

The 21st Annual Awards Program

Progressive Architecture

January 1974 A Reinhold publication





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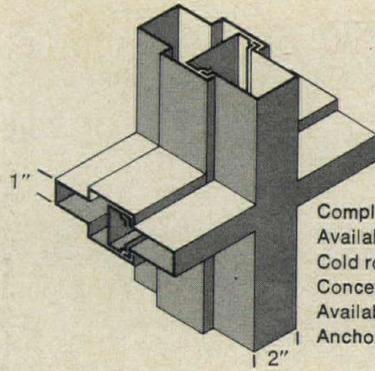
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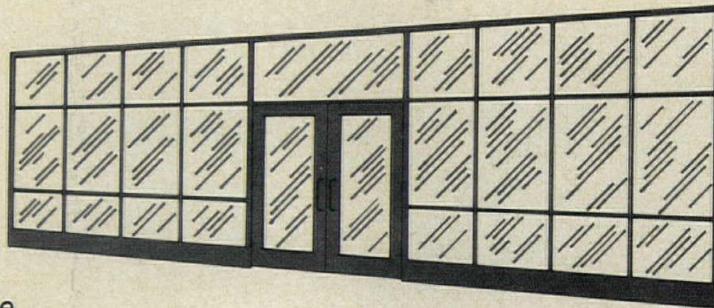
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BOB MANKIN, President, Madison Decorating Company, Kensington, Maryland



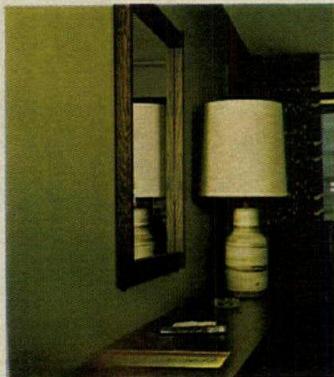
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January 1974

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Cover: Combined media drawing by Lebbeus Woods of IDS, Inc., part of an entry (p.88) which was given a special commendation for graphics and a citation for applied research by the jury.



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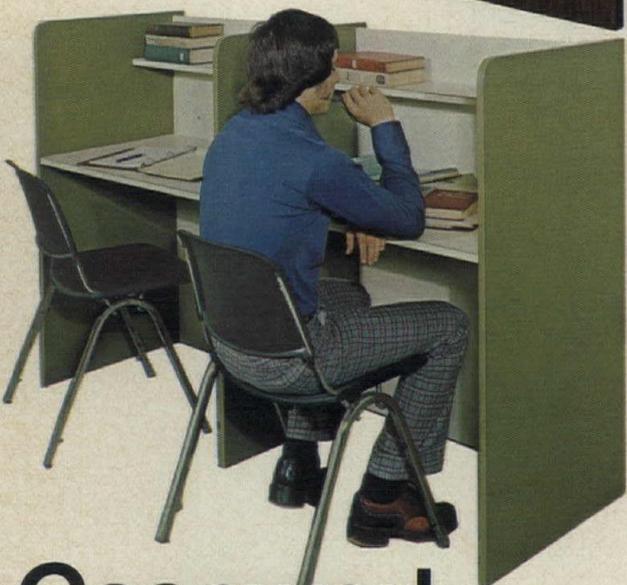
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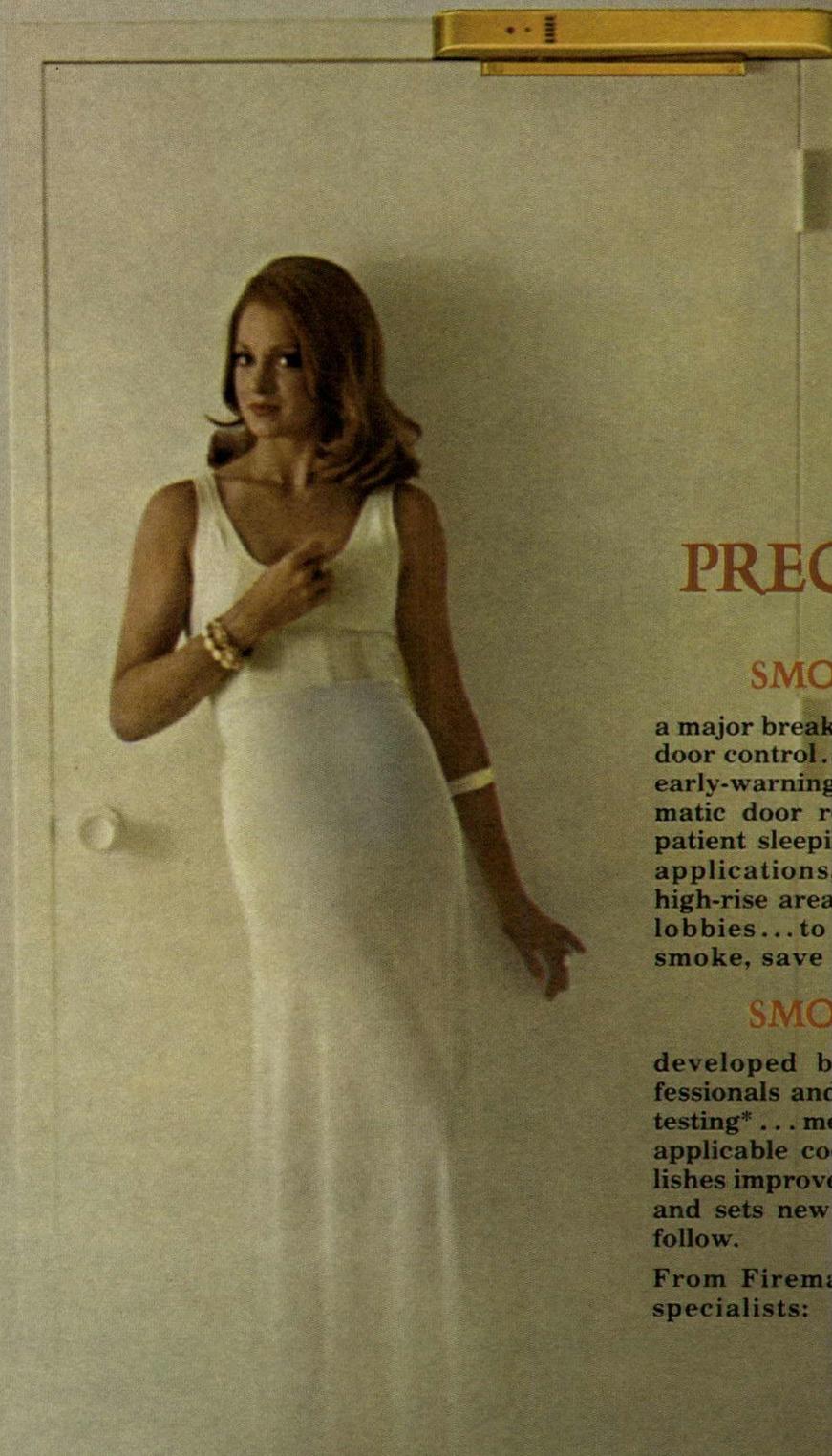
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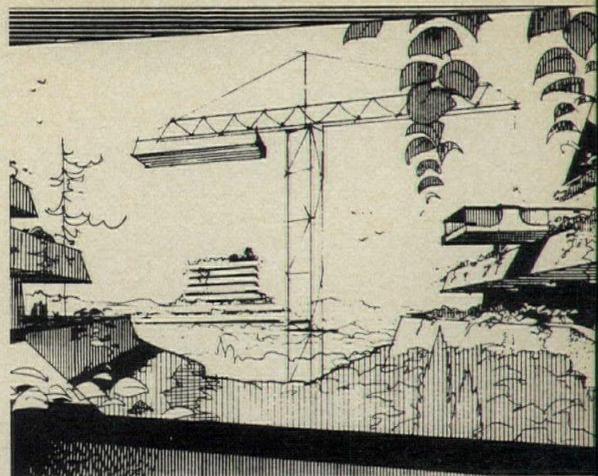
*California State Fire Marshal's "Project Corridor" facility and I. I. T. Research Institute, patient room study

Views

logical benefits of his generalized forms are considered. Gentle architecture (photo) may well accomplish Hodgetts' goals without abandoning all the ebb and flow, all the light and shade, of a history he says has ceased to be.

Future population centers may well consist of huge, landscaped earth-shelves into which well-insulated, factory-made room components can be plugged (and unplugged and recycled) at will, without further disturbance to the living land.

Malcolm B. Wells
Architect
Cherry Hill, N.J.



Non-architects like P/A too

I am sure you receive many letters praising your magazine and I would like to add mine. I work for a temporary office help agency and currently am working in an architect's office. They subscribe to P/A and I've had a chance to read it. Not being in the profession, I have become very interested in the dynamicness of the field of architecture—I never realized that it reaches into all aspects of life.

Again, many thanks for an interesting publication that is interesting even to non-professionals!

Lynne Taylor
Bethel Park, Pa.

An architecture of interiors

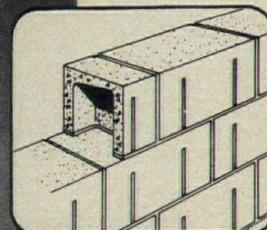
My congratulations and thanks to you for such an excellent issue of your magazine in November. *Progressive Architecture* seems to be progressing, and I have brought this to the attention of our AID education committee. I could not agree more with your presentations.

Harold W. Grieve, FAID
Los Angeles

Congratulations on the marvelous, Margolies, Mangurian, machine aesthetic, color extravaganza, featuring eye boggling banks where the only clues as to which way is up are the chairs and stairs. This is P/A at its best and most distinguishable from the other magazines. If for no other reason than the pre-Venturi ad on page 63, the November issue is bound to become a collector's item. Today Kansas, tomorrow the world.

T. Merrill Prentice, Jr.
New York

Craig Hodgetts' November article on the death of modern architecture, caused by television and the transistor, is a welcome breath of fresh air, particularly if the eco-



Lecture Room, Gilbert H. Boggs Chemistry Building, Georgia Institute of Technology.
Architects: Finch, Alexander, Barnes, Rothschild & Paschal, Atlanta

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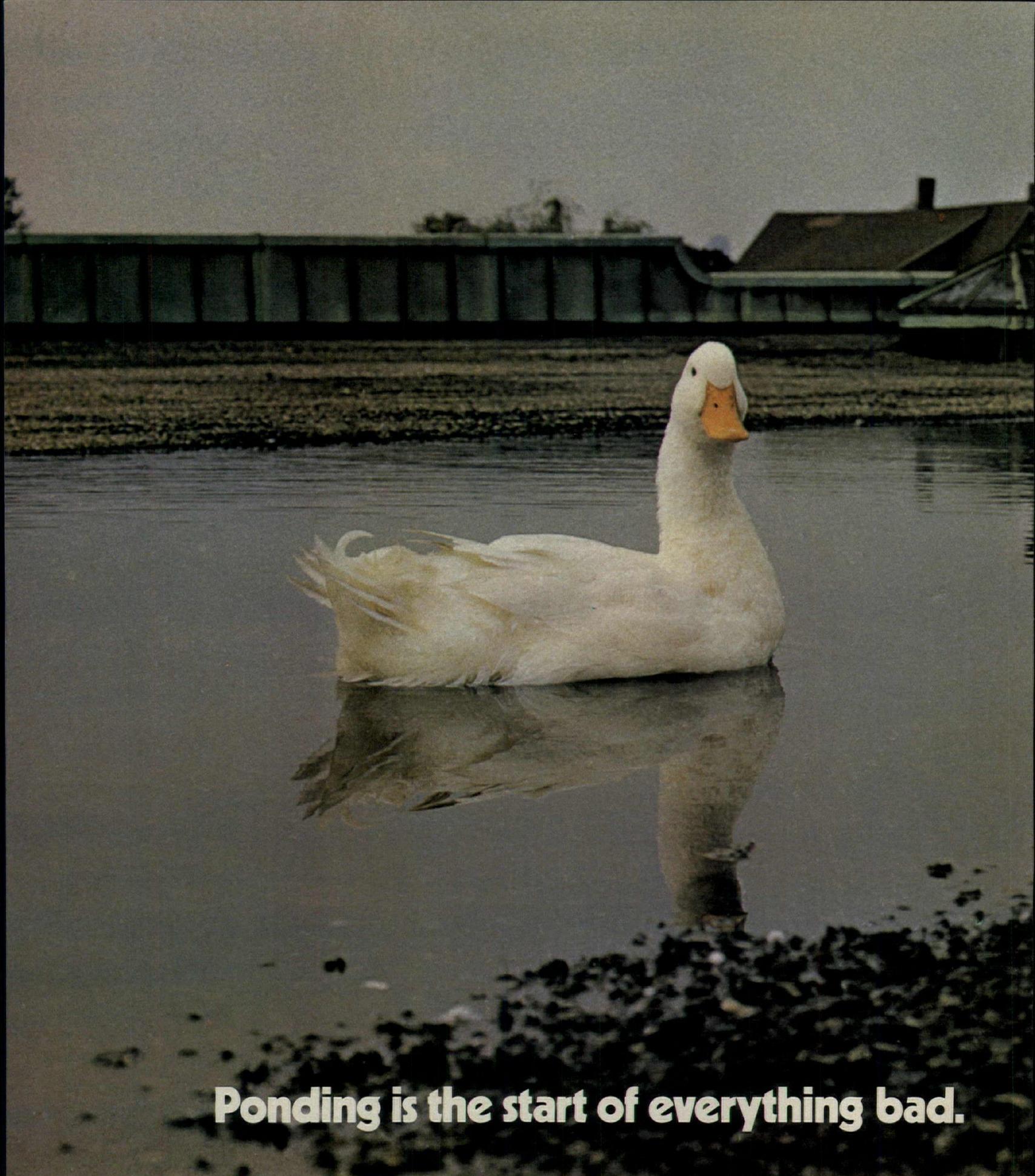
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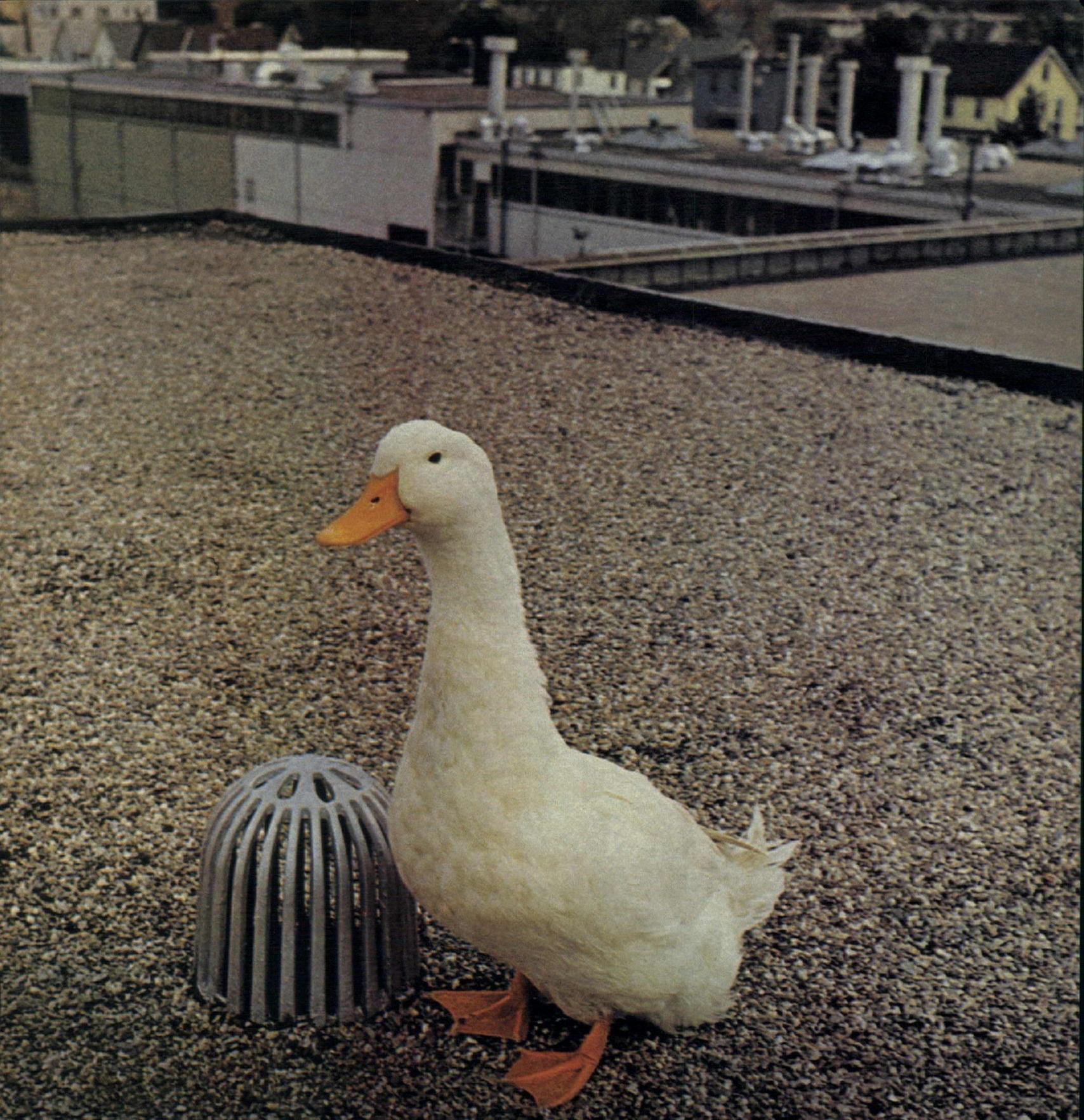
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(a)

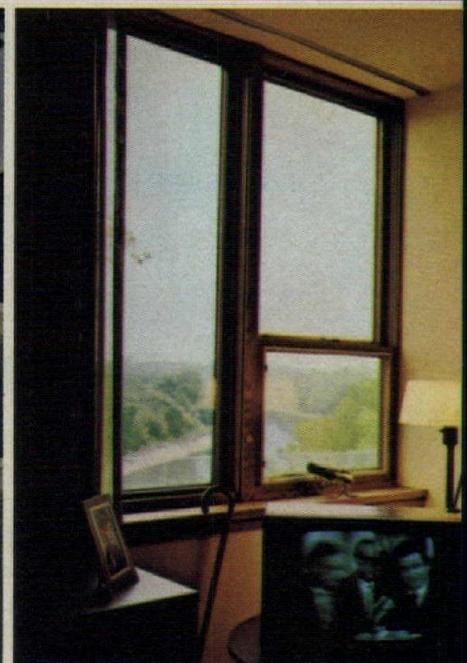
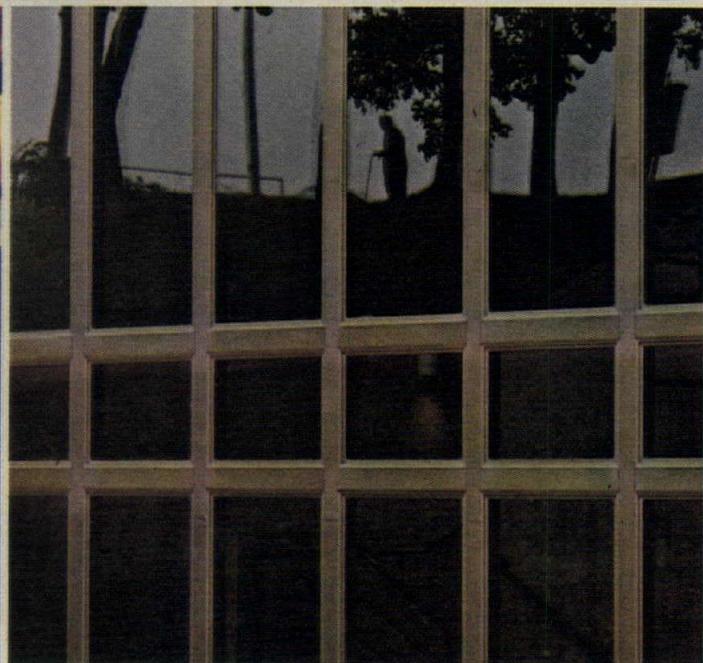
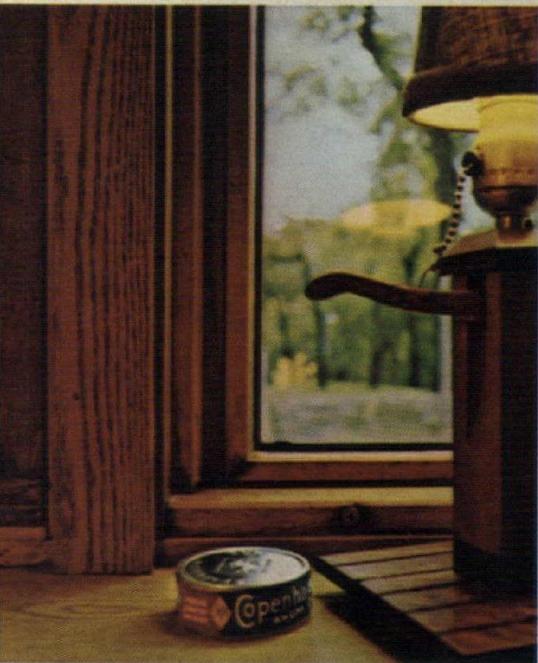
Inside, the unspoiled beauty of a carefully-crafted wood window.

Wood windows are known for their warmth. Visually. And because of their natural insulating value. And in designing the Pella Clad Wood Window, we left both of those properties unchanged. The exterior aluminum skin does not penetrate the frame or sash (b). Nor is it visible anywhere on the inside of the window. We recognized the need for a weather-resistant, low maintenance window. But seeing no reason to compromise the natural warmth of a wood window, we very carefully avoided doing just that.



(b)

**At the Minnesota Veterans Home,
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inside and out.**



Architect: S. C. Smiley & Associates Builder: Arkay Construction Company Windows: Pella Clad Fixed Units and Contemporary Double-Hung

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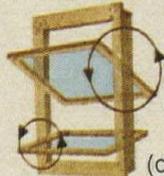
The removable inside storm panel gives you any number of interesting options. Like using our unique Slimshade® (c) to control sunlight, privacy and solar heat gain and loss. Housed between the panes, this fully adjustable blind remains virtually dust-free. The system also accommodates our snap-in wood muntins, and the selective use of privacy panels. But flexibility is not the system's only strong point. The 13/16" air space between the panes does a better job of insulating than welded insulating glass.



(c)

Afterward, the ease of washing a counterbalanced, pivoting sash double-hung window.

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(d)



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LATER, THEY DID
IT AGAIN.**

Joist Girders. The advantages they had over I-beams were more than enough for Berlin Steel to specify them for the Sage-Allen Department Store they were building in West Hartford, Connecticut. So much



Joist girders have a simple span design. Which explains why ponding calculations are easier. And why design time is shortened.

more, that eleven days later they specified them again. Only this time for National Plastics and Plating Supply Co. in Plymouth, Connecticut.

Where did Berlin Steel learn about those advantages? From meeting with Vulcraft. The people who knew as



Joist girders need fewer foundations and columns. Which means less work for you and larger bay areas for your clients.

much about joist girders as Berlin did about steel fabricating.

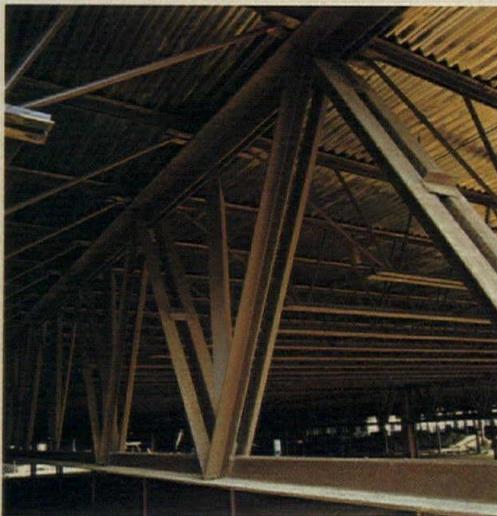
And the first thing the Vulcraft engineers did was show Berlin Steel

why joist girders are easier to specify and erect. By explaining that the simple span design of joist girders make ponding calculations easy. And shorten design time.

By telling them about the larger bay areas possible with joist girders. And by talking about the fewer foundations and columns needed with joist girders than with I-beams.

Then came the subject of the advantages joist girders offer after they're erected.

And to explain that topic Vulcraft talked about the modified Warren truss configuration used in joist girders. And that it gave joist girders a high strength to weight ratio.

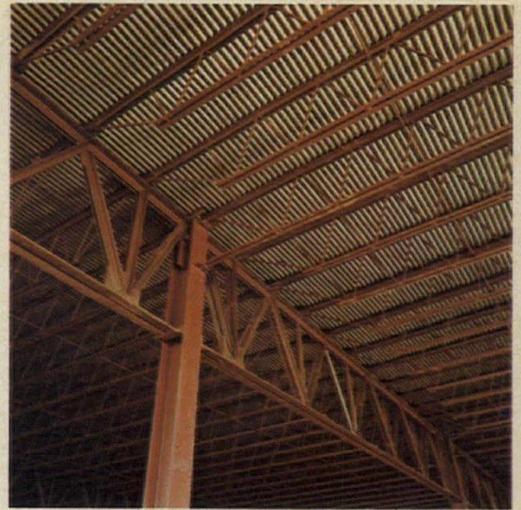


Joist girders have a modified Warren truss configuration using hot rolled double angle sections for top and bottom chords and single and double angle sections for web members. What that means is a high strength to weight ratio.

They mentioned further, that bar joist erection was faster. Because top chord panel points show joist location, eliminating a lot of measuring.

Finally, the matter of ducts, pipes and conduits came up. And Vulcraft explained how these things go right through a joist girder. Something no one can say about an I-beam.

What it all added up to for Berlin Steel was a change. A change from I-beams to another roof-framing system. A roof-framing system that was more economical and easier to erect



Joist girders have top chord panel points that show joist location. Which makes a lot of measuring unnecessary.

for anything over 10,000 square feet.

It wasn't surprising to Vulcraft, though. Because architects and engineers all over the country are discovering the advantages joist girders have over I-beams.



Joist girders already have spaces for pipes, conduits, and ducts to run through. So you don't have to cut them yourself.

If you'd like more information about how joist girders can work for you, send for Vulcraft's Joist Girder Specification Guide. Just contact your local Vulcraft sales office. Or write P.O. Box 17656, Charlotte, N.C. 28211. Or call (704) 366-7000. You'll find a few things even Berlin Steel didn't know. Until they asked.

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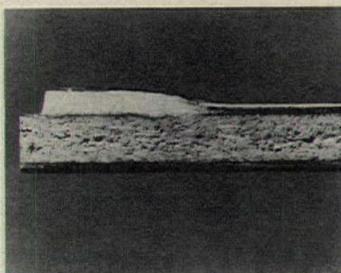


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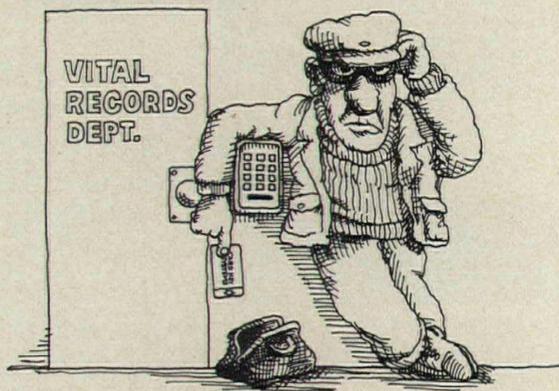


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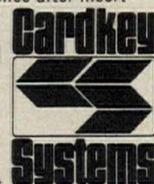
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Progressive Architecture

News report

P/A announces staff advancements

As of October 29, James A. Murphy, AIA was appointed Managing Editor of *Progressive Architecture*. Jim, who joined P/A as an Associate Editor in 1970, is a registered architect and a corporate member of the American Institute of Architects. He holds a Bachelor in Architecture degree from the University of Nebraska and has had seven years of experience with architectural firms in Nebraska and Connecticut before coming to P/A. He will bring to the job an intimate knowledge of the individual architect's needs as well as a broad view of worldwide developments in architecture and an exceptional understanding of the mechanics of journalism.

Simultaneously, David A. Morton was named Senior Editor. David joined P/A as an Associate Editor in 1970 after several years of experience as an editor with Charles Scribner's Sons, Publishers, New York. He holds a B.A. degree in English from the University of Florida and studied painting in Amsterdam and at the Museum of Modern Art School in New York. David has been responsible for some of P/A's major theme issues, including the June 1973 "Twenty years of Design Awards" issue and the November 1972 historic preservation issue. He was also the photographer of the award-winning November 1972 cover and the October 1973 cover.

Meskill spares the Merritt

It was one of those rare victories over mindless road-building efforts on December 7, the day Connecticut Governor Thomas Meskill sent that state's Department of Transportation back to the drawing boards. His action was taken to halt the proposed "modernization" of the Merritt Parkway, one of the nation's more picturesque routes. Completed in 1940, the highway will require some updating, particularly at exit and entry ramps. The state's proposals, however, would have had much broader effects than the three interchanges immediately involved.

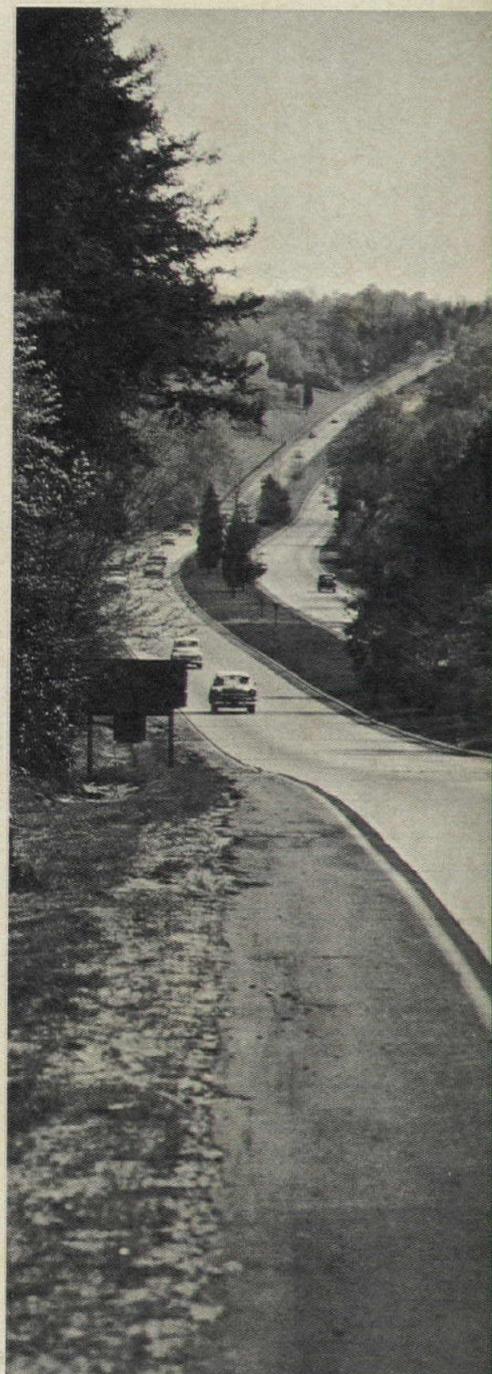
If the interchanges were built as proposed, the disruption of trees and the resulting changes in the parkway setting would be only the beginning. As David Rosow, the president of the Save the Merritt Committee pointed out, the state had also planned to relocate 13 miles of parkway roadbed to make it more consistent with modern highway design. With that foot in the door, the committee observed, it would be only a matter of time before pressure would be applied to convert the four
[continued on page 31]



Jim Murphy

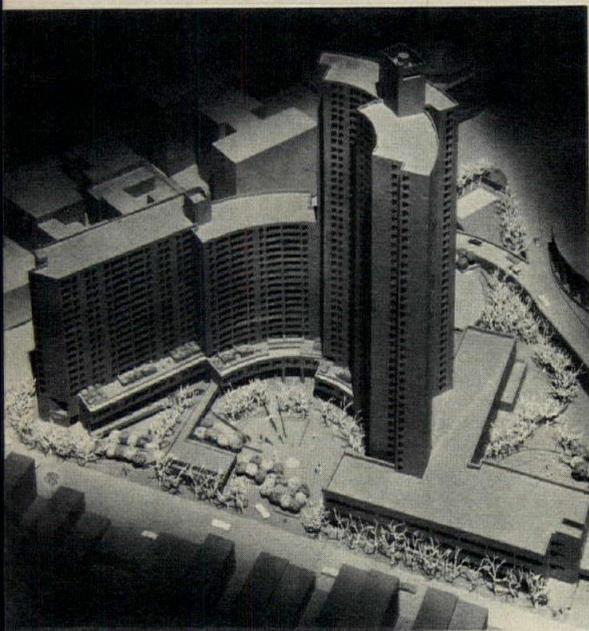


David Morton

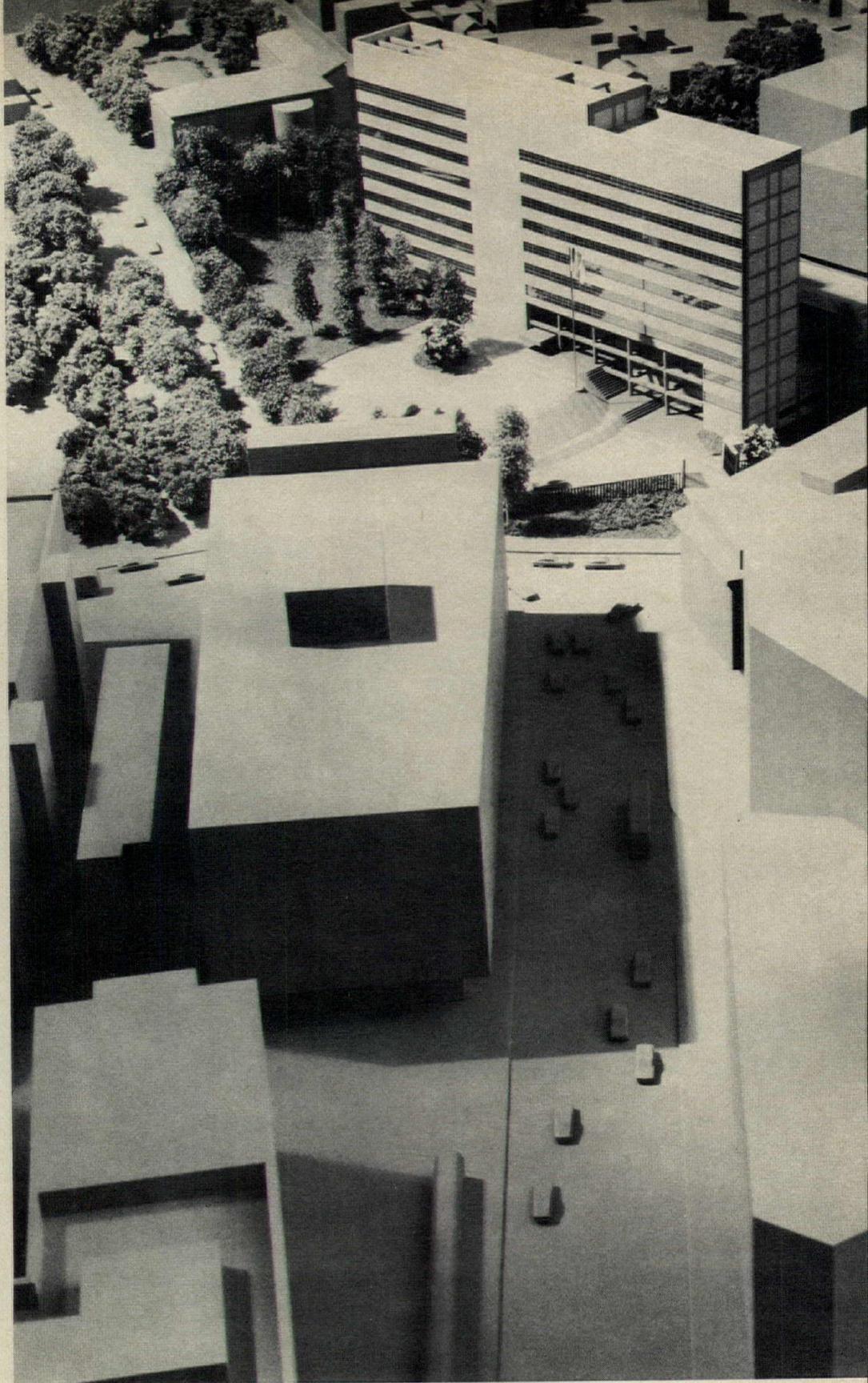


Merritt-Wilbur Cross Parkway

Buildings on the way up



1



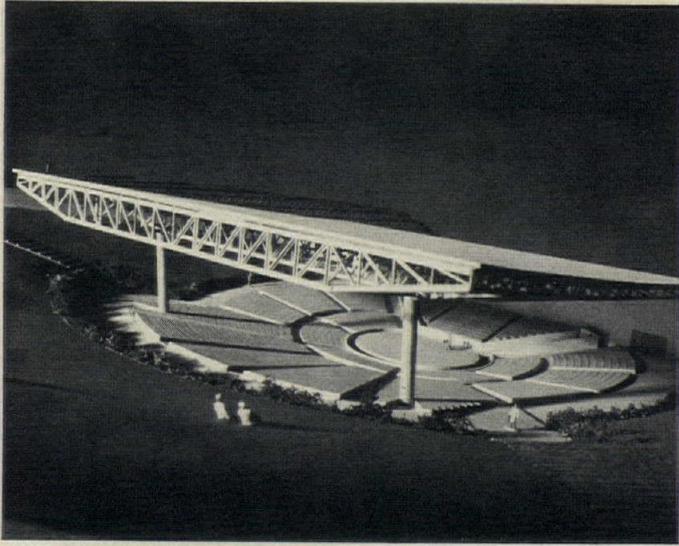
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1 Chinatown, the New York City version, is to get a \$45 million school, housing and community complex when Confucius Plaza is completed. Project includes a primary school for 1200 students and 762 housing units around a multi-level plaza ringed with shops, health, day care and senior citizens centers. Housing will be in two contiguous semicircular towers, one 19-stories, the other 44; off the 24,000-sq-ft plaza will be 24,000 sq ft of commercial space and 17,000 sq ft of community space. The sponsors are the Chinese Chamber of Commerce of New York, Inc. and The Association for Chinatown Housing, Inc. Architects are Horowitz & Chun; the New York City Educational Construction Fund and the city's Housing and Development Administration are financing the project.

2 An extraordinary site, for Tokyo, is the site of the new U.S. Embassy office building designed by Gruen Associates. The 245,000-sq-ft building

will rank behind State Department facilities in London and Mexico City in size. Structural frame will be poured-in-place reinforced concrete; exterior, precast concrete panels. The long 11-story office tower and the parallel 3-story wing will be separated by a central court housing an auditorium, terraces and gardens.

3 Permanent home for the Concord, Calif. Summer Festival was designed by Frank O. Gehry & Associates, architects for the Merriweather Post Pavilion in Columbia, Md. and the redesigned Hollywood Bowl. Seating and stage will be in a crater scooped out of the hillside site; seats for 3500 will be provided, and the grassy hillside will handle another 4500. The stage can be set up as a conventional proscenium, thrust stage or theater-in-the-round; a 640-seat intimate theater is also possible. Christopher Jaffe is acoustical engineer. Gordon Sommers photo.



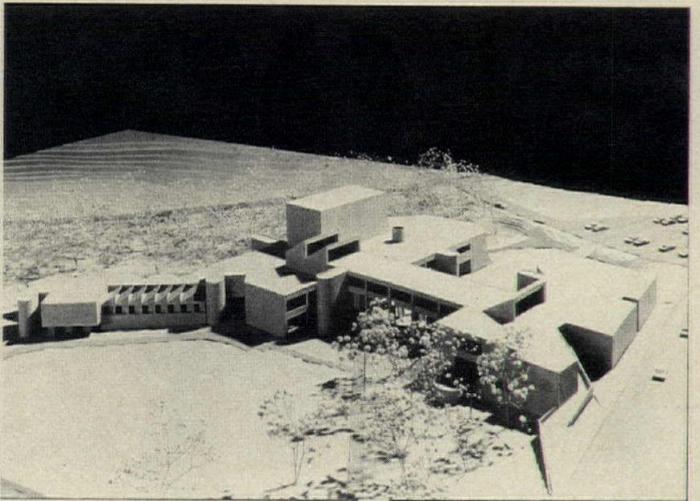
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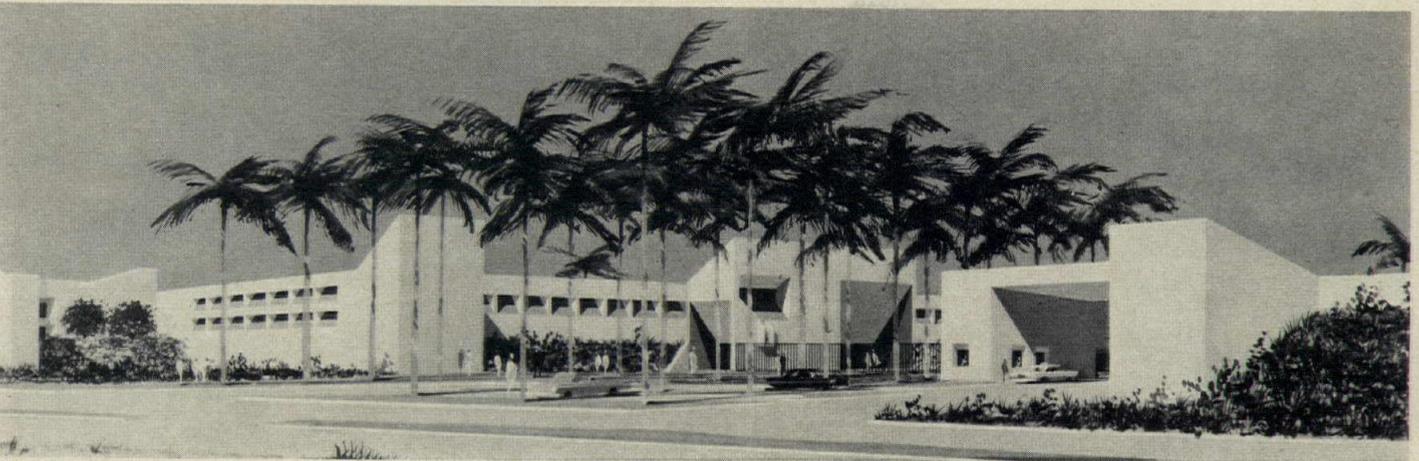
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5



6



7

4 First tall building (over four stories) for Stanley Tigerman & Associates is a 28-story, 450-unit apartment complex. Besides apartments, the Chicago building includes a 270-car garage, commercial space, restaurant, swimming pool and bath house, tennis court and landscaped plaza deck. Reinforced concrete building is glazed with bronze solar glass and has central heating and air conditioning. Cost, excluding land cost and fees: \$8.4 million. Structural engineers are Cohen-Barreto-Marchertas.

5 The largest acute hospital between Hawaii and Japan will be the 320-bed Guam Memorial Hospital, slated to get underway in 1974. First phase of \$30 million project will provide 334,000 sq ft of space; when finished, the project will include the seven-level hospital plus a medical office building and staff housing. By 1990, 650 beds are projected. Daniel, Mann, Johnson & Mendenhall are architects.

6 Stepping down its steeply sloped 3-acre site, the Wake Forest University Fine Arts Center in Winston-Salem, N.C. provides 109,213 sq ft of space for theater, art and music. Steel and concrete building, designed by Caudill Rowlett Scott, has a brick exterior; sloping site allows for as many as eight separate levels in the \$4.5 million building.

7 Severe climate and shortage of electricity in Karachi, Pakistan had strong influence in the design of the proposed Aga Khan Foundation Medical Center. Buildings will be sited to take advantage of prevailing winds, and will be built to capture and store heat for warmth during cold nights. Solar devices and rooftop cooling pools are also planned, according to architects Markus Nocka Payette & Associates. Center calls for 670-bed hospital, 500-student medical college, nursing school, student and staff housing and an Islamic mosque.

A.



B.



E.

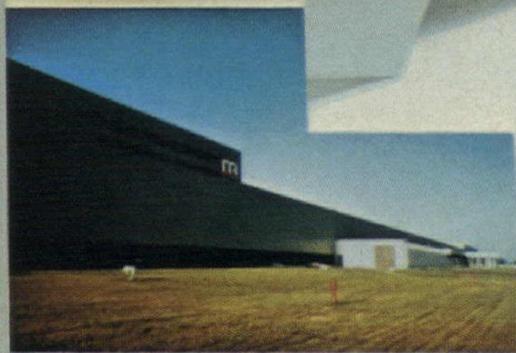
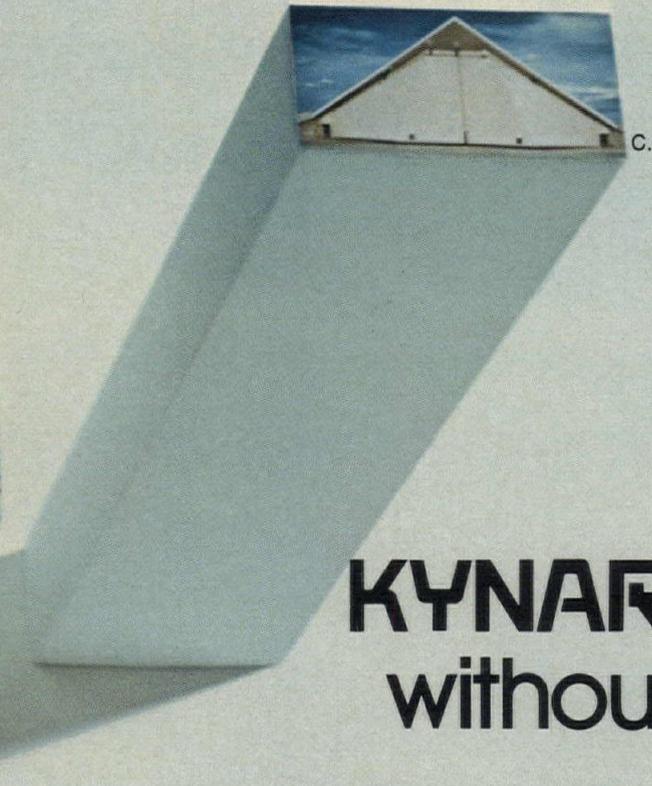
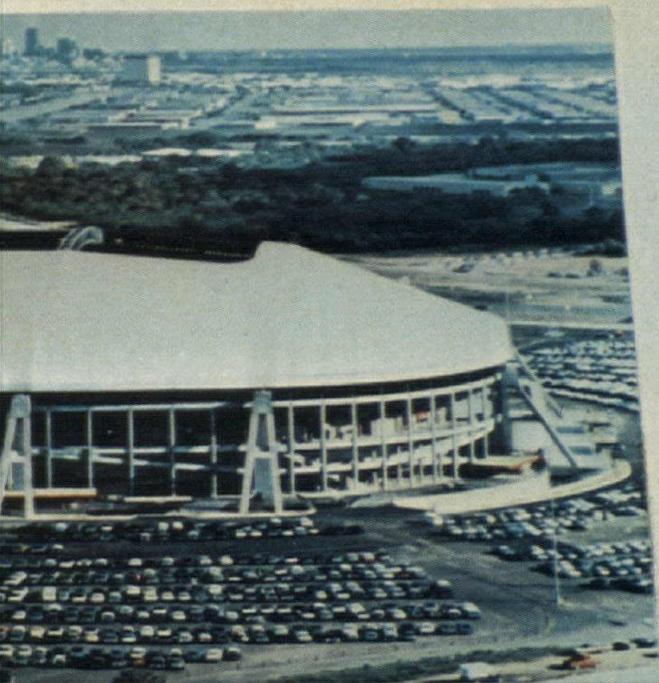


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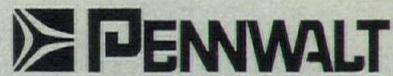


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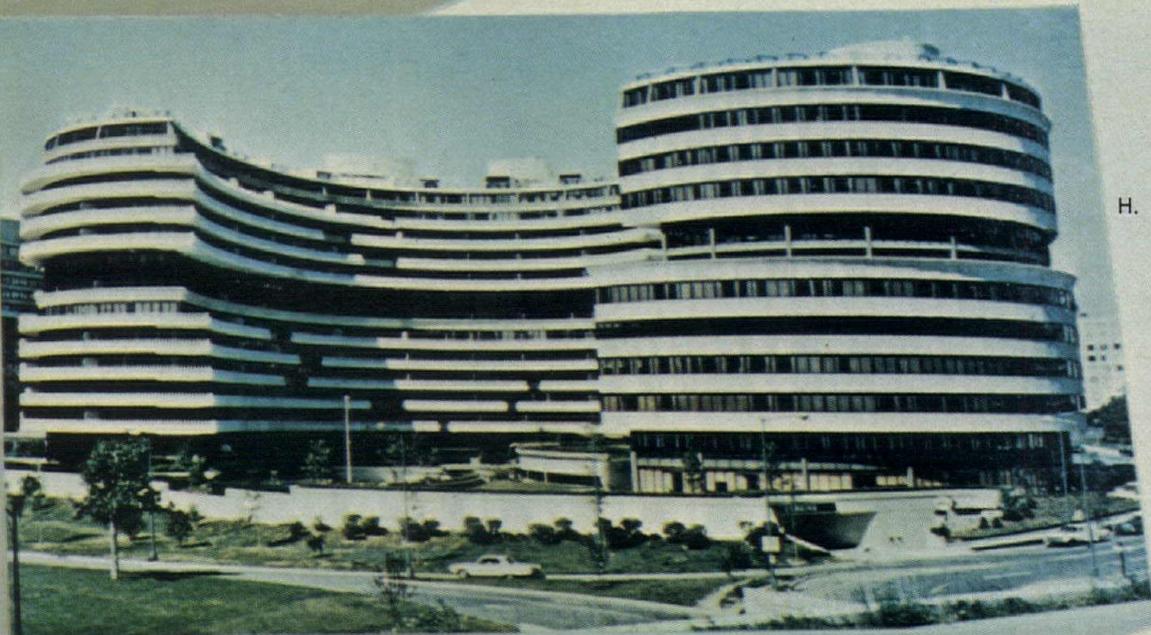
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- F. Midland-Ross Warehouse
Maumee, Ohio
- G. Bailey Plaza Shopping Mall
Jackson, Mississippi
- H. The Watergate Development
Stage IV
Washington, D.C.

