



Yale University Art Gallery
Renovation and Expansion

ennead



ORO Editions
Publishers of Architecture, Art, and Design
Gordon Goff: Publisher

www.oroeditions.com
info@oroeditions.com

Published by ORO Editions

Copyright © 2019 Ennead Architects LLP.

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, including electronic, mechanical, photocopying of microfilming, recording, or otherwise (except that copying permitted by Sections 107 and 108 of the U.S. Copyright Law and except by reviewers for the public press) without written permission from the publisher.

You must not circulate this book in any other binding or cover and you must impose this same condition on any acquirer.

Text by
Book Design by
Images/Photography by
Managing Editor: Jake Anderson

10 9 8 7 6 5 4 3 2 1 First Edition

ISBN: 978-1-943532-50-6

Color Separations and Printing: ORO Group Ltd.
Printed in China.

ORO Editions makes a continuous effort to minimize the overall carbon footprint of its publications. As part of this goal, ORO Editions, in association with Global ReLeaf, arranges to plant trees to replace those used in the manufacturing of the paper produced for its books. Global ReLeaf is an international campaign run by American Forests, one of the world's oldest nonprofit conservation organizations. Global ReLeaf is American Forests' education and action program that helps individuals, organizations, agencies, and corporations improve the local and global environment by planting and caring for trees.

Books in this series:

Brooklyn Museum Elizabeth A. Sackler Center for Feminist Art

Brooklyn Museum entry pavilion and plaza

Frank Sinatra School of the Arts

Holland Performing Arts Center

Lycée Français de New York

Mercersburg Academy Burgin Center

National Museum of American Jewish History

Natural History Museum of Utah

New York Botanical Garden Pfizer Plant Research Laboratory

New York City Center

New York Hall of Science

Newseum/Freedom Forum Foundation headquarters

Ohio State University Scott Laboratory

Penn State Dickinson Law

Sarah Lawrence College Heimbold Visual Arts Center

Scandinavia House

Stanford Law School Neukom Building

Stanford University Bing Concert Hall

Syracuse University Newhouse III

The Schermerhorn, Breaking Ground

The Standard, High Line, NYC

University of Michigan A. Alfred Taubman Biomedical Science Research Building

Weill Cornell Medical College Belfer Research Building

Westchester Community College Gateway Center

WGBH headquarters

William J. Clinton Presidential Center and Park

Williams College Paresky Center

Yale University Art Gallery

Zucker Hillside Hospital Inpatient Care Center

YALE UNIVERSITY ART GALLERY RENOVATION AND EXPANSION

This is one in a series of books, each of which tells the story of a single building. It is our hope that as these books accumulate alongside our body of work, they, in their aggregate, will form a profile of our design intentions.

Ennead Architects



JOHN TRUMBULL

The Yale University Art Gallery was founded in 1832, when artist John Trumbull sold 28 of his paintings and 60 of his miniature portraits to the university. Trumbull himself designed a Neoclassical building to exhibit the works. When the Trumbull Gallery opened to the public on October 25, 1832, it became the first college art museum in the United States.

Trumbull Gallery, Yale University, New Haven, 1860s

Right: Reverse of U.S. two-dollar bill, featuring Trumbull's Declaration of Independence. The original painting is in the museum's collection.



IN HIS WORDS

I resolved, therefore, to begin a new series of my paintings of revolutionary subjects, of a smaller size than those in the Capitol, and to solace my heavy hours by working on them. I chose the size of six feet by nine, and began.

The cholera made its appearance in New York, soon after I commenced, and was peculiarly fatal in the sixth ward, in which I lived. I was busily employed upon the Declaration of Independence, when I was attacked by this deadly disease, but, by the blessing of Providence on the kind care of my friends, it passed away in a few days, and without any serious consequences.

Funds, however, began to diminish, and I sold scraps of furniture, fragments of plate, &c. Many pictures remained in my hands unsold, and to all appearance unsaleable. At length the thought occurred to me, that although the hope of a sale to the nation, or to a state, became more and more desperate from day to day, yet, in an age of speculation, it might be possible, that some society might be willing to possess these paintings, on condition of paying by a life annuity. I first thought of Harvard College, my alma mater, but

she was rich, and amply endowed. I then thought of Yale — although not my alma, yet she was within my native state, and poor.

The Gallery now contains fifty five pictures by my own hand, painted at various periods, from my earliest essay of the Battle of Cannae, to my last composition, the Deluge, including the eight small original pictures of the American revolution, which contain the portraits painted from life.

Thus I derive present subsistence principally from this source, and have besides the happy reflection, that when I shall have gone to my rest, these works will remain a source of good to many a poor, perhaps meritorious and excellent man.

The large set of Revolutionary paintings was not included in this contract, and indeed, at its date, they did not exist, having been painted since. Five of the series are finished, and should my long life be still further prolonged, I trust they will all be completed, and they will remain a legacy for posterity.

Excerpted from Autobiography, Reminiscences, and Letters from 1756 to 1841 by John Trumbull

YALE UNIVERSITY
ARTS AREA PLANNING STUDY



A coeducational painting studio around the turn of the century.



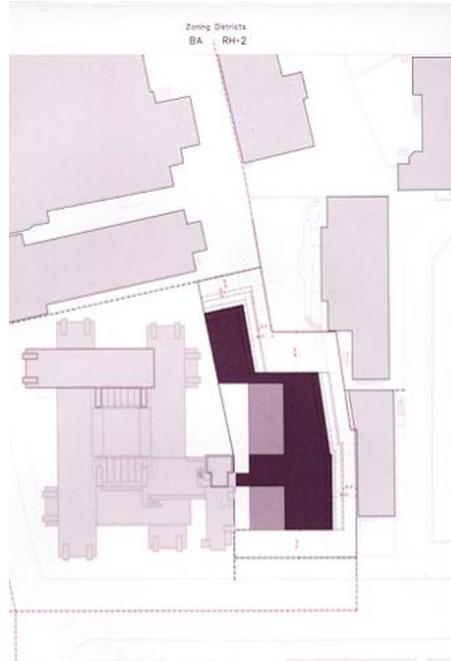
Street Hall, Peter Bonnett Wight, 1866



Old Yale Art Gallery, Egerton Swartwout, 1928

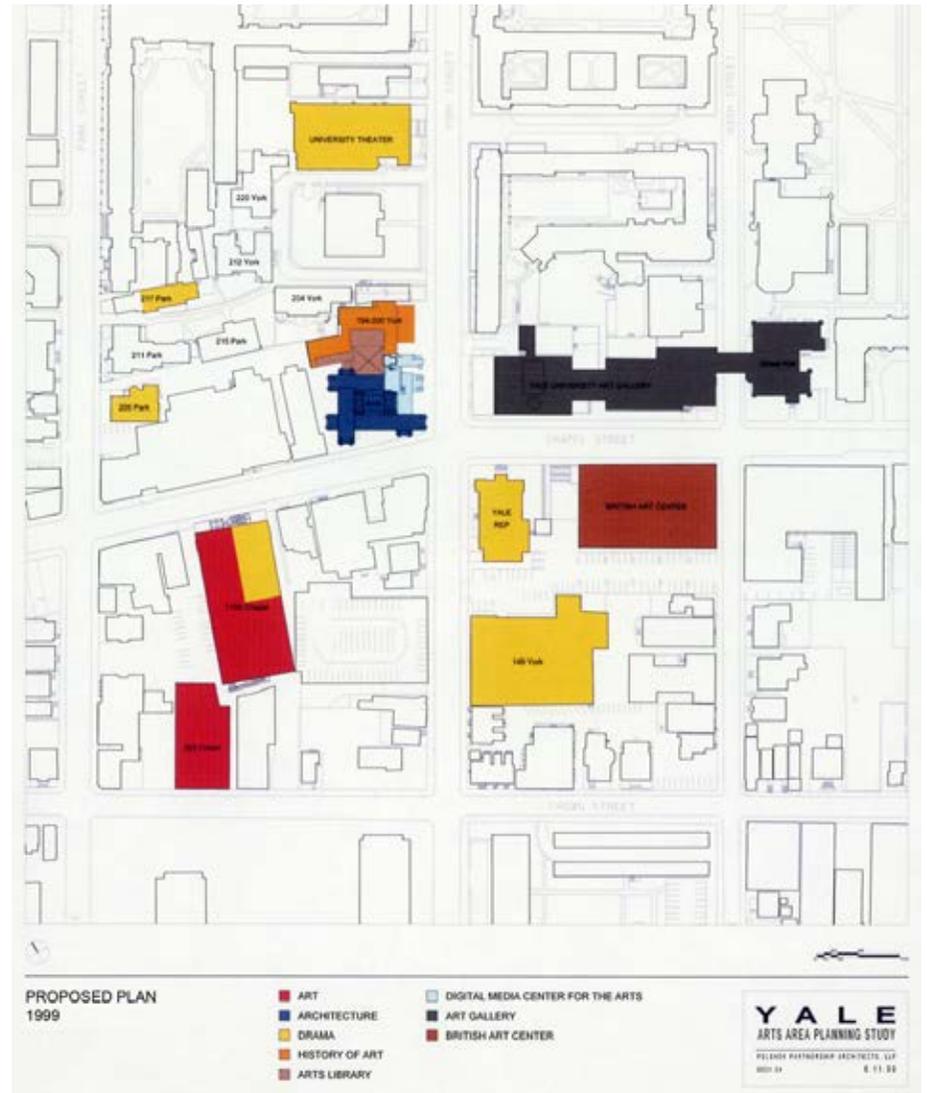


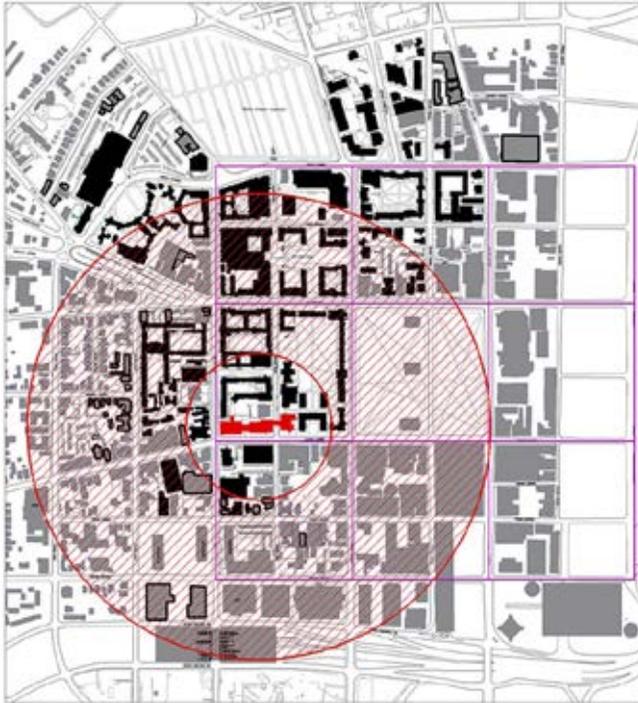
Art Gallery, Louis Kahn, 1953



Under Ennead's renovation and expansion, the Yale University Art Gallery for the first time in its history occupies three buildings — Street Hall (designed by Peter Bonnett Wight in 1866), the Old Yale Art Gallery (Egerton Swartwout, 1928), and Louis Kahn's iconic Art Gallery building (1953) — and thus is able to showcase more of its permanent collection at one time than ever before.

