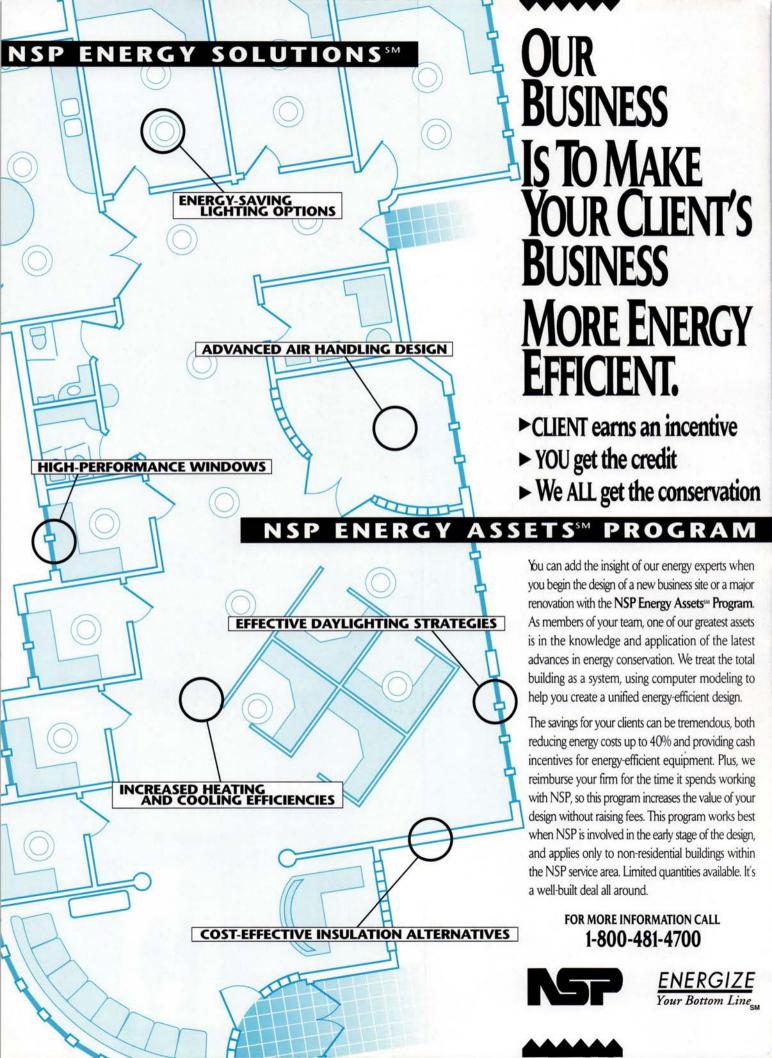
# Architecture



Exp 8/17/87





### Adolfson and Peterson, Inc.

listens as carefully today as it has for the past 50 years. Listening turns concerns into solutions. Listening transforms vision into reality. And most importantly, listening builds relationships.

### LIST

On behalf of our construction services – negotiated general contractor, design-build, construction manager, heavy industrial, bid general contractor and controlled environments through AP Technology Management, Inc. – we would like to thank our customers and business associates for allowing us to listen and be a part of your success.

We look forward to the next 50 years. Call us in Minnesota at (612)544-1561, or ask for our Wisconsin, Arizona and Colorado office numbers.

We're ready to listen.

50 YEARS

Total Construction Services Since 1946



### **DEPARTMENTS**

- 5 Sketches
- 9 Previews
- 13 Up Close CALA dean Harrison Fraker reflects on the past 10 years, by Bruce N. Wright
- Is Insight Crossroads:

  Architecture has evolved along a curve that presents greater business and social challenges for each new generation of architects, by Janet Whitmore
- 17 Editorial Community roots
- 46 Drawing board
- 47 Directory of landscape architecture firms
- 53 Directory of consulting engineering firms
- 62 Advertising index
- 63 Credits
- 64 Lost Minnesota

### **STAFF**

#### Editor

Eric Kudalis

Contributors this issue

David Anger, Jack El-Hai, Camille LeFevre, Janet Whitmore, Bruce N. Wright

Graphic Design

Rubin Cordaro Design Photographer

Don F. Wong

Advertising Sales Judith Van Dyne, Director

Circulation Distribution

Susan Belland

Printer

St. Croix Press

Color Separations

Publisher

Peter Rand, FAIA

### Cover

Origen Center

Architects: James/Snow Architects, Inc.

Photographer: Don F. Wong

#### **FEATURES**



**Honor Awards** These outbuildings by David Salmela are part of this year's round-up of award-winning designs, by Eric Kudalis **Page 24** 



**Travelogue** The backroads of Tuscany offer glimpses into centuries-old traditions, by Brad and Ruth Christian **Page 42** 



**Duluth sketchbook** Artist Robb Quisling finds artistic inspiration in historic Duluth architecture **Page 21** 

#### Also

**Street scenes** Superior Street in Duluth is rich in architectural history, by David Anger **Page 18** 

**Sod living** Once common on the wind-swept plains of the Midwest, sod houses are a nearly washed-away chapter in American architectural history, by Camille LeFevre **Page 22** 

### **Specify Natives**

A restored prairie or wetland landscape uses native plants to add color, motion and interest to your design.

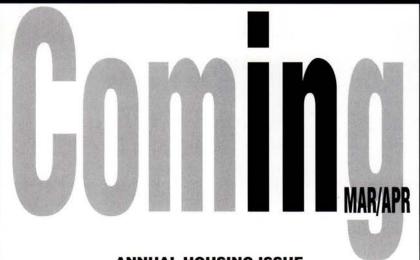
They also add economic value and environmental health for the property owner.

Design the beauty and value of native landscaping into your next project.

To find out how our ideas and materials can work into your specifications, call:

Prairie Restorations, Inc.

P.O. Box 327 ● Princeton, MN 55371 612-389-4342



ANNUAL HOUSING ISSUE
1996 DIRECTORY OF ARCHITECTURE FIRMS
1996 INDEX OF FIRMS BY BUILDING TYPE
1996 CONSULTANTS DIRECTORY

For advertising information call Judith Van Dyne 612/338-6763.

### AIA Minnesota A Society of the American Institute of Architects

**Board of Directors** Edward J. Kodet, Jr., FAIA, President Bill Beyer, AIA, Pres.-Elect Robert DeBruin, AIA, Secretary Michael D. Wirtanen, AIA, Treasurer Thomas C. Van Housen, FAIA, Immediate Past Pres. Vicki L. Hooper, AIA, Pres., AIA Minneapolis F. John Barbour, AIA, Pres., AIA St. Paul Robert Hewitt, AIA, Pres. AIA Northern MN. Duane Blanchard, AIA, Director Jack Boarman, AIA, Director Steve Edwins, AIA, Director Harold Kiewel, AIA, Director Chip Lindeke, III, AIA, Director Josh Rownd, AIA, Director William B. Scalzo, AIA, Director Christine Zagaria, AIA, Director Lisa Nelson, Associate Representative Ryan Thuftedal, Student Representative Brian Larson, AIA, Regional Director James O'Brien, AIA, Regional Director Beverly Hauschild, Hon. AlA, Executive V.P. Peter Rand, FAIA, Executive Vice President

AIA Minnesota Publications Committee Tim Alt, AlA, Chair John Albers, AIA Mark Baumhover Heather Beal George Cundy, AIA Robert Gerloff, AIA Andrea Stephenson Komschlies Janet Whitmore

Editorial Advisory Board Edward J. Kodet, Jr., FAIA Michael Plautz, AIA Kenneth Potts, AIA

**AIA Minnesota Staff** 

Minnesota Architectural Foundation Gail Andersen, AIA Catherine Brown Howard Goltz, AIA, Treasurer Clint Hewitt Frank Nemeth, AIA Leonard S. Parker, FAIA Craig Rafferty, FAIA, Vice President Ralph Rapson, FAIA, President Julie Snow, AIA, Secretary

Beverly Hauschild, Hon, AlA, Executive V.P.
Peter Rand, FAIA, Executive Vice President
Marvel Anderson, Preservation Alliance
Susan Belland, Information Systems Director
Deanna Christiansen, Programs Director
Ellen Jambois, Convention Sales/P.R.
Eric Kudalis, Editor
Dean G. Siegrist, Financial Manager
Judith Van Dyne, Advertising Sales Director
Amy Wheeler, AlGA, QBS

Architecture Minnesota is published bimonthly by AIA Minnesota. The opinions expressed herein are not necessarily those of the Board of Directors or the editorial staff of Architecture Minnesota. Editorial offices: International Market Square, 275 Market Street, Suite 54, Minneapolis, MN 55405. (612) 338-6763. FAX: (612) 338-7981. Note to subscribers: When changing address, please send address label from recent issue and your new address. Allow six weeks for change of address. Subscription rate: \$18 for one year, \$3.50 for single issue. Postmaster: Send address change to Architecture Minnesota at above address. Second-class postage paid at Minneapolis, and additional mailing offices. Advertising and Circulation: Architecture Minnesota, above address and phone. Copyright 1996 by Architecture Minnesota (ISSN 0149-9106).

### The first 25



t. John's the Evangelist Catholic Church, designed in the 1960s by Rafferty Rafferty Tollefson Architects, is this year's recipient of AIA Minnesota's 25 Year Award. The church

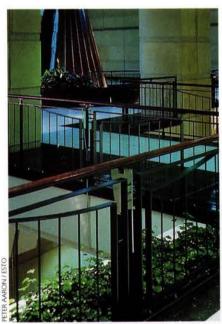
represents the era's latest thinking in liturgical design by creating an open plan that inspires community involvement. Unlike many newer churches, which often are set back from the community on large lots and surrounded by parking lots, St. John's, seating about 700, is slipped tightly into the neighborhood. Houses surround the church on three sides. The interior, filled



with light, further emphasizes community involvement. The narthex is the hub of the church, which leads to the nave, chapel, and other support facilities.

Many buildings deteriorate over time because of flimsy materials. Not here, though. The architects chose materials that are both durable and beautiful, and applied them simply and elegantly. Walls, inside and out, are brick-masonry, floors are quarry tile and ceilings in the church and chapel are cypress board, while all millwork is dark oak.

### It's in the details



hough LaSalle Plaza on Hennepin Avenue in downtown Minneapolis is a largescale. full-block project that makes a grand gesture to Hennepin Avenue, it also has its quiet side. It's that quiet, subtle side to the interior railings that won this year's AIA Minnesota Divine Detail award. The railings repeat the curved form used in the overall project to express water. A

stainless-steel blade floats within the center of each rail, signifying the intersection of Hennepin Avenue to the city's grid. A cherry top lends warmth in contrast to the metal.

### Art on CD



ARTISTAVENUE allows art connoisseurs to survey more than 130 artists and their works on CD-ROM. With nearly 800 images representing small minimal prints to a canvas originally housed in Moscow's Tretyakov Gallery, this is the first electronic catalog geared toward the purchase of art. Represented artists are from around the world, from Beijing to Grand Rapids, Mich. The CD is published by K Street Systems, Denver.

# WHATEVER THE APPLICATION... KEYSTONE'S PINNED UNITS ARE STILL THE LEADER.



Start with the basic patented fiberglass pin KEYSTONE system. Factor in the large selection of sizes and colors. Then consider the fast, easy installation and the distinctive natural look and you'll soon realize why KEYSTONE is your best choice for a beautiful curved, terraced or straight wall.



Nobody can match KEYSTONE's level of proven performance with modular retaining wall systems... For timeless beauty and low maintenance, simply specify KEYSTONE.



Manufactured By



FOR MORE INFORMATION, CALL: (612) 686-7100





In the Imaging Business for 50 years

- Document management
- High speed xerographic copying
- Color copying
- Large format color printing to 36" wide
- Large document xerographic copying
- Blueprint reproduction services
- Large document copiers, plotters, printers & blueprint equipment
- Supplies for large format copiers, blueprint machines & drafting
- Xerox Sales Agent for copiers, printers and fax machines

Minneapolis: 1401 Glenwood Ave ■ 374.1120 ■ 374.1129 fax

St Anthony Main: 201 SE Main St • 378.0345

Downtown Minneapolis: 300 1st Ave North • 342.9275

Downtown Minneapolis: 44 South 9th St = 339.7874 = 337.5317 fax St Paul: 347 Wabasha St = 224.3123 = 223.8127 fax

Edina: 4930 W 77th St • 835.2141 • 835.2383 fax

Minnetonka: 5640 Smetana Dr • 933.5025 • 933.5035 fax

St Cloud: 3345 W St Germain St • [612] 656.1300 • [612] 656.1302 fax

### **Eco-design charette**

ith the environment all the buzz in the design industry today, Minneapolis's architectural community is also getting in on the act. Approximately 90 architects and related design professionals, students, members of the Phillips neighborhood, children and interested participants gathered this fall to brainstorm ideas for a new Eco-Industrial Park for the Green Institute. This nonprofit organization is devoted to creating community-based models to protect the natural and urban environments through education and sustainable economic development.

The Eco-Industrial Park, to be located just east of Hiawatha Avenue between 28th and 29th streets, will include a business incubator for environmentally responsible businesses, and environmental-education center, materials-exchange and reuse cen-

ter, and offices for nonprofit environmental advocacy groups. The Eco-Industrial Park is intended to create jobs through appropriate technology, solid-waste reduction and energy conservation.

Proposals touched on various solutions. Some suggested restoring the urban fabric of site and weaving the new facility into the existing urban grid, while others viewed the site as a distinct feature within the Phillips neighborhood. Suggestions included underground construction to leave the site as a community park; a Habitat for Humanity eco-village of small-scale industrial, commercial and residential structures; and a series of interior and exterior rooms that could expand or contract based on needs.

The environmental design charette, one of 19 occurring the same weekend in early October throughout the country, was sponsored by the national AIA Committee on the Environment. Local sponsors included the Green Institute, the Minneapolis chapter of C.O.T.E., and the College of Architecture and Landscape Architecture at the University of Minnesota.



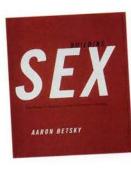
Environmentally concerned citizens and designers gathered for a weekend charette (above) to devise schemes for an Eco-Industrial Park (left) east of Hiawatha Avenue.

### Hot off the presses

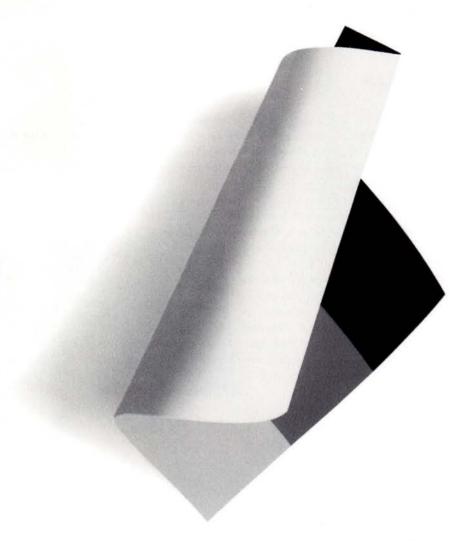
n City Life: Urban Expectations in a New World, author Witold Rybczynski says "Our cities are definitely not like Paris. But then what are they like? And how did they get that way?" Rybzynski explores these questions by tracing how American cities developed. "This is a book about cities as they are, not as they might be. It's also about our cities' evolution, for I'm convinced that our undistinguished record of the last 50 years of building cities and towns stems at least in part from a willful ignorance of our urban past," the author writes. Stretching across the country from New York, Philadelphia and Boston, to Chicago, Los Angeles and San Francisco, the book discusses how cities acquired their unique identities and reflect American concerns and lifestyles. Rybczynski, who has written numerous architecturally related books and magazine articles, is a professor of urbanism at the University of Pennsylvania. City Life is published by Charles Scribner's Sons, New York.



Witold Rybezynski



Building Sex: Men, Women, Architecture, and the Construction of Sexuality, by Aaron Betsky, traces the history of architecture as a male-dominated endeavor. Betsky writes, "We live in a strangely and unequally divided world. Our man-made world was made by men. Men founded our cities and designed the buildings in them. Men decided what the world we travel through every day was going to look like, and men decided what the streets would look like. Men planned, designed, built, and ran the towns, suburbs and cities we live in. Where were women during all this? They were the ones who made this world livable. They made the homes comfortable and the streets places of activity. Women brought up the children and cared for the old. They made the grand plans of men real within a framework that contained and imprisoned them." Betsky is curator of architecture and design at the San Francisco Museum of Modern Art. Building Sex is published by William Morrow & Co., Inc., New York.



### Gestalt: Visions of German Design June 5-9, 1996 Aspen, Colorado

»The International Design Conference, held annually since 1951 at Aspen, Colorado, is with good reason regarded as the world's most important, prestigious and authoritative design culture venue.«

DOMUS, June 1995.

Designers, architects, business and political leaders, critics, and other visionaries explore:

The coming design leadership agenda for success in world markets.

How a new generation reinterprets Bauhaus concerns in the light of new technologies and new visions.

Social and ecological challenges in Berlin's explosion of international architecture.

And many other issues, plus special presentations, films, exhibits and events. Register early.

### Registration

\$ 625 Early registration (postmarked by March 1, 1996) \$ 750 Regular registration fee \$ 350 One additional member of household \$ 175 Full-time student (send photocopy of current ID) Please complete the following information for each registrant (use photocopies if necessary)

Name	20-5-10-20-20-20-20-20-20-20-20-20-20-20-20-20	
Address		
City		
State		
Zip		
Telephone	Fax	
Profession		
Firm Affiliation		
Aspen Accommodations		
Visa or MasterCard Number		
Name on Card		
Expiration Date		
Signature		

Make check payable to IDCA.
Mail to IDCA, PO Box 664, Aspen, CO 81612.
For further information please call (970) 925-2257, fax (970) 925-8495 or e-mail idca@csn. net.
Cancellation requests postmarked before June 1, 1996, will be honored at 80% of fees paid.

Jacob Lawrence:
30 Years of Prints
Frederick R. Wiesman Art Museum
University of Minnesota
Minneapolis
Jan. 12-March 17

Approximately 70 prints highlight the work of this African-American artist who traces his beginnings to the Harlem Renaissance in the 1920s and 1930s.

Call the Wiesman for more information at (612) 625-9494.



Confrontation at the Bridge, 1975

### Winter Book Marks Carolyn Ruff Gallery Minneapolis Jan. 13-Feb. 17



Urn, T. Rose, 1993

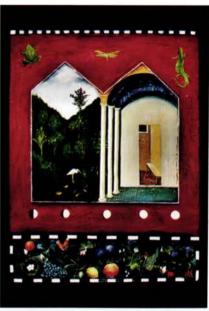
Books come alive with this new exhibit featuring artists Siah Armajani, Virginia Bradley and Paul Clifford in collaboration, Diane Katsiaficas and Thomas Rose. With a literary bent, they present small works which are based on books, utilize books or are books.

For more information, call (612) 338-8052.

### Winter Salon Mixed Media By Gallery Artists Circa Gallery Minneapolis Through January

Circa's salons, initiated three years ago, offer an opporfor the tunity gallery's represented artists to display their work in an informal atmosphere that encourages interaction and appreciation of the different media explored. The regionally based artists work within a diverse range, from furniture to ceramic, print, and more.

For additional information about the featured artists, Nancy McCallum call Circa at (612) 332-2386.



Outside Time, oil on wood panel, 1995, Nancy McCallum

### Prairie School Collaborators: Frank Lloyd Wright and George Mann Niedecken Milwaukee Art Museum Through Feb. 4, 1996

This exhibit examines the working relationship between Wright and interior designer Niedecken, who collaborated with Wright from 1904 to 1918. Niedecken created custom furniture, lighting fixtures, rugs and murals that harmonized



Card Table and Chair, George M. Niedecken

with Wright's Prairie-style houses. The exhibit examines the design process the two employed in five commissions spanning a decade, with 75 drawings for furniture, rugs, murals and interior decoration, along with actual objects fabricated from these designs.

For more information, call (414) 224-3200.

### AIA Documents Make Life Easier.

### **A-SERIES DOCUMENTS**

Prices are effective June 1, 1995 Please call for Member Discount Prices

	A101	2.00	Owner-Contractor Agreement Form-Stipulated Sum (4/87) with instruction sheet
	A101/CMa	2.00	Owner-Contractor Agreement Form-Stipulated Sum- Construction Manager-Advisor Edition (1992)
	A105/A205	4.00	Combination Document Standard Form of Agreement Between Owner and Contractor for A Small Project and General Conditions of the Contract for Construction of A Small Project (1993)
	A107	2.00	Abbreviated Owner-Contractor Agreement Form for Small Construction Contracts-Stipulated Sum (4/87)
	A111	2.00	Owner-Contractor Agreement Form-Cost Plus Fee (4/87) with instruction sheet
	A117	2.00	Abbreviated Owner-Contractor Agreement Form- Cost Plus Fee (4/87) with instruction sheet
	A121/CMc	3.00	Owner-Construction Manager Agreement Form where the Construction Manager is also the Constructor (1991)
	A131/CMc	3.00	Owner-Construction Manager Agreement Form where the Construction Manager is also the Constructor-Cost
	A171	2.00	Plus Fee (1994) Owner-Contractor Agreement for Furniture, Furnishings and Equipment (1990) with instruction sheet
	A177	2.00	Abbreviated Owner-Contractor Agreement for Furniture, Furnishings and Equipment (1990)
	A191	3.00	Standard Form of Agreement Between Owner and Design/Builder (1985) with instruction sheet
	A201	4.00	General Conditions of the Contract for Construction (4/87) with instruction sheet
	A201/CMa	4.00	General Conditions of the Contract for Construction- Construction Manager-Advisor Edition (1992)
	A201/SC	2.00	General Conditions of the Contract for Construction and Federal Supplementary Conditions of the Contract for Construction (1990) with instruction sheet
	A271	4.00	General Conditions of the Contract for Furniture, Furnishings and Equipment (1990) with instruction sheet
	A305	2.00	Contractor's Qualification Statement (12/86)
	A310	1.00	Bid Bond (2/70)
	A312	2.00	Performance Bond and Payment Bond (12/84)
	A401	3.00	Contractor-Subcontractor Agreement Form (5/87)
	A491	3.00	Standard Form of Agreement Between Design/Builder
	7431	3.00	and Contractor (1985) with instruction sheet
	A501	3.00	Recommended Guide for Bidding Procedures and Contract Awards (1995)
8	A511	5.00	Guide for Supplementary Conditions-incorporates A512 (6/87)
	A511/CMa	5.00	Guide for Supplementary Conditions-Construction Manager-Advisor Edition (1993)
	A512	1.00	Additions to Guide for Supplementary Conditions (12/89)
	A521	3.00	Uniform Location Subject Matter (1995)
	A571	5.00	Guide for Interiors Supplementary Conditions (1991)
	A701	2.00	Instructions to Bidders (4/87) with instruction sheet
	A771	2.00	Instructions to Interiors Bidders (1990)
		2.00	mondonolio to interiore biddele (1990)

Save time and money by eliminating the need to draft a new contract for every transaction!

