

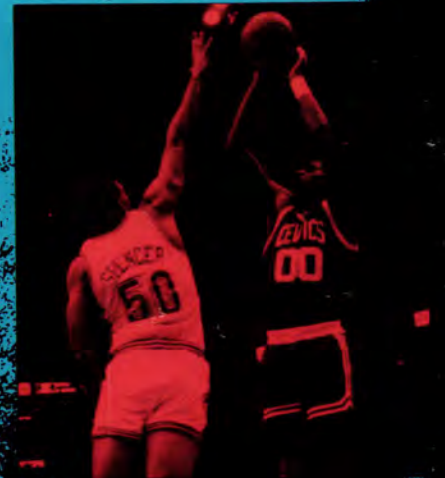
AM

architecture minnesota

HOT



SPOTS



N23942/S24340
Matthew Libbets
5300 Fremont Ave S
Minneapolis, MN 55419
Exp 12/16/91



FGA

WALLCOVERING • FABRIC • PAINT



PRATT & LAMBERT PAINTS, EXCLUSIVE CALIBRATED
COLORS IV FEATURED AT FRED G. ANDERSON,
WHERE THE EXPERT ADVICE IS AS GOOD AS OUR PAINTS!



FRED G. ANDERSON, INC.

5825 EXCELSIOR BLVD. • MINNEAPOLIS, MN 55416
MN 612-927-1812 US 800-365-2222

KANSAS CITY • DES MOINES • ST. LOUIS • CHICAGO • MILWAUKEE • DENVER • INDIANAPOLIS • LOUISVILLE

Here's what the AIA Benefit Insurance Trust Means to You...

Consistently affordable rates and less expensive than other plans over time

The only insurance plans endorsed by the National AIA

Owned and operated by AIA members -- the Trustees oversee the plans to make sure you get the best value available

AIA/Trust

Easy to administer because you can call TOLL FREE for fast and accurate answers to any questions you may have

Developed specifically for architects with options that let you design the plan

**Call for free information kits
1-800-343-2972**

**Life Insurance and Major Medical Plans
available to members, employees and families**

Sole proprietors interested in life insurance should call (202) 898-0944.



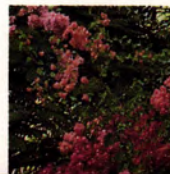
SKYLIGHTS

Kalcurve by Kalwall



Phillip MacMillan James

New Brighton City Hall and Police Department
Lindberg Pierce Inc.
C.O. Field Co.



Custom windows and skylights for over 40 years.
Distributed and installed by

W.L. Hall Co.

14800 Martin Drive
Eden Prairie, MN 55344
(612) 937-8400

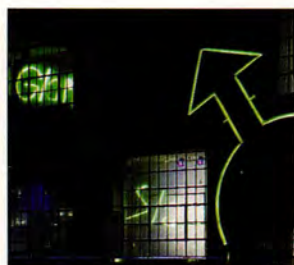
AM

architecture minnesota

VOL. 18 NO. 1

THE REGIONAL DESIGN ARTS MAGAZINE

JANUARY/FEBRUARY 1992



16 Industrial chic at
Glam Slam



20 Architecture of ice

- 5 Sketches
- 7 Previews
- 9 Up close: Richard Zehring in
St. Paul, by Jennifer Waters
- 12 Insight: Designing for winter,
by Barbara J. Knox
- 15 Editorial: Winterizing Minnesota

-
- 16 Niteclubbing: Two new
downtown bars,**
by Eric Kudalis
 - 20 Chilling tales: Historic
St. Paul ice palaces,**
by Mary Jean Jecklin
 - 24 The sporting life:
Three new athletic facilities,**
by Bruce N. Wright
 - 30 Architecture by bus:
University Avenue,**
by Kristy Aldrian and
Steven Buetow
 - 36 The art of diversity:
Ankeny, Kell, Richter &
Associates, by
Jennifer Waters**
-

- 43 Details
- 46 Directory of engineering firms
- 54 Advertising index
- 55 Credits
- 56 Lost Minnesota

Cover: Happening places in the Twin Cities. Background image: Glam Slam. Architects: KKE Architects. Photo: Rusley Design and Photography. Inset images, clockwise from top: The 1992 ice palace. Architects: Rust Architects. Photo: Courtesy St. Paul Winter Carnival Assoc. Timberwolves Arena. Architects: KMR Architects. Photo: Shin Koyama. Bocce nightclub. Architects: Shea Architects and Richard D'Amico. Photo: Parallel Productions

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. 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: \$15 for one year, \$2.75 for single issue. Postmaster: Send address change to *Architecture Minnesota*, International Market Square, 275 Market Street, Suite 54, Minneapolis, MN 55405. Second-class postage paid at Minneapolis, MN, and additional mailing offices. Advertising and Circulation: *Architecture Minnesota*, International Market Square, 275 Market Street, Suite 54, Minneapolis, MN 55405. (612) 338-6763. Printed by St. Croix Press, Inc. Color separations by Riverside Color. Copyright 1992 by *Architecture Minnesota* (ISSN 0149-9106).



24 Neon art at Target Center



36 Inside with AKR

Editor
Eric Kudalis

Contributing Editors
Bill Beyer, John Coughlan, Jack El-Hai, Robert Gerloff, Barbara J. Knox, Camille LeFevre, Sandra LaWall Lipshultz, Bruce N. Wright

Correspondents
John Albers, Bette Hammel, Janet Johnson, Janis LaDouceur, John Larson, Harold Skjelbostad, Sara Stafford, Janet Whitmore

Graphic Design
Rubin Cordaro Design

Photographer
Don F. Wong







Contributing Photographer
Hilary Bullock

Advertising Sales
Judith Van Dyne, Director
Lori A. Lickteig

Circulation Distribution
Gina Sekelsky

Publisher
Peter Rand, AIA

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



AIA Minnesota A Society of the American Institute of Architects

Board of Directors
Arvid Elness, FAIA, President
C. Jay Sleiter, AIA, President-Elect
Howard Goltz, AIA, Secretary
Alexander Ritter, AIA, Treasurer
Duane Kell, AIA, Immediate Past President
Gail Andersen, AIA, President,
Minneapolis Chapter
Eldon Morrison, AIA, President,
St. Paul Chapter
Steven McNeill, AIA, President,
Northern Minnesota Chapter
William Armstrong, AIA, Director
Peter Carlsen, AIA, Director
Christopher Colby, AIA, Director
Steve Edwins, AIA, Director
John Klockeman, AIA, Director
Linda Ostberg, AIA, Director
Dennis Probst, AIA, Director
David Schilling, AIA, Director
Harrison Fraker, FAIA, Director
Della Ihms Kolpin, AIA,
Associate Representative
James Miller, AIA, Regional Director
Beverly Hauschild, Hon. AIA,
Executive Vice President
Peter Rand, AIA, Executive Vice President

AIA Minnesota Publications Committee

Sarah Susanka, AIA, co-Chair
Janet Whitmore, co-Chair
Mina Adsit, AIA
John Albers, AIA
Heather Beal
George Cundy, AIA
Howard F. Goltz, AIA
Janet Johnson
Andrea Stephenson Komschlies
Carolyn Krall, AIA
Janis Ladouceur
Stephen P. Patrick, AIA
Harold Skjelbostad
Sara Stafford
Conne Turk

Minnesota Architectural Foundation

Leonard S. Parker, FAIA, President
John Gaunt, AIA
Larry Millett
James O'Brien, AIA, Vice President
Ralph Rapson, FAIA
George Riches, AIA, Treasurer
Robert Rietow, AIA
David Runyan, AIA
Duane Thorbeck, FAIA, Secretary

AIA Minnesota Staff

Beverly Hauschild, Hon. AIA,
Executive Vice President
Peter Rand, AIA, Executive Vice President
Deanna Christiansen, Program Director
David Gardner, Financial Manager
Eric Kudalis, Editor
Lori Lickteig, Advertising Sales
Gina Sekelsky, Information Systems Director
Judith Van Dyne, Director of Marketing

Minnesota AIA
International Market Square
275 Market Street, Suite 54
Minneapolis, MN 55405
(612) 338-6763

DRYWALL



—Beauty
—Economy
—Versatility
—Speed

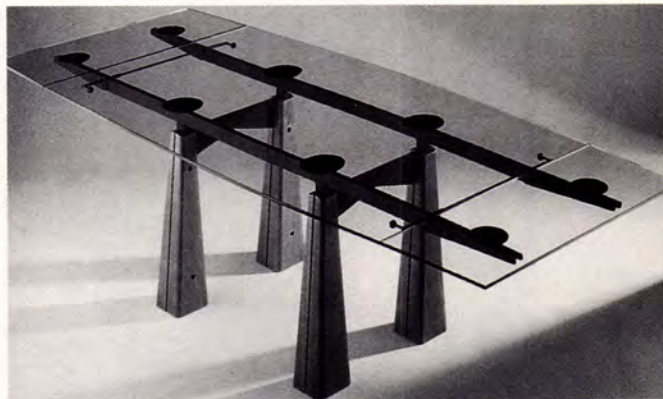
Project: Embassy Suites
Architect: Bentz Thompson
& Rietow
Owner: United States
Development Corporation



Minnesota
Drywall Council
(612) 546-5416

New product

Coda Design Studio in Minneapolis has found a place for those extra tables leaves—right under the table for everyone to see. The ANDANTE features flip-down leaves that tuck under the table with a flip of a lever. Originally unveiled at the International Contemporary Furniture Fair in New York and NEOCON in Chicago, the steel-frame table is finished in a black, textured powdercoat with mahogany legs and topped with rectangular or boat-shaped half-inch glass.



High-speed biking



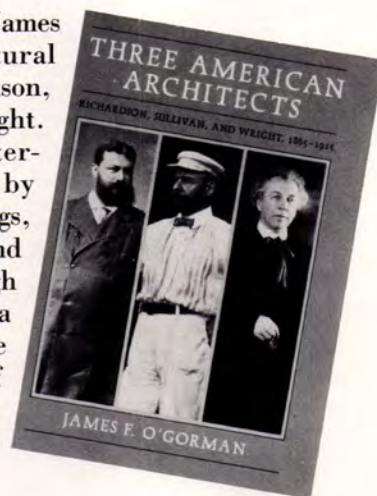
Indianapolis has its auto-racing track, now Minneapolis has its cycling track. And just as the other 'apolis track has brought world attention to the Midwest, the new Velodrome promises to shine the light on Minneapolis as it hosts national and international cycling competitions.

Located at the National Sports Center, a 92-acre training-and-competition complex in Blaine, the Velodrome was designed by Ralph Schurmann, a West German architect whose firm is responsible for some of the world's fastest cycling tracks. Similar to the velodrome in Barcelona, Spain, the site of the 1992 World Olympics, the Minnesota version is the first all-weather wood cycling track in the U.S., far outstripping the standard concrete fare. The architect used African Afzelia, one of the hardest known woods, for the high-speed, 25-meter-circumference track. The wood is impervious to weather and allows bikes to reach upward of 85 kilometers per hour.

The National Sports Center, designed by TKDA Architects in St. Paul, offers training facilities for soccer, track and field, wrestling and weightlifting.

Hot off the presses

In *Three American Architects*, author James F. O'Gorman examines the architectural contributions of Henry Hobson Richardson, Louis Sullivan and Frank Lloyd Wright. O'Gorman analyzes the creative inter-relationships between the three men by focusing on specific designs and buildings, demonstrating how they shared ideas and theories and built upon them through their successive careers. O'Gorman is a professor of history at Wellesley College and has written previously on the life of H.H. Richardson. *Three American Architects* is published by the University of Chicago Press.



The Midwest in American Architecture, edited by John S. Gardner, features a series of essays examining the rich variety of the region's architecture. By looking at major figures and buildings—and even some hidden treasures of the Midwest—the book demonstrates that midwestern architecture is, indeed, more than the sum of a few Chicago high-rises or Prairie-style houses. Among discussed architects and their works are George Grant Elmslie, Louis Sullivan, Walter Burley Griffin and S.S. Beman. *The Midwest in American Architecture* is published by the University of Illinois Press.

HOW ANDERSEN DID JUSTICE TO AN OLD TENNESSEE COURTHOUSE



Washington County Courthouse in Jonesborough, Tennessee

As one of the most stately buildings in the oldest town in Tennessee, the Washington County Courthouse in Jonesborough deserved and needed a lot of special attention.

Built in 1913, this historic landmark was not aging gracefully. Major renovation—more than 1.6 million dollars worth—was required. A year-long project. "Inside, it was a major redesign," explained architect Joe Lusk of Beeson Lusk and Street in Johnson City. "New plumbing. Heating. Air conditioning. New decor. Improved lighting and sound systems. We even added an elevator and new stairs.

"But outside, we tried to retain the original look of the building. To preserve its historic nature."

Andersen Windows Distributed By:



**INDEPENDENT
MILLWORK,
INC.**

9420 83rd AVENUE NORTH
MINNEAPOLIS, MN 55445
(612) 425-6600

Bill Enright, CSI CDT
Architectural Representative



**PACIFIC MUTUAL
DOOR COMPANY**

2655 FAIRVIEW AVENUE NORTH
ST. PAUL (Roseville) MN 55113
(612) 631-2211

Brad Gregerson
Architectural Representative

To do this, Lusk first looked to local millwork houses for custom windows. The cost was prohibitive.

Fortunately, an Andersen sales representative had another idea: By stacking standard Andersen® windows and adding a custom designed vertical muntin, the look of the old double-hungs was replicated. And, by taking advantage of the Andersen® High-Performance insulating glass in their Perma-Shield® windows, the requirement for high energy efficiency was answered.

"Best yet," concluded Lusk, "we were able to save roughly \$30,000 using Andersen® windows. And that makes everybody happy."

Come home to quality.



Andersen

AM

previews

Faculty Exhibition MCAD Gallery Through Jan. 5, 1992

This exhibit at Minneapolis College of Art and Design showcases the works of more than 40 artists and designers from the faculty. On view will be painting, sculpture, print-making, drawing, mixed-media, photography, film, video-and-computer art, as well as graphic, architectural, product and clothing design.

For more information, call (612) 874-3785.

AMERICAN ART: The Fifties through the Seventies Minnesota Museum of Art Jemne Building Through Jan. 19, 1992

Post-war America saw great artist changes as new trends and experimentation emerged, with international focus on New York. "The Fifties through the Seventies," which pulls painting, drawing, print and sculpture from the museum's permanent collection, as well as from area museums, examines a broad range of artistic expressions, including Abstract Expressionism, Pop Art, Color Field painting, Op Art and Photo Realism. Represented are several key artists, among them Willem de Kooning, Richard Lindner, Robert Motherwell, Louise Nevelson, Robert Rauschenberg, Frank Stella and Andy Warhol.

For more information about gallery hours or special programming, call MMA at (612) 292-4355.

Corey Sevett: Sound Art Anderson & Anderson Gallery Jan. 25-Feb. 29

The urban sounds of Minneapolis's Uptown district is the subject of "Newfound Street Sound," a sound-

Lake Superior Design Retreat Fitgers Inn and Spirit of the North Theater Duluth Jan. 31-Feb. 1

In the bitter dead of winter, when the snow is piling up to the roof, what better place is there for a weekend retreat? Duluth, of course. And in celebration of the latest arctic blast, the American Institute of Architects Minnesota launches its fourth annual Winter Design Series with a host of speakers who will warm your chilled bones. Among the featured speakers will be Minnesota author and humorist Bill Holm, whose most recent book is *Coming Home Crazy*; Mike Plant, a sailboat designer from Rhode Island who has competed in 'round-the-world sailboat races; and Frank LaGiusa, a lighting expert from General Electric, who will discuss the strategies of lighting such major monuments as Mount Rushmore and the national Christmas tree.

After the presentations, you will have plenty of opportunities for extracurricular, snowtime activities—like the annual sleigh ride through sunny Duluth. For those with design finesse, there's also the "Why did the chicken cross the bridge?" contest, in which participants will be asked to design a footbridge for the Temperance River in Minnesota's Temperance River State Park.

So come to Duluth. Bask in the cold. Enjoy conversation with the guest lecturers. You won't regret it. The program is cosponsored by Minnesota Power.

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



Minnesota humorist Bill Holm will be among the featured speakers at the Lake Superior Design Retreat.

art installation by Corey Sevett. The 20-minute, 4-channel work, originally written for the streets at Lake and Hennepin, utilizes electronic keyboard, flute, harp and other percussion instruments. In addition to Sevett's exhibition, the gallery also will feature the works of sculptor Robert Gehrke and painter Roger Kast.

For more information, call (612) 332-4889.

AIA Minnesota Centennial Celebration Landmark Center St. Paul Feb. 21

Get ready for the gala to end all galas. The American Institute of Architects Minnesota kicks off its year-long centennial celebration with food, fun and fantasy at St.

Continued on page 52

S T A T E O F T H E

ART



Dayton's Southdale, Edina, Minnesota
Design Consultant: Slomanson, Smith, Barresi
Architect of Record: Frederick Bentz / Milo Thompson / Robert Rietow, Inc.
General Contractor: Adolfson Peterson

Great designs deserve state-of-the-art technology. At Super Sky, we have been finding better ways to help you use skylights for 61 years. Rapid technological advancements in design, materials and fabrication techniques have made our skylights of the Nineties better than ever before:

GLASS: Let Super Sky's glass experts help you choose from a nearly infinite variety of new glazing materials.

SEALANTS: New silicone sealant materials make skylights more watertight than ever before. Careful application by experts ensures superior adhesion, and a lasting seal.

DESIGN: Our newest flush glazed and total flush glazed designs minimize traditional crossbars for stunning overall glass looks with lower maintenance costs and greater design flexibility.

We think the more you know about skylights, the more you'll want to work with Super Sky.

We offer

- ☐ Design assistance and engineering analysis.
- ☐ Super Sky's experienced installation crews.
- ☐ Start to finish responsibility.
- ☐ And a comprehensive **TEN YEAR GUARANTEE AGAINST LEAKS AND DEFECTS.**

Find out what's new in skylighting. Discover our latest designs at Mall of America. For more information, see Sweets 7.8 SU or call your nearest Super Sky representative:



Architectural Consultants, Inc.
5500 Lincoln Drive, Suite 155
Edina, Minnesota 55436
(612) 935-9800

Super Sky Products, Inc.
10301 N. Enterprise Drive, Mequon, Wisconsin 53092
(800) 558-0467

AM

up close

Richard Zehring: Chilling out in St. Paul

By Jennifer Waters

If Minneapolis is trendy and St. Paul traditional, then that makes Richard Zehring downright conventional. He's been publicly described as honorable, honest, decent and ethical—in that order—qualities that have a tendency to be matched with someone who has more of an endemic bent.

While his lanky 6-foot-3-inch stature and coarse white-gray hair sets him apart from a crowd of businessmen, there's nothing in his demeanor to suggest that he's anything but terribly congenial and totally attuned with the issues facing St. Paul.

In the 19 years that Zehring has lived and worked in the Twin Cities, almost all of that time has been in downtown St. Paul, where today he works in real-estate consulting as the other half of Zehring & Angelson Co.

"St. Paul is in my blood," he says unapologetically. It sounds like the chorus of a smarmy "I-love-my-city" song, but when you hear Zehring, 43, say it, you know he means it. Never mind the fact that he's been involved in no fewer than a dozen of the city's most prestigious and visionary boards, councils and committees. And forget also that he's held that esteemed of all St. Paul titles, King Boreas of the Winter Carnival in 1988. Zehring is one of those city leaders who truly believes in his city for pure—almost altruistic—reasons: It's a nice city in which to live.

In his latest role as chairman of the board of the 1992 St. Paul Winter Carnival, Zehring again does



HILARY N. BULLOCK

Richard Zehring, chairman of the St. Paul Winter Carnival, expects the annual winter festival to attract nearly 2 million visitors during Super Bowl weekend.

about the only thing he knows how—that's to take on a challenge. For 104 years, the St. Paul Winter Carnival has been the highlight of the long, blustery winters Minnesota has become famous for, ultimately making the job of chair fairly formulaic. But this year, the National Football League will blaze through town during Winter Carnival week for what has been locally dubbed "The Minnesota Warm-Up," but what the NFL simply refers to as the Super Bowl. That puts pressure on St. Paul—and its Winter Carnival chair—to perform well under the glare of the national spotlight and to provide a package of entertainment possibilities that will wow even the most complacent out-of-town sports enthusiasts and reporters.

No problem, says Zehring, who believes that the city and the Winter Carnival are rising to the occasion.

