

**BUILDING/
INSIDE
STUDIO
GANG
ARCHITECTS**

edited by **JEANNE GANG & ZOË RYAN**

Copyright © 2012 by Studio Gang Architects.
All rights reserved.

This book may not be reproduced, in whole or in part,
including illustrations, in any form (beyond that copying
permitted by Sections 107 and 108 of the US Copyright
Law and except by reviewers for the public press),
without written permission from the publishers.

Published by Studio Gang Architects
1212 N Ashland Avenue, Suite 212
Chicago, IL 60622
www.studiogang.net

In association with
The Art Institute of Chicago
111 S Michigan Avenue
Chicago, IL 60603-6404
www.artic.edu

Distributed by Yale University Press
P.O. Box 209040
New Haven, CT 06520-9040
www.yalebooks.com/art

Managing Editor: Alissa Anderson
Art Direction and Design: Margot Harrington and Chad Kouri
Set in DIN 1541 & Sentinel

Printed by The Schulman Group at Shapco Printing Inc.,
Minneapolis, MN

Library of Congress Control Number: 2012947376
ISBN 978-0-300-19118-9

10 9 8 7 6 5 4 3 2 1

*Generous support for this project provided by
Magnusson Klemencic Associates and Arup.*

**BUILDING/
INSIDE
STUDIO
GANG
ARCHITECTS**

edited by JEANNE GANG & ZOË RYAN

Studio Gang Architects in association with the Art Institute of Chicago
Distributed by Yale University Press, New Haven and London

CONTENTS

01 Preface Brett Steele

03 Studio Gang Architects: Building Ideas Zoë Ryan & Karen Kice

13 BUILDING NATURE

- 15 | Northerly Island Framework Plan
- 25 | Nature Boardwalk at Lincoln Park Zoo
- 35 | Chicago River Boathouses

43 BUILDING DENSITY

- 45 | Aqua Tower
- 53 | Tower Research
- 61 | Solar Carve Tower

69 BUILDING COMMUNITY

- 71 | Hyderabad 02
- 79 | Arcus Center for Social Justice Leadership
- 89 | City Hyde Park

97 BUILDING PERFORMANCE

- 99 | Kaohsiung Maritime Cultural & Popular Music Center
- 109 | Writers' Theatre / Michael Halberstam & Jeanne Gang in Dialogue
- 121 | Columbia College Chicago Media Production Center

