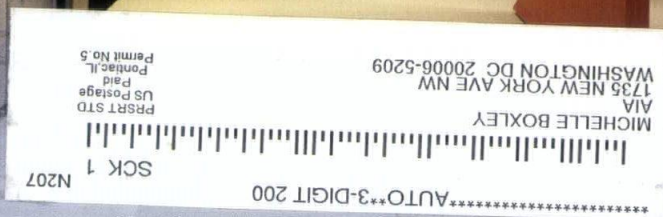


LIVING IN A MATERIAL WORLD

TOM SHAFER'S MODERN PALETTE

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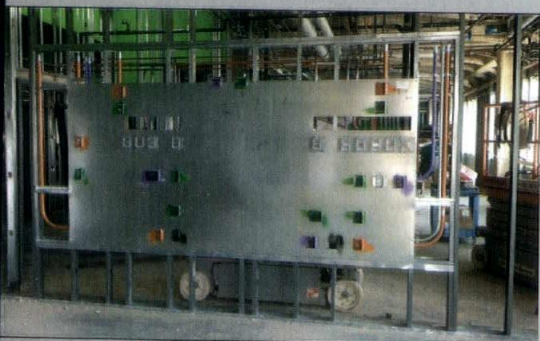
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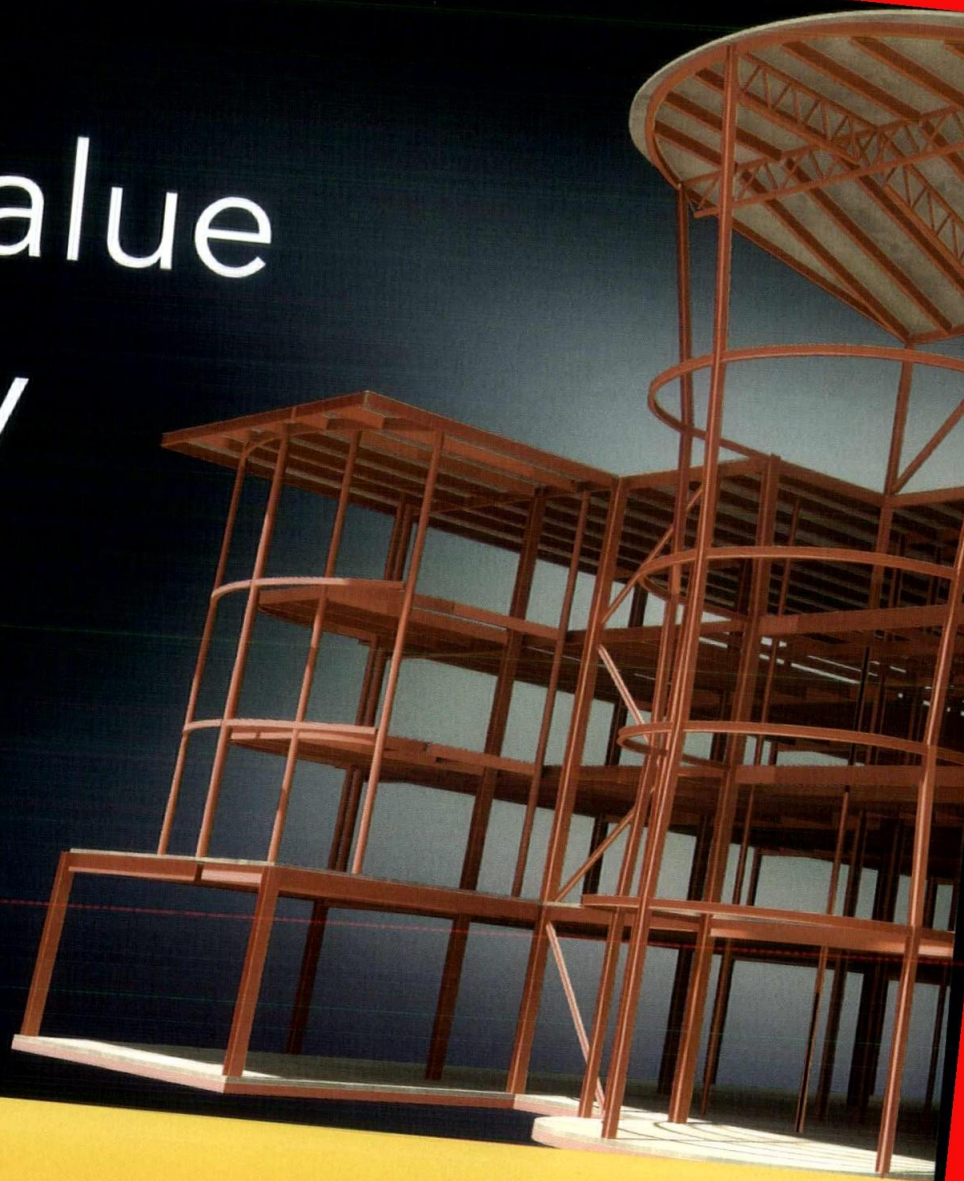


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PRESIDENT'S LETTER

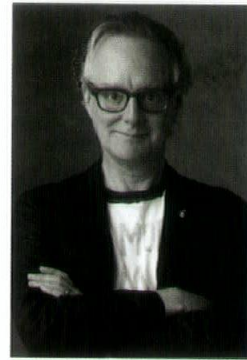


Photo by Marc Hauser 2012

Hello, Chicago architects.

The first thing I did after becoming a registered architect was join AIA Chicago. It seemed the natural and obvious thing to do. It was cool, and those three letters after my name came with wonderful access to a network of colleagues and resources. I suspect that many of you share the same feeling of pride and exhilaration.

I was recently approached by an emerging architect, in the midst of the architectural registration exams (ARE), who suggested that the AIA had lost touch. This surprised me and made me reflect on our incredible programs and achievements, which are relevant to emerging and seasoned professionals.

This is how AIA Chicago—your organization—is impacting the art and practice of architecture and how we are relevant around the world.

Emerging professionals in Chicago are passing the ARE at an impressive rate, largely because of programs offered by AIA Chicago. Since 2010, more than 400 emerging professionals have participated in AIA Chicago's ARE Prep Course. According to a recent survey, 65 percent have passed one or more divisions of the seven-part exam, and more than 90 percent would recommend the course to a friend. This is a unique opportunity provided by AIA Chicago. This is very cool.

These same professionals are oversubscribing by three times to the AIA Chicago Young Architect's Forum and College of Fellows BRIDGE program. It's a national model; one our youngest members are rolling out. They are leading—and being cool.

The AIA 2030 initiatives and the AIA Energy Modeling programs are putting real metrics in our hands, and those of our clients. Significant leadership for this is coming from AIA Chicago (my predecessor, 2012 AIA Chicago President Rand Ekman, AIA, has been leading that charge—thank you Rand). It may surprise you that both big and small AIA Chicago member firms are participating and setting the bar. We are taking our leadership role back. And that is cool.

Along with AIA Illinois, our relationship with city, state and national elected officials is magnificent. The grassroots AIA member and staff energies dedicated to this are impressive. We are seen as proactive, and AIA members serve as important resources. There is more to do, but the direction is positive. We are frequently at the table, and this is cool.

Chicago Architect adds to this list and further illustrates that Chicago is the epicenter of architecture. AIA Chicago is the loudest voice emanating from that epicenter, and it's our voice.

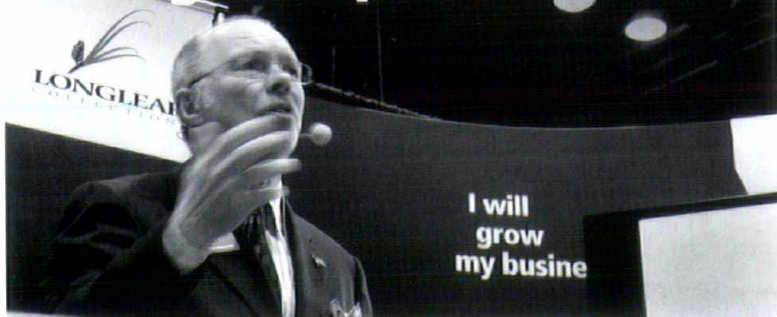
I am proud to be the 2013 AIA Chicago President (it's really cool), working with our 3,000-strong membership and the most respected staff of any component in the country.

In the coming months, let's continue working on the coolness and relevance thing.

We are AIA Chicago. We are cool.

Peter Exley, FAIA

When we do our courses, architects like you have great questions.



by Jim Nowakowski @interlinejim

At presentations of our CEU courses, architects ask questions that result in discussions about increasing their business. Here were three from our recent *Staying in Front of Your Customers* CEU that I'd like to share as you decide if our courses can benefit your firm.

- 1. What is the most practical way of advertising?** When you do advertising, remember: Conditions change. When I ran the 8th largest direct mail shop in the country many years ago, we constantly had feedback from our advertising, so we continually honed our creative messages and HOW we sent them. If you target building owners, they want to be talked to via e-mail. In a recent piece of research we did for *BUILDINGS* magazine, 53% of the owners we interviewed said e-mail. But they also said phone (44%) while 22% said "other," including articles, faxes (believe it or not), Internet, magazines and newsletters. So you see, the general rule of "practical" when it comes to advertising is this: **Just do it!** But do it the way they want it, not the way you want it.
- 2. How do we know how to price our services?** We were asked by a major public company once to quote on doing some advertising research. We really, REALLY wanted this project, and we knew we were competing with major research companies. We calculated the hours, applied our hourly rate, and then did a pro forma. We felt confident with our bid of \$25,000. After we were awarded the project, the client said: "I would have paid you twice that for this research." I learned a valuable lesson about pricing: It is always based on the demand and supply in the buyer's mind – not yours! You are selling your time, not just your talent. You will never get back the hours you spend on a project. Please go to <http://goo.gl/uxuLo> to see my article on pricing in *Countertops and Architectural Surfaces* magazine.
- 3. Are there more detailed pros and cons connected with social media?** Our sessions last only one hour, but Interline offers courses on this and other topics. Brad Holem, our Chief Technologist, presents *Making Sense of Social Media*, which was a big hit at the KBIS® show. Interline offers other courses, including website design, the Internet, strategy and more.

There are a dozen more questions we discussed that I can share with you. It begins by inviting us to your place (or ours) for business discussions in the form of our CEUs or custom training. Call us now for an appointment at 847 358 4848! We're ready when you are.

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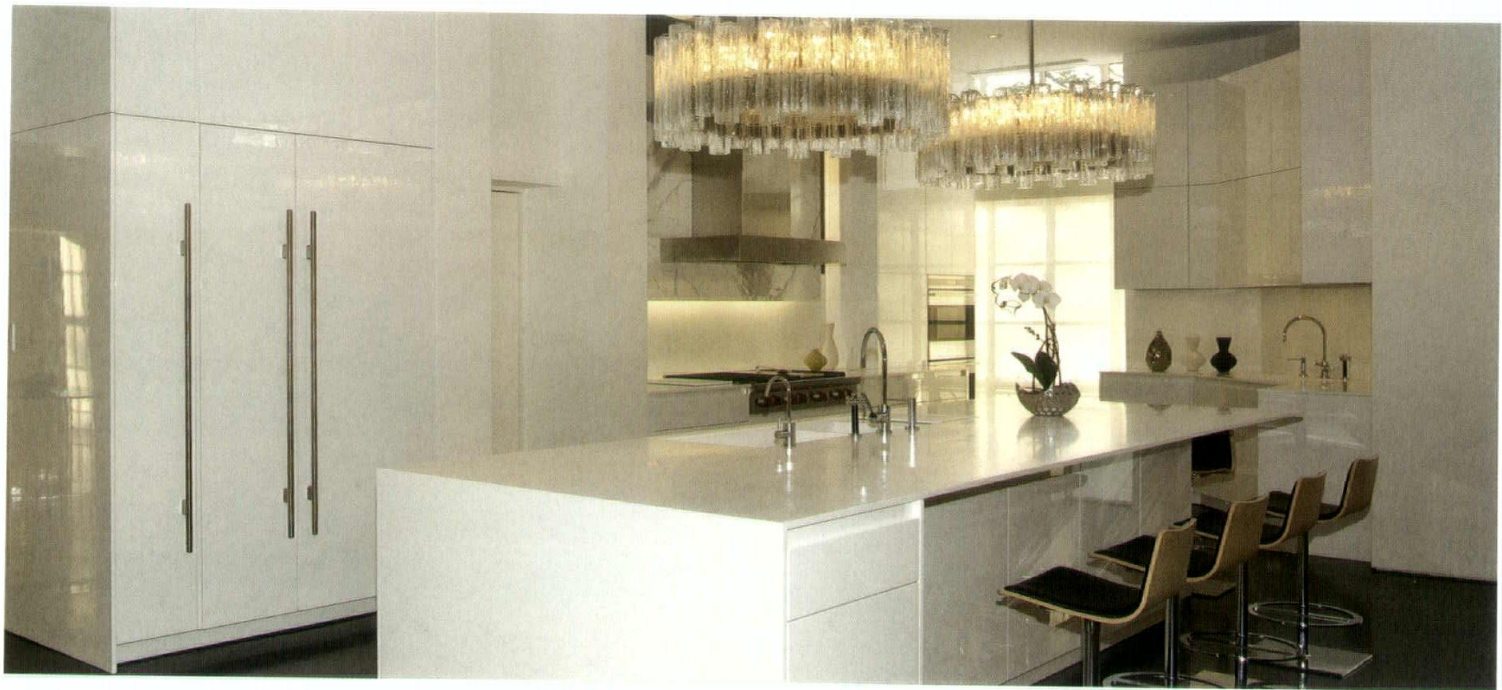
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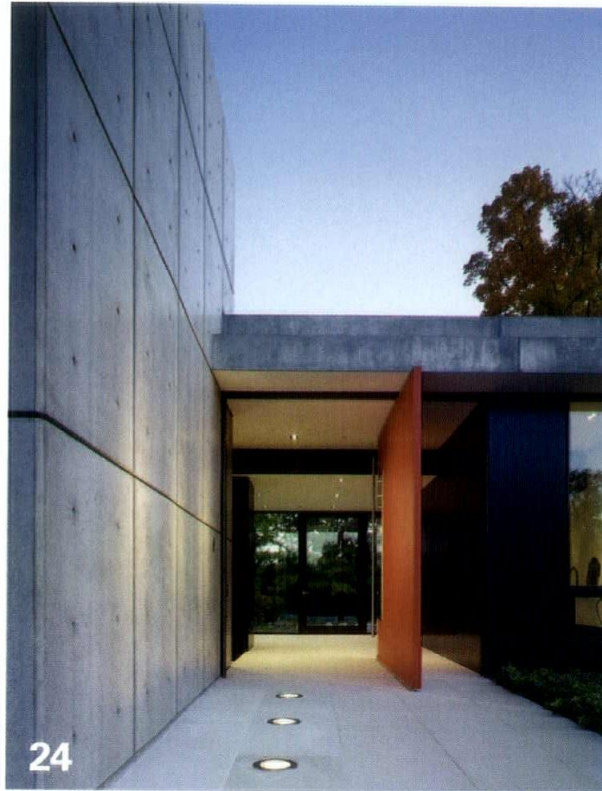
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Image courtesy of Peter Ellis New Cities



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Photo by Richard Pare



MoGES Power Plant, Moscow.
Built in 1926 and designed by
Ivan Zholtovsky.

It's a Mod, Mod World

GRAHAM FOUNDATION EXHIBIT DOCUMENTS
DECAYING RUSSIAN MODERNIST GEMS

The term “Soviet architecture” brings to mind visions of architectural unpleasantness; grim, poured-in-place structures as repressive as the regimes that built them.

But some spectacular and exceedingly modern architecture was designed by a corps of relatively unknown and unsung architects during the early years of the former Soviet Union. Nearly all of these bold and heroic buildings are virtually unrecognized outside of the old republic. Until now.

“The Lost Vanguard: Russian Modernist Architecture, 1922-1932,” a photography exhibit now showing at the Graham Foundation, shines light on this brief early modernist movement. With more than 80

images on display across three floors, the exhibit by British-born architectural photographer Richard Pare explores a host of structures and sites—bakeries, power stations, ministry buildings, factories, offices and more—designed with much of the same architectural daring found in the work of celebrated modernists of the day such as Walter Gropius, Mies van der Rohe and others.

The Graham installation of “Vanguard” is the exhibit’s first American showing outside of New York.

Pare’s photography and painstaking research provide an intriguing and important look inside this architectural lost world, revealing gems that would be widely

celebrated had they not been locked away behind the Iron Curtain for nearly half of the 20th century.

This often-exuberant architecture embodies the optimism of the years following the 1917 Russian revolution, when modernism—as often happens—was used to cast off the past. The movement was a precursor to the lovely mid-century modern buildings produced in the early Castro era in Cuba that are now being rediscovered.

Pare’s excellent large-format photography lovingly captures the former Soviet era buildings in big, expressive, razor-sharp photos. Pare made the images between 1992 and 2010 and often negotiated with government officials for months to gain access to more obscure sites, only to be given about an hour to photograph them. But this limitation never comes across in his work, as each image is rich in detail and texture.

Pare shows us the Palace of the Press building built in 1932 in Baku, a city in present-day Azerbaijan, that was designed by the virtually unheard-of architect Semen Pen. Pare’s lens captures the four-story building’s dramatic, horizontal window bands that gracefully culminate in rounded terraces at the edge of the square-jawed concrete structure.

“Vanguard” also features one of Moscow’s best-known buildings: the remarkable Centrosoyuz Building, built in 1933 and designed by LeCorbusier, his cousin Pierre Jeanneret and Russian engineer and constructivist architect Nikolai Kolli. LeCorbusier’s only Soviet building, the massive brick complex is a powerful mix of angles, curves and rectangles. Spiraling ramps and sweeping staircases mark portions of the building’s interior.

Pare, a 1973 graduate of the School of the Art Institute of Chicago, has tackled the

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Photo by Richard Pare

Gosplan Garage, Moscow. Built in 1936 and designed by Konstantin Melnikov.

subject of Soviet-era architecture before. He has lectured widely on the topic, and his photography was featured in the book, "Building the Revolution: Soviet Art and Architecture 1915-1935," which was also a 2011 exhibition at the Royal Academy, London. ("Vanguard" is also a book, published by The Monacelli Press.)

Pare's photography is matched by his solid research on the buildings and their designers. Giving an artist's talk before a packed auditorium last fall at the Graham Foundation, Pare told of the skilled Moisei Ginzberg, a modernist who might have been LeCorbusier's equal but was increasingly forced to do more classically-detailed buildings as his career progressed.

