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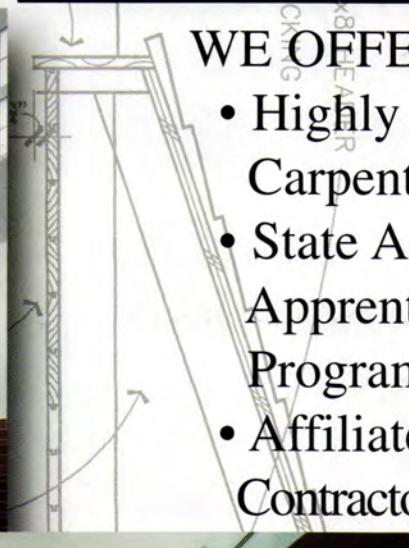
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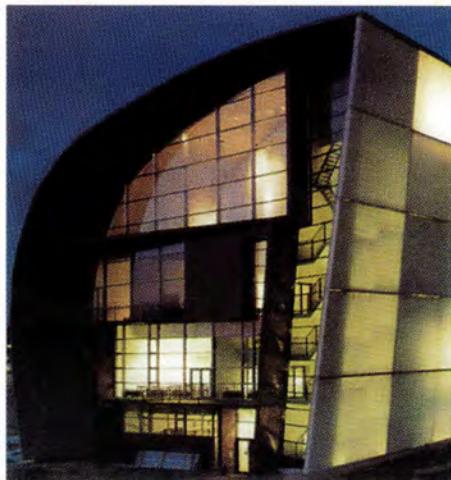
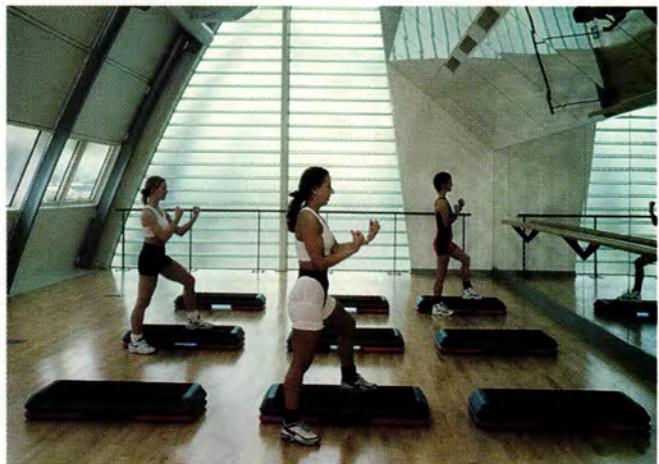
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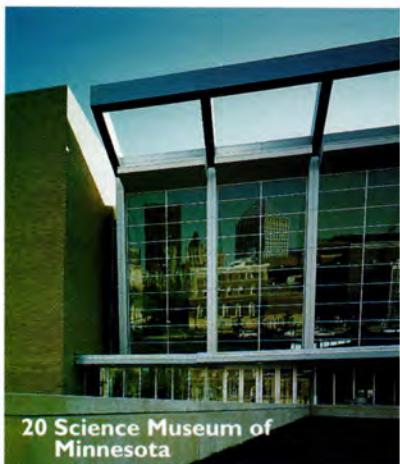


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Departments

- 5 Essay** Bicycling about the Twin Cities, By Bill Beyer
- 7 Endangered Species** The Fawkes Block houses cafes, publishing ventures and other small businesses now, but it began life as Automobile Row, By Robert Roscoe
- 9 Sketches**
- 13 Up Close** William F. Conway, new head of the University of Minnesota's architecture department, talks about the department's expanding, interdisciplinary role, Interview by Todd Willmert
- 15 Technology** The fireplace as a symbol of hearth and home throughout history, By Todd Willmert
- 17 Insight** Museum requests for hands-on exhibits that tell stories have architects meeting new design challenges, By Diane Richard
- 19 Editorial**
- 62 Lost Minnesota** The Winnebago Agency House, Blue Earth County, By Jack El-Hai

Features

- 20 Science Project** The new Science Museum of Minnesota in St. Paul raises the bar in museum design while it excites and informs with new interactive galleries and the return of favorite exhibits, By Joel Hoekstra
- 26 PEEC Performance** The Phillips Eco-Enterprise Center in Minneapolis incorporates groundbreaking sustainable-design features into a warehouse/office building, By Camille LeFevre
- 30 Home Grown** The Andersen Corporation renovates its late-president's home site in Bayport, By Camille LeFevre
- 34 Bus Stop** The understated Greyhound Bus Museum in Hibbing celebrates an American icon, By Diane Richard
- 36 Inner Strength** Four Minnesota architects explain why they left traditional practices for positions as in-house architects within the corporate realm, By Todd Willmert and Camille LeFevre
- 44 Face to Face** Design and technology experts discuss the influence of technology, media and culture on architecture in the 21st century, By R.T. Rybak



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Light and lighter

Happy trails to you, until we meet again,
Happy trails to you, keep smilin' until then... Roy Rogers & Dale Evans

By Bill Beyer

When my doctor suggested I either add eight inches to my height or subtract more than a few pounds from my weight, I reasonably chose the latter. Having tried jogging and walking in previous failed attempts to lighten up, I needed another option. My new aerobic activity of choice was bicycling.

I had noticed a fresh ribbon of bituminous pavement along a railroad track I cross on my daily commute downtown, and took a Sunday morning ride to investigate. The route led to the Southwest Regional Trail Corridor and a delightfully smooth six-mile trip to Shady Oak Lake. The new trail floated over Highway 100 and crossed only five other streets at grade. I also found the new Cedar Trail open, providing me with a direct and bucolic commute.

I took to riding to the office on weekend mornings, stopping at the farmer's market on the way home. In my first month of bicycling, I was treated to foxes and rabbits, sumac and prairie grass. Even the back-sides of industrial suburbia can look pretty good when seen from a sustainable saddle.

In his chronicle of the Lewis and Clark expedition, *Undaunted Courage*, Stephen Ambrose noted that in 1803 nothing in the world traveled faster than a horse. The railroad would change that in a generation, trailing the early explorers across the continent and establishing the infrastructure of a mobile, industrial society.

Meanwhile, the first primitive bicycle arrived from France around 1820. In 1869 the first free-wheeling bicycle was patented. During the bicycle boom of the 1890s, 2,000 American companies were making bikes. Bicycle promoters agitated for better roads, but were promptly run off them by the more powerful automobile. By 1910, the bicycle industry languished. But passionate purists persisted. In May of 1941, a Frenchman named Letourner pedaled a souped-up Schwinn to a record 108.92 miles per hour. Space-age technologies have continued to inspire mechanical refinements.

The bicycle is an elegantly sustainable transportation device. Lightweight and portable, it easily magnifies human leg power fourfold, from a four-mile-per-hour gait to a sweet 16-mph cruise. And at virtually no environmental operating cost. The speed of walking is ideal for seeing the natural and built environment. The speed of automobiles has been proven to make us blind to anything but the grossest caricatures of architecture and environment. The bicycle strikes an enlightened balance of enhanced mobility, recreational enjoyment, healthy exercise, and the ability to stop and park to smell the roses.

In 1965, Wisconsin's Elroy-Sparta Trail triggered the national rails-to-trails movement, opening a 32-mile recreational-biking corridor through three old railroad tunnels. Elroy sits among hills and dales halfway between LaCrosse and Madison on the west fork of the Baraboo River. Rather than let its economy be derailed by the demise of trains, Elroy has become the hub of three major recreational trails and a mecca for cyclists. Peak-season hotel rooms along the trail are booked a year in advance. Half of the trail users are from out of state.

Wisconsin, Minnesota and Michigan lead the national rails-to-trails trend, each boasting about 1,200 miles of converted trails with another 500 to 600 miles projected. Federal transportation funding in the past two Intermodal Surface Transportation Efficiency Act (ISTEA) bills provided for trails and other alternative means of mobility. The Rails-to-Trails Conservancy continues to nurture the dream of a national network of converted rail beds. But most conversion efforts are local, driven by volunteers with passionate convictions and cobbled-together coalitions. They have been serendipitously aided by the explosion of electronic information networks. Everything you need to navigate the bike trails of any state is available by cyber-cycling the Internet.

The federal government provided the free land that has become a recycled resource for cyclists. Minneapolis and St. Paul saw the light long ago and are now on the verge of having a spectacular network of urban trails. The metro trail system may never outrank the Mall of America as a tourist attraction, but as a measure of urban vitality it will be more sustainable and useful.

So I bike lightly along, floating past Kenwood, imagining I'm crossing to the Mississippi River on the new Crosstown Greenway and returning home along Minnehaha Parkway. And I smile.



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The Fawkes Block

Minneapolis

By Robert Roscoe



ROBERT ROSCOE

The Fawkes Block is anchored to the southwest by the Loring Bar and Café.

At the spot where Minneapolis's Hennepin Avenue bends in front of the Basilica of St. Mary sits an odd-shaped block containing a variegated sampler of period architectural styles; a dozen structures that served one of the 20th century's largest commercial ventures—automobile sales.

In 1901, Leslie Fawkes made his commercial transformation from bicycle salesman to automobile dealer, becoming the first auto dealer in Minneapolis. In 1911, Fawkes built a 2-story brick dealership-headquarters building at 1625 Hennepin Avenue. A year later an adjacent building was designed to appear as a separate storefront structure.

Fawkes's third building—a Classical Revival, granite-and-terra-cotta-clad, 3-story building designed by the architectural firm of Tyre, Chapman and Gage that wrapped around the corner of

Hennepin Avenue and Harmon Place—was a signature element on the block and established Fawkes as the area's premier auto dealer.

From 1910 to 1935, the block was known as Automobile Row. The block's prime location near Hennepin and Lyndale avenues made the high-visibility site perfect for promoting the new automobile technology. Automobile Row dealerships offered many brand names of cars mostly unknown today: the Ashley, the Auburn, the LaFayette. The auto-showroom district eventually extended along Harmon Place toward downtown, where Packard, Studebaker, Ford and other brands were merchandised.

The Depression of the 1930s caused a gradual exodus of car dealerships from Automobile Row; but the area's prominent location, the storefronts' pleasing curves and finely detailed facades, and the buildings' views of Loring

Park attracted such new tenants as commercial-art studios, publishers, and law and architectural offices.

Today the area is known as the Fawkes Block, and its notable tenants include the Loring Bar, Playhouse and Café, the *Utne Reader*, the Ballet of the Dolls dance company, Amazon Bookstore, Circa Gallery and Starbucks Coffee. One of Minneapolis's most interesting alleys winds behind the block, its time-worn brick walls lining the Loring's al fresco café that lends a European flavor to the area. On summer nights, lights twinkle, café life provides its own animation and a sonorous saxophone sound tip-toes down from the rooftop, making Loring nightlife a memorable experience.

The Fawkes alley is reminiscent of a similar space once nestled in the heart of downtown St. Paul in the 1960s. Alley 29 was a former alley converted by happenstance into a narrow 12-foot-wide walkway that drew people into little shops, art galleries and cafés built into the backs of street-fronting stores. St. Paulites bragged that Minneapolitans couldn't find it. Alley 29 disappeared after city planners wanted the site for a corporate headquarters.

How long the Fawkes Block's off-beat mix of faux-decadent hip and fine-grained architecture will persist is a question many Loring residents and city literati are pondering. Rumor has it nearby institutions are eyeing the block for expansion. Authoritative sources claim the Guthrie Theater has listed the Fawkes Block as an

Continued on page 46

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Winning architecture



1



2



3

Eight projects won 1999 AIA Minnesota Honor Awards during the architectural association's annual year-end convention and products show. The winners, chosen from a pool of 95 submissions, were selected by Cheryl McAfee, AIA, president, Charles F. McAfee Architects and Planners, Atlanta; William E. Pedersen, FAIA, principal design partner, Kohn Pedersen Fox Associates, New York City; and Lawrence W. Speck, FAIA, dean, School of Architecture, The University of Texas, Austin. The jurors also cited one Divine Detail award. In addition, Meyer, Scherer & Rockcastle, Ltd., earned the 1999 Firm Award. Several of the award-winning projects have already been featured in *Architecture Minnesota*. Expanded coverage of the other winning projects, and of Meyer, Scherer & Rockcastle, Ltd., will appear in future issues of the magazine.

1 Private Cabin

Bay Lake, Minnesota
Meyer, Scherer & Rockcastle, Ltd.

2 John Frank's Sauna

Eveleth, Minnesota
Salmela Architect

3 WMEP Interdistrict Downtown School

Minneapolis, Minnesota
Cunningham Group

4 Jerstad Center: The Good Samaritan Institute and Retreat Center

Sioux Falls, South Dakota
Julie Snow Architects, Inc.

5 Jackson Meadow

Marine on St. Croix, Minnesota
Salmela Architect

6 Bassett Creek Building

Golden Valley, Minnesota
Hammel Green and Abrahamson, Inc.

7 Dubuque Museum of Art

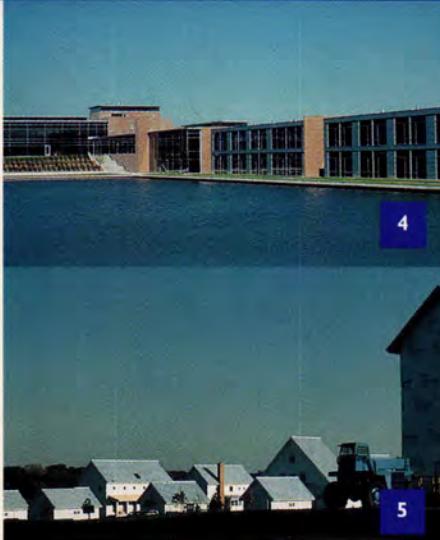
Dubuque, Iowa
Hammel Green and Abrahamson, Inc.

8 Barbara Barker Center for Dance

Minneapolis, Minnesota
Hammel Green and Abrahamson, Inc.

9 Divine Detail: Custom Metal Panel

World Trade Center Ramp
St. Paul, Minnesota
Hammel Green and Abrahamson, Inc.



4



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Calendar

CHOKWE! Art and Initiation Among Chokwe and Related Peoples
Minneapolis Institute of Arts

Through Jan. 16

This rare opportunity to explore the art and cultural traditions of the peoples of Central Africa includes such objects as masks, thrones, scepters, pottery and figures of chiefs. The Chokwe aesthetic values symmetry of form and smooth surfaces, which can be seen in the exhibition's more than 175 pieces. (612) 870-3000.

Structures of Memory

World Views: Maps and Art
Weisman Art Museum

Through Jan. 30

Structures of Memory is a exhibition of new architecture models by Andrzej Piotrowski, a professor at the University of Minnesota. **World Views** explores the complex relationship between world maps and art by presenting historical and contemporary maps as art, and presenting art that uses map forms and strategies. (612) 625-9494.

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Icebox Gallery

Through Feb. 26

Twenty-five photographers, graphic artists, painters, sculptors and other artists are gathered in a juried exploration of what defines the new millennium in art. (612) 788-1790.

The Nature of Abstraction: Joan Mitchell Paintings, Drawings and Prints

Walker Art Center

Through May 28

The almost 40 works by this abstract-expressionist artist include paintings, pastels, lithographs and multipaneled canvases that span the artist's 50-year career. (612) 375-7622.

Radio architecture

IN THE NEW YEAR, MINNESOTA PUBLIC RADIO, in conjunction with AIA Minnesota, will begin broadcasting a series of short programs on Minnesota architecture and architects. The series is scheduled to begin in January and 26 topics are currently in production. Subjects include local living legends, late legends, world-wide legends, legendary designs, legendary towns and sundry architectural topics. The AIA Minnesota program committee, chaired by Mike Schrock, organized the series. "Our intent is to create more visibility for the profession," Schrock says, "demonstrate how much architects and architecture have contributed to our state and quality of life, and highlight legendary architects, architecture and architectural subjects in Minnesota." Stay tuned.

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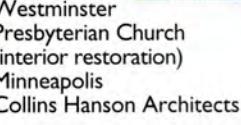
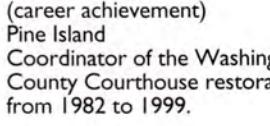
LAST YEAR, sleek new products by Michael Graves lit up the housewares section of Target stores. In late January, the retailer will introduce new clocks by Graves and Robert Abbey, and begin marketing 12 high-style chairs by Philippe Starck. One of the chairs, "Cheap Chic" (pictured), comes in gray polypropylene with matte gray aluminum legs and exemplifies Starck's "no design" approach.