The design celebrates the stylistic distinctions of these three historic buildings and weaves them into a cohesive museum environment.



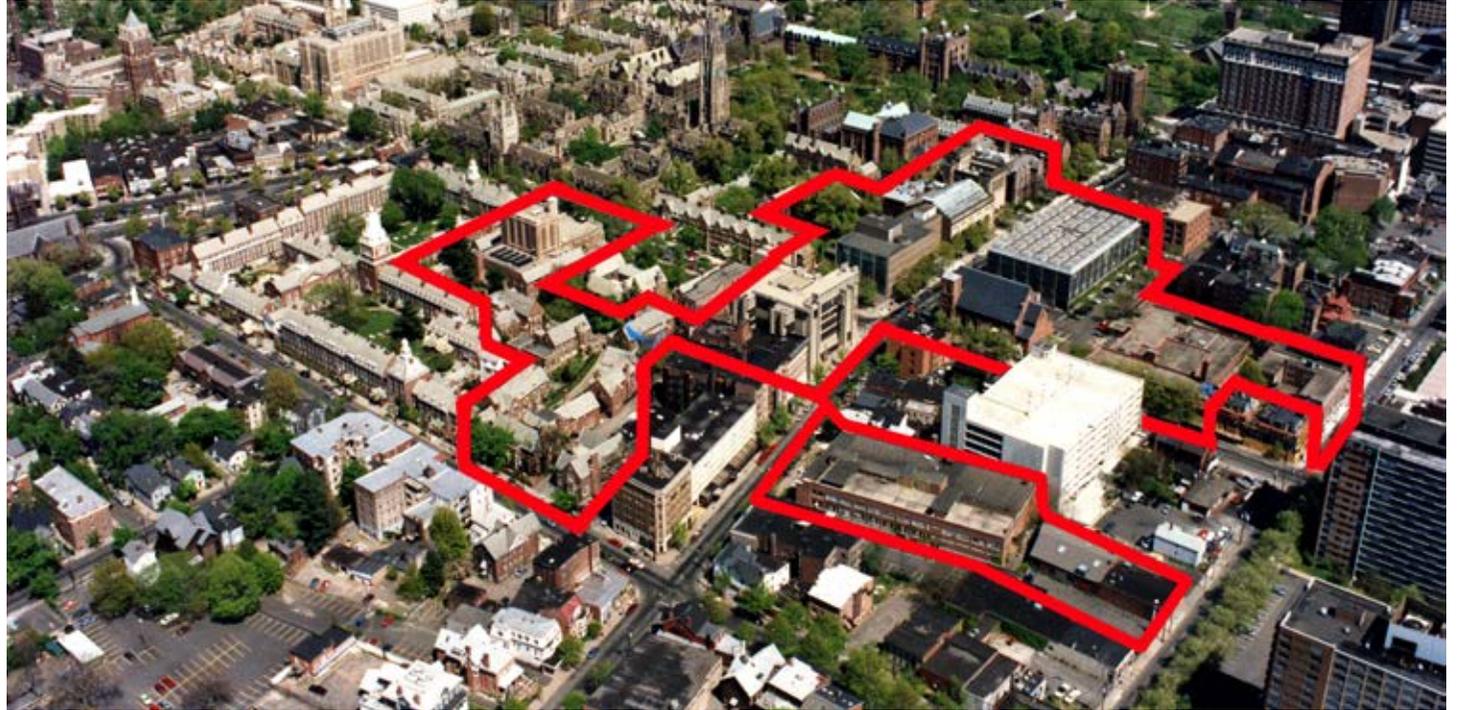


The Arts Area on the Yale University campus comprises the Center for British Art, the Art Gallery, the Robert B. Haas Family Arts Library, the Department of the History of Art, the Repertory Theatre, and the Schools of Drama, Art, and Architecture.

Three primary objectives drove the Arts Area planning study: to determine the optimal use for each existing facility by analyzing its physical condition, available space, expandability, and potential; to encourage synergy and interdependence of the arts at Yale, while at the same time reinforcing the

identities of each individual unit; and to encourage interaction between the arts at Yale and the school's immediate community of New Haven, Connecticut.

The scheme called for the creation of a new arts complex on York Street comprising a restored Arts & Architecture Building and an additional building to house programs of the School of Architecture, the Department of the History of Art, the Arts Library, and the Digital Media Center. This plan was realized under the 2008 Rudolph Hall renovation and Loria Center expansion.



The plan also proposed the expansion of the Art Gallery, which would occupy the three-building complex comprising Kahn's original Art Gallery building, Swartwout's Old Yale Art Gallery, and Wight's Street Hall. This was achieved through the renovation of the Kahn building in 2006 and the Yale Art Gallery Renovation and Expansion of 2012.

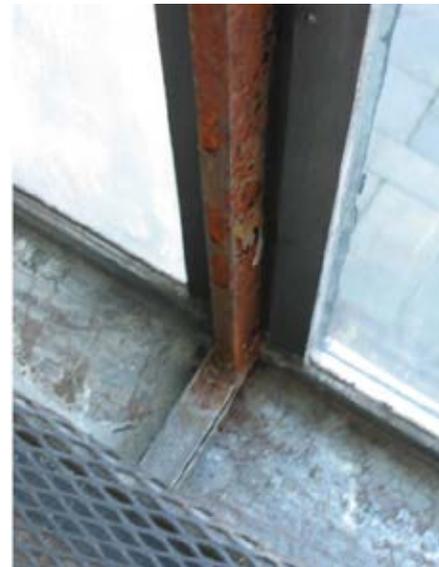
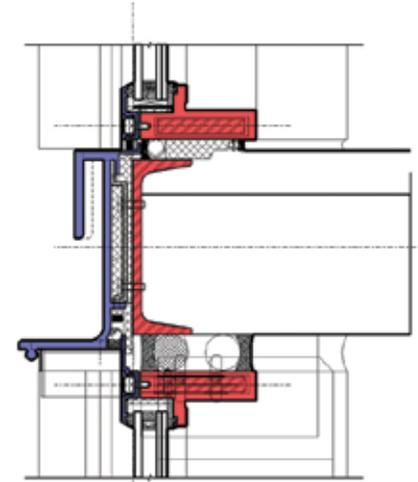
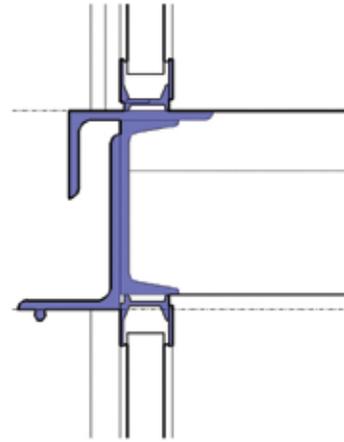
RESTORATION OF THE
KAHN BUILDING



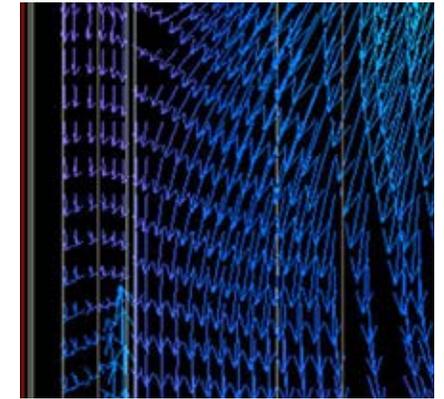
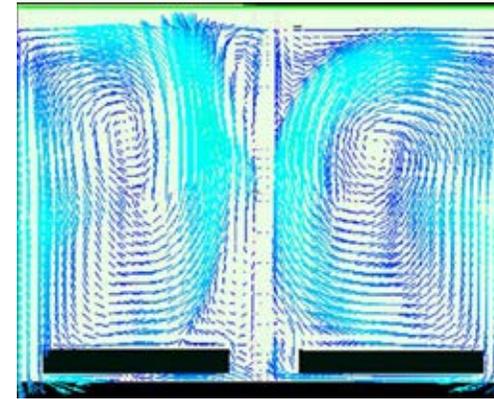
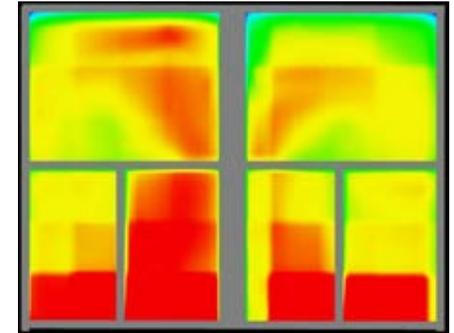
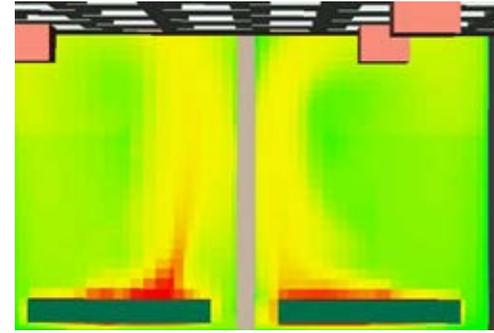


Louis Kahn's first significant project, the Yale Art Gallery building of 1953, was acclaimed for its bold geometry, daring use of light and space, and structural and engineering innovations. The 2006 renovation by Polshek Partnership (now Ennead Architects) restored Kahn's design intentions, reversed past interventions, and upgraded outmoded structural and environmental systems, providing the Yale campus and New Haven with an educational and cultural resource for the optimal preservation and display of the university's extensive art collection.





Regarded as a milestone in the development of the modern glass wall, Kahn's window wall has long been regarded as one of the most distinctive and beautiful features of the building. However, due to the materials and technology available at the time of its construction, the wall was subject to structural and thermal problems.



