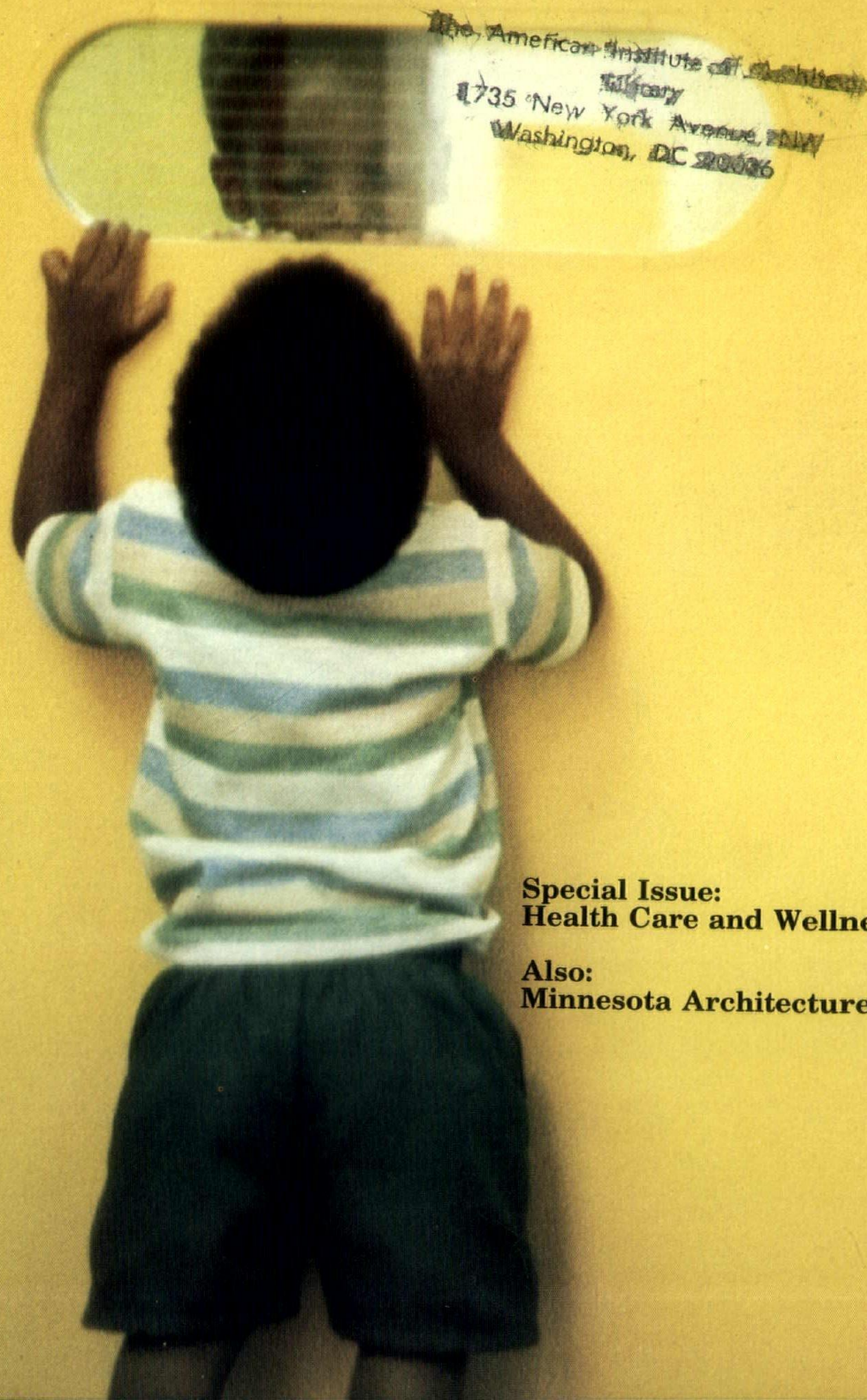


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wake up to AM

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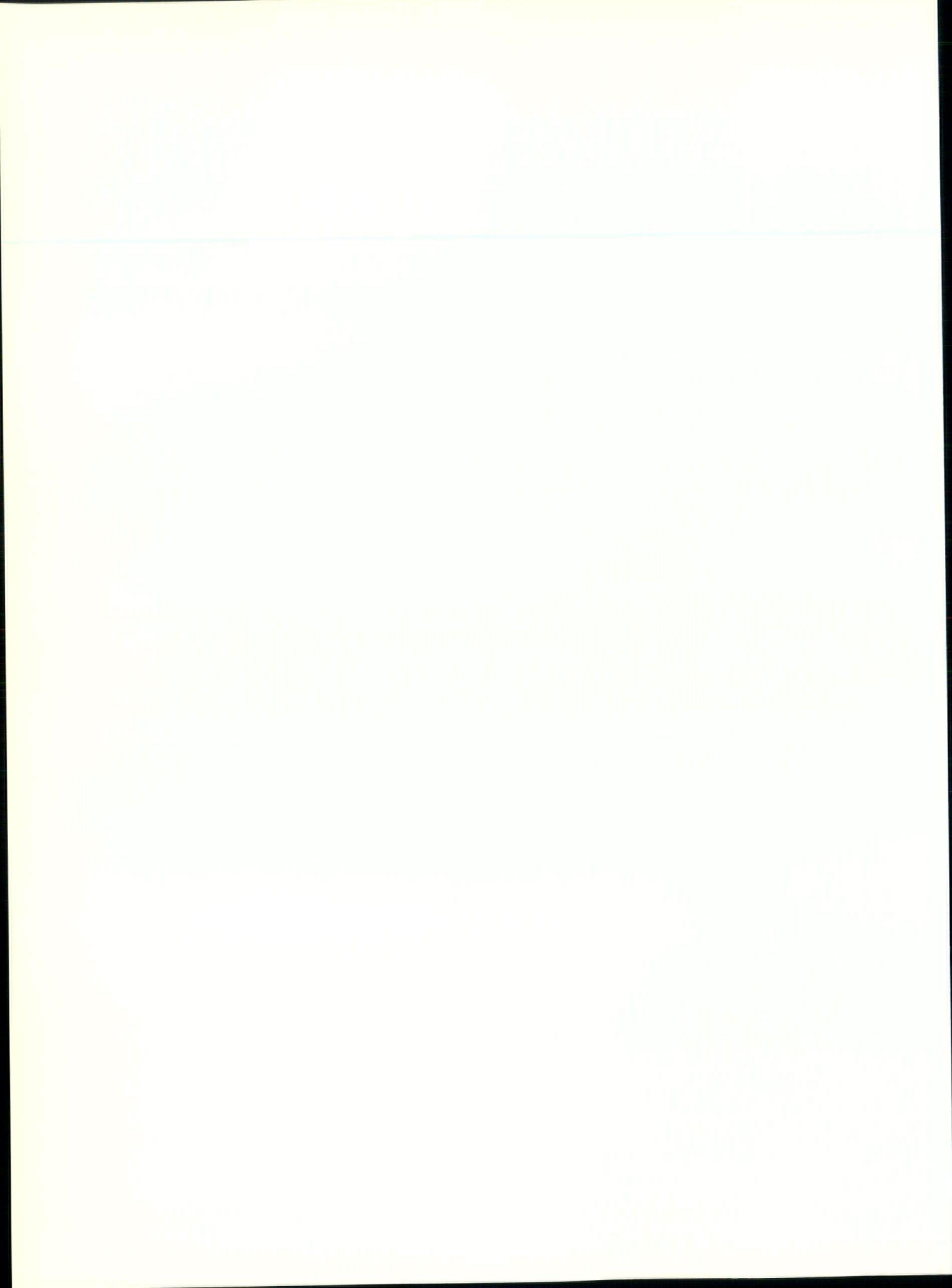
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A handwritten signature in dark ink, reading "Peter Rand". The signature is stylized, with the first name "Peter" written in a cursive script and the last name "Rand" in a more blocky, capital-letter style.

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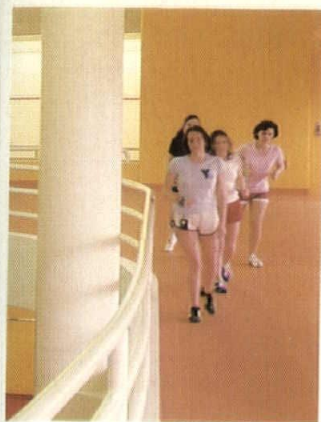
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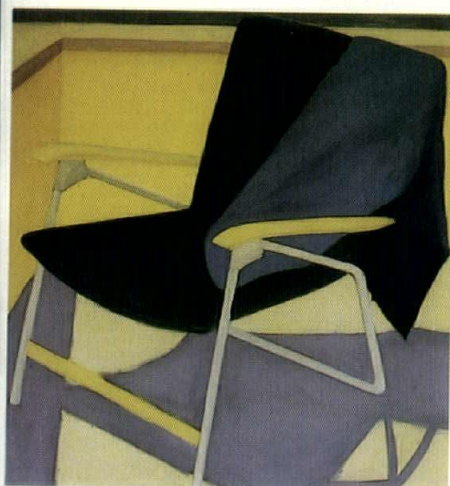
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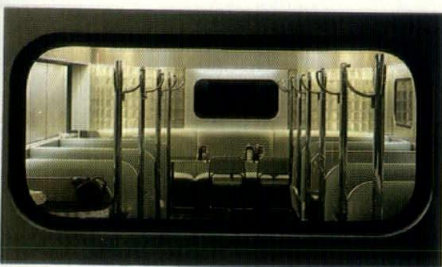
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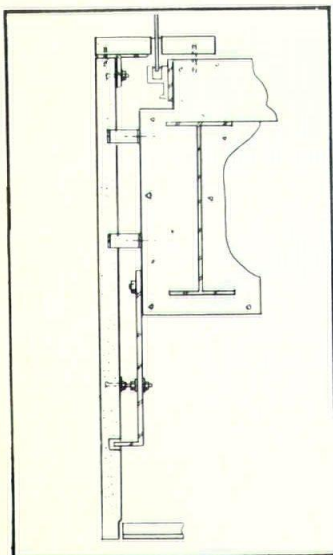
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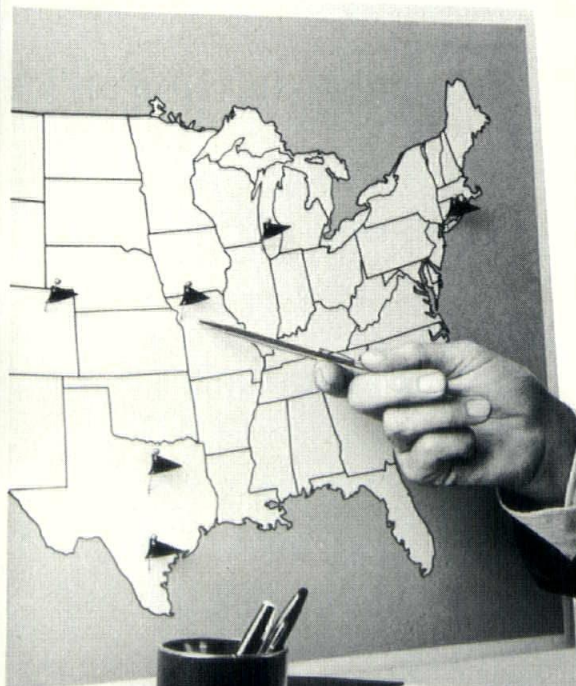
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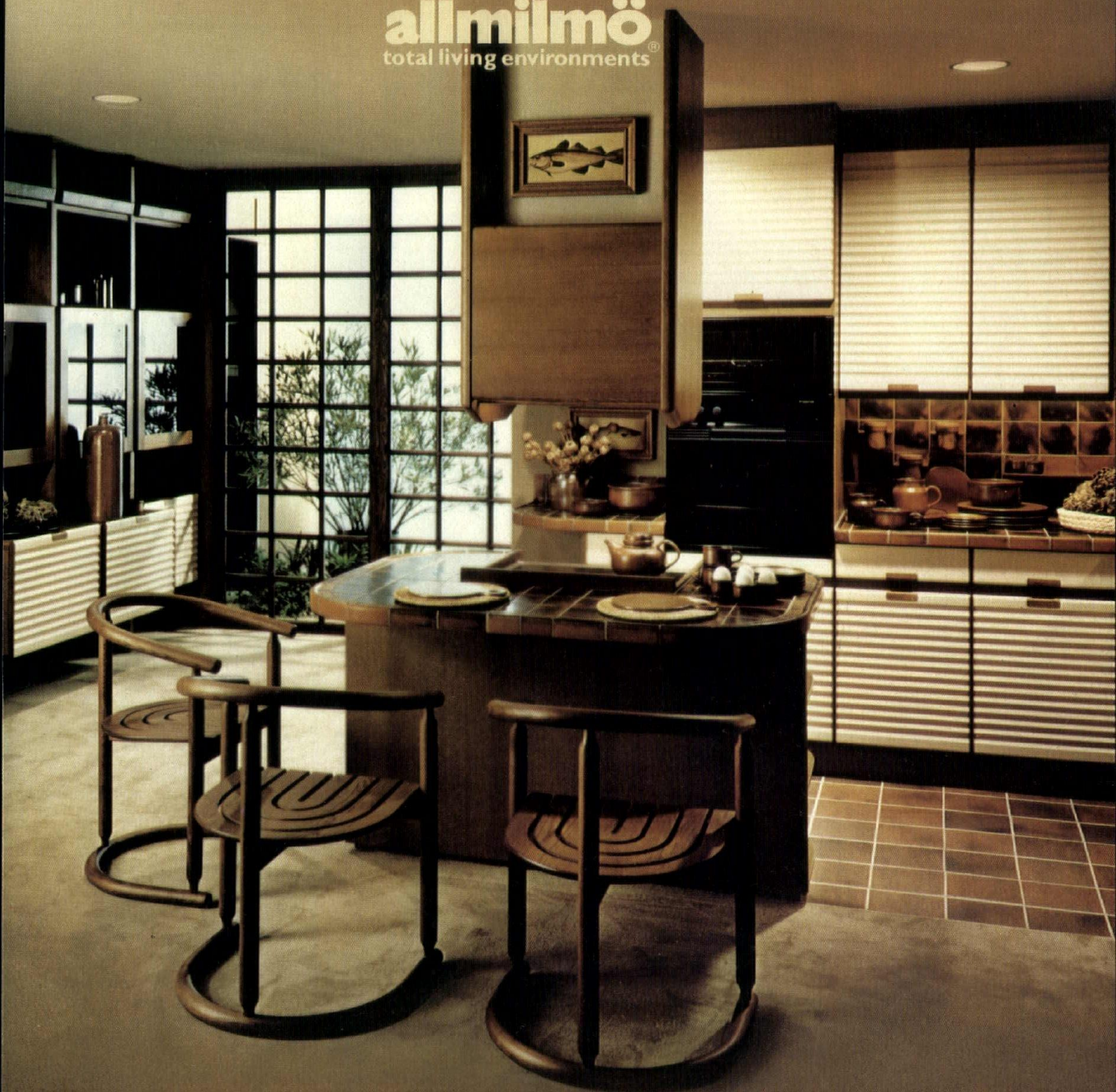
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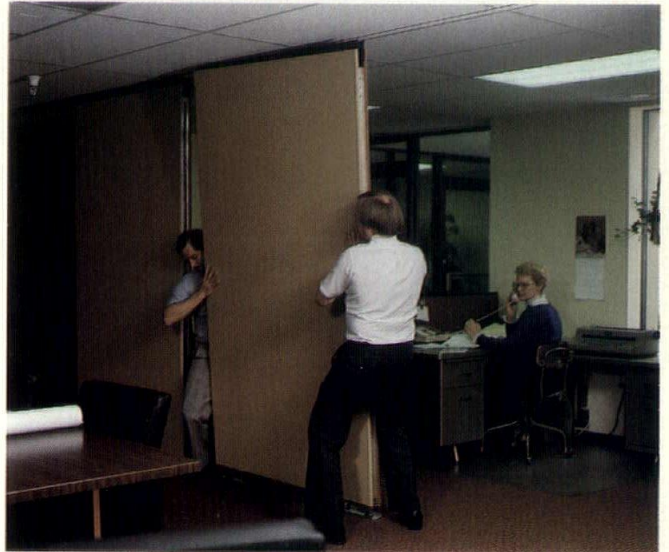
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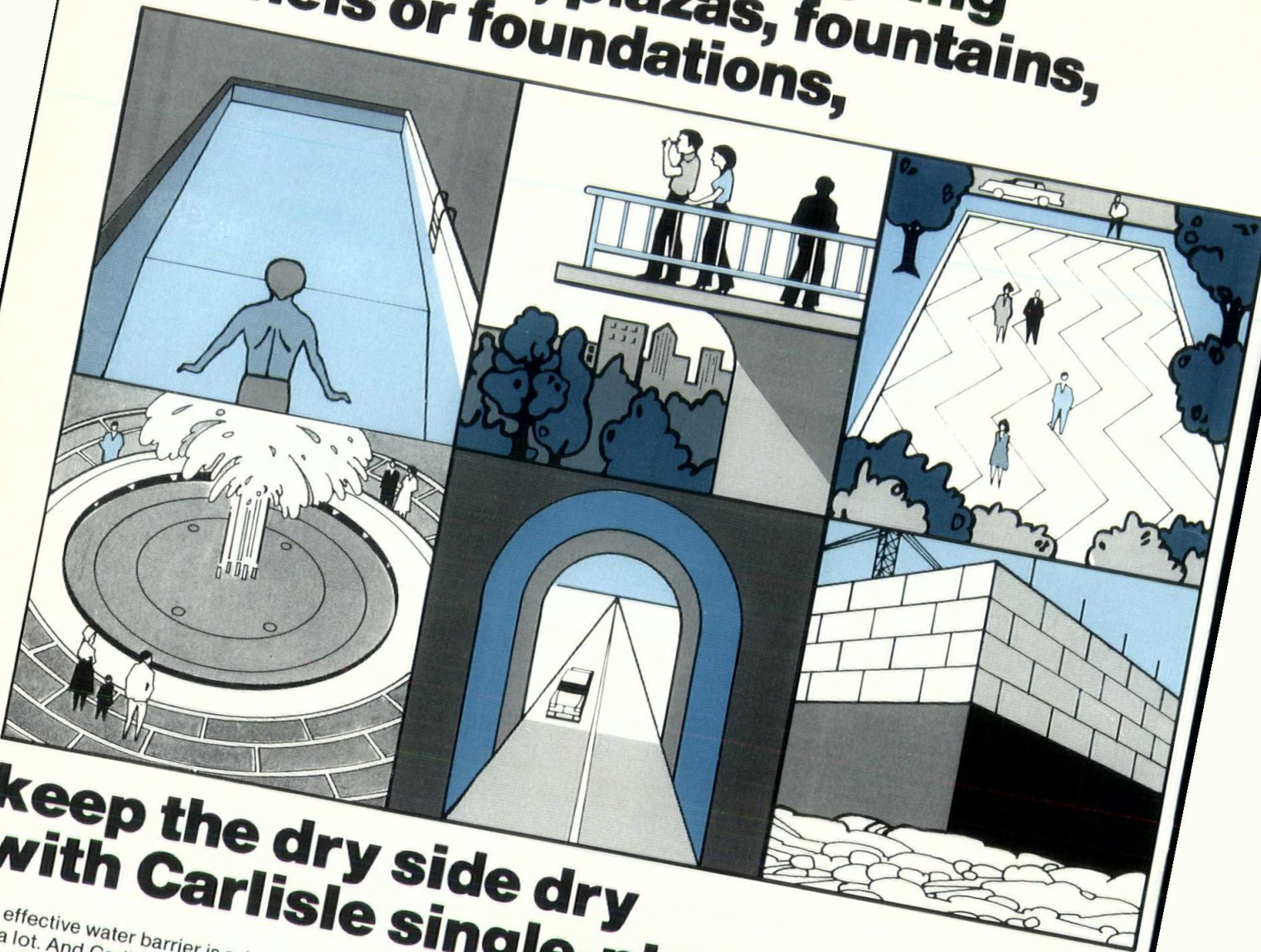
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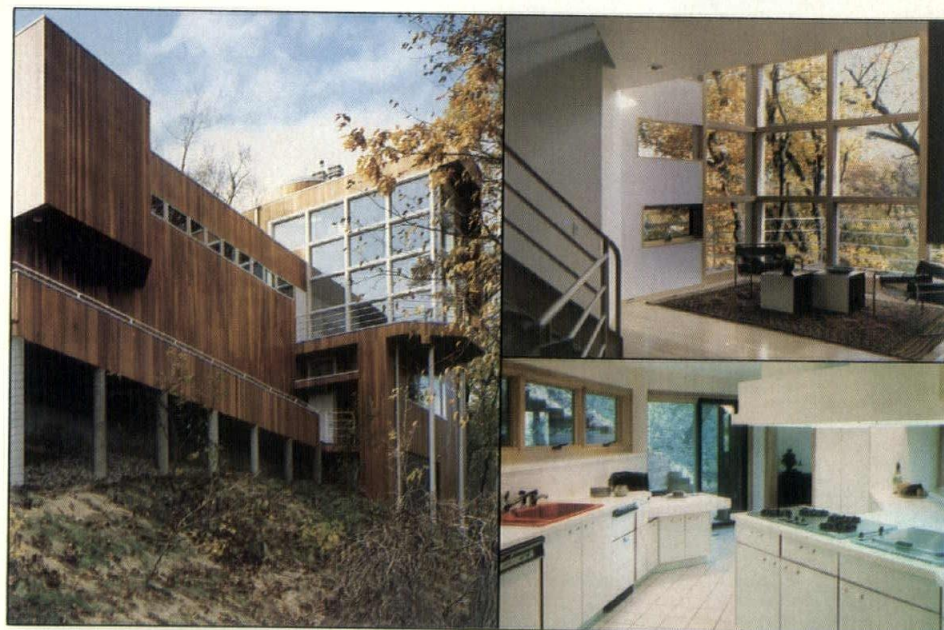
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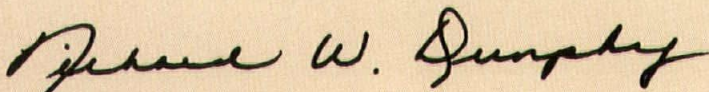
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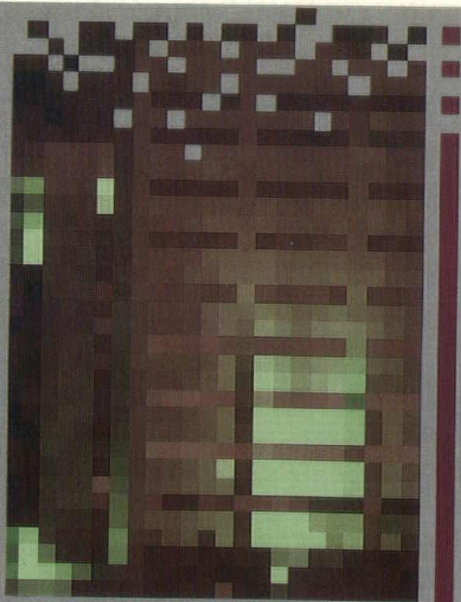
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Oxboard is a proven product already accepted by the construction industry and in extensive use. Over 150 million square feet has been shipped since its introduction in 1981, and demand is growing.

COMPARATIVE SPANS¹

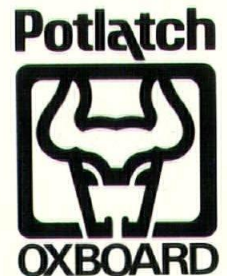
Sheathing Thickness		Oxboard and Plywood	Waferboard
3/8"	Sheathing—span index	24/0	NA
	Max. roof span/no clips	20	NA
7/16"	Sheathing—span index	24/16	24/0
	Max. roof span/no clips	24	16
1/2"	Sheathing—span index	32/16	24/16
	Max. roof span/no clips	28	24
5/8" ²	Sheathing—span index	40/20	NA
3/4" ²	Sheathing—span index	48/24	NA

1—Left-hand number is maximum recommended spacing of roof framing in inches. Right-hand number is maximum span between floor joists.

2—5/8" and 3/4" Oxboard panels are APA certified for Sturd-I-Floor applications with the same span ratings as plywood.

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news, notes & opinions

Walker panel will crit new buildings

When the current wave of downtown Minneapolis building is complete, will the city be better or worse? A panel of distinguished architects, critics and planners will critique four of the new projects at a symposium to be held May 13-15 at the Walker Art Center. The projects to be discussed, now under construction, are: City Center, the Piper Jaffray Tower, Riverplace, and 701 Fourth Avenue South, on the Charlie's Cafe site.

The panel will include architect Jaquelin Robertson, architectural historian Michael Dennis, critic Joseph Giovannini, Adele Chatfield-Taylor, a New York historic preservationist, urban planner Martin Krieger, and Robert Maguire, a Los Angeles developer. A lecture by Rem Koolhaas, Dutch architect and author of *Delirious New York*, will open the symposium Friday evening. Saturday the panel and audience will tour the sites and hear presentations by the project architects and planners. The panel will evaluate the buildings and then, on Sunday morning, lead audience discussions.

For more information, contact Walker Art Center, 375-7600.



Innovative diabetes center planned for St. Louis Park

The proposed International Diabetes Center in St. Louis Park, Minnesota, represents a revolutionary approach to the treatment of diabetes. If sufficient funding is raised to construct it—and this looks likely—it will be the most comprehensive diabetes treatment center in the world and a model for the treatment of other chronic disorders.

The purpose of the International Di-

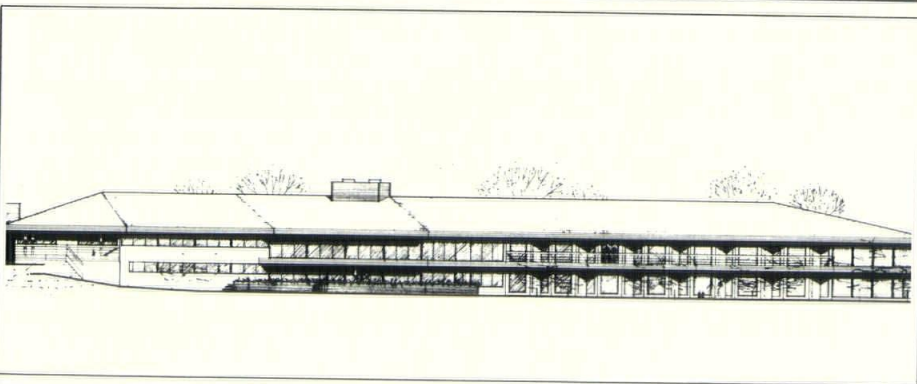
abetes Center is to bring together diabetics and their families with a team of physician specialists to learn the most up-to-date techniques in diabetes control, emphasizing wellness. It will also be a research and education center for physicians and other health care people from all over the world. The founders believe that better informed diabetics and better informed physicians will help prevent the very serious complications which can arise from diabetes, including cardiovascular disease, blindness, kidney failure and birth defects.

Designed by Minneapolis architectural firm Setter, Leach, & Lindstrom, the International Diabetes Center will have four levels. An exercise therapy center and gym will fill the lower level; research labs/clinics, examination rooms and retail stores will be on the first level; a nutrition center and classrooms on the second level; and lodging for 20 patients and their families on the third, along with an outdoor exercise area.

AIA honors three Minneapolis architects

Three members of the Minnesota Society of the American Institute of Architects have been advanced to the Institute's prestigious College of Fellows. They are: David J. Bennett of BRW, Inc., and Herbert A. Ketcham Jr., and John W. Lackens Jr. of Architectural Alliance. Fellowship is the highest honor the AIA can confer on any member with the exception of the Gold Medal.

continued on page 76



New "renewal" facility is linked to Hazelden Center for chemically dependent

In recognition of the need for an aftercare program for individuals who have completed its rehabilitation program, the Hazelden Center at Center City, Minnesota, has commissioned Hills Gilbertson Architects, Inc., of Minneapolis, to design a special "renewal"

facility on the non-profit organization's 250-acre site. The new structure will accommodate 28 persons in double and single guest rooms. Partially earth-sheltered and designed for solar energy gain, the renewal center provides meeting, lounge and dining facilities for the rehabilitated chemically dependent who return for short-term retreats. The building's anticipated completion date is summer, 1984.

Going commercial ...
Going multiple ...

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AMERICAN MEDICAL SUPPLIES CO. OFFICE
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PHOTO: LEA B

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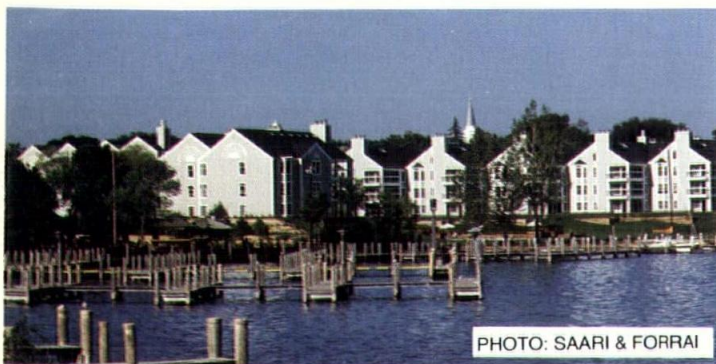


PHOTO: SAARI & FORRAI

EXCELSIOR GABLES, EXCELSIOR, MINN.

The Excelsior Gables Condominiums represent an extraordinary lakeside multiple housing project featuring Canton's Clear All Heart Vertical Grain bevel siding. The architectural firm of Miller, Hanson, Westerbeck, and Bell, Minneapolis, feel Redwood is a natural stained weathered gray for this waterfront project in Excelsior, Minn. Rick Cornell, Craig Wallin, and Eric Canton worked on specification development with Dave Ryerse, Thompson Lumber Co., Minneapolis to make sure all the details fell into place. Another exceptional project in Canton Redwood—Sold!

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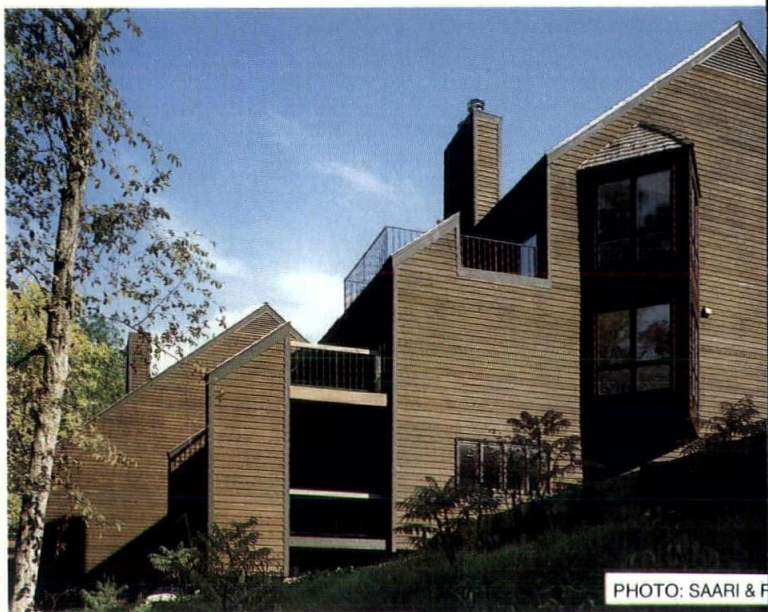


PHOTO: SAARI & F

TEALWOOD TOWNHOUSES, LONG LAKE, MINN.

Three and one-half years of planning and site development led to the Tealwood Townhouse Project in Long Lake, Minn. Peter Pflaum, president of Lundgren Brothers Construction, Inc., Wayzata, Minn., the developer, Lundgren's Operations vice president Rick Burger, Mark MacDonald, Multi-family Projects sales manager, and Dennis Mulvey, Zejdlik Harm DeLapp, Inc., architect first reviewed product options at Canton's Display Center. Eric Canton worked with all parties to develop the Ruf Rider specification, the finishing detail, even the proper nailing procedure. D. Somerfeld, Lyman Lumber Co., serviced the project. The 1982 Reggie Award, given by the Minneapolis Builders Association in the category of multi-family, over \$125,000 went to Tealwood. The American Wood Council has also presented Tealwood its Design for Better Living Award. What better testimonials to the combination of design and products including Ruf Rider Select Knotty Redwood siding from Canton's can there be? Another exceptional value in Redwood from Canton's—Sold!

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scanning the media

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Chips off the old block

APPRENTICE STONECUTTERS ARE LEARNING AN ANCIENT SKILL AT ON-AGAIN-OFF-AGAIN CATHEDRAL (*The New York Times*). Architecture critic Paul Goldberger reported recently that work has begun once again, for the umpteenth time, on the oldest unfinished religious edifice in America, if not the world—New York City's Cathedral Church of St. John the Divine. Begun in 1892, the latest burst of building at St. John's resumed last fall under the supervision of an English master mason. But something new and enlightened has been added—a work program for youths in the nearby Harlem and Morningside Heights neighborhoods. They are being trained in the centuries-old craft of stonecutting—"an absolutely natural marriage," writes Goldberger, "between the needs of the cathedral and the needs of the surrounding community."

A nourishing design trend

THE FINGER-FOOD COURT, WHERE CHINESE AND TEX-MEX MIX, GAINS SECOND GENERATION SOPHISTICATION (*Urban Land*, March '83). It has always been known that a public place such as Peavey Plaza in downtown Minneapolis needs the sensory appeal of fun foods, available on site, to succeed as a social magnet. (Peavey Plaza, of course, has no such magnet and suffers accordingly.) Writer-designer David Lemonds summarizes in this issue the surprisingly recent development of the "food court," as it is known in the real estate game, and its significance as an architectural and economic element in urban growth. Says Lemonds, "Except for urban marketplaces, there is still debate about whether a food court can provide enough identity to generate traffic on its own unless it is of extraordinary flair ... Among the most successful food courts, the seating encourages the pleasure of 'seeing and being seen.'"

"The open kitchens of various new food court cafes, such as Colorado Place in Santa Monica or the Copley Place

restaurants in Boston conceived by food consultant George Lang, bring a new role-playing to people watching. From the first crepe kitchens, where patrons watched the deft assembly of their meal or dessert, one now witnesses any manner of food display and preparation."

When is architecture a steal?

OR, HOW DOES PLAGIARISM DIFFER FROM THE SINCEREST FORM OF FLATTERY? The answer, according to Joseph Giovannini in the *New York Times* (March 17, '83) is, it all depends on who is doing what to whom for what reason. Citing designs by renowned architects that strongly resemble other, often lesser known architects' work, he reminds us of the following inconclusive situations:

- You may be able to protect an architectural drawing by copyrighting it as a product; but you are not likely to succeed in protecting a design as an idea.

- Thanks to the Copyright Act of 1978, the courts are "focusing more attention on the use and abuse of architectural documents."

As for the degree of anguish felt in plagiarizing situations, writer Giovannini quotes Robert Venturi's epigrammatic gem: "There is a tendency of people to be generous in acknowledging insignificant influences."

Old post office now furiously reused

AN 82-YEAR-OLD LANDMARK IN BUFFALO ASSUMES NEW LIFE FOR 2,000 COLLEGE STUDENTS (*Building Design and Construction*, March '83). Although the redesign of old buildings for new uses has accelerated so phenomenally as to be non-news, the payoffs in both economy and architectural quality are no less impressive. In this issue, Gordon Wright describes the adaptive reuse by Cannon Design, Inc. of the obsolete post office and federal building at Buffalo, New York.

Like many similar buildings of great age and scale, the Buffalo post office building seemed doomed for demolition after it was vacated in 1975. It was saved because a really valid community use was found for it; and its adaptation was made possible through its transfer, under the Surplus Buildings Act, by the federal government to the state for \$1.

Of special note was the exceptional twin benefits that accrued: one, the \$13.2 million project yielded high quality new space at a cost of about 25 percent less than new construction; and, two, the purpose could scarcely have been more worthy—namely, a new facility for 2,000 college students at a downtown campus of Erie Community College. Besides, the architectural impact is stunning, what with the reclaiming of a 100-foot-high atrium that spans some 12,000 square feet of daylight auditorium, library and cafeteria open space.

Sexist designs

NUMBER OF WOMEN STUDENT ARCHITECTS SOARS—AND SO DOES THE LIST OF CONCERNS (*Crit*, Winter '83). Architecture doctoral candidate Rochelle Martin writes in the Association of Student Chapters (AIA) magazine that with women comprising up to 50 percent of the student population in some schools of architecture, their concerns and aspirations had better be heeded. The author's informal interviews of 20 women students elicited these common concerns:

- a need for role models and "networks"
- relationship with male classmates and faculty
- problems as non-traditional students
- resentment at being labeled "women architects"
- the dilemma of career and family

Not least of the male-female friction in the schools traces to comparative levels of achievement. Writes Rochelle Martin, "One woman told of slurs on her moral character when she received the highest grade in the class on a structures exam."



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Latest findings from the figures-lie-and-liars-figure department:

The other day I was stopped cold by a double-page ad in *USA Today*. Its headline proclaimed: "*Rochester ranks #1 in quality of life.*" Beneath this cheeky boast, a sub-head added parenthetically, "*And just look at the heavyweight cities we were measured against!*"

Well, I mused, can this ad be referring to our world-famous center for health care and medical research in the southeast corner of the state? No, I learned soon enough, this paragon among cities was not Rochester, Minnesota. It was Rochester, New York.

Struck by the improbability of Rochester, New York ranking #1 over the fourteen other "heavyweight cities" enumerated in the *USA Today* ad, I wondered who did the ranking. I soon found out. Reading further, I was able to deduce that since the same folks who paid for the ad also commissioned the "prestigious" research firm that produced the rankings, Rochester itself decided, in effect, that it was #1.


If you missed the ad, you are entitled to know how the rest of the heavyweights ranked. After Rochester in descending order, the fourteen were: Seattle, Minneapolis, Denver, Boston, Cincinnati, San Francisco, Nashville, Philadelphia, Chicago, Washington, D.C., Dallas, New York City, Phoenix, and Atlanta.

At least two lessons can be gleaned, I think, from Rochester's flight into hyperbole. One is that such buzz phrases as "quality of life" have a way of biting you on the ankle when they are mistreated. For example, any survey that purports to rank heavyweight cities by

such crazy-mixed-up criteria as "weather," "work force," and "citizen awareness & concern," is sure to confirm the sponsor's overt biases and undermine his serious intentions. What Rochester is really after is ingenuously spelled out in its ad copy: It wants nice new high-tech industry. The way to lure it is to buy a quality of life survey that makes Rochester #1 in those categories deemed critically important to corporation presidents looking for a new plant site. Rochester, through its own survey, ranks itself #1 in "education," "work force," "low crime rate," and #2 in "citizen awareness & concern." But what corporation president will be fooled by such self-anointing?

The other lesson is as old as the hills. It is that one's meat is another's poison. Take Rochester's view of "weather." It ranks itself #6, which presumably should be taken to mean not too bad, not too good—sort of *bracing*. San Francisco's weather is rated #1, Boston's #2, Seattle's #3, Phoenix's #4, and New York's #5. I challenge anyone, other than Rochester, to formulate a rational theory which explains such a bizarre ranking of dissimilar climates.

Personally, I am glad to see that Rochester ranks the Minneapolis weather #11, by which I take it they mean terrible. This jaundiced opinion tells me that if a person is determined to come to the Twin Cities region (and bring his nice clean high-tech industry along?), it is because of a whole lot of other compelling reasons besides the weather. Like the late Tom McCall, who, during his lively years as Governor of Oregon urged people to "visit Oregon but don't stay," I would worry about populating this invigorating environment with people whose horizons stretch no farther than witlessly being #1.



