DEPARTMENT OF CITY PLANNING
CITY OF NEW YORK

ENVIRONMENTAL ASSESSMENT AND REVIEW DIVISION

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Department of City Planning

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NOTICE OF COMPLETION OF
THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

NYU Core

Project Identification
CEQR No. 11DCP121M
ULURP Nos. 120122 ZMM, N 120123 ZRM,
N 120124 ZSM, and 120077 MMM
SEQRA Classification: Type I

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Pursuant to City Environmental Quality Review (CEQR), Mayoral Executive Order No. 91 of 1977, CEQR Rules of Procedure of 1991 and the regulations of Article 8 of the State Environmental Conservation Law, State Environmental Quality Review Act (SEQRA) as found in 6 NYCRR Part 617, a Draft Environmental Impact Statement (DEIS) has been prepared for the action described below. Copies of the DEIS are available for public inspection at the office of the undersigned. The proposal involves actions by the City Planning Commission and Council of the City of New York pursuant to Uniform Land Use Review Procedures (ULURP). A public hearing on the DEIS will be held at a later date to be announced, in conjunction with the City Planning Commission's citywide public hearing pursuant to ULURP. Advance notice will be given of the time and place of the hearing. Written comments on the DEIS are requested and would be received and considered by the Lead Agency until the 10th calendar day following the close of the public hearing.

A. INTRODUCTION

New York University (NYU) is seeking a number of discretionary actions (the "Proposed Actions") in connection with a proposed expansion of NYU facilities at NYU's academic core near Washington Square. The project site for the Proposed Actions includes: a "Proposed Development Area," bounded by LaGuardia

Place to the west, Mercer Street to the east, West Houston Street to the south, and West 3rd Street to the north,[1] where substantial new development is proposed on two superblocks; 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,[2] 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; 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 (the "Cogeneration Plant")[3] below-grade.

Over a period of approximately 19 years, NYU is proposing to construct within the Proposed Development Area: four new buildings (including academic uses, residential units for NYU faculty and students, a new athletic facility, a University-affiliated hotel, and retail uses); below-grade academic uses; approximately 3.8 acres of parkland and publicly-accessible open spaces; and replacement below-grade accessory parking facilities. NYU also anticipates making space available to the New York City School Construction Authority (SCA) for the provision of an approximately 100,000-square-foot public school. By 2031, the Proposed Actions would result in the development of approximately 2.5 million gross square feet (gsf) of new uses in the Proposed Development Area. 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.

The Proposed Actions require environmental review and the preparation of an Environmental Impact Statement (EIS) under the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR). This EIS has been prepared in conformance with the SEQRA (Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91 of 1977, as amended, and the Rules of Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York. The EIS follows the guidance of the 2010 *CEQR Technical Manual*, dated May 2010. The Department of City Planning (DCP)—acting on behalf of the City Planning Commission (CPC), which is the "lead agency"—has determined that the environmental issues have been adequately studied in the form of a Draft EIS (DEIS) in order to permit meaningful review by the public and decision-makers.

B. PROJECT DESCRIPTION

SITE CONDITIONS AND HISTORY

The project site is located within NYU's academic core near Washington Square Park. This area, together with the Union Square area, contains approximately 10.8 of the 15.0 million gsf of space NYU owns or leases in the City to accommodate its academic, administrative and residential needs. NYU owns all of the properties within

[1] The Proposed Development Area includes: Block 524, Lots 1, 9, and 66; Block 533, Lots 1 and 10; and portions of Mercer Street and LaGuardia Place that are proposed to be demapped. The unimproved portions of Mercer Street and LaGuardia Place owned by the City are under the jurisdiction of the New York City Department of Transportation (NYCDOT), and are referred to in this DEIS, respectively, as the "Mercer Street Strip" and the "LaGuardia Place Strip." The City-owned portion of Bleecker Street adjacent to the South Block (none of which is proposed to be demapped) is under the jurisdiction of the New York City Department of Parks and Recreation (NYCDPR), and is referred to herein as the "Bleecker Street Strip."

[2] The Commercial Overlay Area includes: Block 546, Lots 1, 5, 8, 10, 11, 15, 20, 21, 26, 30; Block 547, Lots 1, 4, 5, 8, 14, 15, 18, 19, 20, and 25; and Block 548, Lots 1, 4, 21, 24, 40, and 45.

[3] NYU operates a "Central Plant" that includes a Cogeneration Plant to provide energy for portions of NYU properties.

the Proposed Development Area1 (with the exception of City-owned mapped streets) and a majority of the properties within the Commercial Overlay Area. NYU does not own the property within the Mercer Plaza Area. The project site's existing uses comprise approximately 3.7 million of the 11.4 million gsf of space owned or leased by NYU in the Washington Square Park area.

The Proposed Development Area—bounded by LaGuardia Place to the west, Mercer Street to the east, West Houston Street to the south, and West 3rd Street to the north—is comprised of two superblocks separated by Bleecker Street. The superblock north of Bleecker Street in the Proposed Development Area is referred to in this document as the "North Block," while the superblock south of Bleecker Street is referred to as the "South Block." Collectively, the North and South Blocks are largely residential in character, with mid- to high-rise apartment buildings, a number of private and public open spaces, and the Coles Sports and Recreation Center, which is a gymnasium/recreational facility for NYU students, faculty, and alumni. The Proposed Development Area also contains retail uses located along LaGuardia Place.

The 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—is generally characterized by NYU academic buildings, as well as four non-NYU residential buildings. There are several buildings in the Commercial Overlay Area that include ground floor retail, either as accessory to community facility (NYU) uses, or as non-conforming uses under existing zoning.

The Mercer Plaza Area—bounded by the western sidewalk of Mercer Street to the east, the existing NYU property line east of Weaver Hall to the west, West 3rd Street to the south, and West 4th Street to the north—contains a renovated public space above grade (Mercer Plaza) and NYU's 251 Mercer Street Cogeneration Plant below grade. There is no proposed development within this approximately 4,500-sf area.

The Proposed Development Area contains 10 buildings, as well as a variety of public and private open spaces and landscaped areas. The Commercial Overlay Area includes 26 individual buildings, of which 22 are owned and occupied by NYU.

The entire project site is currently zoned R7-2. There is a C1-5 overlay along LaGuardia Place on the two superblocks in the Proposed Development Area (this overlay area contains the Morton Williams Associated Supermarket and the LaGuardia Retail building).

A portion of the South Block of the Proposed Development Area (Block 524) is also part of a Large Scale Residential Development (LSRD) designated in 1964. The New York City Zoning Resolution provides for the creation of LSRDs "... to deal with certain types of problems which arise only in connection with large-scale residential developments and to promote and facilitate better site planning and community planning through modified application of the district regulations in such developments." The LSRD allowed the development of the three residential buildings within the LSRD, by permitting the distribution of floor area, open space, rooms and parking spaces without regard to zoning lot lines. The LSRD was modified by special permit and authorization in 1979 to permit the development of Coles Athletic Facility, and special permits relating to minor modifications to the design of the Coles rooftop open space and the minimum spacing between buildings were approved by CPC in 1999.

The Proposed Development Area is located immediately adjacent to three historic districts: the NoHo Historic District (State and National Register-eligible [S/NR-eligible], New York City Landmark [NYCL]) is located east of Mercer Street; the South Village Historic District (S/NR-eligible, NYCL-eligible) is located west of La Guardia Place; and the SoHo Cast-Iron Historic District (National Historic Landmark [NHL], S/NR, NYCL) and Extension (NYCL) are located south of West Houston Street. The Greenwich Village Historic District

[1] The 505 LaGuardia Place building is not owned by NYU; the building is on property under a 99-year lease from NYU.

(S/NR, NYCL) is located north of West 4th Street, and incorporates Washington Square Park and areas to the north and west of the park. University Village (aka Silver Towers and 505 LaGuardia Place) is S/NR-eligible and is a NYCL. Additionally, Washington Square Village is S/NR-eligible.

The Commercial Overlay Area contains a number of designated and eligible historic resources. These include: the Brown Building at 23-29 Washington Place (NHL, S/NR, NYCL); Silver Center/Hemmerdinger Hall at 100 Washington Square East (NR-eligible); and the 20-story apartment building at One University Place/27 Waverly Place (NR-eligible). In addition, a potential NoHo Historic District Expansion has been determined S/NR-eligible by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The NoHo Historic District Expansion is bounded by West 4th Street, Washington Square East/University Place, mid-block between Waverly Place and East Eighth Street, and Mercer Street. The Commercial Overlay Area is located adjacent to 13-19 University Place (NR-eligible); across Washington Square East/University Place from the Greenwich Village Historic District; and across Mercer Street from the NoHo Historic District.

PROPOSED ACTIONS

NYU's application requests a rezoning, two zoning text amendments, and a large-scale general development (LSGD) special permit to facilitate the development of four buildings in the Proposed Development Area. On the North Block, the requested actions would facilitate the development of two primarily academic buildings of 8 and 14 stories in height, and associated publicly accessible open spaces. On the South Block, the requested actions would allow for the development of a mixed-use building of varying heights up to 25 stories containing academic, dormitory, hotel, residential and retail uses, and a 14-story building containing a public school, academic and dormitory uses. The application would also map a commercial overlay within the Commercial Overlay Area, an approximately six-block area just east of Washington Square Park, to allow for new ground floor retail uses. A concurrently submitted related application requests 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 two of the demapped areas as a public park.

More specifically, the Proposed Actions required to facilitate the proposed project are as follows:

- **Zoning map change**:
  - Rezone the Proposed Development Area from R7-2 and R7-2/C1-5 to C1-7;
  - Rezone the Commercial Overlay Area from R7-2 to R7-2/C1-5;
  - Rezone a 19.5-foot-wide strip within the bed of Mercer Street between West Houston Street and West 3rd Street from C6-2 to C1-7 in order to keep the zoning district boundary line coincident with the center of the street; and
  - Rezone a 10.5-foot-wide strip within the bed of Mercer Street between West 3rd Street and West 4th Street from C6-2 to R7-2 in order to keep the zoning district boundary line coincident with the center of the street.
- **Zoning Text Amendment to Sections 74-742 and 74-743:**
  - Allow applications for LSGD special permits within the former Washington Square Southeast Urban Renewal Area to be submitted without meeting normally-applicable ownership requirements (Sec 74-742); and
  - Allow public parks in the former Washington Square Southeast Urban Renewal Area to be treated as a street for all zoning purposes (Sec 74-743).
- **LSGD Special Permit (ZR Section 74-74):**
  - Permit the transfer of 19,214 sf of zoning floor area between two areas of the South Block;

- Waiver of height and setback regulations to allow portions of the proposed Zipper, Bleecker, Mercer, and LaGuardia buildings, as well as the existing Silver Tower I and Washington Square Village buildings to penetrate the required setback and sky exposure plane (ZR Sections 23-632, 33-432 and 35-23);
- Waiver of rear yard equivalent regulations for the proposed Zipper Building (ZR Section 23-532, 33-283);
- Waiver of rear yard regulations for the proposed Bleecker Building (ZR Section 33-26); and
- Waiver of minimum distance between buildings regulation for existing Silver Tower II and Coles Gymnasium buildings (ZR Section 23-711); and

The existing Large Scale Residential Development (LSRD) special permit would be dissolved as a consequence of the Proposed Action.

- **Concurrent NYU City Map Change Application:**
  - Narrow, by elimination, discontinuance and closing, the western 39 feet of Mercer Street between West Houston and Bleecker Streets and authorize its disposition to NYU;
  - The elimination, discontinuance and closing of the western 21 feet of Mercer Street between West 3rd and 4th Streets, and a slightly larger area encompassing the existing co-generation plant below an upper limiting plane at 30 feet above the Manhattan datum, and authorize disposition to NYU;
  - Narrow, by elimination, discontinuance and closing, below an upper limiting plane located at 28 feet above the Manhattan datum, the western 39 feet of Mercer Street between Bleecker and West 3rd Streets and authorize its disposition to NYU;
  - Map the western 39 feet of Mercer Street between Bleecker and West 3rd Streets above a lower limiting plane located at 28 feet above the Manhattan datum as parkland subject to certain easements to be disposed of to NYU;
  - Narrow, by elimination, discontinuance and closing, below an upper limiting plane located at 22 feet above the Manhattan datum, the eastern 50 feet of LaGuardia Place between Bleecker and West 3rd Streets and authorize disposition to NYU; and
  - Map the eastern 50 feet of LaGuardia Place between Bleecker and West 3rd Streets above a lower limiting plane located at 22 feet above the Manhattan datum as parkland subject to certain easements to be disposed of to NYU.
- **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**
- **New York City Department of Transportation revocable consent for utility lines beneath City streets**

In addition to the above-described Proposed Actions, on March 3, 2011 NYU submitted an application to the New York City Landmark Preservation Commission (LPC) for a Certificate of Appropriateness (CofA) for proposed changes to landscaping at University Village, which is a NYCL. At a public hearing on April 5, 2011, LPC approved the proposed landscape changes. On July 27, 2011, LPC approved the proposed landscape changes and issued a CofA. The CofA has not yet been issued in its final form. This is contingent upon LPC's review and approval of the final New York City Department of Building filing set of drawings. No work can begin until the final drawings have been marked approved by LPC with a perforated seal.

RESTRICTIVE DECLARATION

In connection with the proposed project, a Restrictive Declaration would be recorded for the Proposed Development Area at the time all land use-related actions required to authorize the proposed project's development are approved. The Restrictive Declaration would, among other things:

- Require development in substantial accordance with the approved plans, which establish an envelope within which the buildings must be constructed, including limitations on floor area;
- Require that the proposed project's development program be within the scope of the reasonable worst case development scenarios (RWCDS) analyzed in the EIS;
- Ensure the provision of publicly accessible open space and that it is provided in accordance with the phasing schedule proposed by NYU and analyzed in the EIS; and
- Provide for the implementation of "Project Components Related to the Environment" (i.e., certain project components which were material to the analysis of environmental impacts in the EIS) and mitigation measures, substantially consistent with the EIS.

PROPOSED DEVELOPMENT PROGRAM

PROPOSED DEVELOPMENT AREA

Beginning in 2013, over a period of approximately 19 years NYU is proposing to build the following within the Proposed Development Area:

- Four new buildings that would include NYU academic uses, residential units for NYU faculty and students, a new NYU athletic facility, a possible University-oriented hotel with ancillary conference/academic space, and retail uses;
- A below-grade NYU academic use on the North Block spanning the distance between LaGuardia Place and Mercer Street (i.e., beneath and between the two proposed buildings on the North Block and extending below-grade in demapped areas of LaGuardia Place and Mercer Street between Bleecker and West 3rd Streets);
- Approximately 3.8 acres of publicly accessible open space, including the creation of new City-owned public parks on the above-grade portions of the demapped areas of LaGuardia Place and Mercer Street between Bleecker and West 3rd Streets;
- 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 on the South Block; and
- Below-grade replacement parking facilities on the North Block. The existing North Block garage contains 389 required accessory parking spaces and 281 additional, non-required spaces. The new parking facilities on the North Block would accommodate the relocation of the 389 existing required accessory parking spaces, and would be accessed from one of the existing driveways on West 3rd Street. The remaining 281 existing spaces would be permanently displaced by the proposed project, resulting in a net loss of 281 below-grade parking spaces with the Proposed Actions.

NYU also anticipates making space available to the SCA for the provision of an approximately 100,000-square-foot public school. The rooftop above the seven-story public school is expected to contain a play area that would be utilized exclusively by the students of the public school. 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 above-described development would require the demolition of three NYU-owned buildings within the Proposed Development Area: (1) the Coles Sports and Recreation Center; (2) a retail building containing the

Morton Williams Associated Supermarket; and 3) a retail building with seven storefronts (LaGuardia Retail).[1] The proposed below-grade academic space on the North Block would require the displacement of the existing, approximately 670-space below-grade parking garage on the North Block. The project would develop new below-grade parking to accommodate the relocation of the existing 389 required accessory spaces, resulting in an overall reduction of approximately 281 parking spaces within the Proposed Development Area. The demolition of the three NYU-owned buildings would result in the loss of approximately 200,000 gsf of space.

A goal of the proposed project is to enhance public recreational opportunities in the Proposed Development Area by providing new and replacement publicly accessible open spaces in place of the private and publicly accessible open spaces to be removed. Overall, by 2031 the proposed project intends to provide an improvement in the quality, and a net increase in the quantity, of publicly accessible open spaces on the project site.

The proposed project would incorporate a number of sustainable design measures that would reduce energy consumption, and GHG emissions, including measures to be incorporated in order to achieve at least the LEED Silver certification required by the *NYU Sustainable Design Standards and Guidelines.* In addition, NYU plans to utilize energy produced by the existing Cogeneration Plant operating at 251 Mercer Street, which would service the heating and cooling needs of several project buildings.

NYU's proposal within the Proposed Development Area also includes the re-cladding of the ground floor of the Washington Square Village apartment buildings, as well as potential reprogramming and reconfiguring of the ground floors and the basements. Re-cladding is intended to activate the ground floor and complement the new publicly accessible landscaping on the North Block adjacent to these buildings. Reprogramming would enable ground floor uses that are compatible with the ground floor uses envisioned for the LaGuardia and Mercer Buildings and surrounding streets, and the gardens, lawns, and play areas connecting the development. With the proposed project, the reprogrammed ground floors at Washington Square Village could contain an estimated 4,583 square feet of new academic uses, 9,312 square feet of university-related retail, and a 5,814-square-foot loading bay east of the garage entry on West 3rd Street. Together with separate emergency egress stairs for the subsurface development, certain areas within the Washington Square Village ground floor would require reconfiguration to accommodate the new program (the existing lobbies would remain). To the immediate north and south of the apartment buildings between LaGuardia Place and Mercer Street, the proposed improvements to West 3rd and Bleecker Streets include enhanced pedestrian crossings.

Table S-1 shows the minimum and maximum density by use expected to be developed in the Proposed Development Area by 2031. Overall by 2031, the Proposed Actions would result in the development of approximately 2.5 million gsf of new uses.

The new uses are presented as a range for the Proposed Development Area in order to allow NYU a degree of flexibility in meeting its future programming needs. Specifically, there are a number of potential uses, and a variety of densities for those uses, primarily for the proposed Zipper Building, which is expected to be developed by 2021.[2] The potential use variations for the Zipper Building include maximizing academic uses instead of providing faculty housing; maximizing student dormitories instead of providing faculty housing; the exclusion of a hotel use in order to maximize academic, dormitory, or housing uses; and variation in the size of the proposed hotel relative to faculty housing and academic uses. Within these contemplated use ranges, **Table**

[1] The LaGuardia Retail building is occupied by Citibank; NYU Mail Services and Copy Central; Wine Barrel; Favela Cubana; and Bare Burger. It contains two vacant retail spaces.

[2] Separate from the Zipper Building, the potential for variation in programming is limited to a total of approximately 25,000 square feet of above-grade space in the proposed North Block buildings that could be either ground-floor retail or additional academic space; and a total of 39,000 square feet of below-grade space on the North Block that could be used for academic uses or additional space to accommodate valet and self-parking services (the amount of proposed parking would still be limited to 389 accessory spaces).

S-2 presents an "Illustrative Program" that reflects the scale and uses currently anticipated for the new project buildings.

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

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

Notes:
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 approximately 2.5 million gsf of 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

Table S-2
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	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

COMMERCIAL OVERLAY AREA

The Commercial Overlay Area contains some non-complying ground-floor retail uses. The Proposed Actions, through a new C1-5 commercial overlay zoning designation, would serve to bring the existing retail uses into compliance, and would allow for the development of some additional ground-floor retail uses. As detailed below in the discussion of the Reasonable Worst-Case Development Scenario for the Commercial Overlay Area, the maximum amount of additional retail space expected to be developed in the Commercial Overlay Area is projected to be 23,236 gsf, and would be comprised of neighborhood retail uses at the ground floor of six NYU buildings (five existing buildings and one building that is being redeveloped in the future without the Proposed Actions). The projected new retail uses are intended to activate underutilized ground-floor uses and introduce new street level activity.

MERCER PLAZA AREA

There is no proposed development within this approximately 4,500-sf area. The Proposed Actions would enable NYU to purchase the land in which its recently-completed, below-grade, state-of-the-art Cogeneration Plant is located. NYU entered into revocable vault license agreement with the New York City Department of Transportation (NYCDOT) to enable the Cogeneration Plant to be located and maintained on City property. The license agreement can be unconditionally revoked at any time. NYU seeks to purchase and own the vault space in which the Cogeneration Plant is located to ensure its continuing right to operate and maintain the facility.

C. PROJECT DESIGN

PROPOSED DEVELOPMENT AREA

BUILDINGS

As described above, the proposed project would develop four new buildings in the Proposed Development Area, with two new buildings located on the North Block and two new buildings on the South Block.

South Block

The Zipper Building would be built primarily on the site of the Coles Sports and Recreation Center, replacing the one-story building with a larger, multi-story building containing academic space, student and faculty housing, a new athletic center, ground-floor retail, a University-oriented hotel, and academic/conference space. The building has been designed with a low 4- to 5-story plinth that has a series of narrow, staggered volumes above the plinth that range in height from 10 to 26 stories, the largest of which is oriented to the northwest corner of Mercer and West Houston Streets. The building is anticipated to have a panelized rainscreen and glass curtain wall. The building's varied heights would be similar to the range of building heights of existing nearby buildings, including the warehouse and loft buildings on the east side of Mercer Street, the three 30-story University Village buildings to the west, and the southern Washington Square Village apartment building on the north side of Bleecker Street.

Unlike the existing Coles building, the new Zipper Building would be built to the Mercer Street sidewalk, and would have residential, commercial, and/or academic entrances on its Mercer and West Houston Street frontages, and on the building's west façade which would face a widened and landscaped north-south pedestrian walkway (the proposed Greene Street Walk, described below) between the Zipper Building and the easternmost University Village building (Silver Tower II).

The proposed Bleecker Building would be located at the northwest corner of the South Block on the site of the existing Morton Williams grocery store. The new 14-story building would contain academic space, dormitories, and a public school. Its taller, 14-story portion would face LaGuardia Place and is expected to be faced in panelized rainscreen and glass. The building's shorter, seven-story section facing the interior of the South Block would contain the public school, and is anticipated to have a largely glass curtain wall with louver screens. The rooftop above the seven-story public school would contain a play area that would be utilized exclusively by the students of the public school.

North Block

The two buildings to be developed on the North Block would be sited at the east and west ends of the block between the two existing Washington Square Village apartment buildings. The proposed new buildings and open spaces would be located in areas currently occupied by a children's playground, landscaped open space, paved driveways, and a one-story commercial building.

Both new buildings are anticipated to have curved forms designed to maximize access to light and air, and to enhance physical and visual access to the new street level open space that would be created in the middle section of the North Block. The building forms would lean away from the adjacent streets and buildings, establishing a diagonal view corridor across the North Block's open space. The proposed Mercer Building would be a 14-story curved building. The LaGuardia Building would have a similar form and massing but would be lower in height at eight stories. The Mercer Building would be the same height as the University Village buildings on the South Block, and the LaGuardia Building would not be as tall as the Washington Square Village apartment buildings. The varied heights of the proposed Mercer and LaGuardia buildings would reflect the transition of building heights in the areas east and west of the North Block: the taller Mercer Building would be positioned closer to tall buildings east of the North Block, while the shorter LaGuardia Building would be positioned closer to shorter buildings west of the North Block. Both buildings are expected to have a primarily glass curtain wall and would contain academic uses, potentially with some retail on the ground floor. Both buildings would also have below-grade elements extending between them and into below-grade portions of the demapped areas of LaGuardia Place and Mercer Street. The buildings would be served by a proposed new loading dock within the Washington Square Village apartment building on West 3rd Street.

LANDSCAPE

South Block

The proposed project would modify certain landscaping components of University Village (aka Silver Towers and 505 LaGuardia Place). Because University Village is a NYCL, the proposed modifications to University Village are subject to the review and approval of LPC.[1] With the proposed modifications, the existing approximately six-foot-tall fencing along Bleecker Street and part of West Houston Street would be replaced with an edge defined by low fencing and low perimeter plantings, allowing for better views into the site. (The six-foot-tall fencing for 505 LaGuardia Place, along LaGuardia Place and part of West Houston Street, would remain.) The Oak Grove, located in the northern area of the South Block, would be extended to the east to align with the western boundary of the north-south pedestrian walkway. New low plantings would also be added to the Oak Grove, and a new pedestrian path would be created immediately south of University Village's existing eastern tower (Silver Tower II), connecting the interior of the site (University Plaza) with the north-south pedestrian walkway between Silver Tower II and the site of the proposed Zipper Building. The proposed project would substantially widen and landscape the north-south pedestrian walkway from approximately six feet to approximately 30 feet, providing a notable pedestrian circulation and an open space element. The widened walkway would be demarcated by trees, low shrubs, and seating. The redevelopment of the Coles gymnasium building site with the new Zipper Building would move the building footprint to the east to allow for the widening of the pedestrian walkway, and is intended to engage the Mercer streetscape, which would be improved with street trees and a 15-foot-wide sidewalk.

The approximately 3,175-sf Mercer-Houston Dog Run currently located east of the Coles gymnasium building (at the northwest corner of Mercer and West Houston Streets) would be relocated to the site of the existing University Village children's playground, approximately 50 feet east of Silver Tower I and 150 feet south of Silver Tower II. The new, approximately 3,195-sf dog run would be located along West Houston Street and adjacent to the Greene Street Walk, and would be entered from the Greene Street Walk.

A new, approximately 11,000-sf children's playground would be created on the University Village site between the relocated dog run and the eastern University Towers building (Silver Tower II). The new

[1] At a public hearing on April 5, 2011, LPC approved the proposed landscape changes. On July 27, 2011, LPC approved the proposed landscape changes and issued a CofA.

playground would incorporate the existing sculptural concrete components in this area of the University Towers site.

Landscaping changes along the north sidewalk along the Bleecker Street Strip would be limited to trees, low plantings, and possibly benches. No landscaping changes would be made to the 505 LaGuardia Garden, the Time Landscape, or the LaGuardia Corner Gardens.

Bleecker Street improvements include re-landscaping from Mercer Street to the north-south pedestrian walkway (along the Zipper Building). The remainder of the south side of Bleecker Street would include new benches in a similar design to the proposed benches on the North Block, and an upgrade of the planting areas with native plants to complement plantings on the North and South blocks.

North Block

Approximately 147,000 sf (3.4 acres) of new parkland and publicly accessible open space would be created on the North Block. The proposed landscape design has been formulated as a site-specific response to the existing site plan. It would replace the existing automobile-oriented plan that incorporates private open space with a new, inviting pedestrian-focused landscape plan that incorporates publicly accessible open space.

The proposed project would replace two demapped streets serving as driveways (the Greene and Wooster Street driveways); unlandscaped blacktops; a partially underground parking garage; a one-story commercial building; fenced in grassy areas; two existing children's playgrounds (one on the interior of the block and one on the linear Mercer Street Strip); and one planned children's playground on the linear LaGuardia Place Strip. The central, raised landscaped plaza of the existing open space is private open space; currently, the raised landscaped plaza is not readily visible or easily accessible from the street.

