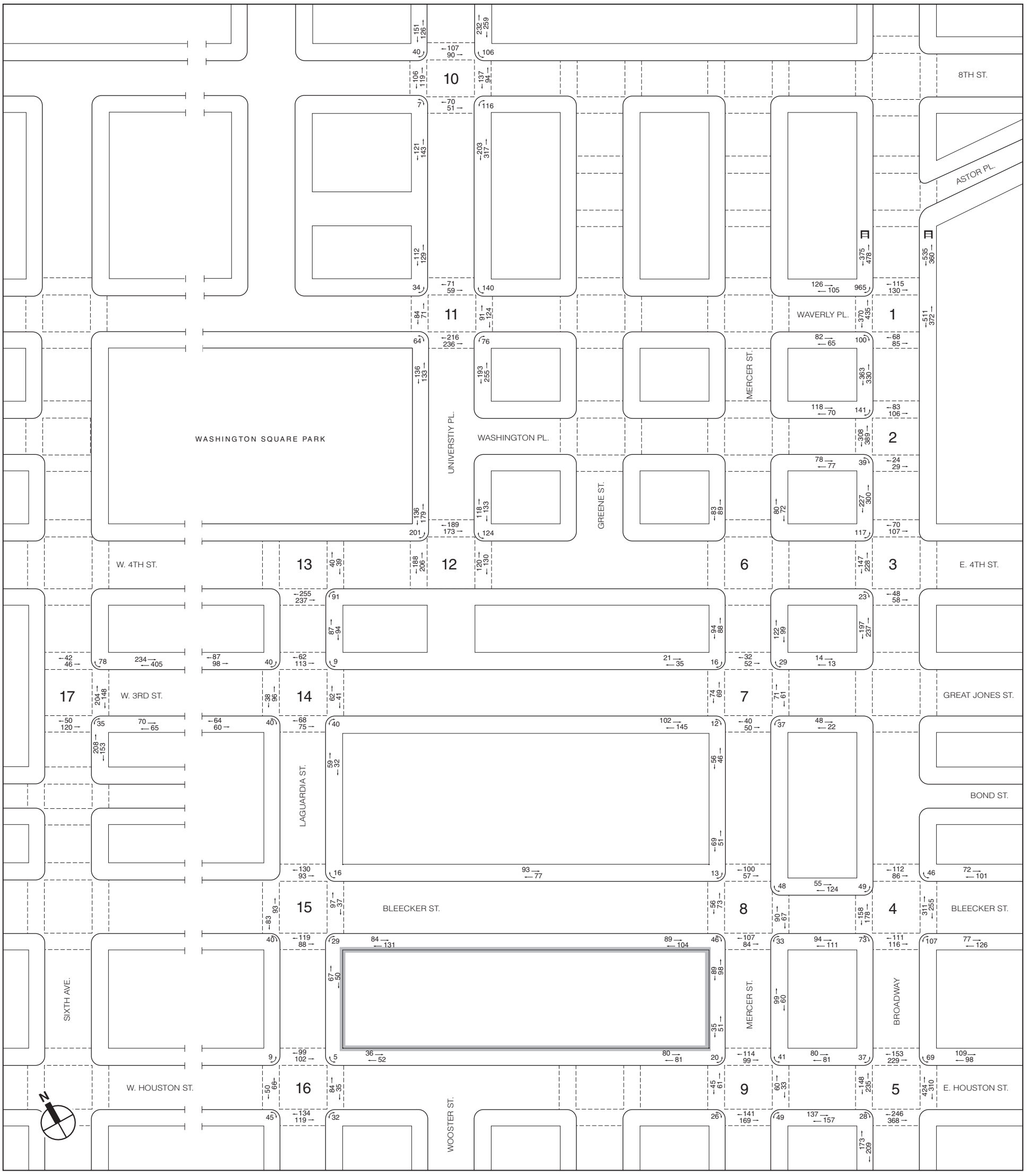
NOT TO SCALE

Subway Stairs

Potential CPC Modifications—2021 No Build Pedestrian Volume
Weekday midday Peak 15 Minutes
Figure 26-40

NYU Core

5.24.12



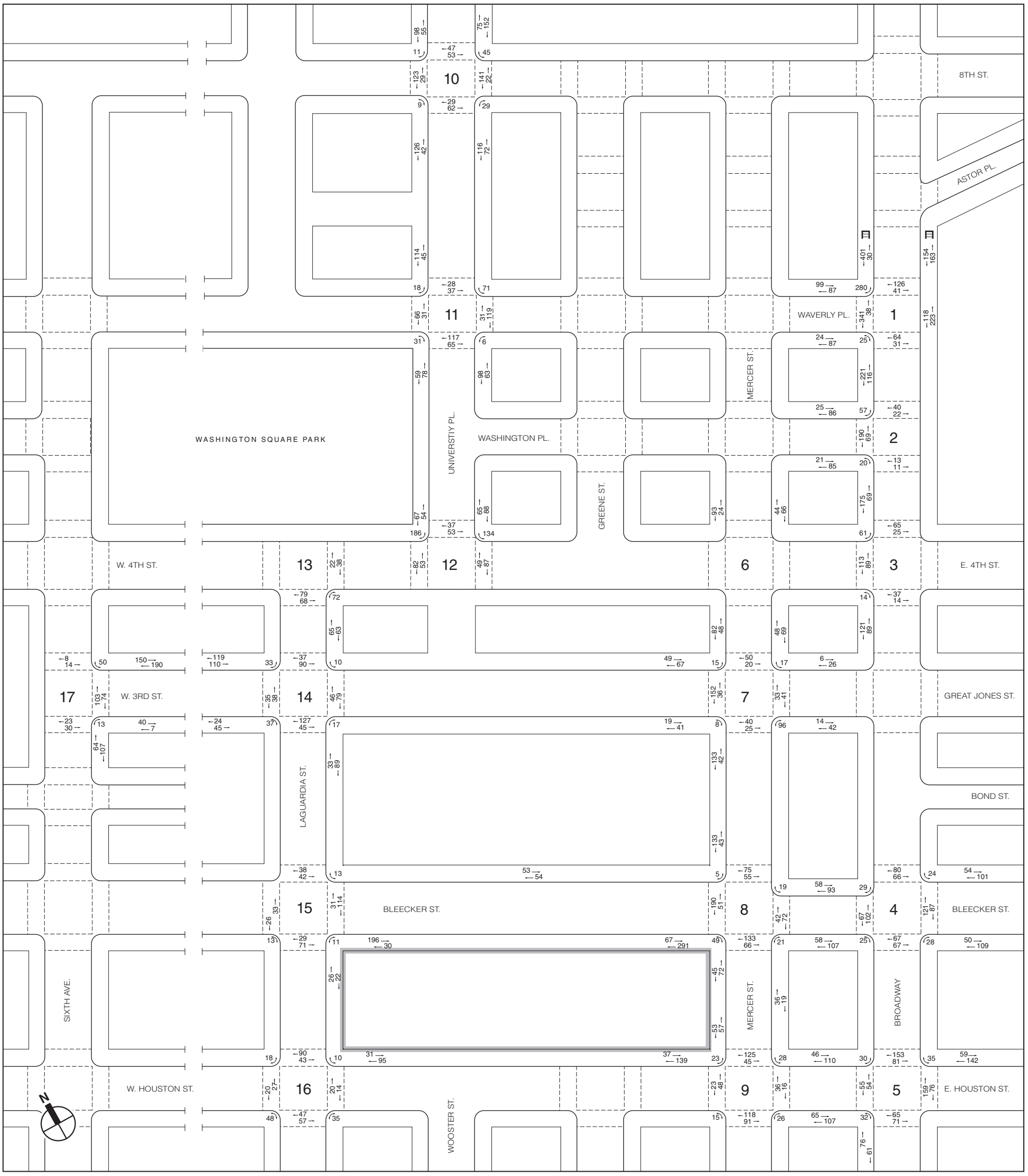
NOT TO SCALE

Subway Stairs

Potential CPC Modifications—2021 No Build Pedestrian Volume
Weekday PM Peak 15 Minutes
Figure 26-41

NYU Core

5.24.12



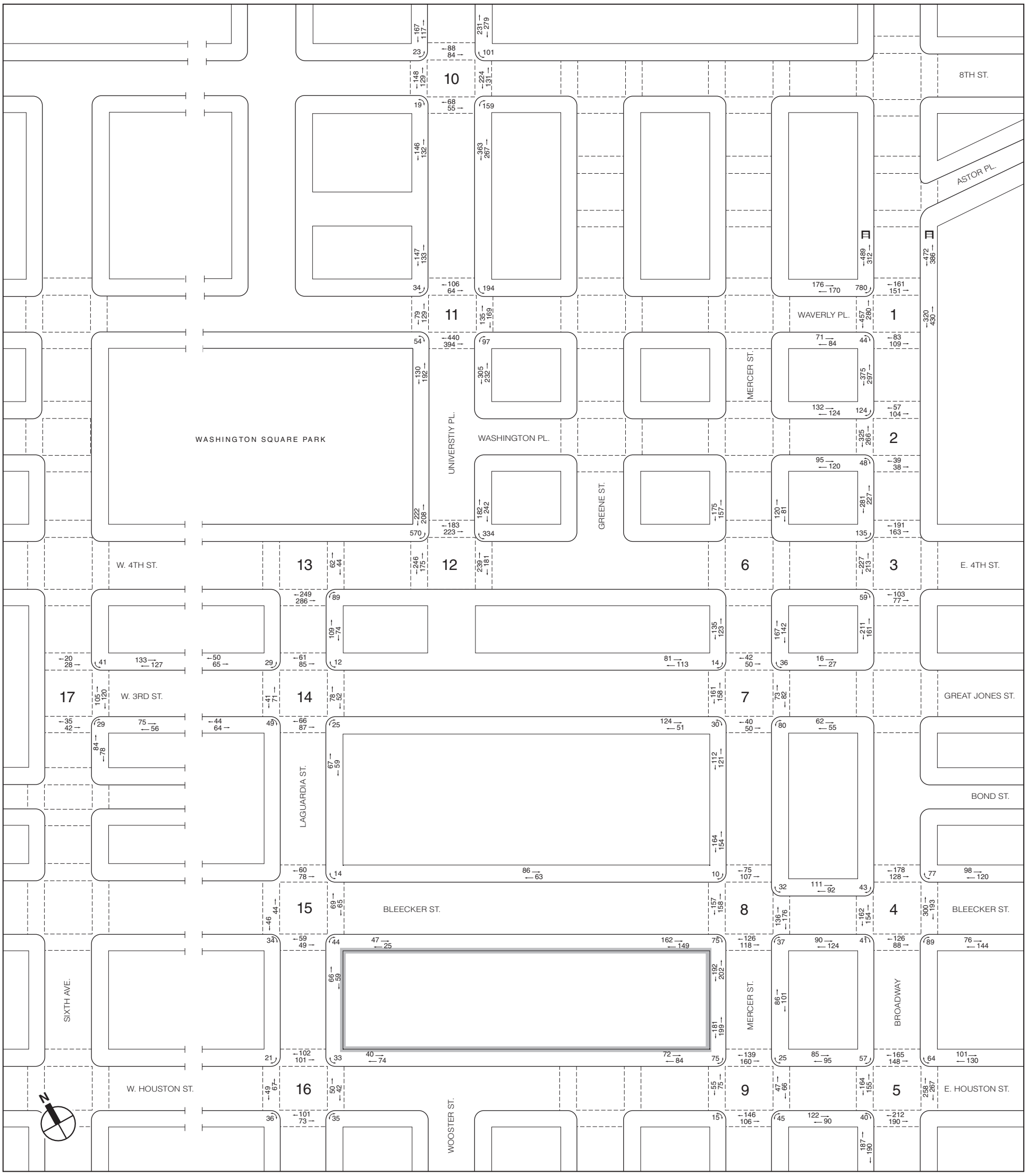
NOT TO SCALE

Subway Stairs

NYU Core

Potential CPC Modifications—2021 Build Pedestrian Volume
Weekday AM Peak 15 Minutes
Figure 26-42

5.24.12



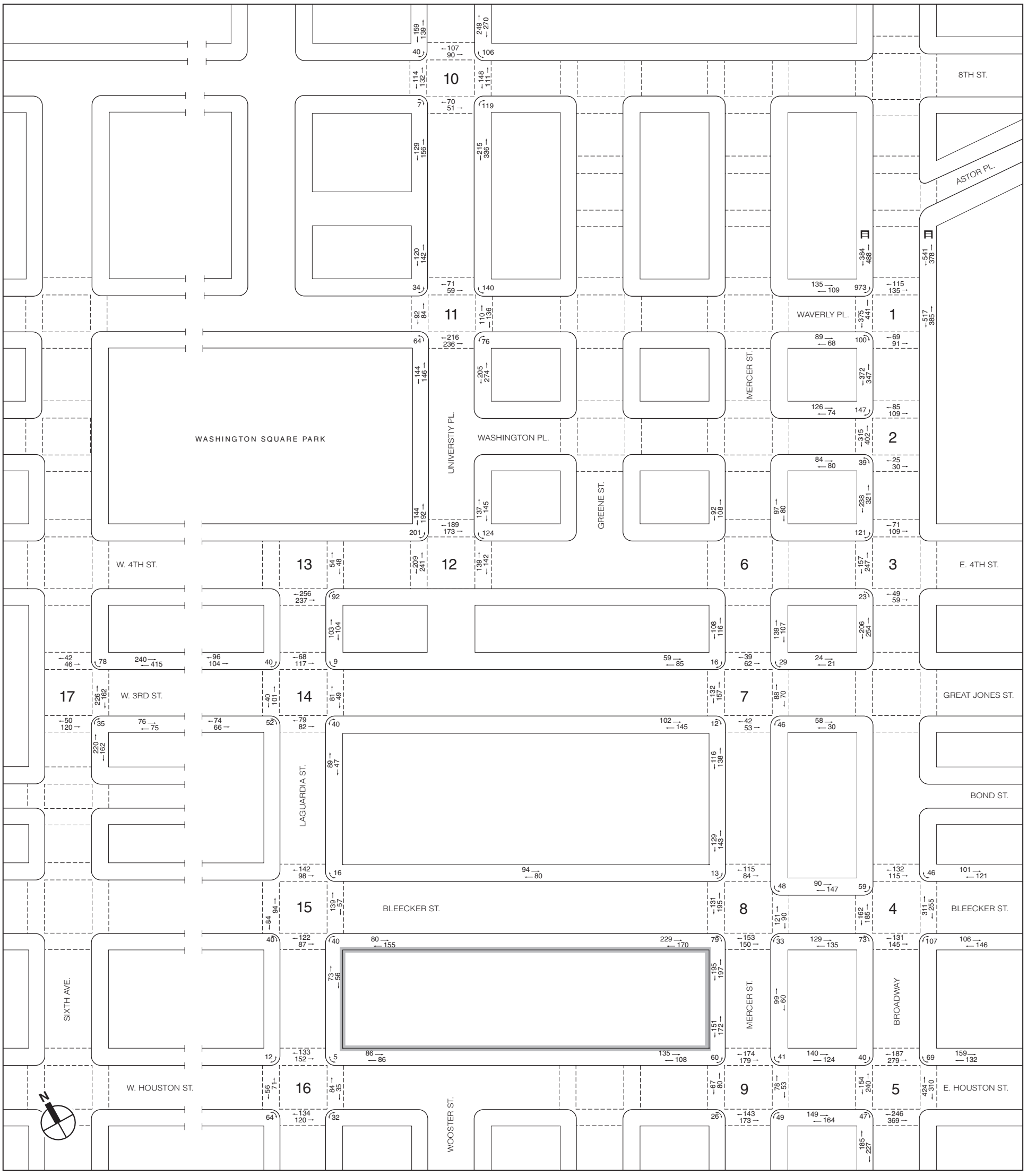
NOT TO SCALE

Subway Stairs

NYU Core

Potential CPC Modifications—2021 Build Pedestrian Volume
Weekday midday Peak 15 Minutes
Figure 26-43

5.24.12



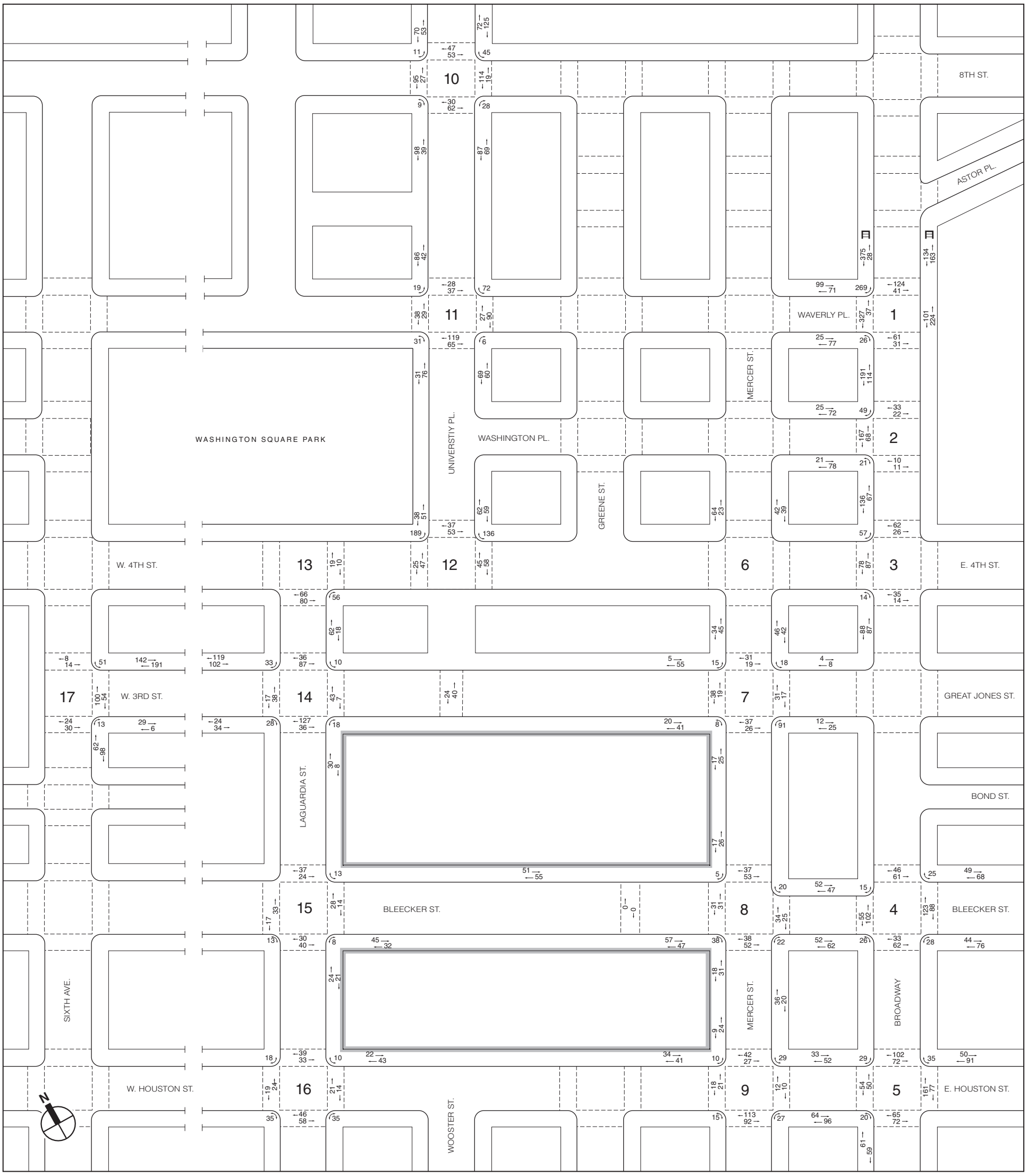
Subway Stairs

NOT TO SCALE

NYU Core

Potential CPC Modifications—2021 Build Pedestrian Volume
Weekday PM Peak 15 Minutes
Figure 26-44

5.24.12



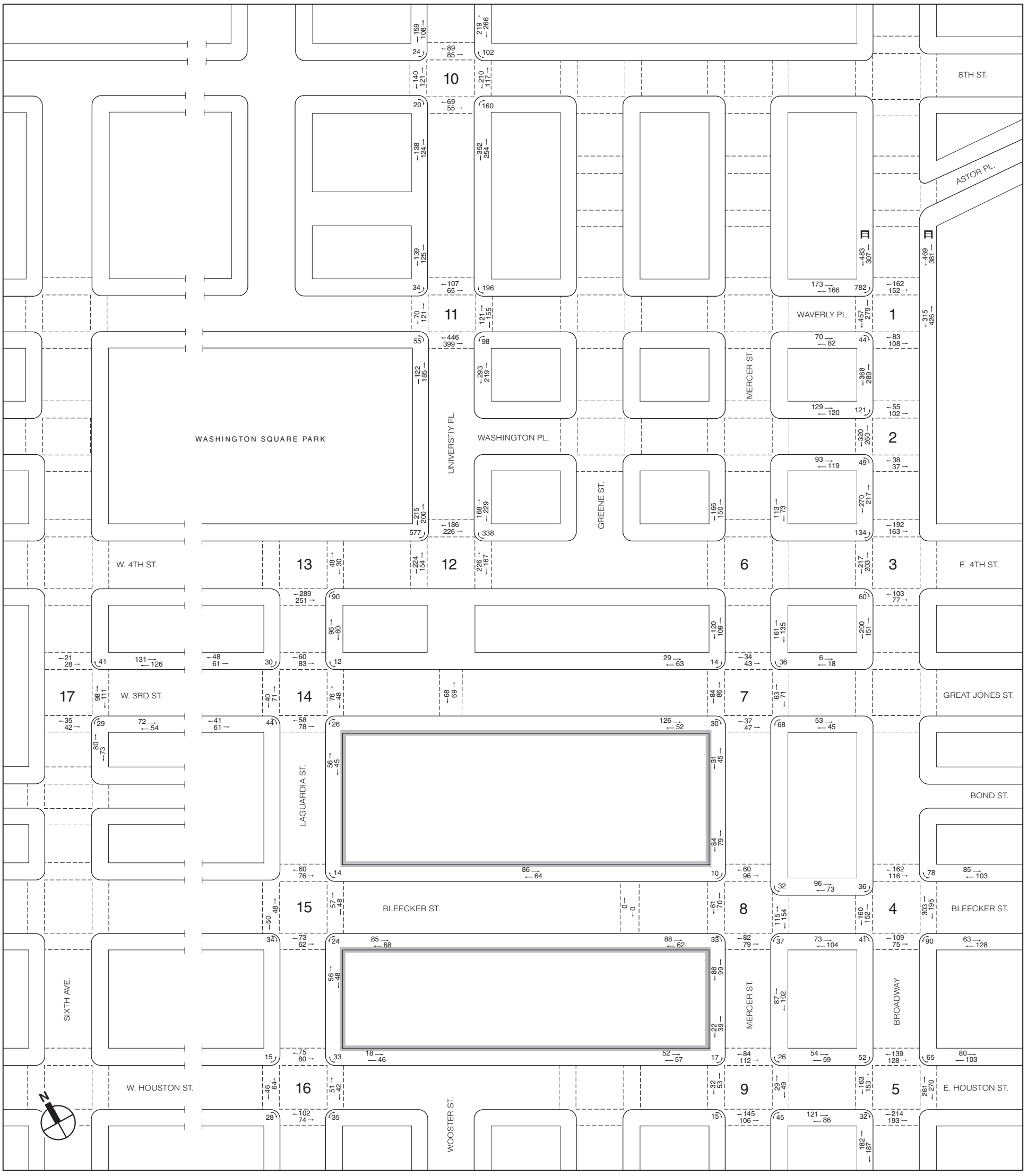
NOT TO SCALE

Subway Stairs

NYU Core

Potential CPC Modifications—2031 No Build Pedestrian Volume
Weekday AM Peak 15 Minutes
Figure 26-45

5.24.12

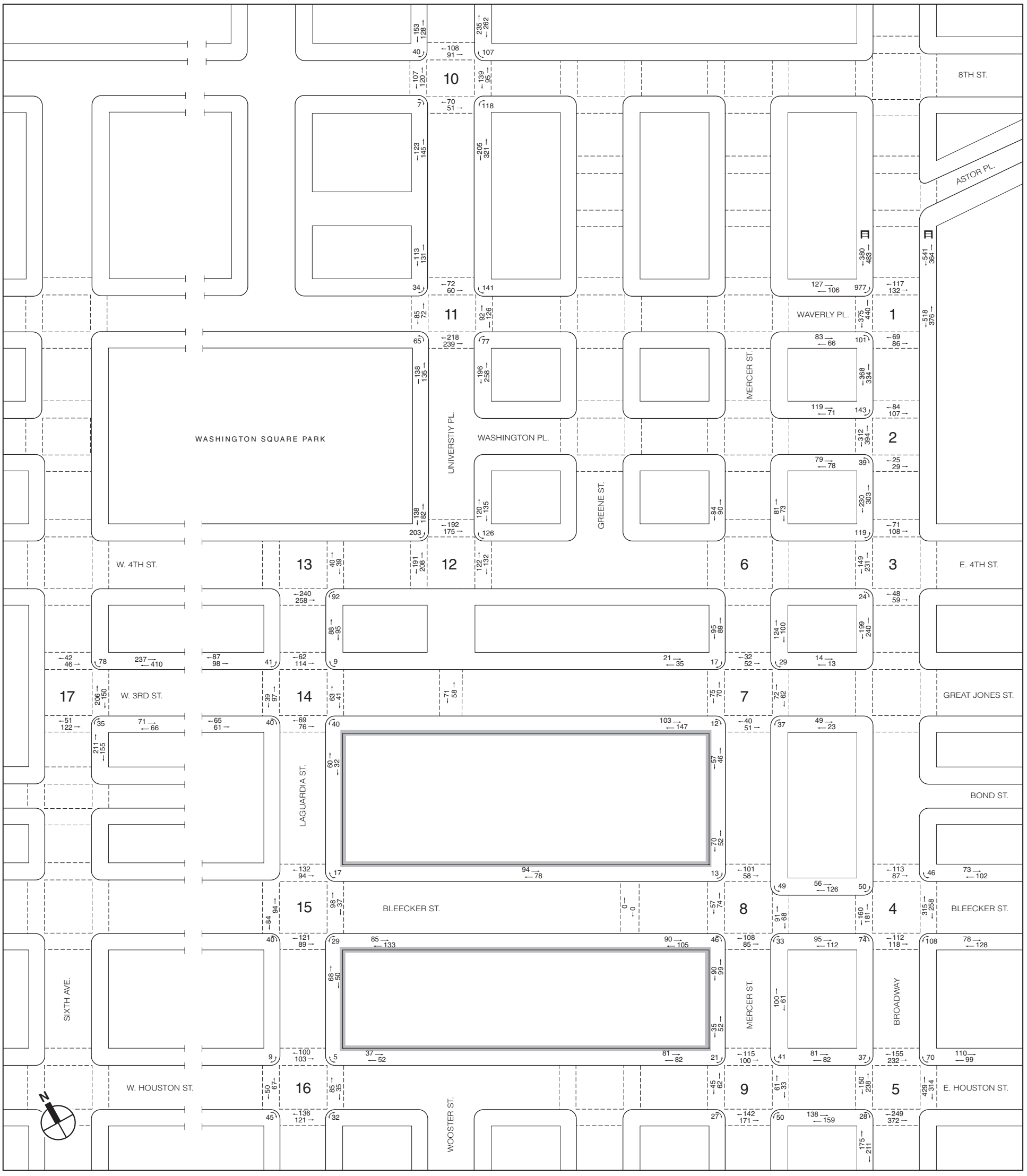


NOT TO SCALE

Subway Stairs

NYU Core

Potential CPC Modifications—2031 No Build Pedestrian Volume
Weekday midday Peak 15 Minutes
Figure 26-46