This year the Harriet Island ice castle, long a symbol of St. Paul's gala, will be the largest yet. A classic version of a medieval palace, the castle will stand 150 feet high on a 200-foot to 240-foot base—roughly equivalent to the size of the Northstar block. It will weigh about 21 million tons and include 17 towers, flying buttresses, and colored nylon canopies that encircle a 15-story tower. While the interior of the castle is not open to the public, it will be surrounded by a frozen moat, ideal for ice skating and walkways. The city expects it also will put St. Paul in the limelight during a Minneapolis Metrodome event, and that it will draw a whopping 2 million people, placing it first on the list of most-visited attractions in the city. The price tag is a massive \$1 million

Continued on page 53

All you hear about Wall Decor leaves you blank?



Wall Decor?, you say. No problem, I say. I'm Drew Kalman, President of PS Decor. I have 3000 solutions to fill the blanks—the selections in the Past Tense™, Scenic and Custom Collections. Imagine the impact of a larger-than-life locomotive rushing right at you? Or your own great outdoors—indoors? Got the picture? Fantastic!

Looking for 19th century charm or turn-of-the-century nostalgia, or the timeless beauty of Mother Nature? The PS Decor Collections match your imagination with the right tone your theme demands. Stuck for the perfect image and it's not in stock? Look to PS Decor to turn your idea into reality.

Any size. Anywhere. Any time. PS Decor is your single source for wall decor. We feature Cibachrome® for brilliant prints and display transparencies... guaranteed for 25 years. We fill the blanks with museum-quality black-and-white photomurals, too. Mounting and framing add the finishing touch.

I've spent ten years setting the standards in the photo decor business. That means treating your project like a special order—because it is! That means photomurals exactly to your specifications. And following through to the installed wall.

Want to hear more? I'd like to fill you in about PS Decor. Write or call, 612/522-7741, for samples and exciting new ideas. At PS Decor, the sky's the limit... so far.



A Division of Photographic Specialties

1718 WASHINGTON AVENUE NORTH/MINNEAPOLIS, MN 55411

THE BOLD LOOK OF **KOHLER**

KOHLER

DISTRIBUTORS

ARE

Goodin Company

Minneapolis (612) 588-7811
St. Paul (612) 489-8831
Duluth (218) 727-6670
Detroit Lakes (218) 847-9211
St. Cloud (612) 259-6086

Graybow-Daniels Co.

Div. of Westburne Supply

Blaine (612) 780-9782
Brainerd (218) 829-9794
Burnsville (612) 894-9385
Chaska (612) 448-7051
Duluth (218) 628-2844
Eau Claire, WI (715) 835-5151
Fargo, ND (701) 241-8412
Faribault (507) 334-5568
LaCrosse, WI (608) 784-6181
Mankato (507) 388-2916
Maplewood (612) 779-7319
Milwaukee, WI (414) 771-7200
Minneapolis (612) 332-1155
Overland Pk, KS (913) 541-1211
Plymouth (612) 544-9561
Plymouth (612) 557-0660
St. Cloud (612) 251-8191
Willmar (612) 235-1131
Wisc. Rapids, WI (715) 421-5300

Heles Supply Company

Worthington (507) 376-6101
Sioux Falls (605) 336-2083

Pipeline Supply, Inc.

Hopkins (612) 935-0445
Blaine (612) 784-4478



Handles Well

Taboret™ Faucets. When it's time for a change, recommend Kohler faucets. It's the one-of-a-kind combination of commercial durability and distinctive residential style. Interchangeable acrylic and metal handle inserts, included with every faucet, are a no-cost option that can be changed to match almost any decor. And Taboret faucets feature solid brass construction and reliable, washerless System C™ ceramic valving. With its interchangeable looks, Taboret is an affordable way to get a handle on your best customer.

THE BOLD LOOK
OF **KOHLER®**

Designing for winter: A four-season garden takes a bite out of January

By Barbara J. Knox

When the snow started to fall this past Halloween, even the complacent among us were reminded that we live in the most serious of winter climates. We may pass a year or two in relative balmy temperatures, but the cold realities eventually come home to roost—for about five straight months.

Dealing with life in a winter city poses a unique set of challenges. Unlike our southern counterparts, we talk with ease about snowblowers and Thinsulate, skyways and space heaters. For architects, the issues get larger, but no less climatic: clustering buildings for maximum protection from the elements, planning for efficient snow removal, siting

structures for energy efficiency.

Indeed, all these issues and more are being regularly addressed by professionals from cold climates who gather to share information through the auspices of the Winter Cities Association, a group dedicated to realizing the potential of northern communities. At biannual conferences, this group attends seminars that deal with such far-flung topics as “In Quest of a Good Night’s Sleep in a Northern Climate” to “The Winter Car in the Year 2010.” Speakers devote time to issues of color, clothing and tourism, in addition to more purely architectural issues like urban planning, daylighting and energy-efficient design.

But while many professionals have focused on interiors—that is, shielding inhabitants from the rigor of a cold climate—others have begun to embrace the very outdoor obstacles that lend mythic status to our region: snow, cold and ice. In

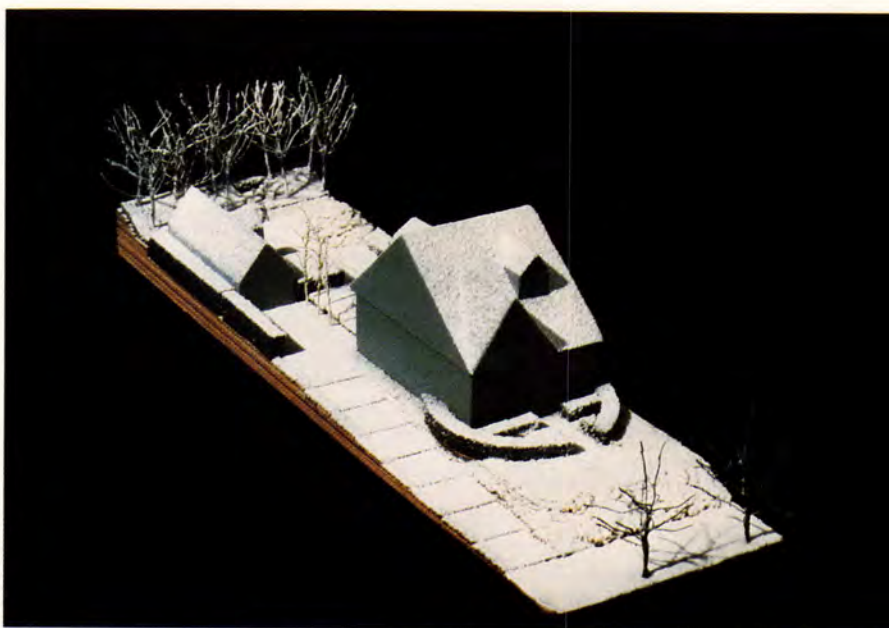
fact, there is a growing feeling among many architects and landscape architects that the time is past due to turn our attention to the winter landscape, to making the winter city not just more efficient within, but more aesthetically rewarding without.

Architect Bill Rogers, a member of the local chapter of the Winter Cities Association, summed up the philosophy when he wrote, “a more prosaic and less spiritual and artistic reason for making the winter city more livable is that, if we don’t, our inhabitants will continue their movement from the frost belt to the sun belt. This is a very real threat to northern cities.”

Landscape architect Tom Oslund of Hammel Green and Abrahamson has been dealing with just such issues, and recently completed a design for a winter garden located in Minneapolis. As he says, “During the long, midwestern winter, most gardens are abandoned for their subtlety and seemingly monochromatic character. Ordinarily, we regard a garden as a real space only when the vegetation and blossoming flowers are visible.” In Oslund’s scheme, the garden is designed for all four seasons, to be appreciated even through the deepest winter.

Oslund’s garden sits on a typical 45-foot by 150-foot city lot that slopes upward to the back of the property and organizes itself along the axis of the 1920s bungalow house. In both front and back, he has chosen vegetation for its aesthetic and practical applications.

Along the entry path to the house, for instance, Oslund planted a 5-foot-high hedge of *Arborvitae Occidentalis* to provide both color and wind protection. Within the hedge row, he added Japanese Red Leaf Barberry and Winged Euonymus to recall the windrows of agriculture indigenous to this region.



COURTESY HGA

Rather than shunning winter, architects are learning to embrace Minnesota’s five-month freeze. Landscape architect Tom Oslund of Hammel Green and Abrahamson designed a four-season garden (above) that becomes a sculptural oasis in the snow, and a lush landscape in summer (opposite).

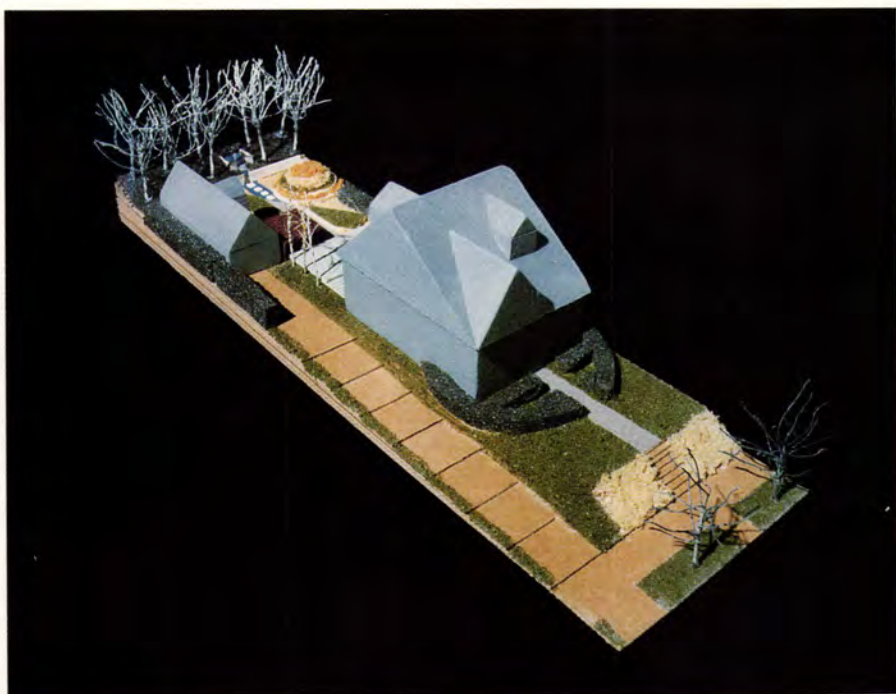
As he notes, "the *Euonymus*, with its corky horizontal branch structure, provides a perfect shelf for snow to collect, which elegantly contrasts with the vertically borne *Arborvitae* foliage."

It is not just Oslund's choice of plantings but his use of forms that also distinguishes the winter garden. A 2-level deck opens off the back of the house, connected by a crushed-granite path to a reflecting pool and steam fountain at the back of the site. Active year round, the steam fountain adds a ghostly dimension to the garden in winter, emphasizing Oslund's belief that, "while the garden is a very physical place in summer, it becomes a spiritual, psychological and emotional place in winter."

Between the deck and fountain, Oslund reinforces his design with a series of simple shapes and textures. A new, hardy strain of bamboo (*Yellow Grove Bamboo*) frames the deck along its southern edge; in winter, Oslund protects the bamboo with a canvas wrap, unveiling it once warmer temperatures prevail. Even in winter, the square-shaped stand of *Redosier Dogwood* sited along the northern façade of the garage provides a vivid splash of red against the snow, which accumulates in an undulating pattern over the *Little Blue Stem* prairie grass planted below.

Interested in our Minnesota winter light, Oslund also has chosen materials like native *Kasota* stone to best take advantage of the winter sun. A concentric perennial ring, planted with *Iris Sibirica*, *Campanula Carpatica*, *Veronica Latifolium* and *Hosta Lancifolia*, is built of *Kasota* stone, selected, says Oslund, "for its rich golden color, contrast, and its ability to reflect and illuminate the intense winter sun."

When he talks about the garden, Oslund constantly returns to the



ideas of emotional well-being, of spiritual awareness and visual stimulation. "The snow leaves a blanket so you see the elements ghosted beneath," explains Oslund. "You recall what is there. The garden is not dormant, just shrouded for a time." It is this ability to look at the garden, without necessarily being in the garden, and make connections to another time that fascinates Oslund. "You can stand inside and look out, even when it's 20 below zero, and make all these subliminal connections. You can look out, with the sun shining, and remember the raspberries, then go get them from the freezer. That's a very emotional, very positive connection."

Oslund's garden epitomizes the new thinking about winter-city living. Others advocate not just gardens, but whole new systems for integrating the natural winter landscape into our lives. In Sweden, urban planners accommodate skiing commuters with comprehensive

cross-country trail systems; in Ottawa, commuters can skate to work via groomed waterways. Countries like Norway and Sweden have used steam-heated pavements to remove snow since the 1950s. It is all these sorts of ideas that ambitious winter-city planners point to when they talk about realizing the potential of the northern city. Considering that our own Twin Cities, which feature a mean January temperature of 15 degrees, are even colder than, say, Greenland, it's perhaps past time to explore innovative ways to reach out into the landscape. Extravanzas like the St. Paul Winter Carnival, which celebrates rather than eschews the winter, are certainly a beginning place for changing our often negative thinking. Far-reaching architectural solutions, crafted especially for this rigorous climate, are hopefully not far behind.

Barbara J. Knox is a frequent contributor to Architecture Minnesota magazine.

There's More To Heat Than Fire

When you design that next project, why not consider an alternative space heating technology for your customers. ◇ Suggest the electric heat pump alternative. Electric heat has always provided the cleanliest, safest, and most efficient space heating. Today's electric heat pump technologies combined with our low special rate, make electric heat competitive with other fuels including natural gas. ◇ Whether you install a ground-source heat pump or combine an air-source heat pump with a furnace, the end result is the most efficient heating (and cooling) system available. ◇ Electric heat pumps can work for any floor plan and any type of construction — residential and commercial. They can also be installed to supplement domestic hot water needs. ◇ Since electric cooperatives produce electricity from an abundant domestic energy source, North Dakota

low-sulfur coal, the long-term price is stable and the supply is reliable. ◇ So recommend a genuinely contemporary space heating technology to complement your contemporary (and not so contemporary) design schemes. ◇ For more information, call the electric cooperative that serves your area or call **1-800-545-WARM**. Don't forget to ask about E.T.S. (Electric Thermal Storage) systems — another affordable electric heating alternative.

For a free brochure, "An Electric Heat Pump Can Be Right For You," fill out and send to: Northland Heat Pump Association, P.O. Box 811, Hopkins, MN 55343

Name _____
Company _____
Title _____
Address _____

Telephone _____

**Electric Heat.
Everyone's Warming Up To It.**



AM

editorial

Winterizing Minnesota When the television cameras turn to Minneapolis during Super Bowl weekend, the Twin Cities will have the opportunity to showcase its livable winter climate. The Super Bowl planning committee surely has plenty of winter-fun activities plotted for revelers that weekend—but not all the fanfare will be on football. The Winter Carnival, a St. Paul tradition for more than 100 years, will give out-of-towners a bone-chilling dose of northern comfort with the largest ice castle yet built. Architectural fantasies in ice (featured in a historic article this issue) have become symbols of Minnesota's intrepid embrace of winter. When the going gets tough, we build an ice palace and throw a party to show the world how impervious we are to subzero temperatures.

But the Winter Carnival and the romantic vestiges of the ice palace are short lived. Minnesota winters last a good five months. A few years back, an out-of-state architect, while reviewing submission folders for the AIA Minnesota annual honor awards, commented that none of the submissions—some 100—was photographed in the snow. Considering that this is a northern city, he was surprised that architects ignored winter.

We talk a lot about how the cold has made us sturdy, but we have, in fact, devised elaborate systems for escaping winter. The skyways and enclosed shopping malls are designed to disassociate us from the elements. The Crystal Court, Minneapolis's closest thing to a town square, securely shields us from the boreal bite. When we do step outside, we're confronted with downtown wind tunnels created by high-rises that block the sun.

The Winter Cities Association, which is holding its biannual meeting this January in Montreal, discusses design issues that allow us to enjoy winter despite the cold. Minnesota certainly is ripe for creative winter-city design. Winter landscapes, whether rural or urban, hold aesthetic potential, and some designers are beginning to tap that source. This month's *Insight* column looks at a garden that is as much about winter as summer, creating a visually appealing environment in the snow. Downtown St. Paul's recently completed Hamm Plaza, designed by architect Bill Pederesen and artist Jackie Ferrara, is an oasis in winter as well as summer, and a sculptural wall of ice at the twin Opus towers enlivens downtown Minneapolis in January.

There are other examples, but too often we shut the door tight once the first flurries start falling. It's time to move beyond interiors. Winter is a vast resource for innovative design.

Eric Kudalis
Editor

Niteclubbing

Two new bars light up Minneapolis's nightlife

By Eric Kudalis

Glam Slam

Prince's movie *Graffiti Bridge* slipped in and out of town last fall with hardly a peep, but Glam Slam, modeled after the film's nightclub, continues to shake the rafters in Minneapolis's historic warehouse district. Designed by KKE Architects with Spaces Interiors, a division of KKE, Glam Slam is industrial chic—1990s high-tech, audio-visual wizardry tucked into a 1920s warehouse shell, the perfect venue for the oh-so tragically hip to see and be seen.

Club owners Ruth Whitney Bowe, of the Fine Line Music Cafe, and Gilbert Davison, Prince's former bodyguard, wanted to create a decidedly urban nightclub with an industrial twist. They found inspiration in the Wyman-Partridge textile factory, a 12-story, concrete-framed structure with a granite façade and metal-framed sash windows.

Leaving the exterior largely untouched because of the building's historic designation, the architects focused on the interior. KKE started by punching through the concrete-slab, second-story floor and arranging the club on two levels. The private, upper-level lounge (reserved for those with \$3,000 for membership) overlooks the main dance floor, with a performance stage at one end and the techno-wunderwiz D.J. box prominently placed at the other.

Although inspired by the film, Glam Slam is not a carbon-copy of the movie set—but the spirit is there. For instance, many scenes were filmed in the alleys behind the Wyman-Partridge building. So the gritty feel of alley life is brought inside, seen particularly in a graffiti-painted "funk corner" stairwell leading to the second level. The architects further emphasized the urban-industrial theme by using exposed bolts and nuts, concrete-block walls, exposed mechanical systems, brushed steel and wire security glass. Concrete columns continue the theme, wrapped in unpolished steel and adorned only with



ERIK RUSLEY

KKE Architects used the historic Wyman-Partridge building (above) in Minneapolis's warehouse district for the setting of this nightclub, inspired by a similar club in the movie *Graffiti Bridge*. The dance floor (right) is at the center of the 2-level club. Although the club is designed for live performances—this is, in fact, Prince's official hangout—the high-tech audio/visual equipment is enough to keep the place hopping even when a band isn't on stage.





seams and rivet heads. The second-level steel railing conveys function over beauty as it supports the floor.

Sleeker elements that put the glamour in the Glam offset the stripped-down warehouse look. The columns' upper portions are painted in faux-marble finishes, with backlighting illuminating cast-relief images of the two owners and Prince. And a bar with a mirrored wall and purple vertical bands of fluorescent lighting counter the less polished materials.

From the graffiti walls to the technological wonder of the lights and sound, the individual parts create a backdrop for the real show—the people themselves. Glam Slam is nightlife fantasy.



A glitzy mirrored bar fronted by brushed-aluminum chairs (above) adds to the industrial-chic ambience. Art displays (left) highlight the members'-only upper level.

*Project: Glam Slam Nightclub
Client: Heaven and Earth, Inc.
Architect: KKE Architects
Interiors: Spaces Interiors*



D'Amico + Partners never takes the predictable route. For Bocce in Butler Square, the restaurateur wanted a sports bar with a sophisticated twist. Richard D'Amico says he combined masculine and feminine features throughout the bar. For instance, sleek, European-style chairs in the bar (above) are offset by mounted big-game trophies.

Bocce

A bocce court on the lower level of D'Amico + Partners' latest dining venture might suggest that this is a sports bar. But make no mistake. Bocce is unlike any sports bar you've stepped into before.

"We wanted to create something fun—but still have a lot of style," says Richard D'Amico, whose company has created some of the Twin Cities' most innovative restaurants, including D'Amico Cucina and Azur. With Bocce, however, D'Amico wanted to reach a wider client base by offering a more casual atmosphere without sacrificing innovative design.