The proposed public park and landscape plan have been designed to substantially enhance visible and physical access from the surrounding streets. The park land and publicly accessible open space would be at street level. It would incorporate the same types of uses that currently exist on the site but would reconfigure the open space to improve circulation and access to and through the site. Unlike the existing raised landscaped plaza, the proposed open space would be accessible from clearly defined pedestrian entrances at the northwest, northeast, southwest and southeast corners of the North Block. Additional north-south pedestrian access points would be established from the demapped Greene and Wooster Street driveways, three of which would be reprogrammed as pedestrian walkways. (The eastern driveway on West 3rd Street would remain a driveway and would provide vehicular access to a new, entirely below grade parking garage to be located in the northeast area of the North Block.) The pedestrian entrances would provide views and physical access to the new publicly accessible open space. The open space itself would be developed with varied new landscaping components, including amenities such as public lawns for active and passive uses, fixed and moveable seating, and three children's playgrounds for different age groups. Paving materials would be varied and would be used to distinguish different pathways and uses on the North Block. A variety of plantings of different heights, colors, and densities would be used throughout the open space. Although some trees would be removed from the site, the number of new trees to be planted would exceed the number of tree losses. In comparison to the existing landscaping on the North Block that includes approximately 50 percent paved surfaces, the North Block's proposed landscape design would include approximately 40 percent paved surfaces, and would increase the overall amount of vegetated areas on the North Block even when accounting for the addition of the two proposed buildings.

The proposed open space on the LaGuardia Place and Mercer Street Strips adjacent to the North Block would be mapped as City parkland above-grade. The below-grade volumes of these strips would be owned by NYU, and would contain below-grade portions of the proposed LaGuardia Building and proposed Mercer Building.

Proposed improvements along Bleecker Street include replacing the 4-foot-high fence with a lower 18-inch rail, and installing benches to create a passive sitting area along the street. The planting beds in front of the buildings would contain native plants similar to those used to landscape the center of the North Block.

COMMERCIAL OVERLAY AREA

It is anticipated that with the Proposed Actions, new ground floor neighborhood retail uses would be developed in six NYU buildings in the Commercial Overlay Area. These changes in use could result in alterations to the ground-floor treatments of these six buildings, to provide for neighborhood retail uses.

MERCER PLAZA AREA

The Proposed Actions would not result in any physical changes to the Mercer Plaza Area.

D. PURPOSE AND NEED OF THE PROPOSED ACTIONS[1]

The proposed project—"NYU Core"—is a key element in NYU's plan to meet its long-term needs with respect to academic space, housing for faculty and students, campus and neighborhood amenities, and recreational facilities. It is located within the existing boundaries of NYU's central Washington Square campus. Its key components—the four new buildings over 19 years proposed to be located on the two superblocks bounded by West 3rd Street, Mercer Street, West Houston Street and LaGuardia Place—are on two NYU-owned blocks that have been part of the campus since the 1960s.

By proposing to locate the four new buildings in this location, NYU would be able to enhance its facilities significantly while minimizing its need to expand the footprint of its campus into the Greenwich Village neighborhood. The four new buildings proposed for these two blocks would serve the expansion needs of the existing NYU schools and divisions that are already located at the Washington Square campus and which cannot be as well served by facilities in remote locations of New York City.

NYU has stated that it developed the NYU Core project proposal with several planning objectives in mind:

- Locate the new buildings within the footprint of NYU's existing Washington Square campus to integrate the new buildings into the existing campus and minimize impacts to the character of the neighboring communities.
- Design the new buildings to accommodate program below grade and thus limit the size, height, and bulk of buildings above grade. This strategy is possible because below-grade spaces are well-suited for certain academic program needs such as classrooms, study areas, rehearsal spaces, lounges, computer rooms, and student activity areas. Similar spaces have been successful in other Washington Square locations—for example, the law school library under Sullivan Street, the business school's classroom concourse under Gould Plaza, and the Bobst Library's lower levels—are all vibrant and heavily-used spaces. By accommodating these uses below grade, the above-grade building component can accommodate academic program elements that require windows such as departmental and research space. With a substantial below-grade building program, the height and bulk of above-grade buildings are reduced, thus maximizing open space and circulation at grade level.
- Design the publicly accessible open space to be an integrated network of attractive spaces that are welcoming to the general public.
- Design the ground floors of all buildings to activate street frontages (and open space frontages) to enhance the public realm.

[1] Portions of Section D are statements provided by New York University.

- Include a variety of uses in the new buildings—including academic space, dormitories, student services and other uses—to create a vibrant campus environment.
- Meet NYU's need for additional facilities in a manner that engages the public and allows for public input.

Today NYU faces a shortage of academic facilities, classroom space, specialized teaching spaces (performance spaces, workshops, clinics), faculty offices, student service facilities, and student housing. Similarly the inventory of NYU's classrooms needs to be upgraded to include an increased number of flexible and technologically sophisticated classrooms. Thus NYU's stated goal is to both decompress current facilities and allow for future state-of-the-art facilities.

NYU has substantially less gsf than its peer institutions. Based on a 2011 analysis of space needs conducted by NYU, in 2010 NYU averaged approximately 313 gsf of total space[1] per student, as compared to an average of 627 gsf of space per student among 17 peer institutions over the same period. Specific to academic space, the discrepancy between NYU and its peers is even more pronounced, with NYU averaging approximately 144 gsf of academic space per student in 2010, while its peers averaged 328 gsf of academic space per student

NYU has carefully considered which university functions require location at the Washington Square campus. Co-locating faculty offices, classrooms, research facilities, student service spaces, dormitories and faculty housing at the Washington Square Campus encourages interaction among NYU's faculty and students, interaction between faculty members in diverse disciplines, interdisciplinary research teams and academic and social engagement with the University. NYU believes that physical proximity in a campus setting is the best way to promote integration of disciplines and interaction among the faculty and students, and thus to create a learning and research community. A campus setting also makes possible the planned provision of open space and other amenities, which benefit faculty, students, and neighborhood residents alike.

PROGRAMMATIC NEEDS FOR THE PROPOSED DEVELOPMENT:

- Academic Space (projected as approximately 1 million square feet)
  - Allows for continued incremental growth on NYU's property, thereby reducing pressure on the surrounding neighborhood.
  - Allows the university to better organize and more efficiently utilize some of the large loft block buildings which have classrooms on high floors, causing elevator delays and general scheduling problems.
  - Provide new, modern facilities; many of NYU's assets are 19th-century buildings that are not easy to convert to modern academic uses (i.e., column free class-rooms and dance studios; sound-proofed music practice rooms, etc.).
  - Serves the disciplines and programs of NYU's long term academic plans; the academic space on the superblocks would largely be dedicated to classroom, student support space, faculty offices and department space. Student-oriented spaces would include classrooms, reading and common rooms, music and performance practice rooms/rehearsal spaces, computer labs, and the potential for small theaters and other uses that require larger column-free footprints.
- Student Residential (projected as approximately 370,000 square feet)
  - Allows for approximately 1,233 student beds on the property, increasing the percentage of students that can be accommodated within NYU housing at the Washington Square core campus, and providing a safety valve if local leases are not renewed.

[1] Total space includes academic, residence, student life, support buildings, and athletics.

  - The university has a goal of putting freshman students closer to the Washington Square core campus to help them acclimate to the city and the university and become more engaged with the university's academic life and student activities.
  - Student housing on the Washington Square core campus contributes to a vibrant core campus and enhances learning and student engagement with university life.
- New Athletic Facility (projected as approximately 146,000 square feet)
  - Allows replacement of the outdated sports facility that the university built 30 years ago; it lacks basic amenities such as air conditioning and adequate facilities for modern day athletic requirements. A Division III school, NYU has 19 varsity teams and a robust intramural club sports program.
- Faculty Residential (projected as approximately 105,000 square feet)
  - The University currently houses over 2,000 faculty members, and the ability to offer housing is critical to recruitment of faculty members, many of whom come from around the nation and the world.
  - Locating faculty housing on the Washington Square core campus helps attract faculty, encourages faculty engagement with university activities and contributes to the vibrancy of campus life.
- University-Affiliated Hotel (projected as 115,000 square feet, plus academic/conference facilities at 50,000 square feet)
  - The hotel would provide convenient, moderately priced, accommodations for those traveling to the NYU campus, a growing need as scholars from around the world (including NYU's several international campuses) visit NYU to participate in conferences, lectures, research and teaching.
  - NYU consistently draws to New York City for both academic and other programming purposes people who prefer to stay within walking distance of the Washington Square campus.
  - The hotel facility would act as an academic/conference space to support NYU's executive education programming, and its wide array of academic conferencing that takes place throughout the year.
  - The hotel would also be open to the general public to the extent that hotel rooms are available.
- Public park land and publicly accessible open space (projected as approximately 3.8 acres)
  - Create more open, porous sites that increase pedestrian connections and a sense of openness to the public.
  - Encourage public circulation through blocks that currently have a closed design.
  - Define more useable public open spaces of various sizes and typologies (existing open spaces on the site are mostly private).
  - Improve the streetscape at the side walk level.
- Retail in the Proposed Development Area (projected as approximately 64,000 square feet)
  - Replaces existing Morton Williams supermarket with new supermarket location on the same block.
  - Activates ground-floor of proposed Zipper Building with neighborhood retail uses; enlivens streetscape along Mercer Street.
- A commercial overlay within the Commercial Overlay Area north of the two superblocks (projected to affect ground-floor uses in six existing NYU buildings in the area)
  - Allow for an enlivened, more flexible streetscape to better connect NYU's buildings to the City and the surrounding area.
  - Bring zoning up to date to reflect pre-existing non-conforming use.

E. ANALYSIS FRAMEWORK

The Proposed Actions would change the regulatory controls governing land use and development in the project area and would allow its development over the long term. The analysis framework of the DEIS is discussed below.

OVERVIEW

The DEIS for the development of the project area contains:

- A description of the proposed project, the proposed development program, and their environmental setting;
- The identification and analysis of any significant adverse environmental impacts of the proposed project, including the short- and long-term impacts;
- An identification of any significant adverse environmental impacts that cannot be avoided if the proposed project is implemented;
- A discussion of reasonable alternatives to the proposed project;
- An identification of irreversible and irretrievable commitments of resources that would be involved in the proposed project, should it be implemented; and
- The identification and analysis of practicable mitigation to address any significant adverse impacts generated by the proposed project.

ANALYSIS APPROACH

The DEIS assesses whether development resulting from the Proposed Actions could result in significant adverse environmental impacts. The analysis approach first describes existing conditions, and then projects conditions forward into the future without the Proposed Actions, incorporating information available on known land-use proposals and, as appropriate, anticipated overall growth. Finally, the Future with the Proposed Actions is described, the differences between the Future without and with the Proposed Actions are assessed, and any significant adverse environmental impacts are disclosed. The DEIS also identifies and analyzes appropriate mitigation for any identified significant adverse environmental impacts.

REASONABLE WORST-CASE DEVELOPMENT SCENARIOS

Proposed Development Area

Although the Illustrative Program described above reflects what is currently contemplated by NYU, the desired programming and timing of development of certain buildings may change over time. Since the LSGD special permit approvals would specify a range of floor areas by land use for the Proposed Development Area, for analysis purposes potential building program development scenarios that could result from the LSGD special permit approvals are identified. In addition, SCA could decline the option to build a public school on the South Block as part of the proposed Bleecker Building, or could decide to build the school at a later date than is currently anticipated (completion by 2021). 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 currently contemplated by NYU. The total development for each RWCDS would be limited to the total approximately 2.5 million gsf permitted by the LSGD special permit approvals. The RWCDS that are utilized in the EIS are presented in **Table S-3**. The Illustrative Program for the proposed project is also presented. For those

technical areas where potential project impacts are not dependent on the floor area of each use, the Illustrative Program is assumed. Each technical analysis area in the EIS identifies the RWCDS, if any, that is utilized for analysis.

Table S-3
Reasonable Worst Case Development Scenarios (RWCDS) for the Proposed Development Area
Full Build (by 2031)

Use	Illustrative Program	RWCDS 1 (Max Academic)	RWCDS 2 (Max Dormitory)	RWCDS 3 (Max Hotel)
Academic	1,071,583	1,636,583	1,156,895	1,021,895
Student Housing (Dormitory)	370,000	180,000	525,000	395,000
Faculty Housing	105,000	0	0	0
Athletic Center	146,000	156,000	146,000	146,000
Retail	64,312	49,312	94,000	94,000
Hotel	115,000	0	0	180,000
Academic/ Conference Space	50,000	0	0	85,000
Community Facility (Public Elementary School)	100,000	0	100,000	100,000
Parking	76,000	76,000	76,000	76,000
Mechanical/ Service Areas	376,814	376,814	376,814	376,814
TOTAL GSF	**2,474,709**	**2,474,709**	**2,474,709**	**2,474,709**

Note: RWCDS for the Proposed Development Area does not include the 23,236 square feet of ground-floor retail development projected for the Commercial Overlay Area.
Sources: New York University and AKRF, Inc.

Commercial Overlay Area

The Proposed Actions would result in the application of a C1-5 commercial overlay on all properties in the Commercial Overlay Area. As compared with the existing R7-2 zoning, the C1-5 overlay would permit the same residential FAR (0.87 to 3.44) and the same community facility FAR (6.5). However, unlike the existing R7-2 zoning, the C1-5 overlay permits commercial uses up to an FAR of 2.0, effectively allowing for ground-floor and second-floor retail or other commercial uses.

In the Commercial Overlay Area, limited new development is expected as a result of the proposed C1-5 commercial overlay zoning designation. The proposed commercial overlay will bring some existing retail uses into compliance, allow modest flexibility for neighborhood retail uses, and provide opportunities to activate the street. Because there are ground floor academic uses NYU wishes to retain, the overlay would result in new retail uses at a limited number of locations.

For purposes of CEQR analysis, a RWCDS was developed for the Commercial Overlay Area that considered physical criteria—as well as NYU's desire to retain all existing second-floor uses and certain existing ground-floor uses as non-retail institutional uses—in determining the maximum potential incremental commercial development that could reasonably be expected to result from the Proposed Actions. The RWCDS for the Commercial Overlay Area assumes that up to 23,236 of ground-floor retail uses would be developed in a total of six buildings within the Commercial Overlay Area.

These new retail uses would all occur within NYU-owned buildings, and in keeping with the existing retail in the area, would be oriented to meeting the demands of the neighborhood's residents, workers, and visitors. The changes in use are assessed for the two build years as part of the overall impact analysis for the Proposed Actions.

STUDY AREAS

Each technical study must address impacts within an appropriate geographical area. These "study areas" vary depending on the technical issue being addressed and are identified in each of the EIS chapters.

FUTURE ANALYSIS YEAR AND BASELINE CONDITIONS

The analysis of the Proposed Actions is performed for the expected year of completion of the proposed project, which is 2031. However, since the proposed development would be built out over an approximately 19-year period, some buildings would be completed before 2031, and they could result in significant adverse impacts prior to completion of the full development program. Therefore, the analysis also considers an interim 2021 analysis year, which as detailed below, accounts for full development of the South Block.

2021 ANALYSIS YEAR

Future Without the Proposed Actions

For purposes of a conservative analysis, the future condition without the Proposed Actions in 2021 assumes no new development within the Proposed Development Area, with the exception of two open space improvements: an approximately 4,500-square-foot playground called Adrienne's Garden to be built on the LaGuardia Place Strip adjacent to the North Block; and it is expected that the currently-closed, approximately 0.16-acre Coles Playground will be reopened. Within the Commercial Overlay Area, with or without the Proposed Actions, NYU plans to develop an additional 20,000 gsf of academic uses at 25 West 4th Street. Also within the Commercial Overlay Area at 15 Washington Place, NYU plans a renovation and building addition that would convert the approximately 74,000-gsf residential building into a 129,000-sf academic building. The redevelopment plans for 15 Washington Place are permitted under current zoning and is not dependent on the proposed C1-5 overlay.

Future With the Proposed Actions

By the end of 2021, it is anticipated that construction would be completed for all proposed uses (including publicly accessible open spaces) on the South Block within the Proposed Development Area. The only development activity that would occur on the North Block by 2021 would be the construction and demolition of an approximately 30,000-gsf temporary gymnasium, the temporary relocation of a private playground located on the site of the temporary gymnasium, and landscaping improvements on the Mercer Street Strip adjacent to the North Block. During the construction period of the Zipper Building, the temporary gymnasium would accommodate some recreational demands from the displaced Coles. It would contain a field house with basketball courts, locker rooms, and a small weight room and would be available only to NYU affiliates, although the public could view competitive sporting events held in the facility. Construction of the new permanent buildings would not commence on the North Block until 2022. **Table S-4** shows the amounts and types of development anticipated within the Proposed Development Area under the Illustrative Program and under each RWCDS by 2021. Within the Commercial Overlay Area, under the RWCDS by 2021 up to 23,326 gsf of neighborhood retail uses would be developed in the ground floor of six buildings. In total, by 2021 there would be approximately 1.3 million gsf of completed development on the project site.

Table S-4
Illustrative Program and RWCDS for the Proposed Development Area
Phase 1 (2021 Analysis Year)

Use (gsf)	Illustrative Program	RWCDS 1 (Max Academic)	RWCDS 2 (Max Dormitory)	RWCDS 3 (Max Hotel)
Academic	173,000	738,000	283,000	148,000
Student Housing (Dormitory)	370,000	180,000	525,000	395,000
Faculty Housing	105,000	0	0	0
Athletic Center	146,000	156,000	146,000	146,000
Retail	55,000	40,000	60,000	60,000
Hotel	115,000	0	0	180,000
Academic/Conference Space	50,000	0	0	85,000
Public School (PS/IS)	100,000	0	100,000	100,000
Parking	0	0	0	0
Mechanical/Service Areas	161,000	161,000	161,000	161,000
TOTAL GSF	**1,275,000**	**1,275,000**	**1,275,000**	**1,275,000**

Sources: *New York University and AKRF*

2031 ANALYSIS YEAR

Future Without the Proposed Actions. The future condition without the Proposed Actions in 2031 assumes that the site of the existing Morton Williams supermarket would be redeveloped as-of-right, at some point after the 2021 expiration of the property's HPD deed restrictions. The approximately 175,000-sf, nine-story building would contain an approximately 25,000-square-foot supermarket and NYU academic space. The redevelopment of the Morton Williams site is the only structural change expected to occur within the Proposed Development Area in the future without the Proposed Actions.

Within the Commercial Overlay Area there are no known additional planned projects beyond those identified to be developed in the future without the Proposed Actions by 2021 (see above).

Future With the Proposed Actions. By 2031 the full development program for the proposed project (described above) is expected to be complete.

ENVIRONMENTAL REVIEW PROCESS

CPC as lead agency in the environmental review has determined that the proposed actions and project have the potential to result in significant environmental impacts and, therefore, pursuant to CEQR procedures, issued a positive declaration dated April 22, 2011 requiring that an EIS be prepared in conformance with all applicable laws and regulations, including SEQRA, the City's Executive Order No. 91, and CEQR regulations (August 24, 1977), as well as the relevant guidelines of the 2010 *CEQR Technical Manual*. The draft scope of work was prepared in accordance with those laws and regulations and the City's *CEQR Technical Manual*.

In accordance with SEQRA and CEQR, the Draft Scope of Work was distributed for public review and a public hearing was held on May 24, 2011 at Spector Hall, Department of City Planning, 22 Reade Street, New York, NY, 10007; the period for submitting written comments remained open until June 6, 2011. After the lead agency considered comments received during the public comment period, a Final Scope of Work dated December 30, 2011 was prepared to direct the content and preparation of a DEIS. As the next step in the process, the DEIS will be subject to public review, in accordance with the CEQR and Uniform Land Use Review Procedure (ULURP) processes with a public hearing and a period for public comment. A Final EIS (FEIS) will then be prepared to respond to those comments received on the DEIS. The lead agency will make CEQR findings based on the FEIS, before making a decision on project approval.

F. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

LAND USE, ZONING, AND PUBLIC POLICY

This analysis finds that the Proposed Actions would not result in significant adverse impacts on land use and zoning, and would be consistent with applicable public policies.

LAND USE

While the proposed academic, public school, dormitory, and University-oriented hotel uses would be new uses in the Proposed Development Area, they would be consistent with, and appropriate for, the existing mix of uses on the project site and in the study area. The new buildings within the Proposed Development Area are within or immediately adjacent to the existing footprint of the NYU campus, and new uses would be compatible with existing uses and would be expected to help to better integrate the superblock form of the Proposed Development Area with the surrounding neighborhoods. In the Commercial Overlay Area, the Proposed Actions would not represent a major change in the land use mix of the area, and would improve land use conditions by adding new street-level neighborhood retail uses in six buildings, which would enliven the streetscape by activating currently underutilized ground-floor spaces. The Proposed Actions would not alter the existing land use in the Mercer Plaza Area, which would remain a publicly accessible open space in the future with the proposed project. Further, while the Proposed Actions would increase NYU's operations in the Proposed Development Area, this increase would not be expected to significantly alter existing land use patterns in the broader study area. Overall, the Proposed Actions would not be expected to result in any significant adverse impacts with regard to land use for both the 2021 and 2031 analysis years.

ZONING

The Proposed Actions would rezone the Proposed Development Area from R7-2 and R7-2/C1-5 to C1-7 and would map a C1-5 district overlay over the existing R7-2 zoning designation in the Commercial Overlay Area. In addition, NYU requests a Large Scale General Development (LSGD) special permit pursuant to Zoning Resolution (ZR) Section 74-743 to waive regulations of height and setback, rear yard, rear yard equivalent, the transfer of floor area between zoning lots and minimum distance between buildings in order to allow for a better site plan that would otherwise be permitted by zoning. NYU also requests 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 to NYU of the demapped portion of Mercer Street between Bleecker and West Houston Streets and between West 3rd and West 4th Streets, as well as below-grade portions of the demapped areas along LaGuardia Place and Mercer Street between West 3rd and Bleecker Streets. The related application also includes mapping the demapped portions of LaGuardia Place and Mercer Street between West 3rd and Bleecker Streets at the surface and above as public park subject to certain easements granted to NYU. In connection with the demapping and disposition of portions of Mercer Street, NYU is also proposing to relocate the zoning district boundary that runs in the centerline of Mercer Street to the east so that the zoning boundary line remains in the centerline of the newly-narrowed street. In addition to the rezoning and LSGD special permit, NYU requests zoning text amendments to ZR Sections 74-742 and 74-743. These zoning changes are necessary to facilitate the park mapping and the proposed development, including the range of uses that NYU needs to achieve its goals and objectives. Absent the text changes, it would not be possible to include the demapped area adjacent to the South Block within the LSGD, and it would not be possible to map the demapped areas adjacent to the North Block as public park because it would create non-compliances for existing residential windows. The analysis finds that the zoning changes would be consistent with other zoning designations in the area, and would not allow incompatible uses or out-of-scale development. Therefore, the zoning changes would not result in significant adverse impacts for the 2021 and 2031 analysis years.

PUBLIC POLICY

The Proposed Actions would be consistent with public policies that are applicable to the Proposed Development Area, Commercial Overlay Area, and Mercer Plaza Area, as well as the study area, and would not result in any significant adverse impacts with regard to public policy in 2021 and 2031. The Proposed Actions would be consistent with the New York State Smart Growth Public Infrastructure Policy Act, as they would result in a mixed-use development in a centrally located dense urban setting that is energy efficient, utilizes low-carbon power sources, and is highly supportive of transit and non-motorized commuting. With mitigation measures in place to partially mitigate adverse impacts to historic resources, the Proposed Actions would be fully supportive of the Act.

Overall, this analysis finds that the Proposed Actions would not result in significant adverse impacts to land use, zoning, or public policy for the Proposed Development Area, Commercial Overlay Area, Mercer Plaza Area, and ¼-mile study area, in both the interim 2021 analysis year, and the 2031 full build-out year.

SOCIOECONOMICS

This analysis finds that the Proposed Actions would not result in any significant adverse impacts as measured by the five socioeconomic areas of concern prescribed in the *CEQR Technical Manual*. The following summarizes the conclusions drawn from the analysis.

DIRECT RESIDENTIAL DISPLACEMENT

The Proposed Actions would not result in significant adverse direct residential displacement impacts; the potential for residential displacement would fall well below the 500-person *CEQR Technical Manual* assessment threshold. NYU's proposal for the Proposed Development Area includes the potential reprogramming of the ground floors and the basements of the North Block's Washington Square Village apartment buildings. The ground floors of the buildings collectively include 25 residential dwelling units (including 21 occupied NYU-affiliated units, 3 occupied rent stabilized units, and 1 vacant unit). While a specific program for the ground floors has not been formulated, any reprogramming could require permanent relocation of some or all of the ground floor residents of the buildings. If relocation is required, NYU would relocate ground floor residents to other dwelling units within the Washington Square Village buildings or into other nearby NYU properties.

DIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

A preliminary assessment found that the Proposed Actions would not result in significant adverse impacts due to direct business and institutional displacement. Direct retail displacement would be limited to eight storefronts located within the Proposed Development Area: the Morton Williams Associated Supermarket on the western side of the South Block; and seven storefronts within the LaGuardia Retail building on the North Block. Significant adverse impacts due to direct business displacement of retail uses are not expected for several reasons. First, the NYU Mail Services and Copy Central would be relocated by NYU in the future with the Proposed Actions. Second, retail uses that would be displaced are common in the study area such that businesses and consumers would be able to find similar products and services elsewhere in the study area in the future with the Proposed Actions. Furthermore, although there would be some direct retail displacement, the Proposed Actions would introduce up to 94,000 square feet of new retail uses, including a new supermarket use in the proposed Zipper Building that is intended to be operational prior to the displacement of the existing Morton Williams Associated Supermarket. Overall, there would be a modest net increase in the amount of retail offerings and retail employment on the project site as a result of the Proposed Actions, and the retail that would be introduced is anticipated to be similar to the existing retail in the area (i.e., a supermarket and other neighborhood-oriented goods and services).

The Proposed Actions also have the potential to result in direct office and institutional displacement, but such displacement would be limited, and would not result in significant adverse socioeconomic impacts. During Phase 2 of the proposed project, the reprogramming of ground floor uses in the two Washington Square Village buildings could require the displacement of existing ground floor businesses and institutional uses in these buildings. Currently, there are seven NYU institutional tenants and five non-NYU business and institutional tenants in the ground floors of the Washington Square Village buildings. While a specific program for the Washington Square Village buildings has not been developed, it is possible that some or all of the existing users could be displaced. If displacement is required to accommodate a reprogramming of the ground floors, it is expected that NYU would relocate most of the NYU uses elsewhere in the buildings, or to other NYU property in the area. The private day care facility would also be relocated elsewhere within the Washington Square Village buildings or into another NYU property in the area if relocation were deemed necessary. Similarly, NYU would assist Community Board 2 with relocation of their office uses on the ground floor to another location within the Washington Square Village buildings or to comparable office space in the area. Businesses that could be displaced include three medical offices. While these businesses could be directly displaced, this would not constitute a significant adverse impact under CEQR since they do not represent a substantial amount of study area employment and since the services would continue to be available in the trade area to local residents and businesses.

Within the Commercial Overlay Area, all of the six ground floor uses at projected development sites are operated by NYU, and it is expected that many of the displaced uses would be accommodated within other existing or proposed NYU space.

INDIRECT RESIDENTIAL DISPLACEMENT

A preliminary assessment found that the Proposed Actions would not result in significant adverse impacts due to indirect residential displacement. A population increase of less than 5 percent of the total study area population would generally not be expected to change real estate market conditions in a study area. In the future with the Proposed Actions, under the Maximum Dormitory RWCDS as many as 1,750 student beds would be added to the study area as a result of the proposed residential development. Under this RWCDS, the study area population would increase by approximately 4.3 percent as compared with the population in the future without the Proposed Actions. Therefore, the Proposed Actions would not introduce a substantial new population that could substantially affect residential real estate market conditions in the study area. By creating housing opportunities for students and faculty who currently compete with residents in the study area for off-campus housing, the provision of new housing in the Proposed Development Area with the Proposed Actions could serve to reduce upward pressure on rents within the study area.

INDIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

A preliminary assessment found that the Proposed Actions would not result in significant adverse impacts due to indirect business and institutional displacement. The Proposed Actions would introduce substantial new development on NYU properties that are central to NYU's core campus. However, the new development would not introduce new economic activities, and would not substantially alter existing economic patterns in the study area. The study area already has prominent and well-established institutional, commercial and residential uses. In addition to NYU space, other university uses in the ¼-mile area include space used by Cooper Union for the Advancement of Science and Art and Hebrew Union College. While the Proposed Actions could introduce up to approximately 1,233 dormitory units, the study area already has a concentration of students living the area. Based on 2010 Census data, there are approximately 6,023 students living in college or university housing in the study area, representing 14.9 percent of the study area population. In the future with the Proposed Actions, the student resident population in college or university housing would increase to as many as

7,256 students, or up to 18.0 percent of the population. Thus, there would be a 3.1 percentage point increase in student residents in the future with the Proposed Actions.

The proposed and projected retail uses also would not represent a new activity within the study area as 20.0 percent of study area employment (or 10,366 employees) is currently in the retail trade sector. The ¼-mile study area also has hotels and several elementary schools; therefore, these would not be new uses to the study area. Therefore, the Proposed Actions would not introduce a new economic activity to the study area, nor would it change the concentration of a particular sector of the local economy sufficiently to alter or accelerate existing economic patterns.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

A preliminary assessment found that the Proposed Actions would not have the potential to have a significant adverse impact on specific industries. The businesses that would be directly displaced from the LaGuardia Retail building and the business and institutional uses that could be displaced from the ground floors of the Washington Square Village buildings would collectively account for only a small fraction of the total employment and economic activities in the study area, and the neighborhood retail uses that would be displaced are not expected to be critical to the viability of any City industries.

COMMUNITY FACILITIES

The Proposed Actions would not result in any significant adverse impacts with respect to community facilities.

The preliminary assessment finds that the Proposed Actions would not result in any significant adverse impacts on public schools, outpatient health care facilities, publicly funded child care facilities, or police and fire services. The Proposed Actions would not have any direct effects on these community facilities, because the proposed project would not physically displace or alter any community facilities. With respect to potential indirect effects, the Proposed Actions would not introduce a population that would exceed *CEQR Technical Manual* thresholds for detailed analysis of public schools, outpatient health care facilities, publicly funded child care facilities, or police and fire services.

With respect to public libraries, the Proposed Actions would introduce new residents in the faculty housing and dormitory units, and these residents could use public library services. The *CEQR Technical Manual* recommends a detailed analysis of an action's potential impacts on library services if the action would result in a 5 percent or greater increase in the ratio of residential units to libraries in the borough. In Manhattan, this threshold is met by the introduction of 901 residential units. Conservatively treating each dormitory bed as a residential unit, and assuming that students added as a result of the Proposed Actions would use public library services, a detailed analysis of the potential impact of the proposed project on libraries is warranted.

According to the *CEQR Technical Manual*, if a proposed project increases the study area population by 5 percent or more as compared with the no action condition, this increase may impair the delivery of library services in the study area, and a significant adverse impact could occur. The detailed libraries analysis finds that the new residents would constitute just over 1 percent of the total catchment area population, and new residents would have access to NYU libraries such as Bobst Library as well as NYU Consortium and Affiliate libraries. Therefore, the new residents would not be expected to impair the delivery of library services in the study area, and the Proposed Actions would not result in any significant adverse impacts on public libraries.

OPEN SPACE

This detailed open space analysis finds that the Proposed Actions would not result in significant adverse impacts to publicly accessible open space. The following summarizes the analyses leading to this conclusion.

DETAILED QUANTIFIED ANALYSIS FINDINGS

With or without the Proposed Actions, all open space ratios in the study areas would be below, and in many cases severely below, the levels recommended by the City's open space planning guidelines. 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*, a project would result in a significant adverse impact if it reduced open space ratios by more than 5 percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. 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.

By 2021, even when accounting for the increased demands associated with the proposed project, all open space ratios would improve as compared to future conditions without the Proposed Actions. Therefore there would be no other potential significant adverse quantified impacts with the Proposed Actions by 2021.

By 2031, all of the open space ratios would improve as compared to future conditions without the proposed project. Some of the improvements would be substantial; most notable are the approximately 21 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. Therefore, by 2031 the Proposed Actions would not result in any quantified significant adverse open space impacts.

DETAILED QUALITATIVE ANALYSIS FINDINGS

From a qualitative perspective, the 2021 and 2031 open space conditions would be improved with the proposed project, and no significant adverse qualitative impacts would result from the Proposed Actions. The quality and types of proposed open spaces would better satisfy the demands of the users of open spaces that would be displaced by the proposed project, and would be targeted to better accommodate the demands of the study area residents and non-resident users. The open spaces within the Proposed Development Area would be more visible and publicly accessible, and the above-grade portions along the LaGuardia Place and Mercer Street Strips adjacent to the North Block would be mapped as parkland and managed by the New York City Department of Parks and Recreation (NYCDPR).

SHADOWS

The Proposed Actions would result in a significant adverse shadow impact on one sunlight-sensitive resource—LaGuardia Corner Gardens.

Following *CEQR Technical Manual* guidelines, the analysis began with a preliminary assessment which found that project buildings could—assuming the absence of intervening buildings—create new, incremental shadows during one or more seasons on identified sunlight-sensitive resources. A detailed shadow analysis was conducted for these resources, and the detailed analysis found that the Proposed Actions would not result in significant adverse shadow impacts on the following:

- **Washington Square Park** would not receive any incremental shadows from the proposed project due to intervening buildings.
- By 2021 the **Time Landscape** would receive between a half hour and two hours and 20 minutes of incremental shadow in the spring, summer, and fall, early in the morning, but would continue to be in sun from late morning to late afternoon in these seasons and consequently the proposed project would not result in significant adverse shadow impacts to this resource.
- By 2021 portions of the **Bleecker Street Strip** would experience incremental shadow during all seasons. The longer portions of the strip, in the center of the South Block, would continue to receive adequate

sunlight during the growing season. The smaller landscaped areas toward the eastern and western ends of the block would experience longer durations of incremental shadow. However, they would be re-landscaped as part of the proposed development of the South Block, and more shade-tolerant species would be selected for the plantings in these areas. Therefore, the strip of landscaped areas would not experience significant adverse shadow impacts.

- **Schwartz Plaza** would not receive any incremental shadows from the proposed project due to intervening buildings.
- **Mercer Plaza**, on Mercer Street between West 3rd and 4th Streets, would by 2021 receive 20 minutes of incremental shadow from the proposed project on the December 21 analysis day. By 2031, Mercer Plaza would receive a half-hour of incremental shadow on December 21 (including the 20 minutes of shadow generated by 2021) and on March 21/September 21. This limited amount of new shadow would not cause significant adverse shadow impacts to this space.
- **University Village** is a designated NYCL, and the gridded and sheer concrete facades of the three identical 30-story towers were analyzed as sunlight-sensitive features of this cultural resource, because documents supporting its designation reference "that each tower has four to eight deeply-recessed horizontal window bays, as well as a 22-foot-wide sheer wall, creating dramatic juxtapositions of light and shadow." By 2021, the proposed Zipper Building would for several morning hours throughout the year cast new shadows on the east facade of 100 Bleecker Street/Silver Tower II (the easternmost of the three University Village buildings), on the south façade in December and March/September for shorter durations, and on the north façade in May/August and June for a brief duration. New shadows also would be cast on one or more facades of the other two University Village buildings, but for shorter durations and on smaller areas in most months. Despite these new shadows, large portions of the gridded and sheer concrete facades of the three buildings would remain in sunlight during the affected periods. In addition, the proposed project's Greene Street Walk would introduce a new publicly accessible vantage point from which to view the facades. Therefore, the University Village buildings would not experience significant adverse shadow impacts as a result of the proposed project.
- The **Church of Saint Anthony of Padua** would not receive any incremental shadows from the proposed project due to intervening buildings.
- By 2021 a portion of the **LaGuardia Landscape** on the west side of the North Block would experience about two hours of new shadow in the winter and March/September analysis days, but the limited extent and duration of this new shadow would not cause significant adverse impacts.
- By 2021 a portion of the **Mercer Street Playground** would receive between two and three hours of new shadow throughout the year from the proposed Zipper Building, but the area of new shadow would remain small most of the time, and this space, which is completely paved except for some fenced-off landscape at the northern and southern ends, would not experience significant adverse shadow impacts as a result of the project.
- By 2021 the state-endangered **willow oaks** located in the South Block's Oak Grove would experience between one and three-and-a-half hours of incremental shadow from the proposed project on the March 21/September 21 analysis day, and would experience incremental shadows on the May 6/August 6 and June 21 analysis days as a result of the proposed project, but the durations would be less as compared to the March 21/September 21 analysis day. Although the trees located in the Oak Grove would continue to receive adequate sunlight during the peak of their growing season, during the early and late portions of their growing season the trees would receive less than the four-to-six-hour minimum threshold of daily sun that is recommended in the *CEQR Technical Manual*. The proposed project's incremental shadows could place stress on the six willow oak trees located in the Oak Grove (two of which are already in serious decline and should be removed irrespective of the project). In order to maintain the viability of the four

willow oaks that are not already in serious decline, NYU would commit to a tree maintenance plan. With the implementation of a tree maintenance plan, the four willow oaks are not expected to decline as a result of project-generated shadows.

The detailed analysis found that the proposed project would result in significant shadow impacts on the following sunlight-sensitive resource:

- **Laguardia Corner Gardens**, a community garden located on the corner of LaGuardia Place and Bleecker Street on the LaGuardia Street Strip adjacent to the South Block, would by 2021 experience significant adverse shadow impacts in the spring, summer, and fall as a result of the proposed project. While the remaining sunlight could support shade-tolerant species, the proposed Bleecker Building adjacent to the garden would cast between four and five and a half hours of new shadow on the garden during morning hours throughout the growing season, jeopardizing the viability of shade-intolerant species. Potential mitigation for this significant adverse impact is discussed below in "Mitigation."

According to CEQR methodology, open space that would be developed as part of a project cannot experience adverse impacts from the project, because without the project the space wouldn't exist. However, a discussion of shadows on the proposed open space is provided for informational purposes. The proposed South Block open spaces—including the Toddler Playground, the Greene Street Walk, and relocated dog run (a private, membership-only dog run)—would experience shadow from the proposed Zipper Building during the mornings throughout the year, and shadow from the existing University Village towers in the afternoons. In the late spring and summer the southern area—the playground and dog run—would be in sun for long periods. The Greene Street Walk adjacent to the Zipper Building would be in shade for most of the day in all seasons. On the North Block, the southern half of the proposed open spaces would be in shadow or partial shadow from the Washington Square Village 3 & 4 throughout the day in the fall, winter and spring, and to a lesser extent in the summer. The northern portion of the open space, and the eastern and western areas along LaGuardia Place and Bleecker Street, would be mostly in sun during the spring, summer and fall analysis days.

HISTORIC AND CULTURAL RESOURCES

The Proposed Actions would result in significant adverse impacts on one architectural resource—Washington Square Village—and could have significant adverse impacts on the Potential NoHo Hisoric District Expansion within the Commercial Overlay Area. The Proposed Actions would not result in significant adverse impacts with respect to archaeological resources.

ARCHAEOLOGICAL RESOURCES

In June 2011, a Phase 1A Archaeological Documentary Study of the Proposed Development Area was completed by AKRF. The study concluded that portions of the Proposed Development Area have moderate to high sensitivity for historic period archaeological resources. The conclusions from the Phase 1A study are summarized in "Existing Conditions, Archaeological Resources." The Phase 1A recommended a Phase 1B archaeological investigation to determine the presence or absence of archaeological resources in only those areas that were identified as both archaeologically sensitive and where proposed construction would occur. These archaeological resources could include domestic shaft features (i.e., privies, cisterns, or wells) dating to the early- to mid-19th century.

In a letter dated July 26, 2011, the New York City Landmarks Preservation Commission (LPC) concurred with the conclusions and recommendations of the Phase 1A Archaeological Documentary Study. As stated in a letter dated September 14, 2011, the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) also concurred with the recommendation for Phase 1B archaeological testing in limited areas of the Proposed Development Area.

As part of the proposed project, should any intact archaeological resources be identified during the Phase 1B investigation, further testing, documentation, and evaluation may be necessary and would be undertaken in consultation with OPRHP and LPC. The Phase 1B survey would determine the need for additional archaeological analysis (i.e., a Phase 2 survey) to assess the horizontal and vertical extent of any recovered archaeological resources as well as their potential significance (S/NR-eligibility). A Phase 2 survey would therefore determine if further investigation in the form of Phase 3 data recovery, is warranted. With the implementation of the Phase 1B testing and continued consultation with OPRHP and LPC regarding the need for and implementation of any Phase 2 or 3 investigations—which will be incorporated into the Restrictive Declaration—there would be no significant adverse impacts on archaeological resources.

ARCHITECTURAL RESOURCES

Project Area

Proposed Development Area

The Proposed Development Area's South Block contains University Village, which has been determined eligible for listing on the State and National Registers of Historic Places (S/NR-eligible) and is also a designated New York City Landmark (NYCL). The North Block of the Proposed Development Area contains Washington Square Village, which has also been determined S/NR-eligible. University Village and Washington Square Village are both architectural resources that would be altered with the Proposed Actions. Therefore, OPRHP and LPC have reviewed the proposed project.

South Block—The proposed project would add two new, tall buildings—the Zipper and Bleecker Buildings—to the east end and northwest portion of the South Block on the sites of the Coles Gymnasium and the Morton Williams grocery store. Although the Zipper and Bleecker Buildings would change the context of University Village with taller, new buildings built adjacent to the landmarked site, the new buildings 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. 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, east, and west of the South Block. Further, the redevelopment of the Coles Gymnasium site and the Morton Williams grocery store site would not be expected to adversely affect University Village because these two sites do not have a meaningful historic or contextual relationship with University Village.

The proposed project would also modify certain landscaping elements of University Village. Because University Village is S/NR-eligible and the proposed project involves actions by a state agency (the Dormitory Authority of the State of New York [DASNY]), the proposed alterations to University Village was reviewed by OPRHP. Subject to meeting conditions with respect to construction monitoring and a construction protection plan, the Proposed Actions are not expected to result in significant adverse impacts to University Village. In addition, because University Village is a NYCL, LPC reviewed and approved the proposed alterations to this architectural resource. These alterations to University Village were approved by LPC on July 27, 2011. LPC's findings with respect to the appropriateness of the proposed alterations to the landmarked University Village are contained in a Certificate of Appropriateness (CofA) issued by LPC (CofA #12-3095; Docket #12-2680).

North Block—The proposed project would also develop two new academic buildings on the North Block on the site of Washington Square Village. The two new buildings—the Mercer and LaGuardia Buildings—would be sited at the east and west ends of the block, respectively, between the two existing Washington Square Village apartment buildings. Both new buildings are anticipated to have curved forms designed to maximize access to light and air, and to enhance physical and visual access to the proposed street level open space that would be created in the middle section of the North Block. The Mercer Building would be a 14-story curved structure that would be similar in height to components of the Zipper Building and the three University Village towers. The LaGuardia Building would have a similar form and massing but would be lower in height at eight

stories. It would be three stories shorter than the Washington Square Village apartment buildings. Both buildings are expected to have primarily glass curtain walls and would contain academic uses, potentially with some retail on the ground floor.

Approximately 3.4 acres of new publicly accessible open space would be created on the North Block. The open space has been designed to substantially enhance visible and physical access from the surrounding streets. In contrast to the existing Washington Square Village private open space that is located approximately five feet above street level atop a mid-block partially underground parking garage, the new open space would be a publicly accessible pedestrian-focused landscape plan that would function as a public garden, and also include publicly accessible playground areas.

Limited alterations would be made to Washington Square Village's north and south buildings. These include: the removal of the canopies at the Greene and Wooster driveway entrances; modifying some first floor windows and installing new metal cladding panels on the first floors; and re-programming the first floors and basements. The reprogrammed ground floors would contain approximately 27,776 sf of academic space, 9,312 sf of university-related retail, and a new 5,814-sf loading bay adjacent to the garage entry on West 3rd Street. Together with separate emergency egress stairs for the subsurface development, certain areas within the ground floor of the north and south buildings would require reconfiguration to accommodate the new program (the existing lobbies would remain).

As part of NYU's consultation with OPRHP for the proposed project, OPRHP determined that Washington Square Village is eligible for listing on the S/NR (S/NR-eligible). In a comment letter dated February 23, 2011, OPRHP determined that the Washington Square Village "superblock complex of two residential towers, elevated landscaped plaza, commercial strip, and below-grade parking meets Criterion C as an impressive example of postwar urban renewal planning and design." The proposed project would result in alterations to the Washington Square Village complex that would remove elements of this architectural resource that contribute to its significance, including the elimination of the LaGuardia Retail building and the elevated landscaped garden, the development of two new buildings and landscaping on the site, and limited alterations to the Washington Square Village buildings themselves.

To evaluate the feasibility of retaining elements of Washington Square Village to avoid a significant adverse impact to this architectural resource, a study has been prepared in consultation with OPRHP. The study concluded that there is no prudent and feasible alternative that would both meet the purpose and need to the NYU Core project and avoid an adverse impact to Washington Square Village. Therefore, while it is not possible to meet the goals and objectives of the project while fully avoiding adverse impacts to this architectural resource, impacts would be minimized through the retention of Washington Square Village's two residential buildings. NYU is consulting with OPRHP regarding appropriate measures to minimize or partially mitigate the significant adverse impact on Washington Square Village. Measures to minimize or partially mitigate significant adverse impacts to Washington Square Village would be implemented in consultation with OPRHP and would be set forth in a Letter of Resolution (LOR) to be signed by the applicant, OPRHP, and DASNY.

Potential mitigation measures include the following:

- Preparation of Historic American Buildings Survey (HABS) documentation of Washington Square Village would be prepared which would include photographic documentation, historic plans, and an accompanying historical narrative.
- NYU would consult with OPRHP regarding proposed changes to the first floor facades of Washington Square Village's north and south buildings as design plans proceed. The LOR will specify the points in the design process at which consultation with OPRHP would occur.

- Prior to construction of the proposed project, and in consultation with OPRHP and LPC, NYU would develop and implement CPPs for University Village, Washington Square Village, the buildings in the Commercial Overlay Area that would be directly affected by ground floor alterations and buildings immediately adjacent to these buildings, and Shimkin Hall. The CPPs would be prepared.

To avoid potential adverse impacts to University Village and Washington Square Village from construction-related activities, a Construction Protection Plan (CPP) would be developed and implemented in consultation with OPRHP and LPC prior to construction of the proposed project. The CPP would be prepared in coordination with a licensed professional engineer and would follow the guidelines set forth in section 523 of the *CEQR Technical Manual,* including conforming to LPC's *New York City Landmarks Preservation Commission Guidelines for Construction Adjacent to a Historic Landmark* and *Protection Programs for Landmark Buildings*. The CPP would also comply with the procedures set forth in the New York City Department of Buildings (DOB)'s *Technical Policy and Procedure Notice* (TPPN) #10/88.

Commercial Overlay Area

With the Proposed Actions, six buildings in the Commercial Overlay Area would be modified with ground floor alterations. Four of the six buildings are contributing to the S/NR-eligible Potential NoHo Historic District Expansion, described below. These four buildings—82 Washington Square East (80-84 Washington Square East/30-36 Washington Place), 14 Washington Place (12-16 Washington Place/240-242 Greene Street), 246-248 Greene Street/20-22 Waverly Place, and 18 Waverly Place—could be adversely affected by the proposed ground floor alterations. Although these buildings are within a S/NR-eligible historic district, because there is no federal or state funding involved with the proposed ground floor alterations, there is no regulatory process to control changes to these architectural resources. Further, none of these architectural resources is a NYCL, therefore, alterations to these architectural resources would not require LPC's review and approval. 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.

The CPP described above would also include protective measures for the buildings in the Commercial Overlay Area that would be directly affected by ground floor alterations and buildings immediately adjacent to these buildings.

Mercer Plaza Area

The demapping of the Mercer Plaza Area would not affect architectural resources as there are no such resources in this portion of the project area and no development is planned in the Mercer Plaza Area.

Study Area

With the Proposed Actions, the context of the historic districts east, south, and west of the North and South Blocks—the NoHo Historic District, the SoHo-Cast Iron Historic District and Extension, and the South Village Historic District—would change. The replacement of the Coles Gymnasium on the South Block with a new, tall building with varied heights would be in keeping with the massings and heights of buildings in the NoHo Historic District east of the South Block, the 30-story University Village towers to the west, and the 17-story Washington Square Village south building to the north. Although the Bleecker Building would be a new, taller building in the northwest portion of the South Block adjacent to the Community Garden across LaGuardia Place from the South Village Historic District, it would also be located in an area characterized by buildings of different heights and from different construction periods, including the University Village towers and the Washington Square Village residential buildings. The proposed changes to the landscaping on the South Block would not be expected to adversely affect any architectural resources in the study area.

The architectural resources in the study area adjacent to the North Block—the NoHo Historic District, the South Village Historic District, and Shimkin Hall—would not be adversely affected by the Proposed Actions. Although the Mercer Building would add a new tall building to the North Block and would have a sculptural

form that would contrast with the rectilinear forms of the historic district's loft and warehouse buildings, the Mercer Building would contribute to the transition of building heights from east to west on the North Block. Like the Mercer Building, the eight-story LaGuardia Building would have a sculptural form that would contrast the rectilinear forms of the South Village Historic District's lofts and commercial buildings located west of LaGuardia Place. The new LaGuardia Building would replace the existing commercial strip that has been previously extensively altered with an infill structure that eliminated views from west of LaGuardia Place into the North Block. While the new LaGuardia Building would be taller than the existing commercial strip, it would replace this small building that forms a north-south barrier to visual and physical access to Washington Square Village's mid-block landscaping with a new building whose form would contribute openness in views and physical access from LaGuardia Place and the South Village Historic District.

In the future with the Proposed Actions, the existing and new buildings on the North and South Blocks would continue to act as visual dividers between the historic district buildings to the east, south, and west of the Proposed Development Area. Therefore, the addition of new buildings and landscaping changes in the Proposed Development Area would not adversely affect views to architectural resources in these historic districts because these views are already limited by the existing buildings in the Proposed Development Area.

The proposed alterations to the six buildings in the Commercial Overlay Area also would not be expected to result in adverse impacts to architectural resources in the study area as these changes would be limited to the ground floors of these certain buildings and would have little effect on architectural resources in the study area.

Because Shimkin Hall is located within 90 feet of proposed construction-related activities on the North Block, to avoid potential inadvertent adverse impacts to this architectural resource, the CPP would also include measures to protect Shimkin Hall. In addition, the CPP would include measures to protect architectural resources adjoining the Commercial Overlay Area architectural resources that would be affected by ground floor alterations.

URBAN DESIGN AND VISUAL RESOURCES

The Proposed Actions would not result in significant adverse impacts with respect to urban design and visual resources.

URBAN DESIGN

The Proposed Actions would not have significant adverse impacts on urban design or visual in either the 2021 or 2031 analysis years. The Proposed Actions would have beneficial streetscape effects that would improve the pedestrian experience through the landscape changes to the University Village and Washington Square Village sites that would provide new, publicly accessible open space and more pedestrian-friendly site perimeters with lowered fences and new plantings; the creation of a widened and enhanced pedestrian walkway through the South Block of the Proposed Development Area; the replacement of mostly windowless buildings on the South Block with new buildings that would have transparent and active ground floors; the creation of new buildings with transparent ground floors and a new publicly accessible open space on the North Block of the Proposed Development Area that would be at grade and open to the adjacent streets; the recladding of the ground floors of the Washington Square Village buildings to increase transparency; and the addition of new ground-floor neighborhood retail spaces to existing buildings in the Commercial Overlay Area.

While the proposed, approximately 768,100-square-foot (above grade) Zipper Building on the South Block would be larger in terms of floor area than other buildings in the study areas, it would be massed to respond to the different existing contexts along Houston and Mercer Streets and to the adjacent University Village complex. Its massing of staggered, narrow towers of varying heights above a low-rise base would serve to break up the building's bulk, put the largest building component on West Houston Street, and pull some of the mass away from Mercer Street and the University Village complex. The varied massing and staggered heights

would reference the arrangement of buildings across Mercer Street and on the surrounding streets where there are variegated heights. At its tallest point, the Zipper Building would be no taller than the University Village towers. Overall, it would only be approximately 133,100 square feet larger than the Washington Square Village south residential building (which is approximately 635,000 square feet above grade) and approximately 168,100 square feet larger than the Washington Square Village north residential building (which is approximately 600,000 square feet above grade). The floor areas of the proposed Bleecker, LaGuardia, and Mercer Buildings would fall within the range of building floor areas found in the study areas. The heights of all four proposed buildings would be in keeping with the range of existing building heights in the Proposed Development Area, Commercial Overlay Area, and 400-foot and ¼-mile study areas, where there are numerous buildings of comparable or taller height.

VIEW CORRIDORS AND VISUAL RESOURCES

It is not expected that the Proposed Actions would have significant adverse impacts on visual resources in the 400-foot or ¼-mile study areas. It is expected that the Bleecker and Zipper Buildings on the South Block of the Proposed Development Area would be visible from south of West Houston Street in certain northward view corridors, but in those view corridors the buildings would be background buildings to the existing mid-rise loft buildings lining those streets. As the Bleecker Building would be built to the lot line on LaGuardia Place, it would not obstruct northward views that include Washington Square Park, the Washington Square Arch, or 1 Fifth Avenue. From where the Bleecker and Zipper Buildings could potentially be seen from Washington Square Park and from the north on Fifth Avenue and University Place, they would be background buildings seen among numerous buildings of varying heights. Both buildings would be visible along Bleecker Street, from west of LaGuardia Place and from east of Mercer Street, along with the southern Washington Square Village residential building, but they would not block any significant views and their visibility would decrease from farther away due to intervening buildings. On West Houston Street, the Zipper Building would obscure eastward views of the Cable Building (a visual resource at Mercer Street), but this would not be a significant adverse impact, because the Cable Building would still be prominently visible in its immediate vicinity and in westward views on East Houston Street. Further, the University Village complex already partially obscures views of the Cable Building from western vantage points on West Houston Street. The Zipper Building would change the views on Houston Street of the University Village towers, but this change would not be a significant adverse impact. From mid-block on Houston Street adjacent to the South Block, as well as from mid-block on Bleecker Street and LaGuardia Place, there would continue to be views of the three University Village towers as an integrated whole. From the west, the University Village towers would be in the foreground of the views and the Zipper Building would be viewed as another tall building on the South Block of the Proposed Development Area. In addition, the Zipper Building would be massed with the tallest (275-foot) portion on Mercer Street and a transitional shorter (138-foot-tall) tower volume between that tallest portion and Silver Tower I to create a space between the two equally tall towers that would maintain the prominent free-standing quality of Silver Tower I. From the east on East Houston Street, the Zipper Building would obscure views of 505 LaGuardia Place but those are not significant views of that tower or the other two University Village towers, as only the upper floors are visible from limited vantage points.

The LaGuardia and Mercer Buildings on the North Block of the Proposed Development Area would not be visible from the east or west within the study areas as there are no east-west view corridors to the sites of those proposed buildings. From locations to the north and south, it is expected that the LaGuardia Building would have limited visibility because it would be shorter than the two existing Washington Square Village residential buildings. The Mercer Building could likely be seen from the north in Washington Square Park and on Fifth Avenue and University Place, but only the uppermost 60 feet of the building would be visible behind the north Washington Square Village residential building on West 3rd Street and the building's limited visibility would have no effect on southward views. It is not expected that the Mercer Building would be visible in the northward view corridors on Mercer and Greene Streets because of the intervening Zipper Building.

