Appendix 7
Historic and Cultural Resources

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Final Sign-Off

Project number: OFFICE OF ENVIRONMENTAL COORD. / LA-CEQR-M
Project: CORNELL NYC TECH
Date received: 2/9/2012

Archaeological Review Only

Properties with Archaeological significance:
1) ADDRESS: ROOSEVELT ISLAND, BBL: 1013730020
2) ADDRESS: 40 RIVER ROAD, BBL: 1013730001

Comments: LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century and Native American occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2010).

2/10/2012

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 27899_FSO_DNP_02102012.doc

NYC Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

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ARCHAEOLOGY

Project number: OFFICE OF ENVIRONMENTAL COORD. / 12DME004M
Project: CORNELL NYC TECH
Date received: 3/19/2012

Comments:

The LPC is in receipt of the, "Phase 1A Archaeological Documentary Study for Cornell/NYC Tech Roosevelt Island Campus B 1373, Lot 20 and Block 1371, Lot 1 (in part), New York, New York," prepared by AKRF, Inc and dated March 2012. The LPC concurs that there are no further archaeological concerns. Please submit two bound copies of the reports to LPC for our archives.

3/26/2012

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 27899_FSO_ALS_03262012.doc

ENVIRONMENTAL REVIEW

Project number: OFFICE OF ENVIRONMENTAL COORD. / 12DME004M
Project: CORNELL NYC TECH
Date received: 4/9/2012

Comments:

The LPC is in receipt of the draft historic documentation report of 4/4/12. Comments are as follows.

The Coler Goldwater Specialty Hospital and Nursing Facility appears eligible for listing on the State and National Registers. The WPA artworks within the hospital are of unusual significance as they are abstract murals unique to the New York City region as part of a group of the first non-objective public murals in the United States. WPA murals usually depicted historical narratives and portraits; the American scene; or portrayed the worker. An exception to this was the WPA region that included New York City, New York State, and New Jersey. This region was distinctive in that abstract murals, not the typical representational murals, were approved by the WPA.

The New York City Design Commission has submitted the following list of WPA artworks within the hospital to LPC as listed on page 3 of this document. This may not be a complete list of all artworks. With regard to as yet unidentified WPA artworks, including those thought to be demolished (evidence of demolition shall also be provided), a survey meeting the American Institute for Conservation of Historic and Artistic Works (AIC) standards of all structures shall be completed by the lead agency in conjunction with New York City Health and Hospitals Corporation (HHC), New York City Economic Development Corporation (EDC) and Cornell University. See: http://www.conservation-us.org/index.cfm?fuseaction=page.viewpage&pageid=1026. The survey shall include an inventory of all the rooms in the buildings and a finding of presence or absence of WPA era resources in each space. Should previously unidentified resources be found, a description of the condition of the resource shall be provided. A copy of the survey report shall be provided to SHPO and LPC for review and comment. Any previously unidentified WPA artworks found to be historically significant by the SHPO and the LPC shall be included in the restoration and relocation program.

According to an email communication from EDC dated 4/24/12, HHC, EDC, and Cornell are committed to the preservation and relocation of the stained glass and murals as partial mitigation for demolition of the hospital complex. EDC also submitted a current conditions report on the WPA murals on the Design Commission list as follows:

> "Some of the murals on the list provided attached are already gone per information received from HHC and the Roosevelt Island historic society
>
> a. 8 total (6 still exist)
> b. 2 were likely demolished
>
> i. Recreation and Sports – Day Room WA 333 East and Day Room WA 448 West

ii. Title Unknown – Room W-443 East

c. 1 has been restored
   i. Abstraction – Room B-11

d. 5 are covered up in paint
   i. Abstraction – Top Floor, Room B-41
   ii. Abstraction – Third Floor, Room B-31
   iii. Abstraction Based on Music – Room A-41
   iv. Title Unknown – Room D-31
   v. Fantasy – Room C-12”

[go to page 3]

27899

WPA Artworks in Goldwater Hospital

1. *Abstraction* (F- 5/11/42) by Ilya Bolotowsky, oil on canvas; 324 sq ft, 1st Floor Room B-11
   Status: Conserved in 2001

2. Stained glass windows for the Goldwater Hospital Catholic and Protestant Chapels (F- 4/13/70) by Emanuel Millstein
   Status: Not surveyed in 1985; on 1/31/12, HHC confirmed that they windows are in good condition.

3. *Abstraction* (F- 7/13/42) by Albert Swinden, oil on canvas; 324 sq ft, top floor, Day Room B-41
   Status: Painted over

4. *Abstraction* (F- 6/13/42) by Joseph Rugolo, oil on canvas; 324 sq ft, 3rd Floor Room B-31
   Status: Painted over

5. *Abstraction Based on Music* (F-4/13/42) by Dane Chanase, oil on canvas; 324 sq ft, Day Room A-41
   Status: Painted over

6. *Recreation and Sports* (P- 4/9/40) by Byron Browne, photo-mural; 324 sq ft, Day Room 333 East and Day Room 448 West, Ward Buildings A, B, C and D
   Status: Unknown as of 1985 per Alan Farancz survey; HHC to hire new conservator to open windows on walls to confirm findings.

7. Title unknown (P- 9/10/40) by Byron Browne, photo-mural; 324 sq ft, Day Room, Room D-31
   Status: Unknown as of 1985 per Alan Farancz survey; HHC to hire new conservator to open windows on walls to confirm findings.

8. Title unknown (P- 4/9/40) by Richard Goldman, photo-mural; 324 sq ft, Day Room 443 East, , Ward Buildings A, B, C and D
   Status: Unknown as of 1985 per Alan Farancz survey; HHC to hire new conservator to open windows on walls to confirm findings.

9. *Fantasy* (P- 12/9/41) by Theodore Haupt, oil on canvas; 324 sq ft, Day Room C-12 East
   Status: Unknown as of 1985 per Alan Farancz survey; HHC to hire new conservator to open windows on walls to confirm findings.

LPC recommends that restoration of the artworks conform to the AIC code of ethics and guidelines for practice: http://www.conservation-us.org/index.cfm?fuseaction=page.viewpage&pageid=1026 and the National Park Service conservation guidelines: http://www.nps.gov/history/museum/publications/handbook.html

The Final Environmental Impact Statement shall indicate the final repositories for the restored artworks and their accessibility to the public. The text shall state whether the artworks are reinstalled for display in other facilities or placed in storage. LPC recommends that the artworks be accessible to the public as much as is practicable, including temporary exhibition at a New York City museum and, at a minimum, on an online digital gallery.

Regarding recordation and documentation of the Goldwater Hospital structures themselves, the historic documentation report as submitted appears acceptable, although LPC defers to the SHPO on this issue.

4/26/2012

SIGNATURE DATE

Gina Santucci, Environmental Review Coordinator

File Name: 27899_FSO_GS_04262012.doc

Cc: SHPO
EDC
HHC
NYC Art/Design Commission
Cornell University

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION
NEW YORK STATE

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

RESOURCE EVALUATION

DATE: May 31, 2012 | STAFF: Kathy Howe

PROPERTY: Coler Goldwater Specialty Hospital and Nursing Facility | MCD: Manhattan

ADDRESS: Roosevelt Island | COUNTY: New York

PROJECT REF: 12PR02181 | USN: 06101.018356

I. ☐ Property is individually listed on SR/NR:
name of listing:
☐ Property is a contributing component of a SR/NR district:
name of district:

II. ☒ Property meets eligibility criteria.
☐ Property contributes to a district which appears to meet eligibility criteria.
Pre SRB: ☐ Post SRB: ☐ SRB date

Criteria for Inclusion in the National Register:

A. ☒ Associated with events that have made a significant contribution to the broad patterns of our history;
B. ☐ Associated with the lives of persons significant in our past;
C. ☒ Embodies the distinctive characteristics of a type, period or method of construction; or represents the work of a master; or possess high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction;
D. ☐ Have yielded, or may be likely to yield information important in prehistory or history.

STATEMENT OF SIGNIFICANCE:[1]

Coler Goldwater Specialty Hospital and Nursing Facility was designed by architect Isadore Rosenfield in association with Butler & Kohn and York & Sawyer. Originally known as the Welfare Hospital for Chronic Diseases, the hospital was completed in 1939 under the direction of Dr. Sigismund Schulz Goldwater (1873-1942), the Commissioner of Hospitals. An addition, designed by architect William Lescaze, was built at the southern end of the original building around 1971.

Built with the aid of Public Works Administration (PWA) funds, the Goldwater Hospital is historically significant under Criterion A in the areas of health/medicine and science for its contributions to the scientific study and treatment of chronic diseases including heart disease, chronic arthritis, and neurological diseases. During World War II, the hospital's research department became part of the U.S. government's major research initiative into the

[1] Much of the documentation included in the Statement of Significance is from "Coler Goldwater Specialty Hospital and Nursing Facility, Roosevelt Island, New York – Historic Documentation," prepared as part of the Section 14.09 review of the proposed CornellNYC Tech project, April 4, 2011.

treatment for malaria.

Goldwater Hospital is significant under Criterion C in the area of art for its mural paintings. The New York Landmarks Preservation Commission notes that:

> The WPA artworks within the hospital are of unusual significance as they are abstract murals unique to the New York City region as part of a group of the first non-objective public murals in the United States. WPA murals usually depicted historical narratives and portraits; the American scene; or portrayed the worker. An exception to this was the WPA region that included New York City, New York State, and New Jersey. This region was distinctive in that abstract murals, not the typical representational murals, were approved by the WPA.[2]

According to a list prepared by the NYC Design Commission there were originally eight WPA murals.[3] The abstract artists represented were Ilya Bolotowsky, Albert Swinden, Jospeph Rugolo, Dane Chanase, Byron Browne, Richard Goldman, and Theodore Haupt. Of the eight, only Bolotowsky's "Abstraction" has been conserved and is visible. Two were likely demolished and the remaining five are covered in paint.

