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Progressive Architecture

20th annual P/A design awards program

The architecture jury comments

First design awards

Hoyt-Schermerhorn Mezzanine, Brooklyn
Myriad Gardens, Oklahoma City

Awards

Rehabilitation, 110 Monticello Ave., Boston
Manitou Station, Philipstown, N.Y.
LaVerne College Student Center, LaVerne, Calif.

Citations

Beilflower Elementary School, Mentor, Ohio
Whig Hall, Princeton, N.J.
Manhattanville Health Park, New York City
Queen Village, Philadelphia
Office Annex, U.S. Embassy, Paris
Prototype Housing, Kitchener, Ontario

A package of citations

57 Porsche Monument House
House of the Century
Residence in Windham, Vt.
Tech Cluster-1

The urban design jury

Awards

Custom House Urban Renewal, Monterey, Calif.
Sea Pines Plantation, Amelia Island, Fla.

Citations

Forum/Fountain, Dunbar High School, Baltimore
Interstate 90, Mercer Island, Wash.
Historic St. Charles, Mo.
Inner Harbor 1, Baltimore
Mill River Run, Lewistboro, N.Y.

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Cover: Two first design awards, montage by Joel Petrower and George Coderre
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- Seattle
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- Temple, Texas
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Re: alternatives to fear

I have read your excellent article, "Alternatives to fear," in the October '72 issue (p. 92) with great interest, and have immediately suggested to our local library to buy Oscar Newman's book, Defensible Space, on which your article is based. It certainly produces some new ideas, and it will probably have an effect on our architecture.

The question in my mind is whether or not the recommendations contained in the article will be accepted and applied as temporary stop-gap measures only, while we are reducing extreme poverty, eliminating discrimination, and stopping our participation in the Vietnam conflict, which are the true causes of the increased crime rate. But the danger lies in the all-too-ready possibility that we might assume that open spaces, bushes, long walkways, isolation, dark corners, double-loaded corridors and similar physical aspects of indefensible space, as listed in your article, are the causes of criminal acts, and consequently believe that if we eliminate them, we will eliminate crimes. This would be a tragic misconception.

Walter V. Medenica, PE
Huntsville, Ala.

The author replies:

Mr. Medenica's letter raises many questions which concern us as well, and these are discussed at some length in the book (Defensible Space, Macmillan, $8.95).

It was our purpose to describe housing which incorporated "defensible space" attributes as an alternative to present residential developments. Buildings which incorporate these qualities do not cost more and should not be seen as an expenditure of government monies alternative to anti-poverty programs of another sort.

I hope that the study does not convey the impression that physical design alone can eliminate the root causes of crime. What it can do, however, is create environments which inhabitants control naturally, decrease their vulnerability, and allow them to gain maximum use of the facilities provided.

Oscar Newman
Director of the Institute of Planning & Housing
New York University

Saving Toronto

Your associate editor has done her homework badly on the blurb on Toronto in your Sept. issue (p. 95).

The Jane Jacobs' quote, "the only city in the Northern Hemisphere that can and should be saved," is most unfortunate. A simple comparison with Vancouver will demonstrate the potential of each, the topographical layout, the development alternatives, the relative size to development. Toronto easily comes out second best in this comparison. That makes Vancouver "worth saving" too.

Toronto is not the only place in the world nor is it the greatest city in the world (as claimed a few years ago by former mayor Philip Givens) as many Torontonians often muse. Of course, it is far from the bottom of the heap but it is not on the top.

The second and more serious assertion [continued on page 10].
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Views continued from page 6

by your associate editor is “Except for the deliberate clustering of high rise development around transit stations, Toronto is a low rise, sprawled city.” This statement is erroneous. It makes me wonder whether Sharon Lee Ryder has been to Toronto!

I see Toronto's skyline every day and my eyes dispute this report. For example: the Thorncliffe Park/Flemingdon Park area on the east side of Toronto; the nearest rapid transit is about one and a half miles away. This area contains: two 42-story apartment buildings; two 30-story apartment buildings; four 25-story apartment buildings; six 23-story apartment buildings.

Districts with similar densities are to be found in the Don Mills Road-401 area; the St. Clair-Spadina area; the Dixon Road-Irvington area; the Bathurst-Steeles area and so on. The latter two areas are right on the border of Metro Toronto, illustrating that high rises are not confined to the core.

On top of these areas are the developments around the transit routes. They are of similar densities except in the core where office buildings soar to 57 stories and soon to 80. I don't think that Toronto is the only city worth saving but I think that it should be saved.

In my view, Toronto's problems are similar to those of other large American cities, with variables of course. My assessment of Toronto has evolved over six years of study and I am now in a position to submit a preliminary report to the Ontario government indicating that Toronto's most crucial challenges to its crisis are: a) limiting sprawl growth by decentralization, by zoning and transportation design; b) providing more green areas, particularly in the core; c) providing more refuge within the city; d) the high rise apartment complexes, most of which your associate editor missed, present a major problem—quality of life. The high rise is unsatisfactory for good quality living, particularly the rearing of children.

Toronto is a developer's paradise; its politicians are empire builders. Empire builders give no consideration to social needs. It has become apparent that there is no virtue in empirical bigness. It is unmanageable. We encourage our cities to grow but we do not ask ourselves how or more important, why?

Toronto is an overweight child. The city fathers want to feed it more candy. At our expense.

Stephen D. Head
Don Mills, Ontario
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Kansas City opens country’s newest airport

With the exception of baggage claim areas and loading areas, the new Kansas City International airport looks rather empty a few short weeks after its grand opening. That’s because the airport, with its three almost circular terminal buildings, is designed to handle about twice the air traffic that Kansas City currently gets.

It’s big, at least for Kansas City. Each of the three terminals has 15 to 19 gates, and together they can handle 10 to 12 million passengers a year. And there’s room for a fourth terminal building. Big as it is, however, it isn’t overwhelming. Once inside one of the terminals, the passenger really has no feeling of being in an immense airport. The curving buildings pretty well block each other from view, their scale is human on the landside (and appropriately large on the airside), and there is plenty of tan aggregate concrete and wood to give the interior spaces a welcome warmth.

The proudest boast of the country’s newest airport (and of its designers, Kivett & Myers) is what they refer to as “the world’s shortest walk to fly.” By putting parking areas inside the arms of the curved terminals, and by making gate information available to passengers in advance, the designers hoped to have passengers parking their cars close to their departure gates. The big challenge was getting advance information from the airlines, and they all seem to be coming through. From curbside drop-off to check-in at the gate is as short a walk as 75 ft; from the middle or far side of the parking area, of course, it’s farther. Interline transfers account for hikes, not walks, in some airports, but at KCI, lines with the most frequent transfers are in the same terminals.

Antioch’s balloon goes up

Few student projects could be more ambitious than one to construct the building in which they will study. The inflation in November of the one acre cable restrained air structure for Antioch College’s Columbia, Md. campus came after nearly three years of obstructions that included zoning battles and fire code testing. As if to prove that this was the test of the group’s determination, final site assembly stages were hampered by heavy rains.

It is up now, though, due to efforts by architect Rik Ekstrom, Antioch and University of Maryland students, Educa-

[continued on page 34]
Buildings on the way up
1. First phase of St. Louis' $150 million, six-block Mercantile Center will be the $25 million, 35-story Mercantile Trust Company Tower. When completed in 10 years, the Center will include an 800-room luxury hotel, three more office towers, shops, stores and landscaped plazas; enclosed walkways above street level will link major parts of the center. Inset corners on tower allow as many as 16 corner offices on a floor; triangular elements are wind bracing. Sverdrup & Parcel & Associates, Inc. are supervising and coordinating architects and engineers; Thompson, Ventulett & Stainback, Inc. are master plan and design architects.