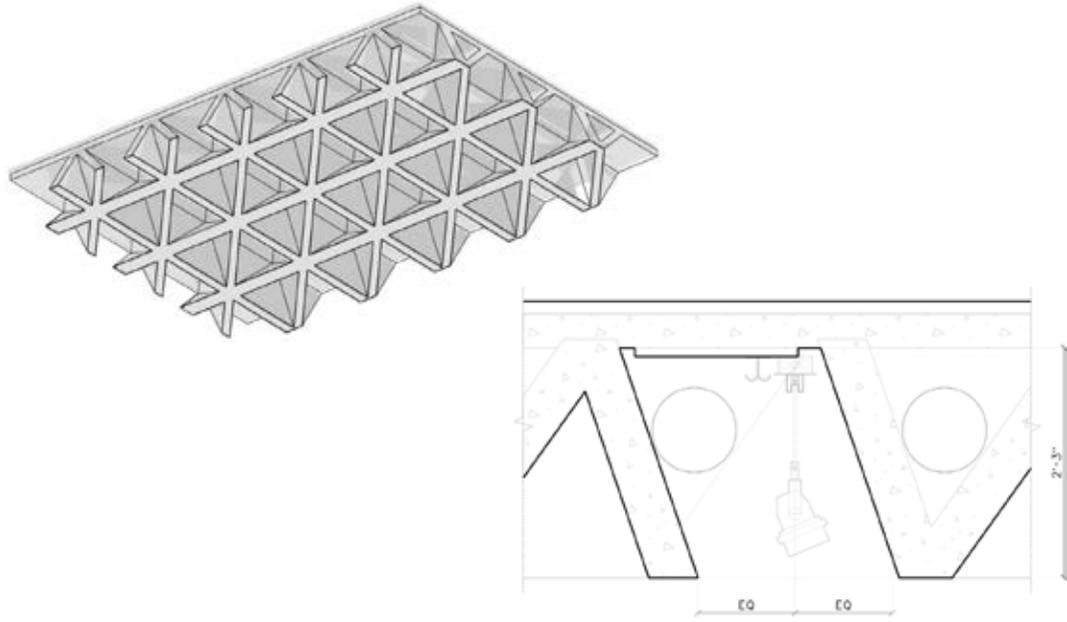
The replacement of the original window-wall system, most dramatically along the west and north facades, was a particularly complex and challenging aspect of the renovation. Following a lengthy process of planning and testing, the architects and engineers were successful in designing a window-wall system that at once addressed the original wall's technical shortcomings, duplicated the appearance and profiles of the original, and accommodates modern museum standards of climate control.



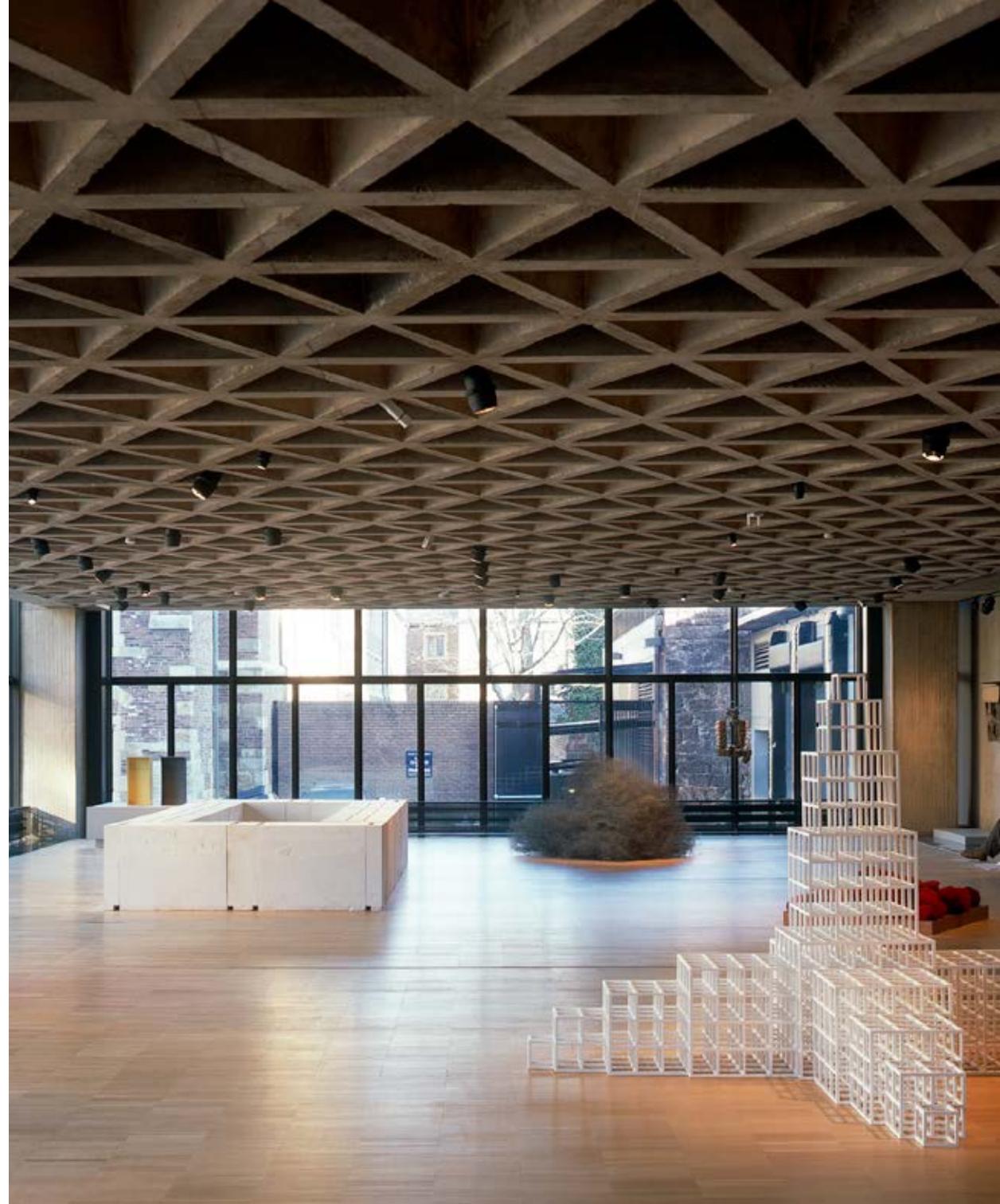
The renovation restored an open exterior courtyard, located on the west façade of the basement level, that had been roofed over in the 1970s to create additional interior space. The courtyard is now the site of Richard Serra's 1990 sculpture *Stacks*. The window wall on this side of the building, which had previously been reduced from five to four stories, was restored to its original dimensions.

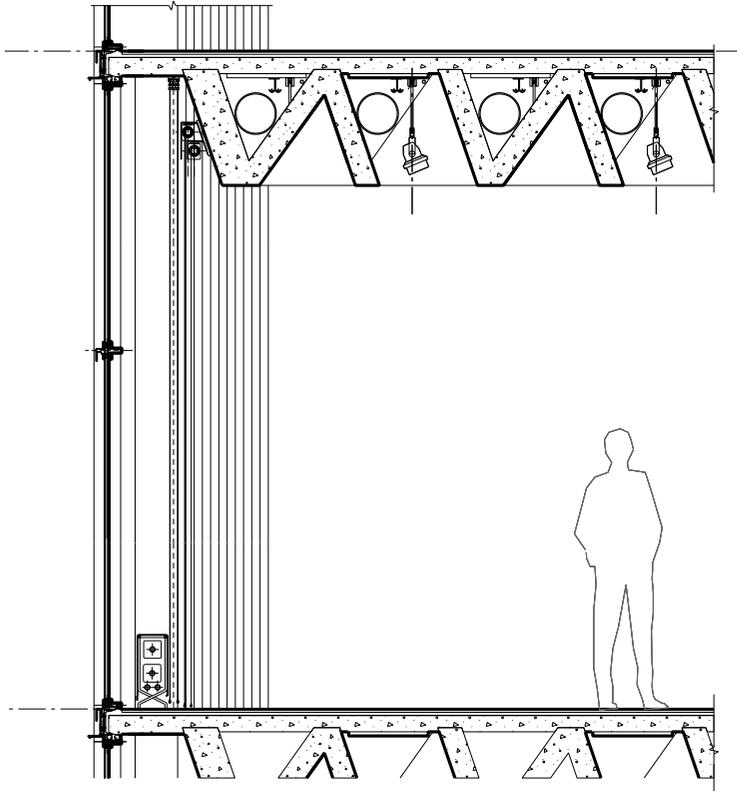
Kahn's original – and at the time of its construction, highly innovative – spacious open plan for the interiors was restored in the renovation. The building had initially included studios for both art and architecture students, as well as a series of expansive, uncluttered exhibition spaces. However, as the art collection grew, the studios were relocated to another building, and the museum's open spaces were partitioned into smaller galleries, classrooms, and offices. With the removal of these partitions, the galleries once again provide the unobstructed, light-filled vistas Kahn envisioned. The renovation also reintroduced a newly engineered version of Kahn's famous mobile "pogo" wall units, which allow the gallery spaces to be temporarily reconfigured as needed.

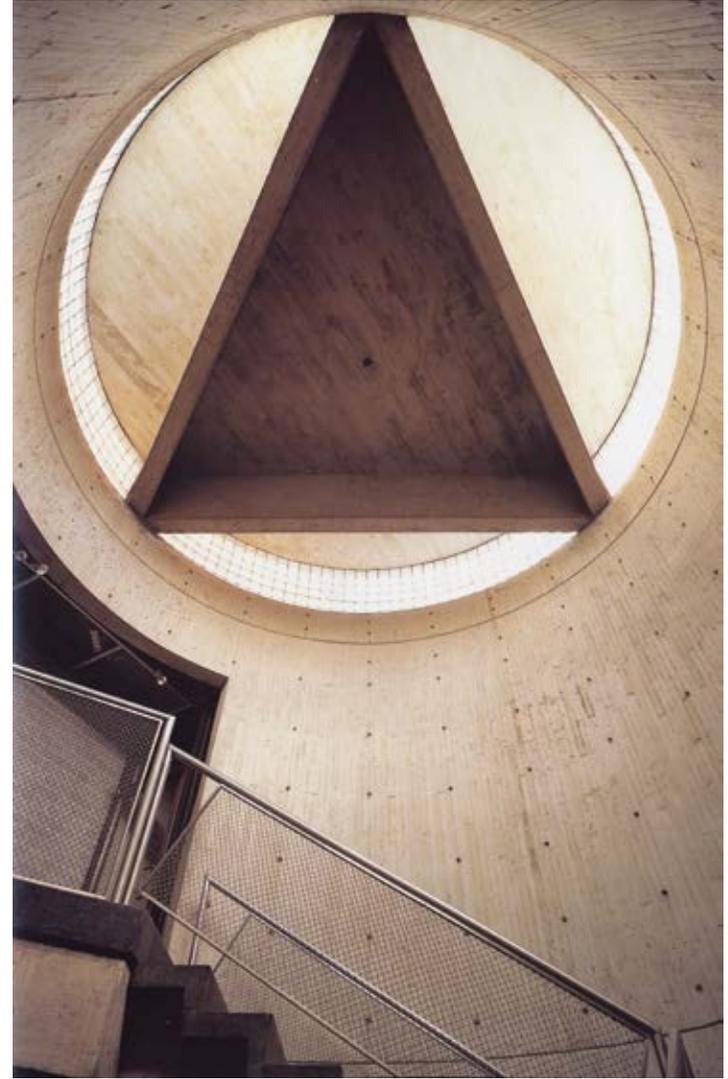




Highlights of the renovation included refurbishment of the tetrahedral ceilings. Fashioned of poured concrete and configured to form a three-dimensional matrix of interlocking triangles, they are at once visually arresting and functional, as they were ingeniously designed to house the electrical and ventilation systems. As part of the ceiling refurbishment, the lighting capacity was doubled. Also as part of the renovation, the first-floor lobby was transformed into a media lounge, inviting information center, and gathering place.