FEDDERS, first to meet the challenge

New Fedders E-Flex™ is today's full line of residential central air conditioning systems that already meets the efficiency standards being considered by the U.S. Government for 1975.

Fedders saw the energy crisis coming.

Fedders started doing something about it—a long time ago.

Now, after years of research and the expenditure of millions of dollars, Fedders has achieved an engineering breakthrough and arrived at a new and more efficient system of central air conditioning.

It's called the E-Flex System of central air conditioning.

What This Means to You

Major users of energy—such as builders of office and apartment complexes and large-scale residential builders—are in an energy squeeze. On one side there is the constant rise in the cost of fuels. On the other side is the dwindling supply.

A remarkable quality of the new Fedders E-Flex System is that it is the builder's answer to both these problems—rising costs and dwindling supply. Be-

cause an E-Flex System—by actual tests—requires less energy and makes better use of it.

So startling are the capabilities of new Fedders E-Flex to perform in both these critical areas that, in a feature article in the October 1973 issue of "Airconditioning & Refrigeration Business," editor Sam Milnark reports:

...“for a 200-apartment complex, it would cost the owner about \$10,000 to \$20,000 more (at \$50 to \$100 more for each system.) but in 20 years he'd save \$150,000 on the average in electricity at today's rates.”

Since the Fedders E-Flex System will save you considerable sums of money at today's rates, think how much more it will save in the future. Right now, experts predict that within a decade the cost of electricity may double or treble, which means that costs for this energy source alone will rise from an average of 3 cents a kilowatt to 9 cents.

manufacturer of air conditioners of the **energy crisis**

Here's Evidence

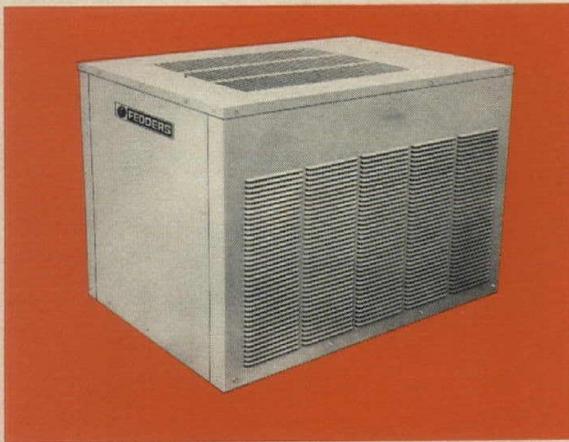
Look at the table below. It compares the BTU-Watt efficiency ratios of new Fedders E-Flex Central Air Conditioning with the best and most efficient models (1-1/2 to 5 ton capacities) of five other leading manufacturers. As you can see, Fedders outscores them all.

Translate these energy-efficiency ratios into dollars and cents per month or per air conditioning season and you'll determine for yourself the exact amount an E-Flex Central Air Conditioning installation can save.

CAPACITY BTU/HR	CENTRAL AIR CONDITIONING EFFICIENCY RATINGS BTU PER WATT					
	FEDDERS	SEARS	CARRIER	G. E.	LENNOX	YORK
18,000	8.18	6.2	7.5	6.66	—	—
24,000	9.60	8.27	7.5	7.27	7.27	7.01
30,000	8.56	7.89	7.14	8.33	7.89	6.67
36,000	9.23	8.57	7.35	8.78	7.66	7.06
42,000	10.00	8.40	7.77	7.77	7.92	7.37
48,000	10.00	8.42	8.0	7.16	7.50	7.38
60,000	9.52	7.79	7.50	9.37	—	—

Competitive capacities and watts based on the Directory of Certified Unitary Air Conditioners, published by the Air Conditioning & Refrigeration Institute, August 1-December 31, 1973.

An E-Flex System for Every Use



Are there new Fedders E-Flex Systems with the right capacity for special builder needs? Yes. In fact, the E-Flex System was originally conceived for residential use and smaller commercial installations then later expanded to include units of large capacities.

Whatever your need, whether it is to air condition a 200-apartment complex or to cool an 8 room single family residence, the adaptability of the Fedders E-Flex System is remarkable.

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For complete information on the Fedders E-Flex Residential Central Air Conditioning System and equipment, circle the appropriate number on the reader reply card or write to Fedders Corporation, Woodbridge Avenue, Edison, New Jersey 08817.

See the E-Flex at the Fedders Booth Number 2220 at the NAHB Show, Houston, January 20 through 24 and at the ASHRAE Show, Los Angeles, February 4 through 7.

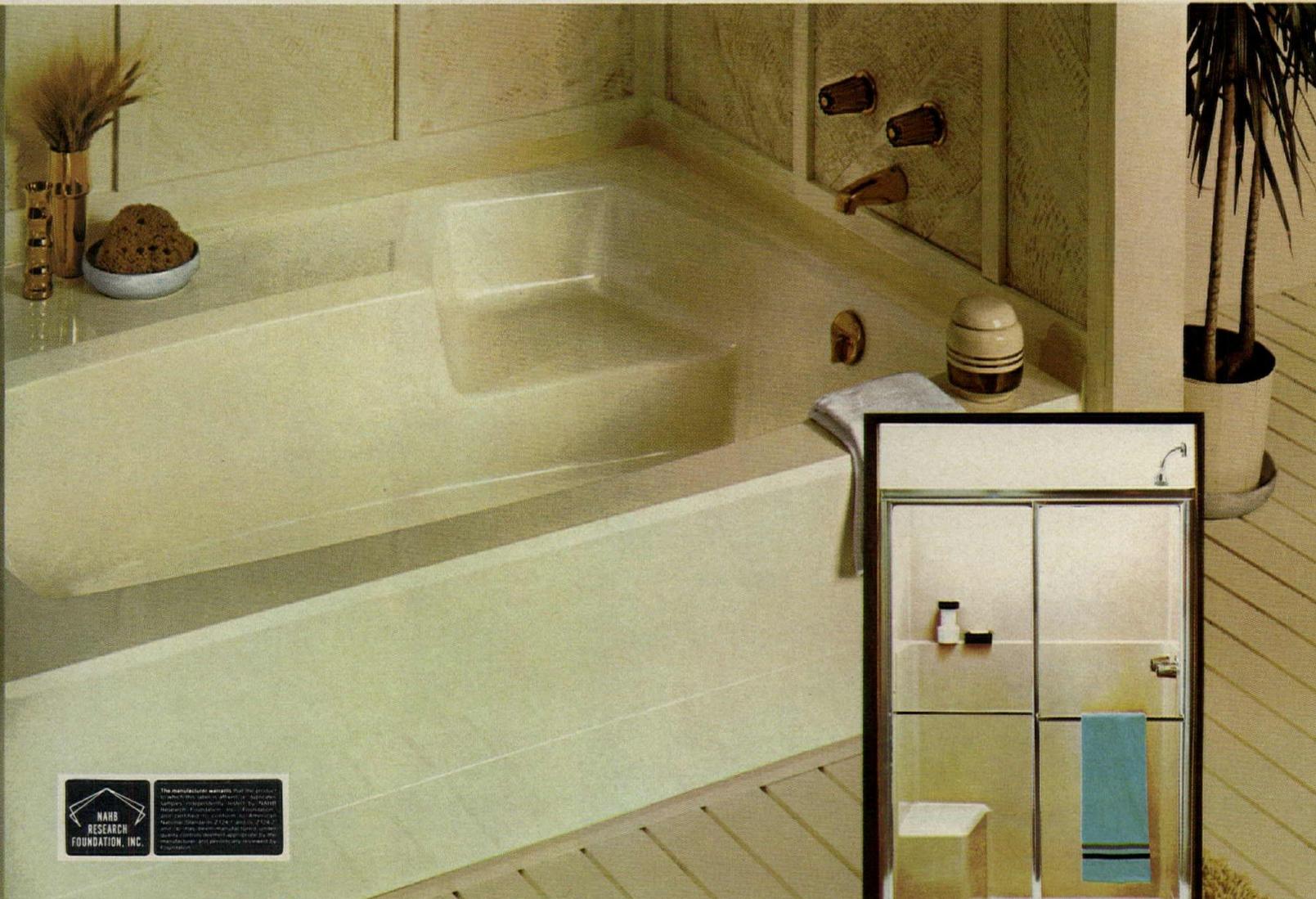
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Designer Line: A good name to drop when specifying fiberglass bath fixtures.



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lane road into an eight lane expressway. In light of recent government steps to reduce auto speeds and restrict use, the proposed parkway plans seem more ludicrous than ever. The State Department of Transportation had already admitted that the interchange work *could* be done with less disruption of the sylvan parkway borders. Given the determination of the Save the Merritt Committee, and Governor Meskill's strong stand, it looks like the engineers will have to reconsider. Granted, the Parkway will still have its alignment problems, but it will also retain the character that makes every season a driving event, and the delightful array of bridges that punctuate the route. It is hoped that the Governor's action will be a precedent for others to follow.

Washington report

Construction industry lacks energy

The ever-expanding ramifications of energy shortages have made a hash of predictions of the construction industry's economic condition for 1974. The industry already is being affected by its inability to obtain adequate fuel and lubricants for its machines; by spot shortages of steel and cement; by looming shortages of other materials (roofing, caulking, interior finishes and paints) that are based on petroleum.

Certainly, the industry will be affected even more by business and government decisions to hold up construction of

new plants, offices, even highways and bridges, while waiting to see what effect the oil shortage will have: Will a planned new factory be able to get enough fuel to operate, obtain raw material, have enough transport to move materials and finished products? Will road traffic grow enough, under restrictions of fuel and speeds, to warrant a new road or improvement of an old one? Will suburban development continue at present rates—thus, will the planned new sewage treatment plant, water system, or municipal office building be justified?

Annual predictions, which started in early October, were for a continuation of the steady increase in overall construction volume, at rates ranging from a fairly modest 2 percent to a substantial 5 percent called for by the U.S. Department of Commerce. Figured on the basis of final estimates for 1973—about \$137 billion—that meant another whopping year ahead. But the energy crisis seems to change all that. Now, it seems that the industry will do well to hold the 1973 pace without any drop.

There are some offsets, of course, to the prospects of continuing shrinkage of housing construction, holdbacks in commercial and industrial work, etc. These include the start, this year, of that \$4 billion trans-Alaska pipeline (after three years of ecological battling); emphasis on crash programs related to energy, such as improvements of ports and harbors and a start on offshore terminals for supertankers; oil and gas pipeline expansions; possible starts on new refineries (not one of which has been built in the U.S. in more than six years); some speedup in plans for nuclear-fueled powerplants; further mining for coal, etc. One other offset may also appear: as pros-

[continued on page 32]



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Safety • Glazing

News report continued from page 31

pects of a shrinkage in jobs begin to hit home, there seems less likelihood of major disruptions of work, or demands for excessive wage increases.

The problem, of course, is that real solutions for oil shortages are long-term matters—years away. Vast potential reserves like the oil-shale lands of the west exist, and contracts for their development are now being let by the Department of the Interior. But these are prototype contracts, designed to determine whether or not oil can be extracted economically; on-going projects for gasification and other treatment of coal are also in experimental stages. Practical answers on these matters are years away.

Everything in Washington suddenly came into focus on energy—overriding the sort of political considerations that are involved in scandals. Of the 20,000 or so bills now before Congress, only the 50 or so concerned with energy problems were getting real attention as the year ended. These ranged over the whole spectrum of possible answers—from calling for more money for research and development, to modifications of air pollution and stream pollution regulations (to permit burning of now unacceptable fuels), to attempts to give homeowners tax deductions for installing insulation and making other repairs that might conserve fuel. Also included were proposals seeking to speed use of such other energy sources as thermal steam (from hot springs, etc.); and even a move to bring NASA into the picture, by making use of its resources to develop practical uses of solar energy for both heating and cooling.

Aside from legislation, there were many other efforts to provide energy-related answers. One was a two-day seminar under the auspices of the National Bureau of Standards and the National Council of States on Building Codes and Standards, seeking input from architects, engineers, and manufacturers on energy-conserving building designs. Many ideas were advanced such as: varying the lighting intensity on office building floors according to the activity taking place; better orientation of buildings to take advantage of climatic conditions; use of devices like sunshades to help control interior heating-cooling output; better exterior designs to minimize heat loss.

But a basic conflict also appeared: architects and engineers wanted as much flexibility as possible, within any new standards that may be developed, and they wanted enforcement responsibility placed squarely on building officials. The officials, on the other hand, generally wanted to make the professionals responsible for energy-saving measures, with as little enforcement responsibility (beyond the A-E's) as possible. This preoccupation, plus the fact that 1974 has to be a furiously political year (with the whole House, one-third of the Senate seats up for grabs in November), means that the 1974 congressional session won't be very productive of legislation for any special interest group.

Normally, the three annual Presidential messages presented this month (economic report, state-of-the-union, budget) could be considered guidelines as to how things will go. But this year, they are far more likely to be takeoff points for loud arguments, and not much more.

For these reasons, it seems safe to say that professionals will be lucky to end the year without too much loss of their

[continued on page 39]

Safety Designed Treads and Mats



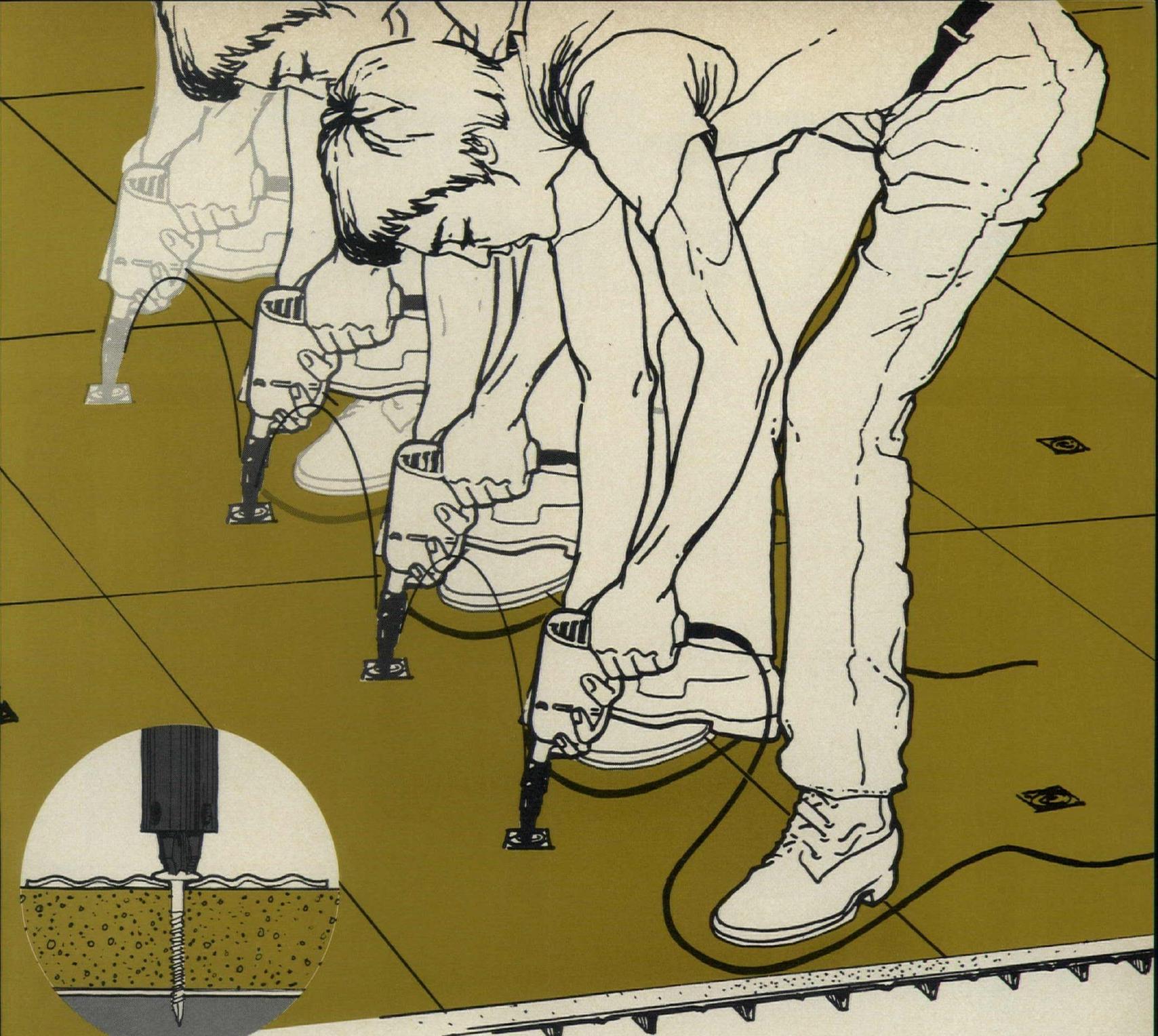
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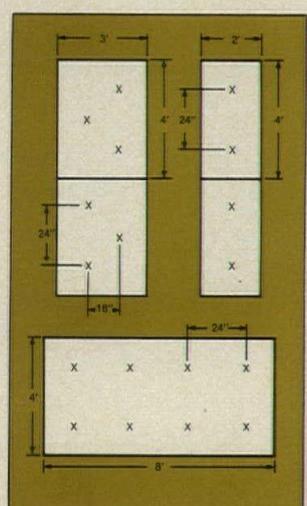
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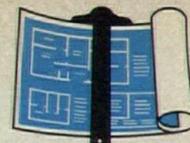
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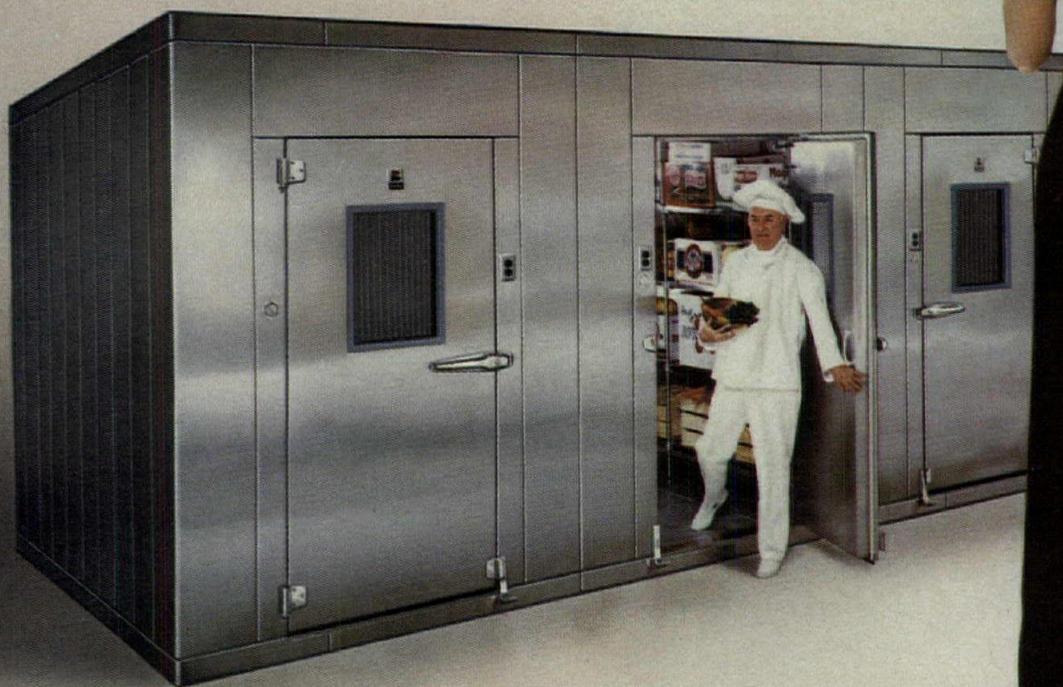
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hard-won right not to compete for contracts on a price basis; that there will be some sort of legislation approved to bolster the sagging housing market (which had dropped to a disappointing 1.7 million rate in October); that labor will get little or nothing new. Casualties of particular interest—pension reform and adoption of the metric system—may also result. Pension reform (a Senate bill provides for early participation, vesting, portability, financial security of pension funds, etc.) seemed to be faltering near year's end, in the House, over lack of enthusiasm by the Treasury Department, and lagging interest in the whole scheme. The idea of converting the U.S. to metric measurements simply isn't well understood or popular anyway—and prospects that changeover could cause enormous expenses to industry make it less attractive at this time. [E. E. Halmos]

AIA Research Corporation

For many years now, the U. S. government has put 80 percent of its research dollars into space, weapons and atomic energy. Depending on how—or where—you look at it, the achievements have been either great or quite horrifying. But now the aura of glamour seems to be diminishing in space research, there are hopeful signs for future military cutbacks, and the intensive research effort going into atomic energy is increasingly coming under fire.

A growing number of people are asking what is being done about the quality of life on earth which becomes more and more degraded each year. Some architectural professionals, including John Eberhard, the president and chief executive officer of the new AIA Research Corporation, are asking what, specifically, architects can do to redress the serious environmental problems. One answer can be found in the basic rationale underlying the founding of the AIA/RC.

As signs of new directions begin to emerge in our national research efforts, Eberhard sees a new role emerging for the architect—a role where he can become a new key member of the research team. Because of the nature of his professional training and practice the architect emerges as a professional who is highly skilled at synthesizing knowledge to achieve real, practical results. And it is here, Eberhard believes, that the architect can bring a special expertise to problems of national consequence concerning the man-made environment.

The AIA/RC aims to create opportunities through which areas of environmental problem solving and policy formation will be able to benefit from these synthesizing skills of the architect. Already, the Corporation is working with three major Institute task forces—Recreating the Inner City, Creative Economics, and Energy Conservation, chaired respectively by Harry Weese, Robert F. Hastings and Leo A. Daly. In addition, several new federally assisted programs are being formed and more will be initiated in the future. Those who are interested in participating in new projects should write directly to the AIA Research Corporation at 1735 New York Avenue N. W., Washington, D. C. 20006.

Calendar

Jan. 6–27. The Design Necessity Exhibit, First National Bank of Minneapolis, Minn.

Jan. 10–12. Nineteenth annual educational conference and

seminar of the Ceramic Tile Institute, Anaheim, Calif.

Jan. 15. Deadline for proposals for Brunner Scholarship competition sponsored by New York Chapter AIA.

Jan. 15. Deadline for entries to competition of student design work combining energy conservation and design, sponsored by the Association of Student Chapters of the AIA, Washington, D.C.

Jan. 18. The 21st Annual P/A Awards presentation luncheon, The Four Seasons, New York.

Jan. 18. Deadline for mailing of programs for LeBrun Traveling Fellowship competition sponsored by New York Chapter AIA.

Jan. 20–24. Thirtieth annual convention and exposition of the National Association of Home Builders, Houston, Tex.

Jan. 22. Deadline for submissions to R.S. Reynolds Memorial Award Program sponsored by Reynolds Metal Company and administered by the AIA.

Jan. 31. Deadline for entries to 1974 Plywood Design Awards Program sponsored by the American Plywood Association, Tacoma, Wash.

Jan. 31–Feb. 2. Third annual forum of the American Institute of Constructors, Hilton Palacio Del Rio, San Antonio, Tex.

Feb. 3–7. Semi-annual meeting of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Los Angeles. Concurrent with the meeting will be the International Air-Conditioning, Heating, Refrigerating Exposition co-sponsored by ASHRAE and the Air-Conditioning and Refrigeration Institute, Los Angeles Convention Center.



Ann Carter



Roger Yee

Two new faces at P/A

Ann Carter has been appointed Associate Editor of *Progressive Architecture*, with special responsibility for the News Report. Ms. Carter holds a Bachelor's Degree in Journalism from the University of Florida and a Master of Fine Arts in Environmental Design from the Art Institute of Chicago, where her thesis was a study of New Towns. She has been a reporter for the *Atlanta Journal* and arts editor for the *Sunday Journal-Constitution*. While in that post, she was the recipient of an American Federation of the Arts grant to young critics for a special study program in New York. Recently, she has been a contributor of features on architecture and environment for *Chicago Today*, *Inland Architect*, and *The Christian Science Monitor*.

Roger Yee has accepted the position of Associate Editor. He will be responsible mainly for feature articles in the areas of design and building technology. Mr. Yee holds a bachelor's degree from Yale University in art and anthropology and Master in Architecture, also from Yale. While at Yale he served on the staff of *Perspecta*, the School of Architecture's internationally recognized annual; he was also student representative to the American Institute of Architects committee on systems building. He has worked as an editorial researcher for *Reader's Digest* and as a draftsman and designer for the architectural firm of Kilham, Beder & Chu and the office of Philip Johnson and John Burgee, Architects, both of which are in New York City.

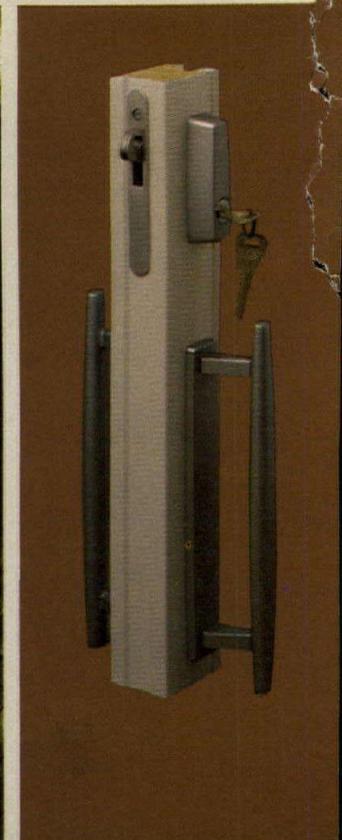
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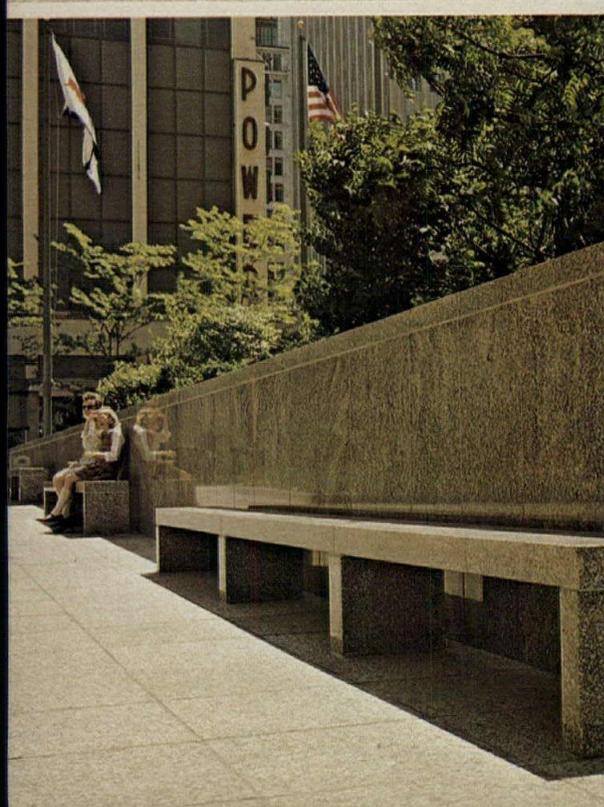
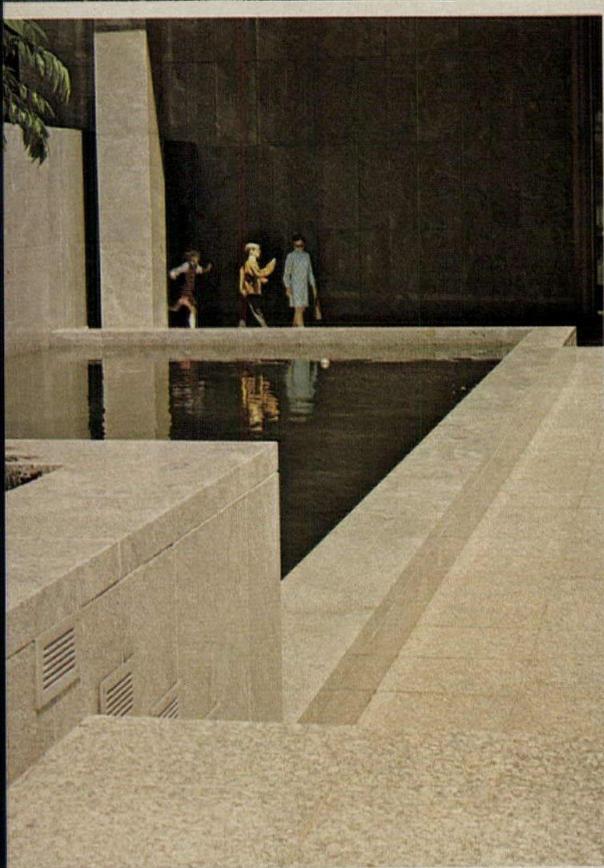
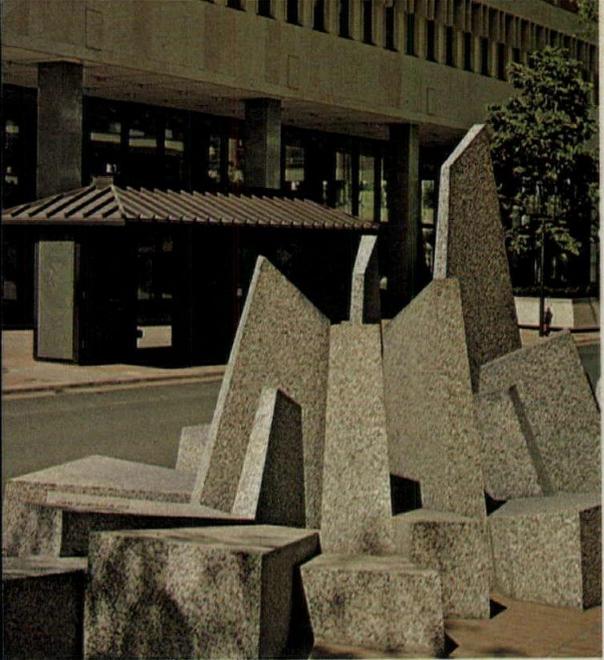
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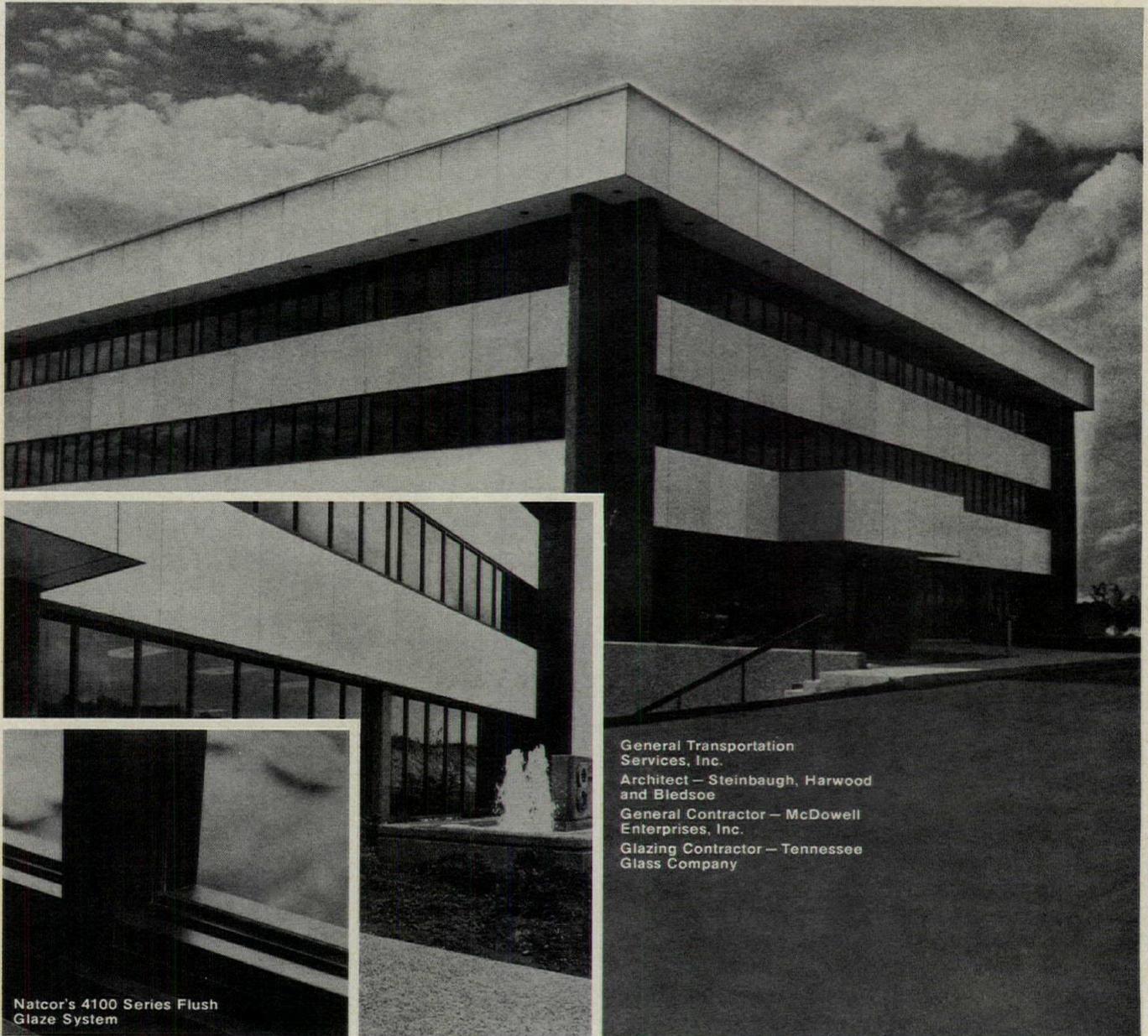
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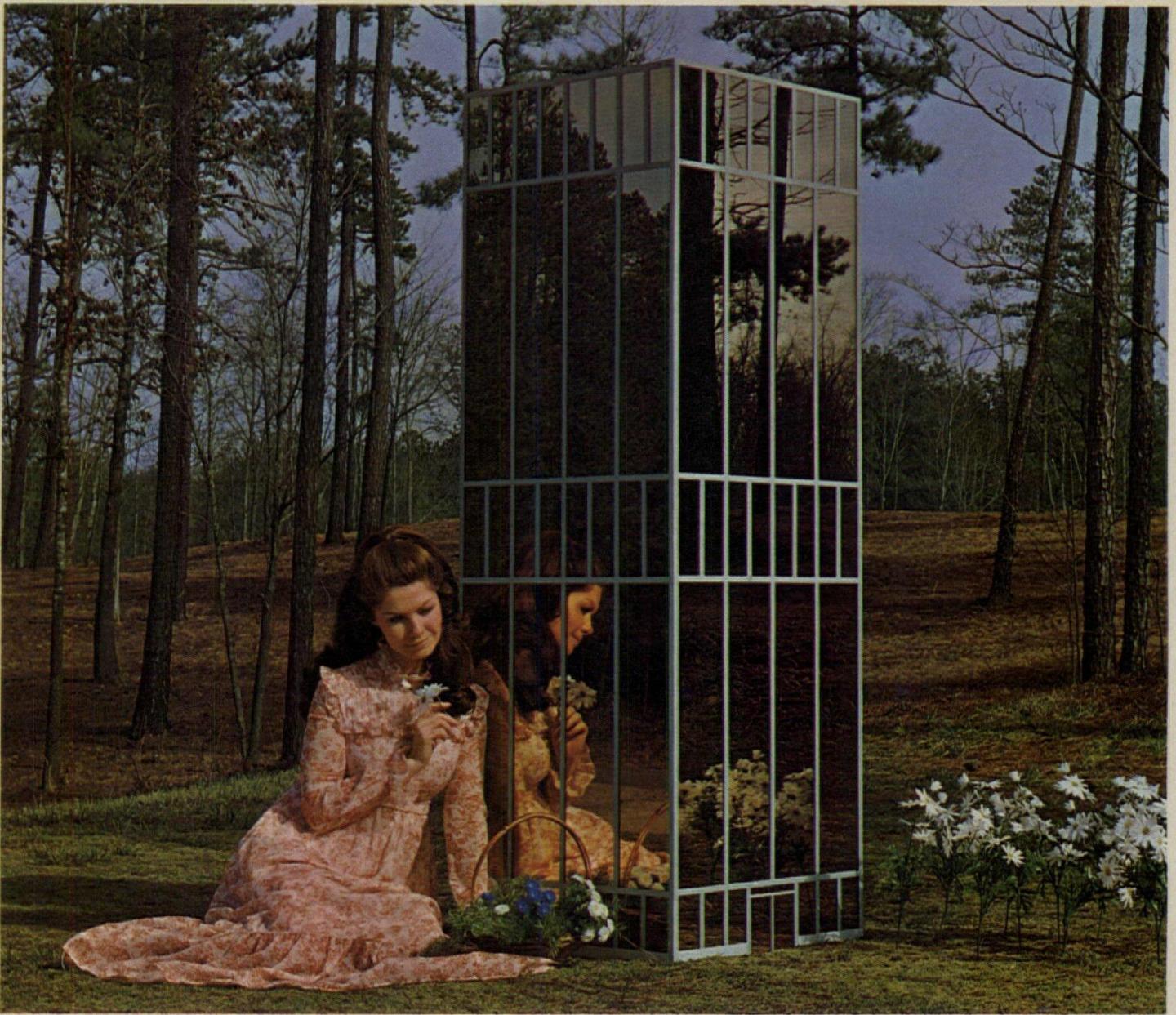
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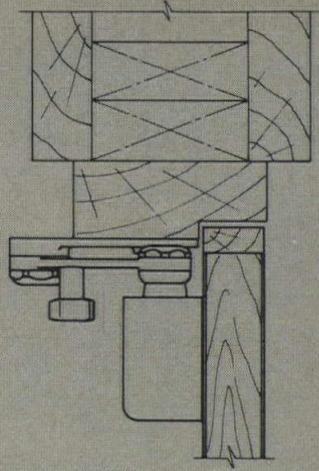
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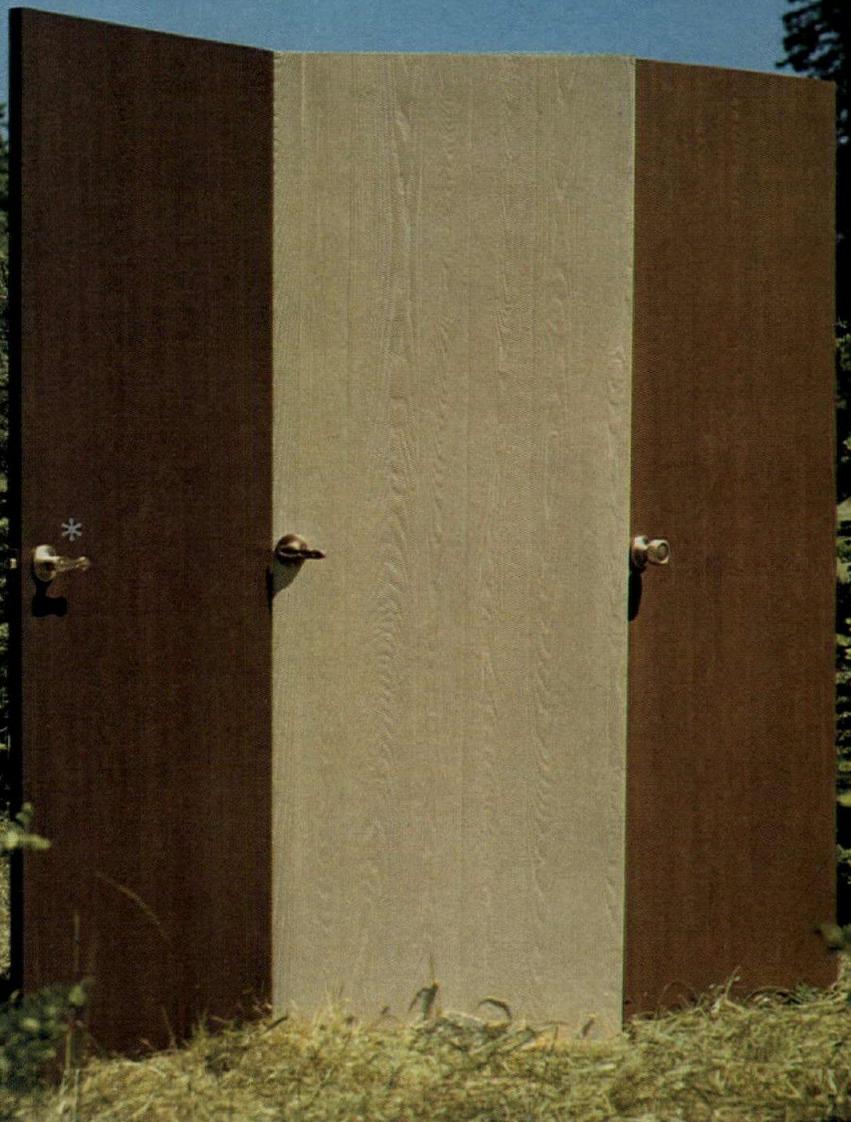
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Towards a responsible architecture

January 1974

Back in September, when the 21st P/A Awards jury met, the U.S. was a younger, more confident country. We had had some recent setbacks, but we had not yet had a vice president resign under charges of misconduct. We had never faced economic strangulation for want of energy. We had never depended so totally on resources in foreign hands.

Alarms had been raised about energy. P/A's Oct. 1971 issue, "Life support systems for a dying planet," opened with an article headed "Energy: crisis amidst plenty." That issue, and many publications of the two years since, belonged on everyone's prepare-for-the-worst bookshelf. But only the far-sighted were listening.

This year's awards jury was obviously alert to these portents, and to implications beyond any imminent "crisis." As the following pages make clear, their discussion focused on a few "issues," on which most of their choices were based. And these issues had to do in one way or another with responsible use of resources: the re-use of old structures, the control or retrieval of solar energy, the recycling of wastes, the conservation of natural landscape, the use of urban ground and air space. In the research category, and in some other selections, there was concern that design effort itself not be wasted, solutions re-invented, or mistakes repeated.

Even the stylistic trends that the jury was concerned about—and felt obligated to question publicly—are related in an ambiguous way to the matter of resources. The Corbusian aesthetic seen in so many submissions presents an *image of economy*, an effort to recapture the austerity symbols of the International Style. The machine aesthetic is an attempt to evoke a related *image of efficiency*—based instead on recent industrial design. With few exceptions, however, these efforts are mere travesties of these ideals—actually wasteful of mate-

rials and energy. That may explain why the jurors could not just pass them by dispassionately.

The jury was more tolerant of stick-on decorative flourishes, those intended as user clues to identity or orientation. Venturi's proposition that decoration is the least expensive means of architectural expression seems to have been accepted not only by his wife and partner, Denise Scott Brown, but by the majority of the jurors.

Previous P/A juries have shown strong concern about resources, but mainly about *allocation* of resources assumed to be available. They have been concerned about the decision-making process—who is involved and whose needs are considered. Occasionally, readers have protested, that the juries have been judging the programs not just the solutions.

Yet questioning the program—or determining the program—is a process architects are especially qualified for. And they are being called upon more and more to go beyond the now-commonplace feasibility study (can this function be accommodated on this site?) to study whether the function needs to be rehoused at all, and even to delve into the management question of whether the function itself is essential.

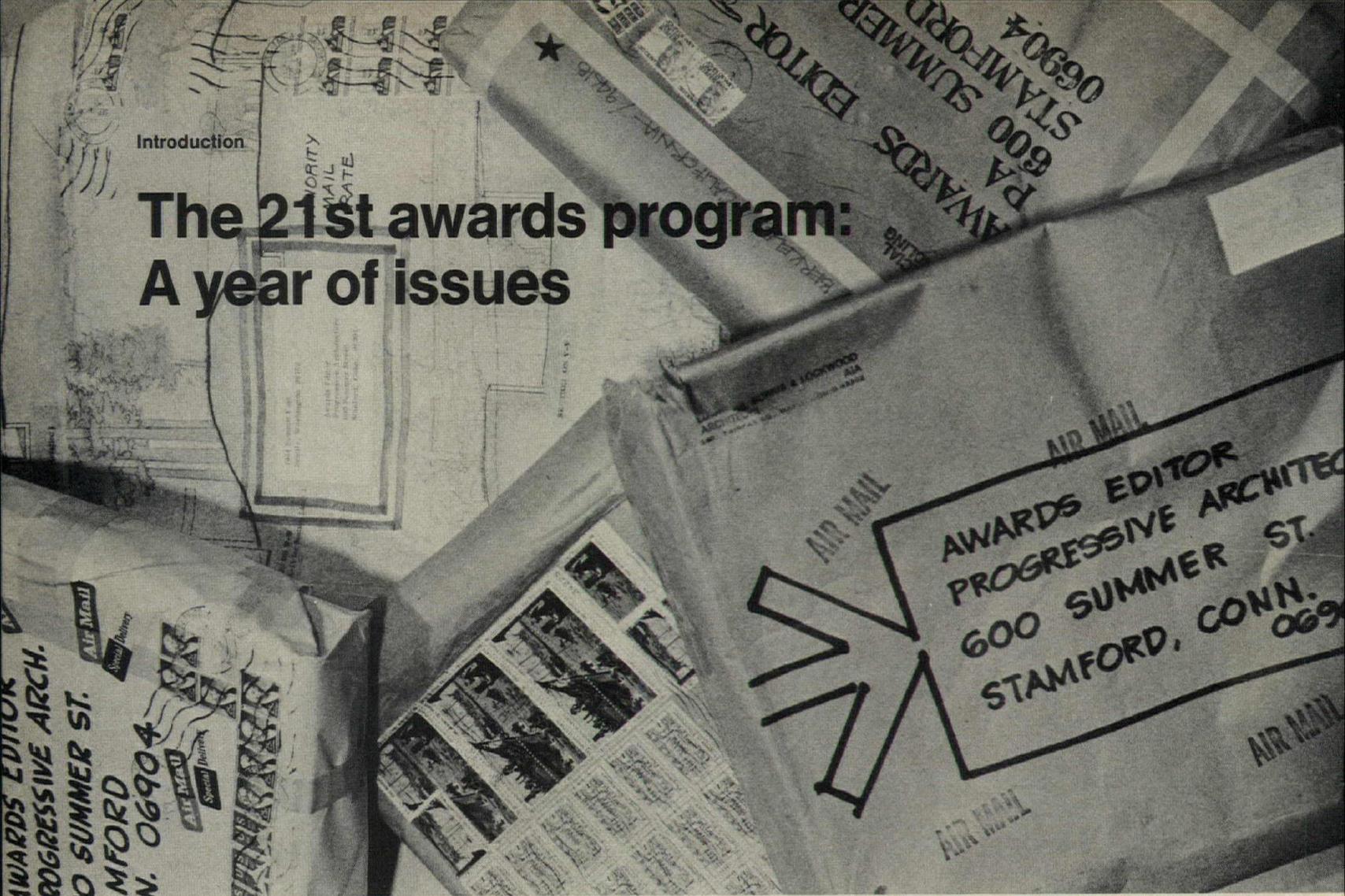
As realization of the energy shortage deepens, architects will be called upon, of course, for responsible decisions on such energy-saving features as insulation, temperature control systems, recycling of heat, and re-use of existing construction. But all of these considerations are irrelevant if the building itself is unnecessary.