PEDESTRIAN WIND CONDITIONS

A detailed pedestrian wind analysis was undertaken for the Proposed Development Area to assess whether the Proposed Actions would result in channelized wind pressure from between buildings, or downwashed wind pressure from parallel buildings, that may cause winds that jeopardize pedestrian safety. The analysis was conducted in a wind tunnel using a scale model of the proposed and existing buildings in the Proposed Development Area, the existing and Proposed Actions' landscape elements, and surrounding buildings and topography within a 1,600 foot radius of the Proposed Development Area. Receptors were placed both on and off-site, in areas where pedestrian activity would be expected.

The analysis found that during the summer months (May through October), for both existing conditions and in the Future With the Proposed Actions, there is no potential for pedestrian wind conditions exceeding safety criteria. During the winter months (November through April), the wind tunnel analysis for existing conditions showed that wind conditions exceed safety criteria at one location—immediately southeast of the 505 LaGuardia building on the South Block. In the Future with 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. Therefore, no significant adverse urban design impacts would result from potential pedestrian wind conditions with the Proposed Actions.

NATURAL RESOURCES

The Proposed Actions would not result in any significant adverse impacts to natural resources.

A natural resource assessment was conducted because the proposed project site and its surroundings contain natural resources as defined by CEQR. The natural resources assessment concludes that there would be no significant adverse impacts to ecological communities, vegetation, and wildlife as a result of the Proposed Actions. No threatened, endangered or special concern wildlife species are documented for the vicinity of the Proposed Development Area and no state-listed wildlife would be impacted as a result of the Proposed Actions.

The Proposed Actions' incremental shadows could place stress on six state-listed endangered willow oak (*Quercus phellos*) trees (including two which are already in critically poor condition). In order to maintain the viability of the four willow oaks that are not in critically poor condition, NYU would commit to a tree maintenance plan. With the implementation of a tree maintenance plan, the health of the four willow oaks is not expected to decline as a result of project-generated shadows. With respect to the landscape design plan, several large trees would remain in place, would be protected, and would be incorporated into the landscape design. Plantings used in the landscaping design would be chosen in accordance with NYU's planting guidelines, which emphasize the use of plants that are native to New York City's bioregion.

Construction and operation of the proposed project would not result in any significant adverse impacts on groundwater. Rather, as discussed below under "Hazardous Materials," construction for the proposed project would remove on-site sources of groundwater contamination if encountered, thus providing a benefit with respect to local groundwater quality. In addition, groundwater is not used as a source of drinking water in Manhattan.

HAZARDOUS MATERIALS

With the incorporation of the measures described below, the Proposed Actions would not result in significant adverse impacts with respect to hazardous materials.

A Phase I Environmental Site Assessment (ESA) performed for the Proposed Development Area identified potential sources of contamination, including historical manufacturing uses, a Consolidated Edison substation,

garages and auto repair shops as well as nearby historical manufacturing, auto-related uses, and dry cleaners. A fuel oil spill (Spill #0910543) was reported on the North Block of the Proposed Development Area in December 2009 due to a leak from a No. 6 fuel oil underground storage tank (UST) for an on-site residential building. The leaking UST was subsequently closed and removed, and three additional USTs used for heating residential buildings on the North Block were closed in place. Investigation of the spill indicated that contamination was generally limited to soil above the water table, with limited impacts to groundwater. Remediation is in progress, and the spill listing remains open.

Based on the concerns identified by the Phase I ESA, a Subsurface (Phase II) Investigation was performed which included the collection of soil and groundwater. Concentrations of certain semi-volatile organic compounds (SVOCs) and metals in the soil samples were somewhat elevated, but likely attributable to urban fill materials rather than a spill or release. One soil sample collected near an underground electrical transformer vault contained elevated concentrations of polychlorinated biphenyls (PCBs), which may be attributable to a release from the transformer and/or urban fill materials. No petroleum-contaminated soil (e.g., associated with Spill No. 0910543) was encountered in the proposed disturbance areas. The groundwater samples detected certain volatile organic compounds (VOCs) commonly associated with solvents at concentrations below or slightly above New York State Department of Environmental Conservation's (NYSDEC) drinking water standards (though groundwater in Manhattan is not used as a source of drinking water). These VOCs were not detected in on-site soil samples, and are therefore likely attributable to regional groundwater conditions.

To reduce the potential for human or environmental exposure to known or unexpectedly encountered contamination during and following the Proposed Actions, a Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) would be prepared and submitted to the New York City Department of Environmental Remediation (OER) for review and approval. The RAP and CHASP would be implemented during project construction. The RAP would address requirements for items such as: soil stockpiling, soil disposal and transportation; dust control; dewatering procedures; quality assurance; and contingency measures should petroleum storage tanks or contamination be unexpectedly encountered as well as vapor barriers or other measures to reduce the potential for vapor intrusion into new construction. The CHASP would identify potential hazards that may be encountered during construction and specify appropriate health and safety measures to be undertaken to ensure that subsurface disturbance is performed in a manner protective of workers, the community, and the environment (such as personal protective equipment, air monitoring including community air monitoring, and emergency response procedures).

A Limited Hazardous Materials Evaluation of the Commercial Overlay Area and Mercer Plaza Area identified potential on-site or nearby sources of subsurface contamination, including: historical manufacturing uses, laboratories, dry cleaning, known or potential petroleum storage, and regulatory listings indicating spills and hazardous waste generation. However, the Proposed Actions would not result in an increased potential for exposure to any associated subsurface contaminants compared to the Future without the Proposed Actions since no soil disturbance is expected to occur in these areas due to the Proposed Action (only redevelopment of the ground floors of several buildings for retail uses).

Lead-based paint, asbestos-containing materials (ACM) and PCB-containing electrical and/or hydraulic equipment and fluorescent lighting fixtures may be present in the Proposed Development Area, Commercial Overlay Area and Mercer Plaza Area. Both during and following the Proposed Actions, regulatory requirements and, for NYU-owned buildings, university-wide Environmental Health and Safety (EHS) plans pertaining to ACM, lead-based paint, PCBs and chemical use and storage would be followed.

With these above-described measures, the proposed project would not result in any significant adverse impacts related to hazardous materials.

WATER AND SEWER INFRASTRUCTURE

The Proposed Actions would not result in any significant adverse impacts on the City's water supply, wastewater or stormwater conveyance and treatment infrastructure.

WATER SUPPLY

By 2031 the proposed project (including development in both the Proposed Development Area and the Commercial Overlay Area) would generate an incremental water demand of 706,672 gallons per day (gpd) as compared to the future without the Proposed Actions. This represents a 0.06 percent increase in demand on the New York City water supply system. Based on the projected incremental demand, it is expected that there would be adequate water service to meet the proposed project's incremental water demand, and there would be no significant adverse impacts on the City's water supply.

SANITARY SEWAGE

By 2031 the proposed project (including development in both the Proposed Development Area and the Commercial Overlay Area) would generate an incremental 357,576 gpd of sewage over the future without the Proposed Actions. This incremental volume in sanitary flow to the combined sewer system would represent approximately 0.16 percent of the average daily flow to the Newtown Creek Wastewater Treatment Plant (WWTP). This volume would not result in an exceedance of the Newtown Creek WWTP's capacity, and therefore would not create a significant adverse impact on the City's sanitary sewage treatment system.

Per the New York City Plumbing Code (Local Law 33 of 2007) low-flow fixtures are required to be implemented and would help to reduce sanitary flows from the new buildings. Additionally, the proposed project is expected to achieve the Leadership in Energy and Environmental Design (LEED) Silver certification as per NYU's *Sustainable Design Standards and Guidelines.* To achieve this certification, NYU would work to implement a variety of sustainable design measures that could be included to reduce the overall sanitary sewage generation into the combined sewer system. Implementation of best management practices (BMPs) such as high-efficiency fixtures would reduce the overall sewage generated.

STORMWATER

The Proposed Actions would increase the total amount of impervious surfaces within the Proposed Development Area of the project site. However, with the incorporation of selected BMPs in redeveloped portions of the Proposed Development Area—including on-site detention and vegetated areas over underground structures—the Proposed Actions would decrease the rate of stormwater runoff from the project site as compared with conditions without the Proposed Actions, and would not have a significant impact on the downstream City combined sewer system or the City sewage treatment system. Stormwater runoff discharges would not change in the Mercer Plaza Area or the Commercial Overlay Area.

ENERGY

The Proposed Actions would not result in significant adverse impacts with respect to the transmission or generation of energy. The proposed project would comply with the New York City Energy Conservation Code (NYCECC) and Energy Conservation Construction Code of New York State (ECCCNYS), incorporating all measures relating to energy efficiency and combined thermal transmittance.

As noted in the *CEQR Technical Manual*, the incremental demand caused by most projects would not create a significant impact on energy supply. Consequently, a detailed assessment of energy impacts is limited to those projects that may significantly affect the transmission or generation of energy. The proposed project would not have such affects. By 2031, full development of the proposed project within the Proposed Development Area is

projected to result in a combined 217,854 million Btu of energy demand annually, drawing an estimated 38,639 million Btu of grid-supplied electricity (18 percent of total demand). The proposed project's total combined energy intensity is 88,032 Btu per square foot. This is substantially lower than the average intensities in New York City: 65 percent lower than average institutional uses, 60 percent lower than average commercial uses, and 30 percent lower than large residential uses. This efficiency would come from design of the proposed buildings as well as the efficient central system, which includes cogeneration of electricity and heat as well as other efficiency features.

The Proposed Actions would incorporate a number of measures intended to reduce energy consumption. NYU intends to attain a project score of 80 or higher under the U.S. Environmental Protection Agency (USEPA) *Energy Star*'s Target Finder, and to meet the requirements for the United States Green Building Council's (USGBC) LEED Silver certification for all development under the Proposed Actions, requiring a minimum of 10 percent less energy as compared with the baseline building designed to code. In addition, NYU plans to utilize energy produced by the existing Cogeneration Plant operating at 251 Mercer Street, which would service the heating and cooling needs of several project buildings.

TRANSPORTATION

The Proposed Actions would result in significant adverse impacts with respect to traffic, transit, and pedestrians. The Proposed Actions would not result in significant adverse parking impacts.

TRAFFIC

Weekday peak hour traffic conditions were evaluated at 17 intersections for the Phase 1–2021 Completion and Phase 2–2031 Full Build-Out scenarios. The traffic impact analysis indicates that under the Phase 1–2021 Completion scenario, there would be the potential for significant adverse impacts at two intersections during the weekday AM peak hour, three intersections during the weekday midday peak hour, and three intersections during the weekday PM peak hour, as follows.

Weekday AM Peak Hour

- West Houston Street and Sixth Avenue—northbound approach; and
- Bleecker Street and Mercer Street—eastbound approach.

Weekday Midday Peak Hour

- West Houston Street and LaGuardia Place/West Broadway—northbound right-turn;
- Bleecker Street and Mercer Street—eastbound approach; and
- East Houston Street and Lafayette Street—eastbound left-turn.

Weekday PM Peak Hour

- West Houston Street and Sixth Avenue—westbound right-turn;
- Bleecker Street and Mercer Street—eastbound approach; and
- West Houston Street and Mercer Street—southbound approach.

Under the Phase 2–2031 Full Build-Out scenario, significant adverse impacts were identified for three intersections during the weekday AM peak hour, six intersections during the weekday midday peak hour, and seven intersections during the weekday PM peak hour, as follows.

Weekday AM Peak Hour

- West Houston Street and Sixth Avenue—northbound approach;
- Bleecker Street and LaGuardia Place—eastbound approach; and
- Bleecker Street and Mercer Street—eastbound approach.

Weekday Midday Peak Hour

- West Houston Street and Sixth Avenue—westbound right-turn;
- Bleecker Street and LaGuardia Place—eastbound approach;
- West 3rd Street and LaGuardia Place—northbound approach;
- West Houston Street and LaGuardia Place/West Broadway—northbound right-turn and southbound left-turn/through;
- Bleecker Street and Mercer Street—eastbound approach; and
- West 4th Street and Broadway—southbound approach.

Weekday PM Peak Hour

- West Houston Street and Sixth Avenue—westbound right-turn;
- West 4th Street and LaGuardia Place—northbound approach;
- West Houston Street and LaGuardia Place/West Broadway—northbound left-turn/through and southbound left-turn/through.
- Bleecker Street and Mercer Street—eastbound approach;
- West Houston Street and Mercer Street—southbound approach;
- West 4th Street and Broadway—southbound approach; and
- West 3rd Street and Broadway—westbound through.

TRANSIT

The preliminary screening assessment summarized below concluded that a detailed examination of subway and bus line-haul conditions is not warranted. However, a detailed analysis of station elements at three area subway stations was prepared. With Phase 1–2021 Completion, the proposed project under RWCDS 3 would not result in any significant adverse transit impacts. Upon Phase 2–2031 Full Build-Out, significant adverse impacts are anticipated to occur under this development scenario at two subway station stairways, as follows.s

- Broadway/Lafayette Street Station—northeast stairway (S9) during the weekday AM and PM peak periods; and
- West 4th Street Station—northeast stairway (S2A/B) during the weekday PM Peak period.

For RWCDS 1, the above subway impacts would occur under both Phase 1–2021 Completion and Phase 2–2031 Full Build-Out scenarios. At the direction of the Metropolitan Transportation Authority (MTA) New York City Transit (NYCT), additional station elements at the above two stations and at the Prince Street Station will be analyzed for the Final EIS and any significant adverse impacts identified for these other station elements will be disclosed as appropriate.

PEDESTRIANS

Weekday peak period pedestrian conditions were evaluated at key sidewalk, corner reservoir, and crosswalk elements at 17 intersections. Under the Phase 1–2021 Completion scenario, there would be one significant adverse pedestrian impact, as follows.

- University Place and Waverly Place—southeast corner during the weekday midday peak period.

Under the Phase 2–2031 Full Build-Out scenario, significant adverse impacts are anticipated for two pedestrian elements, as follows.

- University Place and Waverly Place—southeast corner during the weekday midday peak period; and
- Washington Square East and West 4th Street—west crosswalk during the weekday midday and PM peak periods.

VEHICULAR AND PEDESTRIAN SAFETY

Accident data for the study area intersections were obtained from the New York State Department of Transportation (NYSDOT) for the time period between December 31, 2007 and December 31, 2010. During this period, a total of 378 reportable and non-reportable accidents, no fatalities, 320 injuries, and 115 pedestrian/bicyclist-related accidents occurred at the study area intersections. A rolling total of accident data identifies three study area intersections as high pedestrian accident locations in the 2007 to 2010 period. These intersections are West Houston Street at Sixth Avenue, West 4th Street at Sixth Avenue, and West Houston Street at LaGuardia Place/West Broadway.

Under the full build-out of the proposed project in 2031, the intersections of West Houston Street at Sixth Avenue and West 4th Street at Sixth Avenue would experience moderate increases in vehicular and pedestrian traffic. The net incremental vehicular levels at these two intersections would be slightly above the CEQR analysis threshold of 50 peak hour vehicle trips while the net incremental pedestrian levels would be below the CEQR analysis threshold of 200 peak hour pedestrian trips. The intersection of West Houston Street at Sixth Avenue would incur significant adverse traffic impacts during all three weekday peak hours. These impacts would be fully mitigated with the implementation of standard traffic engineering measures. The intersection of West 4th Street at Sixth Avenue would continue to operate acceptably during all three analysis peak hours. With the moderate increases in vehicular and pedestrian activities at these two intersections and with the proposed traffic mitigation measures in place, the proposed project is not anticipated to exacerbate any of the current causes of pedestrian-related accidents.

At the intersection of West Houston Street and LaGuardia Place/West Broadway, noticeable increases in vehicular and pedestrian traffic are anticipated from trips generated by the proposed project. The 2031 Build condition pedestrian analysis did not reveal the potential for any significant adverse pedestrian impacts. However, traffic operations at this intersection would be significantly impacted during the weekday PM peak hour. The projected impact would be fully mitigated with the implementation of standard traffic engineering measures. With the proposed traffic mitigation measures in place, the proposed project is not anticipated to exacerbate any of the current causes of pedestrian-related accidents.

Nevertheless, pedestrian safety at the intersection of West Houston Street at Sixth Avenue could be improved by installing pedestrian safety signs such as School Advance Warning assemblies on the northbound approach, and re-striping the western crosswalk as a high-visibility crosswalk. At the intersection of West 4th Street at Sixth Avenue, pedestrian safety could be improved by restriping the four regular crosswalks as high-visibility crosswalks, and by installing pedestrian safety signs such as “Turning Vehicles Yield to Pedestrians” and crosswalk countdown timers on all the approaches. And at the intersection of West Houston Street at LaGuardia Place/West Broadway, pedestrian safety could be improved by installing pedestrian safety signs

such as "Turning Vehicles Yield to Pedestrians" on the northbound and southbound approaches, and countdown timers for both the north and south crosswalks.

PARKING

Under the Phase 1–2021 Completion scenario, the existing 670-space public parking garage in WSV would remain in operation. Accounting for the parking demand generated by the proposed project, the 2021 Build condition parking supply and utilization analysis shows that there would be adequate parking supply in and near the project area to accommodate the projected incremental parking demand.

Under the Phase 2–2031 Full Build-Out scenario, the existing 670-space public parking garage on the North Block would be replaced with a 389-space accessory parking garage. Access and egress to this new 389-space accessory parking garage would be provided on West 3rd Street only, whereas the existing 670-space public parking garage has access and egress along both West 3rd and Bleecker Streets. Accounting for the parking demand generated by the proposed project, the 2031 Build condition parking supply and utilization analysis shows that there would be a parking shortfall during the weekday midday hours. However, as stated in the 2010 *CEQR Technical Manual*, for proposed projects located in Manhattan, this parking shortfall would not be considered significant due to the magnitude of available alternative modes of transportation.

Measures that would be feasible to mitigate the significant adverse impacts summarized above are discussed below in "Mitigation." These measures would be subject to the review and approval by NYCDOT and/or the MTA NYCT.

WEEKEND CONDITION ASSESSMENT

The development program planned for the NYU Core project contains primarily university-oriented uses that would generate most of their trip-making during weekday peak periods. However, some of the project's supporting uses, such as the local retail, hotel, and conference space, albeit expected to primarily serve the university population and its visitors, would together with the university academic and housing uses generate a measurable amount of vehicular and pedestrian trips during weekend peak periods. To determine the potential for transportation-related impacts during non-weekday peak hours, a semi-quantitative/qualitative assessment of a representative weekend peak period (Saturday afternoon) for the Phase 2–2031 Full Build-Out scenario was prepared. This assessment, which included estimates of project-generated Saturday peak hour trips and comparisons of weekday and Saturday background conditions, including an evaluation of roadway operational characteristics, concluded that the potential transportation-related impacts during the Saturday afternoon peak hour would be within the envelope of impacts identified for the weekday peak hours. The likely measures that would be required to mitigate these weekend impacts are also discussed below in "Mitigation."

AIR QUALITY

The Proposed Actions would not result in significant adverse impacts with respect to air quality.

A detailed assessment found that the Proposed Actions would not result in significant adverse impacts from mobile source emissions. The maximum predicted concentration increments due to emissions from vehicle trips generated by the Proposed Actions would be in compliance with the City's interim guidance criteria for fine particulate matter ($PM_{2.5}$). Vehicle emissions inside the proposed parking garage would be mechanically vented. The concentrations in the Proposed Development Area resulting from the emissions within the parking garage and from on-street traffic would be in compliance with the applicable standards and thresholds.

Based on detailed stationary source analyses, there would be no potential for significant adverse air quality impacts from the heat and hot water systems of the proposed Bleecker Building, the temporary gymnasium, and the portion of the Zipper Building that would not be connected to the NYU Central Plant (approximately

350,000 sf). Provisions would be included in a Restrictive Declaration for the Proposed Actions on the placement of heating and hot water system exhaust stacks for the proposed Bleecker Building and temporary gymnasium. Other proposed buildings would not have on-site heating and hot water systems, and therefore, would not have the potential for significant adverse impacts on air quality.

Large existing buildings were analyzed for their potential to affect the Proposed Development Area. Based on detailed stationary source modeling of those existing buildings, they would not have a significant adverse impact on the Proposed Development Area's air quality.

To preclude the potential for significant adverse impact on air quality from the existing NYU Central Plant on the Proposed Actions, the location of operable windows and air intakes on the proposed Mercer Building would be restricted to a height of 195 feet and less. In addition, NYU would be required to switch the NYU Central Plant boiler fuel to natural gas or No. 2 fuel oil before the proposed Zipper and Mercer buildings are occupied. These requirements would be included in a Restrictive Declaration for the Proposed Actions. With these restrictions in place, there would be no potential for significant adverse impacts on air quality from any existing sources.

Based on a cumulative assessment of proposed and existing sources, there would be no potential for significant adverse impact on air quality on the proposed buildings or at locations where the effect of the proposed buildings' heat and hot water systems would be greatest.

Nearby existing sources from manufacturing or processing facilities were surveyed for their potential impacts on the Proposed Development Area. There are no existing permitted sources of manufacturing use emissions within the study area that could affect the Proposed Development Area. Therefore, there would be no potential for significant adverse impacts on air quality with the Proposed Actions.

GREENHOUSE GAS EMISSIONS

The Proposed Actions would result in a mixed use development that is energy efficient, utilizes low-carbon power sources, and is highly supportive of transit and non-motorized commuting. The proposed project's design includes many features aimed at reducing energy consumption and GHG emissions, and would be consistent with the City's citywide GHG reduction goal.

This conclusion is based on a review of the proposed project's design. As per NYU's development policy,[1] NYU intends to attain a score of 80 or higher under the USEPA *Energy Star*'s Target Finder, and to meet the requirements for the USGBC LEED Silver certification for all development in the Proposed Development Area. Currently LEED requires a minimum of 10 percent less energy as compared with the baseline building designed to code. The public school would be built to achieve a LEED certified or higher rating and would require a minimum of 20 percent less energy as compared with the baseline building designed to code. The project site is also well served by many public transportation options. Overall, the building energy use and vehicle use associated with the proposed project would result in approximately 19 thousand metric tons of carbon dioxide equivalent (CO_2e) emissions per year. Since not all efficiency measures could be accounted for at this time, this emissions estimate may be conservatively high.

NOISE

The analysis finds that the Proposed Actions would not result in any significant adverse noise impacts due to operations of the proposed project.

[1] NYU, 2011, *NYU Design Standards and Guidelines* available online at: http://www.nyu.edu/sapd/pdf/design_standards_apr_2011.pdf

The proposed buildings' mechanical systems (i.e., heating, ventilation, and air conditioning systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code and Section 926 of the New York City Department of Buildings Mechanical Code) and to avoid producing levels that would result in any significant increases in ambient noise levels, and was therefore not analyzed.

The analysis of the potential noise effects from the proposed relocation of the Mercer-Houston Dog Run concludes that noise level increases at nearby noise-sensitive locations would be less than 3 dBA and would not be considered a significant adverse noise impact.

The rooftop play area noise analysis concludes that noise level increases at all nearby noise sensitive locations are anticipated to be less than 3 dBA and would not be considered a significant adverse noise impact.

The CEQR building attenuation analysis concludes that in order to meet CEQR interior noise level requirements, the analysis prescribes up to 33 dBA of building attenuation 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. Noise levels in the newly created open spaces would be greater than the 55 dBA $L_{10(1)}$ CEQR guideline, but would be comparable to other parks around New York City. Therefore, there would be no significant adverse noise impacts associated with the newly created open spaces.

PUBLIC HEALTH

The Proposed Actions would not result in unmitigated significant adverse impacts in technical areas such as air quality, water quality, hazardous materials, or operational noise.

While during some periods of construction 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, the Proposed Actions would not result in significant adverse public health impacts.

NEIGHBORHOOD CHARACTER

The Proposed Actions would not have a significant adverse impact on neighborhood character.

The Proposed Actions would introduce a new mix of uses to the Proposed Development Area, but these uses would be consistent with the mix of uses throughout the study area. Major new buildings would be confined to the two superblocks that comprise the Proposed Development Area, and these blocks stand in physical contrast to the rest of the neighborhood, because they break the street grid and their development dates back only 50 years to the era of urban renewal, while the preponderance of the study area contains smaller-scale, much older buildings, in a regular, if distinctive street grid. The increased access to the open spaces within the superblocks, the new public pathways through the blocks, and the improved streetscape on these blocks would be generally beneficial to neighborhood character. Thus, although the new structures would change the character of the Proposed Development Area and along its periphery, they would not create a significant adverse impact on neighborhood character. While the Proposed Actions were found to have a significant impact on historic resources because of the change to open space on the historic North Block, this impact would be generally limited to the visitors' and residents' experience of that block, and thus was not considered to be significantly adverse to overall neighborhood character. The proposed development on the two superblocks would not adversely affect the character of the historic districts in the surrounding area, since the newer, distinct superblocks already stand in their midst.

Potential changes to the Commercial Overlay Area include possible introduction of street level retail in up to six of the area's buildings. Because the area contains retail on nearly all of its streetfronts, this potential

addition was not considered significant to land use, urban design, or visual resources, and thus it would not be significant to neighborhood character.

The shadows analysis identified a significant adverse impact on the LaGuardia Corner Gardens. However, although the impact would be significant to the utility of this resource, the garden is not a defining feature of the neighborhood with respect to uniqueness or overall characterization of the area, and the property could continue as community landscaped open space. Thus, it would not create a significant adverse impact on community character. In addition, the play of light and shadow on the historic University Village buildings, which are considered sunlight-sensitive, would not change substantially with the Proposed Actions, and the new shadows would not detract from the buildings' contribution to neighborhood character, nor would they create a significant adverse impact on neighborhood character.

The mix of project uses would add students, faculty, and visitors to the area. The travel associated with this population would increase utilization of the area's transportation facilities and in some cases would result in significant transportation impacts requiring mitigation if practicable. While there would be increased activity, the resulting conditions would be similar to those seen in the high activity urban neighborhoods defining the study area, and would not result in density of activity or service conditions that would be out of character with the surrounding neighborhoods. In addition, the project would create new and improved opportunities for crossing the North and South Blocks. Therefore, the changes in activity and transportation in the area would not create a significant adverse impact on neighborhood character.

The presence of the new development would be felt primarily in the Proposed Development Area and along Mercer Street and LaGuardia Place between West 3rd and Houston Streets. Activity in these areas would increase, from the additional floor area and new uses. The superblocks would be opened up more for public use, and the combination of the increased population, access to the interior gardens, new pathways through the superblocks, and new retail along their periphery would enliven the area and make the character of the superblocks more similar to that of the surrounding study area. Overall, the combined effect of changes to the defining elements would not create a significant adverse impact on neighborhood character.

CONSTRUCTION

The Proposed Actions would result in significant adverse construction impacts related to transportation, noise, and open space.

TRANSPORTATION

Construction of the proposed project is expected to result in significant adverse traffic, transit, and pedestrian impacts during Phase 2 construction, as summarized below. The proposed project is not expected to result in significant adverse parking impacts during construction.

Traffic

The proposed project would result in significant adverse traffic-related construction impacts during Phase 2 of construction, but not during Phase 1. As discussed further below in "Mitigation," traffic mitigation measures needed for the 2031 build year would also be sufficient to mitigate Phase 2 traffic-related construction impacts and would be implemented when needed during Phase 2.