Lescaze's Activity Building from the early 1970s includes stained glass windows by artist Emanuel Millstein located in the Catholic and Protestant Chapels.

The hospital is also significant for its architectural design as a progressive example of institutional architecture. The original hospital consists of six Art Deco buildings with exterior walls faced in tan-colored brick with limestone parapets. Situated on a narrow site, the hospital has a central, north-south corridor with five pairs of projecting wings. It was organized by with a central six-story, "H" plan Administration building with four four-story chevron shaped Patient Ward buildings, a three-story Laboratory and Morgue building at the north end, and a one-story addition (Activities Building) at the south end. The Patient Wards were carefully designed to maximize light, air, and views. Of special note, are the projecting first floor curved terraces and balconies at the Patient Wards. Alterations made to the hospital through the years have been more extensive on the interior than the exterior.

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[2] Gina Santucci, Environmental Review Coordinator, "Environmental Review of the Cornell NYC Tech project," New York City Landmarks Preservation Commission, April 9, 2012.

[3] A copy of the NYC Design Commission's list is included with LPC's comments (above).

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Division for Historic Preservation • Peebles Island, PO Box 189, Waterford, New York 12188-0189
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www.nysparks.com

June 19, 2012

Amy D. Crader
AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: RIOC
Cornell NYC, Roosevelt Island
New York County
12PR02181

Dear Ms. Crader,

Thank you for requesting the comments of the New York State Bureau of Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). Since the project involves the Roosevelt Island Operating Corporation (RIOC), which is a considered a state agency, we are reviewing the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

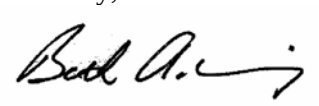
Our architectural historian for New York County has determined that the Coler Goldwater Specialty Hospital and Nursing Facility on Roosevelt Island is eligible for listing on the State and National Registers of Historic Places. Her Resource Evaluation is attached for your use. Our archeological unit has no further archeological concerns. Since the facility is considered historic, we offer the following comments and request the following additional information in order to continue our review:

1. We note that the project proposes to demolish the historic facility. By definition, demolition of an historic property is deemed an Adverse Impact, which is an action that can only be moved forward after a thorough exploration of alternatives. The intent of the exploration is to determine if there are any prudent and feasible alternatives to demolition. If none are identified, then we would enter into a formal "Letter of Resolution" (LOR) which would identify proper mitigation measures to be incorporated into the work.
2. We understand that the site includes several WPA artworks within the hospital that are of particular historic significance. These artworks are identified within the New York City Landmarks Preservation Commission's (LPC) Environmental Review Comments dated 4/9/2012. Please include impacts to these murals in your alternatives analysis.
3. From the information provided, it seems reasonable to think that these institutional buildings could be adapted to meet the needs of an applied sciences and engineering campus. In addition, since the buildings are considered historic, we urge you to explore the use of the Federal Rehabilitation Tax Credit Program. This

program enables building owners to earn a tax credit equal to 20% of all certified rehabilitation expenditures. Eligible costs include all hard and soft costs attributed to the rehabilitation of the historic property.

At this point, we recommend a full alternatives analysis be undertaken. If you have any questions, I can be reached at (518) 237-8643, ext. 3282. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,



Beth A. Cumming
Historic Site Restoration Coordinator
e-mail: Beth.cumming@oprhp.state.ny.us

cc: G. Santucci – NYC LPC
R. Ryan – RIOC

Enc: Resource Evaluation

via e-mail only

NYC Landmarks Preservation Commission

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ENVIRONMENTAL REVIEW

Project number: OFFICE OF ENVIRONMENTAL COORD. / 12DME004M
Project: CORNELL NYC TECH
Date received: 7/16/2012

Comments:

The LPC is in receipt of the Historic and Cultural Resources chapter of the EIS dated 7/3/12. Comments are as follows.

In order to complete the review, the Alternatives and Mitigation chapters and the draft LOR shall be submitted for review and comment.

The NYS SHPO has indicated that the Steam Plant appears S/NR eligible.

Cc: SHPO

Gina Santucci 7/19/2012

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 27899_FSO_GS_07192012.doc

Proposed Cornell NYC Tech Project

Alternatives Analysis
Goldwater Hospital Complex
Roosevelt Island, New York, NY

A. INTRODUCTION

Cornell University (Cornell), the applicant, proposes to develop an applied science and engineering campus on Roosevelt Island (the Cornell NYC Tech project) comprising up to 2.13 million gross square feet (gsf). Of this, 620,000 gsf would be academic space, 500,000 gsf would be partner research and development (R&D) space, 800,000 gsf would be residential, 170,000 gsf would be for an academic-oriented hotel with conference facilities, 40,000 gsf for the central utility plants, up to approximately 25,000 gsf of campus-oriented retail, and up to 500 parking spaces.

A Draft Environmental Impact Statement (DEIS) is being prepared to assess the potential impacts of the Cornell NYC Tech project. The proposed development would allow Cornell to build an applied sciences and engineering campus in New York City, meeting the City's goal of maintaining and increasing New York City's global competitiveness, diversifying the City's economy, driving economic growth, and creating jobs for New Yorkers. The Cornell NYC Tech project intends to focus on research and graduate degrees in the applied sciences and fields of study related to the technology sector with a campus centered on flexible and dynamic interdisciplinary application hubs instead of traditional academic departments.

The project site is located on the southern portion of Roosevelt Island, south of the Ed Koch Queensboro Bridge (Queensboro Bridge). A majority of the project site (Block 1373, Lot 20) is owned by the City of New York and is occupied by the Coler-Goldwater Specialty Hospital and Nursing Facility's Goldwater Memorial Hospital (Goldwater Hospital), which is operated by the New York City Health and Hospitals Corporation (NYCHHC) (see **Figures 1 through 4**). The remainder of the project site (Block 1372, part of Lot 1) is vacant and owned by the City of New York and leased to the Roosevelt Island Operating Corporation (RIOC). Independently of, and prior to, the proposed project, NYCHHC will vacate Goldwater Hospital and relocate patients and services elsewhere.[1] Outside of the project site, Roosevelt Island is controlled by RIOC, under a long-term lease with NYC.[2] Roosevelt Island is under the political jurisdiction of the borough of Manhattan.

[1] NYCHHC issued a Negative Declaration on December 6, 2011 for the closure and relocation of operations currently housed at the Goldwater Memorial Hospital (CEQR No. 12HHC001M).

[2] Roosevelt Island is owned by the City of New York, and the entire Island except for the Goldwater Memorial Hospital campus and the Coler Memorial Hospital campus is leased to the State of New York. RIOC was established by New York State in 1984 to manage the operation, maintenance, and

The Goldwater Hospital complex has been determined eligible for listing on the State/National Registers of Historic Places (S/NR-eligible) by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). Cornell has evaluated the potential for retaining and reusing the existing Goldwater Hospital complex buildings in conjunction with the proposed Cornell NYC Tech project proposed for the project site. This alternatives analysis presented below in greater detail, concludes that it is not feasible to retain all or portions of the Goldwater Hospital complex as part of the proposed project. The hospital buildings, containing a total of 647,900 gsf, do not contain sufficient square footage to meet the City's development requirements for an applied science and engineering campus of a minimum of 1.8 million gsf of total building space, of which a minimum of 620,000 gsf must be academic use and the campus must have no fewer than 286 faculty and 1,800 students, as stipulated under an agreement between the City of New York and New York City Economic Development Corporation (NYCEDC). The existing hospital does not meet the requirements for academic research and R&D facilities due to the small and irregularly-shaped floor plates of most of the buildings and configurations including incompatible floor-to-floor heights and restrictive column spacing. Further, alternatives that were considered to expand or enlarge the hospital buildings to allow them to meet the spatial needs of the proposed project do not meet the program requirements and would substantially alter and destroy elements of the building complex that convey its historic significance and compromise the integrity of the Goldwater Hospital complex, adversely impacting this historic resource.