2. Steel trusses 300 ft long are canted to form a prismatic steel frame covering 190,000 sq ft of columnfree exhibition space for the new Kansas City, Mo. Convention Center. Clear height under the frame varies from 33 to 48 ft. The steel roof frame is supported by a rigid concrete frame of beams and columns. Sloping site provides room for expansion on lower levels; main entrance is in center of building, covered by main exhibition floor. Architects and engineers are Convention Center Associates, a joint venture of Seligson/Eggen Architects, Inc.; Horner/Blessing, Inc.; Howard, Needles, Tammen & Bergendoff and C.F. Murphy Assoc.

3. Designed for the good life, Jockey Club International of Atlanta will provide 800 condominium apartments in three high rise towers. Towers will be linked by a great hall housing four indoor tennis courts and a swimming pool, restaurants, lounges and shops along with 150 hotel rooms. The roof of the great hall will boast an outdoor pool and tennis courts plus 50 townhouses. Below it all will be parking for 1200 cars, and the Club will also include a Sports Medicine Clinic/Physical Fitness Institute with its own pool, indoor track and other facilities for examinations and treatment. All traffic, pedestrian or vehicular, will enter through a manned guard station. Architects for the $35 million project are a joint venture of Clayton & Associates, Inc. and Miller, Melby & Hanson, Inc. Engineers are Pyblowski & Gravino (s) and Newcomb & Boyd (m,e).

4. Judges, prisoners and public will never meet except in the courtrooms, in a United States Courthouse under construction in Philadelphia. Designed by Bellante, Claus, Miller & Nolan, Inc., the courthouse features a special elevator for judges only, which connects the lower levels with judges chambers; from there judges have direct access to the bench, and they have their own private dining room. Prisoners arriving for trial also have special entrances and elevators. Courtrooms, with their high ceilings, are staggered on different levels for efficient use of space. Judges' offices are in a 19-story tower rising from the 3-story podium. Courthouse building and an adjoining 10-story federal office building will have brick, glass and bronze anodized aluminum façades.

5. Face lifting for Touro Infirmary, New Orleans, will modernize and enlarge one of country's oldest medical institutions. As outlined by Ellerbe Architects/Engineers/Planners, the $15 million project will raze the central portion of two blocks currently occupied by the hospital and replace with ancillary units and 107-bed units. Above the three floors of the ancillary support facility, housing offices and other hospital departments, will be a fourth-fifth mechanical floor, topped by two reflective glass cubes containing two floors of nursing units.

6. Downtown complex, combining a bank, offices and retail space, is seen as a nucleus for further growth in Wichita, Kan. Included in the 9-story building will be headquarters of Fourth National Bank and Trust Co., along with rental offices, meeting room, restaurant and a private club. Typical floor will provide 33,900 gross sq ft of columnfree space. Entrance lobby will be 160 ft square and 130 ft high. Structure is a system of 15-ft-square reinforced concrete pylons on 80-ft centers; they will support a fireproofed steel frame and house mechanical and electrical equipment as well as fire stairs. Architects are Skidmore, Owings & Merrill, Chicago, with Schaefer, Schirmer & Eflin as consulting architects.

7. Two air supported structures, one a fixed cover for the main activity area and the other a retractable roof for the swimming pool, make up the student activities building at The University of Santa Clara, Santa Clara, Calif. Translucent roof skin lets in natural light during daytime and the berms can be landscaped on the inside as well as on the outside. Roof skin is coated fiberglass fabric held down by 2½ in. steel cables against the 5 psf pressure differential. Up to 5000 seats can be provided for athletic events, with another 1000 available for other special events. Architects are Caudill Rowlett Scott and Albert A. Hoover & Associates.
Osaka's port center

Ice City
FAE GO, N.D.

News report continued from page 31

tional Facilities Laboratories, Research and Design Institute (REDE), Goodyear Tire and Rubber Company, Charles Tilford, Blair Hamilton and others. "The important thing," says Hamilton, now REDE consultant to Antioch, "is to recognize this structure as a laboratory. Its occupants will be looking for ways to use facilities like this." Emphasis on the bubble-learning-experience is not new. From its beginnings with EFL design funding, the Antioch/Columbia project has been aimed at acquiring new technical and educational knowledge. Antioch wanted space in which to study Columbia as a new town, space that would be abandoned when Columbia is no longer new. Columbia's developers, The Rouse Company, liked the proposal for a nonpermanent college and agreed to lease the site for one dollar per year. With technical help from Goodyear, Union Carbide and Birdair, the membrane (vinyl of three opacities—clear, reflective and translucent) was fabricated and erected. Because funding has been hard to come by, REDE's Howard Yarme hopes for additional industrial commitments to help with interior space-use components. REDE is uncovering new uses for off-the-shelf items which, with manufacturers' help, will form the pieces of a flexible interior architecture for the bubble.

Three gyms under one 88-piece roof

A sports center recently completed in Osaka, Japan boasts three indoor gymnasiums and an 88-piece roof. The 88 identical roof components were assembled on the ground, then lifted and placed on structural girders. Covering the roof, reports Fumihiko Maki of Maki & Associates, took only 16 days.

Ice City: no place for a hot time

Everybody knows what ice is—frozen water, of course. But if you want to get technical, you can describe it as a polycrystalline that forms when H₂O freezes; it is also a building material, as a group of students at North Dakota State University proved last year with the help of a visiting lecturer from Texas. Working in subzero weather they sprayed water on an inflated form to create a thin shell structure of ice (P/A April 1972, p. 51).

This year they are going a little further. Wolf Hilbertz, the visiting lecturer (he is an associate professor at the University of Texas at Austin) is going back to Fargo for a seminar on high-latitude cold-region structures. North Dakota State, the U. of Texas and Carnegie-Mellon University are putting the seminar together; the dates are Jan. 10-25.

Instead of last year's single structure, the seminar will try to erect several low-cost, low-maintenance buildings in a city park. The primary material will be water—found on site in abundance and at no cost. A variety of construction techniques—freezing water on static and dynamic forms, making columns by ice extrusion or icicle formation, using foamed ice, reinforcing ice with glass fibers or other materials—are expected to produce inhabitable structures by the first day. Melting and reforming them will allow alterations.

Besides the on-site experiments, the 15-day workshop is expected to provide a research base for future structures—not only ice ones, but other thermoplastic structures as well. For, as Hilbertz points out, water is at present the only cheap

[continued on page 36]
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and abundant thermoplastic material that can be easily manipulated. The workshop also expects to use automated machinery, now being assembled, to automatically shape and erect the structures, and later to reclaim them.

Church within a church

St. Charles Borromeo Church, often called the “Cathedral of Harlem,” was built in 1905 and burned in 1968, leaving its gray and red brick Gothic structure an empty shell. In November, a new church was dedicated: a modern chapel with 400 seats, built under a new flat roof spanning the old walls.

The new chapel is more intimate than the old 800-seat, 50-ft-high, church; its molded white plaster ceiling starts out at 10’ 6” high at the rear and rises to 28 ft as a fluted oval lantern over the altar. Around the chapel, the architects, L.E. Tuckett & Thompson, have provided meeting rooms and offices, still within the original structure.

The old stained glass windows, destroyed in the fire, have been replaced with panels of sculptural block and brick, lighted from the outside. The original window in the front of the church has been preserved and is lighted from within. The result is a windowless church, which Tuckett says “saves on long range maintenance costs as well as initial construction costs. Like modern windowless schools, ancient catacombs and other underground religious spaces, this new chapel has both historical and contemporary spiritual relatives.”