131 BUILDING IDEAS

- 133 | Studio Matter
- 157 | Whiting & Gang in Conversation

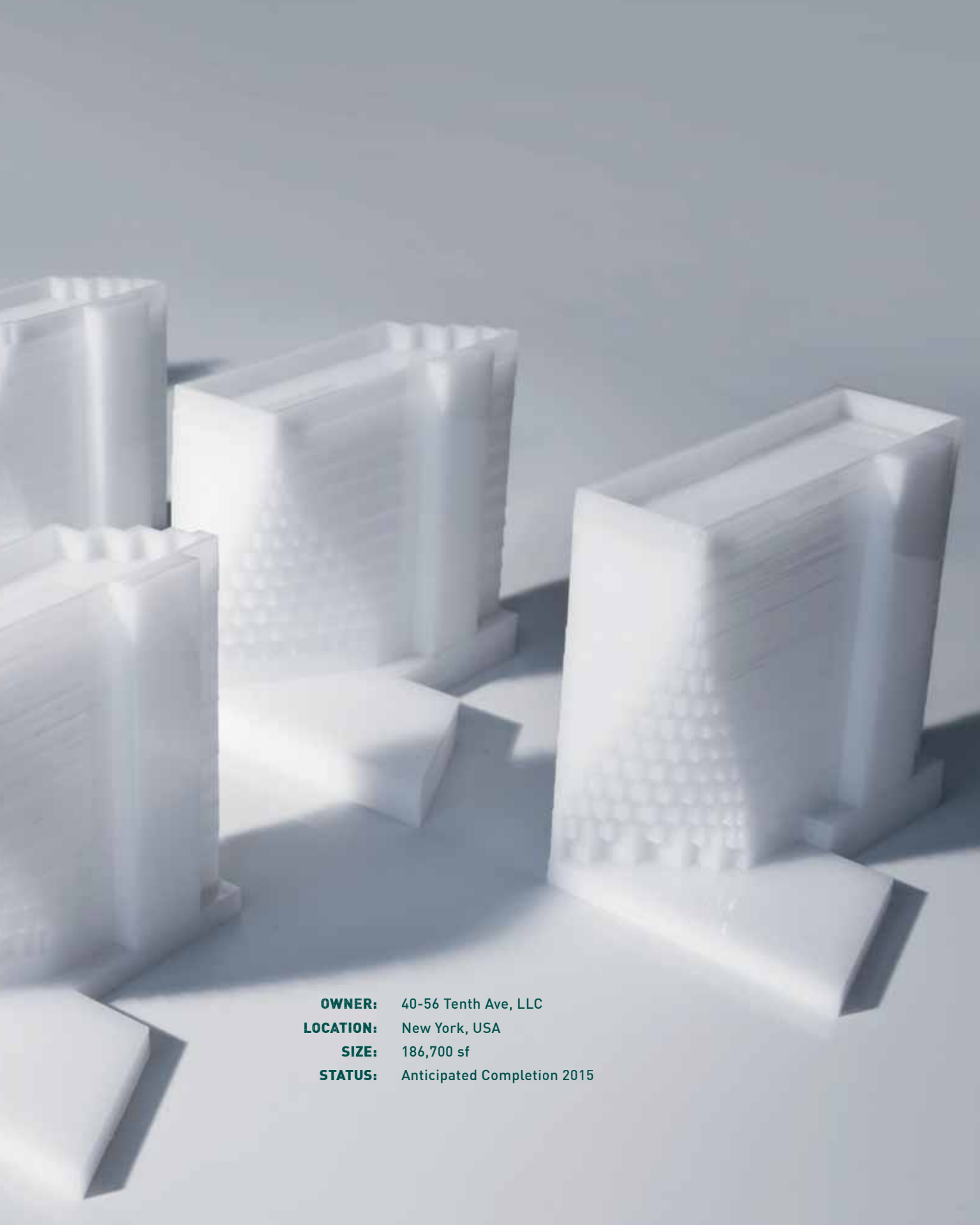
175 Project Credits

177 Acknowledgments

178 Image Credits

Solar Carve Tower





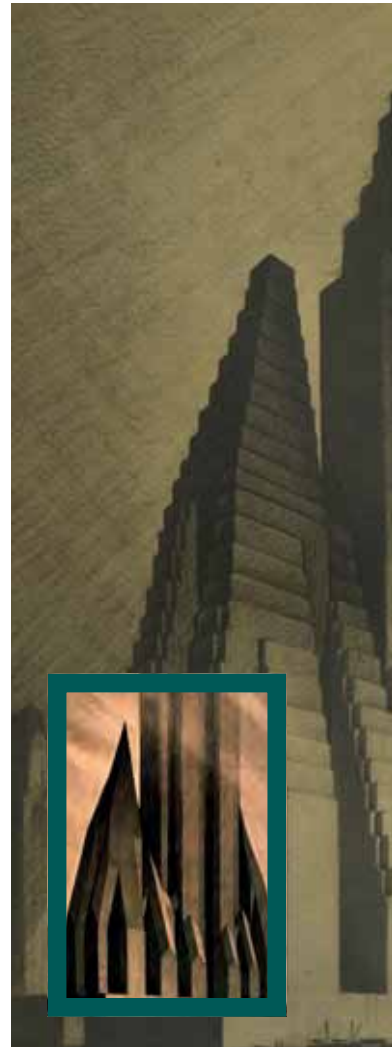
OWNER: 40-56 Tenth Ave, LLC
LOCATION: New York, USA
SIZE: 186,700 sf
STATUS: Anticipated Completion 2015

Solar Carve Tower

New York City's 1916 Zoning Resolution, which required that skyscrapers be set back from the street as they rise upward, was the first American law to address the tall building's relationship to the space of the city. By putting rules in place to ensure the public's right to sunshine and fresh air without explicitly limiting the height of the highrise, early planners and elected officials were able to prioritize public benefit over the private interests of unlimited floor area and bulk. Ralph Knowles, a professor at the University of Southern California in the 1980s, extended the concept of solar access as a zoning principle by introducing "the solar envelope" as a guide to shaping building form. When a new building adheres to the boundaries developed by Knowles' research, solar access for neighboring properties is maintained during the key energy-receiving times of day and season. Sunlight is treated as a valuable resource, and everyone's right to harvest it is ensured.

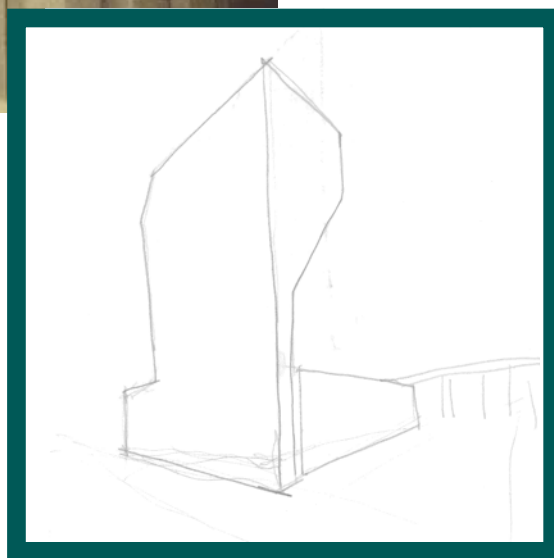
While these ordinances and envelopes are specific to latitudes and times of day, every city nevertheless produces spaces that defy their logic. In New York, that space is the High Line. Opened to the public in summer 2009, the High Line is the fortuitous result of a grassroots effort to save an abandoned elevated rail line in Lower Manhattan and the vegetation that spontaneously overgrew it. Now converted into a popular linear park, the High Line is a public phenomenon that lies not in the realm of the street but in the center of the city's block structure. While this unique condition makes it an extraordinary urban green space, it also means that it is endangered rather than protected by the setback zoning regulations.