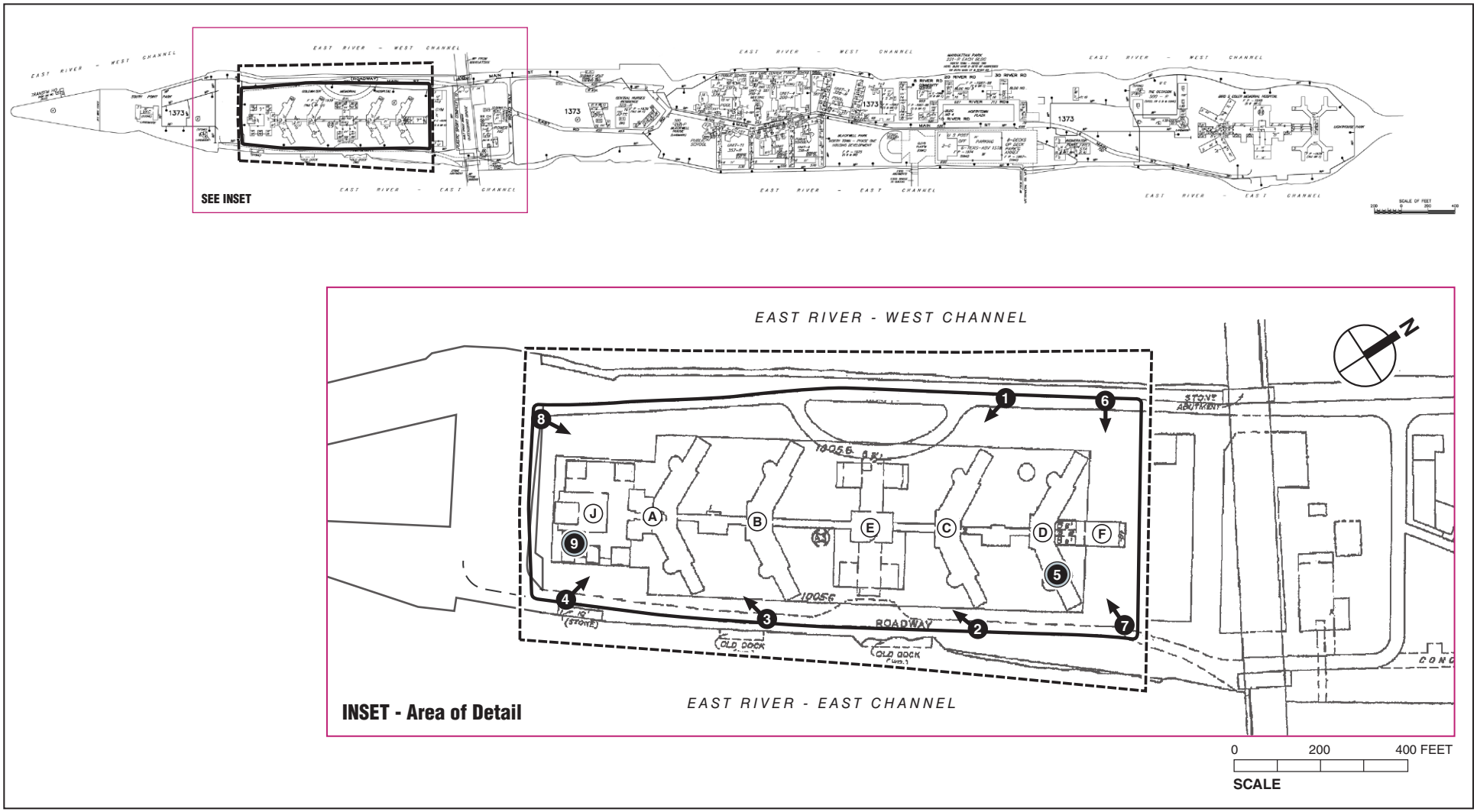
The removal of the S/NR-eligible Goldwater Hospital campus would constitute a significant adverse impact to this architectural resource. The proposed project has been developed through the careful consideration of a number of design alternatives that explored reusing all or some of the existing components of the Goldwater Hospital complex. The analysis described below sets forth the alternatives that were considered including those that seek to avoid and minimize impacts to the Goldwater Hospital complex. The following analysis concludes that it is not feasible to retain and reuse the Goldwater Hospital complex as part of the Cornell NYC Tech project.

B. CORNELL UNIVERSITY IN NEW YORK CITY

Cornell has a long history and a strong presence in New York City. Founded in Ithaca, New York in 1865, Cornell first established a presence in New York City in 1898, with the founding of what is now known as the Weill Cornell Medical College (WCMC). WCMC began an affiliation with New York Hospital in 1913 and subsequently with what is now New York-Presbyterian Hospital in 1998. Weill Cornell's Graduate School of Medical Sciences was founded in 1952 through the convergence of two institutions—the Sloan-Kettering Institute and WCMC. WCMC and Weill Cornell Graduate School of Medical Sciences are located on the Upper East Side of Manhattan between East 65th and East 72nd Streets. In addition to medical studies, Cornell has a number of other active academic programs in Manhattan, including programs in finance, labor relations, architecture and planning, and cooperative extension.

development of the Island. The State's lease on the Island expires in 2068, when control will revert to New York City.

8.15.12



Project Site

Rezoning Area (Special Southern Roosevelt Island District)

