Department of City Planning
City of New York

MEMORANDUM

To: Members of the City Planning Commission

From: Robert Dobruskin

Date: September 1, 2017

Re: **NYU Core – 181 Mercer Street Modification**
CEQR No. 11DCP121M
ULURP No. M 120124(A) ZSM
SEQRA Classification: Type I

Attached is a Technical Memorandum submitted by the applicant for the above-referenced project. It was prepared in connection with a proposed modification to a previously approved special permit. The building envelope currently being proposed by the applicant for the 181 Mercer Street Building (formally known as the "Zipper Building") is different from that analyzed for the building in the 2012 Final Environmental Impact Statement (FEIS) and subsequent Technical Memoranda. This Technical Memorandum (TM003) analyzes whether the proposed modification would result in any significant adverse environmental impacts not already identified in the FEIS and subsequent Technical Memoranda for the project.

The Environmental Assessment and Review Division has reviewed the Technical Memorandum. Based on our review, pursuant to the City's Environmental Quality Review process and NYCRR 617, we conclude that the proposed modification would not result in any new or different significant adverse impacts not already identified in the FEIS.

Attachment

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TECHNICAL MEMORANDUM 003
NYU CORE
CEQR No. 11DCP121M
ULURP No. C 120124 ZSM

A. INTRODUCTION

In 2011-2012, New York University (NYU) sought a number of discretionary actions in connection with an expansion of its facilities at NYU's academic core (the "NYU Core" project) near Washington Square (see **Figure 1**).

NYU's proposal included the development of four new buildings in the 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 (Development Area), with two new buildings on the superblock north of Bleecker Street (North Block) and two new buildings on the superblock south of Bleecker Street (South Block). See **Figures 2 and 3** for the existing and approved future site plans in the Development Area.

On the eastern portion of the South Block, the 181 Mercer Street Building (referred to as the "Zipper Building" in the NYU Core project approvals) will replace the former one-story Coles Sports and Recreation Center with a larger, multi-story building containing academic space, student and faculty housing, a new athletic center, and performing arts spaces. The approximately five-foot-wide pedestrian walkway along the western edge of the former Coles Gym will be widened to create the Greene Street Walk, a public passageway.

As per the 2012 approvals, the 181 Mercer Street Building's design includes a plinth ("A") rising to a height of approximately 85 feet, on top of which are six staggered tower components referred to as the "C" tower, "D" tower, "E" tower, "F" tower, "G" tower, and "H" tower (see **Figure 4**). The Proposed Modification relates principally to the "C," "E," "G," and "H" towers. NYU is currently seeking approval from the New York City Planning Commission (CPC) for a modification (the Proposed Modification) to the building envelope of the 181 Mercer Street Building (detailed in Section B below) imposed by the Special Permit (C 120124 ZSM) that CPC approved for the NYU Core project in 2012.

The Proposed Modification requires environmental review under the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR). This technical memorandum has been prepared in conformance with 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. Small adjustments to the building design that are in substantial compliance with the approved plans (see details in "Background" below) do not, on their own, require environmental review under SEQRA and CEQR. However, this technical memorandum considers whether the Proposed Modification—inclusive of the substantial compliance changes made by NYU—would result in any significant adverse environmental impacts not already identified in the environmental review documents for the NYU Core project (Tech Memos 001 and 002 described in "Background" below).

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NYU Core Development Area Boundary

Future 181 Mercer Street Building

0 2000 FEET

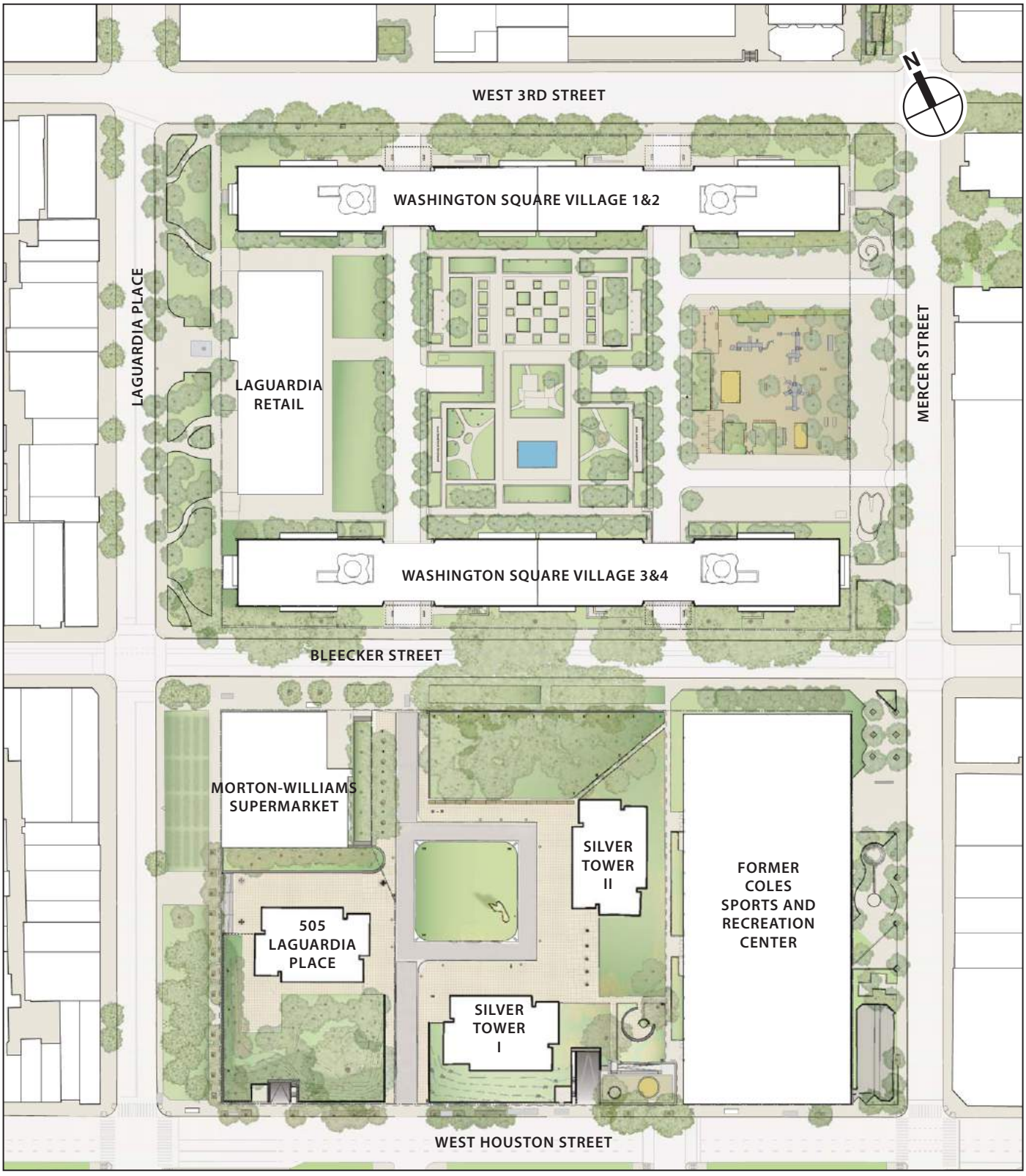
SCALE

NYU CORE

Regional Context

Figure 1

6.15.17



Existing Site Plan in Development Area

Figure 2

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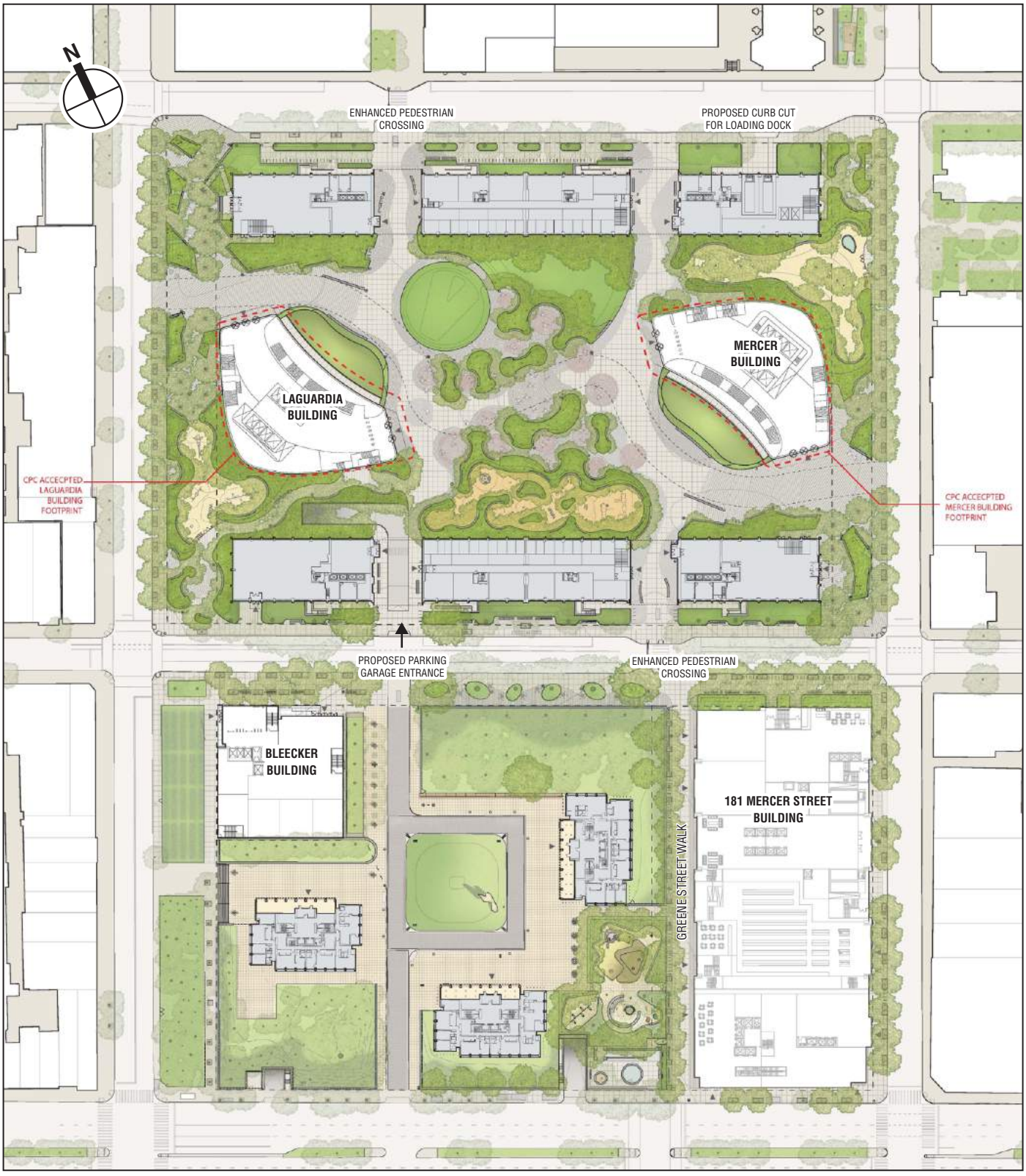
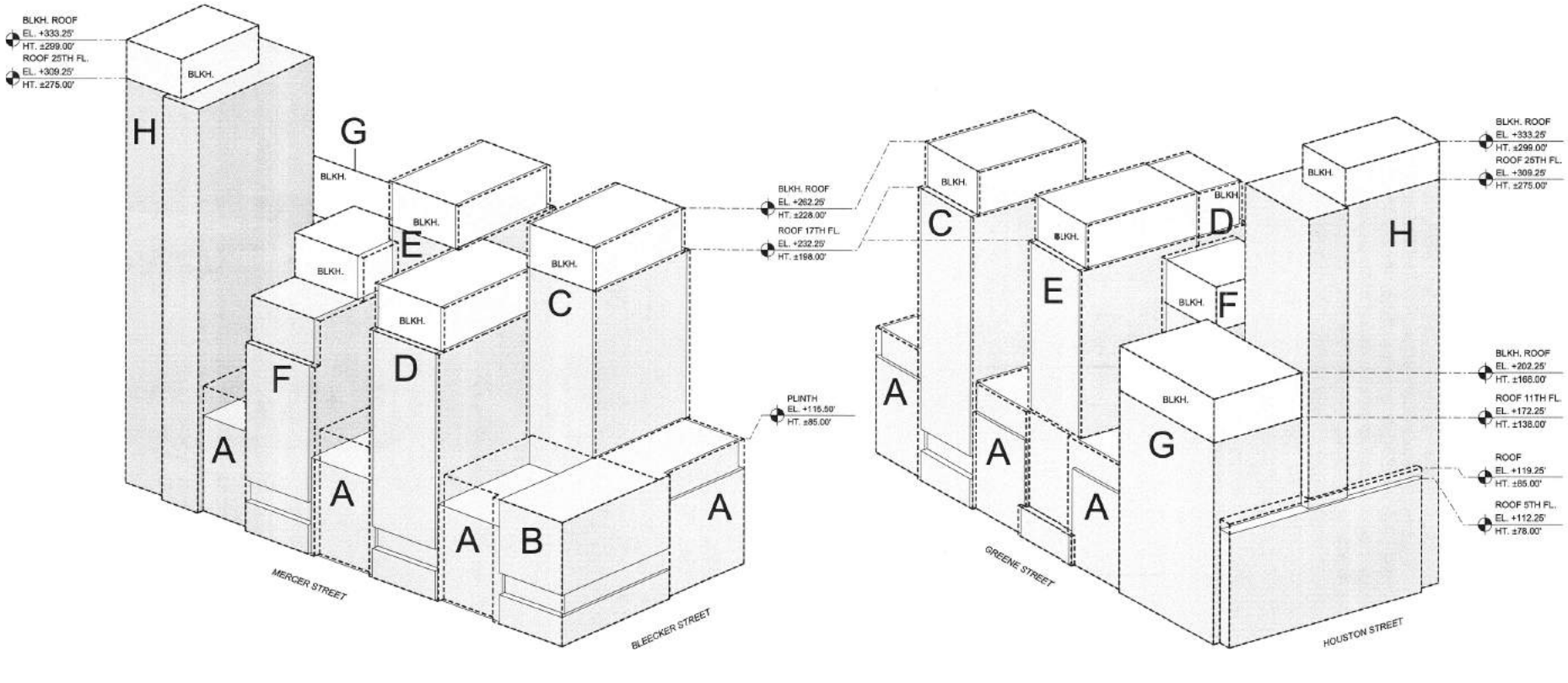