Historic winners

THE PRESERVATION ALLIANCE OF MINNESOTA, a nonprofit organization dedicated to preserving, protecting and promoting Minnesota's historic resources, named 12 Preservation Awards in 1999. The awards recognize extraordinary contributions to the preservation of historic resources in Minnesota. The winners are:

- **Nicollet Hotel** (restoration)
St. Peter
Thomas Blanck
- **Stone House** (restoration)
St. Peter
Nancy and Daniel Joret
- **Schumacher House** (restoration)
St. Peter
Judy and Mark Ahlstrom
- **1998 Tornado Recovery** (community effort)
St. Peter
Citizens of St. Peter
- 
- **Superintendent's Building** (renovation)
Loring Park
Minneapolis
Miller-Dunwiddie Architects, Inc.
- **Paramount Theatre** (restoration)
St. Cloud
Groeters
Leapaldt
Tideman
Architects

- **Westminster Presbyterian Church** (interior restoration)
Minneapolis
Collins Hanson Architects

- **Hibbing High School** (stewardship)
Hibbing
Hibbing community and school board

- **Huddle's Resort** (restoration)
Leech Lake
Kay and Roy Huddle
- **Saga Hill Preservation Society** (stewardship, community effort)
Orono
Kathleen Kesprick, Irene Silber and others
- **Marlene De Boef** (career achievement)
Pine Island
Coordinator of the Washington County Courthouse restoration from 1982 to 1999.

Youthful Design

FOUR MEMBERS OF AIA MINNESOTA received Young Architects citations for demonstrating outstanding leadership in service to the profession, the community, design, planning and/or education. The winners, who have been licensed for less than 10 years, are: **E. Tim Carl** of Hammel, Green and Abrahamson, Inc., Minneapolis; **Michael Huber** of Rafferty Rafferty Tollefson Architects, St. Paul; **Richard Lundin** of CONSTRUCT Architects, Inc., Minneapolis; and **C. Josh Rownd** of Setter, Leach & Lindstrom, Minneapolis. Carl was noted for design leadership with clients and colleagues that created inspiring architecture. Huber was cited for the unique creativity, devotion and humor he brings to the profession and to his work. Lundin's talent, professionalism and enthusiasm for design in art and architecture contributed to his citation. Rownd was awarded for his stewardship of time and talents on behalf of colleagues, clients and the community.

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The College of Architecture and Landscape Architecture at the University of Minnesota recently named William F. Conway as the new head of its architecture department. One of Conway's first duties was to help break ground for CALA's new addition, which "will reaffirm the college's position as a locus for design education and continuing studies, as well as scholarship, research and exchange," Conway says.

Conway has enjoyed a varied and successful career. He worked as a contractor before attending North Dakota State University's architecture program and the

William F. Conway

A practitioner and an academic, the new head of CALA's architecture department discusses the larger discipline of architecture and CALA's growing interdisciplinary role

graduate program at Yale University. While at Yale, he worked for Cesar Pelli & Associates in New Haven. After graduation he received a Fulbright Fellowship to Rome where he was a visiting artist at the American Academy. Upon his return to the United States, Conway accepted a teaching position in the Master of Architecture program at Iowa State University.

In Iowa, Conway established Conway+Schulte Architects with his wife and business partner Marcy Schulte. The firm enjoys a reputation for innovative work and in the past several years has won numerous awards, including a 1996 P/A Design Award for a public open-space project in Atlanta. This and other projects can be seen on the Conway+Schulte Architects website at www.conwayandschulte.com.

Conway enters CALA at a time of transition. Not only is a new addition to the college being constructed, but various initiatives are expanding CALA's role within the university and the region. Conway will participate in these efforts as a CALA leader

and as a practitioner. In spring 2000, Schulte will also join the faculty as an adjunct assistant professor and the couple will move their practice from Ames to the Twin Cities.

Architecture Minnesota talked with Conway about CALA's new partnerships, its possibilities for collaboration and its growing interdisciplinary role at the university.

Many recent books, including *A Theory for Practice* (Bill Hubbard, MIT, 1995) and *Architectural Practice: A Critical View* (Robert Gutman, Princeton Architectural Press, 1988), as well as the architectural press, comment on the dichotomy between architectural practice and training. Do you see a schism? If so, is this gap to be celebrated or bridged, and how does CALA address it?

There is a natural split. Practice and training should be different, but there are points of contact. CALA's teaching practitioners successfully work in both realms, illustrating that it is not really a question of either/or. Both practice and education are professional endeavors that share a commitment to risk taking. While risk taking is not without trepidation, planning and management, I am reminded every day that the design of buildings, landscapes, professional environments, pedagogy and scholarship are by necessity risky ventures. Like many other architects, I have constructed my professional life around two pow-

erful poles within the discipline of architecture: the academy and the profession. But I define my career as located not in either one or the other, but within the larger discipline of architecture. This position gives me a freedom that opens critical discussion in both realms. Furthermore,

this position affords a greater awareness of possible collaborations with others in the remote reaches of our own discipline, as well as a sensitivity to points of tangency and overlap with other disciplines, which is a major goal of CALA as we enter the new millennium.

As long as we continue to view ourselves as "the academy" or "the profession," we lose potential to make important changes. Recent efforts to explain to the public what we do, how we are compensated, how we work with government agencies and still practice design—in short, what we provide to culture and industry—is essential to our profession's growth.

CALA exists within a broader university context, with a mission to train future practitioners, but also to inform potential architectural "patrons" in the student body, as well as the wider public. How can this second mission be better addressed?

I think the profession is moving beyond the "myth of the myth" of the hero architect and is defining itself in a broader sense, which is helping to demystify the profession and its role. Also, in more concrete terms, as an element of the College of Liberal Arts, CALA students rub elbows with other students every day. This offers students a greater sense of awareness of the possibilities of collaboration. The university's renewed commitment to undergraduate education translates into greater ties between architecture and other students.

In addition, because of long-term efforts, as well as recent ones by President Mark Yudof and Dean Tom Fisher, we are experiencing a heightened awareness of design and a renewed

Interview by Todd Willmet

Continued on page 48

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Hearth and Home

By Todd Willmert

ARCHITECTURAL STYLES HAVE CHANGED THROUGHOUT HISTORY, BUT THE SYMBOLISM OF FIREPLACES HAS REMAINED CONSTANT

Vitruvius, architect and original architectural commentator, posited that "it was the discovery of fire that originally gave rise to the coming together of men." Before fire, people lived like "wild beasts, in woods, caves, and groves," he added. Harnessing fire gathered people together to share in the flames' warmth and wonder. Arguably these first assemblies gave rise to the construction of shelters, and thus the birth of architecture.

constants remain. The hearth is still a steadfast element of domestic architecture even though central-heating systems have been widely used for more than a century, obviating the need for a fireplace's heat.

Nowhere is this idea more prevalent than in Le Corbusier's work. He proposed that the house was a "machine for living," created by a new modernism divorced from historical precedent. Despite his pronouncements about overthrowing architectural traditions and forging a modern architectural vocabulary—complete with central mechanical systems producing "heat at will"—fireplaces are prime elements within Le Corbusier's domestic designs.

Le Corbusier wrote eloquently about the symbolism surrounding the hearth. In one of his many thoughts on the topic, Le Corbusier noted, in a Wrightian manner, that "The home=the hearth=the flame...the hearth has become, by extension, the symbol of an almost inevitable social group: the family." Frank Lloyd Wright, and Prairie School disciples like Purcell and Elmslie, are renowned for their anchoring hearths: masonry masses around which domestic life revolves. Le Corbusier addresses this attitude in his writings and its tenets are evident within his work.

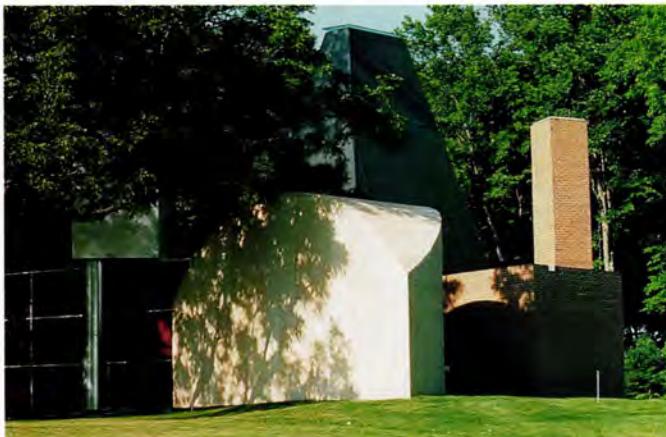
Consider the manifestation of these ideals in Le Corbusier's Villa Savoye. This icon of modern architecture, hovering on columns above a field outside Paris, was a weekend retreat in the "Virgilian" tradition. Two fireplaces—the salon fireplace angular and masculine, the boudoir fireplace curvilinear and feminine—are sensitively detailed, and analogous in height,

brickwork and other characteristics. While the Villa's machine aesthetic garners attention, the fireplaces' humanist sensibilities also merit consideration. That literally all of Le Corbusier's dwelling designs have fireplaces—each carefully crafted within its context—illuminates the hearth's importance.

Though fireplaces are a seeming anachronism, they were certainly embraced by other luminaries of modern architecture. Alvar Aalto's hearth designs embody a distinctive voice. The two-sided fireplace within his Villa Mairea—which is half-indoors, half-outdoors—addresses both realms with his design vocabulary. Mies van der Rohe's study for a brick country house uses brick—a basic building block—to forge elements with simple planes and masses, including a hearth.

Yet for all their connotations and tradition, a fireplace must adhere to a surprisingly simple precept. Smoke rises; it needs a place to escape. In fact, many indigenous shelters, such as the teepee, were essentially a fire pit sheltered by walls and a roof with a smoke hole at its apex. Even into the 16th century, logs were burned bonfire style in many houses, with smoke snaking through a ceiling hole. Heat radiated in all directions, a benefit lost when fireplaces became integrated within walls at the end of the Renaissance.

Count Rumford (nee Benjamin Thompson, originally of Woburn, Massachusetts, who went to work for the Bavarian government to study the nature of heat), understood that the only useful heat generated by a fireplace was radiant heat. Air heated by fire quickly



Throughout architectural history, fireplaces have remained central to home design, even when treated as an independent building, as is Frank Gehry's brick inglenook in the Winton Guest House.

Fire was later embraced by Roman civic life. The Romans worshipped the hearth goddess Vesta in her own temples and her cult, the Vestal Virgins, tended the perpetual fire present in each temple. Domestically, Romans viewed the hearth and fire as sacred elements, and the fire was to burn constantly. Indeed, that the word "focus" derives from the Latin word for "hearth" illustrates the profound significance Romans attached to the fire within each home. For Romans, the hearth fire and family line were synonymous.

Since Vitruvius wrote in the 1st century B.C., two millenniums have passed along with 2,000 years of technological innovation and transformation. Yet architectural

Continued on page 46



Project: Calhoun Beach Club Architect: KKE Architects Inc. General Contractor: Bor-Son Construction Mason Contractor: Adolphson & Peterson Location: Minneapolis, MN Brick: Mountain Shadow King S

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Museums at the Millennium

Once cultural bastions of the educated elite, today's museums are being designed to fully engage, and reflect, their growing audiences

By Diane Richard

Remember the days of the stuffy old museum? A field trip to the institution of intellect would begin at the back door, the only place buses would drop off loads of shrieking school kids. Then you'd wander helpless, hapless through cavernous halls. Here a big painting of a nude (Don't touch it!), there a mummy (Don't breathe on it!), everywhere a cordoned-off chair with comfy velvet cushions (For heaven's sake, don't sit on it!).

Those days are long gone and those museums are literally history. Even venerable museums are making tectonic shifts in accessibility, exhibit presentation and programming. (The Louvre in Paris even has a website. *Quel horreur!*) Decades in the making, the changes have been directed by a better-educated public, greater amounts of leisure time, diminished federal funds for nonprofits, and broader civic and financial participation that picks up the fiscal slack.

Chock-full of computer terminals, classrooms, cafés and stores-cum-emporiums, today's museums are a whole different breed both inside and out. Minnesota architects who design museums are facing plenty of new challenges with one over-arching goal: to make museums more welcoming—physically, psychologically and socially.

Indeed, the new breed of museum is just as likely to be called an educational facility or interpretive center by educators, curators, historians and architects alike. This change in nomenclature, along with a host of other adaptations, indicates a monumental shift from

the passive, come-if-you-care-to style of curatorship, to buildings designed to fully engage—and indeed reflect—their visitors.

Museums today are doing this, in part, in order to "tell people's stories, which is a major change," says Janis LaDouceur, principal, Barbour/LaDouceur Architects LCC, Minneapolis. "Museums, when they were initiated, were cultural bastions for the educated elite. Now, we're all educated, so the museums for the educated elite don't appeal in the same way."

What she means is that though people may be educated about the history and artwork of other cultures, they know less about their own. Hence, the introduction of the interpretive museum, a facility that showcases a different kind of legacy. Its collections may include pieces of history that reflect a region, for instance. One example is the interpretive center planned for the Washburn-Crosby A-Mill warehouse site in Minneapolis, which is intended to highlight Minnesota's milling history.

"An interpretive museum is trying to express a way of life or a way of being for people," LaDouceur explains. "You can come in your jeans and your T-shirts. You don't have to try to be someone else, because it's about you."

As Joan Soranno sees it, museums are bent on breaking down barriers and education is their jackhammer. "Probably the biggest change I've seen is the whole education component," says Soranno, vice president, Hammel Green and

Abrahamson, Inc., Minneapolis. "A lot of museums 20 years ago were called elitist. A certain type of people went and there weren't a whole lot of them. Today, museums are trying to attract a broader range of people. One way to attract them is to explain the exhibits, so that people know about the paintings, their context and larger meaning. Another is to hold seminars or continuing-education sessions, to help make museums less scary places to visit."

The Bakken Library and Museum in Minneapolis, which doubled its exhibition and educational space in a nearly 12,000-square-foot addition in 1999, is a perfect example. Designed by Jeff Scherer of Meyer, Scherer & Rockcastle, Ltd., Minneapolis, the \$6 million expansion and renovation answers the museum's educational mission with new classrooms, workshop facilities and an education resource center. "Engaging, self-directed exhibits that appeal to all ages, backgrounds and interests" is how the museum, dedicated to the history of electricity and magnetism, describes its hands-on approach.

Indeed, hands-on is the mantra of many new museums. Like the Bakken, the new Science Museum of Minnesota, which opened last December in St. Paul, invites sticky little fingers to touch many of its collections. In the Human Body Gallery, for example, visitors are invited to feel the pulse and examine the pumping mechanism of the Bloodstream Superhighway, an area surrounded by a

Continued on page 49

THE BEST BUILDINGS ON EARTH ARE STILL BUILT BY HAND



More than a million bricks laid in a series of unique patterns, textures and colors make the Veterans Administration Health Care Facility in Detroit, Michigan, a striking example of masonry design by architects Smith, Hinchman & Grylls Associates. But masonry was chosen for more than its beauty and flexibility of design. Buildings built of masonry by skilled union craftworkers will outperform, outshine and outlast any others. Add to that the speed and efficiency of union masonry contractors, and you have a prescription for health care facilities that satisfies any schedule and budget. We're The International Masonry Institute, and we'd like to help you design and construct the best buildings on earth. Visit us on the World Wide Web at www.imiweb.org, or call us toll free at 1-800-IMI-0988 for design, technical and construction consultation.



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Past, Present, Future Perfect

By now nearly everyone has a millennium image that encapsulates their sense of possibility and limitation, hope and dread, past and future as we pass from the 20th century into a new one. Mine occurred last autumn, as I traveled through southern England visiting pre-Christian megaliths and ruins from Glastonbury, to Stonehenge, to Avebury and finally to Bath.

One drizzly afternoon, filled with the wonder and mysteries of the ancient structures I'd already seen, I wandered the cavernous labyrinth of exhibits beneath the Roman Baths Museum. After marveling at the engineering and architectural feats accomplished between the 1st and 4th centuries, daydreaming in front of the temple portals that welcomed ancient bathers, I reached the open-air Great Bath.

Statues of warriors and gods guarded the opening overhead. Steam rose from the murky green water flowing into the bath through the original lead pipe connected to a sacred spring. Framing the bath were long, gentle steps, worn low in spots where centuries of barefoot bathers had shuffled into the therapeutic waters.

No one is allowed in the bath today. So I stood on a worn step at the water's edge, literally placing myself in someone else's footprint, and tried to send myself back thousands of years. There was no escaping the other visitors, milling around the site with their ears glued to the black, oblong, computerized personal-guide devices we were given at the museum entrance.

Then, KER-splash! A little boy next to me, stowed in a carrier on his dad's back, had flipped his personal-guide device right into the water. As the young parents blamed each other for allowing the child to carry the thing in the first place, I laughed with indescribable delight. Fixed in my mind's eye was the indelible image of a 20th-century, obsidian, monolithic, one-person-only computer cleaving the dank pea-soup waters of a centuries-old communal bathing arena. The juxtaposition was hilarious and ripe with questions, including some for 21st-century design.