Ⓐ *Goldwater Hospital Building Name*

❶ *Photograph View Direction and Reference Number*

❺ *Interior Photograph*

CornellNYC Tech

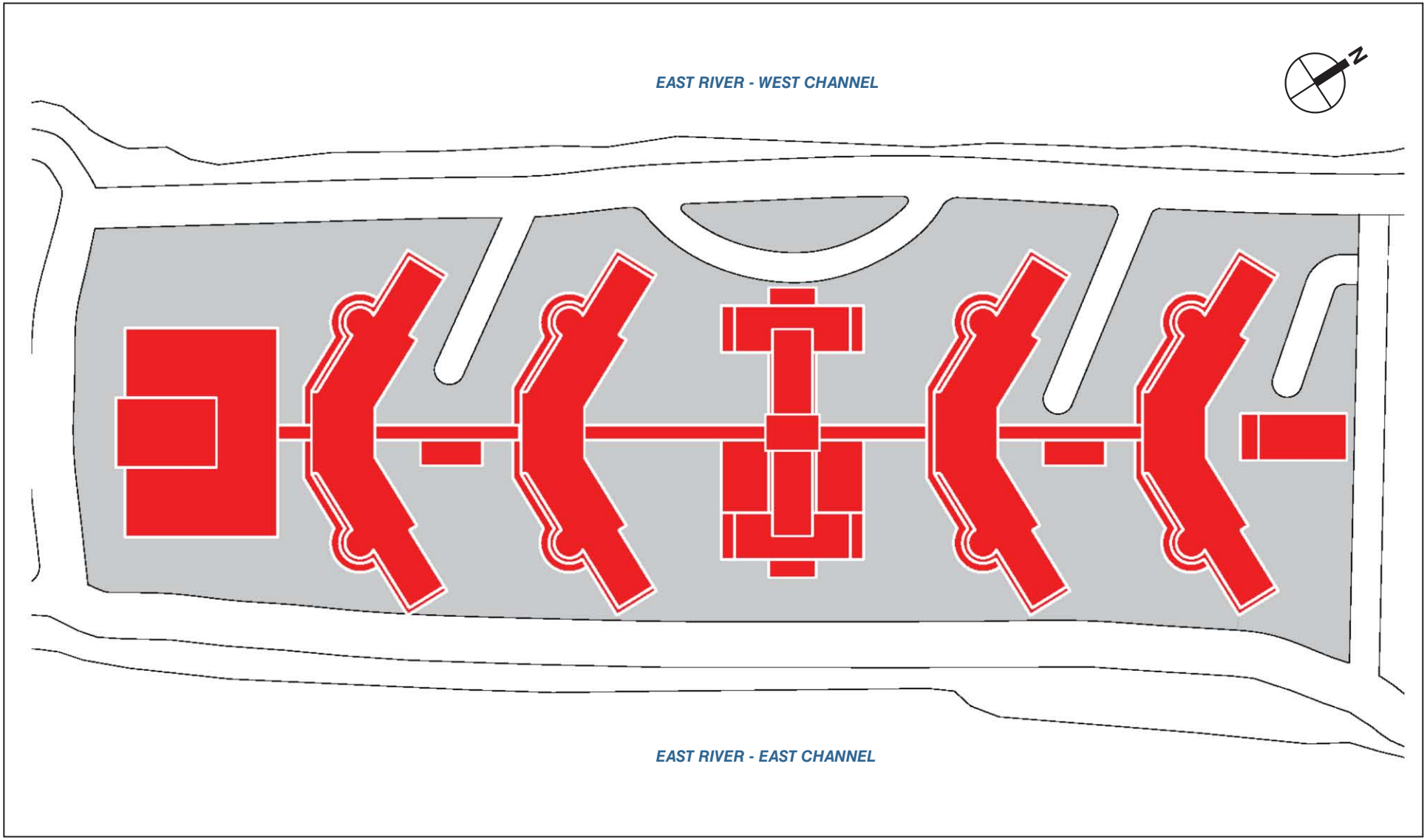
Project Location Map
Figure 1

8.15.12

Existing Conditions: Aerial Photograph of Goldwater Hospital

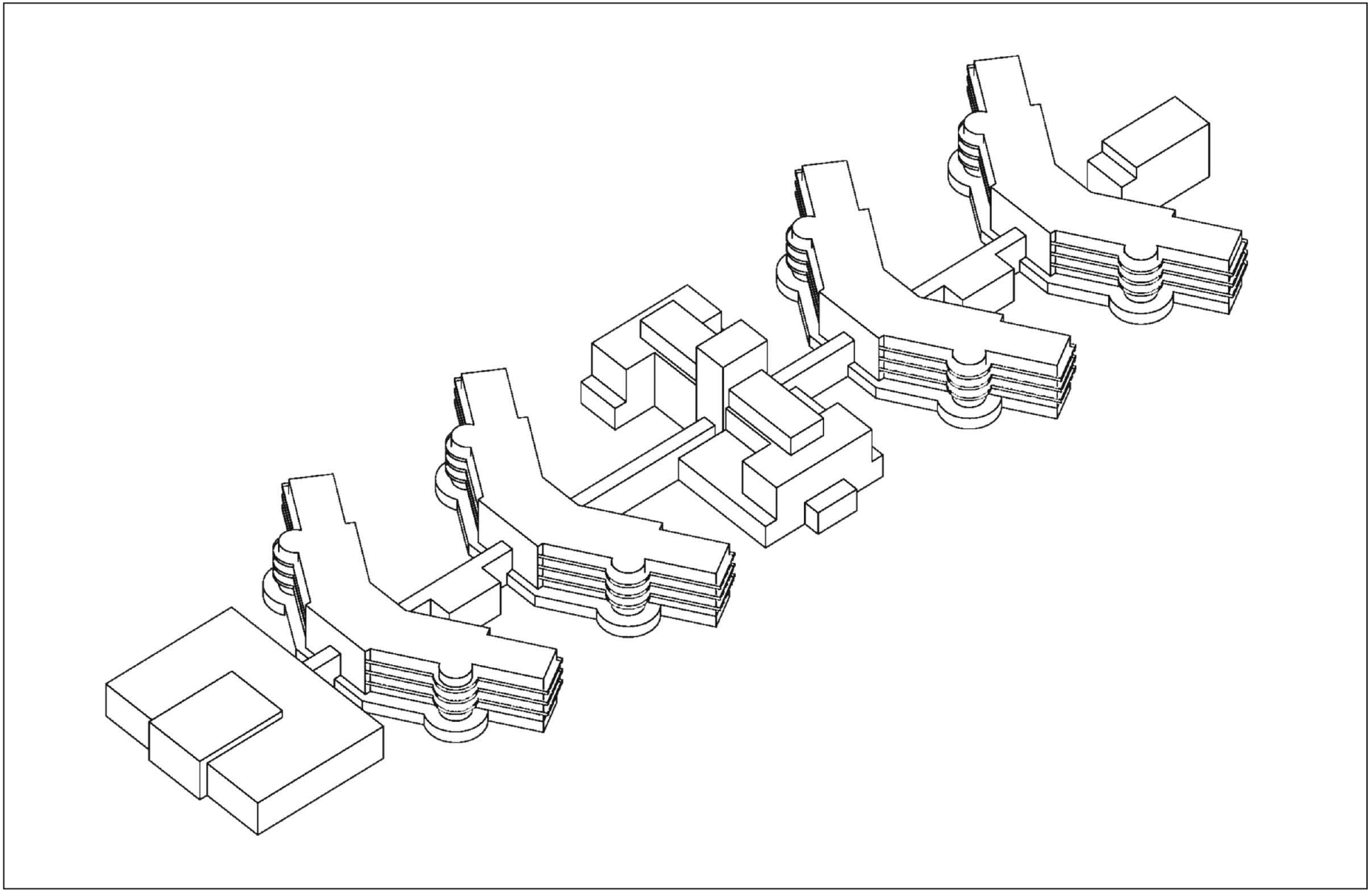
Figure 2

8.15.12



Existing Conditions: Goldwater Hospital Site Plan

Figure 3



Existing Conditions: Goldwater Hospital Axonometric View

Figure 4

In 2011 Cornell responded to the City's Request for Proposals (RFP) to build an applied sciences and engineering campus in New York City that would continue the University's long relationship with New York City and be consistent with Cornell's plan to expand its engineering and technology programs. Cornell, in partnership with the Technion–Israel Institute of Technology, was selected to develop the Cornell NYC Tech project at the Goldwater Hospital site on Roosevelt Island.

C. PROPOSED CORNELL NYC TECH PROJECT

PURPOSE AND NEED

The City of New York launched its Applied Sciences[1] NYC initiative in 2010 after working with a variety of New York City's business leaders, academics, community groups, and entrepreneurs to identify ambitious, achievable initiatives that the City could undertake to achieve local economic growth. From that process, it was determined that there is an unmet demand in New York City for top-flight engineers and applied scientists. The purpose of Applied Sciences NYC is to provide an opportunity for a leading academic institution to build an applied sciences and engineering campus in New York City. The overarching goal is to maintain and increase New York City's global competitiveness, diversify the City's economy, drive economic growth, and create jobs for New Yorkers.

To this end, in December 2010, the City issued a Request for Expressions of Interest (RFEI) from academic institutions to develop and operate a new applied science and engineering research campus in New York City. In connection with the new campus, the City indicated its willingness to provide City-owned land in addition to a significant capital contribution in site infrastructure. Four sites were identified: the Goldwater Hospital campus on Roosevelt Island, the Navy Hospital campus within the Brooklyn Navy Yard, certain buildings and land on Governors Island, and a site on Staten Island. The City announced plans for the closure of the hospital in 2010 prior to the City issuing a Request for Proposals (RFP) in 2011. Based on the RFEI and RFP process, Cornell University, in conjunction with its academic partner the Technion–Israel Institute of Technology, was selected to develop the Applied Sciences NYC project—the Cornell NYC Tech project—at the Goldwater Hospital site on Roosevelt Island.

Under an agreement between the City of New York and NYCEDC, Cornell is obligated to build a minimum of 1.8 million gsf of total building space, of which a minimum of 620,000 gsf must be academic use. The terms of the agreement also obligate Cornell to have no fewer than 286 faculty and 1,800 students when the campus is fully operational.

The Cornell NYC Tech project intends to focus on research and graduate degrees in the applied sciences and fields of study related to the technology sector. A defining aspect of the proposed campus's graduate-level academic programs is the close tie to business and entrepreneurship that will be woven through the curriculum. Research will be focused on technology in application areas that have commercial potential in New York City markets. Specifically, New York City's technology sector and information-driven economy serve as the impetus for the development of many consumer-oriented companies focused specifically on technology to meet end users'

[1] Applied sciences is the discipline of applying scientific knowledge from one or more fields to practical problems.

needs, including some of NYC's core industries: media, advertising, finance, healthcare, real estate, construction, and design. The Cornell NYC Tech campus will be centered on flexible and dynamic interdisciplinary application hubs instead of traditional academic departments. This model will serve as a focal point for accelerating existing sectors of NYC's economy and driving the formation of new technology businesses through close ties to customers and core industry knowledge.

CAMPUS FRAMEWORK

Since its selection by New York City, Cornell has prepared various planning activities for the Cornell NYC Tech project, including campus framework planning. Cornell's campus framework is being developed to guide development of the proposed project but to allow Cornell flexibility in implementing the plan over the project's long build out period. The framework will include a discussion of principles that will guide design and implementation of the campus; strategies for campus operations (e.g., vehicular and pedestrian circulation, service access and loading, and parking); principles for site design, including sustainability goals and strategies to meet these goals; and design guidelines that would apply to the campus as a whole and to individual parcels and the site's open spaces.

CAMPUS FRAMEWORK PRINCIPLES

The campus framework principles are intended to inform the campus design, and consist of the following:

- Create a River to River Campus Vision. The Cornell NYC Tech project intends to create a campus that will recognize the existing Roosevelt Island esplanade and the Island's water frontage as important adjacent elements of the campus site.
- Create a Diverse Collection of Active Open Spaces. The Cornell NYC Tech project intends to create a diverse array of publicly-accessible open spaces that extend from the waterfront road into the campus. Cornell intends to design and program these spaces so that each space is clearly defined in its character and use. The site's open spaces are also intended to facilitate movement within the campus, both north to south and east to west.
- Create a Symbiotic Cycle between Indoor and Outdoor Spaces. To ensure an active and engaging campus, the Cornell NYC Tech project intends to activate the lower floors of the campus buildings by encouraging both indoor and outdoor amenities.
- Create a North-South Pedestrian Spine. The Cornell NYC Tech project would include a north-south pedestrian spine, a pedestrian thoroughfare that is intended to create a dense, urban scale circulation spine uniting the campus from north to south.
- Optimize Campus Buildings for Use and Performance. The Cornell NYC Tech project site plan would orient the academic and partner research and development buildings along the north-south pedestrian spine to encourage connections between such buildings. The residential and conference/hotel facility buildings would be located along the ring road to optimize access to light and air.
- Create a Livable and Sustainable Campus. The Cornell NYC Tech project campus plan is intended to enhance pedestrian flows, maximize views of the East River and Manhattan and Queens, and take advantage of the solar orientation with the goal of enhancing the health, comfort, and productivity of the project's workers and residents.

PRINCIPLES FOR SITE DESIGN

The proposed project would incorporate a number of sustainable design measures that would reduce energy consumption and greenhouse gas (GHG) emissions. In addition to meeting all applicable local laws regarding energy, Cornell has agreed to achieve a minimum of Leadership in Energy and Environmental Design (LEED®) Silver certification for all project buildings and has set a goal to achieve net-zero energy consumption for its Phase 1 academic building. This means that the campus collectively would generate enough renewable electricity to offset the cumulative electrical power, heating, and cooling energy use of the Phase 1 academic building on an annual basis.

DESIGN GUIDELINES

The framework will outline a series of design guidelines for the campus that are intended to guide campus development over time, building by building, by providing flexibility while ensuring the integrity of the campus as a whole. The design guidelines will inform specific building design and relate specifically to frontage, entry points, energy and space-use efficiency, and overall functionality.

CAMPUS PLAN

Within this framework, the Cornell NYC Tech campus has been planned to develop up to 2.13 million gsf and would include the following components—academic and research space, partner R&D space, residential units, and an academic-oriented hotel with conference facilities. These project components would be located within approximately 10 new buildings, ranging in height from approximately four to 27 stories (approximately 60 to 290 feet). The campus would also include new landscaping, publicly accessible open space, roadway improvements, and two new central utility plants. The new buildings have been designed to contribute to a unified, pedestrian-oriented campus centered around a north-south walkway that would extend through the project site. The campus would also include a minimum of 2.5 acres of publicly accessible open space that would form a network of open spaces among the approximately 10 new buildings (see **Figure 5**).

The Cornell NYC Tech campus would include the following components:

Academic and Research Space—As required by the City's agreement with NYCEDC, 620,000 gsf of academic and research space would be developed with classrooms, faculty offices, research space for faculty and scientists, and adequate space for activities including student projects and corporate-sponsored research. Ancillary space would also be provided for exhibits, interactive and social gatherings, cafés, and other amenities as well as meeting space for the adjacent conference center. The academic and research space would be located in three new buildings that would have large floor plates of up to 40,000 gsf with open floor plans and a core configuration allowing for maximum flexibility of space for different academic and research uses. The floor-to-floor heights would be 14 feet or greater to sufficiently allow for 10-foot or greater ceiling clearance heights, consistent with current design standards for academic research buildings. The large open floor plans would provide opportunities for interactions among the campus's faculty, researchers, students, and private R&D companies.

Partner R&D Space—The Cornell NYC Tech campus would include 500,000 gsf of commercial R&D space that would accommodate private companies interested in taking advantage of proximity to academic research occurring at the Cornell NYC Tech campus and having access to the Cornell NYC Tech faculty, researchers, and students. The campus is envisioned to include

three partner R&D buildings with larger floor plates (greater than 24,000 gsf) and floor-to-floor heights of 14 feet or greater, consistent with current design standards for such structures. The buildings' large floor plates would allow for lower height buildings while meeting the expressed need for large, flexible rectangular open floor plans with a core configuration. The structural system would be expected to have generally wide column spacing to allow for large and flexible open floor plates suitable for academic buildings.

