

TECHNICAL MEMORANDUM
American Museum of Natural History
Richard Gilder Center for Science, Education, and Innovation
CEQR No. 16DPR004M
April 25, 2018

A. INTRODUCTION

The American Museum of Natural History (AMNH or the Museum) is proposing minor modifications to the previously approved Richard Gilder Center for Science, Education, and Innovation project. As described in greater detail below (see Section B, “Background”), the Gilder Center project was analyzed in a Final Environmental Impact Statement (FEIS) consistent with the requirements of the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR). The New York City Department of Parks and Recreation (NYC Parks) was the lead agency for the environmental review. The Notice of Completion of the FEIS was issued by NYC Parks on November 15, 2017, following which NYC Parks released a Statement of Findings and approval of the Gilder Center project on December 4, 2017.

Overall, the basic scale and function of the project would be unchanged, as would the location and open space improvements within Theodore Roosevelt Park. The project would continue to serve the same purpose and need identified in the FEIS, and anticipated attendance levels, access, and utilization would be unchanged from that previously identified in the FEIS.

The purpose of this Technical Memorandum is to determine whether the proposed modifications to the approved project, coupled with any relevant changes in circumstances or newly discovered information, would result in any significant adverse environmental impacts that were not identified or inadequately addressed in the FEIS. As described below, this Technical Memorandum concludes that there would be no new or inadequately addressed significant adverse environmental impacts.