Approved Site Plan In Development Area

Figure 3



Northeast Axonometric View

Southwest Axonometric View

LEGEND:

MAXIMUM BUILDING ENVELOPE

ILLUSTRATIVE BUILDING LINE

Illustrative Axonometric Views — Approved Special Permit

As set forth below, this Technical Memorandum concludes that the Proposed Modification inclusive of the substantial compliance changes would not result in any new or different significant adverse impacts not already identified in the 2012 FEIS and subsequent Tech Memos 001 and 002.

BACKGROUND

CPC is the lead agency for the environmental review of the NYU Core project (CEQR No. 11DCP121M). CPC issued the Notice of Completion for the Final Environmental Impact Statement (FEIS) on May 25, 2012.

Following the publication of the 2012 FEIS, proposed modifications to the NYU Core project were addressed as follows:

- Chapter 26 of the FEIS included an analysis of a number of potential modifications to the Proposed Actions that the CPC was considering at the time of preparation of the FEIS. Modifications under consideration by the CPC in addition to those studied in Chapter 26 of the FEIS were the subject of a Technical Memorandum dated June 4, 2012 (Tech Memo 001). The Tech Memo found that the proposed project with both the modifications described in Chapter 26 of the FEIS and the additional modifications, would not result in any significant adverse environmental impacts not already identified in the FEIS. On June 6, 2012, the CPC approved the NYU Core project with the modifications.
- Modifications proposed by the New York City Council were the subject of a Technical Memorandum to the FEIS dated July 20, 2012 (Tech Memo 002), which found that they would not result in any significant adverse environmental impacts not already identified in the FEIS and Tech Memo 001.

At the end of the NYU Core Uniform Land Use Review Process (ULURP), a Restrictive Declaration, dated July 24, 2012, was issued on the NYU Core Large-Scale General Development (LSGD) to outline NYU's responsibilities on constructing various components of the NYU Core project. These include, among other things, a requirement to develop the buildings and other elements that comprise the NYU Core project in substantial compliance with the approved plans—which establish an envelope within which the buildings must be constructed, including limitations on height, bulk, building envelopes and floor area.—and to implement the required mitigation measures outlined in the 2012 FEIS and Tech Memos 001 and 002.

During building design and preconstruction planning, small adjustments were made that are in substantial compliance with the approved plans. These adjustments include:

- On the west side of the 181 Mercer Street building, small height increases (ranging from 2.89 feet to 5.55 feet) of portions of the plinth setback from Greene Street Walk and Bleecker Street to account for the sloping ground at the site, and to allow greater ability to accommodate the building program. The increase in plinth heights in these areas would not be visible from the streets immediately surrounding the building because of the setback from the edge of the plinth;
- Addition of an elevator bulkhead at the east face of the "C" tower to accommodate a circulation system that includes corridors, open stairs and associated elevators at the building perimeter;

- Adjustments to the west facade locations of the "D" and "F" towers, and the east facade locations of the "C" and "E" towers, within the height and setback requirements of the underlying zoning; and
- Removal of a small notch at the southwest corner of the building.

This Technical Memorandum considers whether the Proposed Modification—inclusive of the substantial compliance changes—would have the potential to result in any significant adverse environmental impacts not previously identified in the analyses of the 2012 FEIS, Tech Memo 001, and Tech Memo 002.

B. DESCRIPTION OF THE PROPOSED MODIFICATION

The Proposed Modification includes adjustments to the maximum building envelope of the 181 Mercer Street Building (described below and illustrated in **Figure 5**).

"C" TOWER

The Proposed Modification would adjust the maximum permitted building envelope for the 181 Mercer Street Building's "C" tower as follows (illustrated in **Figure 6)**:

- Elimination of the small setback (as shown in the Special Permit drawing Z- 122) at the bulkhead level of the western façade.

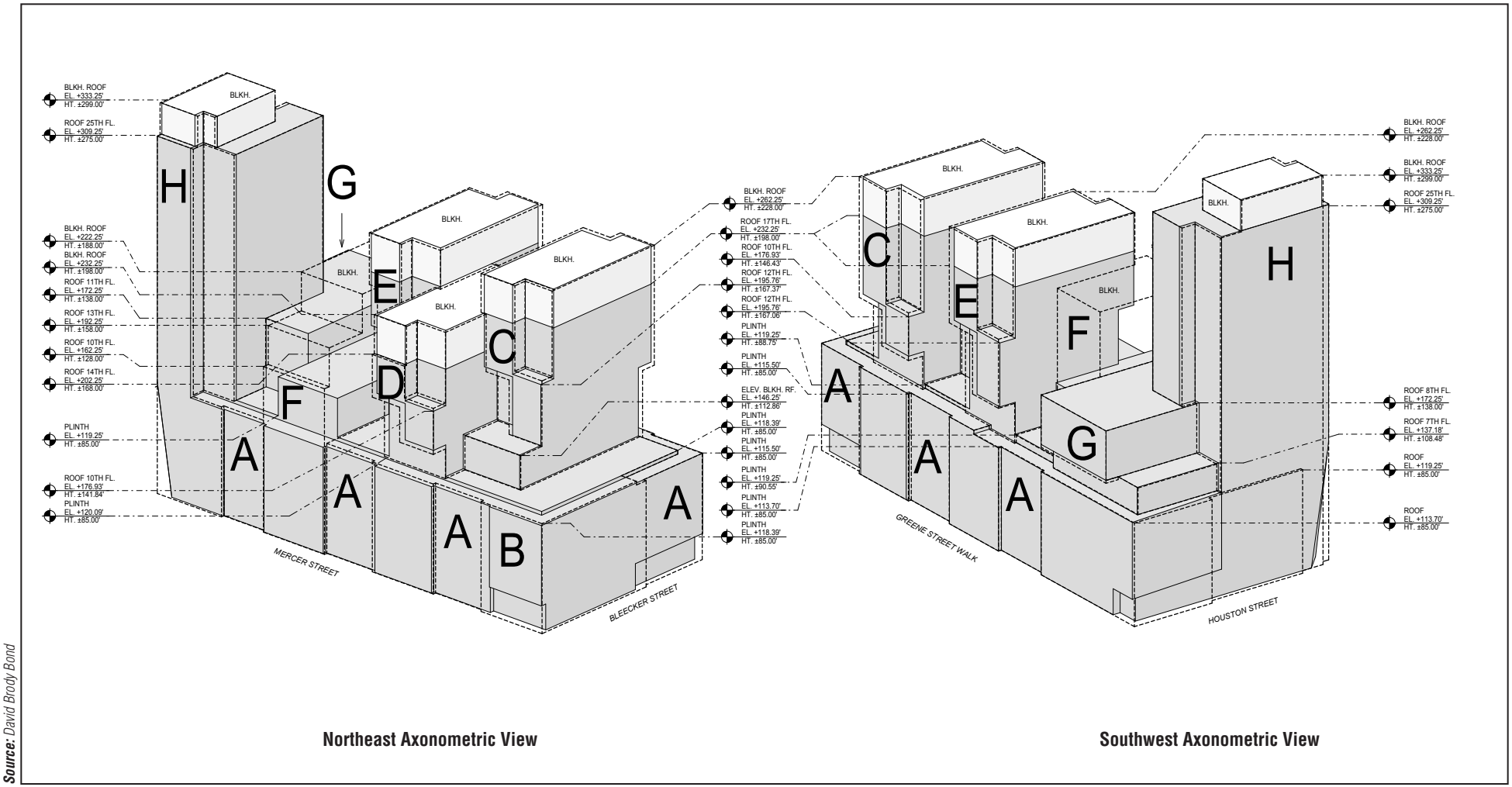
The "C" tower modification would shift the maximum envelope of the bulkhead westward to meet the maximum envelope of the tower below the bulkhead level. The articulation of the western façade of the "C" tower would be implemented through a new larger setback from Greene Street Walk above the plinth. At some elevations, the new setback above the plinth would apply to the entire "C" tower frontage on Greene Street Walk; at other elevations, the new setback would apply to only a portion of the "C" tower. The new pattern of setbacks is illustrated in **Figure 5**. The new setbacks would reduce the mass of the portion of the "C" tower facing Greene Street Walk above the 85-foot plinth level to a greater extent than the setback in the Special Permit drawings approved in 2012.

NYU and its architects have determined that the proposed elimination of the bulkhead setback would enable a unified approach to the setbacks and façade articulation on the "C" tower and that an additional setback at the bulkhead level would detract from the façade design. This modification would not increase the maximum permitted floor area for the 181 Mercer Street Building.

"E" TOWER

The maximum permitted envelope for the 181 Mercer Street Building's "E" tower would be adjusted as follows (see **Figure 7**):

- Elimination of the small setback (as shown in the Special Permit drawing Z-122) of the western façade at the top of the first floor.
- Elimination of the small setback (as shown in the Special Permit drawing Z-122) of the western façade at the plinth level.
- Elimination of the small setback (as shown in the Special Permit drawing Z-122) of the western façade at the bulkhead level.



Northeast Axonometric View

Southwest Axonometric View

Source: *David Brody Bond*

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

LEGEND:

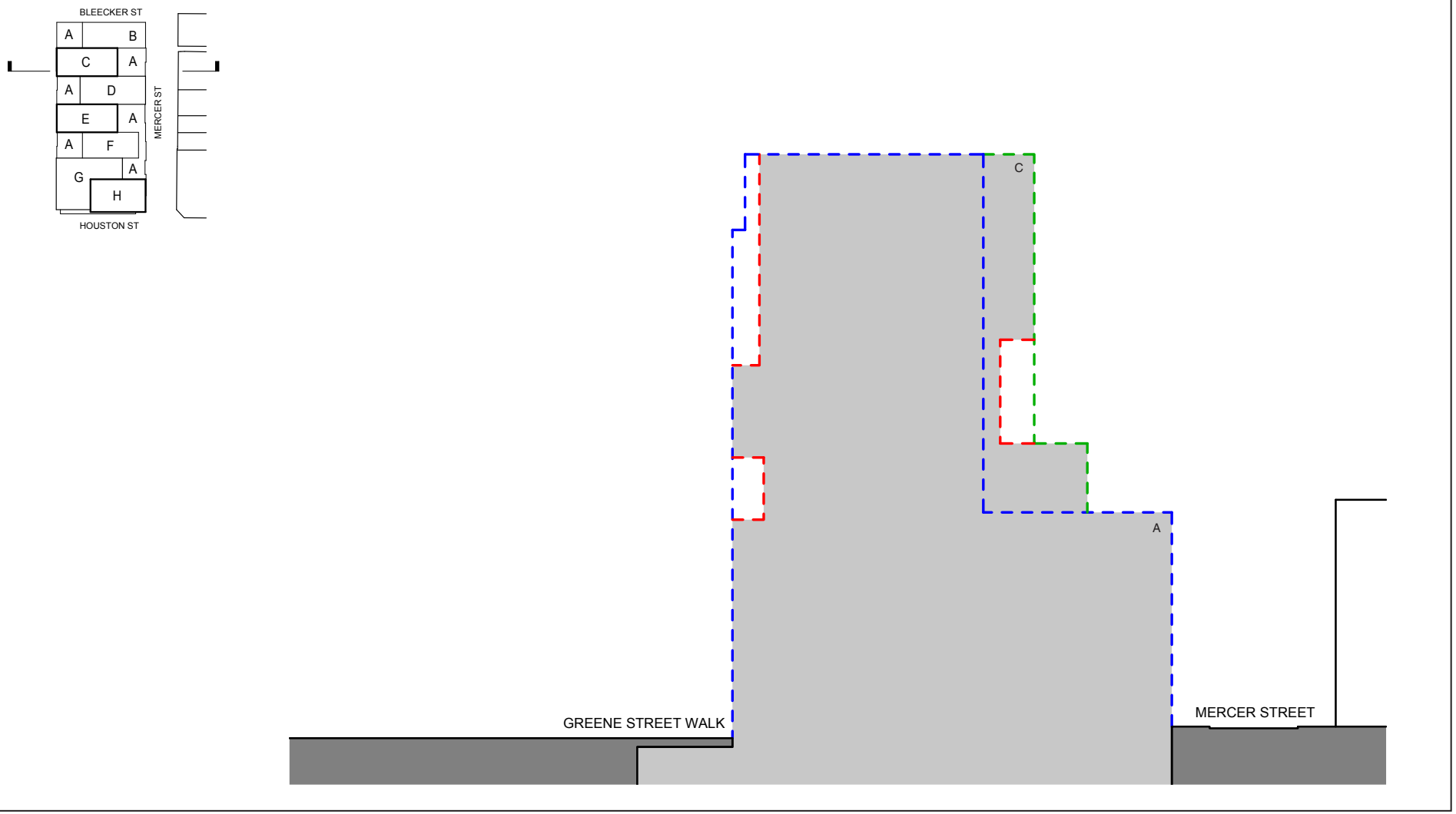
- MAXIMUM BUILDING ENVELOPE
- ILLUSTRATIVE BUILDING LINE
- ILLUSTRATIVE BUILDING TONE