Residential Space—Providing housing is an essential component of a successful campus. The Cornell NYC Tech campus would provide residential units for Cornell leadership, faculty, post-doctoral fellows, Ph.D. candidates, and master's students. Based on Cornell's experience with both its Ithaca and WCMC campuses, Cornell would provide housing to 100 percent of the campus leadership and 80 percent of tenure track and research faculty, postdoctoral students, PhD candidates, and masters' students. No University housing would be provided for administrative and building staff, corporate-funded researchers, or visiting/adjunct professors, as it is assumed that these populations would already reside in NYC. As described above, under the terms of the agreement between the City of New York and NYCEDC, Cornell is obligated to have no fewer than 286 faculty and 1,800 students when the campus is fully operational. Therefore, based on the above requirements, approximately 1,094 residential units would be accommodated in 800,000 gsf of residential space on the Cornell NYC Tech campus. The project would develop three residential buildings. The heights of these buildings are expected to range from 20 to 27 stories to accommodate residential needs within the available campus footprint.

Academic-Oriented Hotel with Conference Facilities—An approximately 170,000-gsf academic-oriented hotel with conference facilities would serve the campus's industry partners and visitors. The hotel would be designed, financed, developed, and operated by a private, non-Cornell entity and would include 200-225 guestrooms and also accommodate flexible meeting and breakout space. The hotel would have a large first floor plate of column-free space for large conference/meeting rooms, with approximately 20-foot-tall floor-to-floors on the first floor. Additional conference room floors would be approximately 15 feet high, and guest rooms would have approximately 10-foot-tall floor-to-ceiling heights

In addition, the Cornell NYC Tech project has been designed to include active street frontages (and open space frontages) to enhance the public realm and would contain up to approximately 25,000 gsf of campus-oriented retail that could include cafés, newsstands, bookstores, etc.). The proposed project would provide public open space in place of the existing small grassy and paved areas on the project site.

Overall, by 2038 with the Cornell NYC Tech project, Cornell would develop a new academic campus on Roosevelt Island that would meet the City's goals for a new technology campus in New York City.

MODERN ACADEMIC RESEARCH AND R&D FACILITIES REQUIREMENTS

In designing academic research and R&D facilities, floor plate size and configuration are key to creating a building that will serve evolving state-of-the-art research functions over the long term. Generally, large academic research and R&D buildings have multiple floors. Upper floors generally have the same basic form and layout, and share the same vertical core and infrastructure with the lower floors. The functional design objectives of academic research and R&D building floor plates are to: (1) create flexible space for the long-term life of the building; (2) promote

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Source: SOM

Note: For illustrative purposes only

Proposed Illustrative Site Plan

Figure 5

interaction among the research teams; (3) support the research functions in floor layout; and (4) keep the building systems as simple as possible.

With large open floor layouts, which must be flexible enough to respond to changes in technology and research teaming, academic research and R&D buildings need to have simple and efficient building systems. A central core for all vertical functions, one or more combined building systems, rather than numerous multiple systems, and a minimum of jogs or corners for pipes, conduits, and ducts are all features that help achieve this purpose.

Therefore requirements for modern academic research and R&D facilities include the following features:

- Flexibility and Adaptability
- Shared Spaces
- Large Floor Plates
- High Floor to Floor Heights
- High Performance Mechanical and Centralized Utility Systems

Each of these requirements is described in further detail below.

1) Flexibility and Adaptability

   i. It is important that modern academic research space provide for flexibility and adaptability. Over time researchers needs change, expanding and contracting with advances in technology and shifting emphasis in scientific and technology direction. Generic spaces that can readily accommodate changes are critical and are even more important for interdisciplinary research.

   ii. The generic academic research spaces are best fit into floor plates with broad dimensions in both directions. A large, open floor plate provides flexibility for expansion and contraction of space allocation quickly and without costly and time-consuming alterations to the facility. The advantages of a large, open, floor plan that allows for the creation of adaptable/flexible spaces are immeasurable in terms of avoiding major disruptions to ongoing research programs necessitated by costly renovations.

2) Shared Research Support Spaces

   Critical to the success of a highly interdisciplinary research program is the provision of shared research support spaces, such as computer labs. These types of spaces need to be in close proximity to investigators, their offices, and meeting rooms. Modern academic research buildings have some of these uses located on each floor to enhance interaction among the researchers with easy access to equipment, files, and important supplies. The shared interactive functions must serve the needs of all research groups' requirements on the floor, but may also serve the broader needs of the building's entire research community.

3) Large floor plates

The need for shared spaces mandates large open floor plates of at least 24,000 gsf to allow for an optimal number of researchers working in proximity on each floor, to accommodate the required uses per floor and to allow for research groups from various disciplines to

interact. The creation of an environment conducive to interaction, or a research "neighborhood," is facilitated by a floor plate design with a minimum of obstructions, that is as column-free as possible, and allows for physical and visual contact between researchers and associated staff. The rectangular floor plan best meets this requirement as it is conducive to easy access between laboratories and support space.

4) High Floor-to-Floor Heights

To effectively support the work of the researchers it is imperative that modern academic research facilities have high floor-to-floor heights of at least 14 feet to accommodate infrastructure systems that would otherwise take up valuable space. This height provides for approximately 10 feet of clear ceiling height, and 4 feet of mechanical distribution and structural zones. The systems required to support the research space located within the mechanical and structural zones include:

- Heating, cooling, and general ventilations systems;
- Robust electrical distribution for analytic imaging and computing systems;
- Supplemental cooling systems as needed to support sensitive analytical and laser imaging apparatus, robotics, or similar technology;
- Distribution of piping to support plumbing, compressed air, vacuum, gas and sprinkler systems; and
- Network and computational data wiring.

D. EXISTING CONDITIONS OF THE GOLDWATER HOSPITAL COMPLEX

The Goldwater Hospital complex, originally known as the Welfare Hospital for Chronic Diseases, was developed during the Fiorello LaGuardia administration as part of the Works Progress Administration (WPA)[1] initiative at a time when Roosevelt Island[2] was being redeveloped with hospital facilities.[3] Completed in 1939 under the direction of Dr. Sigismund Schulz Goldwater (1873-1942), the New York City Commissioner of Hospitals, the hospital complex was designed by architect Isadore Rosenfield with the aid of Public Works Administration (PWA) funds.[4]

THE BUILDINGS AND SITE PLAN

The six original buildings in the hospital complex were designed in the Art Deco style by Rosenfield in association with Butler & Kohn and York & Sawyer. Rosenfield's site plan

[1] The "Works Progress Administration" was renamed the "Works Project Administration" in 1939.

[2] Until circa 1921, Roosevelt Island was known as "Blackwell Island." At that time, the island was renamed "Welfare Island." The island was renamed again in 1973, becoming "Roosevelt Island."

[3] "Hospital for Chronic Diseases, Welfare Island, New York. *The Architect & Building News*. January 12, 1939. Page 208.

[4] "Rosenfield Resigns." *The New York Times*. August 4, 1945.

organizes the buildings along a central, north-south corridor with five pairs of projecting wings, maximizing exposure to sunlight and East River views from the hospital's frontages on both its east and west sides. The hospital complex was altered with the circa 1971 addition of the one-story modernist "Activities Building" designed by architect William Lescaze.

The complex was designed as a hospital with the majority of the hospital facility serving as Patient Wards. The hospital complex has a central six-story Administration Building that has a shallow "H" plan, four four-story chevron-shaped Patient Ward buildings (two to the north and two to the south of the Administration Building), a narrow rectangular three-story Laboratory and Morgue building that establishes the hospital's north end, and the one-story Activities Building at the hospital's south end (see **Figures 1 through 4, 6, and 7**). The 15-foot-wide north-south corridor connects the hospital's original six buildings at the basement, first, and second floors; the corridor was extended to the south to connect to the Activities Building at the basement and first floors. The original six buildings are faced in buff-colored brick with limestone parapets; the Activities Building is a boxy modernist structure faced in brown brick and buff-colored limestone.

The Goldwater Hospital complex contains a total of 647,900 gsf, allocated as follows:

- The six-story Administration Building has 155,497-gsf. It is the tallest building in the hospital complex and is located at the center of the building complex (see **Figures 1, 3, 4, and 6**). The Administration Building contains the hospital's primary entrance, which is accessed by a U-shaped ramp from the west side of the hospital site. The Administration Building's basement and first floors have 38,895 gsf floor plates while the upper floors have smaller floor plates ranging from 2,314 gsf on the sixth floor to 31,885 gsf on the third floor. The building has steel columns located 20 feet from the outside walls on floors two through six to create a double-loaded corridor configuration, with the columns forming an approximately eight-foot-wide corridor on these floors. The building has nine-foot ceilings (with 12-foot floor-to-floor heights). At the basement and first floors where the floor plates are larger, the columns are spaced at 15-foot-intervals.
- Each of the four four-story Patient Ward buildings has 114,164 gsf with 19,928-gsf floor plates (for a total of 456,656 gsf). The Patient Ward buildings have long and narrow, approximately 45-foot-wide floor plates that narrow to approximately 28 feet wide at the outer ends of each floor. The Ward buildings have steel columns spaced at approximately 15-foot intervals, located approximately 18 feet from the outer walls to create a double-loaded corridor configuration, with the columns forming an approximately eight-foot-wide corridor on each floor. Like the Administration Building, the Patient Ward buildings also have 9-foot ceilings (with 12-foot floor-to-floor heights).

  Each Patient Ward building has two wings that extend at an angle from the north-south connecting corridor in a chevron shape (see **Figures 1, 3, 4, and 7**). The south façade of each Patient Ward building has concrete balconies and curved concrete slab terraces with metal railings and wood handrails. Some balconies have been modified by glass enclosures and metal framing creating additional interior space. The Patient Wards have circular day rooms on their south facades (see View 4 of **Figure 7**). Each Patient Ward building originally had Rigs ward configurations arranged with open wards; however, only the fourth floor of the western wing of Patient Ward D remains in its original layout. All other corridors are double-loaded and have narrow floor plates.