AIA documents are courttested and updated regularly to reflect industry changes, construction practices, technology, insurance and legal precedent.

Choose from more that 120 contracts and forms that help clarify your rights and obligations as well as those of the client, contractor and consultant.

For a complete price list and ordering information, contact *Minnesota's only full service distributor*:

### **AIA Minnesota**

International Market Square 275 Market Street, #54 Minneapolis MN 55405 TEL: 612/338-6763 FAX: 612/338-7981



FULL SERVICE DISTRIBUTOR



For more information, call (612) 338-6763.

We Will Be Back: Oklahoma City Rebuilds **National Building Museum** Washington, D.C. Through March 17



In the aftermath of the April 19 bombing of the Alfred P. Murrah Federal Building in Oklahoma City and the widespread destruction of the north downtown area, this exhibit examines the community's mobilization toward renewal. Organized into different sections highlighting the city's past, present and future, We Will Be Back looks at Oklahoma City's origins in 1889 on the prairie and continues through recent development. Television and newspaper clips focus on the devastating impact of the bombing, while video interviews with city officials and residents discuss the rebuilding process.

For more information, call The National Building Museum at (202) 272-2448.

### An Exhibition of North American and **European 20th Century Chairs Dolly Fiterman Fine Arts Minneapolis** Through March

Chairs are one of the most utilitarian items in any house or office. They have provided, however, inspiration for great artist and architectural imagination through the ages. The 20th

century has produced a number of high-designed achievements to the chair pantheon. as this exhibit testifies. Featured designers include some of the century's most important architects, including Frank Gehry. Gerrit Rietveld. Ludwig Mies van der Rohe. Frank Llovd Wright, Charles Eames and others.

For more information call the (612) 623-3300.



Fiterman gallery at Red-Blue Chair, Gerit Rietveld, 1918

### **Bungalows of the Twin Cities** Landmark Center St. Paul Through 1996

Almost as American as apple pie, bungalows are the staple of American residential architecture. The Twin Cities boast a hefty



This classic Twin Cities craftsman-style bungalow is among many featured.

display of bungalows-from the modest to the not-so modest-as you will see in this exhibit looking at the history and significance of this popular and ubiquitous residential style.

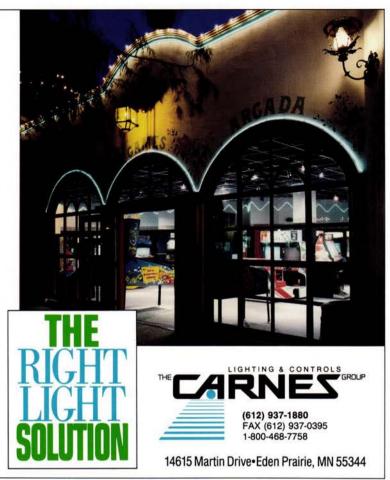
For more information call (612) 731-4913.

# Be Creative With FIBER OPTIC LIGHTING

Building Highlights • Signs & Graphics Interior Design • Landscapes • Waterscapes



Imagine the possibilities with fiber optics! It's lighting that can change color. It's lighting that accents exteriors or interiors. It's lighting that can be used near or even in water because there is no electricity in the fiber tubing. It's safe because there are no glass tubes or lamps to break or burn out. It has virtually no heat and no UV. Easy to install, low maintenance and low operating costs. Get full details on Fiberstars by calling Carnes at (612) 937-1880.



# Try an Engineering Firm with a Unique Capability. Listening.

You've worked hard to achieve the goal of thrilling your client with a design of integrity. Now you need a team player that gets involved and has the passion for the project that you do, to bring your design to life. You need an engineer that can really *listen*.

Listen to deadlines and budgets as well as your ideas.

Listen to the latest developments in technology to offer you creative solutions with valueengineering incorporated throughout.

Call Engineering Design Group of Minnesota for your next project. We make architectural dreams come to life.

We listen.

Structural Engineers Specializing in:

•Commercial•Residential•Industrial

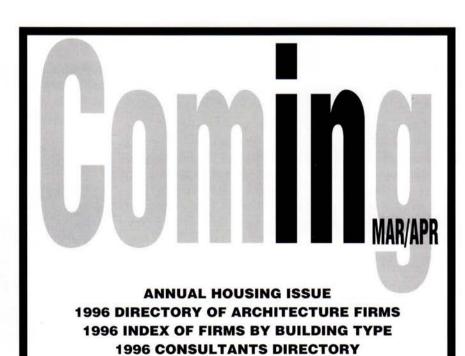
•Curtain Wall•Listening

547 Lovell Avenue Roseville, MN 55113

(612) 481-9195

OF MINNESOTA, INC

FNGINFFAING



For advertising information call

Judith Van Dyne 612/338-6763.



Passing along a venerable tradition at the University of Minnesota's College of Architecture and Landscape Architecture, Harrison Fraker heads for a new post at Berkeley

Interview by Bruce N. Wright



For more than 10 years Harrison Fraker has presided over his work like a master chef supervising the production of haute cuisine in the kitchen of a four-star restaurant. A bit of this, a pinch of that; stir up this pot and cool down that one, et voîla! A new creation is born. Only for Fraker, his kitchen is the College of Architecture and Landscape Architecture (CALA) at the University of Minnesota, and his creations are the 600-plus architecture and landscape-architecture students who work their way through the design

program on the university's Minneapolis campus. Like a chef, Fraker knows that every dish concocted starts with a good recipe.

Since 1984, when he arrived from Princeton University's Architecture School—where he taught alongside such design heavyweights as Peter Eisenman, Michael Graves and Jean La-Battoux—to take over the head of the School of Architecture and Landscape Architecture after Ralph Rapson's retirement, Fraker has constantly tinkered with the recipe for a school of design. Within two years of his arrival, Fraker had created the Design Center for the American Urban Landscape, and coaxed away from sunny California the dynamic duo William Morrish and Catherine Brown to head the center. Morrish and Brown were described in a New York Times article as "the most valuable thinkers in American urbanism today."

By 1989, Fraker had successfully maneuvered the school out from under the umbrella of the Institute of Technology into becoming an independent professional college (CALA). And Fraker appointed himself dean. Fraker is no slouch. The list of his accomplishments runs more than 40 pages. He has received a National Endowment for the Arts Design Fellowship, three national solar design awards and a Progressive Architecture citation for applied research in teaching passive-solar design in architecture. He's received several citations for design excellence, an AIA Minnesota Honor Award for his design of a residence on Lake Minnetonka, and second place (out of 400 entries) in the Evanston, Ill., Public Library national design competition.

His changes to the curricula at CALA have been major and numerous, enough to pull the master's program in architecture up to a well-respected sixth among public universities and 13th among all universities.

But now that the recipe has been refined and things are simmering along quite nicely, Fraker is moving on. He begins another cooking project in January 1996 as the dean of the College of Environmental Design at the University of California at Berkeley. Architecture Minnesota caught Fraker during a rare stationary moment in his office in the Architecture Building on the Minneapolis campus of the University of Minnesota as he began the process of handing over the spatula to CALA's numerous and quite capable sous-chefs.

### Architecture Minnesota:

What motivated you to go into architecture in the first place?

Harrison Fraker: I suppose it would be a number of experiences in my youth. I built a number of elaborate electrictrain setups with my father right up into my teens, and I raced sailboats from the time I was a teenager until I went to college, even into college.

For a while I thought I might be a sailboat designer and designed a number of sailboats. I designed a 12-meter boat when I was 16 years old. I actually built a 1-meter model of the boat and sailed it. I've always been fascinated about the way things are made and work. I knew when I went to college that if I wasn't going to major in English I would explore architecture. I've always been good at technical things, and it's been relatively easy for me to do math and physics.

While I was at Princeton I had a sort of epiphany on Earth Day [1972] and said to myself, we need to better understand how buildings interact with their environment and we need to design for that. I discovered that we had lost all kinds of practical wisdoms that were based on good science and good research. I really devoted 10 years of my professional career to developing

Continued on page 60

### Damon Farber Associates

### Serving Minnesota Architects Since 1935

Audio, Visual & Data Design

**Engineering Studies** 

Fire Protection

Security & Fire Alarm

Life Safety Improvements

Underground Fuel Storage Tank Removal & Replacement

Energy Audits & Retrofit

Plumbing

Campus Master Planning

Power Distribution

Heating, Ventilating, & Air Conditioning

Lighting Design

Communication Systems



St. Louis County Jail Duluth, Minnesota

Adaptive Re-Use Study

Architect: the STANIUS JOHNSON architects, inc.

### Gausman &Moore

Our 60th Year of Mechanical and Electrical Professional Engineering Services

St. Paul 612-639-9606

Duluth 218-722-2555

Brainerd 218-828-2133

### ARCH T

### Architectural Software for AutoCAD®

Realize time savings, increased productivity, and outstanding value.

- Support your architectural design process.
- Create production drawings and design visualizations.
- Uses industry standard layering formats or create your own.
- ARCHT comes with over 2,100 pre-defined blocks in plan, elevation, and 3D.
   On-line help, manuals and tutorials.

ARCHT enhances AutoCAD with a thoughtful, comprehensive design philosophy based on the components and assemblies of a building. You conceive the idea, then use ARCHT to leverage the production of drawings, models, and documentation.

Autodesk-

### EKETIV CAD Software & Supp

6601 NE 78th Court, A-8 Portland, Oregon 97218 USA

800-458-0690 503-252-3230 Fax 503-252-3668

ARCHT and Draw it oncel are registered trademarks of KETIV Technologies, Inc., Portland, Oregon, USA. All other product names are trademarks of their respective companies.



DRAW IT

Landscape Architects

3 3 2 - 7 5 2 2

# roads From prehistoric care that presents

From prehistoric caves to contemporary urban skyscrapers, architecture has evolved along a curve that presents ever-greater social and business challenges for each new generation of architects

By Janet Whitmore

In the last 15 years, the architectural profession has faced myriad challenges posed by new technology, economic freefall and vigorous social change. With this article, Architecture Minnesota begins a series about the challenges, opportunities and problems that architects face today. Future articles will look at such issues as the design-build process, computer-aided design and community leadership.

The need for shelter and the desire to design it is as old as humanity. In the prehistoric caves of southern France, we find sacred paintings decorating the walls. In the earliest archaeological records at Ur and Mohenjo-Daro, we find traces of planned communities and a clear intention to design and build a specific type of architecture. The sophistication of these developments often surprises us. and vet they might also be viewed as evidence that the social need for intelligent, responsive design is basic to our species.

An historical overview of the architect's role reveals that four basic types of architect have been at work: the architectural team: the theoretical architect: the gentleman architect; and the solitary eccentric architect.

The first type, the architectural team. is probably the oldest. In fact, that epitome of traditional Western culture, the Parthenon, was the team creation of Pericles, Ictinus and Phidias—client, architect and sculptor, respectively. Two thousand years later, the same team concept produced Versailles. Le Vaux. Le Notre, Le Brun and Louis XIV formed a formidable and interactive team, turning a dreary, swampy estate into the center of European culture for almost 200 years.

The second type of architect, the theoretician, also springs from Greek culture, but it is the Roman Vitruvius who really begins the tradition of the architectural theorist as writer. His comments on "firmness, commodity and delight" still carry meaning today. Vitruvius's theoretical musings reappeared during the Italian Renaissance in the writings of the Florentine architect Alberti, and perhaps most remarkably in Palladio's Four Books of Architecture. This writing has influenced architectural design throughout Western civilization, from London to colonial Virginia. Each time the classical trend emerges, whether it's 18th-century France or 20th-century America, Palladio's work again becomes a touchstone. a reference point and a guide.

In contrast, the gentleman architect no longer exists in our increasingly compartmentalized, specialized society. The gentleman architect is more of an armchair architect who is not trained or necessarily employed as an architect. But his interest and dedication to architecture are far-reaching. Think of Thomas Jefferson of vestervear or the Prince of Wales today. They are both classic examples of gentlemen architects. Yet in today's world, Thomas Jefferson would not be allowed to build Monticello or the University of Virginia until a registered architect approved the design. And with the possible exception of Prince Charles. there are few individuals who can afford to take an active role in contemporary architecture unless they are qualified to make a living by doing so.

The solitary eccentric architect, so well embodied by Howard Roark in Avn Rand's novel The Fountainhead, reflects the modern concept of the avant-garde. This particular model for architects appeared in the late-19th century, at least 75 years after the solitary eccentric type emerged in painting, literature and music. In the United States, this model has been a mixed blessing. It supports the notion that a single individual, such as Louis Sullivan or Frank Lloyd Wright, can and should follow their own vision to the exclusion of the nay-sayers and Philistines of the time. However, it also supports the unfortunate perception that architects are unresponsive egotists who are incapable of listening to their clients or designing a functional building.

The reality of architectural practice today is that it requires four to six years of education, a three-year period of apprenticeship, passage of a national registration exam. licensure, and finally the patience and perseverance to learn all the business practices that weren't taught in architecture school.

Xerxes Architects, founded in 1991. exemplifies the complexity and challenge of practicing architecture in the late-20th century. The three founding partners, Gregory Carroll, Rolf Haarstad and Kathleen Lechleiter, assume a wide range of responsibilities that they did not anticipate during their vears of formal education. As Haarstad says, "We were typical architecture graduates with no business background. But we also were fortunate to have worked with a large East Coast firm where we had the opportunity to learn about the complexity of architectural practice. Not everyone becomes a designer. Lots of people become project managers or business specialists.

Continued on page 61



U.S. Department of Agriculture Northern Crop Research Center, Fargo, ND "We wanted...(the structure) to tie into other buildings at the

"We wanted...(the structure) to tie into other buildings at the University, so we used a color of brick found on the adjacent structure, plus two other colors predominant on campus. The patterning of the brick draws from the Scandinavian tradition of enlivening utilitarian structures with color and pattern, creating visual interest during the long northern winters."

– Loren Ahles, AIA, Project Designer – Hammel, Green and Abrahamson, Inc., Minneapolis Photography: Tom Hlavaty



Burnsville Marketplace - Burnsville, MN

"Brick was chosen as the primary facing material...for all the long established, practical advantages; durability, low maintenance and cost effectiveness. Equally important...were the major aesthetic benefits...Brick was consistent with the surrounding context. The inherent design flexibility of unit masonry coupled with the available ranges of color and texture ensured us that Burnsville Marketplace would indeed age with interest."

– John Gould, AIA, Director of Design – KKE Architects, Inc., Minneapolis Photography: Lea Babcock



Bailey Elementary School – South Washington
County Schools, ISD 833,
Dan Hoke, Superintendent
"Brick brought the appropriate scale to this building for a sense of strength and warmth. Its color provides a pleasing contrast to the brightly colored steel elements, and its long-term durability adds value."

 James Rydeén, FAIA, President
 Armstrong, Torseth, Shold and Rydeen, Inc., Minneapolis Photography: Ralph Berlovitz

# JUST A FEW OF THE STRONG STATEMENTS ARCHITECTS HAVE MADE ABOUT US.

Attractive and flexible. With a myriad of colors, textures and styles, it's no wonder award-winning architects design with masonry. Call (612) 332-2214.



Architecture comes in many forms. A look at this year's Honor Awards, featured this issue, illustrates the diverse nature of Minnesota design.

Seven projects won awards: the Minnesota Children's Museum by James/Snow Architects and Architectural Alliance (featured November/December 1995); the Origen Cen-

ter, also by James/Snow Architects; the Knox Garden by Loom; Community roots the Cowles Farmhouse by Meyer, Scherer & Rockcastle; the Lemington Municipal Transit Hub by Ellerbe Becket; the Conceptual

River Corridor Plan by Scott Wende Architects; and the Carlson Outbuildings by Salmela Architect. This year's jurors-Mark Mack of Mack Architects, Venice, Calif.; Laurie Hawkinson of Smith-Miller and Hawkinson Architects, New York; and Frederick Bland of Beyer Blinder Belle, New York-pulled the winners from 102 submissions.

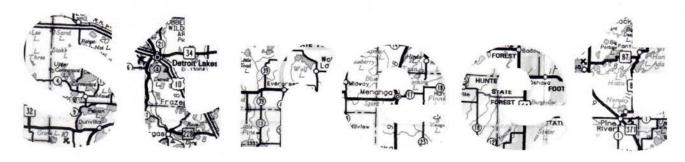
Whenever a group of projects wins awards, we seek to identify common traits. We look for architectural threads that define Minnesota design, architectural characteristics that can't be found in other states. On the surface, these projects have little in common. One winner is a pair of utilitarian outbuildings in northern Wisconsin, another is a parking garage in downtown Minneapolis, and a third is a colorful museum in an urban setting.

Yet while functionally quite different from each other, several projects share an attitude or approach to design. Take the Knox Garden and the Conceptual River Corridor Plan, for instance. Both seem unlikely winners: They are not particularly glamorous or glitzy. What distinguishes these two is their grass-roots method to design. Both represent community involvement, people taking charge of their neighborhoods. Numerous neighborhood groups participated in the development of the river plan. And those same groups will need the collective will and drive to convert these urban-design concepts into reality. The Knox Garden arose from similar community efforts. Here volunteers rolled up their sleeves and transformed an abandoned lot in north Minneapolis into a garden for children and adults alike. Rather than sitting around and waiting for City Hall to fix the blight, the neighbors fixed it themselves.

Other winning projects also speak of community. The Origen Center, built by a large corporation, is a democratic building. Origen is designed and planned to encourage interaction between different divisions. Here hierarchy is thrown out the window. All who use the building are equal. The Children's Museum, too, is a place for shared activities and equality. With its range of educational exhibits, the museum is a metro-wide Eric Kudalis and state-wide playground where children from all neighborhoods are invited.

As this year's winners indicate, when a community comes together positive solutions result.

If you know northern Minnesota, then you know Duluth. And if you know Duluth, then you know Superior Street. Since the 19th century; Superior Street has carried on as the city's principal thoroughfare, surviving fits of boom and bust. The retail scene has been eclipsed by the Miller Hill Mall "over the hill," but history lingers on. Superior Street is home to more than six turn-of-the-century buildings; Hennepin Avenue in Minneapolis can claim only one. Of course, when Daniel Greysolon Sieur du Lhut passed through the Lake Superior area in 1679, visions of great architecture were far in the future. For the next 100 years Duluth remained an undiscovered hinterland, until the British Northwest Company established a trading post in 1793. Still, development was slow. In 1857 "du Lhut" incorporated itself as Duluth. Two years later, a Federal Land Office opened shop and eager investors soon discovered the city's potential. "Duluth is a Chicago at the head of the Lakes," proclaimed Jay Cooke of Philadelphia in 1868. One year later, Cooke established Duluth's first bank. Commerce was born. And the Northern Pacific Railroad followed. By 1872, Superior Street had emerged as Duluth's principal business district. Mule-driven streetcars appeared in 1883. And in 1887, the architectural firms of McMillen and Stebbins, and Wirth and Traphagen were formed to help shape the "metropolis of the Northwest." The best way to understand Superior Street's architecture is on foot. So bundle up and carry this article along.





If architecture is a barometer of a city's economic and cultural success, then the inflationary and recessionary 1970s were not kind to Duluth and its treasured Superior Street. Indeed, the 1970 Radisson Hotel by William Tabler at 505 West resembles a Duracell Mattery. Even though the brick-clad structure pushes the envelope of

good taste, the hotel is a familiar icon on Duluth's cityscape, as well as a beloved testament to modern kitsch. The rooftop revolving restaurant and cocktail lounge are fabulous.

Modern architecture redeems itself in Gunnar Birkerts celebrated design for the Duluth Public Library.
Opened in 1980, the civic



building evokes images of sailing ships, a perfect metaphor for northern Minnesota's premier city. To further the

oceanliner motif, Birkerts offered several moderne touches, including the building's rounded front and chrome decorative elements.

Continue along the southern side of Superior Street to the central business district. Between Fourth and Third avenues West stand three architecturally significant buildings: the Medical Arts Office, Torrey and Alworth buildings.

The first stop at 324 West is the Medical Arts Office Building of 1933. Steppedback in art-deco fashion, the 12-story steel skeleton is the brainchild of Duluth architect Ernest Erickson. It is a familiar design, recalling St. Paul's heroic city hall with perpendicular windows gracing a cold, smooth skin of white stone. In addition, it is one of the few examples of art deco in the city. However, this building is localized by the stylized sculpted heads of Native Americans that are visible

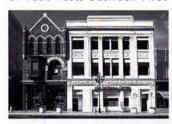
rated fire-proofing techniques, allowing the owners to advertise the building as "absolutely fireproof." Here, iron and wooden beams were covered with terra cotta or baked clay, a method pioneered in Chicago after the Great Fire of 1871. The \$300,000 building was the talk of the Upper Midwest. In the 1950s, the entrance as well as the two floors above were covered with a dubious International-style facade.

Twenty years after the completion of the Torrey Building, D.H. Burnham was invited to design a 16-story skyscraper called the Alworth Building. The great Chicagoan had already gained international recognition for his famed Flatiron Building in New York and Wannamaker's in Philadelphia. Opened in 1910, Alworth was trumpeted by the local press. The Duluth News Tribune gushed that it is "a cosmopolitan office build-



West (218-722-7763) for great burgers and onion rings. A Duluth institution since 1917.

The historic Wirth Block of 1886 rests between First



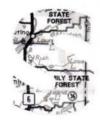
Avenue West and Lake Avenue. Like the nearby Oppel Block, the narrow 3-story structure combined residence and store. Completed in 1886 for druggist Max Wirth, the rough quarry-faced sandstone surface was embellished by Oliver Traphagen with Gothic and Romanesque touches. A

the-century C.H. Oppel Block at 115 East. It can't be missed—the owner's name is carved in relief above the third floor. Attributed to the opus of Traphagen, the 1885 building housed a general store and was topped by two levels of apartments. The Richardsonian Romanesque influence is evident in the busy brick and stone work.