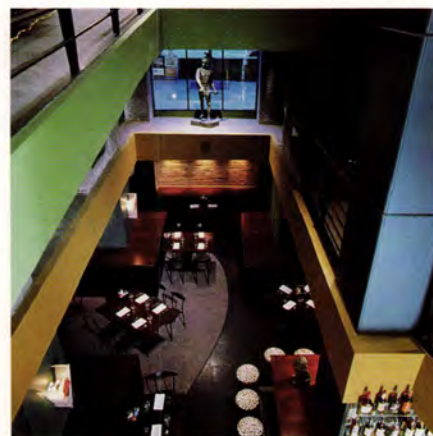
By all counts, Bocce succeeds. Located in Butler Square amidst the growing nightclub-and-restaurant scene of Minneapolis's warehouse district, Bocce is best described as an Italian cafe with a sports-theme twist. Like Glam Slam a few blocks away, Bocce is a decidedly urban bar and restaurant. But where Glam Slam opts for industrial chic, Bocce favors high-style eclecticism.

To accommodate a broader clientele, D'Amico divided the restaurant into different zones spread over several levels. Patrons enter from Sixth Street onto a mezzanine, which leads down to the bocce court and dining and bar areas, or up to more dining and a separate bar. The rooms are delineated by a diverse blend of deep colors, textures and furnishings, in which contrasting architectural and interior elements—including the heavy-timbered structural shell of Butler Square itself—combine to "create something new," D'Amico says.

The main bar, for example, blends "masculine" features with more refined and stylized accessories. Big-game trophies—of the deer, zebra and moose variety—are mounted on deep-red, padded walls. You might think, just for a moment, that you've stepped into a North Woods lodge. But sleek Italian tables and chairs speak of a high-end restaurant, while television sets keep you abreast of the game scores.

Bocce continues a zest for the unexpected downstairs, where patrons play on a green bocce court or dine on Euro-style tables designed by the restaurateur. As with the upper-level bar, contrasting materials are inventively applied. Deep-mustard walls contrast with the green playing court, and printed leopard-spot horsehide covers the bar stools and banquettes. Other materials, however, are quite utilitarian. The mezzanine and stairway are paved in the same brick used outside, and the floor, which resembles slate, is really concretet that has been scored and painted black. Custom-designed sconces, a bronze Roman warrior, and Chinese masks, among other art objects, complete the mix.

*Project: Bocce
Client: Sports Italia
Construction Documentation: Shea Architects, Inc.
Designer: Richard D'Amico/D'Amico + Partners
Contractor: PCL Construction Services*



D'Amico, working with Shea Architects, punched a hole through the mezzanine (above) to open the bar on several levels. The green bocce court (below) is on the lower level.



Chilling tales

A history of the St. Paul Winter Carnival ice palaces

By Mary Jean Jecklin

"My golly, it's beautiful, isn't it!" cried Harry Bellamy excitedly, while viewing the frozen edifice in F. Scott Fitzgerald's 1918 short story, *The Ice Palace*.

Fitzgerald's era of flappers, gangsters and bathtub gin, and that particular ice palace, all melted away long ago. But the public's infatuation with ice edifices remains rock solid. Today, 106 years after the first ice palace was built for the original St. Paul Winter Carnival in 1886, people still shiver with delight at the idea of a fanciful crystal palace made of frozen water.

For the 1992 "Great Minnesota Warm-Up" (Jan. 22–Feb. 2), Rust Architects is hoping for plenty of shivery weather because it is planning the world's tallest structure ever built of ice. Architect Bill Rust will blend castle and cathedral elements to create a traditional look and magical feel. The Medieval-style castle, with four wings and towers of

varying heights, will span 200 feet at its widest point, use 30,000 500-pound blocks of ice, and weigh up to 15 million pounds. State-of-the-art lighting and colorful, rip-stock nylon accents will add visual impact.

Rust's castle will wow the locals and out of towners arriving for Super Bowl XXVI on Jan. 26. In fact, according to Bob Carter, chief executive director of the St. Paul Winter Carnival Association, "Because building the 1986 palace [commemorating the Carnival's 100th anniversary] was such an enormous undertaking, we normally wouldn't go through this again so soon. But due to the attention generated by the Super Bowl, we didn't want to miss this marvelous opportunity." Marvelous though it may be, Carter, nevertheless, found building the 1986 palace so "incredible" that, "I hoped they'd never build another one in my lifetime."

Constructing ice structures has always been a catch 22. Everyone loves the romantic fantasies they generate. But moving from fantasy to frozen reality is a perilous venture. The effort is fraught with architectural problems like structural and thermal instability (melting), called creep (the tendency to gradually change shape).

When problems arose for the first people who built ice dwellings—the Eskimos—they simply constructed new igloos.

Revenge motivated Russian Empress Anna Ivanovna to build the first well-documented ice house in 1739 to 1740 on the frozen River Neva. She forced an out-of-favor prince to marry a servant and honeymoon in an architect-designed ice villa.

The first North American ice castle was built in 1883 for a Montreal winter carnival. Celebrations continued annually until a smallpox

COURTESY ST. PAUL WINTER CARNIVAL ASSOC.



Building the first ice castle in 1886 was a statewide effort. Communities from around Minnesota contributed ice blocks, and Stillwater offered the cornerstone. Spectators were astounded by the finished 10-story product, an electrically lit castle by Montreal architect A.C. Hutchinson.



Because it pushed technology to the limits, the 1887 ice palace, by local architect Charles E. Joy, is considered by many the most picturesque ever built. When it came time to storm the palace, almost St. Paul's entire population watched 25,000 carnivalgoers lay siege with 20,000 Roman candles.

epidemic hit the city in 1885, resulting in the cancellation of the 1886 carnival.

St. Paulites quickly decided to import the Montreal ice-castle architect, A.C. Hutchinson, and create their own carnival. They were eager to improve their image and prove wrong the Eastern journalist who had called Minnesota "another Siberia, unfit for human habitation." The first American "Crystal Carnival" and castle were a huge success. At a time when skyscrapers didn't exist and electricity was a novelty, revelers were awed by the enormous 10-story, electrically lit structure.

Since then, other northern cities have taken turns constructing ice architecture, including Quebec City; Ottawa, Ontario; Leadville, Colo.; and Sapporo, Japan. But only in St. Paul has the tradition transcended the decades.

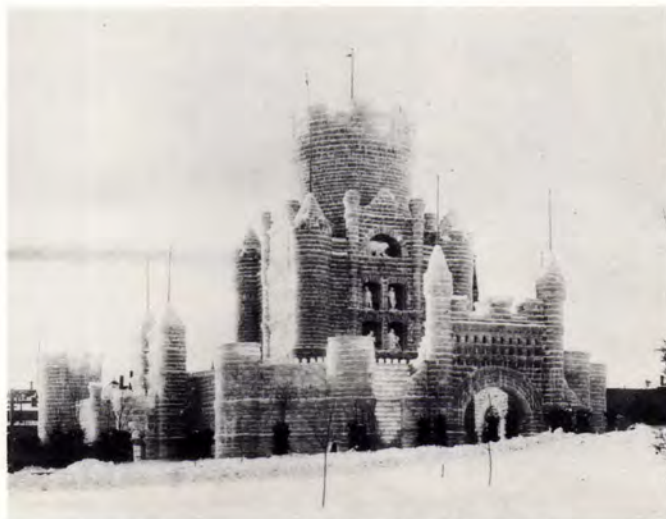
The 1887 palace, a Gothic design with flying buttresses by local architect Charles E. Joy, is the all-time favorite of Winter Carnival historian and ice-palace expert Bob Olsen. "Fantastic engineering features made it look transparent," he says. "It had an airy, delicate, icy look no other palace has had."

For sheer mass, the 1888 palace, also designed by Joy, was the largest ever built. It was 10 times bigger than the one built in 1886 and covered nearly one acre. Olsen says Fitzgerald knew of this palace's maze when writing his short story.

Minnesota is well known for its brutal winters. But unseasonably warm temperatures have contributed to construction problems for several palaces and brought many to inglorious ends. Both the 1889 and 1890 fortresses of ice were never built due to balmy Januaries.

Interest in carnivals waned until 1896 when Fort Karnival, a stockade and frontier fort made of ice, was built. But rain liquidated the ice structures and submerged the carnival in bankruptcy. Twenty years passed before St. Paul celebrated another winter carnival.

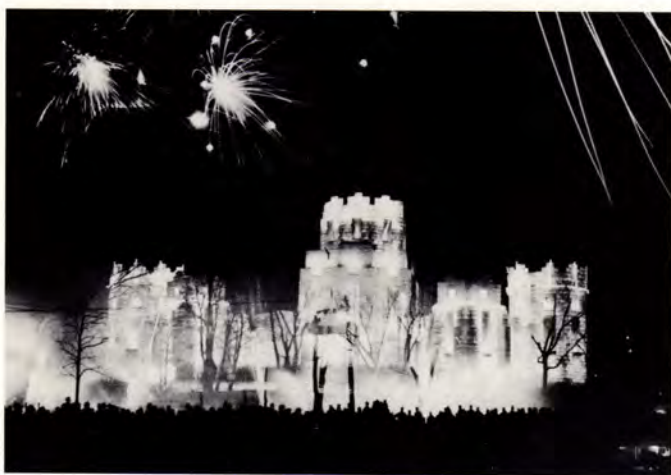
Olsen says Louis W. Hill, son of railroad tycoon James J. Hill, "got



Constructed of 55,000 blocks of ice, the 1888 palace, again designed by Charles E. Joy, was behemoth compared to the 1886 structure made of 20,000 ice blocks and the 1986 palace built of 6,000 blocks.



The 1938 ice structure, designed by a committee headed by Jack Horner of the St. Paul Public Works department, had a distinctively Art-Deco style. The electricity consumed by it could have lit a town with a population of 7,000 for a year.



Until the 1986 castle surpassed it in height, the 80-foot-high 1941 palace was the tallest built in this century. Impressions from the palace's foundation can still be seen on a Como Lake hillside. Most of the palaces built between 1937-1947 were designed by Clarence W. Wigington, chief design architect for the city of St. Paul.



Like the 1941 structure, a major appeal of the 1986 palace, by Ellerbe Becket, was its changing color. Alternating brilliant blue, fiery red, and pastel shades elicited breathtaking admiration from viewers.

the 1916 carnival going almost single-handedly." Both the 1916 and 1917 ceremonial ice forts were modest. When America entered World War I, such frivolities seemed inappropriate.

Winter carnivals were often held to stimulate sluggish economies. From 1937 to 1942, palaces were built annually. Highlights included an elevator in the 1937 building, an *Arabian Nights*-inspired palace in 1939, and a post office in the 1940 edifice. As in the past, the enormous 1941 castle, as well as the 1942 and 1947 structures, suffered from unseasonably warm weather.

Although carnivals have been held annually since 1947, palaces were not part the pagentry again until 1975 when Olsen, then a St. Olaf College student, designed and oversaw building one. "Its height was dictated by how high the forklift could lift a piece of ice."

Smaller palaces were constructed from 1967 through 1976. But it took 45 years, from 1941 until 1986, until a really magnificent model was again erected.

In 1986, St. Paul native Karl Ermanis of Ellerbe Becket Architects undertook building a palace that was part of all Minnesotans' "collective memory and imagination." Recalling his design, Ermanis says, "I wanted to figuratively weave the St. Paul Winter Carnival legend into a timeless palace that would be both fantasy and fantastic." His palace won numerous architectural awards. But Ermanis's most memorable experience occurred while walking across frozen Lake Phalen with hundreds of other people all streaming toward his creation. "It was one of those rare moments when you look at something you've designed and feel a closeness to the project while also marveling at it."

This year, when Bill Rust continues the tradition of building a glittering, magical castle, among the expected 2 million admirers may well be a postmodern, young Harry Belamy who looks up, sighs "awesome," and fantasizes about creating the next great palace of ice.

Mary Jean Jecklin is a writer living in Minneapolis.

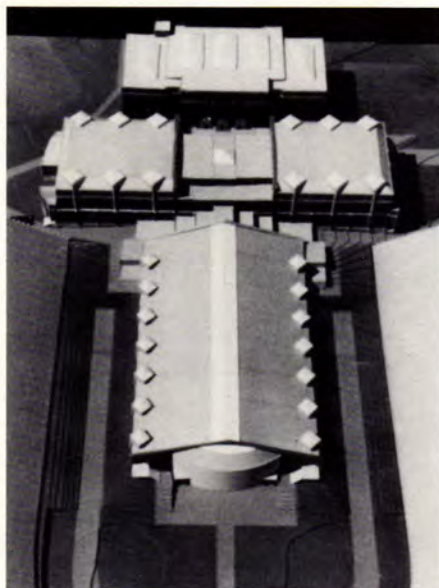


Architect Bill Rust hopes more than the weather will make chills run up and down viewers spines when they see his 1992 castle. "We're going to try to build the biggest castle ever, but also blend aesthetics of delicacy and intrigue."

The sporting life

Three new athletic facilities pump up downtown Minneapolis

By Bruce N. Wright



A core of racquet courts, locker rooms and elevators connects Cooke Hall (above) with the new Aquatic Center (bottom).

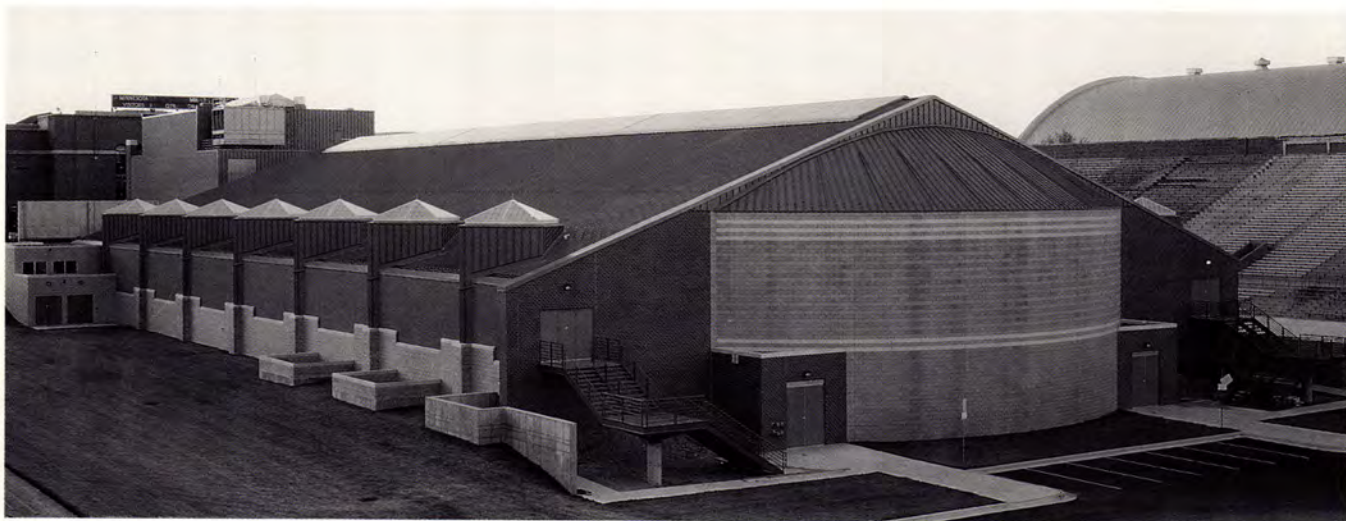
University of Minnesota Recreation and Aquatic Center

In its first year and a half of existence, the new University of Minnesota Recreation and Aquatic Center has secured quite a reputation. Not only was the facility the site of the 1990 US Olympic Festival for aquatic sports, it has been the venue for seven national swimming records, several Women's Big Ten swimming records and Masters Diving World records, and the site of the highest score for any dive in world history.

According to UM Athletic Director Duane Proell, the new sports center "ranks in the top three or four facilities of its kind in the country and has established itself as one of the fastest pools around, perhaps in the top five worldwide." In its 1991 rating of athletic facilities, *Athletic Business* magazine named the Aquatic Center one of the top-10 facilities in the nation.

By all accounts, the University of Minnesota Recreation and Aquatic Center, designed by The Stageberg Partners/Ralph Rapson Architects, exceeds all expectations.

Bright, cleanly designed and well organized, the new complex makes the most of formidable circumstances. Wedged between an existing recreation building, the 1935 Cooke Hall, and an obsolete football stadium scheduled for demolition, the 73,500-square-foot center, to be completed in several phases, houses the University's departments for recreational sports, physical education, and men's and women's athletics, each with their own demanding schedules. Phase one, shown here, connects the two existing pools in Cooke Hall with two new pools—a diving pool and a 50-meter competition pool. Subsequent phases will see the addition of 22 handball, racquetball and squash courts, two 5,000-square-foot exercise/weight rooms, two 13,000-square-foot gymnasiums for student recreational use, and the renovation of Cooke Hall.



CHRISTIAN KORAB

To combine several facilities into one, the architects located the new building on a central axis extending east from Cooke Hall. They then placed a core of men's and women's locker rooms on the lower level between the old and new pool buildings. This has the advantage of serving both buildings equally well and, by stacking later construction phases on top of this core, links future ball courts, exercise rooms and gymnasias with the same locker rooms.

The central core, already built up four floors to handle the expansion, is brightened by a large, truss-framed atrium that stretches from the lower level to its rooftop skylight. A glass wall visually links the atrium to the Aquatic Center. Thus, upon entering the atrium, the focus is upon the new pools and diving towers, framed by a curved apse and steel-arch proscenium that contains the stairway to the diving platforms. The extra-deep diving well, lined with dark-blue tile, provides a calm, no-current pool for controlled dives.

A continuous-ridge skylight and 14 perimeter-light monitors in the roof contribute to a diffused, nonglare daylighting that reduces the need for artificial lights, a fact appreciated by many athletes. Extra care also was given to reducing acoustical reverberation. Interior materials include an epoxy-painted steel structural frame, acoustic-metal roof deck, pale-green, acoustic-glazed tile walls, southern-yellow, pine bleacher seats and trim; and, clear anodized aluminum and stainless-steel doors, frames and fittings. The permanent bleachers seat 1,585 spectators, with deck space for an additional 1,200 seats.

The new UM Recreation and Aquatic Center works exceptionally well with existing facilities as it anticipates future needs for years to come.



The diving tower (above) is framed by a semicircular apse and steel-arched proscenium that creates the main focus of the swimming center. A ridgetop skylight and 14 light monitors brighten the interior of the center (below).



*Project: Recreational Sports Complex
Client: University of Minnesota
Architect: The Stageberg Partners
Contractor: Sheehy Construction*

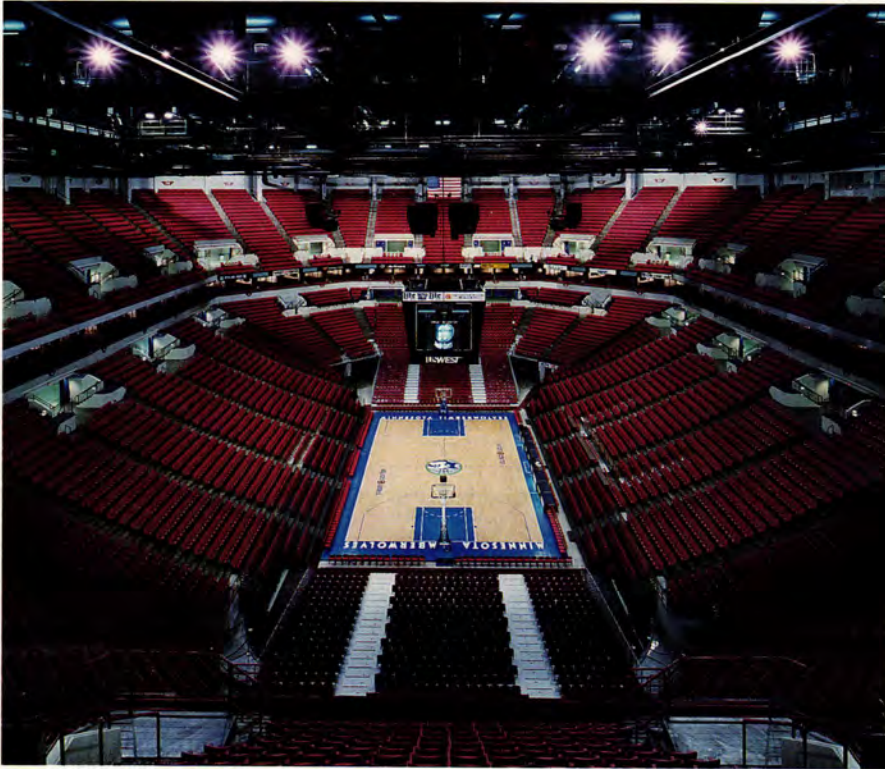
Target Center Athletic Arena

The new Target Center, designed by Minneapolis-based KMR Architects, Ltd., is anything but simple. Containing not only a 18,800-seat arena that converts from basketball to hockey formation, Target Center also holds a 150,000-square-foot health club with two gymnasias, 10 racquetball courts, two squash courts, a pool, three aerobic-dance studios, exercise and weight-lifting areas, a four-lane running track, plus locker rooms and juice bar, and an independently functioning video, recording and production studio, all underneath the building. When everything is in use, Target Center becomes a veritable beehive of activity, a city within a city.