How will architects, designers and planners treat our sacred places, our historical architecture in the new millennium? How will new or revamped museums balance state-of-the-art technology and ancient meaning, interactive exhibits and the preservation of artifacts, celebration and interpretation, sustainability and innovation? In essence, how will architects, designers and planners keep us honest with ourselves and connected to each other as they create buildings and spaces that reflect their own integrity?

In this issue of *Architecture Minnesota*, we look at two new museums with polar-opposite approaches to their subject matter. The Greyhound Bus Museum in Hibbing (page 34), a simple building designed pro bono as a labor of love, celebrates the people and history that have made the Greyhound bus an American icon. Conversely, St. Paul's new Science Museum of Minnesota (page 20) is a spectacular building that takes science learning to high-tech heights with innovative interactive exhibits, while helping to revitalize St. Paul's river front.

This issue also investigates the new Phillips Eco-Enterprise Center (page 26), a sustainable office and industrial facility that provides jobs for 150 people in Minneapolis's Phillips Neighborhood. The Andersen Corporation's renovation of its adjacent Andersen family home site (page 30) shows the company's recognition of its history and its forethought in preserving these buildings for its corporate community. And we look at the endangered Fawkes Block (page 7), a set of buildings "that allows small businesses to thrive in a community that values them."

All of these projects are essentially about community; perhaps that is where the answers lie. In the 21st century, our finest expressions of art and science, technology and culture, memory and invention may be found in how our built environment reflects our value of community. In this era of unparalleled prosperity, history remains our context for the future. And our need for community is always present.

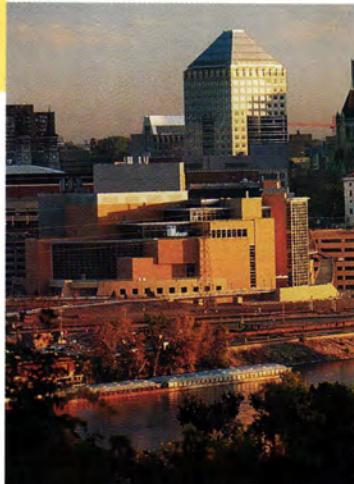
My favorite definition of "millenarianism," found in Webster's, is "belief in a coming ideal society." Webster's also defines "millennium" as "a period of great happiness or personal perfection." As one millennial moment at the Roman Baths Museum revealed, when the future and the past collide in the present, the juxtaposition can generate tremendous delight through a profound appreciation of the past and renewed sense of potential for the future.

Camille LeFevre

Science project



The new Science Museum of Minnesota overlooks the Mississippi River (below) and welcomes visitors along busy Kellogg Boulevard in St. Paul (above).



As a civic, learning and commercial institution, the new Science Museum of Minnesota raises the standard in museum design

By Joel Hoekstra



BRIAN DROEGE

Make no mistake, a museum commission is a coveted thing. Considered plums of the design profession, museum projects are rare and prestigious, and often awarded to the senior statesmen of architecture. Frank Gehry's gleaming Guggenheim in Bilbao, Richard Meier's serene Getty outside Los Angeles, I. M. Pei's angular Louvre addition are all the crowning achievements of architects cum celebrities.

But when the Science Museum of Minnesota decided to construct a new facility on the edge of downtown St. Paul overlooking the historic Upper Landing on the Mississippi River, planners wanted no part of such fame or flattery.

"A lot of museums have gone after a particular designer or a famous name or a specific look," says Teresa Sterns, the Science Museum's project manager for the new building. "That works for some museums, particularly art museums. But we didn't want a building that was first and foremost about design. We wanted a

flexible building that would serve our mission far into the future."

Nonetheless, forward-thinking design is certainly in evidence within and across the exterior of the 370,000-square-foot building; and the design supports and serves the Science Museum's mission at every turn.

Designed by Ellerbe Becket of Minneapolis, the building cascades off the bluffs that line Kellogg Boulevard and connects St. Paul's urban grid to the Mississippi River below. The museum's broad public plaza and soaring glassed-in entry welcome passersby and commuters on the building's city side. A series of stepped balconies and floor-to-ceiling windows offer visitors panoramic views of the river valley along the museum's southern perimeter.

An exterior of fired-clay face brick, silver-finished metal detailing and an underlayer of faux limestone blocks (concrete molded to resemble the retaining walls that line the Mississippi upstream) give the building a sense of solidity that belies the levity of the interior spaces.





ELLERBE BECKET

The glass walls of the central atrium rise 65 feet from floor to ceiling, bathing the museum's interior in sunlight.

"A museum isn't a building," argues Andy Cers, senior project designer, Ellerbe Becket, but rather "the dynamic, passionate, creative institution that lives within the building. So it makes no sense to start out by thinking about making an architectural monument. Instead, our approach was to explore, in a focused and creative way, how a new building could best support the museum's mission and activities through design."

"The museum realizes its mission through an ever-changing variety of science research, public learning and interpretive activities," Cers adds. "So success for us was to design a structure that first supports these activities, and second makes the visitor's experience of these activities more potent and exciting through the architecture."

Simply put, the old facility had reached a point where it was no longer supporting the museum. In fact, the East 10th Street facility, with its black-box structure and awkward two-buildings-connected-via-skyway layout, could barely breathe. Designed to serve a half-million visitors a year, the '60s-era building was choking on 700,000 to 800,000 people annually, according to Sterns. Navigation was clumsy; bathrooms were few and tucked away. Even the mechanical systems regulating humidity and temperature were substandard, threatening textiles, pottery and other rare items in the museum's collections.

The museum's mission had also changed since the construction of the old facility. "We always go back to the visitor experience," says Jim Peterson, president, Science Museum. Today's visitors increasingly expect entertaining, hands-on interactivity from museums. And for a museum that serves as a destination for school groups, that's vital. Peterson challenged his staff, Cers and the other designers to create a building that was flexible in meeting the needs of the 93-year-old organization.

The museum's inner workings are evident at twilight (opposite), while the building's exterior assemblage of forms (above and right) creates aesthetic excitement.

Deliberate, thorough and time-consuming don't begin to describe the decision-making process that shaped the new museum design. But Cers claims the process of divining the museum's particular needs as a civic and commercial institution, as well as obtaining buy-in from the constituents involved in the process, was professionally energizing.

Five teams comprised of museum staff and architects sorted through issues associated with visitors, building siting, objects and materials, sustainable design, and staff and information systems. "The museum is very much like a city, with all kinds of disciplines, interests and neighborhoods," Cers says.

"There are scientists, educators, archivists, exhibit developers, marketing people, IMAX film producers and volunteers all contributing something essential to what this place is about," he con-



tinues. "It's a far more diverse group of people and activities than you normally encounter as an architect. When the challenge is to embrace the full value of all those people, and help them succeed in what they do, you have to approach the project differently. We architects often talk about partnerships with our clients. This really had to be one."

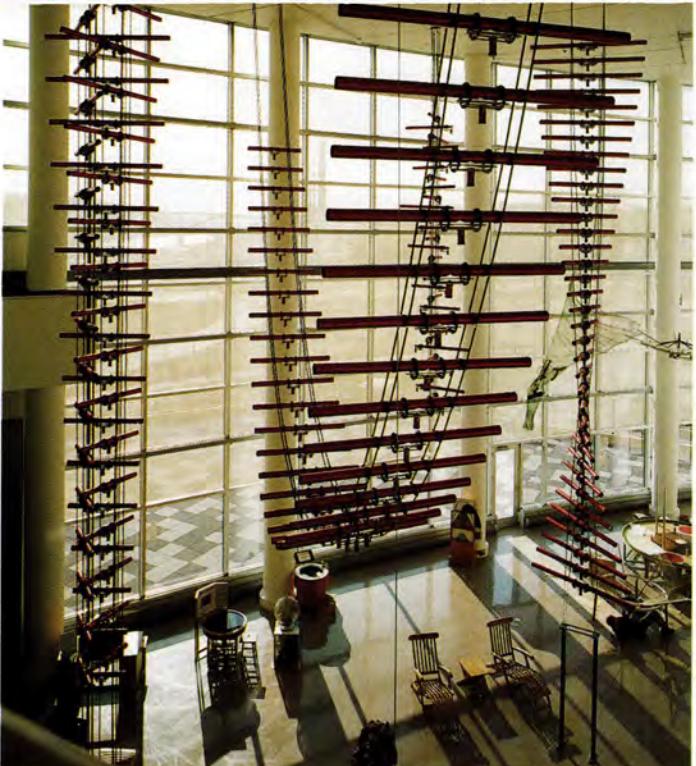
The city that is the new Science Museum of Minnesota rolls out the red carpet for visitors of all stripes: pedestrians, conventioneers, cyclists, out-of-town visitors, suburbanites and downtown workers looking for a lunch spot. Its very address embodies easy access: Kellogg Boulevard is one of St. Paul's main thoroughfares. The designers concealed the museum's ample parking under the public plaza. Car commuters emerging from the ramp elevators join pedestrians in a common glass vestibule before passing into the main lobby festooned with colorful sculptures and a replica of a Quetzalcoatlus with a 35-foot wingspan.

As evening settles in, these features glow behind the entry's tilted glass facade. A circular ticket counter (resembling a circus merry-go-round) dominates the lobby. Periodically, a line queues to the right

as filmgoers await entry into the new William L. McKnight-3M Omnitheater: a state-of-the-art-technology setup, replete with a 70-by-90-foot IMAX flat screen and 92-foot-diameter spherical shell that lowers visorlike over the audience prior to Omni shows. The lobby also leads to a separate exhibits entry, as well as a dramatic triangular staircase accessible to the public for descending to the riverbank pathways below.

"School groups comprise 20 percent of our visitors," Sterns says, "but in the old facility we didn't have any way to welcome them." Today kids—hordes of them, bused in from schools across Minnesota—regularly inundate the new museum via a separate, lower-level entrance. Students scrambling off buses are greeted by Iggy, the famed bronze iguana who guarded the entrance of the old facility, and herded into a low-ceiling lobby painted in bright purples, reds and greens. Lockers provide easy storage, classrooms down the hall are equipped for on-site experiments and labs, and a large carpeted area is easily converted into a brown-bag lunch spot.

DON F. WONG



Whether visitors descend via the main lobby or ascend from the school-group's entrance, one glance across the atrium offers a carnival of choices, including the Mississippi River Gallery, the Human Body Gallery and the Experiment Gallery.

There are surprises, too. An 82-foot *Diplodocus* dinosaur peers over the edge of a pedestrian bridge. In the lower paleontology exhibit hall lurk the largest *Camptosaurus* ever found and one of just four *Triceratops* in the world. "A good museum needs to offer surprises," Cers says. "As you move through the museum, the interior spaces, exhibits and river views unfold in unexpected ways, making your visit more exciting and memorable."

Wowed by views of the river and the collections themselves, most visi-

Highlights of the new museum include: the atrium's tube sculptures, which translate the seismic activity of earthquakes into music (above right); the 3-D laser theater (above left); the Mississippi River Gallery, organized as a journey down the famed river and featuring a restored towboat anchored on an outdoor terrace (right); and the ever-popular dinosaur skeletons (opposite).

tors are likely to forget that the museum also houses a staff of more than 600 full- and part-time employees. Curators, marketing specialists, vice presidents, food service and an IMAX film-production lab are wedged behind the gallery walls. The result is a web of activity across all seven floors of the building, requiring flow paths for materials and exhibits, as well as complex security measures.

The museum also has a civic role to play, notes Peterson. It should serve not only paying patrons, but the individuals who pass it on a daily basis and the residents who share its neighborhood. An extended staircase along the building's east side forms a public link between downtown St. Paul and the river below—a physical realization of St. Paul's efforts to reclaim its river front and revitalize its downtown.

David Loehr, vice president and project director, Ellerbe Becket,



notes that the museum auditorium that houses a new laser show doubles as a public auditorium. Outdoor exhibits to be developed later will also stimulate the curiosity of passersby who may never set foot in the museum. For the museum's planners and architects, making connections among ideas, communities and geography is what the new museum is all about. "People see the museum as a piece of the civic and urban fabric," Loehr says, "whether they're touring the museum or not."

**Science Museum of Minnesota
St. Paul
Ellerbe Becket**





BRIAN DROEGE

BY CAMILLE LEFEVRE

The Green Institute's Phillips Eco-Enterprise Center breaks new ground in environmental building

PEEC *Performance*

Mention these specifications—64,000-square-foot warehouse/office building—and this image probably springs to mind: a glum, precast rectangle in a former farm field surrounded by parking lots, built with a single-mindedness that precludes forethought of energy-efficiency or sustainable design.

Now, take a look at The Green Institute's new Phillips Eco-Enterprise Center (PEEC), located in the Phillips neighborhood of Minneapolis next to the planned Hiawatha corridor and light-rail line. A curving, 2-story glass curtain wall welcomes visitors into a soaring, light-filled atrium. Note the operable windows, the salvaged steel joists (from an old building at a farm site), the glue-laminated engineered-wood ceiling, the window sills made from soybeans and newspaper, the iron-tough linoleum derived from linseed oil.

Out the south windows is a 25,000-square-foot plot that masks the buried geothermal wells that heat and cool the office portion of the building, and will be home to a future prairie restoration that retains and filters roof runoff. On the building's north side are the parking lots, fitted with biofiltration strips that double as parking-lot islands. The strips filter oil and sediment from storm water flowing through the parking lot before the water hits the sewer system.

Follow the corridor, which begins in the atrium, through the 20,000-square-foot office section of the building, and pass several common meeting rooms carpeted with resilient-textile flooring that is 100-percent recyclable; bathrooms with salvaged sinks and cabinets, and showers for bike commuters; and walls with low- or no-emission coatings and adhesives.

The corridor leads beyond sun-filled offices to the 44,000-square-foot production warehouse with common loading dock and common entry/reception area. Here solar-tracking insulated skylights bathe the cavernous spaces with daylight and salvaged steel trusses add architectural support to ceilings. Venture to the roof and picture a water-retaining garden, which next spring will be comprised of layers of monolithic membrane, black-plastic waffle filter and drainage rock, topped with short-rooted prairie plants.

Developed by The Green Institute and designed by LHB Engineers and Architects, Minneapolis, PEEC has become a new benchmark for planning, design and construction of such projects. One of a handful of sustainable industrial buildings in the world, the project has a social, as well as environmental conscience. The building houses a mix of social-service and industrial tenants that have an environmental focus, and that together will provide



The Phillips Eco-Enterprise Center welcomes tenants and visitors with a curving curtain wall that illuminates the atrium (above). The building's outstanding sustainable-design features include a buried geothermal well field on the south side of the building that will soon become a wet-prairie restoration (left) and solar-tracking insulated skylights (opposite).



up close

Continued from page 13

commitment to design thinking throughout the academic community. Not just in the preservation of existing buildings and the construction of new buildings, but in the university's decision to fund the Design Initiative, which provides nearly \$500,000 for interdisciplinary research in design. This program will forge ties between disciplines. For instance, a medical researcher who collaborates with design faculty to consider the design of equipment and devices will be broadening the perspective of researcher and designer alike.

We have also entered into a partnership with the Walker Art Center to conduct a design studio in their main gallery during the upcoming summer exhibition entitled "The Un-Private House," which is currently at the Museum of Modern Art. As one of four installations at the Walker in conjunction with this exhibition, a CALA studio will explore issues relative to the design of housing within the context of a specific Minneapolis neighborhood within a three-mile radius of the Walker.

What specific challenges do budding architects face? What CALA initiatives do you envision to help address those challenges?

When I started my professional life, the tools I had were an X-acto knife and a drawing triangle. Today, I tend to ask new interns in our office what software programs and other tools they will need to do their jobs. Graduates today are in a great position to leverage their knowledge in crucial ways.

More important, however, is that CALA must graduate students with the confidence to face critical design issues of our day with intelligence and insight. They must be able to challenge clients in a positive way. As a professional school we have the responsibility to go beyond teaching knowledge. Graduating students should depart with confidence in themselves, their education and their beliefs.

At the same time, we must remain relevant. Studios are increasingly engaged in projects of social import and community life, with CALA reaching out in other ways. We have been fortunate to be in discussion with Aspen Research Laboratories—affiliated with Andersen Windows—about a building-research center, which would create educational opportunities for undergraduate and graduate students.

CALA must build confidence in students by helping them equip themselves with the tools to tackle challenges. Overarching, in my mind, must be a commitment to the discipline of architecture, excellence, risk taking, support and optimism.

CALA's Mentor Program pairs students with practicing professionals. So many students want to participate that there are not enough willing practitioners. Why is this program so popular and what does its popularity indicate?

A busy economy contributes to busy practitioners, which of course impacts this problem. But we should not squander these good times by not pursuing ways to strengthen the profession. Academics and professionals should identify points to create partnerships—publishing joint articles, teaching together or linking research efforts.

If we are to broaden our mission and influence within the discipline of architecture we cannot afford to leave students behind. When I worked in large offices, I might not have shared the aesthetic decisions of principals or partners, but the point was to watch how they conducted themselves and picked staff to be a part of the office. Student exposure to office workings is an important part of their development. You learn by watching mentors.