International directory of behavior and design research

It is a bit past the Dec. 31 deadline mentioned in the announcement, but the project is worth mentioning anyway: an international directory of behavior and design research is being prepared by the Division of Environmental and Urban Systems at Virginia Polytechnic Institute and State University, the Association for the Study of Man-Environment Relations (ASMER, Inc.) and the AIA. The aim is to provide a directory that can be updated each year, indexing researchers by name, discipline and project.
The announcement included a detailed questionnaire which was to be returned by Dec. 31, 1972; interested people who did not receive one might still want to contact Wolfgang F.E. Preisser at VPI–SU, Blacksburg, Va. 24061.

**Here comes EDRA FOUR**

For its fourth international conference, the Environmental Design Research Association has picked the College of Architecture at Virginia Polytechnic Institute and State University, Blacksburg, Va. The conference will be April 15–18.

Current knowledge and directions for future research will be assessed in a series of symposia in which invited papers will be discussed; among the topics: environmental design research in the social and political context, theory of man-environment relations, design languages and methods. Another group of sessions will be devoted to current research findings; some 40 submitted papers will be summarized and criticized. A third series of sessions will be held as workshops dealing with problem solving processes, methodological applications to environmental analysis and other topics. A ‘supermarket’ for distribution of information by conference participants will also be set up.

Further information is available from Wolfgang F.E. Preisser, conference chairman, College of Architecture, VPI–SU, Blacksburg, Va. 24061.

**Architects chided on fire safety**

A rash of high rise fires, most notable being the blaze in Chicago’s John Hancock Building underlines severe criticism for failures in fire safety designs and provision as the Senate Commerce Committee probed the activities of the year-old National Commission of Fire Prevention and Control.

Said Richard E. Bland (of Pennsylvania State College), speaking as chairman of the Commission: “Architects, with a few notable exceptions, are largely indifferent to providing satisfactory levels of protection for life safety in buildings . . .

Most architects find it easier and acceptable to clients to design to the minimal life safety standards of the building codes—[and] existing codes need concentrated review for applicable engineering principles and to assure allowance for cost trade-offs that recognize a safe total building design.

“[I]n turn, building owners and occupants see fire either as something which will never happen to them, or as a risk which they can tolerate, because fire prevention methods are costly. Physiological researchers and product engineers are largely unaware of the toxicological effects of products when consumed by fire.”

“Urbanization,” he told the Senators, “has . . . created more of a demand for intensive use of the land; as a result, there are bigger buildings which create more complex safety problems from fire. More people are concentrated in buildings and exposed to the threat of fire or its toxic gases and smoke . . . High rise buildings, though hallmarks of urban progress, present problems for which there are no solutions within the capabilities of many contemporary fire-fighting units.”

Bland also criticized the federal government itself for “being largely indifferent to the fire problem.” The Commission is preparing to recommend that a high federal office be established to provide a “national fire focus” by becoming a public forum for discussion of fire problems and solutions. [continued on page 39]
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The office would coordinate federal programs relating to fire prevention, research and control; publish an annual "plan" for a coordinated program for reducing fire losses and serve as a reference center for information.

Boston: renewal restored

It was Boston's first urban renewal project. Mayor Josiah Quincy, in 1826, against some opposition, laid out a plan to reclaim the town's waterfront, mainly used as a dump, and turn the area into a market. Quincy Market was built for $150,000, and the remainder of the project, including some 40 buildings along North and South Market Sts and six new streets, ran the total up to $1.1 million.

That was not quite 150 years ago. In November, Boston's current mayor, Kevin H. White, laid a block of granite that marked the start of a restoration project that will return 43 of the buildings to their original appearance.

First phase of the restoration will involve stripping the façades from seven buildings and removing ten roofs to expose and restore the original roofline of the connecting buildings. Once that preliminary work is done, slate roofs will be added, granite exteriors rebuilt and new windows put in. This phase's described by BRA as a holding action to physically save the buildings and also make the project more attractive for future private developers. Earlier plans by a team that included architect Ben Thompson (P/A, Sept. 1971, p. 157) had been dropped for economic reasons.

When fully restored, the buildings will be used for retail and specialty shops, restaurants and other commercial activities. The Boston Redevelopment Authority is carrying out the project as part of its Waterfront Urban Renewal Plan. Private funds will be the primary financing, but $2.2 million from HUD will be used for the first phase of the project (that's twice the total cost of the 1826 renewal). Stahl Associates, who are experienced restoration architects, are in charge of the restoration; Le Messurier Associates, Inc. are structural engineers.

The BRA project isn't the only one in the area, however. Facing Faneuil Hall at the west end of South Market St. is One Faneuil Hall Square, built in 1853 and known as the Pond Building. In a corner of the L-shaped building is a two-story restaurant; on the ground floor is a well-known fish market.

Under plans by Architectural Heritage, Inc., two sides of the building will be left in the original granite; the other visible façades will be of precast concrete, colored to match the granite and glass. The restaurant will go, the fish market will stay. The pitched roof of the existing building, removed in the late 19th Century, will be restored, and two floors will be added to part of the building, which will primarily be used for offices.

On the other side of Faneuil Hall is 24 North St., at one time a wholesale warehouse for a meat packing house. Now a property of BRA, it is being restored as a small office building with a delicatessen on the ground floor. It's not as old a build-

[continued on page 43]
Andrew Ivar Morrison and Bruce R. Hannah design for Knoll

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FOOTNOTES TO CHART:
(1) All given value of 1.1 for calculations. Different thicknesses of glass interlayers and metallic coatings will have insignificant effect on "U" value.
(2) No indoor/outdoor shading—Summer Value
(3) 216 total solar BTU’s—(Based on 1967 ASHRAE Handbook of Fundamentals—July 21—4 p.m.—west exposure—32° North Latitude)—Times shading coefficient. Average temperature for July 21—4 p.m.—is 93.6 degrees, with 72 degrees inside air temperature, there are 21.6 conductance BTU’s to be added—Times the thermal "U" value of 1.1 = 23.76. Maximum BTU gain per square foot of vision lites—west exposure.
(4) ASG performance values taken from published data and authenticated by test reports from recognized testing laboratories. Names of specific data and laboratories provided on request.

Ambient light was eliminated in the rear of the glass to show actual appearance as glazed in a building facade. Left to right: Silver, Chrome and Gold.

Progressive Architecture 1:73
ing as many of the structures around it, but architects Lyndon Associates point out, "It is valuable testimony to the fact that the 19th and 20th Centuries also happened here, a fact sometimes overlooked in the cradle of liberty."

**Plaque marks offices of Adler, Sullivan, Wright**

In 1890, after the Auditorium Building had been dedicated, Louis Sullivan and Dankmar Adler moved their offices to its 17th floor. Although Adler retired five years later, Sullivan remained until 1918. Frank Lloyd Wright, who had joined the firm in 1887, was there, too, until he left in 1893 to set up his own firm.

Now Roosevelt University occupies the building, and a bronze plaque marks the 17th floor, recounting the story of its architectural occupants and reproducing the original office plan complete with principals' offices, drafting room and all the rest. The floor today bears little resemblance to the original plan, as it was changed considerably during a recent reconstruction of the Tower's interior; the plaque is in the main corridor; at the turn of the century it would have been in Sullivan's office.

**Proposal for energy courses wins grant for Penn**

A proposal to develop new and expanded courses in energy conservation, along with a comprehensive textbook brought the University of Pennsylvania a $25,000 grant from the PPG Industries Foundation. The Penn proposal was selected from nine entries invited from schools of architecture.