Illustrative Axonometric Views —
Proposed Modification (Inclusive of Substantial Compliance Changes)

NYU CORE

Figure 5

9.1.17



Source: *David Brody Bond*

"C" Tower Maximum Envelope as per Approved Special Permit

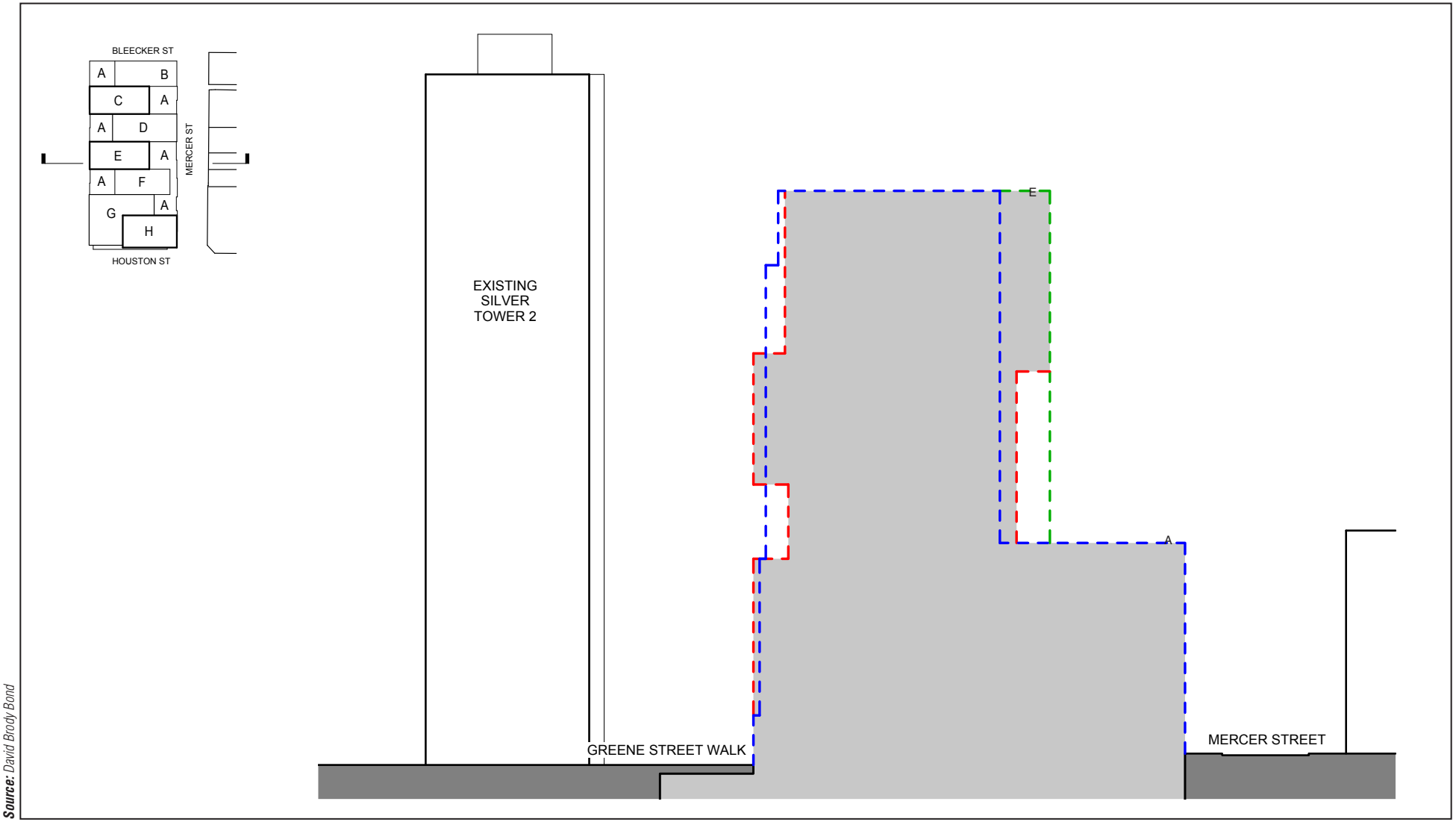
"C" Tower Maximum Envelope with Substantial Compliance Changes

"C" Tower Maximum Envelope as per Proposed Modification

E-W Section through 181 Mercer Street
Building Element C
View North

Figure 6

9.1.17



Source: David Brody Bond

"E" Tower Maximum Envelope as per Approved Special Permit

"E" Tower Maximum Envelope with Substantial Compliance Changes

"E" Tower Maximum Envelope as per Proposed Modification

E-W Section through 181 Mercer Street
Building Element E
View North

Figure 7

The "E" tower modification would shift the maximum permitted envelope (above the first level of the tower) westward to meet the maximum envelope at the first level of the tower. Similar to the modification described above for the "C" tower, the articulation of the western façade of the "E" tower would be implemented through a new larger setback from Greene Street Walk above the plinth. At some elevations, the new setback above the plinth would apply to the entire "E" tower frontage on Greene Street Walk; at other elevations, the new setback would apply to only a portion of the "E" tower. The new pattern of setbacks is illustrated in **Figure 5**. The new setbacks would reduce the mass of the portion of the "E" tower facing Greene Street Walk above the 85-foot plinth level to a greater extent than the setback in the Special Permit drawings approved in 2012.

Similar to the "C" tower, NYU and its architects have determined that the proposed elimination of the Special Permit-required setbacks on the "E" tower would allow for a unified approach to the setbacks and façade articulation on the "E" tower and that the Special Permit setbacks would detract from the façade design. The façade articulation on the "C" and "E" towers would be consistent. This modification would not increase the maximum permitted floor area for the 181 Mercer Street Building.

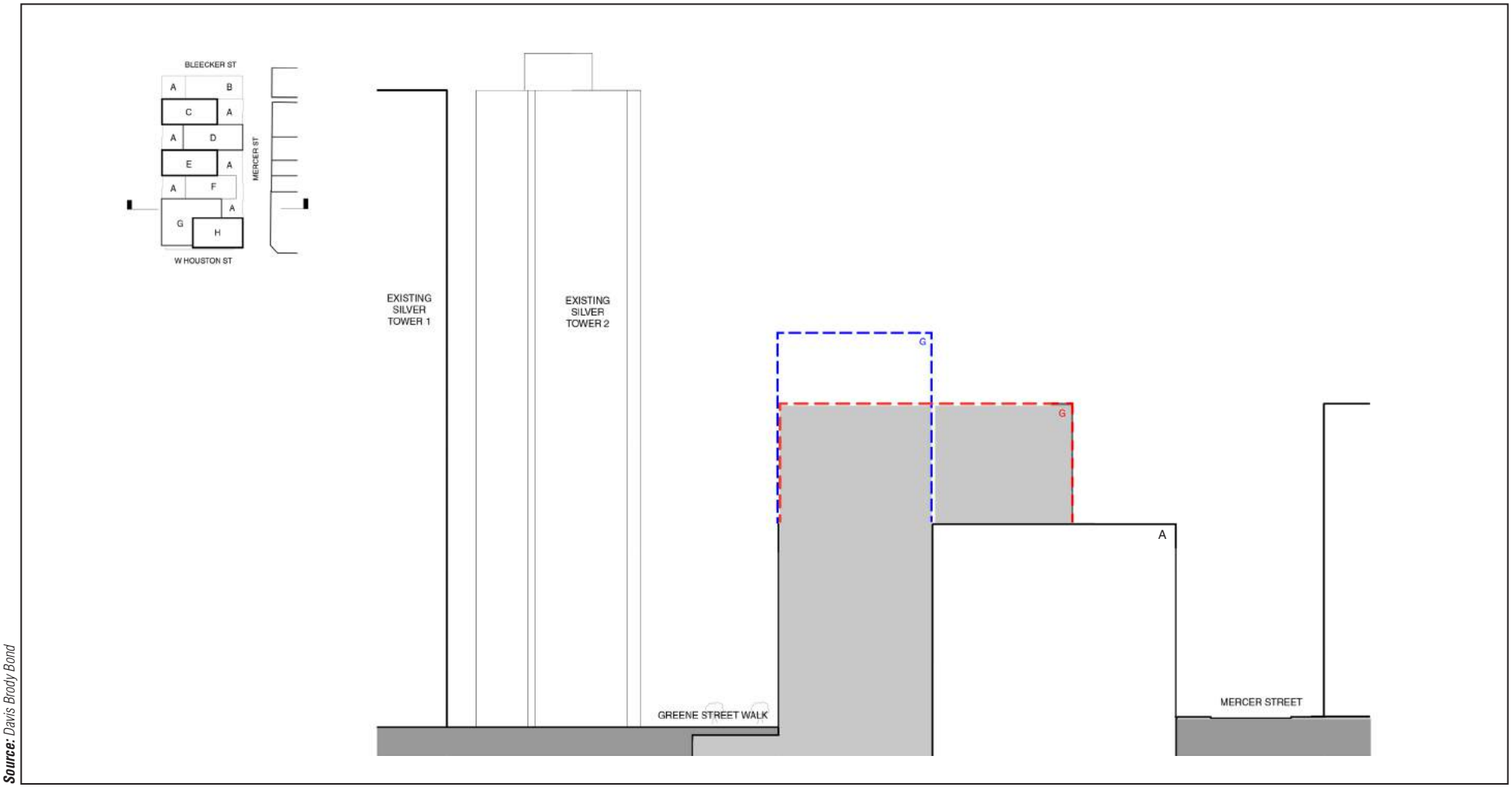
"G" TOWER

The Proposed Modification would adjust the maximum permitted building envelope for the 181 Mercer Street Building's "G" tower as follows (illustrated in **Figures 8, 9, and 10)**:

- A reduction in the height of the "G" tower from 168 feet (the maximum height specified in the Special Permit drawing Z-102) to 138 feet.
- An extension of the width of the "G" tower in the east-west direction beyond the 67.5 feet specified in Special Permit drawing Z-102, reducing the east-west length of the plinth between the "H" and "F" towers to less than the 107 feet specified in the same drawing.

The result of the above-described modification would be a shift in the bulk of the "G" tower to a lower elevation located over the rear portion of the "A" plinth between the "H" and "F" towers of the building (see **Figure 10**). The shifted bulk of the "G" tower over the rear portion of the "A" plinth would be compliant with the height and setback regulations of the underlying zoning district and the Design Guidelines for the building specified in Special Permit drawing Z-122. The shifted bulk would not require any waivers. Although important to the 181 Mercer Street Building's functionality (as discussed below), the shifted bulk would be an immaterial change to its massing, accounting for less than 1 percent of the cubic volume of the building allowed by the Special Permit.