The Old City Hall and Jail, one of Traphagen's first



commissions, can be found across the street at 126 East. After Duluth's government was rechartered in 1887, the city needed a new headquarters. In 1889, this building of soft sandstone and spacious windows was realized. Won-













from the street. Erickson moved to Evanston, Ill., where he designed, among other things, apartments along Lake Shore Drive.

Next door is the Torrey Building, dating from 1892. The product of the Duluth architectural duo of Traphagen and Fitzpatrick, the 11-story structure was the city's tallest building until 1910. It incorpo-

ing, one that dwarfs the Tower of Babel to a mere cottage in comparison." Complete with 275 offices carried on steel beams, columns and girders, the \$500,000 Alworth Building was properly identified as "an epoch in the architectural legacy of Duluth."

For a calorie-heavy yet delicious lunch stop by Mr. Nick's Famous Charburgers at 220 bay window on the second floor enlivens the façade, while allowing light into an otherwise bleak flat.

Flow Kops Gallery at 32 East (218-722-0831) showcases Duluth and Northern Minnesota artists, including gallery owner Jay Kops' own art furniture. Exhibitions change regularly.

After crossing First Avenue East, walk toward the turn-of-

derful details abound, including Duluth's crest. The distinctly Richardsonian Romanesque design is modified by the presence of 19th-century French bay windows. The 2-story building is a stunning example of architectural preservation on Superior Street.

On the northeast corner of Superior Street and Second Avenue East discover one of Duluth's most celebrated buildings: Masonic Temple Opera Building. For a sum of \$200,000 the Duluth archi-



tectural firm of McMillen and Stebbins watched its bizarre mix of Moorish and Romanesque ideas rise in 1889. Sitting atop the building's corner stood a Moorish-style cupola. The towering 5-story structure housed the Masonic Lodge, among other things. When passions for the Romanesque plummeted, building owner G.G. Hartley chopped off the upper three stories so that the building would not compete with the classic purity of the new Orpheum Theater

Kaplan's 1939 contribution to the city. Take a short jog up Second Avenue East to study the Orpheum Theater of 1910, which was designed by J.E.O. Pridmore of Chicago in the Greco-Roman architectural ethos

Self-made iron man George Crosby led a citizen's committee to build the impressive Hotel Duluth at 227 East. When Duluth's population



Overnight guests are no longer welcome here, but long-term residents make it home.

Everyone knows about the spirited medieval landmark at 600 East called Fitger's Brewery, which is a must



see. Designed by the Duluth architectural duo of Traphagen and Fitzpatrick, and completed in 1890, the building's surface is of Lake Superior black basalt. In addition, small windows endow the place with a castlelike appeal. Nowadays, it is home to a first-rate hotel and restaurant.

To rest weary feet and warm hearts, stop for a microbeer at Fitger's Brewhouse

four buildings in Duluth and his Hartley Office Building at 740 East remains an architectural treasure. Completed in 1914, the diminutive building of Elizabethan Tudor pretensions sits on a narrow strip of land between East Superior Street and the railroad tracks. Together with the Kitchi Gammi Club ahead, the building joins the city to the rugged lakeshore.

Our walk concludes outside the Kitchi Gammi Club at 831 East, which marked



Goodhue's architectural debut in Duluth. When Goodhue unveiled his design for the \$300,000 edifice, senior members of his New York firm

### Exploring Duluth's Superior Street by foot reveals a city rich in architectural history

next door. Yet much of the stone and detailing remain, including the street's most impressive entryways.

Next door to the Opera building at 211 East stands the Nor Shor Theater. The artdeco façade is Liebenberg and



peaked at 113,754 in the 1920s, this palace could compete with the best in Minneapolis, Chicago and beyond. The \$2.4 million project boasted 500 rooms as well as steel and reinforced-concrete construction. Architecturally, the building reflects the eclectic fashion of the day. For instance, the management described the hotel as possessing a "thoroughly Italian Renaissance" lobby, leading to a "typical Spanish dining room."

(218-726-1392), featuring libations and ciders.

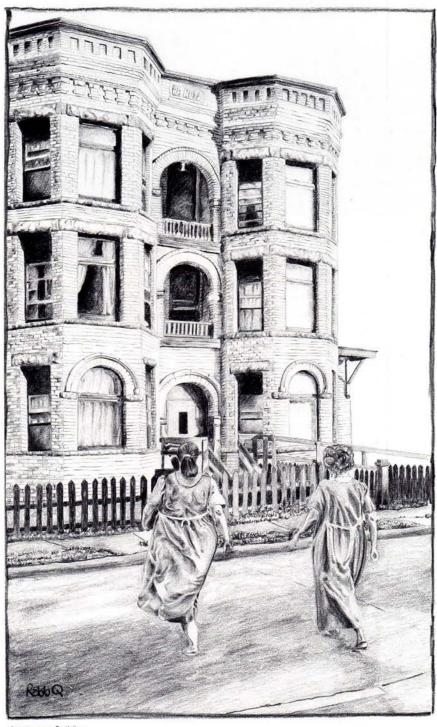
The simple Northwestern Oil Company at 706 East was built in 1921. The gasoline station was conceived as part of the "City Beautiful" movement. Unfortunately, the building lost much of its cache when the dramatic cantilevered canopy-supported by Art Nouveau ironworkwas removed.

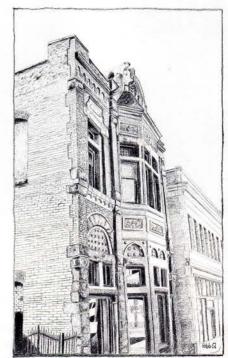
New York architect Bertram Goodhue designed winced. The architect broke with the firm's dogmatic Gothicism by simplifying decoration. Goodhue also added such elements as Georgian pilasters and Tudor details. Still a favorite haunt of Duluth's establishment for wedding receptions and business gatherings, everyone enjoys the club's union of traditional metal, wood and stone handicrafts. A rare find, indeed.

Old Duluth Central High School Lake Avenue and Second Street Architects: Emmet S. Palmer and Lucien P. Hall 1892

### **Duluth Sketchbook**

Duluth artist Robb Quisling, initially focusing on portraits, has expanded his aesthetic gaze to Duluth's architectural landscape for new inspiration. "I find that many of our local structures have their own personalities, as reflected in their distinct designs and unique historical stories," he says. His drawings are made from wax crayon, litho-crayon, black oil pencil and china marker. He then tints the prints with oil pastels and oil pencils, made transparent with a turpentine wash.





Duluth's First Jail 126 East Superior Street Architect: Oliver G. Traphagen 1889



Apartment Building 301-307 East Third Street Architects: Oliver G. Traphagen and Francis W. Fitzpatrick

sod houses are a nearly washed-away chapter

### SOD LIVING

in American architectural history



ince twilight I've been reading by oil lamp, tucked into a creaky wood bed warmed by a handmade quilt and buffalo robe. Retiring meadowlarks and killdeer have quit their lullabies. Evening breezes that tickled dry grass stems peeking from between window frames are still. In the country quiet, the earthen walls and roof sheltering me issue a reassuring permanence that belies a lost history, the lack of similar structures nearby. I leave my bed for one last trip to the outhouse. Pulling open the heavy plank door reveals a celestial sight: fireflies spark the night sky, lighting my way as I walk through big bluestem damp with light rain. Looking over my shoulder, the one-room sod house in which I'm staying rises organically from the landscape—long, squat and sturdy—like a small aberration.

No, I'm not aping Laura Ingalls Wilder, author of *Little House on the Prairie* and other books about pioneer sodhouse living in the Midwest. I'm describing a night's stay at the McCone Sod House on the Prairie, an 1880s-era reconstruction of a "rich-man's soddy" that's both a museum and a bed and breakfast. A few yards away from this sod house sits a reconstruction of a "poor-man's dugout" as well, open for visiting only. Both soddies have their own sod outhouses and are surrounded by restored prairie. At one time, "within a 5-mile radius of this spot," reads the plaque outside the dugout, "stood at least 10 sod houses or dugouts."

One hundred years after sod houses were a familiar sight on the prairie, Stan and Virginia McCone and family constructed these soddies on their rural property near Sanborn in southwestern Minnesota. The area, once part of the tallgrass prairie that stretched from Canada through western Minneso-

ta to Oklahoma, is now a farmland vista of cornfields, crop sprayers and silos.

"Their names have been forgotten, their homes have vanished, their native prairie is gone," says Stan McCone of the pioneers. "We hope people will remember them as they visit our sod houses. and appreciate who they were and how they lived." Part entrepreneurial enterprise, part homage to America's pioneer farmers or sodbusters, the McCones' venture is also a tribute to an oft-forgotten form of frontier architecture.

Fortified with Thomas Jefferson's dream of agrarian democracy and their 160-acres per yeoman farmer, the settlers ventured west during the late 1800s. When they reached the edge of the eastern forests through which they'd been traveling, they were shocked by the treeless grassland that stretched

endlessly before them. The pioneers were knowledgeable in such traditional home-building techniques as stone, brick, log and sometimes timberframe. But on their claims in Nebraska, Colorado, Texas, Oklahoma, the Dakotas, western Kansas and southwestern Minnesota, the only building material present was sod (aside from cottonwoods lining scarce streams and ponds, and the occasional prairiefire-resistant oak). A bonus for cash-poor pioneers, sod was also free.

Initially, some settlers simply dug caves out of rises in the earth or the sides of small

hills. Eventually, they learned that the root-tangled prairie sod (half a square meter of big-bluestem sod may contain 13 miles of rootlets) could be cut into building blocks. Some dug out a hillside for a back or side wall, or dug a pit in the ground, and con-

structed the remaining walls from sod bricks. How they realized the benefits of sod is uncertain. But what we now call earth-sheltered housing has existed in human communities from prehistory through the present.

"It's possible the sod house came to the prairie as the tribal style which the Indo-European migrants had brought from the treeless steppes of central Asia. It has been used for millennia in those regions...," writes Roger Kennedy in his book. Minnesota Houses: An Architectural & Historical View, Consider, also, that Native Americans have carved or built homes out of the earth for centuries: Eskimo igloos, Pueblo kivas. the ancient Indian cliff palace at Mesa Verde. "The earth lodges of the Omaha Indians may have inspired the Mormons in building Nebraska's first sod houses," writes Roger L. Welsch in his book Sod Walls: The Story of the Nebraska Sod House. Throughout the Great Plains, the Mandan. Pawnee and Arikaree Indians also built domelike earth houses.

Whatever the inspiration, from the mid-1800s through the early 20th century, settlers taught each other to build sod houses. Always considered temporary housing (the prelude to a "real" timber-frame house), even when lived in for a decade or more, soddies more than met the climatic, geographic and sociologic perils of pioneer life. The soddy's thick walls and roof insulated against intense summer heat, winter's bitter cold and harsh winds. Sod stopped arrows and bullets. And sod houses frequently withstood tornadoes and prairie fire.

However, sod houses posed perils of their own. If a family could not afford to line their sod roof with tar paper, leaks would continue days after a hard rain. Because of their weight, roofs required substantial wooden support; builders who skimped in this area might end up with tons of soggy sod collapsing on them. Unfinished interior walls and ceilings housed snakes, rodents and bugs that found their way into bedding or dropped on people's heads. Un-



A sod blacksmith shop in West Union Nebraska featured a lapped-sod roof (above). The McCone sod house (opposite) is a reconstruction of an 1880s "rich-man's" soddy near Sanborn, Minn., which is a museum and bed-and-breakfast.

planked dirt floors—despite being tamped to a concretelike hardness—turned to mud during rain. Cows with itchy backs, having no trees to rub up against, found so-



In the late-I 9th century, pioneers built many structures of sod, including this Nebraska school house.

lace on the corners of a sod house. Buffalo or night travelers, unaware that they were passing over a dugout built into a hillside, might unwittingly cause a roof to cave in.

Nonetheless, in addition to houses, settlers built businesses, churches, schools, barns, corrals, even dog houses out of sod. "The sod house, since it was folk architecture, displayed great variety," Welsch writes. Many factors determined style, including site, tool availability, and money to buy wood, shingles, windows and hardware: the number of family members; needs of livestock or other business: and the time of year. Most houses were simple rectangles facing south, one wall lined up with the North Star. L-floor and T-floor plans. even round houses could be found. "In the 1860s, 1870s, and even later, western Minnesota was dotted with sod houses of various types and sizes," reports Merrill E. Jarchow in his book. The Earth Brought Forth.

Today no original sod houses or dugouts exist in Minnesota. Only depressions or indentations may remainlike the outline of the sod dugout, immortalized by Wilder in her book, near Walnut Grove, Minn. The grainy photographs of Solomon Devoe Butcher and others, as well as oral histories collected in various texts, piece together a picture of early settlement architecture on the prairie. But for a real sense of sod-house living, nothing beats a stay in the McCones' soddy.

In the summer of 1987 Stan McCone, a descendent of homesteaders, began constructing a sod house in the manner of his forefathers. He found a low-lying area of virgin prairie and, with the owner's permission, began cutting the sod with a modified modern grass-sod cutter pulled behind a tractor. (Pioneers developed a butterfly plow for cutting prairie sod, which was pulled by a team of oxen or horses.) The sod was cut in 1-foot-wide strips, 4 to 6 inches thick, and later sectioned into 2-foot blocks. Pulling the root-tangled sod from the earth sounded like "the ripping of a giant canvas," McCone says. The sod was piled on a wagon (homesteaders in another state called their sod bricks "Nebraska marble"), and transported to the site.

Rows of sod blocks were staggered on top of each other in the manner of bricklay-

Continued on page 61



### MANUFACTURING 10eas



. C

edar offers contrast to the glass façade.

he Origen Center, designed by James/
Snow Architects in rural Wisconsin, is a
gleaming piece of modernist architecture.
The building's beauty is derived from a
crystal-clear expression of its structural
form and function. As one honor-award
juror noted while praising the building,
less, plus a little extra, is more.

Julie Snow, formerly of James/Snow Architects and now working independently, has designed several facilities for Phillips Plastics Corporation. In addition, she received an AIA Minnesota Honor Award in 1990 for the corporation's Short Run plant near New Richmond, Wisconsin.

The Origen Center, the architect says, "continues the ongoing exploration of the relationship between the structure and the skin."

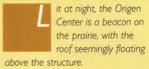
By Eric Kudalis

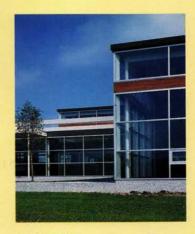


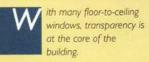




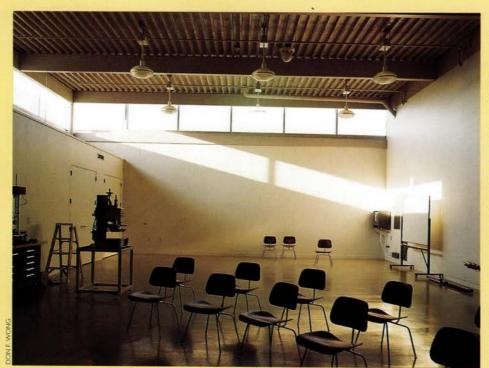
grid-patterned overhang shields the main entrance.





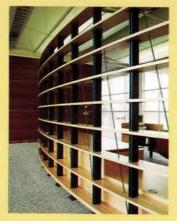


### A division of labor finds common ground in this industrial building



L

ight streams through clerestories into a training room.





partition marks the reception desk.





he main reception desk is sandwiched between a glass back wall and a glass entrance.

The main corridor (opposite) visually alternates between inside and outside

Here the skin is a veneer that functions simply as enclosure. "Opacity, translucency and transparency, as well as the operation of the window units, become the dominant expression," the architect says. "The skin is a taut wrapper, transparent through the structure. Structural information is expressed on the exterior by the transparency of the curtain wall to the structure within."

Although glass and aluminum framing are dominant materials, the architects soften the façade with cedar and cut granite. Thus this is modernism, but modernism with a heart.

Phillips, which produces highly engineered plastics, conceived the Center as a place for the exchange of manufacturing ideas and expertise, in which a manufacturing training center, a start-up manufac-

turing-production facility, and an incubator for new businesses combine in a single building. All three divisions—laid out along a 468-foot-long, 12-foot-wide corridor—are separate from each other. Yet common areas—dining, conference rooms, copy center—are shared by all three divisions to encourage interaction. The fact that the functions share a hall also brings people together in casual encounters and conversations.

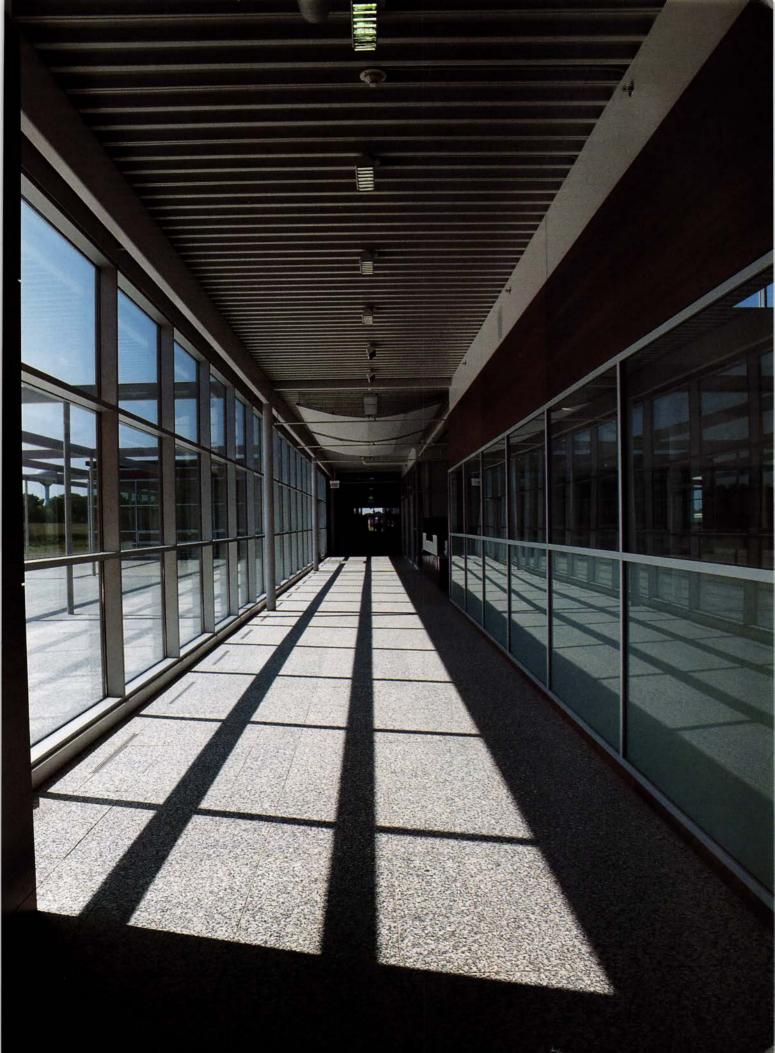
The interior is light-infused; exterior and interior become one. The reception desk stands at the center of the building, sandwiched between a glass wall and glass entry. Walking along the glass-enclosed main east-west corridor, you alternate visually between interior and exterior views. Even interior rooms are filled with light, such as in production and manufacturing rooms where the sun enters from the clerestories, making the metal ceiling seem to float above the rooms.

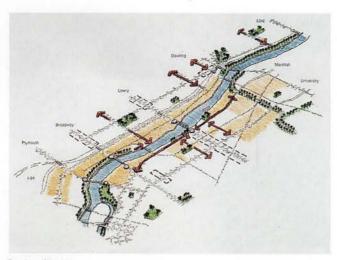
As the seasons change, the interplay of daylight on architecture changes. The users' workday is engaged by the evolution in light and views between inside and outside. This is architecture in which separation and connection dance along the same line.



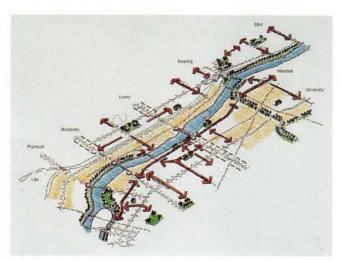
#### HONOR AWARD

Origen Center Menomonie, Wis. James/Snow Architects

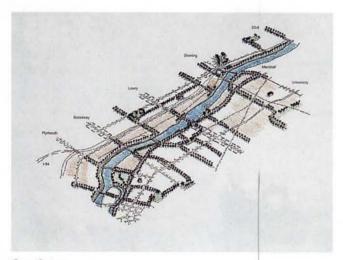




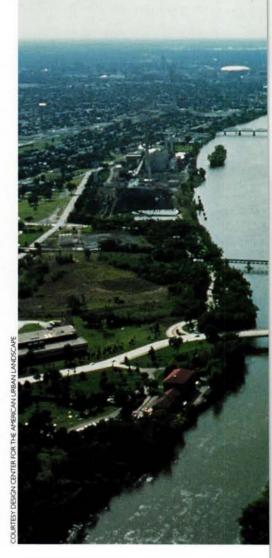
Previous Planning



Proposed Connections

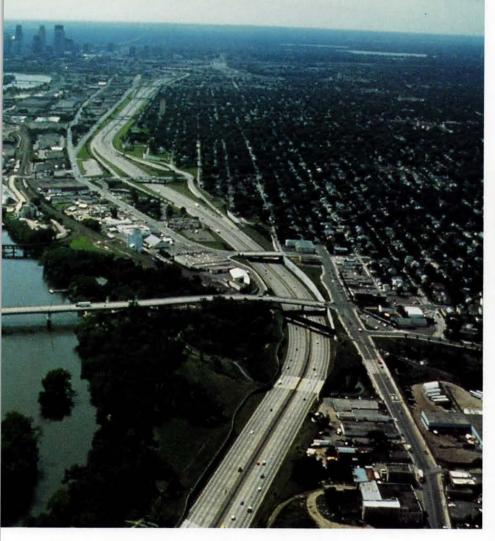


Green System





his conceptual project represents one of the rare occasions that an urban-design plan has won an AIA Minnesota Honor Award. Because the Mississippi River, the fuel of Minneapolis-St. Paul's original economic growth, is tied closely to the city's identity, it seems appropriate that the plan should win for identifying the next wave of urban growth. The Mississippi Corridor Neighborhood Coalition plan looks at the river's potential for real growth by examining the existing land use, improving river access for the neighborhoods, and combining these elements for redevelopment and improvements.