"The irony is savage," Pare told the audience.

Pare also discussed the spotty fates of the buildings. Some have been preserved and reused, while others have fallen into appalling disrepair. Among the latter is Moscow's modernist Narkomfin apartments designed by Ginzberg. The abandoned former NKVD secret police headquarters in Magnitogorsk, Russia, simply crumbles as a mural of Lenin's face peers from a red interior wall like a ghost.

Russia and the former Iron Curtain countries lack an architectural preservation mechanism that could assure the buildings are saved or at least cataloged. Pare said the 15,000 photographs he has taken compose the only contemporary historic record of these buildings.

The good news is the buildings aren't actively being torn down—although demolition by neglect is quite possible. "They are still there," Pare said. "Even if they are being severely neglected, they are still standing."

The exhibit runs until Feb. 16 at the Graham Foundation's Madlener House, 4 West Burton Place. > **Lee Bey**

Out of This World

MULLER + MULLER TAKES ON THE TASK OF RECREATING OUTER SPACE

At Adler Planetarium's renovated Pritzker Hall of Cosmology, a new exhibit, "The Universe: A Walk through Space and Time," takes visitors through a cosmological journey detailing the history and nature of the universe, packing billions of light years into an interactive user experience. For the project, design firm Muller + Muller had to think both carefully and creatively about fitting such a massive subject into a mere 3,000 square feet of museum space.

"The main challenge was to represent the vast and virtually incomprehensible nature of space and time within a room of only a few thousand square feet, [and] with a limited budget," says David Steele, AIA, lead designer of the Muller + Muller team. "To accomplish this, the space of the gallery was made less physical, less tangible."

Formed with black scrim fabric walls and floating screen panels, this incarnation of outer space appears infinite and seamless, with high-definition projections and LED lights carefully placed to help guide visitors through. The beginning of the exhibit aims to mimic that of the actual universe, as the narrow entryway becomes a gradually expanding tunnel, pulsating with light and sound à la the Big Bang theory. After moving through, visitors arrive at a dramatic curving wall of projected images in a room that, according to Steele, appears to be limitless and edgeless.

The goal of this transition, he adds, is to remove users from the familiar sights of the museum and into a true representation of the cosmos. "Surfaces and spaces are defined with warped planes of light floating in blackness," he says. "The user is psychologically transported out of the mundane physical confines of the museum into the depths of space, where nothing is fixed."

As it is in space, the surfaces of the exhibit are constantly changing colors and patterns. In one portion of the exhibit, users are given control of

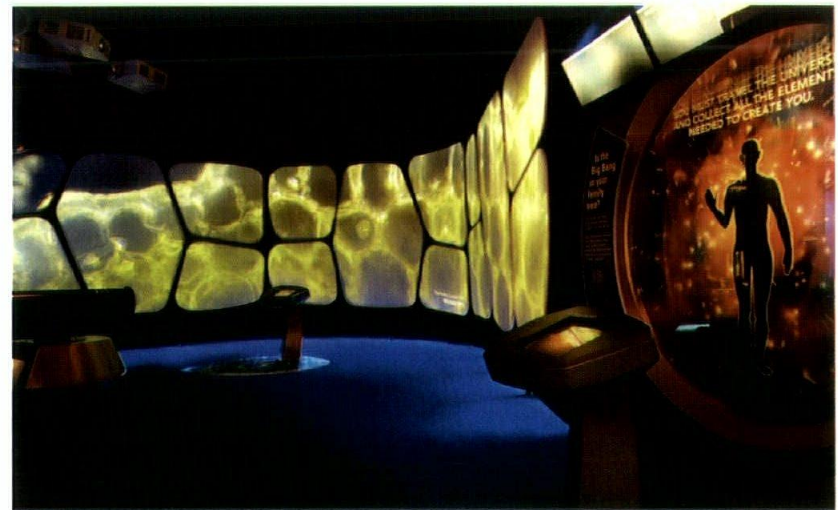
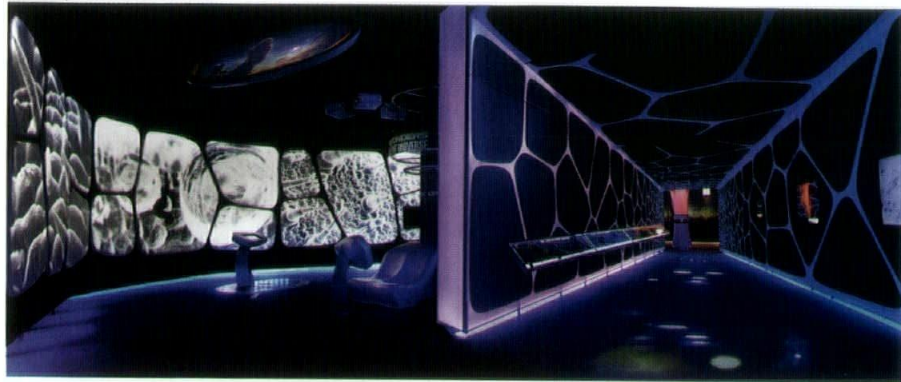


Photo by John Fajer

Interactive projections on floating screen panels at "The Universe" exhibit allow visitors to take control of their experience.

Photo by John Faier



A narrow hallway (right) leads visitors through the Big Bang theory and to a seemingly "limitless and edgeless" representation of outer space, seen at left.

the interactive wall projections, which display a variety of the latest images taken by telescopes. These images range from the most microscopic views of the universe to the most galactic in scale. "Surfaces are never any one thing or any one material, so [they] become a representation of the infinite complexity and beauty of the universe," Steele explains.

In this manner, the architecture of the exhibit appears to be continually changing, as users pick and choose views of different galaxies, star systems and more. Toward its conclusion, the floor plan of the exhibit folds onto itself to form a gallery of interactive stations, explaining various concepts and theories of the universe to audiences both young and old. > **Raissa Rocha**

Dreaming of the Future

AIA CHICAGO JOINS CPS FOR INAUGURAL BARBIE ARCHITECT WORKSHOP

Inside Mies van der Rohe's Crown Hall, more than 130 girls sit around tables cutting out squares of paper representing bedrooms, kitchens and bathrooms. After those rooms are set in place on graph paper, the girls add their own special areas, like indoor playgrounds, expansive backyards, makeup rooms and special rooms for their puppies and turtles. These girls are building their own versions of Barbie's Dream House.

In November, AIA Chicago, Chicago Public Schools, Chicago Women in Architecture and the Illinois Chapter of the National Organization of Minority Architects (INOMA) partnered together to host two "Barbie, I Can Be...Architect" workshops, one at the University of Illinois at Chicago and the other at the Illinois Institute of Technology.

At the two workshops, volunteers, including 35 AIA Chicago members, worked



Photo by Juan Daniel Zavaleta, Wineskins Entertainment

IIT's Colleen Humer, one of 35 volunteer workshop leaders, shares her enthusiasm with a group of Architect Barbie workshop participants.

with 270 girls, ages 7 to 9, from 10 Chicago Public Schools to design their own Dream House. After completing her design, Jamia Little of Libby Elementary School said she was going to go home and practice drawing another Dream House. "If you do something cool, you won't get bored," she said.

Julianne Sherer, AIA, volunteered at the IIT session. She said she volunteered because, "it's important for young girls to have professional women role models exposing them to a career they may not know much about, and one that's currently

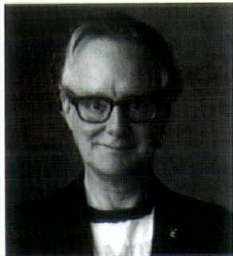
a male-dominated profession."

Mattel Inc., sponsored the event, donating Architect Barbies for every participant to take home. This was the first Architect Barbie workshop at CPS, and it was held to bring awareness to the Career & Technical Education (C.T.E) Architecture Program. Nine CPS high schools currently have architecture programs. "The goal was to get students to dream about what they can be in fun environments," said C.T.E. Architecture Program Coordinator Ayonna Patterson.

> **Lauren Finch**

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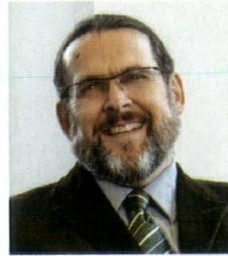


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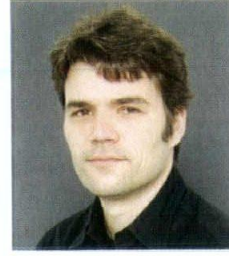
Photo by Marc Hausser 2012



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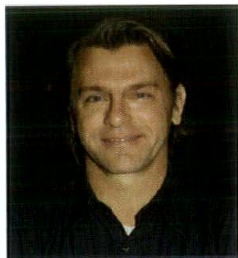
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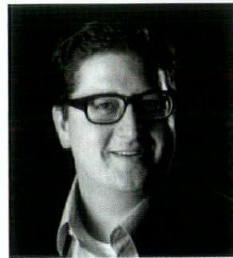
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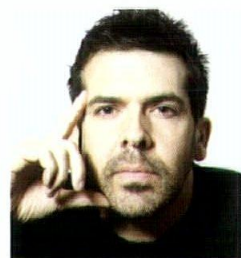
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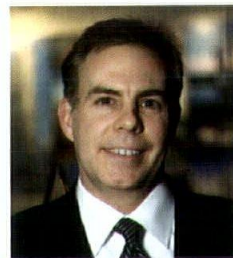


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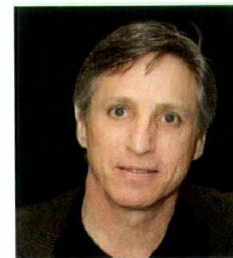
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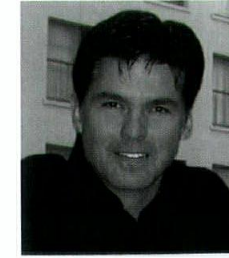
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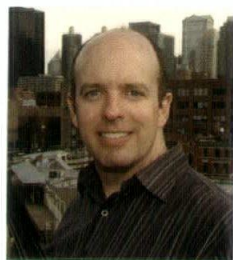
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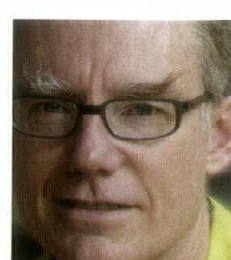
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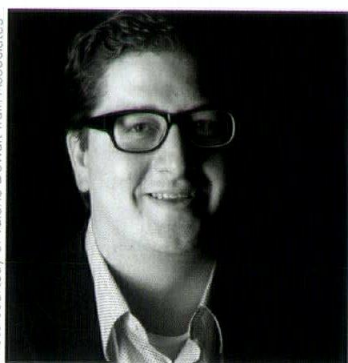
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Dumich Recognized as Dubin Family Young Architect

Photo courtesy of Valerio Dewalt Train Associates



Matthew Dumich, AIA, a project architect at Valerio Dewalt Train Associates, has been recognized as AIA Chicago's Dubin Family Young Architect of the Year. The award, made possible by

an endowment from M. David Dubin, FAIA, and administered by the AIA Chicago Foundation, recognizes excellence in ability and exceptional contributions by a Chicago-area architect between the ages of 25 and 39.

"I am humbled and proud to be included among the distinguished group of past recipients," Dumich said.

Holding bachelor's and master's degrees in architecture from the University of Wisconsin-Milwaukee, Dumich has 12 years of professional experience and has been very active and recognized

in the industry. In 2008 he received the Graduate of the Last Decade (GOLD) Award from the UWM School of Architecture and Urban Planning. In 2009 he founded the AIA Chicago BRIDGE Mentoring program. In 2011 he formed the AIA Illinois Council for Emerging Professionals and was named as one of *Building Design+Construction's* 40 Under 40 recipients. Dumich has served at the Young Architects Forum chair for AIA Chicago, as the YAF National regional liaison and on the YAF National advisory committee. He became the AIA Chicago Board of Directors treasurer in 2012 and is the board secretary in 2013.

"Matt's combination of his work, his leadership in AIA and his outstanding leadership with initiating so many programs [has] launched the Young Architects as a critical force in the AIA," said a Foundation board member.

"As a young architect I have been fortunate to be mentored by strong leaders that have taught me the value of hard work and committed service," said Dumich. "These lessons have shaped my career, instilled an obligation to lead and created an environment for others to thrive."

AIA Chicago Presents Distinguished Service Awards

The AIA Chicago board recognized Lynn Becker, Paul Knight and Vincent Paglione as separate recipients of the 2012 Distinguished Service Award.

> **Lynn Becker**, author of the ArchitectureChicago PLUS blog, was nominated for his ongoing contributions to architectural conversation in Chicago and beyond. Becker's blog receives more than 500 individual visits each day and visiting the blog "is a ritual for information, insight and reflection of the topical issues permeating Chicago architecture," stated his nomination.

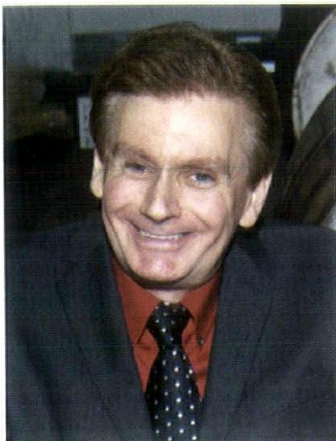
"As someone who's always thought of himself as the ultimate outsider, scribbling about Chicago architecture in a garret with a good internet connection, it's especially gratifying to me to be brought 'inside the family' with this award," said Becker.

> **Paul Knight**, a principal at the residential energy-efficiency consulting firm Domus PLUS, has worked extensively in low-income weatherization and affordable housing. "There weren't many architects in Chicago interested in residential energy

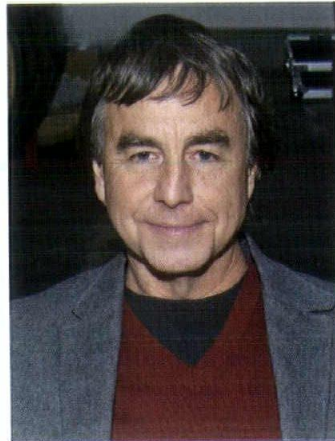
efficiency when I started here in 1977," Knight said. "That is certainly not the case today." He serves as the energy consultant to the Illinois Energy Affordable Housing Construction Program and provides training and technical assistance to the Illinois Low Income Weatherization Assistance Program. His nomination recognized that "Paul has influenced an entire generation of architects by educating us in terms of better practices, but his influence extends so far beyond the architectural community."

"I feel privileged to have been part of that growth and to have worked with so many outstanding architects willing to embrace energy efficiency as part of their affordable housing projects," said Knight.

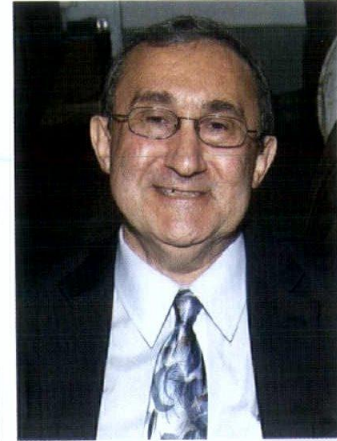
> **Vincent Paglione** spent 33 years as the associate dean with the College of Architecture and the Arts at the University of Illinois at Chicago. Paglione received the award for his service and leadership and his fostering of the profession to students at UIC. As the nomination stated, "his impact, service



Lynn Becker



Paul Knight



Vincent Paglione

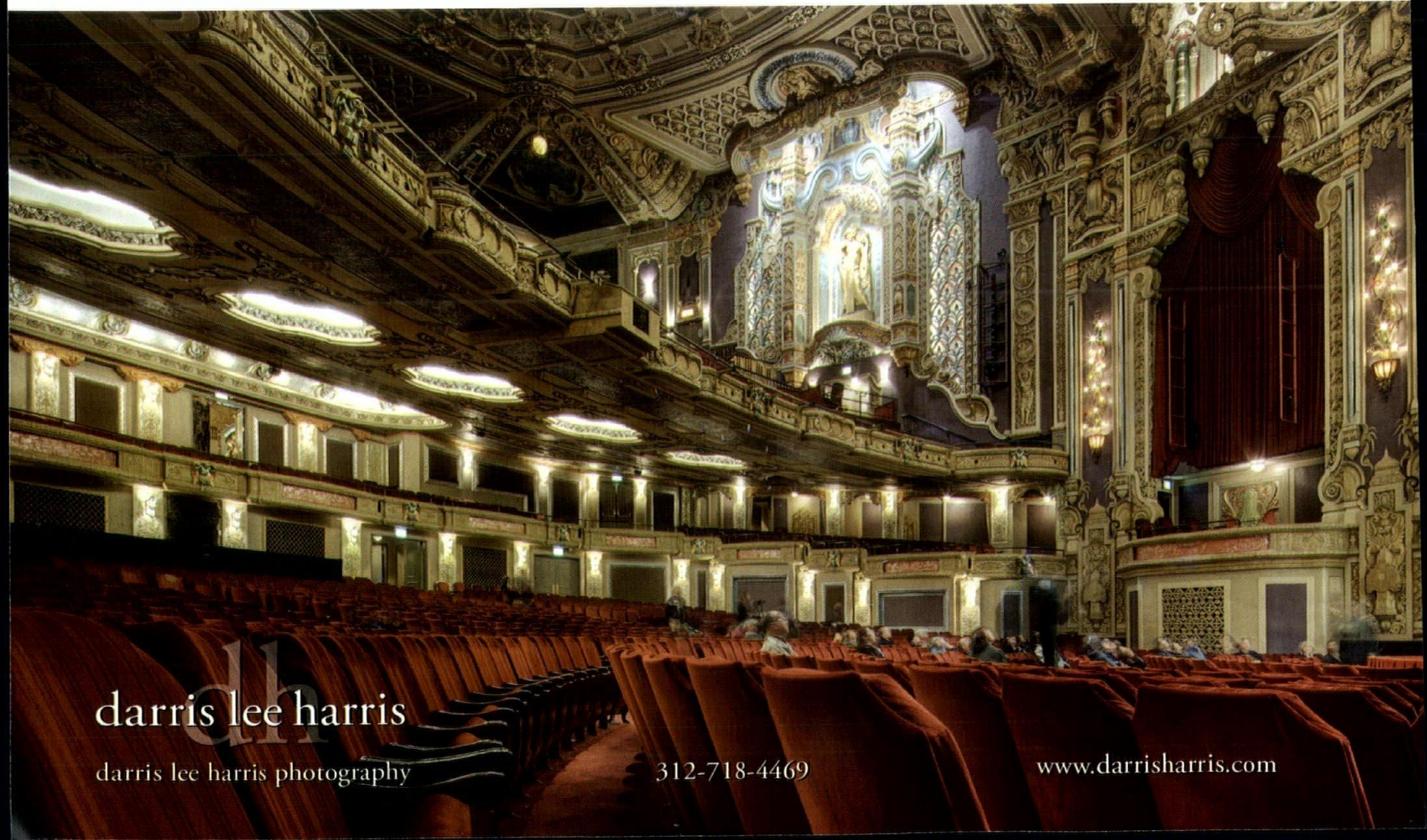
and commitment to students pursuing architecture and the arts has influenced the careers of countless individuals we will never be able to fully quantify or comprehend."