Our Solar Carve Tower employs a surprising twist to traditional zoning logic to resolve this condition. Designed for a site that borders the High Line on the east with the vast openness of Tenth Avenue, the Lincoln Highway, and the Hudson River to the west, the project proposes inverting the light and air setbacks from the already well-exposed street to the High Line, in order to prioritize the inner-block park. Geometric relationships between the building form and the sun's path, as well as the viewshed between the park and the Hudson, guide the shave and shape of the tower. The result is a gem-like façade that displays the exciting architectural potential of expanded notions of solar-driven zoning—and a skyscraper that enhances the public life of the city in ways that a stand-alone icon cannot. ■

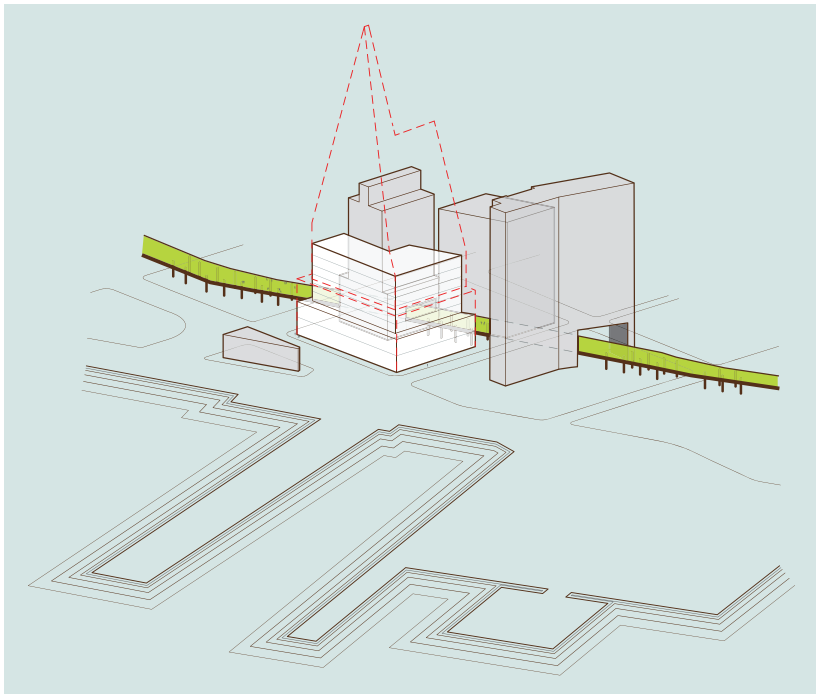
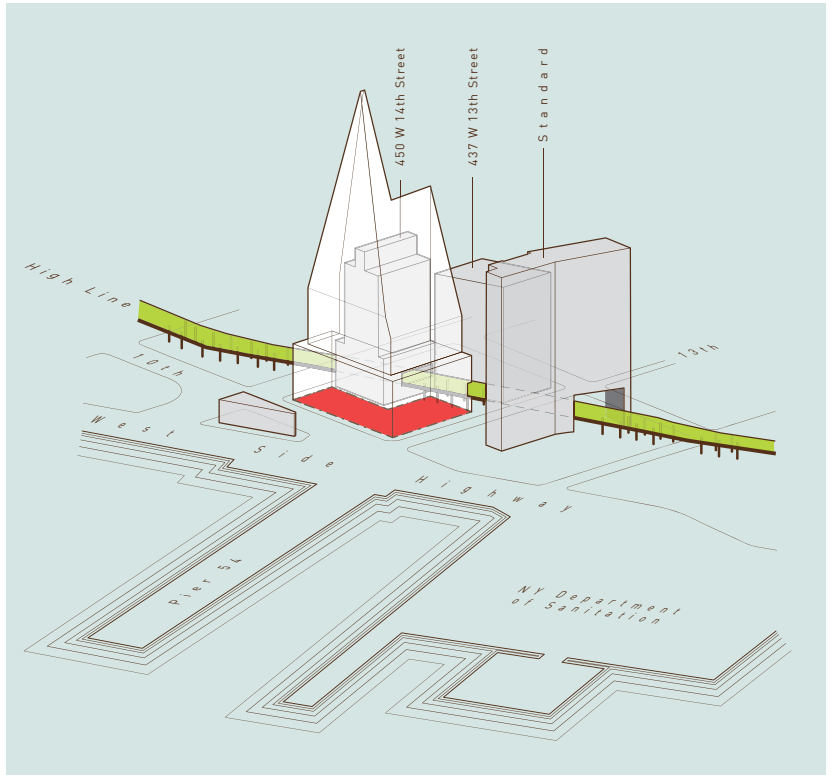