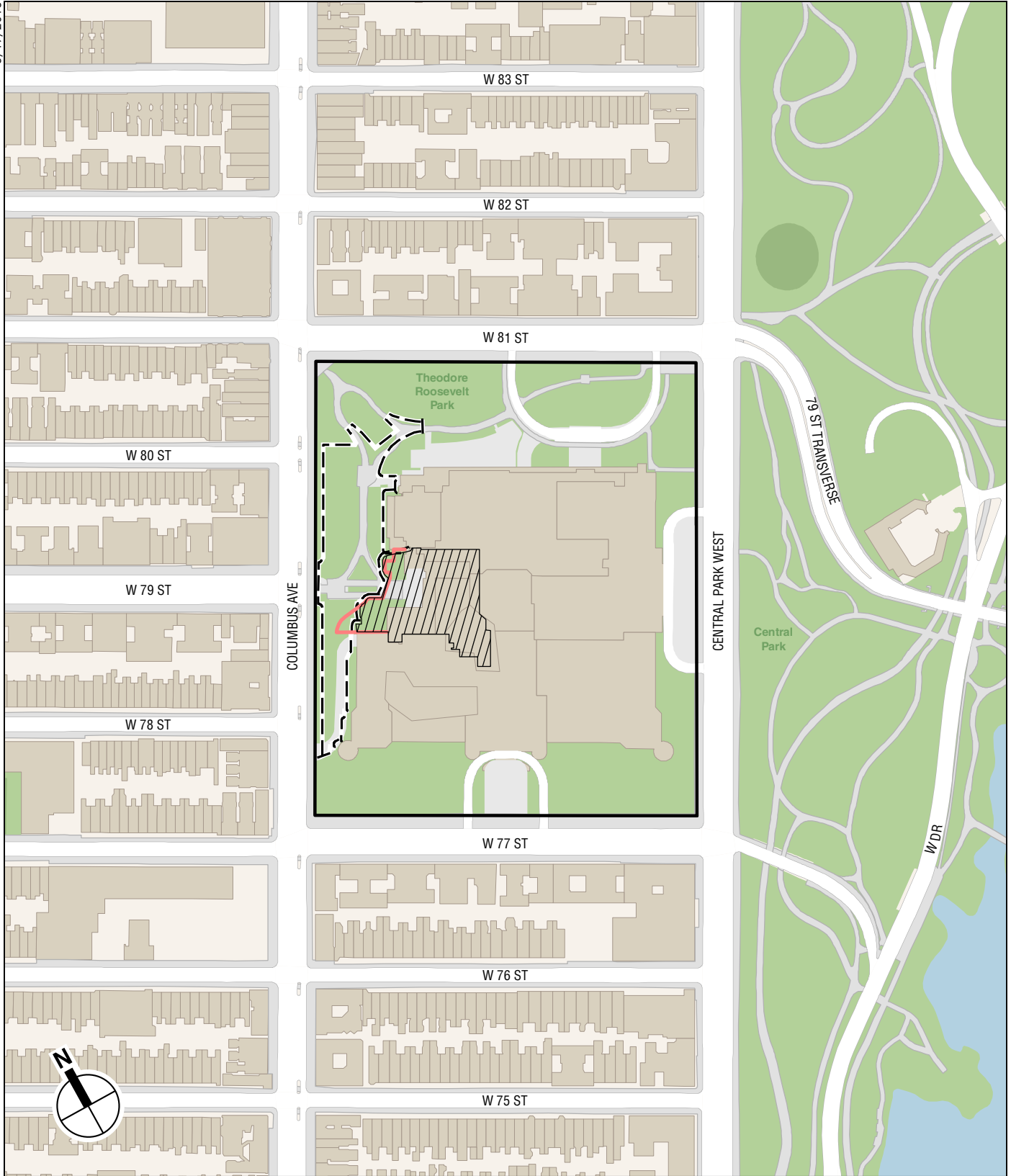
B. BACKGROUND

DESCRIPTION OF THE APPROVED PROJECT

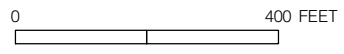
The Museum is located on the superbblock bounded by West 81st Street, West 77th Street, Central Park West, and Columbus Avenue, in the Upper West Side neighborhood of Manhattan (Block 1130, Lot 1). It is located in Theodore Roosevelt Park, which is City-owned parkland under the jurisdiction of NYC Parks. The site for the project is on the west side of the Museum complex facing Columbus Avenue (see **Figure 1**). The site is located in Manhattan Community District 7.

As described in the FEIS, the approved project includes an approximately 105-foot-tall building (five stories above grade; taking into account mechanical and elevator bulkheads, a portion of the rooftop would reach 115 feet), approximately 203,000-gross-square-foot (gsf) addition located on the Columbus Avenue side of the Museum campus. Because the building will be integrated into the Museum complex, an additional approximately 42,000 gsf of existing space was expected to be renovated to accommodate the program elements described in the FEIS and make connections

3/19/2018



-  Theodore Roosevelt Park
-  Building Site
-  Below-Grade Footprint
-  Park Improvement Area



AMNH Gilder Center for Science, Education, and Innovation

Project Location
Figure 1

into the new building, for a total of approximately 245,000 gsf of new construction and renovation. Alterations are also planned for adjacent portions of Theodore Roosevelt Park. The Gilder Center, together with these other alterations, constitutes the approved project. Approximately 80 percent of the square footage of the approved project is located within the area currently occupied by the Museum. Three existing buildings within the Museum complex (Buildings 15, 15A, and the Weston Pavilion) are to be removed.

C. PROPOSED MODIFICATIONS

The Museum has now completed design development and proposes the following design updates to the previously approved project (the “proposed modifications”):

INTERIOR

The Central Exhibition Hall would be reconfigured to better accommodate the program elements, including enhanced public circulation, by shifting the stairs connecting Levels 1 and 2 into a central stair. The new landing at Level 2 would allow visitors coming from the Museum’s main entrance on Central Park West to approach the Gilder Center much more easily and clearly from the Level 2 Theodore Roosevelt Rotunda. The overall volume of the Central Exhibition Hall would be reduced on the upper levels at the east end, as well as on its north and south sides at each level to accommodate adjustments in program space on each floor. The main elevators, along with space for queuing, would be shifted farther into the core of the complex for easier access from multiple points within the complex.

With the advancement of the design, and greater certainty about support, service and renovation needs, the overall size of the project would be reduced from approximately 245,000 gsf to approximately 230,000 gsf (the new building has been reduced from approximately 203,000 gsf to approximately 190,000 gsf; renovated space has been reduced from approximately 42,000 gsf to approximately 40,000 gsf).

PRIMARY FAÇADE (WEST) AND ROOF

The structural support system of the north and south portions of the Gilder Center building would use both sides of the Central Exhibition Hall walls for support. This would result in an extension of the stone parapet above the central entry glass portion of the façade and a more visible angle to the stone façade of the south side, in elevation, above the central entryway (see **Figure 2**). The roof skylight would be separated into multiple smaller skylights, allowing for the roof on each side to be connected between the skylights. The parapet height of the building would be reduced from 105’ to 97’, creating a better relationship with the roof line of Building 8 adjacent to the south (see **Figure 3**). As a result of slight shifts in the undulations of the façade and the location of entries and exit doors, there would be a slight reduction in the line of the building footprint at-grade.