While the "G" tower could be constructed in compliance with existing Special Permit approvals, the Proposed Modification would allow NYU to maximize the functionality of the 181 Mercer Street Building. With the Proposed Modification, the first level of the shifted bulk—at the sixth floor of the building—would contain critical circulation space connecting the "F" and "G" towers at this level, which is the level of the orchestra rehearsal room in the "F" tower and the level of the orchestra-related lobby, bathrooms, and instrumental music instructional space in the "G" tower. This first level of the shifted bulk would also contain instructional space for the instrumental music program and orchestra rehearsal storage. The second level of the shifted bulk at the rear portion of the "A" plinth would accommodate air handlers and other mechanical space that—due to the very large size of the equipment—would extend at this level into adjoining portions of the adjacent "H" and "G" towers. These air handlers provide air circulation to the southern portion of the building's plinth and would function better at this location than the



Source: *Davis Brody Bond*

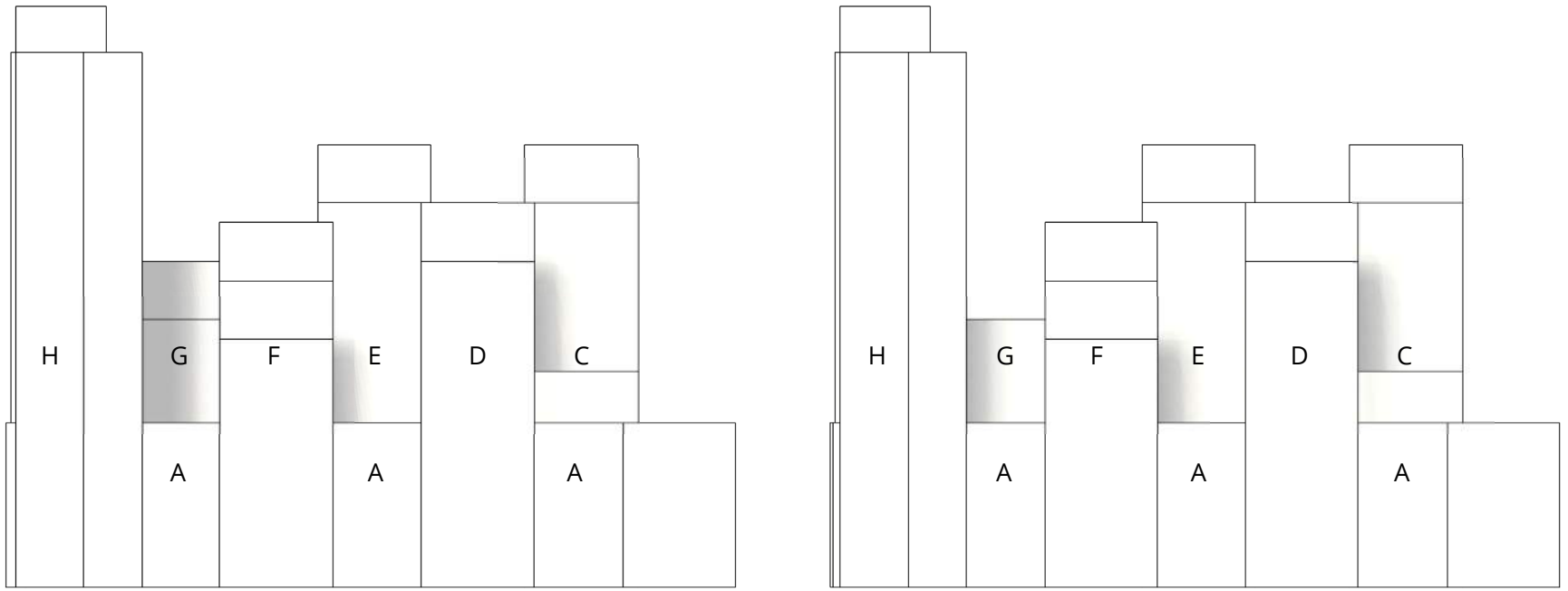
– – – – *"G" Tower Maximum Envelope as per Approved Special Permit*

– – – – *"G" Tower Maximum Envelope as per Proposed Modification*

E-W Section through 181 Mercer Street
Building Element G
View North

NYU CORE

Figure 8

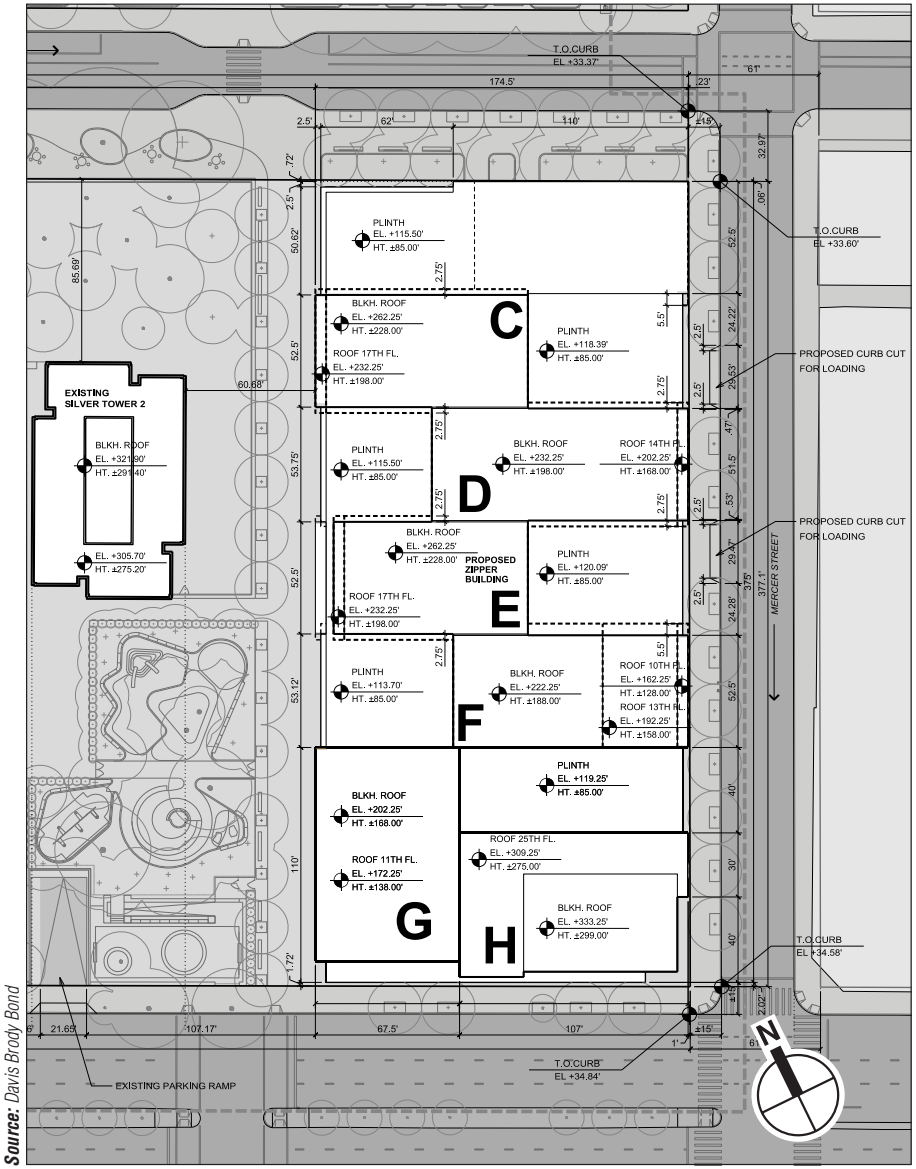


Approved Special Permit East Elevation (Mercer Street)

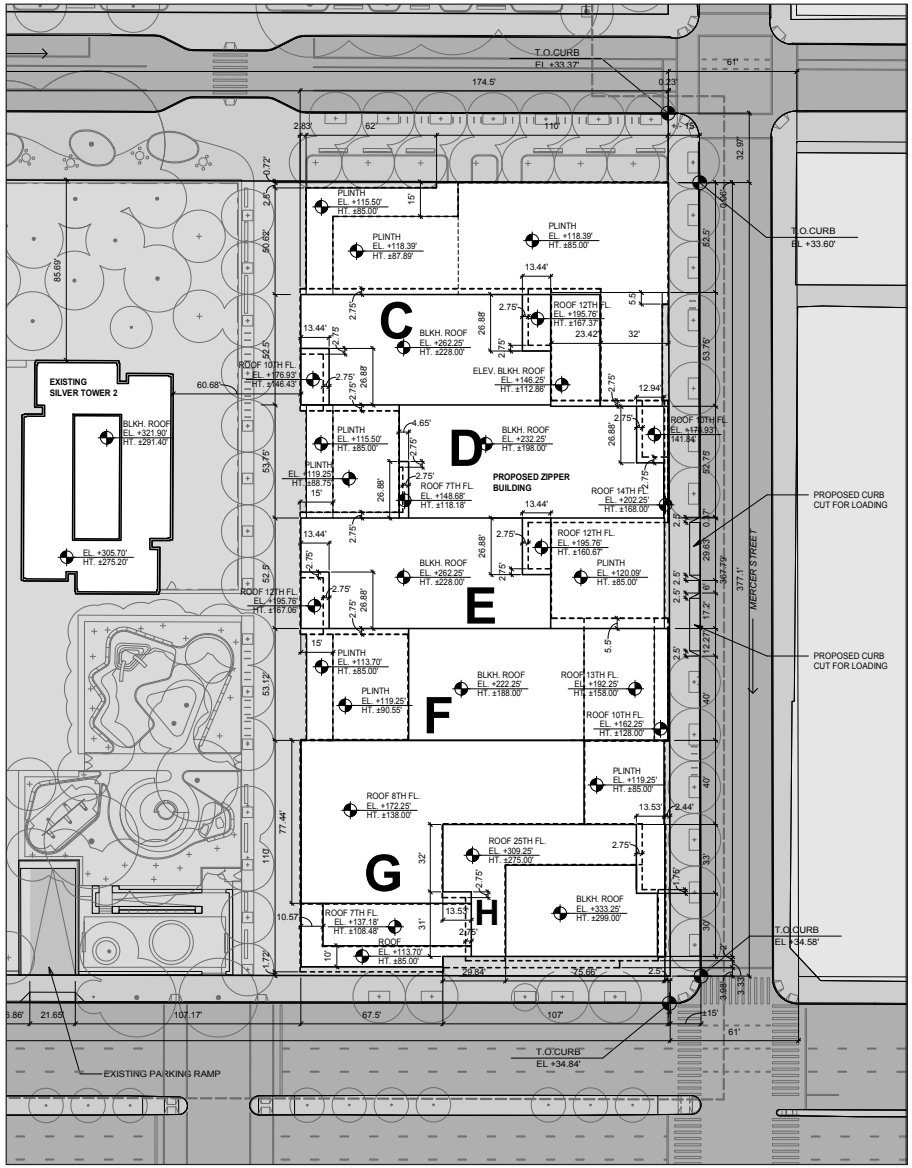
Proposed Modification East Elevation (Mercer Street)

Source: *David Brody Bond*

181 Mercer Street Building Elevation Comparison



Approved Special Permit Roof Plan



Proposed Modification Roof Plan
(Inclusive of Substantial Compliance Changes)

Source: *Davis Brody Bond*

Roof Plan Comparison
Figure 10

roof of the "G" tower, where they would be at a greater distance from the portion of the building they would serve. Without the Proposed Modification, the air handlers would be located on the roof of the "G" tower and would block windows of the faculty apartments on the western façade of the "H" tower and add to the building's bulk as perceived from the adjacent University Village and other vantage points west of the building.

"H" TOWER

The maximum permitted envelope for the 181 Mercer Street Building's "H" tower would be adjusted as follows (see **Figures 10 and 11**):

- Decrease the 6-foot setback from Mercer Street of the southernmost portion of the "H" tower (with 32 feet of frontage along Mercer Street) by 3.5 feet, resulting in a minimum setback from Mercer Street of 2.5 feet. This setback adjustment would occur from ground-level up to and including the top floor of the southern portion of the "H" tower.
- Increase the setback from Mercer Street of the northern-most portion of the "H" tower (with approximately 31 feet of frontage along Mercer Street) to 2.44 feet from ground level to 85 feet in height and to 13.22 feet above 85 feet in height.
- Reduction in the bulk of the western façade of the "H" tower.
- At the base of the "H" tower along West Houston Street, increase the setback of the maximum permitted envelope from 1.72 feet to 3.98 feet.

There would be no change to the required setback of the "H" tower bulkhead. The setback adjustments along Mercer and West Houston Streets would better align the southern portion of the "H" tower plinth to optimize the exterior circulation space at the podium level and the configuration of the faculty apartments in the tower portion. These setback modifications would not increase the maximum permitted floor area for the 181 Mercer Street Building.