  Eight murals were commissioned for Goldwater Hospital as part of the Federal Art Project (FAP) of the WPA, employing artists during the Depression who provided artwork for non-

federal public buildings. Among the murals at the Goldwater Hospital complex were murals painted by abstract artists, including Ilya Bolotowsky (1907-1981), Albert Swinden (1901-1961), Joseph Rugolo (1911-1983), Riccardo Dane Chanase (1894-1975), Byron Browne (1907-1961), Richard Goldman, and Theodore Haupt (1902-present). Of the eight murals, only Bolotowsky's "Abstraction" has been conserved and is currently visible (see **Figure 8**). It is located in the day room in the east wing of Patient Ward D's third floor.

- The three-story Laboratory and Morgue building has 25,377 gsf, with floor plates ranging from 4,424 gsf to 8,377 gsf and 9-foot-tall ceilings (with 12-foot floor-to-floor heights) (see Views 6 and 7 of **Figure 9**).
- The one-story Activities Building has 72,148 gsf, with 36,074 gsf floor plates (contained in the first floor and basement) (see View 8 of **Figure 10**). The ceilings in the Activities Building are approximately 25 feet high. The Activities Building has a U-shaped floor plan with a centrally-located auditorium. The building contains two chapels, a synagogue, and a mosque, among other uses, with stained glass windows in the two chapels (see View 9 of **Figure 10**).

E. ALTERNATIVES

As part of the design process, Cornell considered various options for the Goldwater Hospital campus site to meet the University's programmatic and academic needs while also fulfilling the City's objectives and directives for the project. Throughout the planning process, the overall objective has been to meet the City's expressed goal of developing an academic and research campus in New York City with a total minimum of 1.8 million gsf, including a minimum of 620,000 gsf for academic and research space. Three redevelopment alternatives were developed and analyzed, as detailed below. These include 1) maintaining the current site configuration and retaining the Goldwater Hospital structures to avoid adverse impacts to this architectural resource; 2) expanding the existing Goldwater Hospital buildings to meet programmatic and square footage requirements; and 3) demolishing the Goldwater Hospital complex in its entirety, which would result in a significant adverse impact to this architectural resource.

1. AVOIDANCE OF AN ADVERSE IMPACT—RETAIN AND REUSE THE GOLDWATER HOSPITAL COMPLEX

To avoid adverse impacts, an alternative that retains and reuses all of the Goldwater Hospital complex without new construction or alterations to the buildings or the site plan was evaluated. Under this scenario, the hospital buildings, the site plan, landscaping, and surface parking areas would not be altered apart from regular maintenance (see **Figures 1 through 4 and 6 through 10**).

Under this scenario, the hospital complex's total existing 647,900 gsf of space would be re-tenanted to accommodate the Cornell NYC Tech science and technology campus. However, because the City requires a minimum of 1.8 million gsf including a minimum of 620,000 gsf of space for academic uses on the campus, re-tenanting the hospital buildings to meet the academic research square footage requirement would result in only 27,900 gsf of space within the existing hospital complex remaining available for re-tenanting with other project components. Therefore, there would not be sufficient square footage for the development of other critical project components as established by the project's purpose and need, which include R&D space, proposed at 500,000 gsf; a hotel proposed at 170,000-gsf; and 1,094 residential units, in addition to the requirement to provide open space. Even if the academic square footage requirement can

View east to the Administration Building and Patient Ward Buildings A, B, and D **1**

View west to the Administration Building and Patient Ward Building D **2**

Existing Conditions: Goldwater Hospital—
Administration Building and Patient Ward Buildings

Patient Ward A—View southwest to the east wing's north and east facades **3**

Patient Ward A—View northwest to the east wing's south facade **4**

Existing Conditions:
Goldwater Hospital—Patient Ward Buildings
Figure 7

Mural "Abstraction" by Ilya Bolotowsky—Patient Ward D **5**

Existing Conditions:
Goldwater Hospital—Patient Ward Buildings
Figure 8

View northeast to the Laboratory and Morgue Building's west facade, with Patient Ward Building D in the foreground **6**

View northeast to the Laboratory and Morgue Building's east facade, with Patient Ward Building D in the foreground **7**

Existing Conditions:
Goldwater Hospital—Laboratory and Morgue Building
Figure 9

View northeast to the Activities Building/Building J, with Patient Ward Building A in the background **8**

Stained glass windows in the Protestant chapel **9**

Existing Conditions:
Goldwater Hospital—Activities Building
Figure 10

be met with the reuse of the existing buildings, the buildings themselves do not contain the required characteristics for academic research facilities, as described in greater detail below.

The configuration of the buildings do not meet the requirements for modern academic research facilities as the existing hospital buildings have internal structural layouts that preclude the required open and flexible spaces needed for academic research buildings. Each of the hospital buildings, apart from the Activities Building and two floors of the Administration Building, has double loaded, narrow corridors with small floor plates. In terms of overall square footage, the largest building in the hospital complex is the six-story Administration Building which has 155,497 gsf with floors having varied configurations and containing between 2,314 gsf (sixth floor) and 38,836 gsf (basement and first floor). Although it has two floors with large floor plates in a shallow "H" plan (38,836 gsf), these floors would only provide a small amount of the required academic research square footage in a floor plate size that could be utilized for academic research or R&D use. In addition, the "H" plan would not allow for large, open floor plates that provide the spatial flexibility required for academic research or R&D uses.

Each Patient Ward building has a total square footage of 114,164 gsf, however, each floor has long, narrow and irregularly-shaped floor plates containing 19,928 gsf. This floor plate configuration and the buildings' structural system would not meet programming needs for academic research space or R&D uses which call for large and flexible floor plates with generally wide column spacing. The two smaller hospital buildings have even smaller floor plates, with the Laboratory and Morgue building containing 25,377 gsf on four floors with floor plates ranging from 4,424 to 8,377 gsf, and the Activities Building containing 72,148 gsf on two floors. While the Activities Building has larger floor plates at 36,074 gsf, the building is one-story plus a basement and would also only provide a small amount of the required academic research square footage in a floor plate that could be utilized for academic research or R&D use.

The reuse of the hospital buildings for academic research uses would not provide the large floor plates of up to 40,000 gsf proposed for these types of uses. The existing hospital buildings would not allow for large open floor plates due to their primarily small size, and the existing partitions and structural systems would not provide the spatial flexibility necessary for academic research buildings. In addition, R&D buildings require floor plates of at least 24,000 gsf with open plans maximizing flexibility and efficiency. While several hospital buildings have floor plates of adequate square footage, the floor plate shape and interior configuration of the buildings, as described above, do not provide wide column spacing that allows for large and flexible open floor plans suitable for academic buildings. Further, the existing buildings, with 12-foot-tall floor-to-floors only allow for 9-foot-tall clearances and do not provide the required, at minimum, ten-foot clear interior heights provided with 14-foot-tall floor-to-floor heights necessary for academic research and R&D buildings.

The proposed development of approximately 1,094 residential units would require approximately 800,000 gsf of residential space. The existing Patient Ward buildings contain approximately 19,928 gsf per floor. To accommodate the anticipated user population, the four Ward buildings could hypothetically accommodate a total of 448 residential units, with approximately 28 units per floor (for a total of approximately 112 residential units per building). This would be far below the number of units required to house the no fewer than 286 faculty and 1,800 student population Cornell is obligated to have under the terms of the agreement between the City of New York and NYCEDC. Most importantly, the reuse of these buildings for residential use would preclude the ability to provide the required minimum of 620,000 gsf of academic research space.

CONCLUSION

Although the re-tenanting alternative would hypothetically meet the minimum 620,000 gsf of academic square footage required for the project, the current design and structural configuration of the majority of the buildings precludes their reuse for academic research and R&D use and would not allow for efficiencies of use and interdisciplinary interactions. Further, the remaining 27,900 gsf available in the hospital buildings, would not allow for the remainder of the program (1,207,900 gsf of the required minimum of 1.8 million gsf) to be located on the project site within the existing buildings. Therefore, while the re-tenanting alternative would not result in any significant adverse impacts to the Goldwater Hospital complex, this alternative would not be feasible as it would not meet the goals and objectives of the proposed project.

To develop the other programming components, including R&D space, the hotel, and housing, additional floor area would need to be constructed on the Goldwater Hospital campus. These alternatives are discussed below.

2. EXPANSION OF THE GOLDWATER HOSPITAL COMPLEX

The potential for retaining the Goldwater Hospital buildings and overbuilding and expanding the existing hospital buildings to accommodate the required 620,000 gsf of academic square footage and other program components for the proposed total of 2.13 million gsf was evaluated.

To meet the proposed 2.13 gsf for the various programming components as established in the purpose and need, approximately 1,482,100 gsf would need to be developed on the project site. [To meet the required minimum development of 1.8 million gsf, approximately 1,152,100 gsf would need to be developed]. As described below, two concepts were developed to consider the potential for expanding the existing hospital buildings: Concept A—vertical expansion and Concept B—vertical and horizontal expansion.

Concept A—Build Up

Concept A would involve the vertical expansion of the existing hospital buildings to accommodate the proposed program. However, the potential for developing the vertical expansion concept would be limited by several factors.

The greatest limitation is the structural capacity of the existing hospital buildings. According to available information about the existing buildings' structural systems, the hospital buildings were not designed or constructed to carry additional vertical expansion loads. The buildings' structural systems could support, at best, a minimal overbuild. Vertically expanding these buildings would require modifications to the buildings' structures through structural reinforcement and/or bridging over the existing structures. Vertical expansions would also present substantial structural and engineering challenges and dramatically increasing construction costs. Not only would such modifications substantially compromise the architectural integrity of the existing buildings, the vertical expansions would not result in large, flexible floor plans required for academic research and R&D buildings.