SECONDARY FAÇADE (NORTH, EAST)

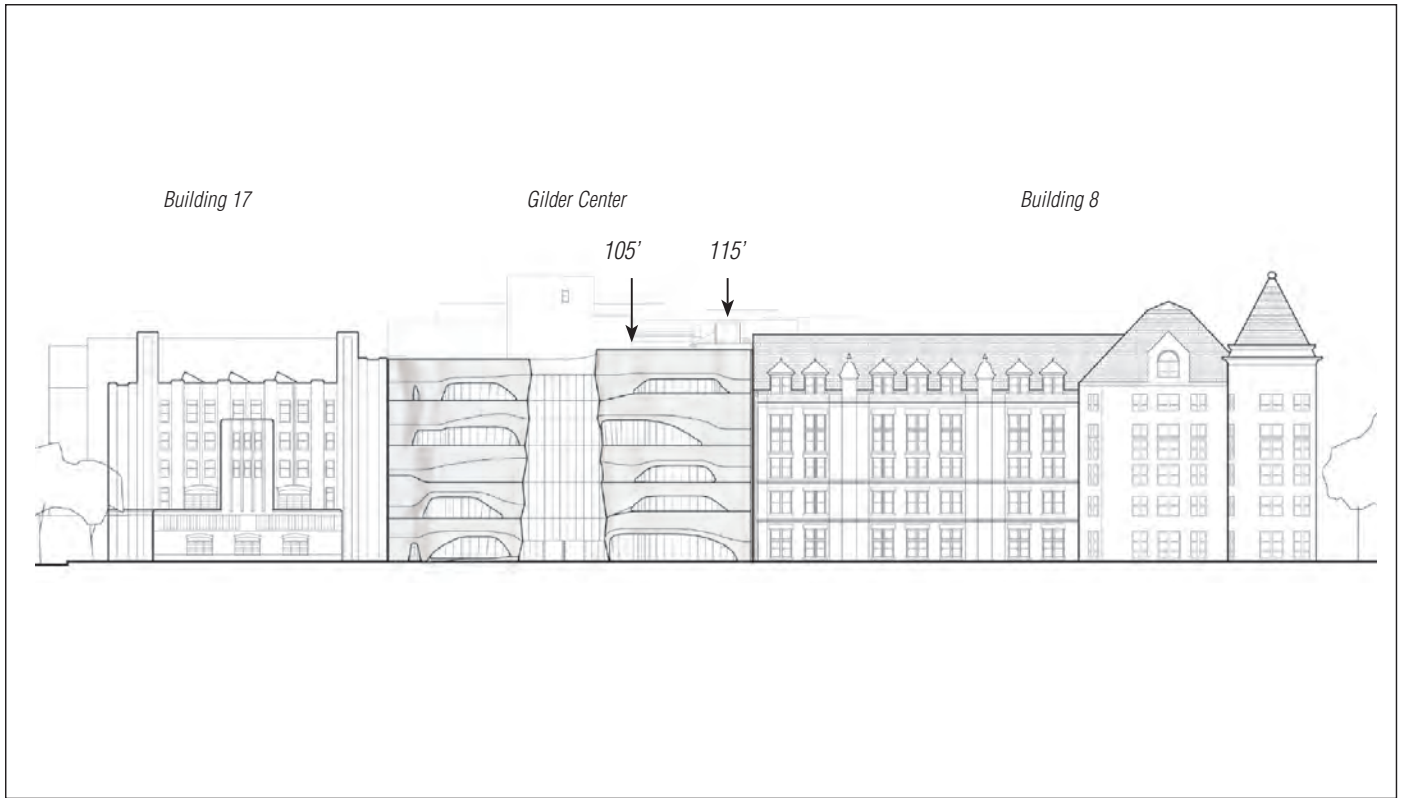
Certain existing structural elements would be retained, including elements of the corridors surrounding the LeFrak Theater and an adjacent exhaust duct for the parking garage (see **Figure 4**), resulting in retention of a stronger red brick vocabulary at the exterior that would be matched by changing the copper façade element to brick on the northeast portion of the Gilder Center (see **Figure 5**). Subtle curving of the corners of the plaster façade elements would maintain the aesthetic connection to the west façade. The reconfiguration of the building’s multi-story Central Exhibition Hall would result in reduced bulk at the center of the eastern façade and shifts in bulk at the north and east side of the building. A non-public connection at Level 5 to the east