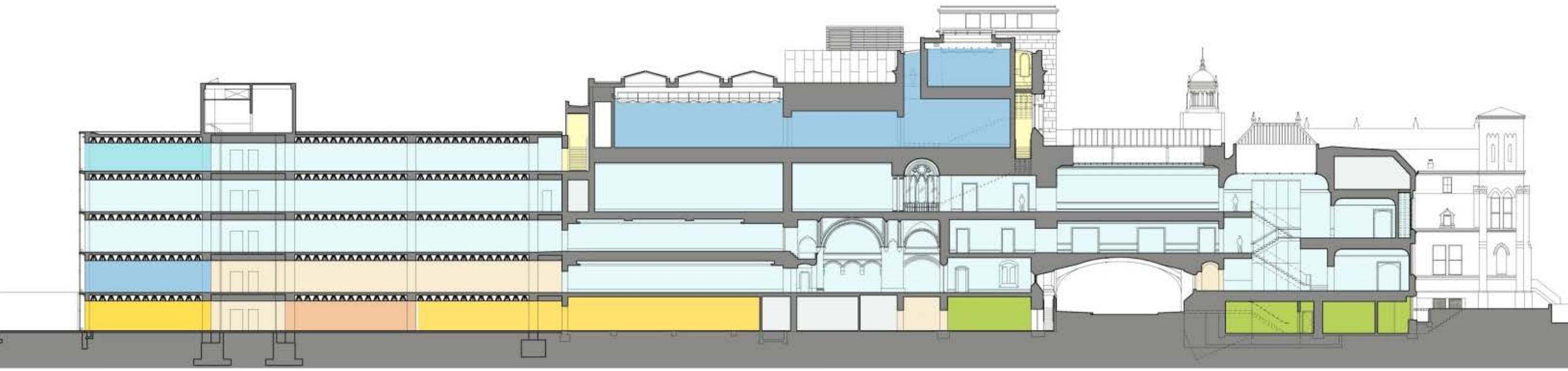
A sculpture garden on the north side of the building was expanded and refurbished.

OLD YALE ART GALLERY AND STREET HALL



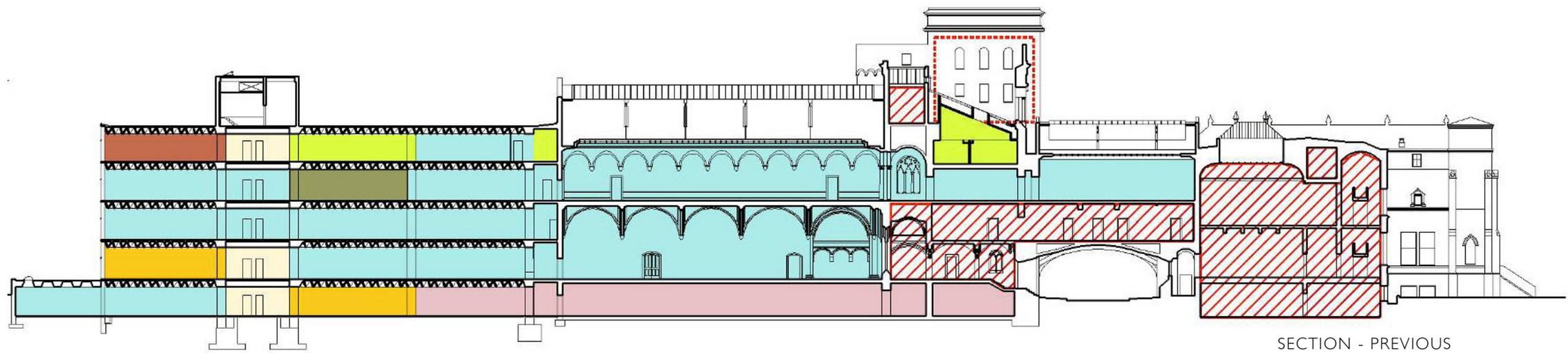
Ennead's comprehensive renovation and expansion of Yale University's Art Gallery united Louis Kahn's 1953 Art Gallery building with Egerton Swartwout's 1928 Old Yale Art Gallery and Peter Bonnett Wight's 1866 Street Hall, forming a cohesive whole that transforms the visitor experience. While each of these buildings is of landmark quality, they are quite different stylistically. The new design celebrates these differences rather than diminishing them in a homogeneous museum environment. In its specificity, the architecture is not only sympathetic to but reinforcing of the various collections, promoting a synergy between the architecture and the art on display.





- | | | | | |
|---|--|--|--|---|
| PERMANENT COLLECTION | EDUCATION OFFICES | COLLECTION STUDY | PRINTS AND DRAWINGS | MECHANICAL & SUPPORT |
| SPECIAL EXHIBITIONS | EDUCATION CLASSROOM | COLLECTION MANAGEMENT | CIRCULATION | FORMER HISTORY OF ART |

SECTION - BUILT

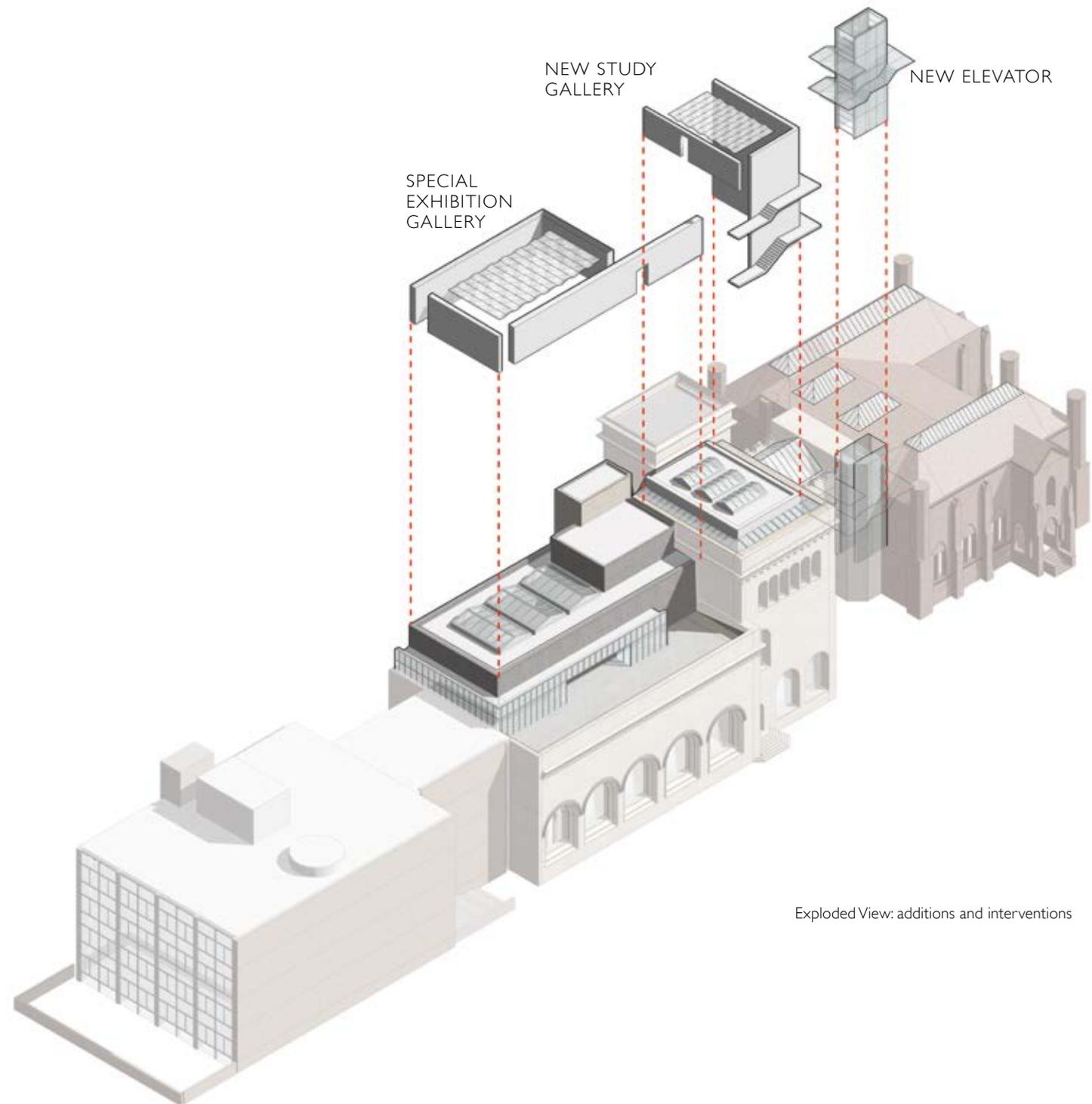


SECTION - PREVIOUS

Ennead's design joined the three landmark buildings, all of which were originally intended for use by the Art Gallery but had been utilized for other purposes over the long history of the Yale campus. The challenge was to unify them into a cohesive, state-of-the-art museum environment while maintaining and celebrating the unique identity of each.

The three structures were returned to their original purity and integrity through restoration of their historic façades and interior architectural elements and finishes. The reconfiguration created a state-of-the-art museum environment, with new stair and elevator systems to unify circulation patterns, upgraded mechanical systems, and improved thermal performance of the exterior walls. Most important, the additions and interventions were designed to achieve equilibrium with the landmark historic architecture.

The overall design, both the restoration and contemporary interventions, has a light footprint that allows the Gallery's artworks to come to the fore.

