

A. INTRODUCTION

In accordance with the 2012 *City Environmental Quality Review (CEQR) Technical Manual*, where significant adverse impacts are identified, mitigation to reduce or eliminate the impacts to the fullest extent practicable is developed and evaluated. Significant adverse impacts that could be partially mitigated were identified in the following technical areas: Shadows, and Historic and Cultural Resources, and Construction—Open Space.

B. SHADOWS

As discussed in Chapter 4, “Shadows,” the shadow analysis concludes that the proposed laboratory building and North Terrace would cast between approximately three and five and a half hours of new shadows on portions of the East River Esplanade adjacent to the project site in the afternoons in the spring, summer, and fall, and 33 minutes on the winter analysis day. These new shadows would eliminate the remaining areas of direct sunlight on the esplanade adjacent to the project site for between 50 minutes in the early spring and fall and up to two hours and 40 minutes on the summer solstice. Therefore, the proposed project would cause significant adverse shadow impacts in those seasons to users of the open space seeking direct sun. All affected portions of the esplanade would continue to receive a minimum of five and a half hours of direct sunlight each day throughout the growing season, and, consequently, any vegetation in planters would not be significantly impacted by the new shadows. ~~Further, any new plantings would be shade tolerant. In addition, the esplanade is adjacent to the East River, and would continue to receive ambient skylight and reflected sunlight from the river throughout the periods when new project-generated shadow would fall within the esplanade.~~ No other sunlight-sensitive resources would be substantially affected by the proposed project.

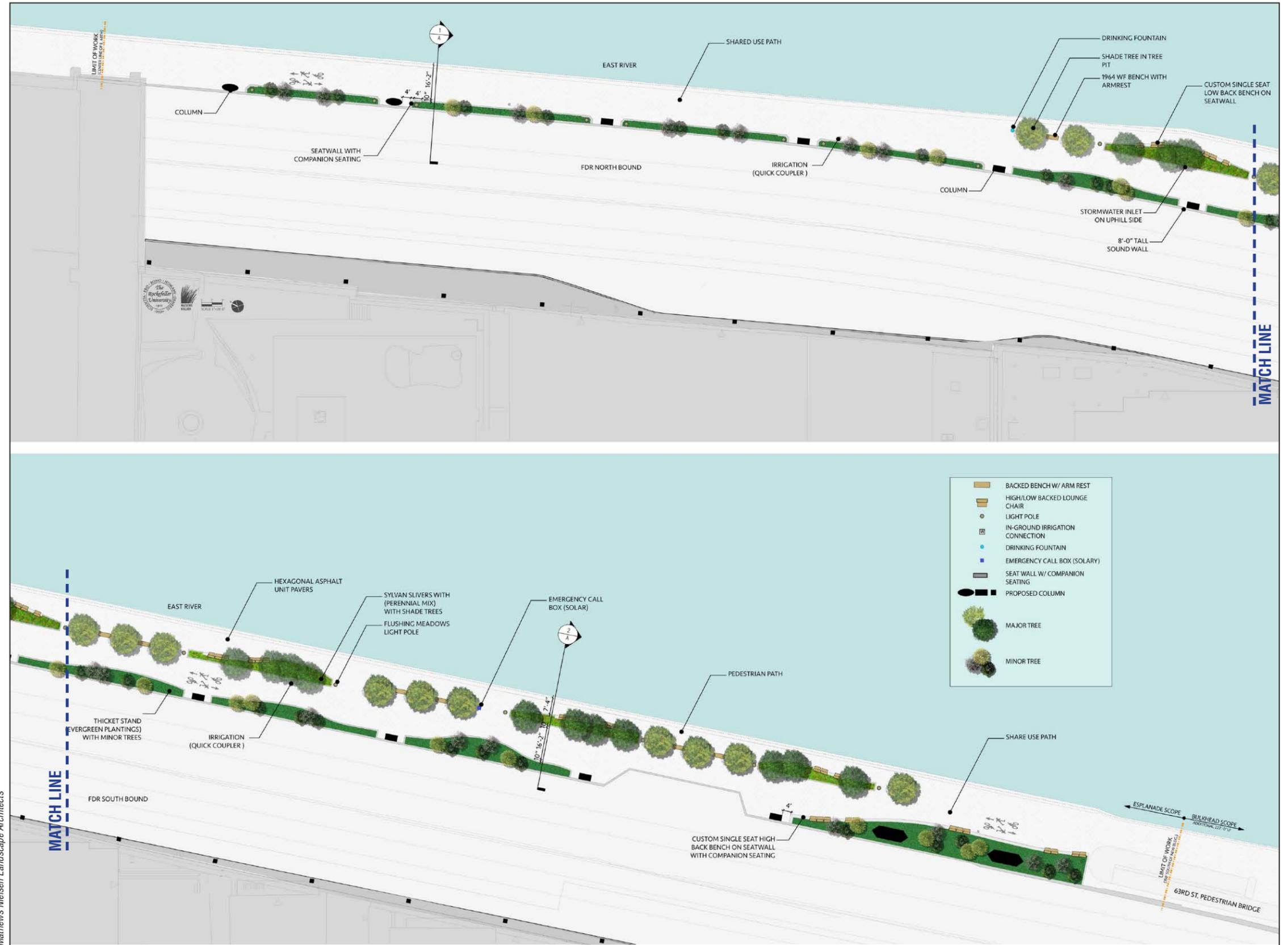
SHADOWS MITIGATION

As partial mitigation for the shadow impact to the East River Esplanade, Rockefeller University—in consultation with the New York City Department of City Planning (DCP) and the New York City Department of Parks and Recreation (DPR)—will undertake a substantial upgrade to the portion of the esplanade adjacent to the project site. In addition, an approximately 150-foot-long area of the esplanade south of the project site would also be substantially upgraded as partial mitigation for the shadow impact (see **Figures 13-1 through 13-56**).¹ The substantial upgrades include a reconfigured shared-use pathway, new planting beds with shade-tolerant plantings, new flood-resistant trees, seating, drinking fountains, and irrigation improvements. Between the Draft and Final Environmental Impact Statement (EIS), the