Architects will be serving society to the fullest only if they are willing, and prepared, to take on the question "Is this building necessary?" The full responsibilities of the architect should include not just *what* gets built, where and how, but also *why* and *whether*.

John Morris Diefen

Introduction

The 21st awards program: A year of issues



None of the 20 previous P/A Awards juries has followed its predecessors' footsteps exactly; nor has the program been bound by tradition to be what it was the year before. Certainly, in terms of size and scope the 21st P/A Awards Program shattered a few precedents.

Beginning its September deliberations on a record number of submissions (863), the jury itself represented a shift of emphasis. Not only did the number of jurors reach a new high (8), but this year's group was the first in the program's history to consider applied research. Taking its place along side of the two more traditional categories of architectural design and planning and urban design, the "new" classification produced some diverse and interesting entries (p. 82).

The research efforts and submissions in planning and urban design were each separately screened initially by two jury members especially qualified in each area. The other four jurors began with the 708 architectural design entries. After arduous rounds of appraisal, the entire jury reassembled for the final selections.

One thing quickly became quite clear: the jury did not consider any project *First Award* material. In the beginning, in fact, the jury was not inclined toward awards at all. As time went on, however, they decided that it was "preposterously arrogant" for them to take a no-award position. It should be stressed that this was not a jury looking only for design. Design was indeed a consideration, but in case it went unnoticed, this year's program was simply called the P/A Awards Program. Over the past few years, P/A juries have called increasing attention to *content* (1970) leading to *causes* (through 1972). *Issue* was the key word this year, and the

search for issues was felt as strongly in the architectural design and planning portions of the jury as in research, where it might be more readily expected. A "good" design, aesthetically, was only one of a possible set of criteria, and was certainly not assumed to be the overriding one. Early discussions by jurors Denise Scott Brown and Jaquelin Robertson (planning and urban design) and John Zeisel and John Eberhard (research) indicate some of the other considerations.

Scott Brown: We've been looking for a set of concerns in each case, even though in a nutshell way, and they were there in some of the entries: quality of life, way of life, and kinds of living in these environments.

Robertson: There are also the additions to the list of traditional client groups.

Zeisel: I was listening to see if that was on your list, because we are initially looking at these entries as three groups, and I think we might be seeing all of these three groups being affected by the same growing social concern.

Robertson: They sure are. The reason I include the point about the client is that by choosing them, you will determine what percentage of what's built is affected by architects. If the client groups effectively don't include developers, then architects will have only a tiny effect on what's built.

Zeisel: The interesting parallel we have is not an identical laundry list, but a very similar set of concerns—signs of similar trends and types of efforts. For example, we've seen that a number of designs submitted in our area will end as city ordinances for bicycle paths or city signs, or for community participation. That participation is not for the sake of saying, "Oh, isn't it wonderful that we've included them," but as *real*



input into design processes, getting information as a research process, as opposed to participation for itself.

Eberhard: I think there is an important notion here that I want to support very strongly. Historically, one gave awards for fancy frolic designs, to the guy who was the creative genius that sat down and wrested from the philistine world this great piece of art. While that's not altogether wrong, I think what's being said around this table is that a lot of other things are happening that are just more important.

Other, more specific issues were raised as well. On a general level, concerning all architectural submissions, Joseph Esherick pointed out the severe lack of concise information in the entries.

Esherick: In almost everything we had to review, it was very hard to find out what we were looking at; we could easily get the impression that, to a lot of architects, it really didn't make any difference where anything was. I would really like to see a concise statement about *what the problem is*—its orientation, its climate, the reason it was submitted—without this clarification, we just can't make any kind of judgment about this sort of thing.

Robertson: Joe said it very well; when he looks at all of the submissions and he doesn't find that each one has strings leading out to a whole series of broader conditions to determine why the solution came out as it did, then there is something wrong. I've criticized my peers' beach houses, and the places where they've built them, because they have assumed that their lot is unrelated to anything around it. There's no way that you can build a house on an imaginary lot and be responsible.

The scene before and during deliberations by jurors (above, left to right): **Joseph Esherick**, FAIA, president, Esherick, Homsey, Dodge & Davis in San Francisco; **Barton Myers**, MRAIC, partner, Diamond & Myers in Toronto; **Denise Scott Brown**, partner, Venturi & Rauch in Philadelphia; **Paul Kennon, Jr.**, AIA, senior vice president and director of design, Caudill Rowlett Scott in Los Angeles; **Jaquelin Robertson**, AIA, vice president, Arlen Realty and Development Corporation and former commissioner, New York City Planning Commission; **John Zeisel**, Ph.D., assistant professor in the sociology of design, Harvard University Department of Architecture; **John Eberhard**, AIA, president, AIA Research Corporation, American Institute of Architects; **Herb Greene**, architect and professor of architecture, University of Kentucky, Lexington.

Esherick: I think most of our buildings are built on imaginary lots, without regard to surroundings.

Robertson: No, I didn't say they weren't, just that they shouldn't be. It's possibly the largest of the concerns that we have. These may be passing concerns that won't be with us in 15 years. We *do* have them, and we are anguished when we see the absence of evidence of these concerns.

Of the remaining major issues raised by the jury, each is treated in detail in the appropriate section throughout the magazine. Each award or citation is presented in the light of a specific concern. The other exception to previous years' recognition is the jury's special commendation of one submission for graphics (cover and p. 88) *in addition* to its citation in the applied research category. □

Less bravado



Paul Kennon

Herb Greene

Barton Myers

Joseph Esherick

While most of the issues raised by this year's jurors must properly be attributed to the entire jury, several specific comments had their roots in the part of the panel especially concerned with architectural design. Some, such as the discussions of clearly visible trends, led to the comment packages on pp. 66 and 68. In those two instances, the issue was not one of commendation or censure for individual projects, but more of a commentary on currently fashionable idioms. In each case, however, the jurors did cite an accompanying project. Several other projects were grouped according to broader categories of intent. Five projects were singled out for reusing existing structures imaginatively, three for appropriately responding to environmental concerns.

Had they had more time, the jury would have liked to send letters to some of the entrants, commending them on what were seen to be good efforts. The sheer weight of numbers was too heavy, however, and that idea had to be abandoned. At the end of two very long days, that additional response would have required an all night charrette.

Several other jury viewpoints were brought out in the discussions. Barton Myers noted the architect's tendency to say that he has reached "the final solution," as opposed to the best of the alternatives. "There is no humility in most of these," Myers said, "only *the final* solution." Myers and Joseph Esherick were also looking for solutions that were not pretentious and overbearing. Esherick described the principle as "doing the least that you can do, as distinct from a 'less is more' ethic." As an example of that, several jurors

Recycle

supported the citing of a Samoan Church in Honolulu, but it failed to get enough votes.

A lack of simple low-income housing schemes also dismayed the jury. There were over 300 housing entries, including both single and multiple dwellings. "They've all been glossy," Myers lamented, "they all seem to indicate that the only concern we have in North America is the individual home, and I don't think that's the truth." Myers also proposed giving an award to the concept of urban homesteading, although it was not submitted, to call attention to that and other movements in housing not well represented in the entries. It was decided that there could be no awards for policies not demonstrated by submissions, or for expressions of human concern other than what jurors saw. No single subject was more important to this year's jurors than the question of quality of projects. Compared with previous years, the level of work submitted was very high. But so were the jurors' expectations. So high, in fact, that only one project from the architectural design categories was given an award; the rest were citations. This was due, again, to the search for quality as *it related to broader implications*. Therefore it is not surprising that the jurors found the research and urban design/planning entries more pertinent than the architecture. Commenting on that aspect, Barton Myers said, "I think that's a very important statement in itself, that the questions and the work being done in urban design were more interesting than what was being considered architecturally. A number of research entries stand out, too. In fact, the production of a development policy is often more important than the product."

The one award they did give goes to a project with broad scope, responsible re-use of existing resources, lifestyle concerns, and design sensitivity. In effect, it sums up one of the jury's strongest desires: its implications beyond the actual design were clear. One project, a community action design for a plaza, was also considered for those reasons, but had to be disqualified because it was not going to be built.

It was the jury's hope that, by citing or awarding submissions in groups that responded to what they felt were overriding common issues, their concerns might be clear. Further, such groupings were meant to indicate a direction for future entrants—give contextual information in concise terms, consider more carefully a project's contribution to that context, and make the statements clear.

Re-use of existing buildings, whether by plugging in new uses or by renovation and addition, was strongly endorsed by the jury. In line with present shortages of almost everything, the jurors clearly expressed the need to examine all methods for using resources wisely. Their concern for old buildings as a resource was not a romantic notion or nostalgia, but as a possible answer to current socioeconomic problems.

Kennon: One of the points here is that we're running out of money as a nation; economic times are tough.

Myers: This group could have all kinds of names: recycling, re-use, rejuvenation, or restoration.

Esherick: Even though there is something of the old "because it's there" whimper in this, the first thing we really ought to think about is saving these things just because they're there. The whole damn trouble now is the tendency to do just the opposite, because the bulldozer is such a nice blunt instrument.

Scott Brown: Are there cost analyses to see that these don't come out more expensive than new buildings?

Greene: There are aspects of the problem that reach far beyond sheer economy.

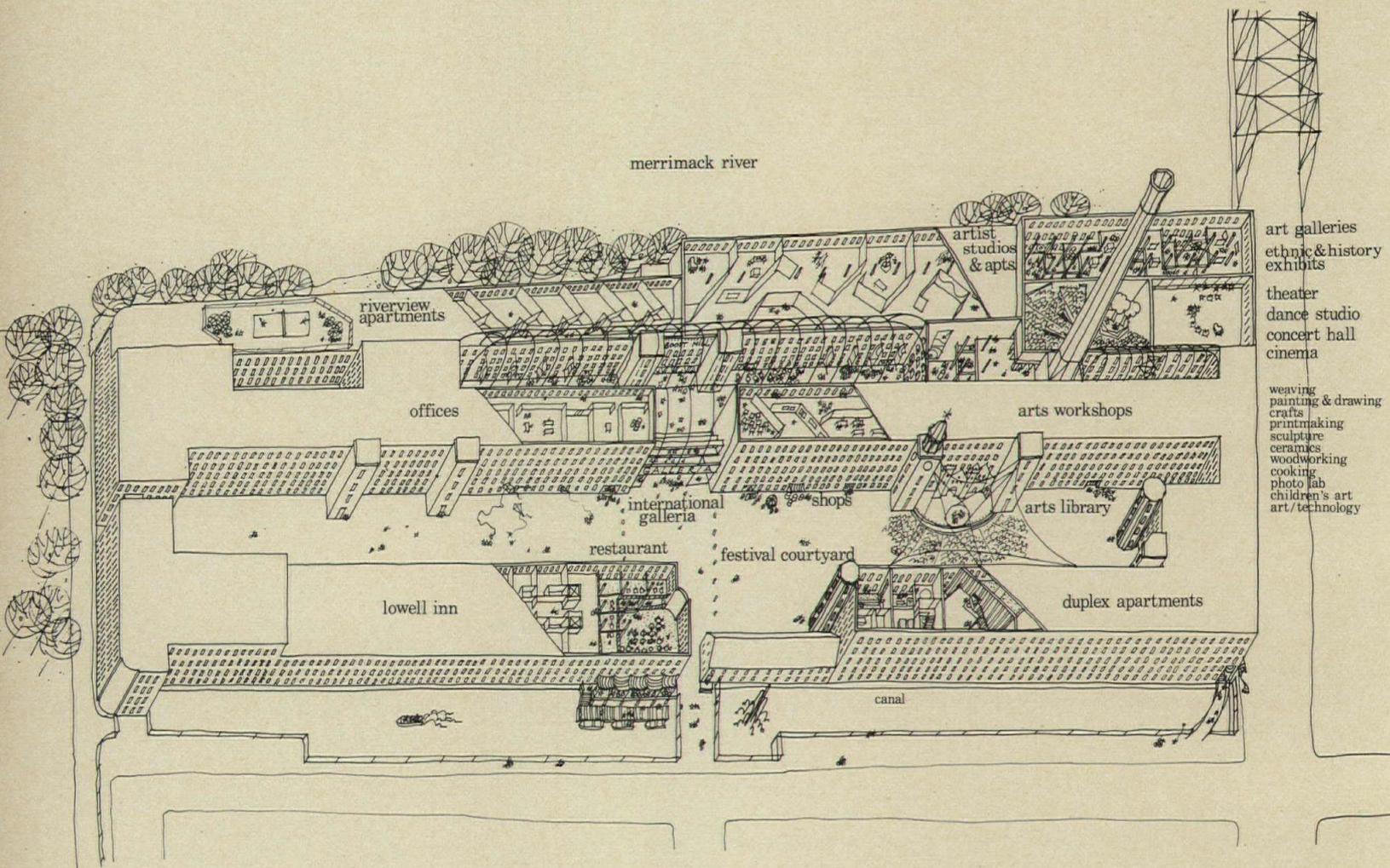
Myers: Yes, I think that ought to be recorded, we should comment that there are these huge, bulky systems in our cities, and the first question should be do we have to do anything to them. Then assuming that you do have to do something, what little can we do to revitalize areas?

Robertson: I agree that the mill project is so big that it represents a building type that is important, in the school program we're looking at, maybe it's an economic program, and I'm trying to find out the major reason for doing this. Is it the quality of the existing schools and is it much cheaper, or is it the location of facilities that people are used to?

Esherick: The problem is more complicated with the mill than with the school, because in a commercial project there are tax consequences. It's good to ask if it's cheaper, but these have to be measured in the more complicated light of economic costs and social costs. My main point is that you just don't tear it down until you've analyzed that. If it doesn't work, you don't do it; it's that simple. There might also be an economic value assigned to the historic content of a building.

Kennon: I think the point made with the schools is that they might stimulate a lot of school districts to start looking at this valid approach.

Michael & Susan Southworth



Boott Mill Cultural Community Center gives a city needed arts and living facilities within an old Merrimack River cotton mill

Program: A new community to be housed in an existing mill complex. As the city has no arts facilities available to the general public, the new community will focus on the arts and ethnic culture and will house arts workshops, exhibition spaces, a theater, restaurant, and an arts branch of the public library.

Site: Historic Boott Mill (1835), Lowell, Mass.

Solution: The enormous, open interior spaces offer a wide range of construction possibilities for adaption to new activities. Outside, the activities focus on the two courtyards: the inner one, enclosed, is used year round; the festival courtyard

will be used in good weather for outdoor theater, concerts, and ethnic celebrations.

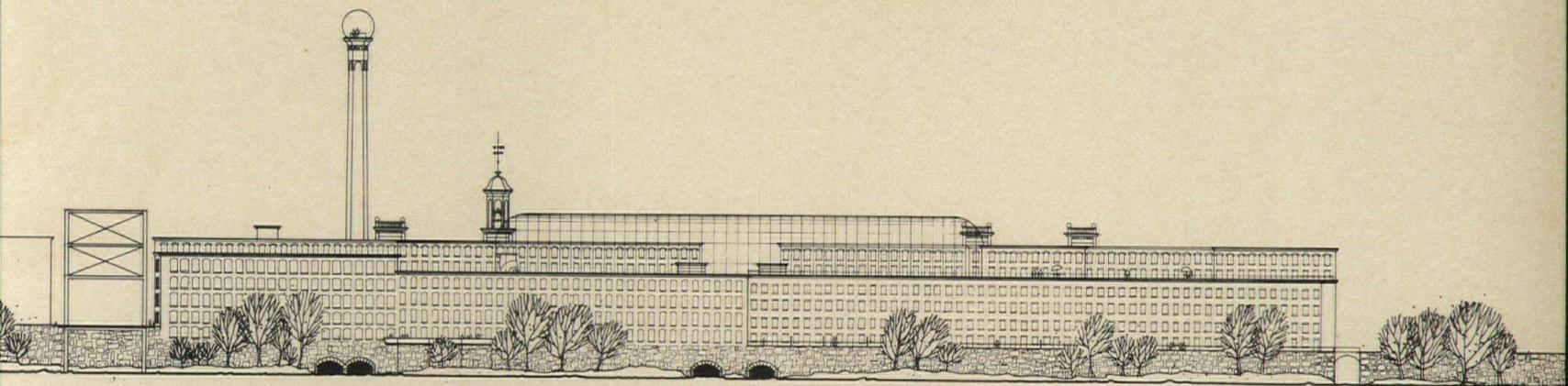
Materials and construction: All new materials were chosen to be consistent with the Mill; wood, glass, brick, and granite.

Jury comments

Esherrick: Someone has made imaginative use of existing things. The existing mill project is really an impressive enterprise.

Kennon: I think the significant thing here is the revitalization of historic buildings. There's a tremendous mix here and it's turned into a vital urban milieu.

Myers: It's important to say that, in order to knock the mentality that everything old is bad. This is a part of a landscape that will never be reproduced again. □



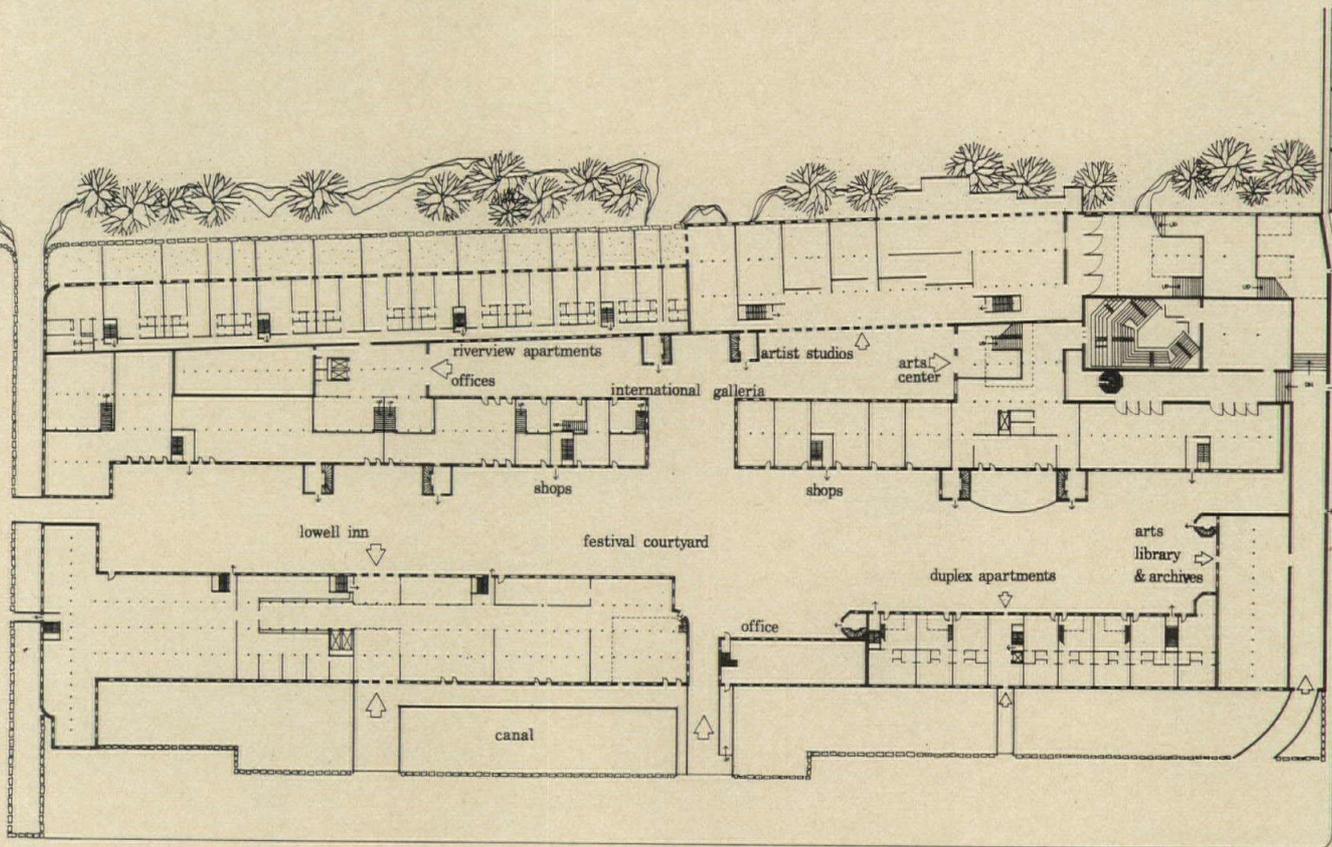
arts center

restaurant

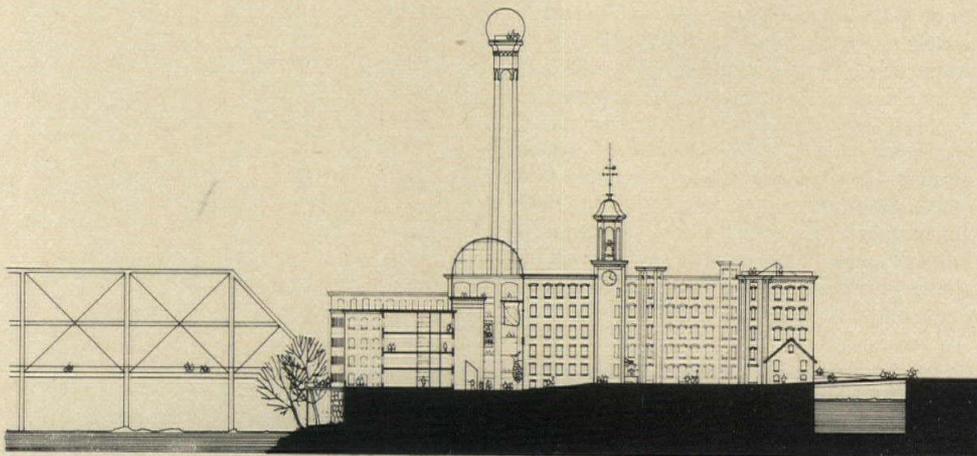
artist apartments

galleria

riverview apartments



0 10 30 60 100'



river

terrace

galleria
riverview apartments

offices

courtyard

duplexes

Credits

Architects: Michael & Susan Southworth, city design and architecture; Jack Fest, administrative assistant; Rosalyn Hawthorne, office assistant.

Photographer: Michael Southworth, Randolph Langenbach.

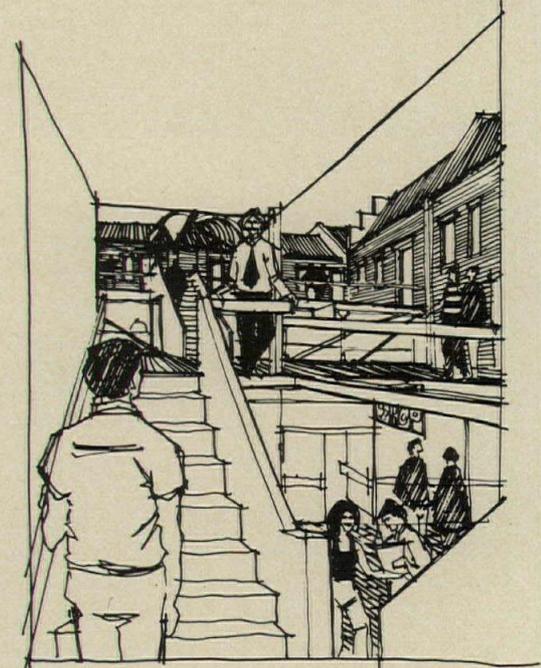
Rendering: Michael & Susan Southworth.

Client: city of Lowell.

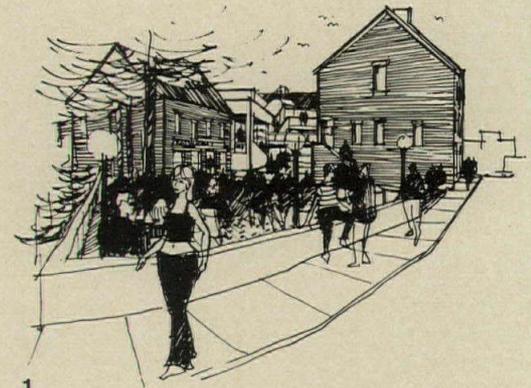
Stifter and Baum Architects



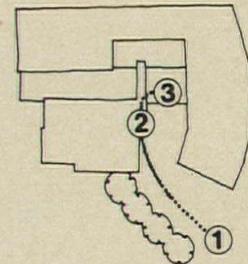
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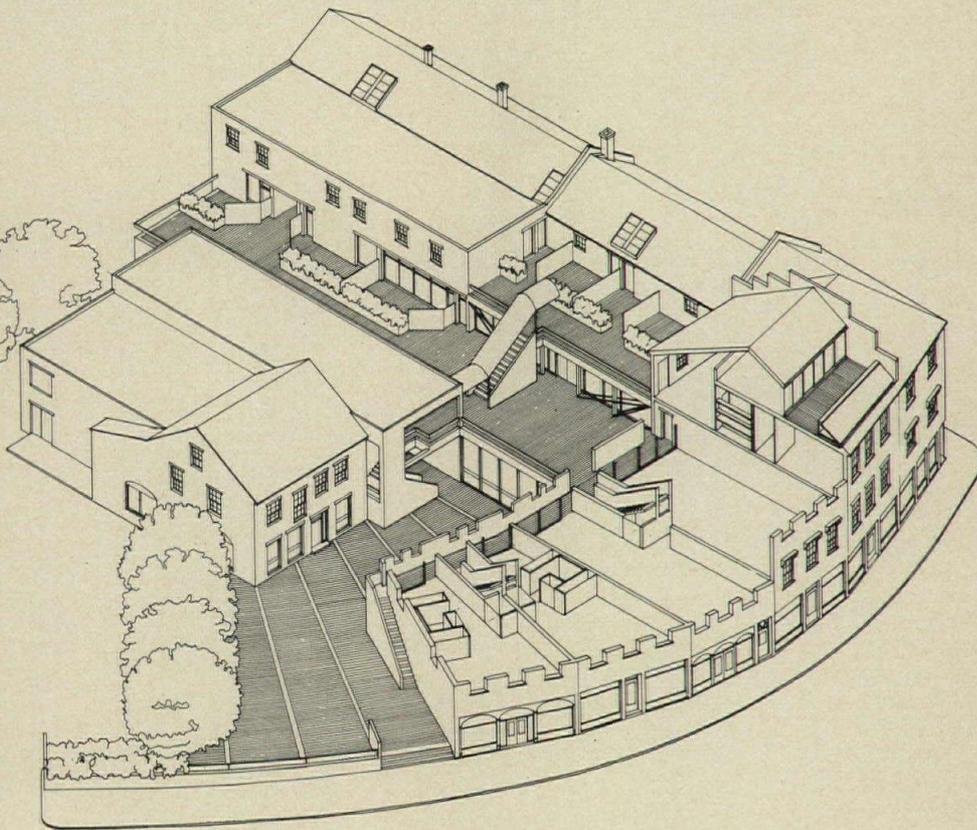


Credits

Architects: Charles T. Stifter, partner, Edward M. Baum, partner.

Consultants: Souza and True, structural; Fitzmeyer and Tocci, mechanical.

Client: Humphrey and Allen, developers.



East Row, Newburyport: A Conversion for Commercial and Residential Occupancy. A lesson in reusing existing urban fabric

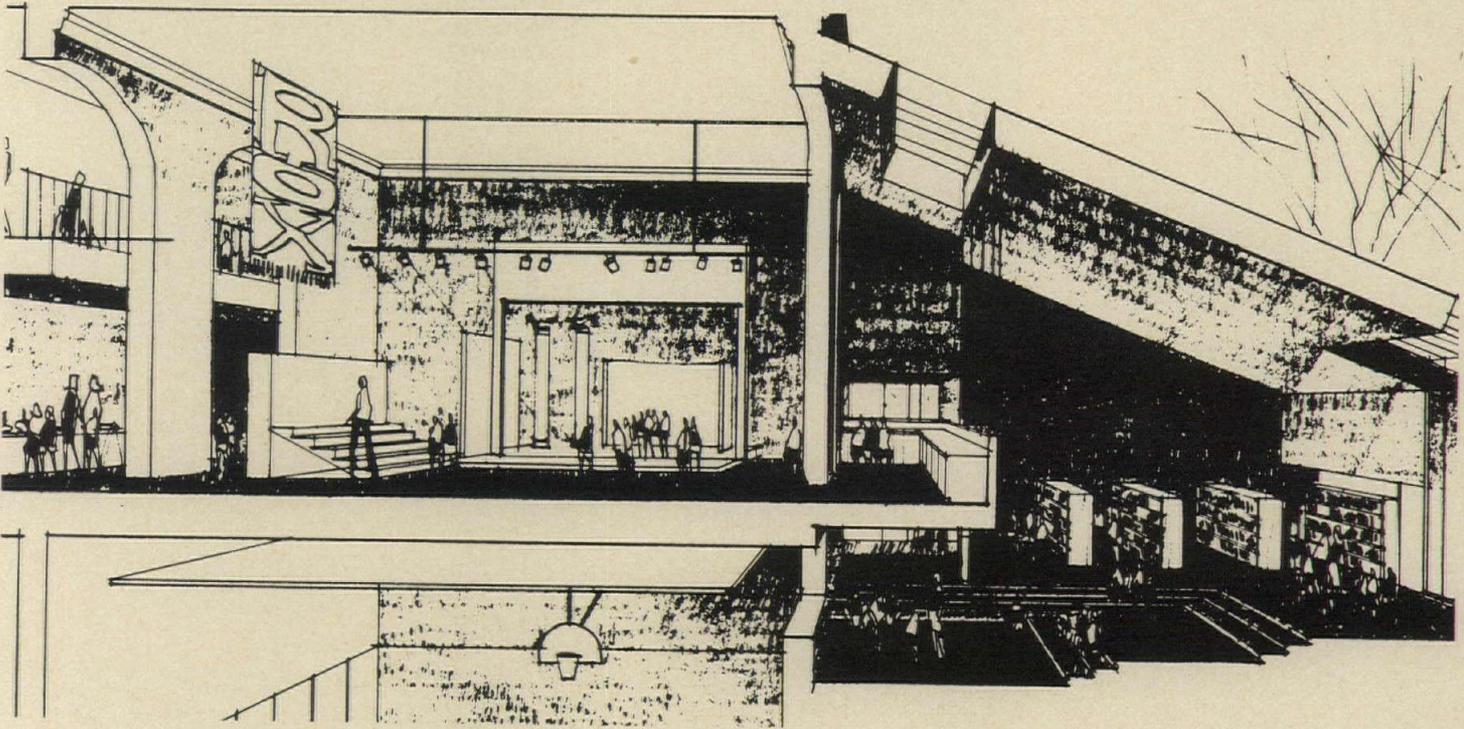
Program: Converting a series of 19th Century structures into 22,500 sq ft of commercial/office space, 12 two-bedroom and 4 studio apartments with a parking place for each apartment.
Site: 40,000 sq ft, downtown Newburyport, Mass.
Solution: Restraints on the solution included integration with the existing renewal plan that required all street façades to be restored, adaptation of various existing structural systems to meet current code standards, and a low budget. The solution preserves the hard edge street side, but opens up the soft edge interior space for public use and circulation with a series of interlocking decks. Living units are on the upper levels with views of the waterfront.
Materials and construction: Street elevations are to be restored to their 19th Century character. The only other new exterior construction is the interior court constructed of brick and wood.

Jury comments

Myers: For so long, so much of what architecture has been about is starting from scratch. But this project represents a theme that really struck us. It seems that a major shift we're seeing now is not so much concern for preservation, but a concern for existing structures, the realization that they have an economy and purpose for reuse. We can no longer wipe out everything and build anew. It takes a long time for a neighborhood to grow, and we must consider that we can continue to work on it . . . We must build on the existing structure of the city. We have become very conscious of the wastefulness of how we build, and we must realize that we're out of the throw-away economy.

This kind of project is an indication of the kind of thing we're going to see more of in the future. We must have less of the huge-project syndrome. This project represents a more evolutionary way of looking at city change; it develops a wonderful mixed use—a return to Jane Jacobs. It is at a modest scale, but it's very complex, and extremely well done. □

Richard Fleischman Architects, Inc.



Cleveland Heights / University Heights Schools 1973-1974 represents a large-scale program to re-use existing schools as resources and add supplementary facilities, through design plan developed by one firm for use by others

Program: Comprehensive plan to develop a design strategy to put 12,000 K-12 students in new learning environments in the next 24 months.
Site: 15 scattered sites throughout the city of Cleveland.

Solution: Renovation and reconstruction of existing schools as well as the building of four replacement schools. Program includes new library and physical education centers, new administrative and student centers, new HVAC, plumbing, power, and lighting. Eight project architects will execute drawing and oversee construction.

Jury comments

Robertson: My immediate reaction to this is that although it is an existing building, it has been stylized to make it appear that the old building has been destroyed.

Scott Brown: Maybe there is an imagery reason for that. You say you don't have a new building, but you think you have one.

Robertson: The question is that in the course of mending old things and performing that kind of surgery, what aside from economic values, are you mending?

Kennon: It's a very sophisticated kind of thing, to reuse existing schools, to rejuvenate them and form a whole new kind of school system. He's blocking out new interior environments within the existing framework, in an old shell. □

Credits

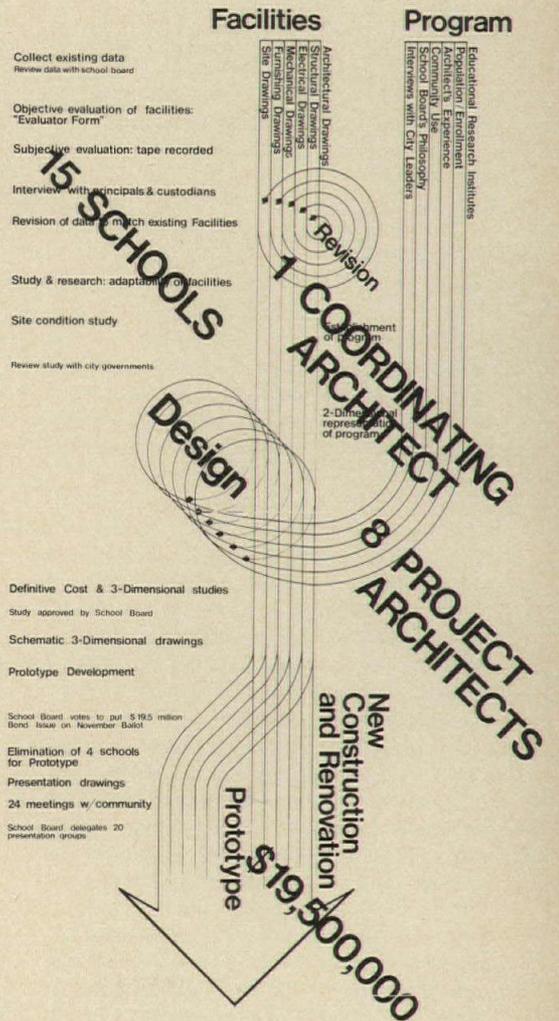
Architects: Richard Fleischman, partner in charge of design; Clyde A. Horn, partner in charge of project management.

Project architects: Barnes, Neiswander & Associates, Collins & Rimer Architects, Inc., Dickson & Dickson Architects, Dyer & Watson Architects, Madison-Madison International, Rode-Kaplan-Curtis & Woodward Architects, Fred Toguchi Associates, Van Auken, Bridges, Pimm, Poggianti, Inc.

Consultants: R. M. Gensert Associates, Barber & Hoffman, Inc., structural; Andrew N. Psiakis, Inc., Pfizenmaier & Jablonski, Inc., Denk-Kish & Associates, Evans & Associates, Inc., Byers, Urban, Klug & Pittenger, mechanical; William A. Behnke Associates, landscape; John Flynn, lighting; Robert Shankland, Ph.D, acoustical.

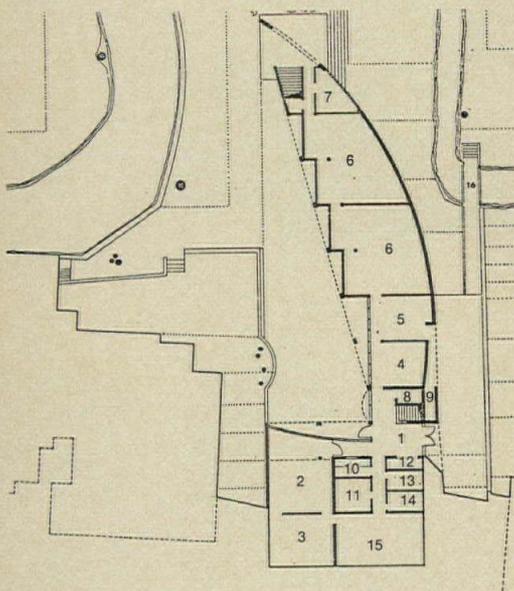
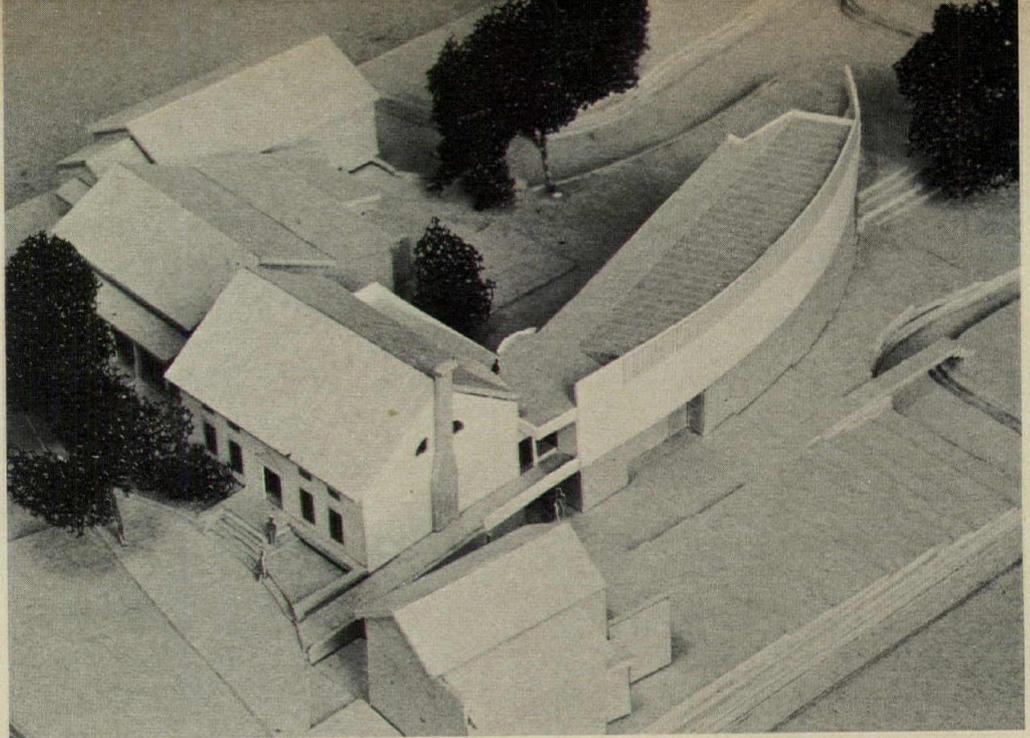
Photographer: Grace Cavan.

Client: Cleveland Heights / University Heights Board of Education, Cleveland, Ohio.

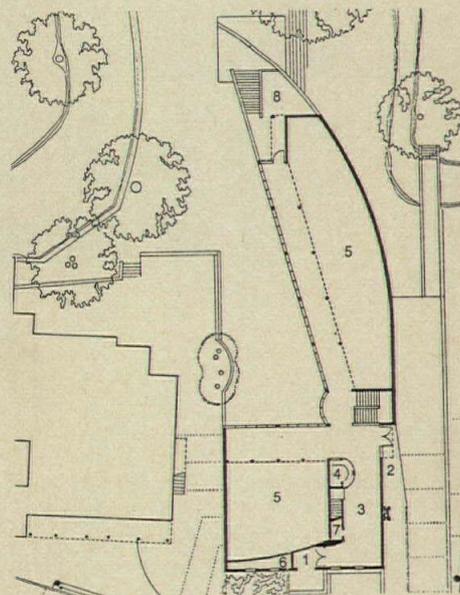


Citation

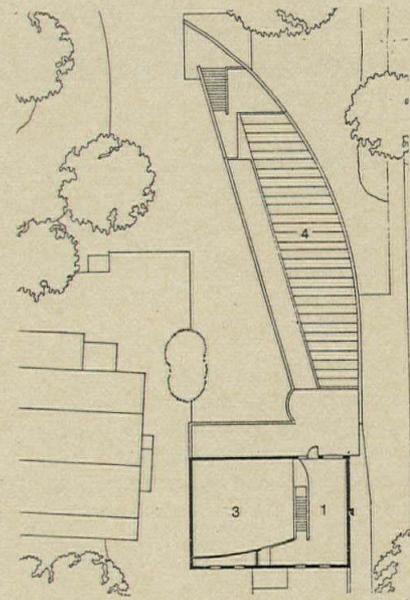
R.M. Kliment Architect



GARDEN LEVEL



STREET LEVEL



BALCONY LEVEL

**Museum Extension and Gallery Renovation.
In Upstate N.Y., artists' architects add
to old urban fabric and enhance town square**

Program: Renovation of the existing gallery building, a one-story, wood-frame structure completed in 1920, and the design of new space to accommodate exhibitions of painting and sculpture, storage, art classes, lectures, performing arts, administrative and curatorial functions.

Site: The site lies between the village green and a tranquil expanse of field in Woodstock, N.Y.

Solution: The new extension is sited to provide open space for the display of sculpture and to link residential areas on one side to the village green on the other. The extension of the building, the existing building, and the sculpture garden are designed to make the new and old appear and function as one coherent organism. Exhibition galleries can be organized for a variety of uses by means of movable panels.

Materials and construction: New extension is steel frame faced with local bluestone on the lower level, white brick on the upper level.

Jury comments

Myers: This renovation and addition to an existing building illustrates a concept the jury was concerned about all during the deliberations—the enhancement of the existing urban fabric. After looking at all the effort, the monumentality that characterized so many projects, we were struck by the simplicity, the clarity and conciseness of the way this was handled, although it's very complex at the same time. The relation of the new addition to the village green, the way it connects to the older building, combines unusual sensitivity to what is there with what is added. It's the making of a good building on existing fabric. So little of this kind of thing is well done. It's a masterful job. □

Credits

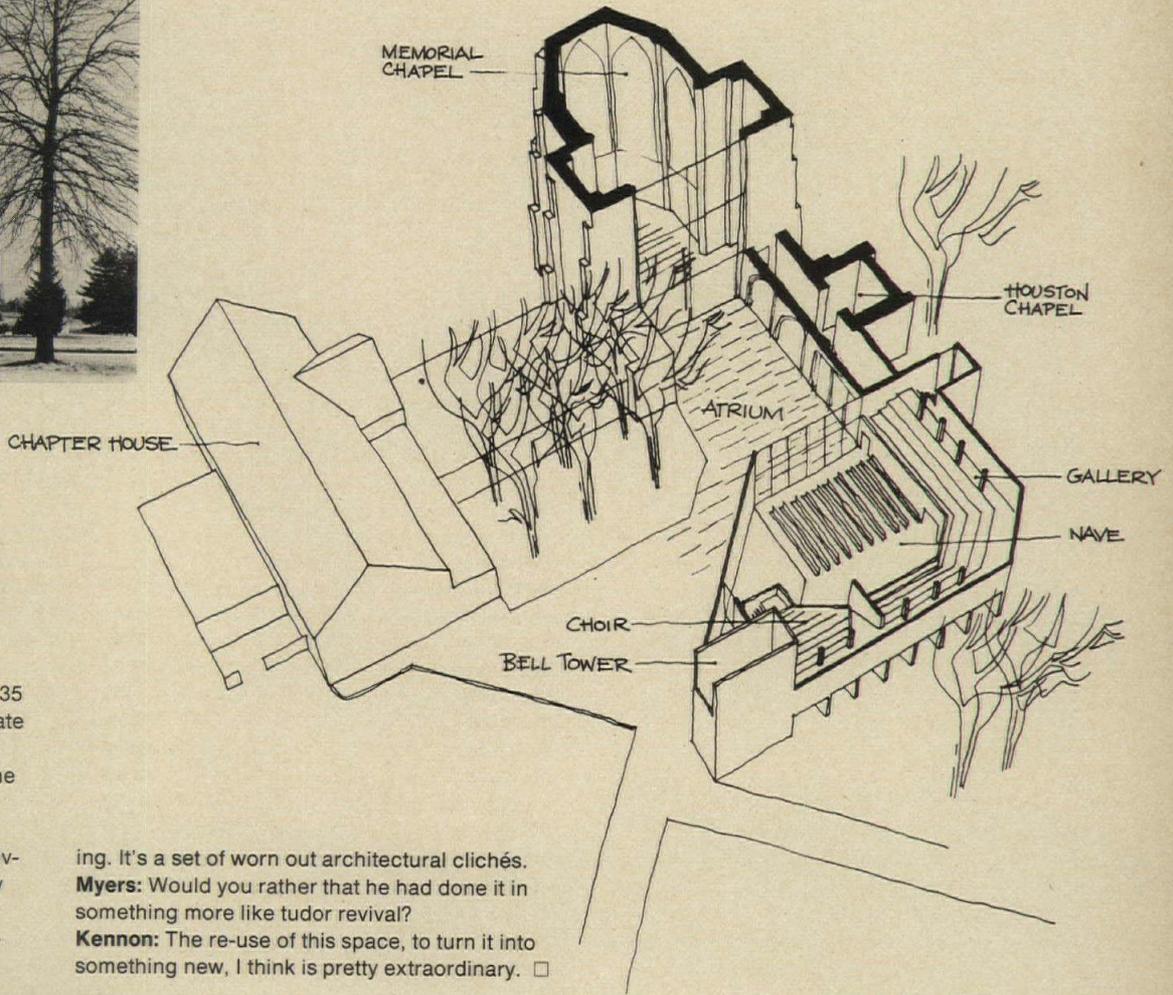
Architects: R.M. Kliment, principal; Francis Halsband, associate.

Consultants: Zoldos/Silman, structural; Dalton & Dunne, mechanical.

Client: Woodstock Artists Association.