What Penn proposes is nothing less than making energy and energy conservation studies an integral part of the education of architects. The textbook, *Energy Conservation in Buildings,* will be developed by members of the architecture faculty, with contributions from the Graduate School of Fine Arts and the University's National Center for Energy Management and Power. Topics will include energy sources and supply, energy and man, energy and the environment, energy conservation in building and city design, economics, the consumer and the future. Under the terms of the grant, the proposed work is to be completed by July 1974; two progress reports are required during the coming year.

Besides the Penn grant, the Foundation offered $1000 to each of the other eight schools to cover expenses of preparing proposals. The other schools: Carnegie-Mellon University, Pittsburgh; Columbia University, New York; Howard University, Washington, D.C.; Massachusetts Institute of [continued on page 47]
You'd like to select pavers for aesthetics and still get a really waterproof deck, plaza or terrace. But — up to now — there have been serious problems in the way. For example, there's been the difficulty, if not impossibility, of waterproofing joints between pavers. There also have been problems of expansion and contraction, freeze/thaw heaving, spalling, and the difficulty of sloping pavers adequately to avoid ponding of water on the surface.
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The dependable one.
News report continued from page 43

Technology, Cambridge; University of California at Berkeley; University of Detroit; University of Illinois, Chicago Circle Campus; and Washington University, St. Louis.

Judges for the competition were Robert F. Hastings of Smith, Hinchman & Grylls Associates, Inc.; Gifford H. Albright of The Pennsylvania State University and Sital L. Daryanani of Syska & Hennessy, Inc.

Calendar

Jan. Joint exhibition of the University of Cincinnati's Department of Art History and the Contemporary Arts Center, dedicated to saving the Cincinnati Union Terminal.


Jan. 29–Feb. 1. International Air Conditioning, Heating, Refrigerating Exposition, McCormick Place, Chicago. The event is co-sponsored by the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc. and the Air Conditioning and Refrigeration Institute.

Feb. 6–9. Twenty-eighth conference of the Reinforced Plastics/Composites Institute, Shoreham Hotel, Washington, D.C.


Mar. 12–15. Twenty-fourth National Plant Engineering and Maintenance Show, McCormick Place, Chicago.


Apr. 9–12. Design Engineering Show, Civic Center, Philadelphia.

Apr. 9–12. American Society of Mechanical Engineers design engineering conference, Civic Center, Philadelphia.

Apr. 11–13. Third national conference for the Building Team, Drake Hotel, Chicago.


Apr. 15–18 Fourth international conference of the Environmental Design Research Association, College of Architecture, Virginia Polytechnic Institute and State University, Blacksburg, Va.

Personalities

Gerald L. King, AIA, AIP, was appointed to the Housing Advisory, Finance and Appeals Board, Fresno, Calif.

The following have been appointed to the Building Research Advisory Board of the National Research Council of the National Academy of Science: Brian J. L. Berry; Patrick J. Cusick, Jr.; Charles P. Graves; Matt M. Jetton; Rudard A. Jones, AIA; Kenneth G. McKay; Charles E. Schaffner; John F. C. Turner; Beverly Willis, AIA; Joseph H. Zettel.

Arthur Hacker, assistant professor of architecture at the University of Houston, has been named editor of the Journal of Architectural Education.

Paul M. Cope, Jr., of Cope & Lippincott, Philadelphia, has been elected to the board of managers of Haverford College.

[continued on page 48]
Washington report

Battle brewing over land use legislation

Already shaping up as a major battleground in Washington in the coming year is the question of "land-use planning." Powerful forces are lined up on both sides of the debate, including the American Institute of Architects, the White House, city and county officials and many in Congress. The idea is a basic extension of the "environmental" excitement of the past few years, but its roots go deeper than that—down to the real concern that the irreplaceable resources of land not be misused or destroyed. Nobody argues with the virtue of preserving and properly using land. The debate begins over how to do the job.

Proposals advanced in Congress last year by Washington's Senator Henry Jackson (they got through the Senate, died in the House), and by the Nixon Administration, would result, in the view of many, in a sort of a national "zoning ordinance"—a federal criteria for proper land use, which would be implemented by the states under threat (as under water pollution control programs) of federal intervention if states fail to act, or don't act strongly enough.

Carried far enough, in legislation being drafted in Maryland and other states, this could end up with state (and in the end federal) review and veto power over almost any action by local governments concerned with zoning, planning, issuance of building permits or anything else that will affect use of land.

That has begun to forge a somewhat unlikely alliance between municipal and county officials through the nation. They see in it the loss of the most cherished of local powers: planning and zoning. In local eyes, these are the keys to development of water and sewer systems, roads and streets, and are the major means of providing increasing tax revenues to support most other local services.

Allied with these officials are the builders and land-developers (and with them, large property owners in metropolitan areas), who anticipate the creation of a further vast bureaucracy to administer these controls, and innumerable further points of attack by which environmental and other "citizen" groups could hold up development for indefinite periods. The extent of delays that could be caused, they say, is easily apparent now: in many states, delays caused by necessary approvals of soil erosion control measures for even small housing developments are now running to four months or more.

The powerful forces favoring development of national land-use policies include AIA. Its Vice President Archibald Rogers took advantage, for example, of a meeting of the National Academy of Science-National Academy of Engineering to chide the Academies for a recent report in which the two organizations recommended that no national land-use policy be established at this time, because of lack of knowledge and lack of national consensus.

The AIA National Policy Task Force recommended broad governmental and tax reforms to encourage rebuilding of inner cities and new communities; assembly of 1 million acres of land in the 60 largest metropolitan areas for construction of "growth units" that would offer essential services on a "neighborhood scale."

White House-sponsored bills suggested that the states—with federal backing—should be empowered to override local communities "wherever land-use decisions would have more than local significance." Specifically, siting of key facilities like airports, highway interchanges, freight terminals, sewage treatment plants, shopping centers, hospitals, colleges, government buildings, office complexes, amusement parks, would be state responsibilities.

A second major battle shaping up, as Washington waited for the President to complete top-level changes and switches, and present his three key annual messages (Economic Report, State-of-the-Union, Budget) with their indications of the legislative direction he wants to follow, was the struggle of contractors to regain control of their own construction sites. The struggle has two parts: 1) battle of closed-shop contractors to eliminate or weaken special laws, like Davis-Bacon, which give union labor leverage in negotiations for wages and working conditions, and 2) softening of the myriad federal regulations that virtually dictate rates of pay, hiring practices, safety measures, even bookkeeping procedures. Oddly, the Occupational Safety and Health Act (OSHA) which has caused contractors added expense and irritation, may prove to be the principal catalyst in bringing fragmented construction industry together to try to wield some real political clout in Washington. Leaders of major contractor organizations have been moving toward unprecedented cooperation and coordination in the past year; many have started restructuring their own internal organizations in an effort to attract more contractors to the fold.

Meanwhile, the industry looked back at a very satisfactory year in 1972, and another good year in 1973, even though economists were cautiously predicting that there may be no increase (even a slight drop) in dollar volume for the new year (a slight up or down movement would mean little really, considering the roughly $120 billion record volume of 1972). Encouraging signs included the fact that the rate of inflation had really come under some restraint—dropping to perhaps 6-7 percent in 1972, as compared to a horrendous 14 percent or more in the previous year; major wage-price rises in 1973 didn't seem in prospect. Economists, by the way, look for a drop in industrial and office buildings; some drop in housing (to a level of about 2 million units, as compared to nearly 2.5 million in 1972); a major dent in overall spending caused by failure to achieve a highway bill in the 92nd Congress. But they thought such changes would be largely offset by a kind of "catch up" work: the new housing communities built in the past few years now demand expanded utilities, better roads, shopping and commercial centers and the like—a demand that will continue for years. [E.E. Halmos]
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Architect: Robert F. Crump, Louisville, Kentucky.