ADDITIONAL FAÇADE ARTICULATION

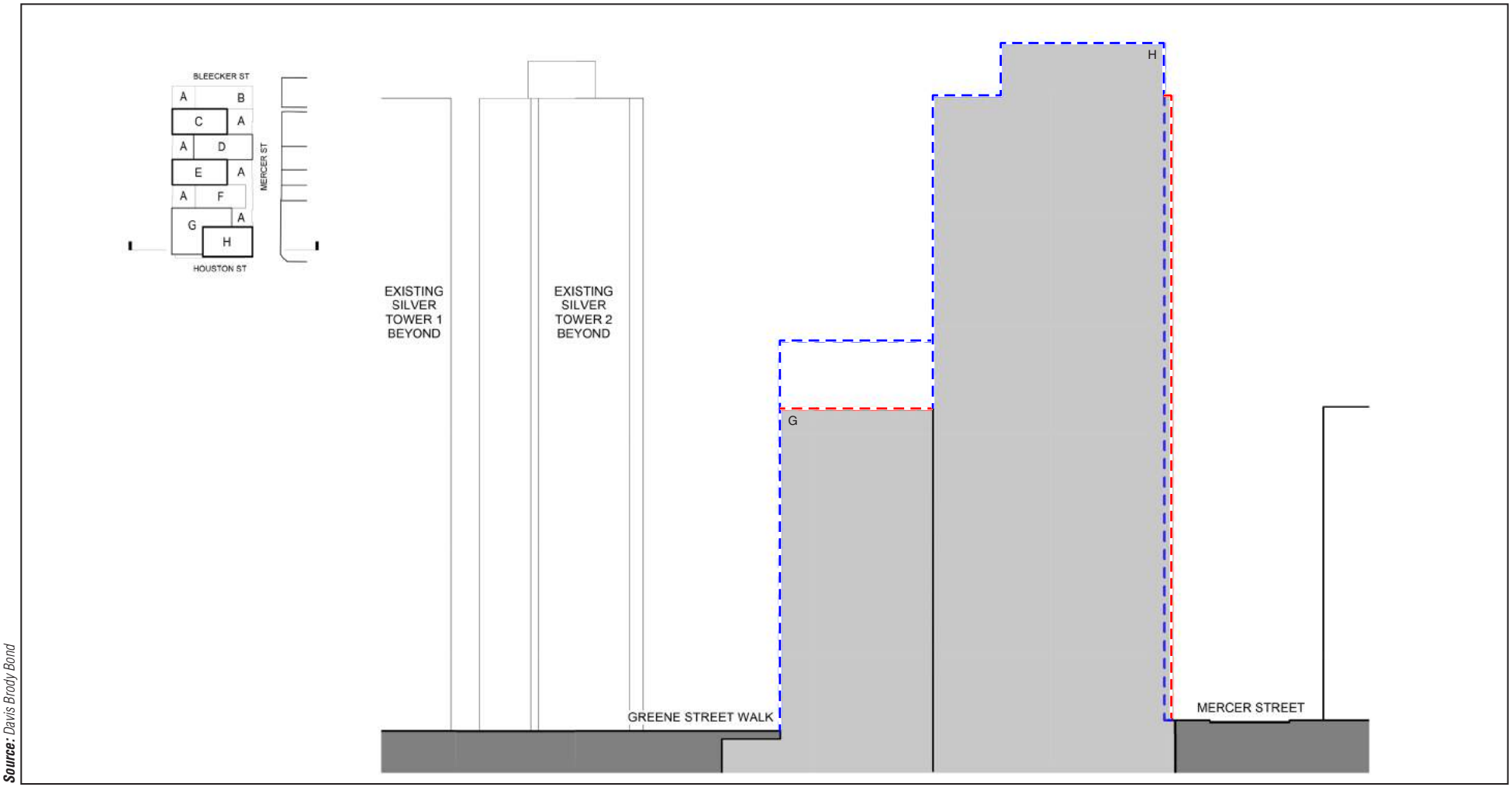
The Proposed Modification includes additional façade articulation cut-outs on the eastern façades of the "C," "D," and "E" towers above the plinth.

C. ANALYSES

This section considers whether the Proposed Modification inclusive of the substantial compliance changes would result in any new or different significant adverse environmental impacts not already identified in the 2012 FEIS and subsequent Tech Memos 001 and 002. The analysis finds that the Proposed Modification inclusive of the substantial compliance changes would not result in any new or different significant adverse impacts not already identified in the 2012 FEIS and subsequent Tech Memos.

The Proposed Modification (inclusive of the substantial compliance changes) relates only to changes in the 181 Mercer Street Building design and does not affect the location of the project buildings, maximum permitted floor area, land uses, or timing of the overall NYU Core project.

Since the Proposed Modification inclusive of the substantial compliance changes would not affect the overall land uses or building locations within the NYU Core project, the findings of the FEIS would not change with respect to land use and public policy.



Source: *Davis Brody Bond*

– – – – *"G" and "H" Tower Maximum Envelope as per Approved Special Permit*

– – – – *"G" and "H" Tower Maximum Envelope as per Proposed Modification*

E-W Section through 181 Mercer Street
Building Elements G and H
View North

NYU CORE

Figure 11

With respect to zoning, the Proposed Modification includes a 3.5-foot eastward extension of the approved Special Permit height and setback waiver along Mercer Street for the southern portion of the "H" tower (as shown on Special Permit drawing Z-133). This change is small and would more closely align the southern portion of the "H" tower plinth with the northern portion of the "H" tower plinth. The increased height and setback waiver for the southern portion of the "H" tower would be offset by a decreased height and setback waiver for the northern portion of the "H" tower. Above the 85-feet plinth level, the originally approved Special Permit drawings for the "H" tower provide for 35 feet of frontage to have a setback from Mercer Street of 6 feet and 30 feet of frontage to have no setback; the modified drawings for the "H" tower above the plinth would require 31 feet of frontage to have a setback from Mercer Street of more than 13 feet and 32 feet of frontage to have a 2.5-foot setback. As described in the 2012 FEIS, the height and setback waiver for the "H" tower facilitates an eastward shift of the building's mass in order to accommodate the Greene Street Walk along the building's western façade, improving connectivity through and across the site and supporting the activation of Mercer Street by engaging the sidewalk. The 3.5-foot extension of the approved Special Permit height and setback waiver for the southern portion of the "H" tower would accommodate the design modification to the "H" tower, and would continue to be consistent with the intention of the waivers. Furthermore, the Proposed Modification changes to the "C," "E," and "G" towers and all of the substantial compliance changes would comply with the height and setback regulations of the underlying zoning district and the Design Guidelines for the building specified in the Special Permit drawings. For these reasons, consistent with the findings of the 2012 FEIS and subsequent Tech Memos, the Proposed Modification inclusive of the substantial compliance changes would not result in significant adverse impacts with respect to land use, zoning and public policy.

The Proposed Modification inclusive of the substantial compliance changes would not increase the amount of dormitory and faculty housing in the building. Therefore, the findings with respect to community facilities would be unchanged, and the Proposed Modification inclusive of the substantial compliance changes would not result in significant adverse impacts with respect to community facilities.

The Proposed Modification inclusive of the substantial compliance changes would adjust the allowable building envelope with respect to the "C," "E," "G," and "H" towers and the base of the building along West Houston Street, but this would not increase the maximum permitted floor area within the 181 Mercer Street Building. The Proposed Modification inclusive of the substantial compliance changes would not significantly alter the total proposed academic space or density of the project. As such, the Proposed Modification inclusive of the substantial compliance changes would not alter the findings with respect to demand on publicly accessible open spaces, water and sewer infrastructure, solid waste and sanitation services, energy, transportation systems, or overall greenhouse gas (GHG) emissions, and the Proposed Modification inclusive of the substantial compliance changes would not result in new or different significant adverse impacts in these areas. Similarly, the Proposed Modification inclusive of the substantial compliance changes would not affect socioeconomic conditions, and therefore would not alter the conclusions that the proposed project would not result in significant adverse impacts due to direct or indirect displacement of residents and business.

With the Proposed Modification and the substantial compliance changes, development would occur on the same two superblocks of the Development Area analyzed in the 2012 FEIS and subsequent Tech Memos 001 and 002. The Proposed Modification inclusive of the substantial compliance changes would not change the building's location or the open spaces on the superblocks. Thus, there

would be no change to the findings presented in the FEIS and subsequent Tech Memos in the areas of natural resources or hazardous materials.

The change associated with the Proposed Modification inclusive of the substantial compliance changes would not have the potential to affect the findings of the FEIS with respect to historic resources, as they would not change the context of the project as it relates to the historic resources of Washington Square Village and University Village or the historic districts or other historic resources near the project site. As it pertains to air quality and noise, the Proposed Modification inclusive of the substantial compliance would not change any of the stationary air quality or noise sources, or create new sensitive receptors; therefore the findings of the FEIS and subsequent Tech Memos with respect to air quality and noise would be unchanged.

The Proposed Modification inclusive of the substantial compliance changes would not alter the overall conceptual construction schedule presented in Chapter 26 of the FEIS. Therefore, the findings of the construction-related analyses (including transportation, air quality, noise and vibration, historic and cultural resources, hazardous materials, natural resources, socioeconomic conditions, community facilities, land use and neighborhood character and public health) presented in the FEIS and subsequent technical memoranda would be unchanged.

Given that the Proposed Modification inclusive of the substantial compliance changes would result in a change in bulk, potential effects on shadows, as well as urban design and visual resources warrant further consideration and are discussed below. In addition, because building form and scale, street grid, and view corridors contribute to the distinct and defining neighborhood characteristics, the findings of the shadows and urban design assessments are then used to consider potential effects on Neighborhood Character.

SHADOWS

As discussed in the 2012 FEIS and subsequent Tech Memos, the 181 Mercer Street Building as approved would cast incremental shadows at certain times on one or more facades of the University Village buildings[1], on the willow oaks within the Oak Grove on the South Block, and on the Mercer Playground on the north block. With the Proposed Modification inclusive of the substantial compliance changes, small changes to the maximum building envelopes proposed for the "C," "E," "G," and "H" towers would slightly increase the extent of incremental shadows on the three sunlight-sensitive resources mentioned above during certain time periods, while at the same time slightly reducing the extent of incremental shadow on other portions of those same resources. On net, the combined increased and reduced extent of incremental shadow would result in a slight reduction of shadow in winter, and a slight increase of incremental shadow in the other seasons. As detailed below, the small areas of additional shadow would not be substantial enough in any season to change the conclusions of the 2012 FEIS and subsequent Tech Memos that project shadows would not result in significant adverse impacts on these resources. The Proposed Modification inclusive of the substantial compliance changes would not result in any changes in shadows to other sunlight-sensitive resources. Therefore, the Proposed Modification inclusive of the substantial

[1] The gridded and sheer concrete facades of the three identical 30-story towers were analyzed in the 2012 FEIS and 2012 Tech Memos as sunlight-sensitive features of this cultural resource, because a document supporting its designation as a New York City landmark states "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."

compliance changes would not result in any new or different significant adverse shadow impacts not already identified in the 2012 FEIS and subsequent Tech Memos.

DECEMBER 21ANALYSIS DAY

On the analysis day representing the winter months, between approximately 8:51 AM and 1:00 PM the Proposed Modification inclusive of the substantial compliance changes would result in slight reductions of shadow on some portions of the University Village facades and slight increases in shadow on other portions (see **Figure 12**). On net, there would be slightly less shadow on the University Village facades with the Proposed Modification inclusive of the substantial compliance changes, because winter shadows fall to the northwest in the morning rather than due west or southwest, and the reduction in height of the "G" tower and the reduction in bulk of the western facade of the "H" tower would have a greater effect on shadows than the changes to the "C" and "E" towers further north. No changes would occur to shadows on the Oak Grove or the Mercer Playground on this analysis day.

MARCH 21 / SEPTEMBER 21 ANALYSIS DAY

On the analysis day representing the early spring and the fall, the Proposed Modification inclusive of the substantial compliance changes would result in small increases of incremental shadow on some portions of the University Village building facades and small reductions of incremental shadow on other portions of the facades between 7:36 AM and approximately noon, as shown in **Figure 13**. On net, there would be slightly more area of additional shadow than of reduced shadow on the facades, but the net increase would be minimal. Briefly, in the late morning, there would be both additional and reduced incremental shadow on a small portion of the Oak Grove, roughly equivalent in extent on net. There would be a brief and small reduction of shadow on the southern end of the existing Mercer Playground at approximately 1:30 PM, and an increase in incremental shadow on the southern portion of the playground between 1:45 PM and 2:30 PM (see **Figure 14**).

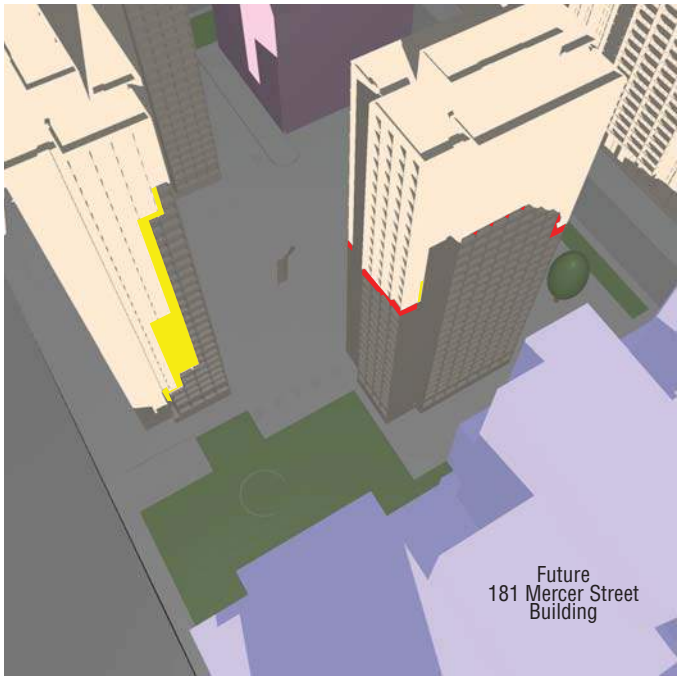
MAY 6 / AUGUST 6 ANALYSIS DAY

On the analysis day representing the growing season in late spring and summer, the Proposed Modification inclusive of the substantial compliance changes would result in slight reductions of shadow on some portions of the University Village facades and slight increases in shadow on other portions (see **Figure 15**). On net, there would be slightly more shadow on the University Village facades with the Proposed Modification inclusive of the substantial compliance changes, but the net increase would be minimal. Briefly, in the late morning, there would be additional and reduced incremental shadow on a small portion of the Oak Grove, resulting on net in a minimal increase in incremental shadow. There would be a small increase in incremental shadow on the southern portion of Mercer Playground between 1:30 PM and 2:00 PM (see **Figure 14**).