A detailed traffic analysis conducted for the area intersections most affected by estimated construction-related traffic concluded that Phase 1 construction of the proposed project would not result in any significant adverse traffic impacts. During Phase 2 construction, peak activities generated by construction workers and truck deliveries would be substantially lower in comparison to those during Phase 1 construction. However, together with new trips resulting from the completion of Phase 1 components of the proposed project, there would still be a potential for significant adverse traffic impacts during Phase 2 construction. The cumulative project trip

generation during Phase 2 construction would be less than what would be realized upon the full build-out of the proposed project in 2031. Therefore, the anticipated impacts would be of equal or lesser magnitude than the significant adverse traffic impacts identified for the 2031 Build condition above in "Transportation." These impacts can be similarly addressed with the mitigation measures described below in "Mitigation."

Parking

Based on the parking analysis results, the parking demand generated by construction workers commuting by private automobiles would be adequately accommodated by available nearby off-street parking facilities during Phase 1 construction. However, there is expected to be a temporary parking shortfall during the peak midday hours during Phase 2 construction. This projected parking shortfall does not constitute a significant adverse parking impact.

Transit

The area around NYU is well served by public transit, including the B/D/F/M lines at the Broadway-Lafayette Station; the No. 6 line at the Bleecker Street Station; the A/B/C/D/E/F/M lines at the West 4th Street Station; and the N/R lines at the Prince Street Station and the 8th Street-NYU Station. There are also several local bus routes, including the M1, M2, M3, M5, M8, and M21. Based on the number of projected construction workers being distributed among the various subway and bus routes, station entrances, and bus stops near the project area, only nominal increases in transit demand would be experienced along each of these routes and at each of the transit access locations during hours outside of the typical commuter peak periods. There would not be a potential for significant adverse transit impacts attributable to the projected construction worker transit trips during Phase 1 construction. After the completion of Phase 1 components of the proposed project, the area's subway stations would incur increases in passengers generated by the completed uses. Subway impacts are expected to occur in 2021 with the development of RWCDS 1. The combination of the Phase 2 construction worker subway trips and those generated by the completed Phase 1 project during the commuter peak hours would result in comparable significant adverse impacts to the subway station elements described for the proposed project (i.e., S9 stairway at the Broadway-Lafayette Station and S2A/B stairway at the West 4th Street Station).

Potential mitigation measures for impacts at these locations will be explored between the DEIS and FEIS, If these mitigation measures are found to be infeasible, the impacts would be unmitigated. Any temporary relocation of bus stops along bus routes that operate adjacent to the project area would be coordinated with and approved by NYCDOT and MTA/NYCT to ensure that proper access is maintained.

Pedestrians

During Phase 1 construction, pedestrian trips generated by construction workers are not expected to result in significant adverse pedestrian impacts. However, construction of the Zipper building would necessitate closing the Mercer Street west sidewalk between Bleecker Street and West Houston Street pedestrian access along this segment of the sidewalk would not be available. A detailed analysis of the redirected pedestrian trips during peak periods showed that these trips could be adequately accommodated by Mercer Street's east sidewalk across from the Zipper building, such that this sidewalk closure is not expected to result in a significant adverse pedestrian impact. After the completion of Phase 1 components of the proposed project, the combination of the Phase 2 construction worker pedestrian trips and those generated by the completed Phase 1 project during the commuter peak hours would result in a comparable significant adverse impact at the southeast corner of University Place and Waverly Place, requiring the same mitigation measure described for the project's 2021 Phase 1 build-out. During both Phase 1 and Phase 2 construction, other sidewalks may also be closed for limited periods of time, but pedestrian circulation and access would be maintained at all times through the use of temporary sidewalks or sidewalk bridges as approved by NYCDOT.

AIR QUALITY

The proposed project would not result in significant adverse impacts with respect to air quality. A detailed analysis of the combined effects of on-site and on-road emissions, determined that annual-average nitrogen dioxide (NO_2), carbon monoxide (CO), and particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}) concentrations would be below their corresponding National Ambient Air Quality Standards (NAAQS). Therefore, the proposed projects would not cause or contribute to any significant adverse air quality impacts with respect to these standards.

Dispersion modeling determined that the maximum predicted incremental concentrations of particulate matter with an aerodynamic diameter less than 2.5 microns ($PM_{2.5}$) (using a worst-case emissions scenario) would exceed the City's applicable 24-hour interim guidance criterion of 2 micrograms per cubic meter ($\mu g/m^3$) at sidewalk receptor locations and one residential location. The occurrences of elevated 24-hour average concentrations for $PM_{2.5}$ would be very limited in duration, frequency, and magnitude. Therefore, taking into account the limited duration and extent of these predicted exceedances, and the limited area-wide extent of the 24-hour impacts, it was concluded that no significant adverse air quality impacts for $PM_{2.5}$ would occur from the on-site construction sources.

Because background concentrations are not known and the analysis methodology for mobile and construction sources have not been developed for the new 1-hour NO_2 NAAQS, exceedances of the 1-hour NO_2 standard resulting from construction activities cannot be ruled out. Therefore, measures including diesel equipment reduction, utilization of newer equipment, and source location and idling restriction, would be implemented by the proposed project to minimize NO_x emissions from construction activities.

NOISE AND VIBRATION

Noise

The proposed project would result in significant adverse impacts with respect to construction noise.

NYU has committed to a proactive approach to minimize noise during construction activities. This approach includes both source and path controls that exceed measures typical of standard construction practices.

Even with these measures, the results of detailed construction analyses indicate that significant noise impacts are predicted to occur for two or more consecutive years at forty-six (46) of the seventy-three (73) analyzed receptor sites. Significant noise impacts are predicted to occur at the following residential locations:

- Washington Square Village 1 & 2 - at various locations on the south façades of the residential buildings (Receptors from A1 through A8), at various locations on the west façade of the residential building (Receptor A9), and at various locations on the east façade of the residential building (Receptor A15);
- Washington Square Village 3 & 4 - at various locations on the north façades of the residential buildings (Receptors from B1 through B8), at various locations on the west façade of the residential building (Receptor B9), at various locations on the south façades of the residential buildings (Receptors from B10 through B17), and at various locations on the east façade of the residential building (Receptor B18);
- Silver Tower II - at various locations on the four facades of the residential building (Receptors from C1 through C4);
- Silver Tower I - at various locations on the east façade of the residential building (Receptor D2), and at various locations on the south façade of the residential building (Receptor D3);
- 505 LaGuardia Place - at various locations on the west façade of the residential building (Receptor E3), and at various locations on the north façade of the residential building (Receptor E4);

- At top floor locations on the north façades of the residential buildings located on West Houston Street between Greene Street and Mercer Street (Receptor F);
- At various locations on the east façades of the sensitive receptor buildings located on LaGuardia Place between Washington Square South and West Houston Street (Receptors I, J, K, and Y); and
- At various locations on the west façades of the sensitive receptor buildings located on Mercer Street between Washington Square South and Prince Street (Receptors O, P, Q, S, BB and EE).

Significant construction-related noise impacts would also be expected to occur at sensitive locations/buildings proximate to the buildings identified above (e.g., sensitive locations between impacted receptors J and K).

In addition, noise levels at on-site open space locations adjacent to where construction activities are taking place would increase significantly above the 3-5 dBA CEQR impact criteria. Due to the close proximity of on-site open spaces to construction activities, construction of the proposed project would result in significant adverse noise impacts on open spaces.

Vibration

The proposed project is not expected to result in significant adverse construction impacts with respect to vibration. 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.

Use of construction equipment that would have the most potential to exceed the 65 VdB criterion within a distance of 550 feet of sensitive receptor locations (e.g., equipment used during tangent wall drilling) would be perceptible and annoying. Therefore, 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 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.

OTHER TECHNICAL AREAS

Historic and Cultural Resources

No significant adverse impacts to archaeological, historic or cultural resources would result from construction of the proposed project.

Construction would involve subsurface disturbance to areas that have been identified as archaeologically sensitive by the Phase 1A studies. Therefore, further investigation in the form of Phase 1B archaeological testing would be conducted in any of the sensitive areas that would be affected by construction. The Phase 1B survey would be completed prior to the start of construction of the proposed project. A Phase 1B testing protocol would be prepared and submitted to LPC and OPRHP for review and approval before the Phase 1B survey would begin. Should any intact archaeological resources be identified during the course of the survey, they would be properly documented and evaluated in consultation with OPRHP and LPC. The Phase 1B survey would also determine the need for additional archaeological analysis (i.e., a Phase 2 survey). With this testing and compliance with any OPRHP and/or LPC directive based on the results of such testing, no significant adverse impacts to archaeological resources would result from construction.

The Proposed Development Area's South Block contains the NYCL, S/NR-eligible University Village. The North Block of the Proposed Development Area contains Washington Square Village, which has also been determined S/NR-eligible.

To avoid potential adverse impacts to University Village and Washington Square Village from construction-related activities, a CPP would be developed and implemented in consultation with OPRHP and LPC prior to construction of the proposed project. The CPP would be prepared in coordination with a licensed professional engineer and would follow the guidelines set forth in section 523 of the *CEQR Technical Manual*, including conforming to LPC's *New York City LPC Guidelines for Construction Adjacent to a Historic Landmark* and *Protection Programs for Landmark Buildings*. The CPP would also comply with the procedures set forth in DOB's TPPN #10/88. With these measures in place, no significant adverse impacts to historic or cultural resources would occur.

Hazardous Materials

The proposed project would not result in significant adverse impacts with respect to hazardous materials during construction.

The Phase 1 Environmental Site Assessment identified historical uses on the Proposed Development Area that could have caused soil and groundwater contamination. A subsurface (Phase II) investigation has been conducted to determine whether past or present, on or off-site activities have affected subsurface conditions. The Phase II investigation found soils typical of an urban environment with polycyclic aromatic hydrocarbons and metals above NYSDEC's most stringent soil standards in some locations.

Based on the findings of the Phase II investigation, a RAP and associated CHASP would be prepared (and submitted to OER for review and approval) for implementation during project construction. The RAP would address requirements for items such as: soil stockpiling, soil disposal and transportation; dust control; quality assurance; and contingency measures should petroleum storage tanks or contamination be unexpectedly encountered. The CHASP would identify potential hazards that may be encountered during construction and specify appropriate health and safety measures to be undertaken to ensure that subsurface disturbance is performed in a manner protective of workers, the community, and the environment (such as personal protective equipment, air monitoring requirements and emergency response procedures). In addition, a vapor barrier (or other form of vapor control) would be installed below any proposed new construction to reduce the potential for vapor intrusion from volatile organic compounds in the soil or groundwater. This barrier would also function as waterproofing.

With these measures in place, no significant adverse impacts related to hazardous materials would occur as a result of the proposed project.

Natural Resources

The proposed project would not result in significant adverse impacts with respect to natural resources during construction.

Foundation construction of the proposed project would not materially affect groundwater flow.

Minetta Brook had been a surface water body, flowing from what is now West 16th Street and Avenue of the Americas to the Hudson River at Charlton Street. The surface course of Minetta Brook ran approximately 1,500 feet to the west of the site of the proposed basement under the LaGuardia Building. Therefore, the construction of the proposed project would not interfere with any flow that may remain from the underground expression of Minetta Brook.

Open Space

The Proposed Actions would result in significant adverse direct open space impacts to LaGuardia Corner Gardens due to the potential displacement of this resource during construction, and to other nearby open spaces due to construction noise. In addition, the Proposed Actions would result in temporary significant adverse

indirect open space impacts within the residential (½-mile) study area during a portion of Phase 2 of construction.

Direct Effects

Prior to construction of the Zipper Building on the Coles Gym site, a temporary gym would be constructed on the North Block. This construction would displace the southern portion of the publicly accessible Mercer Playground and the private Washington Square Village Playground. The Washington Square Village Playground would be relocated to a similarly-sized space within the southern portion of the private Washington Square Village Elevated Garden.

During construction of the Zipper Building, several public and private open spaces on the South Block would be directly displaced. To offset some of these losses, temporary open spaces similar in function would be made available within the Proposed Development Area. For example, the loss of Coles Plaza on the South Block would be offset with a larger passive open space on the North Block (the Temporary Mercer Entry Plaza), and similar to Coles Plaza, this new space would contain seating and landscaping adjacent to the temporary gym facility, thereby serving a similar function. The displaced Mercer-Houston Dog Run would be replaced with a similarly-sized space on the South Block located along West Houston Street. The Zipper Building construction would also displace Coles Playground, the Silver Tower Seating, and the private Silver Tower Playground. These losses would be offset in part by 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, which is anticipated to begin in 2014. 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.

By 2018, no publicly accessible open spaces would be directly affected by the Proposed Actions in terms of displacement under the LaGuardia Place Staging Option (construction staging for the proposed Bleecker Building only along the LaGuardia Place frontage). However, under the Bleecker Street Staging Option (construction staging only along the Bleecker Street frontage), the portion of the Bleecker Street Strip directly north of the construction site would be utilized for construction staging and therefore would be temporarily displaced.

Under the LaGuardia Place Staging Option, the LaGuardia Corner Gardens—a Green Thumb garden on City-owned land that is not assessed as public open space under guidance set forth in the *CEQR Technical Manual* would not be available for the approximately 39-month construction period, 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 north of the construction site would remain publicly accessible. However, for an approximately 27-month period 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 and the landscaped areas contained therein during the 27-month period.

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. As with the LaGuardia Place Staging Option, the smaller, stand-alone portion of LaGuardia Corner Gardens located at the corner of LaGuardia Place and Bleecker Street would displaced for the entire 39-month construction period. In addition, under the Bleecker Street Staging Option, for an approximately 27-

month period during construction, 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 construction shed would reduce the overall utility of the garden, and would block most, if not all, direct sunlight for an approximately 27-month period, thereby affecting the viability of plantings, and therefore would result in a significant adverse impact on this resource.

During construction of the Mercer Building, the remaining portion of the Mercer Playground would be displaced. The Temporary Mercer Entry Plaza would also be displaced.

No publicly accessible open spaces would be displaced during construction of the North Block Below-Grade/Central Open Space/Above-Grade Mercer Building. As mentioned above, construction of the new 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 and temporary Washington Square Village Playground. The proposed central publicly accessible open spaces and the new Mercer Entry Plaza would be open for use while the above-grade portion of the Mercer Building would still be under construction.

In order to accommodate construction of the LaGuardia Building, Adrienne's Garden and the Temporary LaGuardia Play Area would be displaced. These areas would be relocated and expanded to a play area that would also be located along LaGuardia Place on the North Block, following completion of the LaGuardia Building.

The construction air quality analyses showed that construction activities would not result in any significant adverse air quality impacts at any sensitive receptors, which included areas such as public and private open spaces adjacent to construction activities.

Construction of the Zipper Building would result in temporary significant adverse noise impacts on the southern portion of the publicly accessible Temporary Mercer Entry Plaza directly across the street on the North Block. Construction of the Bleecker and Mercer Buildings (prior to the opening of the central open spaces in 2027) would not result in any significant adverse noise impacts at any publicly accessible open spaces. The above-grade construction of the Mercer 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). During construction of the LaGuardia Building, there would be no significant adverse construction noise impacts on publicly accessible open spaces.

Indirect Effects

During construction of Phase 1, there would be no temporary significant adverse indirect open space impacts resulting from the proposed project; all of the open space ratios within the non-residential (1/4-mile) study area and residential (1/2-mile) study area would improve, or would decrease by less than 1 percent as compared to open space conditions in the future without the Proposed Actions. However, during the first few years of Phase 2 construction, as additional existing open spaces are displaced to accommodate construction of future project buildings and open spaces, the Proposed Actions would temporarily exacerbate future deficiencies in passive and active open spaces in both the non-residential and residential study areas. 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. Given that the study areas could be considered extremely lacking in open space resources, the projected decreases in open space ratios would result in temporary significant adverse impacts to open space resources in the residential study area (the reductions in open space ratios in the non-residential study area would be less than 1 percent, and therefore would not be a significant adverse impact). The temporary impact on primarily active open space resources in the residential study area would not begin until the proposed Mercer Building has initiated construction, and would be eliminated by the provision

of the project open spaces associated with the next stage of construction (i.e., completion of the Mercer Building and central portion of the North Block's proposed open space).

Tree Replacement

Although NYU's landscape plans would protect some existing street trees, many street trees would be removed and replaced to facilitate the construction of the proposed project. Specifically, street trees expected to be removed during construction of the proposed project include: all street trees on the portion of the Mercer Street Strip between West Houston and West 3rd Streets; all street trees associated with the LaGuardia Landscape (within the LaGuardia Place Strip between Bleecker and West 3rd Streets); street trees north of Coles Gym on Bleecker Street; and depending on construction staging activities, street trees within and surrounding the LaGuardia Corner Gardens (on the LaGuardia Place Strip south of Bleecker Street) as well as the portion of the Bleecker Street Strip north of the Morton Williams supermarket site. During the design and permitting phases for the Proposed Actions, New York City Department of Parks and Recreation (DPR) would be consulted with respect to tree evaluation for the street trees that would be removed in the vicinity of the Proposed Development Area. A method to calculate the number of replacement trees as per the New York City tree replacement code (New York City Administrative Code Title 18 section 18-107 and Title 56 Section 5-102 et. Seq. of the Rules of the City of New York), such as the caliper replacement method, would be used to quantify the size and number of trees that would be required to replace those removed from the Proposed Development Area. Therefore, construction of the proposed project would not result in any significant adverse impacts to street trees of the region.

Socioeconomic Conditions

The proposed project would not result in significant adverse construction impacts with respect to socioeconomic conditions.

Construction activities would affect pedestrian and vehicular access in the immediate vicinity of the construction. However, lane and/or sidewalk closures would not obstruct entrances to any existing businesses, or obstruct major thoroughfares used by customers, and businesses would not 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, because of the MPT measures required by NYCDOT. Utility service would be maintained to all businesses, although very short term interruptions (i.e., hours) may occur when new equipment (e.g., a transformer, or a sewer or water line) is put into operation. Overall, construction of the proposed projects is not expected to result in any significant adverse impacts on surrounding businesses.

Construction would create direct benefits resulting from expenditures on labor, materials, and services, and indirect benefits created by expenditures by material suppliers, construction workers, and other employees involved in the direct activity. Construction also would contribute to increased tax revenues for the City and State, including those from personal income taxes.

Community Facilities

No community facilities would be directly affected by construction activities, because none would be directly displaced or altered by construction. The construction sites would be surrounded by construction fencing and barriers that would limit the effects of construction on nearby facilities. Measures outlined in the CPP and MPT Plan would ensure that lane closures and sidewalk closures are kept to a minimum and that adequate pedestrian access is maintained. The construction workers would not place any burden on public schools and would have minimal, if any, demands on libraries, child care facilities, and health care. Construction of the proposed project would not block or restrict access to any facilities in the area, and would not materially affect emergency response times. New York Police Department (NYPD) and Fire Department (FDNY) emergency services and response times would not be materially affected due to the geographic distribution of the police and fire facilities and their respective coverage areas.

Land Use and Neighborhood Character

No significant adverse impacts would occur from construction of the proposed project with respect to land use and neighborhood character.

No portion of the area around the Proposed Development Area would be subject to the full effects of the construction for the entire construction period. Except for the six months needed to erect the temporary gymnasium, construction would be limited to the South Block during Phase 1 and to the North Block during Phase 2. For the vast majority of the time, only one building is planned to be under construction at one time. The major construction tasks are planned to be consequent and not concurrent, which limits the area being disrupted by construction. Construction activities would adhere to the provisions of the New York City Building Code and other applicable regulations. Access to surrounding residences, businesses, and institutions, as well as access among the surrounding neighborhoods, would be maintained throughout the duration of the construction period.

Construction activities would be disruptive and concentrated on one superblock at a time over an about 10 year period for each superblock. Throughout the construction period, measures would be implemented to control noise, vibration, and dust on construction sites, including the erection of construction fencing and in some areas fencing incorporating sound-reducing measures. This fencing would reduce potentially undesirable views of construction sites and buffer noise emitted from construction activities. Barriers would be used to protect the safety of pedestrians and to reduce noise from particularly disruptive activities where practicable. Construction activity associated with the proposed project would be localized and would not alter the character of the larger neighborhoods surrounding the project site.

Rodent Control

Construction contracts would include provisions for a rodent (mouse and rat) control program. Before the start of construction, the contractor would survey and bait the appropriate areas and provide for proper site sanitation. During the construction phase, as necessary, the contractor would carry out a maintenance program. Coordination would be maintained with appropriate public agencies. Only USEPA- and NYSDEC-registered rodenticides would be permitted, and the contractor would be required to perform rodent control programs in a manner that avoids hazards to persons, domestic animals, and non-target wildlife.

BLEECKER BUILDING ALTERNATE PHASING SCENARIO

The proposed Bleecker Building is assumed to be constructed following the proposed Zipper Building as part of Phase 1 (from Q4 2018 and Q4 2021). However, the timing of construction of the Bleecker Building could be different, depending upon the timing of SCA's decision on whether to move forward with the development of a public school as part of the Bleecker Building. 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. A discussion of a "Bleecker Building Alternate Phasing Scenario," is provided at the end of this chapter.

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 Proposed Actions, NYU would commit to the following restrictions on the types of concurrent construction activities:

> The demolition of the Morton Williams Associated Supermarket building, Bleecker Building excavation/foundations, and Bleecker Building super structure/foundation work would not occur during:
>
> - excavation/foundations or super structure/exterior work associated with the temporary gymnasium (estimated 6-month cumulative duration);
> - demolition of Coles Gymnasium (6 months);

- excavation/foundation or super structure/exterior work associated with the proposed Zipper Building (36 months);
- foundations, super structure/exterior, or interior work associated with the proposed Washington Square Village parking garage (18 months);
- below-grade foundations and below-grade super structure/exterior work associated with the proposed Mercer Building (27 months);
- demolition of the LaGuardia retail building (3 months); and
- excavation/foundations and super structure/exterior work associated with the proposed LaGuardia Building (18 months).

In addition, to avoid the potential for significant adverse impacts not already analyzed and identified in this DEIS, SCA would be required to commit to construction of the public school as part of the Bleecker Building by 2025. With these restrictions in place, the DEIS analysis establishes that there would be no new or different significant adverse impacts other than those identified in this DEIS if the proposed Bleecker Building were 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 Mercer Building (between Q1 2026 and Q2 2030). While for analysis purposes a scenario within which the school is constructed by 2018 is accounted for in this DEIS, the Department of Education's current Five-Year Capital Plan, which expires on June 30, 2014, does not identify the need for the school nor allocates capital funding for the development of that school at that early date.

Similar to the analysis for the conceptual construction schedule, the shifting of 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; air quality; and rodent control. There would be the same potential significant adverse impacts from construction-related noise, and they would be of the same duration, but may occur at different points in time than identified for the conceptual construction schedule. If the Bleecker Building were to occur during Phase 2, the operational traffic analysis reflecting full development would still represent worst-case traffic conditions for construction, and the mitigation identified for those service levels would be appropriate for addressing construction-period traffic impacts, if necessary. Shifting the construction sequence of the Bleecker Building is expected to similarly not result in significant adverse impacts with respect to other transportation analysis areas, including transit and pedestrians.

G. MITIGATION

Measures to further mitigate adverse impacts will be refined and evaluated between the DEIS and FEIS. Therefore, the FEIS may include more complete information and commitments on all practicable mitigation measures to be implemented with the proposed projects.

SHADOWS

The shadows cast by the proposed Bleecker Building would result in a significant adverse impact on LaGuardia Corner Gardens, a community garden located along LaGuardia Place adjacent to the Bleecker Building site on the South Block. While considered a private open space because of limited public access, the garden is an important community resource. The Bleecker Building would cast between 4 and 5½ hours of new shadow on the garden during morning hours throughout the spring, summer, and fall. Although the remaining sunlight could support shade-tolerant species, the proposed project’s incremental shadows would jeopardize the viability of shade-intolerant species.

Mitigation options considered, but rejected, for the significant adverse shadow impact on LaGuardia Corner Gardens included moving the proposed Bleecker Building eastward toward the center of the South Block, or southward toward West Houston Street, as well as reducing the height of the proposed Bleecker Building. While a change in the location of the Bleecker Building (either eastward or southward) would reduce the incremental shadows cast on the LaGuardia Corner Gardens, such an adjustment in site plan would result in an encroachment on the boundary of University Village (NYCL, S/NR-eligible). Given that such an adjustment could have adverse contextual effects on this historic resource, and that the reduction in shadows would only partially mitigate the significant adverse shadow impact, the relocation of the proposed Bleecker Building was rejected as a potential mitigation measure.

Reducing the proposed height of the Bleecker Building and/or re-orienting the tower portion of the building also were considered, but rejected as potential mitigation measures. Re-orienting the tower so that the nine-story portion of the building faces LaGuardia Place was rejected because shadow modeling of this configuration showed only marginal improvements in shadows on the LaGuardia Corner Gardens, and because the re-orientation could have adverse effects on the context of the proposed building relative to University Village. A reduction in height of the proposed Bleecker Building was rejected because the reduction in height that would be necessary to mitigate the significant adverse shadows impact would substantially compromise the goals and objectives of the Proposed Actions. As described below in "Alternatives to the Proposed Actions," a No Action (as-of-right) building at this location would be approximately 170 feet high including rooftop mechanical, and would still result in significant adverse shadow impacts on the LaGuardia Corner Gardens. Based on further shadow modeling, it was determined that the proposed Bleecker Building would have to be approximately 50 feet in height or less in order to fully mitigate the significant adverse shadow impacts on LaGuardia Corner Gardens. Such a reduction in height would not allow for the provision of a 100,000-square-foot public school within the building in combination with the amount of NYU dormitory space that would be necessary for NYU to redevelop the site as a dormitory and public school building. One purpose and need for the Proposed Actions is to develop NYU dormitories so that more undergraduate students would have opportunity to live in student housing in order to create a strong academic community and to become better acclimated to the City. Additionally, the proposed Bleecker Building is the best location for a public school within the proposed project because it could be built earlier than the buildings on the North Block, thereby allowing greater flexibility in the timing of the public school, and because the building's design would allow for the public school as a separate and distinct use.

A partial mitigation measure under consideration is planting shade-tolerant species in portions of the LaGuardia Corner Gardens that would receive substantial shadowing as a result of the proposed project, and monitoring the health of the replanted garden. This mitigation would occur when the garden is restored (after the construction of the proposed Bleecker Building). While this mitigation is feasible, it would not serve to fully mitigate the significant adverse impact because the extent of project-generated shadows during the growing season could substantially alter the types of plantings that would be viable, and would require a change in the types of plant materials that could grow successfully in the garden. The selection of viable perennial flowers and plants would be more limited in the future with the proposed project, and would require more careful planning and maintenance, which could be supported by NYU. For example, upon completion of the proposed Bleecker Building, NYU could provide more refined analysis of light availability during the growing season, and in coordination with the gardens' operators could support measures to increase the viability of plants.

A potential mitigation measure with uncertain feasibility is the relocation of the LaGuardia Corner Gardens prior to construction of the Bleecker Building, either further south on the South Block or elsewhere in a ¼-mile study area. The feasibility of this mitigation is uncertain because the LaGuardia Corner Gardens and other potential relocation sites—including less shadowed locations further south along the LaGuardia Place Strip adjacent to the South Block—are not owned or controlled by the project sponsor.

Between the DEIS and FEIS, options will be explored to determine the feasibility of the above-described mitigation measures, and to identify different mitigation measures for this significant adverse shadows impact. This further analysis of mitigation will be coordinated with the lead agency; with NYCDPR, which is an expert agency on resources that are not City parks and which provides programming and material support to LaGuardia Corner Gardens as a member of the City's GreenThumb program; and with NYCDOT, which has jurisdiction over the LaGuardia Corner Gardens and other property on the LaGuardia Place Strip.

In the absence of the relocation of facilities or other mitigation measures not yet identified, the significant adverse shadow impacts on the LaGuardia Corner Gardens would only be partially mitigated by the planting of shade-tolerant species in coordination with support for monitoring and maintenance by NYU.