William Houseman
Editor

Health Care

Americans seem bent on living forever, judging from the psychic energy and hard cash they spend on looking, staying and getting well. This year the bill for Medicaid and Medicare alone will be \$75 billion; and if such a sum seems incomprehensible to you in an age of trillion-dollar economies, just wait five years. By 1988, the Congressional Budget Office anticipates that our medical assistance programs will cost \$142 billion, or twice as much as *all other federal spending*.

Paradoxically, the hospitals we build, the physicians we train, and the health care we provide—none of these figure to help people live longer. Recent studies have suggested a finite life span for human beings that probably has not changed over the last hundred thousand years. Indeed, a mean life expectancy of approximately 85 years has been posited as a biological wall which, based on what we know today, cannot be moved. Even more disconcerting for those who have clutched at the omniscient possibilities of medicine, the power of ever-improving health care to alter the life expectancy *status quo* is extremely limited. Dr. James F. Mustard, an influential Canadian associated with the pioneering McMaster Health Sciences Centre in Ontario (see also Eberhard Zeidler's article, page 36), has written, "There is no doubt that medicine has introduced measures that have cured illness. Antibiotics and the treatment of meningitis is but one example with which we are all familiar. However, the illnesses that medical intervention cures are a very small proportion of illnesses that cause death. Therefore the effective treatment of these illnesses has little effect on our national statistics as far as life expectancy is concerned."

What, then, are we to think of health care and wellness? Most authorities agree that the philosophers have been right all along: It is not how long we live that counts but how well we live. Specifically, to the degree that the health care industry (to call it by its correct though unlovely name) borrows intelligently from the arts and social sciences to enhance the quality of patients' lives, it will be serving the public interest in an optimal fashion.

Here, of course, is where architecture enters the health care picture. To be sure, a building never cured anyone of anything (though, as we know, an ineptly designed hospital can contribute to the risks of getting worse instead of better). But it is increasingly evident that a strong linkage exists between one's sense of wellness and the quality of a health care environment.



A river view enjoyed at Minnesota Veterans Restorative F

It has been pointed out elsewhere in this issue, for example, that the mental framework of a patient about to enter an operating room has a "measurable effect" on the rate of recovery. No imagination whatever is required to appreciate the salutary influence of a beautiful place to be just before entering surgery.

Before the architect is given the opportunity to practice the art of architecture in the design of health care facilities, however, the rules of the hospital game need to be rewritten. The physician, during the century of "professional sovereignty" described so conclusively by Paul Starr in his great work, *The Social*

and Wellness



Architects: Smiley Glotter.

Transformation of American Medicine, was the boss. The form and function of hospitals were determined less by the sensibilities of the designer than the monumental aspirations of the physicians-in-charge. The proof is seen in the enormous, ugly, inefficient and inhospitable hospital plants that have proliferated in this country.

But the times are changing, thanks in large measure to the emergence of society as a fabulous medical "market." We are seeing the rise of health care specialization patterned on Detroit, of all places, where the money is made, not on the basic product but on

the extras. Sports medicine, for example. We may not be quite sure what it is, but it sounds good and we've got to have it. So, too, with emergicenters, dialysis centers, same-day surgery, and shopping mall clinics wherein the patient logs in, gets an electronic bleeper and merrily goes off shopping until beeped back for an appointment.

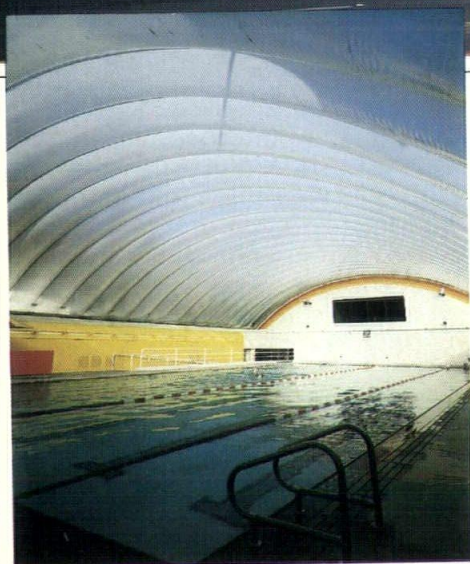
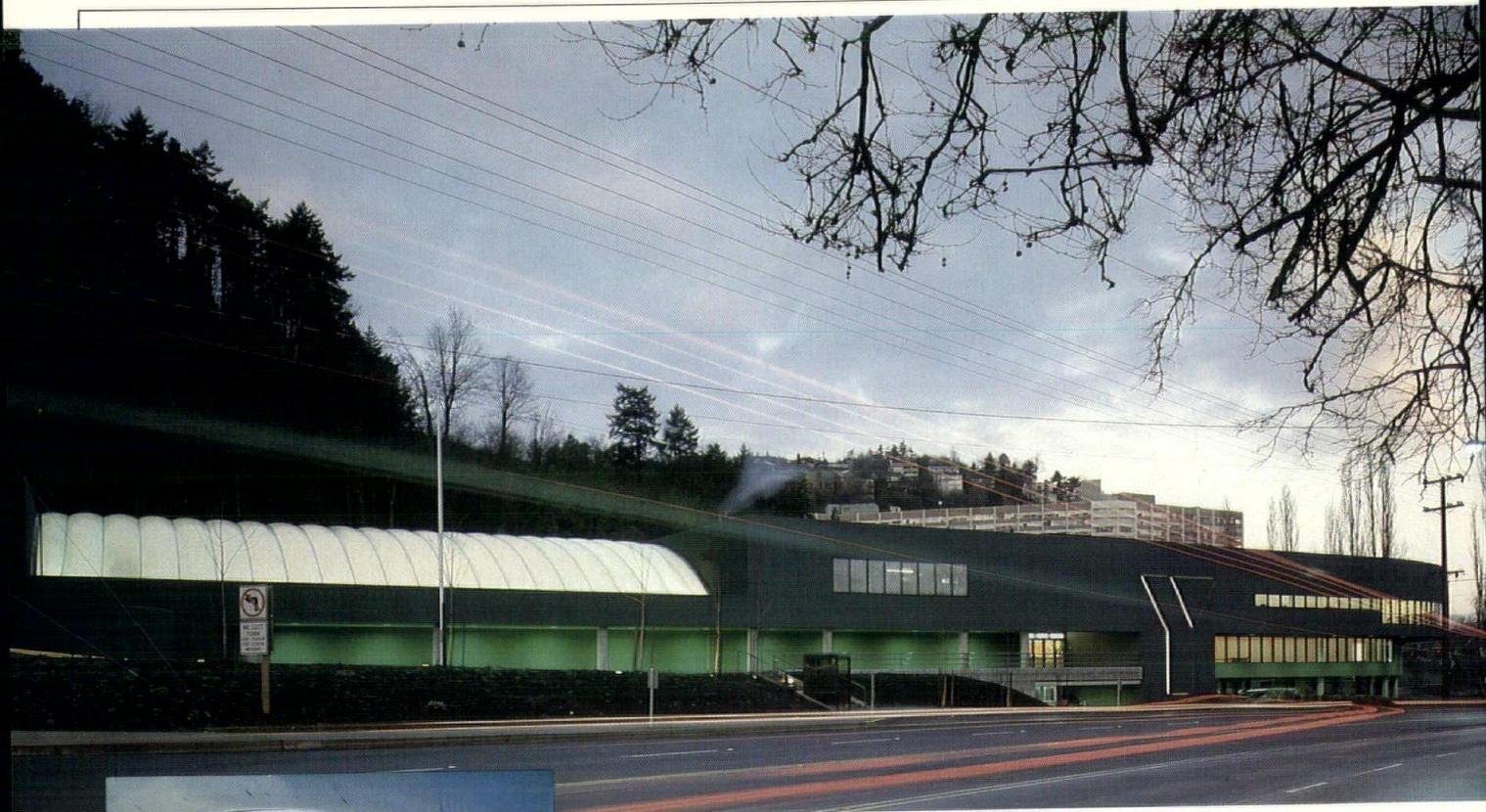
In truth, health care and wellness have increasingly become a matter of giving people what they want. And what the American people want often defies a rational explanation. A recent ad in the *New York Times Magazine* announced the grand opening of a profit-seeking enterprise called the "Biofitness Institute" ("Dial(212) FIT-NESS for more information"). Among the attractions offered are a BIOBIKE and a VERSA-CLIMBER aimed to improve "cardio vascular capacity;" as well as SAMADHI FLOTATION and "the first VIDEO SCREEN FLEXIBILITY PROGRAM."

Meanwhile, in the lotus land that is Southern California, the in thing is to "swing your way to health." Out there, writer Aljean Harmetz reports, "Everybody is looking for a quick way to stay young." In addition to people hanging by their heels from gym bars, "the search for instant youth and perpetual beauty has spilled over into a fanaticism about being physically fit"—including drinking less, going to bed early, and jogging at 4:30 a.m.

There is a fine irony in health care and fitness as a commodity to be bought and sold. For while the national obsession with wellness has people spending their hard-earned money on goods and services that have made for-profit health care a major growth industry, the orthodox medical establishment fueled by Medicaid and Medicare funding is causing the country to teeter toward bankruptcy.

A further irony is associated with the Reagan Administration's suspicion that the users of Medicaid and Medicare run up their medical bills on a variety of health services which they may not need but nevertheless take advantage of because they are either free or cheap. Presumably, if the charges for such health care are increased through proposed legislation now before Congress, our gigantic subsidized health care industry will become solvent but impoverished, thereby causing a greater imbalance between the quality of care for those who need help and those who don't. For a certainty, today's ferment foretells remarkable things to come in the way health care and wellness are marketed.

AM's Editors



The local Y was once better known for preaching its triangular precepts of physical, mental and spiritual health than for implementing them. But times change, and the Metro YMCA Fitness Center in Portland, Oregon is proof positive. Designed by Broome, Oringdolph, O'Toole, Rudolf & Associates (BOOR/A), it replaced a deteriorating downtown gym/hotel Y. The new Metro Y is as functionally invigorating as it is architecturally striking.

As a building and a pro-fitness force, it is taken seriously. Members may take a "stress test," which measures an individual's flexibility, endurance, muscle strength, and assesses body type, then receive guidance on a fitness program to pursue. Those who participate in the YMCARDiac Therapy program, pioneered by the Portland Metro Y and

supervised by physicians, must take the stress test first.

BOOR/A designed the Metro Y to accommodate this enlightened fitness program. Its new setting next to Dun- iway Park allows members to jog on the Park's track or tackle Medical School Hill rising above the Y. The building's curving form seems made for human movement. Indeed, the upper level window strip becomes a kinetic billboard for fitness at night as members jog around the indoor track. Nor is the pool hidden away. Its translucent bubble covering lets it glow at night and allows swimmers to see the sky during the day.

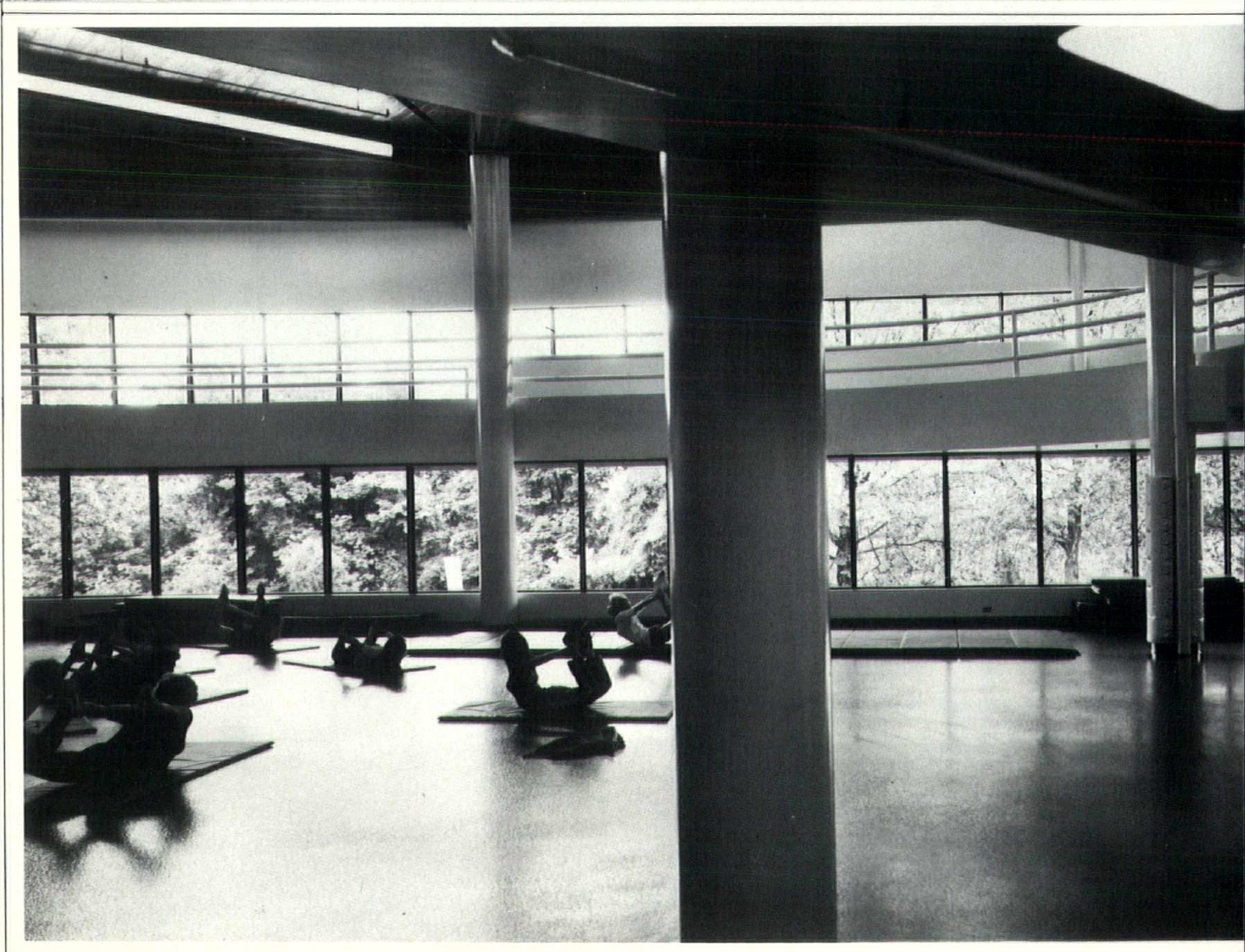
the greening of the

Portlanders gain a healthy respect for fitness in their spirited Y

Inside, the building's open plan renders the scope of the Y program immediately visible. Weight lifters, aerobic dancers, joggers and basketball players can see each other while exercising, encouraging a spirit of camaraderie. And, just as the windows display the Y activities at night, members may enjoy views of the outdoors from many vantage points.

This two-tone green Y in the heart of the greenest corner of the U.S.—Portland, Oregon—effectively promotes the Y program for the '80s: improving total fitness—body, mind and spirit.



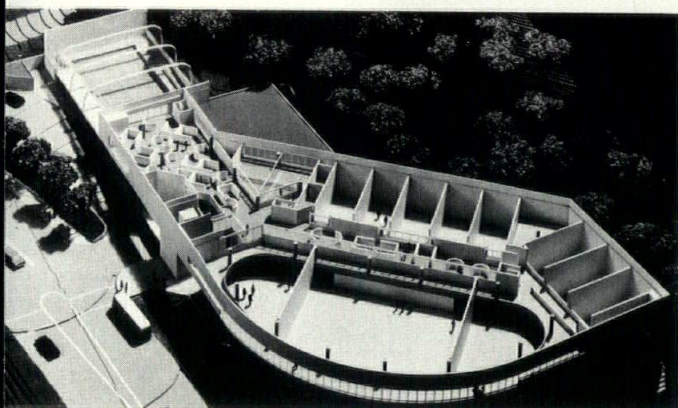


Poised on columns, the Metro Y Fitness Center follows the contour of Medical School Hill (left). The upper level (see model) houses the running track with an interior view of the gym (below left) and exercise areas. Administrative offices and an outdoor terrace are also on this level.

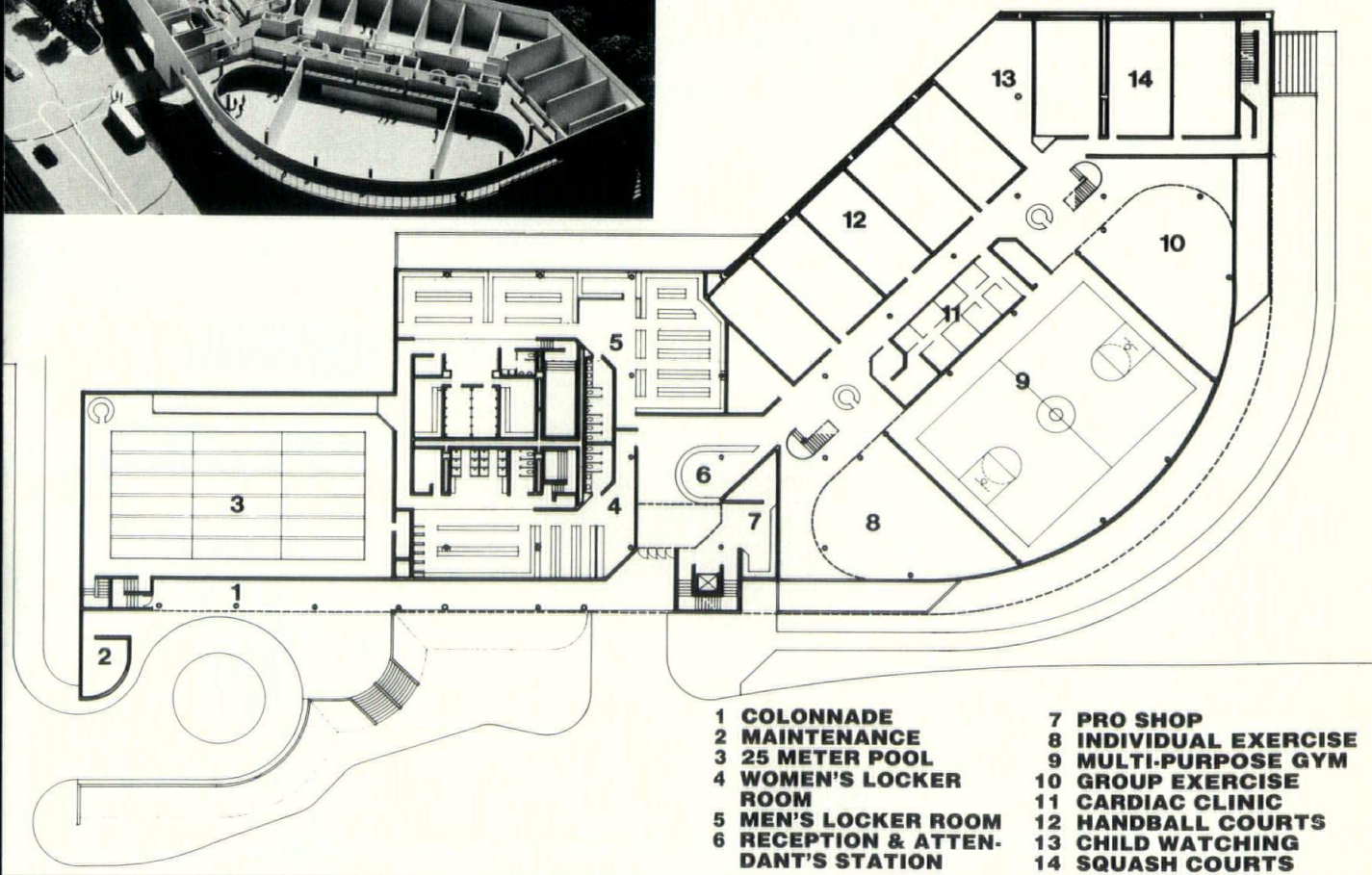
The middle level (see floor plan) contains the reception area (right), the handball and squash courts, child watching area, gym, individual and group exercise areas, locker rooms and a 25 meter pool.

Throughout the building, bright colors enliven selected walls, floor coverings, furnishings and mechanical systems. The reception area repeats the exterior greens; activity areas are in reds, yellows and oranges, while upper level offices are in fuschias and plums.

Parking for cars and bicycles is hidden below grade—a convenience for rain-soaked Portlanders.

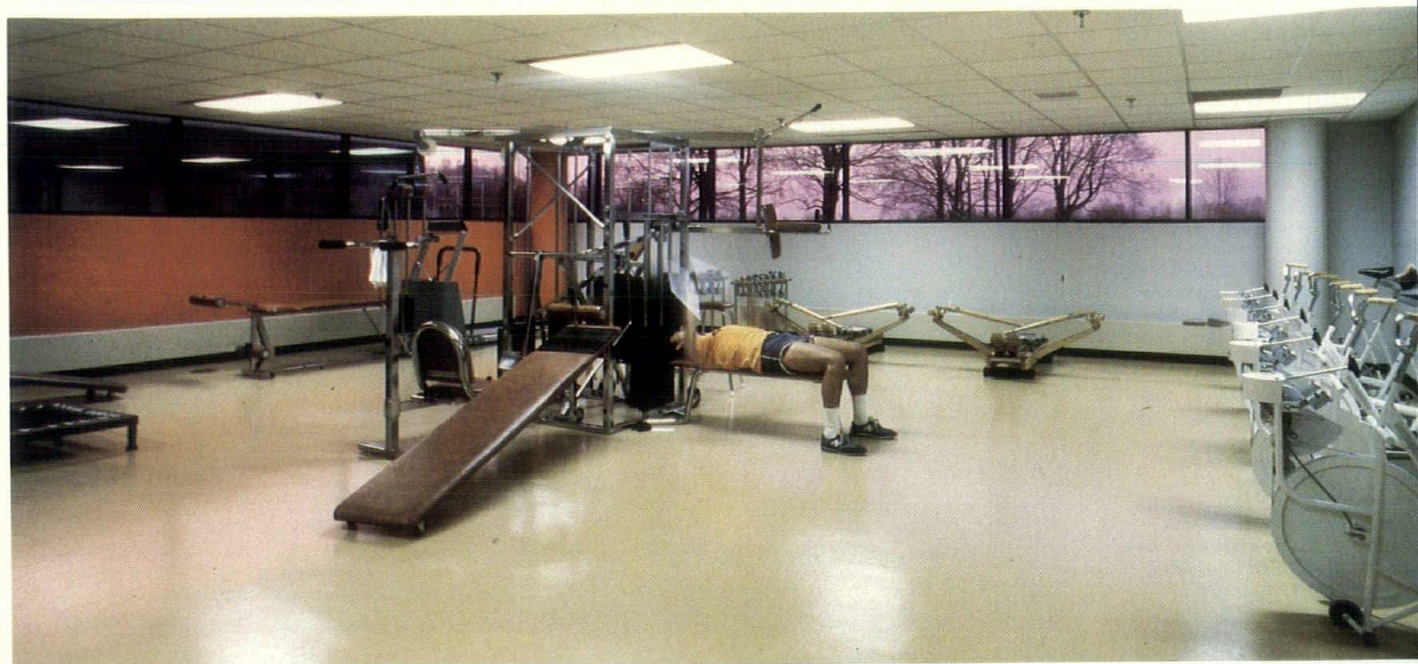


Though right downtown, the Y evokes a campuslike quietude



HANDS-ON POLICY

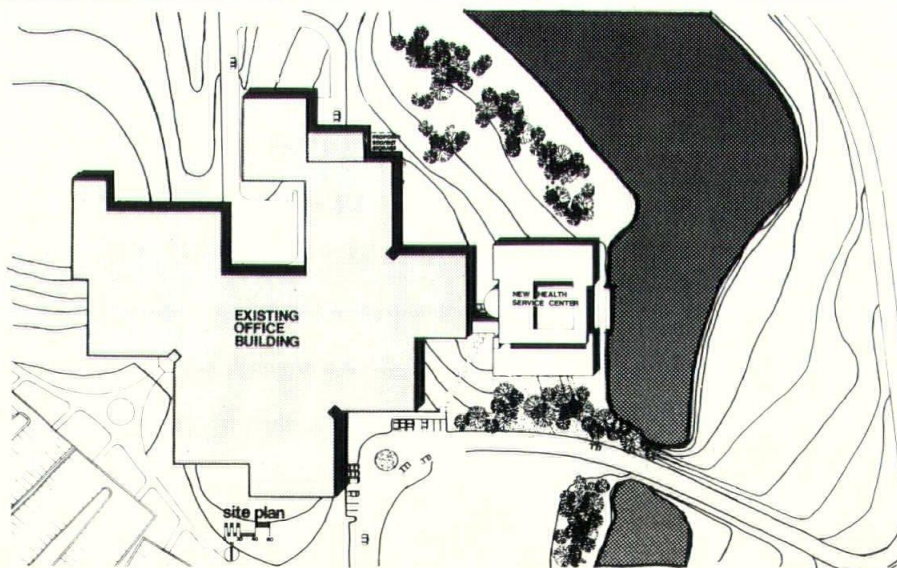
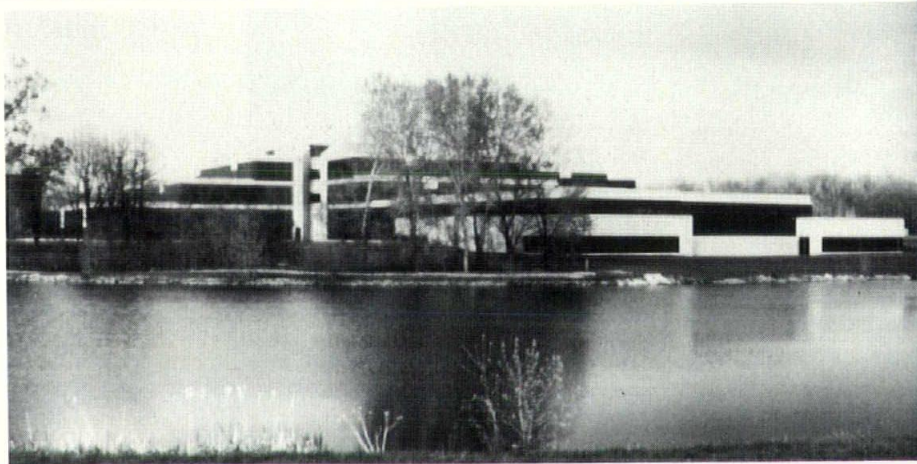
Kimberly-Clark offers employees a model facility for fitness



When Kimberly-Clark built its Health Maintenance Facility in Neenah, Wisconsin, corporate investment in employees' well-being was considered a luxury. Now dollars spent to educate and encourage workers in healthful habits are becoming an essential part of the corporate bottom line. And much credit should go to Kimberly-Clark's example.

The company's 1.8 million dollar facility, designed by Ellerbe Associates, Inc. of Minneapolis, expresses the comprehensive scope of its prevention program. Medical examination rooms and classrooms transformed an unfinished part of the existing Research and Development Building into a health services center. A spanking new athletic building was added right next door. "The complex was built as an investment in the company's 4700 employees," says Fred Richter, Ellerbe project architect. "It's both an employee perquisite and a way to keep workers healthy and productive."

Kimberly-Clark's attractive example has encouraged other corporations to think prevention. Few build expensive additions, but many add exercise rooms, running tracks, or at least showers for commuting joggers or bikers. With fitness itself becoming a multi-million dollar business, the corporate gym may be a new building type of the 1980s.



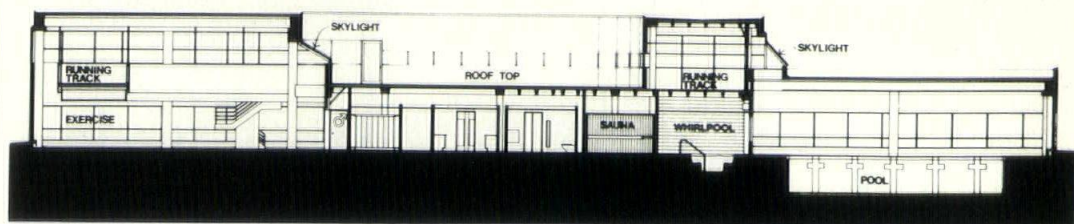


Photos: Shin Koyama

Motorists passing Kimberly-Clark's headquarters may take a second look. There behind a corporate facade bodies are bending, stretching and running. From outside, the two-story Health Maintenance Facility, designed by Ellerbe Architects, blends almost imperceptibly with the earlier HOK-designed Research and Development Building (opposite, left). But inside, a new kind of corporate activity is taking place, as workers swim, run or work out.

Kimberly Clark's program begins in the health services center in the R & D building, where a staff of 28 conducts medical evaluations, offers classes, and devises individualized exercise therapies. Then, in the adjoining athletic building, employees have access to an olympic size pool, running track, gym (above), weight room (top, opposite), and saunas and whirlpools.

Participation. Natural light, bright colors and instructive graphics cheer on the athletes (right). Exercisers enjoy a lake view; runners on the mezzanine level track also see the pool and exercise room (section, below). Doubtless, Ellerbe's expertise in medical and corporate design was a propitious combination for Kimberly Clark.





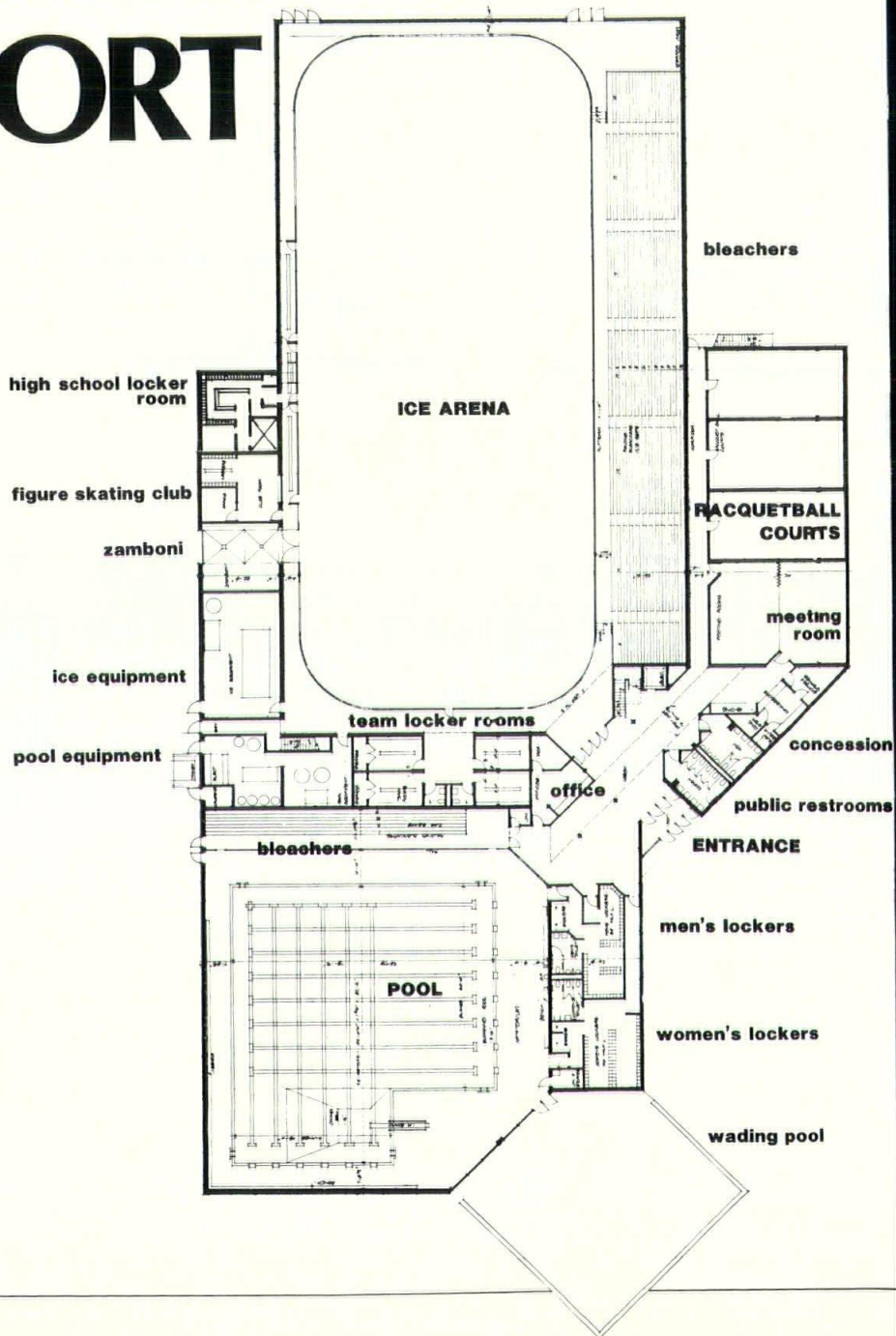
The 60,000 square foot Eden Prairie Community Center, though built on a tight budget, conveys a suitable civic image through a low silhouette and mellow red exterior. The plan (below) divides the interior into "cool" and "hot" zones, with racquetball courts, office, locker and equipment areas intervening between them. Bleachers seat hockey game fans; pool is L-shaped to accommodate swimming meets held at 25-yard and 25-meter lane lengths. Allowance for future expansion, such as ice-making capacity, has been incorporated in plan.

PURE SPORT

Eden Prairie treats itself to fun and games for all ages

Eden Prairie is a small community near Minneapolis with a voracious appetite for sports. Unlike comparable suburban places, however, it has built itself a year-round recreation center that is as profitable as it is popular. Central to this happy state of affairs is the skill with which the architects, Smiley Glotter Associates, incorporated four of the townspeople's favorite activities—ice skating, swimming, racquetball and individual exercise—under one roof. Additionally, a sundeck with a wading pool at its edge expands the center's useful space in fair weather.

The center is organized around a central office core which controls access to all activity areas, thereby minimizing staffing needs. A strategic two-story spine buffers the temperature extremes between the ice arena and pool. Energy efficiency was a key design objective; a heat-reclaiming system from the ice arena is used to heat the swimming pool, domestic hot water, arena sub-soil and the arena itself. And in the pool and lobby areas, large insulated glass walls introduce natural light and solar gain. Located on a site within a pre-determined master plan, the center benefits as a community attraction by its proximity to Eden Prairie High School, athletic fields and a picnic area.



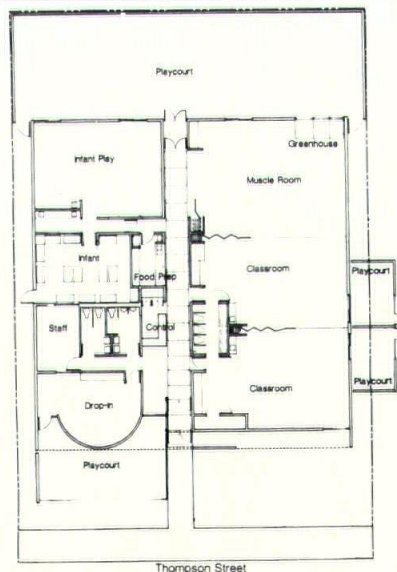
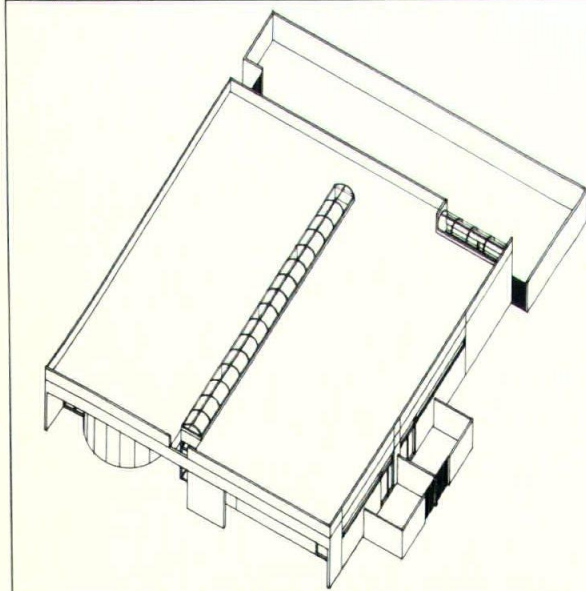


L-shaped swimming pool and ice arena are both unmistakably identified by supergraphics on walls. Eden Prairie High's hockey team plays to capacity crowds, girls' swimming team has already set two national records. Special point of community pride: the hockey rink is being used as a practice surface by the Minnesota North Stars.

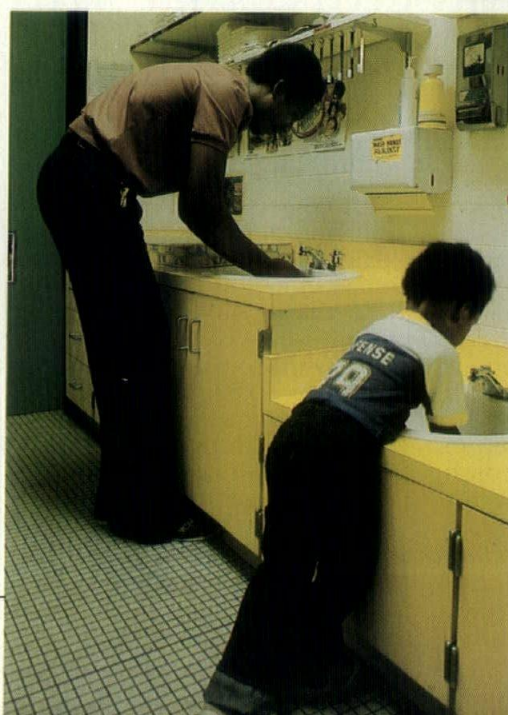
Day Caring on a Fast Track

It is easy to imagine a four-year-old drawing a picture of a day care center that might look just like this one: an unadorned box painted red, yellow and blue. Thus it should also come as no surprise that the 98 children who spend most of their waking hours at the Children's Hospital Child Care Center in St. Paul take to this playful environment like tadpoles to a lily pond. The fourth such center designed by the Minneapolis firm of Williams/O'Brien, this 5,000-square-foot stucco structure is notable not least for the speed with which it was designed and built: 90 days, in accordance with a client requirement. Past experience also served the architects appreciably in detailing their St. Paul project. They were careful, for example, to scale all cabinetry and work counters in classrooms to suit the sizes and abilities of the various age groups. Similarly, toilet/washroom facilities were incorporated not only for accommodating small people's needs but also to encourage their learning of proper hygiene practices.

The center's major organizing element is a skylit "street" that runs from the entrance to a rear playcourt. This clean sweep of a corridor neatly bisects the building into classroom and activities spaces on one side and staff, infant care and a food prep center on the other (see plan). Activity and classroom spaces can be expanded or contracted with movable partitions, and playcourts on three sides of the tight site enlarge the children's recreational opportunities considerably on fair weather days. Roof trusses have been left exposed where practicable, painted a bright yellow, and pressed into service as handy members for hanging play equipment.



Vaulted skylight running the center's length acts as both a major source of daylight (above) and an orienting element for all visitors but especially the pre-schoolers who are the prime users. The plan provides a sense of welcome beyond glass doors of main entrance through an open, carpeted "drop-in" area and a control desk staffed to assist parents in picking up or dropping off their children. A major virtue of the center is its allocation of every square foot (save for a very small staff room) to its central purpose; namely, serving the well-being of the children.



All but the tiniest children may come and go through center's doors without risking a bump in the nose, thanks to view windows low enough for small fry to see through (above). Dual lavatories of different heights enable toddlers to emulate grownups in the handwashing ritual.