Garden level	Street level	Balcony level
1 Entry	1 Main entrance	1 Board/study/lounge
2 Meeting room	2 Ramp entrance	2 Deck
3 Graphic equipment	3 Reception	3 Open to exhibit below
4 Office/workroom	4 Sales/control	4 Roof
5 Shipping/receiving	5 Exhibit	
6 Exhibition/collection storage	6 Storage	
7 Garden equipment storage	7 Coats	
8 Storage	8 Deck	
9 Trash holding		
10 Kitchen/pantry		
11 Building storage		
12 Coats		
13 Women		
14 Men		
15 Mechanical equipment		
16 Bridge to church parking		

Frank Schlesinger, FAIA



St. Mary's at the Cathedral in the Roxborough section of Philadelphia picks up where the abandoned cathedral building plans left off

Program: To complete the lady chapel, begun 35 years ago but never completed; to accommodate a 200-seat worship facility for the local parish.

Site: 7.8 acres of existing church property of the Episcopal Diocese of Philadelphia.

Solution: A physical separation of the old and new. The unfinished lady chapel becomes a "living memorial" connected to the new sanctuary by an atrium.

Materials and construction: Stone-faced, steel-framed construction.

Jury comments

Esherick: I think the church is really remarkable. Although it is about the most mundane kind of church, the whole thing is transformed by someone giving it a lively reinterpretation.

Scott Brown: I think it is a study of an outworn scholastic style, an outworn poetic style and one that produces an intolerable struggle with mean-

ing. It's a set of worn out architectural clichés.

Myers: Would you rather that he had done it in something more like tudor revival?

Kennon: The re-use of this space, to turn it into something new, I think is pretty extraordinary. □

Credits

Architects: Frank Schlesinger, FAIA; Reg Richey, job captain.

Consultants: Joseph Hoffman, structural; Vinkur/Pace, mechanical.

Rendering: Hal Guida.

Client: Cathedral Chapter, Episcopal Diocese of Philadelphia.

Environmental response

Still another jury grouping of projects concerns the response by architects to environmental problems. Two of the three could be broadly classified as attempts to solve ecological and energy problems, while the other deals with site and climate problems. There was some discussion by Joseph Esherick and others that the ecological studies did not represent a more thorough effort than that necessary to complete an environmental impact report (EIR). Still, the jury seemed enthusiastic that considerations such as energy and wise resource use were becoming recognized concerns in the architectural community at last. They expressed hope that the cited projects were just the tip of the iceberg, and that offices everywhere might be taking steps in the same direction.

Citation

Edward Larrabee Barnes

College of the Atlantic, Bar Harbor, Maine is to be a compact college campus including, as demonstrations and experiments, a variety of innovations to reduce uses of resources

Program: A college campus for a projected total enrollment of 400, with a heavy emphasis put on energy and resource conservation.

Site: 80 acres of land spread over a pair of rocky hills overlooking Bar Harbor. The main buildings are located in the saddle between the two hills.

Design solution: A compact plant that still leaves opportunity for flexibility and expansion. Putting the main buildings between the hills takes advantage of scenic views, yet minimizes the visual impact of the campus on the town. The north building will house a large lofted academic space covered by an insulated skylight roof along with three floors of living units; eventually living spaces may become offices, the library may become a lab, or the dining area may become lounges. The south unit combines learning and social spaces, eventually including an extensive library. Between the buildings is a terrace, and the rest of the site is to be left in its natural condition.

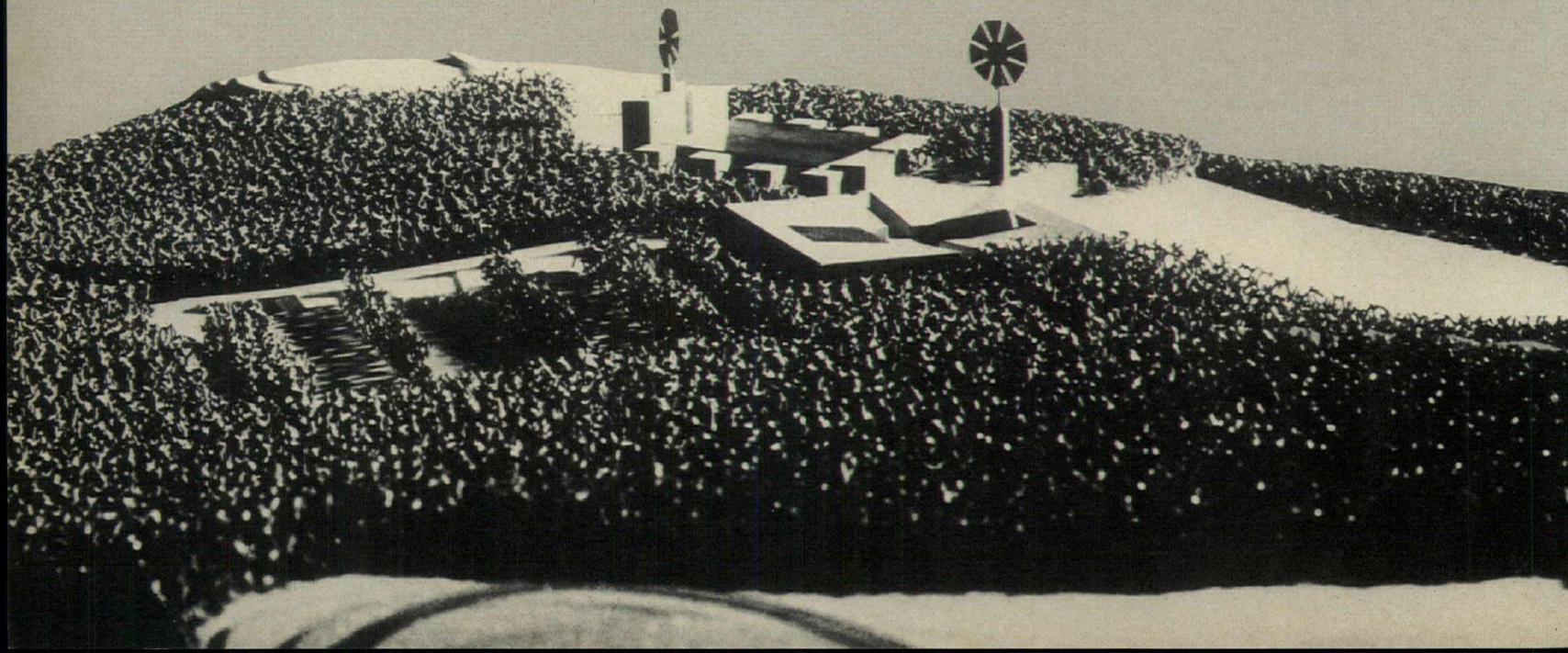
Materials and construction: To demonstrate and test energy- and resource-saving design, the project will include such materials as tile, brick, and block manufactured by the students using

recycled materials: crushed glass aggregate for paving materials; ceramic heat storage material; and recycled inorganic brick. To collect and use solar heat there will be insulating skylights with shading and polarizing screens, equipment for hot water heating and cooking with solar energy, and the use of solar generated condensation to produce water. Rainwater will be collected and stored, sewage recycled for irrigation and/or flushing, and water-saving toilet and lavatory fixtures will be used. Wind power will be used to pump water and generate electricity; besides a windmill on the building itself, two forests of windmills are planned for hilltops. Fuel cells and surplus power storage equipment will be tested.

Jury comments

Eberhard: This is a good project for the other part of the jury to consider. It makes claims about research that it incorporates, but there's no way to tell from the presentation what the process was. We can't tell whether it was systematic, what criteria he used or what alternatives he rejected. All we see is the product. The process isn't clear, although the result is good.

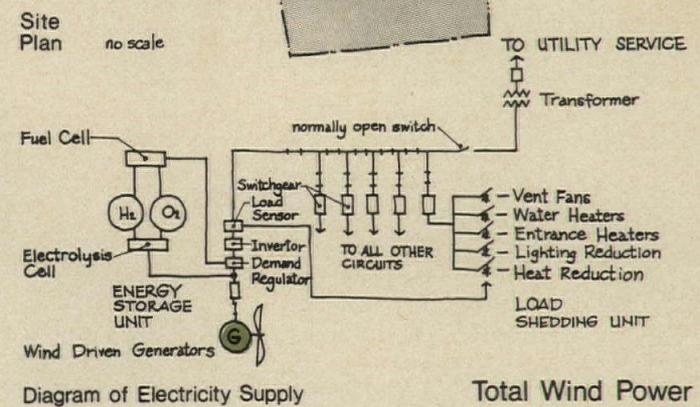
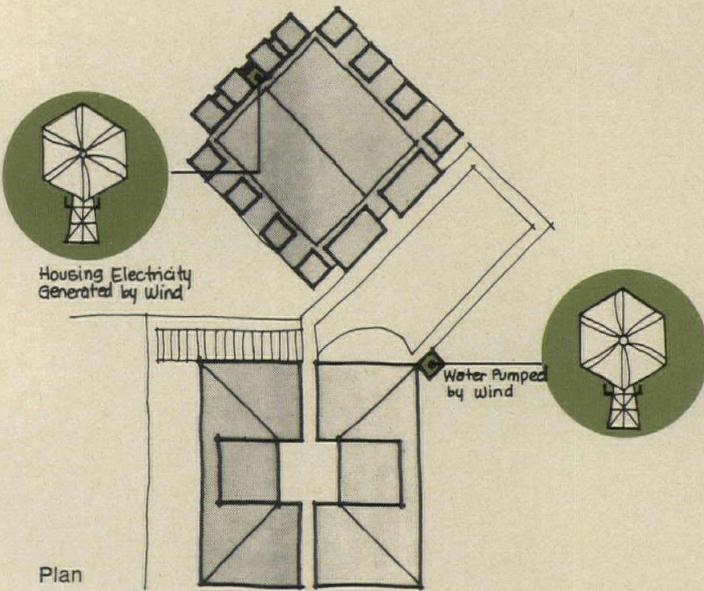
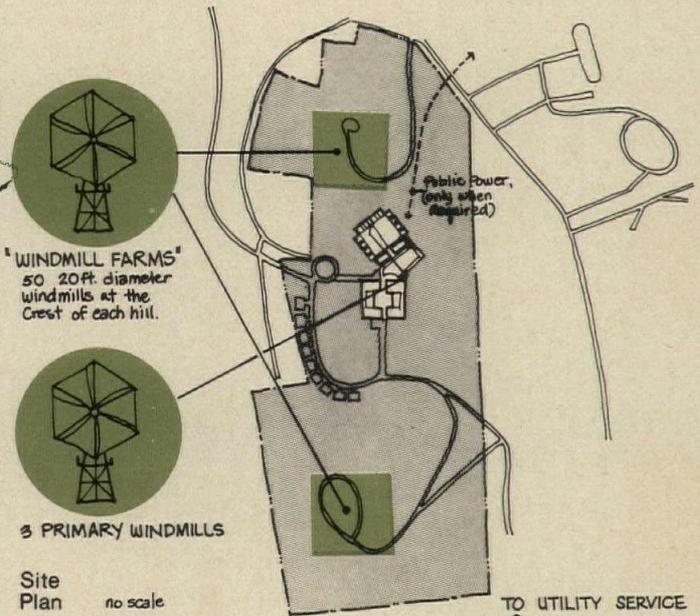
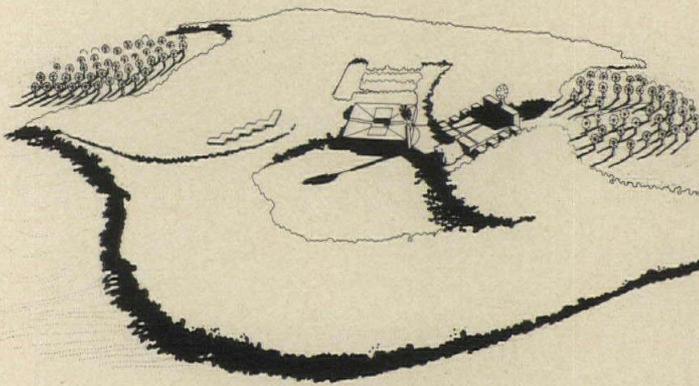
Robertson: My reaction to this is that it attempts to solve major ecological problems in a rather serious way. In spite of all the Flash Gordon things that we've seen, I think this one could actually be done the way they've shown it, with the series of windmills on the top of the hill. □



The intent and site conditions differed widely for the two "energy" submissions; the client for one being the government, the other a college. The jury was encouraged to see evidence of both governmental backing and community feedback in the proposals. Both satisfied the jury that the broader issues of concern for, and response to, external factors surrounding the individual projects were met. Recycled materials were to be used in each.

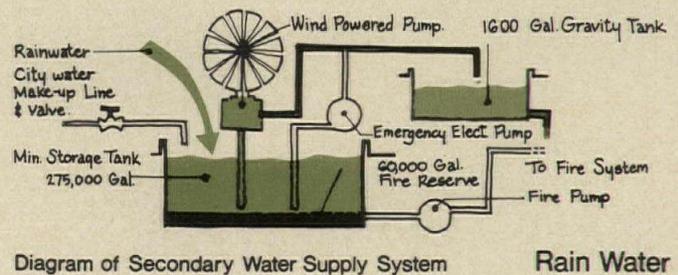
Quite another approach was stressed in the third submission. The site for the relatively small office building was shown as a typical commercial strip, and the attempt was made to shade the building and screen out undesirable views. This was to be accomplished with a net of vines outside the

building. Some jurors thought the solution expressed a tongue-in-cheek attitude, but most commended it as a responsible attack on a difficult problem. Together with the other two, this building was seen as completing a package that illustrated good approaches to the severe constraints that environmental considerations pose. One aspect that confused the jurors about the office building was whether or not the architects intended to accomplish anything other than visual screening. Some read into the submission the desire to cut out sunlight in the summer and allow it to enter in winter. Esherick felt that a vine would be a perfect device for the purpose. While Herb Greene pointed out that the architect didn't tell them that, others wanted not to overintellectualize. □



Credits

Architect: Edward Larrabee Barnes, FAIA; Hildegard Bergeim, associate.
Mechanical engineers; Lehr Associates.
Windpower consultants: Windworks.
Model: Norman Briskman.
Photographs: Louis Checkman.
Client: College of the Atlantic, Dr. Edward Kaelber, president.



Citation

Smith, Hinchman & Grylls Associates, Inc.

Federal Building, Saginaw, Michigan uses its solar collector, landscaped roof, and other energy and resource conservation features to demonstrate government responsibility

Program: Provide office space for 11 federal agencies, a post office with loading dock, and parking for 100 cars; at the same time test and demonstrate energy and resource conservation features and equipment.

Site: Three acres on the eastern edge of the central business district, presently occupied by several nondescript buildings.

Design solution: A one-story building, partly recessed into the ground to allow an extension of the landscaped site onto the roof. Three levels of office space are provided, as well as a loading dock level. The most prominent of the energy conservation features, an 8000-sq-ft flat plate solar collector, slants upward from the building at the optimum angle to the sun. About half the roof is landscaped; the other half is parking area which can be used as a neighborhood play-

ground after business hours. Use of earth berms along with roof landscaping will make the site a major park and recreational area.

Materials and construction: Building will be of reinforced concrete, with post-tensioned concrete girders. Typical span: 63 ft, as bay size for offices is 18' x 63'. Bricks from buildings now on site will be recycled as one material for lobby walls and another for on-grade and roof paving. Besides the solar collector, the building will include closed loop heat pumps and a self-contained mineral oil treatment system for wastes.

Jury comments

Myers: It raises some real issues. Are we rejecting technology and the whole symbolism of technology? The fact that this conserves energy becomes the most important technological symbol for the building.

Robertson: My problem is that it doesn't look complicated enough. It looks like a billboard blown over by a wind storm.

Kenon: It's a very straightforward project and an excellent scheme; a federal building that's

also a park, and using a solar collector.

Myers: It's using energy conservation, integrating into a community, and trying to provide mixed use. It went through a design analysis and produced alternatives. They don't tell us what those were, but they do say that that selection process produced this scheme. It's one of the few entries that presented itself that way. □

Credits

Architects: Smith, Hinchman & Grylls Associates, Inc.

Project designer: J. Richard Pinnell; Loren Klevering, project manager.

Associated architect: Jim Kuschel, SH&G.

Landscape architects: Johnson, Johnson & Roy, Inc.

Electrical engineers: Stephen Squillace, William Kramp, SH&G.

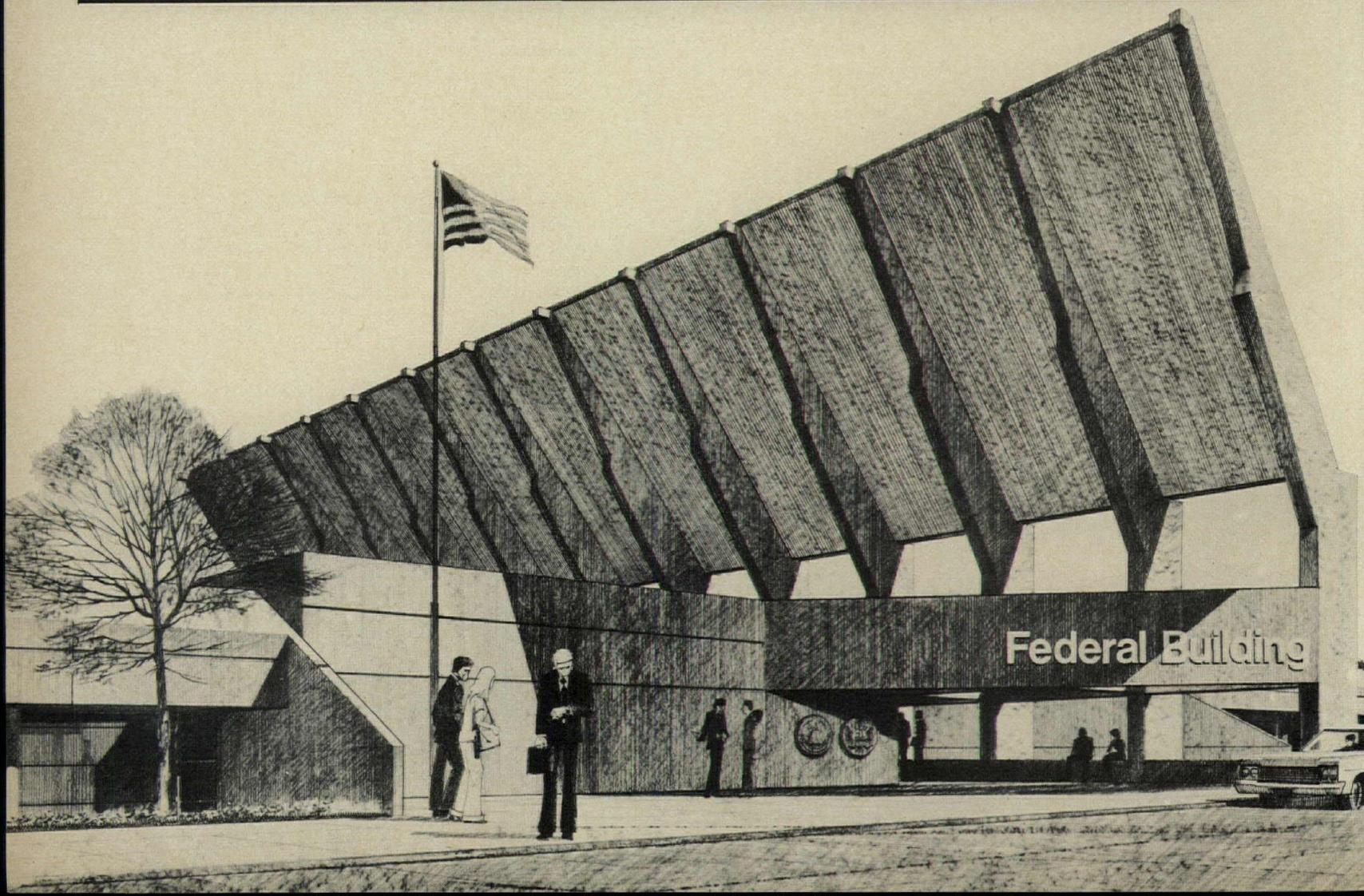
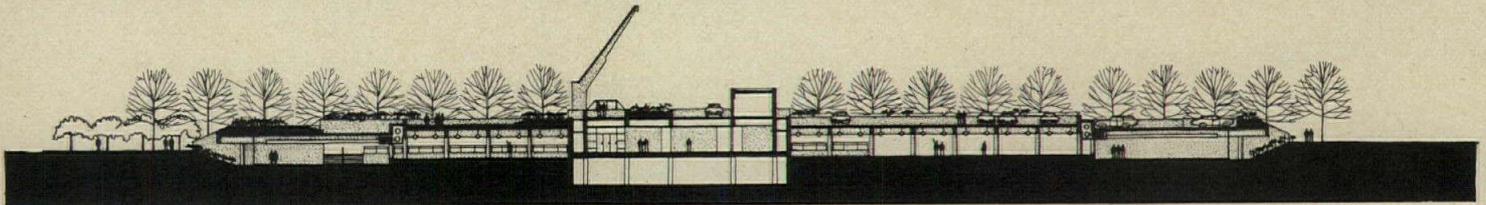
Structural engineer: Dr. Ting Tseng, SH&G.

Mechanical engineers: Grant MacVeigh, Lee Schofer, SH&G.

Consultants and others: Dr. Erich A. Farber, solar energy; Arthur F. Sampson, GSA.

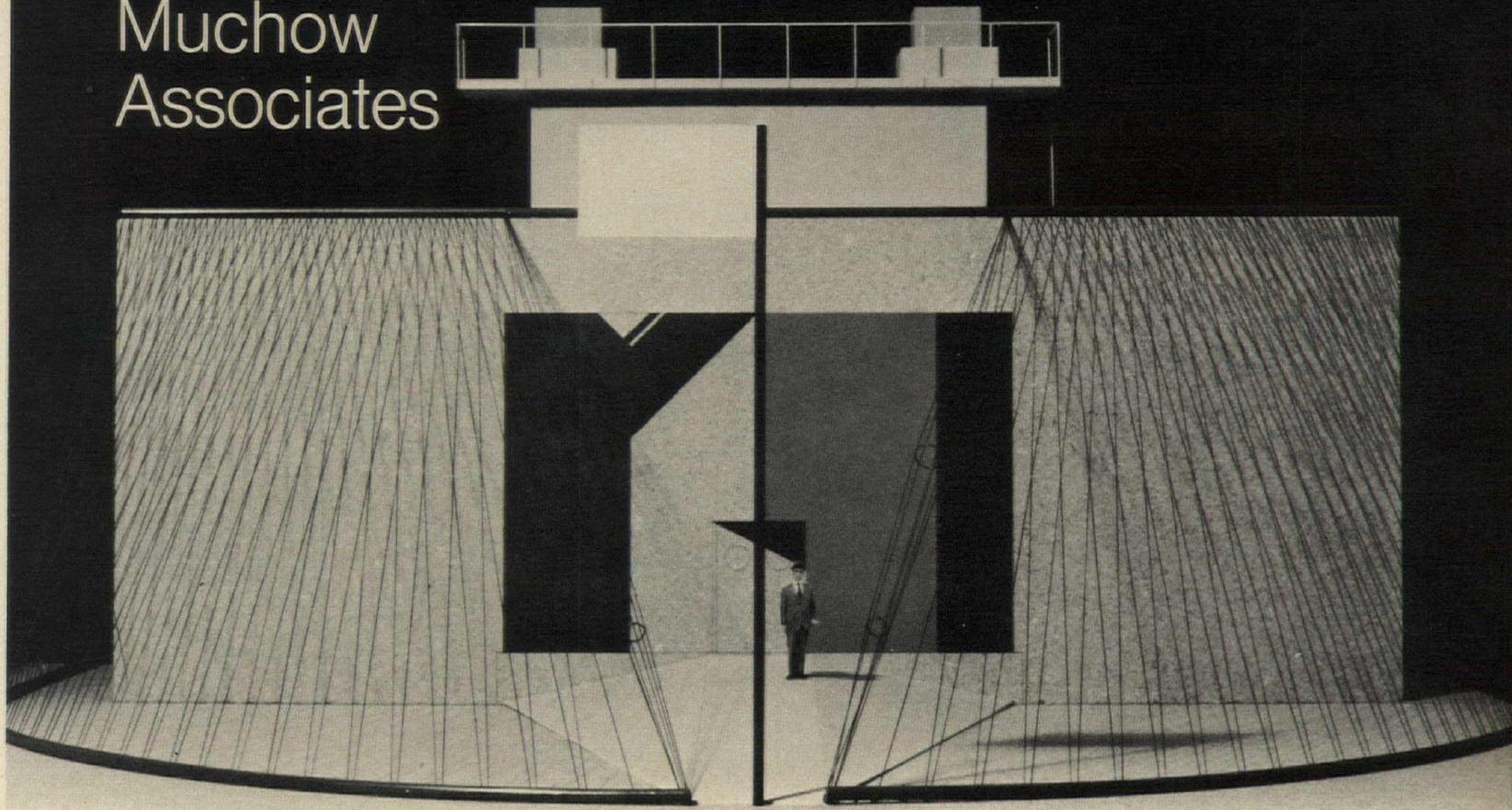
Rendering: Richard Rochon Associates.

Client: General Services Administration.



Citation

Muchow Associates



KKBNA Office Building, Lakewood, Colorado.
Greenery on a trellis provides a natural screen around a low-cost concrete building

Program: Develop a low-cost 20,000-sq-ft office building for a firm of consulting engineers. The firm will occupy 65 percent of the building; the remaining 35 percent will be leased to others until needed for expansion of the engineering firm.
Site: A flat rectangle of land, 180' x 325', one block from a suburban commercial strip.

Design solution: Parking aisles and stalls are arranged to "fence" the site. For the building a 24' x 24' x 10' structural module was chosen; divisible into office or drafting space, it allows each person a desk by a window. The two blocks of the building are formed of 12 modules each; between the blocks is a labyrinth of complex spaces, bridges, ledges, and alcoves which houses building circulation, reception and waiting areas, lounge space, and services. Adding to the complexity of the labyrinth is lush indoor planting, and the roof is pierced to admit natural

light. Surrounding the building is a trellis—almost a tent—of steel rods, on which will be planted an abundance of vines to provide a natural screen for the building.

Construction and materials: Site-cast concrete was chosen for economy; structural module is 24' x 24' x 10'. Rooftop multi-zone units supply heated and cooled air to an exposed distribution network. Estimated cost: \$13-\$15/sq ft.

Jury comments

Esherrick: The thing I like about it is that it's an unpretentious attempt to solve a very difficult problem and about the only attempt that we have seen to really seriously solve the problem. He's trying to control the environment in an area that is very rough.

Robertson: Those outdoor lines are used to fragmentation, to obscure, to camouflage and enclose.

Myers: He goes through all that articulation (of the façade) and then he covers it up.

Robertson: Isn't that articulation a result of his system analysis?

Myers: Here's someone who just takes a simple

building and addresses himself to it in a factual way. Then he comes up with a thing that doesn't look like a standard building because he's got a big net draped around it. He builds it up and then finally, he just wraps it up. He encloses the people inside, because what would they have to look out on? □

Credits

Architects: Muchow Associates Architects, George Hoover, project architect/designer.

Associated architects: Adams & Associates, production.

Landscape architect: Chris Moritz.

Interior designer: Jay Bouton.

Structural engineers: Ketchum, Konkel, Barrett, Nickel, Austin/Donovan Nickel.

Mechanical engineers: McFall & Konkel.

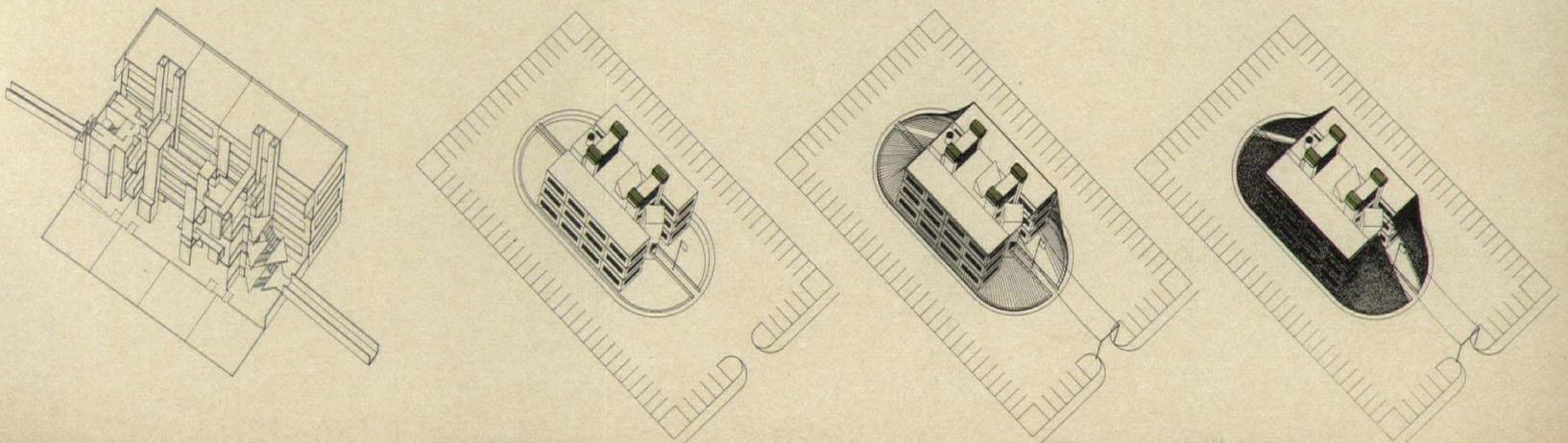
Builders: Dorn Brothers Construction.

Model: Herbert Jensen.

Photographer: Michael Barber.

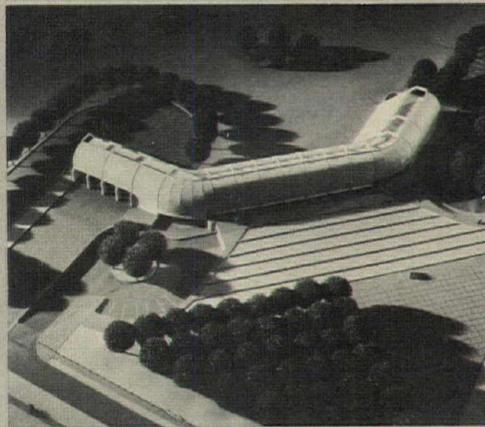
Rendering: Michael Barber/Jay Bouton.

Client: KKBNA (Ketchum, Konkel, Barrett, Nickel, Austin).

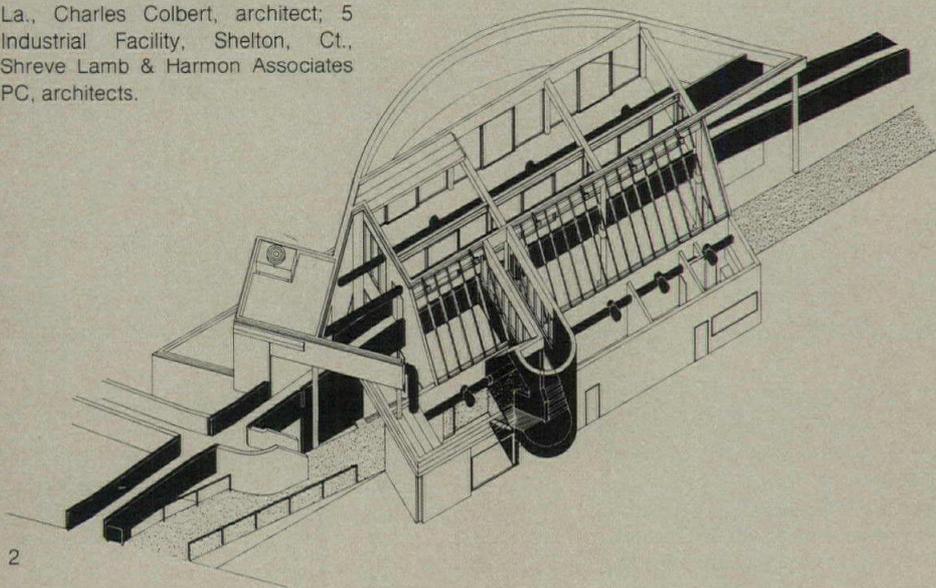


The machines

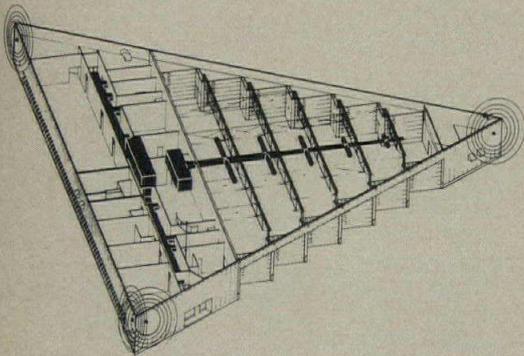
1 Flat Rock Municipal Bldg., Michigan, O'Dell/Hewlett & Luckenbach, architects; 2 Inner City Recreation Center, Baltimore, Md., Designbank Incorporated, architects; 3 Municipal Fire Station, Corning, N.Y., Gunnar Birkerts & Associates, architects; 4 Shawondasse Marsh House, Slidell, La., Charles Colbert, architect; 5 Industrial Facility, Shelton, Ct., Shreve Lamb & Harmon Associates PC, architects.



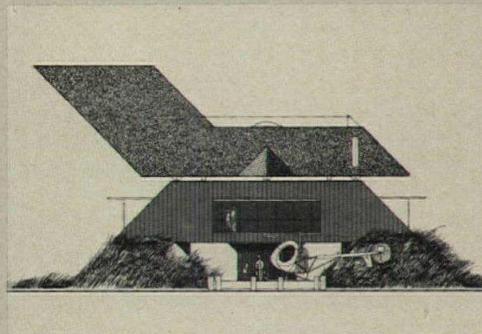
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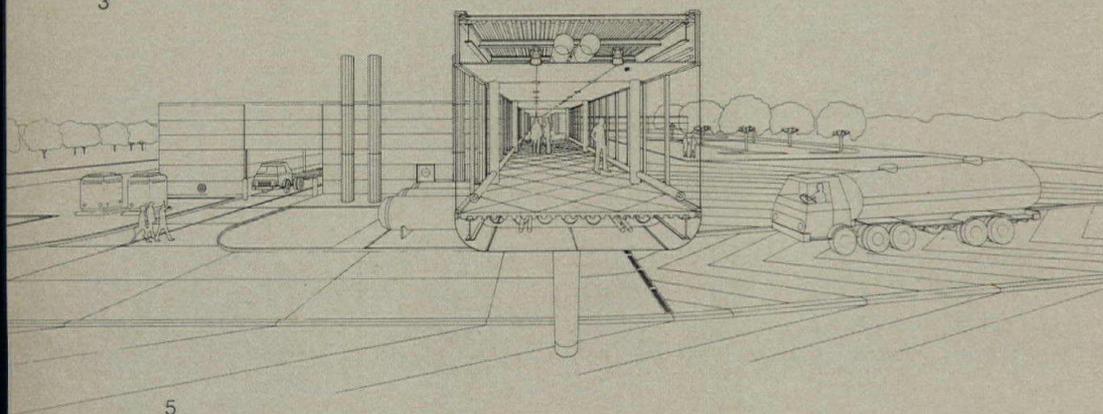
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While some jury members were not opposed to individual projects designed in machinelike packages, they requested a chance to air their thoughts on an idiom that appeared to enjoy such popularity among the entries. These are only a few of the many they chose.

Kennon: This is an industrialized architectural approach, and it ranges into many categories.

Scott Brown: It's all this damn mechanical aesthetic.

Robertson: Yes, but for certain things, that's reasonably appropriate. If it's a fire station, that's really a garage. A garage is reasonably mechanical.

Scott Brown: But it has kitchens and bedrooms and things like that, as well. I don't approve of the whole approach.

Greene: It's grim; it's style over humanity.

Robertson: There is also the other one, which houses a manufacturing process and its offices, and the expandable trailer bank.

Kennon: Yes, I like the Kleenex image with the trailer bank because it responds to the temporary nature of the program.

Esherick: Well, I would argue that it probably wouldn't happen. To my mind it's the kind of fraud that architects keep perpetuating about reusable buildings. I've seen what it costs to build that kind of thing and have it demountable.

Myers: If you want to quickly choose the best one, it's the school (opposite page). It's a box with machinery inside that you can move around.

Kennon: Yes, to research educational environments; it's demountable and you can create flexible spaces in it.

Greene: Sounds like a hell of a romantic notion.

Myers: But you're looking at the best of it, and I worry about singling out one. It seems that it says more as a package with the others.

Scott Brown: I wouldn't want to put my support to any one of them as individual designs. As a piece of editorializing saying that this is still, maybe unfortunately, a trend—I wouldn't mind doing that. Maybe the school has more validity, but it's of the same ilk, the same kind of thinking.

Myers: It's not that one is right or wrong, or that one is more right than the other. We may disagree with some, but it's such a strong statement. Some are so well done in a way.

Kennon: I think they're all very skillful, and that's the state of the art in 1973. □

Citation

The Morphosis Group

The Sequoyah Educational-Research Center in California stresses potential to change form and adapt to emerging programs in education

Program: A facility for educational research to accommodate 200 students, 25 faculty/staff, and 10–15 researchers. Two major concerns are that the building and all of its systems exhibit a high degree of adaptability and that the building makes efficient use of energy and resources. While the general purpose of the building will be educational research, emphasis will be placed on four areas of investigation: the impact of various environments and spatial relationships on curriculum and educational performance; the effects and uses of responsive environments in education; building form as a means of adapting to environmental stress; the potential synergetic relationship between these last two.

Site: 450 acres in the Santa Monica mountains overlooking the Pacific Ocean.

Solution: The building contains 31,000 sq ft divided into four functional areas—core, spine, multipurpose, instruction—each representing a different degree of adaptability. The core, a fixed shell with movable interior, provides major control and supply functions for the entire facility. The spine, a multifunction area, can become an extension of either the core or the multipurpose areas. It accommodates horizontal and vertical pedestrian movement and gantry movement from a component storage building. The multipurpose area, with a fixed structure and movable floor and wall panels, houses active instruction. The instruction area encompasses the major learning spaces and has a completely demountable structure, representing the highest degree of flexibility and form response.

Jury comments

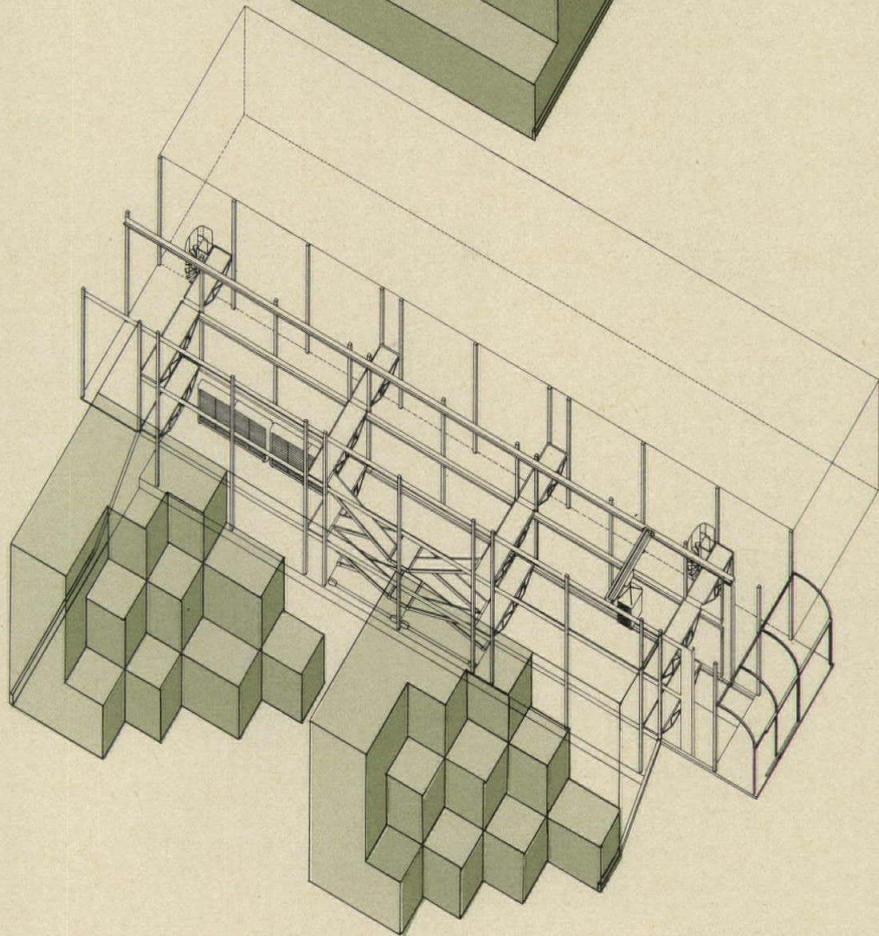
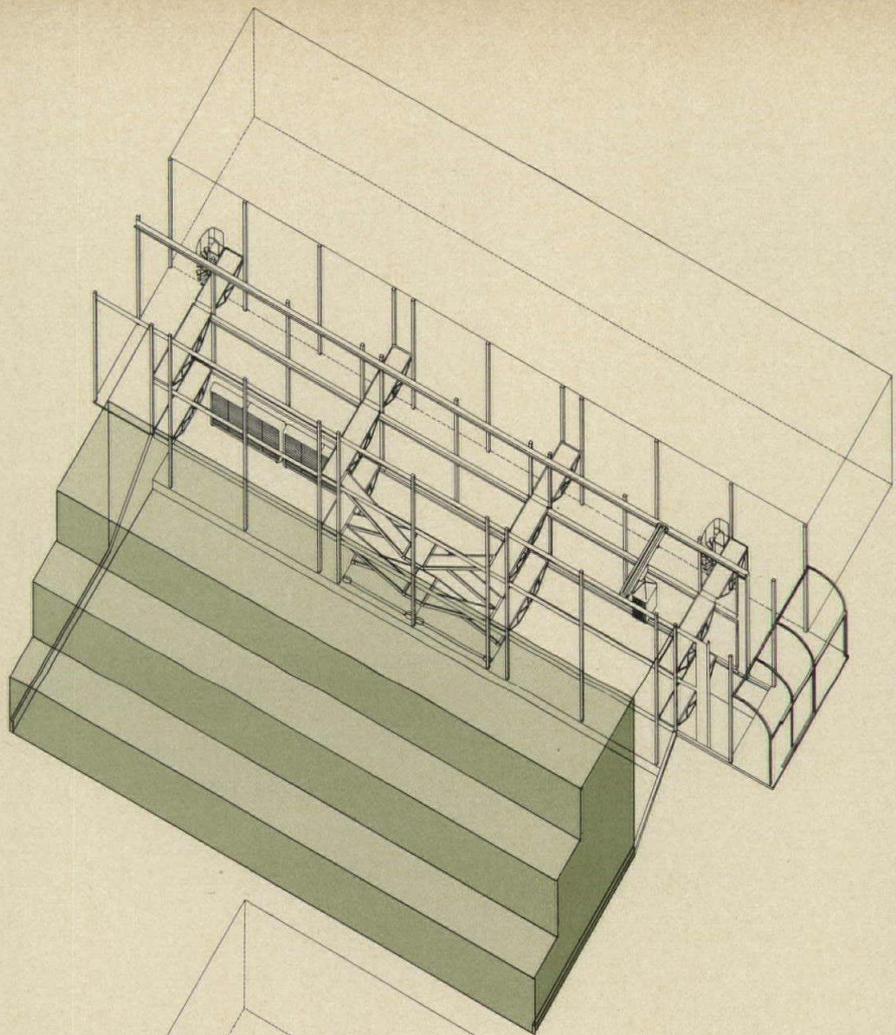
Kenyon: I think it's a great school. It addresses itself to changing educational environments, not just programs. It actually mocks up environments and tests the situations. That whole section is demountable, and can move out on the site for summer programs—a stage set, a school as theater.

Scott Brown: Why couldn't you do that in an old barn? Why do you need all of this equipment to do it?

Myers: He's really trying to make a more sophisticated barn, I think.

Scott Brown: It's a shame to spend all that money making a new old barn, why do you need that sophistication?

Kenyon: He's mocking up different spaces, different activity environments, and that is really important in education. □

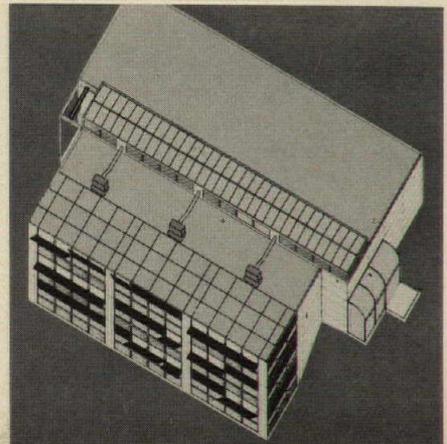


Credits

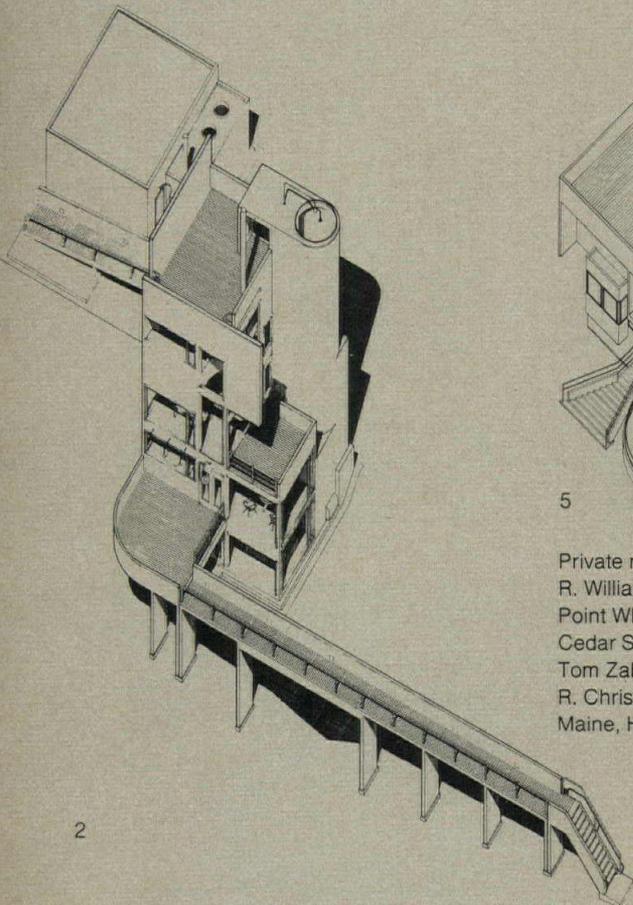
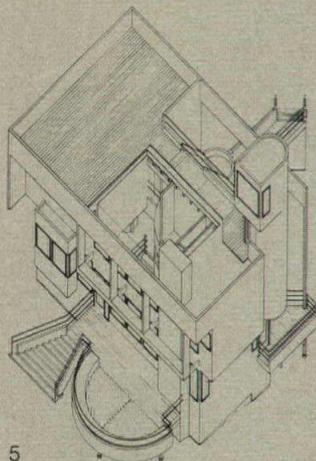
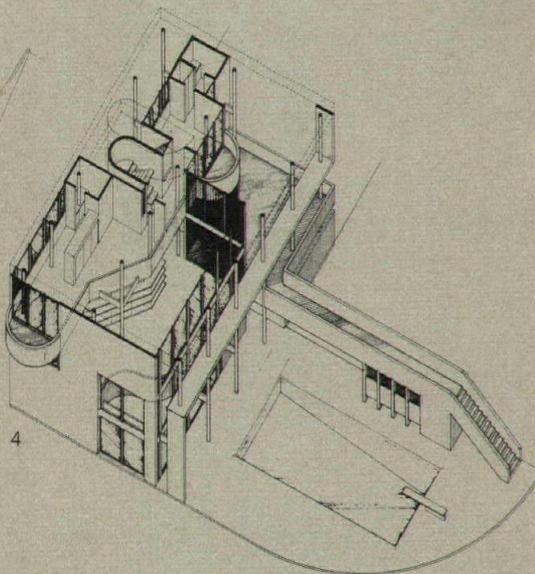
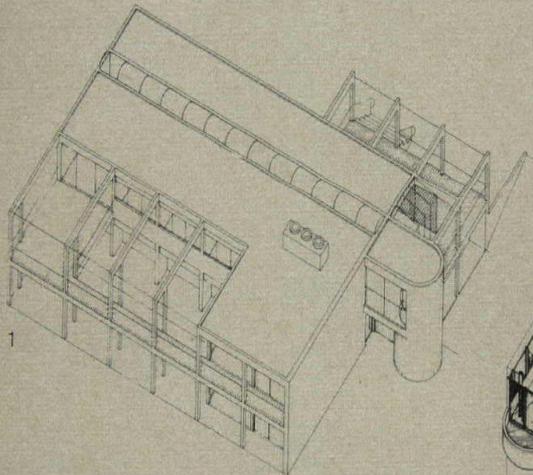
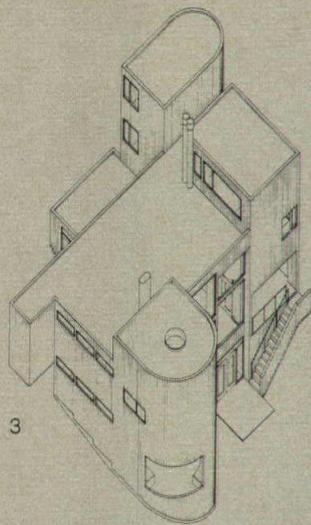
Architects: James Stafford, Thom Mayne, Michael Rotondi, Michael Brickler, design team.