New York City's landmark 1916 Zoning Resolution produced the "setback skyscraper", a tiered building form that is native to New York but has reached international ubiquity. These 1922 renderings of architectural delineator Hugh Ferriss depict possible building forms produced by the regulations.

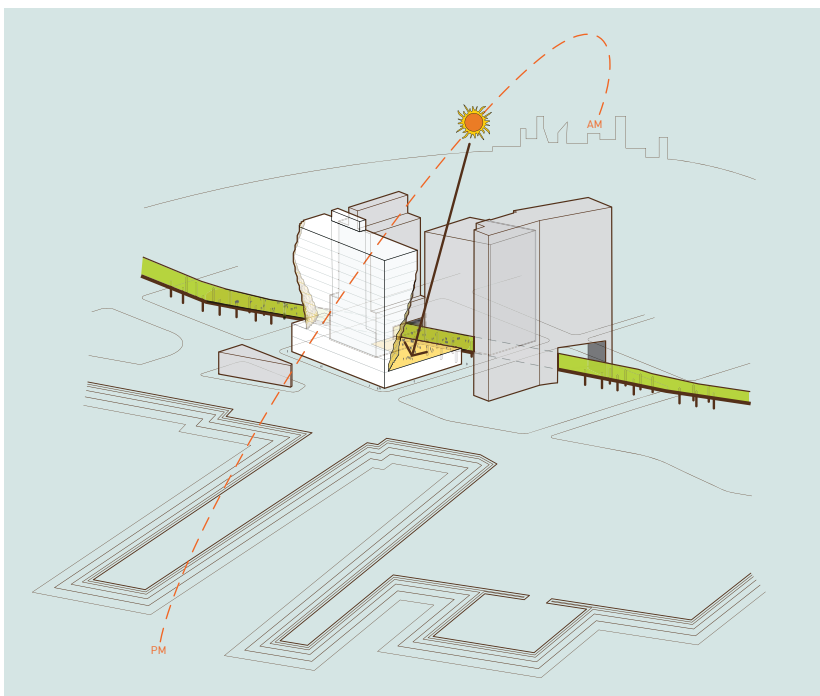
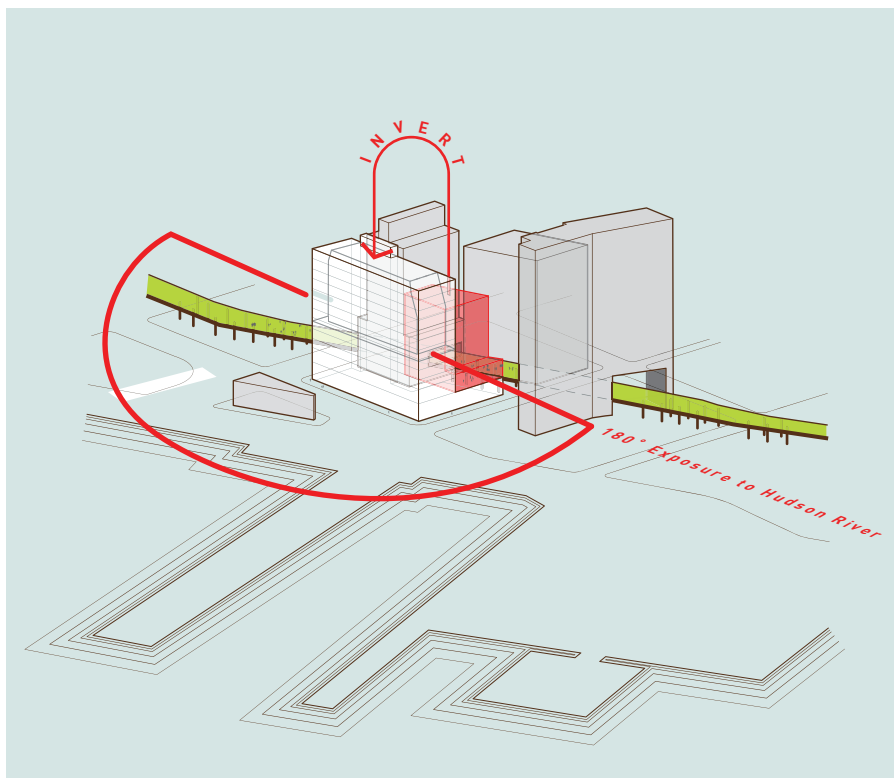


This sketch contemplates a radically narrower base of the building, shaved to preserve views from the High Line.