Leo Babcock

The Care and Nurturing of Hospital Architecture

By Eberhard H. Zeidler



Not so long ago I visited the University Hospital in Augsburg, Germany. It was built centuries ago and still functions. It is still a beautiful building. It still fits into the city, and it still creates its own appealing environment. What does this venerable hospital prove? Perhaps that architecture not only serves a limited function that changes with a changing society, but also that in the best of situations it can be an environment responsive to human emotions. In the design of our buildings, it is important to respond to human emotions, because it is this aspect of architecture that will not change in an otherwise rapidly changing world; emotionally, mankind is not much different than in Plato's time.

Yet the physical comfort we demand today to satisfy our emotional equilibrium has altered drastically. We want to live longer, free of pain and discomfort, and we insist that the available technology be used to improve our prospects. The critic who pooh-poohs the scientific medical aspirations of a modern health center would also be very quick to insist on being taken to such a place if only a complex medical procedure might reduce his suffering or prolong his personal life. He would scorn the aspirin pill of the barefoot doctor.

But here is the dilemma that faces the architecture of hospitals. While the elements of a hospital that respond to human emotions remain rather static, those that respond to technological needs have undergone rapid changes—and are still doing so: Catscanner Generation I is being challenged by Catscanner Generation II, with the third generation perhaps not far behind. The first Catscanner cost a million dollars, the next several millions.

Our firm has been working in recent years on a large health sciences center in Alberta. Its department of radiology,

now in a building of 1961 vintage, will be relocated into the new building this year. In the last decade, however, ten of the sixteen X-ray rooms have been totally renovated to keep this institution abreast of the state of the art. The renovation costs have been as high as \$230 a square foot. It is this pattern that renders our hospitals economically obsolete before their time.

About fifteen years ago, we were challenged by one of Canada's outstanding young physicians, Dr. John Evans, to reconsider the design of the health sciences center in the city of

Hamilton. Our response took the form of a systems approach to hospital design. But it was systems with a small "s"; more a system of mental organization of available technology than the devising of a rigid high-tech solution.

What was our principle? Really nothing new—a "bisociation," as Koestler would say. In essence, we transferred the rentable office building concept to the hospital field. Every developer of large office buildings knows that tenants have leases running from five to ten years, and they tend to be fickle. But the building itself will last, or should last, to the end of the mortgage period—at least 30 years.

So the developer builds a structure with a primary system that will allow a diverse number of tenants to move in. Each tenant is expected to do his own outfitting, particularly the interior partitions, special lighting, ventilating, and so forth. If and when any of the tenants move out, the primary building remains intact. The next tenants take over the space and adjust it to suit their particular needs.

A problem arises, however, in transferring this concept from an office building to a hospital. While the range of an office tenant's needs is quite limited, those of a hospital are much wider; a health sciences center literally has the same needs as a small city: from factory space to office space to animal quarters, operating rooms, bedrooms for patients, residences for interns, and so forth.

Our design of the McMaster Health Sciences Centre was nothing less than a feverish attempt to find an answer to this problem. Today, after more than a decade of use, McMaster has shown that Lady Luck was on our side.

We concentrated in the design process on a series of deductions—deductions to find the point at which available technology could create a physical environment, within the economic limitations of our society, that would provide for the small-city range of needs required in a hospital project of McMaster's size and scope.

Like any search for a new solution, McMaster was a leap into the unknown. It was only after the solution was found, of course, that we were able to prove logically a straight line of reasoning. At the outset, however, we did know that the cost of a hospital can be divided into quantifiable components: *Approximately 15% is spent for structural elements; 29–39% for mechanical, 15% for electrical; 4–6% for exterior skin; and 15% for interior elements. The rest—something between 10–22%—is spent for systems, building equipment and construction management.*

Given these cost factors, we reasoned as follows: *If we could build a*

structure capable of accepting any of the diverse hospital uses without having to adjust the structure itself; and if we could develop an exterior skin that would adjust to these diverse uses; and if we could design a basic mechanical system that would remain unchanged regardless of what uses were plugged in—then we would achieve a hospital structure that performs like a commercial office tower. That is, it could remain unchanged regardless of the changes that might happen inside.

We further reasoned that if we could reach a 60% factor of retention of the original capital construction cost, then we would have realized the same efficiency as in a modern office building. Thus, if the "tenant" called radiology needed more space in the future, or wished to relocate somewhere else, these changed circumstances could be accommodated without losing the basic hospital building investment.

This flexibility based on retaining a considerable part of a building's original worth was one of three major innovations that were first applied in the McMaster project. The other two were the introduction of *interstitial space* and an *integrated mechanical system*. Taking them one by one:

Interstitial space is the result of a structural system which allows a regular column spacing that accomplishes two things: (1) By design, it accommodates all future functions in the building's usable spaces; and (2) it provides for between-floors space (hence the term "interstitial") that allows for distribution of the mechanical system without interference with the usable space. Interstitial space had been used prior to McMaster, notably at the Greenwich Hospital in England and at Louis Kahn's Salk Institute in La Jolla. But McMaster was the first hospital to integrate interstitial space into a systems design including mechanical and electrical systems.

Basically, the concept of an integrated mechanical system calls for separating a primary system that provides for all present and future functions, and a secondary distribution system that changes with the specific function—so that, with future changes, only minor interference with the building will occur.

At McMaster, 36 air-handling units related to fixed vertical shafts create a mechanical quilt in which, during functional changes, only one area will be affected; it can be easily removed and replaced, rather than changing the whole building as is necessary in a central system.

Has the McMaster Health Sciences Centre set a trend? I believe so. Not only has our firm been involved in the design of five large hospitals across

Canada and the U.S. based on this system during the last dozen years; but also most of the other tertiary hospitals that have been planned in North America since McMaster have accepted these principles, totally or in part. And even Europe has followed this example.

Flexibility in such major health care projects comes not only through a building system that allows for future change but also through such secondary considerations as lab systems, partition systems, ceiling systems, and such. Offices and other spaces can be dimensioned, for example, to fulfill different future functions, ranging perhaps from office to examination use, by simply changing the sign on the door—rather than knocking down partitions.

But there is another important element in planning for flexibility—and that is the *handling of traffic as an ordering grid*. The concept is perhaps analogous to a street grid in which the street remains static for hundreds of years while the bordering buildings may change. Such a system is present in McMaster as well as other hospitals we have designed.

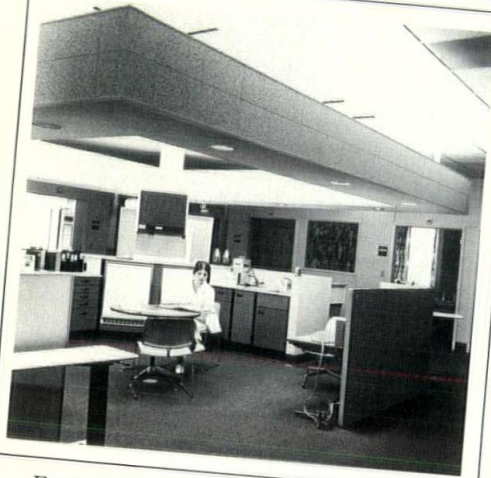
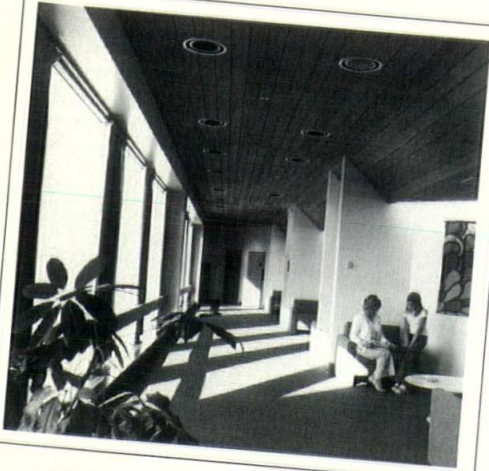
It is one thing, of course, to build a hospital that functions well today and in the decades ahead. It is another to design a health care environment which responds to the emotions of the people using it. Both practical needs and the response to human emotions have influenced the design of our firm's hospital projects as we have sought to create this elusive thing we call Architecture.

Consider how you enter a building. Most hospitals have a lobby, more or less devoid of people, more or less monumental in scale to stress the importance of the Institution. We've felt that the entrance into a hospital should be filled with activities, so we locate all of those which spell "life" in the entrance space. While we can defend such a decision on functional grounds, the main reason to put them there is to create a sense of vitality in the hospital. In the McMaster entrance concourse, we included a coffee shop overlooking the esplanade, an art gallery, a children's play area, various shops, a pharmacy—and also the entrances to most ambulatory facilities in the hospital such as rehabilitation, radiology, emergency, and family practice.

Another important element is orientation. Fatigue in walking is related not only to the actual distance but also the stimulation created during the walk itself. A corridor that gets you there may orient you, but you may be fatigued by its dullness. In a building

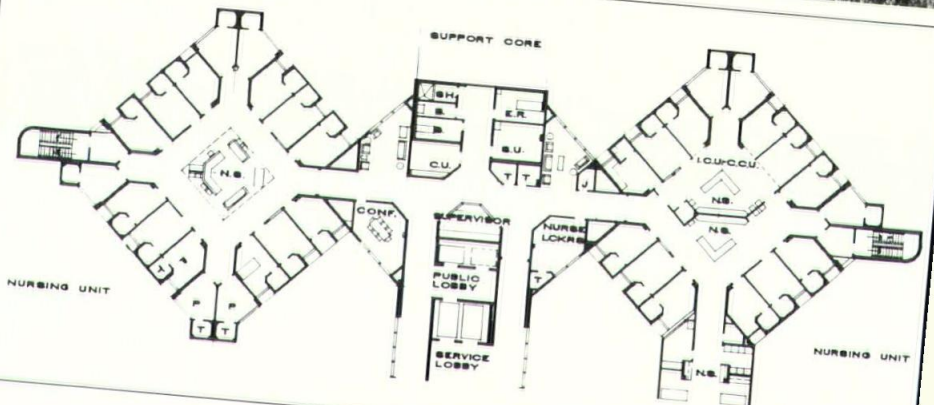
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Patient care in-the-round



Except for the unavoidable circumstance that its guests are patients, Meridian Park Hospital at Tualatin, Oregon, looks and functions like a luxury-class motel. It is not brand new, having been completed in the mid-70s as a joint design project of the Portland firm of BOOR/A and Minneapolis-based Ellerbe. But its many "firsts" remain exemplary innovations in hospital design—including: first hospital in the Northwest to have the Ellerbe-pioneered radial nursing stations (see plan); first with carpeting in all public spaces; first to use the Herman Miller Co-Struc system of interchangeable, wall-hung furnishings; first to employ the Swedish Kiva system of surgical tabletops custom designed for specific types of surgery as well as to plug into hydraulic pedestals in all operating rooms; and first to make extensive use of fine stained woods.

A 99-bed facility on a rolling 48-acre site, Meridian Park Hospital assumes an uninstitutionally low profile, its only visible element from a nearby freeway being the three-story nursing tower from which the patients—all in single-occupancy rooms—enjoy a view of the Oregon countryside.



Diamond-shaped twin towers accommodating all 99 single-occupancy patients' rooms are ingeniously designed to enable two registered nurses on each floor to maintain visual contact with patients in 17 rooms from a single nursing station. Nurses are never more than 19 steps away from a patient's bedside. Each room has its own Swedish bath with flexible shower head adjustable for shampoo. Staff and public circulation are independent of each other, and several alcoves off the

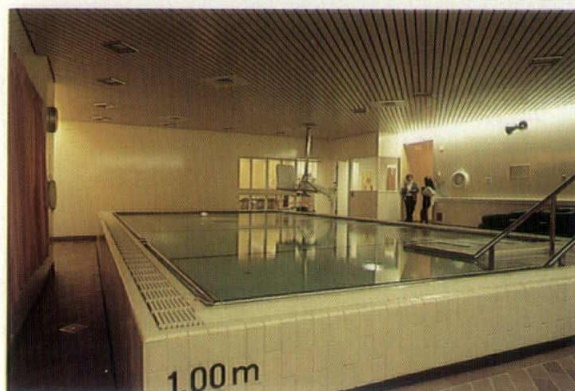
main corridor (top left) afford visitors a comfortable sitting-room ambience for intimate discussions with each other or physicians. The nursing towers and support wing are separated to enable them to be expanded if desired without unwelcome encroachment. Similarly, the mechanical plant and administration buildings are free-standing and set apart. Ground-hugging character of the hospital is enhanced by landscaped berms.

Getting well step-by-step



Like Meridian Park (opposite), the 77-bed rehabilitation hospital shown here emphatically honors the patient above all else. Designed by the Parkin Partnership of Toronto, the Royal Ottawa Regional Rehabilitation Centre makes its mission the rehabilitation of physically disabled people—and it succeeds through an exceptionally adroit meshing of architecture and psychology. Explains project architect Donald Wilson, "The process commences within the patient room. Great emphasis is placed on using standard instead of handicap-design fittings. The patient immediately begins to deal with real world conditions. He or she uses the same self-serve cafeteria used by the other patients, the staff and visitors. The principle of integration is carried out everywhere in the building, thus forcing continual interaction between the staff and the patients."

In areas adjacent to therapy rooms, specially designed planters are located, and patients are encouraged to care for the plants. A major rehab feature of the center is the apartment unit. Says Wilson, "It is designed to replicate the outside world. The patient's final days at RORRC are spent living here."



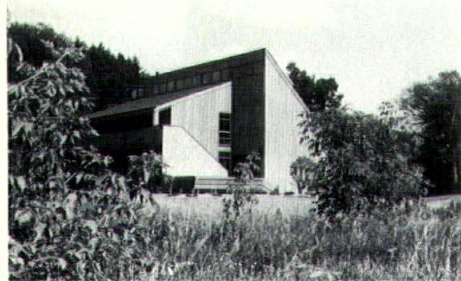
The Ottawa Rehabilitation Centre is a handsome self-contained element of a major regional health sciences center and offers a substantial outpatient as well as in-patient service. Solarium (top) and waist-high therapy pool are typical of design considerations that encourage patients to mingle and exercise personal initiative. Carpeting, a difficult surface for wheelchair travel, is used in some areas as a real world stratagem.

FOR THE CHEMICALLY DEPENDENT

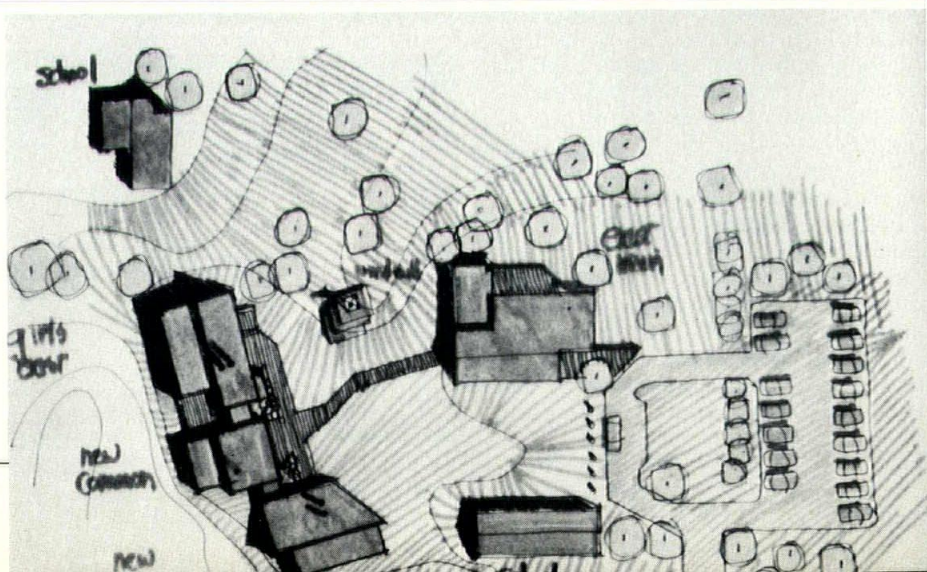
A lofty setting for teens...

The dorms at the Jamestown Treatment Center near Stillwater, Minnesota, are easily mistaken for just two more family vacation houses in a pristine setting. Such an impression was consciously pursued by the architects, Smiley Glotter Associates, of Minneapolis, in their master plan for the Center and their design of the handsome young women's dorm shown here. A privately funded treatment center for chemically dependent young adults, Jamestown asked its architects "to create a sense of community in which each resident assumes responsibility for individual actions." Thus, while the young residents are free to leave if they choose, their home-like environment is designed to keep them from going prematurely. A spacious, open-ceilinged living room encourages casual socializing around the fireplace; and, nearby, a more intimate space invites slumber partying. Throughout, the abundance of natural wood finishes and exposed structural members contribute to a relaxed setting which helps to accelerate the residents' progress toward rehabilitation.

As in any well-ordered mini-neighborhood, the dormitories are sited with a dual emphasis on preserving the natural setting and creating efficient building relationships with each other and the Center's other buildings.



Young women's dorm forms a striking profile in its wooded setting. Indoors, natural daylight from clerestory windows heightens the drama of two-story living area, posts and beams (top). The master plan places the dorms, educational and administrative buildings in visually coherent and functionally effective cluster. Cushion-strewn room for informal small groups resembles a ski lodge inglenook (right).

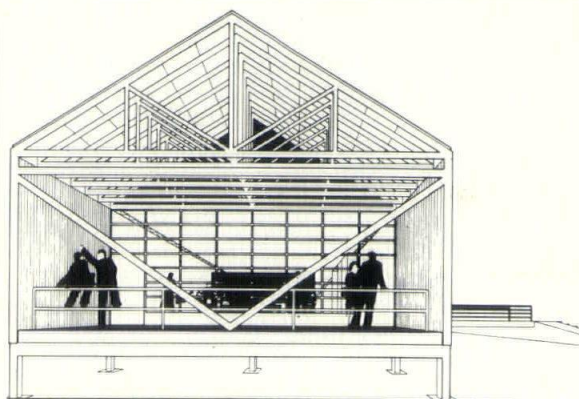
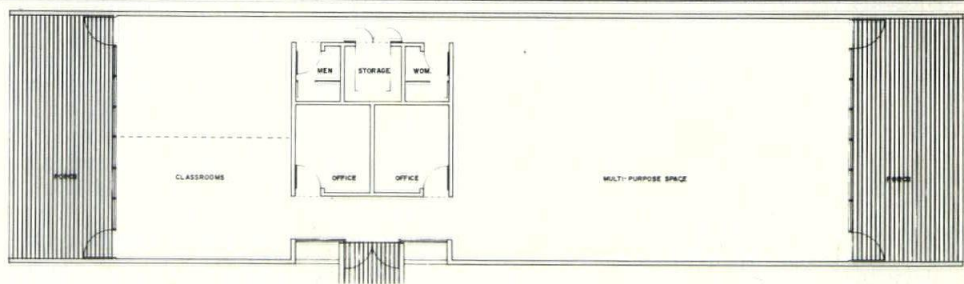


and a beautifully spare "long house"



Anyone who doubts there is beauty in simple things would do well to consider the merits of the Cedar Hills Activities Building in King County, Washington. This 2,000 square foot facility for recovering alcoholics was built, of necessity, for \$78,000. Rising to the challenge, the Miller/Hull Partnership of Seattle created a strikingly spare space, much like an Indian long house, that can be shaped by easy partitioning to serve a myriad of activities. One day art classes may meet to produce art then displayed on the uninterrupted wall space. The next day the center may be divided for vocational training, meetings or recreational doings.

Structurally, simplicity paid off: as few materials as possible were used, and the exposed wood trusses and translucent roof sections lend a light and airy feeling. So, too, does the system of posts that lift the building off the ground to avoid site drainage problems. Says David Miller of Miller/Hull, "The design is an attempt to translate simplicity into elegance."



Save for a restroom/office/storage area, the center's plan lets you manipulate all enclosed space at will; and the options are further enhanced by decks at either end. For visitors, the sensation of a building afloat is heightened by the need to cross an entrance bridge (top). Exposed structure of the gable ends provide a delightful ribbed umbrella beneath which the occupants may view the lush Northwest setting.

A Place to Recuperate

By Paul Fussell

A while ago my wife and I were touring Israel. One morning in Jerusalem I woke with an inexplicable insistent pain in my side: I felt as if during the night someone had kicked me in the ribs very hard. But the pain wasn't bad enough to interfere with our touring schedule for the day, which involved an overnight bus trip to the northern part of the country, including the Sea of Galilee and the Golan Heights, and a stay at a kibbutz which runs a motel and restaurant. At dinner that night my pain worsened, and now I found it hard to breathe. I assumed that somehow I'd broken a rib or pulled a muscle humping our heavy suitcases. A possible alternative explanation was that my years of wine-bibbing had finally paid off in a monstrously swollen liver which was now obtruding anomalously up into my rib cage. I couldn't see the kibbutz physician because he was on vacation. The solution to my problem, it was indicated, was to be examined at a hospital some thirty miles away. A taxi took us there—by this time I was groaning and thrashing about in the back seat—and within an hour I was scrutinized, thumped, X-rayed, and encased in blue pajamas made of some canvas-like material, installed in a bed in a ward. I hurt like hell. For no reason at all, I had achieved a severe case of pleurisy. I would recover, I was told, but the treatment would take two weeks. And after that, I was warned, for an additional week I would have to convalesce somewhere.

Somewhere. "Where do you want to go?" my wife asked when I was ready to leave the hospital. Where indeed did we want to spend a week?

The world was all before them, where to choose

Their place of rest, and Providence their guide.

I could have said I wanted to go to Baden-Baden or a Greek island or Juan-les-Pins, or even Oaxaca or Tahiti. Then I realized where I wanted to go.

I wanted to go to a certain small European provincial city on a large lake. The population is about eighty thousand. A Romance language is spoken there, and the prevailing religion is Roman Catholic in a serious but never solemn way—lots of processions and frequent public blessing of objects like fishing boats and municipal vehicles. Everyone greets the priests in the

streets, and the priests (who wear soutanes and birettas and never smoke cigarettes in public) smile back. Almost every week there is a fête celebrating some saint's day. This begins at dawn with a great echoing explosion from the eighteenth-century cannon on the lake-front, proceeds through a day of municipal sports programs accompanied by many drinks, and ends with fireworks over the lake at night, with tired children, unwillingness of friends to part, and universal satisfaction that the day has been spent so well. On this day the police all wear white gloves, and as you walk home you smell tobacco, wine, coffee, and flowers.

Events like that take place near the town center, laid out as an oval sloping slightly uphill one and a half kilometers, from the hotel at the bottom, on the lake, to the municipal building at the top. The architecture here actually dates from the last third of the nineteenth century, but the style is either Palladian or Romanesque or Baroque. A gently curving main street encloses the central grassed area containing a large fountain, never out of order and lighted at night; statues on pedestals, some classical nudes, some fully dressed local worthies of the last century like doctors, composers, and minor authors; curving walks with green slatted wood benches where the elderly rest and admire the beds of red flowers against the grass; and, in the center, a covered bandstand with a wrought-iron railing around it featuring lyres. Around the bandstand are hundreds of quite comfortable folding chairs, and from it twice weekly (Wednesday evenings, Sunday afternoons) issues three hours of band music like *Poet and Peasant Overture*, "Waltz" from *The Merry Widow*, and the "Anvil Chorus" from *Il Trovatore*, with real anvils sending up real sparks when struck with hammers by members of the percussion section. The band, supported by the city, has mastered the complete oeuvres of Romberg and Sousa and Strauss, with the result that if you stay a week you never hear the same "selection" played twice.

On the main street around this oval-shaped central park there is no building taller than three stories, and the ground floors are occupied by shops, restaurants of all categories, and cafés. The shops sell no cameras or elec-

tronic equipment, and of course they sell no would-be comic T-shirts, no cocaine or dildos. They sell good-looking clothes and luggage and fine small leather goods, chess sets and interesting playing-cards and dice beautifully machined, antique jewelry and chrome-plated corkscrews that work, snuff-boxes and good sandals and surprising things made of marzipan, like little pork chops and slices of salami. There are many bookshops carrying works in the local language as well as stationery and school texts. But there's one shop which stocks all the Penguins and Pelicans, and in addition has all the volumes of Everyman's Library, the Modern Library, and the World's Classics as they existed in 1949.

Each restaurant, whether modest or grand, posts a menu outside, and it is lighted at night. Because the provision of public music is regarded by the municipality as one of its prerogatives and a public trust, mere street musicians are prohibited, and the playing of music inside restaurants, whether by the living or by record or tape, violates a city ordinance which is rigorously enforced. Although this place is neither in northern Italy nor anywhere in France, the food is a combination of northern Italian and French. You can have *prosciutto e melone* and *fettuccine al burro*, and you can also have *truffes en croute*, *poulet d'estragon*, or trout from the lake, and finish with a soufflé Grand Marnier. And there's a nice local slightly Sparkling white wine. The waiter, who would rather die than say something like "Good evening. I am your waiter. My name is Dimitri," leaves the wine in a bucket by your table, assuming that you will want to pour it yourself. After dinner you stroll out to a café, where you have coffee and cognac and perhaps a little pastry or ice cream and watch the young people go by, some slowly in cars, some on foot, but all very attractive and all, boys and girls alike, wearing tight white trousers. They seem very happy. If café musicians are prohibited, lottery-ticket sellers, shoe-shine boys, and itinerant peanut vendors are allowed, but they are a very nice type who smile and go away immediately when you shake your head ever so slightly.

It is at the café especially that you'd do well to master the local currency and coinage. You get four of the mon-

etary units to the dollar. Coffee at the café costs half a unit, beer two, the wine in the restaurant four or five, depending on whether it's 1976 (a nice year) or 1978 (a not so nice one). A large, satisfying meal costs about eighteen units. The coins are cupro-nickel all the way through (no tacky sandwiches) and of satisfying and even comic design, like the Irish. And the sizes make sense: for example, the "nickel" is not twice the size of the "dime." The banknotes reveal their value instantly by being of different sizes and colors, like the French. There is a 15 percent service charge everywhere. You leave a tiny tip over that only when the waiter has told you something really funny (and funny by international standards) or the chambermaid in the hotel has flirted with you. You also might leave a small tip (an eighth of a unit would do it) with the attendant always on duty at the impeccably tidy public conveniences in the center of the park. A man once tried to make a pass at another man there, but he was summarily deported, and there's been no trouble of that kind for years. From the café you can see the taxi rank, with four or five cabs always waiting. They are built on the British model with lots of room and so tall that you look not only out but down. They have entire trustworthy meters, and the driver will expect a tip only if, when the ride ends, he jumps out and opens your door, or carries suitcases into the hotel. Here and there you find kiosks on corners: they sell tobacco and matches and combs and papers of pins and soap, and postage stamps so tastefully designed you hate to stick them on and mail them away. The kiosks also stock a full line of newspapers, weekly journals of opinion, and illustrated magazines from all over. You can stroll slowly around the whole central oval in less than an hour, sampling the various cafés and making small purchases. In the daytime you are likely to pass or be passed by a crocodile of schoolchildren in blue and white carrying little briefcases. A teacher or nun is at the head, and while she's leading them in public, the pupils conduct themselves with the dignity appropriate to learning. You will arrive ultimately down at the lake front, where you will often see fishermen making for their vivid little boats and wearing the traditional outfits including long knitted caps with tassels, like the Portuguese.

The glory of this city is its renowned

hotel on the lake. The citizens are proud of it, and they like the people who come there. This is where I'm going to get my strength back. Architecturally the hotel resembles a large British country house dating from the early part of the nineteenth century. Outside, stucco and stone, roofed patios with Palladian balustrades, ferns and hanging baskets. Inside, the atmosphere is that of a well-run London club of sixty years ago. There are public rooms for specialized purposes: billiard- and card-playing, letter-writing, reading. Downstairs there is a cigar stand which sell cigars. When you arrive the people at the reception desk are not engaged at the telephone.

The elevator closes with a sliding bronze gate finished in faded gilt, and there is a small upholstered bench to sit on. There is no piped music for the same reason there is none in the restaurants. Your guest room will have flowers and fruit in it, as well as a small

table drawers will reveal no Bible, the management entertaining sufficient respect for its clientele to let it select its own reading matter without suggestions clients might find impertinent or, if Moslem or Hindu, provincial, impious, and offensive.

When you go down for drinks and dinner, you will find everything nicely arranged for the convenience of the guests rather than the staff: it's as if these people had never heard of the modern world. Drinks can be had immediately on any one of the covered patios by sitting at one of the low tables and simply ringing the little bell. With the drinks arrive, unfailingly, salted peanuts and sometimes the splendid local potato chips and olives. After 5:00 p.m. one is offered tiny hot hors d'oeuvres such as midget weenies in blankets made of memorable crust.

The hotel restaurant: thick white tablecloths and twenty-four-inch napkins at every meal, including breakfast. Flowers on the table always. The cutlery is heavy nickel silver, the waiters aged and serious. They wear black and white. You are hardly seated at breakfast before someone arrives to pour coffee or tea. The bread and rolls are superb.

On the beach side of the hotel there's a simpler restaurant with light meals and snacks at all hours and a bar with waiters who with the greatest good humor will bring things to your place on the beach. There is no sign on the beach prohibiting anything. When you look across the lake you look not upon emptiness but at boats and, far away, the dim out-

lines of the distant other shore with light-blue mountains rising behind. While you're here the weather is bright and clear, warm in the daytime but at night cool enough for good sleeping.

This is the place where I wanted to go to recuperate. But we did not go to this place. After a day or two in Tel Aviv, which resembles this place in no respect, I felt perfectly well, and we resumed our trip and flew on to Central Europe. And by the time we returned to the United States, and to our condition, this place was only a memory.

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Chair No. 2 by Dani Roach-Walker

sewing kit. When you look into the bathroom, you will find a tub over six feet long. It is made of porcelain. Above it is a small drying line. There are more towels and soap than you will need and two extra rolls of toilet paper. The bed is double and the two reading lamps are fitted with hundred-watt bulbs. There are extra bulbs in a drawer of the dresser, whose mirror is unostentatiously arranged so that if so minded a couple can watch itself performing sexual intercourse. The closets contain an excess of quite stealable broad wood hangers, which the guests do not steal. In the guest rooms as everywhere in the hotel there is moulding at the junctions of walls and ceilings, and there are moulded panels (six or eight) on the doors, which are of oak or similar hardwood. Door fittings are of brass, and the doorknobs have things like lion heads in bas-relief. A search of the bed-

HEALTH CARE *as* BIG BUSINESS

The age of pervasive medical marketing has arrived. Goodbye hometown hospitals and nursing homes. Hello huge health care complexes selling as "uniform and reliable a product as McDonald's hamburgers coast to coast." Here, from a major new work, *AM* presents a distinguished sociologist's somewhat disquieting summary of "the growth of corporate medicine."

By Paul Starr

Medical care in America now appears to be in the early stages of a major transformation in its institutional structure, comparable to the rise of professional sovereignty at the opening of the twentieth century. Corporations have begun to integrate a hitherto decentralized hospital system, enter a variety of other health care businesses, and consolidate ownership and control in what may eventually become an industry dominated by huge health care conglomerates.

This transformation—so extraordinary in view of medicine's past, yet so similar to changes in other industries—has been in the making, ironically enough, since the passage of Medicare and Medicaid. By making health care lucrative for providers, public financing made it exceedingly attractive to investors and set in motion the formation of large-scale corporate enterprises. Nursing homes and hospitals had a long history of proprietary ownership, but almost entirely as small, individually owned and operated enterprises. One of the first developments in the corporate transformation was the purchase of these facilities by new corporate chains. This, in a sense, was the first beachhead of for-profit corporations in the delivery of medical care.

Paradoxically, the efforts to control expenditures for health services also stimulated corporate development. The conservative appropriation of liberal reform in the early seventies opened up health maintenance organizations (HMOs) as a field for business investment. And in ways entirely unexpected, the regulation of hospitals and other efforts to contain costs set off a wave of acquisitions, mergers, and div-

ersification in the nonprofit as well as profit-making sectors of the medical care industry. Pressure for efficient, business-like management of health care has also contributed to the collapse of the barriers that traditionally prevented corporate control of health services.

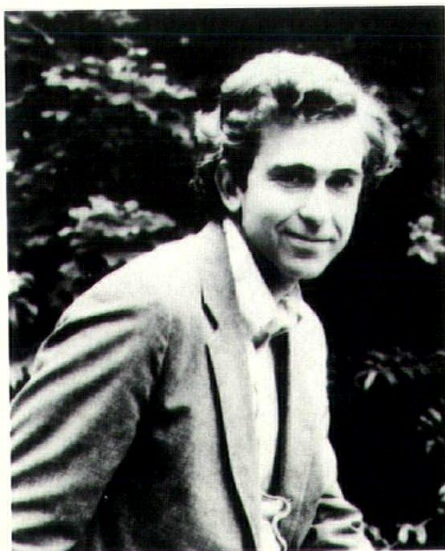
These are the outlines of a process that has now gone considerably beyond what observers have described, at least since the early 1970s, as the rise of a "medical-industrial complex." In its original sense, the medical-industrial complex referred to the link-

ages between the doctors, hospitals, and medical schools and the health insurance companies, drug manufacturers, medical equipment suppliers, and other profit-making firms. Their interests seemed so closely interlocked that they constituted a single system, a seamless web of influence, a common front for a particular style, structure, and distribution of medical care.

This early usage emphasized the hidden connections between industry and a medical system that was still made up almost entirely of independent practitioners and local, nonprofit institutions. As of the early seventies, profit-making hospital and nursing home chains were visibly on the rise but still marginal to the health care system as a whole.

Ten years later, this is no longer the case: Large health care corporations are becoming a central element in the system. Arnold S. Relman, editor of *The New England Journal of Medicine*, alerted his readers in 1980 that the rise of a "new medical-industrial complex" was the "most important health-care development of the day." Relman wanted to distinguish the growing businesses that sell health services to patients for a profit, such as chain hospitals, walk-in clinics, dialysis centers, and home care companies, from the "old" complex of firms that sell drugs, equipment, and insurance.

But the change goes beyond the increased penetration of profit-making firms directly into medical services. By the growth of corporate medicine, we refer also to changes in the organization and behavior of nonprofit hospitals and a general movement throughout the health care industry toward higher levels of integrated control. Five



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separate dimensions need to be distinguished:

1. *The shift from nonprofit and governmental organizations to for-profit companies in health care.*

2. *The decline of freestanding institutions and rise of multi-institutional systems, and the consequent shift in the locus of control from community boards to regional and national health care corporations.*

3. *The shift from single-unit organizations operating in one market to "polycorporate" and conglomerate enterprises, often organized under holding companies, sometimes with both nonprofit and for-profit subsidiaries involved in a variety of different health care markets.*

4. *The shift from single-level-of-care organizations, such as acute-care hospitals, to organizations that embrace the various phases and levels of care, such as HMOs.*

5. *The increasing concentration of ownership and control of health services in regional markets and the nation as a whole.*

Unquestionably the most dramatic corporate expansion has taken place in hospital care. The traditional freestanding general hospital, governed by its own board, administrators, and medical staff, is now giving way to larger multihospital systems run by an increasingly powerful corporate management. In 1961 there were only five consolidations of hospitals in the United States; by the early 1970s, the number had grown to about 50 a year. A survey conducted under the auspices of the American Hospital Association indicates that by 1980 about 30 percent of the nation's 988,000 community hospital beds were in multi-institutional corporations.

Nonprofit organizations account for the majority of beds in multihospital systems. In 1980 the nonprofits operated 57.6 percent of the beds in multihospital systems, the investor-owned chains 35.1 percent, and public systems (excluding federal hospitals) 7.3 percent. But the for-profit chains account for most of the recent growth. Nearly 65 percent of the 20,000 beds added by multihospital systems in 1980 were added by the for-profit companies.

After their emergence in 1968, the profit-making hospital chains grew faster in the 1970s than the computer industry. In 1970 the largest for-profit chain controlled 23 hospitals; by 1981 the same company, Hospital Corporation of America, owned or managed

more than three hundred hospitals with 43,000 beds. In 1981 the profit-making chains owned or managed hospitals with 121,741 beds, up 68 percent over the total of 72,282 beds they had held five years earlier.

Not all of these beds were in the United States. Several of the chains have become multinational corporations. American Medical International owns or manages facilities in England, Spain, Switzerland, Singapore, France, and Venezuela as well as the United States. In 1979 Hospital Corporation of America purchased a prepaid health plan in Brazil with five hospitals, 42 clinics, 780 doctors, and an enrollment of over a half million people.

In the United States, the chain hospitals are concentrated in the South and Southwest in such states as Florida, Texas, and California. The hospitals are typically medium in size, ranging from 100 to 200 beds, and do not have residency programs.

One of the largest chains, Humana, Inc., exemplifies the rise of the hospital corporations. Humana started out in Louisville in 1968 with a few nursing homes and \$4.8 million in revenues. Shifting to the more lucrative acute-care business, the company cashed in on its nursing homes and began buying and building hospitals. According to its president, the firm wanted to provide as uniform and reliable a product as a MacDonald's hamburger coast to coast. By 1980 it had 92 hospitals and \$1.4 billion in revenues; an original share, which cost \$8 in 1968, was now worth \$336. The rise of the for-profit chains has, for the first time, introduced managerial capitalism into American medicine on a large scale.

Multihospital systems vary in the degree of centralization across a spectrum that ranges from fairly loose affiliations to tight management by corporate headquarters. Strong central management is the pattern among the for-profit chains. The majority of for-profit companies report that the power to set hospital budgets, plan capital investments, appoint chief hospital administrators, and make other key decisions rests with management at corporate headquarters. The profit-making chains have also adopted standardized management procedures, standardized accounting and other uniform practices. These tendencies are, as a rule, less advanced in the nonprofit systems.

There are two distinct aspects to patterns of control: Decisions may be local or centralized; and, if centralized, they may rest with a corporate board or corporate managers. One survey reports that local board responsibility for budgets and other key matters is the modal pattern only in the religious

(mainly Catholic) multihospital systems. Among the secular nonprofits, such decisions more commonly rest with corporate boards, but in the for-profit chains, power usually lies with corporate management. The limited role of the boards of for-profit hospital companies suggests that, like most other large corporations, they are controlled by their inside directors.

The greater power of corporate management may reflect how the hospital chains were built. Another reason for greater centralization and standardized management may be size. The average number of hospitals in investor-owned chains in 1980 was 23.5, compared to an average of between 6 and 7 hospitals in nonprofit systems.

However, the differences in size and management may be diminishing. In the late seventies, some nonprofit systems adopted a more aggressively expansionist strategy and began bidding against the for-profits for new acquisitions. In 1981 Fairview Community Hospitals, a nonprofit system founded in 1973 and based in Minneapolis, bought a for-profit chain, A. E. Brim of Portland, Oregon. The purchase gave Fairview a total of 41 hospitals with 2,165 beds. (Fairview now owns or manages over 50 health-care facilities. *ed.*) As of 1979, the largest nonprofit was Sisters of Mercy Health Corporation (founded in 1976), with 23 hospitals and 5,584 beds.

Ownership and control are much more highly concentrated in the for-profit sector. By 1981, after several large mergers, nearly three quarters of the beds in for-profit multihospital systems were operated by the top three companies (Hospital Corporation of America, Humana, and American Medical International). On the other hand, the top three nonprofits (Kaiser Foundation Hospitals, Sisters of Mercy Health Corporation, and Sisters of Charity of Houston) operated less than a tenth of the beds in nonprofit systems.

The for-profits and nonprofits also differ in their patterns of development. While the leading profit-making chains are national, the nonprofits typically operate in one area or contiguous states. The for-profits show a stronger tendency toward "horizontal" growth through the hospital industry; the nonprofits, toward "vertical" growth through different levels of care in health services. While most of the for-profit chains have restricted themselves to acute care facilities, many of the nonprofits have built satellite clinics and operate nursing homes in their areas.

Industry experts anticipate rapid growth of multihospital systems, especially the for-profits. Some are predicting that the for-profit chains will double in size in the eighties while the

hospital industry as a whole will experience little growth. The gloomy economic forecast for voluntary hospitals is a boon to the multihospital systems. The greater the squeeze in reimbursements, the more pressure there will be on the relatively weak, freestanding institutions to sell out to multihospital systems with greater financial resources.