CALA seeks to strengthen ties between the school and practitioners, which can only help students gain professional footholds. Recent efforts in Continuing Professional Studies, lead by Garth Rockcastle, along with renewed efforts in establishing teaching practices, will broaden opportunities for educational, scholarship and research experiences for students, faculty and professionals.

Why were you interested in leading CALA's architecture program?

Few schools do what CALA does: embrace both practitioners and tenured faculty. Southern California Institute of Architecture has used a similar model to create a charged design environment. Yale University's School of Architecture has constructed another version through the auspices of endowed visiting chairs.

While CALA's teaching model has been in place since Ralph Rapson's era, the power of that model to move us into a position of leadership within the realm of architecture programs rests in our willingness and skill to

Continued on page 60

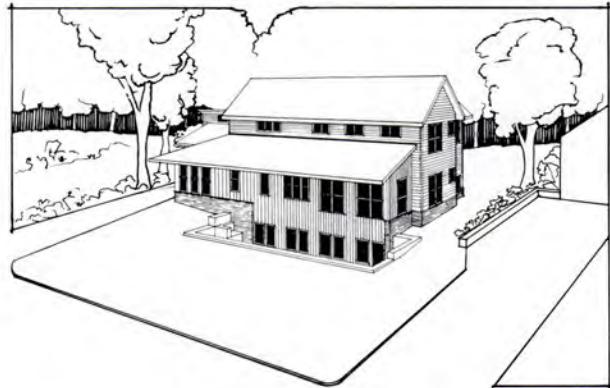
Landscape Architects



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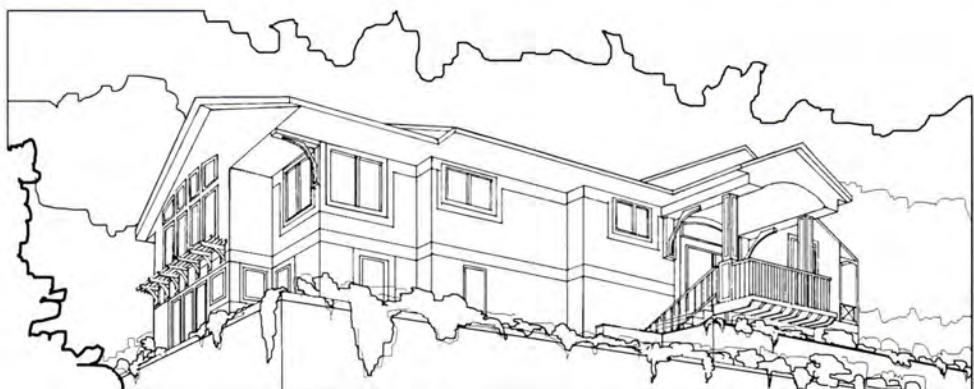
McMonigal Architects
Private Residence
Minneapolis, MN

Set on a city lot, this new house incorporates accessibility on all levels, with a covered porch connecting the detached garage. The house adjoins a rustic park area to the east, with a private screened porch maximizing the views. Generous windows provide sun-filled spaces on all levels. (612) 331-1244



McMonigal Architects
Thompson Residence
Arden Hills, MN

Overlooking Lake Johanna, this addition and remodeling expands the views and daylight while respecting the original architect's home design. The narrow 50' x 500' site shaped the interior and exterior spaces without removing trees. (612) 331-1244



McMonigal Architects
Krieger Residence
St. Paul, MN

Set to the rear of a city lot this expanded kitchen, with a new sun-filled eating area, flows out onto a stone patio. A new detached garage encloses the patio to form a courtyard flanked by trellises. A new master bedroom suite is carved into the roof of the new addition. (612) 331-1244



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endangered

Continued from page 7

alternate site for its planned relocation, pending a decision on the use of nearby athletic fields.

The Fawkes buildings, like other former auto-oriented enterprises on the block, reveal transitions in style and technology performed by an architecture responding to turn-of-the-century economic transformations that made this century vastly different from its predecessor. Classical Revival-style elements that formerly served to shroud 19th-century buildings became delineators of a 20th-century structural-framework system made possible by engineered structural steel. Storefront windows were enlarged to display automobiles. Store interiors, characterized by columns spaced further apart, high ceilings and expanses of display windows, created opportunities for space to dominate as a design feature—a concept carried further and with considerable obsession into the mid-century.

Other structures in the Fawkes Block range from 1 story to 3 stories in height. In general, the architecture of these buildings reveals a strong acknowledgement of the 19th century recently left behind, with their ready employment of brick corbelling, ornamented cornices and vestiges of columns. Twentieth-century architectural expressions found on these building exteriors include: compressed decorative bands that separate masses of wall planes; diamond-shaped patterns of brick with contrasting colors; recessed panels between piers; and bands of implied brick brackets and dentils (projecting brick alternating with flat brick).

Meanwhile, during the 1970s, east of the Fawkes Block into downtown, Minneapolis storefronts that possessed the right kind of architectural scale to offer shopping opportunities were replaced with large office towers. Street-level vitality declined. "Going downtown," once a mix of civic pleasure and duty, became less important. In the late 1990s, a large section of south Nicollet Mall that still reflected the era when Nicollet Avenue was the Upper Midwest's premier shopping street was overtaken by the steel, thin-set, stone-and-glass structural monoculture that now dominates downtown.

This real-estate development occurred while people of diverse interests and backgrounds with concern for their city environment developed a new urban aesthetic. Today

new forms are being articulated with traditional elements. Older buildings are no longer treated as quaint set pieces, but as valued places that comfortably fit into urban redevelopment.

The Fawkes Block is a prime example of a place where architecture has created an articulate group of buildings that knit together small spaces shaped by walls whose material invites the eye and mind to read time's transformation of surface texture, both by nature as well as by people's lives.

Richard Anderson, president of the Citizens for Loring Park Community, says his group's land-use committee is seeking preservation of the Fawkes Block. "That place is one of the last places in our neighborhood that has such a unique mix of retail and office spaces," Anderson says. "These buildings provide opportunities for small businesses to thrive in a community that values them." **AM**

technology

Continued from page 15

mixes with smoke and rises up the chimney. In the late 1700s, Rumford created a fireplace that had a big, tall and wide opening, was very shallow, and had widely splayed coves or jambs to reflect as much radiant heat out into the room as possible. At the same time, however, Benjamin Franklin and others were incorporating superior combustion efficiency into stove design, thus challenging the more traditional notion of fireplace and hearth.

Plutarch wrote that when the barbarians sacked the Temple of Vesta at Delphi and extinguished the sacred flame, the fire had to be relit by a "pure and unpolluted flame from the sun." Brass concave burning mirrors focused sunlight onto a dry fuel source, to ignite the flame anew. The word "curfew" has its origins in the French *couver-feu* or "cover the fire," which meant covering embers with ashes to keep the hearth's fire burning continuously.

While traditional daily tasks and rituals surrounding the hearth are not evident in most of today's homes, fireplaces are as prevalent as ever. Just as all flames embody a bit of the sun, the fireplace is a vessel for a home's animating spirit. **AM**



Jo Davison, vice president creative, Larsen Design + Interactive.



Sanford B. Stein,
founder, SteinDesign.

Where The Eye Will Lead?

emerging design trends for the new millennium



Internet strategist
R.T. Rybak.



Dan Cunagin,
president, Logic
Product Design.



This colorful graphic introduced the roundtable discussion, "Where The Eye Will Lead: Emerging Design Trends for the New Millennium."

also be seeing more retro from Detroit in cars like the Chrysler PT Cruiser, which has strong references to the '37 Ford and street rods. It's coming in everywhere. I was in Denmark looking at very progressive kitchen concepts and there, dropped into the middle of one kitchen, was a cobalt-blue refrigerator that could have come out of an American kitchen in the '50s. Retro is not just referring to the past; it's a point of departure in the present.

Are we looking for a refuge from technology?

Cunagin: It seems like every client who comes in wants us to find a way to embed a Web browser into their product. Web interfaces are going to be everywhere in the home and architects should be watching this carefully. With all of this technology hitting people every way they turn, architects may want some place in the house where people can get away from technology and find some peace.

Will branding have an influence on buildings?

Davison: Branding these days has gone beyond those general ideas about blind trust and dependability. Branding is not just about a name anymore; it's the whole store and the whole experience. Branding is more an expression of the whole company than it ever has been. Architects have to be aware of this because companies are wanting their brands expressed in packaging, and the store and the whole building.

Will electronic communities replace real ones?

Rybak: I work a lot with clients to create Internet communities. Invariably, the successful ones realize that all of these people who have spent all of this time e-mailing each other want to meet face to face. The Internet isn't going to turn us into a world hidden behind computer screens. If anything, the Internet is going to challenge architects to create truly public spaces that remind people there is no substitute for face-to-face interaction.

Face to Face

During AIA Minnesota's 1999 convention, design and technology experts reflected on how disposable culture, image bombardment and the Internet will influence architecture in the 21st century

By R.T. Rybak

In an era when architects design teapots and buildings can look like toasters, it is becoming clear that the lines are blurring between architecture and other design disciplines. To help Minnesota architects see where design trends are headed in related areas, AIA Minnesota's 65th annual state convention, "Building on a Century: A Celebration of 20th Century Architecture," in November 1999, convened four experts from different fields to discuss the topic.

The panelists were: Dan Cunagin, president, Logic Product Design, a company that integrates engineering, industrial design and consumer research to bring products to the marketplace; Jo Davison, vice president creative, Larsen Design + Interactive, a strategic-marketing and -communications design firm specializing in branding, identity, graphic design and interactive media; Sanford B. Stein, founder, SteinDesign, which applies its resources to retail planning and design; and Internet strategist R.T. Rybak, whose clients include media, established businesses and a range of technology startups.

Following are excerpts from their presentation, "Where The Eye Will Lead: Emerging Design Trends for the New Millennium." The questions were raised by the audience during the presentation or between the panel members themselves. The answers represent the panelists' responses to what those questions may mean for the future of architecture.

Is technology making us a throw-away culture?

Dan Cunagin: We are in a technologically aware period in which we are bombarded with electronic messages from all directions. People are looking to find the next gizmo, the smaller handheld, the faster chip. One effect of all this is that we keep shrinking the product life cycle. Our culture is becoming more based on disposable products. That makes it tough enough when you are dealing with consumer products, but it has far more serious implications for architects because buildings aren't as recyclable as products.

Sanford Stein: Our culture is now celebrating and valuing our heritage. Many of us are researching our heritages and taking pictures out of the closets that our parents hid as they were trying to assimilate. So much of our past has been thrown away that we are trying to find some way to reconnect to what we have lost.

Has image bombardment led to simplicity?

R.T. Rybak: Click through the top 10 sites on the Internet and you come away thinking you are looking at ransom notes. Images are pasted on top of each other and lines are going in every direction. Today the Web is filled with visual clutter. And after looking at this all day I imagine more people will want to come home to houses that are more restrained, with cleaner lines, so they can give their eyes some rest. The same should be true of their work environments. People looking at the chaos of the Web all day will probably find buildings with Gehrylike intersections of images less appealing than they did a few years ago.

Jo Davison: The whole trend at this point is clarity. Things have become so complex people want the message upfront and accessible. This is showing up in type and the way pages are laid out. If this carries through into architecture it will mean that people will want rooms that are understandable, that clearly say how people can use the space. If there is experimentation it will be to improve the function, not just to be avant garde.

Has a strong economy sparked innovation?

Cunagin: The economy is so strong right now that companies have the safety net they need to experiment with new designs. If there is ever going to be a time for a designer to try something new this is it. If you aren't experimenting now, don't expect to when the economy slows down.

Is the future in the past?

Stein: While retro is boring to some of us, it is totally new to echo-boomers and some Gen-Xers. Designers from Japan and even some American schools are linking into the '50s and reinventing it. We will

predesign has already been done by one of the many architecture firms we commission, so I'm familiar with the project," Ouska explains. "I make myself available for questions. I also listen to the legislature's concerns and responses by members of the Department of Corrections—both of which are my clients, so to speak."

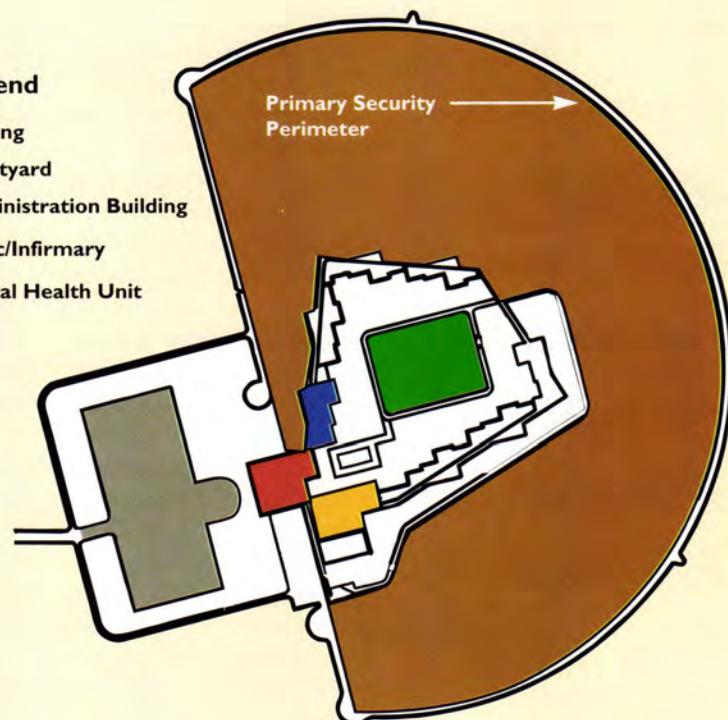
Ouska "designs vicariously" these days, she says. "We hire other architects to do pre-design and design, construction drawings and contract administration." Asked whether she misses the traditional design aspect of architecture, she answers, "Yes and no. Probably, more no. I still need to know the details because I do review drawings and specs. But by working with other architects, I see a variety of techniques, so I pick up a lot of new insights and information. Each architect brings to the table different knowledge and expertise."

Small projects, such as a walking trail at the Veteran's Home in Hastings or a picnic shelter at the Veteran's Home in Luverne, are handled by the department's in-house drafting technicians Ouska manages. On projects with an estimated construction cost of up to \$750,000, Ouska selects architects from a published list. Projects that fall into this category include: video assessment at Lino Lakes correctional facility; the addition of a sprinkler system to the Activities Building at Lino Lakes; and the pre-design for the Mental Health Unit at the Red Wing correctional facility. Architects for major projects are chosen by the State's Designer Selection Board.

In order to work with the State, architects must closely follow established protocol. "We've put our procedures manual on a website, which I've been developing," Ouska says. "I've compiled all of the technical information telling consulting architects how to do business with us. Working in a public setting is a whole different thing than the private sector. We have unique requirements. We are governed by statutes. All of the architects we work with need to be aware of that information."

The challenges Ouska faces working for the State suit her better than those she encountered at traditional firms. "I have an average of 30 projects, which I constantly need to balance," she explains. "I need to judge where to put efforts to make each project the best it can be, to make sure the client agencies get what they need for their programs and to ensure the taxpayers' dollars are spent well. It's a different way of doing architecture and I enjoy it."