The amount of additional square footage that could be developed without requiring structural reinforcement and/or bridging over the existing structures would not result in adequate square footage to meet the programming needs of the proposed project. Hypothetically, even doubling the size of the existing buildings, regardless of structural capacity, would not meet either the proposed 2.13 million gsf or the minimum required development of 1.8 million gsf. In addition, by vertically expanding the existing buildings,

the buildings would still not have sufficiently sized floor plates in a shape required for academic research and R&D uses and the existing floors would not have the appropriate floor-to-floor heights and interior configurations needed for academic research and R&D buildings. This alternative would not allow for the interdepartmental and R&D adjacencies that are essential to the purpose and need of the project.

Concept B—Build Up and Build Infill

Concept B explored the potential to create additional square footage to meet the square footage of the proposed project and increase floor plate size by horizontally expanding the existing hospital buildings with infill structures.

Under this scenario, the Administration Building's floor plates could be in-filled above the first floor to create floor plates of approximately 38,836 gsf (the same square footage as the building's first floor). This would result in a six-story building containing approximately 230,016 gsf. While this concept would allow for floor plate sizes in the Administration Building appropriate to academic research and R&D uses, it would compromise the building's original design and would not provide a structure with an open and flexible floor plate and required floor-to-floor heights. The construction required to expand this building would compromise its original design and the hospital complex's site plan. The Administration Building is an important component of the Goldwater Hospital complex as it is the nexus of the complex, and contains the hospital's primary entrance. Redevelopment of this portion of the hospital site would dramatically alter the hospital's site plan and change the spatial and visual relationship between the complex's northern buildings and the southern buildings, compromising the site's overall design. The in-filled Administration Building could not be used for residential or hotel uses because the large floor plates would not be appropriate for residential units or hotel rooms which require access to light and air, in addition to other building code. The infilled building also would not provide the 20-foot ceiling height at the ground floor needed for the hotel's conference facility space.

Under Concept B, horizontal expansion of the Patient Ward buildings was explored instead of vertical expansions due to limited overbuild potential. With Concept B, additional square footage would be created by constructing additions to the four Patient Ward buildings' north facades. Each of the four additions would be approximately 252 feet tall (18 stories) and would contain approximately 20,500 gsf per floor (a total of 1,483,000 gsf among the four addition structures). The footprint size of the additions would be limited due to the close proximity of the Ward buildings to each other and to the Administration Building. To maintain the balconies and terraces on the Ward buildings' south facades, the additions would be located only on the Ward buildings' north facades (see **Figure 11**). Either the additions would have similar incompatible floor-to-floor heights as the existing Ward buildings, or the additions would have the taller required floor-to-floor heights. Under the second scenario, the floors would be at different levels because the existing buildings do not have the required minimum 14-foot-tall floor-to-floor heights that the new expansion structures would have. Because of the differences in floor heights, the expansion structures would not create uniform large floor plates, and would not meet the purpose and need of the project where large, flexible floor plates are required. The horizontal expansions would also not be suitable to a hotel use because the hotel would include a conference center requiring a large base floor plate with approximately 20-foot-tall floor-to-floor heights and additional conference floors of approximately 15 feet high. In addition, the horizontal expansion of the Patient Ward buildings would not allow for residential or hotel configurations as the floor

plates would be too large to create layouts that meet light and air requirements for these uses. Therefore, the horizontal expansion of the Patient Ward buildings could not feasibly accommodate the proposed programming of the project. Further, to create sufficient floor area for the program, the horizontal expansions would need to be tall structures that would compromise the historic appearance and design intent of the Ward buildings, and destroy the physical and visual relationships between the existing hospital buildings. The horizontal expansion of Patient Ward D also would require the demolition of the Laboratory and Morgue Building.

The potential for constructing new, free-standing infill buildings on the hospital site was also considered. The configurations of the existing buildings, particularly the chevron shape of the Patient Ward buildings, and the narrow distances between the existing buildings would not provide the necessary area to allow for the development of academic research and R&D buildings with adequately-sized floor plates. There are no other locations on the hospital site would allow for buildings with 24,000 to 40,000 gsf floor plates.

With Concept B, the potential for a substantial overbuild of the Activities Building involving major structural reconstruction of the building was explored since the Activities Building was not built as part of the original hospital complex, and has a sufficient floor plate size. Because of the zoning regulations limiting building heights within this portion of the project site, a vertical expansion would only be allowed up to 280 feet. Vertically expanding the one-story Activities Building would require substantial reconstruction with engineering challenges that would ultimately remove the building's original design and compromise its architectural integrity. Using the existing floor plate size and accounting for the height limitation, a total of 721,480 gsf could be built in this location. If the Activities Building were to be demolished, and assuming minimum 14-foot floor-to-floor heights and 40,000 gsf floor plates that would meet academic research and R&D efficiencies, a vertical expansion up to 280 feet would allow for a 20 story building containing 800,000-gsf building that would exceed the required minimum of 620,000 gsf of academic research space. However, the building would not have enough square footage to also accommodate the 500,000 gsf of R&D space. As described above, R&D uses could not be located in any of the other hospital buildings because the existing buildings would not provide adequate floor plates and ceiling heights.

The Laboratory and Morgue Building has small floor plates of 4,424 to 8,377 gsf. Expanding this building's footprint to create larger floor plates would be extremely limited by site constraints, including the close proximity to Patient Ward D, immediately to the south and the loop road immediately to the north. The shape of the Patient Ward building also limits the potential for expanding or redeveloping the Laboratory and Morgue Building site. This site does not provide enough space for developing a building of a size and scale that could house academic research and R&D floor plates, or hotel and residential units.

CONCLUSION

Although the expansion alternative could potentially retain most of the existing hospital buildings, with either Concept A or Concept B, the required alterations to the Goldwater Hospital buildings and hospital site would compromise the architectural integrity of this architectural resource. With Concept A, vertical expansion, even if practical, could not generate sufficient floor area to meet the required 1.8 million gsf minimum. Under Concept B, additional square footage could be created to meet certain aspects of the project. Additional square footage

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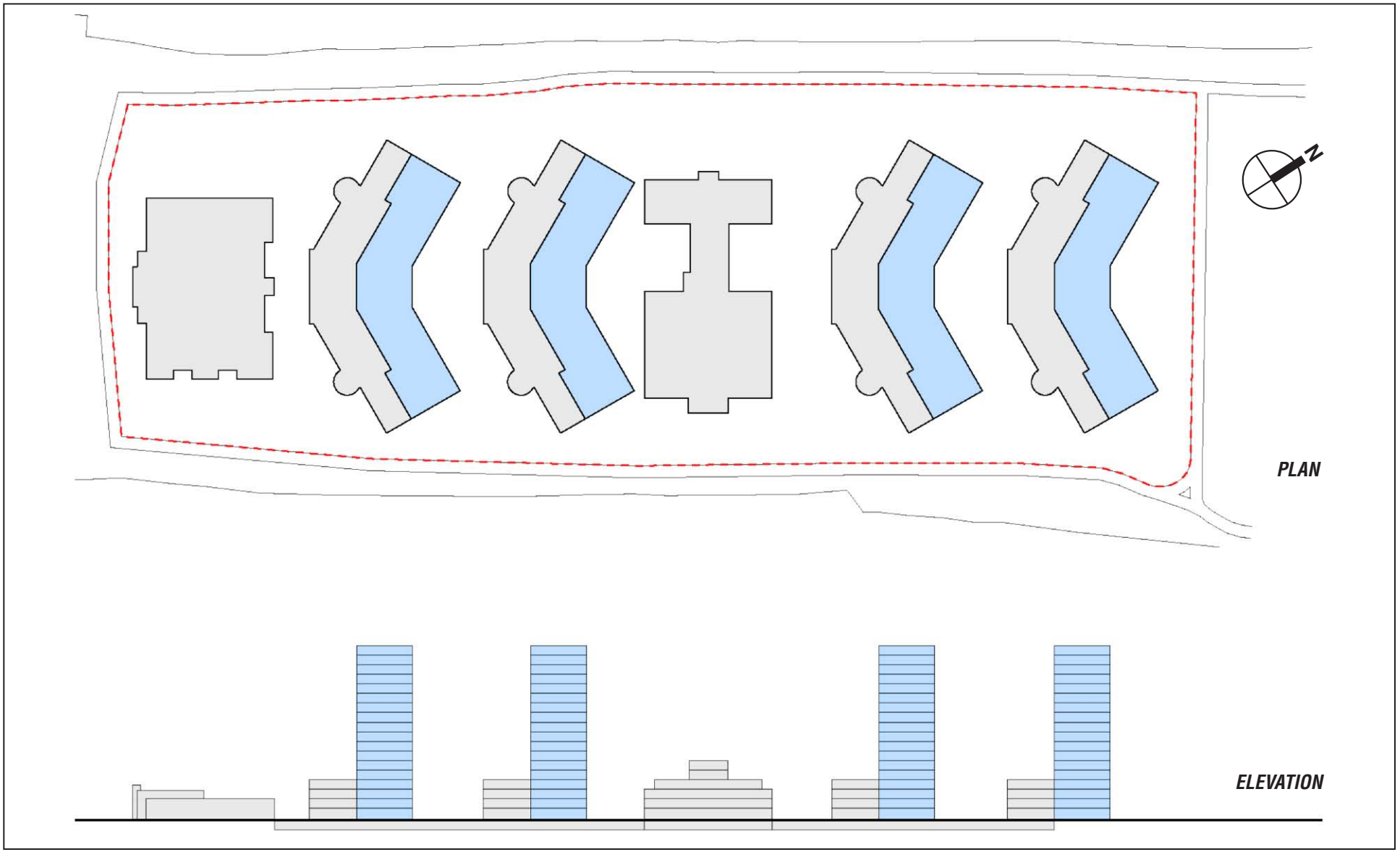

Source: SOM

Project Site

Existing Hospital Building

Expansion Structure

Note: For illustrative purposes only

Conceptual Horizontal and Vertical Expansion Alternative

Figure 11

that could be developed by infilling the Administration Building would provide additional square footage, however, the floors would not have flexible, open floor plates with generally wide column spacing that could accommodate efficient academic or R&D uses and would not be suitable for hotel and residential use. Similarly, though the expansion of the four Ward buildings would create larger buildings, the expanded buildings would not provide the configurations required for academic research and R&D uses, nor would they be appropriate for residential or hotel uses. While a scenario that would redevelop the Activities Building site with a new 800,000 gsf building, the R&D uses could not be fully accommodated in this building and it is not feasible to locate these uses elsewhere on the site. Therefore, both Concepts A and B of the expansion alternative would result in adverse impacts to the Goldwater Hospital complex and would not meet the purpose and need of the proposed project.