Some local governments, meeting stiff resistance to higher taxes or bond issues, are finding it more attractive to sell public hospitals. A vice president of American Medical International explains, "Where historically government officials felt it was improper to sell their hospitals, many now feel that it's inappropriate for government to be in the business of operating them."

The profit-making chains also have a need to grow. Continued growth is necessary to keep up the price of their stocks and postpone tax liabilities. But they do face some limits. The independent proprietary hospitals that provided the basis for their early growth are becoming more scarce. The chains do not want to own hospitals in depressed areas with large numbers of Medicaid patients. Nor are they likely to buy up teaching hospitals. But there is probably ample room for growth in the medium-size hospitals in the more attractive neighborhoods, if the boards of voluntary hospitals can be convinced to sell.

This may ultimately prove to be the limiting factor. The growth of national hospitals chains promises to withdraw control of a civic institution from local authorities. The chains, as David Starkweather, a professor of hospital administration, points out, "transfer ownership out of the local community, increasing the difficulty of achieving local . . . reorganization of health care delivery." Companies may shut down local services that do not yield enough revenue to the corporation, just as industrial conglomerates sometimes close plants that do not make a "hurdle" (return on investment) that may be as high as 20 to 25 percent.

Plant shutdowns have yet to arise in the commercial hospital industry, but they are not hard to imagine. Nor is it hard to imagine the concessions that multinational hospital corporations will be able to extract from local communities by threatening to close down their hospitals.

The 1970s and 1980s have brought harsher times for many public and nonprofit hospitals. The tilt of postwar policy toward the hospital has become

a tilt away from hospital care. Funds for capital investment are no longer abundant. Cutbacks in reimbursement rates under government programs threaten the survival of institutions with large numbers of poor patients. New organizations, such as HMOs, reduce the demand for hospital care, and the growing supply of physicians encourages doctors to "invade" services per-

The rise of health care corporations, plus an increase in the number of doctors, may vastly change medical practice.

formed by hospitals to capture a larger share of ancillary profits. Hospitals face a more competitive market, and many may not endure.

In response, many voluntary hospitals are diversifying into other health care businesses. Administrators see diversification as a way to generate new revenues and raise additional capital for renovation and expansion. Often they are reorganizing their corporate structures at the same time. In one model, the hospital becomes the parent corporation or a variety of subsidiaries; in another, it establishes a parent holding company, which owns the hospital as well as other subsidiaries. These new legal arrangements protect the hospital's tax-exempt status while it diversifies and ensures that reimbursements for hospital care will not be cut because of revenues from new businesses. The "polycorporate" structure, says an enthusiastic hospital consultant, Montague Brown, makes it possible for hospitals "to build thriving business ventures [to] generate profits that the parent corporation can use wherever it chooses."

While the hospital subsidiary contin-

ues to operate as in the past, the new holding company can pursue acquisitions and spin off new subsidiaries. "The chief executive officer of the new polycorporate enterprise," writes Brown, "may well be the former president, or even the current president, of the hospital but his or her work will resemble less and less the traditional task of the hospital administrator." It will be more like managing a conglomerate.

Under the umbrella of this new polycorporate enterprise, the tax-exempt, nonprofit hospital can operate taxable, for-profit businesses. In early 1981 the IRS agreed that a voluntary hospital in California did not lose its tax-exempt status after undertaking various profit-making ventures, which included a medical office building, a shopping center, a restaurant, and a contract management consulting firm. It even appears that the profit-making subsidiaries of a nonprofit hospital can sell stock to investors, as long as the tax-exempt and taxable organizations are kept separate.

By early 1981 several hundred corporate reorganizations of hospitals had taken place. In Pittsburgh, Pennsylvania, for example, the nonprofit Allegheny General Hospital created a new parent holding company, Allegheny Health Education and Research Corporation, to generate new revenues and capital. Among its subsidiaries is a for-profit company, Allegheny Diagnostic Services, Inc., which sells cardiac rehabilitation, sports medicine, and laboratory services. In Berkeley, California, the nonprofit Alta Bates Hospital created a holding company to operate the hospital, another hospital it had acquired, a management services firm, a foundation, a group of nursing home and retirement centers, and Alta Bates Ambulatory Health Services, Inc., which operates a dialysis center, home care services, a pathology institute, a hospice, and a sports medicine unit.

The ambitions of hospital administrators now go considerably beyond the traditional hospital functions. In Kansas City, Missouri, the 600-bed, nonprofit Research Medical Center operates a profit-making subsidiary, Health Services Management, Inc., which sells assertiveness training, stress management, continuing medical education, and speech and language group therapy for children. After reorganizing, Research Medical's president indicated that among the new ventures being considered were a chain of health food restaurants, retail pharmacies, and hearing aid and eyeglass stores. "We have only about two years in which to do this," explained the company president, since hospitals that fail to diversify "are going to be gobbled up in mergers and acquisitions."

The extension of the voluntary hospital into profit-making businesses and the penetration of other corporations into the hospital signal the breakdown of the traditional boundaries of voluntarism. Increasingly, the polycorporate hospitals are likely to become multihospital systems and competitors with profit-making chains, HMOs, and other health care corporations. The president of one nonprofit multihospital system, which has profit-making subsidiaries, comments that "it may be increasingly difficult to distinguish those chains with voluntary origins from those which have been built with stock ownership." Eventually, it may also be difficult to distinguish those health care conglomerates that began as hospital systems from those that began in other markets.

Corporate activity in other medical services has been considerable. About 77 percent of the nursing homes in the United States are proprietary, and an increasing proportion are being bought up by large corporate chains. The nursing home chains are also going into the "life care" business, constructing retirement apartments next to nursing homes. Other companies provide home care, which involves home-making assistance, physiotherapy, and nursing and medical services. Compared to nursing homes, which generated about \$19 billion in revenues in 1980, home care is still a small business, worth perhaps \$3 billion, with about a half billion dollars going to ten large companies in 1980.

There are also dozens of other related health care businesses, such as dental care, optical services, weight-control, rehabilitation, CAT scanning, and various kinds of laboratory services. Emergicenters—also called minor emergency centers, convenience clinics, or walk-in clinics—are typical and perhaps the most important. Often located in shopping centers, they provide immediate treatment for any medical problem, generally without an appointment. The owner of two emergicenters in Massachusetts calls them "the fast-food concept applied to medicine."

Such centers increased in number from about fifty to over 200 nationwide between 1978 and 1981. In several states, chains operate clinics often in partnership with physicians; one company has begun to create a national franchise. A vice president of Merrill Lynch gushes that emergicenters "can attract as much as 25 percent of the approximately \$45 billion that Ameri-

cans spent on physician and hospital outpatient services last year. That's more than \$10 billion—bigger than the fast-food industry. And with centralized management and economies of scale, they can prove highly attractive to entrepreneurial capital."

Large, multi-unit corporations are also gaining a major position in the organization of HMOs. At the beginning of the 1970s, the prepayment plans, except for Kaiser, were locally controlled. None were profit-making companies. By 1980 the majority of HMOs were being drawn into several large networks run by Kaiser, Blue Cross, INA, and Prudential. Without extensive government aid for start-up capital, the consumer-run, cooperative organizations are certain to decline, and the surviving HMOs will increasingly become part of large corporate networks.

Of the many kinds of organization that now exist (or might appear) in medical care, which are likely to prevail in the future? And what effects are they likely to have on the medical profession and the society?

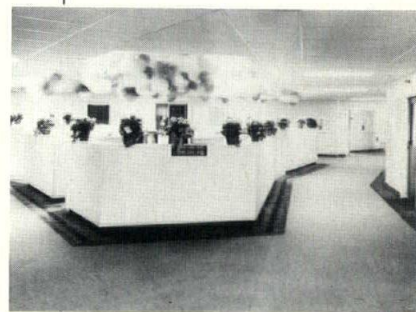
The array of organizational forms in medicine is now extraordinarily complex. There is tremendous ferment and variety through the United States. The traditional private practitioner, free-standing voluntary hospital, and indemnity or service-benefit health insurance plan continue to be the norm, but they are losing their former dominance. In the future, more doctors will be in group practice; more hospitals will be in multihospital systems; and more insurance companies will be directly involved in providing medical care through HMOs.

The traditional boundaries among these three sectors are being challenged: Doctors are integrating "backward" into institutional services; hospitals are integrating "forward" into ambulatory care; insurance companies are adopting new arrangements with "preferred providers" to create hybrid prepayment plans. No one today could safely predict the outcome of these developments.

However, most observers would agree that the movement toward integrated control will continue. Starkweather suggests that the roughly 5,000 different corporations responsible for the nation's hospitals will be reduced to about 2,000 by 1990. Another analyst suggests that by the year 2000, health care conglomerates, each with revenues of over \$500 million a year, will account for about a fifth of all spending on hospitals and nursing homes. These are relatively modest projections. A radical Reaganite program could accelerate the movement. Before being appointed director of the Office of Management and Budget, David Stock-

Fairview, a non-profit health care giant, thrives on business acumen and a religious imperative

Minneapolis-based Fairview Community Hospitals now owns or manages over 50 health care facilities, making it the largest non-profit corporation in the field. Yet the Fairview trustees declare expansively that "their mandate extends beyond their immediate communities to include all people in need of service, whether in the Rockies, the Midwest or Saudi Arabia." Their ambitions are fueled by a sense of Christian mission and a healthy regard for business growth. These virtues, as manifested in such highly successful hospitals as Fairview Southdale (below), have been recognized by shrewd students of the health care industry. Following Fairview's acquisition of the major for-profit hospital management firm, Brim & Associates, a Yale case study concluded that Fairview is notable for its readiness to make decisions that entail "risk as well as vision."



man declared that "under the kind of system that I'm talking about . . . I think most hospitals will become parts of for-profit marketing operations or they will become for-profit on their own.

The long-run question is—which form of integration will predominate? Several major types have now appeared: (1) the academic medical "empire," with its extended network of affiliation agreements; (2) the regional, nonprofit multihospital system; (3) the national, for-profit hospital chains; (4) HMOs, both independent and in chains; and (5) the diversified health care "conglomerate" with different lines of business in health care, but not offering comprehensive services to a defined population as in an HMO.

These different forms of corporate health care will be engaged in both economic and political competition with one another. If the financing system for medical care rewarded economic performance, both the academic medical empires and the for-profit chains would be handicapped by their higher costs. But this is not necessarily a fatal disadvantage as long as the reimbursement system permits higher-cost institutions to receive additional funds. The for-profit chains' higher markups on ancillary services, along with their superior access to private capital, actually provide them with funds for expansion. The academic medical centers are in more serious difficulty because of their higher costs, but they may be able to persuade government, perhaps after a few threatened bankruptcies, to accept more of the burden of financing medical education.

As I've already indicated, there is no evidence for significant savings from for-profit over nonprofit organizations and little evidence for savings from multihospital systems over freestanding institutions. Horizontal integration has more advantages for the organizations than for the society. Similarly, corporate restructuring—the emergence of the poly-corporate enterprise—has as its main motive the maximization of reimbursement. These are primarily adaptations to an incentive system that continues to be skewed; there is no reason to expect that they will meet the demands of the government or employers for containment of medical costs.

On the other hand, vertical integration—comprehensive prepayment—has the potential to yield significant savings of money and improvements in effectiveness. There is clear and convincing evidence for substantial savings from HMOs; the main reason is the reduction in expensive hospital care—hardly surprising in view of the effects on the rest of the health care

system of the long-standing tilt toward hospitals in government policy, private insurance, and relative prices paid physicians for hospital and office services.

Many observers, more confident of the rationality of the medical system than I am, foresee a shift from horizontal to vertical integration. In this view, the regional, nonprofit multihospital systems will be precursors to comprehensive health care plans, and even the for-profit hospital chains will eventually turn toward HMOs.

There is precedent for this view. In his history of the rise of corporate management, Alfred Chandler notes that there were two paths to the modern corporation in America. One was to expand by merger. This was basically a strategy of horizontal integration, aimed at increasing profits by controlling price and output. The other was to combine a system of mass marketing with mass production; this was a strategy of vertical integration aimed at raising profits by cutting costs. In the long run, the first strategy could not succeed alone. "The firms that first grew large by taking the merger route remained profitable only if after consolidating they then adopted a strategy of vertical integration," writes Chandler.

The emergence of corporate enterprise in health services is part of two broad currents in the political economy of contemporary societies. The older of these two movements is the steady expansion of the corporation into sectors of the economy traditionally occupied by self-employed small businessmen or family enterprises. In this respect, the growth of corporate medical care is similar to the growth of corporate agriculture. The second and more recent movement is the transfer of public services to the administrative control or ownership of private corporations—the reprivatization of the public household.

As I've already indicated, liberal and conservative policies, in opposite ways, have both promoted corporate health care. Medicare and Medicaid stimulated the huge growth in proprietary nursing homes and hospitals and later the rise of dialysis clinics, home care businesses, and emergicenters. Cutbacks in financing have encouraged the same developments. This shift was not inevitable. The legal rule against the corporate practice of medicine might conceivably have been steadfastly enforced by the courts. The early liberal programs might have emphasized

neighborhood health centers instead of Medicaid and more generally have fostered public facilities instead of public financing for private health care. The great irony is that the opposition of the doctors and hospitals to public control of public programs set in motion entrepreneurial forces that may end up depriving both private doctors and local voluntary hospitals of their traditional autonomy.

The medical profession was long able to resist corporate competition and corporate control by virtue of its collective organization, authority, and strategic position in mediating the relation of patients to hospitals, pharmaceutical companies, and use of third-party payment. Today, physicians still hold authority and strategic position, but these have eroded. Specialization has diminished the scope of relations between doctors and patients. Although patients who have established satisfactory relationships with private physicians are less likely to enroll in HMOs, HMOs have been developing more rapidly than before partly because ties between doctors and patients are so much weaker. (The rise in malpractice suits against private physicians has the same cause.) Employers and the government have become critical intermediaries in the system because of their financial role, and they are using their power to reorient the system.

In addition, the profession is no longer steadfastly opposed to the growth of corporate medicine. Physicians' commitment to solo practice has been eroding; younger medical school graduates express a preference for practicing in groups. The longer period of residency training may cultivate more group-oriented attitudes. Young doctors may be more interested in freedom *from* the job than freedom *in* the job, and organizations that provide more regular hours can screen out the invasions of private life that come with independent professional practice.

Nonetheless, compared with individual practice, corporate work will necessarily entail a profound loss of autonomy. Doctors will no longer have as much control over such basic issues as when they retire. There will be more regulation of the pace and routines of work. And the corporation is likely to require some standard of performance, whether measured in revenues generated or patients treated per hour. To stimulate admissions, Humana offers physicians office space at a discount in buildings next to its hospitals and even guarantees first-year incomes of \$60,000. It then keeps track of the revenues each doctor generates. "They let you know if you're not keeping up to expectations," says one young phy-

sician. Humana's president is frank about what happens if they fail to produce: "I'm damn sure I'm not going to renegotiate their office leases. They can practice elsewhere."

One reason that there will be a loss of autonomy is that the organizations in which physicians work are themselves likely to become *heteronomous*—that is, the locus of control will be outside the immediate organization. Professional autonomy has been protected by the institutional autonomy of hospitals. In the multihospital systems, centralized planning, budgeting, and personnel decisions will deprive physicians of much of the influence they are accustomed to exercise over institutional policy.

Perhaps the most subtle loss of autonomy for the profession will take place because of increasing corporate influence over the rules and standards of medical work. Corporate management is already thinking about the different techniques for modifying the behavior of physicians, getting them to accept management's outlook and integrate it into their everyday work. That way they do not need to be supervised and do not sense any loss of control. Sociologists have long talked about the "professional socialization" that takes place in medical school as students acquire the values and attitudes of mature physicians. Now they will have to study "corporate socialization" as young doctors learn to do things the way the plan or the company has them done.

The rise of a corporate ethos in medical care is already one of the most significant consequences of the changing structure of medical care. It permeates voluntary hospitals, government agencies, and academic thought as well as profit-making medical care organizations. Those who talked about "health care planning" in the 1970s now talk about "health care marketing." Everywhere one sees the growth of a kind of marketing mentality in health care. And, indeed, business school graduates are displacing graduates of public health schools, hospital administrators, and even doctors in the top echelons of medical care organizations. The organizational culture of medicine used to be dominated by the ideals of professionalism and voluntarism, which softened the underlying acquisitive activity. The restraint exercised by those ideals now grows weaker. The "health center" of one era is the "profit center" of the next.

No less important than its effect on the culture of medical care institutions

is the likely political impact of the growth of corporate enterprise. As an interest group, the new health care conglomerates will obviously be a powerful force. The profit-making hospitals clearly benefit from the structure of private health insurance and can be counted on to oppose any national health program that might threaten to end private reimbursement. The corporate health services industry will also represent a powerful new force resisting public accountability and participation.

A corporate sector in health care is also likely to aggravate inequalities in access to health care. Profit-making enterprises are not interested in treating those who cannot pay. The voluntary hospital may not treat the poor the same as the rich, but they do treat them and often treat them well. A system in which corporate enterprises play a larger part is likely to be more segmented and more stratified. With cutbacks in public financing coming at the same time, the two-class system in medical care is likely to become only more conspicuous.

This turn of events is the fruit of a history of accommodating professional and institutional interests, failing to exercise public control over public programs, then adopting piecemeal regulation to control the inflationary consequences, and, as a final resort, cutting back programs and turning them back to the private sector. The failure to rationalize medical services under public control meant that sooner or later they would be rationalized under private control. Instead of public regulation, there will be private regulation, and instead of public planning, there will be corporate planning. Instead of public financing for prepaid plans that might be managed by the subscribers' chosen representatives, there will be corporate financing for private plans controlled by conglomerates whose interests will be determined by the rate of return on investments. That is the future toward which American medicine now seems to be headed.

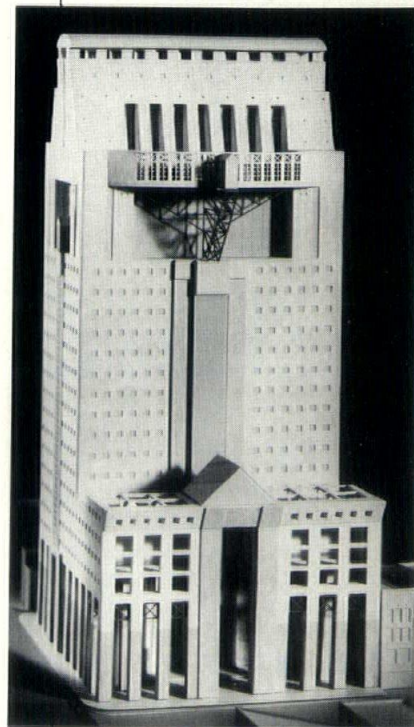
But a trend is not necessarily fate. Images of the future are usually only caricatures of the present. Perhaps this picture of the future of medical care will also prove to be a caricature. Whether it does depends on choices that Americans have still to make.

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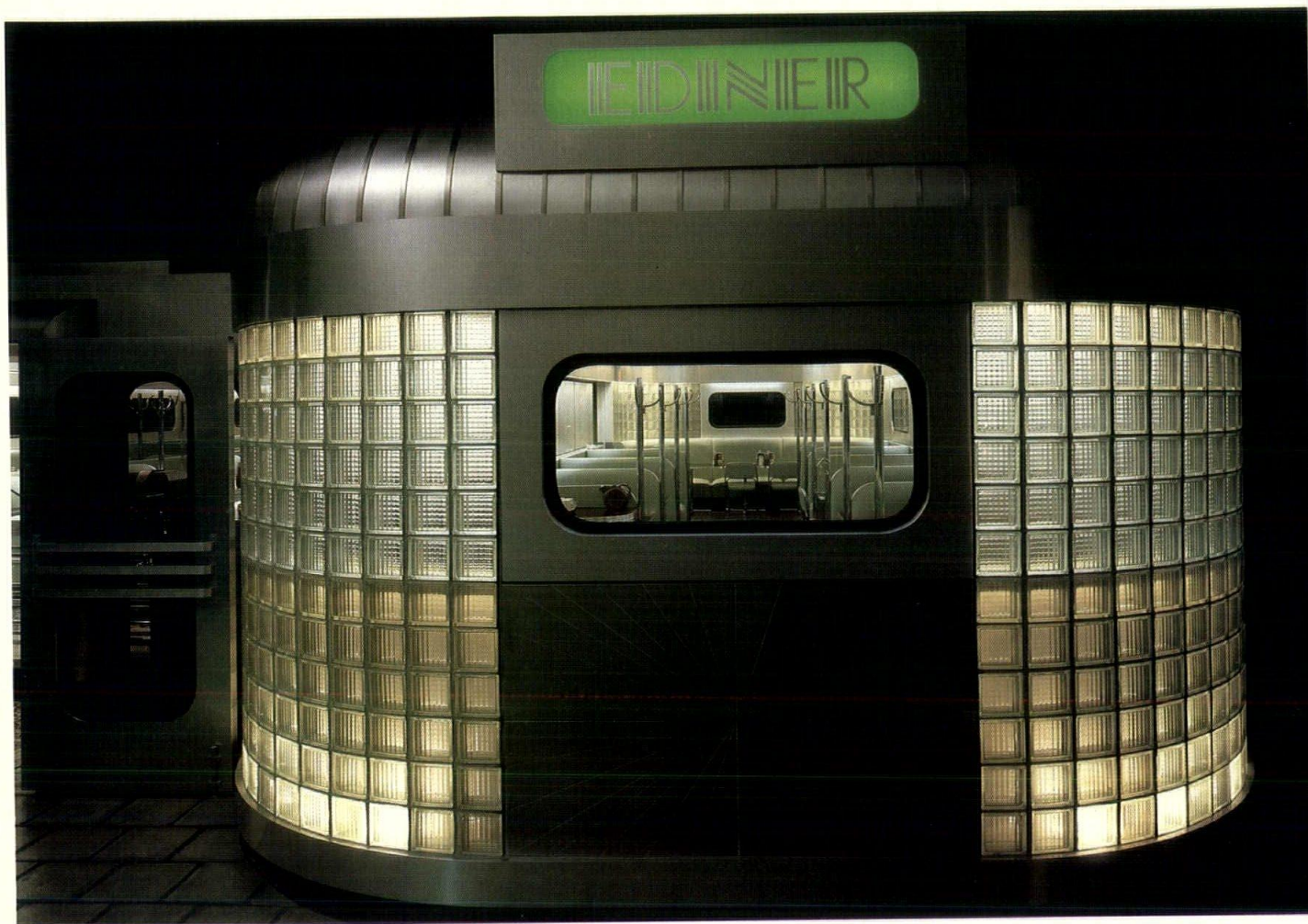
Humana, the self-styled "hospital company," and Michael Graves—a hit and a miss

One of the largest hospital management corporations, Humana, Inc., captured the design world's attention last year when it named Michael Graves the winner in its architectural competition for the design of a Humana headquarters building in Louisville (see model). The competition was stiff: Murphy/Jahn, Ulrich Franzen/K. Kroeger, Cesar Pelli, and Foster Associates. Expressing his pleasure with Graves' design for a 27-story, \$50 million building, Humana's president Wendell Cherry said, "The primary reason for having an architectural competition was to stimulate new ideas for a building of national significance that will capture the imagination of the public."

Meanwhile, Humana has bought a 1914 vintage building across the alley from the headquarters site and commissioned the Louisville firm Grossman, Chapman/Kingsley to renovate it for an employees' fitness center. A two-story skywalk will tie the old and new buildings—reportedly much to Graves' chagrin.



the Consummate Diner



To stop for a burger and malt at the Ediner is to find yourself back in the days when juke boxes blared in every restaurant and roadside beaneries were as ubiquitous as Burma Shave signs. This clever restaurant is all-new and located, not at roadside, but in a high-fashion shopping mall in Edina, Minnesota. But its proprietors Jack and Susan Seltz have made sure that the recall of customers old enough to have patronized a 1950s diner is total. They and their designers—Bob Kalbac of Kalbac & Associates and architect Walter Johanson of BRW Architects—have paid scrupulous attention to such nostalgic details as a stainless steel soda fountain counter with pies under glass, stacked sundae dishes, vintage paper napkin holders, old-time mugs, cafeteria-style silverware, and mimeographed daily menus slipped inside clear acetate holders. The net of it all is convincingly *deja vu*.

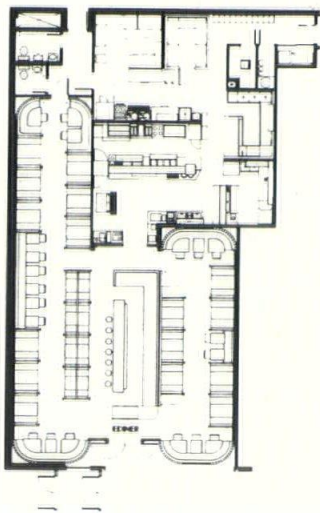
—Bruce N. Wright



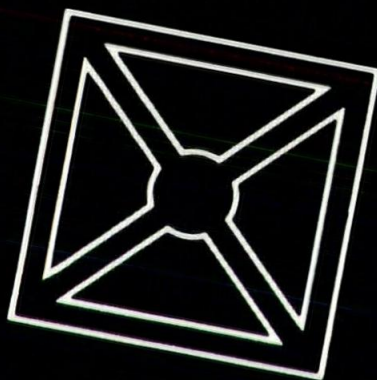


The Ediner's designers went the extra research mile to realize a studiously comic authenticity. Working closely with the owners and drawing on reference books on American diners, Kalbac and Johnson devised a plan (right) that typified the classic beanery: two separate eating areas resembling railroad dining cars are placed parallel, with a classic counter and pedestal-stooled section between them. The kitchen (never a feature in vintage diners) is fitted neatly behind the truncated eating area, where it serves both areas efficiently without violating the Ediner's theatricality. The entrance looks pre-WWII authentic (not easy in a shopping mall), thanks to its signage, glass brick and pleated stainless steel face panel. Inside, the creamy pea green color and chrome detailing reinforce nostal-

gia; and the lighting, done by Guthrie Theater lighting designer Duane Schuler, heightens the drama.



WHEN IT COMES
TO GOOD DESIGN,
WE MEAN
BUSINESS.



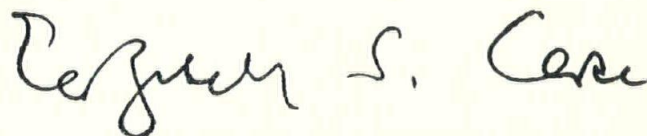
INTERNATIONAL
MARKET SQUARE

Opening January 1, 1985

For information, call Lynne Dale Maboney, (612) 338-1111

Firm Directory

It is with great pleasure that I invite you to turn to the following pages and acquaint yourself with my esteemed colleagues—Minnesota's architects. I know most of them personally. I respect them professionally. Should you require an architect's services—either to design a new building, remodel an existing one, or restore an old structure for a new life—any one of the firms listed in this Directory will be delighted to help you.



*Elizabeth Close, President
Minnesota Society
American Institute of Architects*

Legend

AHA	American Hospital Association
AHP	American Hospital Planners
AIA	American Institute of Architects
AICP	American Institute of Certified Planners
ASID	American Society of Interior Designers
ASLA	American Society of Landscape Architects
CSI	Construction Specifiers Institute
FAIA	Fellow of the AIA
IBD	Institute of Business Designers
IES	Illuminating Engineers Society
PE	Professional Engineer
RAIC	Royal Architectural Institute of Canada

ACKERBERG AND ASSOCIATES, INC.

2622 West Lake Street, Suite 210
Minneapolis, MN 55416
612/920-9020
Established 1955

S. M. Ackerberg AIA
D. P. Watschke

Firm Personnel by Discipline	
Architectural	4
Other Technical	1
Administrative	3
Total in Firm	8

	Work %
Housing	15
Office Bldg./Banks	40
Retail/Commercial	5
Industrial	10
Medical	15
Restoration/Renovation	5
Municipal Bldgs.	5
Interior Architecture	5

Dr. Richard Sweet Residence, Golden Valley, MN; Northwestern Bank West, Plymouth, MN; Granite Falls Municipal Hospital, Granite Falls, MN; Lowy Enterprises, Inc., New Brighton, MN; Minnetonka Woods Townhouses, MN; Fingerhut Corporate Hqtrs., Minnetonka, MN.

THE ADAMS GROUP, INC.

118 East 26th Street
Minneapolis, MN 55404
612/872-8506
Established 1971

C. Culver Adams AIA

Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

	Work %
Housing	50
Office Bldg./Banks	20
Retail/Commercial	10
Industrial	15
Restoration/Renovation	30
Interior Architecture	20
Solar/Earth Sheltered	40

Park Shelters, Edina, MN; The Satterlee Company and SATCO Inc., Minneapolis, MN; Franklin National Bank, Minneapolis, MN; The Down Quilt Shop, St. Anthony Main, Minneapolis, MN; Private residences, Wayzata, Minneapolis, Minnetonka, Long Lake, Deephaven, St. Paul, Cannon Falls, Grand Rapids.

THE ADKINS ASSOCIATION, INC.

Jackels-Morgan-Peterson-Sjoberg
901 Jefferson Avenue
St. Paul, MN 55102
612/224-1358
511 11th Ave. South
Minneapolis, MN 55415
612/332-9176
Established 1958

Robert Morgan	AIA
Robert Jackels	AIA
Gene Peterson	AIA
Roger Sjoberg	AIA

Firm Personnel by Discipline	
Architectural	5
Planners	1
Administrative	2
Total in Firm	8

	Work %
Housing	25
Office Bldg./Banks	10
Retail/Commercial	10
Industrial	10
Medical	5
Churches	20
Education Bldgs.	10
Other (Planning)	10

Selby/Dale Cooperative Housing, St. Paul, MN; Community Electronics Corporation, Minneapolis, MN; Jefferson Office Plaza, St. Paul, MN. Immanuel Lutheran Church, Eau Claire, WI; Shelter Design, Burnsville Park System, MN; Ice Arena, Red Wing, MN.

ALPHA ARCHITECTS, INC.

3585 N. Lexington Avenue
Arden Hills, MN 55112
612/483-3131
Established 1980

Gunnar F. Unger, Jr. AIA
Robert G. Joslin AIA

Firm Personnel by Discipline	
Architectural	2
Administration	1
Total in Firm	3

	Work %
Housing	40
Retail/Commercial	5
Medical	10
Churches	20
Education	5
Solar/Earth Sheltered	20

New Testament Church, Alexandria, MN; Sun Terrace Passive Solar Townhomes, Staples, MN; West Bldg. Alterations, St. Paul Ramsey Medical Center; Lakeside Nursing Home Alterations, Dassel, MN; Northoaks Passive Solar Townhomes, Detroit Lakes, MN; Alexandria Christian Church, Alexandria, MN.

ANDERSON DALE ARCHITECTS, INC.

2675 University Avenue
St. Paul, Minnesota 55114
612/642-4650
Established 1982

Wm. E. Anderson AIA
Kurtis A. Dale AIA
Ted Davis AIA

Firm Personnel by Discipline	
Architectural	6
Interior	1
Administrative	2
Total in Firm	9

	Work %
Corporate	30
Interior Architecture	30
Hotels	5
Laboratory/Technical	25
Broadcasting Facilities	10

Pan American Hotel, Miami Beach, FL; H. B. Fuller Company Willow Lake Laboratory, Vadnais Heights, MN; Minnegasco Corporate Headquarters Remodeling, Minneapolis, MN; Bush Foundation, St. Paul, MN; Hubbard Broadcasting Company, St. Paul, MN; United States Satellite Broadcasting Company, St. Paul, MN.

ANKENY, KELL AND ASSOCIATES, ARCHITECTS

821 Raymond Avenue, Suite 400
St. Paul, MN 55114
612/645-6806
Established 1976

Ronald W. Ankeny AIA
Duane A. Kell AIA

Firm Personnel by Discipline	
Architectural	6
Administrative	1
Total in Firm	7

	Work %
Housing	20
Office Bldgs.	40
Retail/Commercial	40
Restoration/Preservation	75

Baker Court, St. Paul, MN; Dolphin Temporary Help Building, Minneapolis, MN; Riverside Mall, Rochester, MN; Victoria Crossing East, St. Paul, MN; Crosstown Bank, Ham Lake, MN; Northwestern Electronics Institute, Mpls., MN.

ARCHITECTS EN CHARRETTE

2115 Kenwood Parkway
Minneapolis, MN 55403
612/374-4061
Established 1982

Dawn Varda AIA
Apartment Renovation, The Winsor Apartment Renovation, Minneapolis, MN.

Firm Personnel by Discipline	
Architectural	
Total in Firm	

	Work %
Housing	9
Office Bldgs./Banks	

"La Pasta", St. Anthony Main, Minneapolis, MN; 2309-15 Irving Avenue So., Apartment Renovation, 2606 Humboldt Avenue So., Apartment Renovation, "The Winsor" Apartment Renovation, Minneapolis, MN.

ARCHITECTS IV—FUGELSO, PORTER, SIMICH & WHITEMAN, INC.

1226 East 1st Street
Duluth, MN 55805
218/728-5124
Established 1935

Sanford Porter AIA
Leon Simich AIA
Richard Whiteman AIA
Jack Jyring AIA

Firm Personnel by Discipline	
Architectural	
Other Technical	
Administrative	
Total in Firm	

	Work %
Housing	1
Office Bldgs./Banks	1
Retail	

Industrial	1
Medical	1
Churches	
Restoration	
Municipal	
Interior	
Solar/Earth Sheltered	
Education	3

Lakeshore Lutheran Home, Duluth, MN; Central Administration Building, Duluth Schools, Duluth, MN; Marshall Performing Arts Building, UMD, Duluth, MN; National Water Quality Laboratory, Duluth, MN; Continental Telephone Facilities, Minnesota, South Dakota, North Dakota, Wyoming; Minnesota Power Service Center, Cloquet, MN.

ARCHITECTURAL ALLIANCE

400 Clifton Avenue South
Minneapolis, MN 55403
612/871-5703
Mpls./St. Paul Int'l Airport
St. Paul, MN 55111
612/726-9012
6225 North 24th St.
Phoenix, AZ 85016
602/951-6331
Established 1970

John W. Lackens	FAIA
Herbert A. Ketcham	FAIA
Richard D. Lembke	
Carl J. Remick	AIA
Firm Personnel by Discipline	
Architectural	21
Interior	3
Administrative	9
Total in Firm	33

	Work %
Office Bldgs./Banks	40
Retail	10
Industrial	5
Educational	10
Medical	2
Interior	20
Solar/Earth Sheltered	2
Housing	5
Municipal	2
Restoration	2
Churches	2

Prudential North Central Plymouth Operations, Plymouth, MN; Prudential North Central Home office, Minneapolis, MN; Land O'Lakes Corporate Office, Arden Hills, MN; Medtronic Rice Creek Facility, Fridley, MN; Minneapolis/St. Paul International Airport Facility, St. Paul, MN; University of Minnesota Vocational/Technical Facility, St. Paul, MN.

ARCHITECTURAL DESIGN GROUP, INC.

300 Third Avenue S.E., Suite 405
Rochester, MN 55901
507/288-8100
Established 1918

Willis E. Schellberg	AIA
Byron Stadsvold	AIA
Steven Sorensen	AIA

Firm Personnel by Discipline	
Architectural	6
Interior	2
Other Technical	2
Total in Firm	10

	Work %
Housing	20
Office Bldgs./Banks	20
Retail	5
Industrial	3
Medical	10
Churches	5
Restoration	2
Municipal	10
Interior	10
Solar/Earth Sheltered	5
Educational/Academic	10

Hiawatha Children's Home, Rochester, MN; Queen of Peace Hospital Addition, New Prague, MN; Mayo Clinic Institute Hills Research Farm Remodeling, Rochester, MN; Interior Design for Mayo Clinic, Rochester, MN; Minnesota Bible College, Rochester, MN; People's Co-op Power Assoc. Offices and Warehouse, Rochester, MN.

ARCHITECTURAL RESOURCES, INC.

704 East Howard Street
Hibbing, MN 55764
218/263-6868
Established 1972

E. A. Jyring	FAIA
W. H. Moser	AIA
Roger Saccoman	AIA
Parnell Satre	PE
Lyle Peters	AIA
Kent Worley	ASLA

Firm Personnel by Discipline	
Architectural	13
Engineering	5
Landscape	3
Planners	1
Administrative	4
Total in Firm	26

	Work %
Housing	30
Office Bldgs./Banks	10
Medical	20
Churches	10
Municipal	10
Education	20

Itasca County Family YMCA, Grand Rapids, MN; Life Enrichment for the Elderly Housing, Hibbing, MN; UMD Business and Economics Building, Duluth, MN; Elks Lodge, Hibbing, MN; Hospital and Health Facility Housing, Red Lake, MN; Iron Range Law Enforcement Training Center, Virginia, MN.

ARMSTRONG, TORSETH, SKOLD & RYDEEN, INC.

4901 Olson Memorial Hwy.
Minneapolis, MN 55422
612/545-3731
Established 1944

Kenneth L. Skold	AIA
John C. Torseth	AIA
James E. Rydeen	AIA
Kenneth E. Grabow	AIA
LeRoy H. Palmquist	AIA
Harold E. Shull	PE
Donald L. Yungner	PE

Firm Personnel by Discipline	
Architectural	25
Engineering	7
Interior Designers	1
Other Technical	2
Administrative	5
Total in Firm	41

	Work %
Office Buildings	10
Industrial	10
Educational	15
Interior Design	5
Solar/Earth Sheltered	5
Municipal Buildings	5
Churches	15

Wirth Office Park, Golden Valley, MN; CPT Headquarters, Eden Prairie, MN; Calvary Lutheran Church, Golden Valley, MN; Canteen Bldg., VA; Medical Center, St. Cloud, MN; Chapel View Congregate Housing, Hopkins, MN; Worthington Junior High School, MN.

ASSOCIATED ARCHITECTS AND ENGINEERS

241 S. Cleveland
St. Paul, MN 55105
612/698-0808
Established 1958
James E. Speckmann
Charles D. Liddy, Jr. AIA
Grant Peterson

Firm Personnel by Discipline	
Architectural	5
Administrative	1
Total in Firm	6

	Work %
Office Buildings	15
Retail	5
Industrial	5
Solar/Earth Sheltered	5
Housing	40
Restoration/Renovation	5
Medical/Health Care	25

St. Peter's Church Restoration; Napier-McNeil Store; III Imperial Drive Condominium, West St. Paul; Carpenter Nature Center, Hastings, MN; PACAL Steel Office Bldg., Roseville, MN; Fairview Hospital Surgery Renovations, Mpls., MN.

BAKER ASSOCIATES, INC.

301 Chamber of Commerce Bldg.
15 South 5th Street
Minneapolis, MN 55402
612/339-8601
Established 1959

Edward F. Baker	AIA
Brian R. Morgan	AIA
Marshall Levin	AIA

Firm Personnel by Discipline	
Architectural	5
Administrative	3
Total in firm	8

	Work %
Housing	5
Office Buildings/Banks	90
Retail/Commercial	5

MEPC-Parkdale Plaza, St. Louis Park, MN; Northland Exec. Ofc. Center, Bloomington, MN; Wayzata Bank & Trust, Wayzata, MN; TCF-Tower Addition, Minneapolis, MN; Metro Place, Edina, MN; Health Associations Center, Minneapolis, MN.