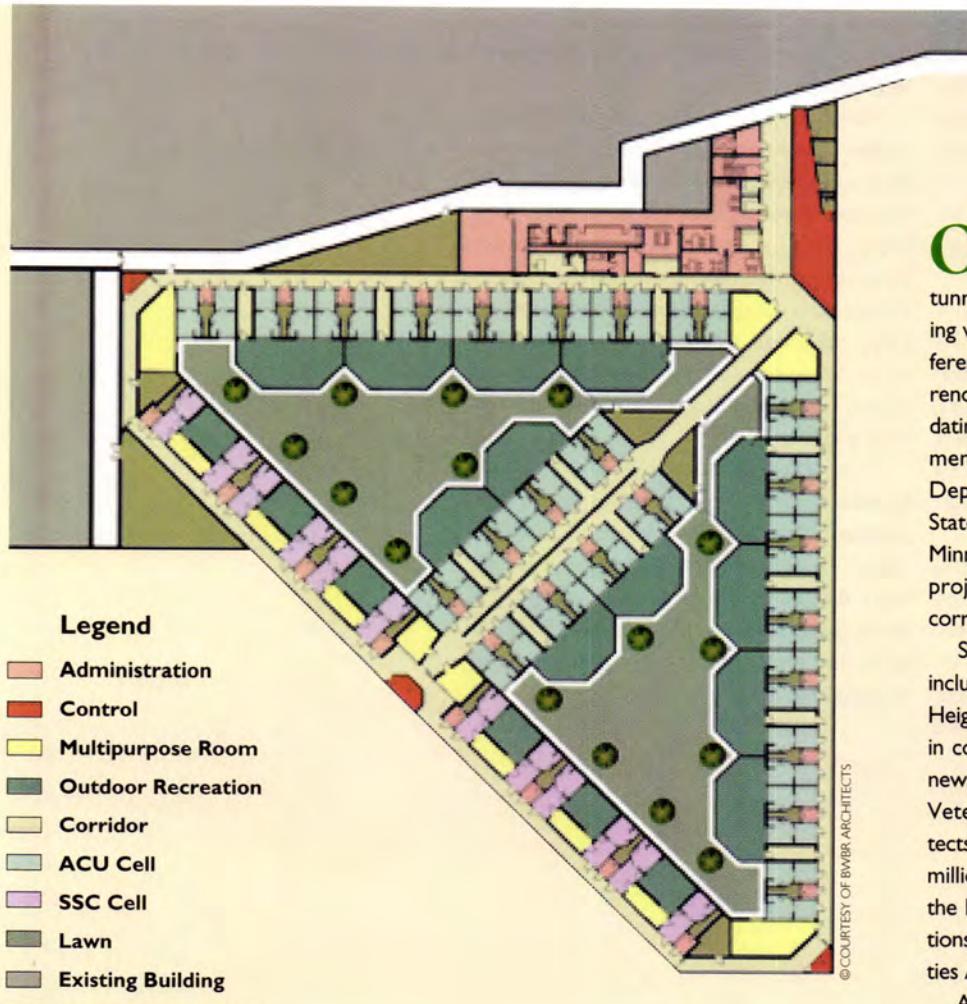
Camille LeFevre



COURTESY OF KLEIN McCARTHY & CO., LTD. ARCHITECTS

Kath Ouska (above right) oversees architectural work on correctional facilities in Minnesota. Current projects include a high-security segregation-unit addition to the Oak Park Heights prison, designed by BWBR Architects (opposite) and a new mental-health unit designed by Klein McCarthy & Co., Ltd. Architects, also for Oak Park Heights prison (above).

KATH OUSKA STATE OF MINNESOTA



On any given day, Kath Ouska might be slogging through a sandstone sewer tunnel 60 feet below the Faribault prison, dealing with security and energy-use issues at a different correctional facility, reviewing plans for renovations on a state historic building or updating the procedures manual on the department website. As assistant director for the Department of Administration, Division of State Building Construction for the State of Minnesota, Ouska manages 15 to 45 building projects at a time. Her area of expertise is correctional facilities.

Some of the projects Ouska has managed include: a \$12-million addition to the Oak Park Heights prison (currently in schematic design) in conjunction with BWBR Architects; and the newly constructed Dementia Unit at Silver Bay Veterans Home with Stanius Johnson architects, inc, Duluth. She has also managed the \$8-million new administrative segregation unit at the Lino Lakes correctional facility and renovations stipulated by the Americans with Disabilities Act at the Hastings Veterans Home.

After graduating from architecture school, Ouska worked at several firms before switching gears to work for the State of Minnesota. What drew Ouska to her current job was the wide variety of projects and “the fact that you’re working on buildings that are built to last 75 to 100 years,” she says.

After working at firms for 12 years, Ouska adds, she was also ready to try something different. In addition to project management, she ensures “the taxpayers’ money is spent wisely,” manages a staff of about 12 people, and is the agency’s team leader for the Department of Corrections’s building projects.

During capital bonding years, she also attends legislative walk-throughs of correctional facilities when looking at capital budget requests. “The

In the seven years Pederson's been with the corporation, he has worked on 30 to 40 Target, Mervyn's and Dayton's stores in various capacities. And he's seen changes in where and how the stores are built. "When I first started, we put a lot of stores on undeveloped land at the edges of communities," he says. "Now we're doing more work in urban areas, on reclaimed land and in reclaimed buildings that have outlived their original uses."

The corporation completes about six retrofits a year. In New York City, for example, Pederson says, "there are miles of developed land so we have to find smaller parcels on which to do a store, and find ways to decrease the amount of land and space we've traditionally used for parking and for the stores. Today we have stores that are multi-level with parking below or in ramps."

Pederson was introduced to Dayton Hudson Corporation while working for a Minneapolis architecture firm he joined several years after graduating from architecture school. When Pederson decided to make a career change, he contacted the corporation and secured his first position in the 100-member division.

"My job is very much like any other architect's job," he says. "We're organized here into teams, the same way it's done in a traditional firm. Like firm architects, I work a lot with other disciplines and outside people with technical knowledge to complete the

projects. I work with cities on codes and site-plan approval; design work that translates my client's wishes into projects; work with engineers and code people and soils people; and supervise projects through construction administration. It's very much a traditional role."

The biggest difference between his job and that of a firm architect, Pederson says, is that "by working for one entity, an architect probably understands more intimately what that client wants. I think that helps us and the corporation come up with better projects for less money."

Asked whether he ever misses the challenges of working with a variety of clients, Pederson responds, "No. Because Dayton Hudson is about change. We constantly change the way we're organized, the way we do projects, the way we present ourselves. Finding ways to adapt is one of the most exciting challenges here. Just when I think I've got it down, the next year something will be completely different and I just find ways to keep adapting."

"The schedules never change, however," he adds. "I might be required to do things a different way, but I find ways to do them within the set schedule. And I like it. If I always did things the same way, solving the same problems year after year, that would bore me. Even from month to month, the changes here are unbelievable. It's fun."

Camille LeFevre



Pederson (above right) currently renovates existing but out-dated Target stores, including this store in Walnut Creek, Calif. (below and opposite above).





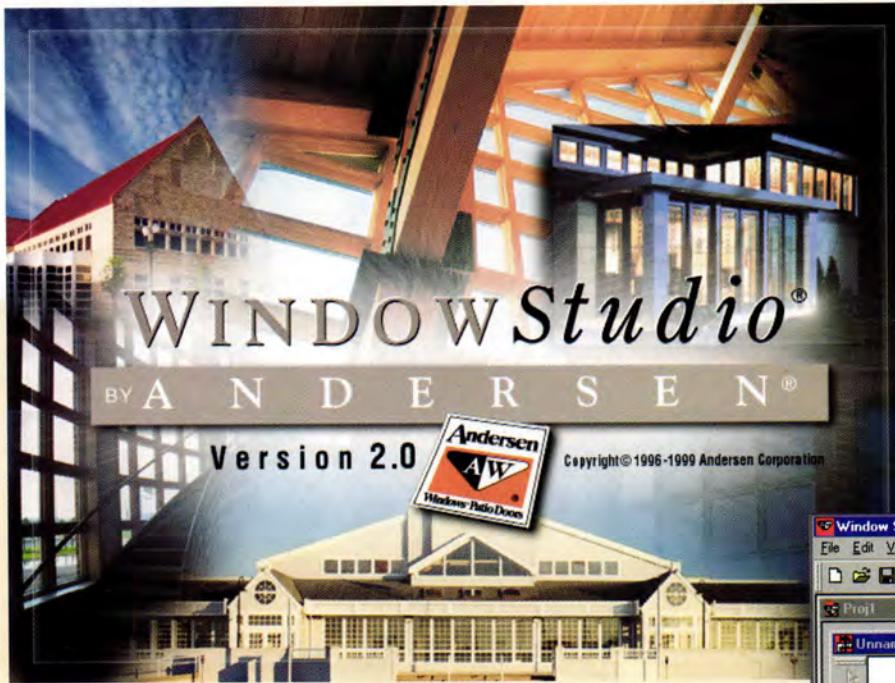
For years, Target stores rarely digressed from the corporate Minnesota prototype: 1-story rectangular tan building with surface parking lot in front. But if you've recently noticed changes in the retailer's new-store designs, as well as in renovated Target stores from coast to coast, you're seeing the work of in-house architects like Dave Pederson.

As project architect with the Property Development division of Dayton Hudson Corporation, Minneapolis, Pederson joined the corporation in 1992 as a member of the new-store department. In this department, he explains, "the emphasis is external. We work with developers, local communities, cities and planning departments. Because we're more free at the beginning—we start with a blank piece of ground—we can tailor the project to local conditions."

After five years designing new stores, Pederson joined the remodeling department where "the emphasis is more internal, as we work with merchants and local store teams to come up with concepts that work better than what was being used before."

DAVE PEDERSON DAYTON HUDSON CORPORATION





design software, as well as tools included on the Andersen website. "This has opened up a whole new world of design for me," Johnson says. "Designing a building, designing website components—both are design processes. Both are about understanding a customer or client's needs and determining a way to bring a solution to them."

After graduating from architecture school, Johnson worked for three different firms in Rochester and Minneapolis. After taking a year off to care for his year-old son while his wife returned to work, Johnson received a call from Andersen. Personnel had located Johnson's resume in a binder at the AIA Minnesota office. He began as a construction specialist, providing design and spec assistance to architects and field representatives.

"Andersen's call surprised me," he says. "The job was something I had never considered. But it intrigued me. So I jumped on it right away." Johnson quickly advanced within the evolving company to his current managerial position.

Diverse challenges and the opportunity to work as a member of a team keep Johnson at Andersen. "Working toward a common goal is pretty exciting," he explains. "It's fun to be a part of that team, not just in technical services, but within the entire business."

Asked whether he ever feels isolated working with just one client, Johnson replies, "I don't feel isolated. There are so many people—internally and externally—involved in the things we do. We get a lot of calls from around the coun-

try from architects, contractors and suppliers, so we deal with a mix of people on a regular basis. We're in a focused area, as another firm might focus its expertise. But because of the number of people involved and the variety of challenges, we always have a lot of interesting things to work on."

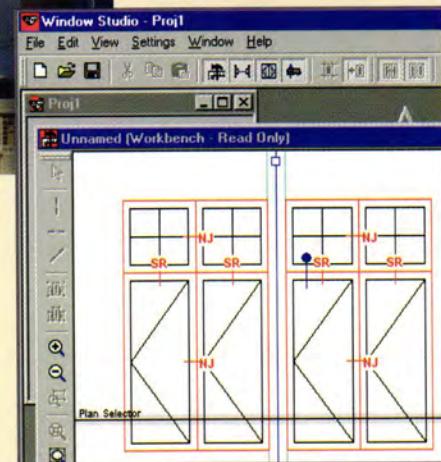
Johnson says his education and his years working for firms provided him with valuable experience. "Architecture is great training for developing a broad perspective of how widely separated things can influence each other and for understanding how things work together," he says. "It's a great background that provides perspectives you can't get from other courses of study."

"There is benefit in studying architecture, whether you go into law or manufacturing or any other career," he continues. "The way you manage a project, work with teams, pull information together and analyze information is all part of learning to do architecture and can be applied outside of the architectural profession."

Essentially, Johnson says, "what you get out of an architectural education is higher than architecture." The things he values, including working with people, being part of a team and "contributing to something greater than oneself," is what his firm experience gave him, which he carries into his work with Andersen.

"People find other things that give them energy and focus, and for many people traditional firm architecture offers that," Johnson says. "But there are good alternatives. And I found one."

Camille LeFevre



Johnson (above right) and his staff assisted in the structural-assembly detail on this office building in Atlanta (opposite). Johnson's department also develops computer programs, including the Window Studio® design software (above).

CRAIG JOHNSON ANDERSEN WINDOWS, INC.



I've grown to have a broader view of architecture than I used to," says Craig Johnson. "The kinds of things I did in a firm that energized me had to do with construction and the design process, but also with working with people toward a common goal to solve a problem. We do that every day, even though we're not designing buildings."

As manager of Commercial Technical Services for Andersen Windows, Inc., in Bayport, Johnson and his group are charged with providing design and specification assistance for users of Andersen products, offering technical advice

on the proper use of those products, and providing technical resources (such as Andersen's architectural detail file) that support the company's marketing and sales efforts.

"I have opportunities to work with structural engineers, with architects, product designers, and marketing and sales people," Johnson says. "All of these contacts, within and outside of the company, are similar to the ones a firm architect has working with a design team."

Johnson's seven-member department enlists the help of software experts and develops computer programs, including the Window Studio®

formed an in-house architectural staff that includes two architects in addition to Piontek. "The advantage of working directly for a corporation is that you're able to focus in one area and your project team becomes so strong," Piontek says. "Communication between members of the design team is much easier when you're located within the same office."

"When the owner, chef, architect and restaurant manager are all in the same room, all work for the same company and all offer valuable design input, the team concept is fully realized," she continues. "I spend a significant amount of time in design and at construction sites making sure the finished product is what everyone wants."

Piontek also receives feedback from staff and customers after a new restaurant opens. "Once problems are determined, they can be corrected and incorporated into the next design," she says. Similarly, her involvement in facility-management tasks results in first-hand information about which materials and manufactured products wear best. "We often change our specifications when we determine that certain finishes require more maintenance than others," she says.

Because D'Amico & Partners is fond of adaptive reuse, with an emphasis on integrating businesses within existing communities, much of Piontek's work involves renovation projects. "We look for significant or historic-neighborhood commercial districts within major metropolitan areas," Piontek says. "We've found that our customers live or work in upscale urban neighborhoods where there are high concentrations of shopping, dining, arts and culture, which enhance the quality of life."

In addition, the company's diverse restaurant types defy formulaic design. Consider the company's approach in Minneapolis's Uptown area. D'Amico & Sons on Hennepin Avenue is a casual café and take-out establishment. The building was renovated, its stone façade preserved and enhanced, and in the process the business became a neighborhood fixture. The more upscale Campiello, on Lake Street off Hennepin Avenue, also underwent extensive renovation before emerging in its present state.

In addition to designing and renovating restaurants close to home, Piontek is charged with shepherding D'Amico's far-flung building program. The Campiello in a historic district of Naples, Florida, required adaptive reuse of the wood-frame, 1919 Mercantile Building—the oldest structure in the city.

After graduating from architecture school, Piontek worked in several traditional offices, as well as in a Wisconsin construction company.



She worked on six D'Amico restaurants while with a Minneapolis architecture firm before joining D'Amico & Partners in 1997. "I decided that at that point in my career I wanted to specialize and become an expert in one area: restaurant design," she says.

"What I like the most about working for D'Amico & Partners is being a true team member instead of an outside consultant," she says. "I have always felt that it is my responsibility to work closely with the client and design what they have determined they need, not what I have determined they need. At D'Amico & Partners there is a mutual respect between team members. I don't try to tell a chef how their station works best and they don't question my professional opinion."

Todd Willmert

Piontek (above right) oversees such projects as the Campiello in Naples, Fl. (opposite) and D'Amico & Sons in Uptown Minneapolis (above).

Four architects, all of whom graduated from the University of Minnesota's architecture program, explain why they left traditional firm practices for careers in the corporate realm

INNER STRENGTH

by Todd Willmert and Camille LeFevre



D'AMICO & PARTNERS, INC.

These days, restaurant reviewers critique a new establishment's ambience almost as much as its food. More and more, critics and consumers alike consider site, setting, exterior design, interior design, acoustics and other design issues to be part of the overall dining experience. As the director of architecture for D'Amico & Partners, Inc., Michelle Piontek tackles such design factors, which have contributed to the company's restaurant successes.

"I'm involved in all architectural and interior decisions, from site selection through the first required remodeling or facelift 10 years later," Piontek explains. "I enjoy being involved in every aspect of the design and it gives me great satisfaction to watch the design materialize during construction. It is also nice to hear from customers that they like the design, as well as love the food."

Because D'Amico & Partners has ambitious growth plans for the next decade, the company



JOHN PETERSON

marks the transition. Exhibits open with an original Hupmobile and close with a dimly lighted video-viewing area that accommodates visitors with seats pulled from a bus. The final stop is the bus collection itself, a large windowless room filled with the steel hulks and accessorized with classic Greyhound posters.

But a museum is only as successful as its ability to attract visitors. Thus, the architect says, the museum exterior needed to be eye-catching to tap traffic going to the mine. Nicolelli Jr. accomplished the task through the use of bright colors, a strong vertical banner and distinctive Greyhound signage.

Two metaphors guided the architect's approach: transportation and Hibbing's mining heritage. The museum is clad in an inexpensive moldable polystyrene material called Exterior Insulation Finish System (EIFS) to evoke the articulations of a bus. Its base is composed of four horizontal gray bands, mimicking unpainted automotive steel. The red, white and blue stripes above are a direct lift from a Greyhound bus.

Meanwhile, a plaza landscaped with bricks and chunks of raw iron ore pays homage to the Iron Range. Its strongest element is an EIFS-wrapped plinth topped with a steel trellis that thrusts from the ore to form part of the portico.

The architect designed the museum pro bono, his condition for accepting the assignment. The architect of record was Hibbing-based Roger Saccoman. Though he is plain about his so-called "beer budget" constraints, Nicolelli Jr. beams at what the museum accomplishes: giving a home to his father's collection and a place to celebrate a

piece of Hibbing—and American—history.