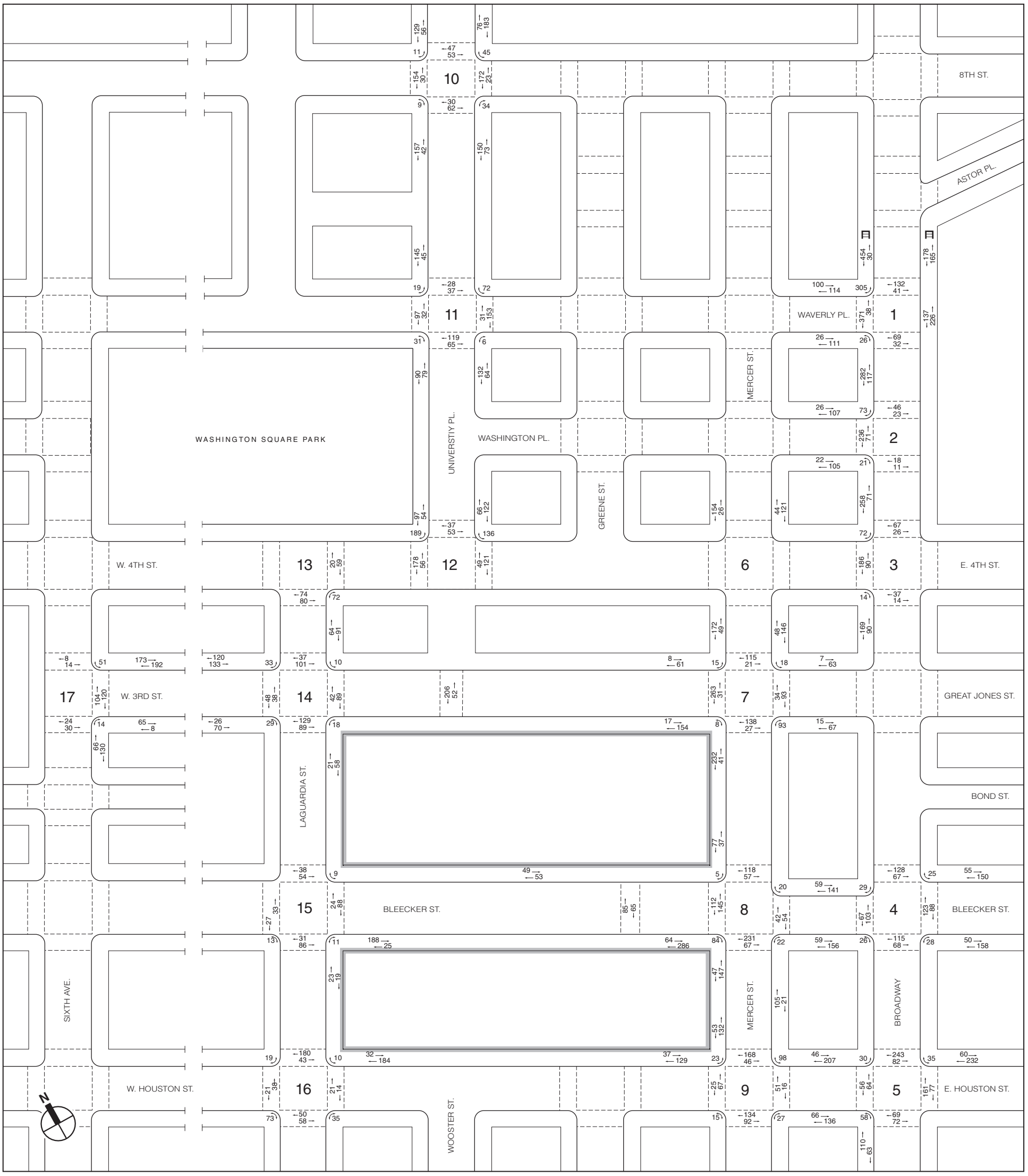
NOT TO SCALE

Subway Stairs

NYU Core

Potential CPC Modifications—2031 No Build Pedestrian Volume
Weekday PM Peak 15 Minutes
Figure 26-47

5.24.12

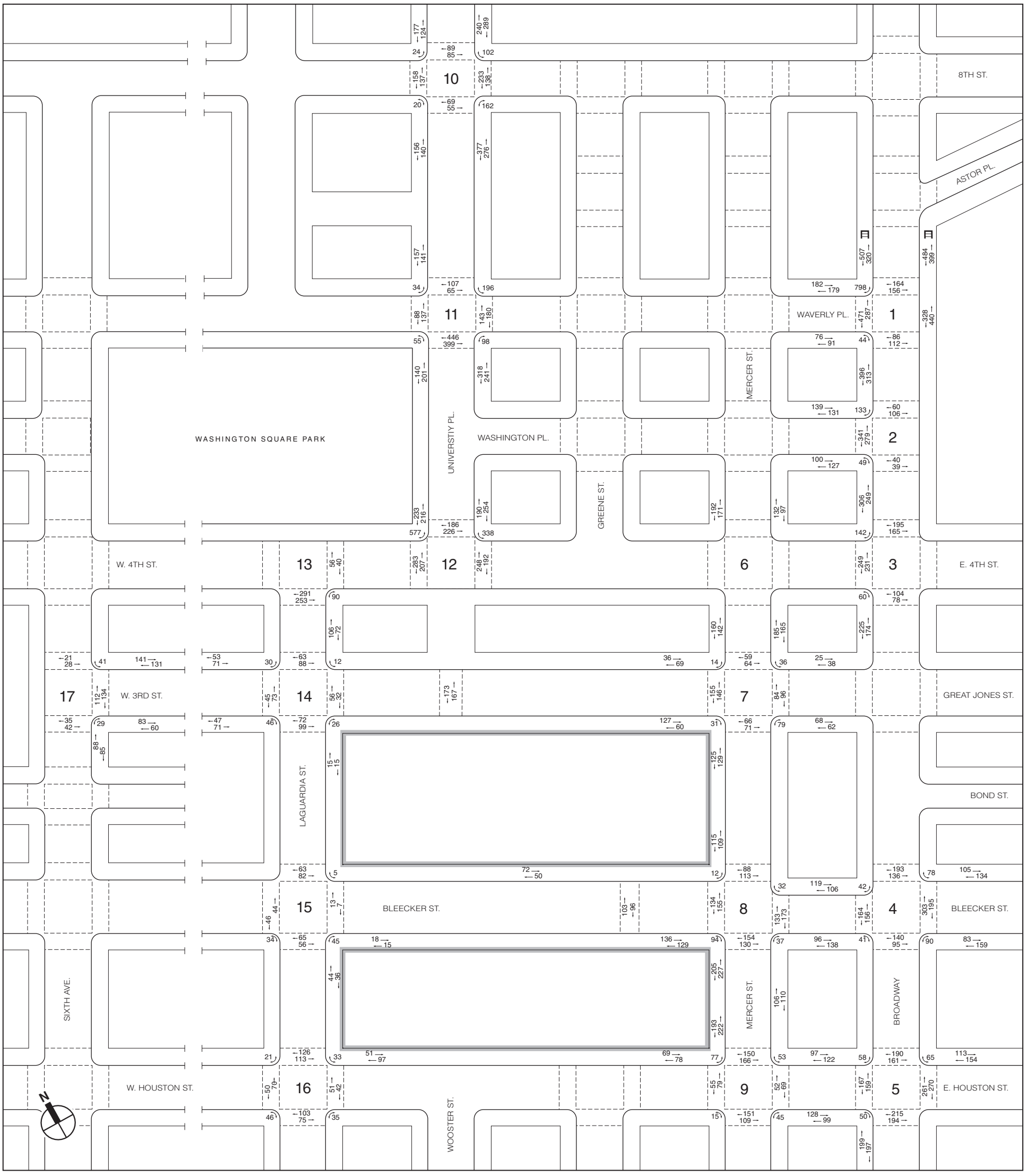


Subway Stairs

Potential CPC Modifications—2031 Build Pedestrian Volume
Weekday AM Peak 15 Minutes
Figure 26-48

NYU Core

5.24.12

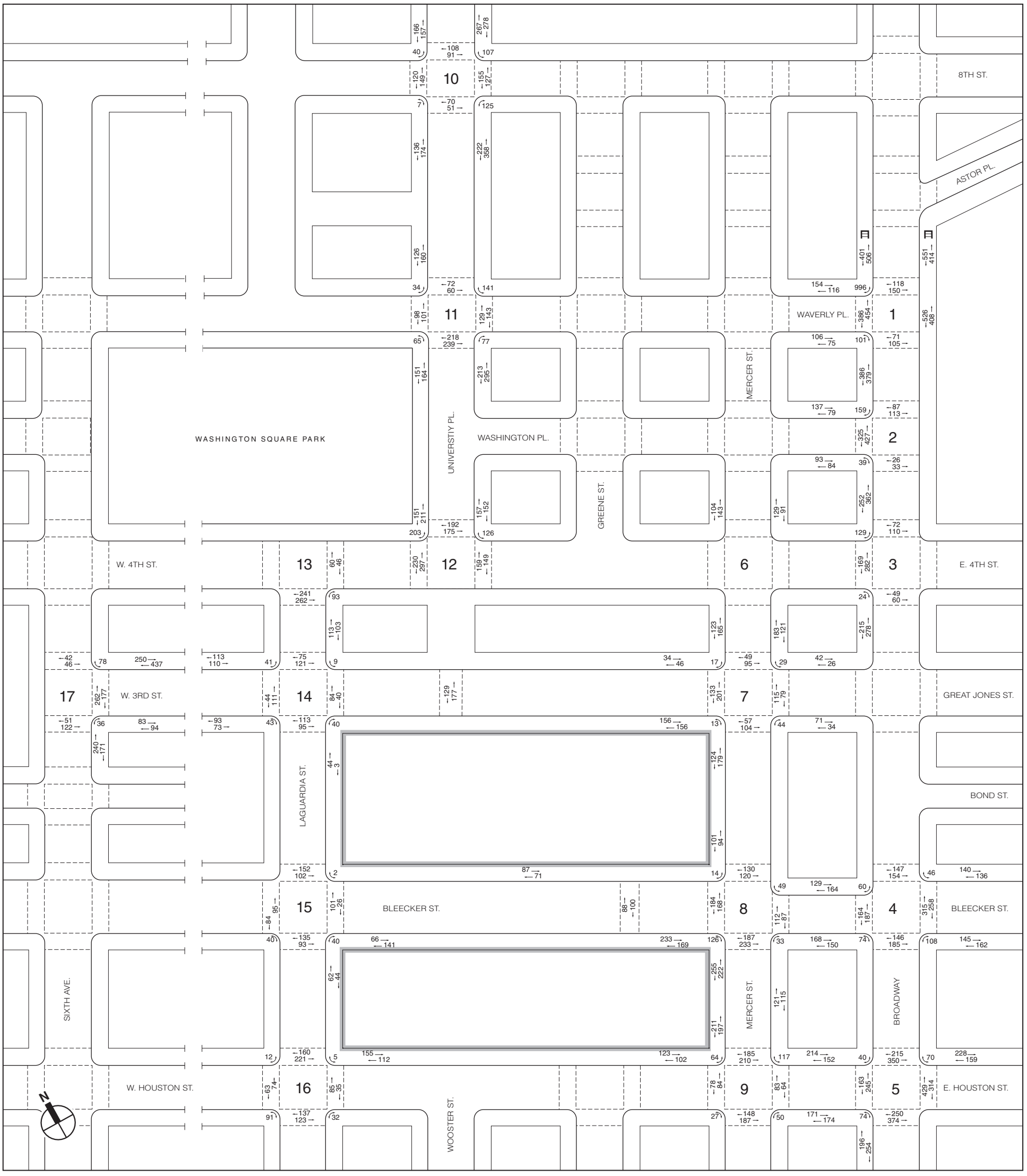


NOT TO SCALE

Subway Stairs

NYU Core

Potential CPC Modifications—2031 Build Pedestrian Volume
Weekday midday Peak 15 Minutes
Figure 26-49



NOT TO SCALE

Subway Stairs

NYU Core

Potential CPC Modifications—2031 Build Pedestrian Volume
Weekday PM Peak 15 Minutes
Figure 26-50

respectively. The Proposed Actions were projected to result in significant adverse impacts in 2031 at the southeast corner of University Place and Waverly Place during the weekday midday peak period and at the west crosswalk of Washington Square East and West 4th Street during the weekday midday and PM peak periods. With lower incremental trip generation, the Potential CPC Modifications are expected to result in equal or lesser impacts than the Proposed Actions at all study area locations. As shown in **Tables 26-28** and **26-29**, the above crosswalk impacts would also occur with the Potential CPC Modifications, but the corner impact that would occur with the Proposed Actions would not occur with the Potential CPC Modifications.

Table 26-28
2031 Potential CPC Modifications No Build and Build Conditions Corner Analysis

Intersection No.	Location	Corner	2031 Potential CPC Modifications No Build Condition – Weekday Midday Peak Period		2031 Potential CPC Modifications Build Condition – Weekday Midday Peak Period	
			SFP	LOS	SFP	LOS
11	University Place and Waverly Place	Southeast	12.1	E	11.5	E

Note: SFP = square feet per pedestrian
+ Denotes a significant adverse pedestrian impact

Table 26-29
2031 Potential CPC Modifications No Build and Build Conditions Crosswalk Analysis

Intersection No.	Location	Crosswalk	Street Width (feet)	Crosswalk Width (feet)	Peak Period	Conditions with conflicting vehicles					
						2031 Potential CPC Modifications No Build Condition			2031 Potential CPC Modifications Build Condition		
						2-way Volume	SFP	LOS	2-way Volume	SFP	LOS
12	Washington Square East and West 4th Street	West	30.0	14.7	Weekday Midday	378	24.2	C	490	17.9	D+
		West	34.0	13.5	Weekday PM	399	23.6	D	527	17.3	D+

Note: SFP = square feet per pedestrian
+ Denotes a significant adverse pedestrian impact

Vehicular and Pedestrian Safety

As with the Proposed Actions, three study area intersections (West Houston Street at Sixth Avenue, West 4th Street at Sixth Avenue, and West Houston Street at LaGuardia Place/West Broadway) have been identified as high pedestrian accident locations. But compared to the Proposed Actions, the Potential CPC Modifications would generate fewer incremental vehicle and pedestrian trips at these intersections. With lessened traffic levels, the extent of potential impacts at these intersections would also be lower. However, the West Houston Street intersections with Sixth Avenue and with LaGuardia Place/West Broadway would still incur significant adverse traffic impacts, albeit at lower magnitudes and during fewer peak periods. And the projected impacts at these intersections would similarly be mitigated with standard traffic engineering measures. The West 4th Street and Sixth Avenue intersection would likewise not incur any significant adverse traffic impacts. As a result, similar to the Proposed Actions, the Potential CPC Modifications would not exacerbate any of the current causes of pedestrian-related accidents. Nonetheless, the same pedestrian safety improvement measures recommended for the Proposed Actions can be implemented to improve safety conditions at these intersections. For school safety, the School Construction Authority (SCA) is expected to consult with NYCDOT during planning and construction of the new school to incorporate the necessary safety measures.

Parking

With regard to parking, the Potential CPC Modifications would also result in an off-street parking shortfall within ¼-mile of the Proposed Development Area during the midday hours, however at slightly lower magnitudes under the Phase 1–2021 Completion and Phase 2–2031 Full Build-Out scenarios. As with the Proposed Actions, it is anticipated that the 2021 and 2031 excess demand could be accommodated with a slightly longer walking distance beyond the ¼-mile radius and the Potential CPC Modifications would likewise not result in any significant adverse parking impacts.

AIR QUALITY

This section examines the potential for air quality impacts from the Potential CPC Modifications. As discussed above, the Potential CPC Modifications would encompass changes to the massing of the Proposed Actions' buildings. In addition, with the Potential CPC Modifications, the access to the proposed parking garage on the North Block would be from Bleecker Street, rather than from West 3rd Street, as it would under the Proposed Actions.

MOBILE SOURCES

On Street Sources

For the Potential CPC Modifications, the number of project-generated trips would not exceed the CO screening threshold of 170 peak hour vehicle trips at an intersection in the study area in Phase 1 and Phase 2, or the particulate matter emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual* in Phase 1. Therefore, the mobile source analysis was conducted for particulate matter for the 2031 analysis year only.

Using the methodology described in Chapter 15, "Air Quality," future maximum predicted 24-hour and annual average $PM_{2.5}$ concentration increments were calculated for the Potential CPC Modifications so that they could be compared to the $PM_{2.5}$ interim guidance criteria. Based on this analysis, the maximum predicted localized 24-hour average and neighborhood-scale annual average incremental $PM_{2.5}$ concentrations are presented in **Tables 26-30** and **26-31**. Note that $PM_{2.5}$ concentrations for the No Build condition are not presented, since impacts are assessed on an incremental basis.

Table 26-30
Future (2031) Maximum Predicted 24-Hour Average $PM_{2.5}$ Concentrations (in $\mu g/m^3$)

Location	Increment
Mercer Street and West Houston Street	0.12
Mercer Street and Bleecker Street	0.13
Note: $PM_{2.5}$ interim guidance criteria—24-hour average, 2 $\mu g/m^3$ (5 $\mu g/m^3$ not-to-exceed value).	

Table 26-31
Future (2031) Maximum Predicted Annual Average $PM_{2.5}$ Concentrations (in $\mu g/m^3$)

Location	Increment
Mercer Street and West Houston Street	0.02
Mercer Street and Bleecker Street	0.02
Note: $PM_{2.5}$ interim guidance criteria—annual (neighborhood scale), 0.1 $\mu g/m^3$.	

The results show that the annual and daily (24-hour) $PM_{2.5}$ increments are predicted to be well below the interim guidance criteria. Therefore, as with the Proposed Actions, there would be no potential for significant adverse impact on air quality from vehicle trips generated by the Potential CPC Modifications.

Parking Garage

The Potential CPC Modifications would include the development of a new below-grade parking garage on the North Block, with an entrance on Bleecker Street. Although the garage capacity would be identical to the garage analyzed for the Proposed Actions, the relocation of the garage would affect the potential vent locations; therefore, an analysis was conducted to determine the potential for significant adverse impacts from the proposed garage's exhaust vents.

The CO levels from the proposed parking garage were predicted using the methodology set forth in the *CEQR Technical Manual*, and as described in Chapter 15, "Air Quality." The maximum predicted CO concentration, with ambient background, and on-street traffic levels would be 4.1 ppm for the 1-hour period and 2.5 ppm for the 8-hour period. The maximum 1- and 8-hour contributions from the parking garage alone would be 0.8 ppm and 0.3 ppm, respectively. These maximum predicted CO levels are in compliance with the CO National Ambient Air Quality Standards (NAAQS) and the City's CO *de minimis* criteria. Therefore, there would be no potential for significant adverse impacts on air quality with the Potential CPC Modifications.

STATIONARY SOURCES

Heating and Hot Water Systems

As with the Proposed Actions, under the Potential CPC Modifications, the thermal energy needs of the proposed LaGuardia Building, Mercer Building would be served by the NYU Central Plant and would therefore not require any on-site heat and hot water systems. Compared to the Proposed Actions, the same floor area of approximately 350,000 gross square feet (gsf) of the proposed Zipper Building would have its own natural gas-fired boiler plant. The proposed Bleecker Building would also have an on-site heating and hot water system that would use natural gas.

Zipper Building

The emissions from the heating and hot water systems exhausting from the Zipper Building would not result in a significant adverse impact on air quality. As shown in **Table 26-32**, the predicted concentrations of NO_2, SO_2, and PM_{10} would not exceed the NAAQS, and the $PM_{2.5}$ concentration increments would be below the City's interim guidance criteria as shown in **Table 26-33**. Therefore, as with the Proposed Actions, the Zipper Building's heating and hot water systems would not have the potential for significant adverse impact on air quality under the Potential CPC Modifications. As with the Proposed Actions, to preclude the potential for air quality impacts the proposed Zipper Building heat and hot water systems stack shall be located at the highest building rooftop with the Potential CPC Modifications.

Bleecker Building

Table 26-34 shows maximum predicted concentrations of NO_2, SO_2, and PM_{10} from the proposed Bleecker Building with the Potential CPC Modifications. As shown in the table, the maximum concentrations from the stack emissions, when added to ambient background levels, would be below the NAAQS.

Table 26-32
Maximum Predicted Pollutant Concentration (in µg/m^3)
From Zipper Building

Pollutant	Averaging Period	Maximum Modeled	Background	Total	NAAQS
NO_2	1-hour	Hourly	Hourly	126.1[1]	188
	Annual[2]	0.30	47	47.3	100
SO_2	1-hour	0.018	91.4	91.42	196
	3-hour	0.017	128	128.2	1,300
PM_{10}	24-hour	0.18	53	53.2	150

Notes:
[1] Total hourly NO_2 concentrations throughout the modeling period were determined by adding the hourly modeled concentrations to the hourly ambient NO_2 concentrations for each corresponding hour. The total 1-hour concentration reported is the five-year average of the annual 98th percentile of the highest combined daily 1-hour NO_2 concentrations, in accordance with EPA guidance.
[2] The annual modeled NO_2 concentration was conservatively reported to be equal to the NO_x concentration. The increment presented is the highest concentration at any receptor over the five years modeled (2006-2010).

Table 26-33
Maximum Predicted $PM_{2.5}$ Increments (in µg/m^3)
From Zipper Building

Pollutant	Averaging Period	Maximum Concentration	Interim Guidance Threshold
$PM_{2.5}$	24-hour	0.18	2 to 5[(1)]
	Annual (discrete)	0.02	0.3
	Annual (neighborhood scale)	0.001	0.1

Notes:
[(1)] 24-hour $PM_{2.5}$ interim guidance criterion, > 2 µg/m^3 (5 µg/m^3 not-to-exceed value), depending on the magnitude, frequency, duration, location, and size of the area of the predicted concentrations.

Table 26-34
Maximum Predicted Pollutant Concentrations (in µg/m^3)
From Bleecker Building

Pollutant	Averaging Period	Maximum Modeled	Background	Total	NAAQS
NO_2	1-hour	Hourly	Hourly	126.4[1]	188
	Annual[2]	2.46	47	49.5	100
SO_2	1-hour	0.34	91.4	91.7	196
	3-hour	0.29	128	128.3	1,300
PM_{10}	24-hour	1.99	53	55.0	150

Notes:
[1] Total hourly NO_2 concentrations throughout the modeling period were determined by adding the hourly modeled concentrations to the hourly ambient NO_2 concentrations for each corresponding hour. The total 1-hour concentration reported is the five-year average of the annual 98th percentile of the highest combined daily 1-hour NO_2 concentrations, in accordance with EPA guidance.
[2] The annual modeled NO_2 concentration was conservatively reported to be equal to the NO_x concentration. The increment presented is the highest concentration at any receptor over the five years modeled (2006-2010).

The air quality modeling analysis also determined the highest predicted increase in 24-hour and annual average $PM_{2.5}$ concentrations from the proposed Bleecker Building (see **Table 26-35**). As shown in the table, the maximum incremental impacts at any discrete receptor location and at the neighborhood scale would be less than the applicable interim guidance criteria.

Table 26-35
Maximum Predicted $PM_{2.5}$ Increments (in $\mu g/m^3$)
From Bleecker Building

Pollutant	Averaging Period	Maximum Concentration	Interim Guidance Threshold
$PM_{2.5}$	24-hour	1.99	2 to 5[(1)]
	Annual (discrete)	0.19	0.3
	Annual (neighborhood scale)	0.001	0.1

Notes:
[(1)] 24-hour $PM_{2.5}$ interim guidance criterion, > 2 $\mu g/m^3$ (5 $\mu g/m^3$ not-to-exceed value), depending on the magnitude, frequency, duration, location, and size of the area of the predicted concentrations.

As with the Proposed Actions, to preclude the potential for air quality impacts the proposed Bleecker Building heat and hot water systems stack shall be located at the highest building rooftop with the Potential CPC Modifications. The Bleecker Building heat and hot water systems exhaust shall be at least 30 feet above the proposed rooftop playground. If the Potential CPC Modifications are adopted, this restriction will be included in a Restrictive Declaration. In addition, as with the Proposed Actions, under the Potential CPC Modifications, provisions would be included in a Restrictive Declaration for the use of natural gas for the proposed Bleecker Building. With the Potential CPC Modifications, there would be no need for the restrictive provisions regarding the placement of the Bleecker Building heating and hot water system exhaust stacks away from the 505 LaGuardia building, which would be included with the Proposed Actions. With the Potential CPC Modification's Restrictive Declaration provisions, there would be no potential for significant adverse air quality impacts from the proposed buildings.

ADDITIONAL SOURCES

Existing Building Heating and Hot Water Systems

For the Proposed Actions, emissions from the heating and hot water systems serving large existing buildings within 400 feet of the Proposed Development Area would not have the potential for a significant adverse impact on the proposed building air quality (see Chapter 15, "Air Quality"). Under the Potential CPC Modifications, since the proposed buildings heights are the same or lower as compared to the Proposed Actions, these existing buildings would not result in any significant adverse air quality impact.

NYU Central Plant

The NYU Central Plant was analyzed for its potential effects on the Potential CPC Modifications. The same inputs and assumptions for the NYU Central Plant used in the analysis of the Proposed Actions were used (see Chapter 15, "Air Quality").

A detailed dispersion analysis was performed to assess the potential for air quality impacts from the emissions associated with the NYU Central Plant with the Potential CPC Modifications. As with the Proposed Actions, under the Potential CPC Modifications, to preclude the potential for a significant adverse air quality impact, NYU Central Plant boilers would be restricted to natural gas and No.

2 fuel oil once the proposed Zipper and/or Mercer buildings are occupied. The Proposed Actions included a restriction in which no operable windows or air intakes on the proposed Mercer Building would be permitted above a height of 195 feet above grade. With the Potential CPC Modifications, operable windows and air intakes would be permitted on all floors of the Mercer Building. As shown in **Table 26-36,** the predicted concentrations of NO_2, SO_2, and PM_{10} from the NYU Central Plant would not exceed the NAAQS, with the above restriction on NYU Central Plant operation in place. If the Potential CPC Modifications are adopted, this restriction will be included in a Restrictive Declaration.

Table 26-36
Maximum Predicted Pollutant Concentration (in μg/m^3)
From NYU Central Plant

Pollutant	Averaging Period	Maximum Modeled	Background	Total	NAAQS
NO_2	1-hour	Hourly	Hourly	148.8[1]	188
	Annual[2]	2.7	47	49.7	100
SO_2	1-hour	7.5	91.4	98.9	196
	3-hour	6.9	128	134.9	1,300
PM_{10}	24-hour	3.1	53	56.1	150

Notes:
[1] Total hourly NO_2 concentrations throughout the modeling period were determined by adding the hourly modeled concentrations to the hourly ambient NO_2 concentrations for each corresponding hour. The total 1-hour NO_2 concentration reported is the five-year average of the annual 98th percentile of the highest combined daily 1-hour NO_2 concentrations, in accordance with EPA guidance.
[2] The annual modeled NO_2 concentration was conservatively reported to be equal to the NO_x concentration. The modeled concentration presented is the highest concentration at any receptor over the five years modeled (2006-2010).

The air quality modeling analysis also determined the highest predicted increase in 24-hour and annual average $PM_{2.5}$ concentrations from NYU Central Plant (see **Table 26-37**). As shown in the table, the maximum 24-hour incremental impacts at any discrete receptor location would be less than the applicable interim guidance criterion of 5 μg/m^3. On an annual basis, the maximum projected $PM_{2.5}$ increments would be less than the applicable interim guidance criterion of 0.3 μg/m^3.

Table 26-37
Maximum Predicted $PM_{2.5}$ Increments (in μg/m^3) from NYU Central Plant

Pollutant	Averaging Period	Maximum Concentration	Interim Guidance Threshold
$PM_{2.5}$	24-hour	3.0	2 to 5[(1)]
	Annual (discrete)	0.14	0.3

Note: [(1)] 24-hour $PM_{2.5}$ interim guidance criterion, > 2 μg/m^3 (5 μg/m^3 not-to-exceed value), depending on the magnitude, frequency, duration, location, and size of the area of the predicted concentrations.

The air quality analysis also evaluated impacts with the 24-hour average interim guidance criterion of 2 μg/m^3 for discrete receptor locations. The assessment examined the magnitude, duration, frequency, and extent of the increments at locations where exposure above the 2 μg/m^3 threshold averaged over a 24-hour period could occur.

Zipper Building

The maximum 24-hour $PM_{2.5}$ incremental concentration from the NYU Central Plant was predicted to be 3.0 μg/m^3 on the northern façade of the tallest Zipper Building tower, at a height of approximately 275 feet above grade. At this receptor location, 24-hour incremental concentrations from the NYU Central Plant were predicted to exceed 2 μg/m^3 at a maximum frequency of four times per year, and at an average frequency of approximately two times per

year. As with the Proposed Actions, $PM_{2.5}$ incremental concentrations exceeding 2 $\mu g/m^3$ on this building with the Potential CPC Modifications were predicted on the eastern, western and southern facades of the tallest Zipper Building tower at heights above 238 feet, and on the northern façade of the same tower at heights above 228 feet. At each of these locations, maximum 24-hour average $PM_{2.5}$ incremental concentrations from the NYU Central Plant were predicted to exceed 2 $\mu g/m^3$ at a maximum frequency of from one to six times per year, and with an annual average frequency of twice per year or less. $PM_{2.5}$ $\mu g/m^3$ incremental concentrations exceeding 2 $\mu g/m^3$ were also predicted to occur up to two times per year on all facades of the 228-foot tower of the Zipper Building, at heights above 218 feet (i.e., on the top floor). At other locations on this building, maximum 24-hour average incremental concentrations from the NYU Central Plant were predicted to be less than 2.0 $\mu g/m^3$. With the Potential CPC Modifications, the effects of the NYU Central Plant on the Zipper Building would be similar to the Proposed Actions. Therefore, as with the Proposed Actions, there would be no potential for significant adverse impact on air quality with the Potential CPC Modifications.

Mercer Building, LaGuardia Building, Bleecker Building

At each of these locations, maximum predicted $PM_{2.5}$ incremental concentrations from the NYU Central Plant were predicted to be below the interim guidance criterion of 2 $\mu g/m^3$.

As mentioned above, under the Proposed Actions, there were restrictions identified on the location of operable windows and air intakes on the proposed Mercer Building, which would be included in a Restrictive Declaration. Under the Potential CPC Modifications, these restrictions would not be required.

Overall, the magnitude, frequency, location, and size of the area of concentrations above 2 $\mu g/m^3$ is low and would not occur at locations where continuous 24-hour exposure would occur. Consequently, similar to the Proposed Actions, no potential significant air quality impacts related to $PM_{2.5}$ are expected to occur from the NYU Central Plant on the proposed project with the Potential CPC Modifications.