3. DEMOLISH THE GOLDWATER HOSPITAL COMPLEX AND REDEVELOP THE SITE

THE PROPOSED PROJECT

With the proposed project, the Goldwater Hospital complex would be demolished. The project's demolition of the Goldwater Hospital complex would result in a significant adverse impact. As described above, retaining the Goldwater Hospital buildings in their existing configurations and with new construction on the site is not practicable.

The proposed project would redevelop the project site with 10 new buildings with academic, research and development (R&D), residential, and conference center/hotel uses (see **Figure 5**). On the northern portion of the project site would be an academic building of at least four stories and 150,000 gsf; a residential building of up to 27 stories (290 feet); a conference facility/hotel building of up to 13 stories (165 feet); and a partner R&D building of at least four stories, adding another 150,000 gsf to the project site. In addition, a central utility plant would be located in the northern portion of the project site. The southern portion of the project site would be developed with six new buildings, including two academic buildings, two partner R&D buildings, and two residential buildings, for a total of up to 2.13 million gsf. A second central utility plant would also be located in the southern portion of the project site. The new buildings would contribute to a pedestrian-oriented campus centered around a north-south walkway that would extend through the project site. The project site would also include a minimum of 2.5 acres of publicly accessible open space that would form a network of open spaces at the perimeters of the project site and among the 10 new buildings.

Because the academic research and R&D buildings require higher floor-to-floor heights and large, unobstructed floor plates maximizing flexibility in use, the program's required 620,000 gsf of academic and research space and 500,000 gsf of R&D space must be accommodated in buildings with these characteristics. As described above, the existing hospital buildings do not have these characteristics. Further, the project objective of building lower height buildings with large floors plates to allow for and encourage interdisciplinary interactions could also not be accommodated by the existing buildings.

The proposed site plan has been designed to locate buildings and amenities on the project site at an angle that would maximize access to air, sunlight, and views. The proposed project would also involve the reconstruction of the existing roadway in the rezoning area with a new bicycle path and sidewalk, new plantings, and roadway improvements and improved access and circulation to the project site.

CONCLUSION

With the proposed project, the amount of square footage required to meet Cornell's program and the City's minimum square footage requirements would be accommodated and would include academic research, R&D, and a hotel located in a cohesive campus of lower height buildings with large, flexible floor plates with appropriate floor-to-floor heights that would maximize efficiencies and interaction opportunities among academic and R&D researchers, while also accommodating the development of a hotel with conference and meeting rooms that would further support the academic research campus. The development of residential units in taller buildings on the campus would support the overall campus plan, providing housing for the at minimum 286 faculty and 1,800 students as per the agreement between the City of New York and NYCEDC, and allow for additional opportunities for formal and informal interactions among the campus population.

F. CONCLUSION

As described above, Cornell has evaluated the potential for 1) maintaining the current site configuration and retaining the Goldwater Hospital structures; 2) expanding the existing Goldwater Hospital buildings vertically and horizontally to meet the project's spatial requirements; and 3) demolishing the Goldwater Hospital complex and redeveloping the site. While the demolition alternative would remove the Goldwater Hospital complex from the project site, it is the only alternative that would meet the purpose and need of the Cornell NYC Tech project.

As described above, only the alternative that maintains the Goldwater Hospital complex in its entirety would avoid a significant adverse impact to this architectural resource. However, as described above, this alternative would not fulfill the City's requirement for developing an academic research campus containing 620,000 gsf of academic research space, nor would it allow for the overall development of the City's minimum requirement of 1.8 million gsf of space for a research campus. In addition, the 647,900 gsf is contained in buildings that, in general, do not meet the requirements for academic research and R&D buildings. Similarly, the expansion alternative would meet certain square footage and programming needs, however, the type of space that could be developed would not provide the spatial configuration needed for dynamic interdisciplinary application hubs for academic research or R&D uses, which are central to the project's purpose and need.

In consideration of Cornell's purpose and need for the proposed project, it is not possible to retain and reuse the Goldwater Hospital complex as part of the proposed project. Therefore, there is no prudent and feasible alternative to avoid a significant adverse impact to the Goldwater Hospital complex. ✷

REFERENCES

"Hospital for Chronic Diseases, Welfare Island, New York. *The Architect & Building News*. January 12, 1939.

"Rosenfield Resigns." *The New York Times*. August 4, 1945.

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

New York State Office of Parks, Recreation and Historic Preservation

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September 19, 2012

Amy D. Crader
AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: RIOC
Cornell NYC, Roosevelt Island
New York County
12PR02181

Dear Ms. Crader,

Thank you for continuing to consult with the New York State Bureau of Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). Since the project involves the Roosevelt Island Operating Corporation (RIOC), which is a considered a state agency, we are continuing to review the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law).

At this time we have reviewed the provided alternatives analysis dated August 16, 2012. In general, we find the document to be thoughtful and reasonable in its evaluation of re-using the existing historic buildings. We understand that Cornell University proposes to develop an applied science and engineering campus comprising up to 2.13 million gross square feet (gsf) as required by the New York City's development requirements. The existing historic buildings contain about 650,000 gsf of institutional space and that they contain irregularly-shaped floor plates, incompatible floor-to-floor heights and restrictive column spacing making their adaptive re-use difficult.

Based upon the information provided, it is clear that the requirement of 2.13 million gsf cannot be met with the existing historic buildings, that new construction within and around the existing buildings is not sufficient to meet the needs of the project and that the existing structures themselves have lost much of their historic interiors over time. Given this information we are able to conclude that there are no prudent and feasible alternatives at this time to demolition of these historic buildings.

Our next step is to begin development of a Letter of Resolution (LOR) which would include mitigation measures that strive to minimize harm. We understand that the project is already evaluating the re-use of the eight WPA murals in the complex. Other mitigation ideas could include documentation, salvage of certain building components, retention of the historic circulation paths and continued consultation with our office on the new campus design.

If you have any questions, I can be reached at (518) 237-8643, ext. 3282. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,

Beth A. Cumming
Historic Site Restoration Coordinator
e-mail: Beth.cumming@oprhp.state.ny.us

cc: G. Santucci – NYC LPC
R. Ryan – RIOC

via e-mail only

Landmarks Preservation Commission

1 Centre Street
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ENVIRONMENTAL REVIEW

Project number: OFFICE OF ENVIRONMENTAL COORD. / 12DME004M
Project: CORNELL NYC TECH
Date received: 8/16/2012

Comments:

The LPC is in receipt of the alternatives analysis dated 8/16/12 and the SHPO comments of 9/19/12. The LPC concurs with the SHPO acceptance of the alternatives analysis.

LPC requests inclusion in the Letter of Resolution under NYS 14.09 as a concurring or signatory party, decision to be determined later.

LPC reiterates the importance of the preservation of the WPA murals and the importance of public access to the murals, preferably both onsite and online. As per LPC comments of 4/26/12, the LPC also states that the Final Environmental Impact Statement shall indicate the final repositories for the restored artworks and their accessibility to the public. The text shall state whether the artworks are reinstalled for display in other facilities or placed in storage. LPC recommends that the artworks be accessible to the public as much as is practicable, including temporary exhibition at a New York City museum and, at a minimum, on an online digital gallery.

Cc: SHPO

Gina Santucci 9/25/2012

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 27899_FSO_GS_09252012.doc

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ENVIRONMENTAL REVIEW

Project number: OFFICE OF ENVIRONMENTAL COORD. / 12DME004M
Project: CORNELL NYC TECH
Date received: 8/16/2012

Comments:

The LPC is in receipt of the final scope of work for EIS dated 9/24/12.

Page 20, "Architectural Resources" shall be amended to start:

"The project site, the Coler Goldwater Specialty Hospital and Nursing Facility has been determined eligible for listing on the State and National Registers. The WPA artworks within the hospital are of exceptional importance.

Task B to be amended to read: "Conduct a field survey of the project site, including the interiors and WPA murals within the Coler Hospital as requested by LPC…"

Cc: SHPO

Gina Santucci 9/25/2012

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 27899a_FSO_GS_09252012.doc

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ENVIRONMENTAL REVIEW

Project number: OFFICE OF ENVIRONMENTAL COORD. / 12DME004M
Project: CORNELL NYC TECH
Date received: 2/22/2013

Comments:

The LPC is in receipt of the draft Letter of Resolution (LOR) of 2/21/13 written by the applicant, and the Evergreene Report, "Evaluation of Murals at Goldwater Hospital on Roosevelt Island" of 1/23/13.

LPC defers comments on the LOR, and possibly inclusion in the LOR, pending receipt of comments from the SHPO on the LOR.

LPC concurs with the Evergreene Report recommendation on page 6 that further investigation be done to confirm the presence of the Swindon and Rugolo murals in rooms B-41 and B-31.

In order to complete the review, LPC requests the final Historic and Cultural Resources and Mitigation chapters of the EIS.

Cc: SHPO

Gina Santucci 3/1/2013

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 27899_FSO_GS_02272013.doc