Consultants: Marty Gantman, structural.

Photographer: Ruben Araujo.



Le's maisons



Private residences: 1 Hunterdon County, N.J., R. William Miller and Assocs., architects; 2 Point White, Bainbridge Island, Wash., 405 Cedar St., Ltd., architects; 3 Layton, Utah, Tom Zabriskie, architect; 4 Weekapaug, R.I., R. Christian Schmitt, architect; 5 coast of Maine, Harrison Fraker, Jr., architect.

The jury identified a full 10 percent of the single-family houses submitted as Corbusian in style. Then, taking cues from a past issue of *Mad* magazine that parodied Le Corbusier's architecture, they dubbed them 'Le's' (Lee's) houses, and wondered why there were so many of them

Robertson: My concern about these houses is that they're all never-never land houses built on imaginary lots for imaginary clients. But what sort of constructive thing comes out of that, what do we want to say?

Myers: It's just an issue in itself. We don't have to say anything about them, let the reader make his own conclusions. It's just something we're baffled by. Why would 10 percent of the houses come out as 'Le's' houses?

Robertson: That's not so baffling. Ten years ago 20 percent were pitched roof houses—Ed Barnes houses.

Myers: We don't want to go into detail about why one Corb house is better than all the rest. That isn't really the issue. The issue is extraordinary, that there is such a predominance of this style. It makes an extraordinary statement.

Scott Brown: We're looking to make editorial statements about the whole lot, and the extraordinary issue is—what a style for 1970s America. Why? Why is that the style everyone is producing? Can anyone think about that, or do they really think they're doing straight "form follows function"?

I bet you most of these architects will say they're doing straight form follows function. **Esherrick:** Sure, but they're using 30's vocabulary, and this is '73. I think it is really fallacious to assume that this is a major trend. The trend you're talking about is the trend of people who make submissions to P/A for awards. Just because 10 percent of the single-family houses can loosely be described as Corb-type houses, doesn't mean that constitutes a trend. For all we know, that 10 percent may be all of them that were built in the whole damn country for the whole year.

Greene: I don't see any of these houses that I would want to give an award to. I think they're degrading to Corbusier. These people have just taken a stylistic formula and repeated it. The interesting thing about the schema in a lot of Corbusier's later work is that you could really get more contrast in objects . . . different objects "happen," like at Ronchamp. Things happen on all four sides of the building that are different. Things happen not just *around* the building, but *in* the content of the forms. These people have never seen that aspect of the schema; they've absorbed it only by taking planes and right angles.

Brown: Cornell imperialism.

Kennon: Yale.

Robertson: It's really more Cornell than Yale. It's Colin Rowe through Peter Eisenman, and then transferred to the less polemical members of the group. □

Citation

Dagit/Saylor Architects

Two townhouses in Philadelphia's Society Hill share an off-street garden entrance and acknowledge their Federal-period neighbors

Program: Two single-family townhouses with three bedrooms, living room, dining room, study, guest room and garage.

Site: Society Hill, Philadelphia, Pennsylvania.

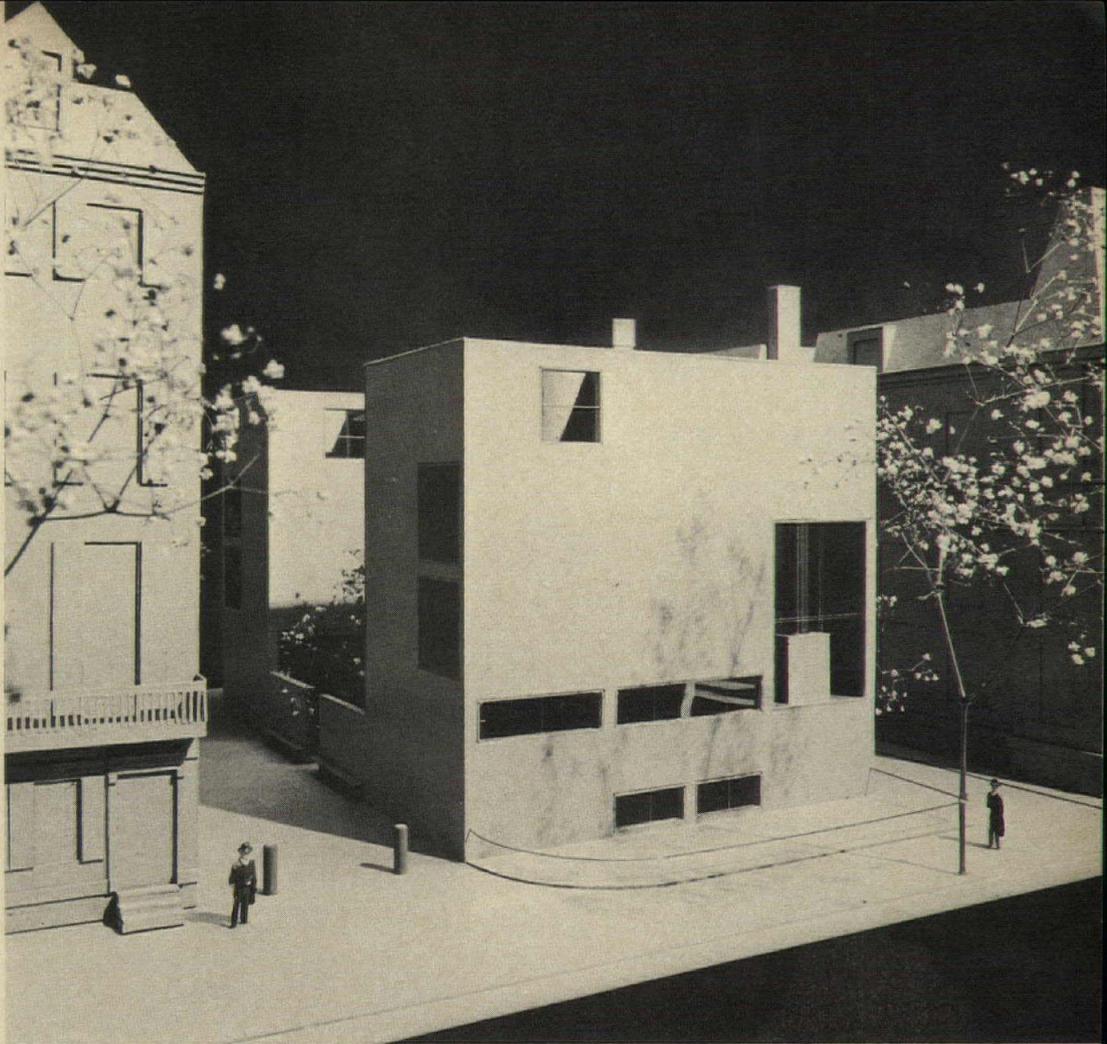
Solution: The site was divided into two parcels with access through the garden between the two houses. The plan is divided into split levels, with living spaces at each end of the stairs and utilities in the middle core.

Materials and construction: Composite structure with brick veneer as a gesture to the Federal townhouses of the neighborhood.

Jury comment

Robertson: I think this house is important just because it uses its site on the frontage in quite a radical way. It is used as an urban design device to reinforce the fabric rather than destroy it. It's very nice to get two houses on that site; the shared open space running against the grain of the block is very successful, and it makes an extremely attractive space. A house built in the city has to be part of an urban design intention, and this is. It's architectural blocks used in a very sensible way; it's enormously responsible.

Myers: I think we should say that we picked it, not particularly, but especially. It is a house that is related to its context, to the city, to urban prob-



lems, in contrast to all the Le Corbusier houses in isolated sites.

Robertson: It seems to me that this is reinforcing the whole theme of what we've been saying about solutions as part of a larger context. □

Credits

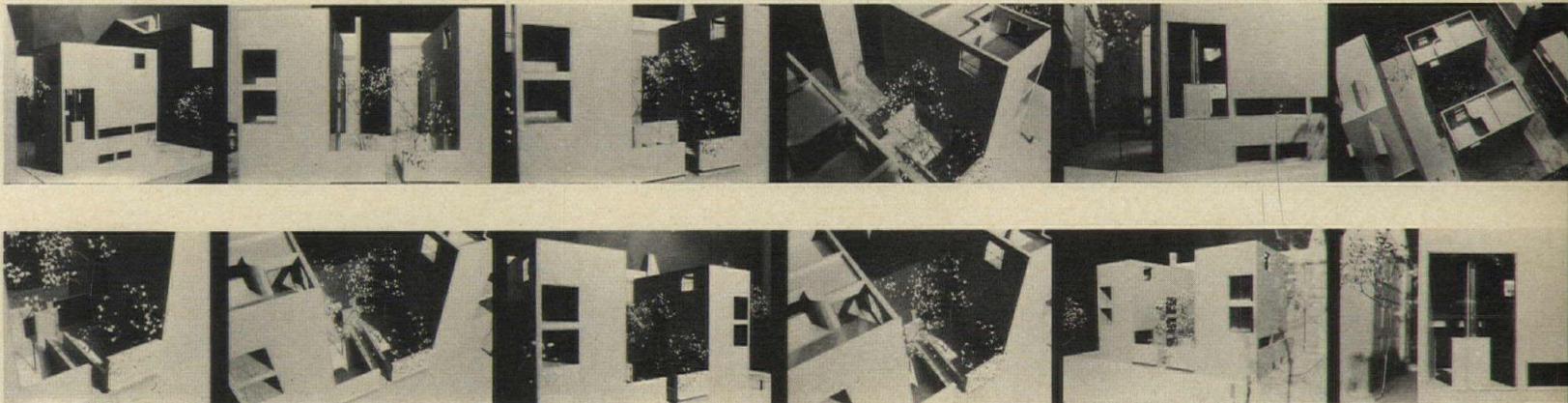
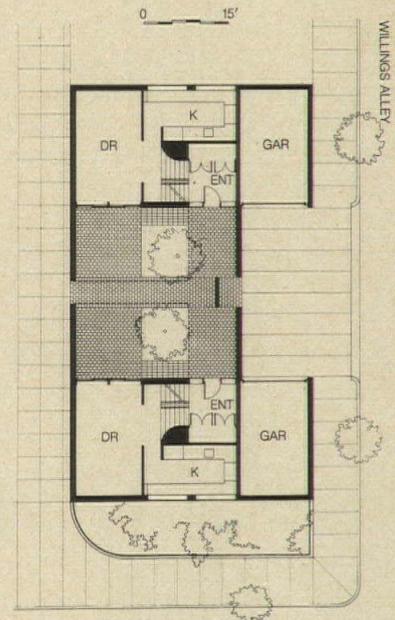
Architects: Charles E. Dagit, Peter M. Saylor, Charles E. Dagit, Jr., James F. Hiser.

Modelmaker: James F. Hiser.

Photographer: Sandy Nixon.

Rendering: Charles E. Dagit, Jr.

Client: Richard Serbin.



Issues, not answers

The urban planning jury, Denise Scott Brown and Jaquelin Robertson, considered nearly 100 submissions over a two-day period, a difficult task for two people who were very intent on understanding each submission before evaluating it. Two days later, when the entire jury reconvened, awards were given to nine projects in three groups and three projects were singled out for individual citations.

As with all juries, this one, too, had its bias. Rather predictably, both jurors felt that learning the developers' language (dealing with image and design for the mass market) was one new role for the architect. In one case, awards were given to four projects that, as a group, illustrated this issue. Also, awards were given to two projects which set up design controls and zoning incentives for use by developers, another issue that both jurors felt should be recognized as a role for the architect.

But unlike juries of other years, their bias went no further. They recognized the legitimacy of the overall, comprehensive master plan and, again, gave awards to three projects that they felt illustrated well this other approach. Their remarks, which follow, will further show their criteria, their criticisms, and the reasons for their choices.



Denise Scott Brown



Jaquelin Robertson

Scott Brown: Most of the schemes did not make clear whether they were showing a possible development, a design intention or a prediction of what will actually happen as a result of what they are suggesting. These are three very different approaches, but the schemes don't inform us about which aspects of the design the planners are controlling, by what

means they are controlling them, and which decisions are left to other individuals. The awards that we gave were extremes. Some schemes had one brilliant idea, which was taken and developed. Their strengths were in their one-sidedness. At the other extreme were the very broadly based, responsible overall plans which go all the way through to who will implement what. In many ways these are duller, though necessary, considering the realistic aspects of getting things done. I think both approaches are valid, and we have given awards in both categories. The image plans that we awarded obviously have one or two good ideas. They satisfy the criteria, somewhat, for depicting the character of a way of life. When they do show a way of life, it is very much the architect's own upper middle class value system that comes through. It's the coffee-clatch, the pedestrian environment, and the architecture of the 60s'.

Robertson: We chose these projects precisely because they reflected these new client groups and because this is where the demand is going to come from in the next few years. The developers' work is still very crude, but they represented intelligent people, trained as formal architects, who were beginning to wrestle with the issues that the developer faces.

The planning studies that we singled out were extremely thorough, but none were brilliant or innovative. They were just exhaustive and responsible and seem to have political realities built into them. Both groups illustrated issues and concerns that are important now.

One of the things I was looking for also was the understanding that what planners should be doing is writing performance guidelines and specifications rather than producing illustrative site plans. How do you write rules under which other people can build at a later time? How do you achieve the desired results which are limited within a legal and equitable framework that will hold up under court challenge and under a variety of different interpretations? The architect, in doing large planning development studies, is therefore not designing a product, but designing rules which will moderate or modify certain products.

Award

Bissell August Associates



Mustang Island and three projects by another firm on the pages following, illustrate housing that has been styled to serve a mass market

Program: To develop the most unusual and complete resort-residential community in the Southwest, and to make recommendations, based on an analysis of the environment and the ecology, for an intelligent and compatible intrusion of man.

Site: 1000-acre site on a barrier island off Corpus Christi, Tex.

Solution: The master plan calls for the dispersal of high-density villages, each having a unique character and each offering a variety of interests and amenities. The major part of the site is left untouched and stabilized by an established growth of natural grasses and vines. The automobile is eliminated as a means of internal circulation. The marshland will be dredged to provide a depth of water suitable for boating.

Credits

Architect: George Bissell, AIA.

Planner: Frank August.

Landscape architects: Fong, Jung, Nababa.

Interior designers: Interior Space Design.

Structural engineer: Robert Lawson.

Consultants: Deborah Sussman, graphics; Thomas Thorp, environmental; Ogletree & Gunn, harbor design.

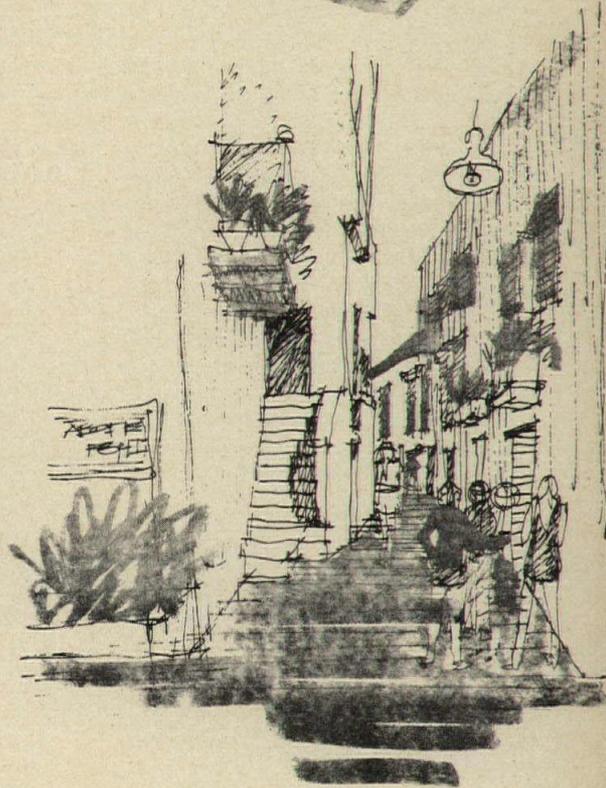
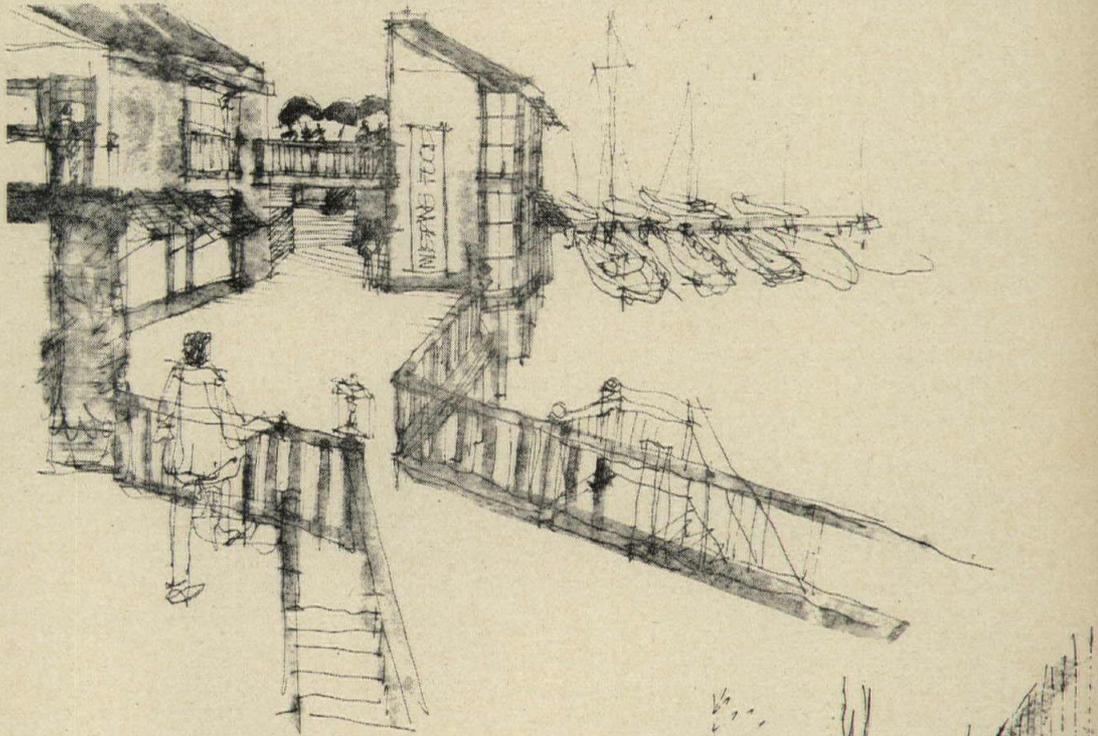
Jury comments

Scott Brown: The good thing about these plans is that the architects have admitted the possibility of styling to suit different groups. They are saying that this is something that architects must deal with. You have to become aware of the cultural pluralism in America and of the architectural needs and values of middle America as understood by the merchant builders. Its time to stop being puritan architects and to learn from them. The architects don't tell you how they arrived at their choices, but in a sense it doesn't matter be-

cause at least they are trying to attend to that pluralism. It's a beginning.

Esherick: I find it curious that at this particular point we are having beginnings. I would not expect any developer that we worked for to take what seems to me to be such an extraordinarily naive approach.

Scott Brown: They are trying to work out where the consumer choice lies, by seeing what is done in a market that architects do not usually serve. It's eclectic, stylistic, historical, nostalgic design.



In a more extreme version, it would come out something like Disneyland. But it's a statement about a way of thinking about problems, an important way, and one that has not been sufficiently tried. That's why we are praising it.

Esherick: I'd say the issue of style is a very unimportant one.

Scott Brown: It's uninteresting to you because you are a modern architect.

Esherick: There are so many more important issues than style. What the real living environment is like is, to me, a serious issue. My interest is not how much you can do, but how little you can do.

Scott Brown: Well, that's "less-is-more" and I'm tired of that as a philosophy. Architects have their hearts in the right place about all the right things, but what it leads to is very god-awful environments that no one likes.

Esherick: Environmental issues, research,

energy conservation—just physically pleasant, comfortable environments—are the problems that simply aren't getting well solved and they are being screwed up all the time by people who are letting style dominate.

Scott Brown: Who says what is physically pleasant and comfortable? The merchant builders are saying that a lot of people agree with them. Now you are saying that it's important to design physically pleasant and comfortable environments, but underneath that, you are saying "and I am the one who must say what it is! I know what it is." Architects don't want to talk about formal vocabulary; they would rather talk about structure and function, when in actual fact, styling is the name of the game. It is the worse tyrant because it can't be admitted. Whether these solve functional problems, I'd have to look more closely, but it seems to me that merchant build-

ers solve functional problems in housing, at least as well, if not better, than most architects.

Robertson: It's good because the architect is finally beginning to work with the predominant method of production in this country, the commercial builder who packages a series of housing types in various appropriate settings and markets them, duplicating one model over and over again. He's playing the game by rules that a developer understands, i.e., working with the kinds of givens that a developer starts with, he is subtly subverting the developer at the same time. The kind of community he is talking about building, the collage community, is probably closer to what the market wants and can absorb than some design solution which we would impose from the outside. What this means is that the architect would finally become a useful member of American society. □

Award

Phillips and Peterson

Three new community projects by the same firm deal with imagery and character of place and the necessity of 'styling' in housing design

Wilderness Community, Wimberly

Program: Development of land use and building concepts that would respect the land, take advantage of views and settings and provide a choice of recreational activities, housing types, and styles.

Site: 2000-acre site in Wimberly, Tex.

Solution: For the land use portion, a method called "Spectra Planning" maps out and analyzes all the natural site conditions. These are then overlaid and analyzed, evaluating impact and suggesting an appropriate response. A total environment is then planned by collaging the best characteristics of land use and building styles. The building program consists of a series of villages to be constructed one cluster at a time. When the time arrives to start construction on a particular cluster, lot owners select and contract for their model house.

Credits

Project team: W. Irving Phillips, Jr., Robert Peterson, James Magee, James Baker, Carey Stanly.

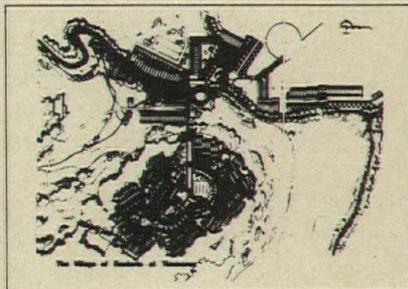
Civil Engineers: Sander Engineering, Inc.

Modelmakers: Stephen Faulk, Robert Anderson, Yolita Schmidt, Tommy Tinner, Suzanne Labarth, Ron Aguillard, Bill Bailey.

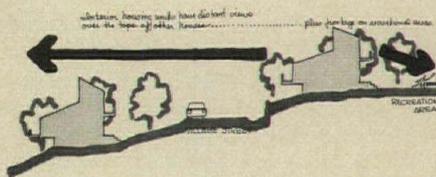
Photographers: Carey Stanly (color), Michael Chaplinsky (b&w).

Client: FTI Corporation.

1 Select a village



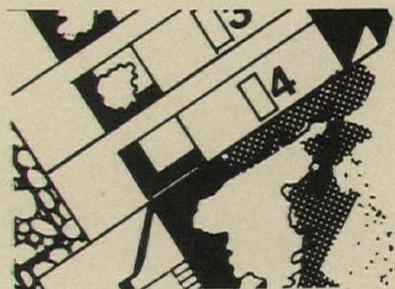
2 Select a view



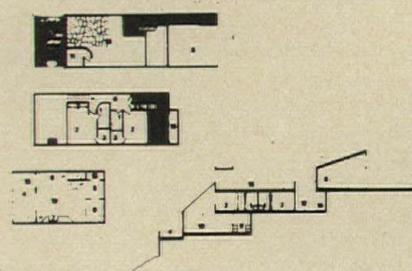
3 Select a cluster



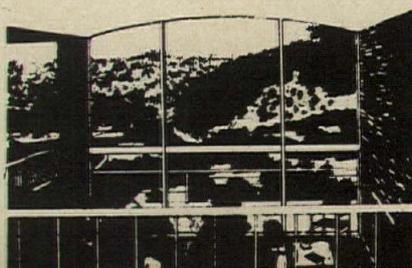
4 Select a spectra site



5 Select a plan



6 Select a builder



Recreation Community / Bluebonnet Country

Program: To plan and design a recreation community consisting of 550 single-family units, 375 cluster units, 500 townhouses, a golf course, a harness racing track and training facilities, and club and lodge facilities. To design the architectural theme and form a vocabulary for the community facilities and prototypical housing.

Site: Navasota, Texas.

Solution: A design system that provides a series of choices to accommodate individual tastes and styles; a master plan that reflects the interplay of geometric order and natural site conditions, incorporating a system of axial relations to structure memorable images.

Credits

Project team: W. Irving Phillips, Jr., Robert Peterson, James F. Magee, Stephen Faulk.

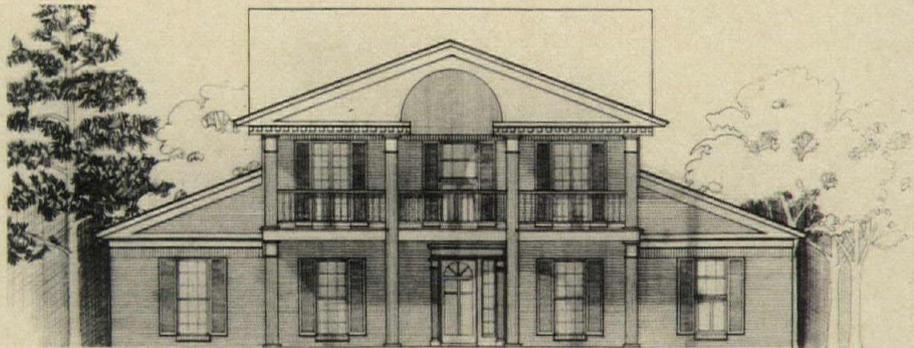
Civil engineers: Sander Engineering, Inc.

Modelmakers: John Dosey, Guillermo Trotti.

Photographer: Bert Brandt.

Rendering: Walt Bell.

Client: FTI Corporation.



Spring Creek Forest

Program: A subdivision of speculative single-family detached housing. Market studies showed desirability of more house for each dollar, a house that looks bigger and is better. Also needed was a well defined set of identity clues and inviolable stylistic rules associated with those clues.

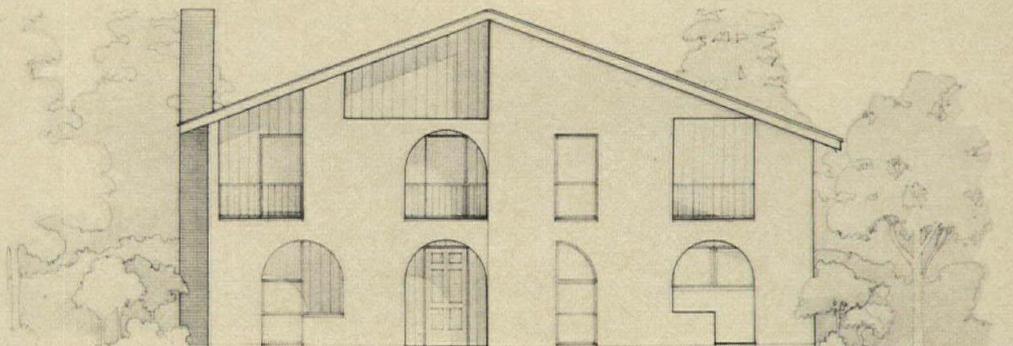
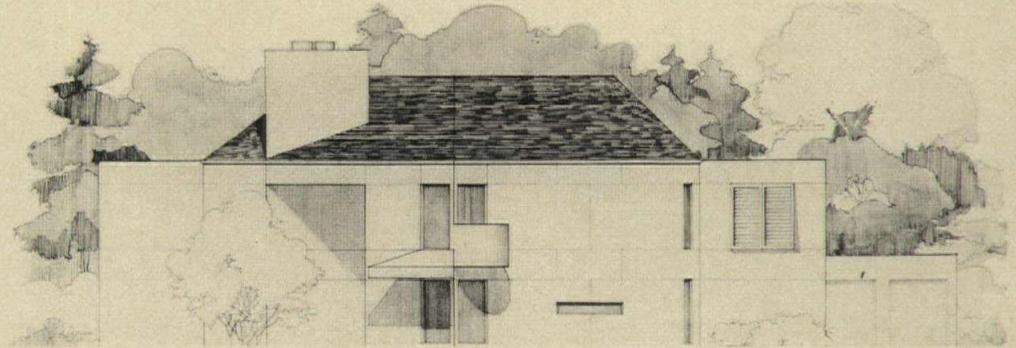
Site: Houston, Tex.

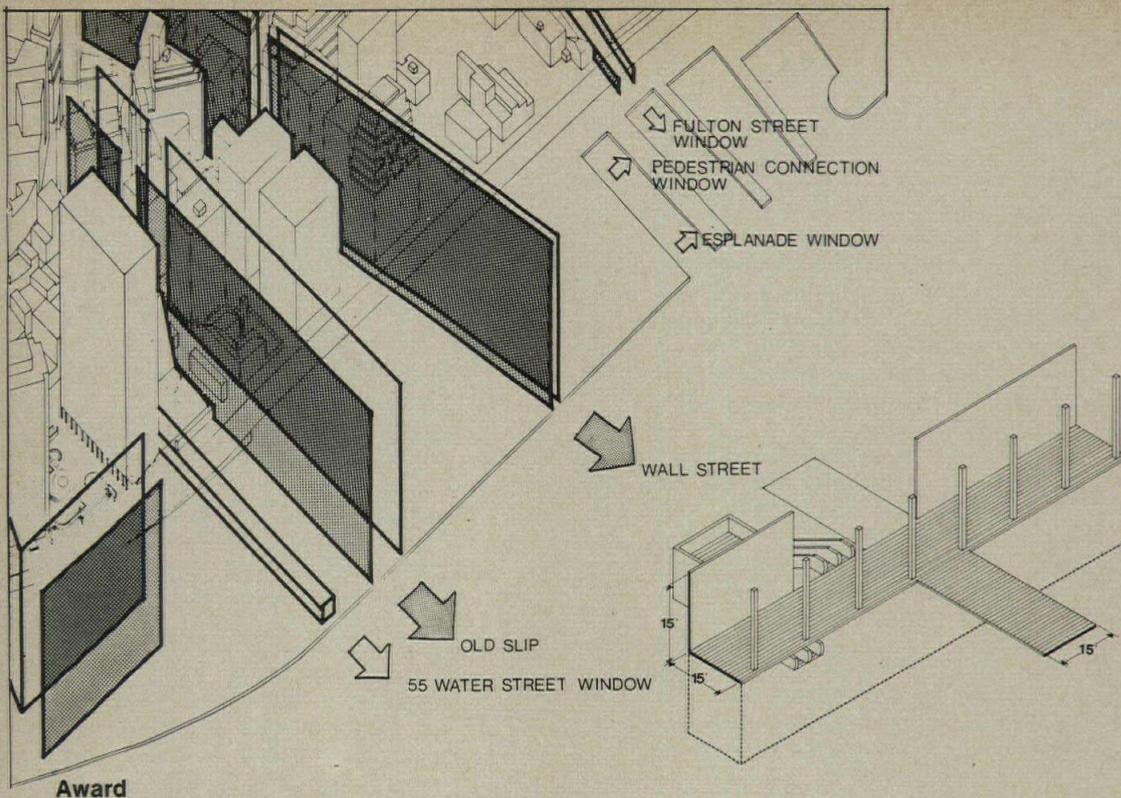
Solution: Starting with the builders "best selling house plans," the architects began a progression of modification, at first only slight, that ended with a completely "purist" house in the subdivision context.

Credits

Project team: W. Irving Phillips, Jr., Robert Peterson, James F. Magee, Gita Dev, Gerald Moorehead, Bob Heingtes.

Client: Clifford, Inc.





Award

The Office of Lower Manhattan Development / The Office of the Mayor

Urban Design Controls for the Lower Manhattan Waterfront presents a matrix within which both the public and private sectors can plan for new development in an established context

Program: Establishment of design controls for two special districts—Manhattan Landing and Battery Park City. The program includes 15,000 units of housing, 6 million sq ft of office space, 1 million sq ft of retail space, parks, schools, and civic facilities.

Site: Lower Manhattan, New York, N.Y.

Solution: A set of objectives relating to efficiency of land use, circulation and open space, and integrating new development into an established area context which will serve as a framework within which the specific urban design controls would operate. The controls are a set of constraints which organizes the interface between the public's use of the project area and those areas of the development which are regarded as the domain of the private sector.

Jury comments

Scott Brown: It's an admirable attempt, but one fraught with many problems. The final result in terms of architecture may not be measurably better, so there is a real question about the desirability of using these guidelines rather than a fine arts commission. □

Award

The Urban Design Council

Housing quality: Program for zoning reform proposes a rating system by which housing schemes can be scored on standards achieved

Program: Major revision of the 1961 zoning resolution to assure the continued vitality of residential environments and to eliminate certain pre-conceptions of ideal physical prototypes—tower in the park—built into the previous zoning.

Site: Lower Manhattan, New York, N.Y.

Solution: The mechanism chosen is a rating system whereby any proposed residential development attains increasingly higher scores by achieving greater compliance with the stated goals of 337 elements, grouped into four broad categories: neighborhood impact; recreation space; security and safety; and apartments. Each has a series of goals rather than minimum standards, so that the degree of compliance is a matter of choice among architect, developer, and tenant representatives. The aggregate score of the choices made then determines the amount of

floor space which may be built on a given site, up to the maximum densities as presently mapped.

Jury comments

Robertson: It is very technical, yet simple to follow in working within the existing ordinances. It is a first step. There are some things wrong with it, but it's an all out attack, an amazing piece of work that has been done very quickly.

Myers: I'd have some real questions about the bonus system because I think that can be a political giveaway.

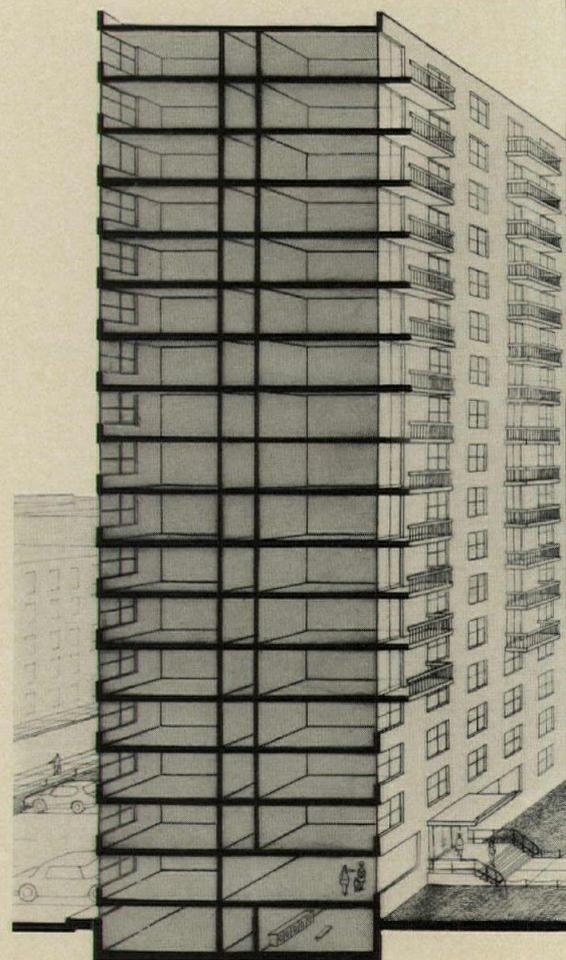
Zeisel: The main thing here is the fact that it deals with performance standards.

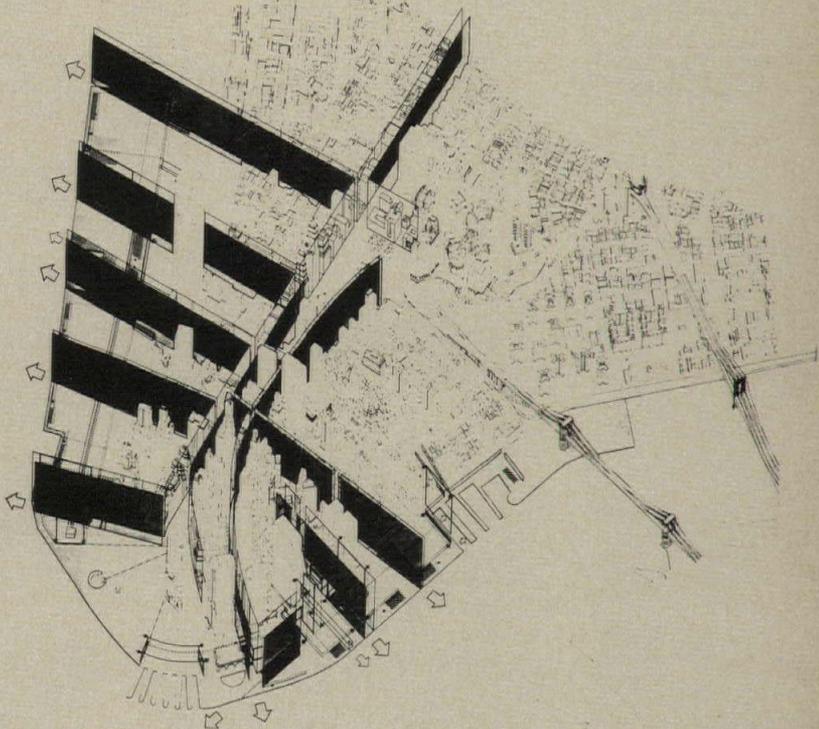
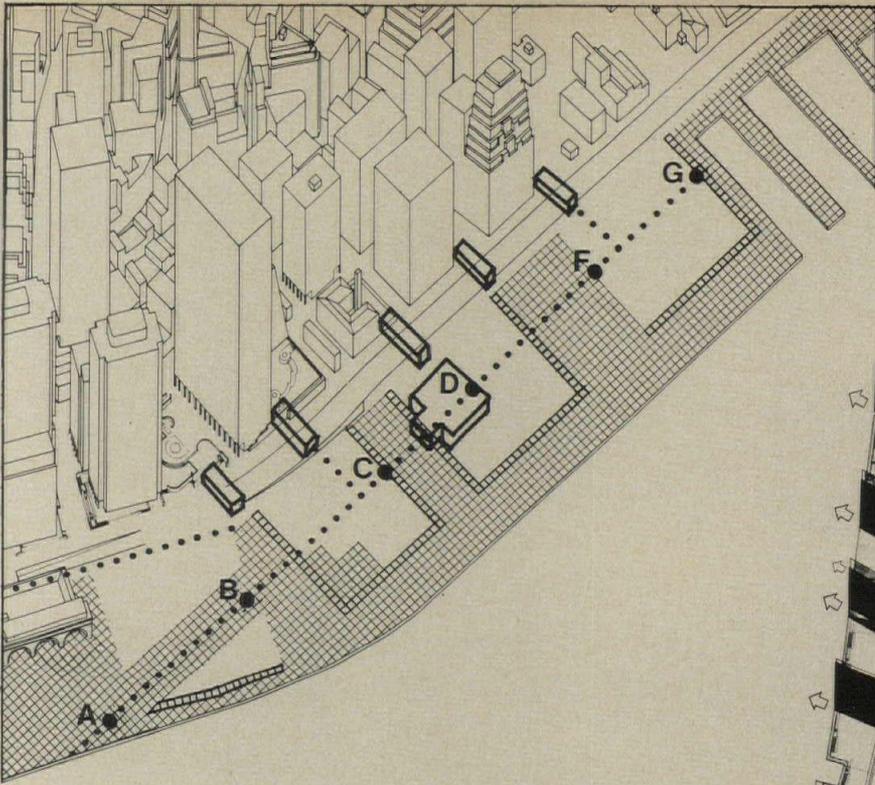
Robertson: It is the beginning of an absolutely necessary revision of zoning procedures. □

Credits

Architects: The Urban Design Council of the City of New York; Alexander Cooper, executive director; Charles Reiss and Michael Kwartler, project directors.

Client: City of New York.

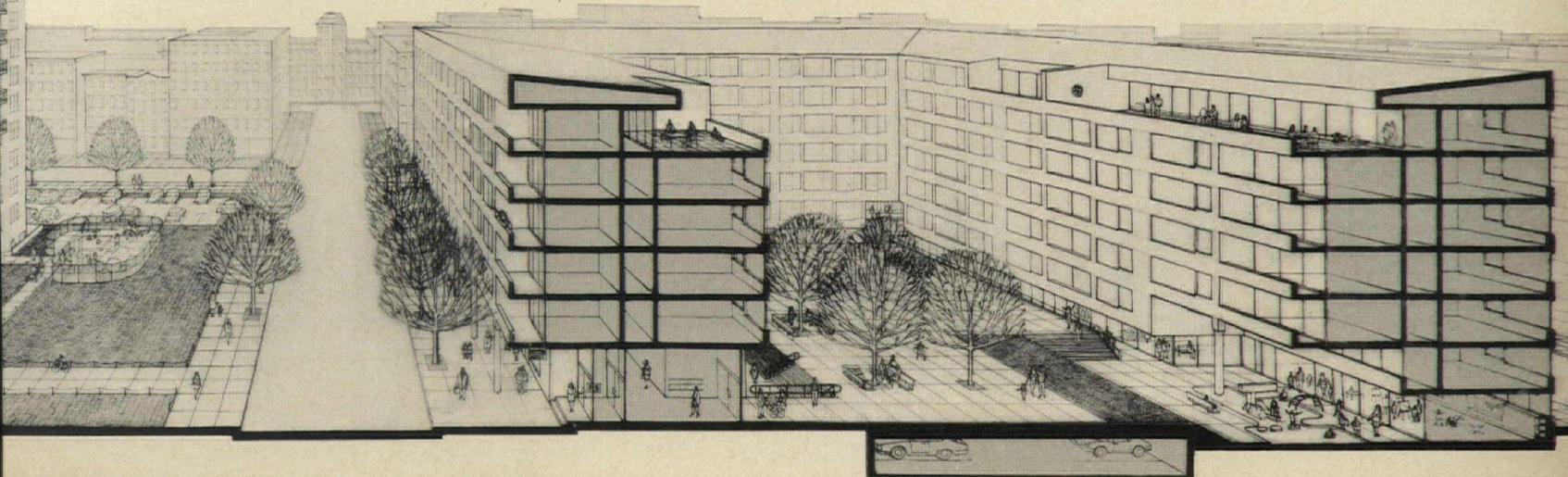
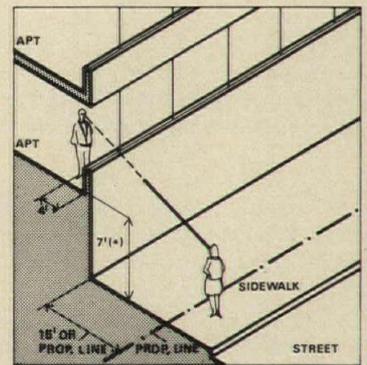
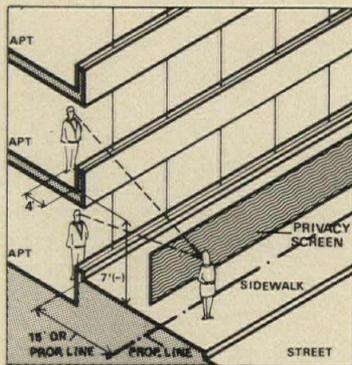




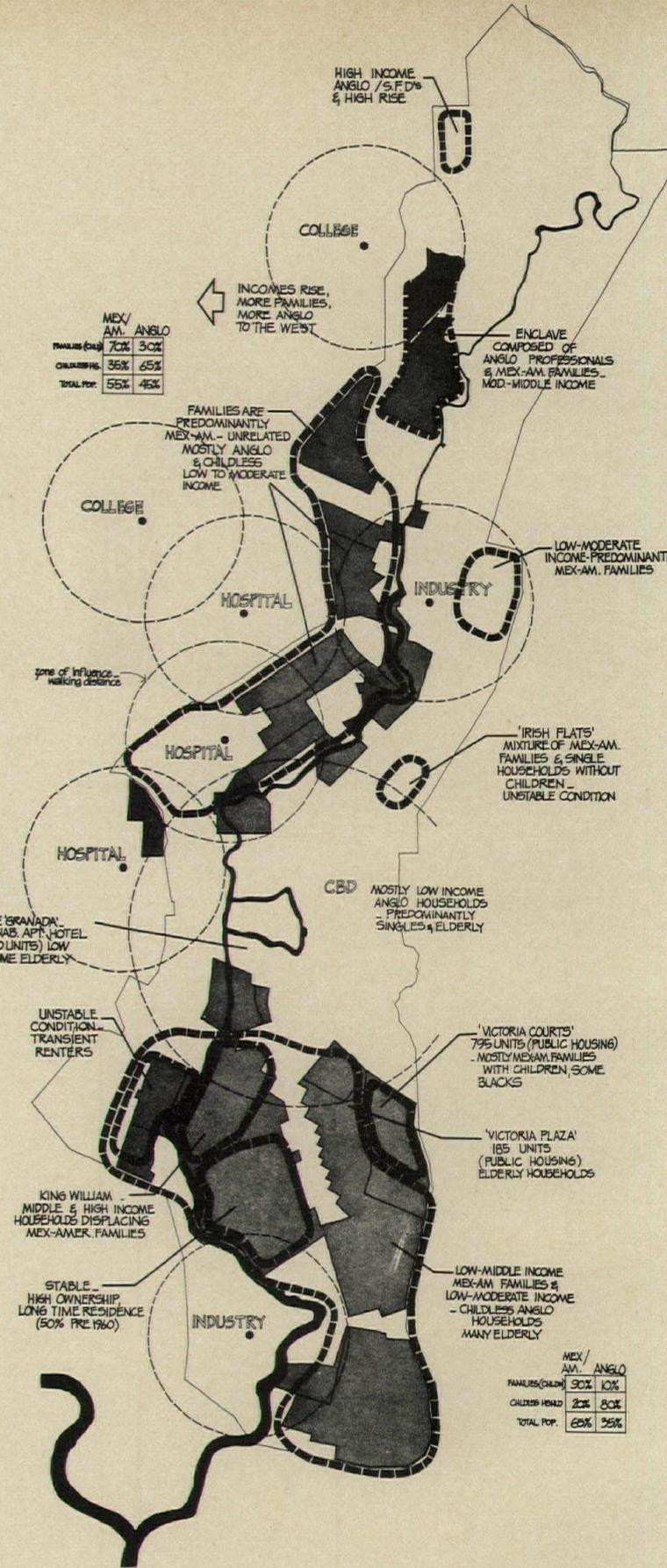
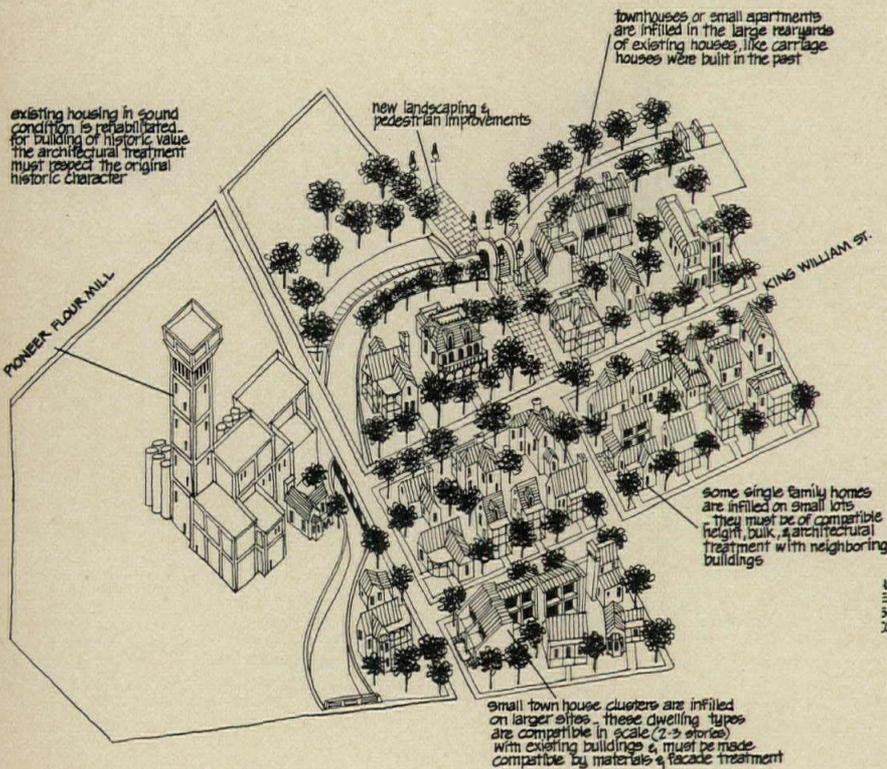
Credits

Project team: Richard Weinstein, project director; Terrance Williams, deputy director; Richard Baiter, Jack Freeman, John West, urban design; Lelia Gilchrist, Suzanne O'Keefe, Foon Chung Yee, graphics; Sue Heller, Ira Goldman, Frank Gilmore, Sharon Griffith, Lawrence Jacobs, Mark Zachman, supporting staff.