¹ Substantial esplanade upgrades would include the portion of the esplanade adjacent to the project site, between the area north of the Rockefeller Research Building north of East 64th Street and demapped East 68th Street, and would include the segment of the esplanade extending an additional approximately 150 feet south of the project site.



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

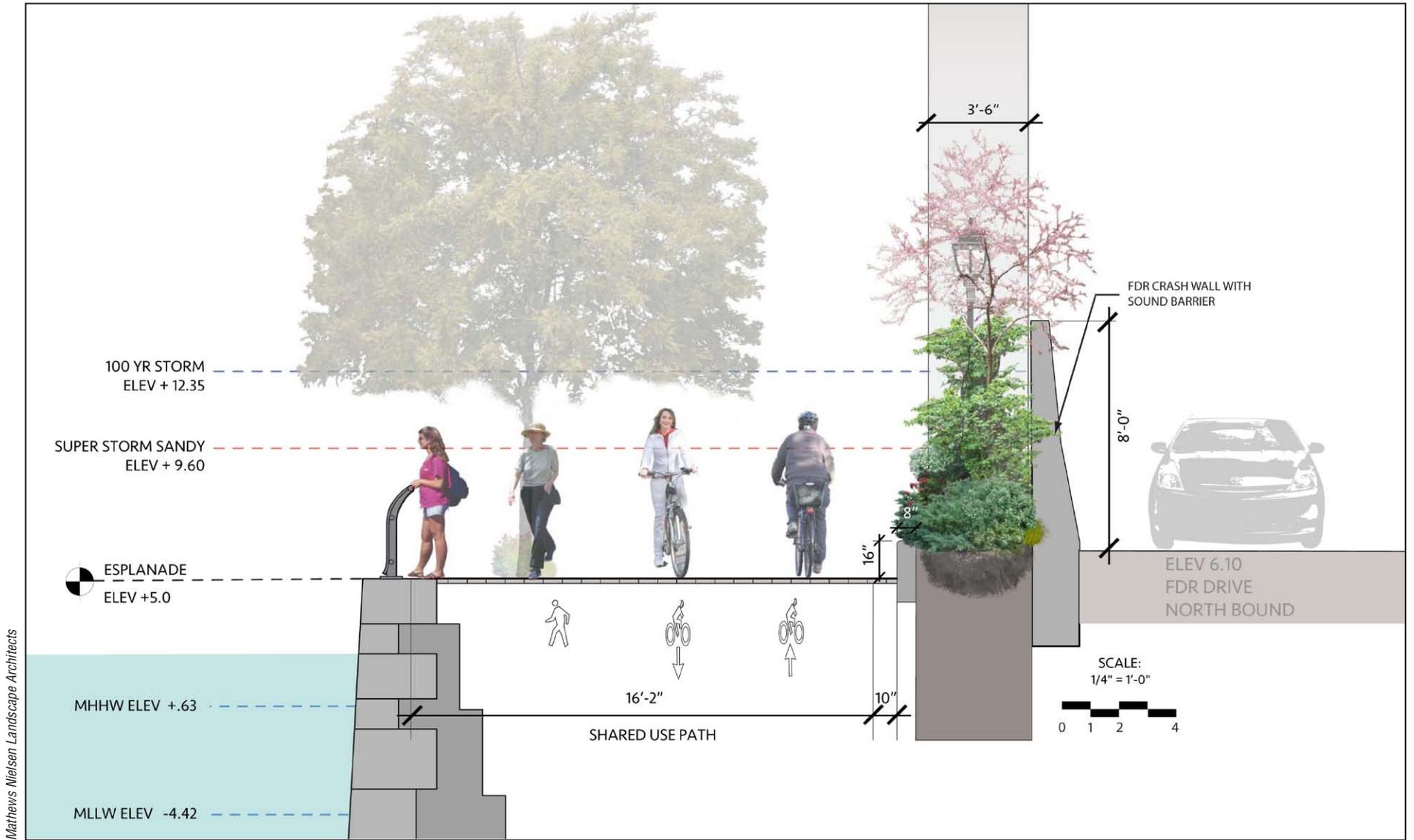


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Esplanade Redesign and Reconstruction—
Elevation A: East Facade
Figure 13-3



Mathews Nielsen Landscape Architects

Esplanade Redesign and Reconstruction—
Section 1: Narrow Section
Figure 13-4



Mathews Nielsen Landscape Architects

Esplanade Redesign and Reconstruction—
Section 2: Wide Section
Figure 13-5

Rockefeller University New River Building and Fitness Center

applicant made changes to the design of the improved esplanade in response to community input, and in consultation with DCP and DPR, the design of the esplanade improvements, including the additional segment south of the project site would be developed in consultation with DCP, and DPR between the Draft and Final EIS.