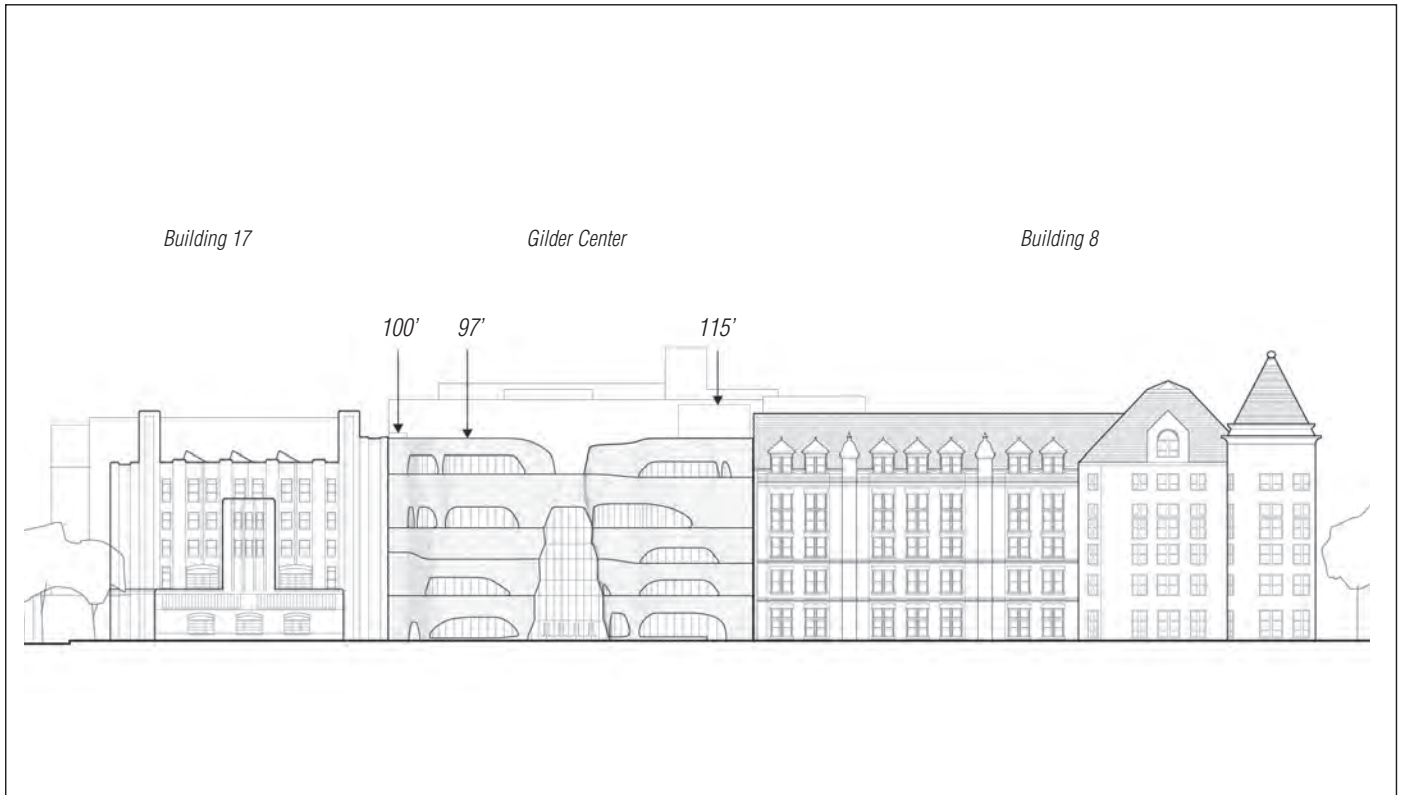
Approved Project **A**



Proposed Modifications **B**



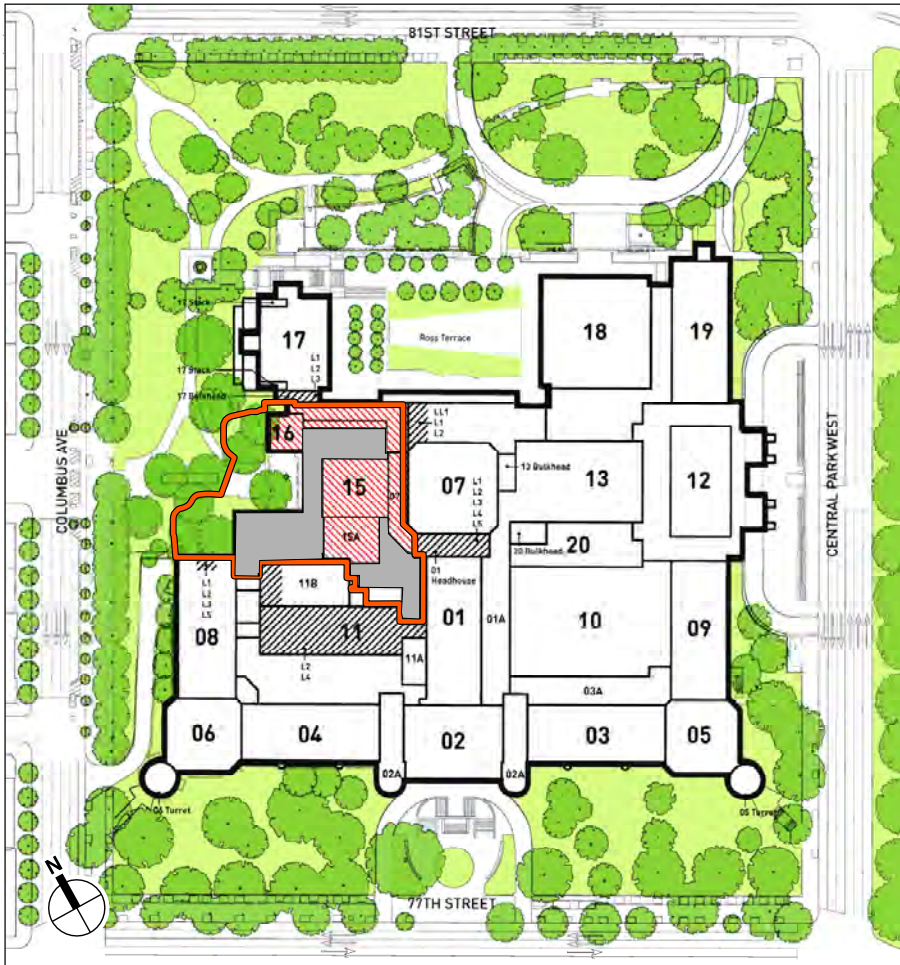
Approved Project **A**



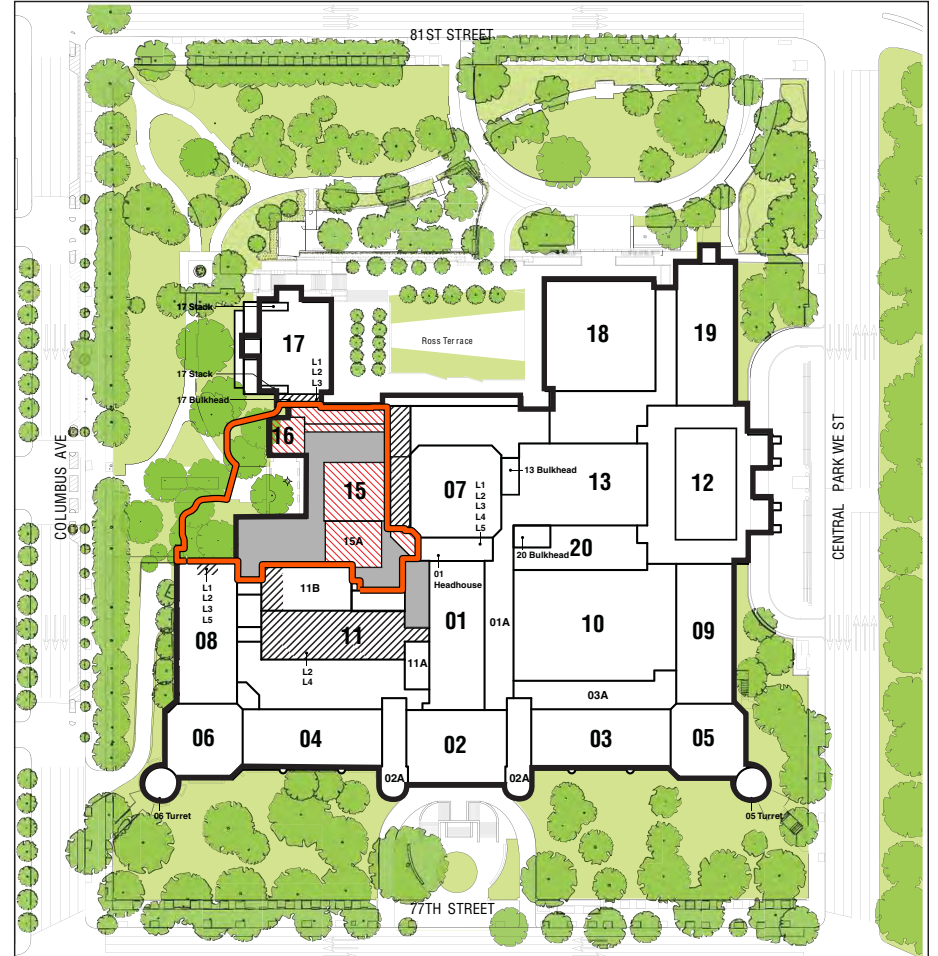
Proposed Modifications **B**

Elevation View of the Proposed Modifications

Approved Project **A**



Proposed Modifications **B**



-  Building Site
-  Renovated Area
-  Demolished Building
- 05** Building Number
-  Service Yard Excavation and Infill

0 200 FEET



Approved Project **A**



Proposed Modifications **B**

has been removed, with a corresponding reduction in the volume of the east–west connecting structure from the south side of the new building.

D. POTENTIAL ENVIRONMENTAL EFFECTS OF THE PROPOSED MODIFICATIONS

This section includes a discussion of the probable impacts of the proposed modifications, compared to the approved project analyzed in the FEIS.

LAND USE, ZONING, AND PUBLIC POLICY

As the land use and purpose of the project are unchanged from the previously approved project, and the conditions at the project site and the larger study area are not notably different than presented in the FEIS, conclusions regarding land use and public policy would be unchanged and, as before, the project is not