Client: City of New York.



Skidmore, Owings & Merrill / Marshall Kaplan, Gans and Kahn



San Antonio River Corridor Study results in a planning framework allowing for large and small scale steps affecting riverfront growth

Program: To realize the city of San Antonio's commitment to the urban river and the 3000 acres of land that surrounds it.

Site: San Antonio, Texas.

Solution: The plan creates places of recreation, high amenity urban housing, and linear educational resources. It deals with five major areas of concern: the river and the necessity of flood control, open space, and recreation; the whole corridor as a potential for commercial, retail, and office location; the neighborhood life, the people, the land, social services, health care, etc.; a framework for decision-making and choice; recommended institutional means for carrying out the program.

Jury comments

Scott Brown: The most important thing is the comprehensiveness and the recognition of the realization and implementation of both.

Robertson: It's another very thorough, very legible report in terms of making its arguments. There is real recognition not only of the large

scale implications, but of a block-by-block analysis of what is possible in different places. It seems to me that this is a really sophisticated document to have this far along for something so complex. □

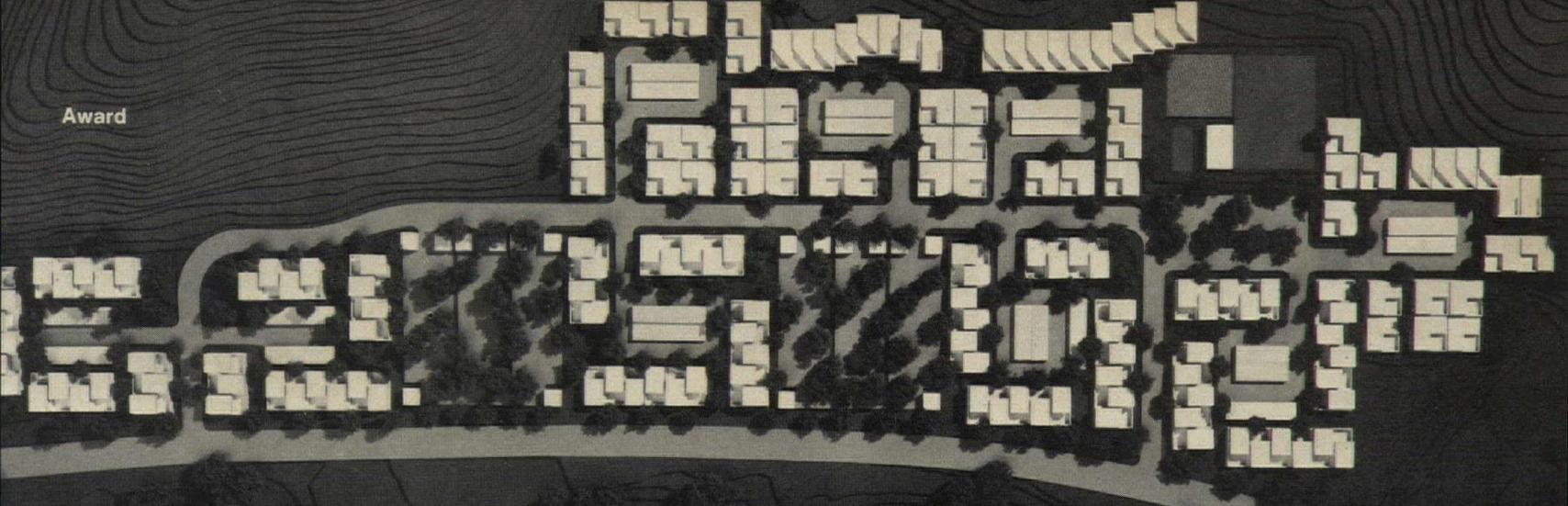
Credits

Project team: SOM, San Francisco: Marc Goldstein, partner in charge; Jerry Goldberg, project manager; John Kriken, project director, Roger Pelissier, Kathrin Moore, Don Beasley. Marshall

Kaplan, Gans and Kahn: Sheldon Gans, partner in charge; George Williams, project manager; William Morgan, Dona Hoard, Peter Bass, Pat Weinstein, Peggy Wheaton, Robert Read, Genette Sonnesyn, Henry Rubenstein, Jean Merritt.

Consultants: Robert Conrard, transportation; Cyrus Wagner, urban design; Robert Copeland, ecology; Paul Sharkey, hydrology; Groves, Farnandez, Ludwig, Barry, Teleford and Associates, Inc., hydraulic engineering.

Client: City of San Antonio.



Daniel, Mann, Johnson & Mendenhall

Oak Park Community Development Plan for a California town balances environmental inputs with a mix of lifestyles and structures

Program: To develop a community plan for a growing town that will accommodate residents with a wide range of incomes, family structures, and lifestyles in varied living environments while maintaining the natural qualities of the existing environment.
Site: Oak Park, Ventura County, California.

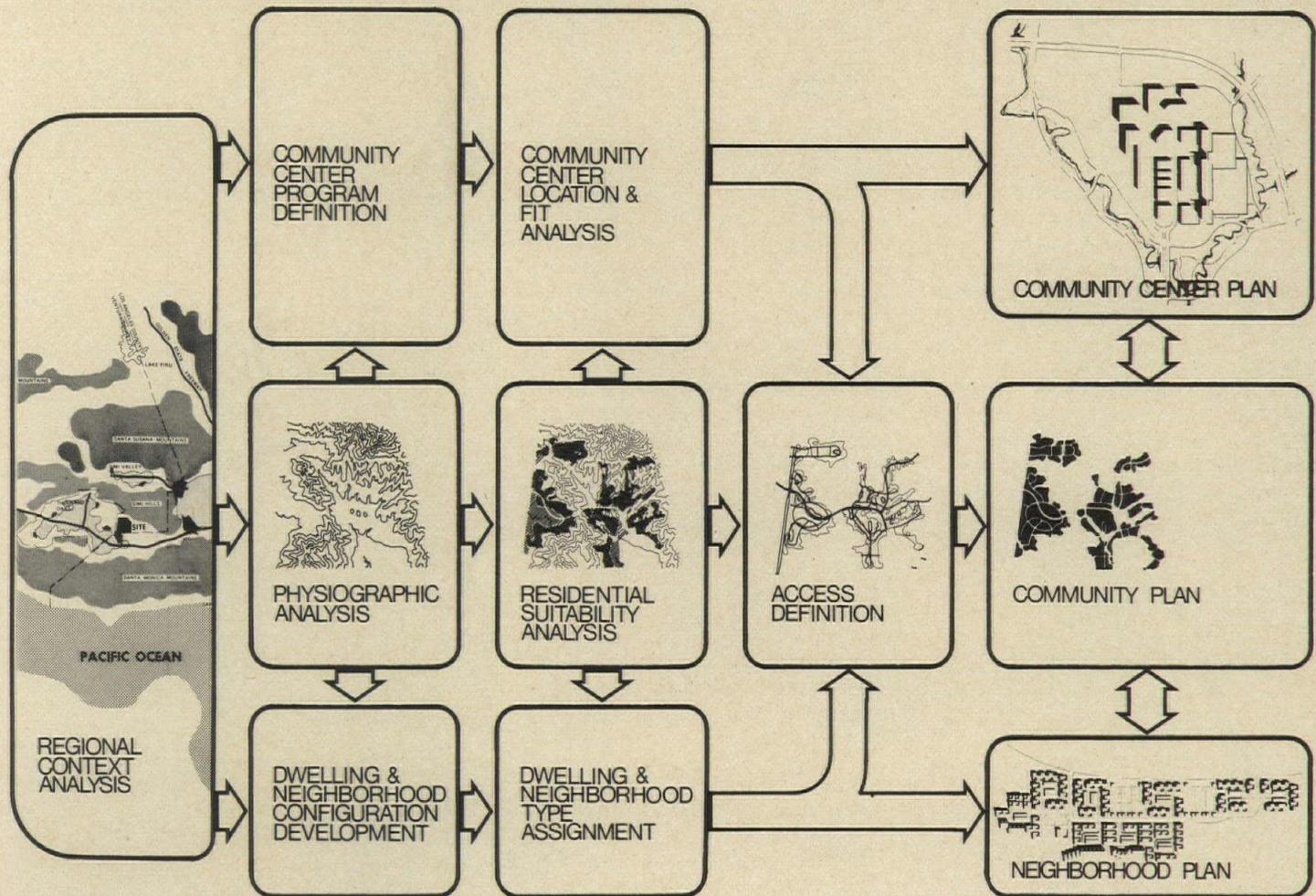
Solution: Based on an ultimate population of 28,000 people, the plan includes provisions for a full range of public services including a community center to serve as a focal point for the entire community.

Jury comments

Robertson: Its real and believable. The densities look right to me. Its exactly the kind of thorough, sensitive report that you want to see done more and more. It should serve as a prototype for this kind of countryside. □

Credits

Project team: Albert A. Dorman, Abraam Kruskov, Gerald P. Brooms, principals; Richard Warren Smith, architect/planner; William H. Whitney, Dan McNichol, economists; James Chen, Wally Dela Barre, traffic engineers; Ron Brent, civil engineer, Renee V. Gould, planning analyst.
Consultants: Robert Stone & Associates, geological consultants.
Modelmakers: Presentation Associates.
Photographer: Herbert Bruce Cross.
Client: Metropolitan Development Corporation.



The Georgetown Planning Group



The Georgetown Waterfront Area Study for the District of Columbia is phased to permit a step-by-step reinforcement and growth process

Program: A four-phased plan, from alternative development concept through implementation, to upgrade the waterfront area of Georgetown.
Site: Georgetown section of Washington, D.C.
Solution: Phase I, now completed, undertook a review of four proposed new freeways to see how they might be compatible with the general objectives of the project. Phase II, now underway, is a study of land use as related to existing and proposed new circulation systems.

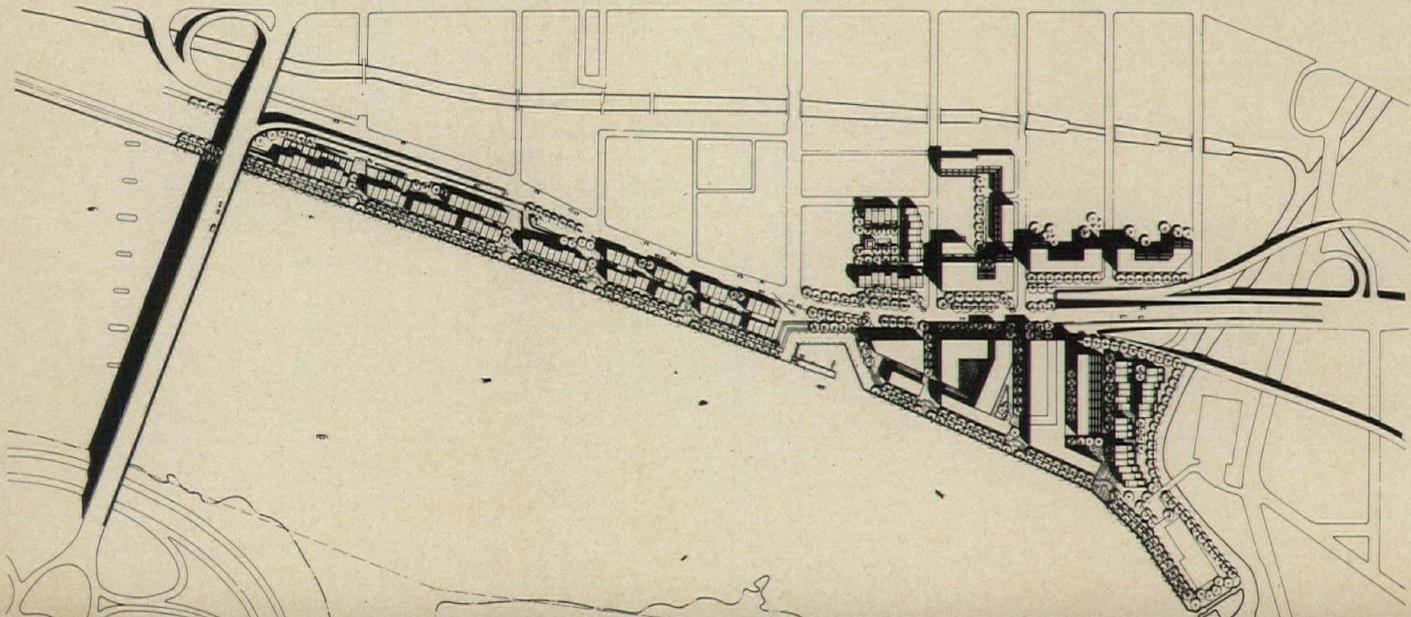
Jury comments

Robertson: It looks like its an on-going process which is being used to make things happen that ordinarily wouldn't happen. The planners have used it as a polemical and political devise. Most

of the urban design decisions in this report are very sensible. Its reinforcing the old canal system and some projects already underway. □

Credits

Project team: The Georgetown Planning Group; David A. Wallace, project director; George C. Toop, Jr., assistant project coordinator; Keyes, Lethbridge and Condon, architects and urban design consultants; Hammer, Greene, Silver Associates, Economic Planning.
Consultants: Creighton, Hamburg, Inc., and R.H. Pratt Associates, traffic and transportation consultants; Mueser, Rutledge Wentworth and Johnston, engineering consultants; Ross, Hardies, O'Keefe, Babcock and Parsons, legal consultants.
Modelmaker: Robert L. Drummond.
Photographers: Harris and Davis, J. Alexander.
Client: The National Capitol Planning Commission and the District of Columbia Department of Highways and Traffic.



OCTOBER

 WE PROVIDED
 TECHNICAL
 ASSISTANCE TO SEVERAL
 NEIGHBORHOODS:

Metro Impact, a project involving community groups, was cited for its effective use of a technique for communicating ideas graphically

Program: To work with the neighborhood groups in reviewing plans for proposed Metro stations in Washington, D.C. Acting as consultants to the Transit Development Team, the architects were free to propose alternatives within the constraints of Metro planning.

Site: Washington, D.C.

Solution: For the Deane Ave. station various site limitations dictated moving the proposed station location to a site more easily accessible to residents on foot and for bus and automobile access. An area need for commercial development was incorporated into the program for the new station, along with criteria for the design. For residents living around the Rhode Island Ave. station, the prime objection was one of increased traffic, taxable property used for parking lots and isolation of the station from the community. Parking was cut 75 percent, housing and commercial development was approved for the area adjacent to the station.

Jury comments

Scott Brown: It is, in the best sense, a classy document, a piece of high design. It uses photography and the collage technique in a way that can be understood by community groups. I think this kind of technique belongs in urban design presentation. □

Credits

Project team: Richard Ridley, partner and job captain; Robert Schwartz, partner; Taylor Culver, Robert Findley, Nancy Debevois.

Client: Mayor's Office of Housing Programs.

- 1 ARTICULATING PEOPLE CONCERNS IN GRAPHIC TERMS
- 2 PROPOSING ALTERNATIVES WITHIN THE CONSTRAINTS OF  PLANNING

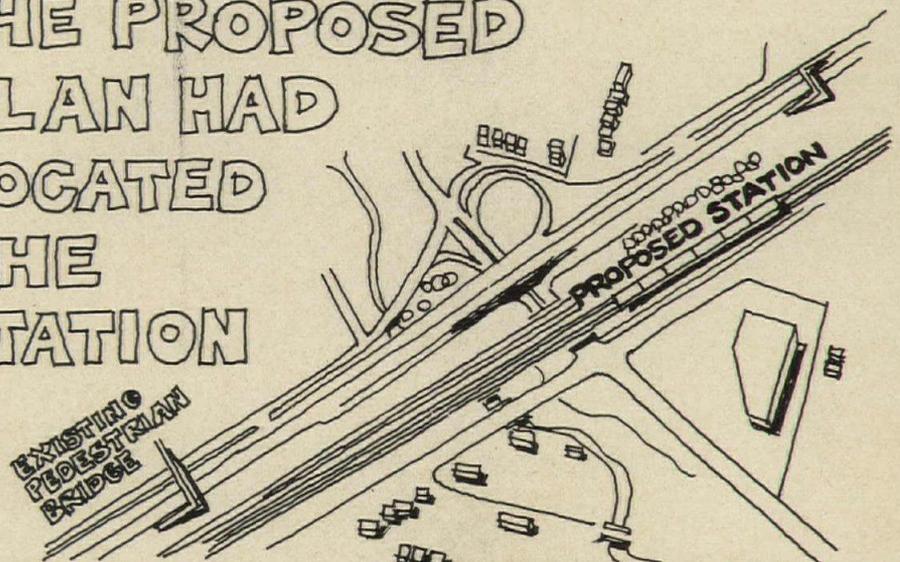
OUR WORK HELPED MAKE CERTAIN CHANGES

HERE ARE 2 ILLUSTRATIONS:

1 DEANE AVE. STATION

THE PROPOSED PLAN HAD LOCATED THE STATION

BETWEEN A FREEWAY



Citation

Jack Sidener, Architect/Planner

Lanai Island Development uses a technique to illustrate its architectural character without making commitments to a specific design

Program: To develop a master land management and development plan for Lanai Island, Hawaii which would establish an optimum population, would be adopted by the county of Maui as the official master plan and by the State of Hawaii Land Use Commission, and would guide growth to the optimum population while retaining the rural and recreational character of the island.

Site: Lanai Island, Hawaii.

Solution: The method involved overlays to establish "pukas," (holes), which have no major agricultural or environmental value, hence are slated for development if feasible. Also included in the study are plans and sketches showing various architectural thoughts about certain building types as well as thoughts on the center city area.

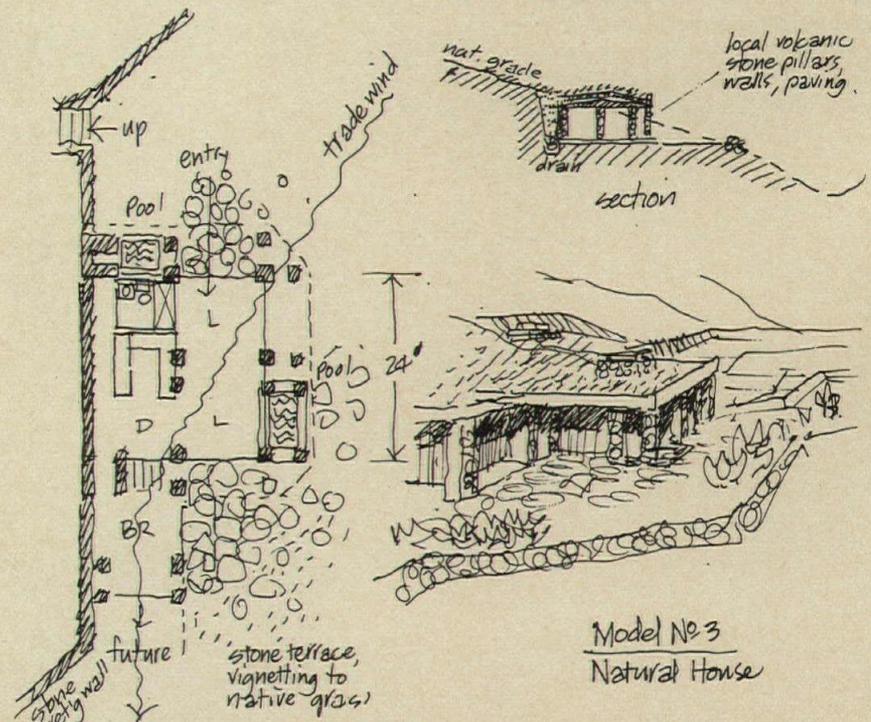
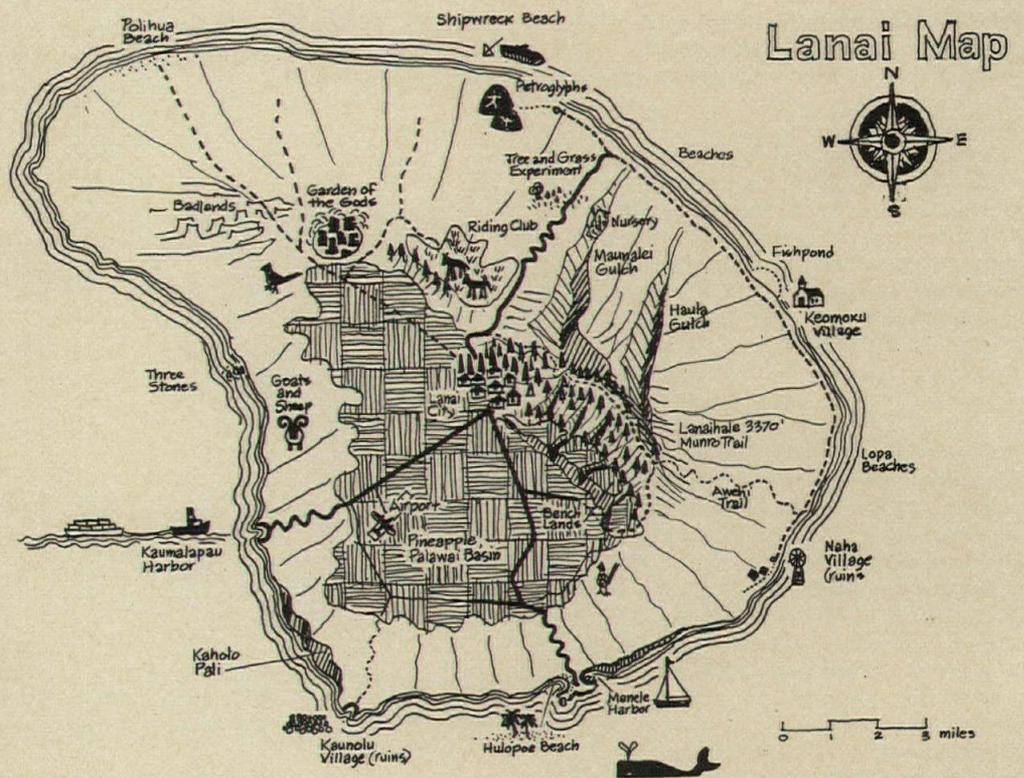
Jury comments

Robertson: Its very rational and looks like the architect knows his turf and his client. The housing types he begins to develop are actually very simple. The synthesis between the technique which he uses to illustrate his ideas and the degree to which the ideas have been developed by degree of specificity are perfectly coordinated. It is also a technique that I think is much more understandable. A very beautiful study. □

Credits

Architect/Planner: Jack Sidener.

Client: Lanai Company.



Citation

Naramore, Bain Brady & Johanson

Sitka Indian Village Redevelopment Plan is cited for its scope of economic, physical, and social change, its program for gradual growth

Program: Overall redevelopment of the village to improve housing conditions through new construction and rehabilitation, new community facilities and recreational space as well as increased social services and job opportunities.

Site: Sitka Indian Village, located on the south-east coast of Alaska.

Solution: Four different schemes were prepared to show the village what choices were possible among different arrangements of new housing, roads, and other facilities. The plan adopted includes a new residential neighborhood with a mix of housing types as well as the restoration of some historic houses. Each of the concerns of the village was studied in detail with recommended improvements, proposed action, and funding sources.

Jury comments

Scott Brown: These architects have followed the right democratic process in working with the community. They have tried to be very responsible about a broad plan of social, economic, and physical change. Their approach to infill housing is very useful. In the drawings you really can't see where they put the new houses. I like that very much.

Myers: One of the very strong things about this is that the gradual intensification will stabilize the town and prevent it from sudden, radicalized change.

Robertson: It's an anthropological view of small scale planning. □

Credits

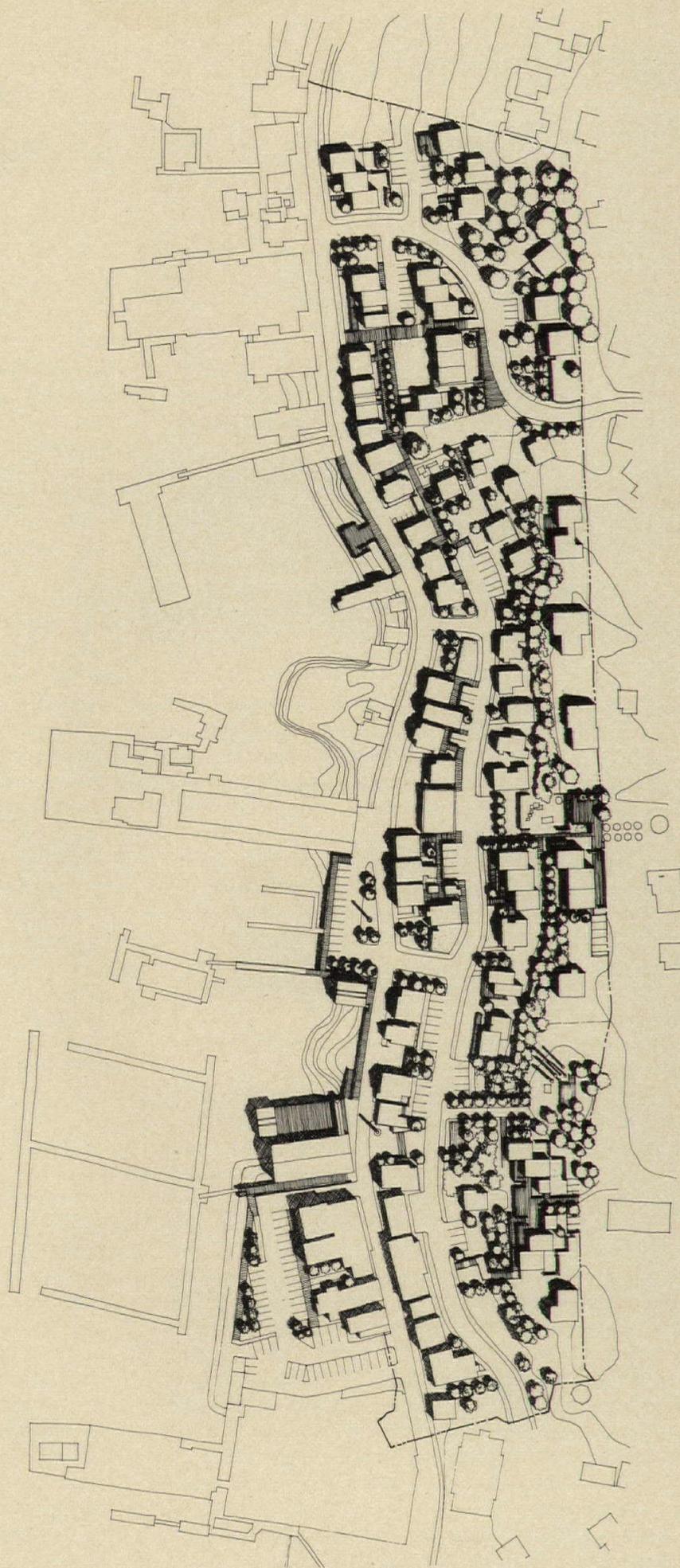
Project team: David Hoedemaker, AIA, partner in charge; Robert W. Corwin, project planner, Roger K. Wagoner, planner.

Modelmaker: Roger K. Wagoner.

Photographer: Niranjana B. Benegal.

Rendering: Paul Chelminak

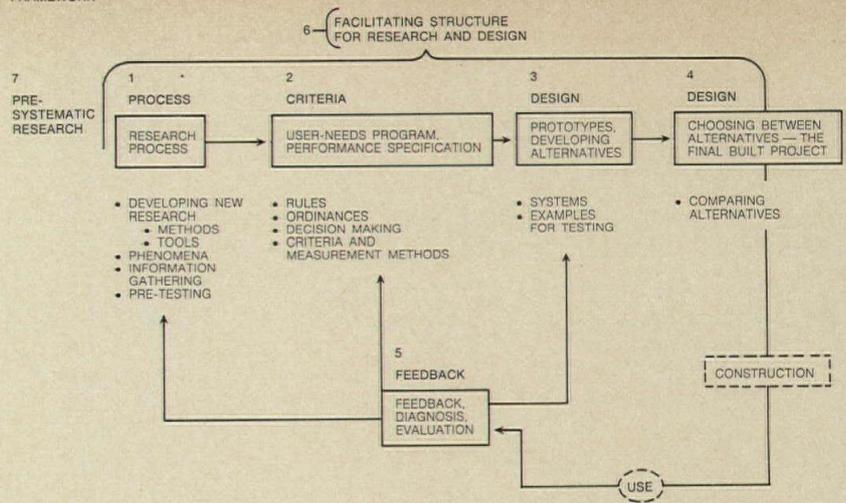
Client: Sitka Village Planning Council.



Applied research

Establishing the program

FRAMEWORK



Because this was the first year that applied research was included in the annual P/A Design Awards Program, the members of the research jury—John Eberhard and John Zeisel—



John Eberhard



John Zeisel

felt their task was as much to help define the program, to provide guidelines for future years, as it was to decide that some projects were better than others. They also realized that each project they reviewed not only represented one architect who knew about the new design awards category, but also that it represented at least five research projects by firms that either did not know about the program, or did not consider a particular effort as research. Because of this, Zeisel noted, "we decided that our primary goal would be to set the stage for future applied research programs by first defining types of projects we felt could legitimately be called research projects, and then by describing some qualities we felt good applied design research projects should have."

The projects the jury selected for premiation represent most of the seven types of research they identified:

1 Research process and techniques. This group of projects deals with developing and refining new research methods, processes, and research tools; they represent, in a sense, research to refine research, which will be applied to design. The BOSTI Planning Aid Kit is an example.

2 Design programming and other criteria for design. Projects in this group include building programs based on systematic and replicable research, and on legal ordinances for design developed from research.

3 Generating design alternatives. The jury established two separate categories for "design" in applied research. The first includes research-based designs meant primarily as testing grounds for the final project that is to be built. This category includes both systems of components, sets of alternative designs, and prototype designs; a good example of this type of research is seen in Barton-Aschman award-winning project, "The Bicycle."

4 Designs of specific projects. The projects of this second category of product- or building-oriented research include

both data gathering and data analysis techniques applied to one specific project. Examples of this type of research are seen in Henry Sanoff's Alternative Strategy for Planning an Alternative School, and in Perry, Dean & Stewart's project for Massachusetts General Hospital.

5 Post-occupancy feedback. The jury noted that designers and researchers are revisiting projects they have designed more frequently after occupancy. In some cases there is an attempt to evaluate what is good or bad about a project, but oftener these research projects are meant to diagnose the product and the process so that designers and researchers can learn important lessons for the next similar design project. Although the jury did not select any post-occupancy feedback projects, they felt this type represented an important category of research for future award juries.

In addition to the five fundamental types of applied design research mentioned, the jury felt there were two additional, special categories that should be considered in the future:

6 Research framework and structure. This category includes the new administrative and legal structures that will be developed to accommodate, encourage, and manage coordinated research projects as research in design increases. Usually, these structures, as exemplified by the award-winning BOSTCO Systems Research and Development Program, will administer research and design projects from inception of an idea through research, to design and feedback.

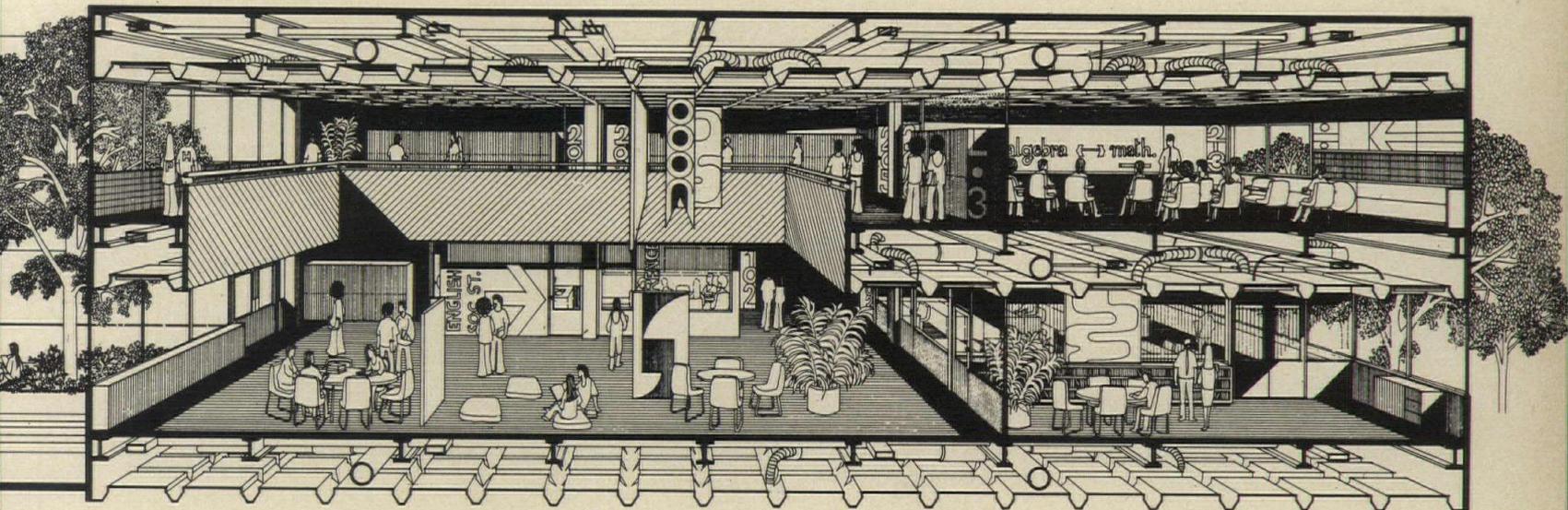
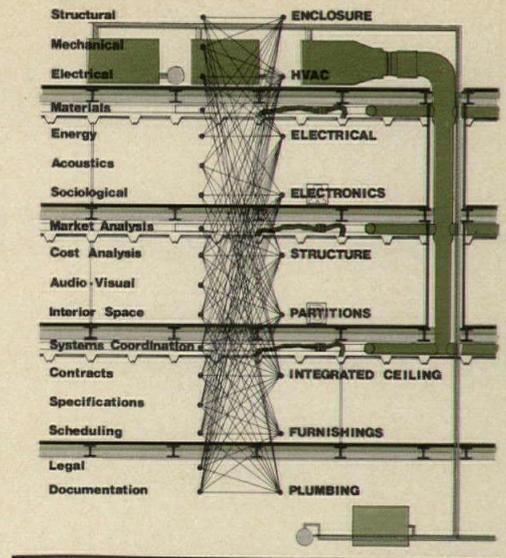
7 Pre-systematic research. The jury recognized that creative research, like other creative acts, must begin with an idea, with insight, with "a hunch about what's going on." They felt that before systematic problem solving could begin, the researcher must define the problem in a new, imaginative, and interesting way, and that a place should be made in future juries for this kind of pre-systematic research, which is well expressed in the VIP Center Shopping Mall by IDS Inc.

In addition to establishing categories for applied design research, the jury also felt the projects should manifest certain qualities, which included that the research project be directed towards design professionals; that the results be of value to others and that there be evidence they will be used in more than just a theoretical way; that the projects represent models of research rather than one-shot problem-solving attempts; that the research be replicable by others; and that the research be formulated to really clarify issues previously unknown, rather than merely to prove a predetermined point of view, value system, or set of assumptions. These criteria, they felt, constituted a complete applied design research project. □

Award

City of Boston, Public Facilities Department

RESEARCH · SYSTEMS



BOSTCO Systems Research and Development Program. One of the nation's largest school building programs is now under way in Boston

In the past five years, the city of Boston has embarked on one of the largest school building programs in the country. Projects totaling \$150 million are currently in the planning and design stages, and because of the large-scale and continuing nature of the program, the city has established a process based on building systems research and development that allows for continuous feedback of information from each phase of development, initial planning through to operations.

The intent of the BOSTCO research program is to develop an open-ended building system vocabulary for the design and construction of urban schools that is responsive to the particular needs of Boston. The effect of the program is that the architect for an individual school is provided with a standard vocabulary for design that is optimized to meet the owner's requirements and conditions. The continuation of the program allows for the evolutionary development of systems and components as the potential of building technology is better realized through additional

research and experience.

The research effort consists of an integrated, multidisciplinary effort to develop specific building components that are optimized in terms of their relation to each other, but that provide well-defined, separate systems for each of the various engineering disciplines and for the major construction contract responsibilities. Approximately 20 separate research contracts in the various disciplines are committed to date; each separate activity must be coordinated with the other research efforts in the development of a specific building system, or with the modification of a specific system.

Jury comments

Eberhard: The BOSTCO program was given an award in recognition of the role of the city as a client for a project that covered the spectrum from use requirements through design synthesis. It was the creative use of a team of research organizations, whose work collectively was greater than the sum of its parts, that we wanted to recognize and encourage as a model for others. While the project concept built on the earlier work of SCSD and SEF, it was nonetheless a well-organized and well-integrated approach to a complex problem. □

Credits

Director of Public Facilities Department: Robert J. Vey.

Systems program director: Ralph W. Clampitt.

Chief architect and director of design: Stuart D. Lesser.

Systems architect: Roger C. Roman.

Systems engineer: Phil Varney.

Legal counsel: Kevin F. Moloney.

Architectural systems research: Wilson Raines & Associate—Wilson Raines, Nick Kuhn.

Mechanical systems research: Hankins & Anderson—H. C. Yu.

Electrical systems research: Hankins & Anderson—Ben Fortner.

Structural systems research: Engineers Design Group—Tom Arthur, Lou Di Napoli.

Project scheduling and market research: Wagner, Hohns, Inglis—H. Murray Hohns.

Client: City of Boston, Mass., Kevin H. White, Mayor.

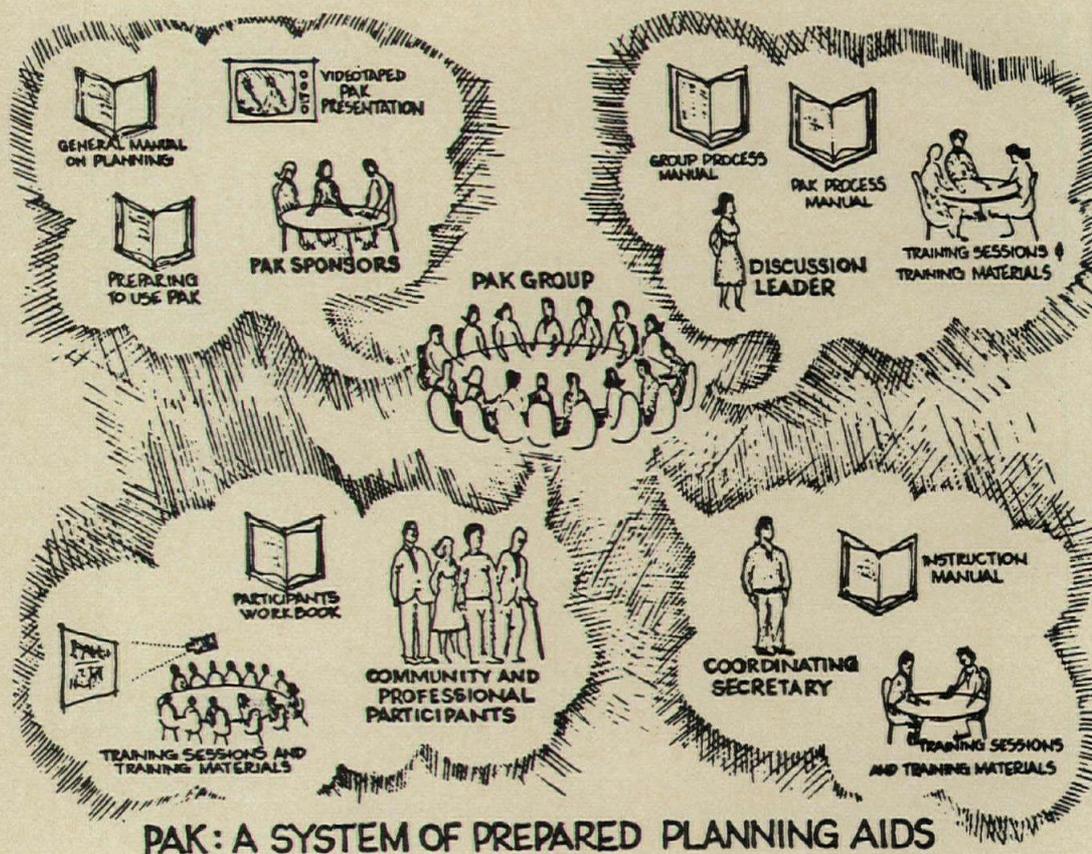
BOSTI

Mental Health PAK: The Planning Aid Kit. A process for organizing and aiding planning of mental health programs and facilities

The mental health planning aid kit was developed by the Buffalo Organization for Social and Technological Innovations Inc. (BOSTI) to aid communities to undertake a community-based approach to program planning, management, and coordination of community health programs. It synthesizes and utilizes current knowledge in community action, systems analysis, performance requirements, and small-group process. In using this structured process—PAK—planning is done according to a prepared set of agendas, in meetings, by a group of service providers and service users, led by a skilled discussion leader assisted by a coordinating secretary. The materials of the PAK include a series of five workbooks, a slide show, a videotaped presentation, and training materials that form a system for planning. The PAK goals are to implement the group planning of mental health programs specifically tailored to local needs; to implement the group planning of facilities which will support desired mental health programs; to ensure community participation in the planning process; to educate group members about mental health and planning; to provide a mechanism for recording and disseminating the work done by each PAK group; and to facilitate follow-up group or community involvement in management and coordination of mental health programs.

Jury comments

Zeisel: The PAK represents the research and development of the research, setting the criteria and measuring them . . . it's all of that. This is going to be used . . . it's a research tool for setting criteria. The research they've been doing has been the testing of the research that goes along with development of the tool. What I get excited about is that a tool for producing an ordinance is a research tool, a data gathering tool. It's a tool that makes the criteria sensitive to different conditions; it's applied research in an operational sense. Instead of saying all mental health facilities have to have two beds per room, it says . . . here, get the information from potential users by



PAK: A SYSTEM OF PREPARED PLANNING AIDS

a method, by a process model about what that criteria should be. □

Credits

BOSTI principals: Michael Brill, Bonnie See, Terry Collison.

Co-principals for original basis for PAK done at U.S. National Bureau of Standards: Michael Brill, Richard Krauss.

Analysis, research, design, consultation, review, and materials preparation: Peter Armstrong, Fred Bateman, George Borowsky, Jean Boulin, Kastle Brill, Barbara Bunker, Justo Chang-Liang, Charles

Cosentino, Antoinette Dauber, Sharon Edelman, Michael Edelstein, Barry Fallon, Harley Flack, Robert Grantham, Eileen Harvard, Michael Holtz, Stewart Instance, Al Katz, Richard Krauss, Curt Lamb, Susan Larner, Pleasantine Mill, Thomas Mullaney, Esther Nowakowski, Suzanne Nowakowski, Rosalind Paaswell, James Potter, Arie Schinnar, Justin Schulz, Alan Sommerman, Environmental Design Group.

Clients: National Institute of Mental Health, Washington, D.C., program officer, Coryl Jones; Erie County Department of Mental Health, Buffalo, N.Y., commissioner, Dr. James Warde.

Award

Barton-Aschman Associates, Inc.

The Bicycle: A Plan and Program for Its Use as a Mode of Transportation and Recreation. A study for the Atlanta metropolitan region

A new rash of problems, including a high increase in accident rates and thievery, has accompanied the sharp rise in ownership and use of the bicycle as a mode of transportation and recreation. As its popularity increases, new facilities will have to be structured to accommodate its use. A regional planning agency in Atlanta, Ga. commissioned this study to inform and influence governmental organizations and private interest groups that are directly or indirectly involved in decisions regarding the bicycle.

The main part of the study summarizes basic trends and proposes solutions to policy issues regarding development of bicycle facilities and programs in the region. An appendix presents technical data for those directly involved in developing specific facilities and programs.

Beyond assessing the magnitude and character of the bicycle boom, the study investigated three major related questions that must be answered before a rational and organized plan for bicycling can be developed: What type of facilities should be developed? Where should they be? How much money should be spent on them?

The study then proposes an "Evolving Bicycle Program" and concludes by developing a demonstration project plan.