Building the arena was no small task. For those who prefer numbers, a list of the building's specifications should prove the point: The main floor of the arena is 220 feet by 87 feet and weighs 2.5 million pounds. The floor is raised and lowered as one unit by an electronically controlled system of 98 screwjacks on synchronized motors. In the raised position, the floor is set for hockey; in the lowered position, basketball is the order of business.

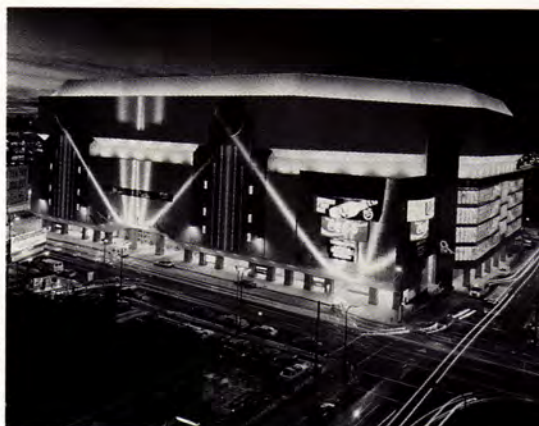
One hundred feet above the playing floor, six steel roof trusses stretch some 330 feet while two shorter trusses run 221 feet long, creating a 3,000-ton roof that can support a 290,000-pound load, ideal for many road shows. For those with their eyes on the game, a four-sided, video-display scoreboard—composed of 16 individual video screens on each side—offers high-resolution color replays or close-ups.

The circulation patterns are one of the best of any sporting facility. Eighteen escalators, nine elevators and 73 exit doors move people swiftly in and out of the building. And if you're hungry, you won't have to wait long for foot-long hot dogs, because there are twice as many concession areas than typically found in the industry. There are also more rest rooms than any other



SHIN KOYAMA

Target Center's arena (above) is transformed from basketball to ice hockey within 24 hours by 98 electronically synchronized screwjacks, which raise and lower the 250-ton, concrete floor. Bright lights and signage make for a festive night scene (below).



STEVE BERGERSON



arena in the country. In addition to general-audience seating, 67 luxury suites allow for private parties, meetings—and great sight lines.

Aside from the technical marvels, Target Center's architecture has been criticized—and with some justification. The site, a 168,720-square-foot city block, is uncharacteristically small for a building of this type. Packing in all the functions meant utilizing air rights in order to expand the building width beyond the lot lines and over the sidewalks from the second level up to the 10th-floor roof line. Thus it was possible to fit 831,533 square feet of space onto one block. Unfortunately, as a result of this effort, the building appears top heavy.

But there were difficult circumstances all around. A tight construction timetable (27 months), a site too small for its program, the need to

link with Hennepin Avenue, and other problems straight jacketed the architects' choices. As with other large urban sports centers of its size, Target Center has the heft and feel of a Comiskey Park in Chicago, or the Metrodome in Minneapolis, but unlike those structures, does not have the proper breathing space. Similar in nature to the Colosseum in ancient Rome, these types of structures work best in a more open setting where the approach is presented with ceremony. Unfortunately, Target Center's opening ceremony, despite its dazzling interior, is all too brief.

*Project: The Target Center and Arena Club
Client: Minnesota Arena Partnership-
Northwest Racquet Swim and
Health Club
Architects: KMR Architects. Ltd.
Contractor: M.A. Mortenson*

The entrance lobby is enlivened by the computer programmed neon sculpture installed in the ceiling by husband and wife artists Michael Cohen and Connie Wexler Cohen.

The Minneapolis YMCA

If Target Center is heavy handed, the new YMCA is sweetness and light. Indeed, the new Y, designed by The Alliance, is a friendly and inviting building with an exceptionally bright and airy ensemble of interior spaces.

Like the basketball arena, the YMCA serves a multiplicity of functions and audiences. In addition to the usual gymnasium, swimming pool and related athletic facilities, the new building houses an auditorium and a number of community meeting rooms, the downtown branch offices of the Y, the YMCA's metropolitan headquarters, and other community-service functions.

The new building sits adjacent to its former home, a collegiate-Gothic tower built in 1918 now being renovated into offices, and is surrounded by a full-block redevelopment project called LaSalle Plaza, designed by Ellerbe Becket. (The entire project includes a shopping arcade, LaSalle Plaza tower, the State Theater, the YMCA, and the 1918 building.) The formal modulation of the 1918 building—white-stone base, red-brick midsection, and fanciful Mansard roof with gables and chimney pots—sets the tone for the new building. The Alliance placed the new Y on a 2-story base of cream stone, next four floors of brick and finally a double-height Mansard roof with a row of buttresses. Marking the entrance at one end is a lighted lantern projecting a full floor above the roof line.

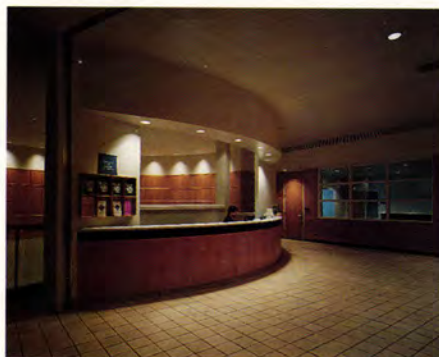
The ground floor houses community services with meeting rooms and a large auditorium within steps of the entrance. A large, 2-story atrium off the street entry directs visitors to these spaces or up a double flight of stairs to more community rooms and the business offices. Here, a second skyway-level entrance also links the building to the retail portion of LaSalle Plaza.

Wherever possible, the architects have penetrated the outer shell of the building to let in generous amounts of natural light. For example, double-height windows that flank the third-floor swimming pool brighten that space and send daylight to the inner



SHIN AND JOEL KOYAMA

The new YMCA entrance is marked by a light tower and marquee (above). The Mansard roof contains the basketball and volleyball courts. The second-story lobby (right) directs skyway walk-ins toward the Y's athletic facilities upstairs, or down toward community rooms and services.



Architecture by bus

University Avenue on the 16A provides an architectural history lesson for commuters

By Kristy Aldrian and Steven Buetow

Snapshots of Minneapolis-St. Paul history are just a bus ride away. Hop aboard the 16A to catch the sights along University Avenue. From the State Capitol in St. Paul to the ubiquitous grain elevators in Minneapolis, University Avenue is an architectural cross-section of Twin Cities' heritage. **T**

Named after Hamline University, University Avenue developed as the first interurban streetcar line in 1890. It remains one of St. Paul's most important commercial streets, with many Victorian and turn-of-the-century commercial buildings, most of which have been altered at street level. **T**

The University Avenue area, from Snelling Avenue North across the Minneapolis city limits to 15th Avenue Southeast, forms what has long been referred to as the Midway district. Around the extensive railroad yards has grown a large, industrial district composed of manufacturing, grain elevators, wholesale houses, and the like. University Avenue itself has tended to attract business offices and even some retail establishments; however, industrial complexes also have developed on both sides of the avenue, as well as academic buildings and single- and multifamily housing. **T**

Other late-19th-century developments include several residential parks, notably Prospect Park to the northwest in Minneapolis (1870s), and Lake Iris Park southwest of University Avenue at Lynnhurst Avenue (1883). **T**

Ever since Interstate 94 connected Minneapolis and St. Paul in the 1960s, University Avenue has lost its importance as the main commuter artery, but the architecture remains a vivid portrait of the Twin Cities' bustling history. So grab that bus pass and hail down the 16A. **T**

While on the bus, keep an eye on the buildings' detailing. Those with an eye keen enough to identify the details on the opposite page will win a free subscription to *Architecture Minnesota*, along with a complimentary copy of *Pocket Architecture*. Mail your responses to *Architecture Minnesota*, c/o Architectural Bus Tour. **T**

And now come along with us as we board the 16A in downtown St. Paul. **T** Kristy Aldrian is a University of Minnesota architecture graduate, and Steven Buetow is a St. Paul Architect.



3. 292 University Avenue

These simple frame houses testify to the Avenue's working-class tradition, in what is known as the Frogtown district, an area bisected by the St. Paul and Pacific Railroad and settled primarily by Poles, Scandinavians, Germans and Irish.



4. 370 University Avenue

Minnesota Milk Company was built as a factory in 1912 by Charles A. Hausler. A moderne, zig-zag and streamline (known as Art Deco) renovation in 1932 established a slicker, cleaner façade. This moderne style became the motif for most milk companies in the 1920s and '30s. The factory was rebuilt in the 1930s and later renovations in 1984 were done for Old Home Dairy Products' commercial use.



8. 1222 University Avenue

A 1914 laboratory for research and development became, in 1922, the St. Paul Casket Company. The original building was brick, plastered over with concrete.

MTC Route 16A Downtown St. Paul



1. State Capitol area

Originally, Cass Gilbert's design of the Capitol grounds, based on the ideas of the City Beautiful movement inspired by the Chicago World's Fair in 1893, envisioned grand boulevards running through downtown toward the Mississippi River. This plan was never fully realized, but the grounds have recently been redesigned with Cass Gilbert's ideas in mind. The Capitol itself, completed in 1904, is on the National Register of Historic Places. Gilbert based his design on 16th-century Renaissance palaces, distinguished by a central building mass and projecting wings. Colonnades surround a central, domed drum, and gilded quadriga (by Daniel Chester French and Edward C. Potter) mounted above the entrance overlook the Capitol grounds.



2. 103 University Avenue

A familiar sight just beyond the Capitol, Christ Lutheran Church was designed by Buechner & Orth in 1913. Its architecture was inspired by the Beaux-Arts tradition, one of the most popular styles of the day and reflected in much of the Capitol-grounds architecture.



5. 709 University Avenue

This beautiful brick building with glazed tile was originally a car-lot office built in 1923 for Owen Motors. It since has been renovated by Rafferty Rafferty Tollefson Architects of St. Paul for the St. Paul Rehabilitation Center. While the interior is now dramatically changed, the renovating architects left the exterior largely intact, concentrating on cosmetic work, such as restoring the windows and brickwork.



10. 1400 University Avenue

The Montgomery Wards & Company Building, design by Lockwood, Green Architects in 1920, may soon succumb to the wrecking ball to make way for new development. The rectangular tower, the most conspicuous feature of this concrete building, is visible to motorists passing on both University Avenue and Interstate 94. The classically styled, utilitarian building, which underwent some renovation when a street-level storefront was added, originally was situated in an open, parklike setting—now paved for parking.



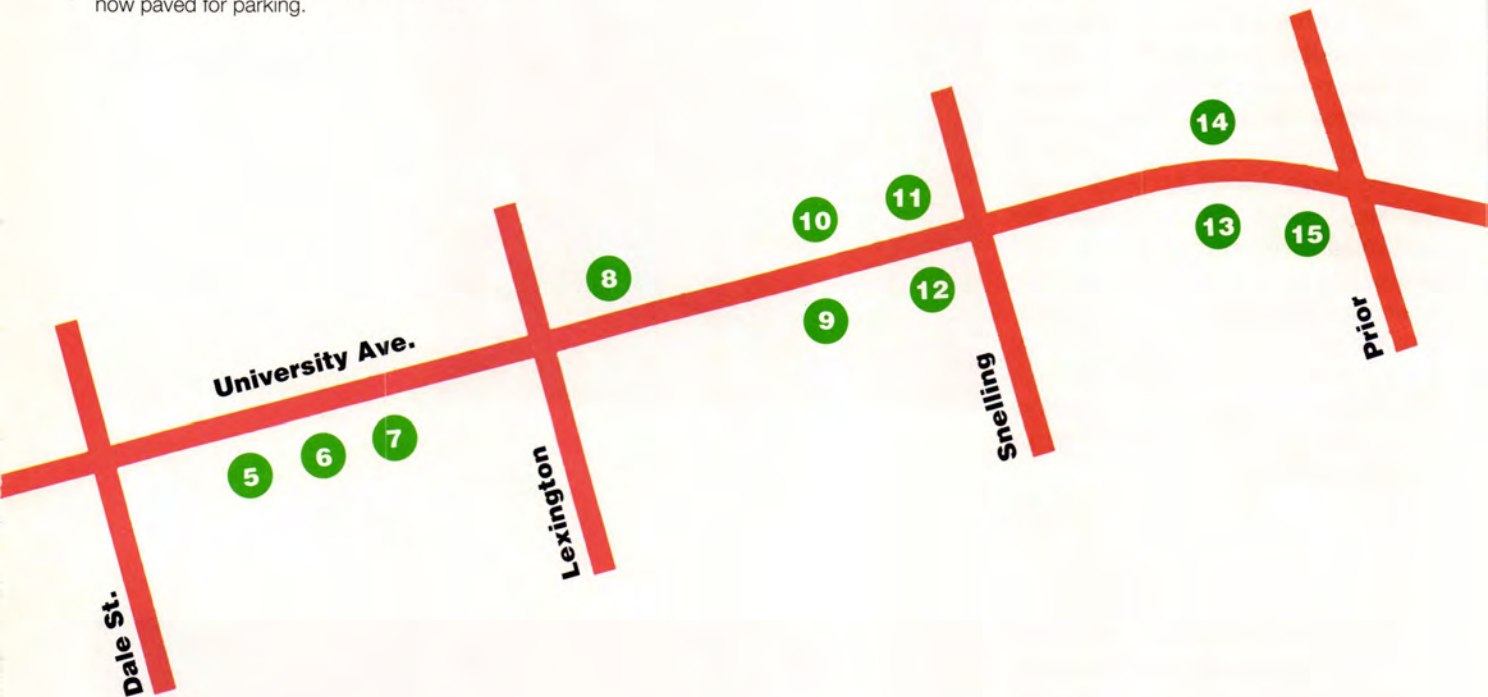
11. 1578 University Avenue

Midway National Bank, built in 1960 by Bergsted Hirsch Wahlberg & Wold, Inc. is a spare but tasteful glass-and-steel building at the corner of University and Snelling avenues.



14. 1894 University Avenue

Porky's Drive-In, built in the 1950s, is a classic example of the teenage hamburger joint, something right out of "American Graffiti." The brightly illuminated Porky's "pig" sign is pure camp. The drive-in still has all of its original features.



6. 825 University Avenue

The Victoria Theater, built in 1915 with a beautiful terra-cotta cornice, is currently occupied by the Edison Light Company, which has owned the building since 1937.



7. 935-937 University Avenue

Martin Schott built the M. Schott building in 1890, which remains completely intact and in its original form. It is built of solid brick with only interior alterations.



9. 1389 University Avenue

Midway Chevrolet built this building in 1942 as a public garage. The moderne façade is of aluminum and glazed tile.

reaches of an exercise area directly behind. A glass wall is the only separation between the two spaces. Behind this is the lounge, a narrow, high slot with large clerestory windows above. On the fourth floor another exercise room overlooks the pool, borrowing light from the double-height windows.

The fifth level contains weightlifting and exercise rooms, three racquetball courts and a running track encircling the perimeter. All sides of level five have banks of windows which give the impression of complete openness to the outside from nearly any vantage point. The sixth floor contains the main gymnasium space, which can be divided into three smaller basketball or volleyball courts, and three more racquetball courts. At the southeast corner is a large picture window with a glance down Ninth Street toward the Nicollet Mall. Directly above the basketball hoop in this corner, and acting like a church steeple, is the tower lantern casting a shaft of light into the gym. Thus, in almost every conceivable way, the architects have brightened the interior spaces, which are usually artificially lit in most sports clubs.

As delightful and satisfying as the interior is, by contrast the exterior is less vigorous. The new facility is architecturally tied to the old Gothic-inspired building; but compared to the delicate tracery and classically inspired proportions of the old YMCA building, the exterior of new Y is not as thoroughly developed. In addition, by using the same buff-colored, Kasota-stone base that anchors the rest of the complex, the architects did little to create a street-level presence that distinguishes the new Y as an entirely separate building.

Yet all in all, the bright interiors make up for the less-than-stellar exterior.



The main street-level entrance to the new Y (left) is a welcoming 2-story space that reincorporates an old stone entrance from the Y's previous building. Fifth-level exercise areas (below) are encircled by a running track and windows on four sides giving the impression of total openness.



Project: YMCA
Client: The YMCA of Metropolitan
Minneapolis
Architects: The Alliance, Inc.
Contractor: M.A. Mortenson, Inc.

The art of diversity

Ankeny, Kell, Richter & Associates combines design finesse with development savvy

By Jennifer Waters



DON F. WONG

In the early days, Ron Ankeny and Duane Kell would park on University Avenue in St. Paul near Highway 280 and trek down the three city blocks to what they affectionately called the "sweat shop": a 600-square-foot converted warehouse that housed their eight-person firm. As the two principals of what was then Ankeny Kell Architects walked passed 821 Raymond, an abandoned public school, Ankeny says he envisioned bigger and better uses for the 2-story building, like more office space for them and rentable space to market.

"I'd say, let's buy that building," he says. "First it was just a dream. Then it came up for sale...and we jumped on it."

And jump they did, taking their first leap into a world of acquisition, development and design—be it renovation or new construction—that would make what is now known (with the teaming of Freder-

ick Richter) as Ankeny, Kell, Richter & Associates unique in the architecture world. Today, with a souring real-estate market that has left many developers—and architects—in dire straits, the school-turned-Baker Court complex is still 100 percent leased.

That project was completed in 1981—with the neighboring Baker West townhouse project constructed in 1985 and sold out 13 months later. Those projects were the start of what would eventually mold three friendships into a financially and professionally rewarding relationship.

Ankeny, Kell and Richter have known each other all their adult lives. They met as undergraduates in architecture at the University of Minnesota, and after graduating in 1969, each carved distinguished careers before teaming up with each other.

Ankeny headed for Europe and

worked with such renowned firms as Paris-based Marcel Breuer Architects before returning to the U.S. and eventually forming Ronald Ankeny Architects in 1976.

Kell, who opted for the graduate-architecture program at the Massachusetts Institute of Technology, was a Rotch Scholar in 1976 and worked on the planning and design of such high-profile projects as the Citicorp Center in New York City; the King Khalid Military City in Saudia Arabia—a \$10 billion "city" created for 60,000 people; and the master planning and design of Como Zoo in St. Paul. He joined Ankeny in 1980.

Richter, also receiving his master's degree in architecture from the Massachusetts Institute of Technology, worked as executive vice president and director of architecture at Ellerbe Associates. He then spent two years in Chicago with Lester B. Knight and Associates before joining



16. 2356 University Avenue

This industrial building was originally built as a furniture store and then was sold to the Specialty Manufacturing Company in 1929. Four years later the Ace Box Lunch and Bar added an Art Deco diner on the east end.