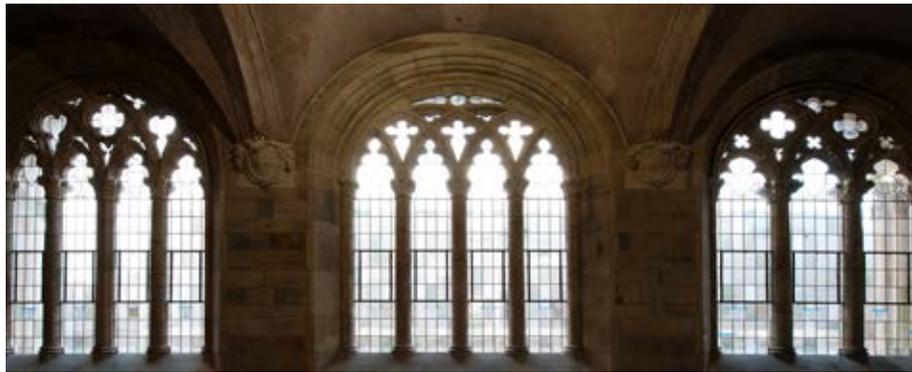


Exploded View: additions and interventions

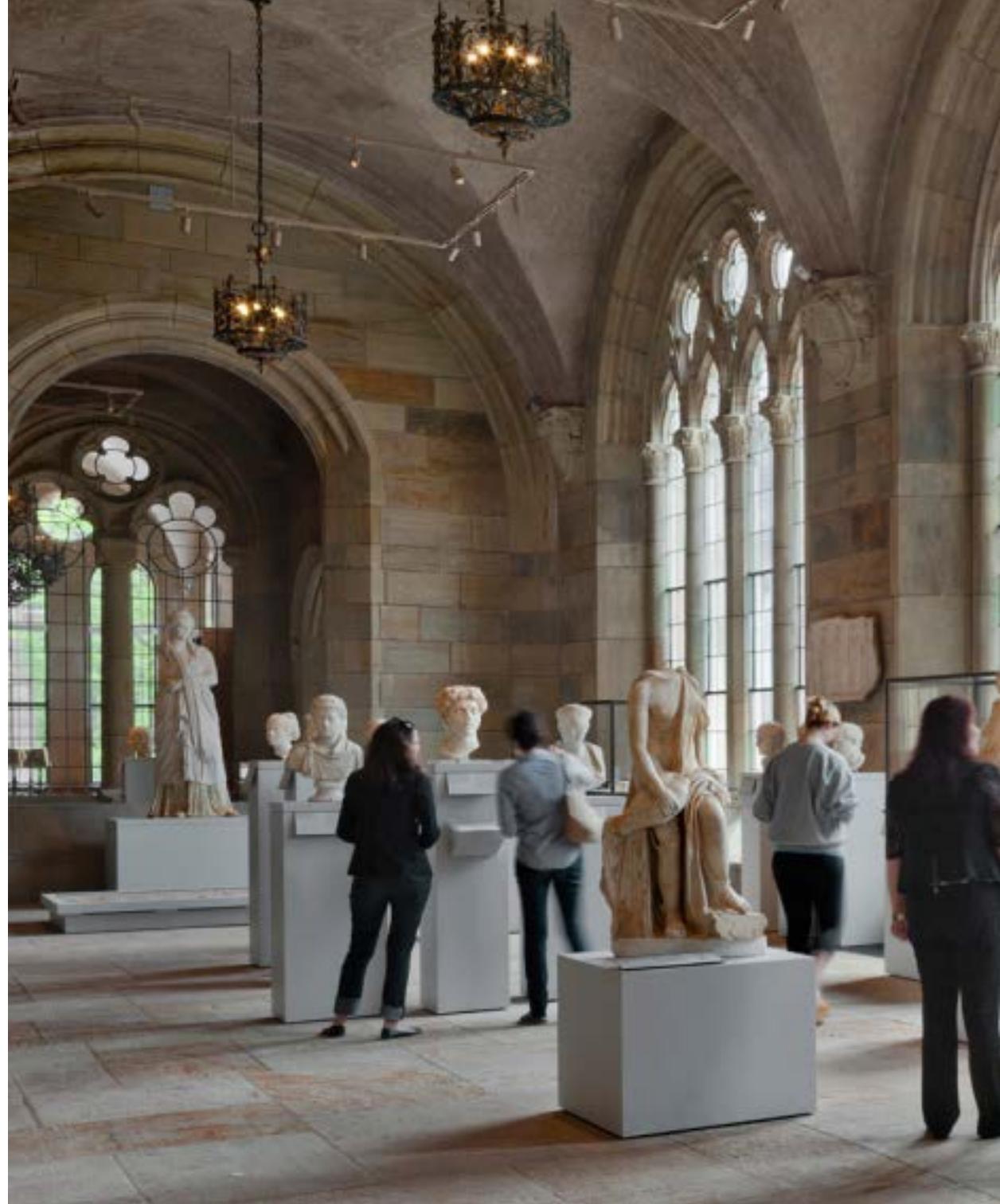


The comprehensive renovation and expansion reinvigorates the Art Gallery, showcasing the encyclopedic permanent collection of one of America's most venerable university museums and rationalizing the visitor experience. The design celebrates the stylistic distinctions of three historic buildings and weaves them into a cohesive ensemble.





Throughout the galleries of each building, architecture and art are harmonized. For example, classical sculpture was relocated to a gallery with immense Roman arched windows that flood the space with light.





The newly expanded Art Gallery contains 69,975 square feet of exhibition space (compared to 40,266 square feet prior to the expansion) and occupies the length of one-and-a-half city blocks to meet the programmatic and spatial needs for exhibition and academic instruction. A new glass stairway and elevator unify the circulation patterns of the three buildings into one logical flow, providing a seamless visitor experience. The variety of spaces in the newly created three-building continuum has enabled the Gallery's curatorial staff to organize the collections in a logical and uninterrupted sequence, in spaces that complement and enhance the artworks they contain.



Pre-renovation and construction views of Modern and Contemporary Galleries





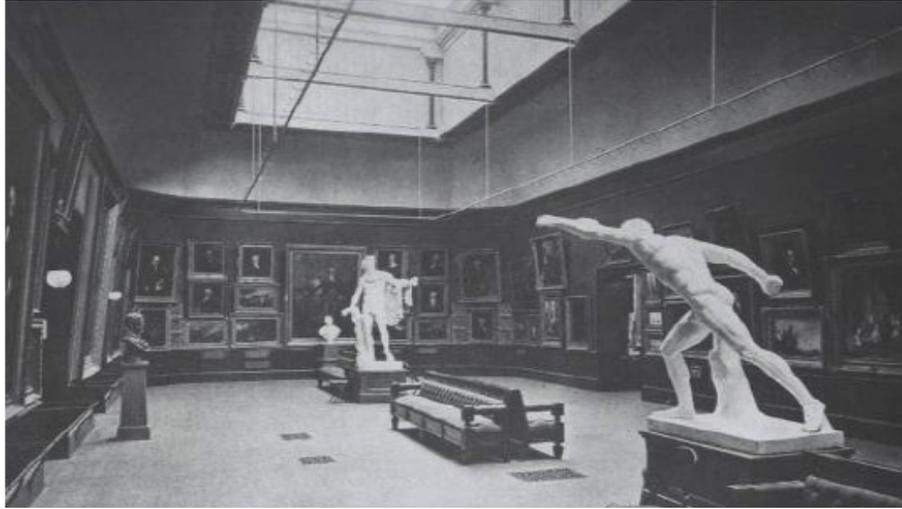
The restoration of the interiors of Street Hall, which opened in 1866 as the first university art-school building in the United States, included the preservation and reuse of historic architectural elements and finishes.





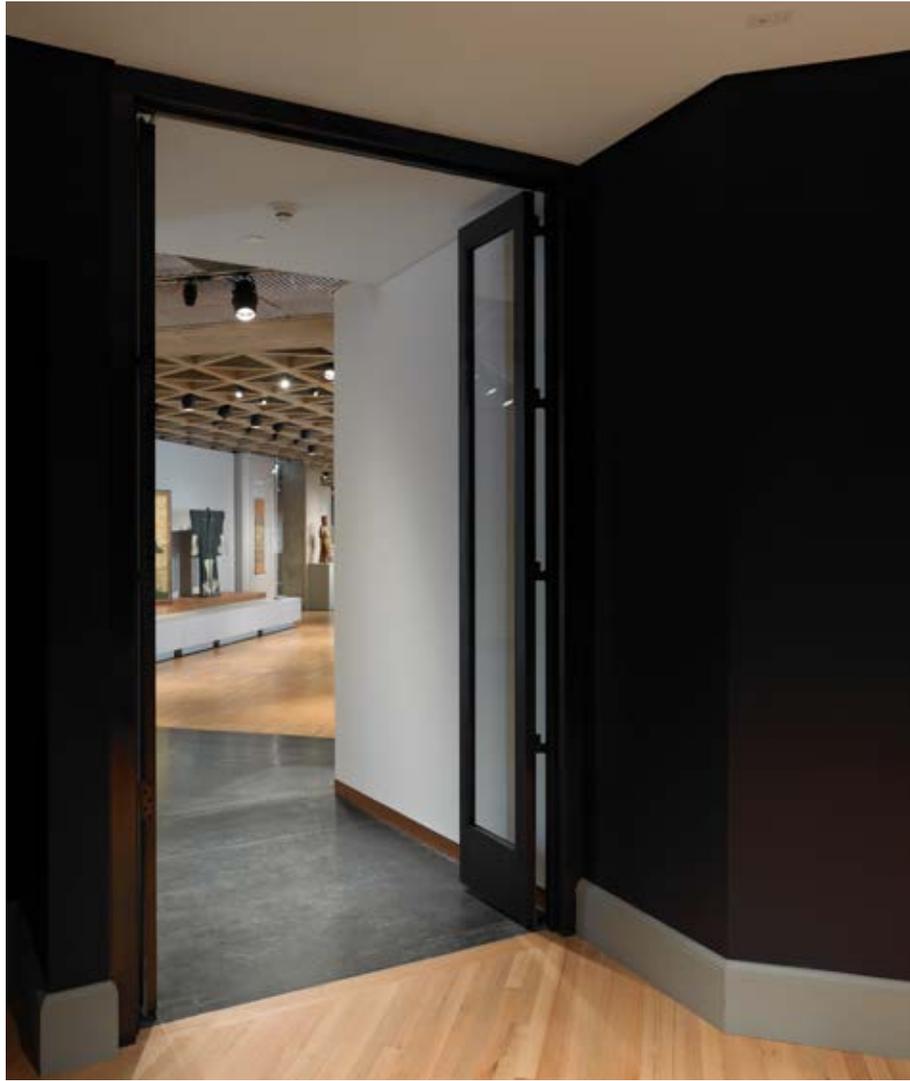
Historic, pre-renovation and renovated views of the American Painting And Sculpture Gallery