DENNIS BATTY & ASSOCIATES, INC., ARCHITECTS

12800 Industrial Park
Minneapolis, MN 55441
612/559-0945
Established 1976

Dennis Batty	AIA
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Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

	Work %
Housing	5
Office Bldgs./Banks	5
Industrial	5
Churches	80
Education	5

College Life Center, North Central Bible College, Mpls., MN; Scientific Computers Office Bldg., Minnetonka, MN; Bloomington Assembly of God Church, Bloomington, MN; First Assembly of God, Des Moines, IA; Bethany Evangelical Free Church, La Crosse, WI; Christ's Church, Minneapolis, MN.

**FREDERICK BENTZ/
MILO THOMPSON/
ROBERT RIETOW, INC.**

1234 Dain Tower
Minneapolis, MN 55402
612/332-1234
Established 1971

Frederick Bentz	FAIA
Milo H. Thompson	AIA
Robert G. Rietow	AIA
Firm Personnel by Discipline	
Architectural	12
Interior Designer	1
Other Technical	1
Administrative	1
Total in Firm	15

	Work %
Housing	10
Office Buildings	25
Retail/Commercial	25
Churches/Worship	10
Restoration/Preservation	10
Interior Architecture	8
Planning	2
Education/Academic	10

Greenway Gables, Mpls., MN;
St. Olaf Catholic Church Addition,
Mpls.; Minneapolis Community College
Physical Education Facility & Skyway;
1221 Nicollet Office Bldg., Minneapolis,
MN; Granada Royale Hotel, St. Paul,
MN; Northwestern Nat'l Bank Interiors,
Rochester, MN.

**A. J. BERREAU AND
ASSOCIATES, INC.**

1220 Glenwood Ave.
Minneapolis, MN 55405
612/377-8314
Established 1970

Alfred J. Berreau	AIA
Firm Personnel by Discipline	
Total in Firm	6

	Work %
Office Bldgs./Banks	3
Industrial	90
Restoration/Preservation	2
Municipal Buildings	5

Eastern Distribution & Spreads
Plant, Kent, OH; Kroger Cheese
Plant, Crawfordsville, IN; Land
O'Lakes Beef Plant, Oakland,
IA.

**BLUMENTALS/
ARCHITECTURE INC.**

6100 Summit Dr. N.
Brooklyn Center, MN 55430
612/571-5550
Established 1976

Janis Blumentals	AIA
Susan Blumentals	AIA
Firm Personnel by Discipline	
Architectural	7
Administrative	1
Total in Firm	8

	Work %
Housing	45
Office	10
Retail	5
Industrial	10
Restoration/Preservation	5
Solar/Earth Sheltered	10
Other—Motels	15

Larson Commons Elderly Housing,
Cloquet, MN; Scotwood & Thrifty Scot
Motels; HRA of Dakota County, Rose-
mount, MN; Solar Townhouses For
HRA of Dakota County; McColl Building
Renovation, St. Paul, MN; Public
Housing for Elderly, New Ulm, MN.

**BOARMAN
ARCHITECTS, INC.**

710 Chamber of Commerce
Bldg.
15 South 5th Street
Minneapolis, MN 55402
612/339-3752
Established 1978

Jack Boarman	AIA
Svend Anderson	AIA
Jerome Undberg	
Mike McDonald	

Firm Personnel by Discipline	
Architectural	9
Marketing Coordinator	1
Administrative	2
Total in Firm	12

	Work %
Housing	30
Office Bldgs./Banks	20
Retail/Commercial	10
Restoration/Preservation	5
Municipal Buildings	30
Education	5

Dain Corporation/Stam Building
Renovation; National City Bank—
Ridgedale and Southdale; Sheraton
Ritz—Pyramid Pool/Restaurant
Addition; Chanhassen Municipal
Center; Minnehaha Square Condo-
miniums and Townhouses; Eagan
Municipal Center.

**RANDALL BRADLEY
DESIGN**

1229 N. Thomas Avenue
Minneapolis, MN 55411
612/529-0146
Established 1981

Randall Bradley	AIA
Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

	Work %
Housing	10
Office	20
Retail	45
Interior Architecture	15
Education	10

The Kit Connection: Rosedale,
Duluth, & Victoria Crossing;
Sabathani Community Center
Remodeling; Adams Residence
Remodeling; KMOJ Radio Studio
Facilities, Mpls., MN;
Cosmic Clown Ice Cream Parlor,
Mpls., MN.

BRW ARCHITECTS

A Studio of Bennett-Ringrose-
Wolsfeld-Jarvis-Gardner, Inc.
2829 University Avenue SE
Minneapolis, MN 55414
Branches in Denver, CO,
Breckenridge, CO, Cheyenne,
WY, and Phoenix, AZ.
Established 1956
(612) 379-7878

David J. Bennett	FAIA
Donald W. Ringrose	PE
Richard P. Wolsfeld	PE, AICP
Peter E. Jarvis	AICP
Lawrence J. Gardner	PE
Thomas F. Carroll	PE

Firm Personnel by Discipline	
Architectural	25
Engineering	21
Landscape Architects	5
Planners	13
Other technical	42
Administrative	17
Total in Firm	125

	Work %
Housing	25
Office Buildings	35
Retail	15
Industrial	5
Municipal Buildings	5
Solar/Earth Sheltered	10
Education/Academic Buildings	5

U.S.A.F. Academy Visitor Center,
Colorado; Holaday Circuits
Manufacturing, Minnetonka;
The Galleria, Edina; Williamson
Hall (University of Minnesota);
Civil/Mineral Engineering,
(University of Minnesota); Am-
hoist Tower/Park Tower Condo-
miniums, St. Paul, MN.

**BUETOW &
ASSOCIATES, INC.**

2345 Rice Street, Suite 210
St. Paul, MN 55113
612/483-6701
Established 1920

Thomas W. Dunwell	AIA
Farrell F. Johnson	
Firm Personnel by Discipline	
Architectural	3
Other Technical	1
Administrative	2
Other General	1
Total in Firm	7

	Work %
Housing	5
Office Buildings	10
Retail	20
Industrial	20
Medical/Health Care	10
Churches/Worship	20
Municipal Buildings	15
Solar/Earth Sheltered	10

3M Research & Development
Facility, Menomonie, WI; U of
M Centennial Hall Cafeteria Re-
modeling, Mpls., MN; Jennie-
O Turkey Plant, Willmar, MN;
Bennigan's Restaurant, Bloom-
ington, WI; Oliver Presbyterian
Church, Mpls., MN; Blaine
Public Works Bldg., MN.

**ROBERT DAVID
BUROW ARCHITECTS,
INC.**

750 South Plaza Drive
Mendota Heights, MN 55120
612/454-8505
Established: 1977

Robert D. Burow	AIA
Firm Personnel by Discipline	
Architectural	2 1/2
Interior Designers	1/2
Administrative	1
Total in Firm	4

	Work %
Housing	10
Office Buildings	20
Retail	10
Industrial	10
Medical	10
Churches/Worship	15
Restoration/Preservation	10
Interior Architecture	5
Solar/Earth Sheltered	5
Other (Clean Rooms)	5

St. Jude Medical, Little Canada,
MN; Cardiac Pacemakers, Inc.,
Arden Hills; 1st State Bank of
Spring Lake Park; Central Tele-
phone, Lakeville, MN; Redeem-
er Lutheran Church, Burnsville,
MN; Cedarvale Lanes, Eagan,
MN; Ellenberg Vacation Home,
Lake Owen, WI.

BWBR ARCHITECTS, INC.

400 Sibley Street
St. Paul, MN 55101
Professional Center
Hudson, WI 54016
612/222-3701
Established 1951

Fritz C. Rohkohl	AIA
Lloyd F. Berquist	FAIA
Wilford F. Johnson	AIA
Charles D. Wahlberg	AIA

Firm Personnel by Discipline	
Architectural	18
Engineering	2
Interior Designers	3
Other technical	2
Administrative	6
Total in Firm	31

Work %	
Housing	15
Office Buildings/Banks	45
Medical Facilities/Health Care	15
Churches	10
Municipal Buildings	5
Interior Architecture	10

Minnesota Mutual National Headquarters, St. Paul, MN; First Bank Duluth, Duluth, MN; Wooddale Baptist Church, Eden Prairie, MN; Cooperative Power Headquarters, Eden Prairie, MN; Blandin Foundation Headquarters, Grand Rapids, MN; Terra Chemical Headquarters, Sioux City, IA.

CARLSON MJORUD ARCHITECTURE LTD.

4915 West 35th Street
Minneapolis, MN 55416
612/922-6677

Bruce M. Carlson	AIA
Al Mjorud	AIA

Firm Personnel by Discipline	
Architectural	6
Other technical	3
Administrative	2
Total in Firm	11

Work %	
Housing	5
Office Buildings/Banks	20
Retail/Commercial	5
Industrial	20
Churches	10
Restoration/Preservation	10
Interior Architecture	20
Solar/Earth Sheltered	10

3 Projects for Sperry Univac, Roseville, MN; Office and Manufacturing Building for Printed Circuits, Inc., Burnsville, MN; Remodeling and Printing Department for Northwestern National Life Insurance Co., Mpls., MN; Northern Telecom Remodeling, Eden Prairie, MN.

CAVIN AND ROVA ARCHITECTS

432 Landmark Center
St. Paul, MN 55102
612/224-2311
Established 1946

Brooks Cavin	FAIA
John P. Rova	

Firm Personnel by Discipline	
Architectural	2
Total in Firm	2

Work %	
Housing	15
Retail	10
Industrial	20
Medical/Health Care	5
Churches/Worship	20
Restoration/Preservation	30

Minneapolis Club Swimming Pool; Brown County Historical Museum; Trinity Lutheran Church Remodeling, Mpls., MN; Loading Dock, MN State Capitol, St. Paul, MN; W. L. Hall Co. Office & Warehouse, Eden Prairie, MN; Cathedral of Our Merciful Saviour, Fari-bault, MN.

CLOSE ASSOCIATES, INC.

3101 East Franklin Avenue
Minneapolis, MN 55406
612/339-0979
Established 1939

Elizabeth S. Close	FAIA
Winston A. Close	FAIA
W. Garman Hargens	AIA

Firm Personnel by Discipline	
Architectural	3
Other technical	2
Administrative	1
Total in Firm	6

Work %	
Housing	55
Office Buildings	5
Retail	5
Medical	5
Municipal	5
Solar/Earth Sheltered	10
Education/Academic Buildings	15

Tuttle School Renovation, Minneapolis; Ronald McDonald House, Minneapolis; "Wind-slope" (Moderate and Low-Income Housing, The Preserve); Residence, St. Mary's Point, MN; Leonard, Street & De-nard Offices, Mpls., MN; Toi-letries Shop, Bonaventure Shopping Center, Mpls., MN.

JAMES M. COOPERMAN & ASSOCIATES ARCHITECTS, INC.

1005 Shelard Tower
Minneapolis, MN 55426
612/545-0409
Established 1962

James M. Cooperman	AIA
Surenda Ahuja	

Firm Personnel by Discipline	
Architectural	4
Administrative	1
Total in Firm	5

Work %	
Housing	20
Office Buildings	40
Retail	20
Industrial	20

Shelard West Office Bldg. & Ramp, St. Louis Park; Ridge Square Center, Minnetonka, MN; Dupont Center Office Bldg., Bloomington, MN; Voro-nyak Office/Warehouse, Plymouth, MN. Edenvale Apartments, Eden Prairie, MN; The Point Motel, Houston, TX.

CO/PLAN, INC.

17 East First Street
Duluth, MN 55802
218/727-2626
Established 1981

Darryl W. Booker	AIA
John F. Scott	

Firm Personnel by Discipline	
Architectural	3
Interior Designers	1
Total in Firm	4

Work %	
Housing	60
Retail	10
Restoration/Preservation	10
Municipal Buildings	20
Solar/Earth Sheltered	10

Superior Shores Lakehomes, Two Harbors; Wuori Community Center, Virginia, MN; Portland Square Housing Rehabilitation, Duluth; Eveleth/Fayal Trail, Eveleth, MN; Hermantown Maintenance Facility, MN; West Research Recreation Center, Duluth.

CORWIN SEPPENEN & ASSOC. INC.

2694 East 19th Avenue
North St. Paul, MN 55109
612/777-2766
Established 1952

Ralph D. Corwin	AIA
Jarl Seppenen	AIA

Firm Personnel by Discipline	
Architectural	2
Total in Firm	2

Work %	
Office Buildings	10
Education/Academic Buildings	90

East Bethel Community School, MN; St. Francis High School, MN.

COTTLE-HERMAN ARCHITECTS, INC.

2344 Nicollet Avenue South.
Minneapolis, MN 55404
612/871-7200
Established 1967

Richard E. Cottle	AIA
Bernard Herman	AIA

Firm Personnel by Discipline	
Architectural	4
Administrative	1
Total in Firm	5

Work %	
Housing	25
Office Buildings	10
Retail Commercial	15
Industrial	20
Medical/Health Care	5
Education/Academic Buildings	25

Nankin Cafe, Minneapolis City Center; Menorah Plaza, St. Louis Park, MN; Bethel College & Seminary Library, Arden Hills, MN; Crystal Medical Center, Crystal, MN; Zipkin Residence, St. Louis Park, MN; Snyder Residence, Edina, MN.

CUNINGHAM ARCHITECTS

2116 Second Avenue South
Minneapolis, MN 55404
612/874-6580
Established 1969

John W. Cuninghame	AIA
John E. Hamilton	AIA
John E. Quiter	AIA

Firm Personnel by Discipline	
Total in Firm	6

	Work %
Housing	50
Office Buildings	25
Industrial	10
Churches/Worship Facilities	15
Restoration/Preservation	40

Breck Chapel of the Holy Spirit, Golden Valley, MN; Itasca Building, Minneapolis; DNR, Region 7 Hdqrs., Grand Rapids, MN; Waldenloch Townhouses, Minnetrista, MN; Ford Office Bldg. & Library for Atty. General of Minnesota; Springsted Residence, Afton, MN.

CURISKIS ARCHITECTS

Minneapolis, MN 55435
(612) 927-9441
Established 1980

Juris Curiskis	AIA
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Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

MN Crop Improvement Assoc. Offices & Lab, St. Paul, MN; Tangible Research & Development Co. Hdqrs., Mpls. MN; Midland Management Corp., Edina, MN; Keller Residence, Mpls., MN; Produce Plaza Executive Offices, Mpls., MN.

DAMBERG & PECK ARCHITECTS, INC.

312 West Superior Street
Duluth, MN 55802
218/722-7467
3200 Lincoln Bldg.
Virginia, MN 55792
218/741-7962
Established 1968

John P. Damberg	AIA
John D. Peck	AIA

Firm Personnel by Discipline	
Architectural	8
Interior Designer	1
Administrative	2
Total in Firm	11

	Work %
Housing	20
Office Buildings/Banks	10
Industrial/Mfg.	5
Medical/Health Care	10
Churches/Worship	5
Restoration/Preservation	10
Municipal Buildings	10
Education/Academic	20
Planning	15

Virginia Library Addition, Mountain Iron Elementary School, MN; Addition to Polinsky Rehabilitation Center, Telecommunications Bldg.

DEAN/DAVY ARCHITECTS

P.O. Box 30222
St. Paul, MN 55175
612/227-9957
Established 1982

James R. Dean	AIA
Joel Davy	

Firm Personnel by Discipline	
Architectural	2
Total in Firm	2

	Work %
Housing	40
Office Bldg/Banks	20
Retail	10
Industrial/Mfg.	10
Restoration/Preservation	5
Interior Architecture	15
Solar/Earth Sheltered	15

Law Offices, Lamb, Schaefer, McNair, Larson, & Olson, Fargo, ND; The Croft, a Retreat, Hastings, MN; The Lomsdahl House, Plymouth, MN; Rozzelle House, Shuffletown, NC; Earth Sheltered Residence & Pottery Studio, Minot, ND; First Award Winner, Lafayette Square Design Competition, Condominiums, St. Louis, MO.

THE DESIGN PARTNERSHIP, LTD

124 North First St.
Minneapolis, MN 55401
612/338-8889

Established 1972

William C. Anderson	AIA
Darrell D. Anderson	AIA

Firm Personnel by Discipline	
Architectural	8
Administrative	1
Total in Firm	9

	Work %
Housing	15
Office Buildings/Banks	30
Industrial/Mfg.	35
Churches	5

Loring Green West; First Bank Plymouth; Century Corporate Plaza; IBM Office Center, Rochester, MN; North Star Banquet Rooms, Mpls., MN; Wagner, Johnston, Falconer, Ltd., Law Offices.

DESIGNERY, ARCHITECTURE

P.O. Box 57
Stillwater, Minnesota 55082
612/433-3973
Established 1978

Raymond R. Raffel	AIA
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Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	10
Office Buildings/Banks	10
Retail/Commercial	15
Industrial/Mfg.	25
Churches	25
Education	5
Solar/Earth Sheltered	10

Passive Solar Residence, Stillwater, MN; Trinity Covenant Church Addition, Crystal, MN; Office/Manufacturing Plant, Blaine, MN; Addition to Redeemer Covenant Church, Brooklyn Park, MN; Industrial Bldg., Evergreen Industrial Park, Coon Rapids, MN; DeMar Children's Home, Coon Rapids, MN.

DESIGN TWO INC.

684 Excelsior Blvd.
Excelsior, MN 55331
612/474-3291
Established 1971

J. Nicholas Ruehl	AIA
Bertil E. Haglund	AIA

Firm Personnel by Discipline	
Architectural	3
Administrative	2
Total in Firm	5

	Work %
Housing	20
Office Buildings/Banks	20
Retail/Commercial	15
Churches	5

Solar/Earth Sheltered	10
Education/Academic	25
Other	5

Mai Tai Restaurant; Minnetonka Senior High School Auditorium Remodeling & Athletic Fields; Andrew Alexander Retail Store, Edina, MN; Lynne Residence, Eden Prairie, MN; Pegasus High Rise Condominiums, Fort Pierce, FL; Office Condominium Complex, Minnetonka, MN.

ARTHUR DICKEY ARCHITECTS INC.

4930 France Avenue South
Minneapolis, Minnesota 55410
612/920-3993
Established 1962

Arthur H. Dickey	AIA
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Firm Personnel by Discipline	
Architectural	3
Other Technical	1
Administrative	1
Total in Firm	5

	Work %
Housing	18
Office Buildings/Banks	10
Retail/Commercial	28
Industrial/Mfg.	5
Medical Facilities/Health	5
Churches	5
Restoration/Preservation	9
Municipal Buildings	9
Interior Architecture	6
Solar/Earth Sheltered	5

Southdale YMCA, Minneapolis, MN; Belzer and Brenner Office Building, Minneapolis, MN; Viking Press, Minneapolis, MN; Minneapolis Fire Station #6, Minneapolis, MN; Franklin Hill Condominiums, Minneapolis, MN; Bachman's Flower Shop, Various Locations.

DYKINS ASSOCIATES, INC.

2950 Metro drive, Suite 307
Minneapolis, Minnesota 55420
612/854-3363
Established 1975

Charles A. Dykins	AIA
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Firm Personnel by Discipline	
Architectural	4
Total in Firm	4

	Work %
Office Buildings/Banks	100
Richfield Bank & Trust Co., Bloomington, MN; State Bank of Long Lake, Long Lake, MN; Empire State Bank, Cottonwood, MN; First State Bank, Bayport, MN; Glenwood State Bank, MN.	

E

ECKBERG ASSOCIATES, INC.

2140 Spruce Trail
Minneapolis, MN 55422
612/588-6388
Established 1974

Erland Eckberg, Jr. AIA

Firm Personnel by Discipline
Architectural 1
Total in Firm 1

	Work %
Housing	10
Office Buildings/Banks	20
Retail/Commercial	20
Industrial	20
Churches	20
Interior Architecture	10

Hypro Engineering, New Brighton, MN; Cornelius Company Headquarters Building, Anoka, MN; McLean Midwest Office, Brooklyn Park, MN; Morey's Fish House Retail Store, St. Louis Park & Edina, MN; Dakota Electric Association Headquarters Building, Farmington, MN; Park Place Condominiums, Fridley, MN.

ELLERBE ASSOCIATES, INC.

One Appletree Square
Bloomington, MN 55420
612/853-2000
Established 1909

Dennis Walsh	AIA
H. William Nara	AIA
Fred Richter	AIA
Donald C. G. Nelson	AIA
Robert F. Jacobsen	PE
Roger Santelman	PE
Donald Chapman	PE
Malcolm Nietz	PE
A. G. Erickson	PE

Firm Personnel by Discipline	
Architectural	255
Engineering	225
Landscape Architects	5
Interior Designers	20
Planners	5
Other Technical	10
Administrative	230
Total in Firm	750

	Work %
Housing	3
Office Buildings/Banks	22
Retail	3
Industrial/Mfg.	4
Medical Facilities/Health	48
Restoration/Preservation	20
Municipal Bldgs/Education	5
Interiors	3
Education	10

St. Paul Companies, St. Paul, MN; Hartford Coliseum, Hartford, CN; Indiana University School of Public & Environmental Affairs, Bloomington, IN; Notre Dame Chemistry Building; Central High School, St. Paul, MN; Bethesda Naval Hospital, Bethesda, MD.

ARVID ELLNESS ARCHITECTS

200 Butler North
510 First Avenue North
Minneapolis, MN 55403
612/339-5508
Established 1975

Arvid Ellness AIA
Paul Madson AIA

Firm Personnel by Discipline	
Architectural	14
Other Technical	4
Administrative	3
Total in Firm	21

	Work %
Housing	40
Office Buildings/Banks	20
Retail/Commercial	30
Churches/Worship	5
Restoration/Preservation	50
Interior Architecture	5
Solar/Earth Sheltered	50

Trinity Church & School, Wausau, WI; Cedar Riverside Infill Housing, Minneapolis, MN; Creekridge Office Building, Bloomington, MN; Nordic Center, Minneapolis, MN; Thresher Square, Minneapolis, MN; St. Louis Park Housing, MN.

RICHARD ENGAN ASSOCIATES, ARCHITECTS

323 W. 4th Street
P.O. Box 89
Willmar, MN 56201
612/235-0860
Established 1979

Richard P. Engan AIA

Firm Personnel by Discipline	
Architectural	2
Administrative	1½
Total in Firm	3½

	Work %
Housing	15
Office Buildings/Banks	15
Retail/Commercial	5
Industrial/Mfg.	10
Medical Facilities	15
Churches/Worship	10
Municipal	5
Solar/Earth Sheltered	10
Education/Academic	15

Christian Living Center, Willmar, MN; Camp Sanderson Peacepipe Girl Scout Council, Spicer, MN; Grandstand Athletic Field, Montevideo, MN; Family Practice Medical Center, Willmar, MN; Jade Center, Willmar, MN; Grove City Community Center, Grove City, MN.

DELANO ERICKSON ARCHITECTS

906 Minnesota Building
46 East 4th St.
St. Paul, MN 55101
612/292-0411
Established 1982

Delano Del Ray Erickson AIA

Firm Personnel by Discipline	
Architectural	1½
Administrative	½
Total in Firm	2

	Work %
Housing	10
Office Buildings/Banks	40
Churches/Worship	10
Restoration/Preservation	5
Municipal Buildings	10
Interior Architecture	10
Education/Academic Buildings	15

CTS Center, Richfield, MN; Solar Office Building, Edith Macy Conference Center, Briar Cliff Manor, New York; Nat'l. Girl Scout Training Center, Girl Scout Council of St. Croix Valley Program Center, St. Paul, MN.

F

FARNAN ARCHITECTS

4681 Banning Avenue
White Bear Lake, MN 55110
612/429-9250
Established 1982

William T. Farnan AIA

Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	75
Retail/Commercial	15
Restoration/Preservation	20
Interior Architecture	5
Solar/Earth Sheltered	40

HUD Earth Sheltered Residential Study; Retail Store, Rochester, MN; Earth Sheltered Townhouse, Denver, CO; Earth Sheltered Residence, Chisago City, MN; Residences, Minneapolis & Roseville, MN.

STANLEY FISHMAN ASSOCIATES, INC.

348 North Prior Avenue
St. Paul, MN 55104
612/646-1381
Established 1965

Stanley Fishman AIA

Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

	Work %
Housing	45
Office Buildings/Banks	15
Medical/Health Care	5
Restoration/Preservation	25
Solar/Earth Sheltered	5
Other (Street Revitalization)	30

Woodmount Townhouses, Cottage Grove, MN; Cedar Riverside Peoples Center, Minneapolis, MN; Riverview Manor Group Home for the Developmentally Disabled, Wamamingo, MN; Fort Road Revitalization, St. Paul, MN.

ORLEN FJELSTED AND ASSOCIATES, INC.

Box 147, 313 Washington
Northfield, MN 55057
507/645-4407
Established 1972

Orlen Fjelsted	AIA
Firm Personnel by Discipline	
Architectural	2
Administrative	1
Total in Firm	3
	Work %
Multi Housing	75
Single Family Housing	10
Restoration	15

Retirement Condominiums, Northfield, MN; Retirement Condominiums, Albert Lea, MN; Apartment Building, Cannon Falls, MN; Single Family Residence, Northfield, MN; Office Restoration, Northfield, MN.

FOSS ASSOCIATES

215 Main, Box 306
Moorhead, MN 56560
218/236-1202
Other offices in Fargo and Bismark, ND, and Billings, MT.

Established 1898

Mark B. Foss	PE
Eleven other principals	
Firm Personnel by Discipline	
Architectural	37
Engineering	16
Interior Designers	4
Other Technical	2
Administrative	9
Total in Firm	68
	Work %
Housing	4
Office Buildings/Banks	10
Retail/Commercial	6
Industrial/Mfg.	2
Medical Facilities	22
Churches/Worship	4
Restoration/Preservation	2
Municipal Buildings	24
Interior Architecture	7
Education/Academic	17

Northwestern Bank, Fergus Falls, MN; Judicial Wing/State Office Building Addition to State Capitol, Bismarck, ND; Music Education Center, North Dakota State University, Douglas County Hospital Addition, Alexandria, MN; Stark County Law Enforcement Center, Dickinson, ND; Center for Aerospace Sciences, U. of ND, Grand Forks, ND.

FOWLER HANLEY INC.

1207 Harmon Place
Minneapolis, MN 55403
612/332-8728
Established 1973

Michael A. Fowler	PE
Thomas J. Zumwalde	AIA
Bruce K. Betker	PE
John T. Hanley	PE
Firm Personnel by Discipline	
Architectural	3
Engineering	6
Administrative	2
Total in Firm	11
	Work %
Housing	30
Office Bldgs/Banks	30
Retail/Commercial	25
Industrial/Mfg.	15

Commercial Office Complex, Boca Raton, FL; Wilkins Townhomes, St. Paul, MN; Willmar Municipal Utilities, Willmar, MN; Oakhaven Family Housing, Minneapolis, MN; Second Avenue Skyway, Minneapolis, MN; 530 Car Parking Ramp, Boca Raton, FL.

H. W. FRIDLUND, ARCHITECTS

4501 Minnetonka Boulevard
Minneapolis, MN 55416
612/920-3080
Established 1950

H. W. Fridlund	AIA
Milt Bruflodt	AIA
Alan Kimpell	
Gerald Runk	AIA
Eileen Greenwood	
Firm Personnel by Discipline	
Architectural	4
Administrative	2
Total in Firm	6
	Work %
Housing	60
Office Buildings/Banks	10
Retail/Commercial	30

Burnsville Racquet and Swim Club, Burnsville, MN; 98th Street Racquet & Swim Club, Bloomington, MN; Rosemount Plaza Elderly Housing, Rosemount, MN; 4-West Office Building, Bemidji, MN; Northgate Woods Elderly Housing, Blaine, MN; Apple Valley Square Shopping Mall, Apple Valley, MN.

GALLAGHER ARCHITECTS

3609 Gettysburg Avenue North
Minneapolis, MN 55427
612/542-8259
Established: 1981

Daniel P. Gallagher	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	10
Industrial	50
Churches/Worship	30
Education/Academic Buildings	10

Banner Engineering, Inc., Plymouth, MN; New Rectory for Church of the Sacred Heart, Robbinsdale, MN; Rectory Remodeling for Parish Community of St. Joseph, Plymouth, MN; Feasibility Study for Minnegasco, Minneapolis, MN; Roers Residence, Fergus Falls, MN; Gallagher Residence, New Hope, MN.

GREBNER ASSOCIATES

85 Langford Park
St. Paul, MN 55108
612/645-8455
Established 1978

D. W. Grebner	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

Architectural design; urban design consulting; design education

GREEN, NELSON, WEAVER & WINDSOR INC.

3033 Excelsior Blvd.
Minneapolis, MN 55416
612/926-7635
Established 1878

Gene L. Green	AIA
Arthur E. Nelson	
John K. Weaver	AIA
Mark F. Winsor	AIA

Firm Personnel by Discipline	
Architectural	5
Engineering	4
Administrative	2
Total in Firm	11

	Work %
Housing	3
Office Buildings/Banks	16
Retail/Commercial	2
Industrial/Mfg.	30
Churches/Worship	2
Restoration/Preservation	14
Municipal Buildings	2
Interior Architecture	2
Solar/Earth Sheltered	2
Education/Academic Buildings	27

Minneapolis Technical Institute and Parking Garage, Minneapolis, MN; Weyerhaeuser Distribution Center (Retrofit), St. Paul, MN; Ridgedale YMCA, Minnetonka, MN; Boise Cascade Manufacturing Plant, Milford, CT; Minneapolis Star & Tribune Newspaper Office Building, Minneapolis, MN; Stone Container, Tupelo, MS

GRISWOLD AND RAUMA, ARCHITECTS INC.

720 2nd Avenue South
Minneapolis, MN 55402
612/339-3071
Established 1952

David J. Griswold	AIA
John G. Rauma	FAIA
Jackson W. Griswold	AIA
Robert G. Egge	AIA
Calvin M. Olson	AIA

Firm Personnel by Discipline	
Architectural	5
Administrative	1
Total in Firm	6

	Work %
Housing	10
Office Buildings/Banks	10
Industrial/Mfg.	10
Churches/Worship	10
Restoration/Preservation	10
Municipal	10
Interior Architecture	20
Education/Academic Buildings	20

Church of the Risen Savior, Apple Valley, MN; Remodeling Sanford, Hickory, & Deputy, Halls, Bemidji State University; Kenwood School Energy Retrofit and Remodeling, Minneapolis, MN; Campus Center, Inver Hills Community College; Residence Hall, St. John Viennay Seminary, St. Paul, MN; Poultry Teaching and Research Facility, U of MN.

H

GARY GROOTERS ARCHITECTS P.A.

400 East St. Germaine
St. Cloud, MN 56301
612/252-3740
Established 1977

Gary Grooters	AIA
Firm Personnel by Discipline	
Architectural	3
Interior Designers	1
Total in Firm	3

	Work %
Housing	30
Office Buildings/Banks	5
Retail/Commercial	5
Industrial	5
Medical/Health Care	40
Churches/Worship	5
Interior Architecture	5
Solar/Earth Sheltered	5

Country Manor Nursing Home and Elderly Housing, Sartell, MN; Woodland Acres Health Care & Retirement Center, Brainerd, MN; Good Shepherd Lutheran Nursing Home, Sauk Rapids, MN; Glen Oaks Nursing Home and Elderly Housing, New London, MN; NSP Office Building, St. Cloud, MN; Carlton Nursing Home Addition, Carlton, MN.

GROUP II ARCHITECTS

104 West Redwood
Marshall, MN 56258
507/532-4946
Established 1979

Thomas J. Osterberg	AIA
Ronald D. Halgerson	AIA
Firm Personnel by Discipline	
Architectural	3
Other Technical	½
Administrative	½
Total in Firm	4

	Work %
Housing	2
Office Buildings/Banks	30
Retail	5
Industrial/Mfg.	20
Medical	5
Churches/Worship	10
Restoration/Preservation	3
Municipal Buildings	20
Education/Academic Buildings	5

Law Enforcement/County Extension Addition, Watonwan County, St. James, MN; Municipal Building, Redwood Falls, MN; The Church of Jesus Christ, Latter Day Saints, Marshall, MN; Office Remodeling for Schwan's Sales, Marshall, MN; Twin City Federal, Marshall, MN; Detached First Bank Facility, Marshall, MN.

DELBERT J. HALL

2021 Hennepin Avenue E.
Suite 189
Minneapolis, MN 55413
612/331-1941
Established 1976

Delbert J. Hall	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Office Buildings/Banks	25
Retail/Commercial	50
Industrial/Manufacturing	25

McDonald's Restaurant, Town Square, St. Paul, MN; McDonald's Restaurant, Cedar Rapids, IA; Maplewood Square, Maplewood, MN; Contract Design—Shop Building, Blaine, MN; Katun Corporation, Bloomington, MN; Burnsville Office Condominiums, Burnsville, MN

HAMMEL GREEN & ABRAHAMSON INC.

1201 Harmon Place
Minneapolis, MN 55403
612/332-3944
Established 1953

Richard Hammel	FAIA
Curtis Green	FAIA
Bruce Abrahamson	FAIA
George T. Riches	AIA
Harry Wilcox	PE
Eldon Burow	AIA

Firm Personnel by Discipline	
Architectural	65
Engineering	50
Landscape Architects	2
Interior Designers	4
Planners	1
Other Technical	7
Administrative	28
Total in Firm	167

	Work %
Housing	10
Office Buildings/Banks	10
Retail/Commercial	5
Industrial/Manufacturing	2
Medical Facilities/Health Care	23
Churches/Worship	4
Restoration/Preservation	5
Municipal Buildings	9
Interior Architecture	4
Solar/Earth Sheltered	1
Education/Academic Buildings	15
Prime Engineering Planning	4

H. B. Fuller, Vadnais Heights, MN; VA Replacement Medical Center, Minneapolis, MN; Piper Tower, Minneapolis, MN; Downtown Radisson Hotel, Minneapolis, MN; Honeywell Computer Center, Honeywell Plaza, Minneapolis, MN; Bemidji Middle School, Bemidji, MN.

RICHARD HANDFORD & ASSOCIATES, LTD.

323 Liberty Bank Building
St. Paul, MN 55104
612/645-4263
Established 1974

Richard Handford	AIA
Firm Personnel by Discipline	
Architectural	2
Total in Firm	2

	Work %
Housing	5
Office Buildings/Banks	90
Other	5

State Bank of Cokato, MN; Citizens State Bank of Winsted, MN; Liberty State Bank, St. Paul, MN; Farmers National Bank, Minnesota Lake, MN; Farmers State Bank, Lester Prairie, MN.

HARMALA, DELAPP, MULVEY/ARCHITECTS INC.

331 2nd Avenue North
Minneapolis, MN 55401
612/338-7574
Established 1960

Dennis L. Mulvey	AIA
Wayne L. Harmala	AIA
Richard W. Delapp	AIA

Firm Personnel by Discipline	
Architectural	4
Total	4

	Work %
Housing	60
Office Buildings/Banks	10
Industrial/Manufacturing	10
Retail	5
Medical	5
Restoration/Preservation	5
Municipal Buildings	5
Education/Academic Buildings	5

Hamilton Manor Housing Complex, Webber Parkway; Dawson Mills Soy Isolate Plant; The Pioneer House-Chemical Dependency Center; Mission Oaks Townhomes, Plymouth, MN; Boardwalk Elderly Housing, Wayzata, MN; Tealwood Deluxe Townhomes, Long Lake, MN.

RODNEY L. HENSLIN, AIA MEDICAL FACILITY CONSULTANTS

169 East Moreland
West St. Paul, MN 55118
612/457-0199
Established 1976

Rodney L. Henslin	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Office Buildings/Banks	20
Medical/Health Care	70
Churches/Worship	10

St. Ann's Hospital, Watertown, SD; Yankton Clinic P.A., Yankton, SD; Hazel Park Family Medical Center, St. Paul, MN

HILLS GILBERTSON ARCHITECTS INC.

104 West Franklin
Minneapolis, MN 55404
612/870-1000
Established 1940

Victor C. Gilbertson	FAIA
Leslie E. Formell	AIA
James I. Lammers	AIA

Firm Personnel by Discipline	
Architectural	6
Interior Designers	1
Engineering	2
Administrative	3
Total in Firm	12

	Work %
Housing	4
Office Buildings	2
Retail/Commercial	10
Industrial/Manufacturing	4
Medical Facilities/Health Care	72
Churches/Worship	6
Education/Academic Buildings	2

St. Cloud Hospital, St. Cloud, MN; St. Mary's Hospital Critical Care, Minneapolis, MN; Paynesville Community Hospital, Paynesville, MN; Hazelden Renewal Center, Center City, MN; St. Mary's Hospital Cardiac Surgery, Duluth, MN; Good Samaritan Homes Energy Management Studies, Minneapolis, MN.

THOMAS HODNE ARCHITECTS, INC.

2404 Stevens Avenue South
Minneapolis, MN 55404
612/871-4440
Established 1982

Thomas H. Hodne, Jr. FAIA
Roger W. Kipp AIA

Firm Personnel by Discipline	
Architectural	5
Planners	1
Other Technical	3
Administrative	1
Total in Firm	10

	Work %
Housing	40
Retail/Commercial	10
Restoration/Preservation	15
Education/Academic Buildings	20
Cultural/Arts Centers	15

Doyle/Ryder Community School, Flint, MI; San Carlos Apache Housing, Phoenix, AZ; Little Wound School, Kyle, SD; Natchez Housing Development, St. Louis Park, MN; Genesee Valley Cultural Center, Flint, MI; Morning Star Media Center, Lame Deer, MN.

HOKANSON/LUNNING ASSOCIATES, INC.

4537 Zenith Avenue S.
Minneapolis, MN 55410
612/926-2510
Established 1981

Brad Hokanson AIA
Robert B. Lunning

Firm Personnel by Discipline	
Architectural	2
Total in Firm	2

	Work %
Housing	80
Urban Design	20

Blaisdell Town Homes, Mpls, MN; Residence, 587 Marshall, St. Paul, MN; Residence, 651 Ashland, St. Paul, MN; Hillcrest Town Homes, St. Paul, MN

HORTY, ELVING & ASSOCIATES INC.

505 E. Grant Street
Minneapolis, MN 55404
612/332-4422
Established 1955

Thomas Horty AIA
Carl D. Elving PE

Firm Personnel by Discipline	
Architectural	9
Engineering	9
Interior Designers	2
Planners	1
Other Technical	1
Administrative	2
Total in Firm	24

	Work %
Housing	2
Medical Facilities/Health Care	91
Churches/Worship	5
Restoration/Preservation	2

CRISTA Senior Housing, Seattle, WA; St. John's Hospital, Red Wing, MN; St. Joseph's Hospital, Dickson, ND; Glenhaven Nursing Home, Glencoe, MN.

TRUMAN HOWELL ARCHITECTS & ASSOCIATES, INC.

620 Mendelssohn Avenue
Suite 130
Minneapolis, MN 55427
612/541-9777
Established 1978

Truman Howell AIA

Firm Personnel by Discipline	
Architectural	4
Administrative	1
Total in Firm	5

	Work %
Housing	20
Office Buildings	10
Industrial/Manufacturing	20
Medical/Health Care	50

Airport Business Center I, Bloomington, MN; Airport Business Center II, Bloomington, MN; Tescom Corporation, Elk River, MN; Share Clinic, St. Paul, MN; Schonbak Residence, Minnetonka, MN; Share Administration Offices, Bloomington, MN.

IDSTROM OSTREIM ARCHITECTS, P.A.

633 E. Lake Street
Wayzata, MN 55391
612/473-1011
Established 1980

John B. A. Idstrom, II AIA
David M. Ostreim AIA

Firm Personnel by Discipline	
Architectural	2
Other Technical	1
Administrative	1
Total in Firm	4

INTERDESIGN INC.