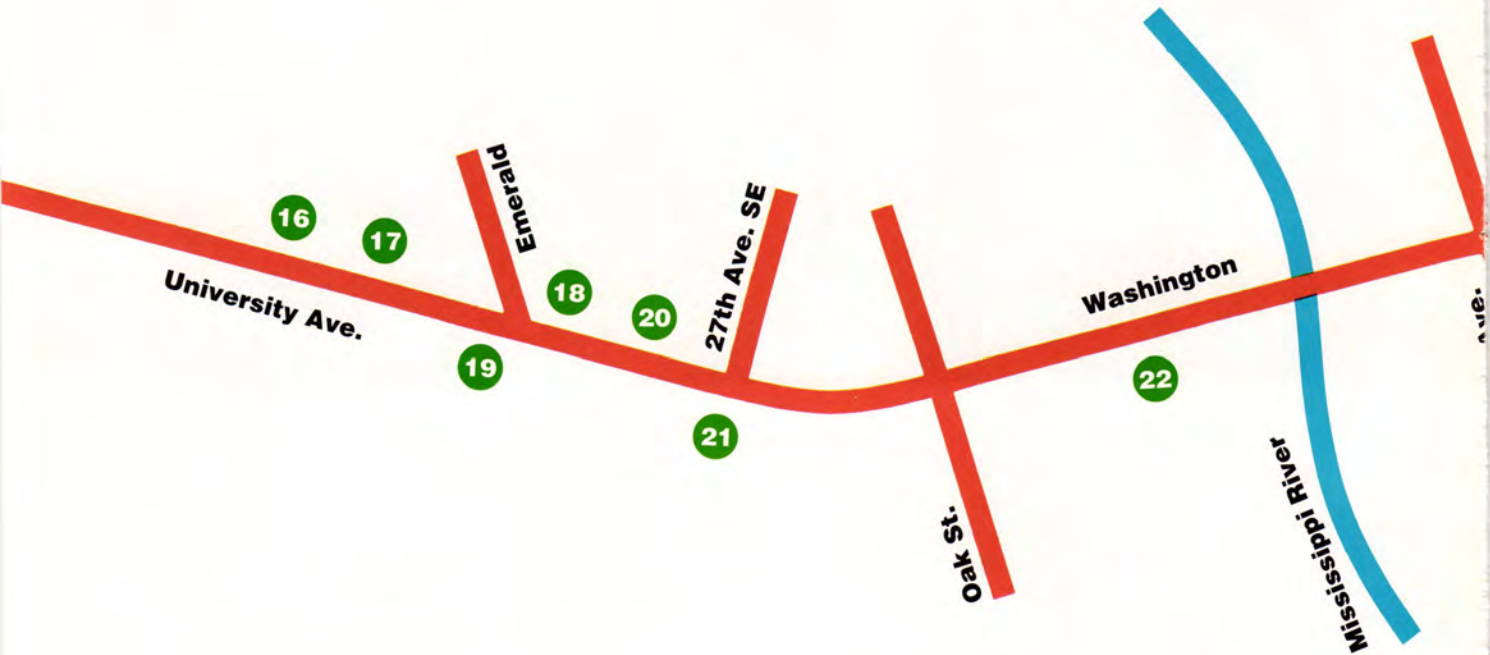
17. 2402 to 2414 University Avenue

The Chittenden and Eastman Company building was built in 1917 as a warehouse and manufacturing plant. It was designed with limestone and brick using decorative terracotta ornamentation in the true Sullivan style.



18. 2550 University Avenue

Now known as Court International, this building was constructed in 1913 for the Illinois Steel Warehouse Company and International Harvester, another producer of heavy machinery. In the 1980s, St. Paul architects Ankeny, Kell, Richter & Associates converted the building into modern office space by gutting the interior and carving a light-filled atrium out of the center. Offices with walls of interior windows overlook the parklike atrium, replete with park benches, plantings and a dramatic glass elevator.



12. 1579 University Avenue

Midway Books now occupies this 1934 store and office, which was built as the Michael Building of Art Deco (moderne) design with Kasota stone detailing.



13. 1885 University Avenue

Across from Irish Park on the north side of University is this 1926 factory, which uses terracotta decoration with brightly carved floral and classical motifs. It was built for the Krank Manufacturing Company.



15. 1919 University Avenue

A prime example of midcentury, modernist architecture in Minnesota. The office building, home of the University of Minnesota Administration Services, was built in 1954 of Kasota stone and red granite.



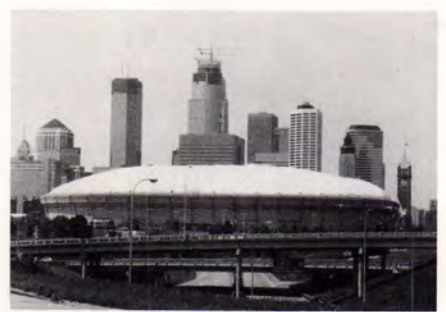
20. Prospect Park

The Prospect Park area, with its irregularly curved streets laid out around the famous "witch's-cap" water tower, features single-family homes built in the early 1900s and 1920s. Shingle and clapboard dwellings, representative of turn-of-the-century, colonial revival are among the more architecturally significant houses in the area. But by far, the majority of the residences are stucco Craftsman dwellings.



23. Cedar and Riverside avenues

The Cedar Square West apartment complex, in the West Bank section of Minneapolis, was to be, in its grandest incarnation, a new city within a city. Designed by Ralph Rapson in the 1960s, the entire complex was to feature a series of high- and low-rise buildings taking up almost the entire West Bank district and housing nearly 30,000 residents in a totally self-contained, engineered neighborhood—complete with parks, stores and mass transit. The entire plan never came to fruition, but what remains is a prime example of midcentury thinking about design and urban renewal.



24. Downtown Minneapolis

The Hubert H. Humphrey Metrodome, designed by Skimore, Owings & Merrill in 1982, is the climate-controlled home of Minnesota's major sports teams. The \$55 million stadium is covered with 310 tons of fabric-and-steel supports and spans 470,000 square feet. It is one of the largest multiuse, air-supported, domed stadiums in the world, seating 62,000 spectators.



Downtown Minneapolis



19. 2675 University Avenue

Built in 1939, KSTP housed the Twin Cities first television station—which was the third in the world—after being the first commercial radio station in the world in 1924.



21. Grain silos

Minneapolis's ubiquitous grain elevators remain today as symbols of the city's milling heritage. Grouped together, they are striking images on the skyline. Anywhere trains ran—and still run—the silos can be found. And although they vary in quality of design, they can be a real asset to a community's sense of history. In fact, some elevators have been turned into condominiums, and the city continues to look for creative reuses for many of the abandoned silos, although many have been demolished.



22. Washington Avenue

Cass Gilbert's Beaux Arts Mall at the University of Minnesota is bounded by the classically detailed Northrop Memorial Auditorium at the north end, and on the opposite end by the moderne Coffman Memorial Union, designed by Clarence H. Johnston, Jr., in 1940. Besides Coffman Union, Johnston designed all of the colonnaded, red-brick buildings, while such firms as Hammel Green and Abrahamson, and Magney, Tusler and Setter designed other buildings. Gilbert's original Mall plan extended the vista down toward the Mississippi River. (Remember his Boulevard plans for the Capitol Mall!). But the construction of Coffman Union (considered one of the more outstanding buildings on campus) pretty much put blinders on that vista.



1



2



3



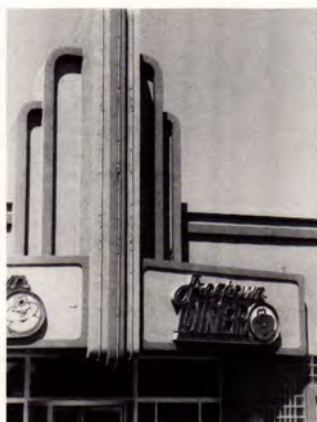
4



5



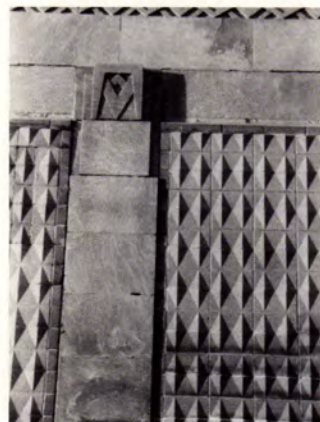
6



7



8



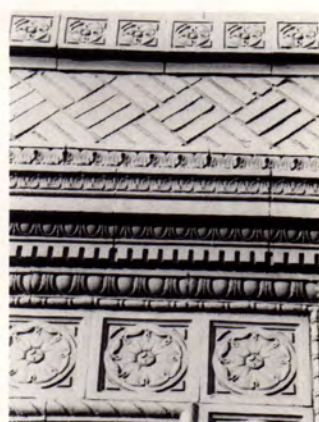
9



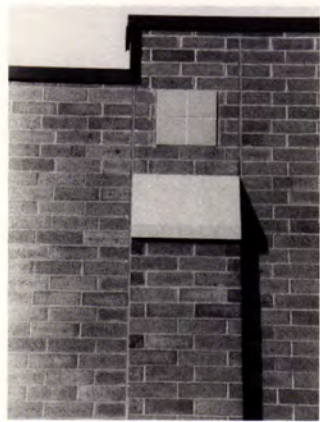
10



11



12



13



14



15



16

the then-fledgling partnership in 1986.

While the three obviously offer a wealth of design and development experiences, it's their own personal touches that make the differences with their clients.

Tom Kordonowy, for example, talks about how Richter's involvement in every project the firm has done for his real-estate company, Steiner Development, has left lasting impressions with his own staff and clients. Kordonowy first met Richter when the firm was competing for the Hazeltine Golf Clubhouse renovation in 1989. Kordonowy, who chaired the Hazeltine Club committee, remembers Richter as being so smooth and controlled at the interviews that the committee unanimously chose his firm. "We knew right away this [renovation project] would be a most pleasing experience," he says. So pleasing, in fact, that Kordonowy hired Richter to design his residence, a 10,000-square-foot mansion in Chanhassen. The home, which is accented with shingles and a fieldstone arched entrance, sits on rolling, wooded farmland. A steeply sloped turret opens into a courtyard entrance that connects to a breezeway, which leads to a lower patio and pool.

"I'm reminded daily of the expertise of their work," says Kordonowy, who finds the large house, "very manageable and functional."

Richter, who designed his own second home as part of a cabinlike housing development in a heavily wooded site on the Mississippi River bluffs in Stockholm, Wis., has created space plans and designs for a number of primary residences. Besides those projects, AKR has other high-profile projects under its belt, including the interior design for Odegaard's Book Store in the Centennial Lakes complex in Edina and Edinburgh Golf Clubhouse in Brooklyn Park, as well as the master planning for the St. Paul Academy and Summit School in St. Paul and The University St. Thomas Business School in St. Paul.

But AKR's real strength is in combining development and design.



The principals of Ankeny, Kell, Richter & Associates (opposite), from left to right, Frederick Richter, Duane Kell and Ronald Ankeny. As developer/architect, AKR converted an 1884 school house in St. Paul (above) into office and commercial space, where the firm now has its own offices overlooking a light-filled atrium (below).

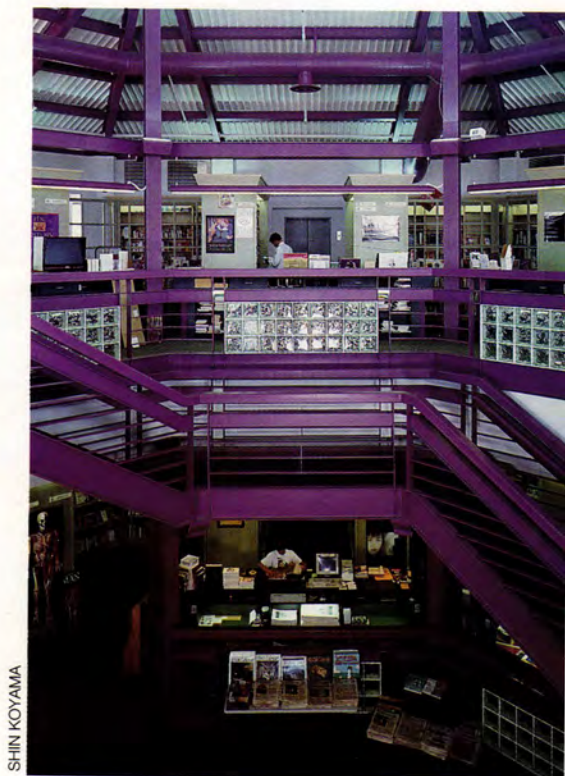
PHILLIP MACMILLAN JAMES



PHILLIP MACMILLAN JAMES



For this historic 1905 city-hall building in Waconia, Minn., AKR retained the architectural character by restoring the entire facade and converting the interior into 13 apartments for the elderly. For Odegard's Books (below) in the Centennial Lakes development in Edina, the architects created a dramatic, 3-level interior that surrounds a stairway.



"What we are and what we do best—our real strength—is that we own and develop our own projects," Kell says. "It makes us better architects for our clients."

Why? Because as owners and developers, these architects are forced to live with their own projects, complete with mistakes and utter nuances. It makes them more aware of what design ideas work best and which processes are most cost-effective, he says. "We become more sensitive to our clients' needs, and we provide better balance and insight that other architects can't deliver," Kell says.

Converting the 1884 brick school building on Raymond into office/commercial space was the first development project Ankeny and Kell ever tried. And it was a trial by fire into the commercial real-estate business, Kell says.

"When we did our first project, we did it on a shoestring," Kell says. "There were a lot of 16-hour days and a lot of sleepless nights. One of the events I remember most was when we went to close on the financing for the project. We signed our names more than 100 times each on all the documents. It was scary to say the least—now it's the norm."

In fact, AKR owns at least half a dozen of the 50-plus projects the firm has designed. Besides Baker Court, the architects' holdings include such properties as the Zumbro Market, a festive retail center in Rochester; the Old City Hall in Waconia; and the Johnston Hall medical-office building in Faribault.

All three projects were innovative reuses of historic sites. Zumbro Market, for example, was a 1930s theater and warehouse building that AKR transformed into a retail center that continues the festive retail concept down the Zumbro River. The 18,000-square-foot project, which was completed in 1983, includes a farmers' market and river-walk promenade.

With the Old City Hall renovation in Waconia, the architects maintained the historic façade of the 1905 building while turning the structure into a 13-unit apartment

building for the elderly.

Not far from the Old City Hall is the Main Street Exchange, a 29,000-square-foot retail/office structure AKR designed for Steiner Development. The new 2-story building covers a full city block and was designed to fit into the master plan for downtown Waconia while emphasizing the city's turn-of-the-century feel.

The Johnston Hall medical-office building also was restored to its original 1888 Romanesque and Gothic façade, while the interior was completely gutted and updated. The \$1.1 million project that Ankeny says is "like owning a castle," has done well for cash flow at AKR, particularly during this year's economic slump.

"The development projects have brought us through slow times in architectural work," Kell says. "It [getting into development] has proven to be a good move. Even now, when times are slow, it helps us. And having that development experience really helps the firm."

The Chaska Community Center—probably the largest community center in the Midwest—has benefited from the firm's multiple areas of experience. The 100,000-square-foot center was an exercise in creative adaptability, with which most architects never have the opportunity to experiment. AKR was brought in during the early planning and design stages of creating a colossal community center that would not only be architecturally appealing—and lasting—but would blend in well with Chaska's picturesque topography.

The firm created a tasteful, linear building that melds well with its bluff site overlooking the Minnesota River Valley and the adjacent Chaska village center. Inside, painted steel beams and trusses highlight much of the space, which includes an ice arena, two gyms, handball/racquetball courts, exercise space, a weight room, locker and shower space, a 12,000-square-foot leisure pool, a multi-purpose community center, and an arts-and-crafts room.



SHIN KOYAMA

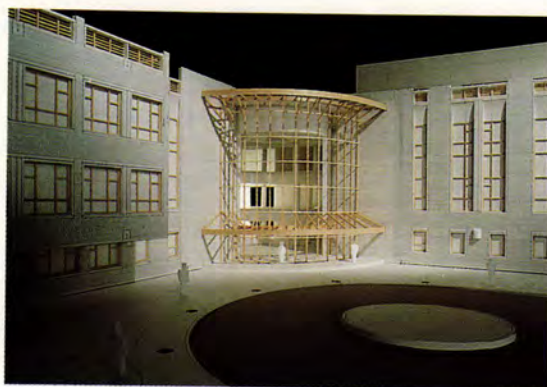
With Johnston Hall (above) in Faribault, Minn., AKR took an 1888 Romanesque-and-Gothic structure and converted it into a modern medical-office building while staying within the guidelines protecting its historic designation. Residential projects include this 10,000-square-foot, shingle-style house (below) on a wooded site in Chanhausen, Minn.



COURTESY AKR



Completed in 1987 in Brooklyn Park, the 37,000-square-foot, traditionally styled Edinburgh Clubhouse (above) is the centerpiece of a new golf course, designed by Robert Trent Jones, Jr. One of the firm's most recent projects is the University Center Rochester (below), which will include science laboratories, classrooms, computer labs, student services and a library. AKR is working with the Stubbins Associates on the project. The Chaska Community Center (opposite), completed this year, contains an ice arena and two gymnasias, among other features. Reflective of rural architecture, the building overlooks the Minnesota River Valley. In form and detailing, the architects took their design cues from the Chaska village hall.



"They got a lot more building than what they paid for," Kell says of the \$8 million project.

Richter adds that the project was a compilation of years of experiences between the principal architects and their associate architects, Barker, Rinker, Seacat and Partners. And that doesn't even include the amount of patience and creativity that it takes to turn what could have been a sow's ear into a silk purse.

"It took a lot of our leadership and commitment to create good architecture," Richter says. "We created a health club with social functions like none other in the state of Minnesota."

It also takes leadership and commitment to bring three large institutional powers to agree on anything, much less the design and planning of a \$14 million facility. Yet, that's what AKR pulled off when it teamed with Stubbins Associates to create the University Center Rochester, now under construction.

The center is an addition to an existing campus that will become the hub of academic programming for the University of Minnesota, Winona State University and the Rochester Community College in the city that is home to a large number of academically motivated professionals. It is a center that can accommodate science laboratories with the same capability and ease that it does computer labs and general classrooms.

Stubbins, a Boston firm that Kell had worked at, had completed a number of large educational facilities and was the lead design architect on the facility. AKR played the project architect and handled all of the day-to-day decisions as well as some of the broader design decisions. The relationship between the two firms—a bond obviously fostered by Kell—is at the heart of what continues to make this extremely cumbersome project work.

Dan Brennan, director of facilities for the State Community College system and recognized as one of the leading facilities-planning engineers in the Midwest, credits AKR for performing miracles by integrating the



SHIN KOYAMA

three complex and diverse systems into one innovative plan and design.

"There were a helluva lot of problems getting this together," Brennan says. "But it was organized around the spirit of problem solving and respect. They were able to make decisions that really helped expedite the project while staying within budget. It was a big and difficult project and they played a key role in it. We were very pleased with the results."

Again, it is that project diversity (AKR also has done planning, design and construction services for a variety of grocery stores, including the Rainbow Foods at Lake and Dupont in Minneapolis) that Kell points to as key to the firm's success.

"It is our strength," Kell says, "and it makes for a rewarding, fun practice because we can offer a lot of things. But it's also our weakness in that we haven't done enough of anything to be recognized as a leader."

Kell claims, however, that the firm has stayed on a more narrow path in recent years as the economy has shifted and everyone's needs have become more basic and more defined.

"When you get started, you pull your shotgun out and spray everything in hopes of hitting something," he says. "We're much more sensitive now in what projects we'll go after. Today we go after projects that we think we can get based on our experience. And if we need help somewhere, we'll go out and find it."

Undaunted by new challenges, AKR most recently has focused its expanding skills on museum design, always a highly sought-after commission. The firm is working as associate architects with Kallmann McKinnell and Wood of Boston on the design of the new \$15 million Minnesota Museum of Art, expect-

ed to be built by the mid-1990s. The pairing should prove a fruitful one because the architects are familiar with each other's work. Richter worked for Kallmann McKinnell and Wood between 1970 and 1971, and Kell in 1972.

Today, with a steady flow of new commissions in a tough economic environment, the 15-person firm defines itself as medium-sized and growing, ranking among the top 25 architecture firms in billings.

"We used to say that we were a young firm," says Ankeny. "But we've been saying that for a long time—and now we're no longer 'young.'"

Maybe not, but with age comes experience and maturity—and by most accounts, Ankeny, Kell, Richter and Associates is aging well.

Jennifer Waters is a staff writer for Minneapolis/St. Paul CityBusiness.

CUSTOM-MADE QUALITY

Photo: J.H. White



Goldner Hawn Johnson & Morrison
Private Investment Firm
Norwest Center, Minneapolis, MN



architectural woodwork institute

We are Principle Fixture and Millwork, Inc., specializing in the custom manufacture, finish and installation of store fixtures, office and commercial cabinets. We pride ourselves in the detail of our work. You'll see it in our processes, in our finished product and in our relationships with our customers. Using your drawings, we'll produce the product that meets your needs.

The designer for this project is Jim Young of Wheeler-Hildebrandt.



Principle Fixture
and Millwork, Inc.

612-464-3998 FAX 612-464-8607

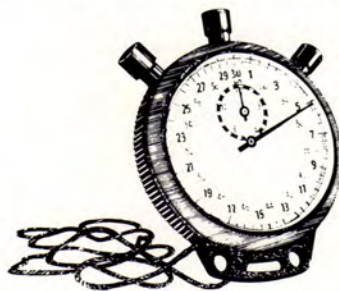
How most insurance programs measure claims processing time

JUNE												
												1
2	3	4	5	6	7	8						
9	10	11	12	13	14	15						
16	17	18	19	20	21	22						
23	24	25	26	27	28	29						

JULY												
	1	2	3	4	5	6						
7	8	9	10	11	12	13						
14	15	16	17	18	19	20						
21	22	23	24	25	26	27						
28	29	30	31									

AUGUST												
			1	2	3							
4	5	6	7	8	9	10						
11	12	13	14	15	16	17						
18	19	20	21	22	23	24						
25	26	27	28	29	30	31						

How the MSAIA Insurance Program does



Most insurance programs can't pass the test of time. They fail when it takes weeks and months to handle your claim. They fail when they treat you like a number with a problem.