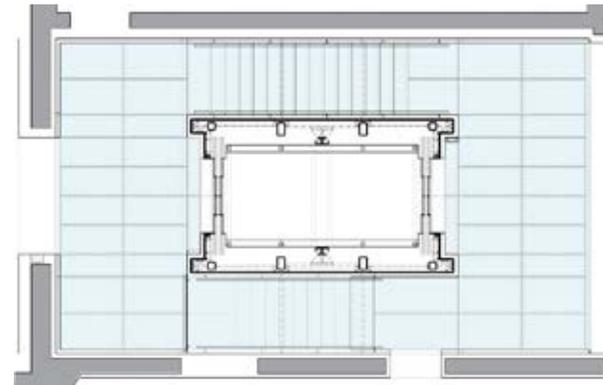


Historic, pre-renovation and renovated views of the American Painting And Sculpture Gallery

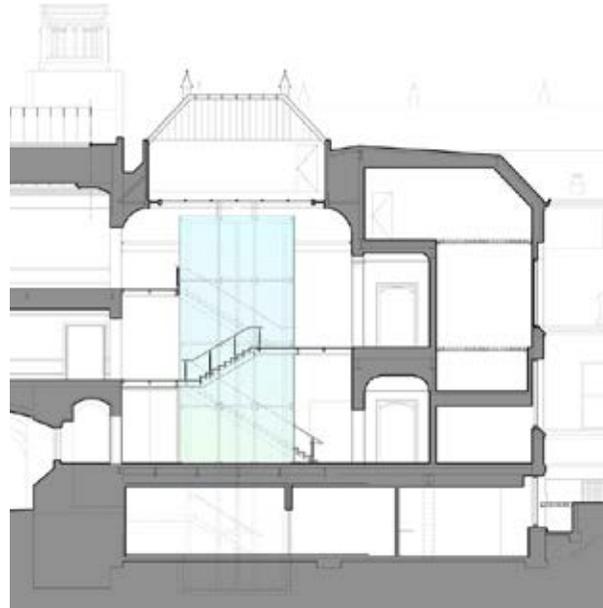






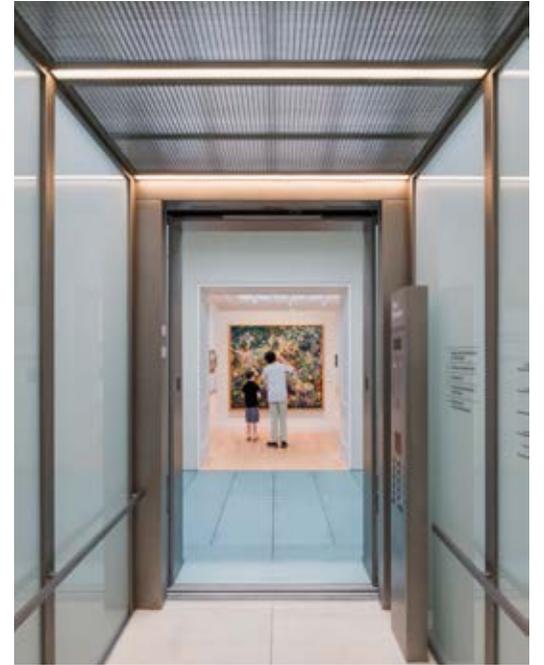


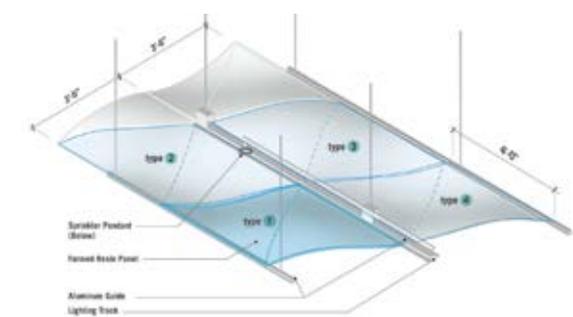
second-floor plan



east-west section

A new glass elevator addition connects Street Hall to old Yale Art Gallery.





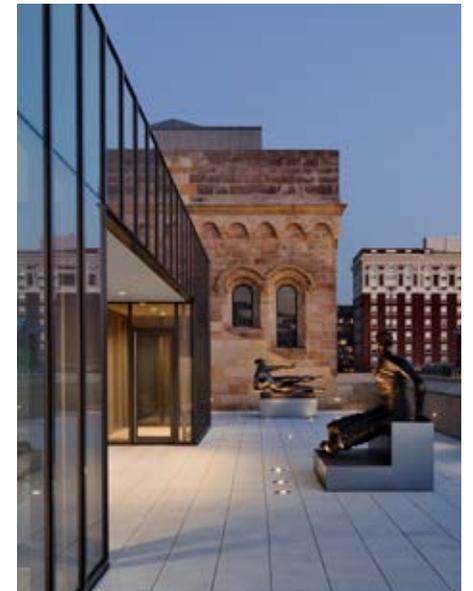
Old Yale Art Gallery, fourth floor gallery ceiling suspension system

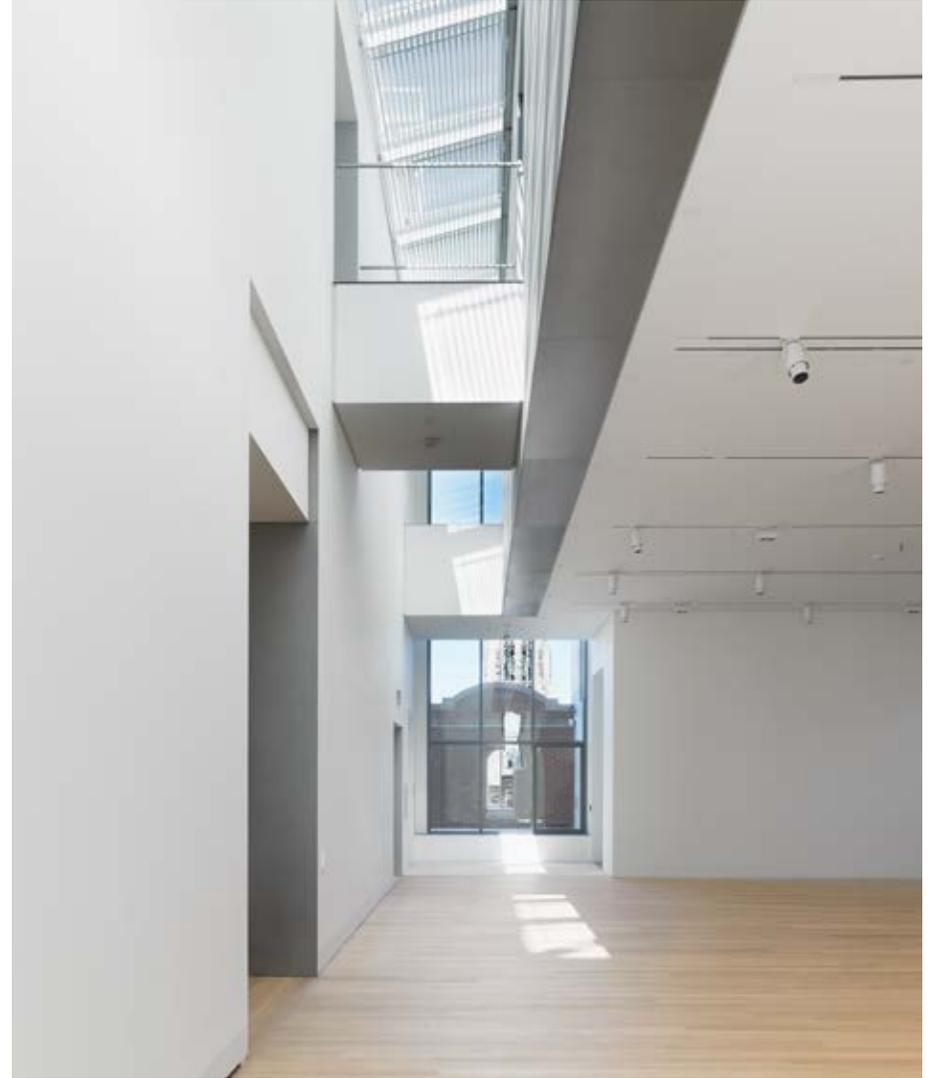


Section of the study gallery



A new rooftop structure links the Old Yale Art Gallery to the fourth floor of the Kahn building, creating a sculpture terrace and suite of spaces used for special exhibitions. Clad in zinc and glass, this addition is set back from the perimeter of the roof in order to minimize its visibility from the street, thereby preserving the original façade of the 1928 building.