Jury comments

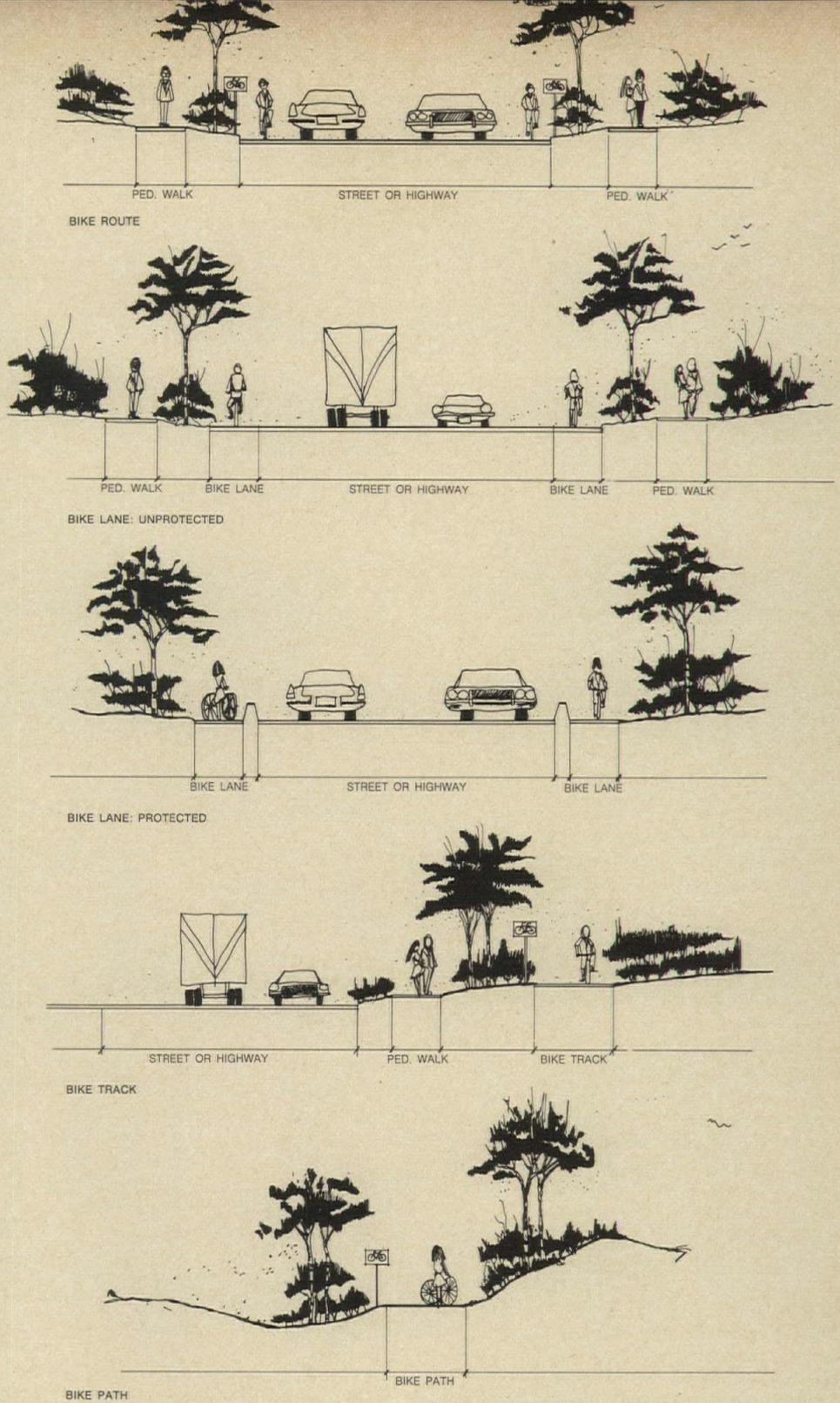
Zeisel: This submission shows that the people involved have done a tremendous amount of research into users, into bicycle accidents, buying patterns, investment strategies; they've analyzed when and where people use bicycles, and they've even researched alternatives for putting bike paths in different places. It's one of the most thorough analyses of a problem we've seen; it sets up suggested strategies for development, strategies for problem solving. It is overwhelming in its neatness, clarity, and logic. □

Credits

Project administrator: Richard P. Braun.
Co-project director: Carl E. Ohrn.
Co-project director: Richard C. Podolske.
Research and editor: Charleen Zimmer Beltt.

Attorneys and counselors at law: Huie, Brown and Ide.

Clients: Atlanta Regional Commission, Metropolitan Atlanta Rapid Transit Authority, Georgia Department of Transportation, Atlanta, Ga.



Perry, Dean and Stewart

ISSUES	INVENTORY	GOALS	PARAMETER	NEEDS	GENERATORS	PARAMETER	OPTION 1	2	3	4	5
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	<p>INTERMEDIATE BED STATION</p>	<p>INTERMEDIATE BED STATION</p>	<p>INTERMEDIATE BED STATION</p>	<p>NEEDS</p>	<p>GENERATORS</p>	<p>PARAMETER</p> <p>INTERMEDIATE BED STATION</p>					
	<p>INTENSIVE CARE STRUCTURE</p>	<p>INTENSIVE CARE STRUCTURE</p>	<p>INTENSIVE CARE STRUCTURE</p>	<p>NEEDS</p>	<p>GENERATORS</p>	<p>PARAMETER</p> <p>INTENSIVE CARE STRUCTURE</p>					
	<p>INTERMEDIATE CARE STRUCTURE</p>	<p>INTERMEDIATE CARE STRUCTURE</p>	<p>INTERMEDIATE CARE STRUCTURE</p>	<p>NEEDS</p>	<p>GENERATORS</p>	<p>PARAMETER</p> <p>INTERMEDIATE CARE STRUCTURE</p>					
	<p>INFORMATION</p>	<p>INFORMATION</p>	<p>INFORMATION</p>	<p>NEEDS</p>	<p>GENERATORS</p>	<p>PARAMETER</p> <p>INFORMATION</p>					
	<p>ANCILLARY</p>	<p>ANCILLARY</p>	<p>ANCILLARY</p>	<p>NEEDS</p>	<p>GENERATORS</p>	<p>PARAMETER</p> <p>ANCILLARY</p>					

Massachusetts General Hospital/Surgical and Special Services provided an opportunity to apply a methodology to structuring information

Faced with a complex problem of designing intensive care/intermediate care facilities into nine floors of an outmoded existing hospital, architects Perry, Dean and Stewart wanted to develop a process for ordering the enormous amounts of information necessary for problem solving.

The information first was divided into four general categories encompassing all information: components, patterns, services, and shell. Each major category was then defined by a series of sub-categories beginning with "inventory" (types of activities), which was linked with the next category, "goals" (that which should be achieved). Other categories that were related were "parameters" and "needs." The last category, "generators," became the link between the verbal and ultimate visual nature of the design

process, providing a place for thought, diagrams, and alternative ways of grouping information.

From there, various physical options were developed that allowed all possibilities for any one category to be seen. By using a system of scoring and a computer to process and printout the compatible sets of options or "linkages" as they are called, it was possible to develop many alternative schemes, based on this compatibility.

The MGH/SSS study resulted in eight alternative linkages, forming the basis for the eight different design schemes assembled from the sets of options chosen. Only after the schemes have undergone preliminary design are they rated according to their emphasis, the needs each best satisfies, and the goals each fulfills. Returning to the client's original set of criteria, it is then possible to rate each solution by how well it fulfills the most important requirements.

Jury comments

Zeisel: This one important as an example of

a thorough analysis of data. There should be a place for good analysis based on researched information, where the award is given not for the researched information but for the way the information is analyzed or structured.

Eberhard: It represents a team effort carried through a total spectrum of researchable areas from the identification of needs through the design solution. While this is in some sense part of the normal architectural practice, it seemed to us more sophisticated in the sense that it incorporated the total process. □

Credits

Project team: Clifford D. Stewart, partner; Charles F. Rogers II, partner; Elizabeth S. Ericson, associate; H. Ueli Marbach, Frank D. Maguire, Albert Harkness, John Lehigh, designers.

Consultants: Simpson, Gumperts and Heger, structural; Hankins and Anderson, mechanical; Carleton N. Goff, resident architect MGH.

Client: Massachusetts General Hospital.

Henry Sanoff

Alternative Strategy for Planning an Alternative School. Participatory planning and charrettes are used in school programming

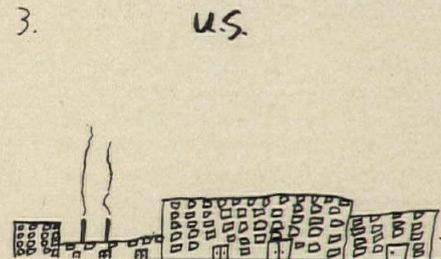
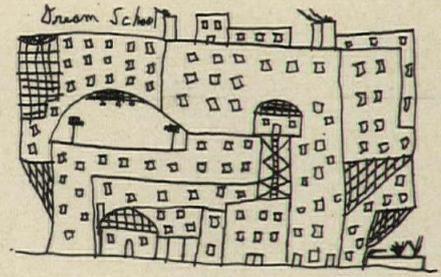
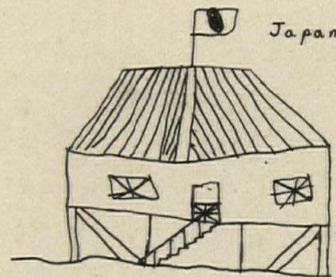
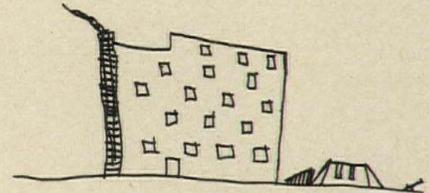
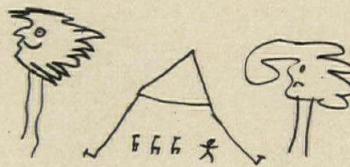
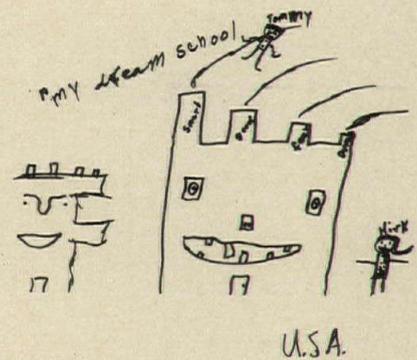
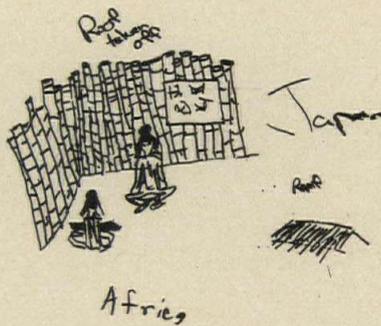
The Wallace O'Neal Day School in Pinehurst, N.C. chose participatory planning and charrettes to develop a long-range school building program. The school first established a parent-teacher-child coalition; after that, charrettes were initiated to define the school's goals. The first session began with the children, who were asked to respond to educational goals through various modes of expression in which the children characterized their aspirations, perceptions, and ideals for educational environments. Parents, teachers, and school board members entered similar activities, and also participated in "Learning Objectives" games where four or more individuals determined educational objectives, relationships between participants, the nature of the physical enclosure, and the physical settings representative of the physical environments. The final and most intensive sessions involved the assessment of the statements generated and their formulation into a consensual set of objectives for the school, which were: developing a sense of responsibility, producing an atmosphere of trust, developing motivation for learning, and developing a realistic self-image.

Following the generation of goal statements, appropriate learning methods were associated with "activities" as well as with the student-teacher relationship. Each activity was analyzed, using a data recording sheet, which ultimately became a building program for the architect.

Jury comments

Eberhard: This method of development for a school through using a charrette technique to incorporate user requirements represents a good use of research data.

Zeisel: It's a good example of documentation of the charrette process, which was, in this case, several days or a week where the architects and their consultants, students, teachers, and administrators all got together and, through an intensive interaction of method—sometimes systematic, sometimes less—they got a great deal of information about the needs of the users of the environment. □



Credits

Consulting psychologist: George Barbour.

Educational consultant: Joan Sanoff.

Client: Wallace O'Neal Day School School Board, Pinehurst, N.C.

In one exercise, children were asked to draw pictures of archetypical African, Japanese, typical American, and "dream" schools. The sharp contrast between the last two was seen as especially interesting by the researchers.

IDS Incorporated

The VIP Center Shopping Mall represents an application of theoretical studies concerning the idea of environmental theater

VIP Center is a community of dwellings, offices, shopping and recreational facilities in Indianapolis, Ind. The shopping mall and retail stores are entirely indoors. Within the 102,000 gross sq ft area, shop fronts face the mall, which is designed as a series of brightly lit spaces connected by narrow, dimly lit corridors. The walls, set off from one another on a 4-ft module, give stores a high degree of visibility as well as a variety of entrances and display windows. Three-dimensional elements and large images silk screened on vinyl wallcovering material will be made available to tenants, who can combine and change them as desired to create unique store fronts.

The mall represents one of a series of studies concerned with the idea of metaphorical architecture, or environmental theater. Its designer, Lebbeus Woods, believes "the city is a stage for human activity where things are never what they appear to be. In one moment, this may create feelings of strangeness, while in another moment, this strangeness becomes an enigma, suggestive of an order and meaning to the life of a city that is greater, more profound and beautiful than any comfortable philosophy or secure understanding can possibly afford."

The importance of these environmental theaters, Woods believes, is that they represent an "anticlassical form, a romantic form in direct opposition to the form of the Bauhaus and the machine ethic; that they are forms expressive of the true nature of human experience, which is metaphor. . . . They are environmental elements that speak not purely of themselves, not merely of machine technology, but of human activity and values, gestures, and movements."

While his work is still in its infancy, Woods is attempting to define, in visual terms, the spontaneous and unpredictable human processes of urbanization. He believes these processes are organic in the same way that nature is organic; "that they evolve by trial and error and are forever becoming, but never achieve a finite, perfectly resolved form." He is also attempting to articulate aesthetic values for the development of

design principles and visual language that support spontaneous processes. His research includes a presentation of the hypothesis of environmental theater, research leading to its development, and the VIP Center Shopping Mall as an application.

Jury comments

Eberhard: Since the implementation of the scientific method, the professional research community has believed that one is not engaged in rigorous research unless it is possible to put a number on it and measure it. While it is not at all clear how to deal with it, there are cases where architects have been artists in their intuitive approach to man's concerns. They can't talk about it very well, but they can convey it by visual images. The visual image of this submission is one of the "gleams" I'm trying to identify; it's so complicated and so badly understood at this point it's not easy to express in language, and it's certainly not measurable in quantitative terms.

Zeisel: It is a pure example of inventiveness, and it's important not only in design but also in research. It's exciting to see an inspiration as vivid as this. By awarding it we're saying we realize the importance of whimsy, of serendipity. In itself, it's not research as much as it's pre-research; it's the first step toward research.

Eberhard: This is the kind of basic research which, at some time in the future when some larger issues come about, has the possibility of being one of those nuggets that gets pulled out and linked with several other things that make a substantial contribution. □

Credits

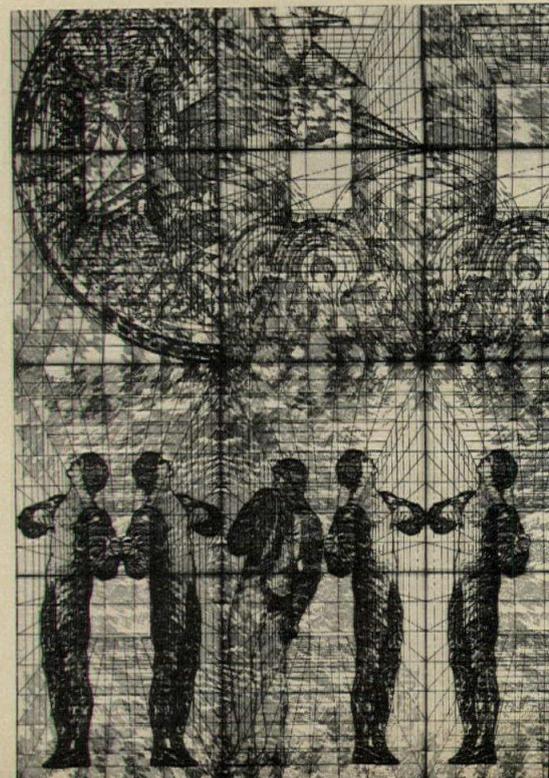
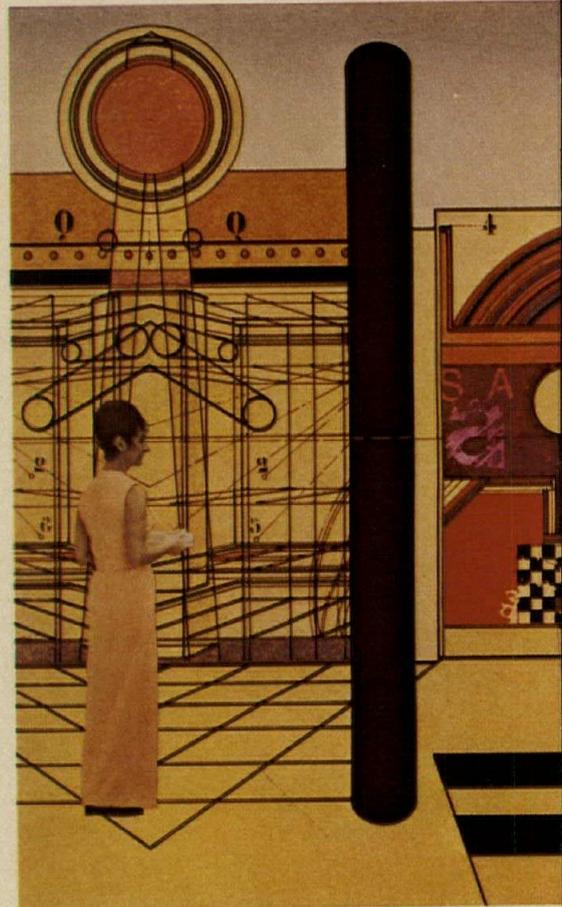
President: Irving D. Schwartz.

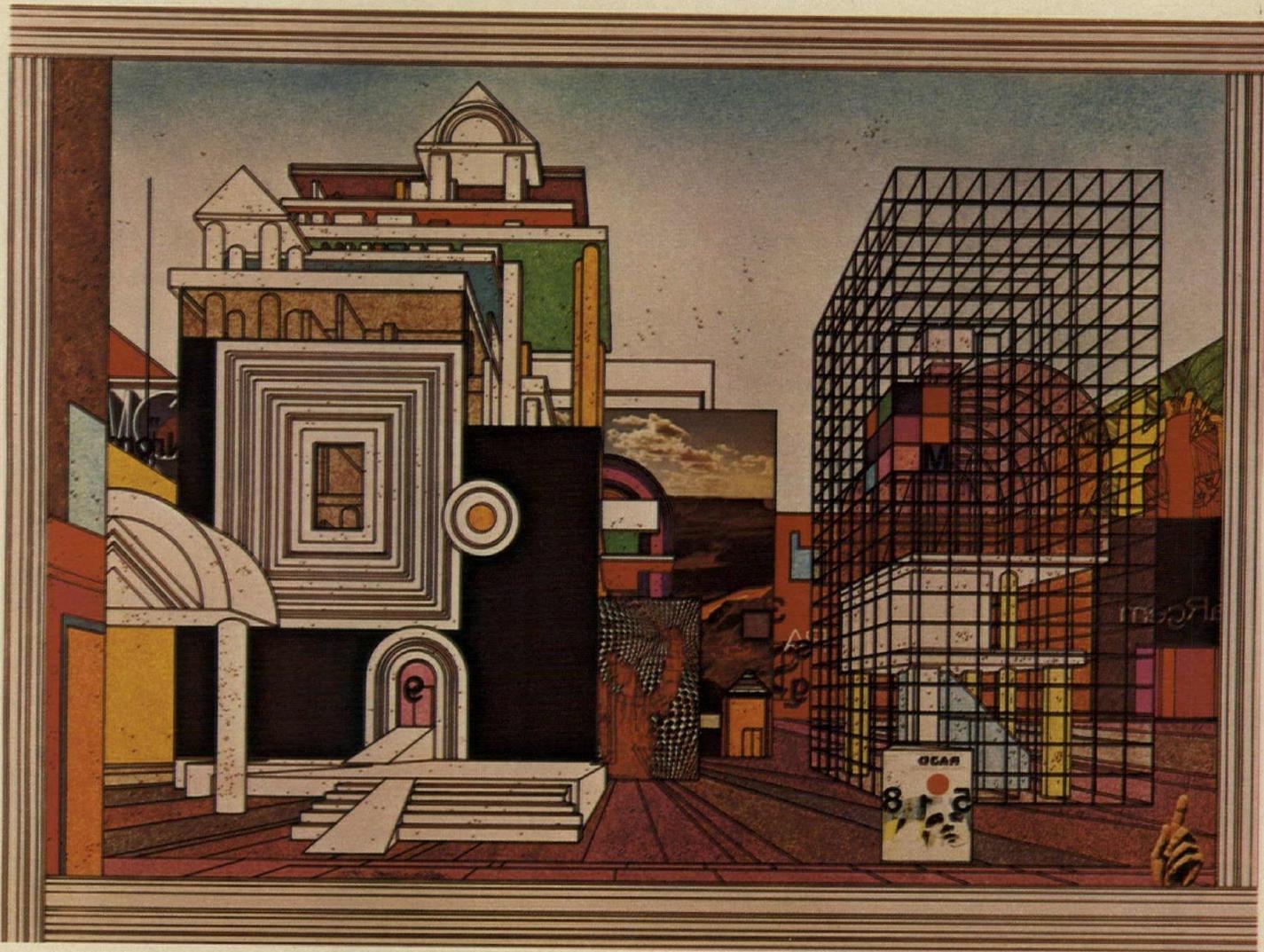
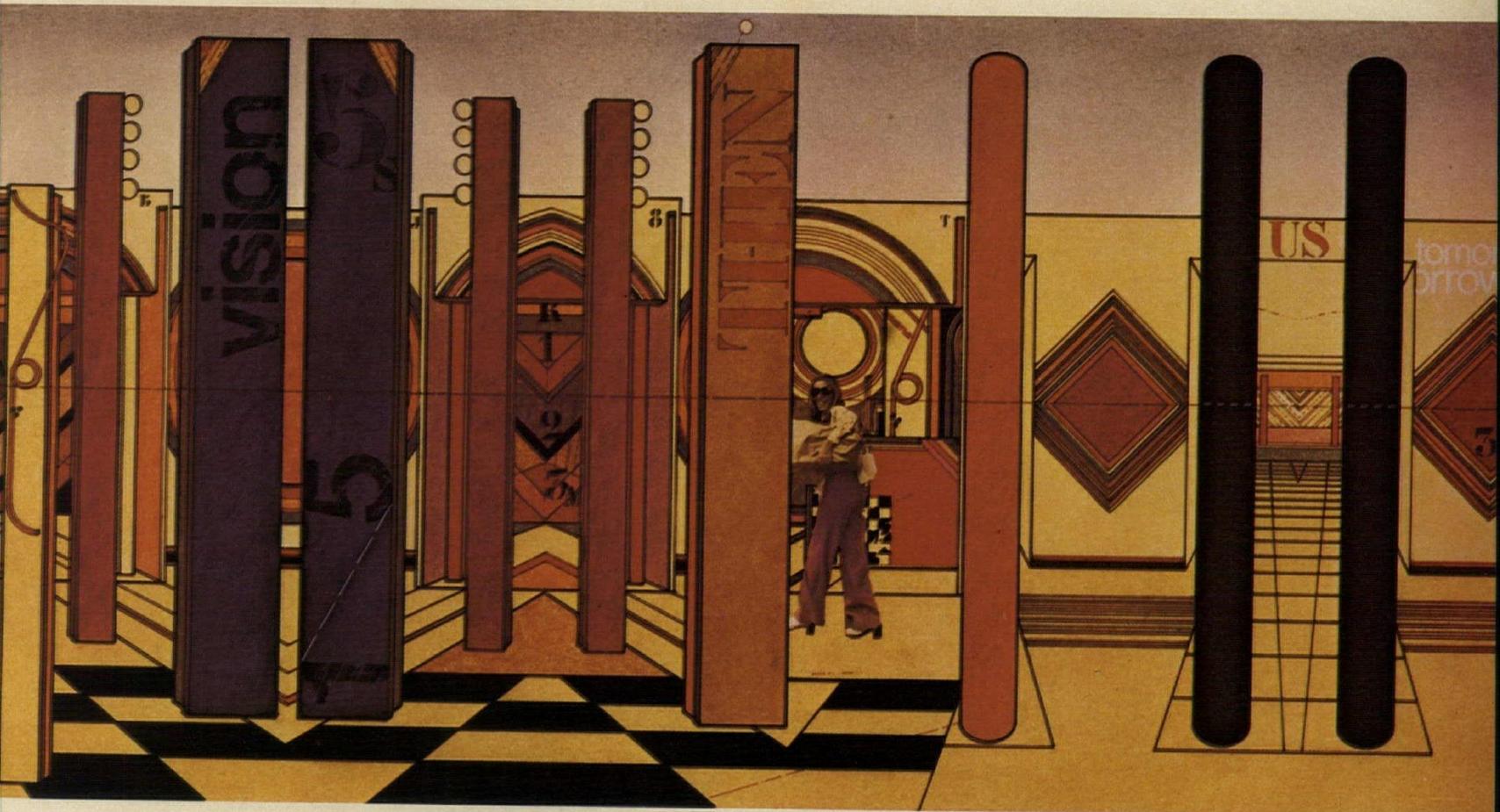
Director, research group: George E. Turner.

Director, design group: Lebbeus Woods.

Client: G. V. Ginger Organization.

The VIP Center Shopping Mall (this page) and The Ideal Square of a City (far right) show Woods's theories about the spontaneous and unpredictable processes of urbanization. The latter, conceived as a counterpart to De Chirico's ideal Renaissance environment, is a celebration of the evolution of man-made environments and the relatively uncoordinated processes by which contemporary cities grow.





LOF VARI-TRAN[®] HELPS CLAYTON A



DEVELOPER: Centerco Development Inc., Clayton, Mo. ARTHUR LOOMSTEIN, PRESIDENT (shown right) / LEASING AND MANAGEMENT: Centerco Properties, Inc. / ARCHITECT: JACK H. TYRER, Clayton, Missouri / GENERAL CONTRACTOR: Centerco Development Inc., Clayton, Mo. / CONSTRUCTION MANAGER: H. B. Deal Construction Co., St. Louis, Mo. / GLAZING CONTRACTOR: Rubin Glass and Mirror, Houston, Texas, Div. Chromalloy Corp.; Rainbow Glass Co., Inc., St. Louis, Mo.

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For more information on Vari-Tran write for our brochure, "Reach for a Rainbow," Dept. P-174, Libbey-Owens Ford Company, 811 Madison Avenue, Toledo, Ohio 43695.

LOF

Architectural precast concrete finishes

Harold J. Rosen, PE, FSCI

Many textures and finishes for architectural precast concrete are possible. How some of the most prevalent ones are produced is explained below

There is an abundance of finishes for architectural precast concrete, giving the designer a wide choice. Essentially, finishes can be achieved during any one of three distinct phases in the manufacturing process: prior to casting, before hardening, and after hardening.

Prior to casting. These finishes can be predetermined and obtained using forms and special materials within the forms:

a. Smooth finishes: obtained simply by using nonporous forms such as fiberglass, steel, sealed plywood, or sealed concrete. The smooth form surfaces impart a similar surface on the faces of precast architectural concrete.

b. Textured finishes: result from using patterned or textured forms such as rubber matting, textured fiberglass forms, rough sawn wood, or any variety of form which has been textured or patterned.

c. Special finishes: acquired by placing selected materials other than concreting materials at the bottom of the form. These materials may be ceramic tile, marble, granite, brick, cobbles, etc. and may be placed so as to obtain a complete facing, or they may be spaced so that a mortar joint is formed between them by the concrete matrix.

Before hardening. These finishes are induced upon the faces in contact with the forms before hardening during the precasting process:

a. Chemical retardation: retarders are applied to those surfaces of the forms which correspond to the panel faces selected for aggregate exposure. Upon placing the concrete in the forms, the retarders inhibit and slow down the chemical process involved in concrete hardening. The retarded cement paste is then removed by jetting with water and/or brushing. The degree of etching results in three textured surfaces:

Light etch. The outer surface of the cement paste and sand is removed, resulting in only a minute exposure of coarse aggregate, approximately $\frac{1}{16}$ in. reveal.

Medium etch. A greater amount of the cement paste and sand is removed, resulting in a partial exposure of the coarse aggregate, approximately $\frac{1}{8}$ in. to $\frac{3}{16}$ in. reveal.

Heavy etch. A significant amount of cement and aggregate

is removed, resulting in a uniform appearance of coarse aggregate, approximately $\frac{1}{4}$ in. to $\frac{3}{4}$ in. reveal.

b. Treatment of exposed face: these finishes are applied to the surfaces of the exposed face of the precast unit while it is still in the plastic state. This may consist of brooming, stippling, or using a roller with a textured surface to impart the desired texture on the exposed face.

After hardening. These finishes are obtained after the precast units have been cast and have attained their required strength:

a. Acid etching. Light and medium etching, described previously for chemical retardation, may be achieved by brushing the units with acid or dipping in an acid bath.

b. Abrasive blasting. Light, medium, and heavy exposure of aggregates may be obtained by blasting the units with sand or an abrasive aggregate. The best possible appearance of the final surface will be achieved by using a gap-graded concrete mix of low slump and adequate cement content. Gap grading, or skip grading as it is sometimes called, omits some of the intermediate sizes of coarse aggregates normally included in a standard concrete mix. Gap-graded mixes result in a uniform size distribution of the exposed coarse aggregate. Abrasive blasting will result in a dulling of the aggregate including the loss of sharp edges.

c. Bushhammering. This is a process in which mechanically or hand-operated hammers remove the skin of hardened cement paste from the surface of the concrete, and fracture the coarse aggregates at the face of the concrete to reveal an attractive varicolored and textured surface. Power hammers are faced with a number of points and are driven by electricity or compressed air. Hand hammers are used for small areas as well as restricted locations. The precast members should not be bushhammered until they have obtained a strength of about 3750 psi. The aggregates that behave best under bushhammering are those that can be cut or bruised without fracturing. Most of the igneous rocks, including granite, are well suited for this purpose, as are the hard limestones. Since corners can be damaged during bushhammering, it is essential to use either a rounded corner or to stay about 1 or 2 in. away from corners.

d. Honing or polishing. In this process the faces of exposed units are ground to the desired appearance by mechanical abraders starting with a coarse grit and ultimately finishing with a fine grit.

Appropriate aggregates for use in exposed aggregate finishes are granite, quartz, quartzite, crystalline aggregates, onyx, pebbles, marble, glass, ceramics, silica sand, and special abrasives such as carborundum and alundum. In using aggregates in concrete it is recommended that a petrographic analysis be made to determine their suitability as a concrete aggregate.

Other textures and finishes are possible. However, it is recommended that procedures be reviewed with precasting plants to determine feasibility and economics.

Author: Harold J. Rosen is an independent construction specifications consultant in Merrick, New York.

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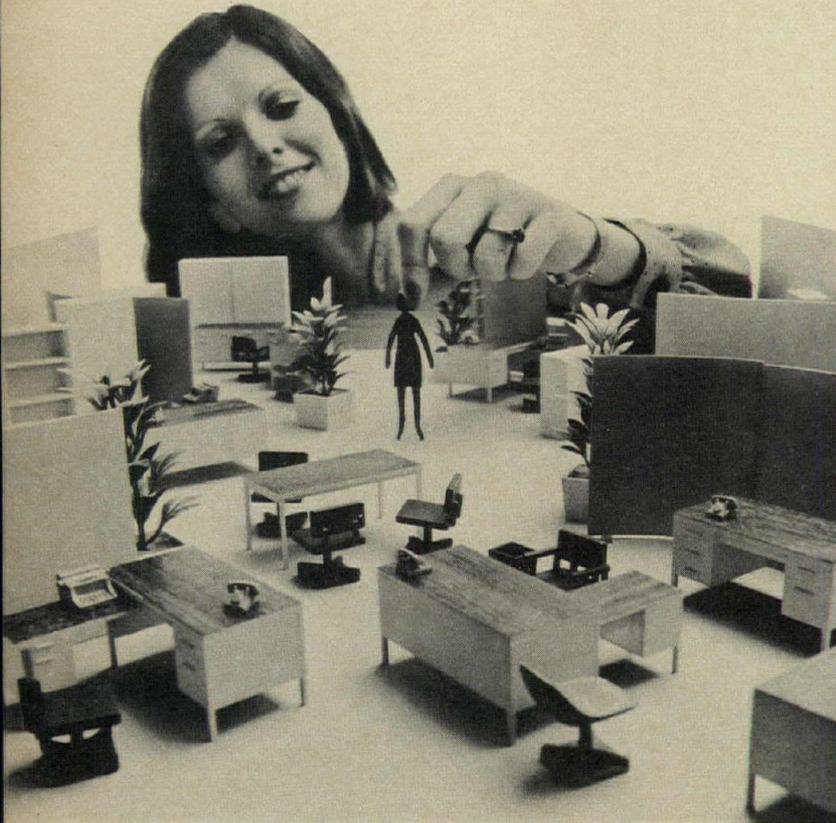
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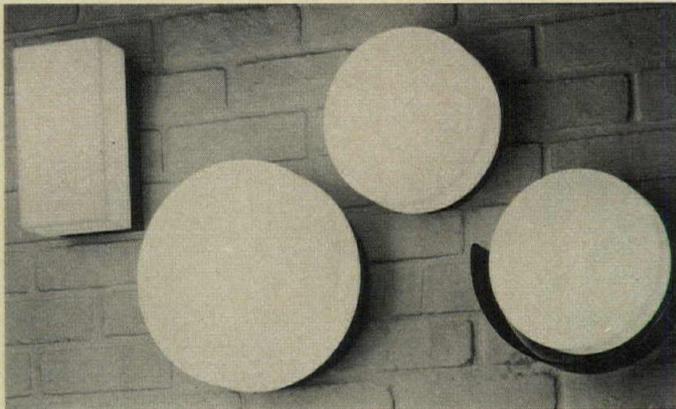
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Products and literature



3-D scale models



Outdoor / indoor luminaires
Graphic wall panels



3-D scale models. Kits or individual items, all plastic, to a 1/2" = 1' scale for layout and design of open offices allow non-technical personnel to see space relationships and spot traffic and clearance problems. Items include tables, screens, planters, chairs, files, desks, floor grid, adhesive backed colored vinyls and other items. Computer rooms and factory scale models are also available. Visual Industrial Products. *Circle 101 on reader service card*

Electronic security. Designed especially for the hotel/motel industry, hotel keys, conventional locksets and problems such as lost or stolen keys, or illegal duplication are eliminated. Keys are replaced with disposable individually coded plastic cards that are inserted in opening next to door and electronically compared to one in the master console; if they match, door opens, if not, door remains locked. ADT. *Circle 102 on reader service card*

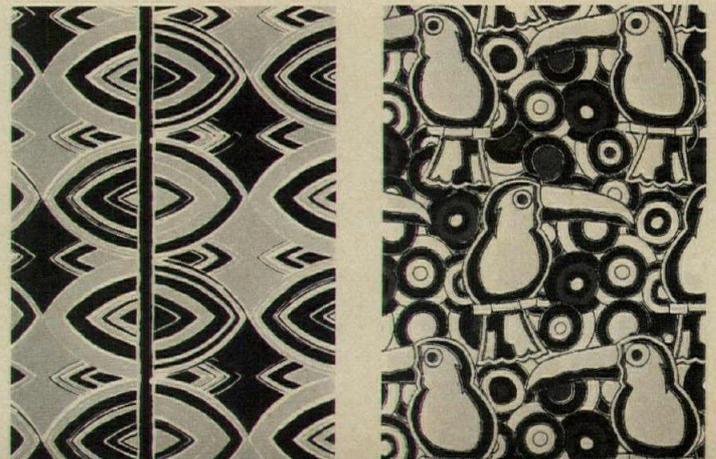
Plastics for lighting. Spheres, cubes, ellipsoids, cylinders—maker states practically any size, shape, style, or color of lighting enclosure can be supplied for both indoor or outdoor use. Plastics, Inc. *Circle 103 on reader service card*

Outdoor/indoor luminaires are designed for ceiling or wall mounting, have die-cast aluminum housing with concealed neoprene gasket, are weather tight and bug tight. Poly-carbonate diffuser is said to be 250 times stronger than glass, retains whiteness, assuring long light output and uniform illumination. Suitable for schools, institutional buildings, apartments, rest homes, hospitals, and open public places. Lightolier. *Circle 104 on reader service card*

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Custom wallcoverings. Composed of 14 patterns in 81 colorways on vinyls and mylars and 3 coordinated fabrics in 15 colorways, the collection translates African and tropical motifs into wallcoverings. Each pattern is named for an African region. Bill Miller's Wallpaper Studio, Inc. *Circle 106 on reader service card*
[continued on page 98]

Custom wallcoverings

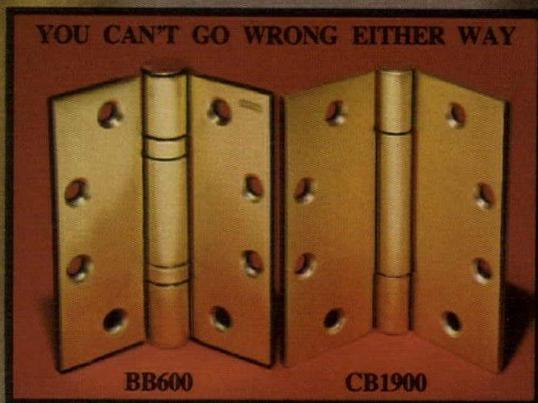


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Products and literature continued from page 96

Panels. Glass fiber mats are applied to both sides of diamond metal mesh of expanded aluminum. Maker states panels resist impact, twist, corrosion and weather; won't rot, rust, crack or fade; are used to build, remodel or reglaze, inside or out; are shatter- and vibration-proof and tamper-resistant; that diffused light is transmitted and ultraviolet rays are reduced, glare eliminated. Reinforced Plastics Division, Reichhold Chemicals, Inc.

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ANSI documents are available on microfilm in two formats: 8mm cassettes and 16mm cartridges. Service includes nearly 1000 documents in nine categories: construction, mechanical, electrical and electronic, chemical, nuclear, information systems, photography and motion pictures, miscellaneous and general, and is updated every three months. Information Handling Services.

Circle 108 on reader service card

Cloth tape. Waterproof, flame-retardant, it is especially suited for institutional, mobile home and aircraft applications. Is said to meet NFPA requirements, offer high adhesion, conformability, easy unwind, resistance to solvents, and is recommended for ductwork and carpet installation wherever building codes or specifications demand flame-retardant material. The tape consists of a polyethylene film laminated to flame-retardant cotton fabric. Standard silver color makes it suitable as a duct tape. Tuck Industries, Inc.

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Computer software system for the structural analysis and design of high-rise buildings has been updated to include the latest requirements of the ACI and AISC building codes. In addition to its static load capabilities, it has analysis capabilities for earthquake study. Will be available on terminals in spring, 1974. Omnidata.

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Lamps. Cast aluminum body, tempered glass diffuser, baked enamel finish, lamp measures 10"x14.3"x7.3" and is designed for floor, wall or table use. Available in white, bronze, dark gray. Atelier International, Ltd.

Circle 111 on reader service card

Bicycle rack. Provides protection for frame and both wheels and offers orderly compact parking. Coin operated and padlock models have low profiles and are available in a variety of colors. The S/S Group.

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Chalk and bulletin boards. Units in six standard sizes to 24 ft wide by 4 ft high are available with combinations of chalkboards, bulletin boards and projection panels. Materials consist of composition chalkboard, cork, vinyl cork, porcelain steel or wood grain vinyl in any combination. Also glass beaded, lenticular or rear projection screen panel materials. Framed in satin anodized aluminum, sliding panels are suspended on four-wheel nylon carriers. A-1 School Equipment.

Circle 113 on reader service card

Literature

Laboratory apparatus. 96-page color catalog features designs in laboratory fume handling equipment, fiberglass safety enclosures, laboratory carts, glassware washers, Kjeldahl apparatus and more. Detailed charts and data for selecting proper components are included. Labconco Corporation. *Circle 201 on reader service card*

Library furniture. Bookstacks, study carrels, exhibit cases and coordinated furniture to completely equip libraries or in-service educational facilities. Landscape system for librarians offices, counselor stations, individual study stations are also shown in brochure. Reflector Hardware Corporation. *Circle 202 on reader service card*

Supergraphic murals collection. Each of the 14 designs and 63 colorway in the Kaleidoscope supergraphic mural collection is illustrated in a full-color brochure. Included is a six-page multi-lingual fact sheet which contains specifications and illustrates uses. James Seeman Studios, Inc. *Circle 203 on reader service card*

Partitions Plus. A structural system that is said to permit a work station to be moved for as little as 30¢ per sq ft. Two basic elements are used: an anodized aluminum framework plus any panels desired, glass or hardwood in any thickness. Configurations of 45, 60, 90 or 120 degrees are possible and system permits incorporating existing furniture into work stations. No height limitations for partitions, and ceiling panels are optional. Literature. Syma Structures, Inc. *Circle 204 on reader service card*

Cobblestone paving. Fishscale cobblestone is one of the many paving patterns available in company's colored and patterned concrete; others simulate the appearance and character of brick or tile in a wide variety of patterns, colors, and textures. Bulletins contain complete information. Bomanite Corporation. *Circle 205 on reader service card*

Classroom furniture is shown in 32-page color catalog along with wide array of supplementary furnishing such as mobile cabinet wall and media center components. All are suitable for either open plan or traditional schools. American Seating Company. *Circle 206 on reader service card*

Roof deck systems. Booklet documents ways roof decks lower heating and cooling bills and conserve energy with properly insulated buildings, help reduce unwanted noise and comply with OSHA standards. School, shopping center, industrial plant and other institutional commercial building application. United States Gypsum Company. *Circle 207 on reader service card*

Acoustics. Design guidelines, technical data, estimating information and application data and specification for Geocoustic acoustical units for sound control are described in brochure. Pittsburgh Corning Corp. *Circle 208 on reader service card*

[continued on page 104]



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Result: an energy cost of only 21.35¢/sq.ft./yr. versus costs

ranging from 23.15¢ to 60.11¢/sq. ft./yr. for other new office buildings in the same area.

Design by Skidmore, Owings & Merrill, San Francisco, California.

Boca Raton Community Hospital, Boca Raton, Florida.

Five rotary, air-to-air energy-recovery exchangers reduce cooling capacity requirements 45 percent. Annual energy saving: \$24,230, plus a \$562,800 first-cost saving on equipment.

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*T.M. Reg. O.-C.F.

Performance tests on the system—which features a unique “total energy” recovery wheel—show that it is 75.9 percent efficient. So savings should increase as energy costs continue to rise.

Design by The Smith, Korach, Hayet, Haynie Partnership, Miami, Florida, previous winner of an Owens-Corning Energy Conservation Award.

General Electric River Works Program, Lynn, Massachusetts.

Couples a 19.5 megawatt gas turbine electrical power generator with a 190,000 pph heat-recovery system for projected annual savings of about 2 million gallons of fuel oil—about \$240,000 a year.

Special note: Both the gas turbine and steam generator burn residual (#6) fuel, yet meet all applicable and anticipated pollution statutes within the state. During normal operation, there is no visible plume above the plant stacks.

Design by GE's Construction and Engineering Section in Lynn, Massachusetts.

Three Honorable Mention Awards.

The Owens-Corning Energy Conservation Award Jury found three other designs worthy of special attention.

The Thomas Glass Factory, Am-

berg, Germany. A-frame design acts as a giant flue hood to exhaust intense heat from glass manufacturing process. Design by The Architects Collaborative, Inc., Cambridge, Massachusetts.

The Massachusetts Audubon Society Building, Lincoln, Massachusetts. Features a solar-energy collector to power heating and cooling equipment. Design by Cambridge Seven Associates, Inc., Cambridge, Massachusetts.

The Oregon Board of Higher Education Recreational Facility, Eugene, Oregon.

Minimizes need for mechanical ventilation

by capitalizing on existing natural phenomena and energy sources. Design by Unthank Seder Poticha, A.I.A., Eugene, Oregon.

How the Award Program works.

Owens-Corning offers an Energy Conservation Award in four building design categories:

Institutional—schools and hospitals, for example.

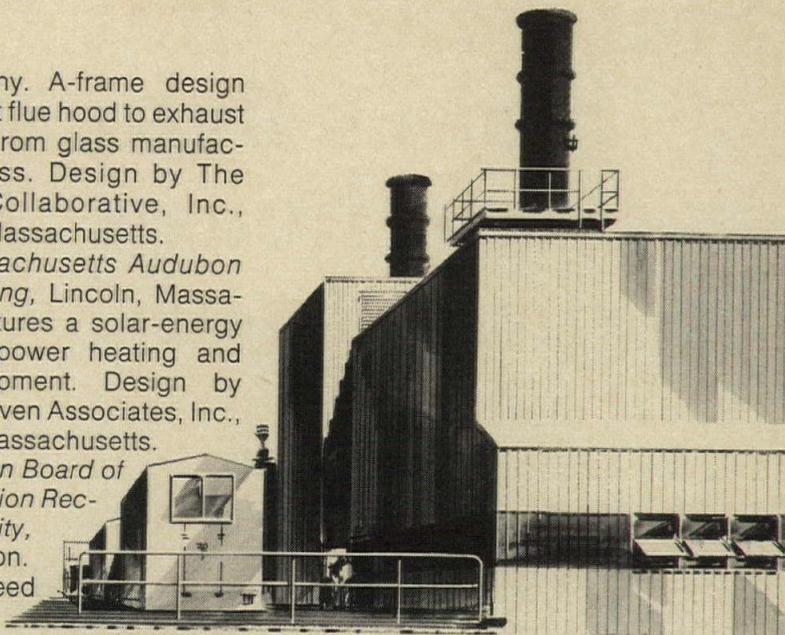
Commercial—office buildings, shopping centers, retail stores and similar structures.

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Governmental—post offices, administrative buildings and military structures, among others.

Any registered architect

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General Electric River Works Program, Lynn, Massachusetts.

design be a *commissioned* building project. (The use of Fiberglas* insulation—although an excellent way to conserve energy—is not a requirement.)

Winners are selected by a special Award Jury composed of leading engineers and architects.

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If you'd like to know more about the winners, or their designs, write for a free brochure giving complete details.

Owens-Corning Fiberglas Corporation, Att.: C.X. Meeks, Fiberglas Tower, Toledo, Ohio 43659.



The Owens-Corning Energy Conservation Award: “Triangles,” a multi-faceted Steuben Crystal sculpture that captures and reflects light from triangular planes.



Boca Raton Community Hospital, Boca Raton, Florida.

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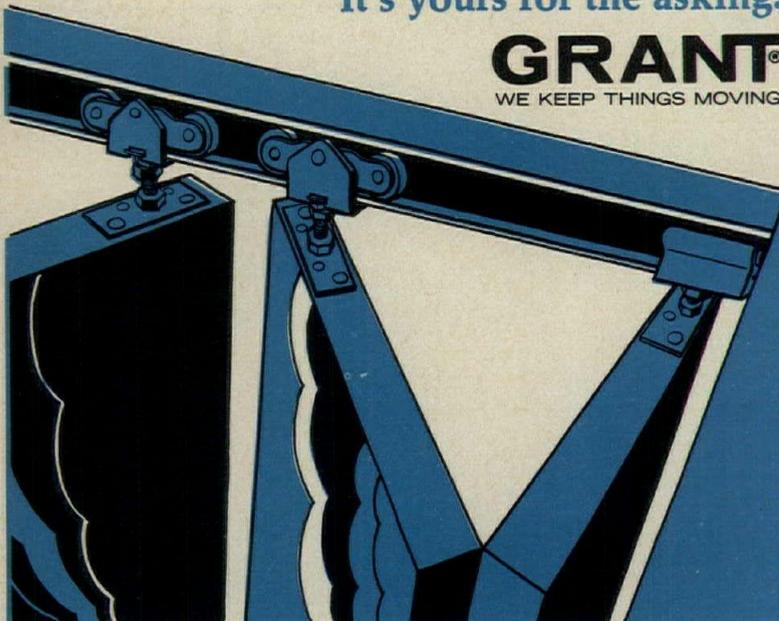
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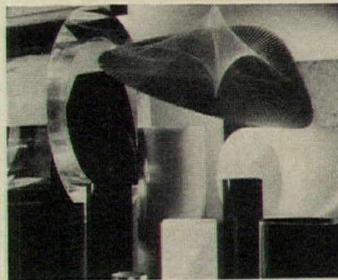
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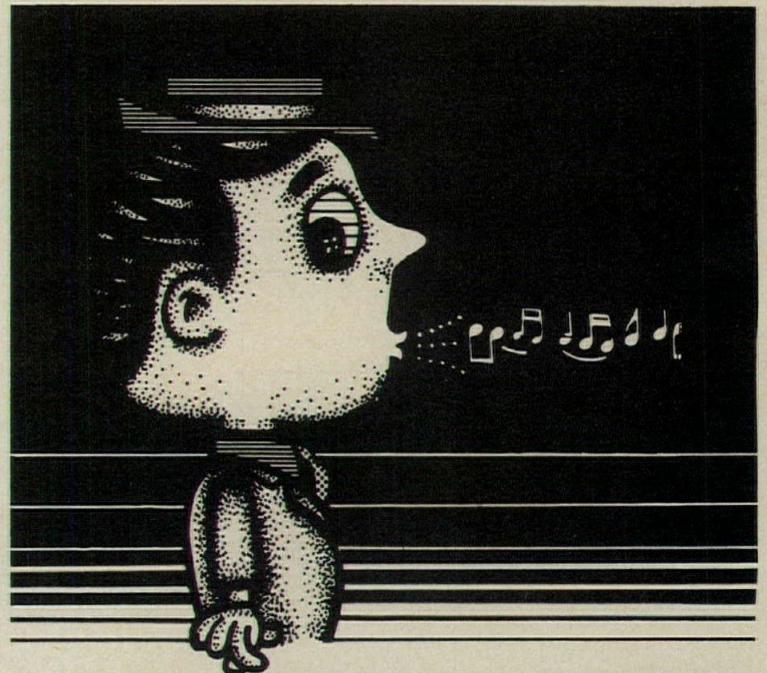


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If new **Carlstadt** acrylic/wood mouldings look like real wood, that's simply because they are. Real oak, ash, or walnut.