The MSAIA Insurance Program, however, passes the test of time with flying colors. Among the program's features:

- 48 hour average claims turnaround time
- A courteous and caring staff that treats you like a person, not a number
- Office hours from 8 a.m. to 8 p.m. central time
- Controlled by active MSAIA members as Trustees

It's your time and your money. If your insurance program isn't giving you the service you pay for, it's time to look into the MSAIA Group Insurance Program.

For more information, call Kathleen McDonnell or Staci Burgus at:

Association Administrators & Consultants
19000 MacArthur Boulevard, Suite 500
Irvine, California 92715
1-800-854-0491 Toll Free



AM

details



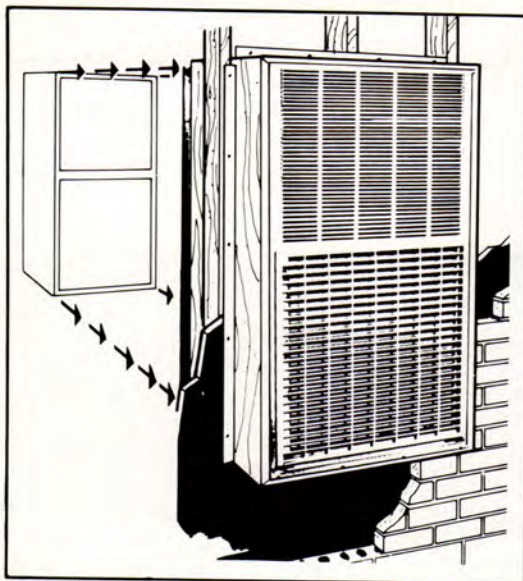
SHIN KOYAMA

Target Center's lobby ceiling is ablaze with neon art.

Electric sky Neon may be the most fitting visual manifestation of electricity, a metaphor for the power that drives us. The colorful electric sky at the Target Center lobby pushes neon to its limits. KMR Architects worked with artists Michael Cohen and Connie Wexler Cohen of the Venice Neon Company, Los Angeles, to realize their initial idea of a ceiling cutout with orderly forms below and randomness above.

Developing three categories of forms, which they named "Discrete Elements," "Infinity Loop" and "Organic Chaos," the artists spun the original idea into one of the largest neon sculptures in the U.S. Three hundred individual tubes on 120 electric circuits swoop, surge, squiggle and swarm to the command of a backroom computer. Countless control sequences, from languid to frenetic, can be programmed to adapt the lobby's mood to the type of event being staged inside the Center. Set to music, this ethereal light dance can become a show of its own. Although the lobby itself is a necessarily transient experience, the swarm of neon lends a permanently friendly visual buzz to the First Avenue streetscape.

Bill Beyer



CUT HEATING COSTS WITH **Magic-Pak®** HIGH TECH GAS SELF-CONTAINED UNITS.

Shrink Installation Costs

Contractors, developers and designers applaud the way the Magic-Pak single package units save time and money starting with the wall opening itself. Each opening is exactly the same size and saves approximately 63 standard bricks (9.7 sq. ft.), plus masonry costs.

The Magic-Pak trim cabinet measures just 28" x 48" x 29". Utility hook-ups are simple, since power, gas and low-voltage connections are mounted on the top of the outside of the cabinet. Magic-Pak completely self-contained units arrive on site completely pre-charged and pre-wired for fast, easy installation, and there's no need for chimneys or flues. Consider this: central systems require early release of heating and cooling equipment to the job site. With Magic-Pak units delivery and installation can take place closer to actual occupancy, even after the carpets have been laid and the walls painted. The result? Real savings on construction financing costs.

Lower Operating Costs

A new cooling chassis with higher energy efficiency ratings combined with electric pilot ignition and power venter give users a high tech, energy saving unit for both heating and cooling modes. Lower fuel costs all year 'round.

- Astonishingly Self-Contained
- Incredibly Simple
- Goes Through Walls Effortlessly
- Over 400,000 apartments, entrance foyers, process rooms, townhomes, condominiums and offices use Magic-Pak units to help cut heating and cooling costs.
- Easy to Install
- Easy to Operate
- Easy to Maintain

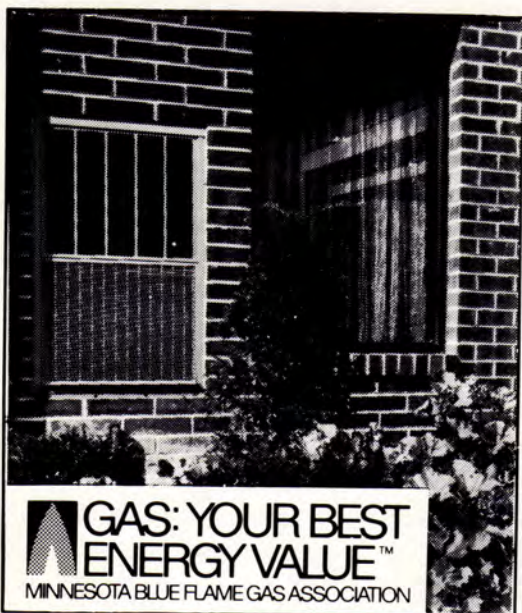
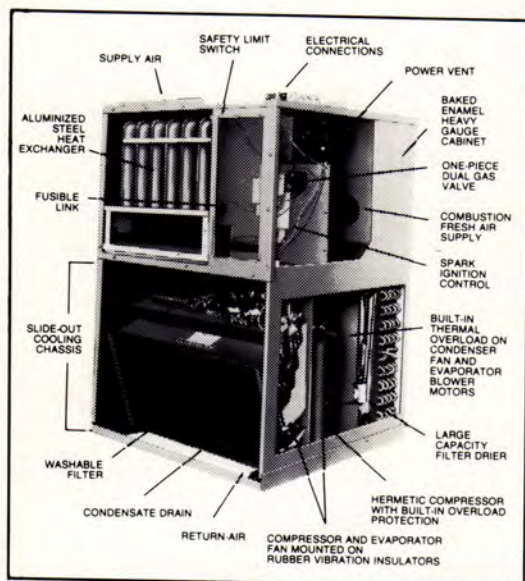
Designed and manufactured by **Armstrong**

DISTRIBUTED BY: **EXCELSIOR MANUFACTURING & SUPPLY CORP.**



1750 THOMAS AVE. ST. PAUL, MN 55104 (612)646-7254
14030 21st AVE. N. MINNEAPOLIS, MN 55447 (612)553-1722

DISTRIBUTOR FOR ENTIRE STATE OF MN.
1-800-735-1840/FAX (612)646-0022

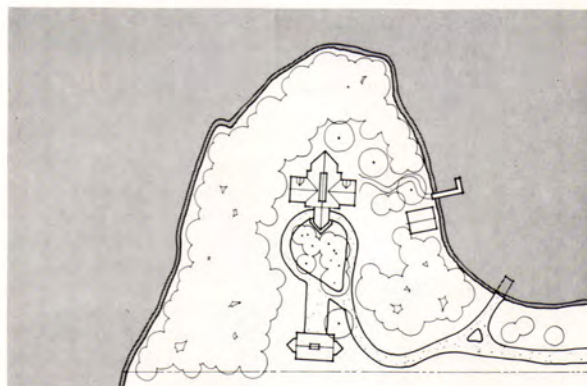


GAS: YOUR BEST ENERGY VALUE™
MINNESOTA BLUE FLAME GAS ASSOCIATION

coming soon

**Rosemary A.
McMonigal Architects
Project: Residence on
Lake Vermillion
Northern MN**

Surrounded by the lake, this point of land features natural forms of a rugged hill with rock outcropping, white pines and birch trees. The house, garage and boathouse are positioned and dramatized by the profile of the natural site. 612/789-9377



**Rosemary A.
McMonigal Architects
Project: Private Res.
Mountain View, ARK**

Located on the edge of the Ozark National Forest, this home sits on a wooded ridge. The master bedroom loft overlooks the living areas and valley below. Ceilings, floors and beams are finished with local hardwoods by local craftsmen. 612/789-9377.



**Rosemary A.
McMonigal Architects
Project: Residence
on Lake Minnetonka
Orono, MN**

On the lake side, the house is formed to take advantage of direct views across Carman's Bay and distant views to the Narrows. On the street side, a wooded courtyard defines the entrance between the house and detached garage. 612/789-9377.



Promote your firm! Advertise in Coming Soon!

Call Judith Van Dyne
at (612) 338-6763
for rate information.

AM has published directories of architectural and landscape architectural firms for some time. With this issue we present our first directory of those Minnesota firms which provide consultative engineering services. Principals of these firms are members of the Consulting Engineers Council of Minnesota or 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'll find that there's a wealth of engineering talent available for your next project. Study this directory and call either the Consulting Engineers Council (612/922-9696) or AIA Minnesota (612/338-6763) for additional information and assistance.

Peter Rand, AIA, Publisher

LEGEND

PE	Professional Engineer
AIA	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., ARCHITECTS/ENGINEERS

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

James E. Rydeen	AIA
Kenneth E. Grabow	AIA
Rodney E. Erickson	CCS
William V. Snyder	AIA
Donald L. Yungner	PE

Firm Personnel by Discipline	
Mechanical Engineers	17
Electrical Engineers	8
Architects	41
Other professional/technical	8
Administrative	9
TOTAL in Firm	77

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, Champlin, MN; Stillwater Senior High School, Stillwater, MN; CPT Headquarters and Manufacturing Plant, Eden Prairie, MN; Calvary Lutheran Church, Golden Valley, MN; Maple Grove Junior High School, Maple Grove, MN.

BAKKE KOPP BALLOU & MCFARLIN, INC.

219 North Second Street #200
Minneapolis, MN 55401
612/333-7101
Fax: 612/342-9482
Established 1967

2200 Second Street SW #102
Rochester, MN 55902
507/252-0201

515 South Washington Avenue
Albert Lea, MN 56007
507/373-6853
Fax: 507/373-1839

904 East Main
Marshall, MN 56258
507/532-5030
Fax: 507/532-5626

Charles L. Ballou	PE
Harold P. Bakke	PE
Thomas J. Downs	PE

Firm Personnel by Discipline

Civil Engineers	4
Structural Engineers	11
Mechanical Engineers	3
Electrical Engineers	3
Other professional/technical	10
Administrative	5
TOTAL in Firm	36

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. Railroad engineering, bridges-track-facilities.

Lakeville High School, Lakeville, MN; Minnesota Judicial Center, St. Paul, MN; John & Sage Cowles Conservatory & Sculpture Garden, Minneapolis, MN; City/County Government Center, Rochester, MN; First Street Parking Ramp & Skyway, Rochester, MN.

BONESTROO, ROSENE, ANDERLIK & ASSOCIATES, INC.

2335 West Trunk Highway 36
St. Paul, MN 55113
612/636-4600
Fax: 612/636-1311
Established 1956

Otto G. Bonestroo	PE
Marvin L. Sorvala	PE
Joseph C. Anderlik	PE
Thomas E. Noyes	PE
Robert G. Schunicht	PE

Firm Personnel by Discipline	
Civil Engineers	33
Structural Engineers	7
Electrical Engineers	2
Environmental Engineers	10
Architects	5
Other professional/technical	51
Administrative	15
TOTAL in Firm	123

Bonestroo specializes in site engineering; traffic engineering and transportation planning; environmental assessments; wastewater collection and treatment; water supply, distribution and treatment; stormwater quantity and quality management; buildings and recreational projects. Bonestroo provides services as a consultant in both design/build and design/bid situations: feasibility studies, design and construction engineering, and project surveys.

Northwest Airlines Headquarters, Eagan, MN; Olympic Festival Sports Complex, Nashville, TN; Closed-loop traffic signal system, Hudson, WI; Downtown Renovation, Fergus Falls, MN; Central Maintenance Services, St. Cloud, MN.

BRAUN INTERTEC

P.O. Box 39108
Minneapolis, MN 55439
612/941-5600
Fax: 612/942-4844
Established 1957

Jack S. Braun	PE
George Klumpke	PE
Robert Orthmeyer	PE
Cameron Kruse	PE

Firm Personnel by Discipline	
Civil Engineers	48
Other professional/technical	323
Administrative	123
TOTAL in Firm	494

Full-service engineering, environmental and pavement consulting and testing organization. Services include: full-service geotechnical engineering, construction materials, non-destructive, pavement evaluation, testing and management; environmental site assessment, natural resource management, technical investigation and remediation of underground storage tanks, hazardous waste sites and landfills; analytical laboratories and industrial hygiene including TEM asbestos analysis. Services available from 25 locations in Minnesota, Wisconsin, Oregon, North Dakota, Montana and Illinois.

Mall of America, Bloomington, MN; Target Center, Minneapolis, MN; Dain Tower, Minneapolis, MN; Great Lakes Gas Transmission Limited Partnership, upper Minnesota, Wisconsin and Michigan; Strategic Highway Research Program, North Central Region.

DAVID BRASLAW ASSOCIATES, INC.

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

Dr. David Braslaw PE

Firm Personnel by Discipline	
Acoustical Engineers	1
Other professional/technical	2
Administrative	1
TOTAL in Firm	4

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.

Riverplace, Minneapolis, MN; Minneapolis Convention Center, Minneapolis, MN; Aircraft Noise Attenuation in Homes, Twin Cities/Metropolitan Council; Ochsner Hospitals, New Orleans, LA; Blandin Paper Company, Grand Rapids, MN.

CAIN OUSE ASSOCIATES, INC.

1310 East Highway 96
White Bear Lake, MN 55110
612/426-9549
Fax: 612/426-5048
Established 1983

Jay J. Cain PE
Wallace M. Ouse PE

Firm Personnel by Discipline	
Mechanical Engineers	2
Electrical Engineers	1
Other professional/technical	5
Administrative	2
TOTAL in Firm	10

Mechanical and electrical consulting engineering to the construction industry. Projects include commercial, industrial, institutional and residential complex facilities as well as chain restaurants and exterior site street and athletic lighting systems. Special services include research laboratories, computer rooms, cleanrooms, and hazardous environment applications.

Laurel Village Block 10, Minneapolis, MN; The New Nicollet Mall, Minneapolis, MN; Fond Du Lac, Cloquet, MN; Medtronic Promcon Lab, Brooklyn Center, MN; Target Store, Mason City, IA.

CLARK ENGINEERING CORPORATION

2815 Wayzata Blvd
Minneapolis, MN 55405
612/374-4740
Fax: 612/374-4749
Established 1938

Charles E. Hansen PE
Larry G. McMurtry PE
Kenroy K. Janzen PE, LS
Hadi Sajadi PE
Daniel L. Johnson PE

Firm Personnel by Discipline	
Civil Engineers	7.5
Structural Engineers	10
Land Surveyors	1
Other professional/technical	22.5
Administrative	6
TOTAL in Firm	47

Complete structural engineering, civil engineering and land surveying for commercial, industrial and public buildings, bridges, towers, foundations, etc. Water supply, distribution and storage, solid and liquid waste collection, treatment and disposal; street, highway, storm water systems; site development planning. Investigations, studies, reports, plans and specifications.

Grand View Hospital, Ironwood, MI; Augustana Homes High Rise, Minneapolis, MN; North Memorial Medical Center Parking Ramps Restoration, Robbinsdale, MN; Champlin Park High School, Champlin, MN; Ezekiel Lutheran Church, River Falls, WI.

DARG, BOLGREAN, MENK INC.

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

Lloyd W. Darg PE
Harry D. Menk PE
Gene Bolgrean PE

Firm Personnel by Discipline	
Structural Engineers	4
Other professional/technical	2
Administrative	1
TOTAL in Firm	7

Darg, Bolgrean, Menk Inc., is an established structural engineering firm with a range of expertise. Our engineers have expertise in commercial construction (large and small), residential (single family and apartment) and municipal (schools, offices, warehouses, etc.). We are registered in 18 states. We have full CAD capabilities with DXF compatible software.

Byron Elementary and High School, Byron, MN; Mounds View Business Park, Mounds View, MN; McDonald's, throughout Midwest; First Bank Renovation, Little Falls, MN; Briar Ponds Apartments, Oakdale, MN.

DATA CORE ENGINEERING, INC.

203 East Little Canada Road
St. Paul, MN 55117
612/486-0697
Fax: 612/482-9897

James D. Coleman

Firm Personnel by Discipline	
Electrical Engineers	.5
Other professional/technical	3.5
TOTAL in Firm	4

Consulting and design services for audio/visual systems and computer networking as an integral part of the building design and construction process. Data Core Engineering combines a strong consulting engineering background with extensive and up-to-date communications systems expertise, enabling us to provide state-of-the-art designs in the formats architects and engineers require.

Rondo Education Center, St. Paul, MN; Foley High School, Foley, MN; Jonathan Elementary School, Chaska, MN; Monticello School District, Monticello, MN; Albert Lea School District, Albert Lea, MN.

DOLEJS ASSOCIATES INC.

1624 North Riverfront Drive
Mankato, MN 56001
507/625-7869
Fax: 507/388-9225
Established 1977

Joseph M. Dolejs PE
David A. Kroells

Firm Personnel by Discipline	
Mechanical Engineers	1
Other professional/technical	7
Administrative	2
TOTAL in Firm	10

Electrical and mechanical engineering, construction plans, specifications, construction observation and contract administration. Preparation of technical studies including energy audits, economic feasibility, system troubleshooting and construction planning programs. Project expertise including hospitals, medical clinics, educational buildings, churches, retail stores, multiple unit housing, motels, recreational facilities including swimming pools, ice arenas and athletic field lighting.

LacQueParle High School, Madison, MN; Minnesota Vets Home, LuVerne, MN; University of Minnesota Health Clinic, Minneapolis, MN; Park Elementary School, LeSueur, MN; Eden Prairie Community Center, Eden Prairie, MN.

DUNHAM ASSOCIATES, INC.

9141 Grand Avenue South
Minneapolis, MN 55420
612/885-1800
Fax: 612/885-1856
Established 1960

George F. Dunham PE
Nancy W. Dunham PE
James M. Christensen PE
Ronald L. Feldhaus PE
Michael Ramerth PE

Firm Personnel by Discipline	
Structural Engineers	7
Mechanical Engineers	22
Electrical Engineers	11
Other professional/technical	46
Administrative	12
TOTAL in Firm	98

Dunham Associates, Inc., is a multi-faceted consulting engineering firm that offers mechanical, electrical and structural engineering services for the design of building systems.

Methodist Hospital, St. Louis Park, MN; IBM 664 Building, Rochester, MN; U.S. Postal Service Vehicle Maintenance Facility, Minneapolis, MN; Minneapolis Community College, Minneapolis, MN; Minneapolis/St. Paul International Airport, Minneapolis, MN.

EMANUELSON-PODAS, INC. CONSULTING ENGINEERS

6607 18th Avenue South
Minneapolis, MN 55423
612/866-8424
Fax: 612/866-8426
Established 1957

Robert F. Emanuelson	PE
Paul R. Emanuelson	PE
Norman F. Podas, Jr.	PE

Firm Personnel by Discipline	
Mechanical Engineers	2
Electrical Engineers	1
Other Professional/Technical	4
Administrative	1
TOTAL in Firm	8

Preparation of mechanical and electrical facility study reports, energy analyses, plans and specifications for building construction and construction observations. Mechanical services include plumbing, fire protection, heating, air conditioning and temperature controls. Electrical services include lighting, power, communication and controls.

Minnewaska area High School, Glenwood, MN; St. Jude Medical Labs & Mfg., Little Canada, MN; Rupperts Nite Club & Restaurants, Golden Valley, MN; Crystal Evangelical Free Church, Crystal, MN; Scott County Courthouse & Law Enforcement, Shakopee, MN.

ENVIRONMENTAL SERVICES, INC.

7831 Glenroy Road, Suite 340
Minneapolis, MN 55439
612/831-4646
Fax: 612/831-6897
Established 1970

David L. Pederson	PE
R. Barry Whiteaker	PE

Firm Personnel by Discipline	
Civil Engineers	2
Structural Engineers	2
Other professional/technical	1
Administrative	1
TOTAL in Firm	6

ESI is a consulting engineering firm specializing in complex structural analyses and vibration testing, analysis and control. We do structural studies of buildings and equipment to investigate structural integrity, determine overstress, minimize weight, or reduce vibration and shock. Our engineers' services normally include analysis with mathematical models, calculations as required, computer processing, written documentation, and consulting support.