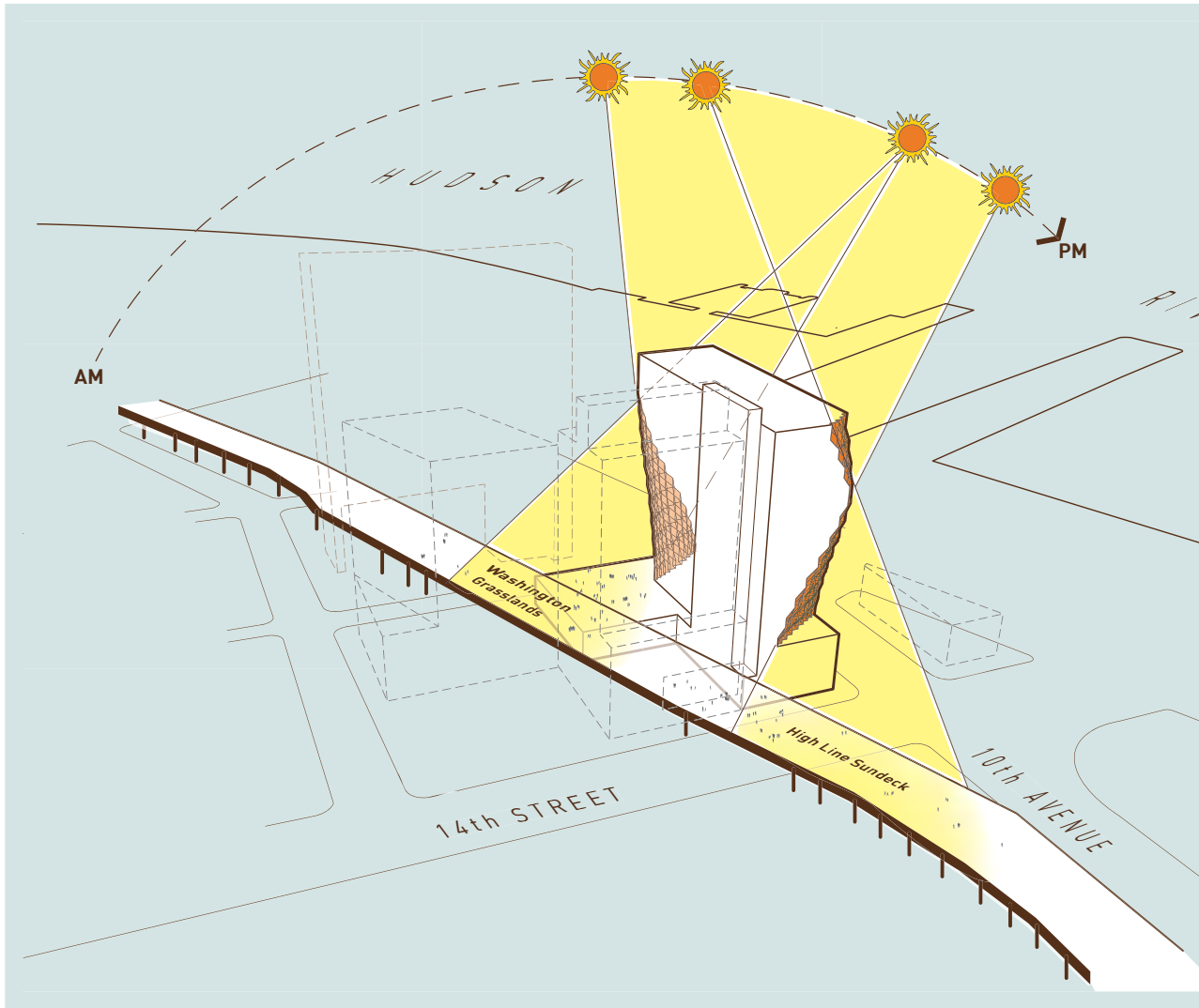
Allowable building volume produced by city zoning regulations.

Allowable floor area designated by city zoning regulations.

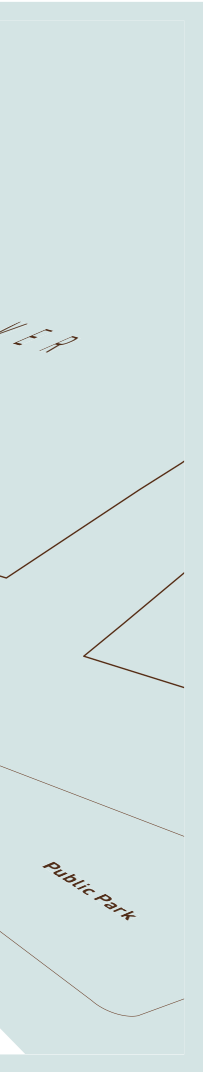


Inverting the Setbacks: giving light, air, and views to the High Line.