## On the river

A new urban-design plan looks at the Mississippi River as a place for community-involved growth and development

Perhaps what makes this plan different from other urban-design frameworks is its grass-roots approach. Numerous public meetings led to its development. The Mississippi Corridor Neighborhood Coalition comprises Bot-

tineau Citizens in Action and 11 neighborhood organizations along the upper Mississippi River corridor, from Hennepin Avenue and Nicollet Island to the city limits on the north.

The final report provides a conceptual plan and implementation steps for the neighborhoods. Strategies and potential projects are suggested for individual and collective neighborhood approaches to utilizing the river.

Suggestions include redeveloping some land for parks, pedestrian and bike trails; building a variety of lowrise housing types; enhancing lateral neighborhood connections with land-



scaping and lighting that would create a sense of entrance to the river; encouraging neighborhood-based commercial enterprises; and implementing neighborhood gateways.

The plan also cautions that certain hurdles must be overcome if any of the ideas are to reach fruition. First, the city needs to change its outdated perspective of the river as an industrial region. The city must recognize the river as a civic place that can help revitalize neighborhoods. Also, the plan advises that the city of Minneapolis, State of Minnesota and Federal government view the river as a national resource exempt from the fickle mood of politics. In addition, the city and the neighborhoods should muster the political will to promote the suggested changes, so that neighborhoods have influence in shaping public policy and revising outdated zoning and development policies.

The Conceptual River Corridor Plan, having laid some groundwork for future growth, is only the beginning. E.K.





### HONOR AWARD

Conceptual River Corridor Plan A Neighborhood-based Plan for the Upper River Corridor Minneapolis Scott Wende Architects



Two outbuildings
rise above pure function
through simplicity and
craftsmanship





David Salmela sited the two outbuildings at right angles to each other. The red-painted workshop (above), in contrast to the deep-blue storage shed (left), has a portico. With both outbuildings, whitewashed walls, concrete floors and exposed framing comprise the interior finishes (right).



### Scandinavian echoes

The Carlson outbuildings in northern Wisconsin are more than the sum of their parts. The clients, whose summer home is an old farmstead beside a lake, asked for a storage shed for the property's large maintenance equipment as well as a workshop for repairs and construction hobbies. A builder suggested a standard

metal shed—a ubiquitous structure along rural highways that certainly gets the job done. The clients wanted more than pure function though, and hired David Salmela of Duluth.

Salmela has become a perennial favorite at the AIA Minnesota Honor

Awards, having taken trophies for his firm's work several years running. A look at these two outbuildings, set at right angles to each other, shows why. No job is too small for Salmela. Whether designing a Finnish-inspired house in suburban Minneapolis or a getaway cabin in northern Minnesota, Salmela applies a steady design hand that emphasizes a Scandinavian-influenced concern for detailing, materials, craftsmanship and simplicity.

Here each cedar-sided building measures 15 feet by 48 feet, one painted a deep blue, the other a deep red, both with white-trimmed windows. By placing them at right angles, Salmela created a courtvard that faces the lake and original courts.

nal farmhouse, a traditional white-sided house with a Dutch-style roof. The courtyard, then, can be used for multiple functions as it maintains a visible connection between the house and secondary buildings. A portico at the shop's west end further establishes the open connection between the outbuildings and

the house and yard.
Interiors for be

Interiors for both buildings are fairly straightforward, with their whitewashed walls, concrete floors, exposed framing and trusses. A large overhead door divides the shop in two: an insulat-

ed side with a double-gabled ceiling, and a noninsulated side with an exposed-truss ceiling. When the door is raised, the shop becomes one pavilion. The noninsulated equipment building is essentially a single open space. Vehicles for both buildings enter from the back sides, which abut the woods.

E.K.

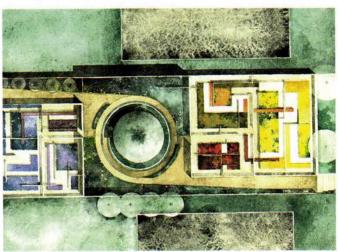




HONOR AWARD

Carlson Outbuildings Northern Wisconsin Salmela Architect

# STORIES STORIES



Site plan of the Knox Garden places the Apple Room of the Original Garden at the center, with Adam's Space to the left and Eve's Space to the right. Volunteers (below) helped construct the garden.

he Knox Garden in north Minneapolis is a successful example of community members working together to improve—however modestly—their north-Minneapolis neighborhood. In fact, the garden—built for \$9,050 in materials and plants—was a real hands-on undertaking. Neighborhood volunteers; a nonprofit job-training program; Sentence to Serve

workers; elementary, high school and university students and a group a crosscountry cyclists all pitched in.

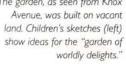
The clients—the nonprofit Sustainable Resources Center and the Minneapolis Park and Recreation Board collaborating with the Oak Park Community Center and the adjacent Boys and Girls Club—requested a multiuse urban green space. With educational as well as recreational uses in mind, the clients wanted a small gathering space for story-telling, programs, demonstrations, and performances. While the adjacent community center uses the garden as an extension of its own facilities, neighborhood residents have specific spaces for gardening, as well.

The community built the garden with such recycled and local materials as salvaged and repainted wire mesh, steel posts from the

















A north Minneapolis
neighborhood reclaims a
small part of the city with a
multipurpose garden





site and leftover warehouse stock. New and salvaged timber were used for retaining walls, steps and raised beds. And the group reclaimed 100-year-old stone pavers from old city streets for a central meeting area and seating. Donated wood chips form a garden path.

Three major areas define the project: the Original Garden. Eve's space and Adam's space. Wire mesh offers enclosure while leaving the open-air rooms visibly exposed for safety. The Original Garden nurtures native plants and fruit-bearing species. Within the Original Garden is the cylinder-shaped Apple Room, devoted to group gatherings and storytelling around a serpentine stone bench surrounding an apple tree. On the east end of the garden is Eve's space, three small rooms made of red, vellow and orange mesh, with a single seat for Eve carved in timber. On the west end is Adam's space, three rooms of blue, purple and green wire Loom



A seating area (above) surrounds an apple tree in the circular Apple Room. Within the Original Garden (opposite) looking toward the Red, Orange and Yellow rooms, a child walks toward the Apple Room (opposite bottom). Painted chain-link fencing, as with all the rooms, make up the Red Room (below).

mesh, with a seat for Adam in the green room. Plants in each room correspond to the room's specific colors. Sunflowers, for instance, grow in the vellow room, carrots in the orange room, and bleeding hearts in the red room. E.K.



### HONOR AWARD

**Knox Garden** Minneapolis



# A transit hub

# makes its imprint in

# downtown Minneapolis



The Transit Hub (opposite) occupies an entire city block in downtown Minneapolis. Facilities include parking for 2,000 cars, a main pedestrian lobby (above) and a bus-transfer system (below).

inneapolis-St. Paul may well hold the national record for the number of high-design, award-winning parking structures per capita. The Lemington Municipal Transit Hub, designed by Ellerbe Becket in downtown Minneapolis, is the latest entry to capture an AIA Minnesota Honor Award.

This 7-level, 2,000-space garage occupies an entire city block near the Minneapolis Convention Center and across the street from the 800-room Hilton Hotel. As a transit hub, the facility accommodates more than just cars. Lemington contains a terminal with lobby and commercial spaces to serve the new central-business district's shuttle-bus system. With car parking beginning on the second level and above, the facility has a seven-gate commuter bus terminal be-

low grade that links to the shuttle lobby and future light-rail transit tunnel. Because the facility is both a transit hub and parking garage, nearly 20,000 people travel through the building daily.

Ellerbe Becket set out to reestablish the urban context of the surrounding blocks by respecting the general heights of existing buildings and providing numerous street-level openings for pedestrians to view interior functions. The building, the architects state, needed to read as a real piece of architecture—not just another municipal garage.

The Lemington Municipal Transit Hub does, indeed, read as real architecture. The exterior is a play of forms, textures, colors and materials that offers an intriguing image to pedestrians. Vertical, glass-enclosed stairwells on each corner contrast with a horizontal, two-toned banding of precast panels along the sides. The façade achieves architectural tension because all the elements are slightly skewed, suggesting motion. Inside, the main pedestrian circulation spine is clean and efficient as it leads to street-level access, as well as parking above and bus terminals below.

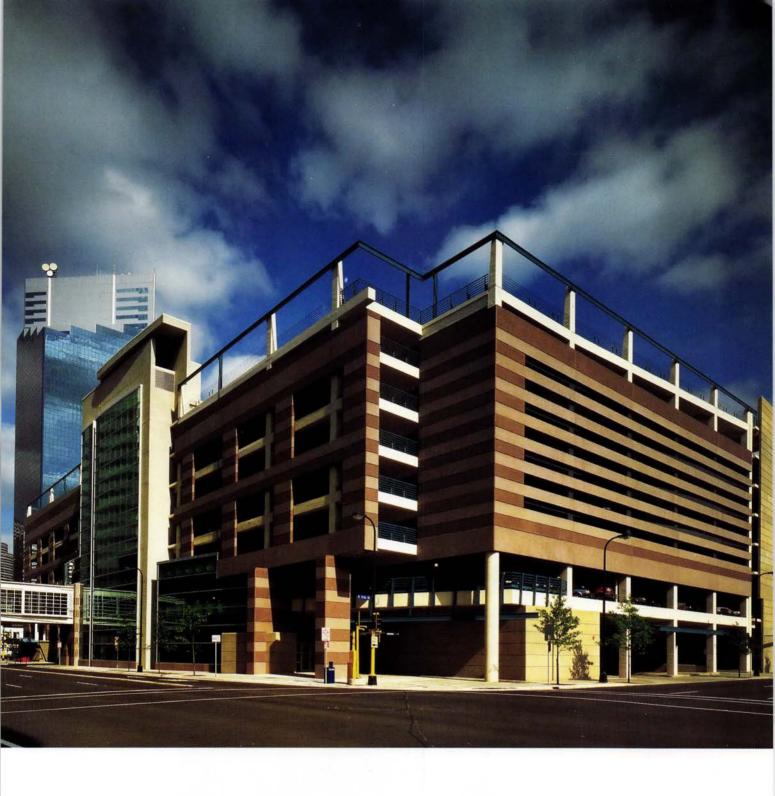
In a city lacking grand old train stations with all the bustle of people dashing to and from their destinations, the Lemington Municipal Transit Hub creates a bit of that urban energy. E.K.





### HONOR AWARD

Lemington Municipal Transit Hub Ellerbe Becket Minneapolis



# D O W N T O W N C O M M U T I N G



Meyer, Scherer & Rockcastle took a modest farmhouse (above) and expanded it into a comfortable country retreat. They added a new garage with a porch (opposite right), and a master bedroom attached via an open-air pergola (opposite bottom). Work also included revamping smaller structures on the property, such as the chicken coop (right), which now serves as an office.





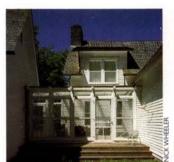
# A renovated and expanded farmstead augments a casual country lifestyle



# On the FARM

Perhaps we all dream of moving to the country at one time or another, secured away from the crime and noise of the city. This renovated farmstead, in all its white-sided, vernacular quietude, epitomizes why we dream of the country.

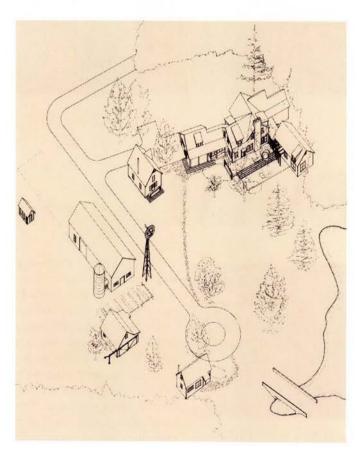
Meyer, Scherer & Rockcastle's mission was to transform a 160-acre grouping of farm buildings with an original house into a family retreat. The job entailed re-



modeling some buildings, tearing down others, revamping the landscape and adding to the house. The original farmhouse was a fairly typical 2-story rural structure with lap siding. This main house still remains, but significantly transformed inside and out. To one side, the architects added a new attached garage with porch tucked under a comfortably deep overhang. The porch and garage lead to a new stone-floored entry hall. On the other end of the house adjacent to the study, Meyer, Scherer & Rockcastle added a

A new entry hall (opposite) leads from the garage to the main house. The floor was designed and installed by Connie Mayron and Fuller Cowles. The living room and dining area (right) have been renewed, while retaining the original country-style charm. The plan (below) shows the house in relation to existing buildings.





dance studio. At a slight angle from the dance room. they added a new master bedroom or "cabin" on the first level. which is attached to the main house by

closed sitting area in the win- lay at the edge of the farm is ter. By attaching the master now a pond. Arranged bedroom with a pergola, the throughout the property are room indeed feels like a cab- a new garden, orchard, tenin, slightly detached from the nis court and car shed. rest of things.

Beyond the house, the architects renovated other farmstead structures, including the chicken coop, which now serves as a home office. The grounds, once farmed, have been restored to native



a glass-covered pergola that prairie grasses by landscape provides an open-air link in architect Herb Baldwin. the summer and a sunny en- Where an eroded ravine once E.K.



HONOR AWARD **Cowles Farmhouse** Shafer, Minn. Meyer, Scherer & Rockcastle



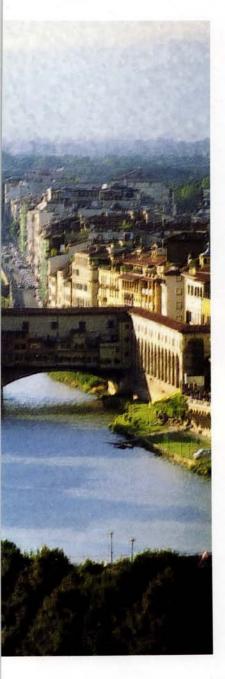
# Backnoads



TOS AND DIGITAL IMAGING BY BRAD OU

# Haly





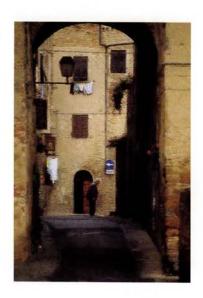


The less-traveled roads often offer the most intriguing experiences. Ruth and Brad Christian, bikes in gear, peddled through the Tuscan countryside this au-



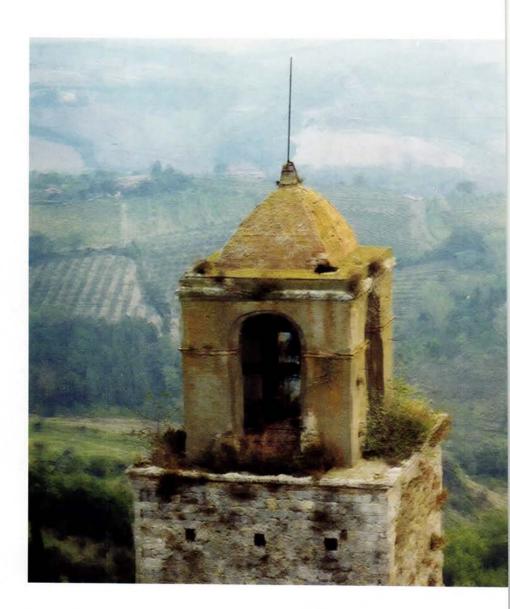
tumn, past medieval villages, up hills, over woodlands and along sprawling vineyards to discover the scent and flavor of this centuries-old region.

■ We began in Florence (left), then rode through rolling woodlands of Tuscan (center) landscape near Gaiole, a local center for the production of Chianti Classico wines (top), and finally indulged in the comforts of Castello di Spaltenna, located in the medieval village of Radda in Chianti (above).





Scenes that caught our gaze along the way were an alley in Siena (top), a detail of the well-preserved walled village of Monteriggioni (above), and Colle di Val d'Elsa, a Tuscan town (right).



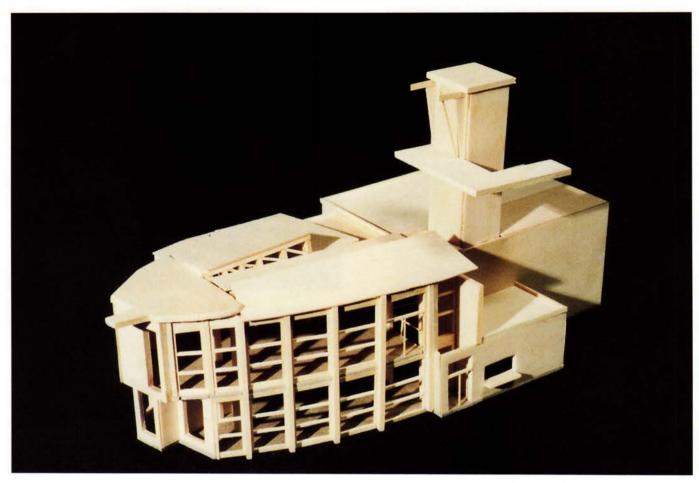






We caught a view of the surrounding Tuscany countryside and roof tops from a tower in the 12th-century hill town of San Gimignano (left and above). Local men gather for their daily visit (below).



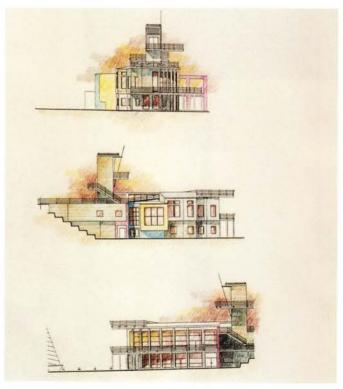


Harbor House Lake Winnebago High Cliff State Park Wisconsin Todd Biekkola

Designed for the shores of the largest inland lake in Wisconsin, this 8,000-square-foot harbor house bridges the gap between water and land, boaters and landlubbers, tourists and residents. Designer Todd Biekkola positions the structure for panoramic views of the lake, park and cliff. And he pulls his references from land and sea.

The front of the facility, facing the harbor, resembles the hull of a ship. A glass-and-steel façade frames lake views from within. At night the illuminated glass hull is a glowing beacon to ships on the distant water. Meanwhile, a tower with stairs and rooftop deck resembles a modified version of a traditional lighthouse. The back of the building, facing land, pulls references from agrarian architecture. Here the designer clads the façade in weathered wood to reflect traditional barns of the area's numerous farms.

The harbor house serves multiple purposes with its community room, lounge, offices for the Coast Guard and locker rooms. This is a place for boaters and the community as a whole to come together.



### Architecture Minnesota

has published an annual directory of landscape architectural firms for the past seven years as a means of informing the public and other design professionals of this rich resource of design talent and judgment.

Firms listed in this directory are those which are either owned and operated by members of the Minnesota Chapter of the American Society of Landscape Architects or are registered landscape architects practicing within AIA Minnesota firms.

Should you wish further information about the profession of landscape architecture, call the Minnesota Chapter of the American Society of Landscape Architects (MASLA) at 612/339-0797.

Peter Rand, FAIA Publisher

### LEGEND

AIA	American Institute
	of Architects
AICP	American Institute
	of Certified Planners
ASLA	American Society of
	Landscape Architects
<b>FASLA</b>	Fellow, American
	Society of Landscape
	Architects
PE	Professional
	Engineer
RA	Registered Architect
RLA	Registered
	Landscape Architect
RLS	Registered Land
	Surveyor

# **ARCHITECTURAL** RESOURCES, INC.

Earl Thedens

704 East Howard Street Hibbing, MN 55746 Tel: 218/263-6868 Fax: 218/722-6803 Other Offices: Duluth & Bemidji, MN Established 1972

Richard Rose	RLA
Douglas Hildenbrand	AIA
Lyle Peters	AIA
Mark Wirtanen	AIA
— Firm Personnel by Discipline	
Landscape Architects	3
Architects	10
Other Professional	4
Technical	4 5
Administrative	4
Total	26
-	
	Work %
Residential/decks/gardens	5
Site planning &	
development studies	25
Parks & open spaces	20

25 Urban design & streetscapes Master/comprehensive planning 10 Waterfront planning Hibbing Downtown Streetscape, Hibbing, MN; Community Square, Aurora, MN: Bemidji Lakefront, Bemidji, MN; Superior Parks Renovation, Superior, WI;

### ATSR/LANDSCAPE **ARCHITECTURE** ARMSTRONG TORSETH SKOLD AND RYDEEN, INC.

Baywalk Duluth, Duluth, MN

4901 Olson Memorial Highway Minneapolis, MN 55422 Tel: 612/545-3731 Fax: 612/525-5613 Established 1944

Paul W. Erickson	AIA
Robert J. Gunderson	ASLA
Todd R. Wichman	ASLA
Patrick J. Sarver	ASLA
Firm Personnel by Discip	line
Landscape Architects	4
Architect	30
Other Professional	12
Technical	42
Administrative	8
Total	96

	Wor	k %
	Site planning &	
	development studies	40
	Parks & open spaces	10
	Recreation areas (golf, ski, etc.)	20
	Master/comprehensive planning	20
	Irrigation design	10
i, MN	_	
	Stillwater Senior High School,	
	Stillwater, MN; Champlin Park	
RLA	Senior High School, Brooklyn Pa	rk.
RLA	MN; Wayzata Senior High Schoo	l,
AIA	Plymouth, MN (under construction	on);
AIA	Brooklyn Park Land Use Study,	200

# ARTEKA CORPORATION

Brooklyn Park, MN; Oak Knoll

(under construction)

Lutheran Church, Minnetonka, MN

15195 Martin Drive Eden Prairie, MN 55344 Tel: 612/934-2000 Fax: 612/934-2247 Established 1970 Stewart K. Hanson Todd Irvine ASLA Forrest Jammer LA Firm Personnel by Discipline Landscape Architects Other Professional Technical Administrative Total Work % Residential/decks/gardens 50

Arbor Pointe, Inver Grove Heights, MN; Boulevard Gardens, Town Homes & Condominiums, Minnetonka, MN; Osmonics, Inc., Minnetonka, MN; Steiner and Koppelman Parade Home. Minnetonka, MN; Emerald Homes Parade Home, Minnetonka, MN

Master/comprehensive planning

Multi-family housing/PUDS

Office park/commercial

### **DEAN BAILEY** ASSOCIATES, INC. 15281 Creekside Court

Site planning & development studies

Multi-family housing/PUDS

Eden Prairie, MN 55346 Tel: 612/937-1124 Fax: 612/937-5711 Established 1992 J. Dean Bailey ASLA Firm Personnel by Discipline Landscape Architects Administrative 1 Total 2 Work % Residential/decks/gardens 90 The Frandsen Residence on the St. Croix River (entrance area, lighting, garden walks, planting); The Dolginow Residence, Edina, MN (arrival area, lighting, patios, site planting); The Buscher Residence, Minnetonka, MN (sculpture gardens, entrance court, swimming pool area); The Luther Residence, Edina, MN (arrival area, swimming pool area, flower gardens, site planting and lighting); Paper Warehouse Corporate Offices, St. Louis Park, MN (visitor entrance area, parking lot development, site planting).