expected to result in any significant adverse land use or zoning and public policy impacts. Similarly, since there would not be notable changes to background development from those specified in the FEIS, there would not be any substantial changes to projected background conditions that would alter conclusions for any of the areas of analyses addressed in the FEIS.

OPEN SPACE

Proposed changes to the project would not affect the previously analyzed open space plan, which is unchanged from that presented in the FEIS.

With respect to the affected population, the Gilder Center FEIS open space analysis examined a study area comprising Census Tracts 143, 153, 157, 159, 161, 163, 165, 167, 169, 171, and 173. The analysis was conducted both with and without Museum attendance data.

More recent population data have become available for the study area since the FEIS analysis was completed. This new American Community Survey (ACS) 2016 (5-Year Estimates) data indicates that the population of the open space study area has decreased from 81,779 residents to 79,813 residents. Using this new population data, the Gilder Center open space analysis shows an increase in the open space ratio from 2.79 acres per 1,000 persons in the study area to 2.84 acres per 1,000 persons. The open space ratio with the project remains above the City’s guideline of 2.5 acres of open space per 1,000 persons, and the impact of the project on the open space ratio remains well under 5 percent, the *CEQR Technical Manual’s* recommended threshold for a significant adverse impact. Therefore, accounting for the more recent population forecast, the modified project, like the previously approved project, would not result in any significant adverse indirect impacts on open space within the study area. Similarly, as the proposed modifications would not directly affect the use of open space, the modified project, like the previously approved project, would not result in any significant adverse direct impacts on open space within the study area.

SHADOWS

The building height and massing would be largely unchanged from the FEIS; the building height of the Gilder Center would be reduced from 105 feet to 97 feet. As the massing and building height would not be substantially changed, these minor changes would not materially alter the shadows cast by the project. Consequently, the modified project, like the previously approved project, would not result in any significant adverse shadow impacts.