As of the date of the FEIS, specific esplanade improvements include the following (as shown in Figures 13-1 through 13-5):

- Overall redesign and reconstruction of this portion of the esplanade, with improved spatial organization of the walkway/bikeway and seating areas, new planting beds, and new shade tolerant plantings;
- Creation of a designated ~~walkway/bikeway~~ shared-use path widened to the desired width of ~~12~~ 17 feet, as per consultation with the DPR;
- Planting of ~~14~~ approximately 29 four-inch caliper (major) trees that will be resistant to flood waters (currently there are 15);
- Planting of ~~64~~ approximately 56 two-inch caliper (minor) trees that will be resistant to flood waters (currently there are nine);
- Installation of new benches to increase seating capacity from the existing 152 to ~~410~~ approximately 207 people;
- Installation of approximately seven new in-ground irrigation hydrants;
- Installation of ~~two~~ one drinking fountains (currently there are none); and
- Relocation and replacement of damaged lighting fixtures.

The final design of the esplanade improvements is subject to approval by DPR and the Public Design Commission (PDC). Any new plantings would be shade tolerant. While the upgrades to the esplanade would not reduce or eliminate the extent or duration of shadows cast on the esplanade, they would improve and enhance the user experience of this open space and therefore are considered partial mitigation of the shadows impact.

In addition to the substantial esplanade upgrades, Rockefeller University will also undertake the repair and rebuilding of the portion of the East River bulkhead adjacent to the project site and the area extending approximately ~~150-222~~ feet south of the project site where deficiencies have been identified in studies undertaken by DPR.¹ The bulkhead repair and rebuilding will serve as additional partial mitigation for the significant adverse shadows impacts to the portion of the East River Esplanade adjacent to the project site.

~~The bulkhead repair and rebuilding would extend the entire length of the portion of the esplanade adjacent to the project site and would extend an additional approximately 150 feet south of the project site. Bulkhead repair and rebuilding would be undertaken in areas where deficiencies have been identified in studies undertaken by the New York City Department of Parks and Recreation (DPR). The bulkhead repair and rebuilding would begin prior to the start of construction of the laboratory building platform and would continue during the early site preparation and demolition activities associated with the platform construction. The bulkhead repair and rebuilding work is anticipated to take approximately four months to complete. Bulkhead work would be undertaken~~

¹ Bulkhead repair and rebuilding would include the entire area adjacent to the project site and the area extending approximately 222 feet south of the project site (approximately mid-block between East 62nd and East 63rd Streets and demapped East 68th Street).

from barges on the East River. No complete closures of the esplanade would be required during the bulkhead repair and rebuilding. ~~However,~~ The installation of a construction fence adjacent to the bulkhead work area would be required. This construction fence would likely be required for the entire four-month duration of the bulkhead repair and rebuilding work. Narrowing of the esplanade may be necessary at certain times during bulkhead-related construction, however a minimum eight-foot wide pathway through the affected portion of the esplanade would remain open at all times during ~~this~~ the bulkhead repair task (see **Figure 13-67**).

The esplanade reconstruction activities, including the substantial upgrades, are anticipated to be undertaken for nine months, compared to the four-and-a-half months for ~~the same duration as~~ the esplanade replacement in-kind construction-related activities that would occur with the proposed project, as described in Chapter 12, “Construction.” The substantial esplanade upgrades would be undertaken between November 2017 and March 2018 for the west portion of the esplanade and between March 2018 and July 2018 for the east portion of the esplanade.