# **BARTON-ASCHMAN** ASSOCIATES, INC.

111 Third Avenue S., Ste. 350 Minneapolis, MN 55401 Tel: 612/332-0421 Fax: 612/332-6180 Established 1946 Other Offices in Principal Cities Throughout the U.S.

Wm. Scott Midness

2

2

1

G

10

25

15

5

5

Craig A. Churchward	ASLA
Kathy G. Ryan	ASLA
Frederick C. Dock	AICP, PE
David B. Warzala	PE
-	
Firm Personnel by Discip	oline
Landscape Architects	4
Civil Engineers	6
Traffic/Transportation I	Engineers 6
Environmental Scientists	4
Technical	3
Graphic Artist	1
Administrative	4
Total	28

ASLA

_	
Work	%
Site planning &	
development studies	20
Environmental studies (EIS)	5
Parks & open spaces	15
Urban design & streetscapes	25
Master/comprehensive planning	10
Transportation planning & design	15
Trails & bikeway planning	10

Woodville Community Vision & Master Plan, Woodville, WI; Montevideo Middle School. Montevideo, MN; German Park Renovation Master Pan, New Ulm. MN; Nicollet Avenue Corridor Study, Minneapolis, MN; Hennepin County Bicycle Transportation Plan, Hennepin County, MN

# 1996 DIRECTORY OF LANDSCAPE ARCHITECTURE FIRMS

		Work %	SUSTEM BOOK	Robbinsdale Down
BRW, INC.		Residential/decks/gardens 10	CUSTOM ROCK	and Streetscape, Re
Thresher Square		Site planning &	INTERNATIONAL	Bismarck CBD Url
700 3rd Street S.		development studies 10	1156 Homer Street	Redevelopment Pla
Minneapolis, MN 55415		Parks & open spaces 25	St. Paul, MN 55116 Tel. 612/600 1245	Excelsior Boulevare
Tel: 612/370-0700		Urban design & streetscapes 25 Master/comprehensive planning 25	Tel: 612/699-1345	Master Plan, St. Lo
Fax: 612/370-1378		Master/comprehensive planning 25 Commercial 5	Fax: 612/699-1830 Established 1971	Two Rivers Histori
Established 1956 Other Offices, Scottle and Pow	dand	Commercial	Other Offices: Las Vegas, NV	MN; City of Plymo
Other Offices: Seattle and Port OR; San Diego, CA; Phoenix, /		Midtown Greenway, Master Plan &	—	Base, Plymouth, M
Denver, CO; Milwaukee, WI;	17.5.	Phase I Development, Minneapolis,	Howard M. Merriam ASLA	7
Orlando, FL		MN; University of Minnesota	Tony Nasvik	DOVOLIS JOH
<del>-</del>		Campus Master Plan, Twin Cities		RUGGIERI, INC
Jack Lynch	ASLA	Campuses: Hennepin/Dunwoody	Firm Personnel by Discipline	1121 E. Franklin A
Miles Lindberg	ASLA	Improvement Project, Minneapolis,	Landscape Architects 1	Minneapolis, MN
Robert Kost	ASLA	MN; Como Park Complex Master	Other Professional 2	Tel: 612/871-600
Thomas Harrington	ASLA	Plan, St. Paul, MN; Trend	Technical 3	Fax: 612/871-174
_		Enterprises, Site Master Plan,	Administrative 3	4
Firm Personnel by Discpline		New Brighton, MN	Total 9	Dean Dovolis
Landscape Architects	28	146		Brian Johnson
Other Professional/Technical	258	COEN + STUMPF +	Work %	John V. Ruggieri
Administrative Total	57 3 <del>4</del> 3	ASSOCIATES, INC.	Residential/decks/gardens 15 Parks & open spaces 10	
	949	128 North Third Street	Theme & specialty landscape	Firm Personnel by
	ork %	Minneapolis, MN 55401	design & consulting	Landscape Archite
Site planning &	OLK 70	Tel: 612/3+1-8070	(simulated rockwork.	Architects Administrative
development studies	20	Fax: 612/339-5327	water features, decorative	Total
Environmental studies (EIS)	10	Established 1992	concrete paving) 75	
Parks & open spaces	15		_	
Urban design & streetscapes	20	Jon E. Stumpf RLA	Spokane Transit Authority, Spokane.	Site planning &
Recreation areas (golf, ski, etc.		Shane A. Coen LA	WA: Casino Addition and Indoor	development stu
Master/comprehensive plannii		Matson Walter LA	Climbing Wall, Shakopee	Parks & open spac
Multi-family housing/PUDS	10	—	Mdewakanton Sioux, Prior Lake,	Urban design & str
		Firm Personnel by Discipline	MN; SI-Hotel, Spa Addition.	Recreation areas (g
Uplands Condominiums at Pa		Landscape Architects 3	Stuttgart, GERMANY; T. Lewis	Master/comprehen
Lake, Plymouth, MN; Tanner's		Administrative 1 Total 4	Residence, Wayzata, MN; RIO Hotel	Multi-family housi
Park, Oakdale, MN; Fortune I Resort Casino, Tower, MN; Su		Total 4	and Casino, Pool Renovation, Las Vegas, NV: Peppermill Hotel and	• 0000000000000000000000000000000000000
Valu Corporate Headquarters		Work %	Casino, Swimming Pool Expansion.	Lac Courte Oreille
Plan, Eden Prairie, MN: Visito		Residential/decks/gardens 10	Reno, NV	Hayward, WI; Mt.
Access Study, Yosemite Nation		Site planning &	The state of the s	Housing Moderniza
Park, CA		development studies 20		MN; Clearwater Es Course, Clearwater
		Parks & open spaces 10	DAHLGREN, SHARDLOW,	Community Center
		Urban design & streetscapes 30	AND UBAN, INC.	Bryn Mawr Park P
CLOSE GRANT		Recreation areas (golf, ski, etc.) 10	300 First Avenue N., Ste. 210	Minneapolis, MN;
LANDSCAPE		Master/comprehensive planning 10	Minneapolis, MN 55401	Townhouses Redev
ARCHITECTS		Spiritual/worship 10	Tel: 612/339-3300	Minneapolis, MN
610 Northwestern Building			Fax: 612/337-5601	
275 E. Fourth Street		Gooseberry Falls State Park; St.	Established 1976	
St. Paul, MN 55101		Francis Peace Garden, Mayo Clinic;	C III III	
Tel: 612/222-5754		Alice Smith Environmental	C. John Uban ASLA	
Fax: 612/222-1017		Courtyard; Jeffers Petroglyphs;	John W. Shardlow AICP	
Established 1977		Long Lake Conservation Center.	Geoffrey C. Martin ASLA	
Bob Close	ASLA		Wallace L. Case ASLA	
Deb Bartels	RLA		Firm Personnel by Discipline	
Bruce Jacobson			Landscape Architects 9	
			Other Professional 3	
Firm Personnel by Discipline			Planners and GIS Specialists 6	
Landscape Architects	3.5		Administrative 2	
Administrative	.5		Total 20	
Total	4			
			Work %	
			Site planning &	
			development studies 20	
			Environmental studies (EIS) 10	

ntown Master Plan Robbinsdale, MN; rban Design and lan, Bismarck, ND; ard Streetscape Louis Park, MN; rical Park, Anoka, outh GIS Data MN

# HNSON & IC.

Avenue 55404 09 746

Dean Dovolis	AIA
Brian Johnson	AIA
John V. Ruggieri	ASLA
— Firm Personnel by Disciplin	ie.
Landscape Architects	4
Architects	19
Administrative	2
Total	25
_	

Wo	ork %	
Site planning &		
development studies	30	
Parks & open spaces	10	
Urban design & streetscapes	20	
Recreation areas (golf, ski, etc.)	10	
Master/comprehensive planning	10	
Multi-family housing/PUDS	20	

les Master Plan, t. Airy Family ization, St. Paul, Estates & Golf er, MN; Mt. Airy er, St. Paul, MN; Playgrounds, Plymouth Avenue evelopment,

10

15 5

20

15 5

Parks & open spaces

Urban design & streetscapes Recreation areas (golf, ski, etc.)

Master/comprehensive planning

Multi-family housing/PUDS Expert testimony

<b>ELLERBE BECKET, INC</b>
800 LaSalle Avenue
MC 1: 10: 25 (00 00)

Tokyo, Japan

Minneapolis, MN 55402-2014 Tel: 612/376-2000 Fax: 612/376-2271 Established 1909 Other Offices: Washington, D.C.; New York, NY; Kansas City, MO; Los Angeles, CA: San Francisco, CA:

Bryan D. Carlson ASLA Richard Varda AIA, ASLA Krisan Osterby-Benson RLA David Loehr AIA, AICP

Randy Manthey RLA Firm Personnel by Discipline Landscape Architects 8 Architects 273 Engineering 131 Construction 71 Corporate & Subsidiary Support 172 Total 647

Work % Site planning & development studies 60 Parks & open spaces 5 Urban design & streetscapes 15 Master/comprehensive planning

University of Notre Dame. Framework Plan, Notre Dame, IN: Carlson School of Management, University of Minnesota. Minneapolis, MN; Science Museum of Minnesota, St. Paul, MN; Hubert H. Humphrey Metrodome Plaza, Minneapolis, MN

# **ERNST ASSOCIATES**

122 West 6th Street Chaska, MN 55318 Tel: 612/448-4094 Fax: 612/448-6997 Established 1977

Parks & open spaces

Urban design & streetscapes

Multi-family housing/PUDS

Recreation areas (golf, ski, etc.)

Master/comprehensive planning

Gene F. Ernst ASLA Valerie J. Rivers ASLA Firm Personnel by Discipline Landscape Architects 9 Technical Administrative 1 Total 4 Work % Residential/decks/gardens 3 Site planning & development studies 15

Datacard Corporation Party Patio, Deck & Corporate & Sales Entry Plaza, Minnetonka, MN; Chaska City Hall Library: ConAgra Corporate Campus, Omaha, NE; University of St. Thomas, Minneapolis, MN; WestHealth Campus, Plymouth, MN

97

15

5

5

### **DAMON FARBER ASSOCIATES** 253 Third Avenue S.

Minneapolis, MN 55415

Tel: 612/332-7522 Fax: 612/332-0936 Established 1981 Damon Farber FASLA Joan MacLeod RLA Todd Johnson ASLA Firm Personnel by Discipline Landscape Architects Administrative Total Work % Residential/decks/gardens Site planning & development studies 25 Parks & open spaces 10 Urban design & streetscapes 25 Recreation areas (golf, ski, etc.) 5 Master/comprehensive planning 25 Multi-family housing/PUDS

Cargill Corporate Headquarters Master Plan, Minnetonka, MN; Canal Park Drive Urban Design & Streetscape Improvements, Duluth, MN; University of Minnesota Campus Entry and Pleasant Street Master Plan, Minneapolis, MN; Winnetka Avenue Streetscape, Golden Valley, MN; Mill Pond Park Comprehensive Plan & Recrational Trail Systems, Austin, MN

# HAMMEL GREEN AND ABRAHAMSON, INC.

1201 Harmon Place Minneapolis, MN 55403 Tel: 612/337-4100 Fax: 612/332-9013 Established 1953 Other Offices: Milwaukee, WI; Rochester, MN

Thomas R. O.	slund	ASLA
Gary M.Fishb	eck	ASLA
_		
Firm Personn	el by Discipli	ne
Landscape Ar	chitects	9
Architects		85
Other Profess	ional	28
Technical		25
Other		63
Administrativ	e	54
Total		264

Work % Residential/decks/gardens 5 Site planning & development studies 35 Parks & open spaces 10 Urban design & streetscapes 15 Master/comprehensive planning

Appleton Memorial Park and Arboretum Garden, Appleton, WI: General Mills Executive Courtyard, Golden Valley, MN; Campus Master Plan, University of Minnesota at Morris and Duluth; Marine Education Center at Minnesota Zoological Gardens, Apple Valley, Mn; Milwaukee Zoo Master Plan. Milwaukee, WI; Kuwait American Foundation Headquarters Master Plan, Washington, D.C.

# HAUCK ASSOCIATES, INC.

3620 France Avenue S. St. Louis Park, MN 55416 Tel: 612/920-5088 Fax: 612/920-2920 Established 1990

Robert P. Hauck ASLA Firm Personnel by Discipline Landscape Architects Other Professional Administrative Total

Work % Residential/decks/gardens 80 Recreation areas (golf, ski, etc.) 10 Neighborhood amenities & renovation 10

4

Edina Country Club (monumentation, signage, lighting, brick paving, planting), Edina, MN; Parkers Lake Suncourt Homes (streetscape & intimate-scaled private yards). Plymouth, MN; Ashton Residence (pond/waterfall, prairie gardens, wildlife area), Medina, MN; Hanson Residence (pond/fountains, arrival area/ entrance remodeling). Hopkins, MN; Moore Residence (estate arrival area, entrances, swimming pool area, porch addition), Orono, MN

# HOISINGTON KOEGLER GROUP INC.

7300 Metro Boulevard, #525 Minneapolis, MN 55439 Tel: 612/835-9960 Fax: 612/835-3160 Established 1982

Fred Hoisington

Mark Koegler ASLA Michael Schroeder ASLA Firm Personnel by Discipline Landscape Architects 6 Urban Planners 9 Administrative 1.5 Total 9.5 Work %

AICP

Site planning & development studies 20 Parks & open spaces 20 Urban design & streetscapes 35 Master/comprehensive planning 20 Multi-family housing/PUDS 5

Brooklyn Boulevard Streetscape, Brooklyn Park, MN; H.B. Fuller Corporate Center Master Plan & Nature Preserve, Vadnais Heights. MN: Central Middle School Athletic Field Design, Eden Prairie, MN; Bush Lake Beach Park Redevelopment. Bloomington, MN; Downtown Development Guide, Ottumwa, IA; City Center Vision 2002 Plan. Chanhassen, MN; City Center Concept Plan, Plymouth, MN: Mississippi River Pathway, Elk River, MN: Virginia Comprehensive Plan. Virginia, MN

### **KEENAN & SVEIVEN INC.**

14411 McGinty Road West Wayzata, MN 55391 Tel: 612/931-3122 Fax: 612/931-0063 Established 1990

Kevin J. Keenan ASLA Firm Personnel by Discipline 2 Landscape Architects Technical 6 3 Master Gardeners Administrative 12 Total Work %

Residential/decks/gardens 80 Public art 20 Sharma Residence, North Oaks, MN;

St. Paul Cultural Garden, St. Paul, MN; University of Minnesota Green Hall Artwork Project, St. Paul, MN; Lundell Residence, Medina, MN; Gallagher Residence, Edina, MN

	- 1
DAVID A. KIRSCHT ASSOCIATES, INC. 5500 Lincoln Drive Edina, MN 55436 Tel: 612/938-4030 Fax: 612/938-0026 Established 1972	
	SLA RLA
Firm Personnel by Discipline Landscape Architects Administrative Total	2 1 3
Wor Residential/decks/gardens	k % 5
Site planning & development studies Golf courses Master/comprehensive planning Multi-family housing/PUDS Office/commercial	15 45 10 10
Christ The King Lutheran Churc Mankato, MN; TL Systems World Headquarters, Brooklyn Park, M Village Green & The Meadows G Courses, Moorhead, MN; Wadena, Municipal Golf Course, Wadena, MN; West St. Paul Executive Gol Course, West St. Paul, MN	d N; olf a
LANDMARK DESIGN, IN 105 Orono Orchard Road Long Lake, MN 55356 Tel: 612/476-6765 Fax: 612/475-8984 Established 1979	IC.
Greg Kellenberger A	SLA

LANDMARK DESIGN	, INC.
105 Orono Orchard Road	
Long Lake, MN 55356	
Tel: 612/476-6765	
Fax: 612/475-8984	
Established 1979	
Greg Kellenberger	ASLA
Dana Kellenberger	
_	
Firm Personnel by Discipline	6
Landscape Architects	2
Technical	1
Administrative	.5
Total	3.5
_	0.0
	Work %
Residential/decks/gardens	20
Parks & open spaces	5
Multi-family housing/PUDS	5
Residential developments:	
site planning &	
landscape design	70
_	***
Bearpath Golf and Country (	lub
Eden Prairie, MN; Residentia	
Developments: Ashcroft,	**
Mr. Asherott,	

Minnetonka, MN; Wildridge. Mahtomedi, MN; Woodlands, Eagan, MN: Private Residences: Scouler Residence, Chanhassen, MN; Lowe Residence, Orono, MN; Hauck Residence, North Oaks, MN

LSA DESIGN, INC. 126 North Third Street Minneapolis, MN 55401 Tel: 612/339-8729 Fax: 612/339-7433 Established 1989	
Harold Skjelbostad P. J. Andersen	SLA SLA AIA
Firm Personnel by Discipline Landscape Architects Architect Administrative Total	3 3 2 8
Wor Residential/decks/gardens Site planning and	k % 5
development studies Parks & open space Urban design & streetscapes	10 10 5
Recreation areas Master/comprehensive planning Transit facilities planning	5 15 50
Burnsville Transit Station, Burns MN; Southwest Metro Transit Station, Eden Prairie, MN; Hopk School District Athletic Facilities Planning and Design, Hopkins, Medtronic Facilities Master Plan- Fridley, MN; Folwell Park, Minneapolis Park and Recreation Board, Minneapolis, MN; Plymouth, Park and Ride Study, Plymouth, MN	ins MN;
MARTIN & PITZ ASSOCIATES, INC. 1409 Willow Street, Ste. 110 Minneapolis, MN 55403 Tel: 612/871-0568 Fax: 612/871-6520 Established 1983	
	SLA SLA
Firm Personnel by Discipline Landscape Architects Other Professional/Technical Total	2 1 3
Residential/decks/gardens Site planning & development studies	k % 5
Parks & open spaces Urban design & streetscapes Master/comprehensive planning	20 25 20
Hennepin Avenue Strategic Plan Minneapolis, MN; Upper Iowa University, Fayette, IA; Sensory Garden, Minnesota Landscape	•

development studies	25
Parks & open spaces	20
Urban design & streetscapes	25
Master/comprehensive planning	20
_	
Hennepin Avenue Strategic Plan,	
Minneapolis, MN; Upper Iowa	
University, Fayette, IA; Sensory	
Garden, Minnesota Landscape	
Arboretum; Nicollet Island Park	and
Adjacent Riverfront Planning,	
Minneapolis, MN; Festival Park.	
Ironworld, USA	

MELCHERT/BLOCK	
ASSOC., INC.	
367 E. Kellogg Blvd.	
St. Paul, MN 55101	
Tel: 612/228-9564	
Fax: 612/223-5857	
Other Offices: Hudson, WI	
Tel: 715/386-7736	
Established 1984	
_	
Ronald L. Melchert	ASLA
Jack M. Walkky	PE
Firm Personnel by Discipline	
Landscape Architects	4
Registered Landscape Survey	
Civil Engineers	5
Administrative	2
Total	14
_	Work%
	W OFK 70
Site planning & development studies	45
Environmental studies (EIS)	5
Environmental studies (E15)	(6)

Soaring Eagle Casino/Hotel Resort Complex; University of Wisconsin LaCrosse Student Life Center; University of Wisconson Eau Claire McIntyre Library: Minnesota Zoo Central Plaza Renovation; Hubert H. Humphrey Metrodome Plaza.

10 10

10

20

14.5

7.5

6

36

Parks & open spaces

Recreation areas (golf, ski, etc.) Master/comprehensive planning

Multi-family housing/PUDS

### RLK ASSOCIATES, LTD. 6110 Blue Circle Drive Minnetonka, MN 55343 Tel: 612/933-0972 Fax: 612/933-1153 Established 1991 John E. R. Dietrich ASLA Richard L. Koppy PE Eric R. Johnson RLA Steven B. Schwanke AICP Firm Personnel by Discipline Landscape Architects

Architect Other Professional

Technical

Total

Administrative

development studies	10
Environmental studies	
(EIS & EAW)	5
Parks & open spaces	5
Urban design & streetscapes	5
Recreation areas (golf, ski, etc.)	5
Master/comprehensive planning	5
Multi-family housing/PUDS	20
Single family residential &	
commercial/retail	45
_	
Cleveland Park, Minneapolis, MN	Ň
(MPRB); Hartford Place,	
Residential/Commercial: Rosevill	e
Civic Center, Roseville, MN; Way	
Medical Center, Wayzata, MN;	
Maplewood Retail Center,	
Maplewood, MN	
SANDERS WACKER	

WEHRMAN BERGLY, INC.

Site planning &

Work %

365 E. Kellogg Boule	vard
St. Paul, MN 55101-	
Tel: 612/221-0401	
Fax: 612/297-6817	
Established 1979	
— William D. Sanders	DIA FACIA
Larry Wacker	RLA, ASLA
John Bergly	
_	
Firm Personnel by D	iscipline
Landscape Architects	6
Other Professional	2
Administrative	1.5
Total	9.5
_	1222 12 12
	Work %
Residential/decks/gar	rdens 5
Site planning &	
development studi	es 10
Environmental studie	

Multi-family housing/PUDS	10
Cemetery planning	10
<del>-</del>	
Minnehaha Park, Minneapolis	MN;
Capitol Area Architectural &	
Planning Board, St. Paul, MN	
Cloquet Downtown Streetscap	e.
Cloquet, MN; Arlington High	School.
St. Paul, MN; Sandstone	
Comprehensive Plan, Sandsto	ne, MN

Parks & open spaces

Urban design & streetscapes

Recreation areas (golf, ski, etc.)