JUNE 21 ANALYSIS DAY

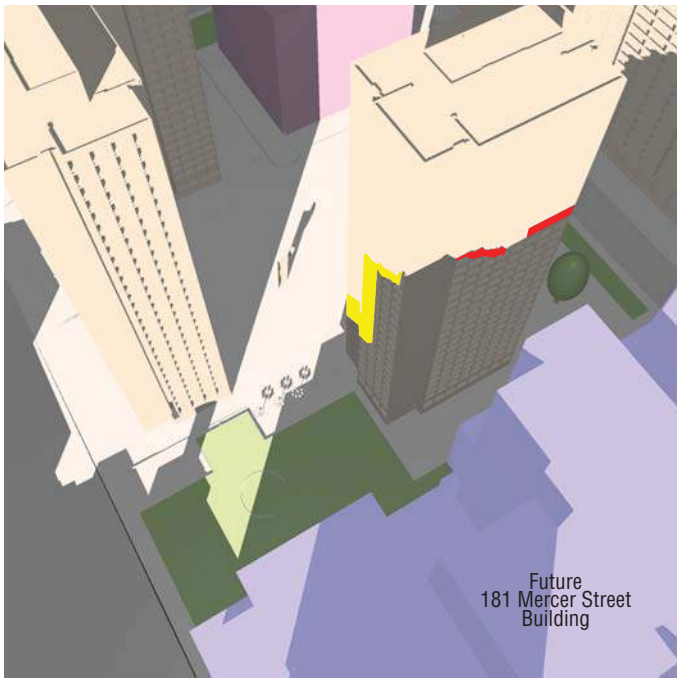
On the summer solstice analysis day, similar to the May 6 / August 6 analysis day, the Proposed Modification inclusive of the substantial compliance changes would result in slight reductions of shadow on some portions of the University Village facades and slight increases in shadow on other portions. Shadow effects would be very similar to those of the May 6 / August 6 analysis day and overall, on net, there would be slightly more shadow on the University Village facades with the Proposed Modification inclusive of the substantial compliance changes, but the net increase would be minimal. From 9:30 AM to 10:00 AM and again from 10:30 AM to 10:45 AM, there would be a

8.30.17

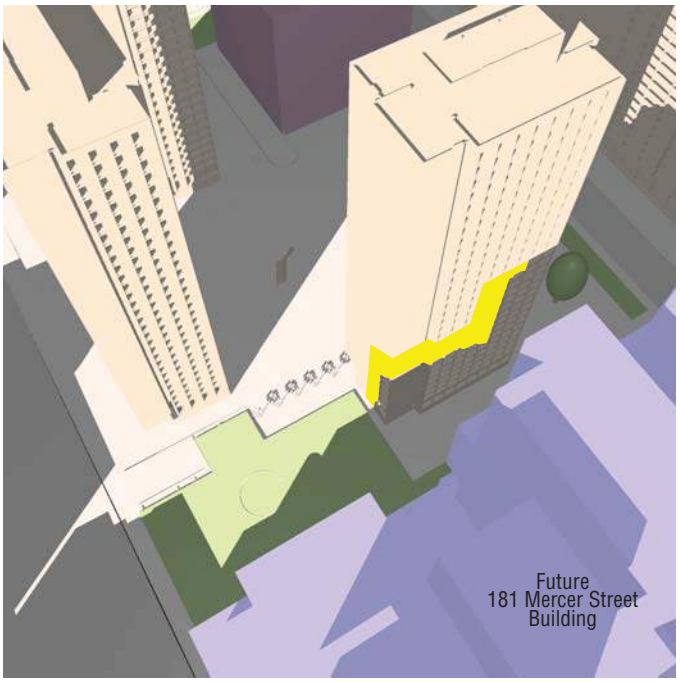


9:00 AM

10:00 AM



11:00 AM



12:00 PM

Incremental Shadow on Sunlight-Sensitive Features

Reduced Shadow on Sunlight Sensitive Features

All times are Eastern Standard Time.

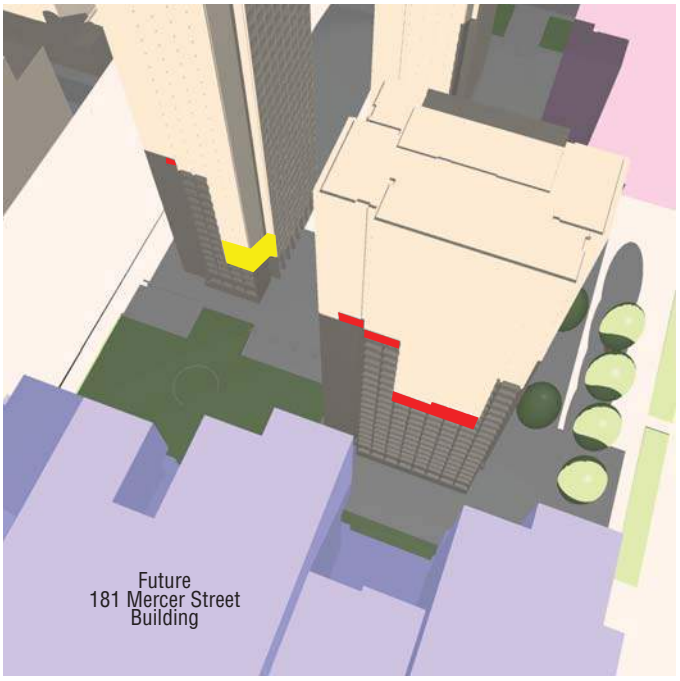
NYU CORE

Shadows - Winter Solstice

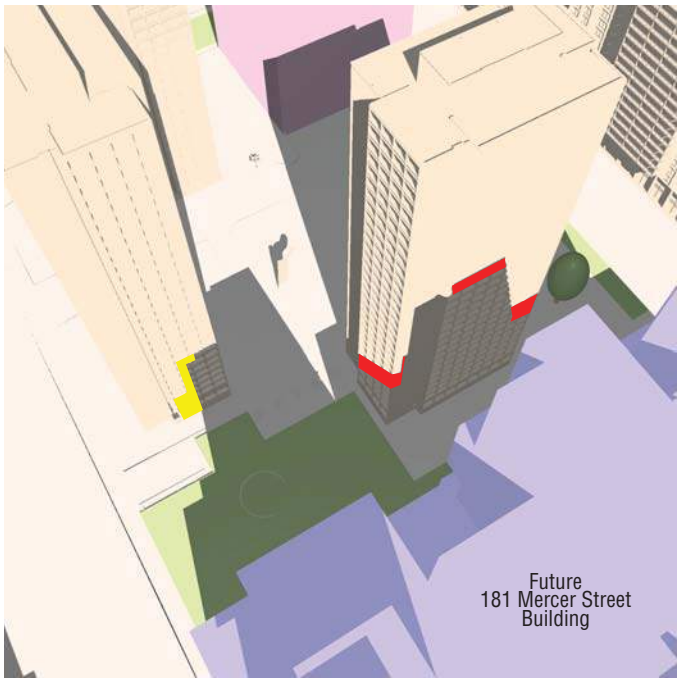
Figure 12

8.30.17

8:00 AM



9:00 AM



10:00 AM

11:00 AM

Incremental Shadow on Sunlight-Sensitive Features

Reduced Shadow on Sunlight Sensitive Features

All times are Eastern Standard Time.

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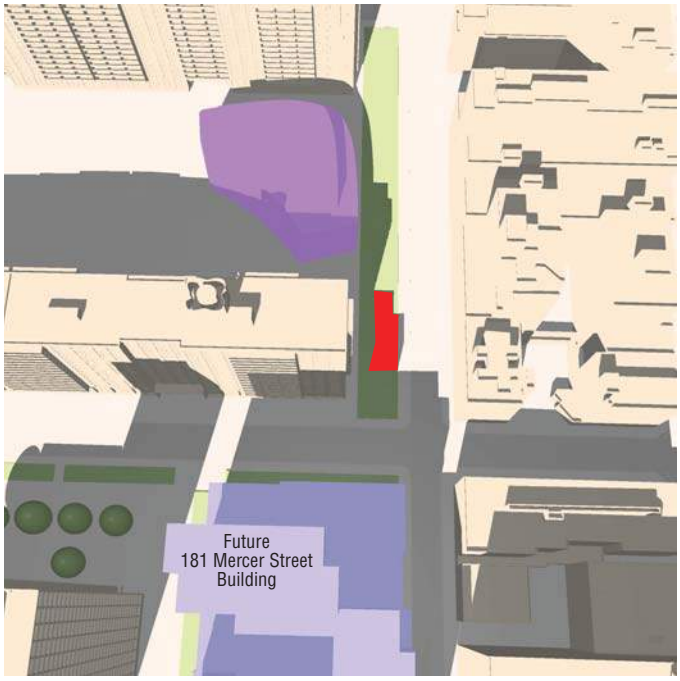
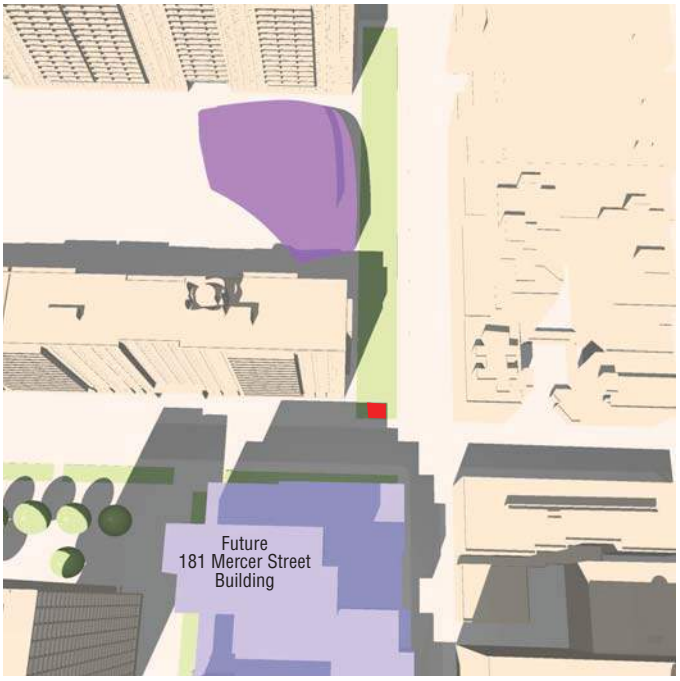
Shadows - Spring and Fall Equinoxes

Figure 13

8.30.17



Spring and Fall Equinoxes - 2:15 PM

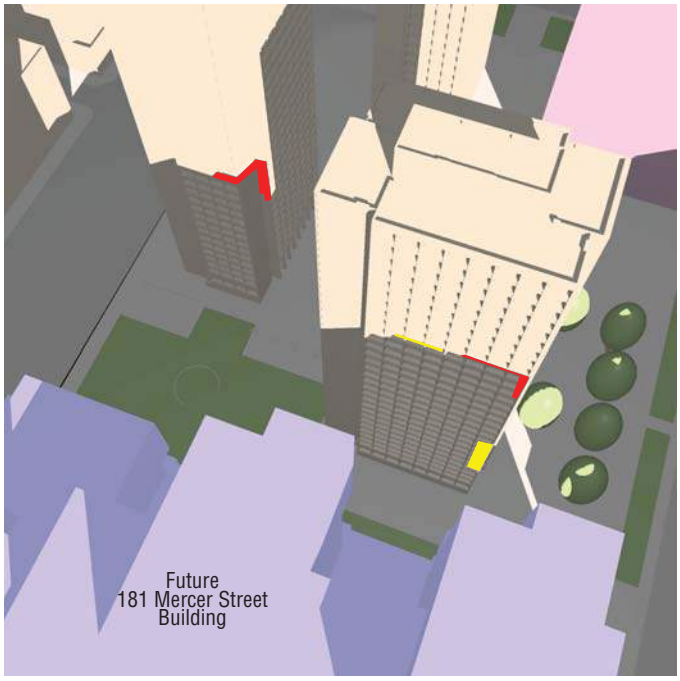


May 6 / August 6 - 1:45 PM

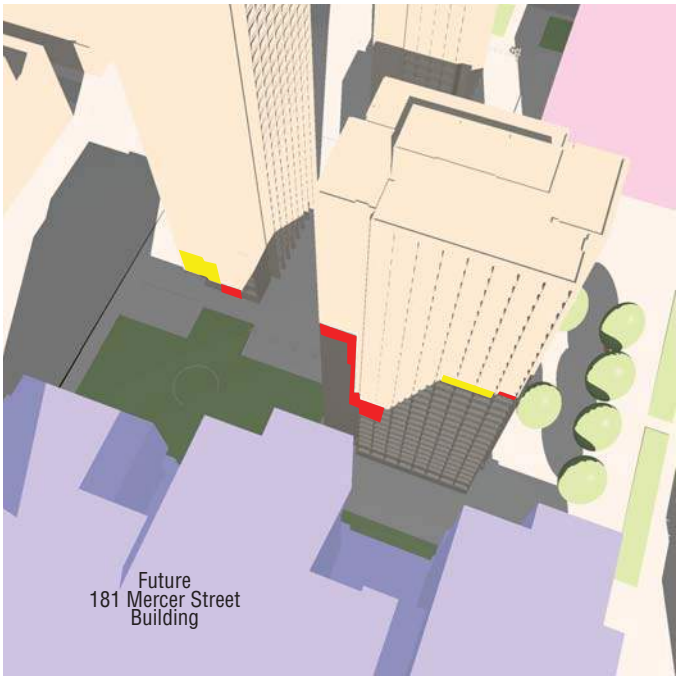
Incremental Shadow on Sunlight-Sensitive Features

All times are Eastern Standard Time.