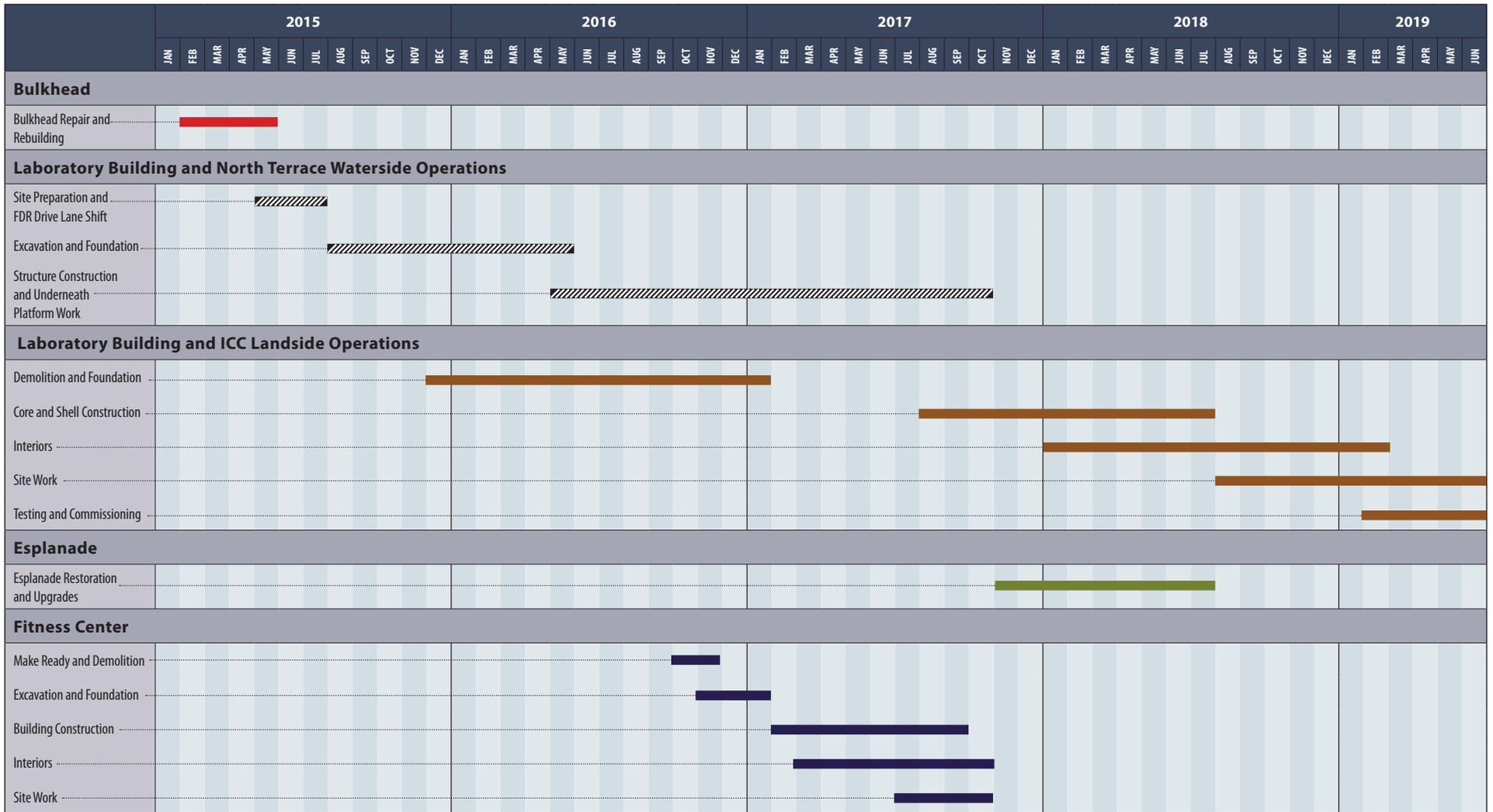
The bulkhead repair and rebuilding and the esplanade upgrades that would be undertaken as partial mitigation would not substantially change the construction schedule, as described in Chapter 12, “Construction.” Therefore, these mitigation measures—bulkhead repair and rebuilding and the esplanade upgrades—would not result in additional significant adverse construction impacts not identified in Chapter 12, “Construction.” These mitigation measures—bulkhead repair and rebuilding and the esplanade upgrades—and construction requirements will be included in a Restrictive Declaration.

Between the Draft and Final EIS, the applicant ~~will~~ considered, in consultation with DPR and DCP, whether there are additional mitigation measures that are feasible and practicable that could be implemented to further alleviate the significant adverse shadows impact. In addition to the measures identified above, partial mitigation will also include at least a 12-year commitment by the applicant to maintain plantings on the portion of the esplanade that would be improved with the proposed project. Maintenance will include weeding, watering, pruning, mulching, applying fertilizer, treating plant disease and insect problems, removing debris and dead plant material, and replacing dead, damaged, or irreversibly declining plants. This commitment will be ensured through the Restrictive Declaration and the Mapping Agreement required in connection with the amendment to the City Map. As provided in the project Restrictive Declaration, the University will enter into a Maintenance and Operations agreement with DPR that will govern the maintenance requirements.

No further mitigation measures for the significant adverse shadows impact have been identified beyond those measures described above.

C. HISTORIC AND CULTURAL RESOURCES

As discussed in Chapter 6, “Historic and Cultural Resources,” the concrete canopy structure and parking area on the Fitness Center Site are contributing elements to the Rockefeller University Historic District which has been determined eligible for listing on the State and National Registers of Historic Places (S/NR-eligible) and for designation as a New York City Landmark (NYCL-eligible). Therefore, the removal of the canopy structure and parking area that would occur with the construction of the proposed Fitness Center would result in an adverse impact to the historic district. In addition, the proposed laboratory stacks that would be located adjacent to the Flexner Hall Extension and the Hospital would result in a significant impact to historic and cultural resources.



¹ Construction fences would be erected on the esplanade during the Bulkhead Repair and Rebuilding, Site Preparation, and FDR Drive Lane Shift tasks.

HISTORIC AND CULTURAL RESOURCES MITIGATION

Partial mitigation measures for the removal of the canopy structure and parking area include the preparation and implementation of a restoration plan for the Philosopher’s Garden, which is located immediately south of the Fitness Center Site. This plan would be developed in consultation with the New York City Landmarks Preservation Commission (LPC) and would be prepared and implemented prior to construction of the fitness center. LPC is in receipt of revised stack drawings indicating that the stacks have been redesigned in terms of their materials and surface articulation to better harmonize with the historic properties (see **Figures 13-78 through 13-910**). LPC finds these design drawings to be acceptable and partial mitigation for the significant impact. Measures to minimize or partially mitigate these adverse impacts to the Rockefeller University Historic District would be implemented in consultation with LPC and are included in a Restrictive Declaration.