Paglione mentored many students over the years, winning mentor awards from INOMA, Project Osmosis and HACIA Scholarship Foundation. He created a number of

programs, including a summer architecture program for minority students and a Summer Institute for Architectural Theory.

"I am very humbled by the Chicago AIA Distinguished Service Award," Paglione said. "It has been an honor to support and work with architecture students, faculty and professionals." **CA**

Photos by Bill Grech, The Apple Group



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Chicago Lakeside Development

Skidmore, Owings and Merrill LLP was named as the Large Middle East Firm of the Year at Middle East Architect magazine's October ceremony in Dubai. The firm also had several other noteworthy achievements:

- > William F. Baker was honored as the magazine's Middle East Engineer of the Year, and Sheikh Khalifa Medical City was awarded the Institutional Project of the Year.
- > The Chicago Lakeside Development plan, designed in conjunction with Sasaki Associates and Antunovich Associates, won the first Sustainia Community Award. The master plan includes more than 15,000 residential units and more than 15 million square feet of retail, restaurant, commercial, institutional, and research and development space.
- > The 228,000-square-foot University of North Carolina Genome Sciences Building celebrated its grand opening in Chapel Hill, N.C. The eight-story building was designed as a center for interdisciplinary research and incorporates wet labs, dry labs and rooftop greenhouses.

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Pratt Design Studio completed the Loyola University Health System Emergency Department renovation.

Located on the north end of the Loyola University Medical Center in Maywood, the renovated 16,000-square-foot department was built while operating continuously. During the design phase, a one-half scale model of the department was created to enable the team to follow the staff, measure their typical steps and then analyze improvements in productivity based on the elimination of wasted movement.

GE awarded Chip von Weise, AIA, of von Weise Associates,

the contract to design its Midwest design center at LuxeHome in The Merchandise Mart. Von Weise Associates designed a space that features working kitchens for cooking demonstrations, as well as numerous other Monogram models throughout the showroom.

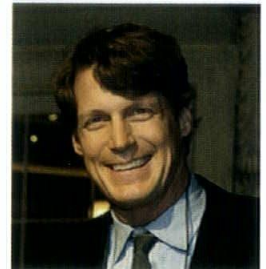


Photo © Anthony May Photography

Foster Dale Architects designed

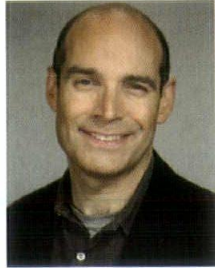
a satellite office space for Sylco, a software company based in Hoffman Estates, inside the iconic Inland Steel building.



Phil Enquist



Gwendolyn Wright



Geoffrey Baer



John Eifler

The Society of Architectural Historians (SAH) honored four individuals for outstanding work in the architectural community at an Awards Gala on November 10, coinciding with the 120th anniversary of SAH's headquarters, the Charley-Persky House. The awards were:

- > Excellence in Design, Planning and Sustainability: Philip J. Enquist, FAIA, SOM, for scripting the Vision for the Great Lakes & St. Lawrence River Region
- > Excellence in Architectural Media: Gwendolyn Wright and Geoffrey Baer for their work on educational television
- > Excellence in Architectural Conservation: John Eifler, FAIA, Eifler and Associates Architects, for continued restoration of the Charley-Persky House and work on greening historic structures

The Country Club Hills Wellness Center, designed by Harley Ellis Devereaux, was completed

in September. The new 77-unit, five-story apartment building is the first permanent supportive housing facility for South Suburban PADS (Public Action to Deliver Shelter).

> In other news of the firm, Paul Goldsmith, AIA, spoke at Greenbuild 2012 in San Francisco with General Motors and Chrysler. The session, titled "How the Auto Industry is 'Driving' Sustainable Manufacturing," took place on Nov. 15. The presentation showed how the automotive industry is proactively involved in the "greening" of its manufacturing facilities, and the bold steps it has recently taken in thinking "out of the box" to move both its buildings and its manufacturing process into the "green age."

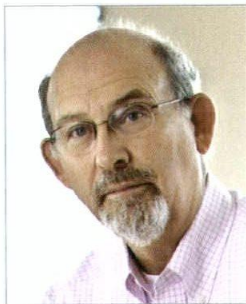


Photo © Thomas Drew

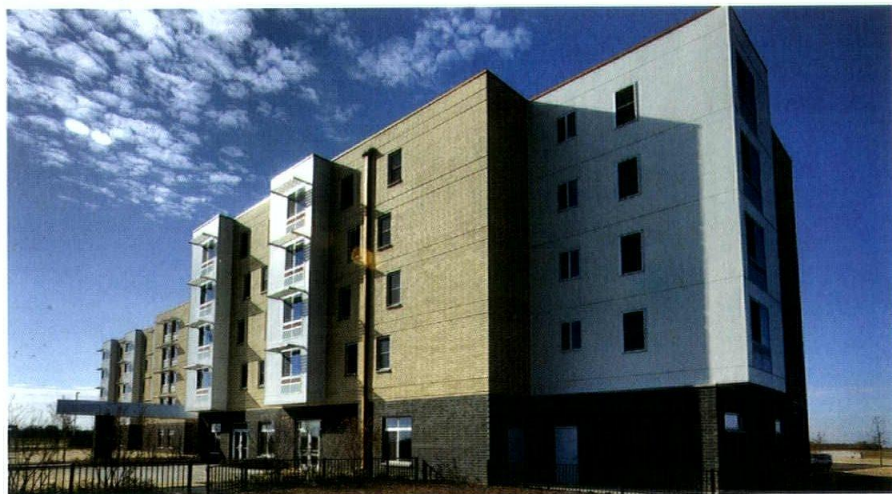


Photo © Albert Photographic Co. 2012



Pappageorge Haymes Partners announced

that the Pomeroy Senior Apartments in Chicago's Bryn Mawr district earned a Silver Award in the Best Renovation Category at the 2012 Multi-Housing News Excellence Awards, and a Bronze Award at the 29th Annual Building Design+Construction Reconstruction Awards. The Pomeroy Senior Apartments were renovated as part of the Chicago Housing Authority's Plan for Transformation.

In October, Adrian Smith + Gordon Gill Architecture

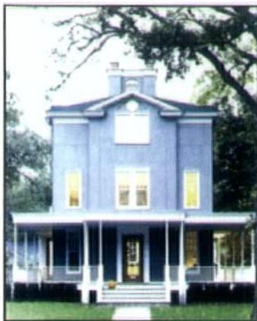
completed a master plan for Chengdu Tianfu District Great City, a self-sustaining, environmentally sensitive 1.3-square-kilometer satellite city on a 3-square-kilometer site outside Chengdu, China. The project will be completed in about eight years.



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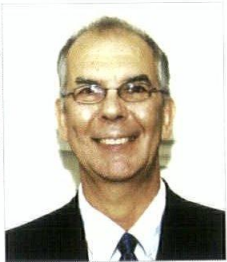
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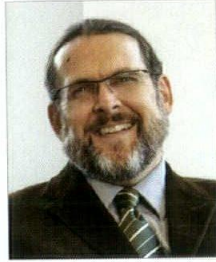
John Albrecht, AIA and Rand Ekman, AIA, were named to the 2012 class of LEED Fellows.

The LEED Fellow designation recognizes exceptional and long-term contributions to green building and significant professional achievement within the community of LEED professionals. Albrecht is Director of LEED Services for Sieben Energy Associates. Ekman is Director of Sustainability at CannonDesign.

Photo © Kevin Johnson



John Albrecht



Rand Ekman

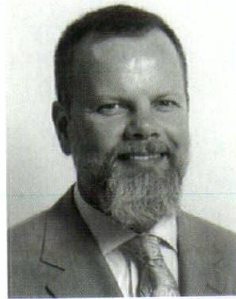


Photo © Michael Bäckström

Joakim Bäckström joined AltusWorks.

Bäckström brings more than 20 years of professional experience in retail and commercial design around the world, including the United States, Sweden, France and Canada.

Stuart Cohen & Julie Hacker LLC

had a kitchen featured in Trends magazine's Top 50 American Kitchens of 2013. Stuart Cohen, FAIA, and Julie Hacker, FAIA, also spoke at the Kitchen & Bath Industry Show, and participated on a panel with kitchen designers at the opening of The Merchandise Mart's LUXE HOME showroom.

Cohen and Hacker were also featured speakers and panelists in October at Reinvention 2012 in Chicago.

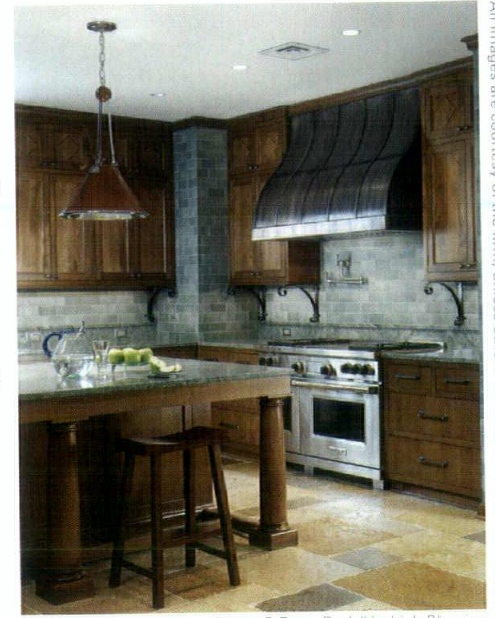


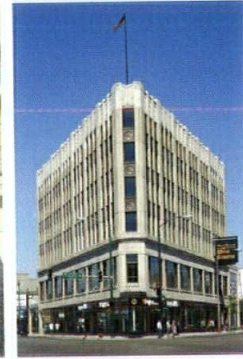
Photo © Dave Burk/Hedrich Blessing



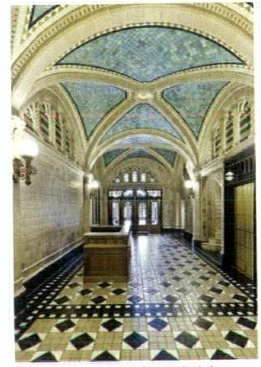
Goettsch Partners (GP) designed the new Poly Business Tower in Shunde, China. Totalling 110,000 square meters, the tower will be the tallest structure in the area, at a height of 200 meters, and will be a centerpiece of the business district. Completion of the development is scheduled for 2014.



Technology Business Center



Hairpin Lofts

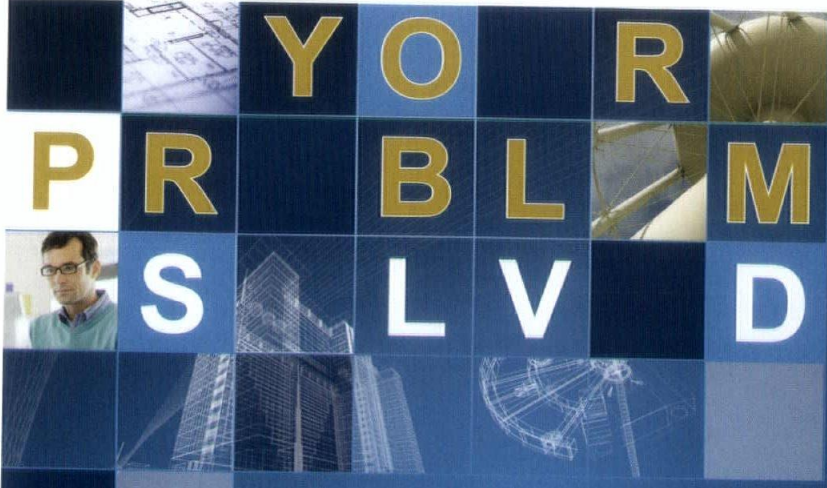


Monroe Building lobby

Landmarks Illinois honored nine Illinois preservation efforts

- with The Richard H. Driehaus Preservation Award. The awards honor work that demonstrates a commitment to excellence in historic preservation. The award winners are:
- > Monroe Building, Chicago (Holabird and Root)—Project of the Year for Restoration
 - > Enos Park Home Renovations, Springfield (Fletcher Farrar)—Joe Antonovich Award for Leadership
 - > Edgar County Courthouse, Paris (Wiss, Janney, Elstner Associates)—Restoration
 - > Hairpin Lofts, Chicago (Brinshore Development LLC)—Rehabilitation
 - > House of Four Winds, Lake Forest (Bill and Lyn Redfield)—Stewardship
 - > Incubator South and Technology Business Center at IIT, Chicago (LCM Architects)—Adaptive Use
 - > Texaco Station, Decatur (Bruce Nims)—Adaptive Use
 - > Ullin Depot, Ullin (Village of Ullin, Ullin Civic Club and Bill Echols)—Rehabilitation
 - > World's Largest Catsup Bottle, Collinsville (Catsup Bottle Preservation Group)—Advocacy

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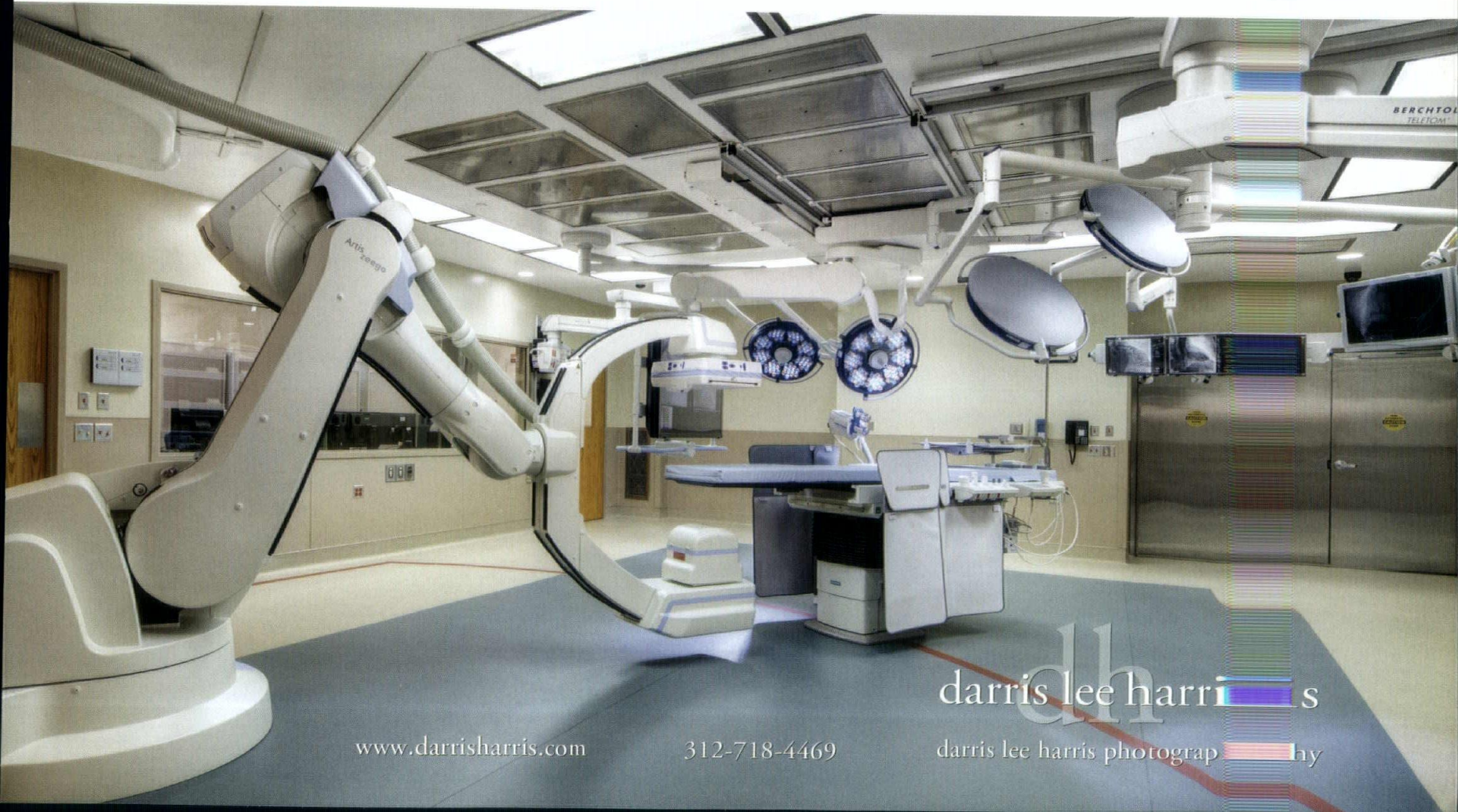
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It's Not Just Prentice