8.30.17



7:00 AM



8:30 AM

10:00 AM

11:30 AM

Incremental Shadow on Sunlight-Sensitive Features

Reduced Shadow on Sunlight Sensitive Features

All times are Eastern Standard Time.

NYU CORE

Shadows - Late Spring and Summer

Figure 15

slight increase in incremental shadow on portions of two of the trees in the Oak Grove (one tree between 9:30 AM and 10:00 AM and a different tree between 10:30 AM and 10:45 AM). There would be a very small additional strip of shadow at the southern end of Mercer Playground between approximately 3:00 PM and 3:15 PM.

Overall, the Proposed Modification inclusive of the substantial compliance changes would not result in any new or different significant adverse shadow impacts not already identified in the 2012 FEIS and subsequent Tech Memos.

URBAN DESIGN AND VISUAL RESOURCES

The 2012 FEIS and subsequent Tech Memos 001 and 002 concluded that the NYU Core project would not result in significant adverse impacts with respect to any of the elements of urban design: streets, buildings, open space, natural features, and view corridors and visual resources. This Technical Memorandum presents a modification to the bulk and height of the 181 Mercer Street Building. As described below, the Proposed Modification with the substantial compliance changes would not result in any significant adverse impacts on urban design or visual resources.

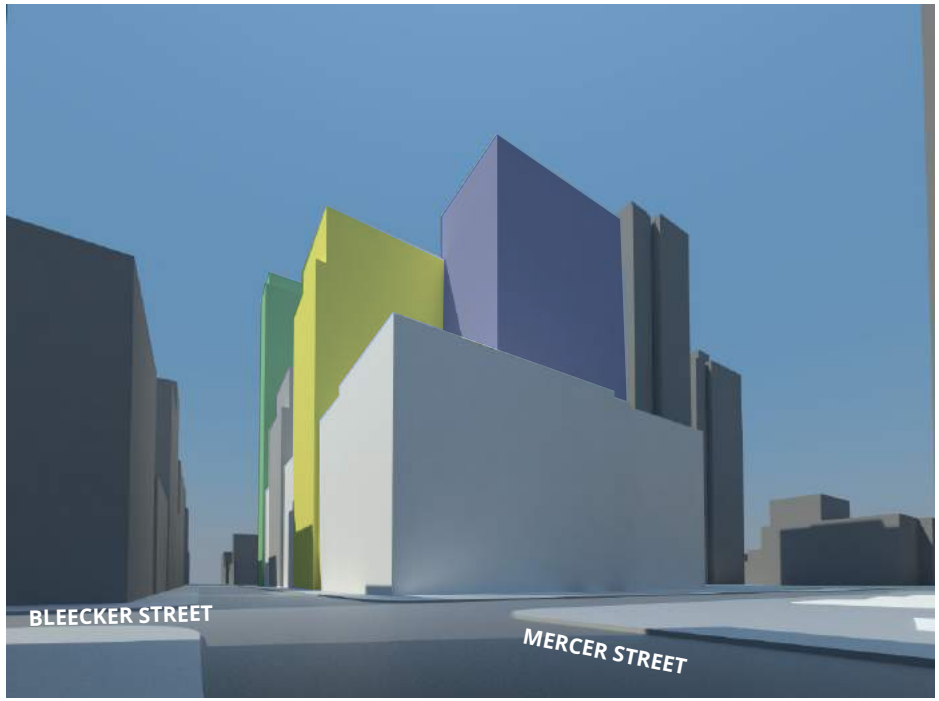
The 181 Mercer Street Building as approved will span the block along Mercer Street between West Houston Street and Bleecker Street. As described in the 2012 FEIS, the 181 Mercer Street Building (referred to as the Zipper Building in the FEIS) would be massed to respond to the different existing contexts along West 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. The heights of the 181 Mercer Street Building's towers as approved would be similar to building heights in the surrounding area. At its tallest point, the 181 Mercer Street Building would be no taller than the University Village towers. The staggered arrangement of the towers above the base would create light courts fronting on Mercer Street and Greene Street Walk. These light courts would break up the volume of the building as seen along Mercer Street, as well as on West Houston and Bleecker Streets.

The Proposed Modification inclusive of the substantial compliance changes would be consistent with the intended massing arrangement of the building analyzed in the 2012 FEIS and subsequent Tech Memos. While the Proposed Modification would eliminate the current required envelope setbacks along the western facades of the "C" and "E" towers, the articulation of those towers would be implemented through a new larger setback above the plinth that would apply to all or a portion of each tower (see **Figure 5**). The new façade articulation form would continue to serve to break up the building's bulk. The Proposed Modification would reduce the bulk of the "G" tower and reduce its height from 168 feet (the maximum height specified in the Special Permit drawings) to 138 feet, and would shift some of the bulk of the "G" tower east towards the center of the building between the "H" and "F" towers. The combination of these changes along the western façade of the 181 Mercer Street Building would allow for more light and air to the Greene Street Walk and would not materially affect the pedestrian experience on Greene Street Walk or any of the streets surrounding the building. Along Mercer Street, the 3.5-foot shift eastward of the maximum envelope of the southern portion of the "H" tower, and the shift north of the building's setback from West Houston Street would not materially affect the pedestrian experience along Mercer Street or West Houston Street (see **Figures 16 through 19**).

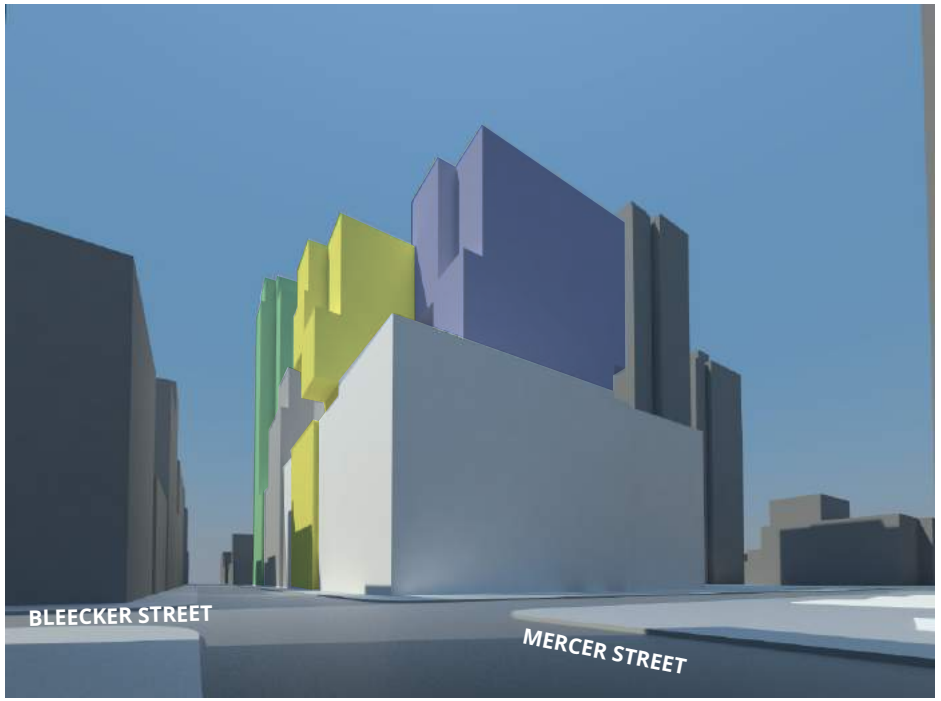
Source: NYU

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY (MAXIMUM HEIGHTS ARE NOT ILLUSTRATIVE)

West Houston Street - North Elevation



Approved Special Permit Massing



Proposed Modification (Inclusive of Substantial Compliance Changes)

Source: *Davis Brody Bond*

"C" Tower

"D" Tower

"E" Tower (not visible in this view)

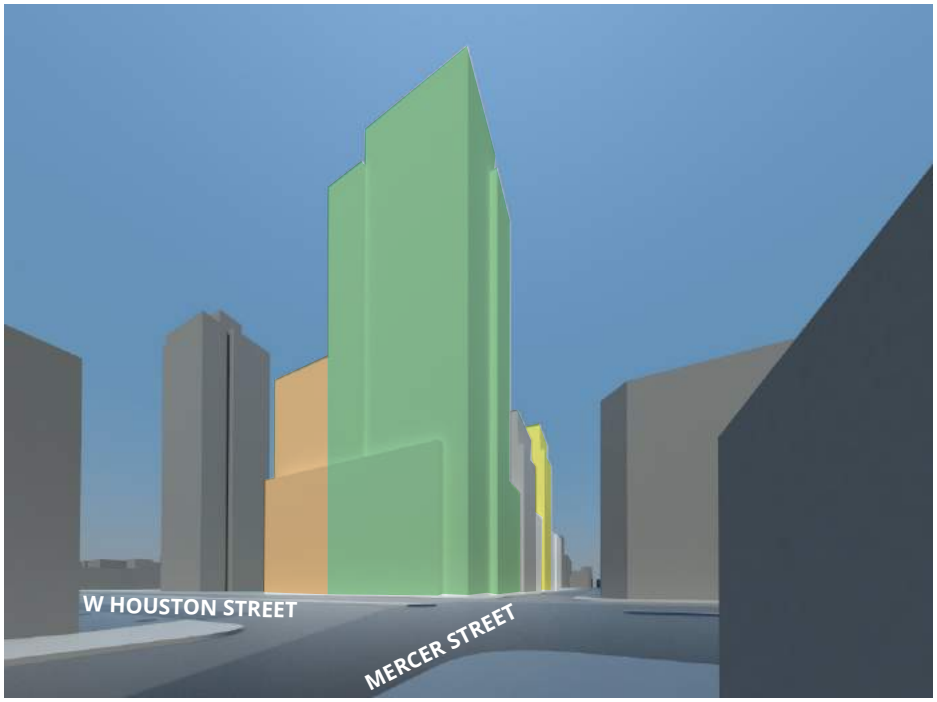
"G" Tower (not visible in this view)

"H" Tower

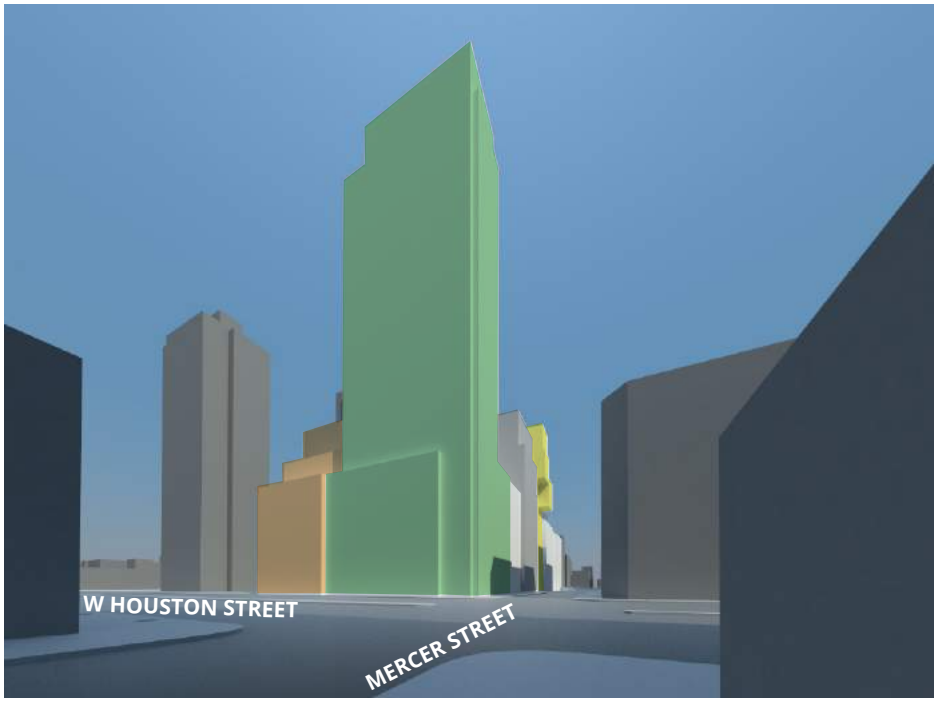
Illustrative View of 181 Mercer Street Building from Intersection of Mercer Street and Bleecker Street Looking South