In addition, prior to construction of the proposed project, and in consultation with LPC, Rockefeller University would develop and implement a Construction Protection Plan (CPP) for the President’s House, Flexner Hall and the Flexner Hall Extension, Welch Hall, Founder’s Hall, the Nurse’s Residence, the Hospital, and the Boiler House which would either be modified as part of the proposed connection with the new laboratory building or are within 90 feet of the Laboratory Building Site. In addition, Smith Hall, Abby Aldrich Rockefeller Hall, the perimeter campus fence, and the Kiley-designed Philosopher’s Garden and Lasker Fountain would be included in the CPP as these contributing elements to the historic district are located within 90 feet of the Fitness Center Site. In addition, as requested by LPC in a March 6, 2014 comment letter, the unanticipated discoveries plan for archaeological resources would be incorporated into the CPP. 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*.¹ The CPP would also be included in the Restrictive Declaration.

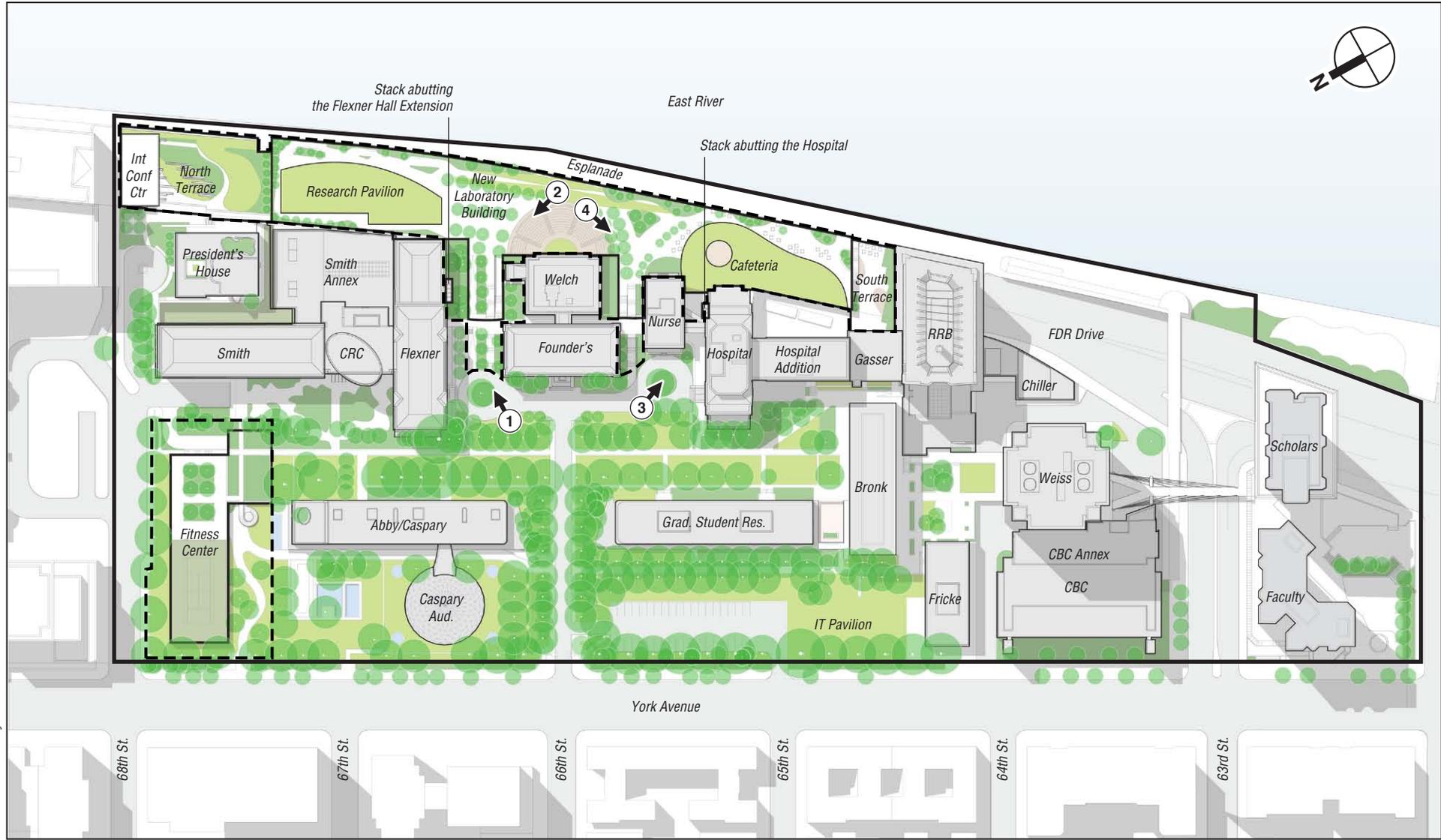
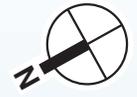
D. CONSTRUCTION—OPEN SPACE

As discussed in Chapter 12, “Construction,” a temporary significant construction period impact to open space, i.e., the portion of the East River Esplanade adjacent to the project site, would result from construction activities associated with the proposed project.