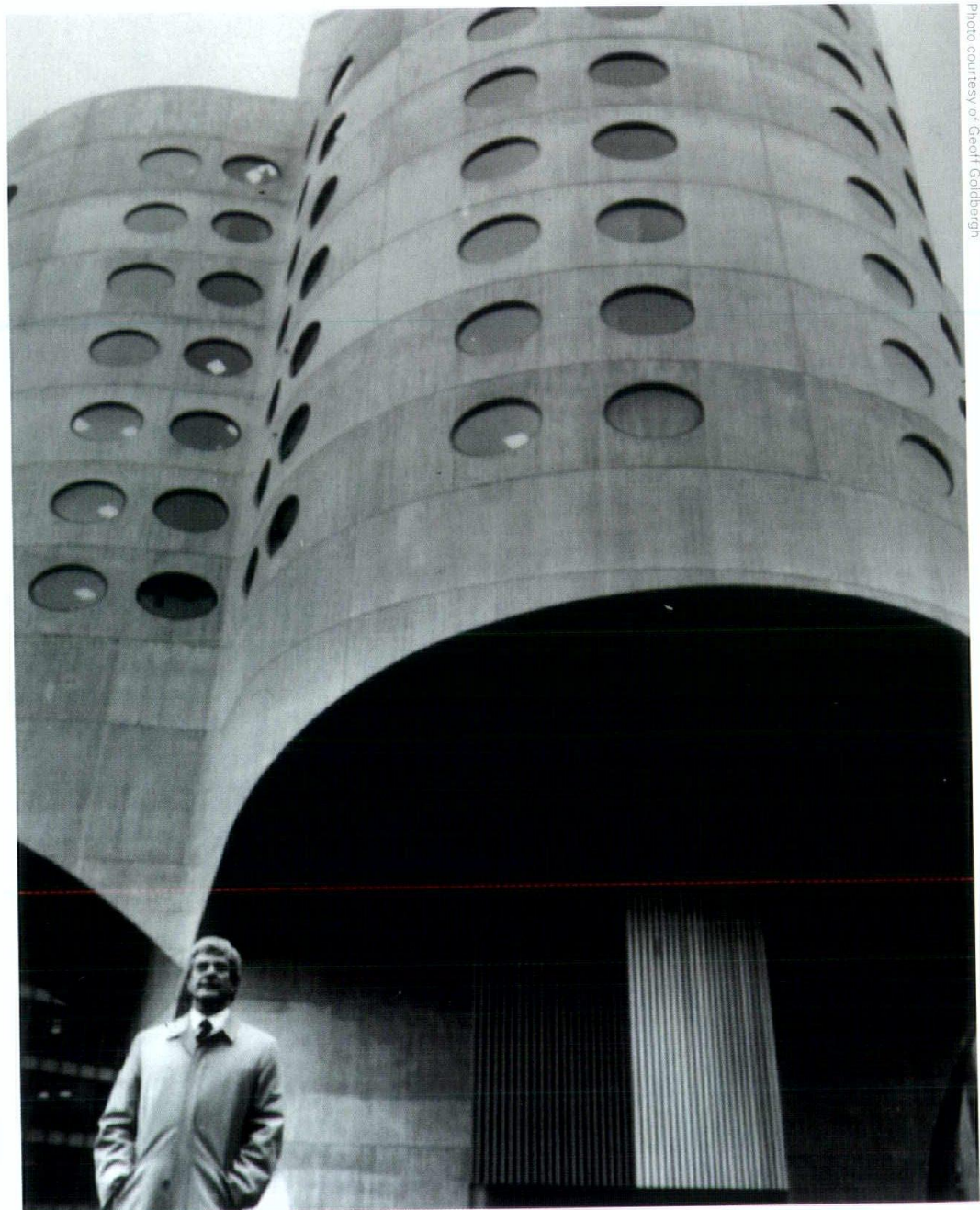
THE NORTHWESTERN ENTITIES SHOULD EXPLAIN THEIR PLANS

By Philip Enquist, FAIA

Chicago is on the verge of losing a contemporary, innovative architectural landmark. The Bertrand Goldberg-designed Prentice Women's Hospital was one of the first buildings designed using computer technology—to our knowledge the only building in the world with its type of cantilevered concrete shell structure—and a visible landmark that is known around the world.

It is a casualty of a short-sightedness by the property's long-time owners, Northwestern University and Northwestern Memorial Hospital. Together, these two closely related institutions control a lot of land—much of which is now vacant—in the Streeterville neighborhood. Last fall, the Commission on Chicago Landmarks voted for preliminary designation of Prentice Women's Hospital as a Chicago Landmark—only to rescind its recommendation just over two hours later, based on a report by the city's Department of Housing and Economic Development. Contrary to that report's implications, there is no public Long Range Plan for growth that determines why it is necessary to tear down this landmark building. A master plan as part of a public planning initiative is desperately needed to show the Chicago community what is or may be coming down the road—for this site and for all of Northwestern's extensive real estate holdings in the area.

These university institutions should be smart. An effective use of their land can ensure connectivity between research buildings and allow the preservation of landmark facilities. It can also allow for greater public open space in Streeterville,



Bertrand Goldberg, FAIA, stood with his newly completed Prentice Hospital for a photo published in *Modern Healthcare* in March 1976. The original photo was shot by Bina Sanghavi for *Modern Healthcare*; this copy is courtesy of Geoffrey Goldberg, the architect's son.

one of Chicago's densest neighborhoods. Northwestern has argued effectively that the old Prentice Hospital cannot be retrofitted into a state-of-the-art wet lab research building. However, it can be renovated into any number of Class A uses compatible with the university's needs and mission, such as:

- a boutique hotel
- a mixed-use dry lab and office
- a home to a significant research institute
- a medical office building
- a long-term stay family residential building

This is a campus issue, not a building-by-

building issue. There are extensive land holdings with great institutional uses and no visible master plan.

Northwestern University could be seen as a leader in the region if it could anticipate growth and save the Prentice Women's Hospital. This is an opportunity for smart planning rather than the piecemeal decision-making that has been their recent *modus operandi*.

They need to step up to the plate and lead. **CA**

Philip Enquist, FAIA, is a partner at Skidmore Owings & Merrill LLP.

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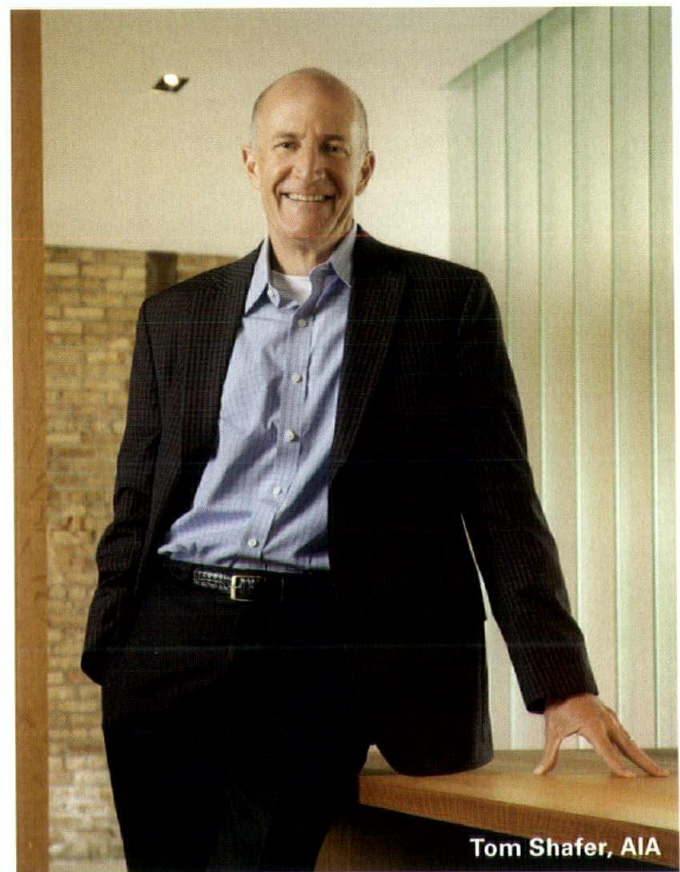
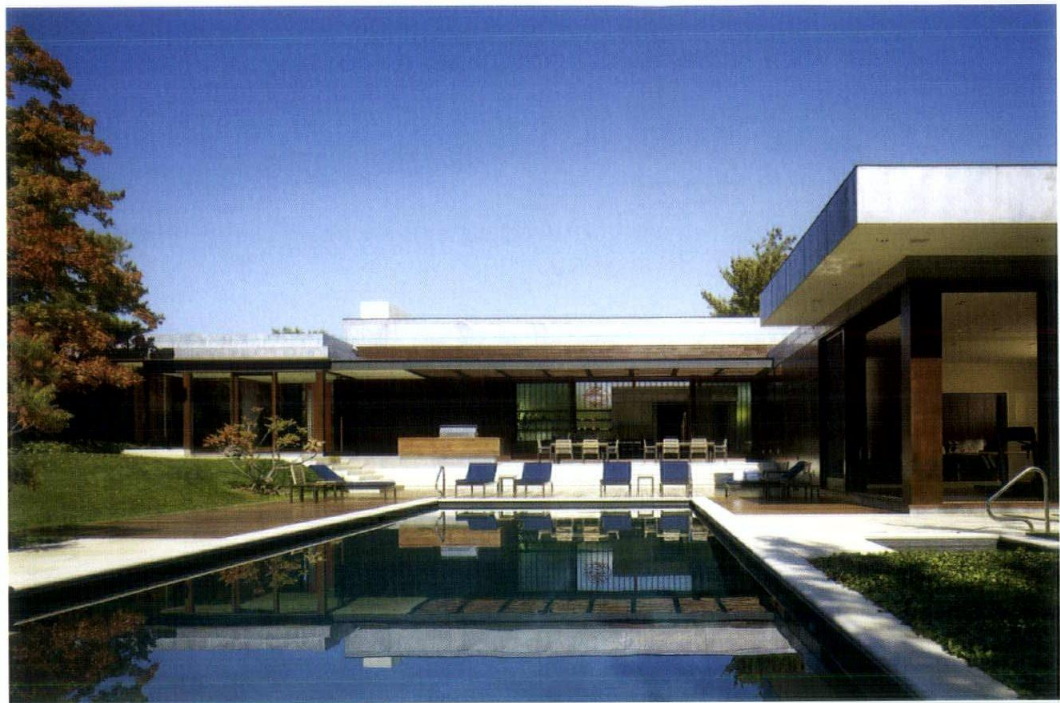
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Tom Shafer, AIA

MODERN FAMILY

IN LONG GROVE, TOM SHAFER
CREATES A LUMINOUS GATHERING
PLACE FOR THREE GENERATIONS

By Dennis Rodkin

Architectural Photography by Steve Hall © Hedrich Blessing
Tom Shafer Photo by Darris Harris



SEVERAL YEARS AGO, A COUPLE DECIDED TO TEAR DOWN AND REPLACE THE OVER GROWN COTTAGE THAT STOOD ON THEIR PLACID FIVE ACRES OVERLOOKING A LONG GROVE GOLF COURSE.

Like so many vintage homes, the cottage was a series of rooms, each of which was meant for a different purpose—a layout that, if it's out of sync with modern family living in general, was even further off from what the family needed on this site.

City residents, they used the Long Grove property primarily as a weekend place, where they could gather with their children and grandchildren to cook, swim, golf and bask in each other's company. Clearly, a divided-up floorplan was at odds with that use.

The replacement, designed by architect Tom Shafer, AIA, and completed within the past two years, is a handsome, thoughtfully detailed vessel for the way the three generations of family come together in Long Grove. In essence, it's a large, glass-walled pavilion where everything social happens—cooking, dining, lounging, watching kids in the pool—or where family members can just gaze out onto the natural landscape. And, oh yeah, there are some bedrooms attached.

But to boil it down to the essence that way is to overlook the home's extraordinary presence. On approach, it presents a dramatic profile: a story-and-a-half section whose face is vertically stripped channel glass, and next to it, a single-story section pierced by a huge pivoting red door and alternating panels of clear glass and dark wood that wrap the sides and rear. Running across the top is a metal-wrapped cornice that seems to rest like a lid atop the interior spaces. Out back, where the home and pool meet, a deep brise soleil extends over terraces.

1. The horizontal plane of the swimming pool doesn't only define the composition in photos; it was the focal point around which the home was designed (although the existing pool wound up being replaced). Complementary roof planes, dark woods inside and out, and Shafer's characteristic design rigor create a unified character.

2. Viewed on approach, the house displays its material palette and its organization. The taller section at left, walled in channel glass, is for a bigger, livelier aspect of life: family gatherings. The one-story pavilion at right is for more intimate life: a bedroom.



Nearly as simple as the home's program is the material palette that Shafer used. The major materials are lead-coated copper, channel glass, mahogany, steel and architectural concrete. They're Shafer's go-to materials, the components of a crisp-edged but warmly textured modernism that imbues the homes he designs for clients, mostly on the North Shore.

"These are materials that are simple, very honest and very modern," says the low-key Shafer. "Steel is steel and concrete is concrete."

The palette suited the client, who says the last thing she needed "was a French colonial. I wanted something that is pretty consistent with what's around it in the landscape. We wanted the land to dictate what we built."

That's where the large front wall of channel glass comes in. Because it would be set near the middle of five acres rather than in an urban setting, "we could make this room very ethereal, open [without] a front and back." There's such a thing as taking openness too literally, though, and while the front wall didn't need to be opaque to block prying eyes, some degree of screening was called for.

While it's used often in commercial projects—including the Evanston office of Shafer's firm, Grunsfeld Shafer Architects—channel glass is less familiar in residential structures. Shafer had used it in several homes and believed it would suit this one well. "It provides an incredible luminosity in the house, and at night when you're in there and people drive up," he says, "you see the lights

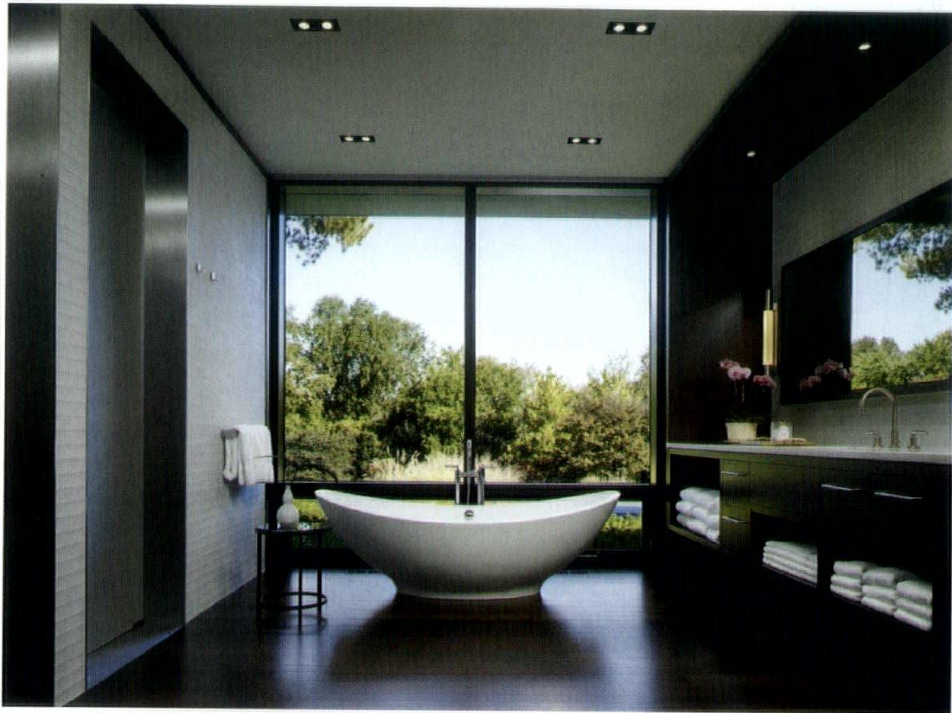
glowing outside. It's a [non-intrusive] signal that your guests have arrived. It makes the house feel that much more transparent, but there's still privacy."

The client admits she was reluctant at first. "I was nervous," she says. "That wall was going to have the television and the bookshelves. Were you going to see all that in shadow from the outside? That would make me crazy."

It's a testament to Shafer's agility with clients that he both reassured her that people outside wouldn't see a cluttered façade and, in a subtle way, played directly to her fear. Inside the great room, steel shelves run across the glass, their lines distinctly visible from outside. On these shelves, the clients place vases and books whose profiles are plainly visible from outdoors, and yet rather than look junky, the objects look like hints of the life that's going on indoors.

Those shelves serve an important programmatic purpose. One way to make guests feel at home would be to put everything they might be looking for in the open kitchen—bowls, plates, coffee mugs—out where they could be found easily. These shelves make that possible in an artful way, and at the same time enliven a wall of glass that is 16 feet tall.

It's a genial touch that the client says communicates the home's warmth. While she's a longtime fan of modernism—she grew up in a North Shore house designed by Shafer's late partner, Ernest Grunsfeld III, FAIA—she's seen her share of homes in the style that



2



3

1. The living, dining and kitchen areas are together at the center of the home, their openness not only a design decision but a reflection of the family's use of the home: this is a weekend place where three generations gather to spend time together. Shafer's material palette creates a warm, lively container where that can happen.

2 & 3: The richness of the wood in the master bath and bedroom holds up to the rooms' strong lines and expansive views.

DRAWING STRENGTH

Tom Shafer's career has included stops at many prestigious institutions and firms, including Harvard University's Graduate School of Design, what's now Machado and Silvetti in Boston (when the firm had a different name), and both Krueck + Olsen (now Krueck + Sexton Architects) and Murphy/Jahn (now JAHN), not to mention his collaboration with the esteemed Ernest Grunsfeld III from 2001, when they merged their firms, until Grunsfeld's death in 2011.