Master/comprehensive planning

20

20

10

10

ASLA, AICP

PE

### SAVANNA DESIGNS, INC. 3511 Lake Elmo Avenue Lake Elmo, MN 55042 Tel: 612/770-6910 Fax: 612/770-6910 Jim G. Hagstrom ASLA Firm Personnel by Discipline Landscape Architect Technical 2.5 Administrative Total 3.5 Work % Residential/decks/gardens 75 Site planning & development studies 10 Parks & open spaces 10 Master/comprehensive planning 5 Brandt Residence, Stilwater, MN: Holmen Residence, Dellwood, MN:

Irvine Residence, Dellwood, MN; St.

Jude Medical, St. Paul, MN; YMCA

# STEFAN / LARSON **ASSOCIATES**

Camp St. Croix, Hudson, WI

807 N. Fourth Street Stillwater, MN 55082 Tel: 612/430-0056 Fax: 612/439-1179 Established 1989

Amy Stefan

, and , commit	
Brian Larson	ALA
Tim Stefan	AIA
_	
Firm Personnel by Discipline	
Landscape Architects	1
Architects	2
Other Professional	2
Total	

RLA

<del></del>	
	Work %
Residential/decks/gardens	20
Parks & open spaces	25
Urban design & streetscapes	20
Multi-family housing/PUDS	5
Site design	35
_	

Brooklyn Center Park/Ride and Park, Brooklyn Center, MN: Pioneer Park Masterplan, Stillwater, MN; Computing Devices International Entry Court and Canopy, Bloomington, MN; Horn Towers Courtyard and Site Design, Minneapolis, MN; Pratt Village Green Plaza and Amphitheatre, Minneapolis, MN

# SRF CONSULTING GROUP INC.

One Carlson Parkway North Minneapolis, MN 55447 Tel: 612/475-0010 Fax: 612/475-2429 Established 1971

Barry Warner

Bob Rosco

Peter Fausch	PE
Charleen Zimmer	AICP
Tom Thorson	ASLA
_	
Firm personnel by Discipli	ne
Landscape Architects	5
Planning/Environmental	20
Traffic/Transportation	20
Municipal Engineering	20
Highway Engineering	25
Structural	6
Technical	18
Administrative	4
Total	118
_	
	Work %

Site planning &	
development studies	15
Environmental studies (EIS)	15
Parks & open spaces	25
Urban design & streetscapes	30
Master/comprehensive planning	10
Multi-family housing/PUDS	5
<del>-</del>	
90th Street/Midtown Croonway	

9th Street/Midtown Greenway. Minneapolis, MN; Cedar lake park Trail, Minneapolis, MN; Park Planning and Design, Lakeville, MN; Community Traffic Calming Study, Hutchinson, MN: Urban Design Plan, Shepard Road, St. Paul, MN

## **SYMMES MAINI & MCKEE ASSOCIATES**

801 Nicollet Mall, Suite 1600 Minneapolis, MN 55402 Tel: 612/332-3654 Fax: 612/332-3626 Established 1955 Other Offices: Cambridge, MA

Gregory Fern	
James Wolahan	PE
Michael Holland	PE
Stefan Helgeson	AIA, ASLA
Paul Filiatrault	ASLA
_	
Firm Personnel by Disc	cipline
Landscape Architects	2

_	
Firm Personnel by Disciplin	ie .
Landscape Architects	4
Architect	40
Other Professional	60
Technical	40
Civil/Site Planner	6
Administrative	15
Total	165

Wor	k %
Site planning &	
development studies	30
Interior landscape/plantings	10
Master/comprehensive planning	30
Corporate parks and	
headquarters	40

Christian Books, FSI, Boulevard Gardens, Asset Marketing, First Bank

## TOLTZ, KING, DUVALL, ANDERSON AND ASSOCIATES, INC.

1500 Piper Jaffray Plaza

444 Cedar Street

St. Paul, MN 55101-2140 Tel: 612/292-4400 Fax: 612/292-0083 Established 1910 Duane Prew PE James Voven PF Westly Hendrickson AIA, AICP William Armstrong AIA Richard Gray ASLA Firm Personnel by Discipline Landscape Architects Architects 11 Other Professional 53 Technical 55 Administrative 24 Total 147

Site planning &	
development studies	15
Parks & open spaces	25
Urban design & streetscapes	20
Recreation areas (golf, ski, etc.)	10
Master/comprehensive planning	10
Athletic fields & tracks	20
— H:D M S. b. al O. d. b. a. M.	24

Work %

Hill-Murray School Outdoor Athletic Facilities Master Plan, Maplewood. MN; Concordia College Athletic Field Development, St. Paul, MN; Lewis University Recreation Facility & Pedestrian Mall, Romeoville, IL: Wabasha Street Bridge Streetscape & Amenities, St. Paul, MN: Scott Co. Highway 44 Landscape Improvements, Prior Lake, MN

# WESTWOOD **PROFESSIONAL** SERVICES, INC.

Tim Erkkila

14180 West Trunk Highway 5, Suite 220 Eden Prairie, MN 55344-2039 Tel: 612/937-5150 Fax: 612/937-5822 Established 1972 Other Offices: Buffalo, MN

ASLA

Greg Kopischke	ASLA
Ed Hasek	ASLA
Dennis Marhula	PE
Marty Weber	RLS
_	
Firm Personnel by Dsicipline	
Landscape Architects	(
Other professional	17
Technical	33
Administrative	4
Total	60
_	
W	ork %
Site planning &	
development studies	20
Environmental studies (EIS)	5
Parks & open spaces	10
Urban design & streetscapes	5
Master/comprehensive plannin	g 10
Multi-family housing/PUDS	20
Civil & traffic engineering:	
surveying, wetland and	
environmental studies	30

Maple Grove Parks Site and System Plans, Maple Grove, MN: Edinburgh Mixed-Use Site PUD, Brooklyn Park, MN; Earle Brown Farm Heritage Center and Streetscape, Brooklyn Center, MN: Woodbury Village Shopping Center, Woodbury, MN: First Bank Systems Operations Center, St. Paul, MN

### ROBERT H. WILLIAMS, R.L.A.

3300 Forty-Third Avenue S. Minneapolis, MN 55406-2253 Tel: 612/722-1491 Fax: 612/722-7659 Established 1994 Internet Address: ROBHWLMS@AOL.COM

Rob Williams 1	(LA
<del></del> 1	
Wor	k %
Residential/decks/gardens	20
Parks & open spaces	55
Master/comprehensive planning	25
_	

The Minnehaha Park Renovation Plan (with S.W.W.B.), Minneapolis. MN: Stewart Park Master Plan. Minneapolis, MN; Stillwater's Pioneer Park Master Plan (with S.L.A.), Stillwater, MN; Park Siding Park, Minneapolis, MN; The Geiger Residence, LLynnhurst Neighborhood, Minneapolis, MN

# "Pioneering innovative solutions for fire life safety"

# New Construction and Retrofit

- Fire Protection Engineering
- Code Consulting
- Fire Risk Assessment
- Due Diligence

Serving the warehouse, manufacturing, industrial, hazardous materials, retail, entertainment, assisted living facilities markets. We negotiate to closure recommended strategies!

# MountainStar

7800 Metro Parkway • Suite 112 Bloomington, MN 55425 (612) 851-3085 • Fax (612) 851-3086

# You can't

drive to work, walk the dog, cook that pot roast, bake that bread, shower after jogging, watch 60 Minutes, toast the toast, brew the coffee, mow the lawn, call your mother, be cool in the summer, wash your sweat suit, dine out, play computer games, medicate your cold, build your new house, listen to old blue eyes, ride your bike, videotape that wedding, vacuum the rug, recycle your garbage, play baseball at night, be warm in the winter, fly to Hawaii, check the time, flush the toilet, buy a fresh tomato in winter, fill that cavity, use the cash machine

# without an engineer.

For a free copy of the Consulting Engineers directory contact: Consulting Engineers Council of Minnesota 5407 Excelsior Blvd., Suite A Minneapolis, MN 55416 (612) 922-9696



a

H. Robert Anderson & Associates. Inc. would like to thank the many Architects & Engineers that have given us the opportunity to handle their Professional Liability Insurance Program.

We would like to handle yours also!

Specializing in Professional Liability Insurance for Architects & Engineers; Exclusive Minnesota DPIC representation.

H. Robert Anderson & Associates, Inc. 4600 W. 77th Street

4600 W. 77th S Ste. 105 Edina, MN 55435

(612) 893-1933 Fax 893-1819 With this issue Architecture Minnesota presents our fourth directory of those Minnesota firms which provide consultative engineering services.

Principals of these firms are members of the Consulting Engineers Council of Minnesota or of AIA Minnesota.

Engineers provide those critical design skills which enable our entire built environment to be structurally safe, comfortably warm and well lit. They also design our highways and bridges, water treatment facilities and power generation plants.

In Minnesota, you will find there is a wealth of engineering talent available for your next project. Study this directory and call either the Consulting Engineers Council at 612/922-9696 or AIA Minnesota at 612/338-6763 for additional information and assistance.

Peter A. Rand, FAIA Publisher

### **LEGEND**

PE	Professional Engineer
AIA	American Institute of
	Architects
FAIA	Fellow, American
	Institute of Architects
ASLA	American Society of
	Landscape Architects
FASLA	Fellow, American
	Society of Landscape
	Architects
RLS	Registered Land
	Surveyor

# ARMSTRONG, TORSETH, SKOLD AND RYDEEN, INC.

4901 Olson Memorial Highway Minneapolis, MN 55422 Tel: 612/545-3731 Fax: 612/525-3289 Established 1944

James E. Rydeen	AIA
Paul W. Erickson	AIA
James N. Riess	PE
Robert A. Martini	PE
Terry L. Stofferahn	PE
Firm Personnel by Discipline	
Mechanical Engineers	29
Electrical Engineers	12
Architects	62
Other Professional	19
Administrative	11
TOTAL	133

ATS&R Expertise: Quality control/ coordination during design, construction, post-occupancy; design of HVAC, plumbing, Direct Digital Control Systems; design of electrical systems including computer facilities, communications; energy conservation, including active/passive solar, heat exchange systems, geo-thermal heat pumps, variable air volume, earth berming, ice storage, natural daylighting, energy management systems, energy efficient lighting, heat pumps.

Champlin Park High School, Brooklyn Park, MN; Stillwater Area High School, Stillwater, MN; Farmington Middle School, Farmington, MN; Rush Creek Elementary School, Maple Grove, MN; Minnetonka Lutheran Church, Minnetonka, MN

# BKBM ENGINEERS, INC.

219 North 2nd Street, #200 Minneapolis, MN 55401 Tel: 612/333-7101 Fax: 612/342-9482 Established 1967 (as Bakke & Kopp) Other Offices: Marshall and Rochester, MN

_	
Charles L. Ballou,	PE
Thomas J. Downs	PE
Ronald J. LaMere	PE
John A. Clark	PE
<del></del>	
Firm Personnel by Discipline	
Civil Engineers	2
Structural Engineers	13
Mechanical Engineers	5
Electrical Engineers	1
Technical	13
Administrative	4.5
TOTAL	38.5

Civil, electrical, mechanical and structural consulting services for buildings and bridges. Design of heating, ventilating, air conditioning, electrical power distribution, lighting systems, and energy management studies for industrial, commercial and institutional facilities. Structural design and investigations for buildings, bridges, heavy and special structure design together with field surveying including construction management service. Historic building preservation. Evaluation studies. Building Commissioning, Railroad engineering. Bridges-track-facilities.

Lakeville High School, Lakeville, MN; Carver County Government Center, Chaska, MN; Target Midwest Distribution Center, Oconomowoc, WI; Marshall Municipal Utilities, Marshall, MN; Rochester Public Library, Parking Ramp and Skyway, Rochester, MN

# BONESTROO, ROSENE, ANDERLIK & ASSOCIATES, INC.

2335 W. Hwy. 36 St. Paul, MN 55113 Tel: 612/636-4600 Fax: 612/636-1311 Established 1956 Other Offices: Rochester, MN; Milwaukee, WI

_	
Otto Bonestroo	PE
Marvin Sorvala	PF
Thomas Noves	PE
David Loskota	PE
Robert Pfefferle	PF
_	
Firm Personnel by Discipline	
Civil Engineers	69
Structural Engineers	(

Firm Personnel by Discipline
Civil Engineers 69
Structural Engineers 6
Electrical Engineers 1
Architects 4
Other Professional 12
Technical 55
Administrative 17
TOTAL 164

Specializing in transportation planning and traffic engineering; stormwater and water resources planning, design and management; water supply, storage, distribution and treatment; wastewater collection and treatment; roads, bridges and airports; parks, aquatic centers and ice arenas. Services offered include feasibility studies, master planning, detailed design, project surveying, construction inspection/administration, GIS consulting.

Prairie Waterway Restoration, Farmington, MN; West Creek Stage 3 Flood Control, Chaska, MN; Lake Pokegama Sanitary Sewer Collection System, MN; Cedar Grove Area Street Reconstruction, Eagan, MN; 80-Acre Athletic Complex, Ice Arena and Fieldhouse, Woodbury, MN

# DAVID BRASLAU ASSOCIATES, INC.

1313 5th Street SE, Ste. 322 Minneapolis, MN 55414 Tel: 612/331-4571 Fax: 612/331-4572 Established 1971

Dr. David Braslau	PI
— F: P 11 - D: -: 1:	
Firm Personnel by Discipline	
Acoustical Engineers	
Other Professional/Technical	
Administrative	1
TOTAL	2.8

Architectural and performance space acoustics, building and partition noise isolation, environmental noise control, exterior facade attenuation for aircraft and other sources, sound system design, industrial noise control, acoustic and noise measurements, control of vibration, blasting and small arms ranges, land use compatibility, environmental assessments, impact statements and indirect source permits.

Combined Operations Center/ Heathrow. London, England: Dual Track EIS (air quality assessment), Minneapolis/St. Paul, MN: Normandale Community College (noise control/HVAC). Bloomington, MN: St. Joseph Church (acoustic design), Lino Lakes, MN; Mille Lac Reservation (school building acoustics), Mille Lacs Reservation, MN

# BRAUN INTERTEC CORPORATION

8000 Town Line Avenue South Minneapolis, MN 55439-0108 Tel: 612/946-6000 Fax: 612/946-6190 Established 1957 Other Offices: Minneapolis, Rochester, St. Cloud and St. Paul, MN; Chicago, IL; Billings, MT; Bismarck and Fargo, ND; Portland, OR and La Crosse, WI

J.S. Braun	PE
George D. Kluempke	PE
Cameron G. Kruse	PE
Larry A. Clem	CPA
Clenn E. Purdue	

Firm Personnel by Disciplin	e
Civil Engineers	50
Other Engineers	19
Architects	1
Other Professional	5
Technical	314
Administrative	123
TOTAL	512

Braun Intertec is an engineering and environmental consulting and testing company providing services to public and private clients from 20 office locations in six states. Services include geotechnical materials and environmental engineering, infrastructure and pavement management; site assessments, natural resource management and air quality management, industrial hygiene services and laboratory testing and analyses.

934th Airlift Wing, Minneapolis/ St. Paul International Airport, MN; Kwik Trip, Multiple Sites in Minnesota, Iowa and Wisconsin; MN/Road Research Project, Monticello, MN; U. S. Postal Service, Multiple Sites in Minnesota; Hiawatha Avenue Reconstruction, Minneapolis, MN

# CARROLL, FRANCK & ASSOCIATES

1357 Highland Parkway St. Paul, MN 55116 Tel: 612/620-9162 Fax: 612/690-9156 Established 1985

Anne R. Carroll

Bruno M. Franck	PhD., PE
— Firm Personnel by Dis	cipline
Structural Engineers	. 1
Other Professional	1
TOTAL	2

MP

Structural engineering services for religious, educational, residential, and industrial buildings. Expertise in design with wood for historical or contemporary architecture using recycled lumber or modern structural wood components; design of masonry, steel and concrete structures. Technical writing of reports, analyses, government regulations, permits, specifications, etc.

K & J Dayton's Residence, Minneapolis, MN; J. B. Gooddman Residence, Minnetonka Beach, MN; Beautiful Savior Lutheran Church, New Hope, MN; Prairie Wood Environmental Learning Center, Kandiyohi County, MN; Long Lake Conservation Center, Palisade, MN

# CLARK ENGINEERING CORPORATION

2815 Wayzata Boulevard Minneapolis, MN 55405 Tel: 612/374-4740 Fax: 612/374-4749 Established 1937 Other Offices: Aberdeen and Rapid City, SD; Fort Meyers, FL

Charles E. Hansen

Administrative

TOTAL

Larry G. McMurtry	PE
Hadi Sajadi	PE
Michael A. Fowler	PE
Leslie G. Renschler	
-	
Firm Personnel by Discipline	
Civil Engineers	17.5
Structural Engineers	11
Other Professional	4
Technical	34.5

PE

9.5

76.5

Structural Engineering, Municipal/ Environmental Engineering, Transportation Engineering, Surveying, Construction Services, Facility/Site Development

Green Bay Packaging Corrugator Plant, Coon Rapids, MN; Hormel Foods Plant Expansion, Austin, MN; Remmele Engineering Co. Plant Addition, Monticello, MN; Wayzata Senior High School, Wayzata, MN; Maple Grove Senior High School, Maple Grove, MN

# DARG BOLGREAN, MENK,

7575 Golden Valley Road., Ste. 210 Golden Valley, MN 55427 Tel: 612/544-8456 Fax: 612/544-8914 Established 1966.

Lloyd W. Darg

Gene Bolgrean	PE
Harry D. Menk	PE
— Firm Personnel by Discipline	
Civil Engineers	4
Technical	1
Administrative	1
TOTAL	6

With expertise in steel, concrete, masonry and wood structural systems, Darg, Bolgrean, Menk, Incorporated has engineered well over 3000 projects nationwide including: commercial, academic, office/warehouse, industrial, renovation/restorations, multiple housing, government, medical, religious, and parking facilities for the architectural profession, contractors, fabricators and building owners, managers and developers.

West Salem Elementary School, West Salem, WI; Net Med Office and Parking Ramp, Burnsville, MN; Cargill Office Building, Fargo, ND; Best Buy Headquarters Addition, Eden Prairie, MN; Raven Golf Clubhouse, Phoenix, AZ

# DOLEJS ASSOCIATES INC.

1624 North Riverfront Drive Mankato, MN 56001 Tel: 507/625-7869 or 612/375-1936 Fax: 507/388-9225 Established 1977 Other Offices: Burnsville, MN (612/435-6790)

_	
Joseph M. Dolejs	Pl
David A. Kroells	

There was a same areas or same	
Firm Personnel by Discipline	
Mechanical Engineers	1
Technical	8
Administrative	1.5
TOTAL	11

Dolejs Associates provides mechanical and electrical design services for the building industry. An experienced and stable staff provides expertise in the HVAC, plumbing, fire protection, temperature control, lighting power, communication and life safety systems. Recent projects include schools, restaurants, athletic facilities, motels, engineered housing churches, ADA and energy conservation retrofits.

Blue Earth Area High School, Blue Earth, MN; Burnsville Post Office, Burnsville, MN; Burnsville Read Life Co-op, Burnsville, MN; Dakota Meadows Middle School, Mankato, MN; Luverne Veterans' Home, Luverne, MN

# PE DUNHAM ASSOCIATES, INC.

8200 Normandale Blvd..., Ste. 500 Minneapolis, MN 5437-1060 Tel: 612/820-1400 Fax: 612/820-2760 Established 1960 Other Offices: Rapid City, SD; Las Vegas, NV

_	
George F. Dunham	PE
Kathleen M. Kolbeck	PE
Dale J. Holland	PE
Ronald L. Feldhaus	PE
Brion P. Szwed	PE
Firm Personnel by Discipli	ne
Structural Engineers	10
Mechanical Engineers	44
Electrical Engineers	26
Other Professional	28
Administrative	22
TOTAL	130

Dunham Associates, Inc. is a multifaceted consulting engineering firm that offers mechanical, electrical and structural engineering and communications systems design services. Specialized areas include health care, retail, airport, hotel/casino, skyways, airport, data centers, clean rooms, schools, master planning, and energy studies.

Minneapolis/St. Paul International Airport FIS (Federal Inspection Services) Facility, MN; West Health Campus, Plymouth, MN; Soaring Eagle Casino/Hotel, Mt. Pleasant, MI; Minneapolis Community College Master Planning, Minneapolis, MN; Medford Outlet Center, Phase II, Medford, MN

# ELLERBE BECKET INC.

800 LaSalle Avenue Minneapolis, MN 55402-2014 Tel: 612/376-2000 Fax: 612/376-2271 Established 1909 Other Offices: Kansas City, MO; Washington, DC; New York, NY; San Francisco, CA.

Robert A. Degenhardt	PE
J. Douglas Maust	PE
Allan Wenzel	PF
MarkW. Duoma	PE
Robert T. Brown	PE
Para Para Para Para Para Para Para Para	
Firm Personnel by Discipline	
Civil Engineers	10
Structural Engineers	31
Mechanical Engineers	80
Electrical Engineers	50
Architects 155	
Other Professional	32
Technical	115
Administrative	190
TOTAL	660

Full spectrum engineering, architectural and planning firm offering complete services for commercial, corporate, educational, sports, industrial, health care and public governmental fields. Master planning, feasibility studies and programming for facilities and operations in a broad field of practice. Recent projects include commercial and corporate office buildings, libraries, hotels and resorts, arenas, stadiums, collegiate facilities, medical facilities, central energy plants and energy retrofit work. The practice is international in scope.

University of Minnesota, Carlson School of Management, Minneapolis, MN; Dow Global Data Center, Midland, MI; First Avenue Cooling Plant, Minneapolis, MN; Crossroads Arena (Buffalo Sabers), Buffalo, NY; Moscow Bank of the Russian Federations Savings Bank, Moscow, Russia

## ENGINEERING DESIGN GROUP OF MINNESOTA, INC.

547 Lovell Avenue Roseville, MN 55113 Tel: 612/481-9195 Fax: 612/481-9195 Established 1989

Sean K. Hallet	PE
Firm Personnel by Discipline	
Civil Engineers	1
Structural Engineers	1
Technical	.5
Administrative	.5
TOTAL	3
_	

Structural engineering of commercial, industrial, residential and curtainwall systems. Complete design and analysis of contract documents for building systems. Facility engineering of Jib, mono, crane and bridge rail systems. Forensic non-destructive inspections of all structures. Heavy equipment foundation engineering. Hazardous explosive room engineering. Structural design of amusement rides. Structural product design.