Solar Carving: even more light, air, and views to the High Line. Final massing is the result of critically analyzing the building setbacks and form.



The building mass benefits the public by funneling sunlight to the shared amenity of the High Line.

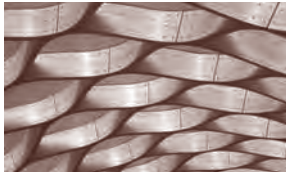


Incident light accentuates the faceted glass wall of the solar carved surface.



Northerly Island Framework Plan

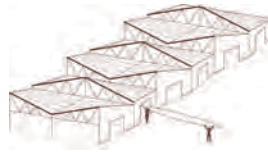
Jeanne Gang, Mark Schendel, Claire Cahan, and William Emmick with Claire Halpin, Jay Hoffman, Thorsten Johann, Wei-Ju Lai, Jeana Ripple, Rodia Valladares Sanchez, Beth Zacherle. Landscape Architect/Coastal Engineer: JJR. Ecologist: Applied Ecological Services, Inc. Financial Consultant: Applied Real Estate Analysis, Inc. Sustainability Engineer: dbHMS. Consultant: Fish Transportation Group, Inc (transportation). Graphic Designer: Studio V Design, Inc



Nature Boardwalk at Lincoln Park Zoo

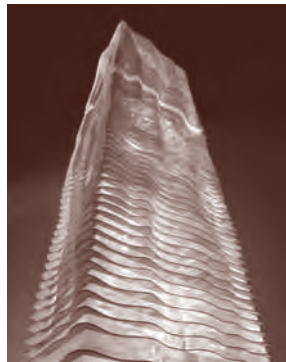
Jeanne Gang, David Gwinn, Harry Soenksen, Beth Zacherle, and Mark Schendel with Kara Boyd, Beth Kalin, Jeana Ripple, Todd Zima. Program Manager, Coordinating Engineer and Master Planner: Shaw Environmental & Infrastructure, Inc. Project Architect: Shaw Sustainable Design Solutions of Illinois, LLC. Landscape Architect: WRD Environmental. Engineers: Christopher B. Burke Engineering, Ltd. (hydrology),

Magnusson Klemencic Associates (structural). General Contractor: Pepper Construction Group, LLC. Pavilion Contractor: Cosgrove Construction, Inc. Sub Contractor: Fox River Components. Fabricators: RLD Company, Shelton Lam and Deck, Atomic Props, Sunrise Fiberglass.



Chicago River Boathouses

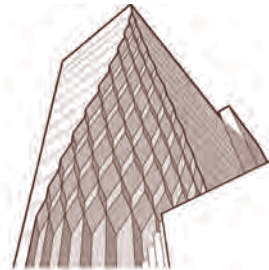
Jeanne Gang, Jay Hoffman, Mark Schendel, and William Emmick with John Castro, Wei-Ju Lai, Angela Peckham, Christopher Vant Hoff, Michan Walker, Todd Zima. Engineers: dbHMS (MEP, fire protection), Matrix (structural), SPACECO, Inc. (civil), AECOM (waterfront civil). Landscape Architect: Terry Guen Design Associates, Inc.



Aqua Tower

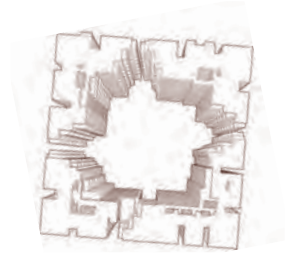
Jeanne Gang, Thorsten Johann, Mark Schendel, and Mauricio Sanchez with Kara Boyd, Margaret Cavenagh, Yu-Ting Chen, Lynda Dossey, David Gwinn,

Claire Halpin, Jay Hoffman, Heather Kilmer, Phillip Leers, Miriam Neet, Sophia Sebti, Schuyler Smith, Kimberly Tseng, Hannes Wingate, Beth Zacherle. Architect of Record: Loewenberg Architects. Engineers: Magnusson Klemencic Associates (structural), IE Consultants, Inc (civil), Advance Mechanical Systems, Inc. (mechanical), Abbott Industries, Inc (plumbing), Gurtz Electric (electrical), Northstar Fire Protection/McDaniel Fire Systems (fire protection). Landscape Architect: Wolff Landscape Architecture, Inc. General Contractor: McHugh Construction. Consultants: Khatib and Associates, Inc (energy), Hugh Lighting Design, LLC (lighting), Horvath and Reich CDC (façade), dbHMS (LEED).