Conveyor Vibration Testing; U of M Lab isolation design and vibration analysis; filter analysis; Hospital vibration analysis and isolation design; press foundation isolation design.

FOSS ASSOCIATES

810 4th Avenue South
P.O. Box 306
Moorhead, MN 56561
218/236-1202
Fax: 218/236-4945
Established 1898

Bill Cowman	AIA
Willis Stelter	AIA
Paul Jacobson	PE
Charles Zeltinger	RLS
Mark B. Foss	PE

Firm Personnel by Discipline	
Civil Engineers	1.5
Structural Engineers	1
Land Surveyors	1
Architects	4
Other professional/technical	6
Administrative	2
TOTAL in Firm	15.5

Structural and civil engineering, architectural and surveying firm with complete design and construction observation services for commercial, educational, recreational, institutional, research, healthcare and governmental agency clients, including feasibility studies, programming, masterplanning, plus existing building structural deficiency surveys, and specialty services of surveying existing buildings for FEMA emergency shelter capabilities.

Westside Terminal Building, Hector International Airport, Fargo, ND; West Acres Regional Shopping Center, Fargo, ND; Fergus Falls Regional Treatment Center (100-bed psychiatric hospital replacement), Fergus Falls, MN; 16 & 12 story lift slab dormitories, Moorhead State University, Moorhead, MN; FEMA Emergency Shelter Surveys of 18,000 buildings in Minnesota and Illinois.

GAUSMAN & MOORE ASSOCIATES, INC.

203 East Little Canada Road
St. Paul, MN 55117
612/482-9606
Fax: 612/482-9897
Established 1935

James W. Giefer	PE
James A. Keller	PE
D. Lane Hersey	PE
Adrian P.H. Keller	PE

Firm Personnel by Discipline	
Mechanical Engineers	7
Electrical Engineers	6.5
Other professional/technical	31
Administrative	9
TOTAL in Firm	53.5

Gausman & Moore's mechanical and electrical engineering services include design of heating, ventilating, air conditioning, plumbing, fire protection, power distribution, and security systems. Also, through affiliated companies DATA CORE ENGINEERING and LIGHTING SOLUTIONS, we offer you comprehensive, specialized expertise in audio-visual, voice/data, network systems and lighting systems design.

Timberwolves Target Center, Minneapolis, MN; St. John's University, Numerous Projects, Collegeville, MN; University of Minnesota Electrical Engineering Building, Minneapolis, MN; 3M, Numerous Projects, St. Paul, MN; St. Anthony Park Library, St. Paul, MN.

HAKANSON ANDERSON ASSOCIATES, INC.

222 Monroe Street
Anoka, MN 55303
612/427-5860
Fax: 612/427-3401
Established 1975

Lawrence G. Koshak	PE
Merland Otto	LA
Peter R. Raatikka	PE
James M. Winter	RLS

Firm Personnel by Discipline	
Civil Engineers	4
Sanitary Engineers	1
Landscape Architects	1
Land Surveyors	5
Other professional/technical	5
Administrative	3
TOTAL in Firm	19

Hakanson Anderson Associates provides services in the fields of civil, sanitary and municipal engineering, planning, land surveying and landscape architecture. The firm's representative projects include wastewater treatment facilities, airports, streets, park and recreation facilities, environmental assessments, commercial site design, water supply and distribution and storm water management.

Isle Wastewater Treatment Facilities, Isle, MN; Grand Marais-Cook County Airport, Grand Marais, MN; Anoka Sports Center, Ramsey, MN; Streets, Water Distribution System & Stormwater Reconstruction, Osseo, MN.

HAMMEL GREEN AND ABRAHAMSON, INC.

1201 Harmon Place
Minneapolis, MN 55403
612/332-3944
Fax: 612/332-9013
Established 1853

Harry R. Wilcox	PE
James M. Moravek	PE
Robert M. Parupsky	PE
James F. Goulet	PE
David J. Galey	PE

Firm Personnel by Discipline	
Civil Engineers	3
Structural Engineers	12
Mechanical Engineers	21
Electrical Engineers	15
Architects	78
Other professional/technical	49
Administrative	41
TOTAL in Firm	219

HGA Engineering, in addition to serving clients through the full-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.

NSP Transformer Maintenance Facility, Maple Grove, MN; Minnesota History Center, St. Paul, MN; Canterbury Downs Race-track, Shakopee, MN; Bethesda Hospital: Birthing Unit, Cincinnati, OH; USDA Research Laboratory, Fargo, ND.

LHB ENGINEERS & ARCHITECTS

4550 West 77th Street Suite 302
Minneapolis, MN 55435
612/831-8971
Fax: 612/831-0115

Lauren A. Larsen	PE
Harvey H. Harvala	PE
William D. Bennett	PE
David M. Sheedy	PE
Richard A. Carter	AIA

Firm Personnel by Discipline	
Civil Engineers	11
Structural Engineers	5
Architects	13
Other professional/technical	4
Administrative	11
TOTAL in Firm	54

LHB offers roadway, civil, bridge and municipal engineering services in addition to structural engineering and architecture. Specialties include providing innovative engineering solutions to hospitals, utility industries, forest products industries and governmental agencies. LHB also specializes in building investigations and building condition documentation.

Holiday Inn Addition, Duluth, MN; Lake Avenue Reconstruction, Duluth, MN; Duluth Skywalk Extension, Duluth, MN; American National Can Press Room Addition, Minneapolis, MN; I-394 Building Condition Surveys, Minneapolis, MN.

■ LARSON ENGINEERING OF MINNESOTA

3524 Labore Road
White Bear Lake, MN 55110
612/481-9120
Fax: 612/481-9201
Established 1979

Other offices:
Chicago, Illinois
Los Angeles, California
Greensboro, North Carolina

Wayne C. Larson	PE
Lee A. Granquist	PE

Firm Personnel by Discipline	
Civil Engineers	2
Structural Engineers	14
Other professional/technical	4
Administrative	2
TOTAL in Firm	22

Structural Division: Specializing in the structural design of schools, government facilities, libraries, medical facilities and law enforcement buildings. Curtainwall Division: Experts in the design and investigation of curtainwall structural systems, air and water filtration, condensation, and energy considerations. Industrial Division: Structural design of industrial structures of all types. Structural design of bulk materials handling systems.

St. Cloud Civic Center, St. Cloud, MN; Foley High School, Foley, MN; Cass Gilbert Building Renovation, St. Paul, MN; Shoreview Public Library, Shoreview, MN; First Bank Place, Curtainwall Systems, Minneapolis, MN.

■ MCCONKEY & ASSOCIATES, INC.

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

H. James McConkey	PE
-------------------	----

Firm Personnel by Discipline	
Structural Engineers	3
Other professional/technical	1
Administrative	1
TOTAL in Firm	5

Structural engineering for commercial, industrial, institutional and residential building projects. Experience in modification of existing structures, structural rehabilitation of older buildings, load analyses, design of foundations and supports for special equipment and bulk material handling structures, structural investigations and reports.

English Lutheran Church, La Crosse, WI; Impressions, Inc., Printing Plant, St. Paul, MN; Marquee Place, Wayzata, MN; General Mills Oat Mill, Fridley, MN; YWCA Uptown, Minneapolis, MN.

■ MATTSON/MACDONALD INC.

1516 West Lake Street #301
Minneapolis, MN 55408
612/827-7825
Fax: 612/827-0805
Established 1983

Wesley C. Mattson	PE
David H. Macdonald	PE

Firm Personnel by Discipline	
Structural Engineers	5
Other professional/technical	1.5
Administrative	1
TOTAL in Firm	7.5

Mattson/Macdonald provides structural engineering services to architectural clients. M/M has considerable experience with a broad range of project types; housing, retail, office, manufacturing, hospitals, churches, educational and government facilities.

Earle Brown Heritage Center, Brooklyn Center, MN; Fond Du Lac Community College, Cloquet, MN; Morrison County Government Center, Little Falls, MN; Cardiac Pacemakers Inc., Arden Hills, MN; Warroad Public Library, Warroad, MN.

■ MEYER, BORGMAN AND JOHNSON, INC.

12 South Sixth Street
#810 Plymouth Building
Minneapolis, MN 55402
612/338-0713
Fax: 612/337-5325
Established 1955

John E. Meyer	PE
Roland V. Johnson	PE
Richard E. Wiehle	PE
Daniel E. Murphy	PE

Firm Personnel by Discipline	
Structural Engineers	9
Other professional/technical	3
Administrative	2
TOTAL in Firm	14

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

Minnesota Orchestra Hall, Minneapolis, MN; Norwest Operations Center, Minneapolis, MN; Civil/Mineral Engineering Building, University of Minnesota, Minneapolis, MN; Reconstruction of Ceresota, Crown and Standard (Whitney Hotel) Mills, Minneapolis, MN; World Trade Center, St. Paul, MN.

■ MICHAUD, COOLEY, ERICKSON & ASSOCIATES, INC.

625 Fourth Avenue South
Suite 1325
Minneapolis, MN 55415
612/339-4941
Fax: 612/339-8354
Established 1946

Robert Erickson	PE
Douglas Cooley	PE
Dean Rafferty	PE
Monty Talbert	PE

Firm Personnel by Discipline	
Mechanical Engineers	55
Electrical Engineers	32
Administrative	20
TOTAL in Firm	107

MCE is the largest mechanical and electrical engineering firm in the Twin Cities. Our engineers design mechanical, electrical, and specialty systems for corporate, medical, data processing, laboratory, retail, educational, public and commercial buildings. We also have in-house experts who specialize in the design of lighting, security, energy-management, and audiovisual systems.

IDS Operations Center, Minneapolis, MN; Cray Research Lone Oak Corporate Campus, Eagan, MN; New Lakeville High School, Lakeville, MN; Shakopee Women's Correctional Facility, Shakopee, MN; Abbott Northwestern Hospital (Multiple Projects), Minneapolis, MN.

■ ORR-SCHELEN-MAYERON & ASSOCIATES, INC.

2021 East Hennepin Avenue,
Suite 238
Minneapolis, MN 55413
612/331-8660
Fax: 612/331-3806
Established 1922

B.A. Mittelsteadt	PE
D. Edward Ames	RLS
Paul J. Blomberg	PE
Ernest E. Fenton	PE
Marlin D. (Butch) Larsen	PE

Firm Personnel by Discipline	
Civil Engineers	17
Structural Engineers	4
Mechanical Engineers	12
Electrical Engineers	7
Architects	2
Other professional/technical	68
Administrative	20
TOTAL in Firm	130

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 land planning. Full service, client oriented firm experienced with multidisciplinary projects. Complete project capabilities in-house.

St. Mary's Medical Center, Duluth, MN; North Memorial Medical Center, Robbinsdale, MN; Henry Street Generating Station, Bay City Electric Light & Power, Bay City, MI; St. Cloud Water Treatment Plant, St. Cloud, MN; Prairieland Solid Waste Composting Plant, Truman, MN.

PALANISAMI & ASSOCIATES, INC.

5661 International Parkway
Minneapolis, MN 55428
612/533-9403
Fax: 612/533-9586
Established 1986

P. Palanisami	PE
R.S. Pandian	PE

Firm Personnel by Discipline	
Civil Engineers	2
Structural Engineers	4
Other professional/technical	9
Administrative	2
TOTAL in Firm	17

Preparation of structural construction documents for residential, commercial and industrial structures, and solid waste composting facilities. Cost estimating. Functional and structural design of multi-level commercial garages. Construction observation and reports. Consulting to precast concrete producers in structural system and component design. Preparation of erection and fabrication drawings. MBE/SBE firm.

Fourth Street Parking Facility, University of Minnesota, Minneapolis, MN; East Central Solid Waste Composting Facility, Mora, MN; Viking Enclosed Practice Field, Eden Prairie, MN; Galleria Shopping Center, Edina, MN; Moose Lake Psychiatric Hospital, Moose Lake, MN.

PLANMARK

11840 Valley View Road
Eden Prairie, MN 55344
612/828-4500
Fax: 612/848-4743
Established 1975

Howard B. Loomis, Jr.	PE
Kenneth R. Stebbins	AIA
Tom G. Peterson	PE
Ronald L. Strandlund	PE
John J. Rudberg	PE

Firm Personnel by Discipline	
Civil Engineers	4
Structural Engineers	4
Mechanical Engineers	3
Electrical Engineers	2
Architects	12
Other professional/technical	15
Administrative	7
TOTAL in Firm	47

Full discipline engineering and architectural firm providing full A/E services throughout the United States for supermarkets, shopping centers, retail stores, offices and food distribution facilities. Project management, feasibility studies, site planning and evaluations, architecture, civil, structural, mechanical and electrical engineering, construction contract administration.

Cub Foods, Apple Valley, MN; Military Commissary, Camp LeJeune, NC; ShopKo Distribution Center, Boise, ID; Middle-town Station Mall, Louisville, KY; 430,000 SF Dry Grocery Warehouse, New Stanton, PA.

STS CONSULTANTS, LTD.

3650 Annapolis Lane
Plymouth, MN 55447
612/559-1900
Fax: 612/559-4507
Established 1948, Minneapolis office Established 1966

James Overtoom	PE
Stephan Gale	PE
Robert DeGroot	PE
Ted Frostman	

Firm Personnel by Discipline	
Civil Engineers	8
Ecologists	3
Geologists	4
Hydrologists	2
Soils Engineers	4
Hydrogeologists	2
Environmental Scientists	8
Materials Engineers	2
Landscape Architects	1
Other professional/technical	14
Administrative	5
TOTAL in Firm	53

STS Consultants, Ltd., is a specialized, multi-disciplined civil engineering firm with services encompassing every phase of a project—from site selection, planning and design to construction and maintenance. Services include: site assessment, wetland evaluation and mitigation, stormwater management, hydrology, geotechnical engineering and testing, geosynthetics design, remedial investigation/design, rehabilitation engineering.

IDS Tower, Minneapolis, MN; IBM First Bank Place, Minneapolis, MN; Dutch Creek Wetland Development, MNDOT, Rochester, MN; Wal-Mart Stores (multiple locations); Downtown Incinerator, Minneapolis, MN.

SCHOELL & MADSON, INC.

10580 Wayzata Boulevard
Minnetonka, MN 55343
612/546-7601
Fax: 612/546-9065
Established 1956

James Orr	PE
Ken Adolf	PE
Theodore Kemna	RLS

Firm Personnel by Discipline	
Civil Engineers	7
Environmental Engineers	2
Other professional/technical	14
Administrative	2
TOTAL in Firm	25

Land use, environmental, and development planning services. Civil engineering services: drainage and grading, water, wastewater and storm water system studies, design and construction/contract administration. Specialist in infrastructure renewal and redevelopment. Survey services: property and easement descriptions, mapping, government corner restoration, boundary, topographical, and construction surveys. Quality control, soil testing, construction observation and environmental services.

Opus 2, Minnetonka, MN; Prairie View Centers, Eden Prairie, MN; Ridgehaven Mall, Minnetonka, MN; Zantigo Restaurants, 7 locations; Children's World, 24 locations.

SETTER, LEACH & LINDSTROM, INC.

1100 Peavey Bldg,
2nd Ave at 8th Street
Minneapolis, MN 55402-2454
612/338-8741
Fax: 612/338-4840
Established 1917

Richard Vasatka	PE
George Theodore	PE
Basil Filonowich	AIA
Kaare O. Faber	PE
Howard Goltz	AIA

Firm Personnel by Discipline	
Civil Engineers	1
Structural Engineers	17
Mechanical Engineers	17
Electrical Engineers	14
Architects	28
Other professional/technical	20
Administrative	16
TOTAL in Firm	113

Setter, Leach & Lindstrom is a multi-disciplined firm with 113 professionals. Engineering services include civil, structural, electrical and mechanical (including fire protection) design for both public and private clients nationwide. For 75 years, SLL has provided engineering services for commercial offices, retail centers, clinics, distribution centers, educational and municipal facilities.

US West Communications Renovation, Minneapolis, MN; University of Minnesota Hospital & Clinic Addition & Remodeling, Minneapolis, MN; Minneapolis Public Schools, Southeast Elementary School, Minneapolis, MN; Safeway, Inc., Food Distribution Center, Tracy, CA; Target, Prototype Stores, Nationwide.

STRUCTURAL DESIGN ASSOCIATES, INC.

4401 85th Avenue North
Suite 202
Minneapolis, MN 55443
612/493-5560
Fax: 612/493-5561
Established 1989

Gregory J. Duerr	PE
Dorance J. Thorn	

Firm Personnel by Discipline	
Structural Engineers	2
Other professional/technical	3
Administrative	5
TOTAL in Firm	5.5

Provide full structural services including engineering design, construction documents, specifications, reports, construction observation for commercial, institutional, industrial, medical, renovation, special structures and foundations. Services provided to architects, engineers, contractors, developers, owners and others.

Minnewaska Area High School, Pope County, MN; New Elementary School, Chaska, MN; Andersen Corporation, Inc. Building 145, Bayport, MN; Kallestad Diagnostics, Inc., Chaska, MN; Lutsen Golf Course Club House, Lutsen, MN.

SYMME, MAINI & MCKEE ASSOCIATES, INC.

Young Quinlan Building
81 South Ninth Street Suite 330
Minneapolis, MN 55402
612/332-3654
Fax: 612/332-3626
Established 1955

Thomas E. Vogel	AIA
Michael K. Powers	PE
Edward R. Frenette	AIA
Daniel L. Ilten	AIA, PE
Robert J. McNair	AIA

Firm Personnel by Discipline	
Civil Engineers	4
Structural Engineers	5
Mechanical Engineers	8.5
Electrical Engineers	5
Architects	22.5
Other professional/technical	16
Administrative	9
TOTAL in Firm	70

SMMA's professional staff is active in civil, structural, mechanical, electrical and plumbing/fire protection engineering; architecture and architectural programming; site/master planning and landscape architecture; interior design and space planning; and project management. Project types include office, laboratory, data processing, manufacturing, distribution and retail for clients in the commercial, industrial, and institutional fields.

First Bank Systems, St. Paul, MN; IBM, Essex Junction, VT; IBM, East Fishkill, NY; Lotus Development Corporation, North Reading, MA; Rosemount, Inc., Chanhassen, MN.

TAC ENGINEERING COMPANY, INC.

620 Mendelssohn Avenue #161
Minneapolis, MN 55427
612/542-8855
Fax: 612/542-8857
Established 1966

Philip L. Anderson	PE
Thomas J. Schoenecker	PE

Firm Personnel by Discipline	
Mechanical Engineers	1
Electrical Engineers	1
Other professional/technical	3
TOTAL in Firm	5

Engaged in the design of mechanical and electrical systems for buildings, including HVAC, plumbing, special piping, lighting, power and miscellaneous supportive systems. Projects include all types of housing, commercial, industrial, municipal, public, religious and educational buildings. Also engaged in forensic engineering for the legal and insurance industries.

Nicollet Towers, Minneapolis, MN; Mall of America Parking Structures, Bloomington, MN; Langton Lake Nursing Home, Roseville, MN; Knox Lumber Company, Eagan, MN; Minnesota Department of Transportation Central Laboratories, Maplewood, MN.

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

2500 American National Bank Building
St. Paul, MN 55101-1893
612/292-4450
MN 800-247-1714
Fax: 612/292-0083
Established 1910

Duane T. Prew	PE
James E. Voyer	PE
Darrel H. Berkowitz	PE
Westly J. Hendrickson	AIA
William J. Armstrong	AIA

Firm Personnel by Discipline	
Civil Engineers	19
Structural Engineers	3
Mechanical Engineers	7
Electrical Engineers	5
Transportation Engineers	30
Architects	22
Other professional/technical	55
Administrative	20
TOTAL in Firm	161

TKDA provides civil, electrical, environmental, mechanical, structural and transportation engineering services to governmental, institutional and corporate clients. TKDA's electrical, mechanical and structural engineers provide building systems design in support of TKDA's architectural department.

TKDA's civil, environmental and transportation engineers provide designs for municipal utilities, highways, bridges, airports and railroads.

National Sports Center, Minnesota Amateur Sports Commission, Blaine, MN; Renovation of Lock & Dam #3, U.S. Corps of Engineers, Red Wing, MN; Machine Shop Expansion (Building 99), 3M Companies, St. Paul, MN; General Office and Service Center, Rochester Public Utilities, Rochester, MN; Integrated Waste Management Facility, University of Minnesota, Minneapolis, MN.