Cumulative Combustion Source Analysis

To assess the potential of the proposed building heating and hot water systems, when combined with the emissions from the NYU Central Plant and heating and hot water systems from large existing buildings within 400 feet of the Proposed Development Area, cumulative impacts with the Potential CPC Modifications were evaluated. 24-Hour average $PM_{2.5}$ incremental concentrations were considered, as individual source analysis described above indicated that $PM_{2.5}$ is the critical pollutant of concern, and the 24-hour average the critical time averaging period for $PM_{2.5}$ assessment. The analysis focused on the locations where the highest $PM_{2.5}$ incremental levels from the proposed buildings were predicted—the existing 505 LaGuardia building, and where the highest incremental $PM_{2.5}$ levels from the existing building heating and hot water systems and the NYU Central Plant were predicted—the proposed Zipper Building. The heights of the proposed building and existing building heating and hot water system exhaust, and the height of the NYU Central Plant exhaust stacks are different and located such that on any given day there would be no significant overlap in the dispersion of pollutant emissions from these sources. Maximum short-term $PM_{2.5}$ increments from the proposed buildings at the 505 LaGuardia building, combined with the $PM_{2.5}$ increments from the existing sources at the same receptor, result in an overall maximum increment of 2.3 $\mu g/m^3$. The overall cumulative concentration with the Potential CPC Modifications is lower than with the Proposed Actions. This is because the Bleecker Building is shorter as compared to the Proposed Actions and the location on the 505 LaGuardia Building where the maximum predicted concentration

from the Bleecker Building occurs with the Potential CPC Modifications is at a lower height than the location where maximum concentrations are predicted from the Bleecker Building with the Proposed Actions. At this location, with the Potential CPC Modifications, the contribution to $PM_{2.5}$ levels from existing buildings and the NYU Central Plant is lower than at the location where cumulative effects were analyzed for the Proposed Actions. As with the Proposed Actions, the maximum contribution to reported cumulative concentrations from the proposed and existing sources would occur at different times and therefore, the overall maximum concentrations would not be materially above the $PM_{2.5}$ increments reported in **Table 26-35,** for the Bleecker Building alone. The maximum combined annual average $PM_{2.5}$ increments would be less than 0.3 $\mu g/m^3$ at locations where the maximum increments from the proposed project alone are greatest (the 505 LaGuardia building). In addition, the maximum combined annual average $PM_{2.5}$ increments (from proposed project buildings, existing buildings, and the NYU Central Plant) at the proposed buildings would be below 0.3 $\mu g/m^3$. Overall, as with the predicted levels above 2.0 $\mu g/m^3$ resulting from the NYU Central Plant alone, the cumulative magnitude, frequency, location, and size of the area of concentrations above 2 $\mu g/m^3$ is low and would not occur at locations where continuous 24-hour exposure would occur. Therefore, with the Potential CPC Modifications, there would be no potential for cumulative significant adverse impact on air quality from the existing and proposed combustion sources.

Industrial Sources

Since the industrial source screening is performed based on the site boundary (not specific building locations), the analysis under the Potential CPC Modifications would be the same as that performed for the Proposed Actions. Based on the results of the industrial screening for the development parcels, industrial sources would not have a significant adverse impact on air quality with the Potential CPC Modifications.

NOISE

As with the Proposed Actions, the Potential CPC Modifications would not generate sufficient traffic to have the potential to cause a significant adverse noise impact, and a detailed mobile source noise analysis would not be required.

The Potential CPC Modifications would not affect the location of the relocated dog run. Therefore, as with the Proposed Actions, noise levels increases from the relocated dog run would be the same as with the Potential CPC Modifications and would not be considered a significant adverse noise impact.

As presented in Chapter 17, "Noise," an analysis was conducted to determine the potential noise effects of the proposed rooftop play areas associated with the public school proposed to be located in the Bleecker Building. Under the Proposed Actions, the proposed rooftop areas would be located on the eastern portion of the seven-story school rooftop, and the proposed dormitory use would rise seven-stories above the proposed school use, on the western portion of the building. The dormitory portion of the Bleecker Building would be expected to provide additional shielding from residences on LaGuardia Place. As mentioned above, the Potential CPC Modifications would eliminate the proposed dormitory use above the proposed public school. However, even with the elimination of the dormitory use, the residences on LaGuardia Place would be sufficiently far away from the rooftop play area noise sources. Noise modeling results show that at receptor distances of 102 feet from the proposed rooftop play areas, noise level increases at sensitive receptor locations would not be considered significant adverse impacts. The residences on LaGuardia Place are located at distances greater than 102 feet, and

therefore there would be no significant adverse noise impacts at these locations due to noise sources at the proposed rooftop play areas. As with the Proposed Actions, noise level increases due to the rooftop play areas on the residential buildings located at Washington Square Village 3 and 505 LaGuardia Place (the residential buildings closest to the rooftop play areas) would be perceptible but would not be considered a significant adverse noise impact. In addition, since under the Potential CPC Modifications the dormitory use in the Bleecker Building would be eliminated, the attenuation requirements for the eastern façade of the dormitory use would no longer be required under the Potential CPC Modifications.

As shown in **Table 17-3**, of Chapter 17, "Noise," the *CEQR Technical Manual* has set noise attenuation quantities for buildings based on exterior $L_{10(1)}$ noise levels in order to maintain interior noise levels of 45 dBA or lower for residential and academic uses and 50 dBA or lower for retail and athletic uses. The building attenuation analysis conservatively includes the mobile source noise contribution from the Noise passenger car equivalents (PCEs) screening analysis. While with the Potential CPC Modifications, the maximum predicted L_{10} values would be slightly different due to the changes in traffic (and therefore Noise PCEs) at some facades of the proposed buildings, the attenuation requirements would remain unchanged. As with the Proposed Actions, under the Potential CPC Modifications, a range of attenuation values, up to 33 dBA would be required for project buildings. Because the project buildings would be designed to satisfy these specifications, there would be no significant adverse noise impact with respect to building attenuation.

PUBLIC HEALTH

As with the Proposed Actions, the Potential CPC Modifications would not result in significant adverse impacts in technical areas which concern public health such as air quality, water quality, hazardous materials, or operational noise.

While during some periods of construction the Potential CPC Modifications, like the Proposed Actions, would result in significant adverse impacts related to noise as defined by CEQR thresholds, the predicted overall changes in noise levels would not be large enough to significantly affect public health. Therefore, as with the Proposed Actions, the Potential CPC Modifications would not result in significant adverse public health impacts.

NEIGHBORHOOD CHARACTER

As presented in Chapter 19, "Neighborhood Character," the analysis concluded that the Proposed Actions would not result in significant adverse impacts with respect to neighborhood character. The Potential CPC Modifications would not alter this conclusion. As described above, the Potential CPC Modifications would not result in any new significant adverse impacts to any of the contributing elements that define neighborhood character (land use, urban design, visual resources, historic resources, socioeconomic conditions, shadows, open space, traffic, and noise) As with the Proposed Actions, the Potential CPC Modifications would introduce substantial physical changes only on the two superblocks that comprise the Proposed Development Area and these blocks are already distinctly different from the surrounding study area. The Potential CPC Modifications would reduce the project size by approximately 14 percent, but the overall mix of uses and the location of buildings would be unchanged.

CONSTRUCTION

The Potential CPC Modifications would result in changes to the conceptual construction schedule when compared with the Proposed Actions (see **Figure 26-51 and Table 26-38**). The sections below analyze the potential for significant adverse impacts in the areas of construction-related transportation, air quality, noise and vibration, open space and tree replacement. These analyses are based on a modified conceptual construction schedule that reflects the sequencing of construction events as currently contemplated for the Potential CPC Modifications. Also presented is a discussion of the Bleecker Building alternate phasing scenario under the Potential CPC Modifications.

Table 26-38
Potential CPC Modifications Conceptual Construction Schedule

Building	Start Month	Finish Month	Approximate duration (months)
Phase 1			
Zipper Building	3rd quarter 2014	4th quarter 2018	54
Bleecker Building	3rd quarter 2018	2nd quarter 2021	33
Phase 2			
Washington Square Village parking garage	1st quarter 2022	1st quarter 2024	24
LaGuardia Building below-grade	1st quarter 2024	3rd quarter 2026	30
LaGuardia Building above-grade	4th quarter 2025	2nd quarter 2027	19
Mercer Building below-grade	3rd quarter 2027	1st quarter 2030	30
Mercer Building above-grade	2nd quarter 2029	2nd quarter 2031	24

Note: Start dates are dependent on many factors and may change.
Source: Turner Construction Company

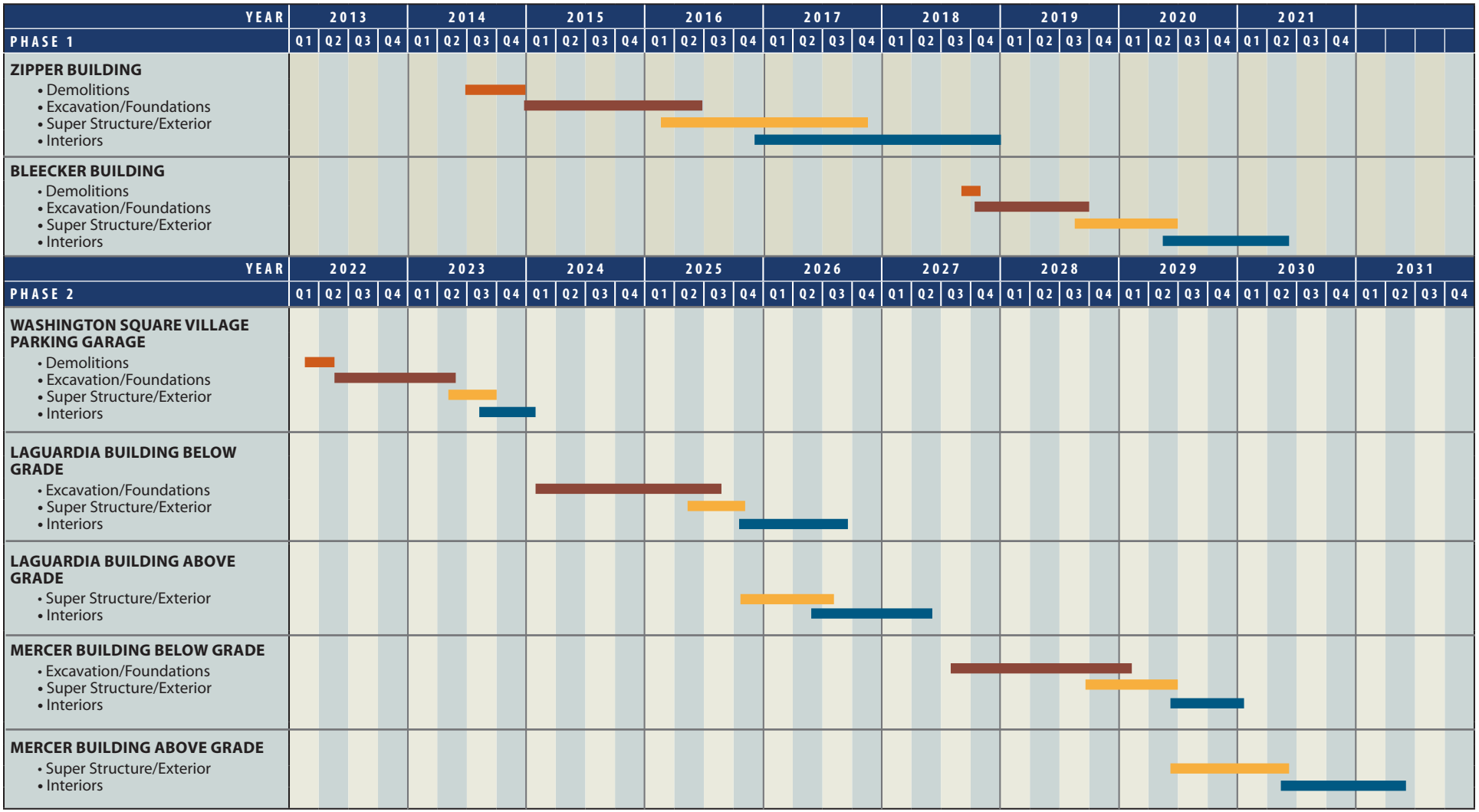
Based on the changes described above, the estimated numbers of workers and deliveries to the project area by calendar quarter for the Potential CPC Modifications were developed, as presented in **Table 26-39**. The average numbers of daily workers and trucks within each quarter are modestly lower than those presented in Chapter 20, "Construction," for the Proposed Actions. The average number of workers for the Potential CPC Modifications would be about 226 per day during Phase 1 and 108 per day during Phase 2. The average number of trucks would be 37 per day during Phases 1 and 29 per day during Phase 2.

For Phase 1, the highest number of workers would be 733 per day in the second quarter of 2018, and the highest number of trucks would be 84 per day in the second quarter of 2016. In Phase 2, the peak number of workers is 292 per day in the fourth quarter of 2029, and the peak number of trucks would be 40 per day also in the fourth quarter of 2029. Detailed workforce and delivery projections can be found in **Appendix H2-B**.

TRANSPORTATION

Traffic

The above daily worker and truck delivery projections were distributed to different hours of the day to arrive at the hour-by-by estimates presented in **Tables 26-40** and **26-41** for Phase 1 and Phase 2 of the Potential CPC Modifications. Compared to the Proposed Actions, the Phase 1 construction worker and truck delivery projections would be identical with the Potential CPC Modifications. For Phase 2 construction, however, the Potential CPC Modifications would be expected to yield modestly fewer construction workers and truck deliveries.



Potential CPC Modifications—
Conceptual Construction Schedule

Figure 26-51

Table 26-39
Potential CPC Modifications Average Number of Daily Workers and Trucks by Quarter

Phase 1																
Year	**2014**				**2015**				**2016**				**2017**			
Quarter	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Workers			28	30	27	57	60	60	80	222	400	564	567	475	430	200
Trucks			13	13	14	43	43	43	62	**84**	66	58	60	55	38	42
Year	**2018**				**2019**				**2020**				**2021**			
Quarter	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Workers	383	**733**	728	343	37	40	28	57	93	83	100	183	183	88	0	0
Trucks	35	35	37	45	22	22	28	28	28	20	25	25	25	25	0	0
Phase 2																
Year	**2022**				**2023**				**2024**				**2025**			
Quarter	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Workers	30	22	40	50	50	40	42	30	12	60	60	60	60	65	78	118
Trucks	14	17	24	25	18	19	21	22	18	31	31	31	35	32	32	39
Year	**2026**				**2027**				**2028**				**2029**			
Quarter	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Workers	230	261	183	233	283	75	10	47	60	60	60	58	73	95	168	**292**
Trucks	39	31	35	25	28	17	11	32	34	34	34	26	25	28	39	**40**
Year	**2030**				**2031**				**Phase 1**		**Phase 2**					
Quarter	1st	2nd	3rd	4th	1st	2nd	3rd	4th	**Average**	**Peak**	**Average**	**Peak**				
Workers	200	107	200	267	225	75	0	0	226	733	108	292				
Trucks	30	31	33	38	38	38	0	0	37	84	29	40				

Sources: Turner Construction Company

Similar to the Proposed Actions, the peak Phase 1 construction activities, in passenger car equivalents (PCEs), would occur in the first quarter of 2017, with 124 PCEs between 7 and 8 AM and 76 PCEs between 4 and 5 PM on weekdays, as summarized in **Table 26-42**. Since these construction trip projections are identical to those for the Proposed Actions, they would similarly not result in any construction-related significant traffic, transit, and pedestrian impacts.

For Phase 2 construction, peak activities would occur in the fourth quarter of 2029, with 73 PCEs between 7 and 8 AM and 41 PCEs between 4 and 5 PM on weekdays, as summarized in **Table 26-43**. Under this peak construction condition, Phase 1 and a portion of Phase 2 of the proposed project would have been completed, occupied, and generating operational trips. Accounting for these and concurrent peak construction trips, a comparison to the 2031 full build-out trip generation under the Potential CPC Modifications was prepared and presented in **Table 26-44**. As shown, the cumulative operational and construction traffic during peak Phase 2 construction for the Potential CPC Modifications would be of lower magnitudes than what the overall project would generate when completed in 2031. Therefore, the potential traffic impacts during peak Phase 2 construction would be within the envelope of significant adverse impacts identified for the 2031 Build condition and can be addressed with the same set of traffic mitigation measures developed for the Potential CPC Modifications' full build-out.

Table 26-40

Potential CPC Modifications Phase 1 Construction Level 1 Screening: Trip Generation

Vehicle PCE Trips (Auto + Truck)		2014				2015				2016				2017			
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
7 AM - 8 AM		0	0	15	15	19	50	51	51	73	109	113	124	**124**	110	89	67
8 AM - 9 AM		0	0	5	5	5	18	18	18	26	38	39	40	40	37	28	22
9 AM -10 AM		0	0	4	4	4	16	16	16	24	32	28	24	24	24	16	16
10 AM -11 AM		0	0	4	4	4	16	16	16	24	32	28	24	24	24	16	16
11 AM - 12 PM		0	0	4	4	4	16	16	16	24	32	28	24	24	24	16	16
12 PM - 1 PM		0	0	4	4	4	16	16	16	24	32	28	24	24	24	16	16
1 PM - 2 PM		0	0	4	4	4	16	16	16	24	32	28	24	24	24	16	16
2 PM - 3 PM		0	0	4	4	4	8	8	8	12	16	12	12	12	12	8	8
3 PM - 4 PM		0	0	4	4	4	8	8	8	13	18	15	16	16	15	11	9
4 PM - 5 PM		0	0	7	7	7	14	15	15	21	41	57	76	**76**	66	57	31
5 PM - 6 PM		0	0	1	1	1	1	1	1	2	5	9	12	12	10	9	4
Daily Total		0	0	56	56	60	179	181	181	267	387	385	400	**400**	370	282	221
Vehicle PCE Trips (Auto + Truck)		**2018**				**2019**				**2020**				**2021**			
		1Q	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**
7 AM - 8 AM		79	119	119	83	28	29	31	34	39	29	35	45	45	34	0	0
8 AM - 9 AM		27	37	37	30	9	9	13	14	15	10	15	17	17	14	0	0
9 AM -10 AM		16	16	16	20	8	8	12	12	12	8	12	12	12	12	0	0
10 AM -11 AM		16	16	16	20	8	8	12	12	12	8	12	12	12	12	0	0
11 AM - 12 PM		16	16	16	20	8	8	12	12	12	8	12	12	12	12	0	0
12 PM - 1 PM		16	16	16	20	8	8	12	12	12	8	12	12	12	12	0	0
1 PM - 2 PM		16	16	16	20	8	8	12	12	12	8	12	12	12	12	0	0
2 PM - 3 PM		8	8	8	8	4	4	4	4	4	4	4	4	4	4	0	0
3 PM - 4 PM		11	13	13	10	4	4	4	4	5	5	5	5	5	5	0	0
4 PM - 5 PM		51	91	91	47	8	9	7	10	15	13	15	25	25	14	0	0
5 PM - 6 PM		8	16	15	7	1	1	1	1	2	2	2	4	4	2	0	0
Daily Total		264	364	363	285	94	96	120	127	140	103	136	160	160	133	0	0

Table 26-41

Potential CPC Modifications Phase 2 Construction Level 1 Screening: Trip Generation

Vehicle PCE Trips (Auto + Truck)	2022				2023				2024				2025				2026			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
7 AM - 8 AM	19	18	29	30	26	25	25	27	21	39	39	39	43	39	41	53	66	62	57	50
8 AM - 9 AM	5	9	9	13	9	9	9	9	8	14	14	14	18	14	14	19	23	19	21	19
9 AM -10 AM	4	8	8	12	8	8	8	8	8	12	12	12	16	12	12	16	16	12	16	12
10 AM -11 AM	4	8	8	12	8	8	8	8	8	12	12	12	16	12	12	16	16	12	16	12
11 AM - 12 PM	4	8	8	12	8	8	8	8	8	12	12	12	16	12	12	16	16	12	16	12
12 PM - 1 PM	4	8	8	12	8	8	8	8	8	12	12	12	16	12	12	16	16	12	16	12
1 PM - 2 PM	4	8	8	12	8	8	8	8	8	12	12	12	16	12	12	16	16	12	16	12
2 PM - 3 PM	4	4	4	4	4	4	4	4	4	8	8	8	8	8	8	8	8	8	8	4
3 PM - 4 PM	4	4	4	4	4	4	4	4	4	8	8	8	8	8	9	9	10	10	9	6
4 PM - 5 PM	7	6	9	10	10	9	9	7	5	15	15	15	15	15	17	21	34	38	29	30
5 PM - 6 PM	1	0	1	1	1	1	1	1	0	1	1	1	1	1	2	3	5	6	4	5
Daily Total	60	81	96	122	94	92	92	92	82	145	145	145	173	145	151	193	226	203	208	174
Vehicle PCE Trips (Auto + Truck)	**2027**				**2028**				**2029**				**2030**				**2031**			
	1Q	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**
7 AM - 8 AM	60	25	13	37	43	43	43	35	32	39	59	**73**	55	44	55	70	66	49	0	0
8 AM - 9 AM	20	10	4	13	14	14	14	14	14	15	21	24	18	15	18	24	22	18	0	0
9 AM -10 AM	12	8	4	12	12	12	12	12	12	12	16	16	12	12	12	16	16	16	0	0
10 AM -11 AM	12	8	4	12	12	12	12	12	12	12	16	16	12	12	12	16	16	16	0	0
11 AM - 12 PM	12	8	4	12	12	12	12	12	12	12	16	16	12	12	12	16	16	16	0	0
12 PM - 1 PM	12	8	4	12	12	12	12	12	12	12	16	16	12	12	12	16	16	16	0	0
1 PM - 2 PM	12	8	4	12	12	12	12	12	12	12	16	16	12	12	12	16	16	16	0	0
2 PM - 3 PM	4	4	4	8	8	8	8	4	4	4	8	8	8	8	8	8	8	8	0	0
3 PM - 4 PM	6	5	4	8	8	8	8	4	5	5	9	10	9	9	9	10	10	9	0	0
4 PM - 5 PM	36	13	5	13	15	15	15	11	12	15	27	41	31	20	31	38	34	17	0	0
5 PM - 6 PM	6	2	0	1	1	1	1	1	2	2	4	6	4	2	4	6	5	2	0	0
Daily Total	192	99	50	140	149	149	149	129	129	140	208	**242**	185	158	185	236	225	183	0	0

Table 26-42
Potential CPC Modifications Phase 1 Peak Construction Vehicle Trip Projections

Hour	Auto Trips			Truck Trips			Total					
	Regular Shift			Regular Shift			Vehicle Trips			PCE Trips		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Weekday (1st Quarter of 2017)												
7 AM - 8 AM	**64**	**0**	**64**	**15**	**15**	**30**	**79**	**15**	**94**	**94**	**30**	**124**
8 AM - 9 AM	16	0	16	6	6	12	22	6	28	28	12	40
9 AM -10 AM	0	0	0	6	6	12	6	6	12	12	12	24
10 AM -11 AM	0	0	0	6	6	12	6	6	12	12	12	24
11 AM - 12 PM	0	0	0	6	6	12	6	6	12	12	12	24
12 PM - 1 PM	0	0	0	6	6	12	6	6	12	12	12	24
1 PM - 2 PM	0	0	0	6	6	12	6	6	12	12	12	24
2 PM - 3 PM	0	0	0	3	3	6	3	3	6	6	6	12
3 PM - 4 PM	0	4	4	3	3	6	3	7	10	6	10	16
4 PM - 5 PM	**0**	**64**	**64**	**3**	**3**	**6**	**3**	**67**	**70**	**6**	**70**	**76**
5 PM - 6 PM	0	12	12	0	0	0	0	12	12	0	12	12
Daily Total	80	80	160	60	60	120	140	140	280	200	200	400

Note: Hourly construction worker and truck trips were derived from an estimated quarterly average number of construction workers and truck deliveries per day, with each truck delivery resulting in two daily trips (arrival and departure).

Table 26-43
Potential CPC Modifications Phase 2 Peak Construction Vehicle Trip Projections

Hour	Auto Trips			Truck Trips			Total					
	Regular Shift			Regular Shift			Vehicle Trips			PCE Trips		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Weekday (4th Quarter of 2029)												
7 AM - 8 AM	**33**	**0**	**33**	**10**	**10**	**20**	**43**	**10**	**53**	**53**	**20**	**73**
8 AM - 9 AM	8	0	8	4	4	8	12	4	16	16	8	24
9 AM -10 AM	0	0	0	4	4	8	4	4	8	8	8	16
10 AM -11 AM	0	0	0	4	4	8	4	4	8	8	8	16
11 AM - 12 PM	0	0	0	4	4	8	4	4	8	8	8	16
12 PM - 1 PM	0	0	0	4	4	8	4	4	8	8	8	16
1 PM - 2 PM	0	0	0	4	4	8	4	4	8	8	8	16
2 PM - 3 PM	0	0	0	2	2	4	2	2	4	4	4	8
3 PM - 4 PM	0	2	2	2	2	4	2	4	6	4	6	10
4 PM - 5 PM	**0**	**33**	**33**	**2**	**2**	**4**	**2**	**35**	**37**	**4**	**37**	**41**
5 PM - 6 PM	0	6	6	0	0	0	0	6	6	0	6	6
Daily Total	41	41	82	40	40	80	81	81	162	121	121	242

Note: Hourly construction worker and truck trips were derived from an estimated quarterly average number of construction workers and truck deliveries per day, with each truck delivery resulting in two daily trips (arrival and departure).

Table 26-44
Potential CPC Modifications Comparison of Weekday Vehicle Trip Generation—Construction and Operational

	Phase 2 Construction in 2029											
	Construction Trips in PCEs (Q4 2029)			2021 Phase 1 & Partial Phase 2 (LaGuardia Building) Completion Operational Trips in PCEs			Total PCEs			2031 Full Build-Out Operational Trips in PCEs		
Time	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
7-8 AM	53	20	73	27	7	31	77	27	104	30	7	37
8-9 AM	16	8	24	117	88	205	133	96	229	143	101	244
12-1 PM	8	8	16	55	49	104	63	57	120	64	58	122
4-5 PM	4	37	41	40	36	76	44	73	117	46	46	92
5-6 PM	0	6	6	64	88	152	64	94	158	79	114	193

Notes: Peak hours of operational traffic are generally 8-9 AM, 12-1 PM, and 5-6 PM.
PCEs = passenger car equivalents where 1 truck trip equals 2 PCEs.

Parking

With comparable parking demand as the Proposed Actions, the Potential CPC Modifications are expected to similarly result in temporary parking shortfalls within ¼-mile of the project site during the peak midday hours. However, this projected parking shortfall would be of lesser magnitude than that identified for the Potential CPC Modifications' full build-out in 2031. Based on the magnitude of available and total parking spaces within ½-mile of the Proposed Development Area, it is anticipated that the excess demand could be accommodated with a slightly longer walking distance beyond the ¼-mile radius. Furthermore, for proposed projects located in Manhattan, this parking shortfall would not constitute a significant adverse impact due to the magnitude of available alternative modes of transportation.

Transit

During peak Phase 1 construction, with identical construction activities as the Proposed Actions, the Potential CPC Modifications would similarly not result in the potential for any significant adverse transit impacts. For Phase 2 construction, the combination of the peak Phase 2 construction worker subway trips and those generated by the completed Phase 1 and portions of the Phase 2 projects during the commuter peak hours would result in comparable significant adverse impacts to the subway station elements described for the completed project under the Potential CPC Modifications and can be addressed with the same mitigation measures recommended for the Potential CPC Modifications' full build-out.

Pedestrians

During peak Phase 1 construction, with identical construction activities as the Proposed Actions, the Potential CPC Modifications would similarly not result in the potential for any significant adverse pedestrian impacts. For Phase 2 construction, the combination of the peak Phase 2 construction worker pedestrian trips and those generated by the completed Phase 1 and portions of the Phase 2 projects during the commuter peak hours may result in comparable significant adverse impacts at the west crosswalk at Washington Square East and West 4th Street described for the completed project under the Potential CPC Modifications and can be addressed with the same mitigation measure recommended for the Potential CPC Modifications' full build-out.