Single and Multiple Family Housing including *Life* Magazine Dream House, Isanti, MN and Premanufactured Housing in various locations around the world; River Oaks Gulf Clubhouse Expansion, Cottage Grove, MN; Pedestrian Bridge, Bloomington, MN; Amusement Rides, Chicago, IL., Atlanta, GA., Denver, CO., Shakopee, MN., Phoenix, AZ

# ERICKSEN ELLISON and Associates Inc.

2635 University Ave. W., Ste. 200 St. Paul, MN 55114-1500 Tel: 612/641-0311 Fax: 612/641-0029 Established 1954

Bruce K. Johnson	PE
William F. Thiesse	PE
Richard A. Hoag	
_	
Firm Personnel by Discipline	
Mechanical Engineers	6
Electrical Engineers	2
Technical	24.5
Administrative	5
TOTAL	37.5

Mechanical and electical design of HVAC, plumbing, ground source heat pumps, fire protection, specialty lighting, power, voice/data communications, and security/surveillance for a variety of building types. EEA has extensive experience in design of correctional facilities, libraries, educational facilities, data processing centers, manufacturing facilities, clean rooms, aircraft engine test facilities, and airports.

Pleasant Hill Library, Hastings, MN; Arlington Senior High School, St. Paul, MN; Stillwater Prison Industries and Education Building Renovation, MCF; Airport Equipment Maintenance Building Metropolitan Airport Commission: Library Archives and Overflow Facility, University of Minnesota

# ERICKSEN, ROED AND ASSOCIATES, INC.

300 First Avenue North, Suite 420 Minneapolis, MN 55401 Tel: 612/342-9210 Fax: 612/342-9214 Established 1985

Alfred G. "Bud" Ericksen

Thomas E. Amundson	
James D. Roed	PE
Robert A. Curtis	PE
Firm Personnel by Discipline	
Structural Engineers	11
Other Professional/Technical	10
Administrative	3
TOTAL	24

PE

Professional Structural Engineering services from planning through construction for corporate, commercial, educational, health care, industrial, sports facilities, parking ramps, aircraft engine test facilities, and restoration engineering. We provide construction documents, specifications, construction observation, existing building analysis reports and forensic engineering.

Minneapolis Federal Courthouse, Minneapolis, MN; Target Center, Minneapolis, MN; University of Minnesota Basic Sciences, Minneapolis, MN; North Memorial Hospital Expansion, Minneapolis, MN; AT&T Office Tower, Minneapolis, MN

# FOSS ASSOCIATES

810 4th Avenue S. Moorhead, MN 56561 Tel: 218/236-1202 Fax: 218/236-4945 Established 1898 Other Offices: Fargo, ND

Paul Jacobson

Charles Zeltinger

Bill Cowman	AIA
Willis Stelter	AIA
Bob Ames	AIA
Town 1935 May 194 Av	
Firm Personnel by Discipline	
Structural Engineers	1
Land Surveyor	1
Architects	7
Other Professional	6
Technical	.5
Administrative	1.5
TOTAL	17

PE

RLS

Structural design, land survey and architecture with programming design, construction documents and construction administration for medical, educational, institutional, commercial, recreational and governmental agency client groups.

Anoka Regional Treatment Center, Anoka, MN; Minnesota Veterans' Home, Fergus Falls, MN; Plain Art Museum, Fargo, ND; Ellendale Public School, Ellendale, ND

### DIRECTORY OF CONSULTING ENGINEERING FIRMS

# FOSTER, JACOBS & JOHNSON, INC.

345 Canal Park Drive, Suite 200 Duluth, MN 55802 Tel: 218/722-3060 Fax: 218/722-1931 Established 1922

James R. Johnson	PE
Charles F. Jacobs	PE
Firm Personnel by Discipline	100
Mechanical Engineers	2
Electrical Engineers	3
Technical	3

1.5

9.5

Administrative

TOTAL

Mechanical and electrical engineering, including design of heating, ventilating, air conditioning, fire protection, plumbing, lighting, power distribution, data, voice, fire and security communications for all building types. Energy audits, studies, building management systems, site and airport lighting.

Aircraft Rescue Fire Fighting Training Facility, Duluth, MN: Village Apartment Complex, University of Minnesota Duluth, Duluth, MN: Douglas County Courthouse Remodel, Superior, WI; Washington Junior High Renovation, Duluth. MN; Mesabi/Vermilion Campus Remodeling, Virginia, MN

# **GAUSMAN & MOORE** ASSOCIATES, INC.

1700 W. Highway 36 - 700 Rosedale Towers Roseville, MN 55113 Tel: 612/639-9606 Fax: 612/639-9618 Established 1935 Other Offices: Duluth and Brainerd, MN

James W. Giefer	PE
James A. Keller	PE
D. Lane Hersey	PE
Robert B. Full	PE
<del></del> /	
Firm Personnel by Discipline	
Mechanical Engineers	5
Electrical Engineers	5
Technical	25
Administrative	12
TOTAL	47

A National practice in traditional Mechanical and Electrical Engineering. Services augmented by specialties including Life Safety Renovations, Energy Sources/Conservation, and Forensic Investigative work.

Media Play, Suncoast, Sam Goody and Shopko Stores, Nationwide; Holiday Companies, Upper Midwest; Hennepin County Medical Center Emergency Room, Minneapolis, MN: USWEST, Plymouth, MN; Technical Colleges in Brainerd, Duluth, Hutchinson/Willmar, Riverland, MN; Public Schools in Minneapolis, St. Paul, Brainerd, and Duluth, MN

# **HAKANSON ANDERSON** ASSOCIATES, INC.

222 Monroe Street Anoka, MN 55303 Tel: 612/427-5860 Fax: 612/427-3401 Established 1975 Other Offices: Monticello, MN 55362

Lawrence G. Koshak	PE
Peter R. Raatikka	PE
Merland Otto	LA
_	
Firm Personnel by Disci	pline
Civil Engineers	. 6
Other Professional	3
Technical	9
Administrative	9
TOTAL	21
_	

Hakanson Anderson Assoc. Inc. offers planning, civil and municipal engineering, survey and landscape architecture services to the public and private sectors. Specialized areas include environmental assessments, wetlands, site master plans, hydrologic studies, streets and roads, park and recreation facilities, wastewater and water supply and distribution, surveying and construction staking.

Anoka Enterprise Park, Anoka, MN; County 81 Frontage Roads, Osseo, MN; Anoka Electric Cooperative Operations Center, Ramsey, MN; Mille Lacs Wastewater Treatment Facility Study, Mille Lacs and Crow Wing Counties, MN: Grand Marais, Cook County Airport, Grand Marais, MN

# HALLBERG ASSOCIATES, INC.

2207 Third Street White Bear Lake, MN 55110 Tel: 612/429-5655 Fax: 612/429-6215 Established 1984

Joseph W. Hallberg	PE
_	
Firm Personnel by Discipline	
Mechanical Engineers	2
Electrical Engineers	2
Technical	7
Administrative	2
TOTAL	13
_	

Mechanical, Electrical and Energy Management Engineering Services for educational facilities throughout Minnesota.

Discovery Middle School, Alexandria, MN: Buffalo Senior High School, Buffalo, MN; Burnside Elementary School, Red Wing, MN; Big Lake High School, Big Lake, MN; Little Mountain Elementary School, Monticello, MN

# **HAMMEL GREEN AND** ABRAHAMSON, INC.

1201 Harmon Place Minneapolis, MN 55403 Tel: 612/337-4100 Fax: 612/332-9013 Established 1953 Other Offices: Milwaukee, WI: Rochester, MN Harry R. Wilcox James M. Moravek

James M. Moravek	LE
David J. Galey	PE
Steve Bieniek (Rochester)	PE
Firm Personnel by Discipline	
Civil Engineers	7
Structural Engineers	19
Mechanical Engineers	25
Electrical Engineers	17
Architects	90
Other Professional	28
Technical	25
Administrative	42
TOTAL	253
_	

HGA Engineering, in addition to serving clients through the ful-service A/E approach, has a broad independent client base. HGA engineers pride themselves on using their creativity and innovation to develop workable, cost-effective solutions to engineering challenges. Each discipline is highly capable and intent upon providing the best possible service to all clients.

3M, Corporate Administration Building and Cafeteria Building, St. Paul. MN: Northern States Power Company, Eau Claire and LaCrosse, WI; IBM Campus, Rochester, MN; Metropolitan Waste Control Commission, Minneapolis, MN; Iowa-Illinois Gas & Electric, Davenport, IA

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

6115 Cahill Avenue Inver Grove Heights, MN 55076 Tel: 612/451-4605 Fax: 612/451-0917 Established 1985

Jim Krech	PE
Dan O'Brien	AIA
Brady Mueller	AIA
Brian Wass	AIA
_	
Firm Personnel by Discipline	
Structural Engineers	2
Architects	2 5 5
Technical	5
Administrative	1
TOTAL	13

Structural engineering for commercial, industrial, medical, retail, agri-facilities and residential projects. We offer Auto-CAD and have a current library of structural design software. Services are provided for architects, owners, contractors, and various agencies.

Nahan Printing, St. Cloud, MN; Tapemark Corporation, West St. Paul, MN; Inver Grove Heights Veterans' Memorial Community Center, inver Grove Heights, MN; Bester Bros. Moving, South St. Paul, MN; Cenex/Land-O-Lakes Containment Facilities, Nationwide

# LARSON ENGINEERING OF MINNESOTA

3524 Labore Road White Bear Lake, MN 55110 Tel: 612/481-9120 Fax: 612/481-9201 Established 1978 Other Offices: Naperville, IL and Appleton, WI

Lee A. Granquist	PE
Henry W. Voth	PE
Kesh P. Ramdular	PE
_	
Firm Personnel by Discipline	
Civil Engineers	1
Structural Engineers	11
Technical	4
Administrative	3
TOTAL	19

Larson Engineering provides structural and civil design for commercial, governmental and institutional buildings. We provide structural design of curtainwall systems for architects and erectors. Structural design of bridges along with civil engineering for building sites and roads. We provide complete engineering and design for industrial-related structures of all types including manufacturing, processing and storage facilities. Expertise in grain and material handling systems including unloading, storage, weighing and loading systems.

Jackpot Junction Casino, Morton, MN; Hutch Technology Center, Hutchinson, MN and Eau Claire, WI; St. Louis County Jail, Duluth, MN; Plymouth City Hall and Administration Building, Plymouth, MN; St. Benedicts Student Center, St. Joseph, MN

# L S ENGINEERS, INC.

200 South Main Street LeSueur, MN 56058 Tel: 612/665-6255 Fax: 612/665-6818 Established 1989

Robert L. Sprengeler	
William P. Lehnertz	
_	
E: D	٤.

Firm Personnel by Discipline Structural Engineers Technical Administrative TOTAL Structural engineering services for all building types in the areas of industrial, commercial, religious, institutional, residential, manufacturing, as well as specialized structures for water and wastewater plants. Full range of services including feasibility studies, investigations, construction documents, cost estimates, and field observations

Bethany Chapel, Mankato, MN; Lyndale Shops, Minneapolis, MN; Office Depot Retail Store, St. Louis Park, MN; Montevideo Middle School, Montevideo, MN; Dakota Magic Casino and Hotel Complex, Hankinson, ND

### LUNDQUIST, KILLEEN, POTVIN & BENDER, INC. (LKPB ENGINEERS)

(Formerly LWPB Engineers) 1935 W. County Road B2, Suite 300 St. Paul, MN 55113-2722 Tel: 612/633-1223 Fax: 612/633-1355 Established 1969

Leonard A. Lundquist

TOTAL

PE.

PE

PE

John M. Killeen	PE
Peter A. Potvin	PE
Gayland J. Bender	PE
Firm Personnel by Discipline	
Mechanical Engineers	7
Electrical Engineers	6
Technical	24
Administrative	7

Professional Mechanical, Electrical and Industrial Engineering services for all types of facilities. Design expertise in HVAC, plumbing, fire protection, refrigeration, building automation, site utilities, lighting design, power, communication. security, data processing environments, fire and life safety, life cycle costing, value engineering, energy conservation and management, feasibility studies and building commissioning. Industrial engineering services include facility planning. material handling, manufacture/ process engineering and warehouse distribution.

US West Market Street Facilities, St. Paul, MN; Mayo Foundation -St. Joseph's 4 East Cardiovascular Stress Center, Rochester, MN; United Hospital Patient Focus Care Centers, St. Paul, MN; United Health-Care Corporation, Edina, Minnetonka and Golden Valley, MN; Gustavus Adolphus College, St. Peter, MN; Grand Casino Hinckley and Grand Casino Mille Lacs, Hinckley and Mille Lacs, MN

# MATTSON/MACDONALD, INC.

1516 West Lake Street Minneapolis, MN 55408 Tel: 612/827-7825 Fax: 612/827-0805 Established 1983

Wesley C. Mattson	PE
David H. Macdonald	PE
-	
Firm Personnel by Disciplin	ie .
Structural Engineers	4
Other Professional	2
Administrative	1
TOTAL	7

Mattson/Macdonald provides structural engineering services to architectural firms serving the five-state Midwest area. Mattson/Macdonald has considerable experience with a wide range of building types: housing, retail, office, manufacturing, hospitals, churches, educational and institutional facilities.

Mille Lacs Indian Museum, Garrison, MN; Kanabec County Hospital Expansion, Mora, MN; Redwood Falls Public Library, Redwood Falls, MN; Theater De La Jeune Leune, Minneapolis, MN; Corpus Christi Catholic Church, Roseville, MN

# MAXIM TECHNOLOGIES INC.

662 Cromwell Avenue St. Paul, MN 55114 Tel: 612/645-3601 Fax: 612/659-7348 Established 1938 Other Offices: Rochester, MN

Marc Shannon	PE
Tracy Toepper	
John Stieben	PE
Sam Ng	PE
Steve Olson	PE
_	
TOTAL STAFF	150

Maxim Technologies, Inc./Twin City Testing provides QA/QC testing for all types of construction projects including geotechnical engineering, construction materials testings, drilling and failure analysis. Additional services include environmental consulting, materials testing and analytical chemistry. Maxim offices total 53 nationwide with Minnesota offices located in St. Paul and Rochester.

Maple Grove High School, Maple Grove, MN; Midway Market Place, St. Paul, MN; Sears, Mankato, MN; Faribault Elementary School, Faribault, MN; Hopkins Schools, Hopkins, MN

# McCONKEY & ASSOCIATES, INC.

3144 Hennepin Avenue S. Minneapolis, MN 55408 Tel: 612/822-6950 Fax: 612/822-8385 Established 1978

H. James McConkey	PE
Richard W. Johnson	PE
Firm Personnel by Discip	line
Structural Engineers	3
Technical	2
Administrative	1
TOTAL	6

Structural engineering consulting services for commercial, industrial, institutional, public and residential building projects; Special design for bins, stacks, equipment supports, material handling. Rehabilitation and remodeling of existing structure. Structural investigations and reports. Licensed in 23 states.

Minnesota Correctional Facility, Faribault, MN; Cinema 6 Theater, St. Louis Park, MN; Carisch Commercial Property and Parking Ramp, Wayzata, MN; St. John the Baptist Church, Savage, MN; Sidney's Restaurant. Scottsdale, AZ PE

# MEYER, BORGMAN & JOHNSON, INC.

810 Plymouth Building Minneapolis, MN 55402 Tel: 612/338-0713 Fax: 612/337-5325 Established 1955

Technical

TOTAL

Administrative

John E. Mever	PE
Roland V. Johnson	PE
Richard E. Wiehle	PE
Daniel E. Murphy	PE
Michael J. Ramerth	PE
— Firm Personnel by Discipline	
Structural Engineers	13

Single discipline consisting of Structural engineering services applied to the design of commercial, educational, industrial, medical, recreational, religious and residential facilities.

21

Fredrick R. Weisman Art Museum, University of Minnesota, Minneapolis, MN; St. Paul High School, St. Paul, MN; Dayton's, Maplewood, MN; H. B. Fuller Willow Lake Campus, Vadnais Heights, MN; West Health Campus, Plymouth, MN

# MICHAUD COOLEY ERICKSON

333 South Seventh St., Ste. 1200 Minneapolis, MN 55402 Tel: 612/339-4941 Fax: 612/339-8354 Established 1946

Dean A. Rafferty	PE
Monty L. Talbert, Jr.	
Douglas C. Cooley	PE
_	
Firm Personnel by Discipline	
Mechanical Engineers	40
Electrical Engineers	25
Other Engineer	1
Other Professional	1
Administrative	15
TOTAL	82

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.

(New) Children's Museum, St. Paul, MN; (New) Federal Reserve Bank, Minneapolis, MN; H. B. Fuller Company, (New) Research & Development Lab Building, Vadnais Heights, MN; North Memorial Medical Center, Expansion and Renovation, Robbinsdale, MN; St. Paul City Hall/Ramsey County Courthouse, Expansion and Renovation, St. Paul, MN

# OSM AND ASSOCIATES, INC.

300 Park Place East 5775 Wayzata Blvd. Minneapolis, MN 55416-1228 Tel: 612/595-5775 Fax: 612/595-5773 Established 1992 Other Offices: Eau Claire, WI

Marlin D. "Butch" Larsen

Jack L. Hunter

Jerry A. Turner	AIA
Edward J. DeLaForest	PE
F. Dennis Hall	PE
<del>-</del>	
Firm Personnel by Discipline	
Civil Engineers	13
Structural Engineers	3
Mechanical Engineers	12
Electrical Engineers	8
Other Engineers	9
Architects	6
Other Professional	8
Technical	72
Administrative	21
TOTAL	151

Engineers, Architects, Planners and Surveyors providing services to the medical, educational, industrial, commercial, and governmental sectors. Specific Services include: mechanical, electrical and structural engineering, architecture, municipal, water resources, transportation and environmental engineering, land surveying and landscape architecture. Full Service, Client-oriented Firm, experienced with multi-disciplinary projects. Complete project capabilities inhouse.

Facilities Engineering, 3M Corporation, St. Paul, MN; HealthEast Corporate Master Plan, St. Paul, MN; EAW for DAMARK Facility, Brooklyn Park, MN; BFI Hoving & Sons Transfer Station Remodeling and Additions, Chicago, IL; Water Treatment Plant Expansion, Richfield, MN

# SCHOELL & MADSON, INC.

10580 Wazata Blvd., Ste. #1 Minnetonka, MN 55305 Tel: 612/546-7601 Fax: 612/546-9065 Established 1954 Other Offices: SMI Testing, Eden Prairie, MN

James Orr	PF
Kenneth Adolf	PE
Theodore Kemna	RLS
Doug Stahl	PE
John Karwacki	PE
====	
Y . Y	***

_	
Firm Personnel by Disciplin	ne
Civil Engineers	7
Other Professional	5
Technical	25
Administrative	3
TOTAL	40

Complete wetlands identification, classification, and delineation; EAWs, EIS and natural resource services; environmental site assessments, regulatory compliance and permitting; civil engineering system studies, design and construction/contract administration; land surveying, topographic, construction, and as-built surveys; quality control soil testing.

Opus II Business Park, Minnetonka, MN; Laurel Village, Minneapolis, MN; Restoration of Historic Main Street, Minneapolis, MN; Hills of Owasso, Roseville, MN; Cedar Pass, Minnetonka, MN

### SHORT ELLIOTT HENDRICKSON INC. (SEH)

Donald E. Lund

3535 Vadnais Center Drive St. Paul, MN 55110 Tel: 612/490-2000 Fax: 612/490-2150 Established 1927 Other Locations: Minneapolis and St. Cloud, MN; Madison and Chippewa Falls, WI and Lake County, IN

Gary R. Gray	PE
Richard A. Olsen	AIA
Robert F. Pauly	AIA
Bradley E. Forbrook	AIA
-	
Firm Personnel by Discip	line
Civil Engineers	91
Structural Engineers	10
Other Engineers	35
Architects	20
Other Professional	22
Technical	74
Administrative	62
TOTAL	314

SEH is a multidisciplined A/E consulting firm offering services in Architecture, Civil Engineering, Environmental and Transportation. Specialty services include VRI Virtual Reality Computer Imaging and Public Involvement Programs.

Becker Community Center, Becker, MN; Charles A. Lindbergh Elementary School, Little Falls, MN; St. Cloud Regional Airport Terminal Building, St. Cloud, MN; I-35E/ University Sewer Separation Project, St. Paul, MN; Stillwater Flood Control Project, Stillwater, MN

# STS CONSULTANTS, LTD.

3650 Annapolis Lane, Ste. 120 Minneapolis, MN 55447 Tel: 612/559-1900 Fax: 612/559-4507 Established 1948 Other Offices: Deerfield, IL, Greenbay and Milwaukee, WI and Lansing, MI

James H. Overtoom	PE
Robert L. DeGroot	CPG, PE
Douglas A. Spaulding	PE
_	
Firm Personnel by Discip	oline
Civil Engineers	4
Mechanical Engineers	1
Other Engineers	7
Other Professional	10
Technical	12
Administrative	6
TOTAL	40

STS specializes in geotechnical engineering, environmental engineering, water resources and construction engineering services. Our services include: environmental site assessments, remediation, stormwater management, air quality, and wetland construction, delineation and mitigation, landfill engineering, foundation design, erosion control, embankment stabilization, dam engineering, and materials testing.

Remediation of the Federal Courts Building Site, Minneapolis, MN; Remedial Investigation at TCAAP, Minneapolis, MN; Foundation design and Material testing for Pillsbury Tower, IBM Tower and City Center, Downtown Minneapolis, MN

# TOLTZ, KING, DUVALL, ANDERSON AND ASSOCIATES INC.

1500 Piper Jaffray 444 Cedar Street St. Paul, MN 55101-2140 Tel: 612/292-4400 Fax: 612/292-0083 Established 1910

Duane Prew	PE
James Voven	PE
Darrel Berkowitz	PE
Robert Boyer	PE
Westly Hendrickson	AIA
Firm Personnel by Discipline	
Civil Engineers	36
Structural Engineers	10
Mechanical Engineers	7
Electrical Engineers	7 2 2
Other Engineers	2
Architects	11
Other Professional	3
Technical	55
Administrative	24
TOTAL	147

A multidisciplined A/E firm offering services in civil, electrical, environmental, mechanical, structural and transportation engineering. Electrical, mechanical and structural building system design in support of our architecture department. Design of municipal utilities, highways, bridges, airports and railroads.