"On July 10 of this year, people from all over the United States—bus drivers, Greyhound employees—came to this building," he says. "It wasn't even finished. Yet people would come to me and shake my hand and tell me, 'What a beautiful building.'"

"For the first time, I realized I didn't design this building for my father, but for all the people in the audience," he continues. "I was humbled. This building is their representation. It's a symbol of their contributions to Greyhound."

Greyhound Bus Museum

Hibbing

Gene Nicolelli, Jr.



Bus Stop

Humble it may be, but the Greyhound Bus Museum in Hibbing proudly celebrates the birthplace of American bus travel

By Diane Richard

Gene Nicolelli Jr. is the first to say that the new museum in his hometown of Hibbing isn't terribly sophisticated. He isn't being harsh, only self-deprecating. He designed it.

Gene Nicolelli Sr. can't disagree more. "It's the most beautifully designed building," he boasts. These aren't just the words of a proud father. He was also the client.

The Greyhound Bus Museum, a museum celebrating the birthplace of American bus travel, was a labor of love for both Nicolellis. After more than 20 years spent collecting memorabilia, researching lore and finagling public, corporate and private financing, the elder Nicolelli is thrilled with the results: a

10,000-square-foot museum, which, at a total cost of \$800,000, gives a bold public face to a point of Iron Range pride.

For the younger Nicolelli, a Plymouth-based residential architect, the project was a lesson in tenacity. "My dad taught me never, ever to give up," he says.

Opened in July 1999, the museum occupies a plum site on the road to the Rust Hull Mahoning Mine, the world's largest open-air mine and Hibbing's top attraction. The museum traces Greyhound's evolution from its start as a 1914 Hupmobile dealership established by miners. Even



The museum's exterior is detailed to reflect the shape and style of a Greyhound bus (above), while the interiors house actual buses (opposite above) and cases of memorabilia (opposite below).

though they couldn't sell the open-air motorized carriages, the owners found a niche transporting Rangers to the mines. Many miles and mergers later, the business became the nation's largest bus line.

According to Nicolelli Sr., Greyhound's silver mascot is the third most recognized dog in the world, after Rin Tin Tin and Lassie. (The name of the company came from an employee who, observing a bus in a store window's reflection, said it looked as sleek and powerful as a you-know-what.)

Museum exhibits tell the Greyhound story, while such artifacts as uniforms and caps, ticket punches tucked into leather-tooled holsters and a fleet of mothballed buses—from rusty relics to a bi-level SceniCruiser—give tangible testament to America's love for the road.

The architectural approach is straightforward: three 1-story boxes of differing heights define a contiguous space for the lobby, gallery and bus hall, respectively. The long, open lobby evokes a station's waiting room, complete with a ticket booth occupied by a uniformed mannequin, an exhibit that has surprised many a near-sighted visitor attempting to converse with the silent teller. Museum volunteers answers questions, and sell tickets and souvenirs from behind a counter off to one side.

From the lobby, a narrow hallway leads to the gallery; rollicking turn-of-the-century music



fireplace. The private offices have transom windows and patio doors like those in the house's living room, and likewise provide patio access and river views. Bluestone-paver and wood floors are present here.

White siding of various types further unifies the three buildings: the house is sided with Fibrex, a new Andersen product not yet on the market; the cottage retains its original siding; and the foundation office has painted cedar siding. Limestone retaining walls anchor the foundation offices and relocated cottage, provide flood protection and recall materials used in the original residence. Exterior lighting reiterates Arts and Crafts detailing in the house and the foundation office. Bluestone-paver walks appear outside, as well.

"It was exciting to work with the idea of keeping the original feel of the site and buildings, while enhancing it where we could," Claybaugh says. Wulf adds that few people in the company today knew Fred Andersen, so by restoring the house and property, and maintaining it much in the way the Andersens did, "we're keeping our employees in contact with our history."

Andersen House, Foundation Office and Cottage

Bayport

Claybaugh Preservation Architecture Inc





JOHN DANICIC, JR.

The Andersen Foundation Office sits in homely contrast to the Andersen industrial facility (above). The building's interior includes an inglenook with fireplace (opposite above) and offices with river views (opposite middle). Overnight guests stay in the Andersen House and enjoy the indoor atrium at the end of the corridor and the outdoor patio (opposite below); the cottage is reserved for business meetings.

back of the house to the river. Inside, the 3,500-square-foot house was gutted and remodeled for adaptive reuse.

The front entry and dining room stayed close to the original design, and are furnished with Andersen family pieces. The master bedroom, however, was modernized and converted into the corporate board room. Three guest bedrooms with baths were recreated in the house, along with kitchen and catering facilities. In the living room, the architect enhanced the spacious feel by raising the ceiling, and installing transom windows and patio doors that offer floor-to-ceiling views of the river and new back patio.

Between the living room and front entry a new library was constructed. The fireplace was uncovered and restored. The ceiling was dropped and a coffer ceiling with art-glass panel installed. Cherry woodwork with classical detailing enhances the room's warmth and inviting feeling.

Because the property is located in the floodplain, some site-grading modifications were called for, which included moving the cottage onto a new foundation just south of the house. Initially remodeled to serve as guest accommodations—with new bath, windows and front-door patio—the 350-square-foot building is now a meeting place for company business.

Just north of the house sits the new Andersen Foundation Office, built on the site of the old garage (which was torn down). The 1,200-square-foot building was designed to be compatible with the existing structures, but project its own character.

The reception room features a vaulted ceiling with art-glass panel similar to the one in the house's library. The adjacent waiting room resembles an inglenook with a



The complex of three buildings (left) offers a residential retreat adjacent to the industrial facility (cottage, foreground; house, right; foundation office, behind).

man-style architecture. While preserving a significant aspect of the corporation's history and keeping the site's residential feel, the buildings also project the company's forward-thinking approach to business.

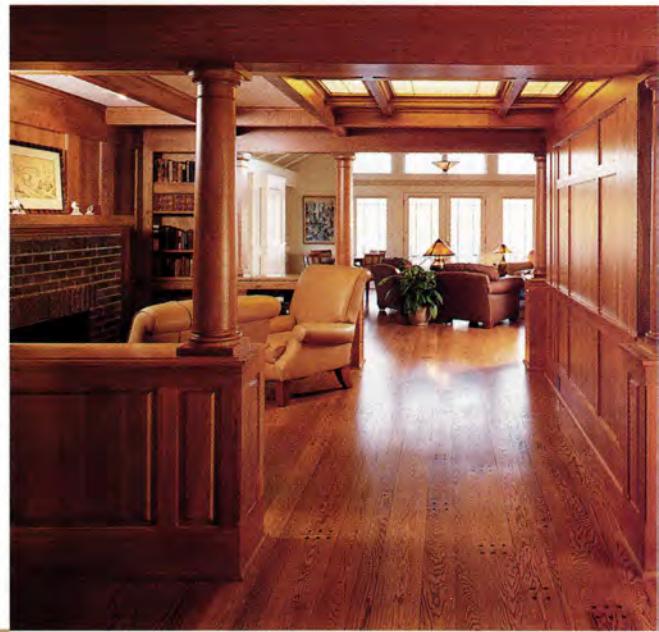
Andersen Corporation was founded by Hans Andersen, a Danish immigrant who started a lumberyard in Wisconsin. Andersen's was the first company to manufacture standardized window-frame units and...the rest is history. The Bayport plant was built in 1913 and today covers more than 2.7 million square feet.

For decades, Andersen's son Fred, who was elected president shortly after his father's death in 1914, ran the company from his home on the St. Croix River adjacent to the factory and offices. Originally a river cottage, the Andersen family built onto the house through the years. "Mr. Andersen tried every new window that came out, so the house had windows everywhere of different styles and sizes," Claybaugh says.

After Andersen's death, the company wanted to preserve the property, "since Fred was such a well-liked man," says Jerry Wulf, the corporation's president and chief executive officer at the time. "Not to make it a shrine. But to have it remain in the company." When Fred's wife died four years ago, the corporation purchased the buildings on the 5-acre, river-front site.

The company wished to keep the building exteriors much as they were, but wanted significant changes inside. Requests included new offices for the Andersen Foundation, accommodations for overnight guests and executive meeting areas. "The Andersens were not showy people," Wulf explains. "We didn't want to restore as much as retain the character of the buildings, which were simple yet elegant."

To reunify the Andersen house exterior, "which had a rather uncoordinated appearance," Claybaugh says, all exterior windows and doors were replaced. The architect also altered some rooflines and opened the



The house's front entrance welcomes guests with Craftsman-style details (opposite above left), while the back of the house features a patio that opens to the river (opposite right). The restored library in the house (above) opens to an airy living room with river views (left).





JOHN DANICIC, JR.

By preserving and updating the Andersen family home site, Andersen Corporation gains new corporate meeting spaces and a renewed sense of tradition

HOME Grown



BY CAMILLE LEFEVRE

The Andersen Corporation, headquartered in Bayport, may produce the most recognized brand name in the window and patio-door industry. But the company reached that stature from humble beginnings. And despite its reputation for innovation, Andersen takes pride in tradition and its heritage.

So when company executives decided to renovate the old Andersen house and guest cottage, and build new offices for the Andersen Foundation, they called on Robert Claybaugh, Claybaugh Preservation Architecture Inc in Taylors Falls. "Andersen is a company that is conscious of its history and of maintaining it," Claybaugh says. "The company has high standards, but isn't ostentatious. They wanted things done correctly with high-quality materials."

Three delightful buildings now sit in a pristine parklike setting just 100 yards from the industrial facility and corporate offices, and next to the St. Croix River. Although different in size and purpose, the quaint buildings reflect variations on Greek Revival- and Crafts-



The 2-story, light-filled atrium (opposite) includes stairs of recycled materials, salvaged steel joists and a glue-laminated engineered-wood ceiling. The building contains offices (left) and warehouse space. Geothermal wells (below) heat and cool the office portion of the building.

about 150 living-wage jobs for residents of the Phillips community.

"Essentially our mission is what strategies can we identify that will simultaneously create jobs and economic activity in the neighborhood, and produce a sound environmental outcome," explains Michael Krause, executive director, The Green Institute. "Our goal is to create sustainable, community-based environmental enterprises."

A nonprofit organization, The Green Institute was founded by residents of the Phillips neighborhood six years ago, following a 12-year battle over the proposed siting of a county garbage-transfer station on the site. After the group won that battle, Krause says, "we wanted to create our own vision of economic development in Phillips, instead of just being against something and waiting for something else to come along."

After a charrette sponsored by the University of Minnesota's College of Architecture and Landscape Architecture, a master plan done by Partners & Sirny LLP, Minneapolis, and presentations to the community, The Green Institute hired LHB in 1997 to drive the design of PEEC. "The client's goals for a sustainable building were aggressive, and most of them were met or exceeded," says Rick Carter, vice president, LHB, which specializes in sustainable design.

Those goals included: reducing energy use by 50 percent (compared to traditional code-compliant buildings); deriving a minimum of 10 percent of construction materials from salvaged sources and 25 percent from recycled materials; and using an aggressive construction-site recycling program. "In addition to looking at the components of the building," Carter says, "we looked

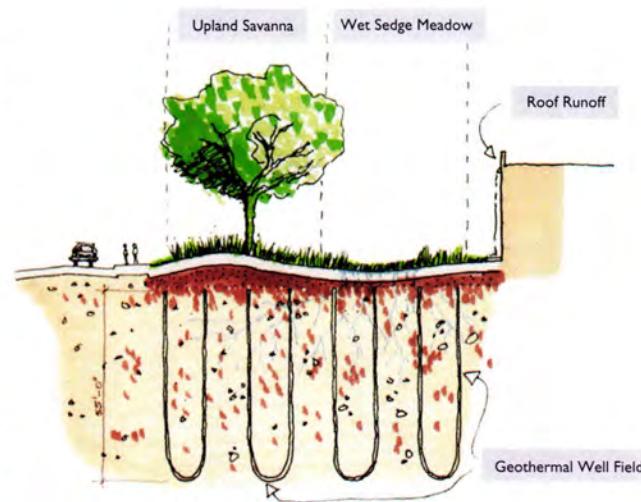
at the building in terms of its future life, and incorporated things like deconstructable elements—such as stair towers that can be taken apart, moved and reassembled—and spaces that are adaptable for future uses."

With the building nearly leased to capacity, the board of The Green Institute recently approved a five-year strategic plan that includes using PEEC as a teaching tool for architects, construction firms and the public. "A lot of times owners drive these projects, as we did," says Krause. "If owners are insistent that design and construction teams approach building in a more green manner, I know the professions—from architects, construction and subcontractors to people who do interiors—will follow."

Phillips Eco-Enterprise Center

Minneapolis

LHB Engineers and Architects



KRECH, O'BRIEN, MUELLER & WASS, INC.

6115 Cahill Avenue
Inver Grove Heights, MN 55076
Tel: 651/451-4605
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E-mail: komw@komw.com
Web: www.komw.com
Established 1985

Jim Krech	PE
Dan O'Brien	AIA, CID
Brady Mueller	AIA, CID
Brian Wass	AIA, CID

Firm Personnel by Discipline

Structural Engineers	3
Architects	5
Interior Designer	1
Technical	9
Administrative	2
TOTAL	20

Structural engineering services providing practical solutions utilizing innovative technologies. Registered in 14 states, KOMW offers expertise in various codes and special geographical requirements, including seismic and high-wind design. KOMW offers full services including architectural and interior design. Specialties include industrial, commercial, institutional, forensic, agricultural, and hazardous material containment.

Inver Grove Heights Ice Arena and Aquatics Center, Inver Grove Heights, MN; FIMCO Manufacturing Facility, North Sioux City, SD; Luther College Fitness Center, Decorah, IA; Dodge Nature Preschool, West St. Paul, MN; Gopher Resource Hygiene Facility, Eagan, MN; Scott County Hazardous Waste Facility, Shakopee, MN

LARSON ENGINEERING OF MINNESOTA

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E-mail: Lee@larsonengr.com
Web: www.larsonen.gr.com
Established 1979
Other Offices: Naperville, IL; Appleton, WI; Norcross, GA; Hazelwood, MO

Lee Granquist	PE
Kesh Ramdular	PE
Henry Voth	PE

Firm Personnel by Discipline

Civil Engineers	6
Structural Engineers	19
Technical	7
Administrative	6
Total	38

Larson Engineering of Minnesota offers engineering services in both STRUCTURAL (including architectural, curtain wall, industrial, and materials handling) and CIVIL (including pavement management and athletic facilities).

STRUCTURAL: Northfield Elementary School, Northfield, MN; Church of St. Josephs, Lino Lakes, MN; Petronas Twin Towers, Kuala Lumpur, Malaysia (CW); The Getty Center (CW); Boeing Industrial Platforms, Seattle, WA
CIVIL: Slumberland Stores, Multiple Locations; Anoka Hennepin Technical College (pavement), Brooklyn Park, MN

LHB ENGINEERS & ARCHITECTS

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Fax: 218/727-8456
E-mail: joelyn.gum@lhbcorp.com
Web: www.lhbcorp.com
Established 1965
Other Offices: Minneapolis, MN

—

Harvey H. Harvala	PE
William D. Bennett	PE
Steven H. McNeill	AIA
Richard A. Carter	AIA
David M. Sheedy	PE
Susan K. Quam	CPA

Firm Personnel by Discipline

Civil Engineers	8
Structural Engineers	8
Mechanical Engineers	7
Electrical Engineers	3
Architects	20
Landscape Architects	4
Interior Designers	5
Surveyors	6
Certified Public Accountants	2
Technical	22
Administrative	25
TOTAL	110

Continued on next column

Civil, structural, mechanical, electrical engineering and surveying services for municipal and other governmental agencies as well as housing, industrial, workplace, educational and healthcare facilities. Typical project types include streets, roadways, highways, bridges, utilities, trails, parks, site development, M/E systems, parking structures, fuel transmission systems, structural investigations and feasibility studies.

St. Paul Port Authority Site Development (Maxson Steel), St. Paul, MN; Duluth City Streets, Duluth, MN; Phillips Eco-Enterprise Center, Minneapolis, MN; Minntac Mine Bridges, Mountain Iron, MN; Minnesota Pulp & Paper/Potlatch Pulp Dryer, Cloquet, MN; SEP II Pipeline for Enbridge/Lakehead Pipeline, Superior, WI to Chicago, IL

LIESCH ASSOCIATES, INC.

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E-mail: liesch@liesch.com
Web: www.liesch.com
Established 1968
Other Offices: Madison, WI; Phoenix, AZ

—

Brian B. Liesch	PE
Harry L. Summitt	PG
Kenneth P. Olson	PE
John C. Lichter	PE
James de Lambert	—

Firm Personnel by Discipline

Civil Engineers	11
Chemical Engineer	1
Geotechnical Engineer	1
Professional Geologists	5
Technical	45
Administrative	10
Total	73

Liesch is a full-service environmental consulting and engineering firm. Our multidisciplinary staff offers expertise in solving environmental challenges from design and oversight of wastewater treatment plant construction to investigation and remediation of soil and groundwater impacts. Liesch environmental professionals have the experience to finish the project on time and within budget.