AIR QUALITY

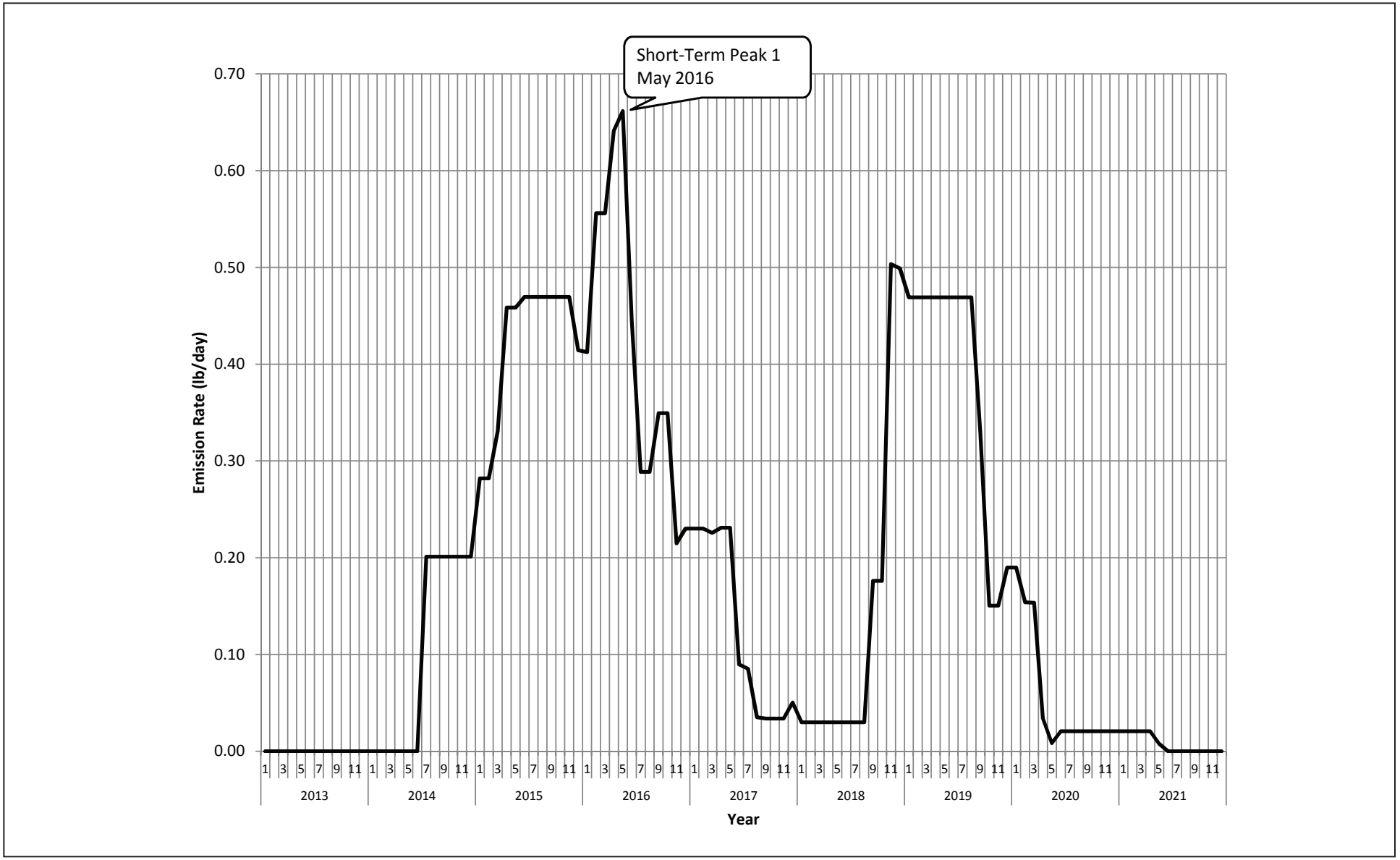
Emissions from on-site construction equipment and on-road construction-related vehicles, and the effect of construction vehicles on background traffic congestion, have the potential to affect air quality. As described above, the Potential CPC Modifications would reduce floor area, building heights and bulk, and change the construction sequencing on the North Block, requiring a change to the location of the proposed below-grade parking facility on the North Block. This section analyzes the revised construction program under the Potential CPC Modifications to determine if there would be any new significant adverse environmental impacts not identified for the Proposed Actions.

Construction Activity Assessment

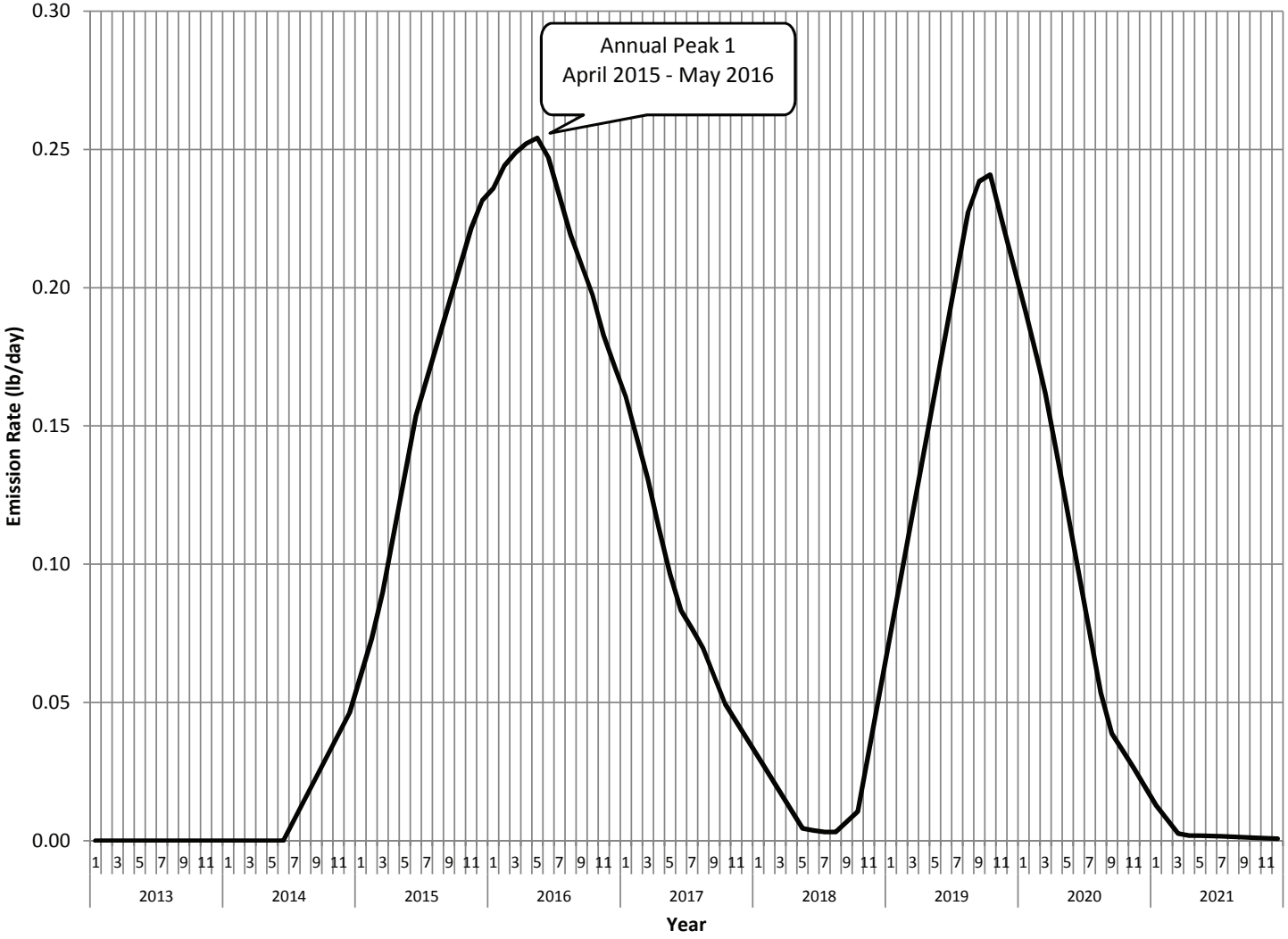
In order to assess the impact on air pollutant concentrations associated with the revised construction program under the Potential CPC Modifications, the emissions assumptions prepared for the Proposed Actions as described in Chapter 20, "Construction," were applied to the program under the Potential CPC Modifications, resulting in new estimates ('emissions profiles') of 24-hour and annual average fine particulate matter ($PM_{2.5}$) emissions throughout the duration of construction. Based on the $PM_{2.5}$ construction emissions profiles presented in **Figures 26-52 through Figures 26-55**, peak short-term and annual periods in each construction phase were identified, representing the reasonable worst case scenario for each phase.

As with the Proposed Actions, April 2016 and the year from May 2015 to April 2016 were identified as the worst-case short-term and annual periods for Phase 1, respectively, since the highest project-wide emissions were predicted in these periods during Phase 1 construction (when the construction of the Zipper Building would take place in proximity to residential locations). However, since the general means and methods used for construction of the Zipper Building would remain the same under the Potential CPC Modifications, the conclusions of the Phase 1 construction air quality analysis presented in Chapter 20, "Construction," would not be affected, and no further analysis is required for Phase 1 construction. Therefore, Phase 1 construction activities under both the Proposed Actions and the Potential CPC Modifications would not result in significant adverse impacts with respect to air quality.

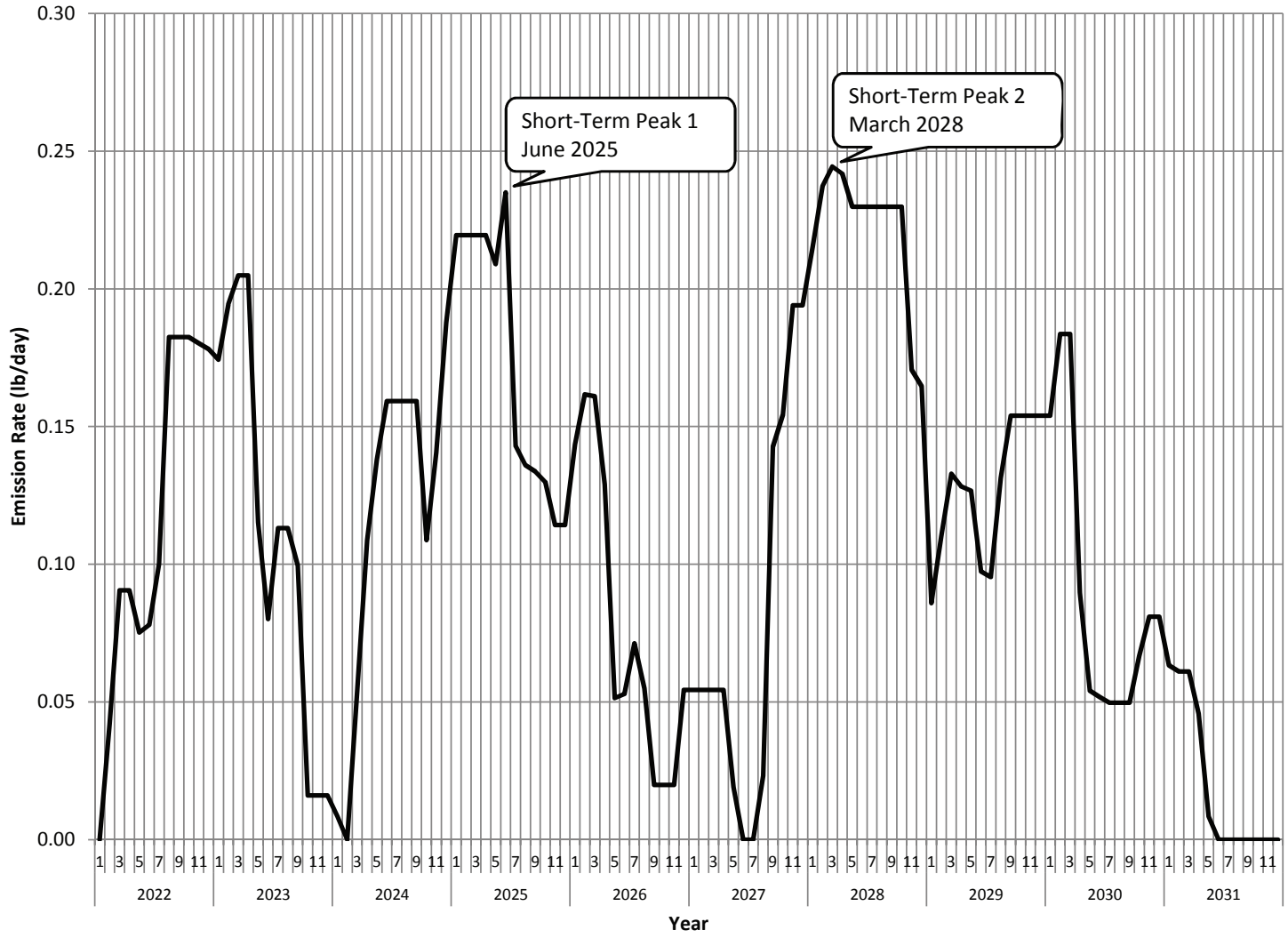
March 2028 and the year from November 2027 to February 2028 were identified as the worst-case short-term and annual periods for Phase 2 construction, respectively, since the highest project-wide emissions were predicted in these periods during Phase 2 (when the construction of the below-grade structure for the Mercer Building would take place in close proximity to the Washington Square Village Buildings 2 and 4). In addition, under the Potential CPC Modifications, one short-term period—June 2025, and one annual period—the year from July 2024 to June 2025, were also identified as peak emission periods during Phase 2 construction. This secondary period would include construction activities for the LaGuardia Building directly south of the Washington Square Village Buildings 1 and 2 and directly north of the Washington Square Village Building 3 and 4. Since the Potential CPC Modifications would revise the construction sequencing and construction activities on the North Block, a quantitative analysis of both on-site and on-road sources of air emissions was conducted for Phase 2 of construction to determine if the Potential CPC Modifications would have the potential to cause new significant adverse impacts not identified for the Proposed Actions. The general methodology for both on-site and on-road sources modeling presented in Chapter 15, "Air Quality," and Chapter 20, "Construction," was followed for modeling dispersion of pollutants during the construction period. Chapter 15, "Air Quality," also contains a review of the pollutants for analysis; applicable regulations, standards, and benchmarks.



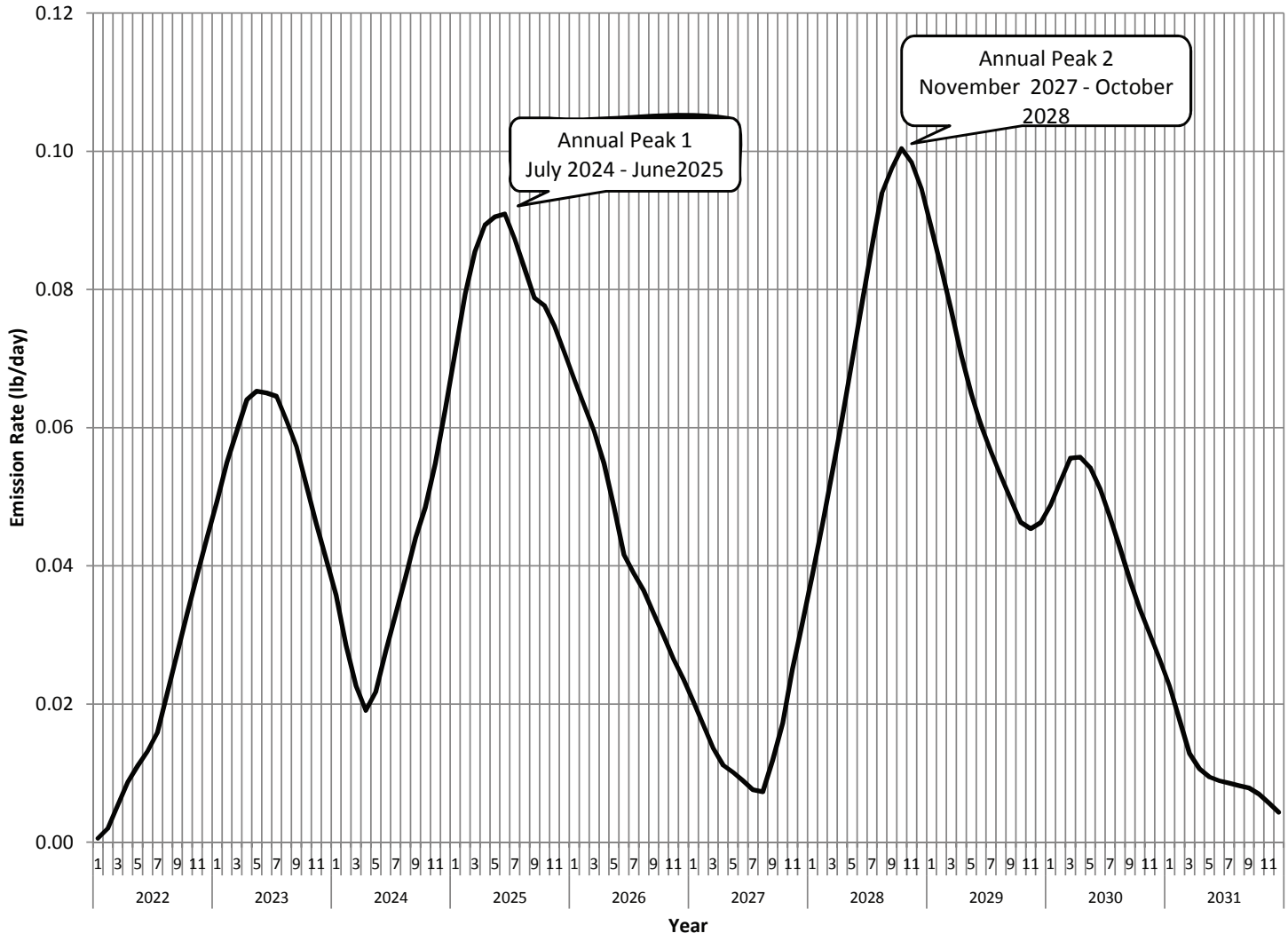
Potential CPC Modifications—
Short-Term (24-Hour Average) $PM_{2.5}$
Construction Emissions Profile, Phase 1
Figure 26-52



Potential CPC Modifications—
Annual (Moving 12-Month Average) $PM_{2.5}$
Construction Emissions Profile, Phase 1
Figure 26-53



Potential CPC Modifications—
Short-Term (24-Hour Average) $PM_{2.5}$
Construction Emissions Profile, Phase 2
Figure 26-54



Potential CPC Modifications—
Annual (Moving 12-Month Average) $PM_{2.5}$
Construction Emissions Profile, Phase 2
Figure 26-55

On-Site Construction Activity Assessment Results – Phase 2

Maximum predicted concentration increments from project construction with the Potential CPC Modifications during Phase 2, and overall concentrations including background concentrations, are presented in **Table 26-45**. For $PM_{2.5}$, monitored concentrations are not added to modeled concentrations from sources, since impacts are determined by comparing the predicted changes between the results under the Potential CPC Modifications and the No Build with the interim guidance criteria.

Table 26-45
Potential CPC Modifications
Maximum Predicted Pollutant Concentrations from Construction Site Sources—Phase 2 ($\mu g/m^3$)

Pollutant	Averaging Period	No Build	Potential CPC Modifications	Increment	Interim Guidance Threshold	NAAQS
Residence, Academic Buildings or Open Space						
$PM_{2.5}$	24-hour[2]	—	—	1.9	2 [3]	35 [1]
	Annual Local[2]	—	—	0.15	0.3	15
PM_{10}	24-hour	53	58	5	—	150
NO_2	Annual	68	72	4	—	100
CO	1-hour	2.3 ppm	4.5 ppm	2.2 ppm	—	35 ppm
	8-hour	1.8 ppm	2.0 ppm	0.2 ppm	—	9 ppm
Sidewalks and Covered Walkways Adjacent to Construction						
$PM_{2.5}$	24-hour[2]	—	—	0.7	2 [3]	35 [1]
	Annual Local[2]	—	—	0.09	0.3	15
PM_{10}	24-hour	53	55	2	—	150
NO_2	Annual	68	70	2	—	100
CO	1-hour	2.3 ppm	4.3 ppm	2.0 ppm	—	35 ppm
	8-hour	1.8 ppm	1.9 ppm	0.1 ppm	—	9 ppm

Notes:
Results for any other time period during Phase 2, or locations other than these sites, would be lower.
$PM_{2.5}$ concentration increments should be compared with threshold values. Total concentrations should be compared with the NAAQS.

[1] EPA has reduced the 24-hour $PM_{2.5}$ standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$ and revoked the annual PM_{10} standard, effective December 18, 2006. A full discussion of the NAAQS can be found in Chapter 15, "Air Quality."

[2] Monitored concentrations are not added to modeled $PM_{2.5}$ values.

[3] DEP is currently applying threshold criteria for assessing the significance of 24-hour average $PM_{2.5}$ impacts. The significance of temporary concentration increments greater than 2 $\mu g/m^3$ is assessed in the context of the magnitude, frequency, duration, location and size of area affected by the concentration increment.

As with the Proposed Actions, the maximum predicted total concentrations of PM_{10}, CO, and annual-average NO_2 for the Potential CPC Modifications are not expected to exceed the NAAQS. While the predicted concentrations resulting from the Potential CPC Modifications would in some instances be slightly higher than with the Proposed Actions, there would not be any predicted 24-hour average $PM_{2.5}$ concentration increments greater than 2 $\mu g/m^3$ at residences or other locations **(see Appendix H2-C)**, where exposure for periods of 24-hours or more can be reasonably expected. Local annual average $PM_{2.5}$ concentration increments would not exceed the threshold level of 0.3 $\mu g/m^3$. The highest annual average neighborhood-scale $PM_{2.5}$ increment would potentially reach 0.003 $\mu g/m^3$, which is lower than the threshold level of 0.1 $\mu g/m^3$. Therefore, as with the Proposed Actions, the Potential CPC Modifications would not result in any new significant adverse impacts with respect to construction air quality.

Mobile Source Assessment Results

For the Potential CPC Modifications, the Phase 1 peak daily construction workforce and truck trip projections would remain the same as compared to the Proposed Actions. Therefore, as with the Proposed Actions, there would be no potential for significant adverse impact on air quality from construction vehicle trips generated by the Potential CPC Modifications during Phase 1 construction.

The general methodology for mobile source modeling presented in Chapter 15, "Air Quality," was followed for intersection modeling during the Potential CPC Modifications Phase 2 construction period. Based on this analysis, the maximum predicted 8-hour average CO concentrations, 24-hour average PM_{10} concentrations, and localized 24-hour average and neighborhood-scale annual average incremental $PM_{2.5}$ concentrations are presented in **Tables 26-46** through **26-49**. Note that $PM_{2.5}$ concentrations for the No Build condition are not presented, since impacts are assessed on an incremental basis.

Table 26-46
Maximum Predicted Future No Build and Potential CPC Modifications
8-Hour Average Carbon Monoxide Concentrations

Construction Phase	Location	No Build 8-Hour Concentration (ppm)	Potential CPC Modifications 8-Hour Concentration (ppm)	NAAQS (ppm)
2	Bleecker Street and Mercer Street	2.0	2.0	9
Note:	An adjusted ambient background concentration of 1.8 ppm is included in the No Build values presented above.			

Table 26-47
Maximum Predicted Future No Build and Potential CPC Modifications
24-Hour Average PM_{10} Concentrations

Construction Phase	Location	No Build 24-Hour Concentration ($\mu g/m^3$)	Potential CPC Modifications 24-Hour Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)
2	Bleecker Street and Mercer Street	72.4	72.5	150
Note:	An adjusted ambient background concentration of 53 $\mu g/m^3$ is included in the No Build values presented above.			

Table 26-48
Maximum Predicted Future
24-Hour Average $PM_{2.5}$ Concentrations

Construction Phase	Location	Increment ($\mu g/m^3$)	Interim Guidance Threshold ($\mu g/m^3$)
2	Bleecker Street and Mercer Street	0.02	5/2
Note:	$PM_{2.5}$ interim guidance criteria—24-hour average, 2 $\mu g/m^3$ (5 $\mu g/m^3$ not-to-exceed value).		

Table 26-49
Maximum Predicted Future
Annual Average $PM_{2.5}$ Concentrations

Construction Phase	Location	Increment ($\mu g/m^3$)	Interim Guidance Threshold ($\mu g/m^3$)
2	Bleecker Street and Mercer Street	0.002	0.1
Note:	$PM_{2.5}$ interim guidance criteria—annual (neighborhood scale) 0.1 $\mu g/m^3$.		

The results show that the future maximum 8-hour average CO concentration and 24-hour average PM_{10} concentration with the Potential CPC Modifications are predicted to be below the NAAQS, and the annual and daily (24-hour) $PM_{2.5}$ increments are predicted to be well below the interim guidance criteria. Therefore, as with the Proposed Actions, there would be no potential for significant adverse impact on air quality from construction vehicle trips generated by the Potential CPC Modifications during Phase 2 construction.

Cumulative Assessment

Since emissions from on-site construction equipment and on-road construction-related vehicles may contribute to concentration increments concurrently, a cumulative assessment was undertaken to determine the potential maximum effect of these sources combined for the Potential CPC Modifications. Total cumulative concentration increments were estimated by adding the highest results from the on-site construction analysis and mobile source analysis.

As described above, since the Potential CPC Modifications Phase 1 peak construction air quality period would remain the same as compared to the Proposed Actions, the conclusions of the Phase 1 construction air quality analysis presented in Chapter 20, "Construction," would not be affected and no further on-site and on-road analysis is required. Therefore, as with the Proposed Actions, there would be no potential for significant adverse impact on air quality from the combined impacts of on-site and on-road sources generated by the Potential CPC Modifications during Phase 1 construction.

For the Potential CPC Modifications, a mobile source analysis of CO impacts for the intersection of Bleecker and Mercer Streets indicated that a maximum predicted concentration of 0.2 ppm would occur at receptors placed along the sidewalks adjacent to this intersection during Phase 2 construction. The maximum predicted concentration of CO from stationary sources of Phase 2 construction is 2.0 $\mu g/m^3$, including background. Total cumulative concentrations of CO for both mobile and stationary sources (conservatively combining two different peak analysis periods) is estimated to be 2.2 ppm, which is less than the applicable air quality standard of 9 ppm. Therefore, as with the Proposed Actions, no significant adverse air quality impacts for CO are expected to occur due to the combined impacts of mobile and construction sources during Phase 2 construction under the Potential CPC Modifications.

For the Potential CPC Modifications, the maximum predicted concentration of PM_{10} from stationary sources of Phase 2 construction is 58 $\mu g/m^3$, including background. Cumulative concentrations from mobile and stationary sources (conservatively combining two different peak analysis periods) for Phase 2 construction is estimated to be 78 $\mu g/m^3$, and would not exceed the applicable air quality standard of 150 $\mu g/m^3$. For $PM_{2.5}$, the mobile source concentrations were an order of magnitude or more lower than the stationary source concentrations, and would therefore have no significant affect when combined with the stationary source concentration contributions, which have a much smaller increment at ground level than the peak increments at elevated receptor locations reported in Chapter 15, "Air Quality." Therefore, as with the Proposed Actions, no significant adverse air quality impacts for either PM_{10} or $PM_{2.5}$ are expected to occur due to the combined impacts of mobile and construction sources during Phase 2 construction under the Potential CPC Modifications.

NOISE AND VIBRATION

Noise

This section assesses noise during the construction periods for the Potential CPC Modifications, including noise from the operation of construction equipment and the construction-related traffic trips. Using the methodology and noise abatement measures described in Chapter 20 ("Construction"), noise analyses were performed to determine maximum one-hour equivalent ($L_{eq(1)}$) noise levels that would be expected to occur during each year of construction with the Potential CPC Modifications, and to determine locations and durations of significant adverse construction noise impacts with the Potential CPC Modifications. Noise analyses were performed for two Bleecker Building construction scenarios (i.e., the LaGuardia Place Staging Option and the Bleecker Street Staging Option). For impact determination purposes, the significance of adverse noise impacts is determined based on whether predicted incremental noise levels at sensitive receptor locations would be greater than the 3-5 dBA impact criteria suggested in the *2012 CEQR Technical Manual* for two consecutive years or more. While increases exceeding the CEQR impact criteria for one year or less may be noisy and intrusive, they are not considered to be significant adverse noise impacts.

The noise analysis results show that predicted noise levels would exceed the CEQR impact criteria during two or more consecutive years at forty-five (45) of the hundred and ten (110) receptor sites (i.e. A1-A9, A15, B1- B18, C2, C3, D2, D3, H1, H2, I, J, K, O, P, Q, Q1, S1, EE, KK, and NN). **Figure 26-56** shows these locations where significant adverse noise impacts are predicted to occur. **Table 26-50** shows the following analysis result for the each of the forty-five (45) noise receptor locations:

- Build Information;
- Impact Façade;
- Impact duration; and
- Associated construction activity.

Details of the construction analysis results at various elevations at each of the one hundred and ten (110) receptor sites are provided in **Appendix H2-D** for the LaGuardia Place Staging Option and for the Bleecker Street Staging Option. In addition to the predicted noise levels at receptor sites, in **Appendix H2-D** noise contours showing the incremental noise due to construction activities (both on-site construction equipment operation and construction-related traffic) for the area surrounding the project sites are provided.