HISTORIC AND CULTURAL RESOURCES

Washington Square Village

The Proposed Actions would result in alterations to the Washington Square Village complex (an S/NR-eligible resource), to include the proposed development of two new buildings and landscaping, which would 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 project would have a significant adverse impact on this architectural resource.

Measures to minimize or partially mitigate significant adverse impacts to Washington Square Village would be implemented in consultation with OPRHP and would be set forth in a LOR to be signed by the applicant, OPRHP, DASNY, and other involved agencies to be executed prior to publication of the FEIS. Potential mitigation measures include the following:

- Preparation of HABS documentation of Washington Square Village that would include photographic documentation, historic plans, and an accompanying historical narrative.
- NYU would consult with OPRHP regarding proposed changes to the ground floor facades of Washington Square Village's north and south buildings as design plans proceed. The LOR will specify the points in the design process at which consultation with OPRHP would occur.
- Prior to construction of the proposed project, and in consultation with OPRHP and LPC, NYU would develop and implement CPPs for University Village, Washington Square Village, the buildings in the Commercial Overlay Area that would be directly affected by ground floor alterations and buildings immediately adjacent to these buildings, and Shimkin Hall. The CPPs would be prepared in coordination with a licensed professional engineer and would follow the guidelines set forth in the *CEQR Technical Manual*, and would conform *New York City LPC Guidelines for Construction Adjacent to a Historic Landmark* and *Protection Programs for Landmark Buildings*. The CPP would also comply with the procedures set forth in DOB's TPPN #10/88.

Potential NoHo Historic District Expansion

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. The four buildings—82 Washington Square East (80-84 Washington Square East/30-36 Washington Place), 14 Washington Place (12-16 Washington Place/240-242 Greene Street), 246-248 Greene Street/20-22 Waverly Place, and 18 Waverly Place—could be adversely affected by the projected ground-floor alterations. Although these buildings are within an S/NR-eligible historic district, because there is no federal or state funding involved with the proposed ground-floor alterations, there is no regulatory process to control changes to these architectural resources. Further, none of these architectural resources is an NYCL and,

therefore, alterations to these architectural resources would not require LPC's review and approval. The analysis in this DEIS finds that 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. To address this potential significant adverse impact, prior to the commencement of construction of the proposed project, in consultation with LPC and OPRHP, NYU would develop and implement CPPs for the four Commercial Overlay Area buildings that are contributing to the potential NoHo Historic District Expansion. The CPPs would be prepared in coordination with a licensed professional engineer and would follow the guidelines set forth in Section 523 of the *CEQR Technical Manual*, including conforming to LPC's New York City Landmarks Preservation Commission Guidelines for Construction Adjacent to a Historic Landmark and Protection Programs for Landmark Buildings. The CPPs will also comply with the procedures set forth in DOB's TPPN #10/88. However, currently there are no specific redevelopment plans for the four buildings contributing to the S/NR-eligible Potential NoHo Historic District Expansion, so at this time it cannot be determined whether this measure would fully mitigate potential impacts.

TRANSPORTATION

RWCDS 3 was determined to be the overall worst-case development scenario for the study of potential transportation-related impacts. However, because RWCDS 1 would be expected to generate substantially more subway trips than RWCDS 3, its potential impacts on the subway system were also evaluated. Where impacts were identified, measures that could be implemented to mitigate these impacts are discussed below.

Traffic

2021 Phase 1

Under the Phase 1–2021 Scenario there would be the potential for significant adverse traffic impacts at: two intersections during the weekday AM peak hour; three intersections during the weekday midday peak hour; and three intersections during the weekday PM peak hour. **Table S-5** summarizes the recommended mitigation measures that are subject to review and approval by NYCDOT.

Table S-5
Phase 1 (2021) Recommended Mitigation Measures

Intersection	AM	Midday	PM
West Houston Street and Sixth Avenue	Shift 1 second of green time from the WB phase to the NB phase.	No significant adverse impact	Shift 1 second of green time from the NB phase to the WB phase.
West Houston Street and LaGuardia Place/West Broadway	No significant adverse impact	Shift 2 seconds 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.
West Houston Street and Mercer Street	No significant adverse impact	No significant adverse impact	Shift 1 second of green time from the EB/WB phase to the SB phase.
East Houston Street and Lafayette Street	No significant adverse impact	Shift 1 second of green time from the EB/WB phase to the exclusive EB phase.	No significant adverse impact

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

With these mitigation measures in place, all of the significant adverse traffic impacts identified above would be fully mitigated, operating at the same or better service conditions as the No Build condition. **Table S-6** compares the LOS conditions for the 2021 No Build, Build, and Build- with-Mitigation conditions for all three peak hours. Provided below is a discussion of each intersection with significant adverse traffic impact and its required mitigation.

West Houston Street and Sixth Avenue. The significant adverse impact at the westbound right-turn at this intersection during the PM peak hour could be fully mitigated by shifting 1 second of green time from the northbound phase to the westbound phase. The significant adverse impact at the northbound approach at this intersection during the AM peak hour could be fully mitigated by shifting 1 second of green time from the westbound phase to the northbound phase.

West Houston Street and LaGuardia Place/West Broadway. The significant adverse impact at the northbound right-turn at this intersection during the midday peak hour could be fully mitigated by shifting 2 seconds of green time from the eastbound/westbound phase to northbound/southbound phase.

Table S-6
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													
West Houston Street and Sixth Avenue													
Westbound	T	0.69	25.7	C	T	0.72	26.3	C		T	0.74	27.6	C
	R	0.73	28.6	C	R	0.76	30.2	C		R	0.79	32.4	C
Northbound	LTR	1.11	80.4	F	LTR	1.12	83.8	F	+	LTR	1.09	70.7	E
	Intersection		59.5	E	Intersection		61.7	E		Intersection		54.4	D
Bleecker Street and Mercer Street													
Eastbound	TR	0.78	32.2	C	TR	1.00	66.0	E	+	TR	0.85	37.6	D
Southbound	LT	0.31	17.4	B	LT	0.35	18.1	B		LT	0.35	18.1	B
	Intersection		27.4	C	Intersection		51.1	D		Intersection		31.5	C
Weekday Midday Peak Hour													
West Houston Street and LaGuardia Place/West Broadway													
Eastbound	LTR	0.78	32.2	C	LTR	0.83	36.0	D		LTR	0.89	43.0	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	0.64	15.3	B		TR	0.67	17.0	B
Northbound	LT	0.78	41.0	D	LT	0.79	42.2	D		LT	0.73	35.9	D
	R	0.82	49.1	D	R	0.91	63.9	E	+	R	0.84	50.8	D
Southbound	LT	0.69	39.8	D	LT	0.73	43.1	D		LT	0.65	35.2	D
	R	0.19	22.9	C	R	0.18	22.8	C		R	0.17	21.2	C
	Intersection		27.4	C	Intersection		30.0	C		Intersection		30.1	C
Bleecker Street and Mercer Street													
Eastbound	TR	1.00	66.4	E	TR	1.15	114.4	F	+	L	0.98	58.5	E
Southbound	LT	0.41	18.9	B	LT	0.48	20.1	C		T	0.48	20.1	C
	Intersection		49.9	D	Intersection		80.1	F		Intersection		44.5	D
East Houston Street and Lafayette Street													
Eastbound	L	1.05	95.1	F	L	1.06	99.0	F	+	L	0.99	78.5	E
	T	0.42	13.7	B	T	0.43	13.8	B		T	0.43	13.8	B
Westbound	TR	0.66	25.0	C	TR	0.67	25.2	C		TR	0.69	26.3	C
Northbound	LT	0.66	27.6	C	LT	0.68	28.2	C		LT	0.68	28.2	C
	R	0.38	24.4	C	R	0.38	24.4	C		R	0.38	24.4	C
	Intersection		27.0	C	Intersection		27.4	C		Intersection		26.4	C
Weekday PM Peak Hour													
West Houston Street and Sixth Avenue													
Westbound	T	0.67	25.0	C	T	0.69	25.5	C		T	0.67	24.3	C
	R	0.96	52.7	D	R	0.98	58.2	E	+	R	0.95	50.8	D
Northbound	LTR	0.93	31.7	C	LTR	0.94	32.3	C		LTR	0.96	37.3	D
	Intersection		34.0	C	Intersection		35.5	D		Intersection		36.5	D

Bleecker Street and Mercer Street													
Eastbound	TR	1.08	89.5	F	TR	1.24	150.1	F	+	TR	1.06	79.6	E
Southbound	LT	0.56	21.7	C	LT	0.63	23.6	C		LT	0.63	23.6	C
	Intersection		62.1	E	Intersection		97.7	F		Intersection		56.4	E
West Houston Street and Mercer Street													
Eastbound	TR	0.46	15.3	B	TR	0.46	15.4	B		TR	0.47	16.1	B
Westbound	L	0.33	19.0	B	L	0.38	20.5	C		L	0.39	21.9	C
	T	0.76	20.8	C	T	0.76	21.0	C		T	0.78	22.2	C
Southbound	LTR	0.73	31.2	C	LTR	0.92	47.9	D	+	LTR	0.89	43.2	D
	Intersection		20.6	C	Intersection		23.8	C		Intersection		23.8	C

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

Bleecker Street and Mercer Street. The significant adverse impact at the eastbound approach at this intersection during all three peak hours could be fully mitigated by widening the eastbound Bleecker Street moving lane from 11 feet to effectively 16 feet. This widening can be achieved by eliminating 4 to 5 alternate side parking spaces on the south side of Bleecker Street on the eastbound approach, installing a No Standing Anytime sign at approximately 100 from the intersection, and painting transitional striping on the pavement.

West Houston Street and Mercer Street. The significant adverse impact at the southbound approach at this intersection during the PM peak hour could be fully mitigated by shifting 1 second of green time from the eastbound/westbound phase to the southbound phase.

East Houston Street and Lafayette Street. The significant adverse impact at the exclusive eastbound left-turn at this intersection during the midday peak hour could be fully mitigated by shifting 1 second of green time from the eastbound/westbound phase to the exclusive eastbound phase.

2031 Phase 2

Under the Phase 2—2031 Full Build-out Scenario, there would be the potential for significant adverse traffic impacts at: three intersections during the weekday AM peak hour; six intersections during the weekday midday peak hour; and seven intersections during the weekday PM peak hour. **Table S-7** summarizes the recommended mitigation measures that are subject to review and approval by NYCDOT.

Table S-7
2031 Recommended Mitigation Measures

Intersection	AM	Midday	PM
West Houston Street and Sixth Avenue	Restripe the second moving lane from the median on the westbound approach from 14-feet to 13-feet. Restripe the third moving lane from the median on the westbound from 11-feet to 12-feet. Shift 1 second of green time from the WB phase to the NB phase.	Restripe the second moving lane from the median on the westbound approach from 14-feet to 13-feet. Restripe the third moving lane from the median on the westbound from 11-feet to 12-feet.	Restripe the second moving lane from the median on the westbound approach from 14-feet to 13-feet. Restripe the third moving lane from the median on the westbound from 11-feet to 12-feet.
West 4th Street and LaGuardia Place	No significant adverse impact	No significant adverse impact	Shift 1 second of green time from the EB phase to the NB phase.
West 3rd Street and LaGuardia Place	No significant adverse impact	Shift 1 second of green time from the WB phase to the NB/SB phase.	No significant adverse impact
Bleecker Street and LaGuardia Place	Shift 1 second of green time from the NB/SB phase to the EB phase.	Shift 1 second of green time from the NB/SB phase to the EB phase.	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. Shift 1 second of green time from the exclusive WB phase to the NB/SB phase.	Shift 2 seconds of green time from the EB/WB phase to the NB/SB phase.
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	Eliminate 4-5 alternate side parking spaces on the south side of Bleecker Street on the EB	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.	approach; install No Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement.	Standing Anytime sign approximately 100 feet from the intersection; paint transitional striping on the pavement. Shift 1 second 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 2 seconds of green time from the EB/WB phase to the SB phase.
West 4th Street and Broadway	No significant adverse impact	Shift 1 second of green time from the EB phase to the SB phase.	Shift 1 second of green time from the EB phase to the SB phase.
West 3rd Street and Broadway	No significant adverse impact	No significant adverse impact	Shift 1 second of green time from the SB phase to the WB phase.
Notes: EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound			

With these mitigation measures in place, all of the significant adverse traffic impacts described above would be fully mitigated, operating at the same or better service conditions as the No Build condition. **Table S-8** compares the LOS conditions for the 2031 No Build, Build, and Build with Mitigation conditions for all three peak hours. Provided below is a discussion of each intersection with a significant adverse traffic impact and its required mitigation.

West Houston Street and Sixth Avenue. The significant adverse impact at the northbound approach at this intersection during the AM peak hour could be fully mitigated by shifting 1 second of green time from the westbound phase to the northbound phase and by restriping the second moving lane from the median on the westbound approach from 14-feet to 13-feet and by restriping the third moving lane from the median on the westbound approach from 11-feet to 12-feet. The significant adverse impact at the westbound right-turn at this intersection during the midday and PM peak hours could be fully mitigated by restriping the second moving lane from the median on the westbound approach from 14-feet to 13-feet and by restriping the third moving lane from the median on the westbound approach from 11-feet to 12-feet.

West 4th Street and LaGuardia Place. The significant adverse impact at the northbound approach at this intersection during the PM peak hour could be fully mitigated by shifting 1 second of green time from the eastbound phase to the northbound phase.

West 3rd Street and LaGuardia Place. The significant adverse impact at the northbound approach at this intersection during the midday peak hour could be fully mitigated by shifting 1 second of green time from the westbound phase to the northbound/southbound phase.

Bleecker Street and LaGuardia Place. The significant adverse impact at the eastbound approach at this intersection during the AM and midday peak hours could be fully mitigated by shifting 1 second of green time from the northbound/southbound phase to the eastbound phase.

West Houston Street and LaGuardia Place/West Broadway. The significant adverse impacts at the northbound right-turn and southbound left-turn/through at this intersection during the midday peak hour could be fully mitigated by shifting 1 second of green time from the eastbound/westbound phase and from the exclusive westbound phase, respectively, to the northbound/southbound phase. The significant adverse impacts at the northbound left-turn/through and southbound left-turn/through at this intersection during the PM peak hour could be fully mitigated by shifting 2 seconds of green time from the eastbound/westbound phase to the northbound/southbound phase.

Bleecker Street and Mercer Street. The significant adverse impact at the eastbound approach at this intersection during all three peak hours could be fully mitigated by widening the eastbound Bleecker Street moving lane from 11 feet to effectively 16 feet. This widening can be achieved by eliminating 4 to 5 alternate side parking spaces on the south side of Bleecker Street on the eastbound approach, installing a No Standing Anytime sign at approximately 100 from the intersection, and painting transitional striping on the pavement. In

addition, a shift of 1 second of green time from the southbound phase to the eastbound phase would be required during the PM peak hour.

Table S-8
2031 No Build, Build, and Build with Mitigation Conditions
Traffic 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													
West Houston Street and Sixth Avenue													
Westbound	T	0.70	25.9	C	T	0.73	26.6	C		T	0.76	28.5	C
	R	0.74	29.0	C	R	0.78	31.2	C		R	0.79	32.6	C
Northbound	LTR	1.12	85.9	F	LTR	1.14	91.5	F	+	LTR	1.11	77.9	E
	Intersection		63.0	E	Intersection		66.6	E		Intersection		59.0	E
Bleecker Street and LaGuardia Place													
Eastbound	LTR	0.85	37.2	D	LTR	0.92	46.3	D	+	LTR	0.89	41.9	D
Northbound	TR	0.55	22.8	C	TR	0.73	31.2	C		TR	0.75	33.4	C
Southbound	LT	0.30	17.3	B	LT	0.37	18.5	B		LT	0.38	19.3	B
	Intersection		29.3	C	Intersection		36.1	D		Intersection		34.8	C
Bleecker Street and Mercer Street													
Eastbound	TR	0.79	33.0	C	TR	1.03	74.7	E	+	TR	0.88	40.8	D
Southbound	LT	0.31	17.5	B	LT	0.36	18.3	B		LT	0.36	18.3	B
	Intersection		28.0	C	Intersection		56.7	E		Intersection		33.6	C
Weekday Midday Peak Hour													
West Houston Street and Sixth Avenue													
Westbound	T	0.70	25.8	C	T	0.72	26.5	C		T	0.73	26.9	C
	R	0.93	47.7	D	R	0.96	52.9	D	+	R	0.94	49.2	D
Northbound	LTR	0.98	39.1	D	LTR	0.99	42.1	D		LTR	0.99	42.1	D
	Intersection		37.3	D	Intersection		40.0	D		Intersection		39.5	D
West 3rd Street and LaGuardia Place													
Westbound	LTR	0.36	17.4	B	LTR	0.43	18.6	B		LTR	0.44	19.4	B
Northbound	LT	0.87	42.7	D	LT	0.90	47.9	D	+	LT	0.88	43.4	D
Southbound	TR	0.13	15.1	B	TR	0.14	15.2	B		TR	0.14	14.6	B
	Intersection		28.2	C	Intersection		30.9	C		Intersection		29.3	C
Bleecker Street and LaGuardia Place													
Eastbound	LTR	0.98	59.0	E	LTR	1.00	64.7	E	+	LTR	0.97	56.8	E
Northbound	TR	0.67	26.8	C	TR	0.70	27.5	C		TR	0.72	29.2	C
Southbound	LT	0.34	18.0	B	LT	0.35	18.1	B		LT	0.36	18.9	B
	Intersection		41.1	D	Intersection		43.7	D		Intersection		40.6	D
West Houston Street and LaGuardia Place/West Broadway													
Eastbound	LTR	0.79	33.0	C	LTR	0.86	37.8	D		LTR	0.88	41.3	D
Westbound	L	0.54	47.1	D	L	0.54	47.1	D		L	0.58	51.1	D
	TR	0.60	14.6	B	TR	0.65	15.4	B		TR	0.67	17.1	B
Northbound	LT	0.80	43.0	D	LT	0.82	44.9	D		LT	0.75	37.0	D
	R	0.83	50.3	D	R	0.92	65.9	E	+	R	0.86	53.0	D
Southbound	LT	0.71	41.5	D	LT	0.77	46.8	D	+	LT	0.68	37.3	D
	R	0.19	22.9	C	R	0.18	22.9	C		R	0.17	21.3	C
	Intersection		28.0	C	Intersection		31.2	C		Intersection		30.3	C
Bleecker Street and Mercer Street													
Eastbound	TR	1.01	69.0	E	TR	1.17	123.6	F	+	TR	1.00	63.8	E
Southbound	LT	0.41	18.9	B	LT	0.48	20.3	C		LT	0.48	20.3	C
	Intersection		51.6	D	Intersection		85.8	F		Intersection		47.9	D
West 4th Street and Broadway													
Eastbound	TR	0.48	27.9	C	TR	0.49	28.1	C		TR	0.50	29.3	C
Southbound	LT	1.01	47.3	D	LT	1.04	54.5	D	+	LT	1.02	47.9	D
	Intersection		44.7	D	Intersection		50.9	D		Intersection		45.4	D

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

Table S-8 (Cont'd)
2031 No Build, Build, and Build with Mitigation Conditions
Traffic Level of Service Analysis

Intersection	2031 No Build				2031 Build					2031 Build with Mitigation			
	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 PM Peak Hour													
West Houston Street and Sixth Avenue													
Westbound	T	0.68	25.2	C	T	0.70	25.8	C		T	0.71	26.2	C
	R	0.97	55.6	E	R	1.00	62.8	E	+	R	0.98	58.3	E
Northbound	LTR	0.94	32.9	C	LTR	0.95	34.1	C		LTR	0.95	34.1	C
	Intersection		35.3	D	Intersection		37.5	D		Intersection		36.7	D
West 4th Street and LaGuardia Place													
Eastbound	TR	0.56	26.0	C	TR	0.59	27.1	C		TR	0.61	28.5	C
Northbound	R	0.67	28.1	C	R	0.89	50.6	D	+	T	0.86	44.2	D
	Intersection		27.0	C	Intersection		38.6	D		Intersection		36.2	D
West Houston Street and LaGuardia Place/West Broadway													
Eastbound	LTR	0.63	26.8	C	LTR	0.67	26.6	C		LTR	0.71	30.7	C
Westbound	L	0.40	41.8	D	L	0.40	41.8	D		L	0.40	41.8	D
	TR	0.64	15.2	B	TR	0.68	15.7	B		TR	0.71	17.7	B
Northbound	LT	0.84	47.5	D	LT	0.88	53.8	D	+	LT	0.80	41.7	D
	R	0.65	36.5	D	R	0.67	38.2	D		R	0.63	33.6	C
Southbound	LT	0.85	56.3	E	LT	0.96	78.0	E	+	LT	0.86	56.2	E
	R	0.28	24.6	C	R	0.32	25.4	C		R	0.30	23.5	C
	Intersection		26.4	C	Intersection		29.4	C		Intersection		27.6	C
Bleecker Street and Mercer Street													
Eastbound	TR	1.10	94.2	F	TR	1.30	177.1	F	+	TR	1.08	86.8	F
Southbound	LT	0.56	21.9	C	LT	0.64	24.0	C		LT	0.66	25.3	C
	Intersection		64.9	E	Intersection		113.0	F		Intersection		61.1	E
West Houston Street and Mercer Street													
Eastbound	TR	0.46	15.4	B	TR	0.48	15.6	B		TR	0.50	17.0	B
Westbound	L	0.34	19.4	B	L	0.40	21.7	C		L	0.43	24.7	C
	T	0.77	21.1	C	T	0.78	21.3	C		T	0.81	23.9	C
Southbound	LTR	0.75	31.9	C	LTR	0.93	50.8	D	+	LTR	0.88	41.2	D
	Intersection		20.9	C	Intersection		24.5	C		Intersection		24.7	C
West 4th Street and Broadway													
Eastbound	TR	0.57	30.1	C	TR	0.61	31.3	C		TR	0.64	32.9	C
Southbound	LT	0.57	39.7	D	LT	1.01	45.5	D	+	LT	0.99	39.9	D
	Intersection		38.1	D	Intersection		43.0	D		Intersection		38.6	D
West 3rd Street and Broadway													
Westbound	L	0.53	31.5	C	L	0.54	32.1	C		L	0.52	30.5	C
	T	0.80	41.6	D	T	0.86	46.8	D	+	T	0.83	42.8	D
Southbound	T	0.86	23.0	C	T	0.86	23.3	C		T	0.88	25.2	C
	R	0.49	18.3	B	R	0.59	22.5	C		R	0.61	24.5	C
	Intersection		26.9	C	Intersection		28.6	C		Intersection		29.0	C

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

West Houston Street and Mercer Street. The significant adverse impact at the southbound approach at this intersection during the PM peak hour could be fully mitigated by shifting 2 seconds of green time from the eastbound/westbound phase to the southbound phase.

West 4th Street and Broadway. The significant adverse impact at the southbound approach at this intersection during the midday and PM peak hours could be fully mitigated by shifting 1 second of green time from the eastbound phase to the southbound phase.

West 3rd Street and Broadway. The significant adverse impact at the westbound through at this intersection during the PM peak hour could be fully mitigated by the shifting 1 second of green time from the southbound phase to the westbound phase.

Transit

The Proposed Actions under RWCDS 3 would not result in any significant adverse transit impacts by 2021 Phase 1 completion, but would result in significant adverse impacts to stairways at the Broadway-Lafayette and the West 4th Street subway stations (stairways S9 and S2A/B, respectively) upon the proposed project's full build-out in 2031. If NYU proceeds with the development of RWCDS 1, the same impacts at these two stations would occur in both 2021 and 2031. Potential measures to mitigate these significant adverse impacts are described below.

Mitigation that would improve conditions at these stations includes widenings of the impacted stairways and/or providing additional station access locations, which are long-term capital improvements. The feasibility of these mitigation measures is yet to be determined and would be subject to future evaluations by MTA/NYCT.

Subway Station Operations

Under RWCDS 3 during the AM peak period, the stairway on the northeast corner of the Broadway and West Houston Street intersection at the Broadway-Lafayette Station (S9) would decline from LOS C (v/c = 0.71) under the 2031 No Build condition to LOS D (v/c = 1.01) under the 2031 Build condition. During the PM peak period, the same stairway would decline from LOS D (v/c = 1.11) under the 2031 No Build condition to LOS E (v/c = 1.48) under the 2031 Build condition. Also, during the PM peak period, the stairway at the West 4th Street station (S2A/B), which is located on the northeast corner of the Sixth Avenue and West 3rd Street intersection, would decline from LOS C (v/c = 0.96) under the 2031 No Build condition to LOS D (v/c = 1.11) under the 2031 Build condition. These declines constitute significant adverse subway station impacts that require an evaluation of potential mitigation measures. According to the *CEQR Technical Manual*, stairway widths are considered in terms of multiples of 30-inch pedestrian lanes, such that all stairway widenings should result in a total width that would be a multiple of 30 inches. As shown in **Table S-9**, the two significantly impacted stairways would have to be widened to 90 inches (7.5 feet) from their current widths of 3.8 feet (Broadway-Lafayette Station) and 6.6 feet (West 4th Street Station), respectively.

With RWCDS 1, the same two stairways would experience significant adverse impacts. However, these impacts would occur in both 2021 and 2031. In 2021 during the PM peak period, both the S9 stairway at the Broadway-Lafayette Station and the S2A/B stairway at the West 4th Street Station would deteriorate to LOS D with v/c ratios of 1.28 and 1.02, respectively. In 2031, the S9 stairway at the Broadway-Lafayette Station would deteriorate to LOS D (v/c = 1.09) during the AM peak period and to LOS E (v/c = 1.53) during the PM peak period. At the same time, the S2A/B stairway at the West 4th Street Station would deteriorate to LOS D (v/c = 1.14) during the PM peak period. As shown in **Table S-10**, these significant adverse impacts could be mitigated with the same stairway widenings described above.

The engineering analysis to determine the feasibility of implementing and any implementation of the above-described mitigation measures would be coordinated with the MTA NYCT to allow enough time for design and specification approvals, and for their construction to address the increased demand that would result from development of the proposed project. For the Broadway-Lafayette Station, the MTA NYCT has also identified a street-level connection on the west side of Broadway between West Houston Street and Bleecker Street. This mitigation would involve reopening slabbed stair by the Cable Building (northwest corner of Broadway and West Houston Street), restoring a closed control area, and reconnecting platform and street-level stairways. The reopening of this station access would help to relieve the high usage projected for the S9 stairway on the northeast corner of Broadway and West Houston Street. Between the draft and final publication of this EIS, additional feasibility evaluation of these mitigation measures will be undertaken. If the stairway widenings or other alternate mitigation measures are determined to be infeasible, the projected significant adverse stairway

impacts would remain unmitigated.