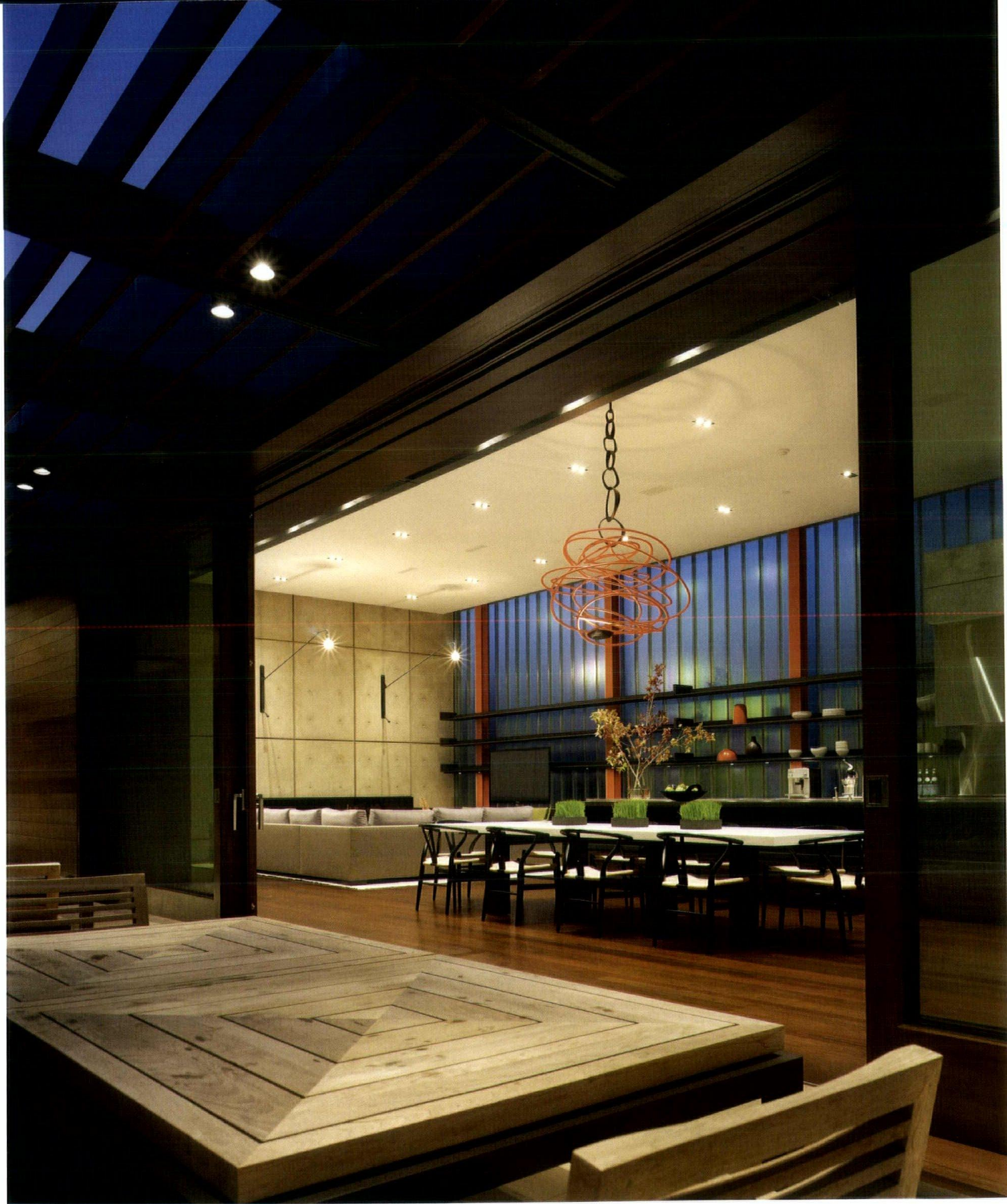
Of them all, Shafer says the one that may have done the most to set the tone of his career was a mid-1980s stint at Kohn Pedersen Fox in New York. Having unsuccessfully applied to several big firms, he landed an interview with Bill Pedersen. "Can you start tomorrow?" Pedersen asked at the end of the interview, and Shafer says that in the course of 3.5 years in the firm, he found Pedersen "a consummate gentleman, a Midwesterner at heart and a lovely human being."

Early on, Shafer was a design assistant for a highrise project in Cincinnati. He played around with ways to make the drawing—which was to be about five feet tall—look sharp, and hit on running the paper through a blueprint machine to give it a dark brown background. He then rendered the building in silver, prisma color and black.

At some point, Bill Pedersen happened to take a shine to the drawing style. Just about the time another version was done, Pedersen told him that a prominent gallery had asked him for a drawing to contribute to a charity auction.

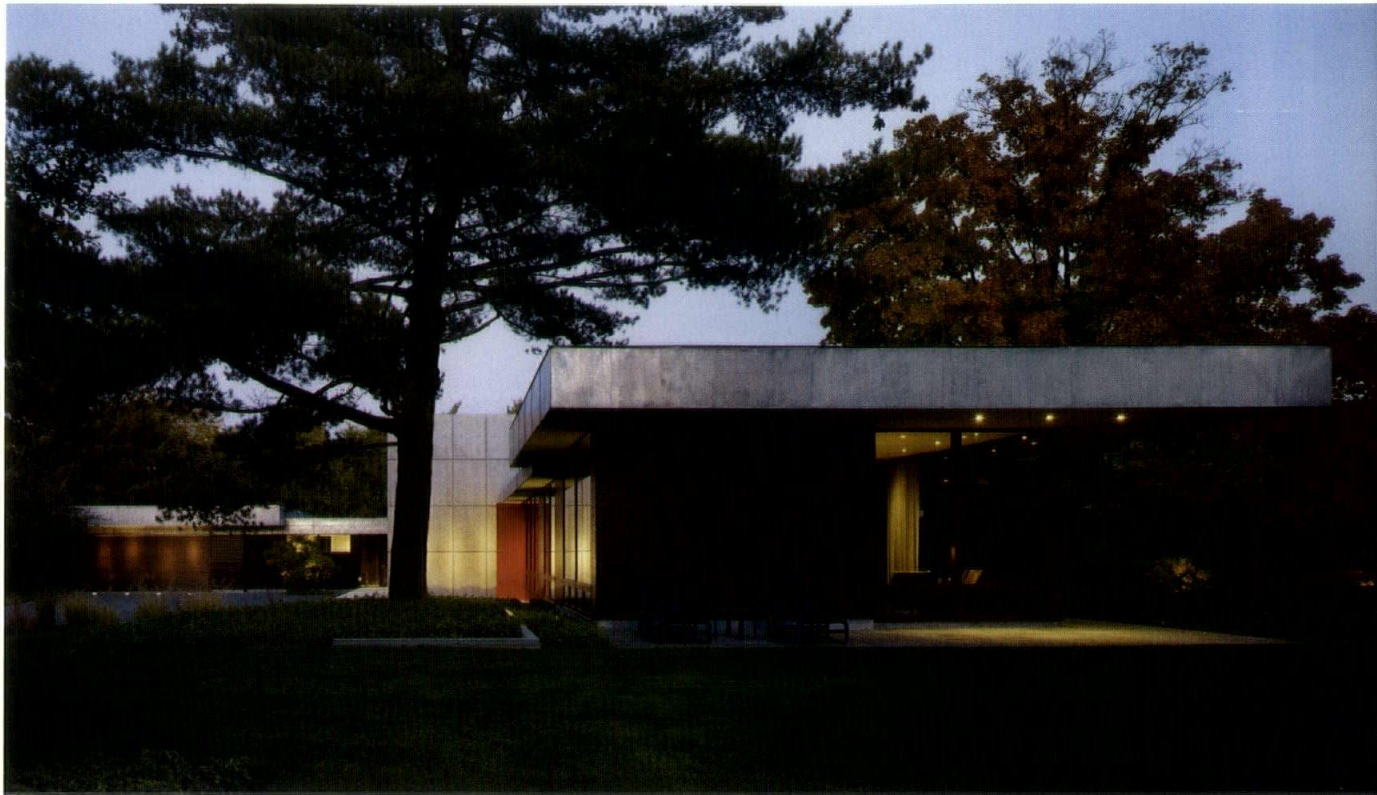
Dutifully, Shafer offered to hand over the drawing to be signed by Pedersen. But the senior architect declined, insisting that his young staffer sign it. Pedersen added his signature as seal of approval, and passed it along to the gallery.

"It was that kind of respect Bill showed for me, this plebe, this grunt in his 20s," Shafer said. "It made me feel great, and it taught me that architecture can be a gentlemanly profession. It doesn't have to be brash, to be about ego and all about you."



1. Sliding doors and a brise soleil ensure that in comfortable weather, family life can spill from indoors to out and back again comfortably. The long, slim shelves along the channel glass wall are also in part about comfort. The owners can put anything a guest might be looking for in reach on the shelves, eliminating worry about prying into the hosts' cabinets.

2. A long cantilevered roof, wrapped in lead-coated copper, creates a sense of shelter for the outdoor space adjacent to the master bedroom.



sends off a chill. Shafer's work for her and her husband has the opposite effect, she says, because of the material palette. "You see the wood on the outside going to the inside," she says, "and you have the texture of that lead-coated copper."

To say that Shafer wrapped the cornice in metal is to under-sell the move he made there (and on other homes). Over time, lead-coated copper patinas in a way that he describes as "furry or soft." The patinated cornice over the entrance to Grunfeld Shafer is starting to suggest velvet, and if it were just a little lower, passersby would probably be reaching out to run their fingers through it.

Shafer is a big proponent of the tactile experience in a home. "We try to impress on clients that anything you can touch in the house, you should really spend the money on," he says, referring to such things as door and cabinet hardware. "If it's a light switch, when you touch it you're going to know if it's substantial. It should redound of being high-quality, solid stuff."

In the Long Grove house, he says that rule extends to the wall over the fireplace, although nobody's going to have much reason to touch it. "You're seeing the quality of that, not literally touching it but [taking] it in, and if it were just drywall you were seeing, it would be a whole different thing."

Shafer's wife, Kathy, the firm's CFO, believes that because of the projects he's done with his preferred materials, "people on the North Shore are beginning to understand that a modern home doesn't have to be cold. They look at his work and say, 'Oh, it can be modern and be pretty.'"

There's no missing the beauty of the Long Grove home's pool side. The home was sited expressly to have it embrace an existing swimming pool (although ultimately the pool got replaced, too). And it's a very affectionate embrace. House and pool are knitted together with dark woods, mahogany and Brazilian walnut (aka ipe), that make up the door and window framing, the brise soleil, some exterior wall panels and the pool decking. A similar effect comes from the large sliding doors that tuck into wall panels to wipe out any boundary between indoors and out.

Inside, doors are used instead to define boundaries. "While this is a welcoming house, it's not necessarily carte blanche for you to go anywhere you want in it," Shafer explains. He carefully delineates the large public space from the private bedrooms, in part by the placement of doors. When people enter, he explains, the big vermilion door—a 10-foot square that pivots to open and close—essentially points them down the few steps to the great room and blocks their view to the master suite. On the other end of the great room, the passageway to the three bedroom suites is obscured in a similar way. "You can tell where you're allowed to go and what's off limits without a lot of arrows painted on the floor," he jokes.

Not that anybody is likely to wander far afield from the centerpiece of the home, the great room. As the client says, "The room does exactly what we needed. It's visually the most beautiful and physically the most comfortable part of the house, and everybody wants to be here." **CA**

poetic cities

A CITY-DESIGN PROJECT IN INDIA SHOWS HOW ARCHITECTS CAN CREATE AN URBAN ENERGY ECOLOGY

By Peter Ellis, FAIA

IN EUROPE, THE DESIGN OF BUILDINGS AND THE CITY IS A SINGULAR PURSUIT. There is little specialization between the architect and the urbanist. Throughout my career, I have always been interested in designing both buildings and the city, and therefore have designed projects such as Philips Electronics Headquarters in Amsterdam and the new commercial city center of Potsdam, Germany. I truly enjoy working at all scales. Over the years, I have come to appreciate the interrelationship of all building and urban systems. I now imagine cities as living organisms that fuse nature and the built world into a single urban ecology that sustains our resources and generates energy. We can create a healthier and better urban life.

I have recently returned from India, where I spent the better part of the last two years designing a new city for one million people about 30 miles south of New Delhi on the new toll road to Agra, site of the extraordinary Taj Mahal. After the initial master plan, which I completed

together with Phil Enquist, FAIA, and Richard Wilson, Assoc. AIA, while at SOM, I formed my own group, Peter Ellis New Cities, to take the plan forward, to the detail design of boulevards, transit, utilities, parks, neighborhoods, and residential and commercial buildings. Our entire team lived in India for three months out of every four, designing the city around us, staying one step ahead of the bulldozers.

Our client is a most extraordinary man, Jaiprakash Gaur. Now in his mid-80's, he founded the Jaypee Group, built and owns major hydroelectric dams in the Himalayas, and is the largest supplier of electrical power to India. He went on to build and finance the recently opened toll road to Agra, for which the government gave him extensive tracts of land. Here we are building Jaypee Sports City, which is 100 percent privately financed by the Gaur companies. This is unique among global cities. The private sector, not government, is financing, building and managing an entire city.

My intent here is to describe what we were able to achieve, and to



This aerial image shows the downtown center of Jaypee Sports City. The boulevard is now under construction.

discuss its relevance to cities in the U.S. India is experiencing significant global warming, with an average temperature increase of 5 degrees Fahrenheit and severely depleted aquifers. There is a sense of urgency that is giving birth to enlightened environmental strategies.

First of all, it is absolutely imperative that we design systems to retain the monsoon rains, channel them to the aquifers, and thereby balance supply and demand to ensure sustainable quantities of potable water. This led us to create an extensive, interconnected network of parks that capture storm water, and also provide a continuous system of pedestrian and bicycle ways tying the city together. The park network is, in fact, the fundamental organizational structure for the entire city.

Furthermore, we placed the major public transit lines and stations within the parks on a dedicated right of way in order to bypass vehicular traffic. This brings people into the parks, activates them and offers attractive, efficient service. Given the great heat of India's

northern plains, we oriented the parks and streets parallel to the prevailing winds, which goes a long way to cool the city at night. They are the lungs of the city.

The Water-to-Waste-to-Energy Cycle

The green network is the foundation for the urban utility network. First of all, the parks are the conduit for storm water, not in pipes but through bioswales that direct water to lakes or to aquifer recharge zones. Groundwater is then pumped to water treatment plants located in each neighborhood. Here we co-locate the wastewater treatment, the electrical substation and district cooling systems.

Potable water is pumped to each building, and after use returns to the wastewater treatment plant, where it is cleaned and then recycled as greywater. The solids are processed in an anaerobic digester, yielding methane gas, which is directed to the substation to drive turbines that generate electricity. Heat from the digestive process



Jaypee Sports City's first permanent lake is now under construction.

generates steam to drive absorption chillers for district cooling.

By linking water, waste and energy, we will be able to save 50 percent of the water and 20 percent of the electric power for the entire city.

Finally, one also gets very good fertilizer to sustain the parks. To our surprise, the most promising source of renewable energy was not the sun or the wind, but human waste.

Water-to-waste-to-energy systems have significant potential for established urban areas, and some U.S. cities are already heading down this path. San Francisco has built a waste-to-energy plant that harnesses methane gas sufficient to power itself and supply electricity to the city grid. Milwaukee combines methane from a landfill site and from its sewage treatment to offset its power needs. Furthermore, all forms of organic waste can be processed to generate power.

A vision for Chicago

The great lesson of our project in India is the unity of all urban systems. The green network is the water supply, is the waste to energy systems, is the pedestrian, cycle and transit systems, is the structure and the beauty of the city.

Starting with Daniel Burnham, Chicago has built a great network of parks. However, we should understand that the lakefront and the emerald necklace of connected parks and boulevards is only a beginning. As UrbanLab proposed in their insightful project "Growing Water,"* we should now extend the park network to every neighborhood, using every available right of way, green streets and green alleys, knitting all together in a fine net to capture storm water and to unite our entire city with green bicycle and pedestrian

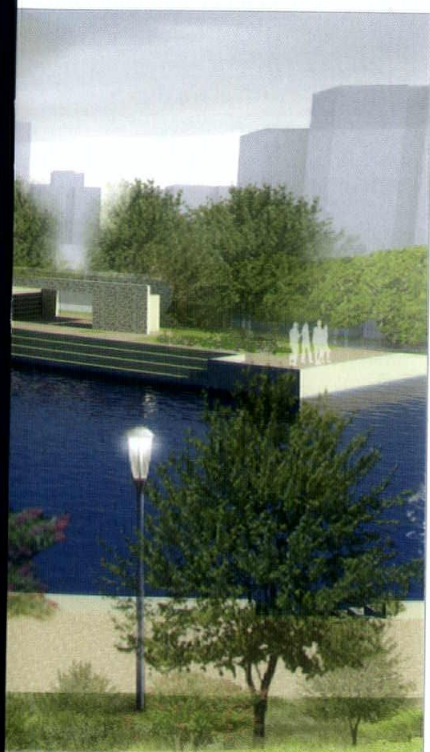
pathways. While retaining storm water in our parks, we can alleviate the burden of storm surge on our 19th-century combined waste and storm water sewers.

Furthermore, we should plan over the long term (as India demonstrates) to decentralize our wastewater treatment from large, centralized plants to smaller, more efficient, distributed neighborhood systems. Here we can clean and recycle our water locally. In addition, the neighborhood center can process all organic waste from homes, offices, shops, restaurants and markets. Through the natural process of anaerobic digestion, all waste can be converted to energy to power the city. We can save significant quantities of water and energy in Chicago and in all of our cities, and thereby decrease our use of fossil fuels. Furthermore, a continuous network of parks fuses nature with the city to profoundly improve the quality of our urban life. We can create a new urban energy ecology.

We have come a long way as architects to create a more poetic modernism. Now we must go beyond individual buildings to create poetic cities. It is through the command of the urban scale that we will make significant progress in sustaining our natural environment. We must have the courage to lead. **CA**

Peter Ellis, FAIA, spent much of his career as a partner at Skidmore, Owings & Merrill before establishing his own practice, Peter Ellis New Cities. He has now merged his team with Cannon Design to create a global city design practice.