CONSTRUCTION—OPEN SPACE MITIGATION

Full mitigation of the construction—open space impact is not feasible due to the close proximity of the project site to the esplanade and the temporary construction-related activities affecting the esplanade. As partial mitigation for the temporary significant construction period impact to open space, the applicant would provide a minimum eight-foot-wide pathway through the affected portion of the esplanade adjacent to the project site. As discussed in Chapter 12, “Construction,”

¹ TPPN #10/88 was issued by DOB on June 6, 1988, to supplement Building Code regulations with regard to historic structures. TPPN #10/88 outlines procedures for the avoidance of damage to historic structures resulting from adjacent construction, defined as construction within a lateral distance of 90 feet from the historic resource.

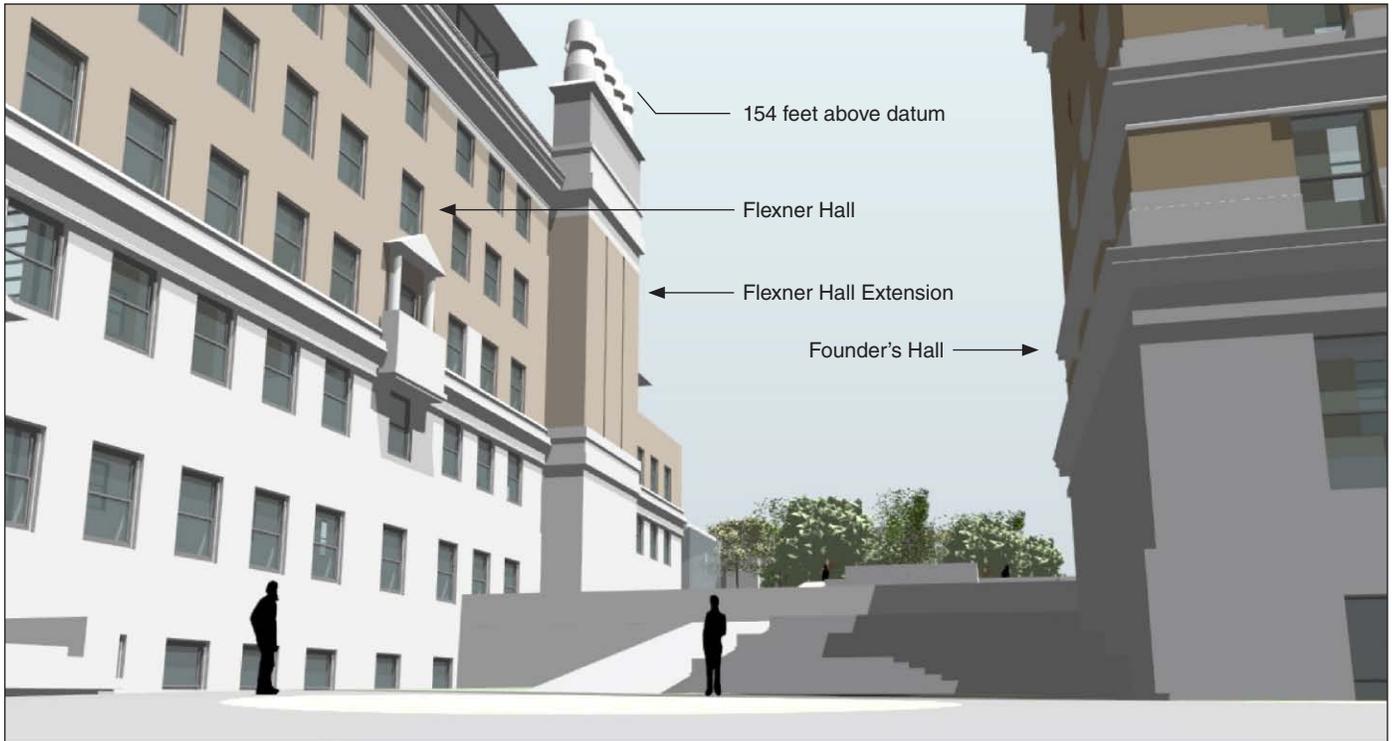


Source: Rafael Vinoly Architects

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

- Large Scale Community Facility Development (LSCFD) (Rockefeller University Campus)
- - - Development Sites
- ① ➔ Note: These views correspond to Figures 13-9 and 13-10