Table S-9
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 3								
2031 Weekday AM Peak 15-Minutes								
Broadway-Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	8.5	7.5	40	455	0.95	0.90	0.51	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	435	310	0.95	0.90	0.75	C
West 4th Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	8.5	7.5	496	464	0.95	0.90	0.97	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	369	275	0.95	0.90	0.65	B
West 4th Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	8.5	7.5	450	437	0.95	0.90	0.90	C
2031 Weekday AM Peak 15-Minutes								
Broadway-Lafayette Station (B,D,F,M Lines) – Broadway and Houston Street								
NE (S9)	8.5	7.5	33	499	0.95	0.90	0.55	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	459	311	0.95	0.90	0.78	C
West 4th Street Station (A,B,C,D,E,F,M Lines) – Sixth Avenue and West 3rd Street								
NE (S2A/B)	8.5	7.5	519	469	0.95	0.90	1.00	D

Notes:
Capacities were calculated based on rates presented in the 2010 *CEQR Technical Manual*.
Surging factors are only applied to the exiting pedestrian volume (2010 *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 S-10
2021 & 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 1 – 2021 (Weekday Midday Peak 15-Minutes)							
University Place and Waverly Place – SE corner	6-inch sidewalk extension (corner bulb-out)	12.5	E	11.2	E	12.3	E
Phase 2 – 2031 (Weekday Midday Peak 15-Minutes)							
University Place and Waverly Place – SE corner	6-inch sidewalk extension (corner bulb-out)	12.2	E	10.7	E	11.8	E
Washington Square East and West 4th Street – West Crosswalk	Widening by 2.5 feet to 16 feet	24.4	D	17.0	D	20.8	D
Phase 2 – 2031 (Weekday PM Peak 15-Minutes)							
Washington Square East and West 4th Street – West Crosswalk	Widening by 2.5 feet to 16 feet	24.4	D	17.0	D	20.3	D

Note: SFP = square feet per pedestrian.

Between the DEIS and FEIS, additional station elements at the Broadway-Lafayette and West 4th Street Stations, as well as the Prince Street Station will be analyzed. Any significant adverse impacts that may be identified for these other station elements will be disclosed in the FEIS. If feasible mitigation measures cannot be determined for these impacts, they would also be disclosed as unmitigated significant adverse impacts.

Pedestrians

The Proposed Actions would result in significant adverse pedestrian impacts at one corner location and one crosswalk location: 1) southeast corner of University Place and Waverly place (2021 Phase 1 and 2031 Phase 2); and 2) west crosswalk of Washington Square East and West 4th Street (2031 Phase 2 only). Potential measures to mitigate these significant adverse impacts are described below, and the mitigated conditions are summarized in **Table S-10**.

2021 Phase 1

University Place and Waverly Place. The southeast corner at this intersection would deteriorate from LOS E (12.5 SFP) to LOS E (11.2 SFP) during the midday peak period. This significant adverse pedestrian impact could be fully mitigated with a 2-inch corner "bulb-out" or sidewalk extension on either Waverly Place or University Place. However, since a more severe impact was identified at this location for the proposed project's 2031 full build-out, the mitigation measure identified below for the 2031 Phase 2 impact should be implemented at this location.

2031 Phase 2

University Place and Waverly Place. The southeast corner at this intersection would deteriorate from LOS E (12.2 SFP) to LOS E (10.7 SFP) during the midday peak period. This significant adverse pedestrian impact could be fully mitigated with a 6-inch corner "bulb-out" or sidewalk extension on either Waverly Place or University Place.

Washington Square East and West 4th Street. The west crosswalk at this intersection would deteriorate from LOS C (24.4 SFP) to LOS D (17.0 SFP) during the midday peak period. It would deteriorate from LOS D (23.6 SFP) to LOS D (16.6 SFP) during the PM peak period. Restriping the width of this crosswalk from its

existing width of 13.5 feet to 16 feet would be required to fully mitigate the projected significant adverse crosswalk impacts.

Effects of Traffic Mitigations on Pedestrian Operations

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 MTA/NYCT, the above recommended mitigation measures would be implemented to mitigate the projected significant adverse transportation impacts at the completion of the project's Phase 1 and Phase 2 build-outs, in 2021 and 2031, respectively. Because the development of the proposed project would 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 Mercer Building and center below-grade space in Phase 2 (currently anticipated for end of 2026); and
3) Completion of the Mercer Building above-grade space in Phase 2 (currently anticipated for end of 2028).

Trip projections for these interim conditions were prepared in the same manner as those described for the Phase 1 and Phase 2 Build conditions. Since these interim conditions represent partial build-out of the 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 completions were evaluated for this interim impact assessment.

For interim condition 1) above, the analysis of Phase 1 impacted locations found that for traffic, the five intersections identified to be significantly impacted under RWCDS 3 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 two stairways (S9 at the Broadway-Lafayette Station and S2A/B at the West 4th Street Station) identified to be significantly impacted during the 2021 PM peak period under 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. With regard to pedestrians, the 2021 significant adverse impact identified for the southeast corner of University Place and Waverly Place is expected to be also impacted with the completion of the Zipper Building and the required mitigation measure would be the same as that described for the 2021 Build condition. 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 interim condition 2) above, the analysis of Phase 2 impacted locations found that for traffic, the nine intersections identified to be significantly impacted under RWCDS 3 would likewise be significantly impacted during one or more analysis peak hours with the completion of the Mercer Building and center below-grade space except for the intersections of West 3rd Street at LaGuardia Place and West 3rd Street at Broadway. 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 two stairways (S9 at the Broadway-Lafayette

Station and S2A/B at the West 4th Street Station) identified to be significantly impacted during the 2031 PM peak period under both RWCDS 1 and RWCDS 3 would likewise be significantly impacted with the completion of the Mercer 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. With regard to pedestrians, the 2031 significant adverse impacts identified for the southeast corner of University Place and Waverly Place and the west crosswalk of Washington Square East and West 4th Street are expected to be also impacted with the completion of the Mercer 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 two intersections (the intersections of West 3rd Street at LaGuardia Place and West 3rd Street at Broadway), would need to be advanced upon the completion and occupancy of the Mercer Building and center below-grade space.

For interim condition 3) above, the analysis of Phase 2 impacted locations found that for traffic, in addition to the intersections identified as impacted under interim condition 2, at which required mitigation measures should already be in place, the intersection of West 3rd Street at LaGuardia Place would also likewise be significantly impacted with the completion of the Mercer Building above-grade space and require the same mitigation identified for the 2031 Build condition. Hence, the only mitigation for the project's full build-out in 2031 that would not be required by this time is the signal retiming recommended for the West 3rd Street and Broadway intersection. For transit and pedestrians, since all projected impacts would already exist prior to the completion of the Mercer Building above-grade space, the implementation of the required measures to mitigate these impacts should already be in place.

Weekend Condition Assessment

The development program planned for the NYU Core project contains primarily university-oriented uses that would generate most of their trip-making during weekday peak periods. However, some of the project's supporting uses, such as the local retail, hotel, and conference space, albeit expected to primarily serve the university population and its visitors, would together with the university academic and housing uses generate a measurable amount of vehicular and pedestrian trips during weekend peak periods. To determine the potential for transportation-related impacts during non-weekday peak hours, a semi-quantitative/qualitative assessment of a representative weekend peak period (Saturday afternoon) for the Phase 2–2031 Full Build-Out scenario was prepared. This assessment, which included estimates of project-generated Saturday peak hour trips and comparisons of weekday and Saturday background conditions, concluded that the potential transportation-related impacts during the Saturday afternoon peak hour would be within the envelope of impacts identified for the weekday peak hours.

Traffic. The findings made for the weekday peak hours represent the worst-case traffic conditions and provided the disclosure on the extent of potential significant adverse traffic impacts at area intersections. Because the weekday peaks reflect the reasonable worst-case traffic conditions, any impacts that may occur during the Saturday peak hours would be of lesser magnitude and would be addressed with the same or lesser mitigation measures identified for the weekday peak hours.

Pedestrian. The findings made for the weekday peak hours represent the worst-case pedestrian conditions and provided the disclosure on the extent of potential significant adverse pedestrian impacts at area sidewalks, corner reservoirs, and crosswalks. In addition, since the mitigation measures discussed above would involve only sidewalk extension and crosswalk restriping, they would be applicable across weekday and weekend time periods. Because the weekday peaks reflect the reasonable worst-case transportation conditions, any impacts that may occur during the Saturday peak hours would be of lesser magnitude and would be addressed with the same or lesser mitigation measures identified for the weekday peak hours.

Construction Impacts

Traffic

A detailed traffic analysis conducted for the area intersections most affected by estimated construction-related traffic concluded that Phase 1 construction of the proposed project would not result in any significant adverse traffic impacts. During Phase 2 construction, peak activities generated by construction workers and truck deliveries would be substantially lower in comparison to those during Phase 1 construction. However, together with new trips resulting from the completion of Phase 1 components of the proposed project, there would still be a potential for significant adverse traffic impacts during Phase 2 construction. It is expected that mitigation measures would be imposed at three intersections to mitigate the 2021 operational traffic impacts identified in the DEIS. While the slightly higher traffic levels during peak construction in Phase 2 could result in additional construction-related impacts beyond the operational impacts identified for the 2021 Phase 1 Build condition, the required mitigation measures are expected to be part of those presented for the 2031 full build-out of the proposed project. The additional mitigation would encompass only signal timing adjustments that would be required to mitigate the 2031 Build condition traffic impacts. These adjustments could be implemented early at the discretion of NYCDOT to address actual conditions experienced at that time.

Transit

After the completion of Phase 1 components of the proposed project, the area's subway stations would incur increases in passengers generated by the completed uses. Subway impacts are expected to occur in 2021 with the development of RWCDS 1. Hence, the combination of the Phase 2 construction worker subway trips and those generated by the completed Phase 1 project during the commuter peak hours would result in comparable significant adverse impacts to the subway station elements described for the proposed project (i.e., S9 stairway at the Broadway-Lafayette Station and S2A/B stairway at the West 4th Street Station), requiring the same mitigation measures.

Pedestrians

After the completion of Phase 1 components of the proposed project, the combination of the Phase 2 construction worker pedestrian trips and those generated by the completed Phase 1 project during the commuter peak hours would result in a comparable significant adverse impact at the southeast corner of University Place and Waverly Place, requiring the same mitigation measure described for the project's 2021 Phase 1 build-out.

Noise

NYU has committed to a proactive approach to minimize noise during construction activities. This approach includes both source and path controls that exceed measures typical of standard construction practices. For example, in terms of source controls, as early in the construction period as practicable electrical-powered equipment would be selected for certain noisy equipment, such as concrete vibrators, crabs for panels, hoists, and man lifts (i.e., early electrification). Path noise control measures (i.e., portable noise barriers, panels, enclosures, and acoustical tents, where feasible) were used for certain dominant noise equipment, i.e., concrete trowel, crane, drill rig, and generator.

Even with such measures, the results of detailed construction analyses reported in "Construction Impacts," indicate that significant adverse noise impacts are predicted to occur for two or more consecutive years at forty-seven (47) of the seventy-three (73) analyzed receptor sites. Significant noise impacts are predicted to occur at the following residential locations:

- Washington Square Village 1 & 2 - at various locations on the south façades of the residential buildings (Receptors from A1 through A8), at various locations on the west façade of the residential building (Receptor A9), and at various locations on the east façade of the residential building (Receptor A15);

- Washington Square Village 3 & 4 - at various locations on the north façades of the residential buildings (Receptors from B1 through B8), at various locations on the west façade of the residential building (Receptor B9), at various locations on the south façades of the residential buildings (Receptors from B10 through B17), and at various locations on the east façade of the residential building (Receptor B18);
- Silver Tower II - at various locations on the four facades of the residential building (Receptors from C1 through C4);
- Silver Tower I - at various locations on the east façade of the residential building (Receptor D2), and at various locations on the south façade of the residential building (Receptor D3);
- 505 LaGuardia Place - at various locations on the west façade of the residential building (Receptor E3), and at various locations on the north façade of the residential building (Receptor E4);
- At top floor locations on the north façades of the residential buildings located on West Houston Street between Greene Street and Mercer Street (Receptor F);
- At various locations on the east façades of the sensitive receptor buildings located on LaGuardia Place between West 3rd Street and West Houston Street (Receptors I, J, and K);
- At top floor locations on the east façades of the sensitive receptor buildings located on LaGuardia Place between Washington Square South and West 3rd Street (Receptor Y); and
- At various locations on the west façades of the sensitive receptor buildings located on Mercer Street between Washington Square South and West Houston Street (Receptors O, P, Q, and BB); and
- At top floor locations on the west façades of the sensitive receptor buildings located on Mercer Street between West Houston Street and Prince Street (Receptors S and EE).

Significant construction-related noise impacts would also be expected to occur at sensitive locations/buildings proximate to the buildings identified above.

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. Buildings that do not have both double-glazed windows and alternative ventilation would provide less building attenuation. For example, interior noise levels for a building without alternative ventilation, during warm weather with an open window would be approximately 10-15 dBA less than exterior noise levels.

Measurements were made at various locations in the NYU-owned Washington Square Village and Silver Towers buildings to determine building attenuation values. The majority of those buildings' windows are single-pane. Occasionally, windows in apartments undergoing renovation will be replaced, but throughout the buildings overall, the windows are original to the buildings and single-pane. Based on the measured window/wall attenuation values, attenuation values for the Washington Square Village building locations tested ranged from 17-24 dBA, and attenuation values for the Silver Tower building locations tested ranged from 19-21 dBA. 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. 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. These steps are expected to increase window/wall attenuation values by up to approximately 5 dBA for the Washington Square Village

buildings and by up to approximately 7 dBA for the the Silver Towers buildings. However, these measures would not be sufficient to result in the minimum 30 dBA window/wall attenuation needed to fully mitigate project impacts. In order to achieve a window/wall attenuation value of that magnitude, in addition to re-caulking the existing windows and installing a storm window, the building HVAC systems would need to be replaced with systems that did not degrade the acoustical performance of the building façade (i.e., central air conditioning). Converting the existing HVAC systems for the Silver Towers and Washington Square Village buildings to central air conditioning is not practicable and potentially not feasible due to structural constraints, space and load requirements and tenant disruption issues.

Between the DEIS and FEIS, NYU will examine whether there are any additional practicable measures that can be utilized at these buildings to mitigate significant adverse noise impacts from construction. Absent the identification and commitment to implement such measures that would provide at least 30 dBA window/wall attenuation, construction activities would result in significant adverse noise impacts that would not be fully mitigated at both the Washington Square Village and Silver Tower buildings during portions of the construction period.

At locations on non-NYU buildings where significant noise impacts are predicted to occur, absent the development of additional measures to mitigate project-related construction noise, 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 building, interior noise levels during much, if not all, of the time when project construction activities are taking place, would be expected to be below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria).

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 already 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 are predicted to significantly increase noise levels, exacerbating these exceedances and resulting 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.

Between the DEIS and FEIS, options will be explored to (1) determine the practicability and feasibility of implementing any additional construction equipment control measures (beyond those already included in this analysis) that could be implemented during construction to reduce the magnitude of or eliminate project impacts; (2) perform detailed analyses for additional time periods to determine whether a more refined analysis would eliminate some of the conservative results obtained by only examining the “worst-case” condition for each year; and (3) examine whether there are any additional practicable measures that can be utilized at these buildings which would mitigate project impacts. The proposed mitigation measures would partially mitigate significant project impacts (and significantly reduce construction-related noise levels) at some locations. However, absent the implementation of additional mitigation measures and/or refined analyses which result in lower noise levels, the proposed project would have significant adverse noise impacts that are not fully mitigated at the locations specified above.

Open Space

During construction of the proposed Bleecker Building, under the LaGuardia Place Staging Option (construction staging only along the LaGuardia Place frontage) most, if not all of the LaGuardia Corner Gardens would not be available for the approximately 39-month construction period 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.

Under the Bleecker Street Staging Option (construction staging only along the Bleecker Street frontage), LaGuardia Corner Gardens would remain accessible throughout Bleecker Building construction. However, for an approximately 27-month period during construction 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 construction shed would reduce the overall utility of the garden, and would block most, if not all direct sunlight for an approximately 27-month period, thereby affecting the viability of plantings, and therefore would result in a significant adverse impact on this resource.

Under both construction staging options, the significant adverse impacts described above would be temporary in nature because upon completion of the Bleecker Building, the community garden could be restored. However, upon completion of the Bleecker Building the LaGuardia Corner Gardens would be significantly impacted by the building's shadows. Therefore, between the DEIS and FEIS, options will be explored to relocate the LaGuardia Corner Gardens, either further south on the South Block or elsewhere within a ¼-mile area of the project site. The feasibility of relocation is uncertain because the LaGuardia Corner Gardens and other potential relocation sites—including less shadowed locations further south along the LaGuardia Place Strip—are not owned or controlled by the project sponsor.

If acceptable relocation space cannot be identified between the DEIS and FEIS, other options will be further explored to refine construction staging and logistics for the Bleecker Building construction site with the goal of minimizing the extent and duration of disturbance of the LaGuardia Corner Gardens during construction activities. For example, the possibility of staging construction from either the south or east of the Bleecker Building site will be further explored. However, this would require occupying property that the applicant owns but does not control due to the existence of a long-term lease and, therefore, the applicant would need to obtain permission from that lessee. Absent the identification of acceptable relocation space, the temporary significant adverse construction impact could only be partially mitigated by the provision of temporary space and/or the refining of construction staging and logistics. Furthermore, this partial mitigation would not minimize the significant adverse shadows impact on the LaGuardia Corner Gardens that is projected to occur once the Bleecker Building is operational.

Noise levels at on-site open space locations adjacent to where construction activities are taking place would increase significantly above the 3-5 dBA *CEQR Technical Manual* impact criteria. Due to the close proximity of on-site open spaces to construction activities, construction of the proposed project would result in significant adverse noise impacts on open spaces.

Noise levels at publicly accessible and private open space locations on the project site (e.g., Mercer Playground, Washington Square Village Elevated Garden, Silver Tower Oak Grove) are currently above the 55 dBA $L_{10(1)}$ recommended in the *CEQR Technical Manual* noise level for outdoor areas. Proposed construction activities 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 during certain construction activities on the project site. Although the 55 dBA $L_{10(1)}$ guideline is a worthwhile goal for outdoor areas requiring serenity and quiet, this relatively low noise level is typically not achieved in parks and open space areas in New York City. Construction activities would not significantly increase $L_{eq(1)}$ noise levels for entire 19-year construction period on the project site. For example, at the open space area where the Washington Square Village Elevated Garden is currently located and where the proposed project's Public Lawn, Philosophy Garden, and Washington Square Village Play Garden would be located, noise levels would increase by more than 10 dBA for several years. 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 would result in noise levels in open space locations that would result in a significant adverse noise impact.

Between the DEIS and FEIS, options will be explored to (1) determine the practicability and feasibility of implementing any additional construction equipment control measures (beyond those already included in this analysis) that could be implemented during construction to reduce the magnitude of or eliminate project impacts at the open spaces specified above; and (2) perform detailed analyses for additional time periods to determine whether a more refined analysis would eliminate some of the conservative results obtained by only examining the "worst-case" condition for each year. Absent the development of additional mitigation measures and/or refined analyses which result in lower noise levels, the proposed project would result in significant adverse noise impacts that would not be fully mitigated at the locations specified above.

Indirect Effects

During all stages of Phase 1 construction, open space ratios in the non-residential (¼-mile) and residential (½-mile) study areas would improve, or would experience marginal decreases (less than 1 percent) that would not result in significant adverse impacts. However, during Phase 2 of construction—from 2022 to 2026 based on the conceptual construction schedule analyzed—open space ratios for both study areas would decrease (between 0.5 and 2.3 percent decreases as compared to future conditions without the Proposed Actions), with the exception of the passive open space ratio for the combined residential and non-residential populations in the ½-mile residential study area, which would remain virtually unchanged. During this period, as additional existing open spaces are displaced to accommodate future project buildings and project open spaces, the Proposed Actions would temporarily exacerbate future deficiencies in passive and active open spaces both in the residential and non-residential study areas. 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. Given that the study areas could be considered extremely lacking in open space resources, the projected decreases in open space ratios would result in temporary significant adverse impacts to active open space resources in the residential study area (the reductions in open space ratios in the non-residential study area would be less than 1 percent, and therefore would not be a significant adverse impact). The temporary impact on primarily active open space resources in the residential study area would not begin until the proposed Mercer Building has initiated construction, and would be eliminated by the provision of the project open spaces associated with the next stage of construction (i.e., completion of the Mercer Building and central portion of the North Block's proposed open space).

Between the DEIS and FEIS, NYU, in coordination with DPR will investigate the feasibility of full or partial mitigation for this temporary significant adverse impact. If feasible mitigation measures cannot be identified to fully mitigate this temporary impact, it would remain unmitigated.

H. ALTERNATIVES

This section considers the following four alternatives to the Proposed Actions:

- a **No Action Alternative**, which is mandated by CEQR and SEQRA, and is intended to provide the lead and involved agencies with an assessment of the expected environmental impacts of no action on their part;
- a **Lesser Density Alternative**, which considers a project with the same mix of uses as the proposed project, but with the total development reduced to approximately 2 million gross square feet (gsf);
- a **No Hotel Alternative**, which considers development that would replace the hotel use within the Zipper Building with faculty housing;

- a **No Demapping Alternative**, which considers development that would take place without the concurrent demapping actions being requested as part of the Proposed Actions; and
- a **No Unmitigated Significant Adverse Impact Alternative**, which considers development that would not result in any identified significant, unmitigated adverse impacts.

For each alternative, the principal conclusions of the analysis are as follows:

NO ACTION ALTERNATIVE

Consideration of the No Action Alternative is mandated by both CEQR and SEQRA and is intended to provide the lead and involved agencies with an assessment of the expected environmental impacts of no action on their part. The No Action Alternative assumes that the Proposed Actions would not be implemented (i.e., none of the discretionary approvals proposed as part of the proposed project would be adopted), and that the site of the existing Morton Williams supermarket would be redeveloped as-of-right with an approximately 175,000-gsf, nine-story building containing an approximately 25,000-square-foot supermarket and NYU academic space. Under the No Action Alternative, the redevelopment of the Morton Williams site would occur after 2021 rather than by 2021 as expected under the Proposed Actions. Unlike the proposed project, the No Action Alternative would not develop the Proposed Development Area with student and faculty housing, a new athletic center, hotel uses, a public school and parking, and this alternative would introduce substantially less academic space than the Proposed Actions. The No Action Alternative would not serve to bring the existing retail uses in the Commercial Overlay Area into compliance with zoning and develop additional ground floor retail uses in that area. Also under the No Action Alternative, NYU would not own the vault space in the Mercer Plaza Area in which its recently-completed, below-grade, state-of-the-art cogeneration facility is located.

The significant adverse impacts anticipated for the Proposed Actions would not occur with the No Action Alternative with the exception of shadows and construction noise. Specifically, the historic, transportation, and construction-related open space impacts identified for the Proposed Actions would not occur under the No Action Alternative. In terms of shadows, the height and bulk of the as-of-right building projected to be constructed on the Morton Williams Associated Supermarket site under the No Action Alternative would result in substantial shadows being cast on the LaGuardia Corner Gardens, although to a slightly lesser extent and duration than the proposed Bleecker Building. Nonetheless, shadows cast by the as-of-right building would affect the viability of shade intolerant plant species, and therefore the No Action Alternative would result in similar significant adverse impacts to the LaGuardia Corner Gardens as the Proposed Actions. With respect to construction noise, the No Action Alternative would result in the same construction noise impacts associated with construction activities on the Morton Williams site that would occur with the Proposed Actions. However, because of the more limited construction program for this alternative, construction noise impacts due to this alternative would be of shorter duration than those predicted to occur with the Proposed Project.

Construction of this alternative could result in impacts, such as increased traffic, noise and dust that are typical of construction projects throughout the city. There is no assurance that construction of this alternative would include the use of equipment with the extensive emission controls, noise abatement measures, and traffic mitigation measures that would be provided with the Proposed Actions.

The No Action Alternative would not meet the goals and objectives of the Proposed Actions. Although this alternative would result in the development of one academic building on the Morton Williams site, the No Action Alternative would not meet NYU's long-term needs with respect to academic space, housing for faculty and students, campus and neighborhood amenities, and recreational facilities. Specifically, because the No Action Alternative would not develop the Proposed Development Area with the proposed project's four new buildings (the No Action Alternative would only develop one building), NYU would not be able to realize its goal of expanding its NYU Core facilities while minimizing the expansion of the footprint of its campus into the Greenwich Village neighborhood. NYU would not be able to serve the expansion needs of the existing

NYU schools and divisions that are already located at the Washington Square campus and which cannot be as well served by facilities in remote locations in New York. The No Action Alternative would not develop additional ground floor uses in the Commercial Overlay Area to serve the day-to-day needs of the study area population and its visitors and to improve land use conditions by activating underutilized NYU ground-floor uses and introducing new street level activity. In addition, under the No Action Alternative, NYU would not own the vault space in the Mercer Plaza Area in which its cogeneration facility is located.

LESSER DENSITY ALTERNATIVE

The Lesser Density Alternative would allow all of the same uses as the Proposed Actions, but with a lesser amount of total development—approximately 2.0 million gsf, as compared with approximately 2.5 million gsf with the Proposed Actions (a reduction of approximately 18 percent). The reduction in density would be achieved by a reduction in the number of above- and below-grade floors in the proposed buildings within the Proposed Development Area. The Lesser Density Alternative would include the same overall site plan layout, including numbers and locations of buildings, and publicly accessible open space (including type and size) as those currently contemplated for the Proposed Actions. The below-grade parking would be the same type and size as with the proposed project. There would be the same amount of projected retail within the Commercial Overlay Area as with the Proposed Actions, and it would be located within the same six buildings in the Commercial Overlay Area. Similar to the Proposed Actions, there would be no development within the Mercer Plaza Area.

Like the Proposed Actions, the Lesser Density Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; urban design and visual resources; natural resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; noise; public health; and neighborhood character.

In areas where the Proposed Actions are anticipated to result in significant adverse impacts, the Lesser Density Alternative may lessen, but not eliminate those impacts. Like the Proposed Actions, the Lesser Density Alternative would result in significant adverse impacts related to: shadows; historic resources; traffic, transit, and pedestrians; and construction (related to traffic, noise and open space).

The Lesser Density Alternative, like the Proposed Actions, could result in unmitigated significant adverse impacts in the areas of historic resources, transit, and construction-related open space and construction noise. In the areas of construction-related open space and construction noise, these impacts would be of slightly lesser extent and duration, but would nevertheless remain not fully mitigated.

The Lesser Density Alternative would not meet the goals and objectives of the applicant to the extent that the Proposed Actions would in meeting NYU's long-term needs with respect to academic space, housing for faculty and students, campus and neighborhood amenities, and recreational facilities. The Lesser Density Alternative would provide approximately 215,700 gsf less of academic uses, approximately 40 fewer faculty housing units, and 442 fewer student dormitory beds, causing greater development pressures elsewhere in the Washington Square Area. With a smaller development program, the Lesser Density Alternative would be less effective in meeting one of NYU's primary goals of ensuring that the university has the appropriate facilities to maintain its academic excellence well into the future.

NO HOTEL ALTERNATIVE

Based on public scoping comments related to the appropriateness of the proposed hotel use and public concern regarding its potential for significant adverse impacts, an alternative excluding the hotel use has been analyzed. The No Hotel Alternative would develop the Proposed Development Area with the same uses and same floor area as the proposed project with the exception of the proposed hotel on the Zipper Building site, which would

be developed instead with faculty housing. This would result in approximately 135 additional units of faculty housing in the Proposed Development Area as compared to the Proposed Actions' Illustrative program, and approximately 212 additional faculty housing units as compared to the Maximum Hotel RWCDS. The below-grade parking would be the same type and size as with the proposed project. The site plan, floor area, bulk and massing of buildings under the No Hotel Alternative would be the same as with the Proposed Actions. There would be the same amount of projected retail within the Commercial Overlay Area as with the Proposed Actions (23,236 gsf), and the projected retail would be located within the same six buildings in the Commercial Overlay Area. Similar to the Proposed Actions, there would be no development within the Mercer Plaza Area.

Like the Proposed Actions, the No Hotel Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; urban design and visual resources; natural resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; noise; public health; and neighborhood character.