Based upon the analysis results, noise impacts due to construction would occur as follows:

- **Washington Square Village 1** (17-Story residential building)—at various locations on the south façade (Receptor A5) during the years 2022 through 2030 due to noise generated by the construction of LaGuardia Building and Mercer Building, at various locations on the south façade (Receptors A6-A7) during the years 2022 through 2027 and Receptor A8 during the years 2024 through 2027 due to noise generated by the construction of LaGuardia Building, and at various locations on the west façade (Receptor A9) during the years 2024 through 2027) due to noise generated by the construction of LaGuardia Building;

Potential CPC Modifications—Construction Noise Receptor Locations and Potential Significant Adverse Impact Locations

Figure 26-56

Table 26-50
Construction Noise Receptor Locations

Building Name	Associated Land Use	Total Stories	Façade	Associated Receptor	Impacted Floor(s)	Range of Increase(s) in dBA*	Impact Duration (year)	Associated Construction Building
	Residential			A5	3rd-top	3.1-19.2	2022-2027	LaGuardia
			South		6th-16th	3.5-7.2	2027-2030	Mercer
			South	A6 & A7	3rd-top	3.2-18.3	2022-2027	LaGuardia
Washington			South	A8	3rd-top	5.4-18.7	2024-2027	LaGuardia
Square Village 1		17	West	A9	3rd-top	3.1-13.0	2024-2027	LaGuardia
	Residential		South	A1	3rd-top	4.1-21.5	2027-2031	Mercer
			South	A2	3rd-top	3.4-19.0	2027-2030	Mercer
			South	A3	3rd-top	3.8-15.1	2023-2026 & 2027-2030	LaGuardia & Mercer
Washington			South	A4	3rd-top	3.8-18.4	2022-2026 & 2027-2030	LaGuardia & Mercer
Square Village 2		17	East	A15	3rd-10th	3.6-14.8	2027-2031	Mercer
	Residential			B5	5th-9th	3.9-17.8	2022-2026	LaGuardia
			North		10th-16th	3.0-7.2	2027-2030	Mercer
			North	B6-B7	3rd-9th	4.3-17.9	2022-2026	LaGuardia
			North	B8	3rd-top	4.9-18.4	2024-2027	Laguardia
				B9	3rd-top	3.9-11.8	2018-2021	Bleecker (LaGuardia Place Staging Option)
			West			3.5-12.7	2024-2027	Laguardia
				B10	3rd-top	3.1-11.6	2018-2021	Bleecker (LaGuardia Place Staging Option)
Washington					3rd-top	5.6-14.5	2018-2021	Bleecker (Bleecker Street Staging Option)
Square Village 3		17	South	B11-B13	3rd-top	3.4-15.8	2018-2021	Bleecker (Bleecker Street Staging Option)
	Residential		North	B1-B3	3rd-top	3.3-19.2	2027-2031	Mercer
			North	B4	3rd-top	3.4-19.5	2022-2026 & 2027-2031	LaGuardia & Mercer
				B14	5th-top	3.1-9.7	2015-2017	Zipper
					10th-top	3.1-4.8	2018-2020	Bleecker (LaGuardia Place Staging Option)
			South		5th-top	3.1-5.9	2018-2021	Bleecker (Bleecker Street Staging Option)
				B15	3rd-top	3.2-11.7	2014-2017	Zipper
					11th-Top	3.3-5.2	2018-2020	Bleecker (Laguardia Place Staging Option)
			South		10th-Top	4.3-6.4	2018-2020	Bleecker (Bleecker Street Staging Option)
				B16	3rd-top	3.3-12.8	2014-2017	Zipper
			South		11th-top	3.3-5.8	2018-2020	Bleecker (Bleecker Street Staging Option)
Washington			South	B17	3rd-top	3.2-14.1	2014-2018	Zipper
Square Village 4		17	East	B18	3rd-top	3.1-11.2	2016-2018 & 2027-2031	Zipper & Mercer
	Residential		East	C2	3rd-top	4.8-10.8	2014-2017	Zipper
Silver Tower II		30	South	C3	5th-top	3.4-9.1	2014-2016	Zipper
	Residential		West	D2	10th-top	3.0-8.1	2014-2017	Zipper
Silver Tower I		30	South	D3	20th-top	3.1-4.3	2015-2016	Zipper

Table 26-50 (cont'd)
Construction Noise Receptor Locations

Building Name	Associated Land Use	Total Stories	Façade	Associated Receptor	Impacted Floor(s)	Range of Increase(s) in dBA*	Impact Duration (year)	Associated Construction Building
510 LaGuardia Place	Residential/Commercial	5	East	I	3rd-top	4.8-15.0	2018-2021	Bleecker (LaGuardia Place Staging Option)
520 LaGuardia Place	Residential/Commercial	7	East	J	3rd-top	3.4-12.4	2018-2021	Bleecker (LaGuardia Place Staging Option)
					5th-top	5.6-11.7	2018-2021	Bleecker (Bleecker Street Staging Option)
					3rd-top	3.5-12.6	2024-2027	LaGuardia
530 LaGuardia Place	Residential/Commercial	8	East	K	3rd-top	6.0-16.5	2024-2027	LaGuardia
246 Mercer Street	Institution	20	West	O	3rd-top	3.1-14.3	2027-2031	Mercer
81 Bleecker Street	Residential	6	West	P	3rd-top	3.4-16.0	2015-2018 & 2027-2031	Zipper & Mercer
200 Mercer Street	Residential	4	West	Q	1st-top	3.0-18.0	2014-2018	Zipper
158 Mercer Street	Residential/Commercial	12	West	EE	10th-top	5.3-9.5	2015-2017	Zipper
81 Bleecker Street	Residential	6	South	KK	top	3.7-10.7	2016-2018	Zipper
520 LaGuardia Place	Residential	7	South	NN	top	3.1-6.7	2018-2021	Bleecker (LaGuardia Place Staging Option)
18 West Houston Street	Commercial	9	West	Q1	3rd-top	3.7-12.1	2014-2018	Zipper
25 West Houston Street	Residential/Commercial	9	East	S1	7th-top	3.3-5.8	2015-2017	Zipper
506 LaGuardia Place	Residential/Commercial	5	East	H1	3rd-top	3.4-12.1	2018-2021	Bleecker (LaGuardia Place Staging Option)
500 LaGuardia Place	Residential/Commercial	5	East	H2	top	3.1-7.3	2018-2021	Bleecker (LaGuardia Place Staging Option)

Note: * Range of increases values were taken from predicted noise levels compared to No Action noise levels.

- **Washington Square Village 2** (17-story residential building)—at various locations on the south façade (Receptor A1) during the years 2027 through 2031 and Receptor A2 during the years 2027 through 2030 due to noise generated by the construction of LaGuardia Building, at various locations on the south façade (Receptors A3-A4) during the years 2023 through 2030 due to noise generated by the construction of LaGuardia Building and Mercer Building, and at various locations on the east façade (Receptor A15) during the years 2027 through 2031 due to noise generated by the construction of Mercer Building;
- **Washington Square Village 3** (17-story residential building)—at various locations on the north façade (Receptor B5) during the years 2022 through 2030 due to noise generated by the construction of LaGuardia Building and Mercer Building, at various locations on the north façade (Receptors B6-B7) during the years 2022 through 2026 and Receptor B8 during the years 2024 through 2027 due to noise generated by the construction of LaGuardia Building, at various locations on the west façade (Receptor B9) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for the LaGuardia Place Staging Option) and during the years 2024 through 2027 due to noise generated by the construction of LaGuardia Building, at various locations on the south façade (Receptor B10) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for both LaGuardia Place and Bleecker Street Staging options); and at various locations on the south façade (Receptors B11-B13) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for Bleecker Street Staging options);
- **Washington Square Village 4** (17-story residential building)—at various locations on the north façade (Receptors B1-B3) during the years 2027 through 2031 due to noise generated by the construction of Mercer Building, at various locations on the north façade (Receptor B4) during the years 2022 through 2031 due to noise generated by the construction of LaGuardia Building and Mercer Building, at various locations on the south façade (Receptor B14) during the years 2015 through 2017 due to noise generated by the construction of Zipper Building and during the years 2018 through 2020 due to noise generated by the construction of Bleecker Building (for LaGuardia Place Staging option) and during years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for Bleecker Street Staging option), at various locations on the south façade (Receptors B15) during the years 2014 through 2017 due to noise generated by the construction of Zipper Building and during the years 2018 through 2020 due to noise generated by the construction of Bleecker Building (for both LaGuardia Place and Bleecker Street Staging options), at various locations on the south façade (Receptors B16) during the years 2014 through 2017 due to noise generated by the construction of Zipper Building and during the years 2018 through 2020 due to noise generated by the construction of Bleecker Building (for Bleecker Street Staging option), at various locations on the south façade (Receptor B17) during the years 2014 through 2018 due to noise generated by the construction of Zipper Building, and at various locations on the east façade (Receptor B18) during the years 2016 through 2018 due to noise generated by the construction of Zipper Building and the years 2027 through 2031 due to noise generated by the construction of Mercer Building;
- **Silver Tower II** (30-story residential building)—at various locations on the east façade (Receptor C2) during the years 2014 through 2017 due to noise generated by the construction of Zipper Building; and at various locations on the south façade (Receptor C3) during the years 2014 through 2016 due to noise generated by the construction of Zipper Building;

- **Silver Tower I** (30-story residential building)—at various locations on the west façade (Receptor D2) during the years 2014 through 2017 due to noise generated by the construction of Zipper Building, and at various locations on the south façade (Receptor D3) during the years 2015 through 2016 due to noise generated by the construction of Zipper Building;
- **510 LaGuardia Place** (5-story residential/commercial building)—at various locations on the east façade (Receptor I) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for LaGuardia Place Staging Option);
- **520 LaGuardia Place** (7-story residential/commercial building)—at various locations on the east façade (Receptor J) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for both Bleecker Building Staging Options), and at various locations on the east façade during the years 2024 through 2024 due to noise generated by the construction of LaGuardia Building;
- **530 LaGuardia Place** (8-story residential/commercial building)—at various locations on the east façade (Receptor K) during the years 2024 through 2027 due to noise generated by the construction of LaGuardia Building;
- **246 Mercer Street** (20-story institution building)—at various locations on the west façade (Receptor O) during the years 2027 through 2031 due to noise generated by the construction of Mercer Building;
- **81 Bleecker Street** (6-story residential building)—at various locations on the west façade (Receptor P) during the years 2015 through 2018 due to noise generated by the construction of Zipper Building, and at various locations on the west façade during the years 2027 through 2031 due to noise generated by the construction of Mercer Building;
- **200 Mercer Street** (4-story residential building)—at various locations on the west façade (Receptor Q) during the years 2014 through 2018 due to noise generated by the construction of Zipper Building;
- **158 Mercer Street** (12-story residential/commercial building)—at various locations on the west façade (Receptor EE) during the years 2015 through 2017 due to noise generated by the construction of Zipper Building;
- **81 Bleecker Street** (6-story residential building)—at top floor locations on the south façade (Receptor KK) during the years 2016 through 2018 due to noise generated by the construction of Zipper Building;
- **520 LaGuardia Place** (7-story residential building)—at top floor locations on the south façade (Receptor NN) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for LaGuardia Place Staging Option);
- **18 West Houston Street** (9-story residential building)—at various locations on the west façade (Receptor Q1) during the years 2014 through 2018 due to noise generated by the construction of Zipper Building;
- **25 Mercer Street** (9-story residential building)—at various locations on the east façade (Receptor S1) during the years 2015 through 2017 due to noise generated by the construction of Zipper Building;
- **506 LaGuardia Place** (5-story residential building)—at various locations on the east façade (Receptor H1) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for LaGuardia Place Staging Option); and

- **500 LaGuardia Place** (5-story residential building)—at top floor locations on the east façade (Receptor H2) during the years 2018 through 2021 due to noise generated by the construction of Bleecker Building (for LaGuardia Place Staging Option).

The forty-five (45) receptor sites where significant adverse noise impacts are predicted to occur with the Potential CPC Modifications are the same forty-five (45) receptor sites where significant adverse noise impacts are predicted to occur with the Proposed Actions (see Chapter 20, "Construction").

Table 26-51 shows results for a comparison of impact duration between the Proposed Actions and the Potential CPC Modifications. While at some locations there is an increase in the duration of impacts for the analysis results with the Potential CPC Modifications compared to the analysis results with the Proposed Actions, in general the Potential CPC Modifications result in a slight decrease in the duration of impacts compared to the results with the Proposed Actions. Specifically, at twenty-three (23) receptor sites the duration of significant noise impacts would be approximately the same with the Potential CPC Modifications compared to the duration of significant noise impacts with the Proposed Actions; at fifteen (15) receptor sites the duration of significant noise impacts would be less with the Potential CPC Modifications compared to the duration of significant noise impacts with the Proposed Actions, and; at seven (7) receptor sites the duration of significant noise impacts would be longer with the Potential CPC Modifications compared to the duration of significant noise impacts with the Proposed Actions (i.e., A3, A4, B4, B9, B18, D2 and J).

As discussed in Chapter 20 ("Construction"), the buildings at many sensitive receptor locations where the significant noise impacts are predicted to occur have double-glazed windows and/or some form of alternative ventilation (i.e., central air conditioning, packaged terminal air conditioner [PTAC] units, or window air conditioning units). Buildings with both double-glazed windows and some form of alternative ventilation would be expected to have interior noise levels which would be approximately 25-35 dBA less than exterior noise levels. To maintain an interior $L_{10(1)}$ noise level of 45 dBA (the CEQR acceptable interior noise level criteria), a minimum of 30 dBA window/wall attenuation would be required. As a result, interior noise levels in these buildings would be expected to be below 45 dBA $L_{10(1)}$.

In order to improve building window/wall attenuation, windows at the NYU-owned Washington Square Village and Silver Tower buildings would be re-caulked and storm windows would be offered. For the Washington Square Village buildings, NYU would offer to insulate/seal existing air conditioning units and provide an interior cover that improves the sound attenuation of the through-the-wall air conditions units, or NYU would offer to provide new air conditioning units. For the Silver Tower buildings, NYU would offer to replace existing PTAC units with high-attenuation PTAC units installed to fit properly/snugly in the PTAC sleeve. While these steps are expected to increase window/wall attenuation values, they would not be sufficient to result in the minimum 30 dBA window/wall attenuation needed to fully mitigate project impacts. Consequently, similar to the Proposed Actions, construction activities with the Potential CPC Modifications would result in significant unmitigated impacts at both the Washington Square Village and Silver Tower buildings during portions of the construction period.

At locations on non-NYU buildings, similar to the Proposed Actions, where significant noise impacts are predicted to occur with the Potential CPC Modifications, the project sponsors would offer to provide storm windows and/or window air conditioning units for buildings without double-glazed windows and/or alternative ventilation to mitigate project-related construction noise impacts. The 505 LaGuardia Place building already has storm windows installed and a means of alternate ventilation; consequently, the mitigation offering is not warranted for this building. With existing building attenuation measures (i.e., double-glazed windows and alternative ventilation) and the mitigation

measures being provided for non-NYU owned buildings, interior noise levels during much of the time when project construction activities are taking place are expected to be below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria).

Table 26-51
Construction Noise Impact Durations

Building Name	Associated Land Use	Associated Receptor	Proposed Actions-Impact Duration (see also Table 20-22) (year)	Potential CPC Modifications-Impact Duration (year)
Washington Square Village 1	Residential	A5	2021-2026 & 2029-2031	2022-2030
		A6 & A7	2022-2026 & 2028-2031	2022-2027
		A8	2024-2026 & 2028-2031	2024-2027
		A9	2028-2031	2024-2027
Washington Square Village 2	Residential	A1	2021-2027	2027-2031
		A2	2021-2027	2027-2030
		A3	2021-2027	2023-2026 & 2027-2030
		A4	2021-2026	2022-2026 & 2027-2030
		A15	2021-2024 & 2026-2027	2027-2031
Washington Square Village 3	Residential	B5	2021-2026	2022-2030
		B6-B7	2022-2026 & 2028-2031	2022-2026
		B8	2022-2026 & 2028-2031	2024-2027
		B9	2018-2020 & 2029-2031	2018-2021 & 2024-2027
		B10	2018-2021	2018-2021
		B11-B13	2018-2021	2018-2021
Washington Square Village 4	Residential	B1-B3	2021-2027	2027-2031
		B4	2021-2028	2022-2026 & 2027-2031
		B14	2015-2021	2015-2021
		B15	2014-2020	2014-2020
		B16	2014-2020	2014-2020
		B17	2014-2018	2014-2018
		B18	2016-2018 & 2026-2027	2016-2018 & 2027-2031
Silver Tower II	Residential	C2	2014-2017	2014-2017
		C3	2014-2016	2014-2016
Silver Tower I	Residential	D2	2014-2016	2014-2017
		D3	2015-2016	2015-2016
510 LaGuardia Place	Residential/Commercial	I	2018-2021	2018-2021
520 LaGuardia Place	Residential/Commercial	J	2018-2021 & 2029-2031	2018-2021 & 2024-2027
530 LaGuardia Place	Residential/Commercial	K	2028-2031	2024-2027
246 Mercer Street	Institution	O	2021-2027	2027-2031
81 Bleecker Street	Residential	P	2015-2017 & 2021-2027	2015-2018 & 2027-2031
200 Mercer Street	Residential	Q	2013-2018	2014-2018
158 Mercer Street	Residential/Commercial	EE	2015-2017	2015-2017
81 Bleecker Street	Residential	KK	2016-2018	2016-2018
520 LaGuardia Place	Residential	NN	2018-2021	2018-2021
18 West Houston Street	Commercial	Q1	2014-2018	2014-2018
25 West Houston Street	Residential/Commercial	S1	2015-2017	2015-2017
506 LaGuardia Place	Residential/Commercial	H1	2018-2021	2018-2021
500 LaGuardia Place	Residential/Commercial	H2	2018-2021	2018-2021

With regard to the residential terrace locations (Washington Square Village 1-4, 566 LaGuardia Place, and 214 Mercer Street), while noise levels at these terraces alre ady exceed the acceptable CEQR range (55 dBA $L_{10(1)}$ or less) for an outdoor area requiring serenity and quiet, during the

daytime analysis periods construction activities with the Potential CPC Modifications, similar to the Proposed Actions, are predicted to significantly increase noise levels and would exacerbate these exceedances and result in significant adverse noise impacts. No feasible mitigation measures have been identified that could be implemented to eliminate the significant noise impacts at these terraces.

Noise levels at open space locations (i.e., LaGuardia Landscape, Washington Square Village Elevated Garden, Silver Tower Oak Grove, etc.) on the project site are currently above the 55 dBA $L_{10(1)}$ recommended in the *CEQR Technical Manual* noise level for outdoor areas. Similar to the Proposed Actions, construction activities with the Proposed Modications would exacerbate these exceedances of the recommended level; average $L_{10(1)}$ noise levels would be in the high 60s to high 70s dBA in these open space locations. No practical and feasible mitigation measures have been identified that could be implemented to reduce noise levels to below the 55 dBA $L_{10(1)}$ guideline and/or eliminate project impacts. Consequently, construction activities with the Proposed Modications would result in noise levels in open space locations that would result in a significant adverse noise impact.

Traffic Analysis

Similar to the Proposed Actions, a traffic noise analysis was performed for the Potential CPC Modifications which examined impacts due to peak construction-related vehicular trips (autos and trucks), which would occur between the peak hours of 7 AM and 8 AM, prior to the start of operational construction activities. The analysis results indicated that, construction-related traffic with the Potential CPC Modifications would not increase noise levels that exceed the 3 dBA CEQR impact criteria. Consequently, no significant adverse construction traffic-related noise impacts are predicted to occur with the Potential CPC Modifications between the peak hours of 7 AM and 8 AM (see **Appendix H2-D** for details).

Vibration

Construction activities have the potential to result in vibration levels that may in turn result in structural or architectural damage, and/or annoyance or interference with vibration-sensitive activities. In general, vibration levels at a location are a function of the source strength (which in turn is dependent upon the construction equipment and methods utilized), the distance between the equipment and the location, the characteristics of the transmitting medium, and the building construction type at the location.

Similar to construction of the Proposed Actions, the primary source of vibration from construction with the Potential CPC Modifications would be expected to be short-term construction operations that include large excavation and sheet piling. To minimize the potential for high vibration levels, augers rather than impact pile driving rigs are expected to be used for the foundations of Zipper Building, Bleecker Building, Mercer Building, and LaGuardia Building. The buildings and structures of most concern with regard to the potential for structural or architectural damage due to vibration are vicinity buildings (i.e., Washington Square Village buildings and Silver Tower II). To avoid architectural damage, a CPP would be developed to protect known architectural resources with a lateral distance of 90 feet from the proposed construction activities. The CPP would include a monitoring component to ensure that if vibration levels approach the 0.5 inches per second PPV criterion, corrective action would be taken to reduce vibration levels, thereby avoiding architectural damage and significant vibration impacts.

Similar to construction of the Proposed Actions, use of construction equipment with the Potential CPC Modifications that would have the most potential to exceed the 65 VdB vibration annoyance criterion within a distance of 550 feet of sensitive receptor locations (e.g., equipment used during tangent wall drilling) would be perceptible and annoying. For limited time periods, perceptible vibration levels may be experienced by occupants and visitors to all of the buildings and locations on and immediately adjacent to the construction sites. However, the operations which would result in these perceptible vibration levels would only occur for limited finite periods of time at any particular location and therefore the resulting vibration levels, while perceptible and annoying, would not result in any significant adverse impacts.

Similar to construction of the Proposed Actions, blasting is not expected to be needed. However, if rock is encountered deep in the foundation construction, any blasting that may occur would be expected to produce vibrations less perceptible than construction of the tangent wall. In no case are significant adverse impacts from vibrations expected to occur.

OPEN SPACE

This section assesses the availability and adequacy of open space resources during the construction periods for the Potential CPC Modifications, including consideration of the potential direct and indirect effects of construction activities. Similar to the analysis in Chapter 20, "Construction," the assessment of direct effects includes estimates of the extent and timing of open space displacement during construction, whether replacement open spaces would be made available, and consideration of construction-related noise and pollutant emissions on the quality of the open spaces resources. The indirect assessment applies the methodologies of Chapter 5, "Open Space" to determine how open space ratios for the non-residential (1/4-mile) and residential (1/2-mile) study areas could change over the course of the 19-year construction period.

Analysis Assumptions

The analysis considers conditions during the construction period when there would be notable changes in the available open spaces within the Proposed Development Area (i.e., displacement of existing open spaces or the addition of new open spaces), or when a new population of open space users would be introduced as a result of the completion and operation of a project building. **Table 26-52** presents five such analysis conditions, which based on the construction schedule analyzed, would occur in 2014, 2018, 2022, 2027 and 2028, respectively.

Zipper Building Construction (2014)

Study Area Population

When the Zipper Building is under construction there would be no new population introduced by the Potential CPC Modifications.

Study Area Open Spaces

The publicly accessible open space changes expected to occur within the Proposed Development Area as a result of Zipper Building construction with the Potential CPC Modifications are illustrated in **Figure 26-57**, and are described below.

As with the Proposed Actions, with the Potential CPC Modifications, on the North Block by 2014 NYU would develop the same approximately 10,300-square-foot (0.24-acre) temporary publicly accessible play area on the LaGuardia Landscape, displacing a portion of this resource.

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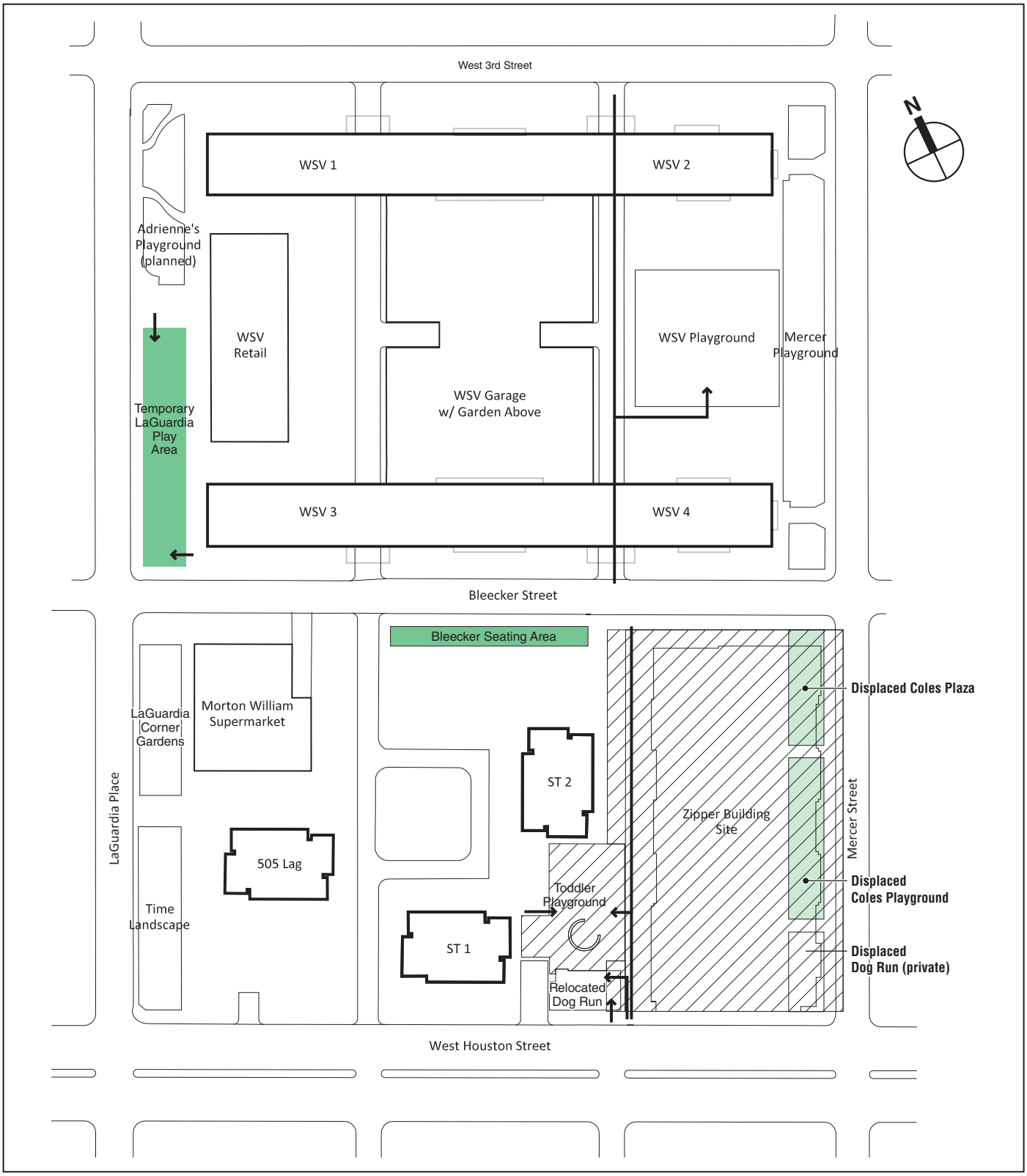

Construction Area

Displaced Publicly Accessible Open Space

New Publicly Accessible Open Space

Open Space Entry

0 100 200 FEET

SCALE

Potential CPC Modifications— Displaced and New Open Spaces by 2014 Construction Year

Figure 26-57

NYU Core

Table 26-52
Displaced and New Publicly Accessible Open Spaces During Construction Open Space Analysis Years (Quantitative Assessment)
Potential CPC Modifications

Analysis Condition (Years)	Publicly Accessible Open Space			
	Displaced		New	
Zipper Building Construction (2014)	Coles Plaza Coles Playground	3,920 sf 7,058 sf	Bleecker Seating Area Temporary LaGuardia Play Area	6,275 sf 10,300 sf
Bleecker Building Construction (2018)*	L1 portion of Bleecker Street Strip** (Bleecker Street Staging Option only)	4,650 sf	Greene Street Walk Toddler Playground	8,060 sf 11,020 sf
North Block Below-Grade and LaGuardia Building Below-Grade Construction (2022)	Adrienne's Garden Temporary LaGuardia Play Area	4,500 sf 10,300	None	
Above-Grade LaGuardia Building Construction (2027)	None		Philosophy Garden and central portion of Public Lawn WSV Play Garden LaGuardia Entry Plaza	27,450 sf 15,000 sf 17,550 sf
Mercer Building Construction (2028)	Mercer Playground	14,375 sf	Tricycle Garden Mercer Entry Plaza	15,200 sf 17,550 sf

Notes:
* An alternate phasing scenario for the proposed Bleecker Building is presented in the "Bleecker Building Alternate Phasing Scenario" section, below.
** See Figure 5-2 for location of Segment L_1. The Bleecker Street Strip is not defined as publicly accessible open space in the baseline assessment of this FEIS because it does not present "usable recreational areas" as defined by CEQR. However, in order to conservatively assess the potential displacement of a portion of the Bleecker Street Strip during certain phases of construction, it is being considered publicly accessible open space for purposes of this analysis, and the proposed improvements to the strip are described in the FEIS.

With the Potential CPC Modifications, unlike the Proposed Actions there would not be the construction of the temporary gym on the North Block, nor would there be the open space displacement associated with the temporary gym. With the Potential CPC Modifications, the southern portion of the Mercer Playground and the Washington Square Village Playground would not be displaced by 2014, and the Washington Square Village Elevated Garden would not be reprogrammed to accommodate a relocated Washington Square Village Playground. Like the Proposed Actions, the Potential CPC Modifications would include the construction of a Temporary LaGuardia Play Area, which would be located on the southern half of the LaGuardia Landscape on the North Block, and which would be operational upon commencement of construction of the Proposed Zipper Building.

On the South Block, like the Proposed Actions, with the Potential CPC Modifications Coles Gymnasium would be demolished, to be replaced by a new athletic facility of comparable size within the proposed Zipper Building. As with the Proposed Actions, the development of the

Zipper building would require the displacement of four open space resources: Coles Plaza and Coles Playground (both publicly accessible open spaces); Coles Gym and the Mercer-Houston Dog Run (private open spaces). As with the Proposed Actions, the dog run would be relocated to a comparably-sized site along West Houston Street on the South Block. As with the Proposed Actions, other proposed open space and landscaping changes to the South Block would be along the Bleecker Street Strip, where there would be new trees, low plantings, and benches as part of the proposed Bleecker Seating Area immediately north of the Oak Grove along Bleecker Street (final design changes to the Bleecker Street Strip would require DPR and Public Design Commission approval).