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Almost the last of the American millionaires’ mansions is William Randolph Hearst’s great Spanish-Moresque pile near San Simeon, Calif., a State Historic Park since 1958 and open daily for conducted tours.

The Southern California Chapter of the Society of Architectural Historians journeyed to the estate by Amtrak and bus last month, with architect Charleton Wilslow, Jr. of the Cal Poly faculty in charge. There was a pause in the trip to see San Luis Obispo’s Path of History and (to get in the mood of the 1920s) a film on Marion Davies.

But nothing is preparation for the Hearst castle. The 100-room structure falls short of Versailles’ 17 acres of roofs, but there was a similar intensity of the building program, compressed in both cases into three decades. Versailles’ cost of nearly $42 million (in 1914 dollars) cannot be compared to the castle because Hearst kept no accounts.

Other American multimillionaires such as Potter Palmer and William Henry Vanderbilt have exercised a strong controlling hand on their architects, but Hearst was the first to control design by amassing the building materials and decoration. The castle was not so much designed as accessioned. Europe was scoured for coffered ceilings and fireplaces, altar frontals, sacristy doors, Roman mosaic floors, marble arches, the gabled teakwood balcony shading Hearst’s quarters between the two towers. Numbered pieces arrived in crates and were stored in the 85,000-acre backyard until a need for them arose as the work progressed between 1922 and 1951.

Millionaires’ houses are usually monuments to power, but because the Hearst fortune (mining) was of second magnitude, Hearst had a greater need to show his own face. It is essentially a western face. No grand staircases or soaring vertical spaces and, except for the few rooms where guests gathered, the floor areas and ceiling heights are comfortable in scale. However, one can never be sure whether or not this is because no grand staircases were on the market in Europe; the dimensions of the coffered ceilings in the stockpile may have determined the size of bedrooms. Changes of level are accomplished by four utilitarian circular stairs.

An example of the catholicity of Hearst’s taste is the dining room—16th Century Italian ceiling carved with life-size figures of the saints, enormous limestone fireplace from France, 16th Century refactory tables from an Italian monastery, 15th Century Gothic choir stalls from Catalonia, 16th Century folding Dante chairs, silk ward banners from Siena, silver on the 17th Century English sideboard from Spain, France and Ireland, and on the walls 16th Century Flemish tapestries.

Hearst inherited his love of collecting and building from his mother, for whom Bernard Maybeck designed the famous 1899 Hearst Hall with laminated wood arches. Hearst chose Maybeck’s protégé and sometime associate Julia Morgan, one of the first women to take a degree in civil engineering at UC Berkeley (1894). Apparently it was Maybeck who then whisked her off to his alma mater, the Ecole in Paris.

She returned with an ability to work in any style—not with Maybeck’s flair for drama but with decorum and generosity. Her numerous women’s clubs and YWCA’s dignified women’s search for individuality early in the century; her redwood houses in Berkeley are squarish and informally elegant. But she is best known for her churches and her buildings at Mills College. How she submerged herself in the demands of the master of San Simeon is puzzling. One of his habits, for instance, was to make revisions directly on the tracings—a big X over what he disapproved, reinforced by the word “OUT.”

But her tenure was long and stubborn. Lame from the after effects of a broken hip, she still journeyed in her seventies by Pullman to the castle and was lifted from the train by Hearst’s men. She retired at age 78 in 1950. On the east side of the castle—gone out of control after her retirement—there remains a sort of lean-to of redwood which was her office. By the door are two wrens’ nests. [Esther McCoy]
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Two extraordinary groups of people gathered this fall at P/A's invitation to help us interpret the world of architecture. One of these groups, the Design Awards Jury, continued a 20-year tradition. The other one, the P/A Editorial Panel, was established just this year to consider, with our editors, how we can best serve our readers. Both represent our conviction that outstanding professionals, participating actively in our editorial program, can make rich contributions to our view of the world and to yours.

The Twentieth P/A Design Award Jury met at our offices late in September to choose among hundreds of submissions from all over the U.S. and Canada. Their selections, and excerpts from their deliberations, are recorded in the balance of this issue.

The first P/A Design Award Jury met back in 1953, when editor Thomas Creighton and his staff decided to elevate their annual Design Preview selection to the status of a competition. They felt that an independent jury of acknowledged authorities was essential to a real competition, and they invited four distinguished professionals—Victor Gruen, George Howe, Eero Saarinen and Fred Severud—to make the choices. The eminence of the nearly 100 jurors who have served since then—and their detachment from the interests of the magazine itself—have given these awards a stature comparable only to that of the annual AIA Honor Awards.

Establishment of an outside jury also made certain, it turns out, that the program would respond to changes in the architect's sphere of responsibility and the performance expected of him. The first 20 years of the Awards Program—as it has reflected, and to some extent influenced, the course of American architecture—will be the subject of a special issue later this year.

One great dividend of inviting a jury is an opportunity for the staff to sit in on an intensive two-day seminar every year on the state of architecture and where it is heading—and to engage in the lively between-the-sessions discussions that inevitably grow out of the work at hand. It is an opportunity no other editors in our field enjoy.

The first P/A Editorial Panel convened in November, a few weeks after the jury meeting. This new advisory group is a means for continually adjusting our editorial course to changing conditions and interests in the fields we cover—as seen by outstanding individuals representing the whole breadth of these fields. The panel of eight members was large enough to represent the required variety of interests yet small enough to converse freely around a table.

You will find their names and affiliations listed on the P/A masthead (page 3), an indication that we will remain in contact with them throughout the year—to follow up ideas discussed at this meeting. Unlike the prestigious names that embellish many mastheads, this list will change regularly; four of the eight members will be replaced each year to assure a flow of new ideas without sacrificing continuity.

One of our firm convictions about the panel was that their deliberations would not be reproduced as editorial material. We wanted each panelist to speak and respond freely, in confidence. So we cannot tell you what they said. We can report only that they left us with thoughts that we will be translating into programs over the next few months.

The Panel and the Awards Jury are two of the means by which we at P/A keep our doors and minds open to influences from outside. Charles Moore, in his superb review this month of Schindler, by David Gebhard (page 132), draws a provocative distinction between those who are "vulnerable"—that is, "open to all kinds of things"—and those who have become "invulnerable." Life is harder if you remain vulnerable, but a shell of fixed ideas and unshakable standards can lead to immobility. We plan to stay vulnerable, and we urge you to.
Design awards

The twentieth annual P/A design awards

Taking its place in what has become an evolution within the design awards program, the jury that met in September again showed a concern for more than form. Mechanisms by which environmental objectives are accomplished, once considered extra-architectural activities, have begun to garner awards on their own merits, sharing the stage with formal design.

As it began deliberations in the P/A conference room last September, another jury wrote another segment in a story that annually ends with a semicolon. Their statement is complete, but a connected thought will no doubt follow, a year from now. With Hugh Hardy as chairman, the jury charged with “architectural” submissions made a number of observations—see also the comments on houses on p. 93—that reflect a broader-than-traditional scope.

For the third year, a separate planning and urban design jury (see p. 98) reviewed 42 of the 768 entries that arrived in Stamford from throughout the U.S. and Canada. The division between “architectural” and “planning and urban design” submissions remains somewhat blurred, and several submissions were passed back and forth between the two groups. One planning jury member, Rai Okamoto, stayed on the second day to deliberate with the architectural jury.