1409 Willow Street
Minneapolis, MN 55403
612/871-7979
R.R. 1
River Falls, WI 54022
Established 1969

Duane Thorbeck AIA
Roger B. Martin ASLA
Robert Lambert AIA

Firm Personnel by Discipline	
Architectural	2
Landscape Architects	2
Other Technical	3
Administrative	2
Total in Firm	9

	Work %
Housing	10
Church/Worship	5
Restoration/Preservation	10
Municipal Buildings	30
Education/Academic Buildings	10
Landscape Architecture	35

Minnesota Zoological Garden, Apple Valley, MN; Augsburg Park Library, Richfield, MN; St. Cloud Public Library, St. Cloud, MN; Pioneer Hall Renovation, Minneapolis, MN; Vinland National Center, Independence, MN; City Services Building, Eden Prairie, MN.

BERNARD JACOB ARCHITECTS, LTD.

55 South 8th Street
Minneapolis, MN 55402
612/332-5515/5517
Established 1970

Bernard Jacob FAIA
Sandra Becker IBD

Firm Personnel by Discipline	
Architectural	1
Interior Designers	1

Planners 1
Total in Firm 3

	Work %
Office Buildings/Banks	25
Retail/Commercial	25
Interior Architecture	50

Cray Research, Inc., World Headquarters Offices, Minneapolis, MN; IDS Tower Public Spaces Redesign, Minneapolis, MN; Brown Photo, Pillsbury Center, Minneapolis, MN; Ed-Burt Women's Wear Showroom, Hyatt Merchandise Mart, Minneapolis, MN.

JAFVERT, MUELLER AND ASSOCIATES, INC.

6700 France Avenue
Edina, MN 55435
612/926-7677
Established 1972

Lloyd R. Jafvert AIA
Steven P. Mueller

Firm Personnel by Discipline	
Architectural	4
Administrative	1
Total in Firm	5

	Work %
Housing	20
Office Buildings/Banks	10
Retail/Commercial	10
Industrial	10
Medical/Health Care	5
Churches	10
Interior Architecture	20
Solar/Earth Sheltered	15

Golden Hills Shopping Center, Golden Valley, MN; American Indian Evangelical Church, Minneapolis, MN; Garcia's Restaurant, St. Louis Park, MN; Southdale Square Shopping Center Remodeling, Richfield, MN; Anderson Residence, Orono, MN; Bluefin Bay on Lake Superior, Tofte, MN.

**PHILLIP D. JOHNSON
ARCHITECT**

5637 Brooklyn Boulevard
Minneapolis, MN 55429
612/533-4235
Established 1978

Phillip D. Johnson AIA

Firm Personnel by Discipline	
Architectural	1
Administrative	1/2
Total in Firm	1 1/2

	Work %
Housing	20
Office Buildings	10
Retail	10
Industrial	10
Churches/Worship	30
Interior Architecture	15
Solar/Earth Sheltered	5

Brooklyn Law Center; Zimmerman Evangelical Free Church Addition; Kwik Copy, Minnetonka, MN; New Life Bible Church, Orono, MN.

**JOHNSON, SHELDON
& SORENSON
ARCHITECTS, INC.**

10249 Yellow Circle Drive
Minnetonka, MN 55343
612/935-6337
Montevideo, MN 56258
Established 1972

Roger F. Johnson AIA
Alvin D. Sheldon AIA
Carlyle A. Sorenson AIA

Firm Personnel by Discipline	
Architectural	8
Administrative	1
Total in Firm	9

	Work %
Housing	40
Office Buildings/Banks	15
Industrial	10
Churches/Worship	15
Municipal Buildings	10
Interior Architecture	5
Education/Academic Buildings	5

Calvary Lutheran Church Addition, Alexandria, MN; Burnsville Car Wash, Burnsville, MN; Clara City Telephone Co., Clara City, MN; Lonsdale Telephone Co., Lonsdale, MN; Mower County HUD Housing, Austin, MN; Northland Glass Co., Albertville, MN.

**KEGEL ASSOCIATES
ARCHITECTS**

1050 Lake Avenue
P.O. Box 599
Detroit Lakes, MN 56501
218/847-9876
Established 1961

Fred W. Kegel, Jr. AIA

Firm Personnel by Discipline	
Architectural	2
Total in Firm	2

	Work %
Housing	10
Office Buildings/Banks	30
Industrial	10
Medical Facilities/Health Care	40
Municipal Buildings	10

Hospital, Red Lake, MN; Telephone Building, Walker, MN; Nursing Home, Fertile, MN; Telephone Building, Erskine, MN; Telephone Building, Red Lake Falls, MN; Elderly Housing, Long Prairie, MN.

KEILLOR ARCHITECTS

1642 Edgewood Avenue South
St. Louis Park, MN 55426
612/545-1324
Established 1980

Richard Keillor AIA

Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	10
Office Buildings/Banks	30
Retail/Commercial	10
Churches	40
Energy Conservation	10

Addition and Remodeling, First National Bank, Anoka, MN; Bunker Riverview Estate, Anoka, MN; Elm Creek Chapel, Brooklyn Park, MN.

**KEISER
ARCHITECTURE
CORPORATION**

752 Springen Ave.
Fergus Falls, MN 56537
218/739-2396

Branch Office: Worthington,
MN 56187

Established 1972

Roger J. Keiser AIA

	Work %
Housing	4
Office Buildings/Banks	4
Retail/Commercial	3
Medical Facilities/Health Care	40
Churches/Worship	2
Restoration/Preservation	5
Municipal Buildings	15
Interior Architecture	2
Solar/Earth Sheltered	5
Education/Academic Buildings	20

Archdeacon Gilfillan School, Bemidji, MN; Sunset Nursing Home, Park Rapids, MN; Phases I, II, & III, Fergus Falls State Hospital Remodeling, Fergus Falls, MN; Nobles County Developmental Achievement Center, Worthington, MN.

**KILSTOFTE
ASSOCIATES INC.**

250 N. Central
Suite 210
Wayzata, MN 55391
612/473-0277
Established 1970

Irwin H. Kilstofte AIA
Fred A. Poisson

Firm Personnel by Discipline	
Architectural	5
Administrative	1
Total in Firm	6

	Work %
Housing	10
Office Buildings/Banks	20
Retail/Commercial	20
Industrial/Manufacturing	15
Medical	5
Churches	5
Restoration/Preservation	5
Municipal Buildings	5
Interior Architecture	5

Warehouse, Red Wing Shoe Company, Red Wing, MN; Royale Inn Hotel, Montevideo, MN; Van Grastek Residence, Minnetonka, MN; Dem Witter Reynolds Office, Wayzata, MN; First National Bank, Baldwin, WI; Thrifty Drug Store, Crookston, MN.

**KLAPSTE GOLTZ
ASSOCIATES INC.**

1112 Nicollet Mall
Minneapolis, MN 55403
612/332-8901
Established 1976

Howard F. Goltz AIA
James L. Klapste AIA

Firm Personnel by Discipline	
Architectural	3
Administrative	1
Total in Firm	4

	Work %
Housing	20
Office Buildings/Banks	20
Retail/Commercial	20
Industrial/Manufacturing	20
Medical	5
Interior Architecture	10
Municipal	5

E&P Enterprises, Inc., Eden Prairie, MN; Ridgeview Office Center, Minnetonka, MN; Lake-ridge Condominiums, Woodbury, MN; Crossings Shopping Mall and Dept. Remodeling, Ashland, WI; Advanced Mobile Phone Service Facility, Mpls., MN; Nortronics Manufacturing Plant, Dassel, MN.

**CLETUS G. KLEIN
ARCHITECT**

32 Tenth Ave. S.
Hopkins, MN 55343
612/935-1975
Established 1969

Cletus G. Klein AIA

Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Medical Facilities/Health Care	75
Churches/Worship	25

**GEORGE KLEIN AND
COMPANY
ARCHITECTS INC.**

18340 Minnetonka Blvd.
Deephaven, MN 55391
612/473-1505
Established 1977

George F. Klein, Jr.	AIA
Firm Personnel by Discipline	
Architectural	3
Administrative	1
Total in Firm	4

	Work %
Housing	10
Office Buildings/Banks	30
Retail/Commercial	15
Industrial/Manufacturing	10
Medical Facilities/Health Care	10
Restoration/Preservation	10
Interior Architecture	10
Other (Expert Witness)	5

Pillsbury Company World Headquarters (with MGA and DCI), Minneapolis, MN; Hennepin County Work/Study Release Facility, Plymouth, MN; Buustead Electric and Manufacturing Company Addition, Golden Valley, MN; MnDOT Garage & Vehicle Storage Bldg., Mpls., MN; Remodeling Cedarvale Mall, Wayzata, MN; Wayzata Yacht Club, Wayzata, MN.

**BRUCE KNUTSON
ARCHITECTS INC.**

123 E. Grant St.
Minneapolis, MN 55403
612/874-7050
Established 1978

Bruce Knutson	AIA, CSI
Firm Personnel by Discipline	
Architectural	2
Administrative	1
Total in Firm	3

	Work %
Housing	25
Office Buildings/Banks	25
Retail/Commercial	25
Industrial/Manufacturing	10
Restoration/Preservation	5
Education	10

Lake Shore Drive Condominiums, Richfield, MN; Calhoun Isles Townhomes, Minneapolis, MN; Corporate Headquarters, Minnesota Rubber, St. Louis Park, MN; Pontillo's Pizzeria, Roseville, MN; David Nitz Residence, Minnetonka, MN; U. of Minn, Arboretum Learning Center Chaska, MN.

**KODETT
ARCHITECTURAL
GROUP**

1960 Kenwood Parkway
Minneapolis, MN 55405
612/330-3694
Established 1983

Edward J. Kodett, Jr.	AIA
Firm Personnel by Discipline	
Architectural	3
Administrative	1
Total	4

**KORNGIEBEL
ARCHITECTS**

102 Main St. S.
Hutchinson, MN 55350
612/587-2483
Established 1969

John Korngiebel	AIA
Firm Personnel by Discipline	
Architectural	3
Other Technical	1
Administrative	1
Total in Firm	5

	Work %
Housing	80
Office Buildings/Banks	5
Church/Worship	10
Municipal Buildings	5

**KORSUNSKY KRANK
ERICKSON
ARCHITECTS, INC**

570 Galaxy Bldg.
330 2nd Avenue So.
Minneapolis, MN 55401
(612) 339-4200
Established 1968

Y. A. Korsunsky	AIA
Ronald Krank	AIA
Ronald C. Erickson	AIA

Firm Personnel by Discipline	
Architectural	26
Interior Designers	3
Other Technical	8
Total in Firm	37

	Work %
Housing	25
Office Bldgs./Banks	15
Retail/Commercial	20
Industrial	10
Medical/Health Care	10
Restoration/Preservation	10
Interior Architecture	5
Parking Ramps	5

Microcomponent Technology Corp. World Hqtrs., Shoreview, MN; First Bank La-Crosse, WI; Northwest Financial Center, St. Cloud, MN; Riverplace, Minneapolis, MN; Metropolitan Medical Office Building, Minneapolis, MN; West Oaks Condominiums.

**LEONARD LAMPERT
ARCHITECTS, P.A.**

1101 East 120th Street
Burnsville, MN 55372
612/890-5323
Established 1980

Leonard Lampert	AIA
Firm Personnel by Discipline	
Architectural	1
Other Technical	1
Administration	1
Total in Firm	3

	Work %
Housing	25
Office Buildings/Banks	15
Industrial	45
Restoration/Preservation	10
Interior Architecture	5

Edenvalle Office/Warehouse, Eden Prairie, MN; Gage Residence, Port St. Lucie, FL; Dain Tower Renovation, Minneapolis, MN; Cabin, Brainerd, MN

**RICHARD LARSEN
ARCHITECTS**

621 North Shore Drive
Detroit Lakes, MN 56501
218/847-9439
Established 1979

Richard A. Larsen	AIA
Firm Personnel by Discipline	
Architectural	2
Total in Firm	2

	Work %
Housing	40
Office Buildings/Banks	10
Medical Facilities	10
Restoration/Preservation	20
Municipal Buildings	10
Solar/Earth Sheltered	10

**LARSEN/ROVA
ASSOCIATES INC.**

15016 Minnetonka Boulevard
Minnetonka, MN 55343
826-B S. Casitas Drive
Tempe, AZ 85281
612/933-8111
Established 1970

Richard J. Larsen	AIA
William M. Rova	AIA
Firm Personnel by Discipline	
Architectural	3
Administrative	1
Total in Firm	4

	Work %
Housing	30
Office Buildings/Banks	20
Retail/Commercial	20
Industrial/Mfg.	10
Medical Facilities/Health Care	5
Churches	5
Municipal Buildings	5
Planning	5

Waconia Fire Station, Waconia, MN; USPFO Office Building,

Little Falls, MN; Izatys Resort Condominiums, Lake Mills, MN; Century Hills Townhomes, White Bear Lake, MN; Highwood Office Center, Minnetonka, MN; Highridge Condominiums, Minnetonka

**LILYHOLM YOUNG &
GLEESON**

237 E. Sixth Street
St. Paul, Minnesota 55101
612/227-7667
Established 1980

Leonard P. Lilyholm	
Howard J. Young	
Daniel J. Gleeson	AIA

Firm Personnel by Discipline	
Architectural	4
Administrative	3
Total in Firm	7

	Work %
Housing	20
Office Buildings/Banks	10
Retail/Commercial	10
Industrial/Mfg.	10
Restoration/Preservation	20
Interior Architecture	10
Solar/Earth Sheltered	10
Planning	10

St. Paul Energy Park, St. Paul, MN; Chicago Great Western Freight Station Office Condo, St. Paul, MN; Market House, St. Paul, MN; The Studio, Minneapolis, MN; Scanlan International, St. Paul, MN; Lakewood Community College, White Bear Lake, MN

**GLEN L. LINDBERG/
ARCHITECTS**

1422 W. Lake Street
Minneapolis, MN 55408
612/822-9300
Established 1973

Glen L. Lindberg	
Firm Personnel by Discipline	
Architectural	3
Total in Firm	3

	Work %
Housing	25
Office Buildings/Banks	20
Retail/Commercial	5
Industrial/Mfg.	20
Churches/Worship	10
Restoration/Preservation	10
Municipal Buildings	10
Interior Architecture	5
Education/Academic Buildings	10

Economic Security Building Renovation, Minneapolis, MN; Kingsway Estates, LeSeuer, MN; Walter Library & Botony Building Alterations, U. of MN, Minneapolis, MN; Lewis Court Remodeling, Minneapolis,

LINDBERG PIERCE, INC.

600 1st Avenue North
Suite 710
Minneapolis, MN 55403
612/332-3339
Established 1973

James H. Lindberg	AIA
Robert L. Pierce	AIA
Firm Personnel by Discipline	
Architectural	4
Administrative	1
Total in Firm	5
	Work %
Housing	5
Office Buildings/Banks	15
Retail/Commercial	10
Industrial/Mfg.	10
Churches/Worship	10
Restoration/Preservation	5
Municipal Buildings	40
Interior Architecture	5

Northwestern Bell Switching Stations, Bloomington & Burnsville, MN; KQRS Radio Station Remodeling & Addition, Golden Valley, MN; State Bank of Young America Addition, Young America, MN; Webber Park Community Library, Minneapolis, MN; Valley Baptist Church, Golden Valley, MN; Fire Station, Rosemont, MN

JACK LINDEMAN—SPECIFICATIONS CONSULTANT

5000 First Avenue South
Minneapolis, MN 55419
612/824-8822
Established 1975

Jack Lindeman	AIA
	Work %
Housing	39
Office Buildings/Banks	7
Retail/Commercial	13
Industrial	9
Medical	1
Municipal Buildings	22
Education/Academic Buildings	4
Maintenance/Repair	5

LUNDAHL ARCHITECTS

5509 Eden Prairie Road
Minnetonka, MN 55343
612/933-3011
Established 1972

Richard L. Lundahl	AIA
Firm Personnel by Discipline	
Architectural	2
Administrative	1
Total in Firm	3
	Work %
Housing	5
Office Buildings/Banks	5
Industrial/Mfg.	5
Churches/Worship	75
Municipal Buildings	5
Education/Academic Buildings	5

St. Michael's Lutheran Church; Minnetonka-Hopkins Assembly of God Church

THE LUNDGREN ASSOCIATES, INC.

1140 Minnesota Building
St. Paul, MN 55101
612/224-4765
Established 1950

Louis R. Lundgren	FAIA
June S. Lundgren	AIA
Cherry Gen Lundgren	
Firm Personnel by Discipline	
Architectural	3
Total in Firm	3

LUTTERS ARCHITECTURE/PLANNING/DESIGN

13517 Garfield Avenue South
Burnsville, MN 55337
612/890-6380
Established 1980

Harry J. Lutters	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Medical Facilities/Health Care	100

MACDONALD AND MACK PARTNERSHIP

215 Grain Exchange Building
Minneapolis, MN 55415
612/341-4051
Established 1977

Stuart E. MacDonald	
Robert C. Mack	AIA
Firm Personnel by Discipline	
Architectural	2
Other	1
Total in Firm	3

	Work %
Restoration/Preservation/ Adaptive Use	100

Historical/architectural survey of Janesville, WI; Restoration of terra cotta, Minneapolis, MN; Restoration, Red Wing City Hall, MN; 69 Sites, Historic Survey, US National Park Service; Restoration Study for Nicholas Jarrot Mansion, Cahokia, IL; Restoration, Security Life Building, Minneapolis, MN

ROBERT G. MAGNEY AIA

11408 Oak Ridge Lane
Minnetonka, MN 55343
612/544-9219

Robert G. Magney	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

MALLOCH-WIRTH ARCHITECTS INC.

221 3rd Avenue South
Minneapolis, MN 55401
612/333-3141
Established 1981

Harry Wirth	
Duncan Malloch	AIA
Bob Ready	AIA, AICP

Firm Personnel by Discipline	
Architectural	2
Administrative	1
Total in Firm	3

	Work %
Housing	40
Office Buildings/Banks	20
Retail/Commercial	20
Solar/Earth Sheltered	20

Control Data Small Farms Earth Berm Housing, Princeton, MN; 1990 Portola Estate Residence, Woodside, CA; Timber Inn Motel-Restaurant, Phillips, WI; Planning Phase—17.5 acres on El Camino Real, San Francisco, CA; Restoration/remodel—Silverado Mountain Ranch, Healdsburg, CA; Wild River General Store, Cable, WI; Milwaukee Depot Planning, Minneapolis, MN

MASTNY ASSOCIATES, ARCHITECTS

15 Brown Road South
Long Lake, MN 55356
612/476-0276
Established 1957

George G. Mastny	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	10
Retail Commercial	70
Industrial	30

American Inns Hotel, Minot, ND; Boosalis Building, Chicago & Lake, Mpls.; Arrowhead Center Remodeling, Minot, ND; Clyde Jorgenson Addition, Plymouth, MN; Red Owl Store, St. James, MN; Industrial Bldg, Northland Park, Brooklyn Park, MN

ROBERT MARTINSON & ASSOCIATES

4941 France Ave. So.
Mpls. MN 55410
(612) 920-5588
Established 1979

Robert Martinson	AIA
Firm Personnel by Discipline	
Architectural	1

	Work %
Housing	80
Office Buildings/Banks	20

Perkins Office Interiors, Wellesley Place Townhouses, Golden Valley Planning Study, Murray Residence, Baker Residence, Martinson Residence

MATRIX ASSOCIATES, ARCHITECTS

7515 Wayzata Blvd., Suite 226
Minneapolis, MN 55426
612/544-4122
Established 1973

Robert D. Hanson AIA

Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

	Work %
Housing	40
Retail	10
Industrial	10
Medical Facilities	10
Education	20
Non-Const. Consulting	14

Bethesda Nursing Home, Willmar, MN; Renovation & Remodeling, Cambridge State Hospital; Remodeling Oddfellows' Home, Northfield, MN; Bank Addition and Remodeling, Bayley, MN; Remodeling & Additions to Three Links Apartments, Northfield, MN

MATSON, WEGLEITNER AND ABENDROTH ARCHITECTS, INC.

North Plaza Building
5217 Wayzata Blvd.
Minneapolis, MN 55416
(612) 544-8941
Established 1958

Al Wegleitner AIA
Urban L. Abendroth AIA

Firm Personnel by Discipline	
Architectural	2
Planners	2
Total in Firm	4

	Work %
Retail	1
Education/Academic Buildings	99

Barnum Senior High School, Barnum, MN; Mora Elementary School Addition, Lakeview Elementary School, MN; Forest Lake Jr. High School, MN; Canby High School Roof Replacement, MN. Studio Addition to Osseo Ed. Service Building

MCENARY KRAFFT BIRCH & KILGORE, INC.

10501 Wayzata Boulevard
Minnetonka, MN 55343
(512) 546-8917
Established 1934

Merrill A. Birch AIA
Robert A. Kilgore AIA
Robert C. Van Hoe CSI

Firm Personnel by Discipline

Architectural	3
Total in Firm	3

	Work %
Housing	20
Office Buildings/Banks	65
Industrial	5
Medical	5
Churches	5

First Bank Robbinsdale, MN; S. J. Groves Building, Plymouth, MN; Public Library, Monticello, MN

MC GUIRE ARCHITECTS PLANNERS INCORPORATED

954 Plymouth Building
12 South Sixth Street
Minneapolis, MN 55402
(612) 332-2116
Established 1966

George E. McGuire AIA

Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

Tobie's Restaurant and Supper Club, Hinckley, MN; State of Minnesota CAAPC Competition No. 1 Award, Parking Structure & Public Park at Central Park, Capitol Campus, Saint Paul, MN; Site Development/Headquarters, Arneson Heating Service Inc., So. St. Paul, MN; Church of St. Thomas, School Window Replacement & Restoration, Minneapolis, MN; Lent Township Hall, Chisago County, Stacy, MN; State of Minnesota, Retrofit Insulation & Weatherstripping, Minnesota Correctional Facility, Stillwater, MN; School Re-Roofing & Miscellaneous Repairs, Howard Lake, MN

MCGHIRE COURTEAU LUCKE ARCHITECTS INC.

867 Grand Avenue
St. Paul, MN 55105
(612) 222-8451
Established 1973

Patrick F. McGuire AIA
Arnold S. Lucke AIA
Richard J. Dufresne

Firm Personnel by Discipline	
Architectural	4
Other Technical	2
Administrative	1
Total in Firm	7

	Work %
Housing	10
Office Buildings/Bank	5
Retail/Commercial	5
Industrial	5
Medical	10
Churches/Worship	10
Restoration/Preservation	10
Municipal Buildings	10
Interior Architecture	5
Solar/Earth Sheltered	10
Education	20

Our Lady of Good Counsel Home, St. Paul, MN; Dakota County AVTI, Rosemount, MN; John Paul Residence Hall, College of St. Thomas, St. Paul, Eastview Recreation Center, St. Paul; District Services Facility, St. Paul Public Schools; Hayden Heights Recreation Center, St. Paul, MN

MARK MCKECHNIE, ARCHITECT

314 West Avenue
Red Wing, MN 55066
612/388-6382
Established 1979

Mark McKechnie AIA

Firm Personnel by Discipline	
Architectural	3
Administrative	1/2
Total in Firm	3 1/2

	Work %
Housing	15
Office Buildings/Banks	20
Retail/Commercial	10
Industrial	10
Churches/Worship	5
Restoration/Preservation	20
Municipal Buildings	10
Solar/Earth Sheltered	5
Education	5

The Old Pottery Development, Reg Wing, MN; Office Addition to Manufacturing Plant, St. Louis Park, MN; Spec Office Building, Zumbrota, MN; Remodeling for City Liquor Store, Cannon Falls, MN; Apartment Building Renovation, River Falls, WI; Elevator Addition to State Facility, Red Wing, MN

JAMES NELSON MCKELLIN III ARCHITECT

604 W. Minnehaha Parkway
Minneapolis, MN 55419
612/823-5223
Established 1977

James Nelson McKellin III AIA

Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

Firm Personnel by Discipline

Architectural	10
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Elderly & Family Housing, Foley, MN; Elderly Housing, Marathon City, WI; Elderly Housing, River Falls, WI; Family Housing, Grantsburg, WI; Elderly Housing, Balsam Lake, WI; Elderly Housing, Dodge Center, MN

JAMES MCNUTT AND ASSOCIATES

409 West Washington
Brainerd, MN 56401
218/829-0424
Established 1981

James McNutt AIA
Robert Meyer

Firm Personnel by Discipline	
Architectural	
Administrative	
Total in Firm	

	Work %
Housing	
Office Buildings/Banks	
Churches/Worship	
Municipal Buildings	1
Education	7

MEINHARDT/ ASSOCIATES/ ARCHITECTS

6050 Duluth Lane
Golden Valley, MN 55422
(612) 545-1050
Established 1981

Don Meinhardt

Firm Personnel by Discipline	
Architectural	
Total in Firm	

	Work %
Housing	
Office Buildings/Banks	
Retail/Commercial	
Industrial	
Medical	
Municipal	2
Education	

Medical Clinic, Albertville, MN; Senior Citizens Center, Delano, MN; Buffalo Water Works Building, Buffalo, MN; Office/Warehouse, Buffalo, MN; Municipal Liquor Store & City Offices, Delano, MN; To Welding Store, Brooklyn Park, MN

MELANDER AND MELANDER ARCHITECTS, INC.

800 Lonsdale Building
Duluth, MN 55802
218/727-5044
Established 1971

Donald K. Melander	AIA
Lance S. Siddens	
Firm Personnel by Discipline	
Architectural	2
Other Technical	1
Administrative	2
Total in Firm	5
Work %	
Housing	11
Office Buildings/Banks	10
Retail/Commercial	2
Industrial	5
Medical	8
Churches/Worship	4
Restoration/Preservation	10
Municipal	20
Interior Architecture	5
Solar/Earth Sheltered	2
Education	23

St. Louis County Heritage & Arts Center, Performing Arts Bldg, Duluth; Duluth Water & Gas Dep't, City of Duluth; Service Center at Long Prairie, for Minnesota Power, Duluth; U.S. Army Reserve Center Modernization/Add'n, Duluth; West End Firehall, City of Duluth; Morgan Park Jr. High School Remodeling/Add'n, Duluth

GORDON R. METCALF, ARCHITECT, AIA, LTD.

3030 Harbor Lane N.
Plymouth, MN 55441
612/559-1734
Established 1969

Gordon R. Metcalf	AIA
Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

Work %	
Housing	65
Industrial	35

MEYER, SCHERER AND ROCKCASTLE, LTD.

325 Second Avenue North
Minneapolis, MN 55401
612/375-0336
Established 1981

Thomas A. Meyer AIA
Jeffrey A. Scherer AIA
Garth C. Rockcastle AIA

Firm Personnel by Discipline	
Architectural	7
Total in Firm	8
Work %	
Housing	20
Office Buildings/Banks	15
Retail/Commercial	10
Industrial/Manufacturing	10
Restoration/Preservation	10
Municipal Buildings	15
Interior Architecture	10
Solar/Earth Sheltered	5
Museums	5

Lagerquist Corporate Headquarters; 1200 Dental Group Clinic; Childrens Museum, Inc.; Lowry Hill Point Renovation (Offices, Residence); Butler North Renovation; Textile Building Renovation; Riverside Community State Bank

VAL MICHELSON AND ASSOCIATES, INC.

1821 University Avenue, Suite N-345
St. Paul, MN 55104
612/646-6377
Established 1960

Valerius Michelson	FAIA
David P. Bowers	AIA
Daniel H. Feidt	AIA
Firm Personnel by Discipline	
Architectural	6
Total in Firm	6

Work %	
Housing	40
Office Buildings/Banks	10
Restoration/Preservation	10
Municipal Buildings	20
Interior Architecture	10
Education	10

25th Street Townhouses, Mpls; West 7th Multi-Service Center, St. Paul; Northwestern Bank, interior restoration, Owatonna, MN; Railroad Island Double Duplexes, St. Paul, MN; Deaconess Housing, Minneapolis; Alexandra House, Inc., Remodeling, Blaine, MN.

WILLIAM MILBRATH, ARCHITECT

233A North Main Street
P.O. Box 481
Austin, MN 55912
507/433-7421
Established 1949

William Milbrath	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

Work %	
Housing	5
Office Buildings/Banks	10
Churches/Worship	15
Municipal Buildings	65
Solar/Earth Sheltered	5

Fire Station, Austin, MN; The Register, Oelwein, IA; Energy Retrofit, Mower County Courthouse & Law Enforcement Center, Austin, MN

MILLER-DUNWIDDIE- ARCHITECTS, INC.

7913 Southtown Center
Minneapolis, MN 55431
612/884-8421
Established 1963

Foster W. Dunwiddie	AIA
William J. Miller	AIA
Firm Personnel by Discipline	
Architectural	8
Administrative	1
Total in Firm	9

Work %	
Office Buildings	10
Retail	5
Industrial	5
Restoration/Preservation	25
Municipal Buildings	25
Other (Airport)	30

Pier "D" 2nd Addition & Remodeling Wold Chamberlain Field, MN; Commandant's House & Officers' Quarters Historic Restoration, Ft. Snelling, MN; Brainerd Crow Wing Airport Terminal Building, Brainerd, MN; Stearns County Historical Museum, St. Cloud; China Airlines Jet Engine Test Cell, Taipei, Taiwan; M.A.C. Office Building and Addition, Wold Chamberlain Field, MN

MILLER HANSON WESTERBECK BELL ARCHITECTS INC.

Butler Square, Suite 300
100 North Sixth Street
Minneapolis, MN 55403
612/338-7700
Established 1962

John R. Miller	AIA
James E. Hanson	AIA
Larry W. Westerbeck	AIA
Edwin M. Bell	AIA
Wilton J. Berger	

Firm Personnel by Discipline	
Architectural	28
Other technical	5
Administrative	1
Total in Firm	35

Work %	
Housing	50
Office Buildings/Banks	15
Retail/Commercial	10
Medical Facilities	10
Restoration/Preservation	10
Municipal Buildings	3
Solar/Earth Sheltered	2

Lake Point Condominiums, Mpls; Nicollet Towers, Mpls; Mills Point, Minneapolis, MN; Galtier Plaza, St. Paul, MN; Excelsior Bay Gables, Excelsior, MN; Fontaine Towers, Rochester, MN

MONSON/UELAND ARCHITECTS, INC.

112 North Third Street
Minneapolis, MN 55401
612/333-4260
Established 1981

D. Jon Monson	AIA
Christopher Ueland	AIA

Firm Personnel by Discipline	
Architectural	2
Administrative	1
Total in Firm	3

Work %	
Housing	70
Retail/Commercial	10
Restoration/Preservation	20

The Hiddenshores of Crystal Lake, Robbinsdale; Mitterhauer's Le Cuisine, Minneapolis, MN; Ewald Place, Golden Valley, MN; The Amsterdam Building Renovation, Minneapolis, MN

N-O

P

ELDON MORRISON ARCHITECTS/INC.

613 Fourth Street
White Bear Lake, MN 55110
612/426-3287
Established 1967

Eldon Morrison	AIA
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Firm Personnel by Discipline	
Architectural	5
Total in Firm	5

	Work %
Housing	20
Office Buildings/Banks	10
Retail/Commercial	10
Industrial/Manufacturing	10
Medical Facilities	5
Churches/Worship	20
Restoration/Preservation	5
Municipal Buildings	2
Interior Architecture	3
Solar/Earth Sheltered	15

Nationality Cultural Center, St. Paul; Active solar earth sheltered residence, Rosemount; Peace United Methodist Church, North Oaks, MN; Lakewood West Condominiums, White Bear Lake; Reell Precision Manufacturing, Corporate Headquarters & Manufacturing, Vadnais Heights; Passive solar earth sheltered Residence, Dellwood, MN

GERALD MUNDT ARCHITECTS

4969 Olson Memorial Hwy.
Golden Valley, MN 55422
612/542-8219
Established 1965

Gerald E. Mundt	AIA
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Firm Personnel by Discipline	
Architectural	2
Administrative	1
Total in Firm	3

	Work %
Housing	15
Office Buildings	15
Retail/Commercial	5
Industrial	5
Medical/Health Care	40
Churches/Worship	5
Restoration/Preservation	5
Municipal	5
Planning	5

Pondwood Office Park, Golden Valley; Castle Ridge Care Center, Eden Prairie, MN; Autistic Group Home, Brooklyn Park, MN; Lincoln Center Housing, Chisholm, MN; Heritage Residence, Hallock, MN

ROBERT M. NELSON, ARCHITECT

2589 Fisk Street
Roseville, MN 55113
612/484-9027
Established 1980

Robert M. Nelson	AIA
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Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	10
Office Buildings	5
Retail	5
Industrial/Manufacturing	50
Churches/Worship	10
Education	5
Project Review	5

Superwood Corp. Addition, Duluth, MN; New Life Community Church, Cottage Grove, MN; Kohler-Mix Specialties Additions, White Bear Lake, MN; Concordia Academy Expansion, Roseville, MN

THE OSTBERG ARCHITECTS

1191 Niles Avenue
St. Paul, MN 55116
(612) 699-9678
Established 1980

Linda Ostberg	AIA
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Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	40
Office Buildings/Banks	10
Interior Architecture	10
Solar/Earth Sheltered	30
Consulting	10

Solar Addition to Stein Residence, Golden Valley, MN; Energy Survey, Bryant Avenue Apartment Building, Minneapolis; Addition to Sieben Residence, Hastings, MN

PALAI-ASVEDBERG/ ARCHITECTS

1409 Willow Street
Minneapolis, MN 55403
612/874-9490
Established 1974

Nicholas A. Palaia	AIA
Vern Svedberg	AIA
Peter Sieger	AIA

Firm Personnel by Discipline	
Architectural	6
Other Technical	2
Administrative	1
Total in Firm	9

	Work %
Housing	50
Office Buildings/Banks	10
Retail Commercial	10
Industrial/Manufacturing	5
Restoration/Preservation	20
Municipal Buildings	5

Riverplace, Minneapolis, MN; Ukrainian American Community Center, Minneapolis, MN; The Glen Condominiums, Minnetonka, MN; Hammond Residence, Little Canada, MN; Shell Lake Dental Clinic, Shell Lake, WI; Masonic Temple Renovation, Minneapolis, MN

THE LEONARD PARKER ASSOCIATES, ARCHITECTS INC.

430 Oak Grove
Minneapolis, MN 55403
612/871-6864
Established 1957

Leonard S. Parker	FAIA
Gary J. Mahaffey	AIA
Francis Bulbulian	AIA
Steve Huh	AIA

Firm Personnel by Discipline	
Architectural	10
Other Technical	2
Administrative	2
Total in Firm	14

	Work %
Housing	5
Office Buildings/Banks	20
Industrial/Manufacturing	5
Churches/Worship	5
Restoration/Preservation	20
Solar/Earth Sheltered	10
Education/Academic Buildings	30
Planning	5

University of Minnesota Law School; Ramsey County Juvenile Service Center, St. Paul; Gelco International Headquarters, Eden Prairie, MN; New York Law School, New York City; Minnesota Public Radio, St. Paul, MN; Tamarac Interpretive Center, National Wildlife Refuge, MN

PAT & ROLF PARTNERSHIP

MM Durnam Building
927 West Broadway
Minneapolis, MN 55411
612/521-8881
Established 1978

Rolf Lokensgard	AIA
Pat Waddick	

Firm Personnel by Discipline	
Architectural	3
Other Technical	1
Administrative	1
Total in Firm	5

	Work %
Housing	60
Retail/Commercial	5
Industrial	10
Churches/Worship	5
Restoration/Preservation	15
Solar/Earth Sheltered	5

Seven on the Corner Townhouses, Minneapolis; Gale Condominiums, Minneapolis; Office/Warehouse Addition, St. Paul, MN; Ligon Residence, Minneapolis; Handicapped House Design, Minneapolis; Building Maintenance Office/Storage, South St. Paul, MN

PATCH ERICKSON MADSON WATTEN, INC.