NYU CORE

Figure 17



Approved Special Permit Massing



Proposed Modification (Inclusive of Substantial Compliance Changes)

Source: *Davis Brody Bond*

"C" Tower (not visible in this view)

"D" Tower

"E" Tower (not visible in this view)

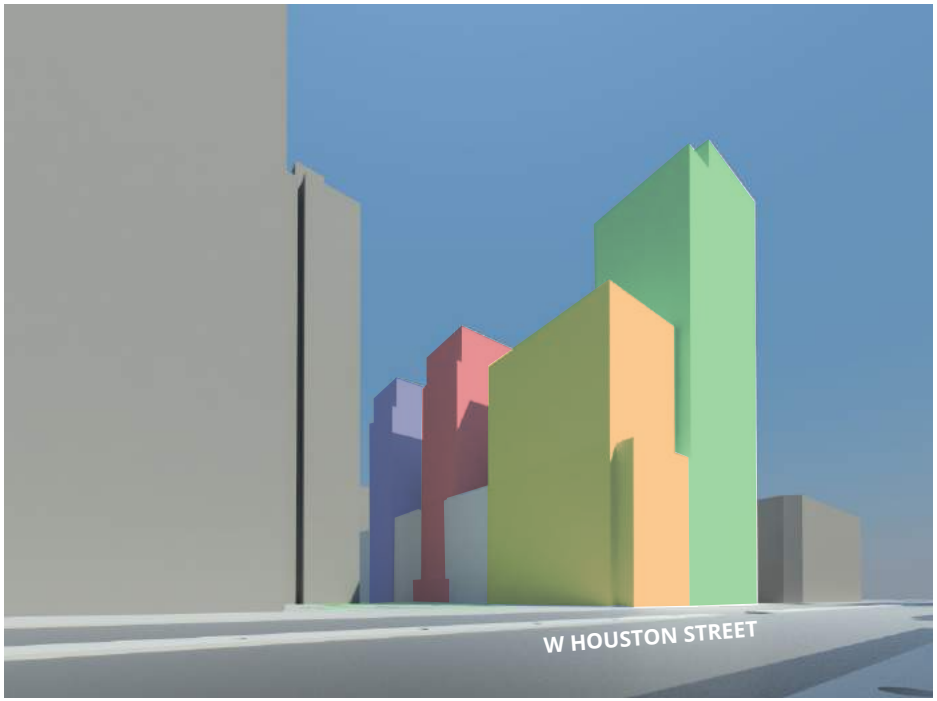
"G" Tower

"H" Tower

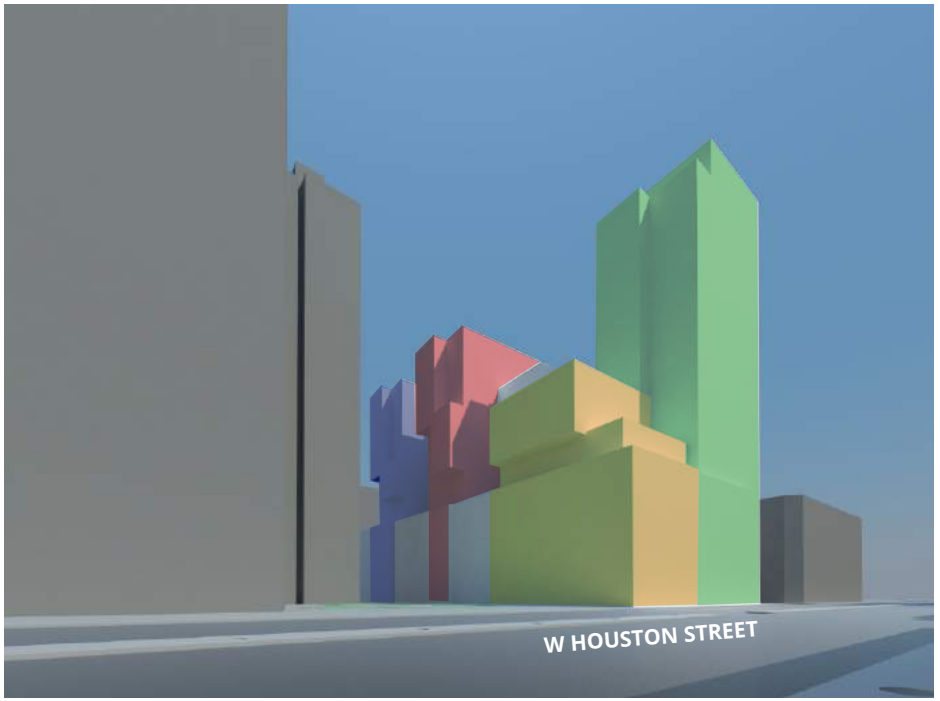
Illustrative View of 181 Mercer Street Building from Intersection of Mercer Street and West Houston Street looking North

NYU CORE

Figure 18



Approved Special Permit Massing



Proposed Modification (Inclusive of Substantial Compliance Changes)

Source: *Davis Brody Bond*

"C" Tower

"D" Tower (not visible in this view)

"E" Tower

"G" Tower

"H" Tower

Illustrative View of 181 Mercer Street Building from West Houston Street looking Northeast

NYU CORE

Figure 19

Similar to the massing shown in the Special Permit drawings, with the Proposed Modification inclusive of the substantial compliance changes the "C" and "E" towers would be visible from the eastern sidewalk of Mercer Street north of West Houston Street. The eastward adjustment of the towers would make them more visible from this pedestrian viewpoint, but the adjustment would be within the height and setback requirements of the underlying zoning, and would not adversely affect any elements of urban design. The "G" tower with the Proposed Modification would not be visible from the sidewalk on Mercer Street north of West Houston Street because it would be located on top of the 85-feet tall base of the building and would be setback at a depth of 46 feet from Mercer Street (see **Figure 20**).

With the Proposed Modification and the substantial compliance changes, the 181 Mercer Street building would continue to provide a staggered massing to break up the building's bulk. The building would continue to have narrow towers, rising between 10 and 25 stories (approximately 128 to 299 feet above street level) set on an approximately 85-foot tall base. Additionally, the varied massing and staggered heights would continue to be in keeping with the varied building heights across Mercer Street and the surrounding area. As presented in the FEIS, at its tallest point, the 181 Mercer Street Building would not exceed the height of the University Village towers and would act as a visual transition between the tall towers and the shorter buildings in the surrounding area (see **Figure 16**).

As described in the FEIS, the 181 Mercer Street Building is not expected to result in significant adverse impacts on visual resources in the urban design study areas as defined in the 2012 FEIS. The 181 Mercer Street Building would be visible from south of West Houston Street in certain northern view corridors, but from those view corridors it would be a background building to the existing mid-rise loft buildings lining those streets. The 181 Mercer Street Building could potentially be seen from Washington Square Park, Fifth Avenue, and University Place, but it would be a partial view as there are numerous intervening buildings of varying heights. With respect to impacts to visual resources, the Proposed Modification inclusive of the substantial compliance changes would not alter the findings of the 2012 FEIS and subsequent Tech Memos, and there would be no impacts to visual resources as a result of the Proposed Modification inclusive of the substantial compliance changes.

Overall, consistent with the findings in the FEIS and June 2012 and July 2012 Tech Memos as to the 181 Mercer Street Building, the Proposed Modification inclusive of the substantial compliance changes would not result in significant adverse impacts on urban design or visual resources.

NEIGHBORHOOD CHARACTER

As described above, the Proposed Modification inclusive of the substantial compliance changes would not result in new significant adverse impacts to any of the contributing elements that define neighborhood character (land use, urban design, visual resources, historic resources, socioeconomic conditions, shadows, open space, traffic, and noise). With the Proposed Modification inclusive of the substantial compliance changes, the finding in the FEIS and subsequent Tech Memos that the proposed project would not result in significant adverse impacts with respect to neighborhood character would remain unchanged. ✷

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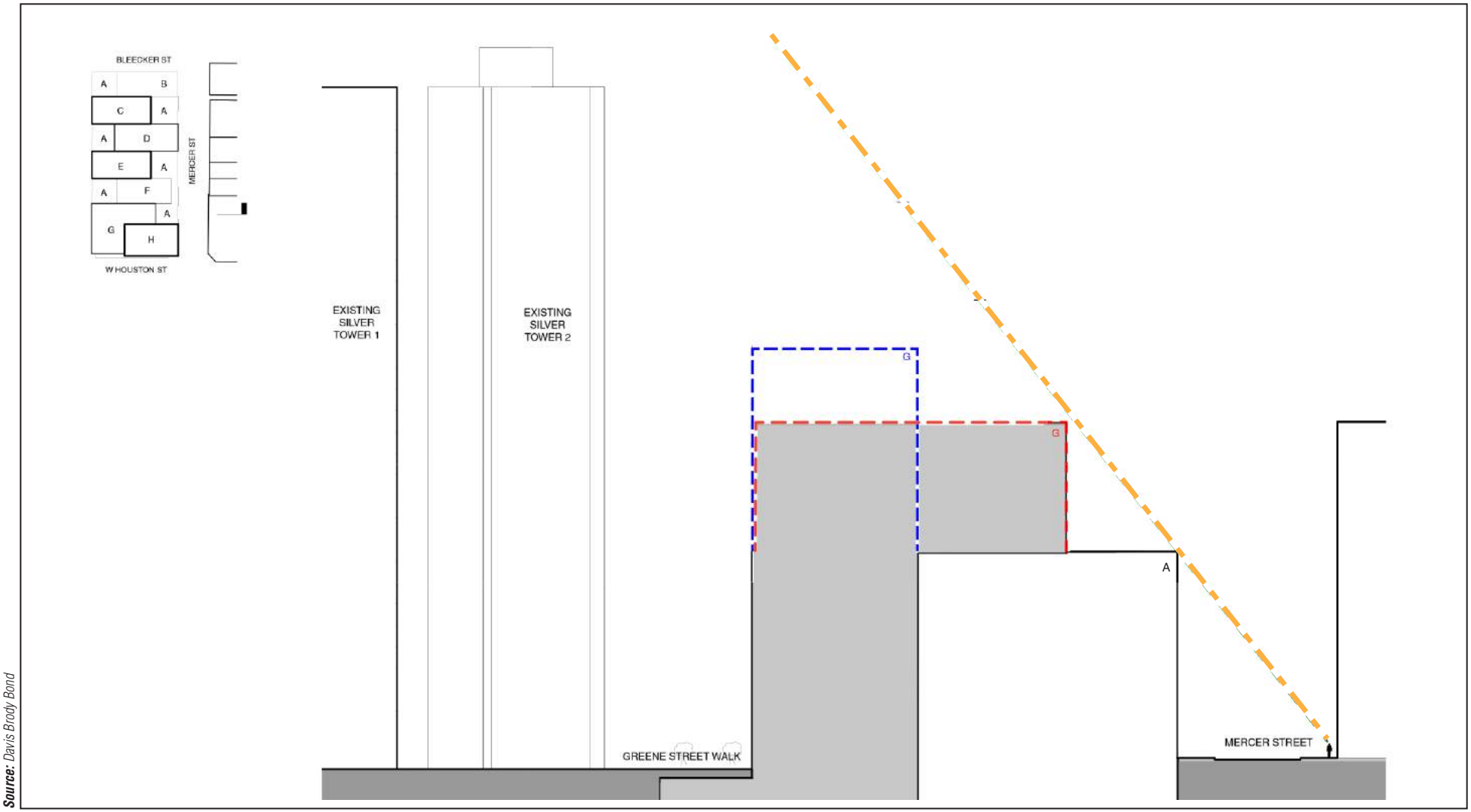

Source: Davis Brody Bond

"G" Tower Maximum Envelope as per Approved Special Permit

"G" Tower Maximum Envelope as per Proposed Modification

Limit of Pedestrian View ("G" Tower not visible)

E-W Section through 181 Mercer Street
Building Element G

NYU CORE

Figure 20