Temporary exhibition galleries

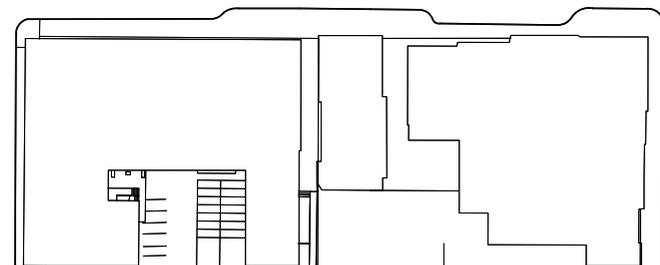
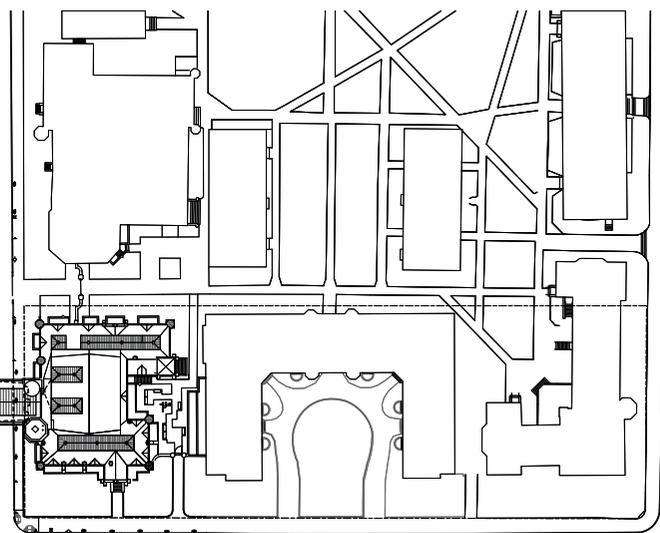
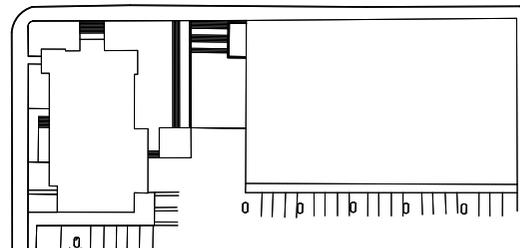
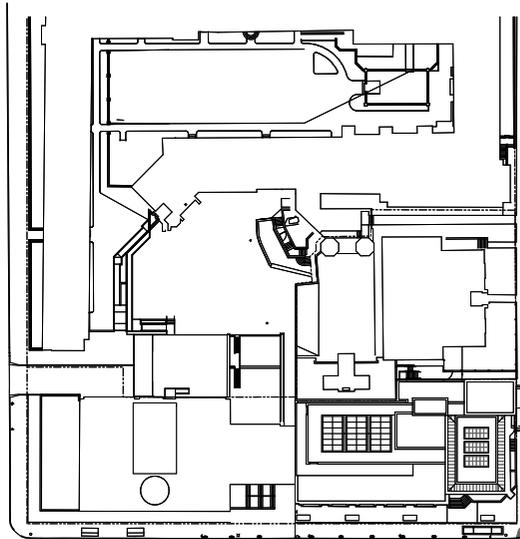
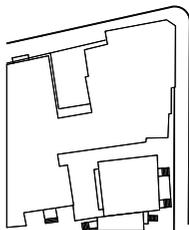
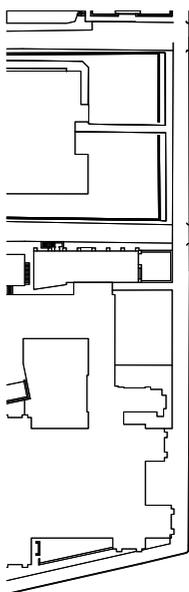


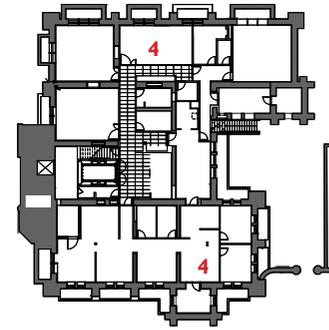
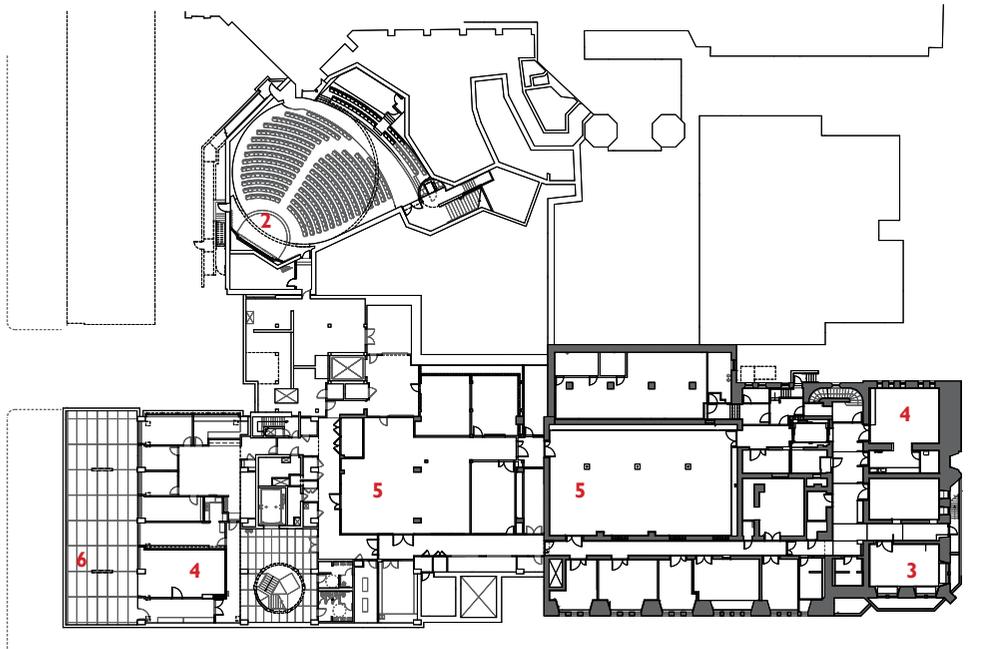




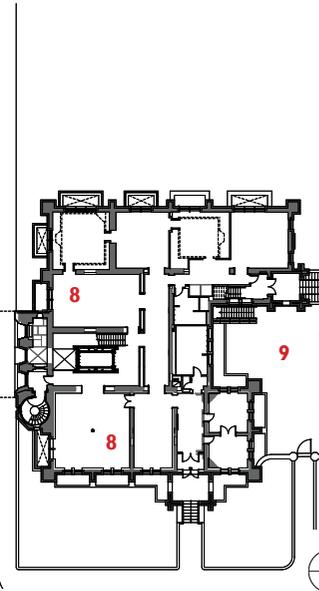
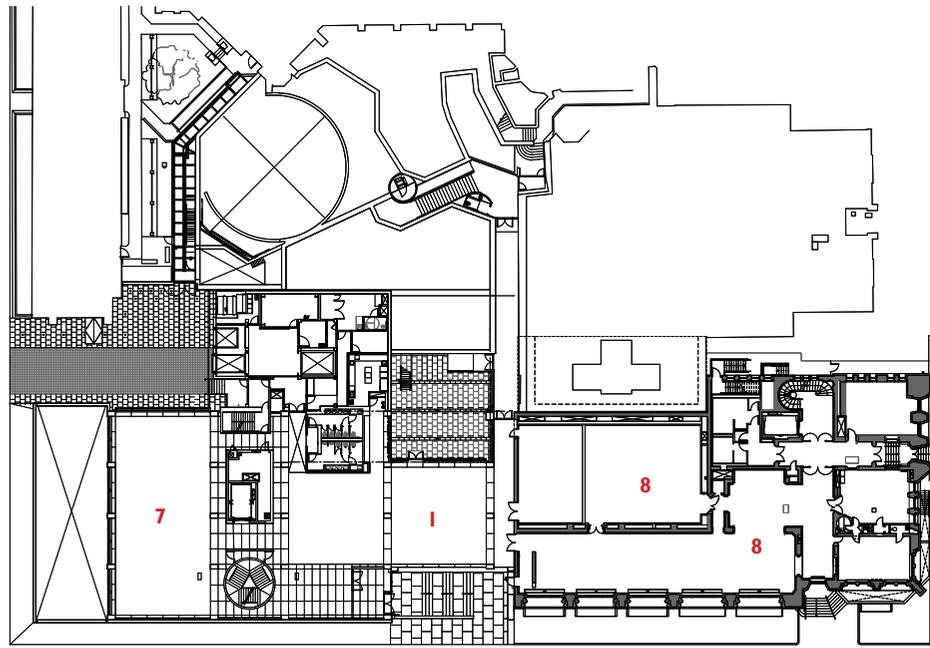
YALE
UNIVERSITY
ART
GALLERY

DRAWINGS



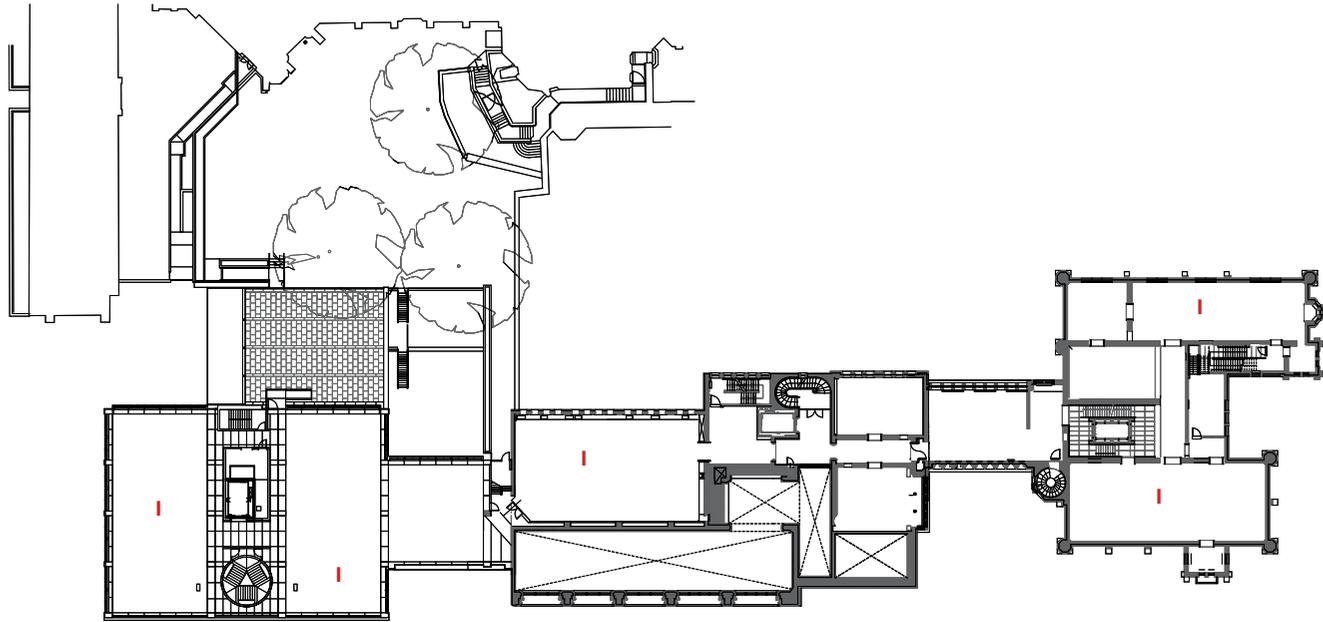


Ground floor

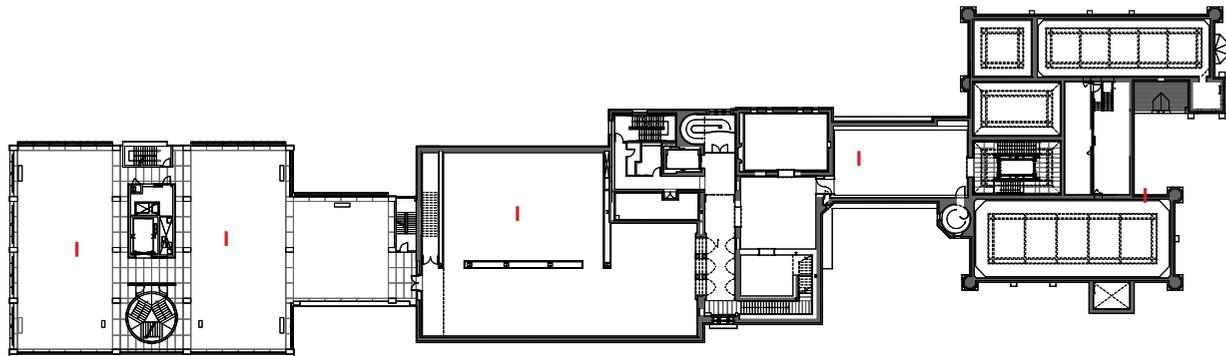


First floor

- 1. Lobby
- 2. Lecture Hall
- 3. Conservation
- 4. Classrooms
- 5. Collections
- 6. Sculpture Court
- 7. Special Exhibition
- 8. Permanent Collection
- 9. Sculpture Garden