2311 Wayzata Boulevard
Minneapolis, MN 55405
612/374-3490
Established 1952

Donald M. Erickson	AIA
John A. Madson	AIA
L. Vern Watten	AIA

Firm Personnel by Discipline	
Architectural	5
Administrative	2
Total in Firm	7

	Work %
Housing	40
Office Buildings/Banks	5
Medical Facilities/	
Health Care	25
Municipal Buildings	30

Wind River Condominiums, Wyoming; Anoka County Parking Ramp and Courthouse Remodeling; Roseau MN Area Hospital and Clinic Additions; Melrose MN Hospital Addition; Scott County Detention Facility; County of Anoka Park Shelter

**DON PATES, AIA
ARCHITECT**

Architect—Planner, Building &
Energy Code Consultant
1291 Charlton
West St. Paul, MN 55118
612/457-3974
Established 1982

Don Pates AIA

**PAULY & OLSEN
ASSOCIATES, LTD.**

113 Fifth Avenue South
St. Cloud, MN 56301
612/252-4740
Established 1974

Robert F. Pauly AIA
Richard A. Olsen AIA
Joseph R. Bettendorf PE
Gale J. Eastwood PE

Firm Personnel by Discipline
Architectural 6
Engineering 5
Other Technical 1
Administrative 3
Total in Firm 15

Work %
Housing 10
Office Buildings/Banks 18
Retail/Commercial 8
Industrial/Manufacturing 10
Medical Facilities/Health Care 10
Churches/Worship 5
Municipal Buildings 4
Education/Academic Buildings 8
Prime Engineering (Civil) 27

DeZurick Office Addition, Sarsell, MN; Maintenance Building, St. Cloud State University; Precision Optics, St. Cloud, MN; Viking Coca-Cola Bottling Co., St. Cloud, MN; Enfield I-4 Safety Rest Area; College of St. Benedict, Henrita Academic Building Remodeling, St. Joseph, MN

**MEARLE EUGENE
PETERSON, AIA
ARCHITECT**

344 Nicollet Avenue, Suite 120,
Minneapolis, MN 55404
612/870-9595
Established 1971

Mearl Eugene Peterson AIA

Firm Personnel by Discipline
Architectural 1
Total in Firm 2

Work %
Housing 70
Office Buildings/Banks 8
Retail/Commercial 5
Industrial/Manufacturing 2
Restoration/Preservation 5
Interior Architecture 8
Solar/Earth/Sheltered 2

Dr. and Mrs. Paul Polski Residence, Sioux Narrows, Ontario, Canada; Mr. & Mrs. Erwin E. Kelm Condominium Minneapolis, MN; Uracey Office Building, Maplewood, MN; Alterations & additions to residence John & Karen Mohler, St. Louis Park, MN; House for Mr. & Mrs. David L. Owen, Lake Minnetonka, MN; Industrial consultation, Northern Aluminum Corporation

**PETERSON, CLARK
AND ASSOCIATES,
INC.**

1212 Plymouth Building
Minneapolis, MN 55402
612/333-3215
Established 1960

Richard A. Peterson AIA
Wilber B. Clark, Jr. AIA

Firm Personnel by Discipline
Architectural 6
Interior Designer 1
Other Technical 1
Administrative 2
Total in Firm 10

Work %
Housing 10
Office Buildings/Banks 25
Retail/Commercial 5
Municipal Buildings 10
Interior Architecture 10
Education/Academic Buildings 5
Rehab/Maintenance 25
Recreational 10

Minnesota Zoological Garden, Apple Valley, MN; Hyatt Regency Hotel, Minneapolis, MN; NWNL Parking Ramp, Minneapolis, MN; Northwestern Bank Operations Center, Minneapolis, MN; Bolander Office Building, St. Paul, MN; Medicine Lake Regional Park, Plymouth, MN

**PIEPER-RICHMOND
ARCHITECTS, INC.**

200 Northeast Professional Bldg.
120 First St. N.E.
Rochester, MN 55901
507/288-1839
Established 1966

Kenneth C. Pieper AIA
Robert E. Richmond AIA

Firm Personnel by Discipline
Architectural 2
Other Technical 1
Administrative 1
Total in Firm 4

Work %
Housing 5
Office Buildings/Banks 5
Retail/Commercial 5
Industrial/Manufacturing 25
Churches/Worship 5
Municipal Buildings 10
Interior Architecture 20

Education/Academic Buildings 5
State and Federal Armories 20

Armed Forces Center, Rochester, MN; National Guard Armory, Jackson, MN; Law Enforcement Center, Rochester, MN; Addition to YM-YWCA, Rochester, MN; Ellsworth Multiple Housing, St. Charles, MN

**PLANNING AND
DESIGN INC.**

354 Grain Exchange Building
Minneapolis, MN 55415
612/339-4530
Established 1978

Loren D. Hoseck AIA

Firm Personnel by Discipline
Architectural 1
Interior Designers 5
Other Technical 1
Administrative 1
Total in Firm 7

Work %
Interior Architecture 100

Honeywell, Inc., Corp. Computer Facility, Minneapolis, MN; Vertimag Systems Inc., Minneapolis, MN; Medtronic, Minneapolis, MN; Honeywell, Residential Division, Minneapolis, MN; Cardiacare Corp., New York, NY; Oppenheimer, Wolff, Foster, Shepard and Donnelly Attorneys, Minneapolis

**POPE ASSOCIATES
INC.**

533 St. Clair Avenue
St. Paul, MN 55102
612/291-8894
Established 1975

Robert L. Pope PE, AIA
Jon R. Pope AIA
Daniel M. Klecker

Firm Personnel by Discipline
Architectural 12
Administrative 2
Total in Firm 14

Work %
Housing 20
Office Buildings/Banks 15
Retail 10
Industrial/Manufacturing 40
Medical Facilities/Health Care 3
Restoration/Preservation 2
Municipal 3
Interior Architecture 2
Education 5

Hoffman Electric/Nu Comp Office Bldg., Roseville, MN; North Ridge Care Center, New Hope, MN; Control Data EMC Lab, Taylors Falls, MN; Chaska Elderly Housing, Chaska, MN; Roseville Office Bldg., MN; Osmonics, Inc. Office and Manufacturing, Minnetonka, MN

**PETER RACCHINI AND
ASSOCIATES,
ARCHITECTS**

2150 3rd Street
White Bear Lake, MN 55110
612/429-5376
Established 1963

Peter Racchini AIA

Firm Personnel by Discipline
Architectural 2
Total in Firm 2

Work %
Housing 10
Retail/Commercial 10
Industrial 5
Churches/Worship 20
Municipal Buildings 40
Education 15

Mille Lacs County Area DAC, Milaca, MN; Isanti Fire Station & City Hall, MN; Lexington Municipal Liquor Store, MN; Christ Evangelical Lutheran Church Addition, North St. Paul, MN; Val-Croix Condominiums, Stillwater, MN; Racchini Ecology House, Stillwater, MN

**RAFFERTY,
RAFFERTY,
MIKUTOWSKI, RONEY
& ASSOCIATES, INC.**

352 Wacouta
St. Paul, MN 55102
(612) 224-4831
Established 1962

George E. Rafferty FAIA
Richard J. Rafferty AIA
Frank Mikutowski
Craig E. Rafferty AIA
Craig D. Roney AIA

Firm Personnel by Discipline
Architectural 10
Planner 1
Administrative 2
Total in Firm 13

Work %
Housing 10
Office Buildings/Banks 20
Retail/Commercial 10
Medical/Health Care 10
Churches/Worship 20
Restoration/Preservation 20
Interior Architecture 10

Como Zoo, Large Cat Exhibit and Marine Mammal Building, St. Paul, MN; Union Depot Restoration, St. Paul, MN; Garfield School Empty Nest Housing, St. Paul, MN; American Beauty Macaroni Building Renovation, St. Paul, MN

RAMBO LOGAN SLOAT

5100 Thimsen Avenue
Minnetonka, MN 55343
612/474-4109
Established 1976

Logan N. Johnson
Lynn D. Sloat AIA

Firm Personnel by Discipline
Architectural 2
Administrative 1
Total in Firm 3

Work %
Housing 10
Office Buildings/Banks 50
Retail/Commercial 10
Industrial 10
Medical 10
Municipal 10

Burwell Residence, Orono; Apple Valley Health Care Center, MN; Twin Birch Health Care Center, Spring Park, MN; Mr. L's Restaurant and Club, Sherman, TX; Zycad Office Interior, St. Paul, MN

RALPH RAPSON & ASSOCIATES, INC.

1503 Washington Avenue South
Minneapolis, MN 55454
(612) 333-4561
Established 1954

Ralph Rapson FAIA

Firm Personnel by Discipline
Architectural 2
Administrative 1½
Total in Firm 3½

Work %
Housing 35
Office Buildings/Banks 15
Churches/Worship 10
Restoration/Preservation 10
Municipal Buildings 5
Interior Architecture 5
Solar/Earth Sheltered Planning 5
Education/Academic Buildings 10

Cedar Square West, Minneapolis, MN; U. of MN Performing Arts Center, Minneapolis, MN; U. of MN at Morris Performing Arts Center, Morris, MN; Tew Residence, Minneapolis, MN; Recreation Facilities Building, U. of Southern Illinois, Carbondale, IL

REESE DESIGN

Suite 140 E
9100 W. Bloomington Freeway
Bloomington, MN 55431
612/884-1172
Established 1981

Frank L. Reese AIA

Firm Personnel by Discipline
Architectural 2
Total in Firm 2

Work %
Housing 20
Office Buildings/Banks 15
Retail 15
Industrial 15
Medical 5
Restoration/Preservation 5
Municipal Buildings 5
Interior Architecture 5
Solar/Earth Sheltered Land Planning 10

Pennock Place Cond. Apts, Apple Valley, MN; Willow Grove Shopping Center, Plymouth, MN; Interplastic Manufacturing, South Bend, IN; West Creek II Office Building, Medina, MN; Academy Ridge Apartments, Apple Valley, MN; Condo Office Park, Eden Prairie, MN

RIEKE CARROLL MULLER ASSOCIATES, INC.

1011 First Street South
P.O. Box 130
Hopkins, MN 55343
612/935-6901
Established 1962

R.C. Robertson PE
W. Hennemuth AIA
C. Barger PE
P. Kaeding PE
H. Koutsoumbos PE
R. Roskopf PE

Firm Personnel by Discipline
Architectural 7
Engineering 22
Landscape Architects 1
Other Technical 15
Administrative 6
Total in Firm 51

Work %
Housing 30
Office Buildings/Banks 15
Industrial 10
Medical 10
Restoration/Preservation 15
Municipal Buildings 10
Prime Engineering 5
Landscape Architecture 5

Parkview Clinic, Eden Prairie, MN; Assumption Nursing Home, Cold Spring, MN; Renaissance Apartments Rehabilitation, Hopkins, MN; John Paul Apartments Elderly Housing, Cold Spring, MN; Ridgedale Office Center, Minnetonka, MN; City Hall Remodeling, Winthrop, MN

ROCKEY & CHEEVER ARCHITECTS

300 Martin Building
Mankato, MN 56001
507/345-3577
Established 1878

Walter B. Cheever AIA, CSI
Gerhard Teschner
A. David Asleson

Firm Personnel by Discipline
Architectural 3
Administrative 1
Total in Firm 4

Work %
Housing 20
Office Buildings/Banks 40
Churches 5
Restoration/Preservation 5
Education 30

HECO Building, Mankato, MN; Swimming Pool Addition and Auditorium Renovation, St. Peter, MN; Elementary School, St. James, MN; Northwestern National Bank, Mall facility, Mankato, MN; Federal Land Bank, Mankato, MN

DAVID TODD RUNYAN AND ASSOCIATES, INC.

2412 Valentine Avenue
St. Paul, MN 55108
612/645-2700
Established 1973

David T. Runyan AIA
Gary J. Vogel AIA

Firm Personnel by Discipline
Architectural 5
Interior Designers 1
Administrative 1
Total in Firm 7

Work %
Housing 10
Office Buildings/Banks 35
Retail/Commercial 25
Industrial 25
Medical 5

Production Service Building, Deluxe Check Printers, Shoreview, MN; Ridgehaven Mall, Dayton Hudson Properties, Minnetonka, MN; Corporate Hqtrs., Novus, Inc., Bloomington, MN; Columbia Heights Office Center, MN; Woodbridge Business Center, Minnetonka, MN; Columbia Heights Mall, MN

RUST ARCHITECTS

2179 4th Street
Suite 3-A Avalon Mall
White Bear Lake, MN 55110
612/429-1913
Established 1980

William E. Rust AIA

Firm Personnel by Discipline
Architectural 1½
Administrative 1-1/2
Total in Firm 3

Work %
Housing 10
Office Buildings/Banks 10
Retail/Commercial 10
Industrial 10
Churches/Worship 10
Municipal Buildings 10
Interior Architecture 3
Solar/Earth Sheltered Education 1
Energy 1

Avalon Mall, White Bear Lake, MN; Nelson Bros. Construction Condo Documents, St. Paul, MN; St. John's Lutheran Church Addition, Withee, WI; Plantenberg Residence, Eagan, MN; Woolsey Residence Addition, White Bear Lake, MN; Energy Analysis, Montgomery School District, MN

ROBERT Y. SANDBERG & ASSOCIATES, INC.

505 East 26th Street
Hibbing, MN 55746
218/263-7553
Established 1955

Robert Y. Sandberg AIA

Firm Personnel by Discipline
Architectural 2
Total in Firm 2

	Work %
Retail/Commercial	10
Medical/Health Care	45
Churches/Worship	5
Municipal Buildings	20
Interior Architecture	5
Solar/Earth Sheltered	5
Education/Academic Buildings	10

Minnesota Power Service Center, Coleraine, MN; Northland Mental Health Center, Grand Rapids, MN; Ely Bloomenson Community Hospital Addition, Ely, MN; Remodeling Itasca Memorial Hospital, Grand Rapids, MN; Addition-Remodeling First Federal Savings and Loan, Grand Rapids, MN; Boentje Residence, Eshquagame-Biwa-bik, MN

RICHARD SCHWARZ/NEIL WEBER, INC.

3601 Park Center Blvd.
Minneapolis, MN 55416
612/925-3542
Established 1970

Richard J. Schwarz AIA
Neil Weber AIA

Firm Personnel by Discipline
Architectural 5
Total in Firm 5

	Work %
Housing	25
Office Buildings/Banks	20
Retail/Commercial	15
Restoration/Preservation	10
Municipal Buildings	15
Solar/Earth Sheltered	15

The Rivers Condominium, St. Paul, MN; Adams Hill Park Building, Richfield, MN; Mankato Municipal Garage Bldg., Mankato, MN; Brooklyn Executive Plaza Office Buildings, Brooklyn Park, MN; Linden Hills Townhouses and Cooperative, Minneapolis, MN; Minnetonka Yacht Club Rehabilitation, Deephaven, MN

LAWRENCE SEIBERLICH, ARCHITECT, PLANNER, FUTURIST AFFILIATE OF CENTRUM

104 West Franklin Avenue
Minneapolis, MN 55404
612/870-0267

Established 1972

Lawrence Seiberlich AIA
Total Staff 1

	Work %
Housing	30
Office/Commercial	25
Planning	30
Future Studies	15

Foley Woods Housing Community, Coon Rapids, MN; South Oaks, 1,650 Dwelling Units, Savage, MN; Roseville State Bank, Arden Hills Office, MN; Grand Rapids Central School, Future Studies and Building Analysis, Grand Rapids, MN; Historic Restoration, 461 Fort Road Office Building, St. Paul, MN

SESSING ARCHITECTS, INC.

424 Hamm Bldg.
St. Paul, MN 55102
612/228-9128
Established 1967

Norman R. Sessing AIA

Firm Personnel by Discipline
Architectural 3
Administrative 1
Total in Firm 5

	Work %
Office Buildings/Banks	30
Industrial/Manufacturing	20
Churches/Worship	40
Municipal Buildings	10

Reroofing State Capitol Building, State of Minnesota; Minnesota South District Office Building, Burnsville, MN; Concordia College Faculty Space, St. Paul, MN; Faribault State Hospital, Reroofing, Faribault, MN; Blackduck State Bank, Blackduck, MN; Roseville Lutheran Church, Roseville, MN

SETTER, LEACH & LINDSTROM, INC.

1011 Nicollet Mall
Minneapolis, MN 55403
612/338-8741
Established 1917

A. J. Wilwerding AIA
Richard Vasatka PE
Basil Filonowich AIA
George Theodore PE
Kaare O. Faber PE
William Scott AIA

Firm Personnel by Discipline
Architectural 31
Engineering 48
Landscape Architects 1
Planners 1
Other Technical 2
Administrative 19
Total in Firm 102

	Work %
Office Buildings/Banks	19
Retail/Commercial	12
Industrial/Manufacturing	30
Medical/Health Care	15
Restoration/Preservation	2
Municipal Buildings	10
Interior Architecture	3
Solar/Earth Sheltered	1
Education/Academic	7
Planning	1

Blake Schools, Mpls., MN; Medical Office Building & Galleria, St. Paul, MN; Target Stores, Inc., various locations nationwide; Southern Region Distribution Center, Maumelle, AR; Coca-Cola Bottling Facility, Eagan, MN; St. Louis Park Medical Center, International Diabetes Center, St. Louis Park

SHANK KLEINEMAN DEZELAR ARCHITECTS

1885 University Avenue
St. Paul, MN 55104
612/644-6699
Established 1977

Fred J. Shank AIA
Steven A. Kleineman AIA
Gerald G. DeZelar AIA

Firm Personnel by Discipline
Architectural 3
Other Technical 1
Administrative 1
Total in Firm 5

	Work %
Housing	10
Office Bldgs/Banks	15
Retail/Commercial	10
Industrial/Manufacturing	20
Restoration/Preservation	20
Municipal	10
Interior Architecture	5
Solar/Earth Sheltered	10

Chemical Engineering Center, Economics Laboratory, Inc., Eagan, MN; Margaret Recreation Center and Wilder Recreation Center, St. Paul, MN; Washington County Human Services, Inc., Oakdale, MN; Commercial State Bank Skyway Facility, St. Paul, MN; Iris Park Place Office Building Renovation, St. Paul, MN

SHEA ARCHITECTS, INC.

808 F&M Marquette Bank Building
Minneapolis, MN 55402
612/339-2257
Established 1978

David A. Shea III AIA
Steven Haas

Firm Personnel by Discipline
Architectural 6
Interior Designers 1
Administrative 3
Total in Firm 10

	Work %
Housing	5
Office Buildings/Banks	25
Retail/Commercial	10
Industrial/Manufacturing	5
Restoration/Preservation	20
Municipal Buildings	5
Interior Architecture	30

Nicollet Island Inn, Minneapolis, MN; F&M Marquette National Bank, Bank remodeling, Minneapolis, MN; Leeann Chin Chinese Cuisine-Restaurant and addition, Plymouth, MN; Investors Diversified Services, Inc.—608 Building, Minneapolis, MN; Golden Valley State Bank, Golden Valley, MN; Car Quest—Office and warehouse, Lakeville, MN

SHELTER RESOURCES, INC.

1219 Marquette Avenue South
Minneapolis, MN 55403
612/333-6837
Established 1978

Michael D. Sharratt AIA

Firm Personnel by Discipline
Architectural 4
Administrative 1
Total in Firm 5

	Work %
Housing	40
Office Buildings/Banks	40
Retail/Commercial	10
Industrial/Manufacturing	5
Restoration/Preservation	90
Interior Architecture	5
Solar/Earth Sheltered	100

1201 Marquette Avenue Renovation, Minneapolis, MN; J. S. Elliot Condominiums, Minneapolis, MN; Madison School Renovation and Townhouses; 808 Nicollet Mall Renovation, Minneapolis, MN

JOHN SKUJINS ARCHITECT

2300 East 22nd Street
Minneapolis, MN 55406
612/340-0590
Established 1976

John Skujins AIA

	Work %
Housing	50
Office Buildings/Banks	5
Retail/Commercial	15
Churches/Worship	15
Restoration/Preservation	5
Solar/Earth Sheltered	50
Education/Academic	10

Solar House, Minneapolis, MN; Camden Mall, Minneapolis, MN; Lyn Park Solar House; Solar Addition to Unity Christ Church, Minneapolis, MN

SMILEY GLOTTER ASSOCIATES

1021 LaSalle Avenue
Minneapolis, MN 55403
612/332-1401
Established 1925

Saul C. Smiley	FAIA, RAIC, AHA
Joel H. Glotter	AIA, AHA, AHP
Ralph Y. Laiderman	AIA
Garold R. Nyberg	AIA, ASID
Ray Geiger	AIA
Firm Personnel by Discipline	
Architectural	23
Engineering	1
Landscape Architect	1
Interior Designers	3
Planners	1
Administrative	3
Total in Firm	32

	Work %
Housing	3
Office Buildings/Banks	10
Retail/Commercial	5
Medical/Health Care	50
Churches/Worship	2
Restoration/Preservation	5
Municipal Buildings	5
Interior Architecture	10
Education/Academic Bldg.	10

Smith Hall, University of Minnesota, Minneapolis, MN; Eden Prairie Community Center, Eden Prairie, MN; Veterans Administration Hospital, Minneapolis, MN; First National Bank, Oelwein, IA; St. Francis Regional Medical Center, St. Louis Park, MN; Redwing City Hall Renovation, MN; St. Louis Park Medical Center, St. Louis Park, MN

W. SMITH ARCHITECTS & ENGINEERS

525 Junction Street
Winona, MN 55987
507/452-4196
Established 1954

W. Wayne Smith	AIA
Willard W. Ward	

	Work %
Office Buildings/Banks	40
Industrial	40
Municipal Buildings	10
Solar/Earth Sheltered	10

Winona County Law Enforcement Center, Winona, MN; Houston County Group Home, La Crescent, MN; Winona Area Technical Institute, Winona, MN; Sauer Memorial Home, Winona, MN; Lamberton Home Remodeling, Winona, MN; A&M Apartments, Mabel, MN

SMSQ, INC.

(Sovik, Mathre, Sathrum, Quanbeck, Architects & Planners)
205 South Water Street
P.O. Box 390
Northfield, MN 55057
507/645-4461
612/332-8679
Established 1949

Edward A. Sovik	FAIA
Sewell J. Mathre	AIA
Clinton L. Sathrum	AIA
Robert M. Quanbeck	AIA
Terrance J. Schlunk	AIA

Firm Personnel by Discipline	
Architectural	9
Landscape Architects	1
Other Technical	2
Administrative	4
Total in Firm	16

	Work %
Housing	10
Office Buildings/Banks	5
Medical/Health Care	10
Churches/Worship	25
Restoration/Renovation	5
Interior Architecture	5
Education/Academic Bldgs	40

Dormitory, St. Olaf College, Northfield, MN; Jones-Harrison Home, Minneapolis, MN; St. Olaf College Old Main Restoration, Northfield, MN; Our Savior's Lutheran Church, Jackson, MN; Christiansen Hall of Music, St. Olaf College, Northfield, MN; Halenbeck Hall Addition, St. Cloud State University, St. Cloud, MN

SMUCKLER CORPORATION

1600 Mount Curve
Minneapolis, MN 55403
612/377-7553
Established 1978

Jack Smuckler	AIA
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Firm Personnel by Discipline	
Architectural	3
Interior Designer	1
Administrative	1
Total in Firm	5

	Work %
Housing	75
Retail	15
Restoration	10

Fingerhut Residence, Minneapolis, MN; Shaver Residence, Eden Prairie, MN; Goodman Residence, Minnetonka, MN; E. W. Blanch Residence, Medina, MN; Allan F. Art Gallery, Edina, MN; Minnesota Malting Corporate Office, Cannon Falls, MN

THE STAGEBERG PARTNERS, INC.

115 Fourth Street North
Minneapolis, MN 55401
(612) 375-1399
Established 1982

James Stageberg	FAIA
Firm Personnel by Discipline	
Architectural	10
Planners	1
Other technical	2
Administrative	3
Total in Firm	15

	Work %
Housing	30
Office Buildings/Banks	10
Retail/Commercial	10
Medical Facilities	5
Churches/Worship	5
Restoration/Preservation	5
Municipal Buildings	10
Interior Architecture	5
Solar/Earth Sheltered	5
Education/Academic Buildings	15

Centre Village Parking Ramp, Offices and Condominiums, Minneapolis, MN; Brookdale Hennepin Area Library and Service Center, MSAIA Award 1982; Perry's Pizza in Dinkytown, Minneapolis, MN; IBM Rochester, Administration and Research Buildings, Rochester, MN; The Crossings Condominiums and Commercial Space, Minneapolis, MN; Physicians Plaza, Aberdeen, South Dakota

THOMAS H. STAHL, INC., ARCHITECTS

200 West Old Shakopee Road
Bloomington, MN 55420
612/881-5610
Established 1966

Thomas H. Stahl	AIA
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Firm Personnel by Discipline	
Architectural	4
Administrative	1
Total in Firm	5

	Work %
Housing	10
Office Buildings/Banks	20
Retail/Commercial	15
Industrial/Manufacturing	15
Churches/Worship	20
Municipal Buildings	10
Planning	10

St. Peter's Catholic Church, Richfield, MN; Normandale Hylands United Methodist Church, Bloomington, MN; Office Building Cherne Contracting Corp., Edina, MN; Bloomington Ice Garden & Addition, Bloomington, MN; St. Alice Catholic Church, Pequot Lakes, MN; River Bluff Estates/Walton Oaks Subdivisions, Bloomington, MN

D. E. STANIUS & ASSOCIATES, INC.

1831 East 8th Street
Duluth, MN 55812
218/724-8578
Established 1976

Donald E. Stanius	AIA
Firm Personnel by Discipline	
Architectural	5
Administrative	2
Total in Firm	7

	Work %
Housing	25
Retail/Commercial	64
Institutional	4

Bayfield County Law Enforcement Center, Washburn, WI; Scattered Duplexes, H.R.A., Duluth, MN; Vo-Tech Addition Northwestern High School, Maple, WI; Midtowne Manor II High-Rise, H.R.A., Duluth, MN; Tri-Towers Waterline Replacement, H.R.A., Duluth, MN; Bayfield County Nursing Care Facility, Washburn, WI

STEGNER-HENDRICKSON

222 Laurel
Brainerd, MN 56401
218/829-2255
Established 1955

L. E. Stegner	AIA
W. C. Hendrickson	AIA, PE

Firm Personnel by Discipline	
Architectural	4
Total in Firm	4

	Work %
Housing	10
Office Buildings/Banks	10
Retail/Commercial	10
Restoration/Preservation	10
Education/Academic	50

Rehabilitation of S&L Building, Hutchinson, MN; Addition to Cass Lake High School, MN; Elks Club, Brainerd, MN; 222 Office Building, Brainerd, MN; Wedelstaedt Residence, Gull Lake, MN; Combined Support Maintenance Shops, Camp Ripley, MN

M. STENERSON, ARCHITECT

205 East Walnut Street
Stillwater, MN 55082
612/439-5329
Established 1975

Maurice Stenson	AIA
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Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

Work %

Housing	60
Office Buildings/Banks	10
Retail/Commercial	20
Restoration/Preservation	10

**DAVID STOVALL
ARCHITECT**

P.O. Box 178	
Excelsior, MN 55331	
612/474-1056	
Established 1980	
David Stovall	AIA

Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

Work %

Housing	50
Restoration/Preservation	10
Education/Academic	20
Recreation Buildings	20

Interpretive Center and Contact Station, Afton State Park, Afton, MN; Handicap Accessibility Alterations, Westbrook Hall, University of Minnesota, Minneapolis, MN; James Lake House, Lighthouse Point, FL; James Hannah House, Tonka Bay, MN; Braced Timber Frame House, Tonka Bay, MN

**SURI ARCHITECTS,
INC.**

1150 Benton Way	
St. Paul, MN 55112	
612/483-6583	
Established 1981	

Shashi M. Suri	AIA
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Work %

Housing	10
Office Buildings/Banks	25
Industrial/Manufacturing	25
Churches/Worship	10
Restoration/Preservation	5
Education/Academic	25

Northwestern Bell Community Dialing Office, North Branch, MN; Northwestern College, Roseville, MN; India Institute, Brooklyn Park, MN

**TEAM 70 ARCHITECTS,
INC.**

(see Bernard Jacob Architect)

**THOMAS AND VECCHI
INC.**

1518 East Superior Street	
Duluth, MN 55812	
(218) 724-8802	
Established 1971	

John Ivey Thomas	AIA
Thomas A. Vecchi	AIA

Work %

Housing	5
Retail/Commercial	80
Industrial	15

Pioneer Hall Convention Center Skywalk System, Duluth; University of Minnesota Health Science Library, Duluth; Koochiching County Courts, Law Enforcement and County Jail; Scolastica Nursing Home; Lake Superior Plaza Office Building, Shops and Underground Parking Garage; DTA Offices, Shops and Bus Garage

**THORSEN &
THORSHOV
ASSOCIATES, INC.**

1000 Title Insurance Building	
Minneapolis, MN 55401	
612/339-7671	
Established 1957	

Willard L. Thorsen	AIA
Roy N. Thorshov	FAIA
William L. Fay	AIA

Firm Personnel by Discipline	
Architectural	7
Administrative	3
Total in Firm	10

Work %

Housing	5
Office Buildings/Banks	15
Retail/Commercial	40
Restoration/Preservation	5
Municipal Buildings	10
Interior Architecture	2
Solar/Earth Sheltered	3
Education	20

Roseville Public Schools, Roseville, MN; Marshall Square, Marshall, MN; Plymouth City Hall, Plymouth, MN; Basic Medical Sciences Building, University of Minnesota, Duluth, MN; Oliver Hudson Kelley Interpretive Center, Elk River, MN; Burbank Livingston Griggs House Restoration, St. Paul, MN

**LEE TOLLEFSON
ARCHITECTS, INC.**

2001 University Avenue S.E.	
Minneapolis, MN 55414	
612/623-1800	
Established 1976	

Lee Tollefson	AIA
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Firm Personnel by Discipline	
Architectural	1
Administrative	1
Total in Firm	2

Work %

Housing	65
Office Buildings	10
Retail/Commercial	10
Industrial	5
Restoration/Preservation	5
Solar/Earth Sheltered	5

Nordstrand Office Building, Hudson, WI; Frisco Professional Center, Frisco, CO; Women's Advocates House, St. Paul, MN; The Lakes Townhouses, Mpls., MN; 2109 Blaisdell Housing, Mpls., MN; Schmit Residence, Hudson, WI.

**TOLTZ, KING,
DUVALL, ANDERSON
& ASSOCIATES INC.**

2500 American National Bank Building	
St. Paul, MN 55101	
612/292-4400	
Established 1910	

Robert R. Ryder	PE
Duane T. Prew	PE
Wayne A. Olson	AIA
James E. Voyer	PE
Walter W. Thorpe	PE
DuWayne R. Kasma	PE

Firm Personnel by Discipline	
Architectural	15
Engineering	59
Landscape Architects	2
Other Technical	48
Administrative	18
Total in Firm	142

Work %

Housing	15
Industrial	25
Restoration/Preservation	10
Municipal Buildings	15
Education	20
Civil & Environmental Eng.	25

Comprehensive Modernization Program, Housing and Community Facilities, Community Development Agency, Minneapolis; Physical Education and Athletic Complex, Gustavus Adolphus College, St. Peter, MN; Waste Water Treatment Facilities, Albert Lea, MN; District Heating Plant and Distribution System, Energy Park, St. Paul, MN; Pioneer Building Restoration, St. Paul, MN; Aerial Port Training Facility, Minnesota; Air National Guard, Minneapolis, MN.

**TRAYNOR,
HERMANSON & HAHN
ARCHITECTS INC.**

311 Medical Arts Building	
St. Cloud, MN 56301	
612/251-8760	
Established 1949	

Gilbert F. Hahn	AIA
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Firm Personnel by Discipline	
Architectural	4
Administrative	2
Total in Firm	6

Work %

Housing	25
Office Buildings/Banks	10
Retail/Commercial	5
Medical	10
Churches/Worship	5
Restoration/Preservation	3
Solar/Earth Sheltered	2
Education	30
Motels	10

Building Trades Addition to AVTI, St. Cloud, MN; Stevens County Developmental Achievement Center, Morris, MN; Thrifty Scot Motel, Bloomington, MN; St. Boniface Church, Cold Spring, MN; Quadrangle Renovation, St. John's University, Collegeville, MN; Elderly Housing, Benson, MN

V

GARY TURPENING & ASSOCIATES, ARCHITECTS & PLANNERS

14500 Burnhaven Dr.
Burnsville, MN 55337
612/435-5354
Established 1982

Gary P. Turpening	AIA
Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	20
Retail/Commercial	20
Industrial/Manufacturing	20
Churches/Worship	20
Restoration/Preservation	20

Westchester Townhomes, Burnsville, MN; Pier 1, Rochester, MN; Breckner Residence, Burnsville, MN; Office Condominium Project, Burnsville, MN; Addition to Knudson Residence, Edina, MN; Design for 2 Story Restaurant, Durango, CO

TYSON ASSOCIATES, INC.

711 West Lake Street
Minneapolis, MN 55408
612/827-5484
Established 1977

Jay W. Tyson	AIA
Firm Personnel by Discipline	
Architectural	2
Administrative	1
Total in Firm	3

	Work %
Housing	50
Office Buildings/Banks	30
Interior Architecture	15
Education	15

Addition to Red Cross Building, Minneapolis, MN; Telephone Building, Redwood Falls, MN; Phone Center Store, Town Square, St. Paul, MN; Interior Remodeling Midway Telephone Building; ESS Building for Northwestern Bell, Mpls; 450 Units of Housing Rehab, Sumner Field, Minneapolis, MN

WILLIAM A. VIEVERING, ARCHITECT, INC.

1939 Munster Ave.
St. Paul, MN 55116
612/699-1294
Established 1971

Wm. A. Vievering	AIA
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Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	40
Office Buildings/Banks	5
Retail/Commercial	10
Medical/Health Care	5
Churches/Worship	15
Restoration/Preservation	5
Municipal Buildings	5
Interior Architecture	5
Solar/Earth Sheltered	5
Education/Academic	5

Five O'Clock Restaurant, Cumberland, WI; Thomas More Retreat Center, Webster, WI; Townhouse Complex, Cumberland, WI; Cumberland Federal Savings & Loan, Cumberland, WI; Jacobson Optometrist Building, Cumberland, WI; First United Methodist Church, Cumberland, WI

VOIGT & FOURRE, INC. ARCHITECTS

2109 Grand Ave.
St. Paul, MN 55105
612/690-2451
111 W. Vine Street
Owatonna, MN 55060
Established 1954

James D. Voigt	AIA
Daniel W. Fourré	AIA

Firm Personnel by Discipline	
Architectural	3
Administrative	1
Total in Firm	4

	Work %
Housing	10
Office Buildings	45
Industrial	10
Medical/Health Care	10
Churches/Worship	20
Municipal	2
Education/Academic	3

Byrne Residence, St. Paul; 4-H Activities Building, Steele County; MN Federal Savings, New Ulm, MN; MN Federal Savings, St. Cloud, MN; St. Stephen's Church, Anoka, MN; St. Paul Seminary Refectory, St. Paul, MN

W

WATERS, CLUTS & O'BRIEN, INC.

7470 Market Place Drive
Eden Prairie, MN 55344
612/941-4822
Established 1978

Keith Waters	
Brian Cluts	
Daniel O'Brien	AIA

Firm Personnel by Discipline	
Architectural	6
Administrative	2
Total in Firm	8

	Work %
Housing	30
Office Buildings	25
Medical	20
Churches/Worship	5
Solar/Earth Sheltered	10
Construction Management	10

Lutsen Mountain Village—Resort Condominiums and Townhouses; Lake Ridge Office Park—Office Condominiums, Eden Prairie; BurnHaven Atrium Office Building, Burnsville; St. Paul Surgical Center, St. Paul, MN; Oliverson Residence, Eden Prairie, MN; Eden Prairie Community Church, Eden Prairie, MN

JOHN WEIDT ASSOCIATES, INC.

110 West 2nd Street
Chaska, MN 55318
612/448-6464
Established 1977

John L. Weidt	AIA
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Firm Personnel by Discipline	
Architectural	2
Other Technical	1
Administrative	1
Total in Firm	4

	Work %
Energy Consulting	70
Housing	27
Restoration/Preservation	3
Solar/Earth Sheltered	27

Knodt Residence, Chaska; "The Store", Chaska, MN; Kasak Residence, Champaign, IL; Anderson Concept IV, Attached Sunspace Program, Bayport, WI; Hultigran Residence, Victoria, MN

FREDRIC WEMLINGER AND ASSOCIATES, INC.

Box 519
1521 Northway Drive
St. Cloud, MN 56302
612/253-2100
Established 1968

Fredric Wemlinger	AIA
-------------------	-----

Firm Personnel by Discipline	
Architectural	3
Engineering	3
Administrative	3
Total in Firm	9

	Work %
Housing	5
Office Buildings	20
Retail	15
Industrial	15
Medical	3
Churches	3
Restoration/Preservation	10
Municipal Buildings	10
Solar/Earth Sheltered	10
Education/Academic	5

Sherburne County Law Enforcement and Judicial Facility, Elk River, MN; Corporate Office, Bankers Systems Inc., St. Cloud, MN; 1521 Northway Professionals, Condominium Offices, St. Cloud, MN; Vision-Ease Office & Manufacturing Addition, St. Cloud, MN

RICHARD A. WHEELER AIA, ARCHITECT

305 Cimarron Road, Apple Valley, MN 55124
(612) 454-6359
Established 1981

Richard A. Wheeler	AIA
--------------------	-----

Firm Personnel by Discipline	
Architectural	1
Total in Firm	1

	Work %
Housing	30
Office Buildings	5
Retail/Commercial	35
Industrial	30

**NICK-KAGERMEIER-
SKAAR ARCHITECTS,
INC.**

26 South Second Street
Mankato, MN 56001
607/388-6271
Established 1932

James H. Kagermeier	AIA
Roger J. Skaar	AIA

Firm Personnel by Discipline	
Architectural	2
Interior Designers	1
Other Technical	1
Total in Firm	4

Work %	
Office Buildings	20
Retail/Commercial	10
Industrial	20
Medical/Health Care	10
Churches/Worship	10
Education/Academic	30

Jackson High School, Jackson, MN; First Bank Detached Unit, Mankato, MN; Spearhead Industries Warehouse; Mankato, MN; First Lutheran Church, LeSeuer, MN; Minnesota Valley Regional Library, Mankato, MN; Multi-Church Center, Mankato, MN

**WILLIAMS/O'BRIEN
ASSOCIATES, INC.**

55 South Ninth Street
Minneapolis, MN 55402
612/338-8981
Established 1962

Lorenzo D. Williams	FAIA
James W. O'Brien	AIA

Firm Personnel by Discipline	
Architectural	6
Administrative	1
Total in Firm	7

Work %	
Housing	25
Office Buildings	15
Retail/Commercial	15
Industrial	5
Restoration/Preservation	10
Municipal	10
Interior Architecture	5
Solar/Earth Sheltered	5
Education/Academic	10

Consulate Housing, U.S. Dept. of State, Kaduna, Nigeria; Findley Place Housing, Minneapolis, MN; Bridgeplace Office & Condominium Project, Minneapolis, MN; Classroom Lab & Special Purpose Lab Buildings, U of M, Waseca, MN; Child Care Center, Children's Hospital, St. Paul, MN; Learning Resource Centers, University of Minnesota, Waseca and Crookston, MN

**WINSOR/FARICY
ARCHITECTS, INC.**

28 West 5th Street
Suite 375
St. Paul, MN 55102
612/227-0655
Established 1971

Richard Faricy	FAIA
Wayne Winsor	AIA
Thomas Lynch	AIA
Eugene Nelson	AIA
Richard Dykman	AIA
Terry Wobken	AIA

Firm Personnel by Discipline	
Architectural	38
Interior Designers	2
Other Technical	4
Administrative	7
Total in Firm	51

Work %	
Housing	30
Office Buildings	30
Commercial/Retail	10
Industrial	10
Restoration/Renovation	15
Medical/Health Care	10
Solar/Earth Sheltered	40
Municipal Buildings	5
Interior Architecture	5
Education/Academic Buildings	5
Correctional	10

Landmark Center, St. Paul, MN; Mutual Service Insurance, Corporate Headquarters, St. Paul, MN; Wilder Housing, Hi-Rise & Condominiums, St. Paul, MN; Cenex Corporate Headquarters, St. Paul, MN; Energy Park Housing and Restoration, St. Paul, MN; Symphony Place Housing, Minneapolis, MN

**WIRTANEN & CLARK
ARCHITECTS INC.**

5217 Wayzata Boulevard
Minneapolis, MN 55416
612/541-9969
Established 1981

Michael D. Wirtanen	AIA
W. David Cook	AIA RAIC

Firm Personnel by Discipline	
Architectural	2
Administrative	1/2
Total in Firm	2 1/2

Work %	
Housing	10
Office Buildings	10
Retail/Commercial	30
Industrial	20
Medical/Health Care	10
Restoration	5
Churches/Worship	5
Municipal Buildings	5
Interior Architecture	5

Target Stores, Minnesota, Colorado, Texas; Haye's Residence, St. Paul, MN; Plymouth Oaks Office Park, Plymouth, MN; Timesavers, Inc., Office Addition, Crystal, MN; Continental Bank, City Center, Minneapolis, MN; Office Interiors, MEPC American Properties

**THE WOLD
ASSOCIATION**

530 Northern Federal Building
St. Paul, MN 55102
612/227-7773
Established 1968

Clark D. Wold	FAIA
Norman L. Glewwe	AIA
Michael S. Cox	AIA
Mikio Kiriara	
Kevin P. Sullivan	AIA

Firm Personnel by Discipline	
Architectural	9
Interior Designers	2
Other Technical	1
Administrative	2
Total in Firm	14

Work %	
Housing	20
Office Buildings	10
Retail/Commercial	10
Industrial	5
Restoration/Preservation	60
Municipal Buildings	5
Interior Architecture	15
Solar/Earth Sheltered	50
Education/Academic	30

Ramsey County Adult Detention Center, St. Paul, MN; Eden Prairie High School; Wayzata Schools—District wide renovation project, Plymouth, MN; Hill City School, Hill City, MN; Citizens State Bank, Milaca, MN; Colleen Loney Manor, West St. Paul, MN

**RICHARD F. ZENISEK
ARCHITECT**

1428 West 31st Street
Minneapolis, MN 55408
612/823-0917
Established 1971

Richard F. Zenisek	AIA
--------------------	-----

Work %	
Housing	40
Office Buildings	40
Retail/Commercial	20

3150 W. Calhoun Condominium, Minneapolis, MN; Clear Springs Townhomes, Minnetonka, MN; X-80 Office Building, Bloomington; Park Place Plaza, St. Louis Park, MN; Yorktown Mall, Edina, MN; Lowry Hill Manor Homes, Minneapolis, MN

**ZUBER SIRNY BAKER
STEBBINS
ARCHITECTS, INC.**

836 West 79th Street
Minneapolis, MN 55420
612/884-6204
Established 1976

Jeri E. Zuber	AIA
John E. Sirny	AIA
Wylie Baker	
Ken Stebbins	AIA

Firm Personnel by Discipline	
Architectural	4
Administrative	1
Total in Firm	5

Work %	
Housing	50
Retail/Commercial	20
Industrial	10
Restoration/Preservation	10
Solar/Earth Sheltered	10

Cook Crossing Townhouse Restoration, St. Paul, MN; Winfield Potters Restaurant, Minneapolis, MN; Administrative Services Center Remodeling, St. Paul, MN; Afton Court Townhomes, St. Paul, MN; The Dance Center of London, Edina, MN; The Bookstore, Edina, MN

continued from page 19

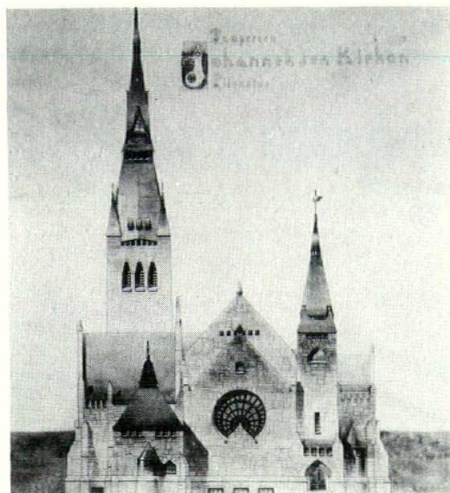
Minneapolis firm wins Missouri Law School design competition

The Leonard Parker Associates of Minneapolis, and McCoy, Hutchinson, Stone Architects of Kansas City have been selected to design the new School of Law at the University of Missouri, Columbia. The new 140,000 square foot law school building will include a working courtroom, administrative offices, classrooms and a 325,000 volume library. A brick and stone building, it will be sited between existing traditional and modern campus structures as a visual bridge between old and new architecture. Construction is slated to begin in the fall of 1984.