HISTORIC AND CULTURAL RESOURCES

The modified project was reviewed by Landmarks Preservation Commission (LPC), which determined that the modifications are consistent with the approved design and findings of the LPC

set forth in the Binding Report issued November 2, 2016. As with the previously approved project, the demolition of Building 15 would represent a significant impact that would not be fully mitigated. Consequently, the proposed modifications would not result in any significant adverse impacts with respect to historic and cultural resources that were not identified or were inadequately addressed in the FEIS.

URBAN DESIGN AND VISUAL RESOURCES

The location and urban design characteristics of the project would be largely unchanged from the previously approved project. As seen from the west from Columbus Avenue and Theodore Roosevelt Park and from the north/northeast from Ross Terrace and Theodore Roosevelt Park, the project would have a reduced height and bulk, but the overall scale, height, massing, footprint, materials, and design of the project as modified are not materially different from those described in the FEIS and the project would continue to be compatible with the existing AMNH complex, as well as the bordering Park and neighborhood. Therefore, the urban design conclusions presented in the FEIS would be unchanged and the modified project, like the previously approved project, would not result in significant adverse impacts with respect to urban design.

NATURAL RESOURCES

The project's effects on natural resources would be unchanged from the FEIS, and the modified project, like the previously approved project, would not result in any significant adverse natural resource impacts.

HAZARDOUS MATERIALS

There would be no material change in the area or depth of excavation as a result of the proposed modifications. As with the previously approved project, a Department of Environmental Protection (DEP)-approved Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) would be implemented during construction. The modified project, like the previously approved project, would not result in any significant adverse hazardous materials impacts.

TRANSPORTATION

Incremental attendance and the transportation characteristics associated with the Gilder Center are expected to be the same as with the previously approved project and would result in the same impacts as those identified in the FEIS. Consequently, the modified project would not result in any significant impacts with respect to transportation that were not identified or were inadequately addressed in the FEIS.

AIR QUALITY

As the proposed modifications would not change any of the emissions characteristics of the project, the modified project, like the previously approved project, would not result in any significant adverse air quality impacts.

GREENHOUSE GAS EMISSIONS

The proposed modifications would not alter the Museum's commitment to energy efficiency and sustainable design. As with the previously approved project, the modified project would enhance the sustainability features of the Museum, and be consistent with the City's emissions reduction goals, as defined in the *CEQR Technical Manual*. The modified project, like the previously approved project, would not result in any significant adverse impacts with respect to greenhouse gas emissions.

NOISE

The proposed modifications would not change the operational noise levels addressed in the FEIS or affect interior noise levels within the Museum. Accordingly, the modified project, like the proposed project, would not result in any significant adverse noise impacts.

PUBLIC HEALTH

The proposed modifications would not affect any of the technical areas contributing to public health as set forth in the *CEQR Technical Manual* such as air quality, water quality, hazardous materials, or noise. As with the previously approved project, these areas would not have any unmitigated significant adverse impacts with the modified project, and any remedial actions such as the RAP or CHASP regarding hazardous materials remain unchanged and will be implemented. The modified project, like the previously approved project, would therefore not result in any significant adverse impacts related to public health.

NEIGHBORHOOD CHARACTER

The proposed modifications would not change the project's effect on neighborhood character. The modified project, like the previously approved project, would not result in any significant adverse impacts on the character of the well-established neighborhood where AMNH is already located. See **Figures 6 and 7** for views of the western façade with the proposed modifications in the winter and spring respectively.

CONSTRUCTION

While there would be some minor modification in the project's construction activities primarily due to the retention of the structural elements described above, the anticipated overall project construction duration of approximately 36 months would be unchanged from the previously approved project, as would the build year used to analyze the Project's environmental impacts. Construction activities would remain the same in character and intensity as those analyzed in the FEIS. Therefore, the potential construction effects from the project are anticipated to be the same as those presented in the FEIS.

MITIGATION

With the proposed modifications there would be no changes in significant impacts due to the Gilder Center Project. The mitigation previously identified in the FEIS would continue to be appropriate with the modified project.

E. CONCLUSION

As described above, the proposed modifications to the previously assessed Gilder Center Project would not result in any new or inadequately addressed significant adverse environmental impacts.



Approved Project **A**



Proposed Modifications **B**



Approved Project **A**



Proposed Modifications **B**