**In 2009, UrbanLab won the AIA College of Fellows Latrobe Prize, a \$100,000 award that helped fund "Growing Water."*

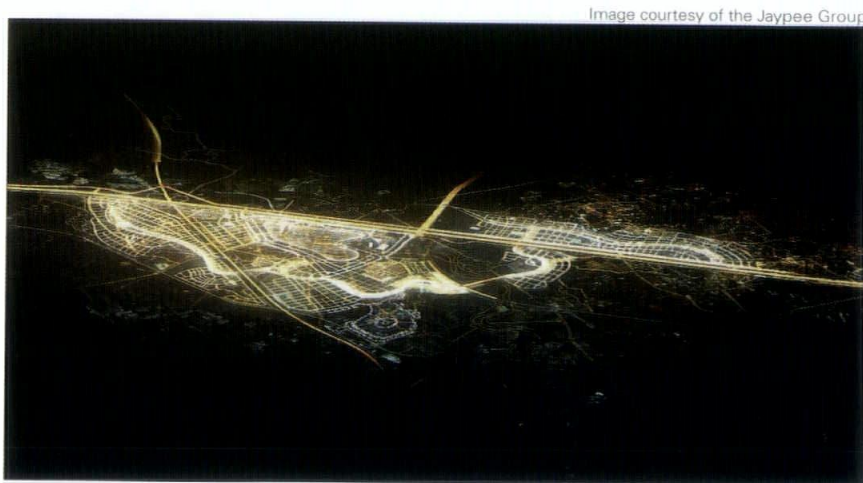


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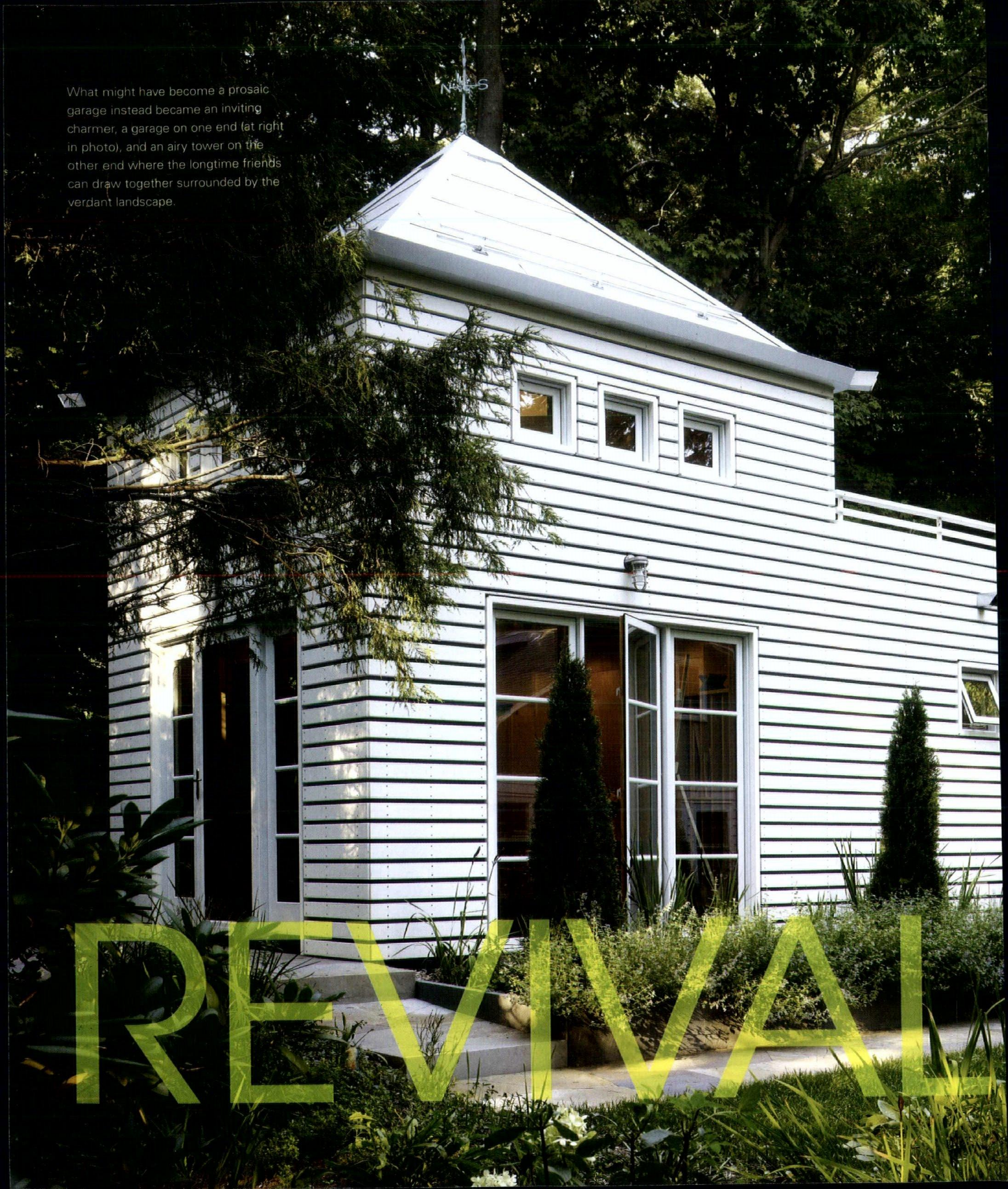
1. An aerial image of the boulevard park
2. A public park in the villa district
3. Jaypee Sports City at night. The brightest curving band is the boulevard running through the city.



3

What might have become a prosaic garage instead became an inviting charmer, a garage on one end (at right in photo), and an airy tower on the other end where the longtime friends can draw together surrounded by the verdant landscape.

REVIVAL





A GARAGE-CUM-STUDIO SPEAKS TO ITS VINTAGE NEIGHBOR AND REVIVES ITS CREATOR

Story by Lisa Skolnik

Photography by Steve Hall © Hedrich Blessing

FORGET LAUGHTER. WORK WAS THE BEST MEDICINE WHEN STANLEY TIGERMAN, FAIA, had a heart attack in 2010 and slogged through six surgeries during a three-month hospital stay. While he was buoyed by the visits of his family and close friends, it's not a long stretch to say he was revived by a sweet little project in Lakeside, Mich., for his long-time friend, interior designer Eva Maddox, principal at Perkins + Will.

The magical structure that stemmed from his ordeal had pedestrian origins as nothing more than a garage.

"Stanley was in the hospital, and ostensibly on his deathbed, so my husband Lynn and I visited him regularly," explains Maddox. "One day, when Lynn was there alone, he mentioned that we were finally going to go ahead with a little project we'd been considering for years, to replace our cottage's crumbling garage. We decided to hire a local architect to do the plans, but Stanley literally raised himself up in the bed and told Lynn 'I want to do it.'"

When she first heard the tale from her husband, "I was incredulous," Maddox chuckles. "He was in such bad shape that I assumed he was delusional. But a few days later, I went to visit him and the first thing he said when I walked in his room was, 'I'm doing your garage.' So I said, 'Okay, Stanley. When you can hold a pencil.'"

When Maddox visited Tigerman a few weeks later he surprised her by announcing that he had some drawings to show her, she recalls. It was the first rendition of the



Small as it is, the drawing studio soars. The exterior (left) rises above the low-slung bungalow with which it shares the property. The interior (right) is light and bright, sheathed in construction-grade maple finished with a clear coat of varnish.

structure, “designed while I was still in bed, and a little too far-out,” Tigerman admits.

In truth, it was more life-affirming than far-out. Tigerman had added a new and welcome wrinkle to the project with an art studio for Maddox. “I told her, ‘I’m building you a studio too because you need it for your art,’” Tigerman says.

The renowned architect’s enthusiasm for the little project may have had a drop of self-interest. He and Maddox draw and paint together when they travel as couples with her husband and Tigerman’s wife, architect Margaret McCurry, FAIA, and have sketched their way through exotic locales in India, Bangladesh, Morocco, Jordan, Germany and more. An art studio in Lakeside, where Tigerman has a neighboring home, would give the friends a venue to draw and paint together more frequently, and on their own turf.

Maddox and Tigerman have also collaborated frequently over the years, most notably on Archeworks, the multi-disciplinary design school that they founded. So “when I did this little structure, I knew exactly what she needed,” Tigerman maintains.

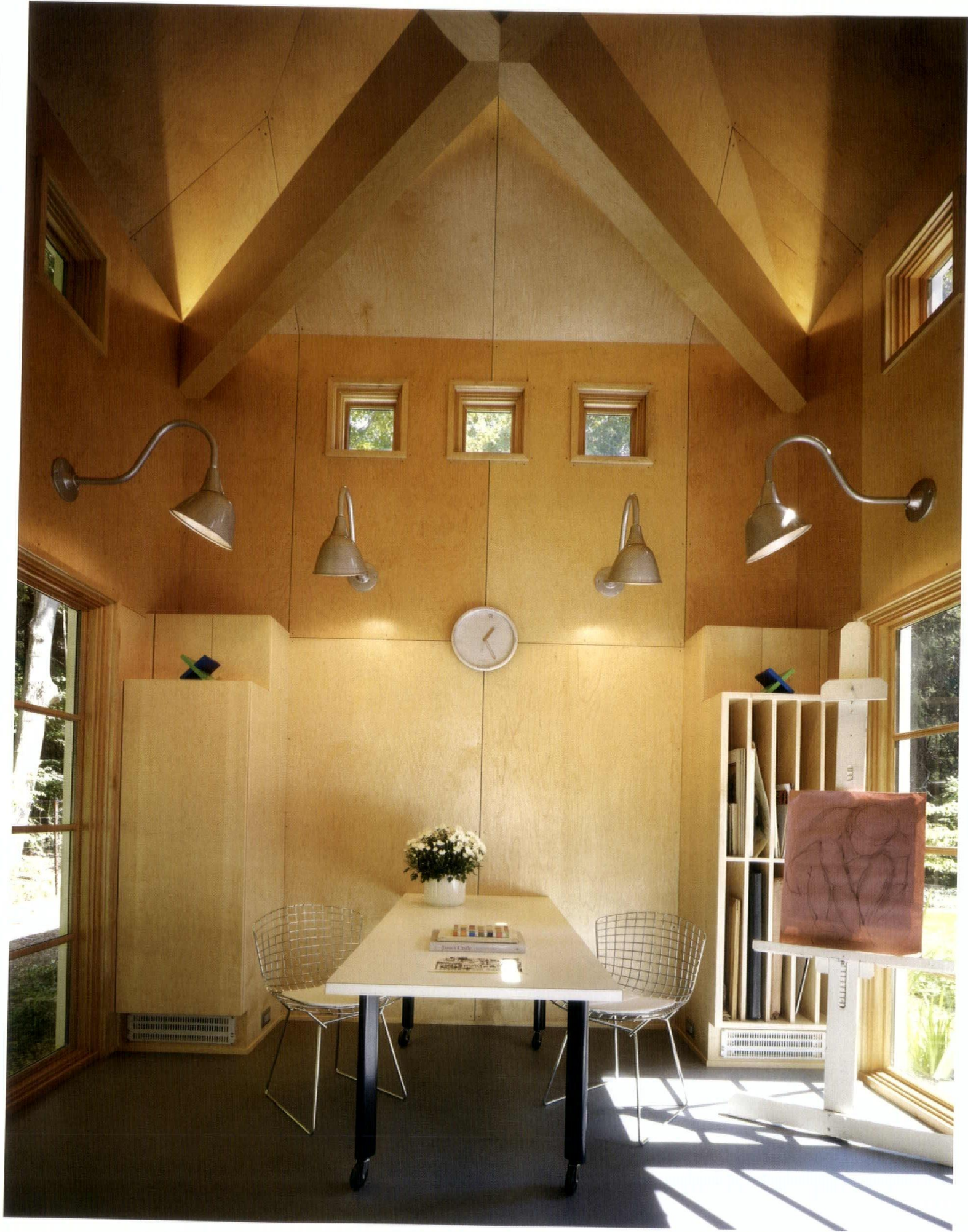
Still, a critiquing process followed where Tigerman and Maddox went back and forth to polish the design and adapt it to code. It

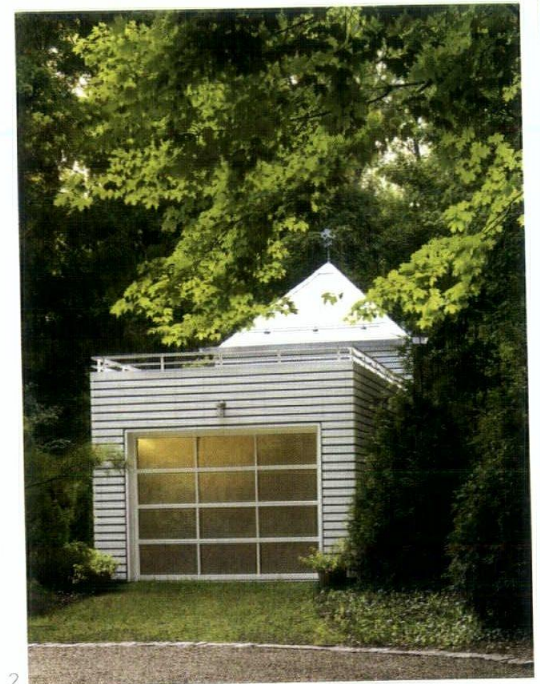
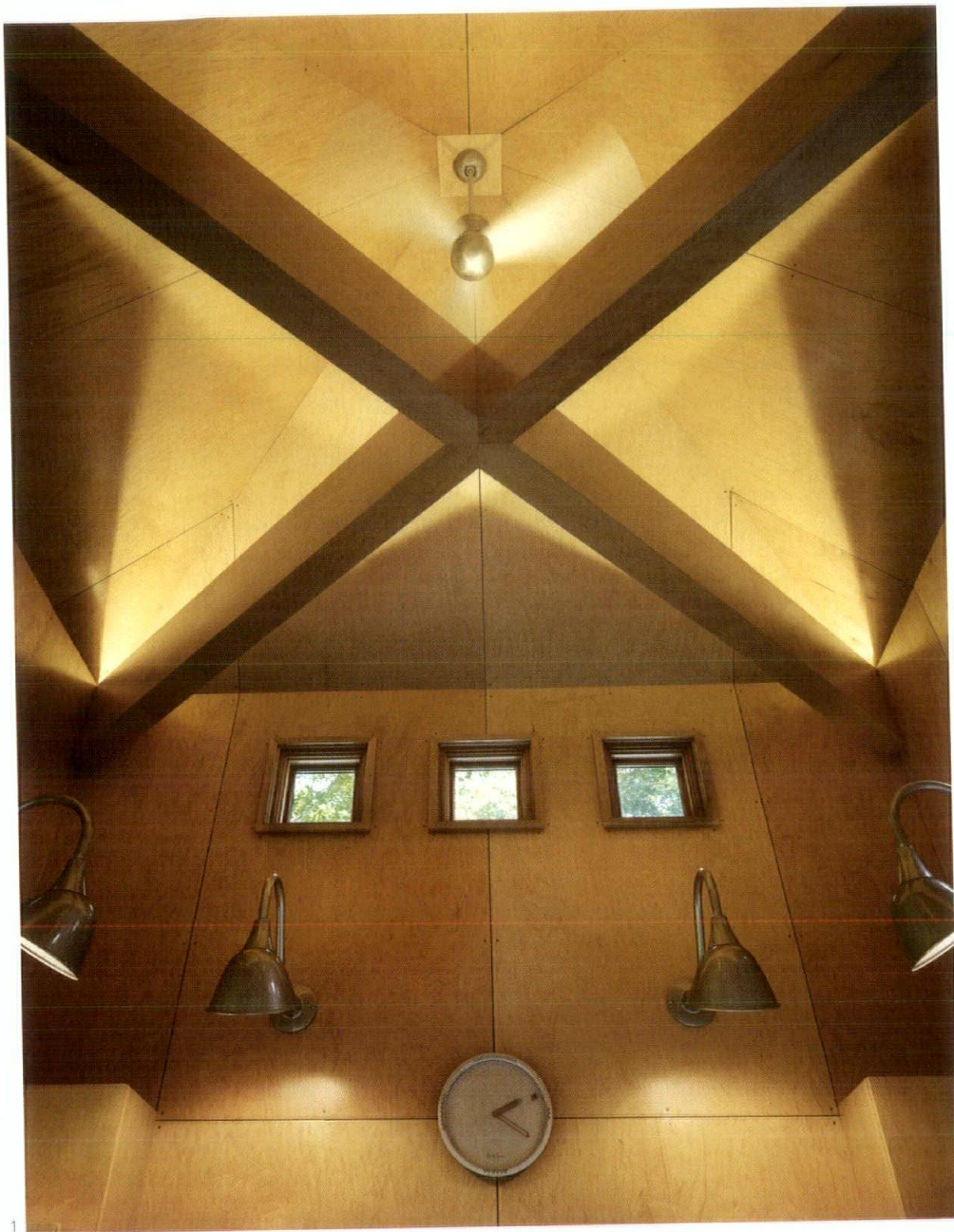
could only be one story, 400 square feet or less and not inordinately costly given the nature of the project.

The charming little structure that ensued is a scant 400-square-foot rectangle measuring 12 feet wide, 33 feet long and 12 feet high for most of its length. The last 12 feet, at the structure’s west end, holds the art studio and is topped with an eight-foot high extension capped by a hipped roof. These elements transform that part of the building into a tower 22 feet tall. And it is crafted of humble materials that didn’t break the bank, yet are grand in their own right, thanks to the way they are employed.

The structure’s dapper walls are nothing more than a simple weatherproof membrane clad in a rain screen made out of prosaic cedar two-by-fours stained ultra white, while the big, airy windows that fenestrate the three unattached sides of the tower are actually seven-foot-square terrace doors that open at 90-degree angles to let the outside in. It all sits on a concrete slab that sports a burnished finish acquired by abrading the concrete as it cured.

And the tower’s interior—a merger of luminous paneled walls and sharply wrought millwork—is done in ordinary, construction-grade maple plywood finished with a clear coat of varnish. But the





2

Precisely executed millwork in the tower (1) makes it plain this is no mere garage, something that passersby might not guess when they see the simple door (2).

material is made sumptuous by the dramatic architectural angles it scales. Tigerman has used it to sheathe the majestically soaring ceiling and angled crossbeams under that hipped roof, and the studio's precisely executed cabinetry. The latter harbors a shoebox-sized kitchen with diminutive appliances on one wall, and built-in storage for art supplies and finished artworks on the other.

Since code prohibits an air handling system in the building, high-efficiency electric baseboard heaters warm the 144-square-foot space when the temperature drops and eliminate the need for ductwork.

Tigerman designed the structure, and stained it white, to correlate to the cottage, which he calls "ticky-tacky Tyrolean" only half in jest. Though it relates, it comes off looking more like a "gracious Palladian basilica, though a very modern one," says landscape architect Maria Smithburg of Artemisia, whom Maddox enlisted to do the grounds surrounding the garage.

To underscore its serene, ethereal demeanor, "I added a one-foot-high plinth around the entire garage, which sets it on a raised plane, and a bluestone terrace behind the art studio," Smithburg explains. There's also a bluestone walk lining its length that connects the garage, the studio and the terrace, and is lined with cat's mint and irises. And arborvitaes flank every window and door for color and drama; Smithburg has high hopes that they will grow to the same height as the building and act as architectural elements to further emphasize the structure's classical spirit.

With so little space, Maddox kept furnishings to a minimum with just a Knoll table, two Bertoia chairs, an easel and a clock she tracked down that was one of Tigerman's earlier designs. He returned the gesture with a weathervane that was also one of his designs, procured from the manufacturer who still had one left. But in this case, "it's a little sculpture of me, so I can keep an eye on the place," he laughs. **CA**

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BEST PRACTICES FOR AN OPTIMIZED JOB SITE

Construction Waste Management

EFFECTIVE CONSTRUCTION WASTE MANAGEMENT IS NOT JUST THE GENERAL CONTRACTOR'S JOB. ARCHITECTS, ENGINEERS, BUILDING OWNERS, AND SUBCONTRACTORS—INDEED, THE ENTIRE BUILDING TEAM—MUST BE UP TO SPEED ON CWM TO GUARANTEE THE SUSTAINABILITY OF THE WORKSITE AND THE ENVIRONMENTAL VIABILITY OF THE PROJECT.