Source: Rafael Vinoly Architects PC

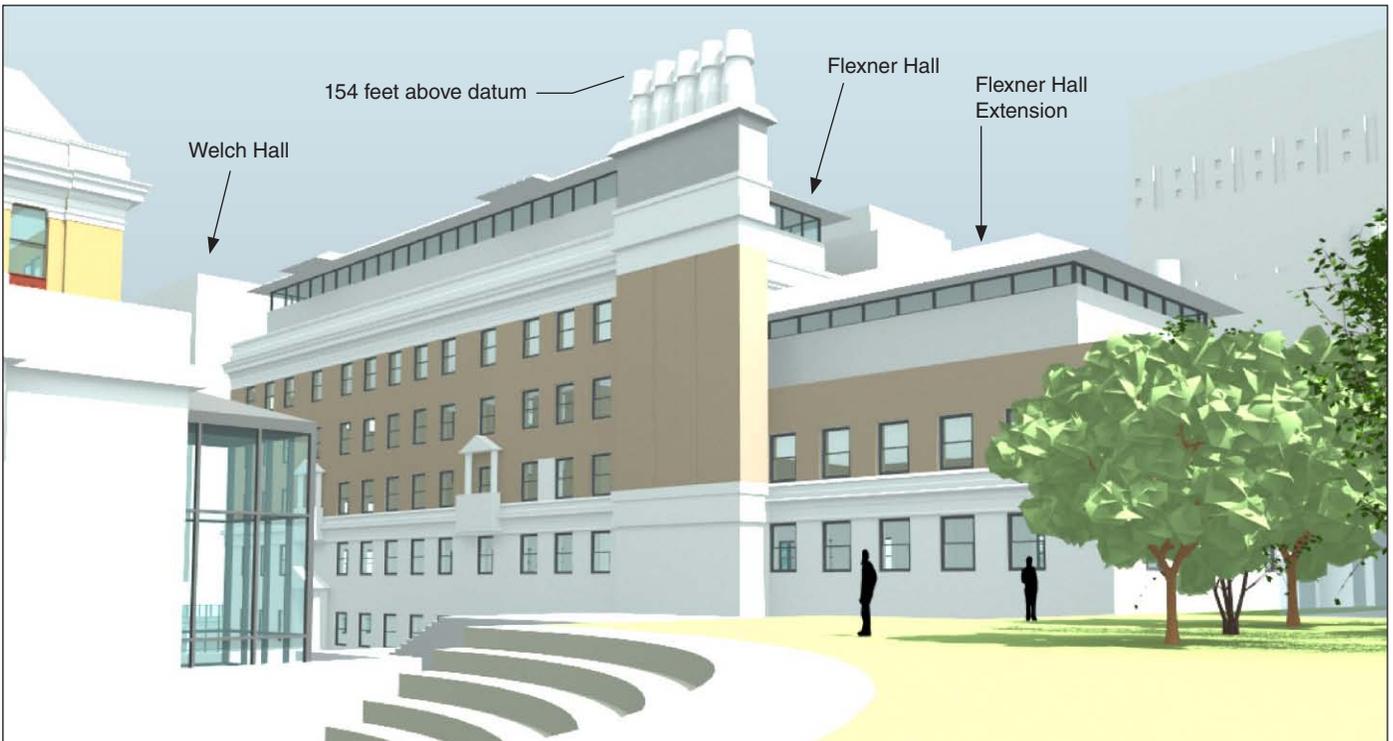


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Pedestrian view from Founder's Hall toward the proposed stack adjacent to the Flexner Hall Extension

View 1

Source: Rafael Vinoly Architects PC



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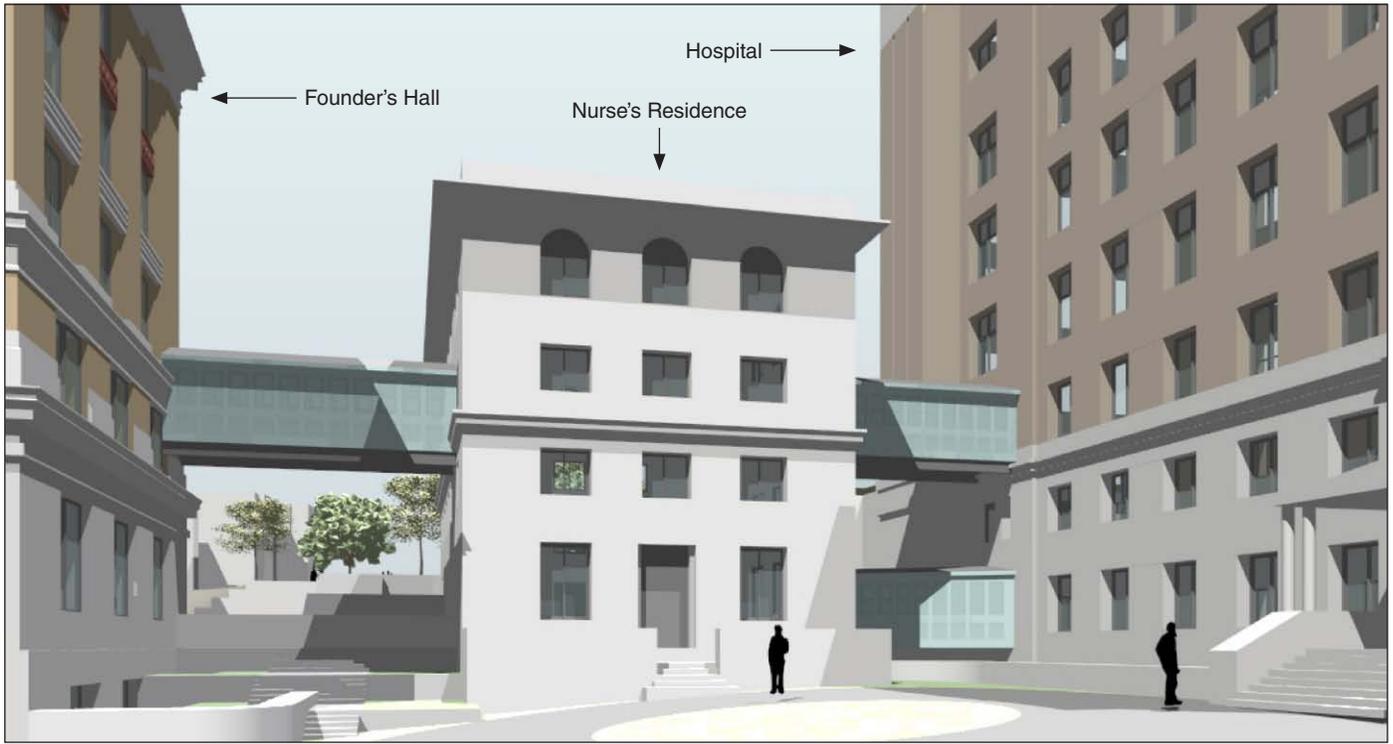
Pedestrian view northwest from the rooftop landscaping toward the proposed stack adjacent to the Flexner Hall Extension