TWIN CITY TESTING CORPORATION

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

Emerson F. Carr	
Craig D. Moritz	PE
Michael J. Costello	PE

Firm Personnel by Discipline	
Civil Engineers	79
Structural Engineers	3
Mechanical Engineers	18
Electrical Engineers	1
Soils Engineers	25
Chemical Engineers	3
Mining Engineers	2
Acoustical Engineers	2
Metallurgical Engineers	3
Architects	1
Other professional/technical	528
Administrative	140
TOTAL in Firm	770

Twin City Testing Corporation (TCT) provides independent analysis of the environment, construction and products. We offer complete testing and consulting from our headquarters in St. Paul, Minnesota, and 28 regional offices throughout the Midwest.

Minneapolis Convention Center, Minneapolis, MN; Light Rail Transit Project, Hennepin County, MN; Mall of America, Bloomington, MN; Minneapolis Hilton Hotel and Garage, Minneapolis, MN; Federal Cartridge, St. Paul, MN.

WIDSETH SMITH NOLTING

2504 Aga Drive
Alexandria, MN 56308
612/762-8149
Fax: 612/762-0264

401 Golf Course Drive
Brainerd, MN 56401
218/829-5117
Fax: 218/829-2517

216 South Main
Crookston, MN 56716
218/281-6522
Fax: 218/281-6545
Established 1975

Donald L. Nolting	PE
Bruce R. Buxton	PE, LS
Donald D. Anderson	PE
George R. Kriha	PE
Timothy J. Moe	PE

Firm Personnel by Discipline	
Civil Engineers	11
Structural Engineers	2
Sanitary Engineers	2
Water Resource Engineers	1
Hydrogeologic Engineers	1
Geologists	1
Land Surveyors	4
Architects	3
Other professional/technical	23
Administrative	6
TOTAL in Firm	55

WSN offers consulting engineering, architectural, land surveying and project management services. We provide a full range of services for projects involving airports, water/wastewater treatment facilities, solid waste, environmental property assessments, hydrogeologic studies, underground storage tank assessments, water/sanitary/storm systems, streets (including federal and state aid), water resources, land surveys and planning/design of buildings.

Mills Fleet Farm Engineering/Architectural Design & Project Management, Oakdale, MN; Sewer & Water Extensions, Southdale Addition, Baxter, MN; Downtown Redevelopment Study, Crookston, MN; Rural Water System, North Kittson County; Wastewater Treatment Plant Improvements, Aitkin, MN.

WOLD ARCHITECTS, INC.

6 West Fifth Street
St. Paul, MN 55102-1420
612/227-7773
Fax: 612/223-5646
Established 1968

Michael S. Cox	AIA
Kevin P. Sullivan	AIA
Norman L. Glewwe	AIA
Dennis G. Leslie	PE
Craig W. Anding	PE

Firm Personnel by Discipline	
Mechanical Engineers	3
Electrical Engineers	4
Architects	23
Other professional/technical	7
Administrative	6
TOTAL in Firm	43

Wold Architects has broadened its established architectural services practice with the addition of mechanical and electrical engineering departments. As a full-service firm, Wold specializes in the planning and design of school facilities, county and municipal buildings, and other governmental facilities. Since 1968, the firm has successfully managed more than 500 team projects resulting in more than \$750 million of construction.

Lakeville High School, Lakeville, MN; Dover-Eyota Elementary School, Eyota, MN; North Side Elementary School, LaCrosse, WI; Hibbing Technical College Aviation Center, Hibbing, MN; District Energy St. Paul, St. Paul, MN.

ROBERT YOURZAK & ASSOCIATES, INC.

7320 Gallagher Drive Suite 325
Minneapolis, MN 55435
612/831-2235
Established 1982

Robert J. Yourzak	PE
Douglas G. Wolfangle	PE
Dennis F. Satterlee	PE

Firm Personnel by Discipline	
Civil Engineers	2
Structural Engineers	1
Mechanical Engineers	1
Electrical Engineers	1
Architects	.5
Other professional/technical	3.5
Administrative	1
TOTAL in Firm	10

Complete program/project/construction management services to owners, architects, engineers and contractors. Services include: project direction, planning, scheduling, budgeting, team member requirements, progress control, computer utilization, construction management, procurement and contract administration.

Northwest Airlines New Maintenance Base, Programming & Conceptual Design Phase—Program Manager, Duluth, MN.

FOR THE FINISHING TOUCH

Create designs to go beyond
your client's expectations.

Custom fabricated granite
from Rex.

It adds the finishing touch
you're looking for when you
want to step above the ordinary.

- Countertops
- Vanities
- Signage
- Accent Furniture
- Boardroom Tables
- Interiors
- Exteriors
- Landscape

Whatever your needs, we
specialize in fabricating the
world's finest granites to meet
your specifications. And budget.

For more information and
price quotes at no charge, just
give us a call to put the finishing
touch on your design.



CUSTOM FABRICATION DIVISION
P.O. Box 924 St. Cloud, MN 56302
800-328-2303 FAX 612-252-4678

previews

Continued from page 7

Paul's historic Landmark Center. So come hear the music play as you hobnob with other architects and local dignitaries—and bask in the pride of Minnesota's architectural heritage. A special bonus will be the premiere of a traveling exhibition highlighting 100 years of Minnesota architecture.

For more information, call David Anderson at (612) 593-0950.

Hot Glass from Swedish Forests American Swedish Institute Through April 1992 \$3 adults \$2 seniors and children

Swedish glass making dates to the 16th century, and today the country is world renowned for the craftsmanship of its glass work. The American Swedish Institute in Minneapolis holds one of the largest collections of Swedish glass outside of Sweden and has a permanent exhibit of this glassware. "Hot Glass from Swedish Forests: Treasures from the Institute Collection," pulls rarely seen items from the vast collection, including works by Edvard Hald, Bertil Vallien and Olle Alberius, among others. A series of photographs, videos and maps further explores the technique of glass-blowing, glass-cutting and engraving.

For more information, call (612) 871-4907.

Modernist Light: 1900-1940 Norwest Center main lobby Minneapolis Through autumn 1992

This ongoing exhibition of modernist lighting pulls lighting objects—table, desk, floor, wall and work lamps, and even chandeliers and ceiling lights—from Norwest's permanent collection to document major developments in modern lighting design. The works represent the principal movements of modernism, including Arts and Crafts,

Art Nouveau, Wiener Werkstatte, de Stijl, Bauhaus and Art Deco.

For more information, call Norwest at (612) 667-1234.

About the House Children's Museum St. Paul Ongoing \$3 adults and children over 2; \$2 seniors; \$1 children 12-23 months

Ever wonder how a house is put together, what magic keeps the roof from collapsing, the heat from escaping on the coldest winter days, how lights turn on and off, how water circulates? This exhibit takes the mystery but not the fun out of residential construction by giving kids a nuts-and-bolts tour of a mock house, from the architect's drawing board to the family photos on the living-room wall.

For more information call (612) 644-3818.

Prairie Metropolis: Life in a Northern City Hennepin History Museum Ongoing

This exhibit identifies the unique character and history of the Minneapolis region. Using the sites, sounds and textures of the city, the exhibit examines the city as a place of opportunity and disappointment, filled with diverse interests. Looking beyond the city borders, the exhibit shows how suburbs, small towns and rural areas all comprise and affect the urban core.

For more information call (612) 870-1329.

Tours of the Purcell-Cutts House 2328 Lake Place, Minneapolis Ongoing Reservations required

One of Minneapolis's finest examples of Prairie School architecture is open to the public following extensive restoration by the Minneapolis Institute of Arts.

For tours, call (612) 870-3131.

AM

up close

Continued from page 9

and has been paid through private contributions, Zehring says.

"The citizens of St. Paul will have done it," he says. "It was our idea and we're going to make it happen."

Now that's boosterism, something that Zehring is unabashedly proud of. As a new business owner, Zehring seems to take a more than keen interest in what is happening in and around St. Paul, a city he may someday lead as mayor if his name continues to be thrown in the ring as it was when George Latimer decided not to run in 1988.

Zehring & Angelson Co. opened its doors to business about a year ago, jumping headstrong into the commercial real-estate services business in the midst of its most serious depression. Declining land and property values, coupled with a recession that just won't go away, has hit St. Paul straight on with an overabundance of office and retail space, and the difficult after-effects that happen when an employer the size of West Publishing moves away. But it has presented yet another challenge for Zehring, who says that while St. Paul commercial real estate has seen better days, it is far from dead.

It is Zehring's fifth job in 10 years, but one he says he's likely to keep for awhile. All of his most recent jobs—St. Paul city attorney for development, corporate counsel for BCED Properties as a private attorney, senior vice president of development for BCED and then Brookfield Development, and senior vice president at Zaidan Holdings, owner of Galtier Plaza—have allowed him to focus on commercial real estate, most of which rises and falls with the economic vitality of the city. For Zehring, however, the pendulum is always swinging up and forward.

"I haven't been job jumping really," he says. "It's been project to project, which is the whole purpose of what we're (Zehring and partner Robert Angelson) doing here. We're

taking on projects and when we're done with them, we go on to something different."

While at BCED, Zehring's task was to open and get rolling the World Trade Center; at Zaidan, his task was to turn around the ailing Galtier Plaza. In his own business, he's tackling troubled projects like the Meritor Tower and is working on managing and leasing such projects as Bandana Square in St. Paul's Energy Park, and The Conservatory in Minneapolis. They have all been formidable challenges in a real-estate industry that hasn't had much happy news to report of late.

"Commercial real estate is in a real challenging and difficult period," he adds. "The days of the major developers doing project after project in various parts of the industry has subsided. The very nature of our business has changed. The fact is that there's some properties that are extraordinarily difficult, but not impossible to make work. And on the other hand, there are many, many projects with history that still have a lot of potential."

For properties in St. Paul, it's been a dual dilemma: stopping the flight to the suburbs that many businesses are taking, while creating a new image for the city. Zehring looks at a number of ways of making St. Paul more exciting, with such proposals as riverboat gambling on the Mississippi River, a plan that could come up against hard antigambling lobbying.

"Quaintness," he says is the key word to describe the Capitol City. "Not so much in a small sense as in an inviting sense. Downtown St. Paul is clean, safe, friendly. It's user-friendly and it's compact. Its primary uses of retail and office are linked together well. It's got an interesting streetscape that blends the old with the new."

Streetscapes, history, a sense of maturity are what makes St. Paul work and what will take it into the future, Zehring says. It's that rich sense of history merging into a new sense of direction.

"What we see in St. Paul is something of a city bridging two different

Damon Farber Associates

Landscape Architects



3 3 2 - 7 5 2 2

MAY WE OFFER SOME CONSTRUCTIVE COMMENTS?

To assist in opening your next project to rave reviews, choose TCT as your consulting engineering firm. Call us to find out how our consulting engineering services and full-service testing lab can help you build better.



Plymouth: (612) 473-2976 • St. Paul: (612) 645-3601

A member of the **HIH** group of companies

There's no place
like Homitel®
for genuine
MARBLE



Granada Royal
Homitel® of
Bloomington

Drake Marble Company

CERAMIC TILE QUARRY TILE MARBLE SLATE
60 PLATO BLVD. ST. PAUL, MN 55107 PHONE: 222-4759

eras," he says. "What I'm finding today is that the people who live and work in downtown St. Paul, and its leadership, is maturing and becoming more confident with a better understanding of what the city is."

When West Publishing announced its decision to move out last year, it was a turning point for downtown St. Paul, one that most would have preferred not to have happened. Still, to Zehring the silver lining around that cloud was that it sounded the alarm, forcing people to really wake up and look at what was happening around them.

"I really do see a mobilization of resources occurring," he says. "I see

a lot more depth and consensus of how we're going to grow and strengthen the city in the next five years. I see that formulating very quickly; it runs all the way across from the executives of the downtown corporations to the foundation heads to the elected officials to the service sector, as well as retail. I would expect and hope that there might be another spurt of growth by now. I don't necessarily mean a lot of new buildings, as much as a revving up of the economic engine. And the interesting thing is that the engine may be running on a different type of fuel."

Jennifer Waters is a staff writer for Minneapolis/St. Paul CityBusiness.

AM

Advertising Index

- | | |
|--|---------------------------------------|
| AIA Trust, p. 1 | G S Direct, Inc., p. 55 |
| Andersen Windows, p. 6 | W.L. Hall, p. 2 |
| Fred G. Anderson, Cov. II | Kohler, pp. 10-11 |
| Architectural Consultants, p. 8 | Minnesota Architects, Cov. IV |
| Association Administrators & Consultants, p. 42 | Minnesota Drywall Council, p. 4 |
| Ceramic Tile Industry, p. Cov. III | PS Decor, p. 10 |
| Coming Soon, p. 45 | Principle Fixture and Millwork, p. 42 |
| Consulting Engineers Council, p. 4 | Rex Granite, p. 52 |
| Cooperative Power, p. 14 | Twin City Testing, p. 54 |
| Degallier Animation, p. 55 | United Power Association, p. 14 |
| Drake Marble, p. 54 | |
| Excelsior Manufacturing & Supply/Minnesota Blue Flame Gas Association, p. 44 | |
| Damon Farber, p. 53 | |
| Directory of Consulting Engineering Services, pp. 46-51 | |

Credits

Project: Glam Slam Nightclub

Location: Minneapolis, Minn.
 Client: Heaven and Earth, Inc.
 Architects: KKE Architects, Inc.
 Partner-in-charge: Ronald C. Erickson
 Project designer: Gordon A. Olschlager
 Project team: Randall Lindemann,
 Tom Wasmoen, Dave Kirwin,
 Julia Sandler, Nadia Anderson,
 David Scott, Charlotte Schwartz
 (Spaces Interiors)
 Structural engineers: Ericksen, Roed/
 Johnston-Sahlman & Associates, Inc.
 Lighting design consultant: Schuler &
 Shook, Inc.
 Sound system/disco lighting: Tucker
 Frattalone
 Construction manager: Bossardt
 Corporation

Project: Bocce

Location: Minneapolis, Minn.
 Client: Sports Italia
 Construction documentation: Shea
 Architects, Inc.
 Principal-in-charge: Richard D'Amico/
 D'Amico + Partners, Inc.
 Project manager: David Jackson/
 David Jackson & Associates
 Project designer: Richard D'Amico
 Project team: Richard D'Amico and
 Gerri A. Determan
 Structural engineer: Bokke, Kopp,
 Ballou & McFarlin
 Mechanical engineer: Modern Heating and
 Air Conditioning
 Electrical engineers: Sterling Electric Co.
 Contractor: PCL Construction Services
 Interior design: D'Amico + Partners
 Photographer: Parallel Productions/
 Tom Berthiaume

Project: Recreational Sports Complex

Location: Minneapolis, Minn.
 Client: University of Minnesota
 Architects: The Stageberg Partners/
 Ralph Rapson Architects
 Project architect: William Beyer
 Project designer: James Stageberg,
 Ralph Rapson
 Project team: Jim Foran, John Stark,
 Jim Scott
 Structural engineers: Toltz King Duvall &
 Anderson & Assoc.
 Mechanical engineer: Toltz King Duvall &
 Anderson & Assoc.
 Electrical engineers: Toltz King Duvall &
 Anderson & Assoc.
 Contractor: Sheehy Construction
 Aquatics: Counsilman/Hunsaker Assoc.
 Photographer: Christian Korab

Project: Target Center and Arena Club

Location: Minneapolis, Minn.
 Client: Minnesota Arena Partnership-
 Northwest Racquet Swim and
 Health Club
 Architects: KMR Architects, Ltd.
 Principal-in-charge: Alan Kimpell
 Project manager: Alan Kimpell (Arena)
 Paul Miterko (Health Club)
 Project manager: Jerry Runk
 Project designer: Jerry Runk
 Project team: Jerry Runk, Alan Kimpell,
 Paul Miterko, Elizabeth Thompson,
 Gerald Klitz
 Structural engineers: Ericksen Roed/
 Johnston-Sahlman
 Mechanical engineers: Gausman & Moore
 Electrical engineers: Gausman & Moore
 Contractor: M.A. Mortenson
 Acoustical consultants: The Joiner-Rose
 Group, Inc.
 Photographers: Shin Koyama and
 Steve Bergerson

Project: YMCA

Location: Minneapolis, Minn.
 Client: The YMCA of Metropolitan
 Minneapolis
 Architects: The Alliance, Inc.
 Principals-in-charge: Herbert A.
 Ketcham, Jr., Thomas J. DeAngelo
 Project architects: Eames Gilmore,
 Jack Bidwell
 Project designer: Thomas J. DeAngelo
 Project team: Darcy Ferrill, Todd Oetjens,
 Maria Hanft (interior design)
 Structural engineers: Ellerbe Becket, Inc.
 Mechanical engineers: Michaud Cooley
 Erickson & Associates, Inc.
 Electrical engineers: Michaud Cooley
 Erickson & Associates, Inc.
 Contractor: M.A. Mortenson
 Interior design: BFS, Inc./The Alliance, Inc.
 Associated architect: Ellerbe Becket, Inc.
 Photographer: Shin and Joel Koyama

Contributing editors

Bill Beyer is a partner with the Stageberg Partners and a member of the MSAIA Publications Committee.

John Coughlan is a vice president of Mankato Kasota Stone Inc., and coeditor of Reading Rooms, an anthology of stories and essays about the American Public Library.

Jack El-Hai writes about history for national and regional magazines.

Robert Gerloff is an associate with Mulfinger & Susanka Architects.

Barbara Knox is a Minneapolis writer who specializes in architecture and design.

Sandra LaWall Lipshultz is a writer and editor with the Minneapolis Institute of Arts.

Camille LeFevre is a Minneapolis writer focusing on the arts.

Bruce N. Wright is an architect and freelance writer.

FREE

Get the book that helped make a Minnesota company famous!



We've made a name for ourselves nationwide for our low prices—now you can save up to **40% off retail** on brand name plotter points & graphic supplies when you buy direct—right here at home in Minnesota!

CALL 800-234-DRAW

for our **FREE** graphic supplies catalog—receive a **FREE** gift with qualifying order—fast delivery!



Satisfaction Guaranteed VISA & MasterCard Accepted

7444 West 78th Street
 Bloomington, MN 55439
(612) 942-6115



Turning your project ideas into a realistic *FirstView*

- 3D computer generated images and walk-throughs.
- RenderMan™ solid modeling from CAD files or blueprints.
- New construction and remodeling simulations.
- Natural and artificial lighting analysis.
- Full color and texture representation.
- Output to computer files, video, slides or print.

Call for a free consultation

(612) 941-4167

13025 Dahlia Circle 310, Eden Prairie MN 55344



COURTESY MINNESOTA HISTORICAL SOCIETY

Lexington Park, 1897-1957.

There's still plenty of open space between Dunlap and Lexington, near University Avenue in St. Paul—that much hasn't changed. But where a parking lot now exists once stood an expanse of grass, dirt and chalk lines. From 1897 to 1957, the site contained Lexington Park, home of the St. Paul Saints minor-league baseball team. Indeed, space was one of the field's most noteworthy features.

As the park was reconfigured in 1916, the center-field wall stood 472 feet from home plate and the right-field foul pole 361, distances that made home runs in those directions no easy matter. But down the left-field line, a ball hit only 315 feet could clear the fence. A long-distance expanse and a short-distance

one defined the character of the park: It was tough going for left-handed batters and paradise for righties.

Lexington Park opened its gates on April 30, 1897. Saints owner Charles Comiskey planned the field with home plate on the Lexington Avenue side. Nineteen years later, after the Saints had joined the American Association league, a rebuilding of the park not only moved the plate to the opposite end, but it also permitted the construction of a dance hall, the Coliseum Pavilion, outside the new left-field fence.

The fortunes of the park and the team rose and fell over the following decades. America's entry in World War I canceled the minor-league season in 1918. About 15 years lat-

er, the Saints nearly abandoned Lexington and St. Paul for greener grass in Peoria, Ill. Electric lights made night play possible in 1937. The Saints brought home an American Association pennant the following year. Attendance hit an all-time peak of more than 350,000 in 1949.

It wasn't long before the construction of Metropolitan Stadium in Bloomington and talk of the relocation of the Washington Senators major-league team to the Twin Cities cast a pall over Lexington Park. The attendance was a puny 2,227 at the final game (a 4-0 Saints victory) in September 1956. And when the Saints recorded their final out, so did Lexington.

Jack El-Hai