Both juries carried out the original intent of the P/A design awards program: to encourage creative effort at its most vulnerable stage—before it is completed. To do this, P/A editors annually invite a jury with the credentials and professional vision to recognize projects that create in the instructive sense, even when the meaning of the word design is called into question. Beyond that invitation, and the necessary mechanics that come with the program, the editorial staff takes a back seat until the selections have been made. Year by year, these selections indicate not so much a change in the design awards program concept as a change in the profession itself.

Even though actual buildings still dominate the winners, expressions of changing professional concerns continue to evolve in this twentieth year of the P/A design awards program. Comments about program content appeared in the 1970 P/A awards issue, and succeeding juries have turned more and more to discussions on program causes. Although not a precedent, this year’s split of top awards to more than...
The Hoyt-Schermerhorn Mezzanine will bring new life to downtown Brooklyn with a three-level complex for shopping, pedestrian circulation and transportation services.

Program: Massive redevelopment programs in downtown Brooklyn seek to reaffirm and strengthen the area as a major retail, commercial and residential center. Part of the redevelopment will eventually include a large, three-level pedestrian circulation system that will tie together all new development within the area. Since Hoyt-Schermerhorn Mezzanine is to be one part of this system, it was programmed and designed to be integrated with all existing and proposed development of the area. When completed, the project will incorporate newly created below-grade space as well as an existing subway mezzanine that will be renovated. It will double, and possibly triple, the present 100,000 sq-ft-area in the retail/business core, transforming it into an exciting, vital complex of retail and entertainment activity completely integrated with the patterns of above-grade, grade and below-grade circulation and activity in downtown Brooklyn.

Site: Located in part under the planned 1750-unit Schermerhorn-Pacific Housing Project, (Benjamin Thompson & Associates, architects; New York Urban Development Corporation, sponsor) the mezzanine will eventually occupy more than 250,000 sq ft of space now mostly under the jurisdiction of
Credits

Project by: The Office of the Mayor, New York City; Office of Downtown Brooklyn Development; Richard M. Rosan, Chairman; Reed Coles, Executive Assistant; Jeaninne Kahan, Transportation Planner; Felix John Martorano, Urban Designer.

Drawings and graphics: Felix John Martorano.
The Office of Downtown Brooklyn Development

The city of New York and the New York City Transit Authority.

**Design solution:** Anchored by large department stores at each end, the mezzanine will follow a generally circular route, bordered by retail space, under the housing project. It will be tied directly to the subway system through both existing and planned connections to become a complete below-grade pedestrian shopping mall. The pattern of nearby development will channel pedestrian traffic into the mezzanine, which will be further enforced by the concentration of 1100 new parking spaces directly over the project. The elimination of part of a roof over an existing below-grade mezzanine will create a high, transparent ceiling over the spine to admit light and air sufficient to eliminate the present subway ambiance, and to make possible the creation of multilevel shops. Stepped-down plazas from the housing project will permit integration of its retail and other activities with the mezzanine development. The above-grade surface openings will be tied to the larger, downtown three-level pedestrian circulation system.

**Jury comments**

**Okamoto:** The way it would work shows a commitment to this sound kind of approach; the space that would result is designed in collaboration with the architects who were awarded the commission to do the actual buildings.
LeMessurier: Actually, what happened was they had the insight to know that with the space underneath they could make the buildings above far more meaningful by connecting them to a subway that becomes part of the urban fabric rather than a place where you get mugged.

Johansen: It's going to be built. It represents very serious workings between the federal government and the New York Urban Development Corporation. You can see that most of the sponsors are worked out, including the private investors, and that's a tough area; I know it.

LeMessurier: The amazing thing about this is that it wasn't asked for by the client. The UDC said build some buildings over the subway. But you've got this whole capacity down there to carry buildings, and the architects of the housing project said, well we can't ignore what is down there, that subway is a fantastic asset to this whole project, now let's do something with it.

Johansen: This is the first instance where we've seen this kind of thing developed in this country, right? And it happens in Brooklyn rather than Manhattan. It attacks the biggest problem of anything we've looked at, including hospitals.

Okamoto: Yes, it ties together public, private and leftover space to make it into something positive and useful.

Hardy: It's also interesting to see who did it—a city agency!
First award

Conklin & Rossant

Credits

Design team: William J. Conklin, James S. Rossant, Peter Mahony, Giuliano Fiorenzoli.
Clients: Oklahoma City Chamber of Commerce; City of Oklahoma City; Oklahoma City Urban Renewal Authority.
Myriad Gardens will transform a large tract of underused land in downtown Oklahoma City into an environment where urbanites can enjoy the benefits of the natural world.

Program: In a unique, intentional and planned manner, Myriad Gardens will consolidate a series of parks and gardens, along with facilities for shopping, civic activities, exhibition, commerce and entertainment to become the new focus for downtown Oklahoma City. It will bring together separated pieces and functions of downtown to define a new relationship between urban man and the natural world where the environment will be exclusively oriented to the pedestrian.

Site: On 11.3 acres of underused land on the edge of the central business district of Oklahoma City, adjacent to the new Mummers Theater, the gardens will draw on the convention center now nearing completion, and on proposed surrounding facilities such as a hotel-retail complex, a downtown retail galleria, a transportation center and a long-term parking structure. Eventually the gardens will expand to 33 acres.

Design solution: A 25-ft-deep underground strata of clear stream water will be tapped and revealed to create a canyon where, in four levels along its walls, all new functions will have their access and frontage. As the center and symbol for the new urban ecology, the glass enclosed Botanical Garden will span the canyon walls over a newly created lake to provide a daily travel link between peripheral parking and the downtown core. The activities in Myriad Gardens will be generated...
by clusters of cultural, educational, commercial and exhibit facilities tucked within a new raised ground level of excavated soil fronting on the canyon, away from the winds and noises of the street. An arts and science center with planetarium will face the new downtown library across the ravine, and exhibit facilities and a visitor center will be at the ravine’s edge; theaters, restaurants, clubs, shops and art galleries will surround the complex.

Construction and materials: Construction will be basically of reinforced concrete, with some steel structures and glass.

Jury comments

Johansen: You should see what’s there now ... a few tall buildings, and then everything goes to squalor within blocks ... wood shacks, flat and dry, no trees ... it’s terrible.

Hardy: It’s an astonishing thing to do. Take up the streets, take up the city, take up the garbage, and there’s water. It’s exactly what the city needs, to quarry out the center. It’s very seldom that in any given city situation someone thinks in this scale. It’s very good.

Okamoto: It’s a good idea ... instead of flattening it out or building 60 high rises, or blocking up the water or making a megastructure or something.

Hardy: Yes, it’s a good answer to the question of what to do with the inside of a city.
Rehabilitation of 110 Monticello Ave., Boston.
Public housing at Columbia Point has only one virtue: partitions can be eliminated to combine small units into larger ones to meet real needs of tenants

Program: Rehabilitate public housing at Columbia Point, Boston.
Site: One building at a housing project, built in 1954, which is separated physically and socially from the city and has been allowed to deteriorate.

Design solution: The Boston Housing Authority and an elected body of tenants had been allotted $550,000 for modernization of bathrooms in the 1500-unit project, but the architectural firm was able to do this within a budget of $350,000. The remainder went for an experimental redesign program that involved tenants of a typical seven-story building who had typical project housing complaints: crowding, lack of storage, no space for family meals. The solution was to remove all non-load-bearing interior partitions and combine the 28 small apartments into 11 larger ones having 1 to 10 bedrooms. All units will have dining rooms, larger kitchens and living rooms and the largest are duplexes.

A day care center, community kitchen and a children’s library will occupy the first floor. The second will be given over to community use (including workshops) and a laundry; meeting and play spaces will be on the fifth floor. New exterior walls and windows will ease the claustrophobic effect of the existing ones, and the exterior of each apartment will be defined by paint colors chosen by its tenants.