Continued on next column

Metropolitan Airports Commission, Minneapolis, MN; Ryan Companies US, Inc.; Minneapolis, MN; Clark Oil/Metcalf, St. Paul, MN; Midway Marketplace, St. Paul, MN; East Bethel Landfill, East Bethel, MN; Ellsworth Air Force Base, Rapid City, SD; Minot Air Force Base, Minot, ND

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E-mail: LJA@lightowlerjohnson.com
Web: www.lightowlerjohnson.com
Established 1954

Stevan G. Dewald	PE
Dennis S. Martin	PE
Joseph Lightowler Jr.	PE
Winton D. Johnson	PE
Frank L. Kratky	AIA

Firm Personnel by Discipline

Civil Engineers	4
Mechanical Engineers	4
Electrical Engineers	3
Architects	5
Technical	13
Administrative	4
Total	33

Food Processing Facilities Engineering for Agri-Businesses; Municipal Waste Distribution Systems, Engineering for Municipal and Industrial Sites. Recreational Swimming Pools, Electrical Power and Lighting Distribution Systems Design, Energy Management Systems Design, Municipal and County Streets and Road Replacement Engineering, Power Plant Modernization, Commercial/Industrial Heating and Ventilation System Design and Modernization.

Hog Processing Plant, Dawson, MN; HVAC Systems Replacements, VA Medical Center, St. Cloud, MN; Steam Piping and Tunnel Replacement, VA Boiler House, Hastings, MN; Waste Water Treatment System, Clinton, MN; Steam/Condensate Line Replacements, Concordia College, Moorhead, MN; Swimming and Wading Pools, New Ulm, MN

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7200 Hemlock Lane, Ste. 300
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Tel: 612/424-5505
Fax: 612/424-5822
E-mail: home@loucksmelagan
Established 1976
Other Offices: Loucks/Melagan, A
Division of Loucks & Associates
Inc., St. Paul, MN

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Jeffrey A. Shopek
Paul J. McGinley
John S. Bergh
Mike St. Martin
William P. Brown
Richard Light

Leonard A. Lundquist
Peter A. Potvin
Gayland J. Bender
John M. Killeen

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**■ McCONKEY JOHNSON
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Web: America Online
Established 1978

—

H. James McConkey
Richard W. Johnson
Christian Soltermann

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team as a strong technical resource
with a wide variety of experience.

—
Sony Jumbotron Video Board Structures, Nationwide; Currell Business Center, Woodbury, MN; Gateway Business Center, Arden Hills, MN; Maple Island Market Renovation, Stillwater, MN; Deerfield Multi-use Residential Community, Prior Lake, MN; Tilsner Carton Expansion, St. Paul, MN

Firm Personnel by Discipline

Civil Engineers	5
Licensed Surveyors	3
Hydrogeologist	1
Planners	5
Archaeologists	3
Surveyors	6
Construction Representatives	2
Environmental Specialists	2
Technical	9
Administrative	4
Total	40

Services include site layout, grading, storm water conveyance systems, water quality retention ponds, wetland mitigation, EAW/EIS documents, Phase I and II ESAs, ground-water contamination, ALTA title surveys, site feasibility studies, comprehensive plan amendments, rezoning, permitting and approvals for industrial, commercial, retail, corporate campus, assisted living community, senior co-op, townhome and educational facilities.

West River Parkway, Minneapolis, MN; University Village, Minneapolis, MN; SciMED Corporate Office, Maple Grove, MN; Crossroads Shopping Center, Shakopee, MN; MN Air National Guard - New Brighton, MN and Holman Field, St. Paul, MN; Ford Motor Parking Facility, St. Paul

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Fax: 651/633-1355
E-mail: ppotv@lkpb.com
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Established 1969

Continued on next column

Founded in 1969, LKPB is a mechanical and electrical consulting engineering firm with 46 employees. We work with a broad range of clients in diverse project environments including corporate, commercial, post secondary education, medical and municipal.

—
Gustavus Adolphus College Student Center: Diversified Pharmaceutical Services Corporate Headquarters; Middlebury College New Chip Kenyon Ice Arena; United Health Groups 360,000 SF Complex in Eden Prairie; Mille Lacs Band of Ojibwe New Community Center; 301 Carlson Parkway, New Five-Story 215,000 SF Addition to Carlson Center

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1516 West Lake St., Ste. 102
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Fax: 612/827-0805
E-mail:

davem@matsonmacdonald.com

Established 1983

—
Wesley C. Mattson
David H. Macdonald
Stephanie J. Cross

PE
PE
PE

Firm Personnel by Discipline

Structural Engineers	7
Technical	4
Administrative	1
TOTAL	12

—
Structural engineering services for commercial, educational, industrial, institutional and residential buildings. Design of new buildings, renovation and restoration of existing buildings. Experienced in the restoration and adaptive re-use of historic buildings.

—
Stone Arch Lofts, Minneapolis, MN; 5th Precinct Police Headquarters, Minneapolis, MN; Southwest Metro Transit Hub, Eden Prairie, MN; County Courthouse Addition, Mora, MN; Prairie Expo Center, Worthington, MN; River Hills Senior Housing, Burnsville, MN

PE
PE
PE
PE

■ THE McSHERRY GROUP, INC.

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Web: mcscherrygroup.com
Established 1990

—
Douglas L. Fell
Alan A. Kretzman
Dennis A. Ludwig
John A. Carroll
Terry D. Nuesse
Jason L. Klecker

Firm Personnel by Discipline

Structural Engineers	5
Landscape Architect	1
Technical	6
Administrative	2
Total	14

—
MGI is a multi-disciplinary consulting firm providing services to the public, private and institutional sectors in the areas of structural engineering, pre-construction value engineering, forensic investigations, existing building evaluations, site design, planning, landscape architecture, recreation design, campus master

PE
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■ MEI ENGINEERING, INC.

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Fax: 651/552-0782
E-mail: info@mei-engineering.com
Web: mei-engineering.com
Established 1969
Other Offices: Bemidji, MN; Fargo and Bismarck, ND

—
Corey Maple
Gordie Maier
Tim Pierce
Joe Schulte
Lynn Strombeck
Randy Vetter

—
Firm Personnel by Discipline
Electrical Engineers
OSP/ISP Specialist
Environmental Specialist
Facility Management Specialist
GIS Specialists
Technical
Total

8
1
2
1
2
6
20

—
MEI provides services including Industrial/Commercial System Design, specializing in small to medium size electrical and mechanical design development and documentation; High Voltage Generation and Distribution Design emphasizing today's changing regulatory environment; GIS Mapping and Environmental Documentation, providing high-quality GIS-based mapping, route design and permitting utilizing GPS tools.

—
Good Shepherd Home, Watford City, ND; Sparboe Generation Control, Litchfield, MN; Eye Clinic, Edina, MN; Powder Ridge Power Quality Analysis, Kimball, MN; Penelope Substation Design, Mankato, MN; KMC Fiber Optic Route Development, St. Paul/Minneapolis, MN

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Established 1955

John E. Meyer
Richard E. Wiegle
Daniel E. Murphy
Michael Ramerth

Firm Personnel by Discipline

Structural Engineers	17
Technical	6
Administrative	2
TOTAL	25

Specializing in the design of structural systems and foundations for commercial, industrial, educational, institutional, performing arts and religious facilities. Services are rendered to architects, contractors and owners for all types of projects which require structural engineering services.

Minnesota Mutual II, St. Paul, MN; Miccosukee Resort Hotel, Miami, FL; Seagate Research Facility, Shakopee, MN; UMD Library, Duluth, MN; Charter Terminal, Minneapolis-St. Paul International Airport, MN; Mayo Medical Services Building, Rochester, MN

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E-mail: michaudcooley.com
Established 1946

Dean A. Rafferty
Monty L. Talbert, Jr.
Douglas C. Cooley
Joseph A. Tennyson

Firm Personnel by Discipline

Mechanical Engineers	53
Electrical Engineers	40
Fire Protection Engineer	
Level IV (Alan Moore)	1
Administrative	18
Total	112

Continued on next column

MCE designs mechanical, electrical, lighting, and special systems for corporate, medical, data processing, high-tech R & D, retail, industrial, educational, public and commercial buildings. Examples of special systems include: security and surveillance, life/safety, fire protection, audiovisual and sound reinforcement, paging and intercom, cable or master television antenna signal distribution.

—
PE Imation, Oakdale, MN; Woodwinds Health Campus, Woodbury, MN;
PE ADC Telecommunications BCG Facility, Shakopee, MN; American Express Financial Advisors 707 Building and Client Services Facility, Minneapolis, MN; (New) Federal Reserve Bank, Minneapolis, MN

MJP ASSOCIATES, Ltd.

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Established 1993

—
Michael J. Preston

Firm Personnel by Discipline

Structural Engineers	1
Administrative	.5
Total	1.5

—
Specialized structural engineering services tailored to high-end residential projects and specialized structures including investigative studies, feasibility studies, structural analysis and design, preparation of contract documents, construction observation and third-party review of pre-engineered systems.

—
Lancing Residence, White Bear Lake, MN; Health East Hospice House, Oakdale, MN; Sewell Renovation, Minneapolis, MN; De LaSalle School Entry Exterior Metal Studs,

PE Minneapolis, MN; Ridgeview Medical Center Exterior Metal Studs, Waconia, MN; Del Camino Canopies, Del Camino, CO

The MountainStar Group, Inc.

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Web: www.mtstar.com
Established 1988

—
Michael A. O'Hara
PE Joseph Faust
CBO Raymond Arntson
CSP, MPH

Firm Personnel by Discipline

Fire Protection Engineers	1
Safety, Code Consultants	2
Technical	2
Administrative	3
Total	8

—
Fire Protection, Code Consulting, Safety, Online Consulting Performance-based design. Specialized Areas: Code Equivalencies and alternate methods of construction.

—
St. Paul Arena - Home of the Minnesota Wild, St. Paul, MN; ADC Telecommunications World headquarters, Eden Prairie, MN; Minneapolis Convention Center Expansion, Minneapolis, MN; Polo Ralph Lauren Distribution Facility, High Pointe, NC; Virginia Regional Medical Center, Virginia, MN; Taylor Center, Mankato State University, Mankato, MN

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Other Offices: Des Moines, IA; Biloxi, MS

—
Gordon H. Reigstad
PhD, PE
Charles Ashton
PE
William Lindau
PE
Ross Redmann
PE
Mark Hostetter
PE

Firm Personnel by Discipline

Civil Engineers	1
Structural Engineers	10
Technical	11
Administrative	5
Total	26

—
Structural and Civil Engineering providing services for educational facilities, entertainment facilities, warehouses, hotels, parking arenas. Reigstad is dedicated to integrity and design excellence with a creative edge and solutions to the most demanding challenge.

Continued on next column

Best Buy Stores, Nationwide Locations: John Deere Corporate Office, Cedar Rapids, IA; St. Croix Ice Arena, Phase I and II; Achievement Plus and East Side YMCA, St. Paul, MN; Lake Bronson Visitor Center, Lake Bronson, MN; Gulfport Oasis Hotel, Gulfport, MS

SCHOELL & MADSON, INC.

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Web: www.schoellmadson.com
Established 1956

—
Dana Swindler
PE
Kenneth Adolf
RLS
Richard Williams
PE
James Orr
RLS
Ted Kemna
CPSM
Thomas Schottenbauer

—
Firm Personnel by Discipline
Civil Engineers
Surveyors
Geologist
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Administrative
Total

11
17
1
9
3
41

—
Complete wetland services; EAW's, EIS, and natural resource services; environmental site assessment, well-head protection, regulatory compliance and permitting; civil transportation engineering system studies, design and construction/contract administration; land surveying, topographic, global positioning system surveys, GIS services, construction and as-built surveys; quality control soil testing, construction observation and environmental services.

—
Cedar Point Townhomes, Minnetonka, MN; Kohl's Department Store, Burnsville, MN; Copper Sales, Anoka, MN; Best Buy, Eden Prairie, MN; Blackhawk Forest, Eagan, MN; East Ridge Townhomes, Minnetonka, MN

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Established 1994
Other Offices: Chicago and Champaign, IL; Boston, MA; Atlanta, GA; St. Louis, MO; Arlington, VA; Chevy Chase, MD; Shanghai, PR China

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Paul J. Blomberg	PE
Rebecca T. Ellis	PE
John A. Carlson	PE
Oleksa P. Breslawec	PE
Dean R. Sharpe	PE
<hr/>	
Firm Personnel by Discipline	
Civil Engineers	5
Structural Engineers	1
Mechanical Engineers	45
Electrical Engineers	24
Chemical Engineers	2
Environmental Engineers	2
Architects	1
Accounting	3
Marketing	1
Technical	36
Administrative	15
Total	134

Sebesta Blomberg is a specialty engineering and management consulting firm providing services to institutional, healthcare, industrial and public markets nationwide. Services include: utility infrastructure modernization and optimization, building systems design and analysis, commissioning, architectural lighting, controls and automation, process engineering, power generation, transmission and distribution, facilities management support and construction services.

University of Minnesota, Minneapolis, MN; Mayo Foundation, Rochester, MN; 3M, St. Paul, MN; Minnesota Power, Duluth, MN; Architect of the Capitol, Washington, D.C.; Kraft Foods, Champaign, IL

SETTER LEACH & LINDSTROM

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730 Second Avenue South
Minneapolis, MN 55402
Tel: 612/338-8741
Fax: 612/338-4840
E-mail: info@setterleach.com
Web: www.setterleach.com

Established 1917

George Theodore	PE
Jon Trumbull	PE
Kaare Faber	PE
Charles Ault	AIA
Richard Speers	AIA
<hr/>	
Firm Personnel by Discipline	
Civil Engineers	5
Structural Engineers	19
Mechanical Engineers	21
Electrical Engineers	22
Architects	48
Interior Designers	8
Construction Administration	7
Administration	30
Total	160

—
As a full-service architecture and engineering firm, Setter Leach & Lindstrom provides complete civil, structural, mechanical and electrical engineering services. We specialize in helping clients meet business challenges through our full service, integrated and creative design solutions.

Rushmore Center, Ellsworth Air Force Base, SD; Minneapolis Convention Center Expansion, Minneapolis, MN; Western Digital ESG, Research & Development Facility, Rochester, MN; GSI Lumonics, Maple Grove, MN; Fairview Red Wing Medical Center, Red Wing, MN; Minneapolis Airports Commission, General Administration Building, Automated people Mover, Minneapolis, MN

SHORT ELLIOTT HENDRICKSON INC. (SEH)

3535 Vadnais Center Drive
St. Paul, MN 55110
Tel: 651/490-2000
Fax: 651/490-2150
Web: www.sehinc.com

Established 1927

Other Locations: Minneapolis, Gaylord, Duluth, St. Cloud and Grand Rapids, MN; Chippewa Falls, Madison and Fox River Valley, WI; Lake County, IN; Chicago, IL

—
Continued on next column

Gary R. Gray

David Pillatzke
Dan Boxrud
Brad Forbrook
Doug Parrott
John Hinzmann

—

Firm Personnel by Discipline

Civil Engineers	72
Structural Engineers	8
Other Engineers	183
Architects	15
Other Professional	42
Technical	92
Administrative	88
Total	500

—
SEH is a multi-disciplined consulting firm offering Architecture, Engineering, Environmental and Transportation Services.

—
City of Ramsey Fire Station, Ramsey, MN; TH 197 (Paul Bunyan Drive), Bemidji, MN; Wastewater Treatment Plant Expansion, Austin, MN; Water Treatment Plant, Rush City, MN; Downtown Redevelopment, Grand Rapids, MN; Stillwater Stage 1, Flood Control Project - St. Croix River, Stillwater, MN

STEEN ENGINEERING, INC.

5650 Lilac Drive North
Brooklyn Center, MN 55430
Tel: 612/529-9664
Fax: 612/529-9681
E-mail: steen@eenet.com

Established 1993

—
Mark R. Brengman
Eugene A. Striefel
Steven M. Youngs

<hr/>	
Firm Personnel by Discipline	
Mechanical Engineers	2
Electrical Engineers	1
Technical	11
Administrative	4
Total	18

—
Steen provides a practical design approach for corporate, municipal, medical, hospitality, institutional and retail clients. Design expertise includes HVAC, plumbing, fire protection, lighting, power distribution, life safety, automatic temperature control, energy analysis and deficiency studies. Steen provides a practical approach to mechanical and electrical engineering, designing sensible cost effective solutions.

—
Continued on next column

PE AmerInn Motels, Nationwide; Volunteers of America, Senior Living Campus, Rochester, MN; Office Depot Distribution Center, Plymouth, MN; Becker Middle and Elementary Schools, Becker, MN; East Central Electric, Braham, MN; ABC/Disney Radio Studios, Detroit, MI

STRUCTURAL DESIGN ASSOCIATES, INC.