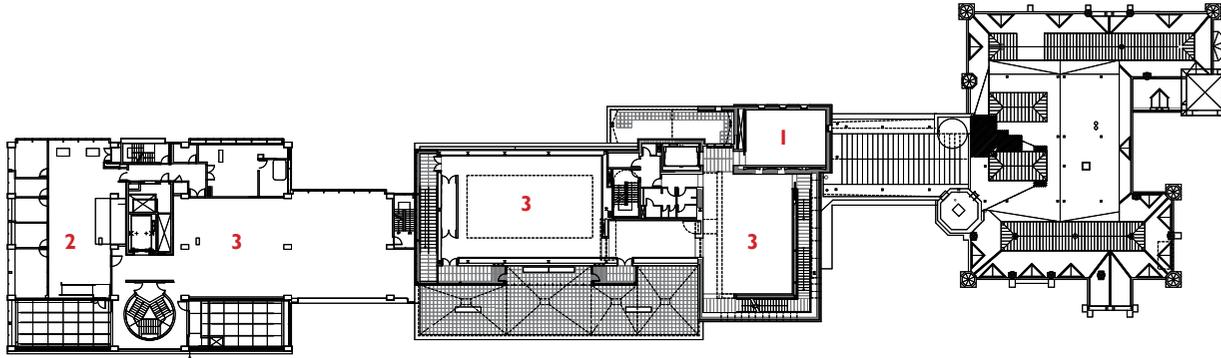
Second floor



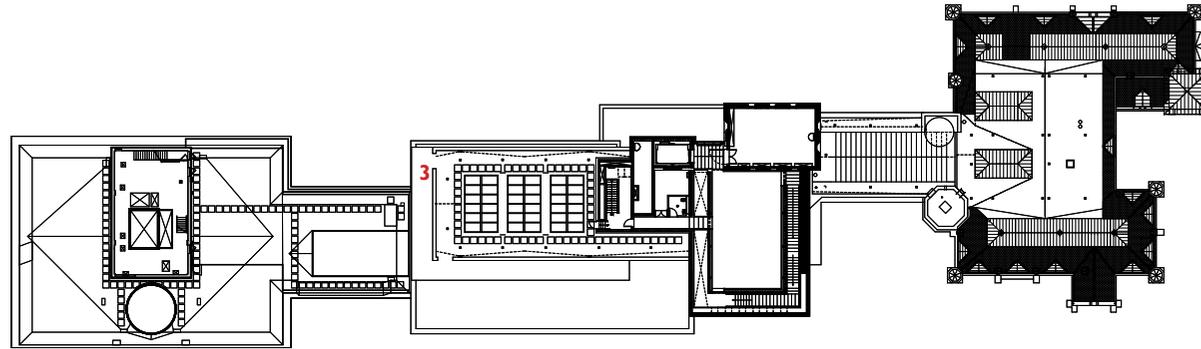
Third floor

I. Permanent Collections

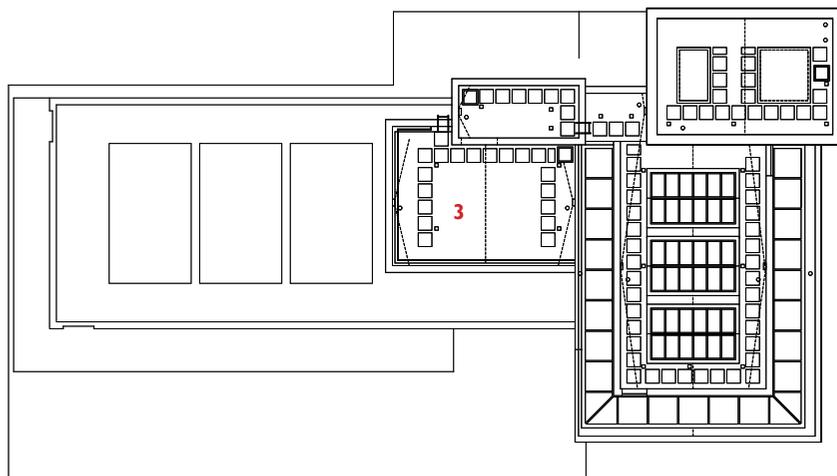




Fourth floor



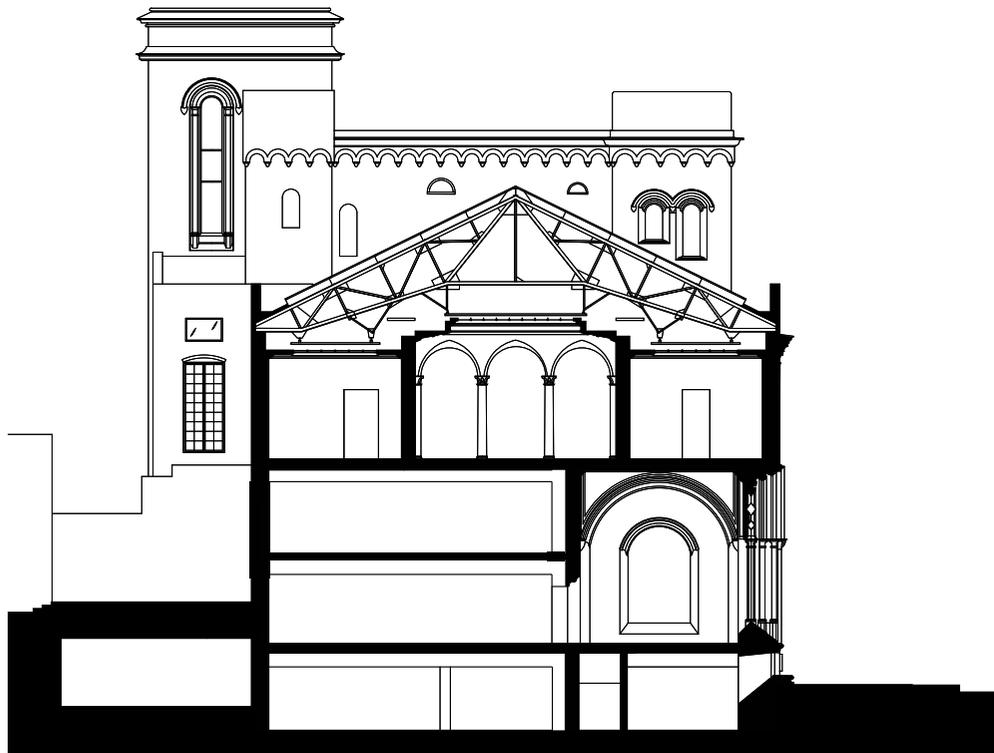
Fifth floor



Sixth floor

- 1. Permanent Collections
- 2. Pnnts and Drawings Study Room
- 3. Special Exhibitions
- 4. Study Gallery





section



section

CLIENT

Yale University Art Gallery

ENNEAD ARCHITECTS

Yale University Art Gallery design team: Richard Olcott, Duncan Hazard, Joseph Fleischer, Todd Van Varick, Lloyd DesBrisay, David Tepper, Jane Lin, Kevin Krudwig, Charmian Place, Gary Anderson, Kingman Brewster, Jeffrey Geisinger, Margaret Gorman, Brad Groff, Gihong Kim, Christopher Lewis, Nathan McRae, Adam Mead, Kenichiro Mito, Dona Orozova, Michael Regan, Setu Shah, Paul Stanbridge, Frederick Tang, Akari Yakebayashi, Jordan Yamada

Kahn Building Renovation design team: Duncan Hazard, James Polshek, Richard Olcott, Steven Peppas, Lloyd DesBrisay, Robert Condon, Gary Anderson, Marlon Aranda, Felicia Berger, Chris Boyer, Kimberly Brown, Yong Joon Cho, Stephen P-D Chu, Alex Leung, James Macho, Marianne Madigan, Cheryl McQueen, Anh Montgomery, Peter Mullan, Craig Mutter, Jesse Peck, Damyanti Radheshwar, Marissa Sweig Trigger, Hans Walter

CONSULTANTS

Structural	Robert Silman Associates, P.C.
MEP / FP	Altieri Sebor Wieber LLC Consulting Engineers
Civil	BVH Integrated Services
Landscape	Towers Golde Landscape Architects and Site Planners LLC
Lighting	Hefferan Partnership Lighting Design
Lighting (Kahn Building)	Fisher Marantz Stone
Acoustics	Shen Milsom & Wilke LLC
Security	Ducibella Venter & Santore
Specifications	Robert Schwartz & Associates
Code / Life Safety	Hughes Associates, Inc.
Cost Estimating	Vermeulens Cost Consultants
Cost Estimating (Kahn Building)	Wolf & Company, P.C.
Exterior Envelope	Simpson Gumpertz & Heger, Inc.
Exterior Glass Wall (Kahn Building)	Gordon H. Smith Corporation
Exterior Diagnostics/Design (Kahn Building)	James R. Gainfort Consulting Architects, PC
Elevator	Iros Elevator Design Services, Inc.
Elevator (Kahn Building)	Van Deusen & Associates
Historic Preservation	Building Conservation Associates, Inc. (BCA)
Historic Preservation (Kahn Building)	David G. De Long
Graphics (Kahn Building)	OPEN Design
Food Service (Kahn Building)	Romano Gatland

CONSTRUCTION MANAGER

Dimeo Construction (Yale University Art Gallery)
Barr & Barr, Inc. Builders (Kahn Building)

BOOK CREDITS

Designers
Editor
Contributors

TEXTS

BUILDING PHOTOGRAPHY

OTHER IMAGES

Louis Kahn: Photo credit: Yale University Art Gallery ©
Arnold Newman/Getty Images