Both the architect and P/A’s jury feel that the single most important part of the experiment is tenant participation. Wampler quotes one tenant: “When we designed our ideal apartment, it was the first time the whole family sat down and did something together.” Tenant design was done with a home model kit complete with new window walls, kitchens, bathrooms, movable storage cabinets, furniture and samples of paint and carpet. Instead of partitions, storage units will separate rooms and areas. They range from floor-to-ceiling size down to bench size and will incorporate some 25 different types of storage from closets to desks. They will be built in the resource center workshop.

Jury comments

Okamoto: It has the notion of participation by the tenants . . . it touches a more central, social kind of issue.

Stull: Do you knock all of these great, enormous, ugly, awful things down, or do you try to do something with them?

LeMessurier: There’s no question that these buildings were awful, but they had one great virtue: the structure was flexible. The multi-story fireproof things we build today are the most inflexible things in the world.

Hardy: Existing housing and buildings are a resource. It took energy, it took time, it took everything else to get the things built. If we can fix these with brand new solutions, they are as much of a resource as open land.

Stull: It permits the actual residents to participate in the process under professional direction. Probably that attitude is more important—to bring a family together and make it feel that it has some control over its destiny—than the actual planning that comes out of the process from the users.

Credits

Architects: Jan Wampler; project staff: Eric Pfeuffer, Randolph Slaughter, Kevin Ruedisueli.

Engineering consultant: Deborah Forsman.


Boston Housing Authority: Steve Demos, Jerry Tuckman, John F. Jennette.

Photography: Jan Wampler.

Client: Columbia Point Modernization Task Force, Boston Housing Authority.
Components of model kit (top) allow tenants to choose from a variety of bathrooms, kitchens, window walls and storage units that will serve as interior partitions, and to arrange them to meet individual needs. Apartments with 6, 8 and 10 bedrooms will be duplexes; others are flats.
Manitou Station, N.Y. Placing 600 condominiums and the necessary urban amenities on 10 percent of the site preserves important natural features of the Hudson Valley scenery.

**Program:** Develop a community of 600 condominium dwelling units with commercial and recreational facilities, a railroad station and parking for 600 cars. Preserve the riverfront and other natural elements on the tract.

**Site:** A former 125-acre estate on the Hudson River near Bear Mountain Bridge and West Point, N.Y. with a reservoir, waterfalls, fast-flowing stream, salt water marsh, forested valleys and slopes ranging from 15 to 35 percent. The project gets its name from an existing railroad station on the site.

**Design solution:** A V-shaped building spans the railroad and valley floor. Placed below the tree line of the riverfront hill, it leaves the shore line visually free but provides views from each apartment. All urban facilities—the relocated train station, shops and offices—are within the V. The building is approached from above, with parking on the roof and within the structure. Alternate-floor corridors on the “urban” side act as pedestrian streets with direct access to the hillsides.

The project leaves 90 percent of the site untouched, and provides for a marina, ice skating on an existing pond and a future tennis and swim club. Potable water will come from wells, other water from the Hudson. An on-site sewage plant will return water cleaner than that taken in.

**Construction and materials:** Concrete frame with masonry infill walls. Interior walls and ceilings will be plaster; floors will be wood or quarry tile.

**Jury comments**

**Okamoto:** It’s got everything in it.

**Hardy:** They get all that so-called urban stuff inside, so the outside causes the least amount of damage to the landscape. That’s the appeal.

**Stull:** It’s a strong direction, a strong alternative, to the conventional approach to the escape to the suburbs. There are very good relationships between the automobile and the living unit.

**Hardy:** And the train.

**Johansen:** Yes, I wonder about the train; I hope it’s got rubber tires.

**Hardy:** It’s the right scale, too. Sometimes people try those things and they aren’t big enough, and sometimes they get out of control because they’re too big. But the land saves this. You couldn’t do it divorced from the land—it’s no prototype.
Award

Research and Design Institute (REDE)

LaVerne College Student Center, LaVerne, Calif. From a package of three submissions, this interior assemblage was selected to represent a design philosophy

Program: Design a new “interior architecture” to make the most efficient, least fixed use of an area inside a tension membrane structure. The jury viewed the program in a broader sense as including two other REDE submissions—neighborhood health centers and a park multiservice center—which use other types of space enclosures. All three deal with the concept of interior space use, not building design.

Design solution: Using a vocabulary of stock, manufactured items, a variety of “micro-environments” is possible, even on limited budgets. Since elements are independent of each other and of the main enclosure, they may be rearranged to respond to changing attitudes and use needs.

Construction and materials: Any of a wide range of off-the-shelf products are used, including such items as inflatable or dome structures, portable ski shelters, tents and scaffolding used as decking structures.

Jury comments
LeMessurier: What goes on top of all this? What does this thing look like? What is it made of?

Johansen: Enobling space, poetic space! That’s meant to work anywhere, no matter what the structure. This is not a rigid composition. Anything that moves and changes cannot be composed. There is still an aesthetic act here in that there are guiding rules. Like pieces on a chessboard, there are patterns of movement. The same goes for cities as well—we’re moving into a noncompositional architecture in which we do care what it looks like, but we don’t have total control. We have basic patterns for how the chessmen move, but that’s all, and this is altogether new in form and new to the profession. I don’t see how anybody can continue, as an architect, to build expensive, permanent structures that bar change.

Erickson: It’s not noncompositional. Nothing is.

Johansen: Yes, I think it is noncompositional.

Erickson: Well, it’s kinetically compositional.

Stull: I also think that it fills a gap between a need and the ability of institutional responses to satisfy those needs. It fills it very, very effectively. It has the additional advantage of being able to get out of the way if ever institutions desire to deal more directly with questions this responds to, as a concept.

Hardy: As long as the award is for the concept, I’ll vote for it, because I think that it is certainly important enough to recognize as a process.

Credits
Executive director: Ronald Beckman.
Program director: Howard Yarme.
Staff designer: Jeffrey Blydenburgh.
Architects for main structure: Shaver & Company.
Consultants: Educational Facilities Laboratories, Max Tadlock & Associates.
Model and photographs: Howard Yarme and Jeffrey Blydenburgh.
Workbook sketches: Edward Wittner.
Client: Board of Trustees, LaVerne College.
Bellflower Elementary School, Mentor, Ohio. Designed as an educational city, an open plan elementary school has a variety of spaces that personalize the learning process.

Program: A school to house an innovative, highly individualized elementary educational program, plus special services and community use.

Site: 54 acres, flat, surrounded by one-story structures.

Design solution: To contradict the rigidity of the neighboring structures, an earth building, or nonbuilding, is planned. The structure is approximately 200-ft square with the exterior wall constructed as an earth berm. Since the program required an open school with a variety of educational spaces delineated by numerous learning alcoves, the concept evolved as an Educational City. Major axis of the plan creates two main avenues called Market and Main Streets, with a traffic light at the intersection. A learning center is located at each of the city corners, and a theater is at the periphery. The outside playground has a 40-ft square skylight; trees are planted in this area to support swings and other recreational equipment. Entrances will be tunnels bored through the earth berm.

Construction and materials: Earth berm with concrete beam at top of perimeter; steel-framed upper structure; porcelainized steel panel curtain wall. Music, seminar and office spaces are located in soundproof rooms on the steel-framed mezzanine.
Jury comments

Johansen: It's an open space school. One roof and the berm. I think it's a very exciting experience.

Stull: It's a space-frame roof.

Johansen: These walls are fairly movable, removable—all of these partitions could come out and the spaces could be reassigned.