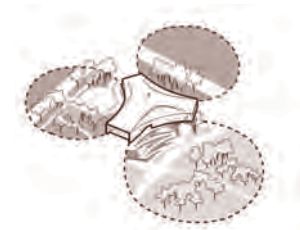
Solar Carve Tower

Jeanne Gang, Mark Schendel, and Weston Walker with John Castro, Juan de la Mora, William Emmick, Wei-Ju Lai, Rolf Temesvari, Todd Zima. Engineers: Arup New York (structural), Arup New York (MEP & fire protection), Langan Engineering (civil). Landscape Architect: SCAPE/ Landscape Architecture, PLLC. Cost Estimator: Davis Langdon.



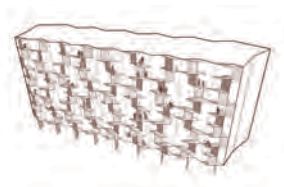
Hyderabad 02

Jeanne Gang, Thorsten Johann, Mark Schendel, David Gwinn, and Akhil Badjatia with Margaret Cavenagh, Federico Diaz de Leon Orraca, Lynda Dossey, Claire Halpin, Lindsey Moyer, Schuyler Smith, Rolf Temesvari, Weston Walker. Engineers: Tadjer Cohen Edelson Associates, Inc. (structural), Spectral Services Consultants Pvt., Ltd. (MEP and fire protection), Buro Happold (environmental), FS Engineers Pvt., Ltd (geotechnical). Consultant: Carl Walker Parking Consultants (parking).



Arcus Center for Social Justice Leadership

Jeanne Gang, Todd Zima, and Margaret Cavenagh with John Castro, Ana Flor Ortiz, Claire Halpin, Wei-Ju Lai, Lindsey Moyer, Rolf Temesvari, John Wolters. Engineers: Thornton Tomasetti (structural), Viridis Design Group (landscape architect/civil), Diekema Hamann Engineering (MEP, fire protection). Cost Estimator: Davis Langdon.



City Hyde Park

Jeanne Gang, Thorsten Johann, Mark Schendel, and Mauricio Sanchez with Akhil Badjatia, Angela Peckham, Natasha Pirondi, Harry Soenksen, Rolf Temesvari, Rodia Valladares Sanchez, Michan Walker, Weston Walker. Engineers: Magnusson Klemencic Associates (structural), WMA Consulting Engineers, Ltd. (MEP), SPACECO, Inc. (civil). Landscape Architect: Terry Guen Design Associates, Inc. Consultant: Jenkins & Huntington, Inc. (elevator).



Kaohsiung Maritime Cultural & Popular Music Center

Jeanne Gang, Weston Walker, Jay Hoffman, Schuyler Smith, Mark Schendel, and William Emmick with Claire Cahan, John Castro, Stephen Claey's, Juan de la Mora, Lynda Dossey, Ana Flor Ortiz, Thorsten Johann, Wei-Ju Lai, Boryana Marche'va, Natasha Pirondi, Rodia Valladares Sanchez, Rolf Temesvari. Associate Architect: JJ Pan & Partners. Engineers: Arup Dublin (structure), Arup Hong Kong (MEP/BP, fire protection), DHV (acoustics). Scenography: dUCKS scéno.

Landscape Architect: SCAPE/ Landscape Architecture, PLLC.



Writers' Theatre

Jeanne Gang, Kara Boyd, and Mark Schendel, with Claire Cahan, Stephen Claey's, Lindsey Moyer, Christopher Vant Hoff. Project Advisor: AMS Planning and Research. Theater Consultant: Auerbach Pollock Friedlander. Engineers: Halvorson & Partners (structural), dbHMS (MEP, fire protection), SPACECO, Inc. (civil). Consultants: Threshold Acoustics (acoustical), Lightswitch Architectural Chicago (lighting). Landscape Architect: Coen + Partners.



Columbia College Chicago Media Production Center

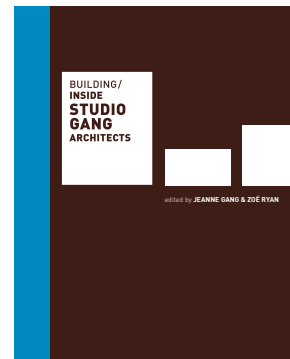
Jeanne Gang, Kara Boyd, Margaret Cavenagh, William Emmick, and Mark Schendel with Kysa Heinitz, Beth Kalin, Brandon Pass, Angela Peckham, Dominique Price, Christopher Tomlan, John Wolters. Engineers: dbHMS (MEP), Magnusson Klemencic Associates

(structural), SPACECO, Inc (civil). Landscape Architect: SITE Design Group, Ltd. Consultant: Threshold Acoustics (acoustical). Project Manager: US Equities.