By Scott Grogan, LEED AP BD+C, Scott Bollmann, LEED AP BD+C, Robynn Selle, JD, LEED AP, and Chrisie Ambrass

LEARNING OBJECTIVES

After completing this course, you will be able to:

- > Describe waste recycling options as they pertain to construction waste management (CWM)
- > Identify key elements of a CWM plan and how the CWM plan enhances the project's sustainability
- > Explain the environmental benefits of contract language specific to a CWM plan
- > Explain how to train and monitor the workforce for best practices in construction waste management

CONSTRUCTION DEBRIS ACCOUNTS FOR MORE THAN ONE-FIFTH OF THE WASTE STREAM. Better construction waste management (CWM) practices can have triple-bottom-line benefits:

Environmental: Less landfill space and less use of natural resources have a positive environmental impact.

Financial: Less wasted material equals less wasted money.

Social: The public appreciates efforts to reduce negative impacts on the environment. To achieve these goals, however, all members of the Building Team must be on board with the CWM program.

Achieving CWM goals requires three important actions: reduce, divert, recycle.

REDUCE According to the California 2004 Statewide Waste Characterization Study,

construction and demolition (C&D) debris accounts for 22 percent of the waste stream. Reducing C&D debris conserves landfill space, cuts down the environmental impact of producing new materials, and can trim overall building project expenses through avoided purchase or disposal costs. Building Teams can further reduce excess on-site waste generation through better estimating.

DIVERT Raw C&D debris can be diverted and used as a resource.

For example, waste concrete and masonry can be crushed on site and used for drainage base, and gypsum waste can be shredded and used as a landscaping supplement.

Materials that can be diverted include:

- Landscape and land-clearing debris (green wood materials)
- Asphalt pavement
- Gravel and aggregate products

- Concrete
- Masonry scrap and rubble (brick, concrete masonry, stone)
- Metals: ferrous (iron, steel), nonferrous (copper, brass, aluminum)
- Clean wood (dimensional lumber, sheet goods, millwork, scrap, pallets)
- Plastics (films, containers, PVC products, polyethylene products)
- Asphalt/bituminous roofing
- Insulation materials
- Glass (untempered)
- Door and window assemblies
- Carpet and carpet pad
- Fibrous acoustic materials
- Ceiling tiles
- Plumbing fixtures and equipment
- Mechanical equipment
- Lighting fixtures and electrical components
- Cardboard packing and packaging

RECYCLE so that raw debris can be processed to create a new usable material. Metals, cardboard and wood are the most commonly recycled C&D debris materials.

EVALUATING WASTE RECYCLING METHODS

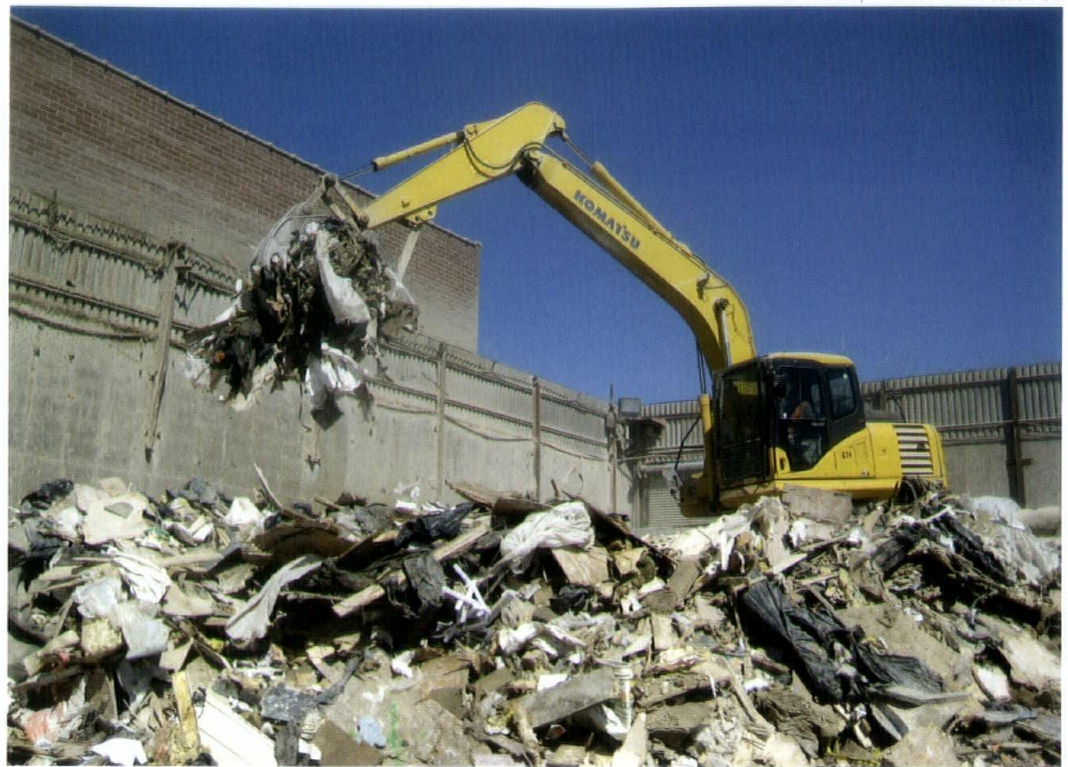
There are three methods of waste recycling: site-separated, commingled, and hybrid. The method selected usually depends on the specific capabilities of the hauler used and the job location, as well as other factors specific to the particular construction project.

Site-separated recycling uses multiple boxes, one for each type of waste (wood, metal, cardboard, etc.) Separating construction waste on the job site provides immediate feedback to everyone on the job and can help ensure that the project's recycling and reuse goals will be reached.

Site separation helps promote a responsible atmosphere on the job site and is the best method for high diversion goals, as in LEED projects seeking 50, 75 or even 95 percent C&D diversion. It's also easier for haulers, which could be a negotiating point to get lower box costs.

On the other hand, site separation takes up more space at the job site and requires a high level of project supervision. It can also be difficult on high-rise projects, where the number of trash chutes may be limited.

Commingled recycling uses one container



High levels of recycling—well into the 90 to 95 percent range—can be achieved through a solid and effectively communicated CWM plan.

for all waste. The hauler sorts everything off site. This makes it easier for field staff to manage waste on the site. It is the best option on tight sites because it usually requires the least amount of storage space.

However, commingled recycling is not available in all parts of the country. In cases where facility labor costs are greater than field labor costs, commingled recycling may cost more than site-separated recycling.

There is also concern that commingled recycling may not be as effective as site-separated recycling in C&D diversion, although the statistics in its favor are improving.

Hybrid recycling combines the site-separated and commingled methods—for example, one box for concrete, one box for cardboard, wood and metal, and one box for general non-recyclable waste.

The case can be made that hybrid recycling represents the best of both worlds. It optimizes weight vs. sorting effort. The total number of boxes can be reduced by working in phases—for example, concrete and garbage during demolition, then miscellaneous and garbage in a later phase. In general, it produces less work for sorting haulers, which could lead to lower hauling fees.

For each project, the general contractor or construction manager must assess the project requirements and site location to determine the optimal waste recycling method to use.

Ask these questions to help make this determination:

- How many waste containers do you have room for? Five, or only two? What will be their location on site?
- Will you be using a trash chute?
- Is it a high-rise site?
- Is this a high C&D diversion project? If it's a LEED project, is your goal ≥ 50 , ≥ 75 or ≥ 95 percent C&D diversion?
- Will there be sufficient staff on site for the required supervision?
- Does the field staff have previous experience on a CWM project?
- Has pricing been negotiated for each method?
- Will there be changes in the type of waste generated during the project?

Finally, when you are evaluating your waste recycling options, the GC/CM and the entire Building Team must first and foremost

keep the owner's goals and requirements in mind. However, there are other factors outside the owner's direct control that must also be considered.

For example, recycling markets can vary greatly in maturity from region to region. In some parts of the country, it can be more difficult to find haulers with the experience or capacity to deliver high recycling rates.

It is also important to remember that there are two components to the hauler's task: the hauling itself and the accurate and timely reporting of the results.

Now that you've put all this effort into C&D diversion, you may ask: What happens to the recycled materials that have been salvaged? Answer: They go into the downstream market, which refers to the companies that take the recycled materials and do something with them or make something out of them. Construction waste management results in more recycled materials being available to the markets that use them. Using materials with high recycled content also may help satisfy corporate sustainable building goals and make the circle of reuse become self-perpetuating.

DEVELOPING THE CONSTRUCTION WASTE MANAGEMENT PLAN

A CWM plan must be project specific. The recycling options used on site will determine how involved with recycling on site each individual subcontractor will be as well as how much site management will be necessary.

The CWM plan will reflect these needs and communicate to all subcontractors the Building Team and owner's expectations for recycling and waste disposal.

The basic elements of a CWM plan include the following:

- Name of the individual or individuals responsible for waste prevention and management
- Actions that will be taken to reduce solid waste generation
- Description of the meetings to be held to address waste management
- Description of the specific approaches to be used in recycling and reuse
- Waste characterization, notably the estimated material types and quantities
- Name of landfill and the estimated costs, assuming no salvage or recycling
- Identification of local and regional reuse programs

BE SURE TO MONITOR OFF-SITE RECYCLING FACILITIES

Off-site sorting facilities that claim to recycle materials should employ the following sorting techniques or their equivalent:

- Concrete and masonry - Pick lines for removing concrete and other masonry debris
- Metals - Electromagnets for ferrous metals (iron, steel); pick lines for nonferrous metals
- Paper - Pick lines for removing paper products (office paper, cardboard, etc.); air classifier for separating lightweight material
- Wood - Float tanks or pick lines
- Gypsum - Pick lines for removing drywall and other gypsum products

Facilities that claim to recycle any other materials should employ pick lines and other appropriate techniques for removing the specific materials.

Caution: It is important to inspect the waste that facilities send to landfills to make sure it contains only minimal amounts of recyclable materials.

- List of specific waste materials to be salvaged and recycled
- Estimated percentage of waste to be diverted by the CWM plan
- Recycling facilities to be used
- Identification of materials that cannot be recycled or reused
- Description of the means by which any materials to be recycled or salvaged will be protected from contamination
- Description of the means of collection and transportation of the recycled and salvaged materials
- Anticipated net cost or savings

The CWM plan must be developed to be project specific, including:

- The list of materials to be sorted and the method by which they will be sorted (by box, etc.)
- Signage: how containers and dumpsters will be marked
- Fines and back-charge schedule

Fines or back charges may be used as leverage with subcontractors on site. If fines or back charges are implemented, be sure to

state where the money will go (e.g., general contractor recovery for additional coordination or claim language in case the project fails to reach the owner's goal).

The plan must also describe the process that will be implemented when "contaminated" materials are spotted in dumpsters slated for recycling, and how any additional labor that may be required for sorting contaminated dumpsters (either at the site or at the hauler's sorting facility) will be compensated.

CWM REPORTING REQUIREMENTS

CWM-specific contract language should be included in the contracts with all subcontractors. Copies of the CWM plan should be provided to all subcontractors, and it should be made clear that the CWM plan applies to all of them. Specifically, contract language should state the exact text to be used on signage and the reporting requirements, including forms to be used and due dates. Finally, contract language should specify that second-tier haulers must also comply with the CWM plan.

Contract language should also include information regarding:

- Documenting and recording every waste container that is removed from the job site
- Requiring the refuse hauler to provide a monthly report of material by weight (pounds or tonnage) that was diverted from the landfill and all recycled materials
- Maintaining monthly reports to check if recycling rates are being met
- Confirming that monthly construction waste management reports are prepared by haulers on time and reviewed for accuracy by project staff on time
- Tying payment to timely and accurate reporting
- Monitoring waste recycling and hauling on a weekly basis and updating documentation so that a running record is kept and reviewed with the Building Team on a monthly basis
- Including weight tickets from the hauler and recycler as additional supporting documentation

For LEED-registered projects, all LEED submittals, including monthly reports on waste hauling, must be collected and kept separate from general submittals at the beginning of the project. This ensures

compliance with LEED requirements before work is put in place.

A weekly on-site green submittal meeting can be helpful to those subcontractors not familiar with LEED requirements. The GC or CM can lead the subcontractor through the process and ensure that the required information is obtained and its accuracy and completeness are verified.

TRAINING AND MONITORING THE WORKFORCE

Before construction begins, all subcontractors and trades should know the answers to these questions:

- What form of recycling will be used: site-separated, commingled or hybrid?
- Which boxes will be used for which type of waste?
- Will a trash chute be used?
- What documentation is required?
- What could happen if procedures or contract requirements are not followed?

The answers to these questions should be spelled out both in the CWM plan and in the contract language. Before a subcontractor begins work on site, the CWM plan should be discussed at the subcontractor orientation meeting. CWM plan requirements should be a topic of regularly scheduled toolbox talks.

Subcontractors should expect on-site leadership to aid them in implementing the CWM plan. Project site staff has the frontline responsibility to educate the workforce as well as to enforce the CWM plan. Don't assume that all subcontractor project managers will explain the CWM requirements to their foremen or tradesmen.

Constant communication regarding waste diversion expectations will likely get trades to buy in to the CWM effort voluntarily. However, it is equally important to communicate what will happen if waste and debris diversion methods are not followed.

Recommendation: Post the rules and consequences of their violation on or near the dumpsters, where they will be seen.

Be prepared to modify the CWM plan depending on the different phases of construction and the varieties of construction waste that can be generated. Waste hauling during foundation work is greatly different from the waste that is generated at later stages of the project.

UP TO 3 LEED POINTS AVAILABLE FOR CONSTRUCTION WASTE MANAGEMENT

According to the LEED Reference Guide (2009 ed.), "The intent of MRc2 is to divert C&D debris from disposal in landfills and incineration facilities." This can be achieved by redirecting recyclable recovered resources back to the manufacturing process and reusable materials to appropriate sites.

- To achieve one credit point, the project must recycle or salvage at least 50% of nonhazardous construction and demolition waste.
- To achieve an additional point, the project must recycle or salvage at least 75% of nonhazardous C&D waste.
- An Innovative Design credit can be achieved if 95% of nonhazardous C&D waste is diverted from landfills.

SITE SIGNAGE—AN IMPORTANT COMMUNICATION TOOL

Signage is an important component of an effective CWM program.

Having clearly marked containers allows workers to know how and where materials are to be disposed.

Keep in mind that dumpsters can be big billboards for your organization.

If they are unsightly, the public will draw a negative impression of your project. Instead, use signage to advertise the good your project is doing to divert C&D waste from precious landfill.

Clear, large and easily readable signage will allow workers to follow the CWM plan. Remember, too, that project signage may need to be translated into multiple languages to inform all workers at the project site.

MONITORING DURING CONSTRUCTION

As the work proceeds, it is important to have regular site inspections to verify and document that all construction waste management measures are in place and working properly are performed. Make sure monthly construction waste management reports are prepared by haulers on time and reviewed for accuracy by project staff on time. The waste hauler should provide an

inventory of the items that are being disposed of as trash.

Waste recycling and hauling should be monitored on a weekly basis and documentation should be updated so that a running record is created and reviewed with the Building Team on a monthly basis. Most important, actual performance to meet or exceed established project goals should be monitored on a frequent basis.

Construction waste management has come a long way in the last 10 years, spurred in great part by LEED. The experience thus far is that high levels of recycling—well into the 90-95 percent range—can be achieved without undue effort on the part of Building Team members, provided there's a solid CWM plan in place and that it is communicated effectively to everyone on the job. **CA**

Scott Grogan is a Sustainability Engineer for Turner Construction's Sustainable Construction Group in New York City, and developed Turner's online construction waste tracking system.

Scott Bollmann, a Senior Project Engineer with Turner's New Jersey business unit, is a USGBC Educational Reviewer, a USGBC NJ chapter member, and head of GBCI Credentialing Maintenance training for Turner's NJ business unit.

Robynn Selle is a member of the Turner Knowledge Network team. She has been a project engineer and purchasing agent on commercial construction projects, a Business Unit Training Director for Turner's Indianapolis Business Unit and a Business Unit Green Champion.

Chrisie Ambrass is an instructional designer with the Turner Knowledge Network.

Editor's Note

This concludes the required reading. To earn 1.0 AIA/CES Discovery learning units, review the text and take the 10-question exam posted at www.BDCnetwork.com/ConstructionWasteManagement.

INTRODUCING

BUILDINGchicago

SEPTEMBER 10-12, 2013

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BUILDINGChicago is a new trade event for the commercial design and construction industry, hosted by *Building Design+Construction* magazine.

The educational and networking opportunities offered through BUILDINGChicago draw upon the high-quality, AIA-accredited educational series *BD+C* University, and are supported by AIA Chicago, the Chicago Chamber of Commerce and the Builders Association.

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Photo courtesy of Architecture for Humanity - Chicago



Young architects at work on an Architecture for Humanity project exhibit the care and attention that practitioners lavish on public-interest projects.

erosion of funding support. At the same time, we had a growing number of young professionals who deeply care about social equity both locally and globally. Their care often focuses on the disenfranchised, whether the underprivileged or, in the case of environmental regeneration, future generations. In my 35 years of practice I have never seen such brilliant and positive energy as I have seen in the cause of socially responsible design. We are fortunate to have a generation of young design professionals that believes not only that it can move the needle on global challenges, but that it must and it will.

So how can public interest or even pro bono (while pro bono is often work provided for reduced or no fee, I prefer the true translation: “for good”) work become integral aspects of a design practice? I believe the answer lies, to a great extent, in making an effective business case. As we were evolving our thinking about this in the Open Hand Studio at Cannon Design, we approached our friends at the Taproot Foundation for guidance. Taproot has organized a national team of volunteer professionals and linked them to clients with needs for their services. Taproot also consults with many of America’s major corporations to assist them in the development and advancement of their skills-based volunteer programs. They have outlined five fundamental aspects of this work that bring business value to professional practices. I have adapted these from the perspective of the architect.

Enhanced corporate citizenship and reputation

Public interest work reinforces the visions and values of our profession through creative problem solving and commitment to

Good Business

INTEGRATING PUBLIC INTEREST DESIGN

By John Syvertsen, FAIA

In recent years there has been a significant increase in both dialogue and action in the area described variously as public interest design, socially responsible design, skills-based volunteering or pro bono design. We are all familiar with the great organizations that launched efforts in this work years ago; organizations such as Public Architecture (founder of The 1% program) and Architecture for Humanity, to name two.

These groups have worked tirelessly to increase the impact of work whose primary emphases include: providing access to the benefits of design to those who would not

otherwise have that access; helping the general public to understand the potential for design to improve life and advance culture; and providing innovative solutions to local and global societal challenges.