6860 Shingle Creek Parkway,
Ste. 201
Minneapolis, MN 55430
Tel: 612/560-5300
Fax: 612/560-5400
E-Mail: sda@sdang.com

Established 1989

Gregory J. Duerr	PE
<hr/>	
Firm Personnel by Discipline	
Structural Engineers	5
Technical	3
Administrative	1
Total	9

—
Structural Engineers providing design, construction documents, reports, and construction administration services for projects in the educational, industrial (manufacturing, warehousing, equipment supports, and repairs), commercial, municipal, medical, and renovation fields. Services provided to Architects, Owners, Contractors, Developers and others.

—
Waconia Middle School, Waconia, MN; Buffalo High School, Buffalo, MN; Green Bay Packing Addition, Wausau, WI; Conference Center for Andersen Windows, Bayport, MN; Redwood Falls Hospital Addition, Redwood Falls, MN; University of Minnesota Housing, Minneapolis, MN

<hr/>	
Firm Personnel by Discipline	
Mechanical Engineers	2
Electrical Engineers	1
Technical	11
Administrative	4
Total	18

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ANDERSON & ASSOCIATES
INC.**

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444 Cedar Street
St. Paul, MN 55101
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Fax: 651/292-0083
E-mail: johnson.da@tkda.com
Established 1910

Darrel H. Berkowitz
Robert A. Boyer
Richard N. Sobiech
Dean A. Johnson

Firm Personnel by Discipline

Civil Engineers	54
Structural Engineers	15
Mechanical Engineers	8
Electrical Engineers	5
Hydrologists	2
Sanitary Engineers	7
Transportation Engineers	4
Architects	8
Technical	56
Administrative	28
Total	188

A multi-disciplined E/A firm offering engineering services in civil, electrical, environmental, mechanical, structural and transportation engineering. Design of municipal utilities, highways, bridges, airports and railroads.

UAW-Ford-MnSCU Training Center, St. Paul, MN; National Checking Company Manufacturing Plant, Crosby Lake Business Park, St. Paul, MN; Rice and Arlington Sports Lighting, St. Paul Dept. of Parks and Recreation, MN; University of Minnesota-Morris Hazardous Waste Storage Building, Morris, MN; Minnesota State Fair Care and Assistance Center, St. Paul, MN; RiverCentre Demolition, St. Paul, MN

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Bloomington, MN 55431
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Fax: 612/888-2587
E-mail: wei@usinternet.com
Established 1990

Lowell E. Wenzel
Patricia A. Cole

Firm Personnel by Discipline
Structural Engineers
Technicians
Administrative

Total
—
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Minneapolis Convention Center Addition Minneapolis, MN; Target Tower Phase 2-1000 Nicollet Avenue, Minneapolis, MN; Intek Industries, Eau Claire, WI; Our Saviors Lutheran Church, Minneapolis, MN; Mille Lacs housing project, Onamia, MN; Gonda Building, Rochester, MN

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Norman C. Wenck
Joseph J. Grabowski
Paul D. Josephson
Keith W. Benker
Michael A. Panzer

Firm Personnel by Discipline
Civil Engineers
Mechanical Engineers
Electrical Engineers
Environmental Engineers
Environmental Scientists
Technical
Administrative
Total

Continued on next column

Wenck Associates, Inc. is a Minnesota, employee-owned environmental engineering firm dedicated to providing solutions for our clients' concerns. We specialize in environmental compliance, wetland issues, brownfields redevelopment, indoor air quality, site planning and plant layout design. Our expertise includes: property assessments; radon, asbestos, and lead management; tank management; and well management services.

—
Environmental Site Assessments - Real Estate Company, Upper Midwest; Wetland Delineation - Developer, Brooklyn Park, MN; Due Diligence Audit - Brewery, Minnesota: Wetland Reclamation Project from Oil Spill, Grand Rapids, MN; Environmental and Safety Compliance Audit - Recreational Vehicle Manufacturer, MN, IA, and WI; Asbestos and Hazardous Materials Assessments - Development Agency, Minneapolis, MN

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Dennis Marhula
Martin Weber
Dwight Jelle
Bruce Miller
Allan Klugman
Tim Erkkila

Firm Personnel by Discipline
Civil Engineer
Traffic Engineers
Landscape Architects
Surveyors
Environmental/Wildlife
Technical
Administrative
Total

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Continued on next column

SuperValu Distribution Facility, Hopkins, MN; County Road 4 Upgrade, Eden Prairie, MN; West Ridge Market, Minnetonka, MN; Liberty/Legends (Subdivisions), Stillwater, MN; Mn/DOT Guidestar AUSCI Project, Minneapolis, MN; Riverdale Village (Retail Dev.), Coon Rapids, MN

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Other Offices: Elgin, IL

—
Craig Anding
Kevin Marshall
Paul Junilla
Doug Lutz
Blaine Krause

—
Firm Personnel by Discipline
Mechanical Engineers
Electrical Engineers
Architects
Technical
Administrative
Total

—
Professional mechanical and electrical consulting engineering services, including indoor air quality, HVAC system design, plumbing system design, fire protection systems, energy management, voice/data communications, media technologies, design and specifications of electrical power systems, and security systems.

—
Ramsey County LEC, St. Paul, MN; Dakota County Northern Services Center, West St. Paul, MN; Hastings High School, Hastings, MN; Scott County Justice Center, Shakopee, MN; Goodhue County Jail and Law Enforcement Center, Red Wing, MN; Minnesota Department of Transportation, Central Office Renovations, St. Paul, MN

insight

Continued from page 48

wheelchairs, walkers and canes, or those who get winded at the thought of such exertion. Says Soranno, "Museums nowadays think about the types of people who will come in and are accommodating them in a primary way, so that people who can't take the stairs don't feel like second-class citizens."

Consider the street-level entrance to the University of Minnesota's Frederick R. Weisman Art Museum in Minneapolis, which draws visitors to its doors via elevator, stairs and by gently graded walkway. One could argue that the variety of approaches simply responds to federal mandates, particularly the Americans with Disabilities Act. Still, architects are finding that designing for all kinds of users has profound side effects—namely, attracting users.

Furthermore, today's museums, which often reflect a more specialized purpose and audience than their forebearers, are free to express themselves in engaging new ways. Says LaDoucer, "If you know the stories you are going to tell, you can design the museum to emphasize the stories."

As an example, LaDoucer refers to designs she and John Barbour created for the yet-to-be-built Edna G. Tugboat Museum in Two Harbors. By specifying industrial materials, hull-like massing and a river-front site, the design evokes its rugged subject, which is docked nearby. Views from inside the museum to the Edna G. tugboat and to ore docks would form an impressive backdrop, enhanced by bubble-textured glass that promotes an underwater feeling in visitors. Moreover, temperatures within the museum would vary from zone to zone: an exhibit devoted to the steam engine would be hot and loud; other areas would be cool to reflect the cold lake water.

In spite of the sea change in museum design, many architectural features of these public institutions remain the same. Exhibition spaces, storage, administrative offices and parking continue to be essential elements of every museum. And the opportunity to design a new museum or renovate an existing one can be an architect's dream, offering a chance to collaborate with an enlightened client with a commitment to design, a healthy budget and a mission that marries a public to a piece of its culture.

That's why museum request for proposals, or RFPs, and museum-design competitions attract so much attention and so many architectural aspirants. As Soranno, who has spent the past 12 years principally in museum design, says, "If I only did museums for the rest of my life, I would die a very happy person." **AM**

up close

Continued from page 48

readdress its fundamental mechanics, to make it even more relevant. This is no small task, but the creativity we bring to bear on the design of our own environment will be the mark of our success.

Because our department is broadening program offerings to construct a diverse environ-

ment for teaching, scholarship and research, these changes should be reflected in the mission statement and departmental governance document currently being developed in the architecture department. The Board of Regents recently approved our department's application for granting a Bachelor of Science degree. In these and other ways, CALA is an exciting place to be.

AM

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Credits

Science Museum of Minnesota

Location: St. Paul, MN
Client: Science Museum of Minnesota
Owner's project manager: Teresa Sterns
Owner's agent: Armlin North and Associates
Architect: Ellerbe Becket
Principals-in-charge: David Loehr, Bill Chilton
Project manager: David Loehr
Project architects: Daniel Thurmes, Linda Morrissey
Project lead designer: Andrejs Cers
Project team: Lee Anderson, Mitra Asbaghi, Kathy Augdahl, Scott Berry, Michael Cummings, Mark Donatelle, Paul Emmons, Dennis Grabuski, Jeff Greisinger, Glenn Hurd, Ed Gratz, Deb Ladwig, Thom Lasley, Kerrie Lindell, Pat Litchy, Derek McCallum, Deanne Neuman, Jay Olson-Goude, Carol Pollard, Brad Pruden, Jane Rademacher, Michelle Rothwell, Carrie Schmidt, Kevin Utecht, Denny Wallace, Chuck Wieck
Structural engineer of record: Scott Saunders
Structural-engineering team: Jon Iverson, Mike Schekhner
Mechanical engineer of record: Doug Maust
Mechanical-engineering team: Rod Haanen, Wade Hofer, Rex Rundquist, Les Vall, Tracie Williams
Electrical engineer of record: Al Wenzel
Electrical-engineering team: Teri LaDouceur, Stan McCoy, Lisa Meyer
Lighting designers: Steven Earl, Laura O'Connell
Civil engineer of record: Robert Brown
Civil-engineering team: Dave Erickson, Jim Michaelson, Kelly Pageler
Construction manager: PCL Construction Services Inc.
Pre-construction consultant: McGough Construction
Building-code consultant: Rolf Jensen Associates
Principal landscape architect: Bryan Carlson
Landscape project team: Jerry Croxdale, Jean Garbini, Ted Lee, Randy Manthey, Brian Stalock
Vertical-transportation consultant: Lerch Bates
Acoustical/structural vibration consultant: ESI
Food-service consultant: Morrissey Hospitality Company
Retail-store designers: Smash Design
Parking consultant: Walker Parking Consultants
Face brick: Taylor Brick
Architectural cast stone: American Artstone
Windows systems: Harmon Inc.
Architectural metal panels: Centria
Concrete work: PCL
Millwork: Paul's Woodcraft
Photographers: Brian Droege, Don F. Wong, Science Museum of Minnesota

Andersen House, Foundation Office and Cottage

Location: Bayport, MN
Client: Andersen Corporation
Architect: Claybaugh Preservation Architecture Inc
Principal-in-charge: Robert J. Claybaugh
Project architect: Robert J. Claybaugh (house and cottage), Tim Stefan, Stefan Associates Architects (foundation office)
Project designer: Robert J. Claybaugh, Peter J. Musty
Project team: Peter J. Musty, James Dean, Rebecca Schubert
Structural engineer: LS Engineers
Mechanical engineer: Erickson Ellison & Associates
Contractor: Lawrence Creek Construction (house), Knutson Construction Company (foundation office), George Sigfried Construction Company (cottage)
Interior design: Greenway Interior Design
Landscape architect: Hoisington Koegler Group, Inc.
Audio/visual consultant: EPA Audio Visual Inc.
Windows: Andersen Windows, Inc.
Stone: Rivard Stone
Library casework: Greg Olson
Cabinetwork: Doug Grossman
Photographer: John Danicic, Jr.

Phillips Eco-Enterprise Center

Location: Minneapolis, MN
Client: The Green Institute
Architect: LHB Engineers and Architects
Principal-in-charge: Rick Carter
Project manager: Pete Salmon
Project architect: Pete Salmon
Project designer: Pete Salmon
Project team: Rick Carter, Pete Salmon, Rachelle Schoessler, David Piriano, Pat Jones, Mark Zeimer, Carla Gallina
Structural engineer: LHB
Mechanical engineer: LHB
Electrical engineer: Sebesta Bloomberg
Contractor: Kraus-Anderson
Interior design: LHB
Landscape architect: LHB
Lighting consultant: Sebesta Bloomberg
Windows: Tru-Therm Aluminum, Inc.
Lighting: Industrial Electric
Roofing: Dalsin Roofing
Stone/brick: Och's Brick
Concrete: Summit Concrete
Flooring systems/materials: Interface (carpet), Forbo (linoleum)
Caserow/woodwork: Phenix Biocomposites (window sills)
Roof-garden system: Edward Sales, Inc., Hydrotech
Skylights: Soluminaire Daylighting Systems Corp.
Photographer: Brian Droege

Greyhound Bus Museum

Location: Hibbing, MN
Client: Gene Nicolelli, Sr.
Architect: Gene J. Nicolelli, Jr.
Architect of record: Roger Saccoman Architecture, Ltd.
Principal-in-charge: Roger Saccoman
Project team: Robert Erickson, Michael Lopac
Structural engineer: Krech & Ojard, Inc.
Mechanical engineer: Barr Engineering Company
Electrical engineer: Barr Engineering Company
Contractor: Harvey Construction
Photographer: John Peterson

Contributors

Bill Beyer is a principal with Stageberg Beyer Sachs, Inc., in Minneapolis.

Jack El-Hai is a Minneapolis writer whose books include *Minnesota Collects* and *The Insider's Guide to the Twin Cities*. He is working on a book based on his Lost Minnesota column, to be published in autumn 2000.

Joel Hoekstra is a Minneapolis-based writer and the editor of *LiveMusic*.

Diane Richard is a Minneapolis-based writer.

Robert Roscoe is head of his own firm, Design for Preservation, a commissioner on the Minneapolis Heritage Preservation Commission, and editor of *Preservation Matters* published by the Preservation Alliance of Minnesota.

R. T. Rybak is an Internet strategist based in Minneapolis, a former architecture reporter for the Minneapolis *Star Tribune* and former development director for Minneapolis's Downtown Council.

Todd Willmert is an architectural designer with Meyer, Scherer & Rockcastle, Ltd., in Minneapolis.

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Albinson, p. 50
H. Robert Anderson & Assoc./DPIC Companies, p. 8
Architectural Consultants, p. 14
Carpenters Union, p. 1
Coming Soon, p. 47
Directory of Consulting Engineering Firms pp. 51-59
Duluth Timber Company, p. 46
Erickson Ellison and Associates, Inc., p. 50
W.L. Hall Co., p. 2

Hanson Spancrete Midwest, Inc., Cov. II
The International Masonry Institute Minnesota, p. 18
Landscape Forms, p. 4
McMonigal Architects, p. 47
MEI Engineering, p. 50
Minnesota Brick & Tile, p. 16
Minnesota Prestress Association/St. Croix Recreation, p. 10
Most Dependable Fountains, p. 49
Lon Musolf Distributing, p. 8
Wells Concrete Products, p. 6



MINNESOTA HISTORICAL SOCIETY

Winnebago Agency House, County Road 138, McPherson Township, Blue Earth County (1855-1986)

The unusual history of the Winnebago Agency House begins in the 1840s, when the United States government relocated the Winnebago Indians from the area around Fond du Lac, Wisconsin, to 891,000 acres of land near Long Prairie, Minnesota. In 1855, the government again moved the Winnebago, this time to a reservation one-quarter the size of the previous one, along the Blue Earth River. There a settlement grew that included log homes, a blacksmith's shop, a warehouse and other buildings.

One of the busiest structures in the reservation village belonged to the Indian agent, a government employee charged with disbursing supplies and treaty payments to the Indians. Jonathan E. Fletcher first fulfilled these duties, and over the next eight years was succeeded by Charles H. Mix and A.D. Balcome. These men lived in and worked from the agency house, a 2-story brick building simply designed in the Federal style. It had unframed windows, two chimneys and two fireplaces on each floor.

The Winnebago Indians lived unhappily on this reservation, coping with unreliable payments from the government, poor fishing and hunting, and the agents' attempts to make them follow European-American customs. Eventually the U.S.-Dakota Conflict alarmed the

Winnebago into accepting a government proposal to relocate once again, this time to a Missouri River site in Dakota Territory. By 1863, the Winnebago were gone from Blue Earth County and the agency house closed.

That year the Truman family picked up reservation land for two dollars an acre and converted the agency house to a hotel. Four other families owned the property and the agency house during the next 120 years. These owners covered the fireplaces and removed the chimneys, divided the rooms, built a stucco addition to the rear, and installed plumbing and heating. Meanwhile, all of the other buildings of the reservation village disintegrated or were razed, although some of their foundations remained. By the 1970s, the Winnebago house was one of only two Indian agency houses still standing in Minnesota.

The house's last owner, Marvin Preston, suffered shifting walls and, finally, the collapse of one section of the building. Repairs would have cost \$200,000 and no government aid was available because Preston did not plan to open the house to the public. In 1986 the house came to an ignominious end. The St. Clair Fire Department set it alight and watched the flames destroy it in a controlled burn.

Jack El-Hai

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