Building: Inside Studio Gang Architects (Exhibition)

Jeanne Gang, Mark Schendel, Claire Cahan, and Schuyler Smith with Alissa Anderson, Juan de la Mora, Laura Ette'dgui, Thorsten Johann, Chris Ortloff, Teo Quintana, Natalie Thomas, Weston Walker. Curators: Zoë Ryan, Karen Kice. Structural engineer: Thornton Tomasetti. Metal Fabrication and Design: Active Alloys. Steel Ring Fabricators: Chicago Rolled Metal Products. Suspension System Consultant: Chicago Yacht Rigging. Model and Display Fabricator: Jason Lewis Furniture. Furniture Maker: Mode Carpentry.



Building: Inside Studio Gang Architects (Book)

Jeanne Gang and Alissa Anderson with Claire Cahan and Weston Walker. Co-Editor: Zoë Ryan. Art Direction and Design: Margot Harrington and Chad Kouri. Contributors: Michael Halberstam, Karen Kice, Zoë Ryan, Brett Steele, Sarah M. Whiting. Copy Editor: Mairead Case.

ACKNOWLEDGEMENTS

This book would not have been possible without the generous support of Magnusson Klemencic Associates and Arup. Our sincere thanks go out to them.

We are thankful for the strong and thoughtful contributions of Michael Halberstam, Karen Kice, Brett Steele, and Sarah M. Whiting, whose valuable insights were crucial to the book.

In shaping and managing the book project, thanks to Alissa Anderson, whose great work and determination were essential. On design, thanks to Margot Harrington and Chad Kouri for their talents, and to Claire Cahan and Wes Walker for their discerning critiques. Special thanks go to Mark Schendel for his solid moral support during the long hours of this book's creation and to our collaborators at Studio Gang, who lent their skills to diagrams, drawings, and photos.

For their support and encouragement at the Art Institute of Chicago, we would like to acknowledge Douglas Druick, President and Eloise W. Martin, Director, David Thurm, Chief Operating Officer, Dorothy Schroeder, Associate Director for Exhibitions and Museum Administration, Robert V. Sharp, Executive Director of Publications, and Elizabeth Hurley, Vice President of Development. We would also like to thank Alison Fisher, Harold and Margot Schiff Assistant Curator, Department of Architecture and Design, as well as the Department of Architecture and Design's diligent interns Salvatore Dellaria and Jennifer Meakins.

Our sincere gratitude also extends to the supporters of the Art Institute of Chicago's [Building: Inside Studio Gang Architects](#) exhibition, the occasion that prompted this publication. The exhibition was made possible by the generous support of Leslie Bluhm and David Helfand, Antheus Capital, LLC, The Arcus Foundation, Magellan Development Group, James McHugh Construction Co., The Graham Foundation for Advanced Studies in the Fine Arts, The Architecture and Design Society of the Art Institute of Chicago, and The Richard H. Driehaus Foundation, with in-kind support provided by Thornton Tomasetti.

Jeanne Gang and Zoë Ryan

All photographs, drawings, diagrams, and other illustrative material not otherwise indicated below are © Studio Gang Architects. All other image credits that do not appear within the text are listed below, including material supplied by other institutions, agencies, or individuals.

IMAGE CREDITS

Front endpaper (third image from left): photograph © Michael McCaskey

p17-18 (top): photograph © Corbis

p25-26: photograph by Steve Hall © Hedrich Blessing

p32 (right): film still © Spirit of Space

p33 (left): photograph by Vicky Hunt, courtesy of Lincoln Park Zoo

p33 (right): photograph courtesy of Lincoln Park Zoo

p34: photograph by Steve Hall © Hedrich Blessing

p35-36: photograph © Tom Harris

p37-38: image courtesy of University of Pennsylvania Archives

p41: photograph by Robin Roberts, courtesy of LPJ Chicago

p45-46: photograph © Paul Merideth

p49: photograph by Steve Hall © Hedrich Blessing

p49-50: photograph © Butler V. Adams

p50: photograph © David Seide

p51: photographs by Steve Hall © Hedrich Blessing

p52: photograph © Eric Hausman

p53-54, 55-56, 61-62: photographs © Tom Harris

p63-64: images © Cooper-Hewitt, National Design Museum, Smithsonian Institution / Art Resource, NY

p75-76: photograph © Akhil Badjatia

p82 (right): photograph © Anthony Dugal Photography, courtesy of Kalamazoo College

p87 (right): film still by Dave Burk © Hedrich Blessing

p121-30: photographs by Steve Hall © Hedrich Blessing

p125 (left): *Killer's Kiss* © 1955 Metro-Goldwyn-Mayer Studios Inc. All rights reserved. Film still courtesy of MGM Media Licensing

p126 (left): *Suspicion* © 1941 RKO Pictures Inc. Licensed by: Warner Bros. Entertainment Inc. All Rights Reserved

p153-54: photograph © Tom Harris