Overall, with the Potential CPC Modifications construction activities associated with the proposed Zipper Building would displace approximately 0.252 acres of publicly accessible open space (0.090 acres passive, 0.162 acres active), and would introduce approximately 0.381 acres of publicly accessible open space (0.203 acres passive, 0.177 acres active), for a net increase of approximately 0.129 acres of publicly accessible open space (a 0.113-acre increase in publicly accessible passive open space, and a 0.015-acre increase in publicly accessible active space).

As with the Proposed Actions, during the construction of the Zipper Building, all construction engines would be located away from the west side of the construction site, so as to maintain a buffer from residential buildings and open spaces west of the Zipper Building, to the extent practicable. The results of the Phase 1 air quality analysis—which represented worst-case conditions during the construction of the Zipper Building—showed that construction activities during this phase would not result in any significant adverse air quality impacts at any sensitive receptors, which included areas such as public and private open spaces directly adjacent to construction activities.

As with the Proposed Actions, during construction of the Zipper Building, there would be no temporary significant adverse noise impacts at any publicly accessible open spaces.

Indirect Effects Analysis

Non-residential Study Area. During construction of the proposed Zipper Building there would be no new population introduced by the Potential CPC Modifications. The number of non-residents in the non-residential study area would remain at 95,841 persons, and the total amount of publicly accessible open space is expected to increase to 13.88 acres from conditions in the future without the Proposed Actions. As shown in **Table 26-53**, during construction of the Zipper Building the ratio of passive open space per 1,000 non-residents would be 0.098, which is below the City's guideline of 0.15 acres, and would be a slight increase as compared to the 0.097 ratio in the No Build condition. For the combined residential and non-residential population, the passive open space ratio would be 0.074 acres per 1,000 people, which is much lower than the recommended weighted average ratio of 0.23 acres per 1,000 residents and workers, but would be slightly higher than the 0.073 ratio for the No Build condition.

With the Potential CPC Modifications the temporary improvements in passive open space ratios would not be as great as those realized with the Proposed Actions during this phase of construction (approximately 5.6 percent increases with the Proposed Actions as shown in **Table 20-26** of Chapter 20, "Construction") because the Potential CPC Modifications would not provide new passive open space with the Temporary Mercer Entry Plaza on the North Block. However, similar to the Proposed Actions, there would not be significant adverse impacts within the non-residential study area during this phase of construction.

Table 26-53
Open Space Ratios During Zipper Building Construction
2014 Analysis Condition for the Potential CPC Modifications

Ratio	DCP Guideline	Existing Ratio	No Build Ratio	Future With the Potential CPC Modifications Ratio	Percent Change (Future With Potential CPC Modifications vs. No Build)	Future With the Proposed Actions Ratio/Percent Change vs. No Build
Non-Residential Study Area						
Passive/non-residents	0.15	0.101	0.097	0.098	1.2%	0.102/5.6%
Passive/total population	0.23	0.076	0.073	0.074	1.2%	0.078/5.6%
Residential Study Area						
Total/residents	2.5	0.243	0.229	0.230	0.6%	0.233/1.9%
Passive/residents	0.5	0.138	0.129	0.130	0.9%	0.134/3.9%
Active/residents	2.0	0.106	0.100	0.100	0.2%	0.099/-0.8%
Passive/total population*	0.27	0.048	0.046	0.046	0.9%	0.048/3.9%

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Residential Study Area. The combined residential and non-residential passive open space ratio within the residential study area would be 0.046 acres per 1,000 residents and non-residents, which is much lower than the recommended weighted average ratio of 0.27 acres per 1,000 residents and workers, but would be virtually the same as the 0.046 ratio in the No Build condition. The active open space ratio would be 0.100 acres per 1,000 residents, which is notably less than the City's planning guideline of 2.0 acres per 1,000 residents, but would be virtually the same as the 0.100 ratio in the No Build condition. The total open space ratio would be approximately 0.230 acres per 1,000 residents, which is well below the City's planning guideline of 2.5 acres per 1,000 residents, but would be virtually the same as the total open space ratio in the No Build condition. There would be no significant adverse open space impact within the residential study area during this phase of construction.

Unlike the Proposed Actions, the Potential CPC Modifications would result in a slight improvement in the active open space ratio because there would not be the displacement of the southern portion of the Mercer Street Playground with the Potential CPC Modifications by 2014. During the first few years of construction, as existing open spaces are displaced to accommodate the Zipper Building and project open spaces, the Potential CPC Modifications would slightly increase passive open space ratios both in the residential and non-residential study areas.

Bleecker Building Construction (2018)

Study Area Population

With the Potential CPC Modifications, the approximately 1-million-gsf Zipper Building is expected to be operational near onset of construction activities associated with the Bleecker Building. Unlike the Proposed Actions, by 2018 the proposed project with modifications would not develop up to 23,326 gsf of new ground-floor retail uses in the Commercial Overlay Area.

- *Non-residential Study Area* - The future project-generated populations for the non-residential study area analysis are based on Potential CPC Modifications RWCDS 1 (the Maximum Academic Scenario), which maximizes the number of workers that would be introduced by the project.

The new uses in the Proposed Development Area would introduce to the non-residential study area an estimated total of 1,865 workers and up to approximately 417 residents. Under this scenario the 2018 combined residential and non-residential population in the ¼-mile study area is projected to be 128,240 people.

- *Residential Study Area* - The future project-generated populations for the residential study area analysis are based on the Potential CPC Modifications RWCDS 2 (the Maximum Dormitory Scenario), which maximizes the number of residents that would be introduced by the proposed project with modifications.

The new uses in the Proposed Development Area would introduce to the Residential Study Area an estimated total of up to 1,567 residents. With the proposed project with modifications, the residential study area would contain an estimated 103,119 residents by 2018.

The uses also would introduce an estimated 1,027 workers to the residential study area. The 2018 combined residential and non-residential population in the residential study area is projected to be 287,590 people.

Study Area Open Spaces

The publicly accessible open space changes expected to occur within the Proposed Development Area by 2018 are illustrated in **Figure 26-58**, and are described below.

As with the Proposed Actions, with the Potential CPC Modifications between 2015 and 2018, no publicly accessible open spaces in the Proposed Development Area would be displaced under the LaGuardia Place Staging Option (construction staging along the LaGuardia Place frontage). Under the Bleecker Street Staging Option (construction staging along the Bleecker Street frontage), the portion of the Bleecker Street Strip immediately north of the construction site would be utilized for construction staging.

The Potential CPC Modifications would modify the same landscaping elements of the University Village complex and make the same improvements that would occur with the Proposed Actions.

Also on the South Block, the approximately 0.6-acre Silver Tower Seating Area would be renovated and expanded to create the same approximately 0.25-acre publicly accessible toddler playground that would be created with the Proposed Actions. As with the Proposed Actions, other proposed landscaping changes to South Block would be along the Bleecker Street Strip, where there would be new trees, low plantings, and benches (final design changes to the Bleecker Street Strip would require DPR and Public Design Commission approval). As with the Proposed Actions, no landscaping changes are proposed as part of the project to the site around 505 LaGuardia Place, the Time Landscape, or the LaGuardia Corner Gardens.

Overall, by 2018 the Potential CPC Modifications would displace approximately 0.359 acres of publicly accessible open space (0.197 acres passive, 0.162 acres active), and would introduce approximately 0.819 acres of publicly accessible open space (0.388 acres passive, 0.430 acres active), for a net gain of approximately 0.460 acres of publicly accessible open space (a 0.192-acre increase in passive open space, and a 0.268-acre increase in active space).

As with the Proposed Actions, construction of the publicly accessible Toddler Playground would commence once the Zipper Building is enclosed, concurrent with building fit-out. While the completion of the Zipper Building would occur at the end of 2018, the Toddler Playground could be open by the end of 2017. However, since the only construction activities associated with the

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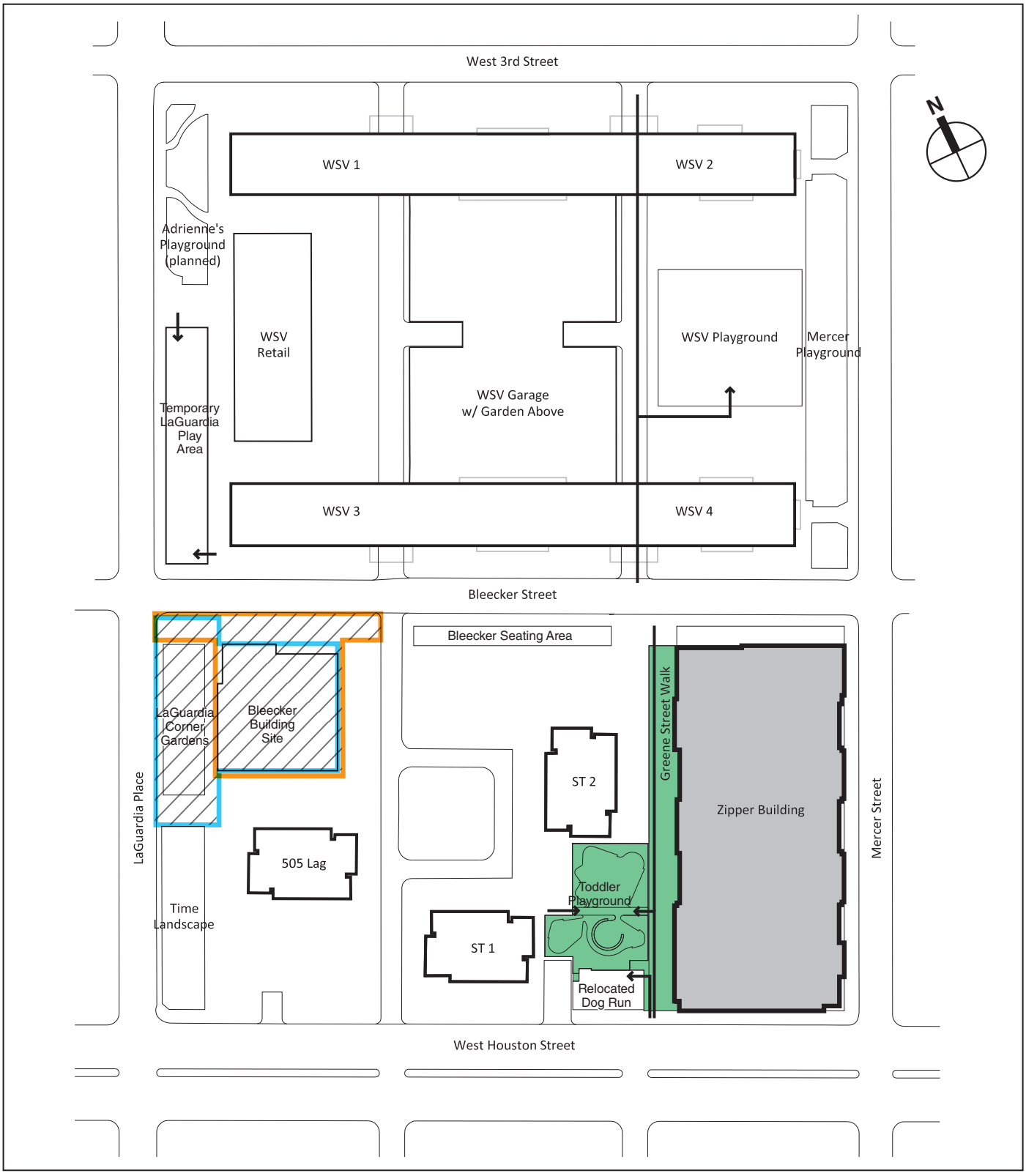

New Above-Grade Building

New Publicly Accessible Open Space

Open Space Entry

LaGuardia Building Staging Option Construction Area

Bleecker Street Staging Option Construction Area

0 100 200 FEET

SCALE

Potential CPC Modifications—Displaced and New Open Spaces by 2018 Construction Year

Figure 26-58

NYU Core

Zipper Building following the opening of the Toddler Playground would be occurring within an enclosed building, construction effects of noise and air quality on the playground would be minimal.

By 2018, no publicly accessible open spaces would be directly affected by the Potential CPC Modifications in terms of displacement under the LaGuardia Place Staging Option (construction staging only along the LaGuardia Place frontage). However, as with the Proposed Actions, under the Bleecker Street Staging Option (construction staging along the Bleecker Street frontage), the portion of the Bleecker Street Strip north of the construction site would be utilized for construction staging and therefore would not be publicly accessible during the approximately 20-month period associated with the excavation/foundations and superstructure/exterior work for construction of the Bleecker Building (7 months shorter than the Proposed Actions). The portion of the Bleecker Street Strip that would be utilized for construction staging (area "L1" in Figu**re 5-2**) is an area devoid of vegetation with the exception of a few street trees (appearing similar to a typical City sidewalk). The temporary displacement of this area would not be considered a significant adverse impact on publicly accessible open space because during the same time period, the project would provide improved passive open space further east along the Bleecker Street Strip in the Bleecker Seating Area, as well as additional passive open space with the proposed Greene Street Walk.

As with the Proposed Actions, under the LaGuardia Place Staging Option, most, if not all of the LaGuardia Corner Gardens—a GreenThumb community garden that does not meet the *CEQR Technical Manual* guidance for consideration as a publicly accessible open space—would not be available for the approximately 30-month construction period (9 months shorter than with the Proposed Actions), because it would be located inside of the construction perimeter, within an area that would be utilized for construction staging. The temporary displacement of the LaGuardia Corner Gardens would be a significant adverse impact on this resource; however, upon completion of the Bleecker Building, the community garden could be restored to its current location. Under the LaGuardia Place Staging Option the portion of the Bleecker Street Strip directly north of the construction site would remain publicly accessible. However, for an approximately 20-month period (7 months shorter than the Proposed Actions) during construction that portion of the Bleecker Street Strip would be covered by a construction shed in order to provide a safe construction perimeter. Specifically, protective measures would be necessary during above-grade work on the Bleecker Building (i.e., superstructure, building envelope, and interior finishes). The construction shed would reduce the overall utility of this portion of the Bleecker Street Strip during the 20-month period.

As with the Proposed Actions, under the Bleecker Street Staging Option, it is expected that the primary area of LaGuardia Corner Gardens (i.e., the area west of the construction site) would remain accessible throughout Bleecker Building construction. However, under the Bleecker Street Staging Option, for an approximately 20-month period during construction (7 months shorter than the Proposed Actions), most, if not all, of the garden would need to be covered by a construction shed in order to provide a safe construction site. Specifically, protective measures would be necessary during above-grade work on the Bleecker Building (i.e., superstructure, building envelope, and interior finishes). The typical construction shed would reduce the overall utility of the garden, and would block most, if not all, direct sunlight for an approximately 20-month period, thereby jeopardizing the viability of all plantings, and therefore would result in a significant adverse impact on this private resource.

As with the Proposed Actions, during construction of the Bleecker Building, there would be no temporary significant adverse noise impacts at any publicly accessible open spaces.

Indirect Effects Analysis

Non-residential Study Area. Under the Potential CPC Modifications RWCDS 1, the number of non-residents in the non-residential study area is forecast to increase to 128,240 and the total amount of publicly accessible open space is expected to increase to 14.21 acres. As shown in **Table 26-54**, by 2018 the ratio of passive open space per 1,000 non-residents would be 0.097, which is below the City's guideline of 0.15 acres, and would be virtually the same as the 0.097 ratio in the No Build condition. For the combined residential and non-residential population, the passive open space ratio would be 0.074 acres per 1,000 people, which is much lower than the recommended weighted average ratio of 0.23 acres per 1,000 residents and workers, but would be virtually the same as the 0.073 ratio for the No Build condition.

Table 26-54
Open Space Ratios During Bleecker Building Construction
2018 Analysis Condition*
Potential CPC Modifications

Ratio	DCP Guideline	Existing Ratio	No Build Ratio	Future With the Potential CPC Modifications Ratio	Percent Change (Future With Potential CPC Modifications vs. No Build)	Future With the Proposed Actions Ratio/Percent Change vs. No Build
Non-Residential Study Area						
Passive/non-residents	0.15	0.101	0.097	0.097	0.1%	0.101/4.3%
Passive/total population	0.23	0.076	0.073	0.074	0.3%	0.077/4.5%
Residential Study Area						
Total/residents	2.5	0.243	0.229	0.230	0.4%	0.233/1.7%
Passive/residents	0.5	0.138	0.129	0.129	-0.1%	0.133/3.0%
Active/residents	2.0	0.106	0.100	0.101	1.1%	0.100/0.1%
Passive/total population*	0.28	0.048	0.046	0.046	0.5%	0.048/3.6%

Notes:
* These estimates conservatively assume that the Bleecker Street Strip is publicly accessible open space as defined under CEQR, and that approximately 4,650 square feet of the open space would be displaced by construction of the Bleecker Building under the Bleecker Street Staging Option.
** Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Residential Study Area. The combined residential and non-residential passive open space ratio within the residential study area would be 0.046 acres per 1,000 residents and non-residents, which is much lower than the recommended weighted average ratio of 0.28 acres per 1,000 residents and workers, but would be virtually the same as the 0.046 ratio in the No Build condition. The active open space ratio would be 0.101 acres per 1,000 residents, which is notably less than the City's planning guideline of 2.0 acres per 1,000 residents, but would be a slight improvement as compared to the 0.100 ratio in the No Build condition. The total open space ratio would be approximately 0.230 acres per 1,000 residents, which is well below the City's planning guideline of 2.5 acres per 1,000 residents, and would be virtually the same as the total open space ratio in the No Build condition.

As shown in **Table 26-54**, all open space ratios would not substantively change as compared to future conditions without the proposed project with modifications (between 0.1 percent decrease and 1.1 percent increases). Therefore, similar to the Proposed Actions, with the Potential CPC

Modifications during the first five years of construction there would be no significant adverse open space impacts.

As compared to the Proposed Actions 2018 analysis condition (shown in **Table 20-27** of Chapter 20, "Construction" and in the last column of **Table 26-54**), the Potential CPC Modifications would result in lesser improvements in passive open space ratios created in part by the Proposed Actions' provision of the Temporary Mercer Plaza on the North Block, which would not be provided with the Potential CPC Modifications. However, with the Potential CPC Modifications the increase in the active open space ratio would be greater, because the Potential CPC Modifications would not displace the southern portion of the existing Mercer Playground, an active publicly accessible open space.

North Block Garage and LaGuardia Building Construction (2022)

Study Area Population

Between the 2018 and 2022 construction years, the Potential CPC Modifications would introduce approximately 154,000 gsf of additional new uses to the Proposed Development Area with the completion of the Bleecker Building. Therefore, by the 2022 construction year, there would be two operational project components in the Proposed Development Area: the Zipper Building, and the Bleecker Building, totaling approximately 1.2 million gsf of new uses in the Proposed Development Area. Unlike the Proposed Actions, with the Potential CPC Modifications the Bleecker Building would not introduce a student residential population. In addition, the Potential CPC Modifications would result in the development of up to 23,326 gsf of new ground-floor retail uses in the Commercial Overlay Area.

- *Non-residential Study Area.* The future project-generated populations for the non-residential study area analysis are based on the Potential CPC Modifications RWCDS 1 (the Maximum Academic Scenario), which maximizes the number of workers that would be introduced by the Potential CPC Modifications.

Collectively, by 2022, the new uses in the Proposed Development Area would introduce to the non-residential study area an estimated total of 2,225 workers and up to approximately 417 residents. The 2022 combined residential and non-residential population in the ¼-mile study area is projected to be 128,600 people.

- *Residential Study Area.* The future project-generated populations for the residential study area analysis are based on the Potential CPC Modifications RWCDS 2 (the Maximum Dormitory Scenario), which maximizes the number of residents that would be introduced by the Potential CPC Modifications.

Collectively, these new uses in the Proposed Development Area would introduce to the Residential Study Area an estimated total of up to 1,567 residents. With the proposed project, the residential study area would contain an estimated 103,119 residents by 2022.

The proposed uses also would introduce an estimated 1,281 workers to the residential study area. The 2022 combined residential and non-residential population in the residential study area is projected to be 287,814 people.

Study Area open spaces

The publicly accessible open space changes expected to occur within the Proposed Development Area by 2022 are illustrated in **Figure 26-59**, and are described below.

Between 2019 and 2022, with the Potential CPC Modifications the publicly accessible open spaces in the Proposed Development Area to be displaced would be Adrienne's Playground and

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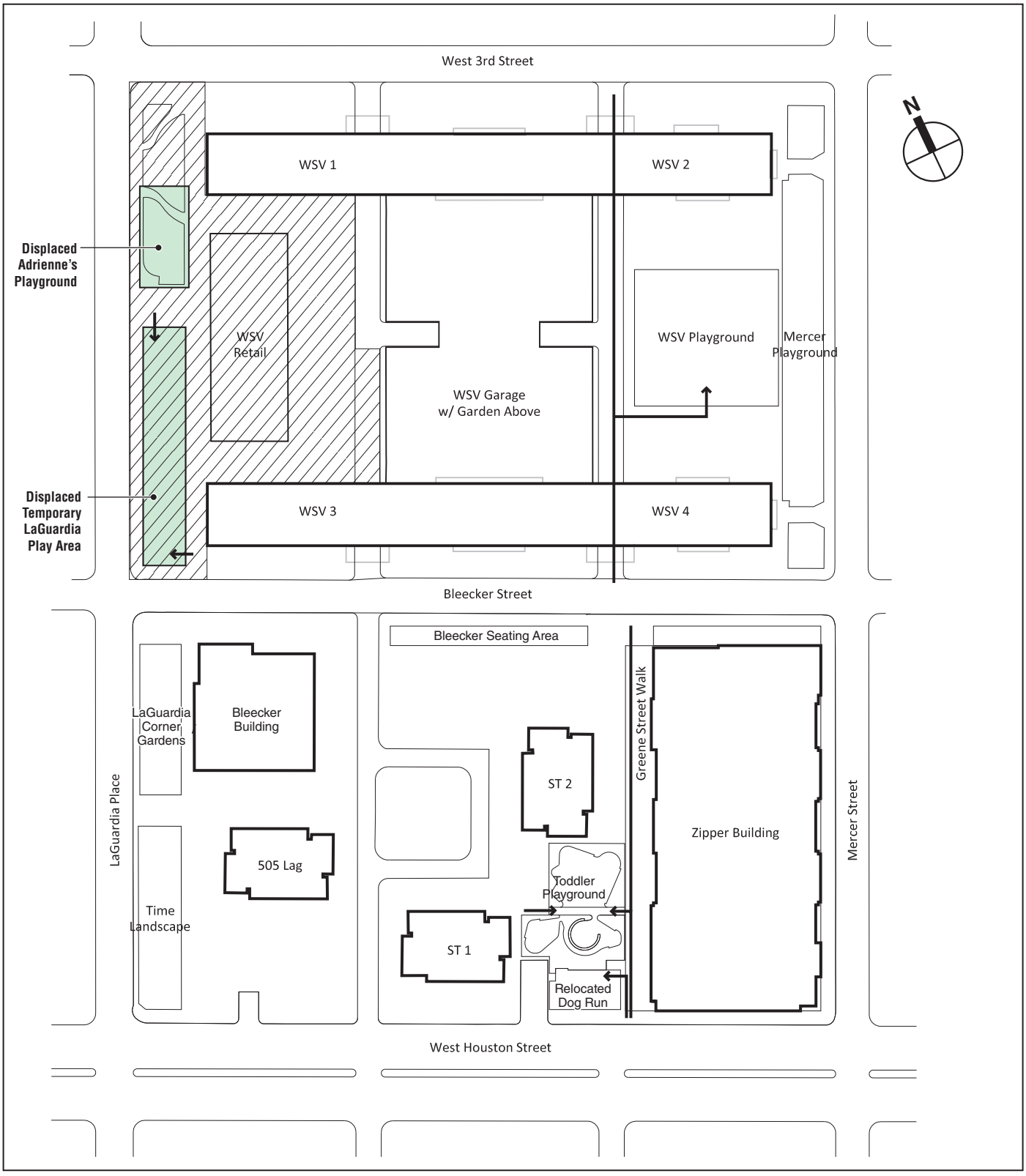

Construction Area

Displaced Publicly Accessible Open Space

Open Space Entry

0 100 200 FEET

SCALE

Potential CPC Modifications— Displaced and New Open Spaces by 2022 Construction

Figure 26-59

NYU Core

the Temporary LaGuardia Play Area. There would be no new open spaces developed in the Proposed Development Area between 2019 and 2022. However, users of these primarily active areas could utilize other active open spaces that would be available on the North and South Blocks, including the project-generated Toddler Playground on the South Block, as well as the Mercer Playground on the North Block. Neither of these open spaces would be subject to significant adverse noise impacts during the garage and LaGuardia Building construction.

Unlike the Proposed Actions, with the Potential CPC Modifications construction activities during Phase 2 would begin on the western side of the North Block in 2022. During construction activities for the LaGuardia Building, all of the publicly accessible and private open spaces east of the construction area would be operational, including the Mercer Playground on Mercer Street, the Washington Square Village Elevated Garden, and the Washington Square Village Playground. As part of startup work, fencing along the eastern boundary of the LaGuardia Building construction area would be installed as a public safety measure to separate the usable spaces on the central and eastern portions on North Block with the construction activities on the western portion. During above-grade construction, safety netting would also be installed.

The results of the Phase 2 air quality analysis—which represented worst-case conditions during the below-grade construction of both the Mercer Building and the LaGuardia Building—showed that construction activities during this phase would not result in any significant adverse air quality impacts at any sensitive receptors, which included areas such as open spaces directly adjacent to construction activities.

As with the Proposed Actions, the proposed Bleecker Building would contain an approximately 7,680-square-foot play area on the rooftop above the seven-story public school. This play area would include an approximately 3,000-square-foot early childhood playground (for pre-K and kindergarten students), with the remaining approximately 4,680-square-foot area for other students of the public school. Both areas would be utilized exclusively by the students of the public school.

Overall, by 2022 the proposed project would displace approximately 0.355 acres of publicly accessible open space (0.09 acres passive, 0.265 acres active).

Indirect Effects Analysis

Non-residential Study Area. Under the Potential CPC Modifications RWCDS 1, the number of non-residents in the non-residential study area is forecast to increase to 98,066 and the total amount of publicly accessible open space is expected to be 13.98 acres. As shown in **Table 26-55**, by 2022 the ratio of passive open space per 1,000 non-residents would be 0.097, which is below the City's guideline of 0.15 acres, and would be virtually the same as the 0.097 ratio in the No Build condition. For the combined residential and non-residential population, the passive open space ratio in 2022 would be 0.074 acres per 1,000 people, which is much lower than the recommended weighted average ratio of 0.23 acres per 1,000 residents and workers, and would be slightly higher than the 0.73 ratio for the No Build condition.

Table 26-55
Open Space Ratios During North Block Garage and LaGuardia Building Construction
2022 Analysis Condition
Potential CPC Modifications

Ratio	DCP Guideline	Existing Ratio	No Build Ratio	Future With the Potential CPC Modifications Ratio	Percent Change (Future With Potential CPC Modifications vs. No Build)	Future With the Proposed Actions Ratio/Percent Change vs. No Build
Non-Residential Study Area						
Passive/non-residents	0.15	0.101	0.097	0.097	0.3%	0.097/0.8%
Passive/total population	0.23	0.076	0.073	0.074	0.5%	0.074/0.9%
Total/residents	2.5	0.243	0.229	0.228	-0.6%	0.227/-0.7%
Passive/residents	0.5	0.138	0.129	0.129	0.3%	0.130/0.5%
Active/residents	2.0	0.106	0.100	0.098	-1.6%	0.098/-2.3%
Passive/total population*	0.28	0.048	0.046	0.046	0.8%	0.046/1.2%

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Residential Study Area. The residential passive open space ratio would be 0.129 acres per 1,000 residents, which is virtually the same as the 0.129 ratio in the No Build condition. The combined residential and non-residential passive open space ratio within the residential study area would be 0.046 acres per 1,000 residents and non-residents, which is much lower than the recommended weighted average ratio of 0.28 acres per 1,000 residents and workers, but would be virtually the same as the 0.046 ratio in the No Build condition. The active open space ratio would be 0.098 acres per 1,000 residents, which is notably less than the City's planning guideline of 2.0 acres per 1,000 residents, and represents a 1.6 percent decrease compared to the 0.100 ratio in the No Build condition. The total open space ratio would be approximately 0.228 acres per 1,000 residents, which is well below the City's planning guideline of 2.5 acres per 1,000 residents, and represents a 0.6 percent decrease compared to the total open space ratio in the No Build condition.

As shown in **Table 26-55**, with the Potential CPC Modifications the active and total open space ratios would decrease as compared to No Build conditions (between 1.6 and 0.6 percent decreases). Therefore, during the first years of Phase 2 construction, as additional existing open spaces are displaced to accommodate future project buildings and project open spaces, the Potential CPC Modifications could temporarily exacerbate future deficiencies in active open space in the residential study area. According to the *CEQR Technical Manual*, in areas that are extremely lacking in open space, a reduction of open space ratios as small as 1 percent may be considered significant, as it may result in overburdening existing facilities or further exacerbating a deficiency in open space.