TH 212 Reconstruction, Eden Prairie, MN; Macalester College Field Expansion/Campus Way Construction, St. Paul, MN; Minneapolis/ St. Paul International Airport Elevated Roadway Reconstruction, Minneapolis, MN; Wabasha Street Bridge Reconstruction, St. Paul, MN; Southeast YMCA, Woodbury, MN

# VAN SICKLE, ALLEN & ASSOCIATES, INC.

4969 Olson Memorial Highway Minneapolis, MN 55422 Tel: 612/541-9804 Fax: 612/542-1405 Established 1978

Richard A. Van Sickle	PE
Charles K. Allen	PE
Reg G. Silverthorne	PE
Gary V. Nagel	PE
Anthony J. Pini	PE
Firm Personnel by Discipline	
Civil Engineers	4
Structural Engineers	7
Technical	11
Administrative	3
TOTAL.	25

A unique firm offering civil and structural consulting for architects' commercial, industrial and institutional facility designs. Also, VAA is the country's largest engineering firm in private practice offering prime engineering planning and design services to the agribusiness community.

Sears - Mall of America, Bloomington, MN; Crossroads Commerce Center, Brookfield, WI; Wedgewood Commerce Center Offices, Maple Grove, MN; Arden Hills Training Center, U. S. Army Reserve, Arden Hills, MN; Cargill Feed Manufacturing Plants in Mexico, PA, MN, CA and Malaysia

### WALKER PARKING CON-SULTANTS / ENGINEERS, INC.

5775 Wayzata Blvd., Suite #25 Minneapolis, MN 55416 Tel: 612/595-9116 Fax: 612/595-9518 Established 1965 Other Offices: Los Angeles, San Francisco, Denver, Chicago, Tampa, Indianapolis, Philadelphia, Boston, Houston, and kalamazoo

William C. Arons	PE
Richard J. Kenney	PE
Terrence A. Hakkola	PE
<del>-</del>	
Firm Personnel by Discipline	
Structural Engineers	6
Architects	1
Technical	5
Administrative	2
TOTAL	14

Walker Parking Consultants provides programming, planning, and feasibility studies for parking structure projects including traffic impact statements and parking equipment selection. We also provide structural, mechanical, electrical, and durability engineering services. Our concrete restoration engineers develop specifications for the restoration of concrete structures and building facades.

Mall of America Parking Facilities (12,000 spaces), Bloomington, MN; Hennepin County Hospital parking Facility (1300 spaces), Minneapolis, MN; City of Minneapolis Parking System Audit/Analysis, Minneapolis, MN; Parking Planning Study, University of Minnesota; Science Museum Parking Facility (700 spaces), St. Paul, MN

# WELLS ENGINEERS MINNESOTA, INC.

123 North Third St. #203 Minneapolis, MN 55401 Tel: 612/332-6093 Fax: 612/332-2725 Established 1986

Shirley M. Walker

Francis M. Jordan	PI
Charles J. Lewis	PF
_	
Firm Personnel by Discip	pline
Civil Engineers	1
Structural Engineers	
Technical	1.5
Administrative	1
TOTAL	6.3

Complete Structural and Civil Engineering services providing prompt personal atention to each client's unique goals and requirements. Structural design experience includes a full range of buildings for commercial, residential, municipal, industrial, recreational, educational and specialty structures. Civil design includes roadways, bridges, drainage, site plans, tunnels and retaining walls.

Federal Express AGT&T Facility, Minneapolis/St. Paul International Airport, MN; Handicap Access for Piek and Eddy Halls, University of Minnesota, Minneapolis, MN; Hennepin Parks Trail Bridges, Hennepin County, MN; Windom School Sound Abatement, Bloomington, MN; Marshall/Snelling Street Improvements, St. Paul, MN

# WENZEL ENGINEERING, INC.

10100 Morgan Avenue S. Bloomington, MN 55431 Tel: 612/888-6516 Fax: 612/888-2587 Established 1990

Administrative

TOTAL

_	
Lowell E. Wenzel	PE
_	
Firm Personnel by Discipline	
Civil Engineers	.5
Structural Engineers	4.5
Technicians	2

WEI is a structural and civil engineering firm dedicated to meeting the unique goals and requirements of each client. WEI's expertise encompasses new facilities, renovations, additions to existing buildings and investigating buildings experiencing structural distress for many building types: commercial, industrial, public, retail, education, religious and healthcare.

Northwest Aircraft Maintenance Facility, Duluth, MN; Dulles International Airport Terminal Expansion, Washington, D.C.; 120 Railroad Bridge, Shreveport, LA; Health Care Facility Expansion - Superior, WI, Grand Island, NE and Salem, SD; Food Folk Grocery Store, Bladenboro, NC; Southtown Renovation, Bloomington, MN

# WOLD ARCHITECTS AND ENGINEERS

6 West Fifth Street St. Paul, MN 55102 Tel: 612/227-7773 Fax: 612/223-5646 Established 1968

Michael Cox	AIA
Norman Glewwe	AIA
Kevin Sullivan	AIA
Craig Anding	PE
Paul Juntilla	PE
_	
Firm Personnel by Discipline	
Mechanical Engineers	10
Electrical Engineers	7
Architects	36
Technical	5
Administrative 12	
TOTAL	70

HVAC system design, plumbing system design, fire protection systems engineering, energy management engineering, voice/data communications systems, media technologies, design and specification of primary/ secondary electrical systems, and security system design.

High School #4, Rosemount/Apple Valley/Eagan, MN; Middle School #6, Rosemount/Apple Valley/Eagan, MN; Ramsey County Correctional Facility Phase II Renovations,

Maplewood, MN; Steele County Law Enforcement/ Judicial Facilities, Owatonna, MN; Wright-Hennepin Electrical Cooperative Engineering and Maintenance Facility, Rockford, MN that area [of research] and was one of the pioneers in both experimental buildings [e.g. Princeton Professional Park, and some designs for Butler Manufacturing], as well as some pioneering work on how to analyze those kinds of buildings. The purpose there was to represent the physical phenomena in ways that it could be an active part of your design imagination, and not just numbers.

AM: Who were your heroes when growing up?

HF: Well, I certainly had the usual sports heroes, and some literary heroes. It wasn't really until I got into architecture that I gained professional mentors. I've been absolutely fascinated by the German and English pioneers of architectural history and theory, such as Rudolf Wittkower and Anthony Blunt, and another wonderful mentor was Victor Ollguyay, author of *Design and Climate*.

AM: What would you say were your major accomplishments over the 10 years you've been head and then dean of the school of architecture at Minnesota?

HF: When I first came to Minnesota the faculty was almost entirely an adjunct faculty with a very small core of fulltime faculty. Most of the lecture courses were taught by the adjunct faculty. The ratio is now close to 50-50 adjunct to full-time faculty. This has strengthened the full-time faculty impact on the lecture courses (and also in the studios, of course), but this has allowed them to have a research agenda for the core courses. At the same time I had a significant turnover in adjunct faculty so that we tried to develop and move a younger, emerging generation of practitioners into teaching positions. Thus the personality of the college has changed dramatically so that now there is a significant amount of research activity taking place within the college.

We've also increased the amount of funding for research. We've gone from approximately \$1,500 per faculty member to \$30,000 to \$50,000. What that

does is completely change the atmosphere of the school. Now 70 to 85 percent of the students are teaching assistants or research assistants and the faculty have significant funds to enhance their travel and attendance at conferences. I think I've tried to support the synergy between the full-time faculty and the adjunct faculty who bring their experience from professional practice into the classroom. It makes a good fit between the two.

We've also gone from \$200,000 in total endowment funds (from the mid-1980s) to more than \$7 million, and this has allowed us to create four endowed faculty chair positions. [These include two visiting critics or practitioners: one in architecture and one in landscape architecture. The other two are the director and assistant director of the Design Center for the American Urban Landscape.] And this funding has allowed us to increase the scholarships available to students.

This fund also enriches the school experience for students and has allowed us to attract leading thinkers and designers from around the country to come and stay for extended periods. This has been a terrific resource. Not only do these visiting faculty help with the teaching load, they stimulate the design and research interests of the permanent faculty.

I am especially proud of the visiting professorship endowment funds, and the creation of the Design Center for the American Urban Landscape headed by William Morrish and Catherine Brown.

In general the research activity at the college has tried to address some of the most interesting and pressing environmental challenges facing our society. The current faculty is much more engaged in work that relates to that need. These challenges include environmental issues, inner-ring suburbs, affordable housing, transportation issues, landscape restoration, using the environment as a means of revitalizing neighborhoods, and increase sensitivity to construction and materials as a form giver. All of these things are alive and well at CALA.

I've really tried to make CALA a school engaged in the community, not only with the research agenda and the design-studio problems presented to students, but also with the professional community. After all, the profession is

one of our most important customers. I've tried to listen to their needs and to engage that community with the school. In that regard, I'm pleased that funds from alumni and the profession that go toward our annual giving campaign have grown from \$3,000 to around \$10.000.

While we've changed the faculty composition and increased interest in research, we've changed the curriculum. It has gone from a predominantly five-year bachelor of architecture professional degree to what we think is an innovative "one-plus-three" master of architecture degree, which is now the professional degree. I couldn't have done that without the collegiate structure. By having a department head, for both architecture and landscape architecture, the primary effort in running these departments was taken on by that person, freeing me to accomplish more.

With respect to research, there are still some relationships to be developed with the building-construction community. I'd like to see this area of research clustered with the urban-design and building-science stuff that we've started. If you want the profession [architecture] to maintain its value to society, it needs to recapture the understanding that architecture is also the *art of building*.

In general I've tried to engage the school with the issues of society, engage it with the profession and tried to increased its ability to be a more responsive and better partner in those areas. And, bottom line, my main focus has been to create a better environment for the students.

AM: What are your plans for UC Berkeley?

HF: I look forward to engaging that faculty and the local community in some of the same issues that I've been talking to this community about. I think I can bring a lot to Berkeley because it is my sense that the faculty and the college have been somewhat disengaged. I want to make sure that they really are addressing issues that are relevant to the society in the Bay Area, and that they really are and become players in the discussion and debate that must occur around important social issues. AM

Continued from page 15

Dennis Walsh, a founding partner of the 11-year-old firm Walsh Bishop Associates concurs. "Not everyone will be a big designer," he says. "We really only need 10 percent of the architects to be designers. We also need managers who can communicate with employees and clients. We need technically competent architects, and we need architects who actually understand construction. Students should be introduced to these choices early in their education so that they can take the courses that apply to their own talents."

At Xerxes Architects, a typical day finds the partners working in three general categories. Haarstad handles marketing and design; Lechleiter manages projects and deals with contractors, consultants and existing clients; and Carroll handles a number of projects from start to finish. All three assume responsibility for such mundane housekeeping tasks as cleaning the office, making coffee and answering the phone.

"People don't understand what it takes to run an architectural firm," Lechleiter stresses. "It's 90 percent work and 10 percent fun. We have a lot of respect for the work that goes into managing an office or preparing a proposal—we know what's involved now, and how much time it takes."

From the perspective of 25 years of experience, Walsh whole-heartedly agrees that mastering basic business practices is mandatory to success. "If we don't understand business practices ourselves, how can we understand our clients?" Walsh says he believes that architects often "don't know how to manage, so leadership roles have been taken away from us. We're in the people business, but we fail to communicate either as speakers or as writers."

John Cuningham of Cuningham Hamilton Quiter, P.A. offers a similar viewpoint, noting that architects' problems often come from responsibilities they've dodged.

"Architects are shirking their responsibility of telling clients the real cost of a building," he says. "We don't explain the financial implications of

our services, and we don't understand what the financial picture is for our clients. We need to know the economic realities of our clients' markets; and we need to understand why the rules are the way they are."

Walsh agrees, "Architects don't comprehend the bigger perspective of a client's situation. We need to 'talk business' and understand finances."

On marketing in architecture, all three firms focus on a client-centered approach. "We need to ask what clients are looking for from us," says Walsh. "Marketing is as creative as architecture-you're creating value for the services architects provide. Architects are good conceptual thinkers: we're good at problem-solving. What we need to do is market those skills by demonstrating that we can create unique solutions to improve a client's business. That means we should be involved in strategic planning, real-estate planning and technological advances demonstrating that we're business-oriented, not just design-oriented."

So how can architecture respond to these issues? It's clear that both Walsh and Cuningham have perspectives that are based on years of experience. The partners from Xerxes Architects offer the counterpoint of a new generation. All agree that the changes begin with architects working together because, as Cuningham says, "there is more work for architects to do than we can handle."

Haarstad finds that there is more respect for architects outside of the building community than is perceived within. "There's the romance of making something, and there's respect for that," he says. He agrees with partner Lechleiter, however, that within the building community "contractors are often taken more seriously than architects."

Carroll notes that the fundamental problem is that "People think it's either good service or good design. That's a misunderstanding. Good service is a natural by-product of good design." Walsh agrees. "Good design is part of our basic service—it's not an additional item."

Another potential component of positive change is revamping architectural education. "It's adversarial," Walsh says. "We're taught criticism in school, and that's what we learn—criticize, criticize, criticize." Cuningham suggests that educators "teach architecture in an integrated way. Teach how it relates to ecology, finance, clients, structure. The focus can be broadened, not narrowed."

Finally, architects must take an active role in public debates about planning and design issues. "We need to be civic leaders," according to Cuningham. "We can be constructive about our suggestions, but we must stand up and let the city know when it's making a bad design decision. We must take a position on public issues. And maybe we've got to be throwing ourselves in front of a few more bulldozers."

# sod

Continued from page 23

ing, grass side down, for 2-foot-thick walls. The McCones also laid every third or fourth layer crosswise to bind stacks together. They filled cracks with loose dirt. They set wood door and window frames into the walls as they laid the sod. McCone estimates he used more than 300,000 pounds of prairie sod to build the 36-foot by 21-foot house; 24,000 pounds are on the roof alone. The simple gable, wood-plank roof was first covered with tar paper and then with a 3-inch layer of sod, grass side up. (Poor settlers often just used pole rafters covered with brush and then sodhence the leaks.)

Lumber salvaged from a 90-yearold flour mill in downtown Minneapolis's Butler Square was used to build
the floor, roof, window frames and
door. McCone got the 112-year-old
chimney bricks from the Aufderheide
kiln in New Ulm. Interior walls were
whitewashed. The soddy is furnished
with two double beds, fainting couch,
tables, wardrobes and rocking chairs.
In true pioneer style, there are woodburning stoves for cooking and heat,
pitcher and basin for washing, and oil
lamps for lighting.

While the bed and breakfast replicates upscale pioneer housing, the more primitive 18-foot by 18-foot dugout (constructed in 1988) offers a look at how those with less means settled on the prairie. The roof is made of peeled cottonwood poles, brush, slough grass and sod. The dugout has 2-footthick walls and a sleeping loft. But the dirt floor, crude furnishings and small interior suggest the difficulty of long winters spent in such cramped quarters, and the toll such times took on settlers like the pioneer wife depicted in O.E. Rolvaag's seminal novel, Giants in the Earth.

"The sod house was an austere reflection of an austere life," writes Jean Caspers in Compendium History of the Dugout and Sod House in Minnesota. "Times were hard and we can only with difficulty imagine that sod-house life could have been at all pleasant. But just as the pioneer devised sod houses to bear the assaults of nature, he also strengthened his spirit to meet the con-

stant assaults on his constitution and resolution."

Today in areas of Great Britain, France and Scandinavia "people still live in pits dug in the ground roofed over by poles and bark, sometimes extended above ground by walls of sod," Kennedy writes. The ecology movement of the 1960s and '70s sparked, with a nod at sod houses, an earthsheltered housing boom that echoed around the world. More recently, the June 1993 issue of Architectural Digest featured a Montana ranch house sporting a sod roof "inspired by pioneer sod-roofed houses," said the architect. But the McCone sod houses, for as along as they stand, are solitary reminders of a pioneer architecture and lifestyle that vanished, almost as quickly as it appeared, from the American landscape.



# **Advertising Index**

Adolfson and Peterson, p. 2

AIA Documents, p. 10

Albinson, p. 6

H. Robert Anderson &

Associates, p. 52

Aspen Design Conference, p. 8

The Carnes Group, p. 12

Consulting Engineers Council, p. 52

Directory of Consulting Engineering

Firms, pp. 53-59

Directory of Landscape Architecture

Firms, pp. 47-51

Engineering Design Group, p. 12

Damon Farber Associates, p. 14

Gausman & Moore, p. 14

KETIV Technologies, p. 14

Minnesota Architects, Cov. IV

Minnesota Ceramic Tile Industry,

Cov. III

Minnesota Masonry Institute, p. 16

MountainStar, p. 52

NSP, p. 1

Prairie Restorations, p. 4

Shiely Masonry Products, p. 6

Spancrete Midwest, Cov. II

# Credits

(We encourage you to support the following architects, consultants and suppliers)

### **Project: Carlson Outbuildings**

Location: Northern Wisconsin Client: Carlson Architect: Salmela Architect Project architect: David Salmela Project designer: David Salmela General Carpenter: Jerry Martinson Photographer: Jim Brandenburg

### Project: Conceptual River Corridor Plan: A Neighborhood-based Plan for the Upper River Corridor

Location: Mississippi River, Minneapolis Architect: Scott Wende Architects Principal-in-charge: Scott Wende Consultants: Citizens for a Better Environment

### Project: Knox Garden

Location: Minneapolis Client: The Sustainable Resource Center, The Minneapolis Park and Recreation Board Architect: Loom Principal-in-charge: Ralph Nelson Project team: Ralph Nelson, Raveevarn Choksombatchai, Ben Awes, Dean Johnson, Don Myers, An Maki, Paul Pavlak Contractor: Volunteer labor Photographer: Ralph Nelson

### **Project: Cowles Farmhouse**

Location: Shafer, Minn.
Client: John Cowles Jr. and Sage Cowles
Architect: Meyer, Scherer & Rockcastle
Principal-in-charge: Thomas Meyer
Project manager: Barry Petit
Project architect: Marc Asmus
Contractor: Lawrence Creek Construction
Interior design: Lynn Barnhouse (MS&R)
Landscape architect: Herb Baldwin
Photographer: Lea Babcock,
Nick Wheeler

### Project: Lemington Municipal Transit Hub

Location: Minneapolis Client: City of Minneapolis Architect: Ellerbe Becket Principal-in-charge: Rich Varda Project manager: Greg Nook Project architect: Pat Bougie Project designer: Rich Varda Project team: Mark Wentzell, Bruce Paulson Structural engineer: Ellerbe Becket Mechanical engineer: Ellerbe Becket Electrical engineers: Ellerbe Becket Contractor: Kraus Anderson Interior design: Ellerbe Becket Photographer: John Miller of Hedrich Blessing

### Project: Origen Center

Location: Menomonie, Wis. Client: Phillips Plastics Corporation Architects: James/Snow Architects Principal-in-charge: Julie Snow Project architect: Douglas Coffler Project team: Paul Gates, Paul Yaggie, James R. Larson, Michael Sheridan, Nancy Blankfard, Nathan Knutson Structural engineer: Meyer Borgman Johnson Mechanical engineer: Erv Smith Service America Electrical engineer: Seymour Davis Seymour Contractor: Schwabe Construction Acoustical consultant: Kvernstoen Kehl Photographer. Don F. Wong

r	е	р	r	i	n	t	s
		ORE	DER AM	REPRIN	N T S		
r	е	р	r	i	n	t	S
AN	D GET T	HE MOS	T FOR Y	OUR M	ARKETIN	G DOLL	AR
r	е	р	r	i	n	t	S
	C	USTOM F	O R M A T 1	ING A	VAILABL	E	
r	е	р	r	i	n	t	S
		FOR MOF	REINFO	RMATIC	ON CALL		
r	е	р	r	i	n	t	S
		PETER R	AND, A	IA, PUI	BLISHER		
r	е	р	r	i	n	t	S
			612/338	-6763			
r	e	р	r	i	n	t	S



The Lyceum Theater (1891-ca. 1962), Superior Street at Fifth Avenue W., Duluth.

n 1890, When Andreas M. Miller, a rich Duluth lumber baron and railroad magnate, decided his city needed a prestigious theater, he quickly set the project in motion. To design this building, the Lyceum Theater, he hired Duluth's busiest architectural team, Oliver G. Traphagen and Francis W. Fitzpatrick, who would also design such city landmarks the Fitger's Brewery, First Presbyterian Church, the Duluth Board of Trade and the Torrey Building.

The Lyceum, situated on Superior Street opposite the Spalding Hotel, became a massive Romanesque structure that was dubbed the "handsomest and costliest building in the Northwest." Most of the 6-story exterior—rising to a

seventh at the corner towers-was constructed from brick with sandstone corner quoins. On the lower two levels. however, Traphagen and Fitzpatrick alternated the sandstone and brick, and the triple-arched entrance was decorated with detailed carvings and ornamentation. A pair of stone lions guarded the front steps and several businesses occupied street-level storefronts.

Inside, the auditorium contained the largest stage in the Upper Midwest. Frescoes and bronze fixtures created "such a sensation in the beholder, as he gazes on the magnificent scene of gold and light, that he instinctively thinks of the story of Solomon's temple and the story of Aladdin," observed the Duluth Tribune upon the opening of the theater on August 3, 1891.

The Lyceum's alleged resistance to fire was highly publicized. Years later, when Fitzpatrick left Duluth to advance his architectural career, he became known as "the father of the fire-prevention movement."

Like many turn-of-the-century theaters, the Lyceum eventually became a movie palace. It also briefly housed Duluth's first radio station, WJAP, in 1922.

Duluth's Gateway Urban Renewal Project of the early 1960s spelled the doom of the Lyceum, along with many other buildings in the area. After the theater was razed, the lions went to the Duluth Zoo. Jack El-Hai