While these organizations have been working hard, in the last five years many individuals and firms have committed to taking major steps to integrate this set of concerns into their own practices. There are many forces at play that together could explain this growth, such as the 2008 economic meltdown, which resulted in staggering job losses and significant

community improvement. Among the most important goals of our work is to improve people's lives. The more we know about the various contexts (social, economic, environmental, historic) in which people live, the better able we are to achieve that goal. Pro bono work is an excellent vehicle for engagement with the world beyond the walls of our practice.

Leveraged impact: the multiplier effect

Our work with non-profits helps to expand their impact by building their organizational capacity. It also increases familiarity with the beneficial impact of design. With this knowledge, these organizations can spread the word and apply their learning to future work.

Improved collaboration and communication

Public interest projects offer opportunities for professionals to improve their skills on projects that are often quite challenging. Client interaction, leadership, oral

presentation, networking and, of course, design and implementation are among the skills enhanced on projects that are often small in scope and limited in duration.

Opportunity for innovation

These projects invariably pose new and different challenges as compared to conventional work. Budgets are usually extremely tight; clients are typically unfamiliar both with the design process and the steps leading up to it. These factors require a high level of creativity. For the most part, there is no road map to refer to. We have to invent processes and create solutions.

Human resource benefits

Our perception that young professionals are attracted to and stay at firms that support and even integrate public interest work is borne out in fact. Sixty-six percent of the Gen Y workforce reports that they would prefer to work in a firm that provides opportunities to apply their skills to benefit non-profit

organizations. Among MBA graduates, 97 percent say they are willing to forego financial benefits to work for an organization with a better reputation for corporate social responsibility and ethics.

In the end, I would suggest that young professionals who dive into this full-spirited are not doing so because of recruitment, retention or public relations reasons. They are doing it because of the belief and conviction that they can have impact whether right here in Chicago or elsewhere in the world. And I suspect that they are engaged in this work out of a combination of love for excellent design and authentic generosity. So while there is a compelling business case, why would we not build our strongest case around the real "why?" Why would we not make the emphasis on public interest an integral aspect of not only of our practices but every project we work on? **CA**

John Syvertsen, FAIA, is a senior principal at Cannon Design

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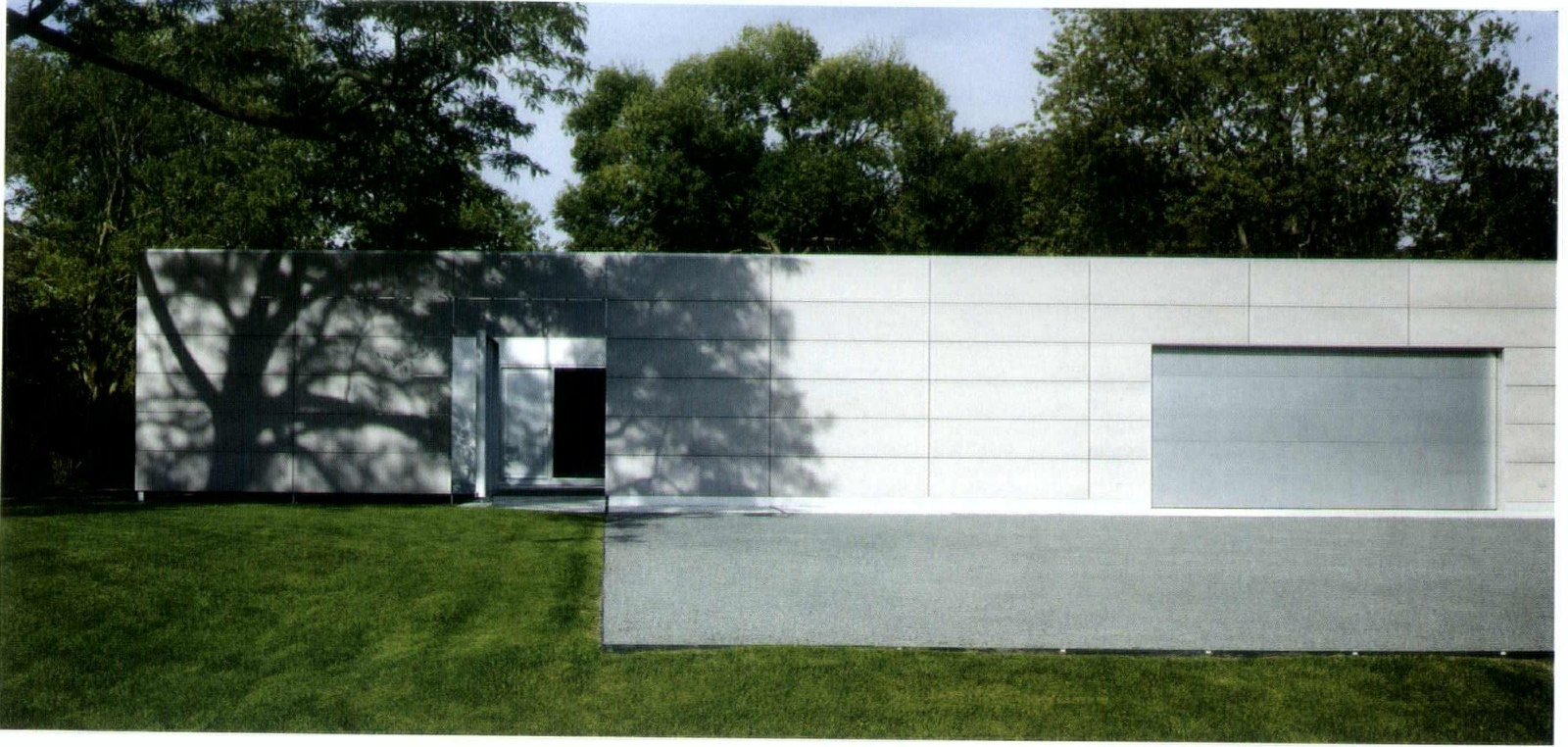
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Dan Wheeler clad his Nine Square project, a residence in Northbrook, in gray fiber cement panels.

Cementing the Rain Screen's Future

FIBER PANELS DEEMED A VERSATILE, ATTRACTIVE MATERIAL

By Amy McIntosh

While fiber cement panels have been a popular cladding material in Europe since the early 1900s, they have become more prevalent in Chicago in the last decade, thanks in part to a notable 2006 project from John Ronan Architects, the Gary Comer Youth Center on the city's South Side.

That influential project caught the attention of many architects and designers.

"It's low maintenance. It doesn't rust. It doesn't corrode because of either rain or insects," said Dan Wheeler, FAIA, principal at Wheeler Kearns Architects. "It's a pretty bulletproof building material."

Wheeler recently completed a project with

the material in Northbrook. Nine Square, a "modest-scale" corner lot residence, is clad in a gray cement board.

"It's a wood-frame house but then we clad it basically like a radish," Wheeler said of the project, which won a Citation of Merit in the Distinguished Buildings category of AIA Chicago's 2012 Design Excellence Awards. "There's a cement skin that wraps around the perimeter of the building."

Wheeler chose to cut the 4-foot-by-8-foot sheets into 2-foot-by-8-foot panels and ran them horizontally, turning the residence into a gridded, opaque gray box.

This horizontal orientation is the

traditional method for hanging fiber cement board, but Mark Weber, AIA, a Wheeler Kearns Architects partner, is doing things a bit differently.

In his current project, Suns End in Harbert, Mich., Weber is using vertically oriented, integrally colored panels on a wooden frame. He has also established a corrugated backup system, with the panels attached to a structure every two and a half inches. These structures typically exist 16 inches apart in horizontally oriented systems.

"The integral coloring seems to weather better," said Weber. "If it chips or weathers, you're getting the same color

Photo by Steve Hall © Hedrich Blessing



At Nine Square (left), the fiber cement cladding acts as an open-joint rain screen, allowing water to enter the system and drain out through the bottom. Another notable example of this technique in Chicago is the Gary Comer Youth Center (above), designed by John Ronan Architects and completed in 2006. The colored panels on the exterior have an aesthetic appeal, while also serving as a functional water management system.

over and over again.”

Fiber cement panels are typically used in exterior applications as an open-joint rain screen.

Conventional lap siding consists of staggered panels attached to a substrate, such as a plywood wall. The panels channel rainwater off the face of the structure.

In a fiber cement open-joint system, the cement boards are pulled away from the substrate and are applied flush along the frame. Water is then allowed to enter between boards through the exposed seams, where it drains out through the bottom.

“The system where we allow water to come through the joints is much more sophisticated than a system where we use a lap siding,” Weber said. “As soon as you allow water to go through the system and try to manage it behind the cement board, it’s a whole different ball game.”

The gap between the fiber cement board and the building frame creates a thermal insulation layer, which helps conserve energy.

This type of advanced design naturally comes with its challenges, specifically during the installation process.

Many varieties of cement board are less than a half-inch in thickness. Thus, if fasteners are placed too close to an edge or driven down too far, the installer risks breakage. Manufacturers will often provide fastening instructions specific to their product.

Weber also stresses the importance of strengthening the fasten points and edges to achieve longevity of the product. This longevity becomes impaired if water is allowed to settle in a particular area, where it will freeze and thaw.

Cost is also an issue, but Eric Kuhlman, project manager at Arcspec, a supplier of a number of architectural products including Swisspearl panels, insists that the benefits of the product outweigh the initial cost.

“You can’t install fiber cement on a brick façade budget,” said Kuhlman. “However, with cement board, there are no future maintenance issues that you’d have with a typical masonry project. So you’re saving

money in the end.”

Wheeler agrees, citing price and the large panel sizes as additional advantages of the fiber cement board. Prices typically range from \$75 to \$250 per 4-foot by 8-foot panel.

According to Kuhlman, the custom color option is a huge draw to cement fiber board over other materials such as aluminum and ceramic, as those products are typically more expensive in custom colors and require a larger order.

As with any product, there are a number of varieties on the market. The Swisspearl line offers integrally colored fiber cement board that does not need to be painted. The James Hardie line, which includes HardiePanel and HardiePlank products, is more absorptive of water and requires painting.

No matter the brand, it is clear that fiber cement board has made a name for itself in the U.S.

“With the advancement and more prevalent use of rain screen technology, I think we’ll start to see it much more typically here in the United States,” said Wheeler. **CA**



Photo by Steve Hall © Hedrich Blessing

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MODERN FAMILY
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ARCHITECTURE + INTERIOR ARCHITECTURE

PARTNER IN CHARGE OF DESIGN: Thomas L. Shafer, AIA

SENIOR PROJECT ARCHITECT: Scott Crowe, AIA

PROJECT ARCHITECTS: Lisa Jacobson, Phil Semon

STRUCTURAL ENGINEERING: Jim Kirk, Enspect, Inc.

MECHANICAL ENGINEERING:
Jim Bess, BES Engineering, Inc.

LANDSCAPE DESIGN:
Mark Allsup

LANDSCAPE CONTRACTOR:
Lance Buhrman, Buhrman Design Group

SWIMMING POOL AND WATER FEATURE:
Pat Boilini, Boilini Company, Inc.

GENERAL CONTRACTOR: Matthew Ehrhard, Hewitt Horn, Inc.

INTERIORS / FURNISHINGS:
Jessica LaGrange, Jessica LaGrange Interiors LLC



Image courtesy of Peter Ellis New Cities

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PHOTOGRAPHY:
Steve Hall, Hedrich Blessing Photographers

VENDORS

CHANNEL GLASS: Arcadia

CASEWORK: Th. Synder Company

EXTERIOR STONE: Valder's Stone

PAINTING: DiVinci Painters

WINDOW TREATMENTS: Paul Zirlin, Zirlin Interiors Inc.

ELECTRICAL AND AV: K J Electric

POETIC CITIES
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ENGINEERING SERVICES: WSP India

FINANCING AND CONSTRUCTION MANAGEMENT:
The Jaypee Group



Photo by Steve Hall © Hedrich Blessing

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REVIVAL
(Page 34)

SCONCES: Xpressives Designer Series by Stonco, brushed aluminum finish

PLYWOOD PANELING: Custom maple plywood & trim

CEDAR SIDING: Port Orford White Cedar

WINDOWS AND TERRACE DOORS: Loewen

GARAGE DOOR: Style View narrow profile by Raynor

ROOFING MATERIAL: Una-Clad Flat Lock by Firestone in natural galvanized finish

SNOW GUARDS: Model 125 2-Pipe by Alpine

MEMBRANE: Sarnafil membrane at flat-roofed

KITCHEN APPLIANCES: General Electric microwave; Elkay Gourmet sink

STAIN: Cabot Solid White on exterior; clear flat lacquer finish on plywood interior

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SHORTLY AFTER WIEL ARETS TOOK HIS POST AS DEAN OF THE ILLINOIS INSTITUTE OF TECHNOLOGY COLLEGE OF ARCHITECTURE THIS FALL, HE MET WITH ZURICH ESPOSITO IN CROWN HALL.

Arets steps into the shoes of Donna Robertson, FAIA. Following her notably progressive 15-year run as dean, Robertson, a tenured IIT faculty member, will teach and continue practicing architecture.

Arets has comfortably, perhaps aggressively, straddled the academic and professional realms. He has held teaching positions at the Architectural Association (AA) in London, Berlin's Universität der Künste, and Columbia University. From 1995 to 2002, he served as dean at the Berlage Institute in Amsterdam, where his own active firm is headquartered. With additional offices in Berlin, Maastricht and Zurich, Arets is quick to point out that he doesn't recommend separating academia from the practice—to himself or to others.

Zurich Esposito: Even though architecture faculties are full of practitioners, people complain of a disconnect between the academic world of architecture and the practice itself. How separate or connected do you think they should be?

Wiel Arets: I personally think there should be no differentiation between them. For me, the academic world and my life as an architect are completely connected. The things I'm doing—writings, buildings, teaching—can't make me two different persons. The schools are like a laboratory.

To architects who don't teach, I wonder how do you develop your thoughts without teaching? I see the academic world as an environment where you can do research that's not always easy to do in offices. I like to bring practicing architects and academics together in a mix.



ZE: Are there any broad goals or expectations that you or IIT have already established?

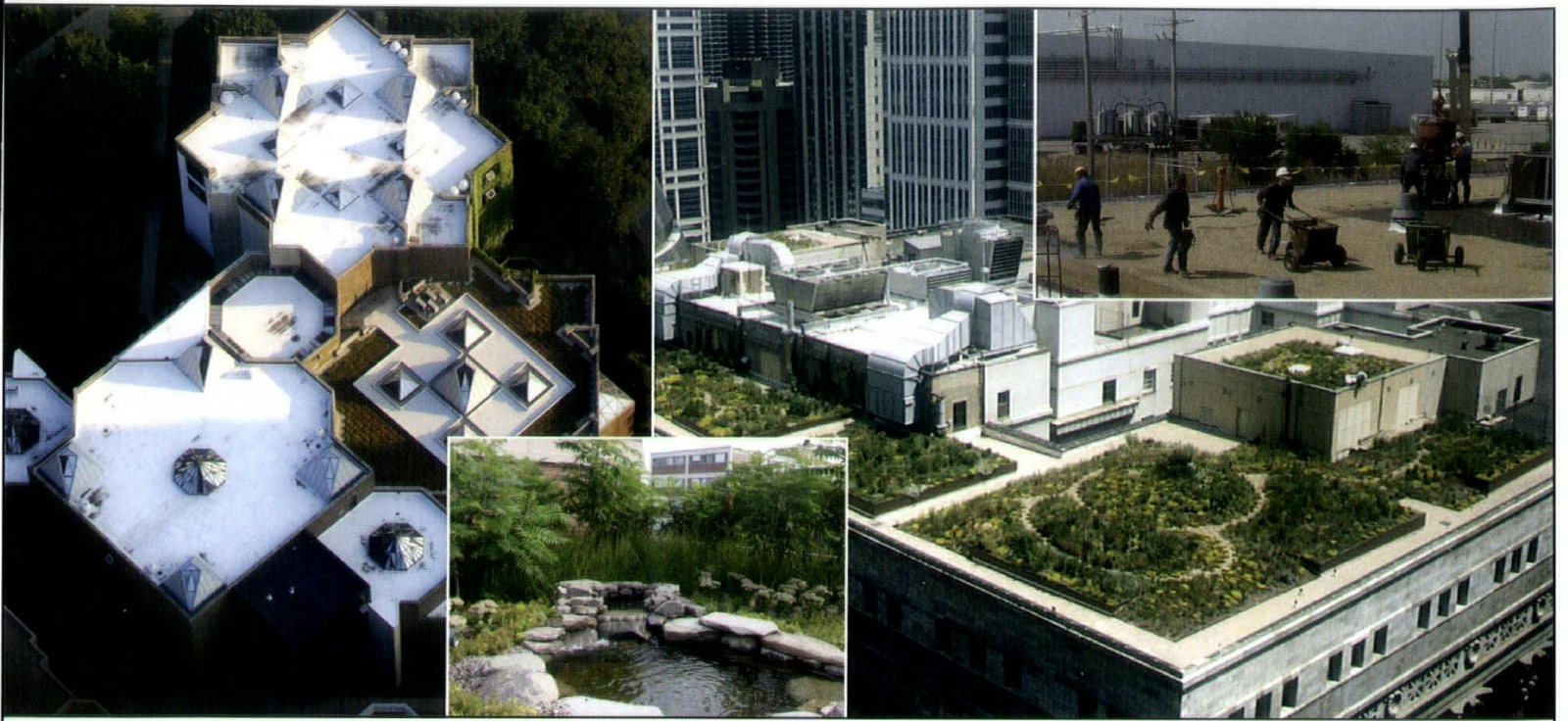
WA: IIT is a very renowned school, always looking at the city at large, at innovative ways of dealing with and using architecture. I would like to bring into the debate the idea that the world is becoming rather small, with all new and greater technologies and access. I would like to do research here on what the new city could be and which innovation, technology and strategies could be developed for that.

ZE: Are these thoughts and goals also the themes you presented in *Autobiographical References*, a new book on your work? I'm particularly curious about the section

called "A Wonderful World," where you describe redefining the "Map of the World." What does "wonderful world" mean here?

WA: When we think about the history of the last 5,000 years and see what we've achieved, you see we've achieved a lot. We are living in a world that has incredible capabilities. And the relatively greater access to knowledge presents possibilities that make the world much richer. The world will have dreams and America is a fantastic place to be—where dreams come true.

I'm a positivist. It's not making sense to be negative. There's so much to discover. And architects should be at the center of the dialogue about the future. That's what a school like IIT should be about. **CA**



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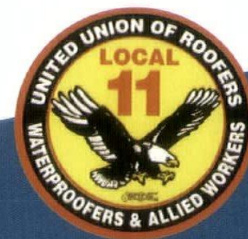
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