The high cost of excessive sprawl

According to a Metropolitan Council report, more than 60 percent of the energy consumed in the Twin Cities area is closely related to land use. Energy for residential, commercial and industrial buildings accounts for 23 percent of the area's annual energy consumption, while transportation consumes another 38 percent. The re-

port points out that moderate increases in residential density and changes in housing unit mix could save from 28 to 40 percent of household energy demand for space heating and personal automobile travel. It recommends building not just high-rise apartments, but more duplexes, quad homes, townhouses, and low-rise apartments.



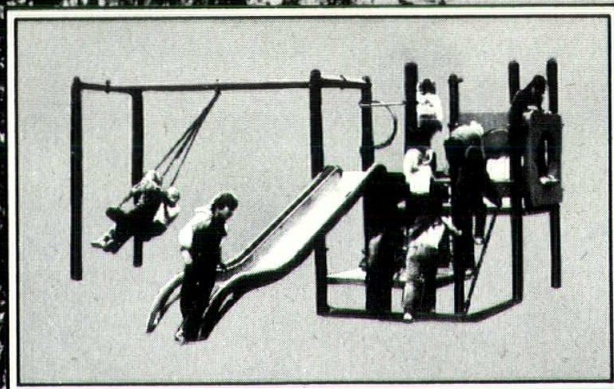
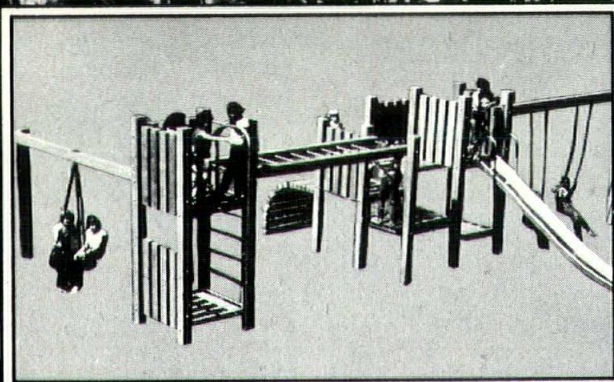
Coming events

On view at the University Gallery through May 8 is "Lars Sonck 1870-1956: Finland's Romantic Architect." The exhibition of twenty photographic

panels and seventeen original drawings of Jugendstil/Art Nouveau features some of Sonck's most notable architectural designs including St. John's Cathedral in Tampere (above), the Helsinki Stock Exchange, and the Helsinki Telephone Company building. The exhibit is presented in conjunction with Scandinavia Today-Minnesota.

The Society for Industrial Archeology, which promotes the study and preservation of the physical remnants of our technological and industrial past, will hold its annual conference in St. Paul and Minneapolis, May 12-15, 1983. Program topics include the interrelationship of architecture and the industrial process, regional bridges, Cass Gilbert's engineering in Minnesota, and architectural and engineering drawings from the railroad collections of the Minnesota Historical Society. The Cream of Wheat building and Alfred Kahn's Ford Plant will be among the buildings of architectural and engineering interest toured. For additional pre-conference or registration information, call John Wickre (612) 296-6980.

The American Solar Energy Society Annual Meeting and Solar Technologies Conference provides the nation's only multidisciplinary forum on advances in the renewable energy field. It will be held in Minneapolis May 30-June 4, 1983. The conference brings



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together researchers, professionals and manufacturers working in the field to update them on technical advances and to discuss future market prospects of energy technologies. For more information on registration on a calendar of events, contact the American Solar Energy Society, 1230 Grandview Ave., Boulder, Colorado, 80302 (303) 492-6017.



Fitness "chalet" is completed at Vinland Center

A striking new structure reminiscent of a landmark barn has been built to house boating, skiing and fitness programs for the physically handicapped at the Vinland National Center. Designed by InterDesign, Inc./Thorsen & Thorshov Associates, the cedar-shingled facility occupies a waterfront site on the organization's 175-acre prop-

erty at Lake Independence, Minnesota. The Vinland Center is modeled after a well-known health sports center in Norway and its development was initially assisted by a \$200,000 grant from Norway. A primary purpose of the Center is "to assist individuals with categorical physical handicaps or other disabilities to achieve an optimal level of health, as well as to assume increased responsibility for their own health."

Twin Cities first to adopt guidelines for "noise zones" near airports

After years of public debate on how to solve the problem of aircraft noise, the Twin Cities has become the first metropolitan area in the nation to adopt official guidelines for controlling land uses near its airports. The Metropolitan Council guidelines discourage construction of single-family homes, schools, churches and hospitals in "noise zones" close to the airports. New apartments, commercial buildings and indoor entertainment facilities will be approved if well insulated. In most areas, industrial construction will be allowed. Communities will be expected to amend their comprehensive plans and revise zoning ordinances, if necessary, to comply with land uses called for in the guidelines. They will

be assisted by the council and the Metropolitan Airports Commission, which will develop a model zoning ordinance for the communities.

One person's stress is another's zest

A recent study conducted by the University of Michigan Institute for Social Research concludes that some people thrive on stress. A group of 700 Navy enlisted men changing from military to civilian jobs after twenty years of service was surveyed to test the "person-environment fit" theory developed by Professor Emeritus John French. The essence of the theory is: "When the resources and demands of the work environment do not fit the needs and abilities of the worker, the worker develops strain leading to eventual illness." The study found that job complexity, work load, role ambiguity, and underutilization of ability created strains which were expressed by job and marital dissatisfaction, low self-esteem, anxiety, depression, irritability and somatic complaints. The data showed that a higher degree of job complexity and larger work load were associated with lower levels of strain. Two of the strongest sources of stress were role ambiguity and underutilization of abilities.

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Hospital Architecture

continued from page 37

such as McMaster, with nearly ten acres per floor, the main corridor could threaten to become 1,000 feet long. By turning it into a square—the "ring street"—we reduced the visual lengths to 250 feet. We introduced many elements to orient and divert a person using this street: courtyards which, like church steeples in a medieval town, help to keep one's bearings, as well as to create a diversion through changing forms and varying light.

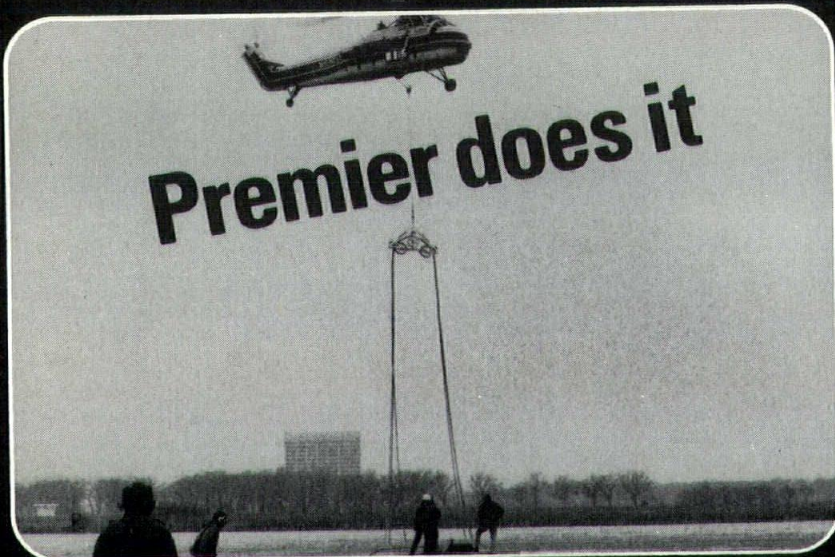
Still another important element in hospitals is the nursing unit. Here we have felt that the traditional unit, with or without a nursing station, has in fact created a physical barrier between the nurse and the patient in bed. Our approach has attempted not only to create a more efficient working pattern for the nurse, notably with shorter walkways, but also to establish the possibility of direct visual contact between the nurse and the acutely ill patient—without losing the possibility of privacy for each patient when needed. Maybe it is the Florence Nightingale ward revisited, but we feel it has been a vital step forward; indeed, it is a pattern that we have successfully repeated in many of the hospitals we have designed since McMaster.

The advantages of designing an environment that allows for adjustment in human efficiency cannot be underestimated. Some time ago a California study outlined that in any standard building the acquisition cost is 2% and its operating expense 6%—with the remaining 92% going for personnel cost. Not surprisingly, the study concluded, "A better working environment that improved worker effectiveness by only 6½% would be cost effective, even if it quadrupled building costs."

All of the elements I've noted are tools to stem the flood of unknown future changes that tend to make health sciences centers obsolete before their natural life span has been expended. Clearly, it is important in designing such centers to make compromises that will serve to accommodate relatively unknown functions in the future. And if we accept the medical prognosis that health care is to improve the quality of life, then we must not forget to introduce an emotional quality into the health care environment that helps to reinforce an improved quality of life. The idea of an efficient, functional health care machine that automatically, on a mathematical scientific basis, spews out the health of a nation has been proven

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to be the wrong prognosis: a dream that became a nightmare. By contrast the emotional response that society seeks, as found in the colonnades of the University Hospital in Augsburg, is not in conflict with functional needs but very much a part of them.

In Edmonton, for example, we separated a 1,000-bed hospital into a series of smaller 60-bed units with their own identity. Each achieves an independent hospital-like atmosphere with its own distinctive space, even its own kitchen facilities, in which a small group of people may relate to each other, contributing the personal care so essential in nursing sick people.

Such attention must also be extended to details in patients' rooms and waiting rooms, because it is at this level that people expect and search for quality health care. Such attention is not an architectural frill but a positive influence that will have as much impact on health care as the actual medical treatment. Statistics have shown, for example, that the mental state in which a patient enters the operating room has a measurable effect on his or her recovery rate. Can we then afford to neglect the waiting spaces provided (or, as in many cases, *not* provided) for patients waiting to be rolled into the operating room? Similarly, a respect for, and response to, human emotion must be developed in all other areas of health care if we mean to create a quality of service.

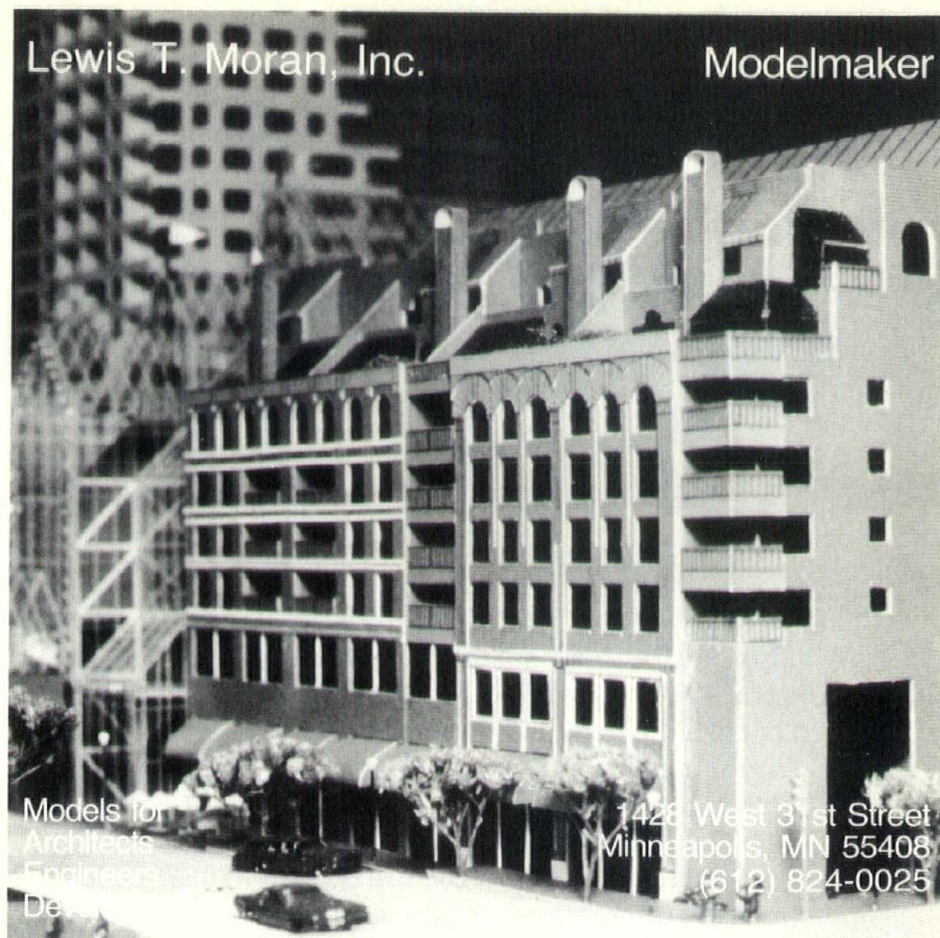
In the architecture of hospitals as elsewhere, form not only follows function but is also an expression of image. In fact, image may usurp function, as we can recognize in our desire to retain Victorian buildings and make function conform to their existing forms. Thus we see that systems are not the end in architecture but the beginning, in the same way that Gothic architects used a building system and transformed it into an emotional response.

What emotional response are we looking for today? Is it not to create an environment that responds to human needs? An architecture that allows us to be active and contemplative? Neither the inspiration of Gothic nor the monumentality of Renaissance, but rather an environment that enhances our life and manifests the equality and freedom of the individual.

The author is senior partner in the Toronto firm Zeidler Roberts Partnership/Architects. In addition to his international prominence as a designer of hospitals, he was architect for Eaton Centre and is currently designing major elements of Expo '86 in Vancouver, B.C.

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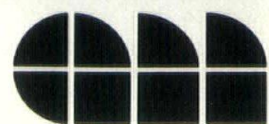
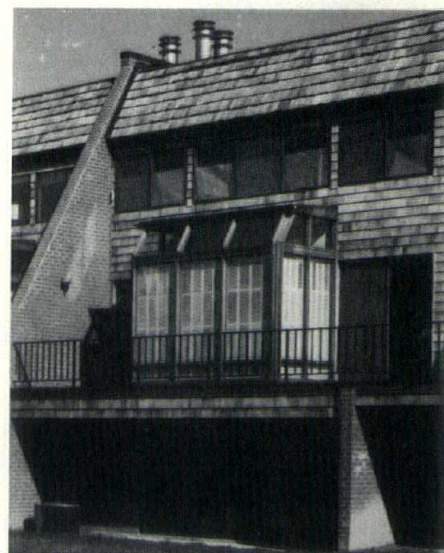
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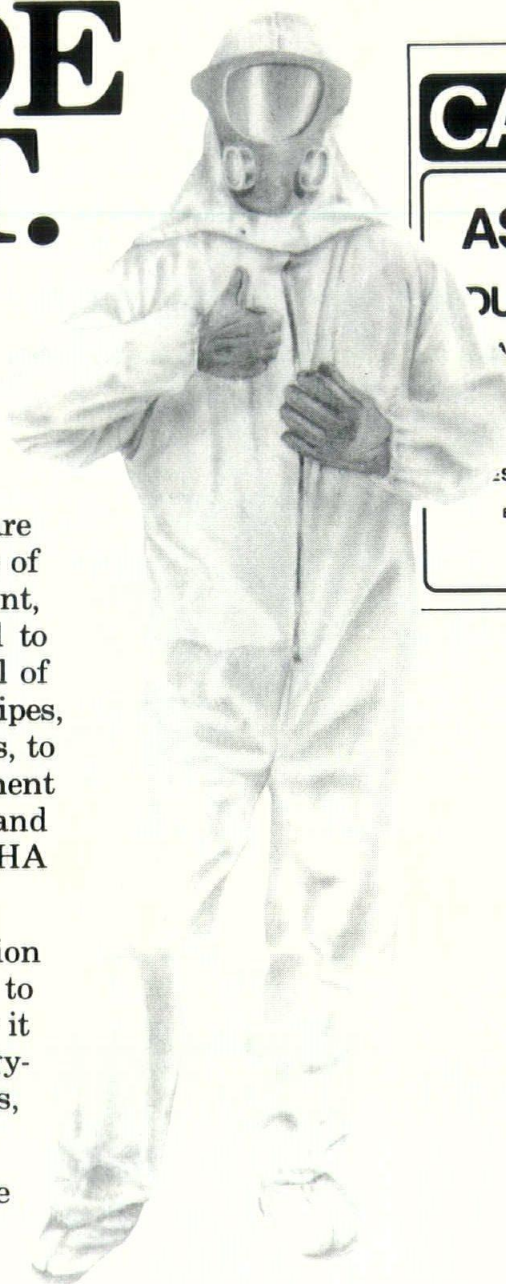
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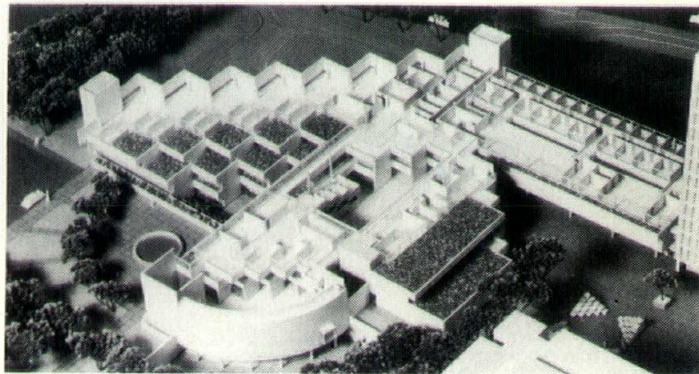
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The Leonard Parker Associates
Project: Humphrey Building, University of Minnesota
Minneapolis, MN

TLPA is currently in the design development phase for the 135,000 square foot building to house the Hubert H. Humphrey Institute of Public Affairs and an addition to the School of Management. Lo-

cated at the gateway to the University of Minnesota West Bank campus, the stepped edge on the northwest complements the Law School. The design will facilitate and enhance academic programs while making visitors aware of Institute activities organized on three levels around a central public forum. The HHH Memorial Exhibit Hall is a major component of the building.



Opus Corporation (formerly Rauenhurst)
Project: Opus Center
Minnetonka, MN

The cornerstone building in Opus 2, Opus Center with its natural Minnesota quarried split-face stone, bronze-tinted glass, and copper roofing, cuts a stately profile. Sitting atop the area's highest point on a 20-acre site, the 10-story tower with two extending wings



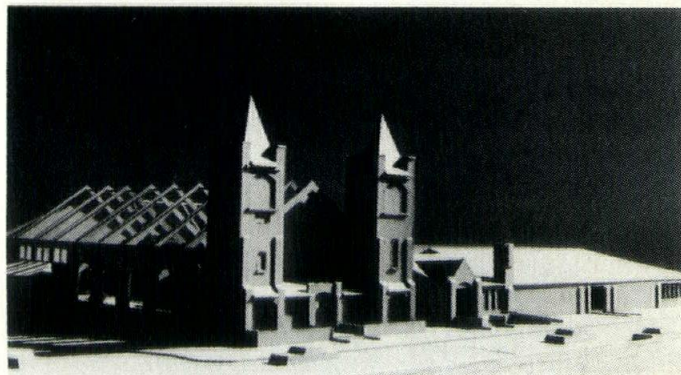
overlooks a quiet pond on one side and the downtown Minneapolis skyline on the other.

Opus Center was designed and built by the Opus Corporation with Ben Thompson as design consultant. Opus corporate offices are housed on four floors of the tower. (612) 936-4444

Arvid Elness Architects Inc.
Project: Trinity Lutheran Church & School
Wausau, Wisconsin

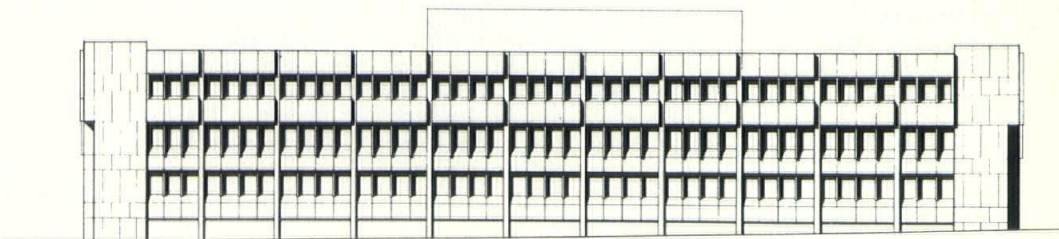
The two story, 40,000 sq. ft. school addition to an existing church houses classrooms, library, cafeteria, gymnasium and support facilities for grades K through 8. The addition incorporates a spacious

narthex that acts as the link between church and school. Offices on the lower level are arranged for shared church/school administrative functions. The school is designed for future expansion and will be constructed in phases to accommodate demolition of an existing school building on site. Materials match the existing church red brick and stone. Completion expected early 1984.



Patch, Erickson, Madson, Watten, Inc.
Project: Scott County Addition
Shakopee, MN

Scott County has approved a 24,684 sq. ft. third floor addition to their courthouse to be occupied in part by the Human Services Department. The addition will be an extension of the limestone veneer facade. The plan provides landscaped



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an exterior of brick and horizontal siding. Construction is planned for the summer of 1983.



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PROJECT: PARK
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LIBRARY
COTTAGE GROVE, MN**

MS&R was commissioned to design this new regional library which will serve Washington County. The project is 20,000 sq. ft. and makes extensive use of

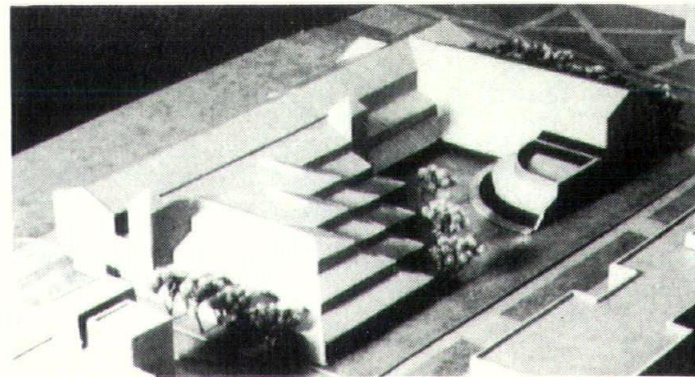


natural lighting. Construction is slated to begin in the fall of 1983.

**The Leonard Parker
Associates
Project: University of
Missouri Law School
Columbia, MO**

TLPA, in association with McCoy, Hutchinson, Stone Architects of Kansas City, Missouri, is designing the new 140,000 square foot Law School building in Columbia, Missouri. The firm was selected for the project after win-

ning an invited two-phase design competition sponsored by the University of Missouri. The brick and stone building will include a working courtroom, administrative offices, classrooms and a 325,000 volume law library. Sited between existing traditional and modern campus structures, the building will be a visual bridge between old and new architecture. Construction is slated to begin in the fall of 1984.



**Architectural
Resources, Inc.
Project: Viking
Amphitheater
Park Rapids, MN**

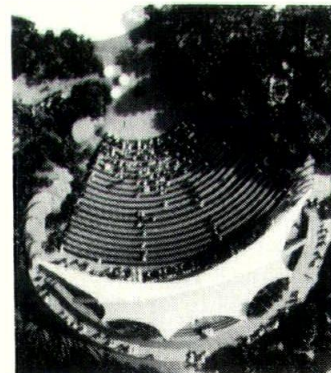
The Headwaters Society in conjunction with Architectural Resources, Inc. of Hibbing and Duluth is currently working on Viking!, an epic drama amphitheater. The complex is located on Birch Lake in the Park Rapids area.

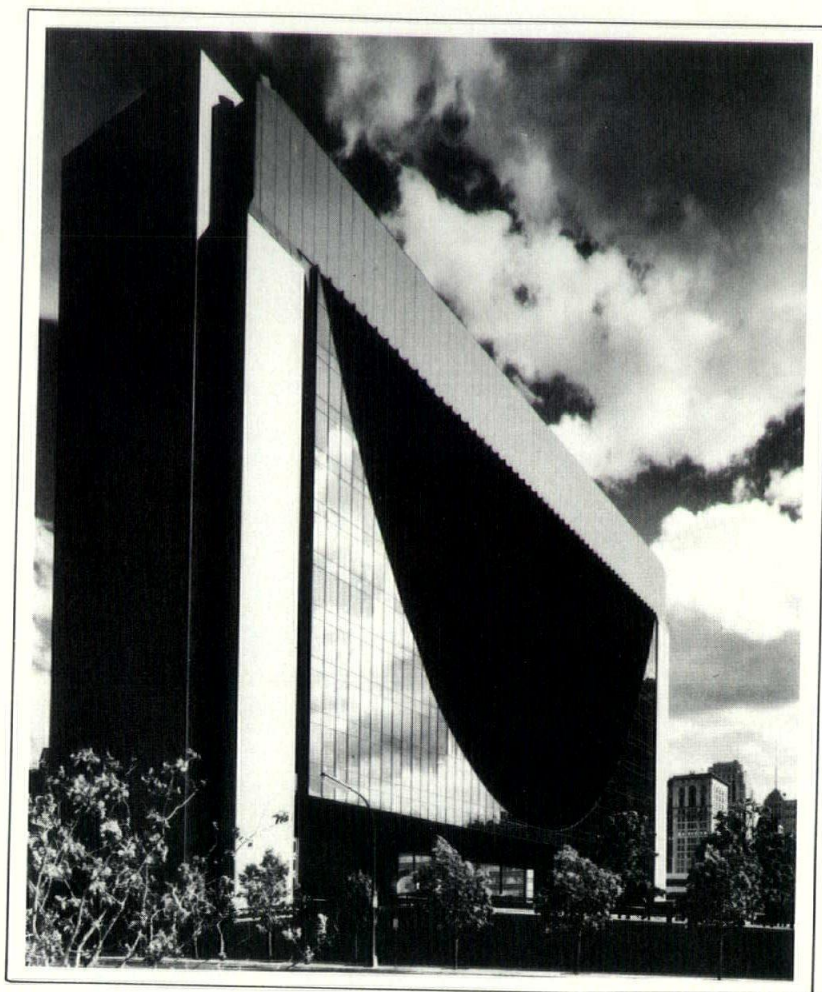
The complex will contain an entrance pavillion, amphitheater seating over 1600 people, related backstage support functions and public functions, and an actors' village.

The script, written by an Ohio consultant, relates the story surrounding the first contact between the native Santee Dakota Indians and Viking explorers. The architecture will reflect typical Vi-

king forms while remaining contemporary in its interpretation, employing tensile structures to protect the public facilities for the amphitheater and the actors' village.

The Headwaters Society is now raising funds to promote this complex which is seen not only as a tourist attraction but also as a cultural outlet for local theater groups such as Bemidji State College. (218) 727-8481





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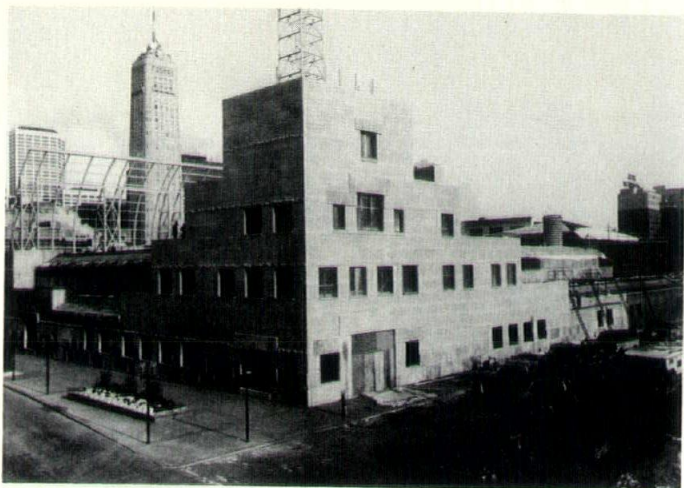


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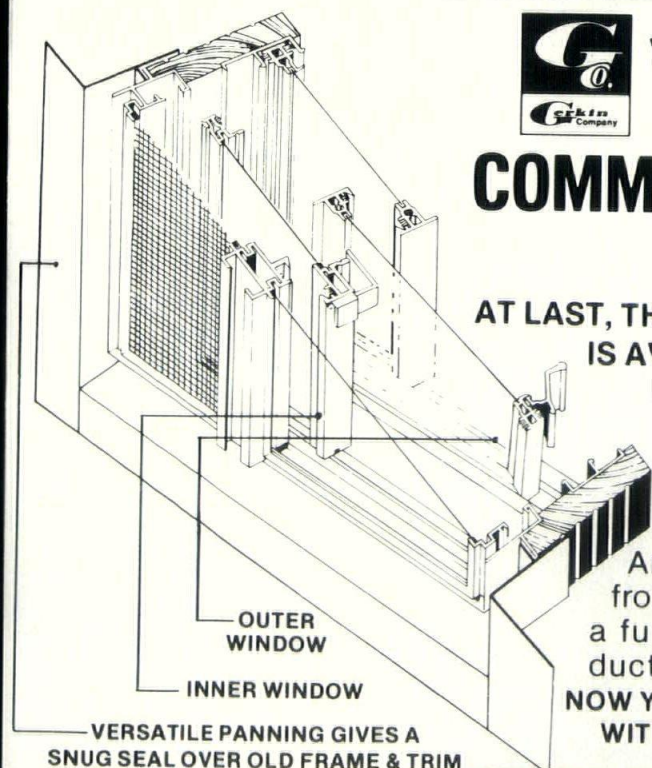
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Errata

This portrait of Winston and Elizabeth Close, published in the January/February 1983 issue, was taken by photographer Judy Olausen. *AM* regrets the omission of the credit.

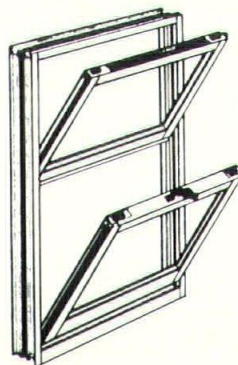
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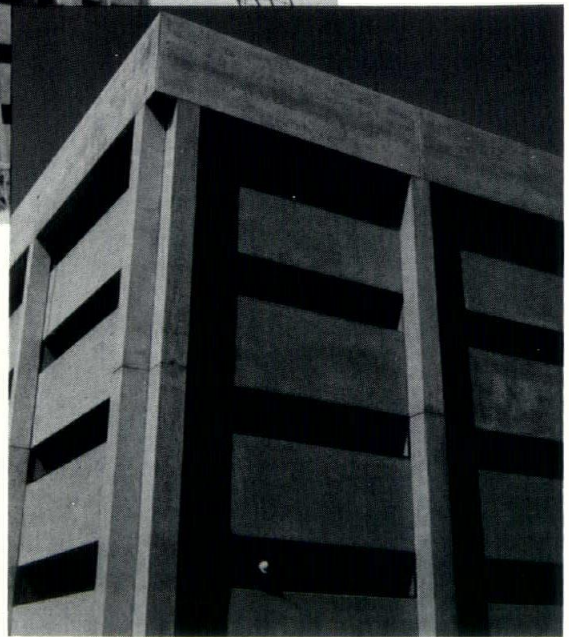
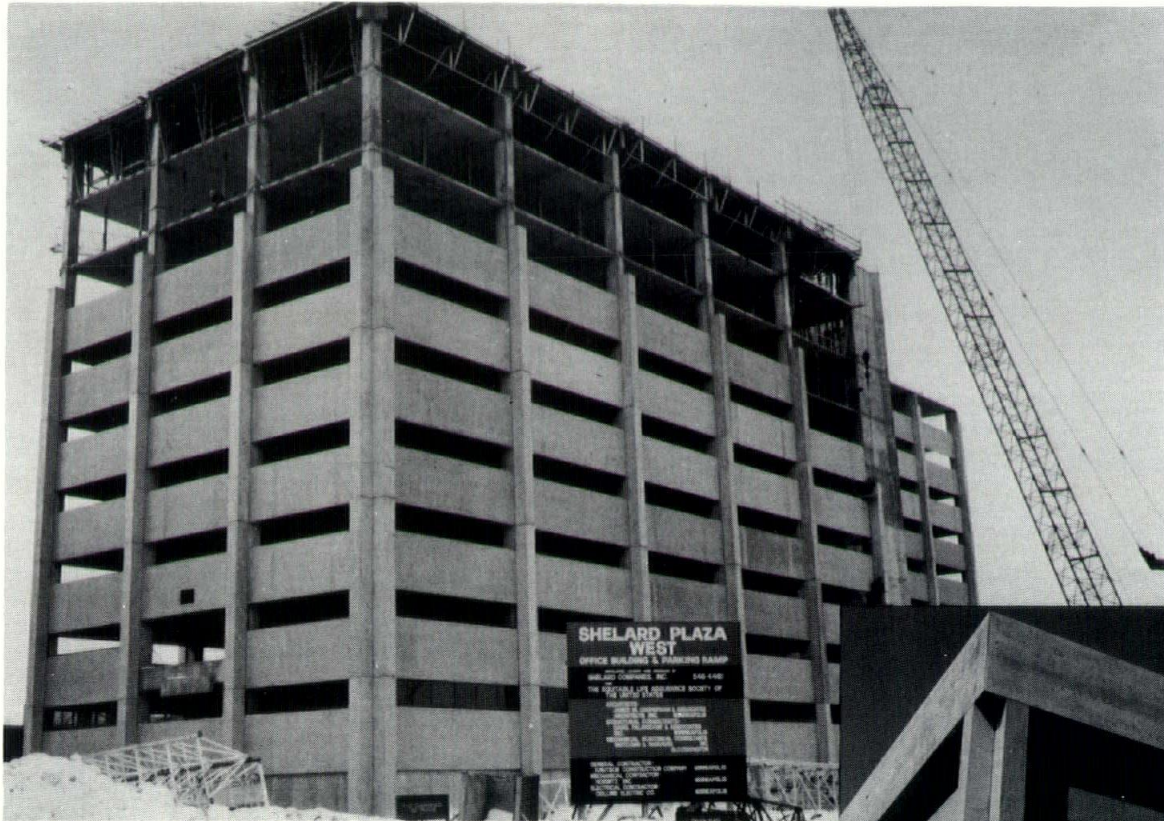
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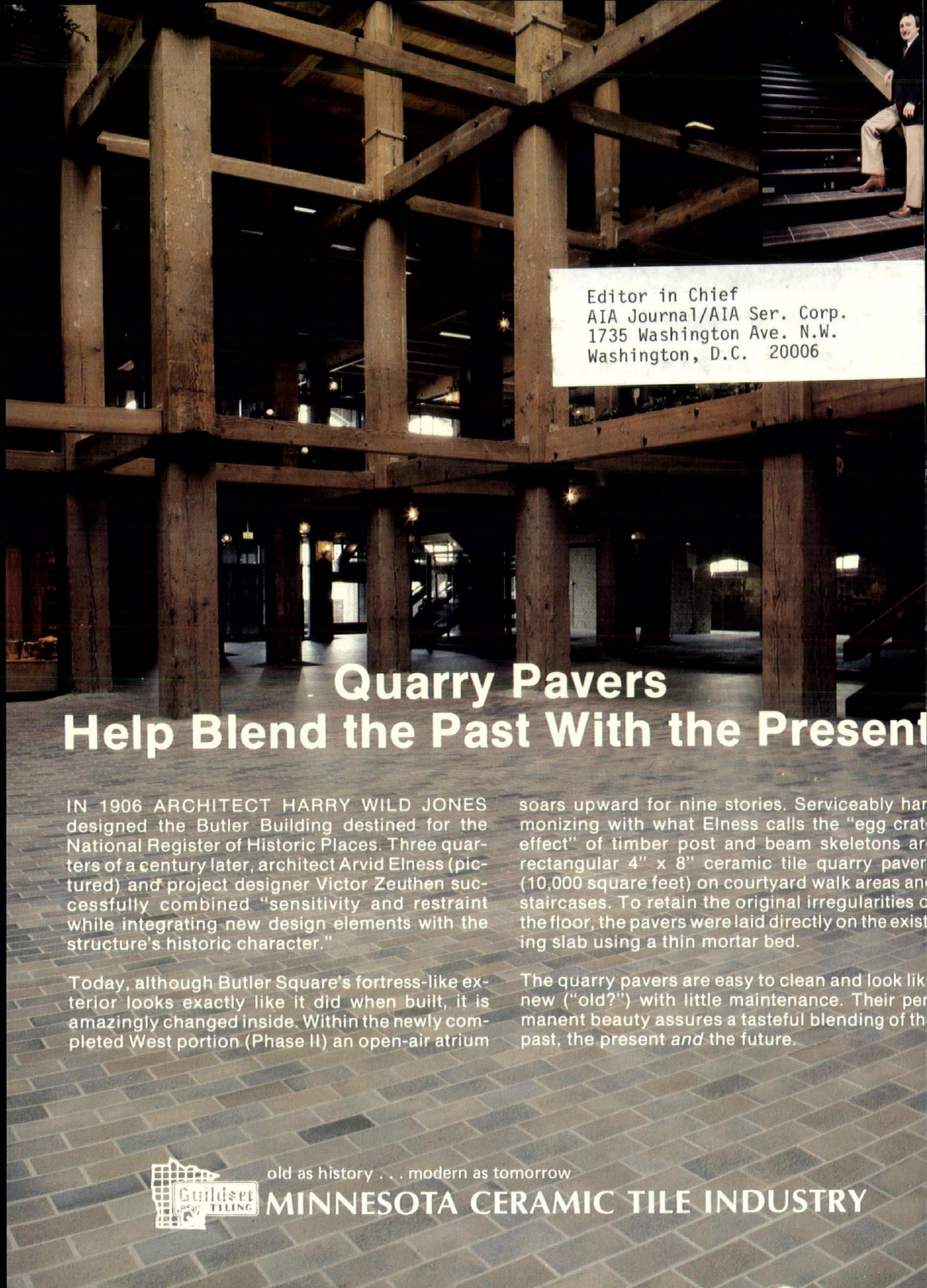
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Quarry Pavers Help Blend the Past With the Present

IN 1906 ARCHITECT HARRY WILD JONES designed the Butler Building destined for the National Register of Historic Places. Three quarters of a century later, architect Arvid Elness (pictured) and project designer Victor Zeuthen successfully combined "sensitivity and restraint while integrating new design elements with the structure's historic character."

Today, although Butler Square's fortress-like exterior looks exactly like it did when built, it is amazingly changed inside. Within the newly completed West portion (Phase II) an open-air atrium

soars upward for nine stories. Serviceably harmonizing with what Elness calls the "egg crate effect" of timber post and beam skeletons are rectangular 4" x 8" ceramic tile quarry paver (10,000 square feet) on courtyard walk areas and staircases. To retain the original irregularities of the floor, the pavers were laid directly on the existing slab using a thin mortar bed.

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