Yet there's a difference. The natural hardwood is impregnated throughout with tough acrylic plastic. So the "finish" is as deep and durable as the moulding itself. That's why **Carlstadt** acrylic/wood mouldings require hardly any maintenance.

These prefinished mouldings come in five distinctive profiles. In three natural wood species. An ideal choice wherever the warmth and texture of fine hardwood is desired. Recommended for interior use only.

As part of the **Carlstadt System**, acrylic/wood mouldings can be combined with an assortment of different posts, fittings, and decorative panels. So they offer custom design possibilities with the economy of standard component production.

Best of all, **Carlstadt** acrylic/wood mouldings are available, from stock, through local metal fabricators everywhere. For complete information, request the Carlstadt acrylic/wood brochure No. 321, or see the BLUM listing in Sweet's Architectural or Industrial file.

Installations and products shown, clockwise from top:

MOULDINGS: 8502 Walnut, 8511 Oak, 8532 Walnut, 8523 Ash

CONNECTICUT BANK & TRUST CO.

Middletown, Connecticut

DELAWARE TECHNICAL AND COMMUNITY COLLEGES

Stanton, Delaware

8511 OAK MOULDING on a bronze Carlstadt Railing System.

8521 OAK MOULDING on 3/4" painted steel balusters.

Designer: Burt, Knust, McCabe Assoc.

Fabr: Miscellaneous Metal Co.

Arch: Caudill-Rowlett-Scott and

Whiteside, Moeckel and Carbonell

Fabr: Savery and Cooke, Inc.

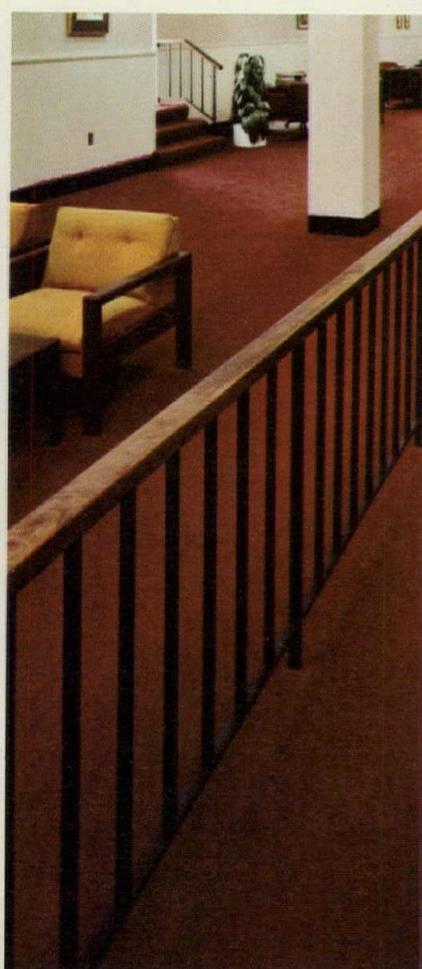
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THE MOST COMPLETE SOURCE FOR ARCHITECTURAL METALS

Carlstadt[®] acrylic/wood



Holds the temperature steady.

RADA'S THERMOSTATIC HOT AND COLD WATER MIXERS.



Neither pressure drop nor temperature rise can upset the steadiness of Rada control. That's the kind of double-pronged safety you can count on with our thermostatic mixing valves.

Rada has a bimetallic brain which automatically adjusts for both temperature and pressure fluctuations in the hot and cold water lines. Scalding or freezing bursts are things of the past and Rada-safety becomes a built-in fact.

Specify Rada for your next job. It's the doubly safe mixing valve for showers in schools, hospitals, nursing homes, hotels and recreational shower rooms as well as industrial plants.

You'll find Rada valves are available in a variety of sizes, and flow rates. With connections sized from 1/2" to 2", they are designed to meet all specific requirements for shower, tub/shower, or gang-shower installations.

The Rada Thermostatic Hot and Cold Water Mixers. Ask for them and make safety part of the specifications.

Richard Fife Inc.

140 Greenwood Avenue, Midland Park, N. J. 07432
201-447-1200 N.Y.C. 212-683-0745

Products and literature continued from page 99

Fluorescent dimming system. Described in four-page brochure is no-flicker, no-swirl 120- or 277-volt dimming system for commercial and industrial users. Includes voltage ratings, descriptions and specifications of the three components of system (intensity selector, dimming auxiliary, dimming ballast) and installation procedures as well as description of available options. General Electric Company.

Circle 209 on reader service card

Fiberglass draperies. "The Feneshield System" of drapery selection for large, multi-windowed buildings, and how to use them to control solar light, brightness and radiant heat through windows of high-rise buildings is described in 20-page color booklet. Shown are how openness of fabric and its degree of color—light, medium, or dark—perform under various environmental conditions. Technical information and cost comparison are included. PPG Industries, Inc.

Circle 210 on reader service card

Compactor. An eight-page brochure on the Pollution Packer on-site solid waste and refuse control systems and accessories for commercial and industrial applications is available from The Tony Team, Inc.

Circle 211 on reader service card

Modular panels, curtain wall. Working to designs, colors, insulations and fastening systems created by the architect or designer, this maker produces panels with clad interiors and/or exterior surfaces in paint, enamel, plastics, aggregate, wood grains, weathering and galvanized steels. Panels can also be used as nonload-bearing movable walls within a building. Brochure. Lusterlite Corporation.

Circle 212 on reader service card

Steel doors and frames. Catalog details complete line of doors, including pre-finished doors, fire doors, pre-painted drywall frames and adjustable steel frames, together with information on standard, special, and labeled frames. Architectural specifications, plus isometric installation details in a variety of applications, are shown. Amweld Building Products.

Circle 213 on reader service card

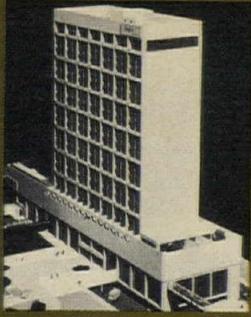
AISI handbook. Characteristics of fire protection materials and fire resistive constructions that influence steel-frame building design are discussed in 60-page booklet. Data for design evaluation and planning that meet architectural and cost factors as well as building code requirements are given. American Iron and Steel Institute.

Circle 214 on reader service card

Luminaires for such areas as roadways, walkways, landscaping, parks where lighting control as well as no glare or no spill-light are involved are explained in detail in 16-page catalog. Unique design eliminates hot spots, dead spots, streaks, striations, according to manufacturer. Gardco Manufacturing Company.

Circle 215 on reader service card

[continued on page 116]



One of the attractive bedrooms carpeted in Patcraft's 100% continuous filament nylon with tight heat set to assure texture retention and long life.



The corridors are carpeted with Stereo . . . the optima blend of 70% Acrylic and 30% Nylon with Zefstat for static control.

Stouffer's Chooses Patcraft Carpet!

The guest rooms . . . luxury suites and accommodating corridors in the elegant STUFFER'S ATLANTA INN are carpeted exclusively in PATCRAFT carpeting. "STEREO" was the carpet selected for the corridors since the basic requirement was a carpet tough enough to stand up under heavy traffic yet attractive enough to reflect the continuing beauty of this new, luxury Inn.

"STEREO" is as modern as Stouffer's Atlanta Inn!

Write for samples and complete specifications. PATCRAFT MILLS, INC., Dalton, Ga.



Circle No. 345, on Reader Service Card

← Circle No. 336, on Reader Service Card

Laminated decking is featured in 1974 catalog. Available to architects, designers, and structural engineers, it includes technical specifications data, descriptive details on species, face grades, patterns and sizes, gives finishes available. Potlatch Corporation.

Circle 216 on reader service card

Drafting equipment. Catalog/textbook in color illustrates line of radius tension drafting tables and chairs designed for architects, engineers, draftsmen, artists, and schools. The Huey Company.

Circle 217 on reader service card

Wood doors. 1974 color catalog illustrates company's product, gives capsule descriptions and specifications, and close-up views of several prefinishing and machining options, protective packaging, and cutaways of door cores. Mohawk Flush Doors, Inc.

Circle 218 on reader service card

Compact kitchens. Schematic drawings of each kitchen unit and complete specifications as well as color photos are included in color brochure. Models range from 30 in. to 7 ft wide. Five undercounter refrigerators are shown. Acme-National Refrigeration Co., Inc.

Circle 219 on reader service card

Wall panels shown in brochure are carried on discs in overhead track to any point in open plan one at a time, by anyone, at any time; they can be placed anywhere along the overhead track in either flat or 45 or 90 degree angular arrangements to create complete walls or landscape screens for large or small study/meeting groups. Available in full-height chalk and tackable surfaces. Panelfold Doors, Inc.

Circle 220 on reader service card

Commercial lighting systems. A 12-page catalog combines into one reference book a complete line of commercial lighting systems using High Intensity Discharge (HID) lamps. Publication includes typical data, coefficients of utilization and lighting system NC (sound) ratings to assist lighting users.

General Electric Co.

Circle 221 on reader service card

Gravity conveyors. Catalog contains data on wheel and roller conveyors and accessories, which include portable and permanent stands, wheel and roller gates, guard rails and spur curve switches. Rapistan.

Circle 222 on reader service card

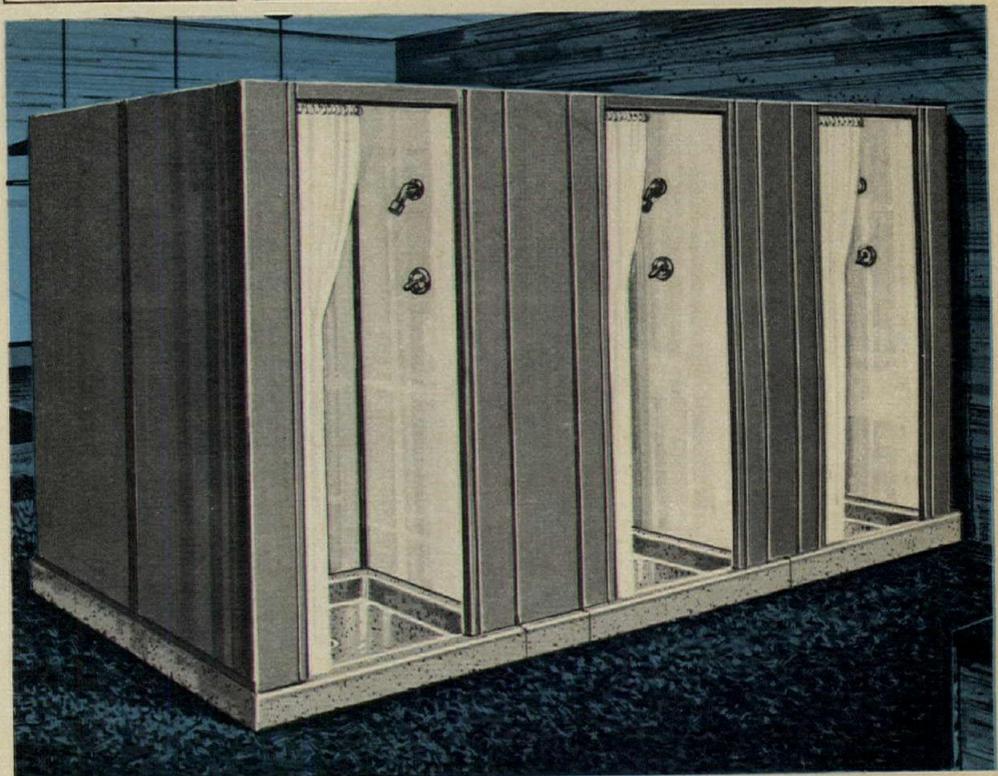
Rolling metal doors. Catalog presents comprehensive architectural details on these and fire doors, rolling grilles, rolling pass window shutters in standard and packaged units, fire shutters and sliding grilles. All products are available in a wide range of sizes. Cornell Iron Works, Inc.

Circle 223 on reader service card

Commander! The quiet metal shower.

Commander® metal shower cabinets with insulated walls for sound damping, leakproof construction and heavy base are ideal for institutional use.

Commander® shower units are built for heavy use. The sandwich panel walls with one-inch-thick bonded cores absorb noise and vibration. One-inch radius cove corners eliminate hard-to-clean crevices that could harbor grime. Heavy-duty precast terrazzo floor has a factory-installed stainless steel drain that can't leak. Four different models are available in a variety of finish combinations. For more information, contact your Fiat representative or write Dept. PA-1.



POWERS **FIAT** CORPORATION
SUBSIDIARY OF POWERS REGULATOR COMPANY

Circle No. 338, on Reader Service Card

This relatively simple but superbly designed bank is a striking example of the manner in which Terne roofing can become an integral part of a total architectural concept.

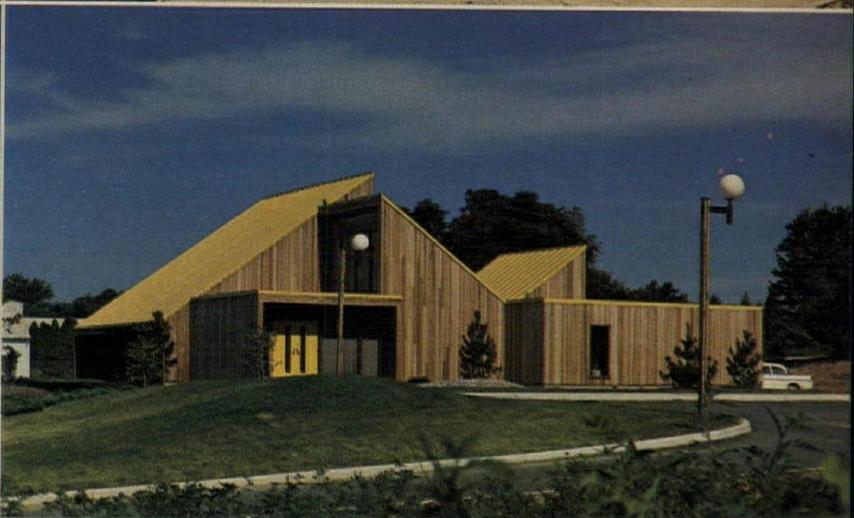
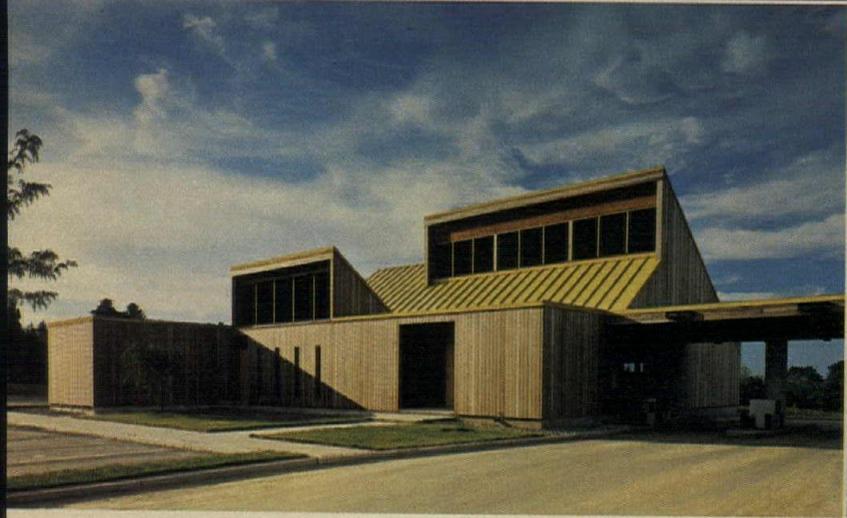
Aesthetics aside however, Terne also has certain outstanding functional characteristics. Among these are great tensile strength combined with light weight and a low coefficient of expansion; exceptional resistance to corrosive attack, and a durability measured in generations rather than years.

Terne roofs are also relatively inexpensive when judged by the standards of those to whom ultimate performance is no less significant than initial cost.

Citizens' Bank, N.A., Readington Township, New Jersey
Finne · Lyman · Finne · Reese,
Architects-Engineers, Elizabeth, New Jersey
Roofers: J. Strober and Sons, Ringoes, New Jersey
Photographs by Otto Baitz

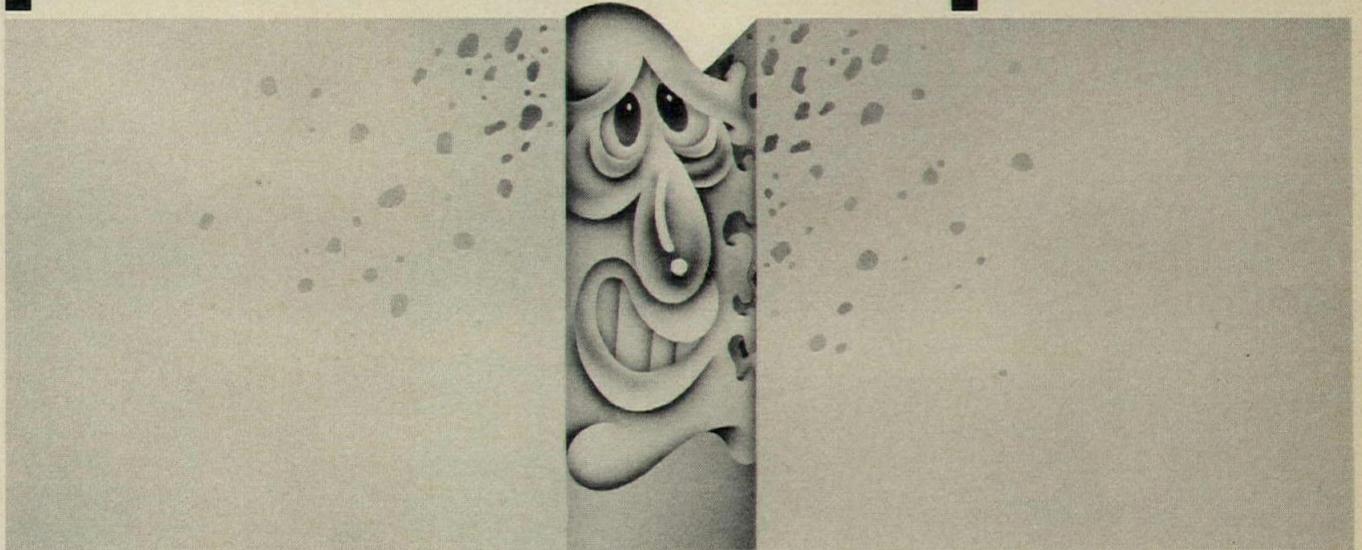
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FOLLANSBEE STEEL CORPORATION • FOLLANSBEE, WEST VIRGINIA



WHAT PRICE FORM, COLOR, FUNCTION?

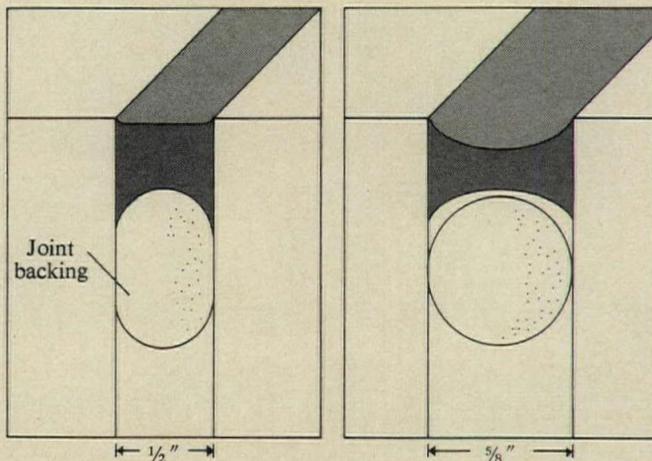
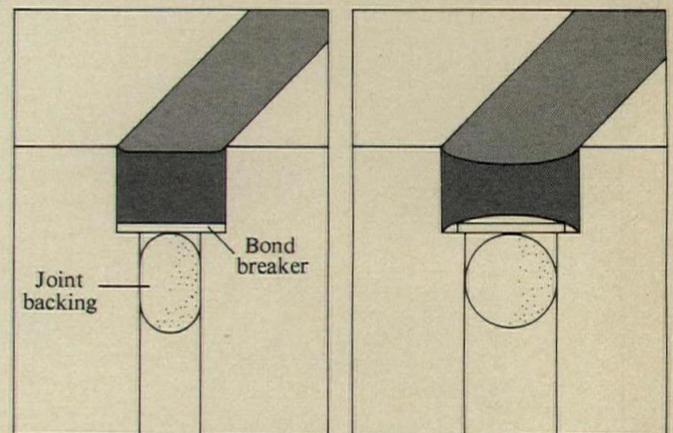
How to avoid sealant problems when you design with precast concrete panels.



Obviously, you don't want sealant-adhesive failure in the joints between the panels. Your precast contractor doesn't want it. And certainly we — Tremco — don't want it. So here's a brief guide to potential problem areas and tips on how to prevent and solve them.

Let's start with design. When you're designing a joint, be sure it's wide enough to allow the sealant to move within its capabilities. If the joint is found to be too small on-site, it should be saw cut to a sufficient width. A good rule of thumb is to design $\frac{1}{2}$ " wide joints for panels up to 15 feet. Larger panels will require a $\frac{5}{8}$ " or wider joint.

While you're in the design stage is also a good time to meet with your precast contractor and your Tremco man. By discussing some of the following problems, odds are you can avoid them.



Form release agents: friend and foe. Form release agents are helpful in removing dense concrete panels from forms. But they can also become a major problem for sealants.

Agents containing wax, oil or silicone create a surface film which impairs adhesion of the sealant bead to the joint interface. When this happens, the sealant may lose its grip. This could happen within weeks or months, depending on the type of sealant and the amount of joint movement.

To prevent this, your precaster should use an agent that will be absorbed by the concrete in the curing process. If your precaster uses new fiberglass forms, he should remove the wax from any portion that comes in contact with the joint interface.

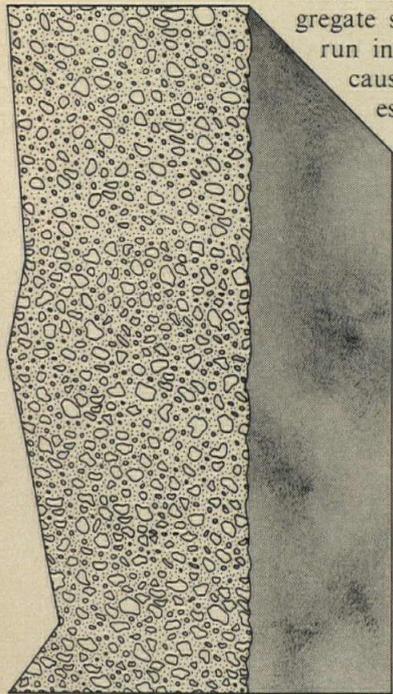
If release agents are found on the joint interface, they must be removed before caulking. The only sure method

of removal is light sandblasting. If this isn't possible, the job may call for mechanical wire-brushing, grinding or high-pressure water and detergent, depending on the type of release agent used.

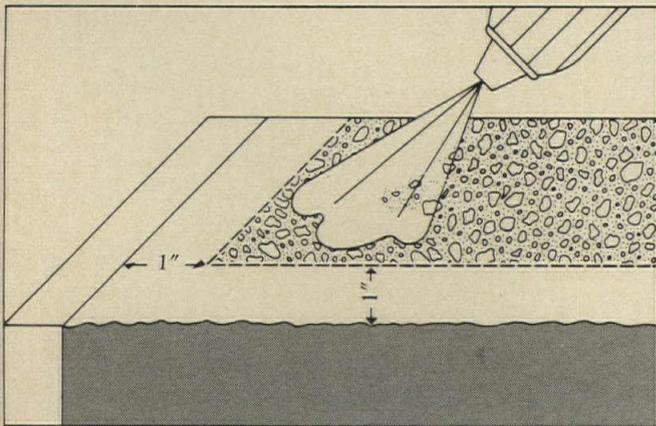
Don't take a powder. Another common problem affecting sealant adhesion is laitance — a dusty or powdery condition — of the joint surface. Interfaces should always be checked for laitance. If masking tape picks up loose particles, laitance is present.

When dealing with exposed aggregate surfaces, you may also run into a powdery problem caused by the retarder process. To prevent this, your precaster should select an application technique that will limit the retarder to the panel face only and prevent migration to the joint interface. The application should stop at least one inch from the panel edge.

To correct either problem, wire-brush. Or use a high-pressure water spray. Or grind lightly. Before caulking, a wipe with an oil-free solvent is recommended. Some sealants may still require the use of a primer to gain positive adhesion.

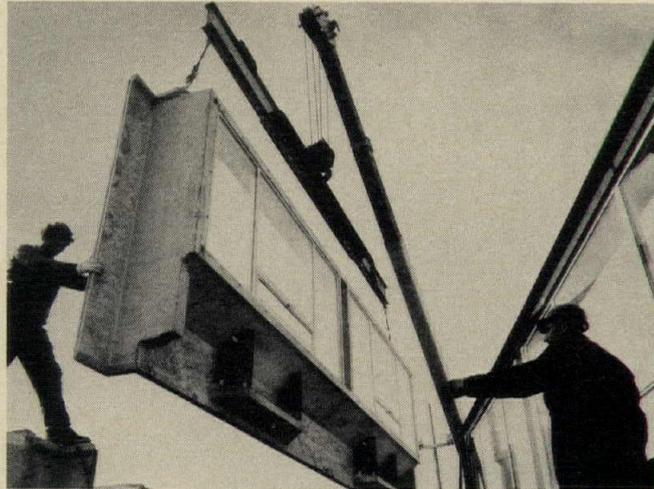


require the use of a primer to gain positive adhesion.



Waterproofing woes. Waterproofing solutions can also cause sealant failure.

If your precaster is going to apply waterproofing to the panel before delivery, he should mask the joint interface before he sprays the panel. Or, if your specs call for waterproofing when the panel is in place, the caulking should be done first.



There are some waterproofing materials that will impair sealant adhesion. The waterproofing can only be removed by mechanical wire-brushing, grinding, or light sandblasting.

To avoid potential problems, always caulk first, then waterproof.

An ounce of prevention. Remember, your Tremco man will be happy to meet with you and your precaster before the job is begun to discuss effective sealing of the walls and to identify potential problem areas.

You can count on Tremco to help because we've been solving sealant and waterproofing problems for more than 45 years. With some 15 basic job-proven sealants to choose from, such as MONO®, DYmeric®, and Lasto-Meric®, and our unique TREMproof™ liquid polymers and our roof edging system, Tremline™, your Tremco man can recommend the sealant and waterproofing systems that are exactly right for your job.

So talk to Tremco first. And you won't have joint sealing problems later. For help, contact your Tremco rep. Or The Tremco Manufacturing Company, Cleveland, Ohio 44104. Toronto, Canada M4H 1G7.

TREMCO®

Notices

Appointments

John Duvivier has been elected an associate of Hawley & Peterson, Architects, Palo Alto, Calif.

Scott Upright, CSI, has been appointed general manager of S.D. Jeffery Associates Inc., Washington, D.C.

The firm of Roger E. Holtman, Landscape Architect/Site Planner, Baltimore, is

now Roger E. Holtman & Associates, Ltd. with two new associates, Surapol Prasertatna and Worawit Suwansawad.

Ronald S.Y. Hsu has been named an associate of William K. Quinter, AIA & Associates, Rockville, Md.

J. Karl Justin, AIA has joined Evans, Delahanty & O'Brien, New York City, as a general partner.

James M. Hughes has been named senior vice president of Caudill Rowlett Scott, Inc. Named as vice presidents were Garland S. Anderson Jr., Michel Bezman, David M. Burdick, William E. Ferro, Frank R. Glass, Neil S. Madeley, Raymond H. Martin, John M. Powell and Henry T. Winkelmann of the

Houston office. Peter Gumpel, Ronald F. Middlebrook, and S. Jay Neyland of the New York office also were chosen as vice presidents.

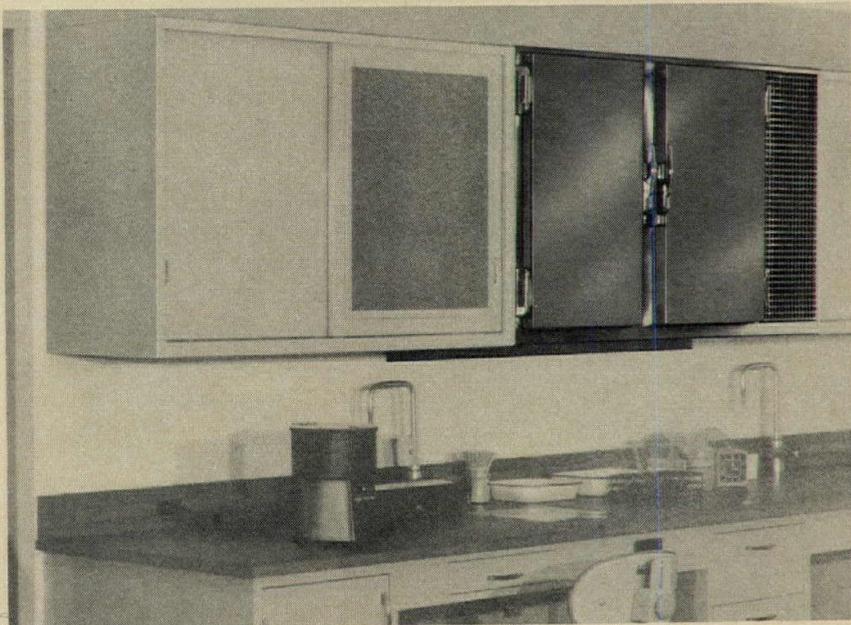
George E. Galayda, AIA has joined Greimel Malcomson James, Inc., Detroit, as a principal.

Adolfo R. Cruz and Frederick J. Gaylord are new general partners and owners of McClellan/Cruz/Gaylord & Associates, formerly Ainsworth & McClellan, Pasadena, Calif.

Bob G. Moore, AIA has been named vice president and director of the Dallas offices of Neuhaus + Taylor.

Gerard VanVugt has been elected vice president in charge of the Boston office of ISD Inc.

when it comes to lab design we fit in



Modular compatibility distinguishes Jewett's eye-level lab refrigerators. They fit flush with existing or planned wall mounted casework to achieve a clean, uninterrupted line of design. Exteriors are of polished stainless steel or can be finished to your specifications.

The model WM-7-BC, illustrated, measures 30" H x 54" L x 13" D, has a 6.6 foot capacity and is cooled by a blower coil system. Smaller single door models, with capacities ranging 1.5 cu. ft. to 4.3 cu. ft., have cold-wall systems.

Removable front grille facilitates easy servicing. Defrost systems, featuring condensate evaporator and accumulator, eliminate need for drain. Available as either refrigerators or freezers, many have optional explosion proof construction. Under-counter models also offered with all the above features.

LET US GIVE YOU A HELPING HAND



New addresses

Richard R. Gromm & Associates Architects, 514 Earth City Plaza, Earth City, Mo.

Eckbo, Dean, Austin & Williams, Design Plaza of Newport Center, Newport Beach, Calif.

Clovis Heimsath Associates, Inc., 1110 Lovett Blvd., Houston, Tex. 77006.

Office Design Associates, Inc., 489 Fifth Ave., New York City 10017.

Charles T. Main, Inc., Engineers, 1800 S.W. First Ave., Portland, Ore.

New firms

Burke Nicolais Archuleta, 7440 N. Figueroa St., Los Angeles, Calif.

Udstad-Dandridge Associates, interior design and space planners, 35 W. 53 St., New York City 10019.

Safeguard Construction Management Corp., 111 Eighth Ave., New York City 10011.

Environ Group, 3309 Clifton Ave., Cincinnati, Ohio 45220 has been formed as an architectural and planning firm with Joseph Theil III as chief architect and David H. Wagner, Jr. as projects manager.

William C. Krommenhoek & Associates, 4305 Gesner St., San Diego, Calif.

Wilbur Edward Kline/Architect, 3492 Terrace Dr., Whitehall, Pa. 18052.

William C. McCulloch, AIA and Gregory E. Heimos, AIA have formed Heimos & McCulloch Architects, AIA, 17925 "B" Sky Park Blvd., Irvine, Calif.

Ray B. Bailey and P.D. Belanger have formed Bailey & Belanger, AIA, Architecture and Land Planning, 1110 Lovett Blvd., Houston, Tex. 77006.

P. Michael Okey, AIA and James P. Lowry, AIA have formed Lowry, Okey & Associates, Inc., LaRosa Bldg., 107 N. Pennsylvania St., Indianapolis, Ind. 46208.

Ostgren Associates, 583 Market St., San Francisco, interior design and planning.

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Now, Shatterproof Glass Corporation has developed a refined, subdued Reflective Glass that still offers the benefits of the harsh reflective glasses.

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To learn more, write for our Reflective Brochure, Shatterproof Glass Corporation, Dept. 101A, 4815 Cabot Avenue, Detroit, Michigan 48210. Phone: 313/582-6200.

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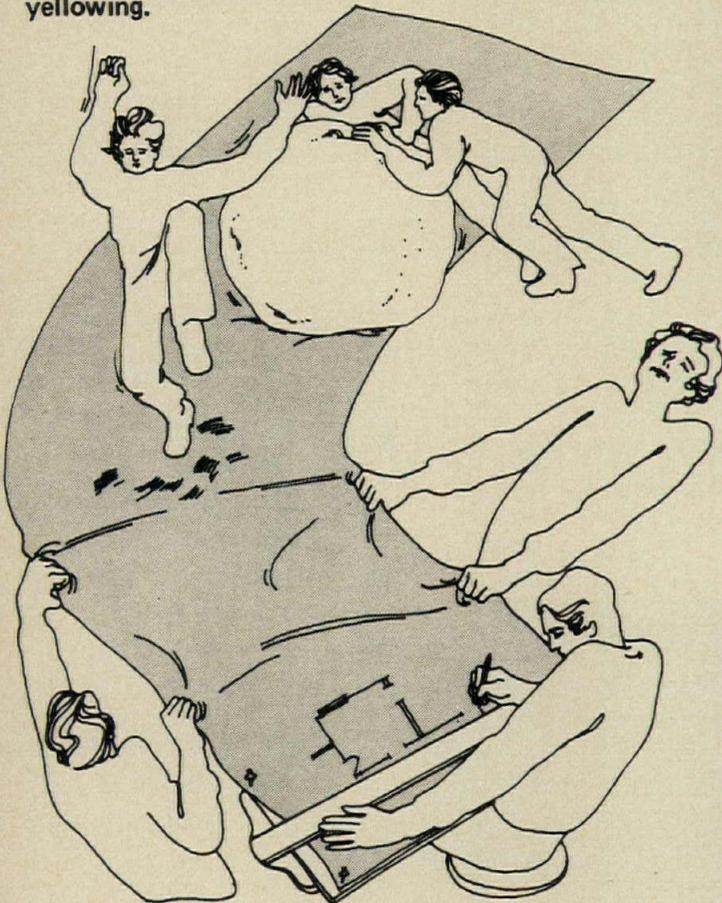


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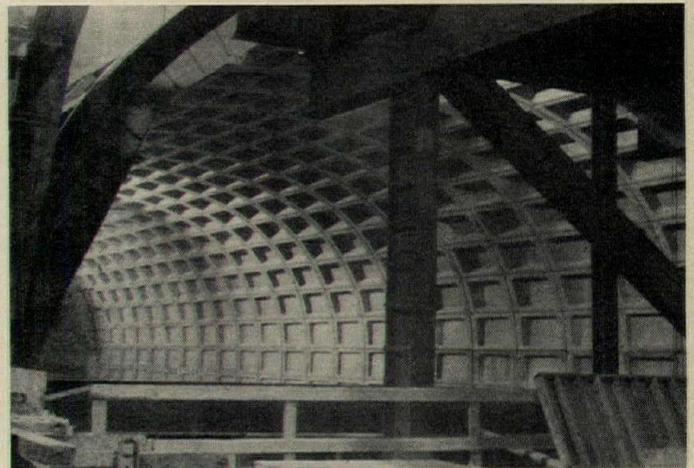
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Nothing is more dramatic than MFG waffle construction in the new transit system in Washington, DC. Arched overhead is the exposed beauty, strength and flexibility of poured-in-place concrete over Molded Fiber Glass forms.



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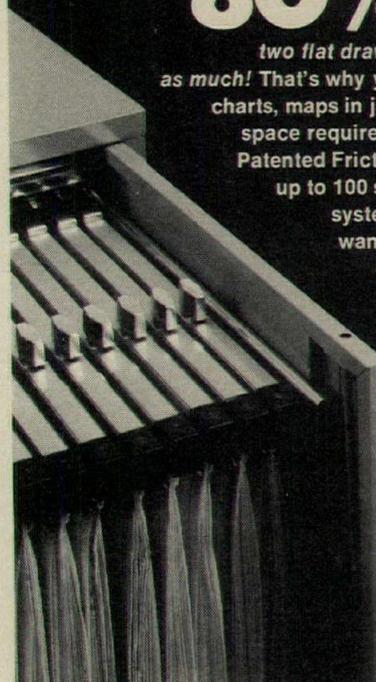
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Circle No. 378, on Reader Service Card

the new washroom:



Who hid the hardware in these laminated plastic toilet compartments? Bobrick did.

Bobrick's "flush-front" design conceals lifetime stainless steel hardware inside the compartments and uses uniform 1" thick pilasters, doors and wall posts.

There are hidden strength features too . . . pilasters with a steel core and pre-drilled holes with threaded steel inserts to assure maximum holding power for hardware.

And compartment panels can be pre-cut for Bobrick accessories. Shown is one example: a recessed unit that combines six accessories and serves two compartments. Saves space, installation cost and maintenance.

To help you plan today's new washroom, send for our Planning Guides and Catalogs. Bobrick, Architectural Service Dept., 101 Park Ave., New York 10017. Bobrick products are available internationally.



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All you have to do is write a Viking Sauna into your specifications.

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Architect: Eastern based OTC company seeks registered architect with strong experience in health field to organize and manage Design Dept. of newly formed subsidiary providing turnkey services on a national basis. Competitive salary, fringe benefits, plus stock options. Contact Edward Fitzgerald, EVP, American Hospital Building Corporation, 10800 Lockwood Dr., Silver Spring, MD. 20901.

Architects: Firm with national and international projects has open positions for experienced job captains capable of handling heavy industrial projects and diversified projects including design production and coordination of working drawings and specifications. Relocation, valued fringes and growth potential. Send resume to: Simons Eastern Company, Consultants-Engineers-Architects, P. O. Box 1286, Atlanta, Ga. 30301.

Architects for Peace Corps/Vista-Action: Volunteer overseas and U. S. Low income housing projects, design of schools, hospitals, community centers, etc. Most openings—singles; some couples. Information: Bruce Mазzie, Action, OCP Box A-2, Washington, D.C. 20525.

Architect-Project Manager: Excellent opportunity for registered architect. Key position involving overall project direction with emphasis on institutional projects. Must be strong in project management and client relations. If you are of above average ability and want an opportunity to show it, we want to talk to you. Excellent fringe package. Well established, east central coast, Florida architectural-engineering firm. Send resumes to Briel Rhame Poynter & Houser, Architects-Engineers, Inc., 1980 No. Atlantic Ave., Suite 718, Cocoa Beach, Florida 32931. An Equal Opportunity Employer.

Architects/Architectural Detailers: Immediate opening-permanent position with expanding A/P/E firm for architectural department head (contract documents), project managers and/or job captains experienced in large complex projects. Challenging opportunity for team work on high-rise structures requiring design oriented detailing. Compensation commensurate with qualifications. Qualified individuals should forward a resume to: Personnel Director, Quiñones Spencer & Partners, 256 Ponce de Leon Avenue, Puerta de Tierra, San Juan, Puerto Rico 00901.

Cornell University: Department of Architecture seeks for Fall 1974 a visiting and/or full-time architectural design critic. We will also accept applications in architectural technology, structures and landscape design. Teaching experience desirable but not required. Applications from women encouraged.

For further details write: Appointments Committee, 143 East Sibley Hall, Cornell University, Ithaca, N. Y. 14850.

Faculty position: Full time and adjunct faculty are being sought for New Jersey's new school of architecture. Initial faculty must be concerned and experienced in a comprehensive approach to problem solving. Team teaching will be basic, requiring collective expertise in all aspects of a professional program involving not only architecture but also the allied disciplines of planning, landscape architecture, urban design, interiors, industrial design, graphic design and the social and behavioral sciences. In an atmosphere free of traditional constraints faculty, administration and students will develop together the new school's undergraduate program. Contact Dean Harlyn Thompson, School of Architecture, Newark College of Engineering, Newark, New Jersey 07102. (201) 645-5541. An Equal Opportunity Employer.

Land planner-Arch. illustrator: Year-old Savannah-based land planning and development firm offers ground-floor opportunity for multi-talented, self-motivated professional/ Will have primary planning and execution responsibility on residential, commercial, industrial and recreational projects/ Applicants need extensive experience in subdivision design, site planning, graphic color presentations and architectural perspective drawing/ Liberal benefits and creative working environment/ Starting salary to \$15,000, plus profit-sharing. Contact Robert F. Savadge, President, Metroplan-Inc., P. O. Box #13683, (203-A, Enterprise Bldg., 6605 Abercorn St.) Savannah, Ga. 31406, Phone: 912-354-4686.

Mechanical Engineer: Minimum 5 years experience in consulting office; to supervise design of HVAC and plumbing for commercial industrial, institutional and military projects. Growing firm with excellent opportunity for advancement. If you enjoy challenging work and 4 beautiful seasons, send resume and compensation requirements to Nelson, Haley, Patterson and Quirk, Inc., 2021 Clubhouse Drive, Greeley, Colorado 80631. An Equal Opportunity Employer.

Project Architect: Design-oriented registered architect interested in team approach to systems oriented projects with a minimum of four years' experience. Outstanding opportunity for advancement and growth as key leader of inter-disciplinary design team. Excellent compensation and benefit package. Reply to Box #1361-612, Progressive Architecture.

Project Coordinator: \$16,500-\$20,000 to start; excellent fringe benefits. Position located in Albany, New York. Responsible for project administration/coordination and reviewing plans/specifications during design and construction for state-wide educational facilities expansion program. Some travel required. Must have ability to maintain cooperative relationship with associates, consultant firms, contractors and various State agencies.

[continued on page 126]



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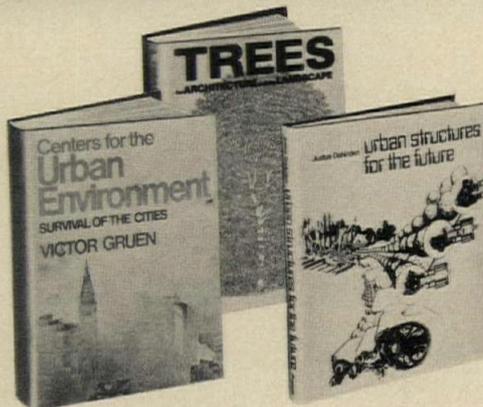
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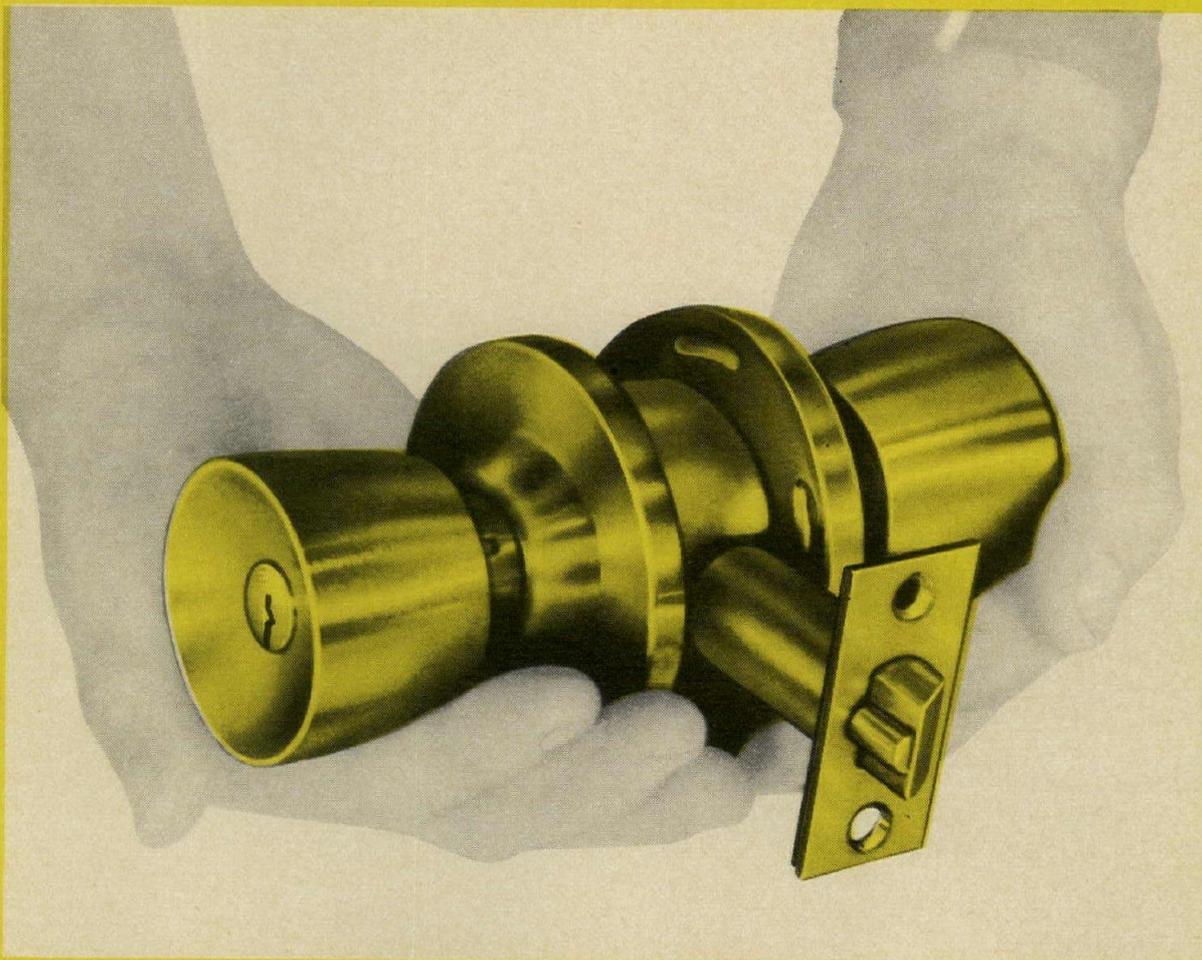
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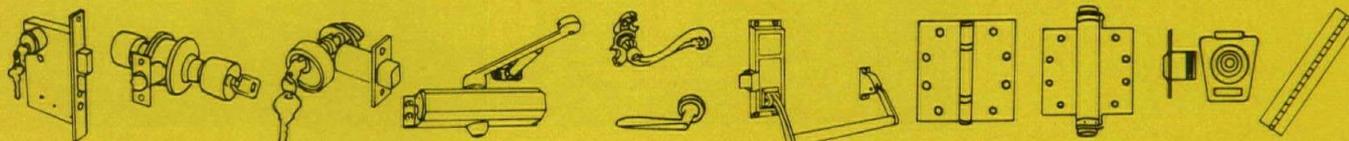
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