The 1.6 percent decline in the active open space ratio would be less than the 2.3 percent decline for the same ratio that is predicted to occur with the Proposed Actions, due to the Potential CPC Modification's lesser residential population, and due to the fact that the Potential CPC Modifications would not displace the Mercer Playground by 2022. Nevertheless, as with the Proposed Actions, under the Potential CPC Modifications there would be a temporary significant adverse open space impact. This temporary impact on active open space resources in the

residential study area would be eliminated by the provision of the project open spaces associated with the next stage of construction (i.e., completion of the LaGuardia Building and central portion of the North Block's proposed open space). See "Mitigation" section below for a discussion of measures that would mitigate this temporary significant adverse impact.

Completion of North Block Below-Grade /Central Open Space/Above-Grade LaGuardia Building Construction (2027)

Study Area Population

Between the 2023 and 2027 construction years, the Potential CPC Modifications would introduce approximately 285,000 gsf of additional new uses to the Proposed Development Area with the completion of a portion of the North Block below-grade space. By the 2027 construction year, there would be three operational project components in the Proposed Development Area; the Zipper Building, the Bleecker Building, and a portion of the North Block below-grade space, totaling approximately 1.5 million gsf of new uses in the Proposed Development Area.

- *Non-residential Study Area.* The future project-generated populations for the non-residential study area analysis are based on the Potential CPC Modifications RWCDS 1 (the Maximum Academic Scenario), which maximizes the number of workers that would be introduced by the Potential CPC Modifications.

By 2027, the new uses in the Proposed Development Area and Commercial Overlay Area would introduce to the non-residential study area an estimated total of 2,839 workers and up to approximately 417 residents. The 2027 combined residential and non-residential population in the ¼-mile study area is projected to be 132,014 people.

- *Residential Study Area.* The future project-generated populations for the residential study area analysis are based on Potential CPC Modifications RWCDS 2 (the Maximum Dormitory Scenario), which maximizes the number of residents that would be introduced by the Potential CPC Modifications.

By 2027, the new uses in the Proposed Development Area would introduce to the Residential Study Area an estimated total of up to 1,567 residents. With the proposed project, the residential study area would contain an estimated 103,119 residents by 2027.

The proposed uses also would introduce an estimated 1,864 workers to the residential study area. The 2027 combined residential and non-residential population in the residential study area is projected to be 291,066 people.

Study Area Open Spaces

The publicly accessible open space changes expected to occur within the Proposed Development Area by 2027 are illustrated in **Figure 26-60**, and are described below.

Between 2023 and 2027, no publicly accessible open spaces in the Proposed Development Area would be displaced. Rather, the central area of the North Block would developed with the same program as with the Proposed Actions.

Overall, by 2027 the proposed project would displace approximately 0.355 acres of publicly accessible open space (0.09 acres passive, 0.265 acres active), and would introduce approximately 1.959 acres of publicly accessible open space (1.362 acres passive, 0.597 acres active), for a net gain of approximately 1.604 acres of publicly accessible open space (a 1.272-acre increase in passive open space, and a 0.332-acre increase in active space).

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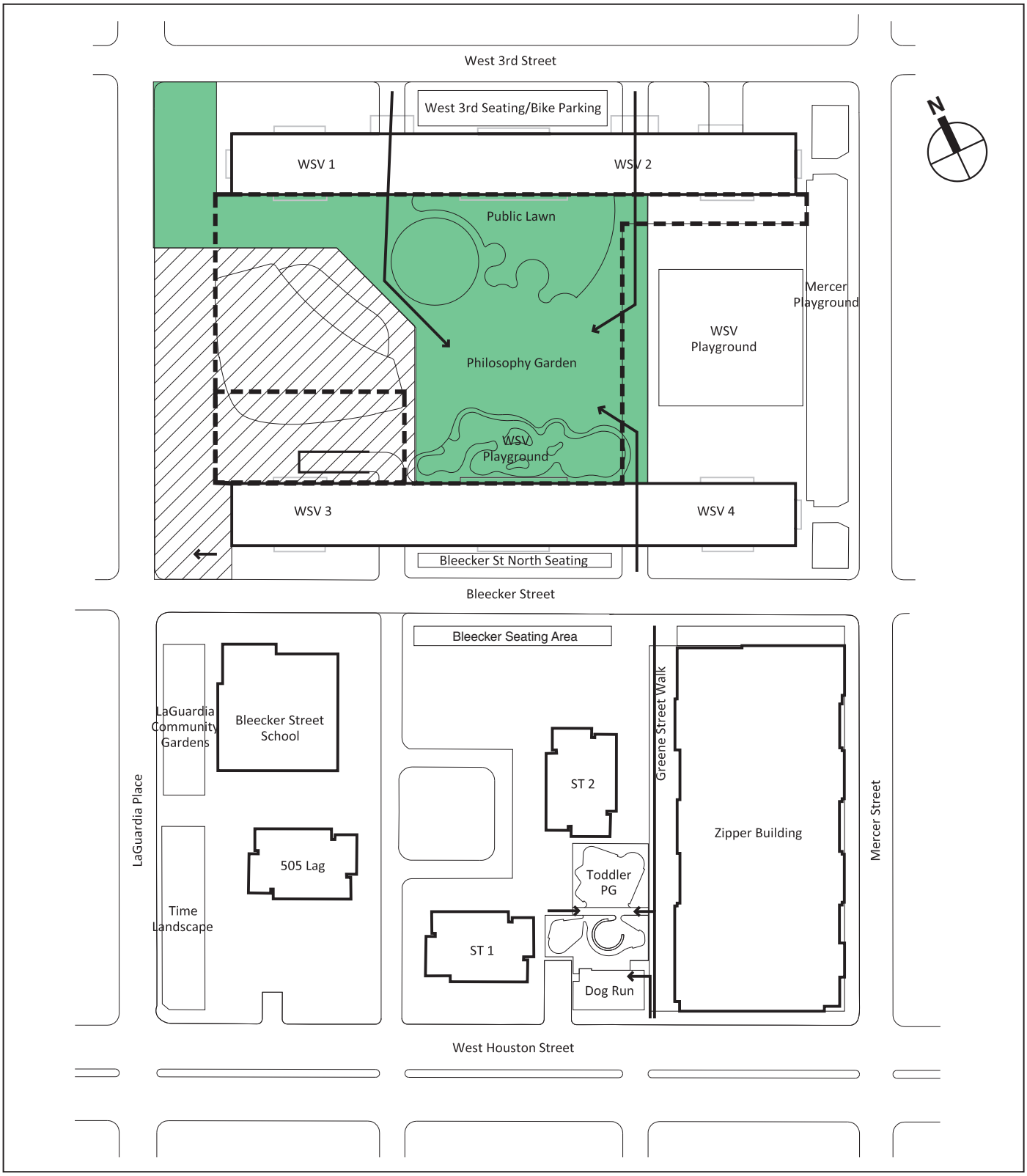

Construction Area

New Below-Grade Building

New Publicly Accessible Open Space

Open Space Entry

0 100 200 FEET

SCALE

Potential CPC Modifications—Displaced and New Open Spaces by 2027 Construction Year

Figure 26-60

NYU Core

Between 2023 and 2027, no publicly accessible open spaces would be directly affected by the Proposed Actions in terms of displacement. As mentioned above, construction of the central publicly accessible open spaces (the Public Lawn, Philosophy Garden and Washington Square Village Play Garden) would displace the private Washington Square Village Elevated Garden, while the Washington Square Village Playground would remain in operation.

In 2027, with the Potential CPC Modifications the proposed central publicly accessible open spaces and the LaGuardia Entry Plaza would be open for use while the above-grade portion of the LaGuardia Building would still be under construction.

The results of the Phase 2 air quality analysis—which represented worst-case conditions during the below-grade construction of both the Mercer Building and the LaGuardia Building—showed that construction activities during this phase would not result in any significant adverse air quality impacts at any sensitive receptors. Above-grade construction is generally less intensive in terms of air quality emissions from construction equipment than below-grade construction. Therefore, in 2027 when above-grade construction of the LaGuardia Building would be occurring with adjacent sensitive receptors in the central publicly accessible open space and LaGuardia Entry Plaza, it can be similarly concluded that there would be no significant adverse impacts from construction-related air emissions on these open spaces.

The above-grade construction of the LaGuardia Building would result in temporary significant adverse noise impacts on the publicly accessible central opens spaces on the North Block (the Public Lawn, Philosophy Garden and Washington Square Village Play Garden).

Indirect Effects Analysis

Non-residential Study Area. Under the Potential CPC Modifications RWCDS 1, the number of non-residents in the non-residential study area is forecast to increase to 101,480 and the total amount of publicly accessible open space is expected to increase to 15.35 acres. As shown in **Table 26-56**, by 2027 the ratio of passive open space per 1,000 non-residents would be 0.104, which is below the City's guideline of 0.15 acres, but would be a substantial improvement as compared to the 0.094 ratio in the No Build condition. For the combined residential and non-residential population, the passive open space ratio would be 0.080 acres per 1,000 people, which is much lower than the recommended weighted average ratio of 0.23 acres per 1,000 residents and workers, but would be a substantial improvement as compared to the 0.072 ratio for the No Build condition.

Residential Study Area. The combined residential and non-residential passive open space ratio within the residential study area would be 0.049 acres per 1,000 residents and non-residents, which is much lower than the recommended weighted average ratio of 0.27 acres per 1,000 residents and workers, but would be an improvement as compared to the 0.045 ratio in the No Build condition. The active open space ratio would be 0.102 acres per 1,000 residents, which is notably less than the City's planning guideline of 2.0 acres per 1,000 residents, but would be an improvement as compared to the No Build condition. The total open space ratio would be approximately 0.241 acres per 1,000 residents, which is well below the City's planning guideline of 2.5 acres per 1,000 residents, but would be an improvement as compared to the total open space ratio in the No Build condition.

Table 26-56
Open Space Ratios During North Block Above-Grade LaGuardia Building Construction
2027 Analysis Condition
Potential CPC Modifications

Ratio	DCP Guideline	Existing Ratio	No Build Ratio	Future With the Potential CPC Modifications Ratio	Percent Change (Future With Potential CPC Modifications vs. No Build)	Future With the Proposed Actions Ratio/Percent Change vs. No Build
Non-Residential Study Area						
Passive/non-residents	0.15	0.101	0.094	0.104	10.6%	0.103/10.2%
Passive/total population	0.23	0.076	0.072	0.080	10.9%	0.079/10.2%
Total/residents	2.5	0.243	0.229	0.241	5.3%	0.238/4.1%
Passive/residents	0.5	0.138	0.129	0.139	8.1%	0.139/7.9%
Active/residents	2.0	0.106	0.100	0.102	1.7%	0.099/-0.7%
Passive/total population*	0.28	0.048	0.045	0.049	8.4%	0.049/8.3%

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

As shown in **Table 26-56**, with the Potential CPC Modifications all open space ratios would improve by 2027. As compared to the Proposed Actions in 2027 (shown in **Table 20-29**), the Potential CPC Modifications would increase the passive open space ratios in the non-residential study area, due primarily to the reduction on worker population with the Potential CPC Modifications, and would result in an increased active open space ratio, due primarily to the retention of Mercer Playground, which would be displaced with the Proposed Actions by 2027. With the Proposed Actions there would be no significant adverse indirect effects to study area open spaces as a result of construction activities during this period.

Mercer Building Construction (2028)

Study Area Population

By 2029, the Potential CPC Modifications would introduce approximately 135,000 gsf of additional new uses to the Proposed Development Area with the completion of the LaGuardia Building. Therefore, by the 2028 construction year, there would be four operational project components in the Proposed Development Area; the Zipper Building, the Bleecker Building, a portion of the North Block Below-Grade space and the LaGuardia Building, totaling approximately 1.6 million gsf of new uses in the Proposed Development Area.

Non-residential Study Area. The future project-generated populations for the non-residential study area analysis are based on Potential CPC Modifications RWCDS 1 (the Maximum Academic Scenario), which maximizes the number of workers that would be introduced by the Potential CPC Modifications.

By 2028, the new uses in the Proposed Development Area would introduce to the non-residential study area an estimated total of 3,797 workers and up to approximately 417 residents. The 2028 combined residential and non-residential population in the ¼-mile study area is projected to be 132,972 people.

Residential Study Area. The future project-generated populations for the residential study area analysis are based on the Potential CPC Modifications RWCDS 2 (the Maximum Dormitory

Scenario), which maximizes the number of residents that would be introduced by the Potential CPC Modifications.

By 2028, the new uses in the Proposed Development Area would introduce to the Residential Study Area an estimated total of up to 1,567 residents. With the proposed project, the residential study area would contain an estimated 103,119 residents by 2028.

The proposed uses also would introduce an estimated 1,158 workers to the residential study area. The 2028 combined residential and non-residential population in the residential study area is projected to be 290,360 people.

Study Area Open Spaces

The publicly accessible open space changes expected to occur within the Proposed Development Area by 2028 are illustrated in **Figure 26-61**, and are described below.

Between 2027 and 2028, the Potential CPC Modifications would displace the Mercer Playground, a publicly accessible active open space, and the Washington Square Village Playground, a private active open space. With the completion of the LaGuardia Building, the LaGuardia Play Garden would be a new active open space offering.

Overall, by 2028 the proposed project would displace approximately 0.685 acres of publicly accessible open space (0.09 acres passive, 0.595 acres active), and would introduce approximately 2.260 acres of publicly accessible open space (1.362 acres passive, 0.898 acres active), for a net gain of approximately 1.575 acres of publicly accessible open space (a 1.272-acre increase in passive open space, and a 0.303-acre increase in active space).

While the Potential CPC Modifications would displace the Mercer Playground, by 2028 there would be a net increase of playground space within the Proposed Development Area, with the South Block's Toddler Playground and the North Block's LaGuardia Play Garden. As part of construction startup work, fencing along the western boundary of the Mercer Building construction area would be installed as a public safety measure to separate the usable spaces on the central and western portions on North Block with the construction activities on the eastern portion. During above-grade construction, safety netting would also be installed.

The results of the Phase 2 air quality analysis—which represented worst-case conditions during the below-grade construction of both the Mercer Building and the LaGuardia Building—showed that construction activities during this phase would not result in any significant adverse air quality impacts at any sensitive receptors.

During construction of the Mercer Building, there would be no temporary significant adverse noise impacts at any publicly accessible open spaces.

Indirect Effects Analysis

Non-residential Study Area. Under the Potential CPC Modifications RWCDS 1, by 2028 the number of non-residents in the non-residential study area is forecast to increase to 102,437 persons, and the total amount of publicly accessible open space is expected to increase to 15.32 acres. In 2028, the ratio of passive open space per 1,000 non-residents would be approximately 0.103, substantially improving on conditions as compared to the No Build condition, but still falling below the City's guideline of 0.15 acres (see **Table 26-57**). For the combined residential and non-residential population, the passive open space ratio would be 0.079 acres per 1,000 people, which is also a substantial improvement as compared to No Build conditions, but would still fall below the recommended weighted average ratio of 0.23 acres per 1,000 residents and workers.

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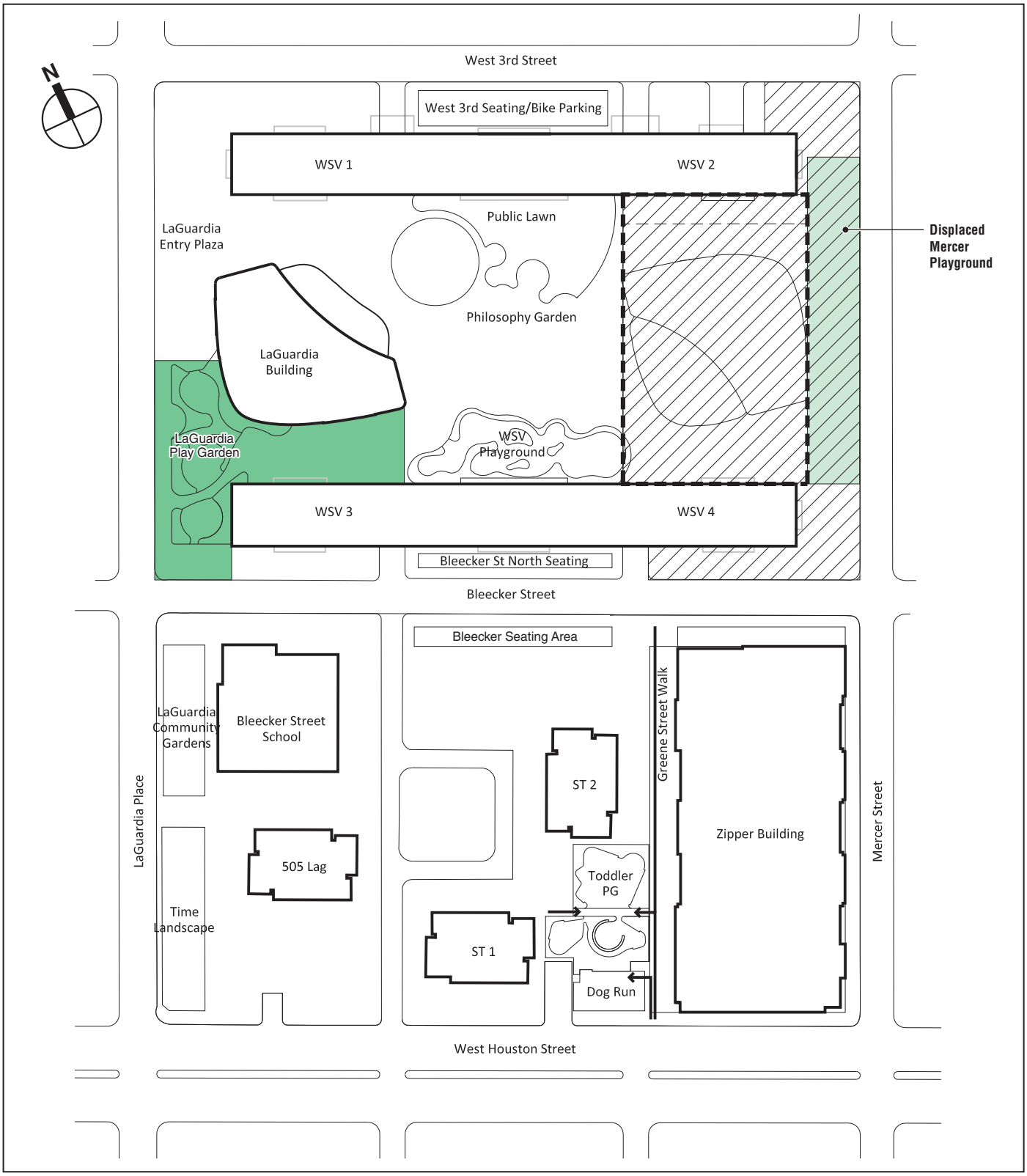

Construction Area

Displaced Publicly Accessible Open Space

New Publicly Accessible Open Space

Open Space Entry

0 100 200 FEET

SCALE

Potential CPC Modifications— Displaced and New Open Spaces by 2028 Construction Year

Figure 26-61

NYU Core

Residential Study Area. The combined residential and non-residential passive open space ratio within the residential study area would be 0.049 acres per 1,000 residents and non-residents, which is a substantial improvement as compared to conditions in the No Build condition, but would still fall below the recommended weighted average ratio of 0.27 acres per 1,000 residents and workers. The active open space ratio would be 0.101 acres per 1,000 residents, which is notably less than the City's planning guideline of 2.0 acres per 1,000 residents, but an improvement for the study area as compared to No Build conditions.

As shown in **Table 26-57**, even when accounting for the increased open space demands of the project-generated population, with the Potential CPC Modifications all of the open space ratios would improve as compared to future No Build conditions. Some of the improvements would be substantial; most notably the approximately nine percent increases in the open space ratios within the ¼-mile non-residential study area. These ratios are particularly important for an area with a large working and/or student population.

Table 26-57
Open Space Ratios During Mercer Building Construction
2028 Analysis Condition
Potential CPC Modifications

Ratio	DCP Guideline	Existing Ratio	No Build Ratio	Future With the Potential CPC Modifications Ratio	Percent Change (Future With Potential CPC Modifications vs. No Build)	Future With the Proposed Actions Ratio/Percent Change vs. No Build
Non-Residential Study Area						
Passive/non-residents	0.15	0.101	0.094	0.103	9.5%	0.102/8.9%
Passive/total population	0.23	0.076	0.072	0.079	10.1%	0.079/9.5%
Total/residents	2.5	0.243	0.229	0.241	5.2%	0.241/5.2%
Passive/residents	0.5	0.138	0.129	0.139	8.1%	0.139/7.9%
Active/residents	2.0	0.106	0.100	0.101	1.4%	0.102/1.7%
Passive/total population*	0.28	0.048	0.045	0.049	8.7%	0.049/8.4%

Note:
* Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Non-residents typically use passive spaces; therefore, for the non-residential study area, only passive open space ratios are calculated. For the residential study area, active, passive, and total park space ratios are calculated.

Tree Preservation and Replacement

Unlike the Proposed Actions, with the Potential CPC Modifications the elimination of the below-grade academic uses on the North Block's LaGuardia Place and Mercer Street Strips would provide opportunity to preserve some of the existing mature trees located on both the LaGuardia Place and Mercer Street Strips. With the Potential CPC Modifications, during construction on the North Block, construction equipment and truck movements on and off the site could be concentrated within the central portions of the strips, offering more flexibility to work around the existing trees, and potentially saving mature specimens at the north and south ends of the LaGuardia Place and Mercer Street Strips on the North Block.

As with the Proposed Actions, during the design and permitting phases for the Potential CPC Modifications, DPR would be consulted with respect to tree evaluation for the street trees that would be planned for removal in the vicinity of the Proposed Development Area. Under Chapter 5 of Title 56 of the Rules of the City of New York and under Title 18 of the Administrative Code of the City of New York, NYU would be required to obtain a permit to remove existing street

trees, which are under the jurisdiction of DPR. If such approvals were obtained, NYU would be required to post a bond with DPR to insure that within thirty days after completion of construction all trees removed, destroyed or severely damaged would be replaced at the expense of NYU.

BLEECKER BUILDING ALTERNATE PHASING SCENARIO

This section analyzes the potential for construction-related impacts under a scenario in which the proposed Bleecker Building is constructed within a period in either Phase 1 or Phase 2 other than that analyzed for the Potential CPC Modifications in the above sections (which is based on a conceptual construction schedule [illustrated in **Figure 26-51]** that reflects the sequencing of construction events as currently contemplated for the Potential CPC Modifications.) As with the Proposed Actions, with the Potential CPC Modifications, the proposed Bleecker Building—which is proposed to include a public school[1]—is assumed to be constructed generally following construction of the proposed Zipper Building as part of Phase 1 (from approximately Q3 2018 to Q2 2021). However, the timing of construction of the Bleecker Building could be different, depending upon the timing of the New York City School Construction Authority's (SCA's) decision on whether to move forward with the development of a public school at the project site. Specifically, if SCA does not identify a need and/or capital budget for the school during Phase 1, the Bleecker Building could be constructed during Phase 2 of the proposed project.

As with the Proposed Actions, in order to minimize to the maximum extent practicable the potential for significant adverse impacts that could be generated by construction activities associated with the Potential CPC Modifications, NYU would commit to restrictions on the types of concurrent construction activities. Certain construction activities have a greater potential to cause impacts than others. For example, excavation and foundations employ more large diesel engines than any other construction activity. Finishing of interiors and fit out generates the largest number of workers. However, excavation and foundation construction on one building could overlap with interior finishing of another building without having synergistic effects that would lead to greater impacts (e.g., the diesel engine emissions are not worsened by construction worker vehicle trips).

As detailed in the sections below, with the following restrictions in place, the construction activities associated with the Potential CPC Modifications would result in significant adverse impacts that are consistent with the conclusions of the construction impact analysis performed for the conceptual construction schedule discussed above.

The demolition of the Morton Williams Associated Supermarket building, Bleecker Building excavation/foundations, and Bleecker Building super structure/foundation work would not occur during:

- demolition of Coles Gymnasium (6 months);
- excavation/foundation or super structure/exterior work associated with the proposed Zipper Building (36 months);

[1] If by 2025 SCA does not exercise its option to build the public school, NYU would build and utilize the 100,000-square-foot space for its own academic purposes.

- demolition of the LaGuardia retail building (3 months), foundations, super structure/exterior, or interior work associated with the proposed Washington Square Village parking garage (20 months);
- below-grade foundations and below-grade super structure/exterior work associated with the proposed LaGuardia Building (21 months); and
- super structure/exterior work associated with the proposed LaGuardia Building.

With these restrictions in place, there would not be new or different significant adverse impacts other than those identified in the preceding analyses for the Potential CPC Modifications. The foregoing restrictions would allow the proposed Bleecker Building to be constructed prior to the proposed Zipper Building (between Q1 2013 and Q2 2018); after the Zipper Building (between Q1 2018 and Q1 2023); or after completion of the below-grade construction activities associated with the parking garage and LaGuardia Building (between Q1 2026 and Q4 2031). As with the Proposed Actions, the SCA would need to exercise its option to build the public school as part of the Bleecker Building by 2025.

Transportation

The shifting of the Bleecker Building in the construction sequence to Phase 2 for the Potential CPC Modifications would follow similar timing and sequencing as described for the Proposed Actions. Similarly, the operational analysis reflecting full development would still represent worst-case traffic, transit, and pedestrian conditions for construction and the mitigation identified would be appropriate for addressing construction-period traffic, transit, and pedestrian impacts, if necessary. For parking, predicted shortfalls for the ¼-mile radius during the midday hours would also be expected to occur during Phase 2 construction. However, based on the magnitude of available and total parking spaces within ½-mile of the Proposed Development Area, it is anticipated that the excess demand could be accommodated with a slightly longer walking distance beyond the ¼-mile radius.

Air Quality

As with the Proposed Actions, adjustments in the timing and sequencing of the Zipper Building and Bleecker Building in Phase 1 under the Potential CPC Modifications would not result in construction conditions more severe than those previously identified. Alternatively, as with the Proposed Actions, if the Bleecker Building construction was shifted to Phase 2 under the Proposed Modificaitons, the construction activities at the Bleecker Building may overlap with portions of construction of the Mercer Building. As indicated in the emissions profile for the Potential CPC Modifications, the highest air quality emissions would be generated during the excavation and foundation phases of construction, when the greatest amount of equipment with large diesel engines would be used. Finishing of interiors and fit-out would generate the lowest air quality emissions. Accounting for the limitations in construction sequencing specified above, the overlapping air quality effects from the Bleecker Building in Phase 2 would be minimal. In addition, air quality concentrations from construction activities are highly localized, i.e., almost entirely due to construction activity in close proximity to the receptor locations and not due to cumulative impacts from the larger project site. Since the construction activities at the Bleecker Building would not be immediately adjacent to the construction activities of the Mercer Building, the cumulative effects of construction activities at these two locations would be minimal and would not result in significant adverse air quality impacts. Furthermore, if the Bleecker Building were built in Phase 2, Tier 4 non-road diesel engines would be used instead of Tier 3 non-road diesel engines. The use of newer Tier 4 construction equipment would reduce

NOx and PM emissions as compared to Tier 3 construction equipment. For these reasons, as with the Proposed Actions, no significant adverse impacts on air quality would occur from the on-site construction sources in the event the timing of the Bleecker building construction was shifted as described above under the Potential CPC Modifications.

Noise

The shifting of the sequencing of the Bleecker Building with the Potential CPC Modifications is expected to result in significant noise impacts at the same locations as those predicted to occur with the conceptual construction schedule for the Proposed Actions. Significant noise impacts would be expected to occur at the same nearby sensitive noise receptors and would generally be of the same magnitude and impact duration if the construction of Bleecker Building would occur in Phase 2 during the construction of Mercer Building (from Q3 2027 to Q2 2031), but may be of higher magnitude and longer impact duration at nearby sensitive noise receptors on LaGuardia Place if the construction of the Bleecker Building would occur in Phase 2 during the interior construction of LaGuardia Building (from Q1 2026 to Q2 2027).

Other Technical Areas

The sequencing of the Bleecker Building would not result in significant adverse impacts to: historic and cultural resources; hazardous materials; natural resources; socioeconomic conditions; community facilities; land use and neighborhood character; and rodent control. For these areas of environmental concern, the shifting of the sequencing only alters the timing of the localized environmental effects, with the exception of socioeconomic conditions and open space, which are addressed below.

Socioeconomic Conditions

The shifting in timing of construction of the Bleecker Building would not alter the conclusion that lane and/or sidewalk closures would not obstruct entrances to any existing businesses, or obstruct major thoroughfares used by customers, and as with the conceptual construction schedule for the Potential CPC Modifications, businesses are not expected to be significantly affected by any temporary reductions in the amount of pedestrian foot traffic or vehicular delays that could occur as a result of construction activities. However, if the Bleecker Building were to be constructed before completion of the Zipper Building, there would not be the continuous provision of a supermarket use on the South Block. As detailed in Chapter 3, "Socioeconomic Conditions," in the future with the Proposed Actions it is NYU's goal to provide a supermarket use in the proposed Zipper Building prior to demolition of the existing supermarket on the Bleecker Building site, and the sequencing of proposed construction activities under the conceptual construction schedule is planned to allow for continuous provision of a supermarket use. If the Bleecker Building were constructed before completion of the Zipper Building, the Morton Williams Supermarket would be closed prior to the availability of the new supermarket space in the Zipper Building. However, even with this interruption in supermarket services on the South Block, there would be alternative food stores within or near the study area that would be available to local residents, including Gristedes grocery stores located at Mercer and West 3rd Streets and at University Place and East Eighth Street, as well as numerous specialty food stores and bodegas. Given the availability of other grocery stores in the immediate area, the potential interruption in the provision of a supermarket use on the South Block would not be a significant adverse impact. Overall, as with the Proposed Actions, the potential shift in construction sequencing would not result in any significant adverse impacts on surrounding businesses or the users of those businesses with the Potential CPC Modifications.