In areas where the Proposed Actions are anticipated to result in significant adverse impacts, the No Hotel Alternative would result in either the same impacts, or may lessen, but not eliminate those impacts. Specifically, the No Hotel Alternative would result in the same shadows, historic resources and construction (related to traffic, noise and open space) impacts as the Proposed Actions. With respect to traffic, transit, and pedestrians, the No Hotel Alternative may lessen, but not eliminate those impacts.

The No Hotel Alternative, like the Proposed Actions, could result in not fully mitigated significant adverse impacts in the areas of historic resources, transit, and construction-related, open space and noise.

While the No Hotel Alternative would generally meet NYU's goals and objectives, and would provide for a greater increment of faculty housing, by eliminating hotel uses, an important programmatic need would be unfulfilled. Namely, the university-affiliated hotel is intended to:

- Provide convenient, moderately priced, accommodations for those traveling to the NYU campus, a growing need as scholars from around the world (including NYU's several international campuses) visit NYU to participate in conferences, lectures, research and teaching.
- Accommodate the people who NYU consistently draws to New York City for both academic and other programming purposes, who prefer to stay within walking distance of the Washington Square campus.
- Act as an academic/conference space to support NYU's executive education programming, and its wide array of academic conferencing that takes place throughout the year.
- Be open to the general public to the extent that hotel rooms are available.

NO DEMAPPING ALTERNATIVE

Based on public scoping comments related to NYU's proposed acquisition of City-owned mapped rights-of-way, a No Demapping Alternative has been analyzed. Under this alternative, the four areas within the mapped rights-of-way of Mercer Street, LaGuardia Place, West 3rd Street and West 4th Street, would not be demapped, nor would portions be subsequently disposed to NYU or remapped as City parkland. While the proposed buildings would be in the same locations relative to each other, the Zipper Building would be shifted westward to avoid the mapped right-of-way of Mercer Street, and would be thinner by approximately 12.5 feet in the east-west direction (from approximately 174.5 feet with the proposed project to approximately 162 feet) and taller than under the Proposed Actions (ranging from 20 to 40 feet taller across the different building elements). Consequently, the ground floor footprint of the Zipper Building would be approximately 61,000 square feet under this alternative, as compared to 65,800 square feet under the Proposed Actions. The floor plates within the tower elements would also be smaller. Under this alternative, the Zipper Building would be

shifted west approximately ten feet closer to Silver Tower II than with the Proposed Actions, requiring an additional waiver. On the North Block, the easements below the mapped right-of-way on Mercer Street and LaGuardia Place would not be disposed to NYU, and therefore the below-grade academic space in these areas proposed under the Proposed Actions would no longer be built. To compensate for this reduction of academic space below-grade, above grade floor area would be added to both Mercer Building and LaGuardia Building. The Mercer Building would increase in height by approximately 45 feet (3 stories), and the LaGuardia Building would increase in height by approximately 60 feet (4 stories).

Within the proposed above- and below-grade buildings, the No Demapping Alternative would develop the Proposed Development Area with the same uses and total square footage as the Proposed Actions. Under the No Demapping Alternative, the Greene Street Walk would be narrower and would provide approximately 0.12 fewer acres of publicly accessible passive open space than the Greene Street Walk under the Proposed Actions (the Greene Street Walk would be reduced in width from 26 feet to six to eight feet). With a narrower Greene Street Walk, there would be limited, if any, opportunities for seating and tables along the walk under this alternative. Unlike the Proposed Actions, the No Demapping Alternative would include approximately 0.15 acres of publicly accessible passive open space along the Zipper Building's Mercer Street frontage. This area would be programmed as publicly accessible passive open space, similar to the existing Coles Plaza, but would be interrupted with multiple building entrances/exits, driveways and loading docks. In total, by eliminating approximately 0.12 acres of passive open space associated with the Greene Street Walk and providing 0.15 acres of passive open space along the Zipper Building's Mercer Street frontage, this Alternative would result in a net increase of approximately 0.03 acres of passive open space compared to the Proposed Actions.

Both the No Demapping Alternative and the Proposed Actions would provide below-grade parking for the existing 389 required accessory spaces. There would be the same amount of projected retail within the Commercial Overlay Area as with the Proposed Actions, and it would be located within the same six building in the Commercial Overlay Area. Similar to the Proposed Actions, there would be no development within the Mercer Plaza Area.

Under the No Demapping Alternative, the programming and location of the central open spaces on the North Block would be the same as proposed under the Proposed Actions. While under this alternative, the mapped rights-of-way of Mercer Street and LaGuardia Place on the North Block (between Bleecker Street and West 3rd Street) would not be demapped and subsequently remapped as City parkland, the programming of these open spaces would be the same as under the Proposed Actions. Similarly under this alternative, the mapped right-of-way of Mercer Street on the South Block (between West Houston Street and Bleecker Street) would not be demapped and subsequently disposed to NYU as under the Proposed Actions.

Like the Proposed Actions, the No Demapping Alternative would not result in significant adverse impacts with respect to: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; urban design and visual resources; natural resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; greenhouse gas emissions; noise; public health; and neighborhood character.

In areas where the Proposed Actions are anticipated to result in significant adverse impacts, the No Demapping Alternative would result in the same impacts. Like the Proposed Actions, the No Demapping Alternative would result in significant adverse impacts related to: shadows; historic resources; traffic, transit, and pedestrians; and construction (related to traffic, noise and open space).

The No Demapping Alternative, like the Proposed Actions, could result in not fully mitigated significant adverse impacts in the areas of historic resources, transit, and construction-related open space and construction noise.

Unlike the Proposed Actions, the No Demapping Alternative has the potential to result in a significant adverse air quality impact on portions of the Zipper Building that would be taller in height than the building analyzed

under the Proposed Actions; however, affected interior areas of the Zipper Building under this alternative potentially could be designed to avoid concentrations of pollutants that would be considered a potential significant adverse impact by restricting placement of operable windows and/or air intakes to unaffected areas of the building.

While the No Demapping Alternative would meet NYU's programmatic needs, NYU believes the design of the proposed Zipper Building due to this alternative would result in inefficiencies with respect to the uses proposed within the building. NYU believes that the above-grade floors of the Zipper Building would be less efficient, as the floor plates within the tower elements would be smaller. With a smaller building footprint, many of the program elements would need to be reorganized and distributed over multiple floors, which could lead to inefficiencies, particularly for the athletic center, retail and academic uses. With the shifting westward of the Zipper Building, the area along Mercer Street in front of the building would be programmed as publicly accessible passive open space, similar to the existing Coles Plaza. However, the usability of this open space as a continuous plaza area could be limited as it would also be needed for pedestrian and vehicular entry and exit into the Zipper Building. This Alternative would also reduce the width of the Greene Street Walk on the west side of the Zipper Building, as under this alternative, the Zipper Building would be shifted westward towards the Silver Towers. In addition, one of NYU's planning objectives is to design the new buildings to maximize program below grade and thus limit the size, height, and bulk of buildings above grade. This strategy is possible because below-grade spaces are well-suited for certain academic program needs such as classrooms, study areas, rehearsal spaces, lounges, computer rooms, and student activity areas. The No Demapping Alternative would meet that objective to a lesser extent than the Proposed Actions on the North Block, as the building footprints and below-grade space would be diminished and the building heights would be increased, (i.e., to compensate for the reduction of academic space below-grade, above grade floor area would be added to both Mercer Building and LaGuardia Building.)

NO UNMITIGATED SIGNIFICANT ADVERSE IMPACT ALTERNATIVE

This alternative considers development that would not result in any significant, unmitigated adverse impacts that could not be fully mitigated. Based on the previous chapters of this DEIS there is the potential for a number of significant adverse impacts for which no practicable mitigation has been identified to fully mitigate the impacts. Specifically, unmitigated impacts were identified in the areas of shadows, historic and cultural resources, transit, open space during construction, and construction noise.

- The proposed Bleecker Building would have to be approximately 50 feet in height or less in order to eliminate the unmitigated significant adverse shadow impact on the LaGuardia Corner Gardens. Such a substantial reduction in height would not allow for the provision of a 100,000-square-foot public school within the building (or a 100,000-square-foot academic space should SCA not exercise its option to build a public school), nor would it allow the amount of space necessary for NYU to redevelop the site as a dormitory. A purpose and need for the Proposed Actions is to develop NYU dormitories so that more undergraduate students would have opportunity to live in student housing in order to create a strong academic community and to become better acclimated to the City. An academic building of 50 feet would be able to accommodate between 45,000 and 60,000 gsf of above-grade space, and NYU believes it would not as effective as the Proposed Actions in meeting its programmatic needs.
- In order to avoid the unmitigated significant adverse impact on the Washington Square Village (NYCL, S/NR-eligible), the development of the proposed project would be limited to the South Block only. Limiting development to this level would not meet NYU's programmatic needs and would substantially compromise the stated goals and objectives for the proposed project.

  To avoid potential unmitigated significant adverse impacts on architectural resources in the Commercial Overlay Area, NYU would need to exclude this area from the Proposed Actions. This would be

inconsistent with meeting the project goal of providing an enlivened, more flexible streetscape to better connect NYU's buildings to the City and the surrounding area.

- The proposed project is expected to result in a significant adverse impact to stairways at the Broadway-Lafayette and the West 4th Street subway stations. Mitigation for these impacts is being explored with MTA/NYCT. In the event feasible mitigation is not identified or implemented, these significant impacts would remain unmitigated. Eliminating the impact would require a reduction in the project activity level of greater than 50 percent; such a substantial reduction in the size of the proposed project would be inconsistent with meeting its goals and objectives.
- Absent the identification of permanent relocation space for the LaGuardia Corner Gardens, the temporary significant adverse impact during construction of the Bleecker Building could not be mitigated. Given its proximity to the Bleecker Building site, there is no feasible construction program that would avoid an unmitigated significant adverse impact on the LaGuardia Corner Gardens.

  Construction activities would result in noise levels in open space locations that would result in an unmitigated significant adverse noise impact. There is no feasible construction approach to the proposed project that would eliminate this unmitigated significant adverse impact.
- The Proposed Actions would result in significant adverse construction noise impacts at some nearby residential locations, including at residential terraces. The proposed mitigation measures would partially mitigate significant project impacts (and substantially reduce construction-related noise levels) at some locations. However, absent the implementation of additional mitigation measures and/or refined analyses which result in lower noise levels, there is no feasible alternative that could fully avoid these impacts. Even accounting for the types of measures incorporated into the proposed project to reduce construction noise, any development comparable in scale to the proposed project (i.e., substantial below-grade excavation, multi-year construction at any one location) would have the potential to result in unmitigated significant adverse impacts at the locations mentioned above particularly at residential terraces.

Based on the above, to eliminate all unmitigated significant adverse impacts, the proposed project would have to be reduced in size or modified to a point where it would not realize NYU's principal goals and objectives for the proposed project of meeting NYU's long-term needs with respect to academic space, housing for faculty and students, campus and neighborhood amenities, and recreational facilities.

I. UNAVOIDABLE ADVERSE IMPACTS

Unavoidable significant adverse impacts are defined as those that meet the following two criteria: there are no reasonably practicable mitigation measures to eliminate the Proposed Actions' impacts; and there are no reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate its impacts, and not cause other or similar significant adverse impacts. In a number of instances no practicable mitigation has been identified to fully mitigate the significant adverse impacts of the Proposed Actions, and there are no reasonable alternatives to it that would meet its purpose and need, eliminate its impacts, and not cause other or similar significant adverse impacts. The following is a summary of those unavoidable adverse impacts.

SHADOWS

The shadows analysis found that the shadows cast by the Bleecker Building would result in significant adverse shadow impacts on LaGuardia Corner Gardens, casting between four and five-and-a-half hours of new shadow on the restored garden during morning hours throughout the growing season (in the spring, summer, and fall). While the remaining sunlight could support shade-tolerant species, the proposed project's incremental shadows would jeopardize the viability of shade-intolerant species.

Mitigation options considered, but rejected, for the significant adverse shadow impact on LaGuardia Corner Gardens included moving the proposed Bleecker Building eastward toward the center of the South Block, or southward toward West Houston Street, as well as reducing the height of the proposed Bleecker Building. While a change in the location of the Bleecker Building (either eastward or southward) would reduce the incremental shadows cast on the LaGuardia Corner Gardens, such an adjustment in site plan would result in an encroachment on the boundary of University Village (NYCL, S/NR-eligible). Given that such an adjustment could have adverse contextual effects on this historic resource, and that the reduction in shadows would only partially mitigate the significant adverse shadow impact, the relocation of the proposed Bleecker Building was rejected as a potential mitigation measure.

Reducing the proposed height of the Bleecker Building and/or re-orienting the tower portion of the building also were considered, but rejected as potential mitigation measures. Re-orienting the tower so that the nine-story portion of the building faces LaGuardia Place was rejected because shadow modeling of this configuration showed only marginal improvements in shadows on the LaGuardia Corner Gardens, and because the re-orientation could have adverse effects on the north-facing views from 505 LaGuardia Place. A reduction in height of the proposed Bleecker Building was rejected because the reduction in height that would be necessary to mitigate the significant adverse shadows impact would be so severe as to substantially compromise the goals and objectives of the Proposed Actions.

A partial mitigation measure under consideration is planting shade-tolerant species in portions of the LaGuardia Corner Gardens that would receive substantial shadowing as a result of the proposed project, and monitoring the health of the replanted garden. This mitigation would occur after the construction of the proposed Bleecker Building. While this mitigation is feasible, it would not serve to fully mitigate the significant adverse impact because the extent of project-generated shadows during the growing season could substantially alter the types of plantings that would be viable. Another potential mitigation measure with uncertain feasibility is the relocation of the LaGuardia Corner Gardens prior to construction of the Bleecker Building. The feasibility of this mitigation is uncertain because the LaGuardia Corner Gardens and other potential relocation sites are not owned or controlled by the project sponsor.

Between the DEIS and FEIS, options will be explored to determine the feasibility of the above-described mitigation measures, and to identify different mitigation measures for this significant adverse shadows impact. This further analysis of mitigation will be coordinated with the lead agency; with DPR, which provides support to LaGuardia Corner Gardens as a member of the City's GreenThumb program; and with NYCDOT, which has jurisdiction over the LaGuardia Corner Gardens and other property on the LaGuardia Place Strip.

In the absence of the relocation of facilities or other mitigation measures not yet identified, the significant adverse shadow impacts on the LaGuardia Corner Gardens would only be partially mitigated by the planting of shade-tolerant species in coordination with support for monitoring and maintenance by NYU.

Since no practicable mitigation measures have been identified to eliminate this significant adverse impact, and there are no reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate this impact, and not cause other potential significant adverse impacts. Therefore, the shadowing of the LaGuardia Corner Gardens is an unavoidable significant adverse impact of the Proposed Actions.

HISTORIC AND CULTURAL RESOURCES

Washington Square Village

The Proposed Actions would result in alterations to the S/NR-eligible Washington Square Village complex that would remove elements of this architectural resource that contribute to its significance. Therefore, the proposed project would have a significant adverse impact on this architectural resource.

Measures to minimize or partially mitigate significant adverse impacts to Washington Square Village would be implemented in consultation with OPRHP and would be set forth in an LOR to be signed by the applicant, OPRHP, DASNY, and potentially other involved agencies. Potential mitigation measures include the following:

- Preparation of HABS documentation of Washington Square Village.
- NYU consultation with OPRHP (per the LOR) regarding proposed changes to the ground-floor façades of Washington Square Village's north and south buildings as design plans proceed.
- Prior to construction and in consultation with OPRHP and LPC, development and implementation by NYU of CPPs, which would be prepared in coordination with a licensed professional engineer and would follow all required guidelines.

No practicable mitigation measures have been identified to fully mitigate this significant adverse impact. Therefore, absent the identification of reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate this impact, and not cause other or similar significant adverse impacts, there would be an unavoidable significant adverse impact on Washington Square Village as a result of the Proposed Actions.

Potential NoHo Historic District Expansion

As detailed above in "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 if the Proposed Actions are contributing to the S/NR-eligible potential NoHo Historic District Expansion. Although these buildings are within an S/NR-eligible historic district, because there is no federal or state funding involved with the proposed ground floor alterations, there is no regulatory process to control changes to these architectural resources. Further, none of these architectural resources is an NYCL and, therefore, alterations to these architectural resources would not require LPC's review and approval. The analysis in this DEIS finds that 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. To address this potential significant adverse impact, prior to the commencement of construction of the proposed project, in consultation with LPC and OPRHP, NYU would develop and implement CPPs for the four Commercial Overlay Area buildings that are contributing to the potential NoHo Historic District Expansion. However, currently there are no specific redevelopment plans for the four buildings contributing to the S/NR-eligible Potential NoHo Historic District Expansion, so at this time it cannot be determined whether this measure would fully mitigate potential impacts. By excluding the development in the Commercial Overlay Area, one of NYU's programmatic needs—to allow for an enlivened, more flexible streetscape to better connect NYU's buildings to the City and the surrounding area—would not be fulfilled. Absent the identification of practicable mitigation measures to ensure that this potential impact would be fully mitigated, or the identification of reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate this impact, and not cause other or similar significant adverse impacts, there is the potential for an unavoidable significant adverse impact on the Potential NoHo Historic District Expansion as a result of the Proposed Actions.

TRANSPORTATION

The transportation analysis identified the potential for significant adverse traffic, pedestrian, and transit impacts as a result of the Proposed Actions. Mitigation measures were identified above that could fully mitigate the significant adverse traffic and pedestrian impacts. The following section describes how the identified transit impacts are potentially unavoidable significant adverse impacts as a result of the Proposed Actions.

TRANSIT

The Proposed Actions under the RWCDS 3 (the "Max Hotel Scenario") would result in significant adverse impacts to stairways at the Broadway-Lafayette and the West 4th Street subway stations (stairways S9 and S2A/B, respectively) upon the proposed project's full build-out in 2031. If NYU proceeds with the development of RWCDS 1 (the "Max Academic Scenario"), the same impacts at these two stations would occur in both 2021 and 2031.

Mitigation that would improve conditions at these stations includes widenings of the impacted stairways and/or providing additional station access locations, which are long-term capital improvements. The engineering analysis to determine the feasibility of implementing and any implementation of these mitigation measures would be coordinated with MTA/NYCT to allow enough time for design and specification approvals, and for their construction to address the increased demand that would result from development of the proposed project. For the Final EIS, additional station elements at the Broadway-Lafayette and West 4th Street Stations, as well as the Prince Street Station will be analyzed. Any significant adverse impacts that may be identified for these other station elements would be disclosed and potential mitigation measures explored to mitigate these impacts. If the stairway widenings or other alternate mitigation measures are determined to be infeasible, the projected significant adverse subway station impacts would remain unmitigated. Eliminating the impact would require a reduction in the project activity level of greater than 50 percent; such a substantial reduction in the size of the proposed project would be inconsistent with meeting its goals and objectives. Absent the identification of feasible and practicable mitigation measures to ensure that this potential impact would be eliminated, or the identification of reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate this impact, and not cause other or similar significant adverse impacts, there is the potential for an unavoidable significant adverse transit impacts.

CONSTRUCTION IMPACTS

Transit

After the completion of Phase 1 components of the proposed project, the area's subway stations would incur increases in passengers generated by the completed uses. Subway impacts are expected to occur in 2021 with the development of RWCDS 1. Hence, the combination of the Phase 2 construction worker subway trips and those generated by the completed Phase 1 project during the commuter peak hours would result in comparable significant adverse impacts to the subway station elements described for the proposed project (i.e., S9 stairway at the Broadway-Lafayette Station and S2A/B stairway at the West 4th Street Station). Potential mitigation measures for impacts at these locations will be explored between the DEIS and FEIS. If these mitigation measures are found to be infeasible, the impacts would be unmitigated. Eliminating the impact would require a reduction in the project activity level of greater than 50 percent; such a substantial reduction in the size of the proposed project would be inconsistent with meeting its goals and objectives. Absent the identification of feasible and practicable mitigation measures to ensure that this potential impact would be eliminated, or the identification of reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate this impact, and not cause other or similar significant adverse impacts, there is the potential for an unavoidable significant adverse transit impacts during construction.

Noise

The Proposed Actions would result in significant adverse construction noise impacts at some nearby residential locations, including at residential terraces. The proposed mitigation measures would partially mitigate significant project impacts (and substantially reduce construction-related noise levels) at some locations. However, absent the implementation of additional mitigation measures and/or refined analyses which result in lower noise levels, the proposed project would have significant adverse construction noise impacts that are not

fully mitigated. Any development of the scale of the proposed project would have the potential to result in unmitigated significant adverse impacts at the locations mentioned above.

Absent the identification of practicable mitigation measures to ensure that these potential construction-related noise impacts would be fully mitigated, or the identification of reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate this impact, and not cause other or similar significant adverse impacts, there is the potential for unavoidable significant adverse construction noise impacts as a result of the Proposed Actions.

Open Space

During construction of the proposed Bleecker Building under the LaGuardia Place Staging Option (construction staging for the proposed Bleecker Building only along the LaGuardia Place frontage), the LaGuardia Corner Gardens would not be available for the approximately 39-month construction period, 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. Under the Bleecker Staging Option (construction staging only along the Bleecker Street frontage), it is expected that the LaGuardia Corner Gardens would remain accessible throughout Bleecker Building construction. However, under the Bleecker Street Staging Option, for an approximately 27-month period during construction most, if not all, of the garden would need to be covered by a construction shed in order to provide a safe construction site. The construction shed would reduce the overall utility of the garden, and would block most, if not all, direct sunlight for an approximately 27-month period, thereby affecting the viability of all plantings, and therefore would result in a significant adverse impact on this resource.

Between the DEIS and FEIS, options will be explored to relocate the LaGuardia Corner Gardens, either further south on the South Block or elsewhere within a ¼-mile area of the project site. However, the feasibility of relocation is uncertain because the LaGuardia Corner Gardens and other potential relocation sites—including less shadowed locations further south along the LaGuardia Place Strip—are not owned or controlled by the project sponsor. If an acceptable relocation space cannot be identified between the DEIS and FEIS, other options will be further explored to refine construction staging and logistics for the Bleecker Building construction site with the goal of minimizing the extent and duration of disturbance of the LaGuardia Corner Gardens due to construction activities. For example, the possibility of staging construction from either the south or east of the Bleecker Building site will be further explored. However, this would require occupying property that the applicant owns but does not control due to the existence of a long-term lease and, therefore, the applicant would need to obtain permission from that lessee. Absent the identification of an acceptable relocation space, the temporary significant adverse construction impact could only be partially mitigated by the provision of temporary space and/or the refining of construction staging and logistics. Furthermore, this partial mitigation would not minimize the significant adverse shadows impact on the LaGuardia Corner Gardens that is projected to occur once the Bleecker Building is operational.

Noise levels at on-site open space locations adjacent to where construction activities are taking place would substantially exceed the 3-5 dBA *CEQR Technical Manual* impact criteria. Due to the close proximity of on-site open spaces to construction activities, construction of the proposed project would result in significant adverse noise impacts on open spaces. Noise levels at publicly accessible and private open space locations on the project site (e.g., Mercer Playground, Washington Square Village Elevated Garden, Silver Tower Oak Grove) are currently above the 55 dBA $L_{10(1)}$ recommended in the *CEQR Technical Manual* noise level for outdoor areas. Proposed construction activities would exacerbate these exceedances of the recommended level. 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 would result in noise levels in open space locations that would result in an unmitigated significant

adverse construction noise impact. There is no feasible construction approach to the proposed project that would eliminate this unmitigated significant adverse impact.

During Phase 2 of construction—from 2022 to 2026 based on the conceptual construction schedule analyzed—the projected decreases in open space ratios would result in temporary significant adverse indirect impacts to active open space resources in the residential study area. The temporary impact would not begin until the proposed Mercer Building has initiated construction, and would be eliminated by the provision of the project open spaces associated with the next stage of construction (i.e., completion of the Mercer Building and central portion of the North Block's proposed open space). Between the DEIS and FEIS, NYU, in coordination with NYCDPR will investigate the feasibility of full or partial mitigation for this temporary significant adverse impact. If feasible mitigation measures cannot be identified to fully mitigate this temporary impact, it would remain unmitigated.

Absent the identification of practicable mitigation measures to ensure that these potential construction-related open space impacts would be fully mitigated, or the identification of reasonable alternatives to the Proposed Actions that would meet its purpose and need, eliminate this impact, and not cause other or similar significant adverse impacts, there is the potential for unavoidable significant adverse impacts on open spaces during construction as a result of the Proposed Actions.

J. GROWTH-INDUCING ASPECTS OF THE PROPOSED PROJECT

The term "growth-inducing aspects" generally refers to the potential for a proposed project to trigger additional development in areas outside the project site that would otherwise not have such development without the proposed project. The *CEQR Technical Manual* indicates that an analysis of the growth-inducing aspects of a proposed project is appropriate when the project: adds substantial new land use, new residents, or new employment that could induce additional development of a similar kind or of support uses, such as retail establishments to serve new residential uses; and/or introduces or greatly expands infrastructure capacity.

The Proposed Actions are designed to accommodate space and programmatic needs of NYU, and would be limited to new buildings and new publicly accessible open space within the Proposed Development Area, along with the potential for limited conversion of ground-floor uses in existing buildings to retail use within a Commercial Overlay Area. The two superblocks comprising the Proposed Development Area present the most significant opportunity for NYU to accommodate future growth on its own land, thereby avoiding disruption, demolition and dislocation in the surrounding neighborhood.

The Proposed Actions would introduce substantial new development on NYU properties that are central to NYU's core campus. However, the new development within the Proposed Development Area and Commercial Overlay Area would not introduce new economic activities, and would not substantially alter existing economic patterns in the study area. The study area already has prominent and well-established institutional, commercial and residential uses; the proposed project would not create the critical mass of uses or populations that would induce additional development. The proposed project would also not include the introduction of new infrastructure or an expansion of infrastructure capacity that would result in indirect development.

Therefore, the proposed projects would not induce significant new growth in the surrounding area.

K. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

There are a number of resources, both natural and built, that would be expended in the construction and operation of the proposed project. These resources include the materials used in construction; energy in the form of fuel and electricity consumed during construction and operation of the proposed NYU Core project; and the human effort (i.e., time and labor) required to develop, construct, and operate various components of the proposed project.

The resources are considered irretrievably committed because their reuse for some purpose other than the proposed project would be highly unlikely. The proposed project constitutes an irreversible and irretrievable commitment of the project site as a land resource, thereby rendering land use for other purposes infeasible, at least in the near term.

These commitments of land resources and materials are weighed against the benefits of the proposed project. The Proposed Actions—which include development in both the Proposed Development Area and Commercial Overlay Area—are a key element in NYU's plan to meet its long-term needs with respect to academic space, housing for faculty and students, campus and neighborhood amenities, and recreational facilities. The project is located within the existing boundaries of NYU's central Washington Square campus. Its key components—the four new buildings over 19 years proposed to be located on parcels bounded by West 3rd Street, Mercer Street, West Houston Street and LaGuardia Place—are on two super blocks that have been part of the NYU campus since the 1960s. By proposing to locate the four new buildings in this location, NYU would be able to enhance its facilities significantly while minimizing its need to expand the footprint of its campus into the Greenwich Village neighborhood. The four new buildings proposed for these two blocks would serve the needs of the NYU schools and divisions that are already located at the Washington Square campus and which cannot be as well served by facilities in remote locations of New York City. The proposed commercial overlay within the Commercial Overlay Area north of the two superblocks is intended to allow for an enlivened, more flexible streetscape to better connect NYU's buildings to the City and the surrounding area, and would bring zoning up to date to reflect pre-existing, non-conforming uses.

In addition, the Proposed Actions would include new parkland and publicly accessible open space, neighborhood retail, and potentially a public school, all of which would be notable assets to the community.

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