View 2

Views to the Stack adjacent to the Flexner Hall Extension

Figure 13-8

Source: Rafael Vinoly Architects PC

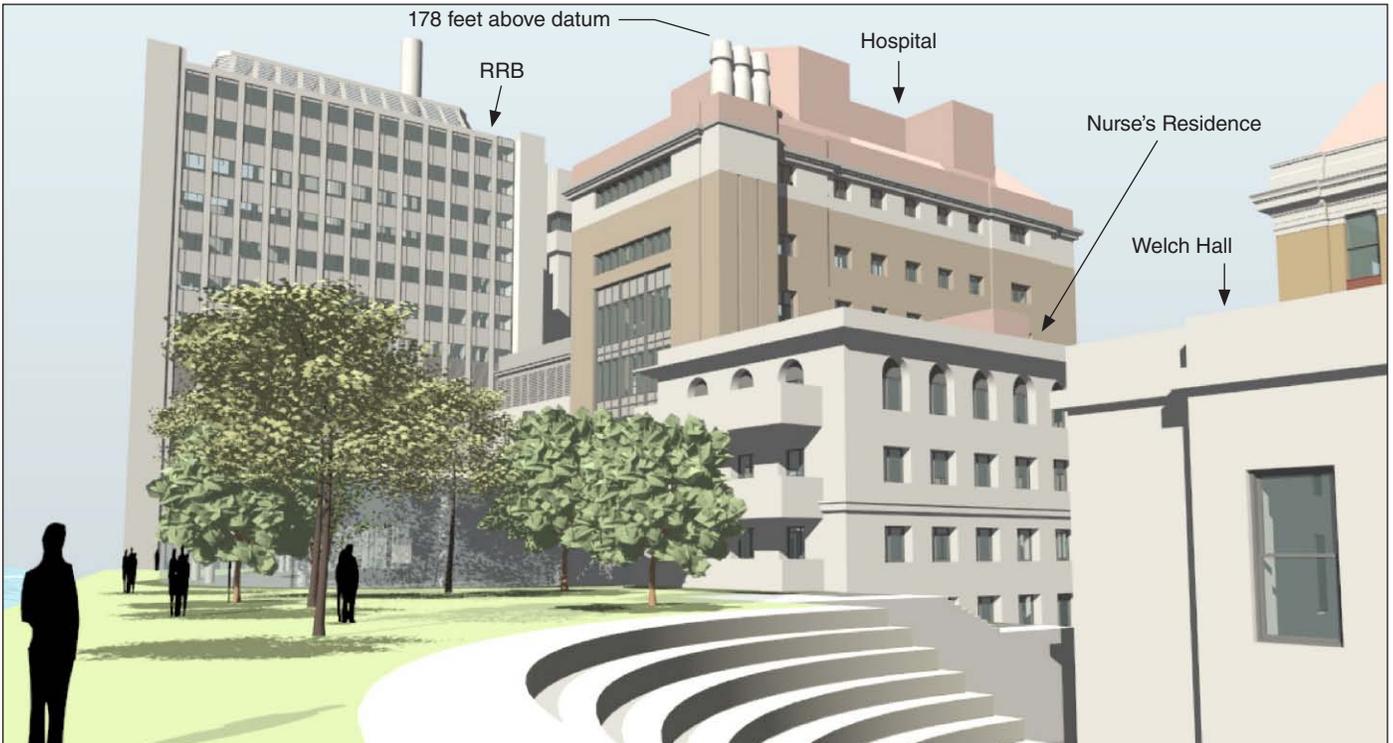


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Pedestrian view southeast including the Nurse's Residence (in the foreground) toward the proposed stack adjacent to the Hospital

View 3

Source: Rafael Vinoly Architects PC



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Pedestrian view southwest from the rooftop landscaping toward the proposed stack adjacent to the Hospital

View 4

this pathway would always be maintained to allow for pedestrian and bike movement through the East River Esplanade except for the very limited night time closures during specific construction activities requiring the lifting of construction materials over the walkway/bikeway from barges located in the East River to the project site. Table 12-4 in Chapter 12, “Construction,” shows the anticipated schedule for the East River Esplanade narrowing and closures during construction. However, As detailed in Table 12-4, the closure periods would be anticipated to only occur at night for approximately 43 nights (from 2:00 AM to 7:00 AM on Sundays for laboratory building and North Terrace waterside operations) during the approximately four-year overall construction period, and would not prevent or limit access to the esplanade during the day. Therefore, while the construction of the proposed project would have a temporary significant construction-related open space impact on the East River Esplanade during a portion of the construction period, it would be partially mitigated by the provision of an eight-foot walkway, as described above. Between the Draft and Final EIS, the applicant will consider whether there are additional mitigation measures that would be feasible and practicable to implement to alleviate this impact.

No further measures to partially or fully mitigate the significant construction period open space impact were identified between the Draft and the Final EIS. The construction open space mitigation measures described above would be included in the Restrictive Declaration. *