Open Space

As with the Proposed Actions, the shifting of the timing of the proposed Bleecker Building to Phase 2 under the Potential CPC Modifications would not result in any temporary significant adverse open space impacts.

As with the Proposed Actions, if the Bleecker Building were constructed prior to completion of the Zipper Building during Phase 1, there would be no new population introduced by the Potential CPC Modifications during the construction of the Bleecker Building, and there would be no direct displacement of publicly accessible open spaces associated with the Bleecker Building. Therefore, the potential effects on open spaces would be limited to the temporary displacement of the LaGuardia Community Garden (although not defined as publicly accessible under CEQR, this open space resource is considered in the qualitative assessment of the open space impacts of the construction activities) and the potential temporary displacement of a portion of Segment L_1 of the Bleecker Street Strip. **Appendix H2-E** includes a more detailed assessment of potential direct and indirect open space effects of constructing the Bleecker Building prior to completion of the Zipper Building, and that assessment finds that there would be no new or different impacts than those already identified above.

As described under "Air Quality," above, the results of the Phase 1 air quality analysis—which represented worst-case conditions during the construction of the Zipper Building—showed that under the Potential CPC Modifications, construction activities during this phase would not result in any significant adverse air quality impacts at any sensitive receptors, which included areas such as public and private open spaces directly adjacent to construction activities.

As described under "Noise," above, noise levels at open space locations on the project site are currently above the *CEQR Technical Manual* noise level for outdoor areas, and the proposed construction activities would exacerbate these exceedances. However, as with the Proposed Actions, with the Potential CPC Modifications, the construction of the Bleecker Building prior to the Zipper Building during Phase 1, or during Phase 2, would not result in significant adverse construction noise impacts at any existing or proposed open spaces.

MITIGATION

As with the Proposed Actions, the Potential CPC Modifications would result in significant adverse impacts in the areas of shadows, historic and cultural resources, transportation, and construction-related transportation, noise and open space.

With respect to historic and cultural resources, the Potential CPC Modifications would result in the same alterations to the Washington Square Village complex as the Proposed Actions resulting in significant adverse impacts to this architectural resource. However, based on the conceptual construction schedule for the Potential CPC Modifications, the timing of the alterations affecting the various elements that contribute to this resource's significance would be different under the Potential CPC Modifications. Measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions. Unlike the Proposed Actions, with the Potential CPC Modifications there would be no potential for significant adverse impacts to the S/NR-eligible Potential NoHo Historic District Expansion from retail development on the ground floors of the four buildings within the Commercial Overlay Area. Therefore, the proposed mitigation measures for the Commercial Overlay Area outlined in Chapter 21, "Mitigation" would not be required.

With respect to construction-related noise, the Potential CPC Modifications would result in significant adverse impacts at the same locations as with the Proposed Actions. In general, the Potential CPC Modifications would result in a slight decrease in the duration of impacts compared to the results with the Proposed Actions. There would, however, be some select locations (see **Table 26-51**) where there would be increase in the duration of impacts, Measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions.

As described above, the Potential CPC Modifications could result in significant impacts in the areas of shadows, transportation, and construction-related transportation and open space that would be similar to those of the Proposed Actions, and would require similar mitigation measures to partially or fully mitigate those impacts. Where there would be differences in the proposed mitigation measures to address these impacts, those measures are outlined in the sections below.

SHADOWS

In Phase 1, the Potential CPC Modifications would result in similar significant adverse impacts as the Proposed Actions with respect to shadows on the LaGuardia Corner Gardens from the proposed Bleecker Building. With the Potential CPC Modifications, measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions. However, with the elimination of the proposed NYU dormitory use (above the proposed public school in the Bleecker Building), the cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by the City of New York, rather than NYU, if the Bleecker Building is constructed as a public school with below grade NYU academic facilities in Phase 1. If a public school is not constructed and NYU builds academic space instead, the cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by NYU, as under the Proposed Actions.

In Phase 2, shadowing from the proposed Bleecker Building with the Potential CPC modifications would not constitute a significant adverse shadows impact, and therefore no shadow mitigation would be required. Nonetheless, if the Bleecker Building under the Potential CPC Modifications were to be constructed in Phase 2, and should NYU academic space be constructed instead of a public school, NYU has agreed to implement the same measures proposed as partial mitigation for the Proposed Actions in Chapter 21, "Mitigation."

TRANSPORTATION

As discussed above, the extent of transportation-related significant adverse impacts would be of lesser magnitude for the Potential CPC Modifications than those recommended for the Proposed Actions. Hence, the required mitigation measures would also be expected to be less extensive. The specific measures that would mitigate the projected impacts identified for the Potential CPC Modifications are described below.

Traffic

With the Potential CPC Modifications in 2021, the mitigation measures recommended for two intersections—1) West Houston Street and Sixth Avenue and 2) West Houston Street and Mercer Street—for the Proposed Actions would no longer be warranted. As shown in **Table 26-58**, the required mitigation measures at the two impacted intersections under the Potential CPC Modifications would be the same or less than those recommended for the Proposed

Actions. With these mitigation measures in place, the identified significant adverse traffic impacts would be fully mitigated, operating at the same or better service conditions than the No Build condition, as summarized in **Table 26-59**.

Table 26-58
Potential CPC Modifications 2021 Recommended Mitigation Measures

Intersection	AM	Midday	PM
West Houston Street and LaGuardia Place/West Broadway	No significant adverse impact	Shift 1 second of green time from the EB/WB phase to the NB/SB phase.	No significant adverse impact
Bleecker Street and Mercer Street	Eliminate 4-5 alternate side parking spaces on the south side of Bleecker Street on the EB approach; install No Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement.	Eliminate 4-5 alternate side parking spaces on the south side of Bleecker Street on the EB approach; install No Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement.	Eliminate 4-5 alternate side parking spaces on the south side of Bleecker Street on the EB approach; install No Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement.

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

Table 26-59
Potential CPC Modifications 2021 No Build, Build, and Build with Mitigation Conditions
Level of Service Analysis

	2021 No Build				2021 Build					2021 Build with Mitigation			
Intersection	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS		Lane Group	v/c Ratio	Delay (sec)	LOS
Weekday AM Peak Hour													
Bleecker Street and Mercer Street													
Eastbound	TR	0.78	32.2	C	TR	0.95	54.9	D	+	TR	0.81	33.9	C
Southbound	LT	0.31	17.4	B	LT	0.33	17.8	B		LT	0.33	17.8	B
	Intersection		27.4	C	Intersection		43.6	D		Intersection		29.0	C
Weekday Midday Peak Hour													
West Houston Street and LaGuardia Place/West Broadway													
Eastbound	LTR	0.78	32.3	C	LTR	0.81	34.3	C		LTR	0.84	36.9	D
Westbound	L	0.53	46.8	D	L	0.53	46.8	D		L	0.53	46.8	D
	TR	0.60	14.5	B	TR	0.62	14.9	B		TR	0.63	15.6	B
Northbound	LT	0.78	41	D	LT	0.78	41.3	D		LT	0.75	37.8	D
	R	0.82	49.1	D	R	0.89	59.4	E	+	R	0.85	52.2	D
Southbound	LT	0.69	39.8	D	LT	0.72	42.0	D		LT	0.68	37.8	D
	R	0.19	22.9	C	R	0.18	22.8	C		R	0.17	22.0	C
	Intersection		27.4	C	Intersection		29.0	C		Intersection		28.7	C
Bleecker Street and Mercer Street													
Eastbound	TR	1.00	66.4	E	TR	1.07	87.8	F	+	L	0.92	45.9	D
Southbound	LT	0.41	18.9	B	LT	0.43	19.4	B		T	0.43	19.4	B
	Intersection		49.9	D	Intersection		63.6	E		Intersection		36.5	D
Weekday PM Peak Hour													
Bleecker Street and Mercer Street													
Eastbound	TR	1.08	89.5	F	TR	1.20	132.5	F	+	TR	1.02	68.6	E
Southbound	LT	0.56	21.7	C	LT	0.60	22.7	C		LT	0.60	22.7	C
	Intersection		62.1	E	Intersection		87.6	F		Intersection		49.9	D

Notes: L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn; LOS = Level of Service
+ Denotes a significant adverse traffic impact

Under the Potential CPC Modifications' full build-out in 2031, the mitigation measures recommended for four intersections—1) West 4th Street and LaGuardia Place; 2) West 3rd Street and LaGuardia Place; 3) West 4th Street and Broadway; and 4) West 3rd Street and Broadway—for the Proposed Actions would no longer be warranted. As shown in **Table 26-60**, the required mitigation measures at the five impacted intersections under the Potential CPC Modifications would be the same or less than those recommended for the Proposed Actions, except at the Bleecker Street intersections with LaGuardia Place and Mercer Street. Although the midday peak period signal timing adjustments would no longer be warranted with the Potential CPC Modifications, an additional second of timing adjustment (from one second to two seconds) during the AM peak period would be required to mitigate the Potential CPC Modifications' significant adverse impact at the Bleecker Street and LaGuardia Place intersection. At the Bleecker Street and Mercer Street intersection, an additional two seconds of timing adjustment (from one second to three seconds) would be required to mitigate the Potential CPC Modifications' significant adverse impact during the PM peak period. Also, at the West Houston Street and Sixth Avenue intersection, the lane restriping recommended to mitigate the Proposed Actions' significant adverse impacts at this intersection would no longer be warranted with the Potential CPC Modifications. With these mitigation measures in place, the identified significant adverse traffic impacts would be fully mitigated, as summarized in **Table 26-61**.

Table 26-60
Potential CPC Modifications 2031 Recommended Mitigation Measures

Intersection	AM	Midday	PM
West Houston Street and Sixth Avenue	No significant adverse impact	No significant adverse impact	Shift 1 second of green time from the NB phase to the WB phase.
Bleecker Street and LaGuardia Place	Shift 2 second of green time from the NB/SB phase to the EB phase.	No significant adverse impact	No significant adverse impact
West Houston Street and LaGuardia Place/West Broadway	No significant adverse impact	Shift 1 second of green time from the EB/WB phase to the NB/SB phase and 1 second of green time from the exclusive WB phase to the NB/SB phase.	No significant adverse impact
Bleecker Street and Mercer Street	Eliminate 4-5 alternate side parking spaces on the south side of Bleecker Street on the EB approach; install No Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement.	Eliminate 4-5 alternate side parking spaces on the south side of Bleecker Street on the EB approach; install No Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement.	Eliminate 4-5 alternate side parking spaces on the south side of Bleecker Street on the EB approach; install No Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement. Shift 3 seconds of green time from the SB phase to the EB phase.
West Houston Street and Mercer Street	No significant adverse impact	No significant adverse impact	Shift 1 seconds of green time from the EB/WB phase to the SB phase.

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

Table 26-61
Potential CPC Modifications 2031 No Build, Build, and Build with Mitigation Conditions
Level of Service Analysis

	2031 No Build				2031 Build					2031 Build with Mitigation			
Intersection	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS		Lane Group	v/c Ratio	Delay (sec)	LOS
Weekday AM Peak Hour													
Bleecker Street and LaGuardia Place													
Eastbound	LTR	0.85	37.2	D	LTR	0.96	53.7	D	+	LTR	0.91	42.8	D
Northbound	TR	0.55	22.8	C	TR	0.76	33.1	C		TR	0.81	38.9	D
Southbound	LT	0.30	17.3	B	LT	0.48	21.3	C		LT	0.53	24.0	C
	Intersection		29.3	C	Intersection		40.7	D		Intersection		37.7	D
Bleecker Street and Mercer Street													
Eastbound	TR	0.79	33.0	C	TR	1.02	71.9	E	+	TR	0.87	39.7	D
Southbound	LT	0.31	17.5	B	LT	0.34	17.9	B		LT	0.34	17.9	B
	Intersection		28.0	C	Intersection		55.7	E		Intersection		33.2	C
Weekday Midday Peak Hour													
West Houston Street and LaGuardia Place/West Broadway													
Eastbound	LTR	0.79	33.1	C	LTR	0.83	35.3	D		LTR	0.85	38.2	D
Westbound	L	0.54	47.1	D	L	0.54	47.1	D		L	0.58	51.1	D
	TR	0.61	14.7	B	TR	0.63	15.0	B		TR	0.65	16.6	B
Northbound	LT	0.80	43.0	D	LT	0.81	43.7	D		LT	0.74	36.5	D
	R	0.83	50.3	D	R	0.91	63.8	E	+	R	0.83	49.1	D
Southbound	LT	0.71	41.5	D	LT	0.74	44.7	D		LT	0.66	35.9	D
	R	0.19	22.9	C	R	0.18	22.9	C		R	0.17	21.2	C
	Intersection		28.1	C	Intersection		30.1	C		Intersection		29.0	C
Bleecker Street and Mercer Street													
Eastbound	TR	1.01	69.0	E	TR	1.13	107.2	F	+	TR	0.97	55.2	E
Southbound	LT	0.41	18.9	B	LT	0.44	19.5	B		LT	0.44	19.5	B
	Intersection		51.6	D	Intersection		76.6	E		Intersection		42.8	D
Weekday PM Peak Hour													
West Houston Street and Sixth Avenue													
Westbound	T	0.68	25.2	C	T	0.69	25.6	C		T	0.67	24.4	C
	R	0.98	56.7	E	R	1.01	65.2	E	+	R	0.98	56.2	E
Northbound	LTR	0.94	32.5	C	LTR	0.94	33.1	C		LTR	0.97	38.5	D
	Intersection		35.3	D	Intersection		37.4	D		Intersection		38.3	D
Bleecker Street and Mercer Street													
Eastbound	TR	1.10	94.2	F	TR	1.41	223.4	F	+	TR	1.11	94.3	F
Southbound	LT	0.56	21.9	C	LT	0.61	23.1	C		LT	0.66	26.7	C
	Intersection		64.9	E	Intersection		145.8	F		Intersection		68.1	E
West Houston Street and Mercer Street													
Eastbound	TR	0.46	15.4	B	TR	0.46	15.4	B		TR	0.47	16.1	B
Westbound	L	0.34	19.3	B	L	0.38	20.6	C		L	0.39	21.8	C
	T	0.77	21.1	C	T	0.77	21.3	C		T	0.79	22.5	C
Southbound	LTR	0.75	31.9	C	LTR	0.91	47.6	D	+	LTR	0.89	43.0	D
	Intersection		20.9	C	Intersection		23.9	C		Intersection		24.0	C

Notes: L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn; LOS = Level of Service
+ Denotes a significant adverse traffic impact

Transit

As described above, under the Potential CPC Modifications' RWCDS 2, significant adverse subway impacts would be expected to occur in 2031 only at the Broadway Lafayette Station's S9 stairway, whereas, under the Potential CPC Modifications' RWCDS 1, this stairway would be significantly impacted in both 2021 and 2031. In addition, the West 4th Street Station's S2A/B stairway would be significantly impacted in 2031. Potential mitigation measures to address these impacts would be identical to those described for the Proposed Actions, which include the widening of one or both of these stairways to an effective width of 90 inches from their current widths. An engineering analysis to determine the feasibility of implementing the

above-described mitigation measures was undertaken and the recommended stairway widening mitigation measures were found to be feasible. As with the Proposed Actions, NYU would commit to implement the stairway widening mitigation measures in coordination with the Metropolitan Transportation Authority (MTA) New York City Transit (NYCT), unless NYU undertakes a study and DCP, in consultation with the MTA NYCT, determines, based on its review of the study and applying applicable CEQR methodologies, that the required mitigation is unwarranted. **Table 26-62** summarizes the operating conditions of the impacted stairways with the recommended stairway widening mitigations in place.

Table 26-62
Potential CPC Modifications 2021 and 2031 Mitigated Build Condition
Subway Stairway Analysis

Stairway	Width (ft.)	Effective Width (ft.)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
			Down	Up				
Reasonable Worst-Case Development Scenario 2								
2031 Weekday PM Peak 15-Minutes								
Broadway-Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	8.5	7.5	418	304	0.95	0.90	0.73	C
Reasonable Worst-Case Development Scenario 1								
2021 Weekday PM Peak 15-Minutes								
Broadway-Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	8.5	7.5	368	274	0.95	0.90	0.65	B
2031 Weekday PM Peak 15-Minutes								
Broadway-Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	8.5	7.5	442	305	0.95	0.90	0.75	C
West Fourth Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	8.5	7.5	507	463	0.95	0.90	0.98	C

Notes:
Capacities were calculated based on rates presented in the *CEQR Technical Manual*.
Surging factors are only applied to the exiting pedestrian volume (*CEQR Technical Manual*).
V/C = [Vin / (150 * We * Sf * Ff)]+ [Vx/ (150 * We * Sf * Ff)]
Where
Vin = Peak 15-minute entering passenger volume
Vx = Peak 15-minute exiting passenger volume
We = Effective width of stairs
Sf = Surging factor (if applicable)
Ff = Friction factor (if applicable)

Pedestrians

With the Potential CPC Modifications, there would not be any significant adverse pedestrian impacts upon completion of the Phase 1 build-out in 2021. For the project's full build-out in 2031, only the west crosswalk at the Washington Square East and West 4th Street intersection would be significantly impacted. The impact identified for the Proposed Actions at the University Place and Waverly Place's southeast corner would no longer occur, hence not warranting the corner or sidewalk extension recommended for that location. As summarized in **Table 26-63**, a 1.5-feet widening (same recommended for the Proposed Actions) would suffice in mitigating the projected significant adverse pedestrian impact at the Washington Square East and West 4th Street intersection's west crosswalk.

Table 26-63
Potential CPC Modifications 2031 No Build, Build, and Mitigated Build Conditions
Pedestrian Level of Service Analysis

Location	Mitigation Measures	No Build		Build		Mitigated Build	
		SFP	LOS	SFP	LOS	SFP	LOS
Phase 2 – 2031 (Weekday Midday Peak 15-Minutes)							
Washington Square East and West 4th Street – West Crosswalk	Widening by 1.5 feet to 15 feet	24.2	C	17.9	D	20.3	D
Phase 2 – 2031 (Weekday PM Peak 15-Minutes)							
Washington Square East and West 4th Street – West Crosswalk	Widening by 1.5 feet to 15 feet	23.6	D	17.3	D	19.6	D
Note: SFP = square feet per pedestrian.							

Effects of Traffic Mitigations on Pedestrian Operations

As described above, intersection operations would alter with the implementation of the recommended traffic mitigation measures. These measures would include changes to existing signal timings and lane utilizations. A review of the effects of these changes on pedestrian circulation and service levels at intersection corners and crosswalks showed that they would not alter the conclusions made for the pedestrian impact analyses, nor would they result in the potential for any additional significant adverse pedestrian impacts.

Mitigation Implementation

Subject to approvals of the relevant agencies, including NYCDOT and NYCT, the above recommended mitigation measures would be implemented to mitigate the projected significant adverse transportation impacts at the completion of the Potential CPC Modifications Phase 1 and Phase 2 build-outs, in 2021 and 2031, respectively. Similar to the Proposed Actions, the development of the Potential CPC Modifications would also span approximately 20 years and include various components that would be completed and occupied prior to the 2021 and 2031 milestones. An "interim impact assessment" was conducted to determine, among those identified for Phase 1 and Phase 2 project completion, the impacts that would occur prior to these milestones and the mitigation measures that could be advanced to address these impact. For this assessment, three interim conditions were considered, as follows:

1) Completion of the Zipper Building in Phase 1 (currently anticipated for end of 2018);
2) Completion of the LaGuardia Building and center below-grade space in Phase 2 (currently anticipated for end of 2026); and
3) Completion of the LaGuardia Building above-grade space in Phase 2 (currently anticipated for the middle of 2027).

Trip projections for these interim conditions were prepared in the same manner as those described above for the Potential CPC Modifications Phase 1 and Phase 2 Build conditions. Since these interim conditions represent partial build-out of the Potential CPC Modifications Phase 1 or Phase 2 development programs, their potential impacts would be within the envelope of impacts identified for each of these analysis phases. Hence, only locations found to incur significant adverse impacts upon Phase 1 and Phase 2 completions were evaluated for this interim impact assessment.

For the Potential CPC Modifications interim condition 1) above, the analysis of Phase 1 impacted locations found that for traffic, the two intersections identified to be significantly impacted under RWCDS 2 would likewise be significantly impacted during one or more analysis peak hours with the completion of the Zipper Building and the required mitigation measures would be the same as those described for the 2021 Build condition. For transit, the S9 stairway at the Broadway-Lafayette Station identified to be significantly impacted during the 2021 PM peak period under the Potential CPC Modifications RWCDS 1 would likewise be significantly impacted with the completion of the Zipper Building and the required mitigation measures would be the same as those described for the 2021 Build condition. The S9 stairway mitigation would be implemented unless NYU undertakes a study and DCP, in consultation with the MTA NYCT, determines, based on its review of the study and applying applicable CEQR methodologies, that the required mitigation is unwarranted. With regard to pedestrians, with the Potential CPC Modifications, there would be not any significant adverse pedestrian impacts upon completion of the Phase 1 build-out in 2021. Therefore, there would also not be any significant adverse pedestrian impacts upon the completion of the Zipper Building. Based on the results of this interim impact assessment, all recommended 2021 Phase 1 mitigation measures, would need to be advanced upon the completion and occupancy of the Zipper Building.

For the Potential CPC Modifications interim condition 2) above, the analysis of Phase 2 impacted locations found that for traffic, the five intersections identified to be significantly impacted under RWCDS 2 would likewise be significantly impacted during one or more analysis peak hours with the completion of the LaGuardia Building and center below-grade space except for the intersection of West Houston Street and Mercer Street. The required traffic mitigation measures at the impacted intersections under interim condition 2) would be the same as those described for the 2031 Build condition. For transit, the S9 stairway at the Broadway-Lafayette Station identified to be significantly impacted during the 2031 PM peak period under both RWCDS 1 and RWCDS 2 would likewise be significantly impacted with the completion of the LaGuardia Building and center below-grade space and the required mitigation measures would be the same as those described for the 2021 and 2031 Build conditions. The S9 stairway mitigation would be implemented unless NYU undertakes a study and DCP, in consultation with the MTA NYCT, determines, based on its review of the study and applying applicable CEQR methodologies, that the required mitigation is unwarranted. However, the S2A/B stairway at the West 4th Street Station would not be significantly impacted at this time under either Potential CPC Modifications RWCDS 1 or RWCDS 2 and would not yet require the mitigation measures described for the 2031 Build condition. With regard to pedestrians, the 2031 significant adverse impact identified for the west crosswalk of Washington Square East and West 4th Street is expected to be also impacted with the completion of the LaGuardia Building and center below-grade space and the required mitigation measures would be the same as those described for the 2031 Build condition. Based on the results of this interim impact assessment, all recommended 2031 Phase 2 mitigation measures, with the exception of signal timing changes at the intersection of West Houston Street and Mercer Street and potential stairway widening at the West 4th Street Station, would need to be advanced upon the completion and occupancy of the LaGuardia Building and center below-grade space.

For the Potential CPC Modifications interim condition 3) above, the analysis of Phase 2 impacted locations found that for traffic, the intersection of West Houston Street and Mercer Street would not be significantly impacted at this time and would not yet require the mitigation measures described for the 2031 Build condition. For the intersections identified as impacted under interim condition 2, the required mitigation measures should already be in place. For

transit, the S9 stairway at the Broadway-Lafayette Station identified to be significantly impacted during the 2031 PM peak period under both RWCDS 1 and RWCDS 2 would likewise be significantly impacted with the completion of the LaGuardia Building above-grade space and the required mitigation measures would be the same as those described the 2021 and 2031 Build conditions. The S9 stairway mitigation would be implemented unless NYU undertakes a study and DCP, in consultation with the MTA NYCT, determines, based on its review of the study and applying applicable CEQR methodologies, that the required mitigation is unwarranted. However, the S2A/B stairway at the West 4th Street Station would not be significantly impacted at this time and would not yet require the mitigation measures described for the 2031 Build condition. For pedestrians, since all projected impacts would already exist prior to the completion of the LaGuardia Building above-grade space, the implementation of the required measures to mitigate these impacts should already be in place. Based on the results of this interim impact assessment, all recommended 2031 Phase 2 mitigation measures, with the exception of signal timing changes at the intersection of West Houston Street and Mercer Street and potential stairway widening at the West 4th Street Station, would need to be advanced upon the completion and occupancy of the LaGuardia Building above-grade space.

CONSTRUCTION

Transportation

Traffic

The potential traffic impacts during peak Phase 2 construction (2029) would be within the envelope of significant adverse impacts identified for the 2031 Build condition and can be addressed with the same set of traffic mitigation measures developed for the Potential CPC Modifications' full build-out.

Transit

For Phase 2 construction, the combination of the peak Phase 2 construction worker subway trips and those generated by the completed Phase 1 and portions of the Phase 2 projects during the commuter peak hours would result in comparable significant adverse impacts to the subway station elements described for the completed project under the Potential CPC Modifications and can be addressed with the same mitigation measures recommended for the Potential CPC Modifications' full build-out.

Pedestrians

For Phase 2 construction, the combination of the peak Phase 2 construction worker pedestrian trips and those generated by the completed Phase 1 and portions of the Phase 2 projects during the commuter peak hours may result in comparable significant adverse impacts at the west crosswalk at Washington Square East and West 4th Street described for the completed project under the Potential CPC Modifications and can be addressed with the same mitigation measure recommended for the Potential CPC Modifications' full build-out.

Open Space

Direct Effects

With respect to the temporary significant adverse construction open space impact on the LaGuardia Corner Gardens outlined above, measures to minimize or partially mitigate these significant adverse impacts would be the same as described in Chapter 21, "Mitigation" for the Proposed Actions. However, Chapter 21 notes that in the absence of a permanent relocation of the community gardens, the Bleecker Street Staging Option for construction will be utilized—unless subsequently developed

information demonstrates to the satisfaction of the City that it is infeasible—and the temporary significant adverse construction impact would be partially mitigated by the provision of temporary space, if such space is identified and accepted by the LaGuardia Corner Gardens; and, if not, through the use of transparent construction shedding, grow lights and permitting intermittent use of the garden during non-construction hours, if deemed feasible, safe and approvable in consultation with the New York City Department of Buildings (DOB). It should be noted that if the Bleecker Building were to be constructed in Phase 1, the utility of the temporary relocation site within the North Block, east of the LaGuardia retail building (identified in Chapter 21) as a mitigation measure would be reduced under the Potential CPC Modifications, given the shorter period of time that the temporary relocation space would be available to the LaGuardia Corner Gardens. If the Bleecker Building were to be constructed in Phase 2, the temporary relocation site within the North Block, east of the LaGuardia retail building, would not be available, as construction on that site would commence at the beginning of Phase 2.

With the elimination of the proposed NYU dormitory use (above the proposed public school in the Bleecker Building), the cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by the City of New York, rather than NYU, if the Bleecker Building is constructed as a public school with below grade NYU academic facilities. If a public school is not constructed and NYU builds academic space instead, the cost of the mitigation with respect to the LaGuardia Corner Gardens would be borne by NYU, as under the Proposed Actions.

Indirect Effects

As detailed in the "Construction" section above, with the Potential CPC Modifications, at the onset of Phase 2 construction activities in 2022, passive open space ratios would increase slightly as compared to No Build conditions, but the ½-mile residential study area's total open space ratio and active open space ratio would decrease as compared to No Build conditions (0.6 and 1.6 percent decreases, respectively). The 1.6 percent decline in the active open space ratio would be less than the 2.3 percent decline for the same ratio that is predicted to occur with the Proposed Actions. However, this temporary impact would exceed the 1 percent threshold for significance, and there would be no additional on-site opportunities to provide active open space resources to mitigate the temporary significant adverse impact during Phase 2 construction activities until 2027, when the North Block's proposed Washington Square Village Playground would become available.

According to the *CEQR Technical Manual*, if construction staging that requires the use of an open space or a loss of access to an open space is determined to be a significant adverse impact, mitigation may involve expansion and improvement of another nearby open space or the creation of an open space of similar characteristics at a nearby location. The DEIS stated that between the DEIS and this FEIS, NYU, in coordination with DPR, would seek to identify feasible measures to mitigate this temporary significant adverse impact to active open space resources during the construction period for the LaGuardia Building. As a result, it has been determined that it would be feasible to partially mitigate this temporary impact through a financial contribution by NYU equal to the installation costs attributable to Adrienne's Garden, the play area that would be displaced during the LaGuardia Building construction period. These funds would be applied by DPR to improvements at the Mercer Street Playground and/or Washington Square Park playgrounds prior to commencement of the proposed LaGuardia Building's construction. In addition, NYU would commit to funding the stationing of a DPR seasonal playground associate at Washington Square Park for six months of the year, during the duration of the period in which the LaGuardia Building construction would result in a significant adverse open space impact. This playground associate would be available for facilitating play activities, as well as clean-up. NYU has committed to implement the foregoing mitigation, and this commitment would be incorporated into the Restrictive Declaration. ✶