Stull: I think it's responsive to the notion that a worthwhile educational experience is an evolving kind of thing.

Hardy: There are all kinds of spaces there.

Stull: I think the exterior appearance is a bit disappointing.

Johansen: It's really all berm, there are no exteriors.

Stull: Also, I think the scale of this school is successful. Although it isn't child scale, it isn't as forbidding as some.
Whig Hall at Princeton University was gutted by fire, but following reconstruction of the interior it now presents a striking juxtaposition of architectural form.

Program: Reconstruct burned-out interior of Whig Hall, which the architects call a reasonable example of neoclassical mis-represented temple architecture. It had historically housed the debating society for a polite elite of the university and although the society was to remain, it had become public and new spaces were required for university use. The new program called for 10,000 sq ft of fireproof, air conditioned space to be incorporated into the old 7000 sq-ft structure.

Site: Centrally located on the main axis between academic and residential centers at Princeton University.

Design solution: The architects felt that to extend their design beyond the existing object would be disastrous with regard to historical architectural precedence, traditional interpretation and site references. Instead, they constructed a new building within the remaining marble shell. This, they feel, reinforces the shell with a sympathetic juxtaposition of form, structure and light, and emphasizes positive precedents while legitimately exposing the fallacies of eclectic architecture. They see the building as a symbol of changing times, expressed by a juxtaposition of architectural forms that produce a synthesis of program, history and extension.

Construction and materials: Existing windows and marble to remain; reinforced concrete columns and floors; stucco finish on masonry walls and ceilings; floors to be slate in public areas, carpeted in private areas; all furnishings designed by architects.

Jury comments
Stull: The beautiful thing about it is the way the whole side opens up.
Hardy: It’s a piece of sculpture inside a piece of sculpture; a very useful little building that’s very skillfully handled.
Johansen: Yes, it’s a delight in the way it’s handled; very knowledgeable; it looks like an International joke. Whig Hall should get an award, though, for good, longtime service.

Citation


Credits

Architects: George Wright, project architect; Richard T. Banks, design architect; Michael Benn, planning coordinator.
Model and photography: Richard T. Banks.
Rendering: Ronald Love.
Client: New York State Urban Development Corporation.
Manhattanville Health Park, New York City. Residential and commercial development combined on six urban blocks with a major medical complex reinforce a variety of activities

Program: Provide for staged rebuilding and expansion of an existing hospital in New York City along with the blighted six-block area surrounding it. Facilities will eventually include a 500-bed hospital, 300-bed nursing home, 100-bed mental health center, a doctors’ office building, staff housing, commercial and retail space, a new school and convent for St. Joseph’s church, a community recreation center, 1500 new housing units for a variety of income levels, and parking for the medical and residential complexes.

Site: Six blocks in Harlem, bounded by 125th St. on the south, Convent Ave. on the east and Amsterdam Ave. on the west. The site slopes downward from the northeast and is well served by mass transit; present traffic congestion will force changes in street patterns.

Design solution: A master plan rather than a fixed design, the plan is based on studies of automobile and parking patterns, service patterns, land use, medical, residential, commercial facilities and open space.

Development will be along the edges of the six-block site, with the interior left as open space. Commercial development at street level with housing above it will focus on the south or 125th St. boundary; the residential character of Convent Ave. will be reinforced and extended around the corner onto 131st St. The medical complex would be placed along Amsterdam Ave. and 126th St. Because the site rises toward the northeast larger structures could be place in the lower sections of the site, reducing their apparent bulk.

The medical complex will be a network of shared facilities; services and products will be bought or leased, and originate from one central source within the hospital proper. The hospital will be the center of a linear services spine running north and south; other facilities will tap into the spine. A similar spine will handle pedestrian circulation, linking all buildings.

A series of glass-roofed, interconnecting malls will penetrate the shopping area from 125th St. to 126th St., leading to the common open space, which will be a buffer between the residential and medical parts of the site. St. Joseph’s Church, a neighborhood landmark, would remain where it is; its school and convent would be moved next to it.

Jury comments

Okamoto: What I like about it is, at least from looking at the drawings, a person inside using the medical part of it would be in a rather pleasant sort of space. The other thing is that it’s a mixed use development; it’s not just all overwhelmingly medical facilities; there’s housing in it. The little towers and elements are housing that face across the street to other housings so the transition is made.

Stull: It also seems technically very competent if you study the way the circulation and parking works, the pedestrian levels.

Johansen: The street that goes through is well handled. They couldn’t get rid of that street so . . .

Okamoto: I think if you track through the plans, see, it doesn’t have that sort of maze impact that so many of them [mixed use developments] have.

Hardy: It’s certainly superior to anything in any way, shape or form being constructed like that.
Queen Village, Philadelphia. A housing project within a renewal project in a blighted inner city area skillfully handles new construction, reconversion and rehabilitation

Program: Rental project to be built on old cab company parking lot in a tense neighborhood undergoing rapid renewal. Package acquired by the owners did not include occupied structures fronting the property, thus most of new construction is to be built behind older buildings. Maximum density within the framework of the Zoning Code was requisite; existing structures to be rehabilitated; old cab company warehouse to be converted to rental units. The plan is for 58 new units, 8 to 12 reconverted, 30 to 45 rehabilitated.

Site: Approximately 1.5 acres in inner city neighborhood, being renewed mostly by private initiative.

Design solution: The plan is for units to form components, components to form buildings. With the emphasis on economy, unit types are minimized. Components form three buildings evolved from identical joining conditions.

Within the criteria of the Zoning Code, density requirements and budget, the architects plan to provide a variety of exterior spaces in order to convey separate uses and experiences as well as to extend an invitation to the neighborhood. The plan was recognized within the project providing convenience, scale and address.

Materials and construction: Masonry construction, with textured block, stucco or 8" x 8" brick is being considered. Concrete plank is to be used over carports with wood floor construction above. Windows are to be coated aluminum. Hard paving materials in the courts to be relieved by raised planters and water fountains.

Jury comments
Okamoto: I like this one. It's like a subtle kind of infill.
Hardy: You could actually believe in it as a place to live, particularly in the way it uses the inside of the block in relation to what's already there. I think it's unique.
Johansen: Look at those streets. The way the circulation moves is very well done.
Stull: It's an opportunity to continue to encourage that kind of urban development, rather than clearance and rebuilding
Hardy: Yes, because it fits in and around what's already there.
Stull: And in this case, extremely well.

Credits
Project designer: F. Cecil Baker.
Photographer: Harris Davis, Inc.
Darker units in model (opposite page) indicate rehabilitation; light units are new construction designed as three building types: the plan shown on this page, a similar one of two apartments above first-level parking and a unit with three apartments without parking.
Shreve, Lamb & Harmon Associates

Credits
Architects: Harvey P. Clarkson, principal; Serge P. Petroff, principal; Robert W. Jones, principal in charge of project; William A. Player, principal; William H. Leyh, principal; Evan L. Schwartz, project designer.
Associated architect: Georges Letelie.
Landscape architect: Currier, Andersen & Geda.
Engineers: A. Epstein & Sons.
Consultants: Propper/Elman (graphics); Howard Brandston Associates (lighting).
Photos: Louis Checkman.
Client: Office of Foreign Buildings, United States Department of State.

One level of parking and three of storage are the base for one to five levels of office space.
Office Annex, U.S. Embassy, Paris. A refined, elegant building reflects and respects a historic district as well as the private green space adjacent to its site.

Program: Consolidate United States Embassy functions from several locations throughout Paris. The 15,000 sq meters of space will provide facilities for consular services, commercial, trade and U.S. Information Services, administrative support, storage and parking for official vehicles.

Site: A long flat rectangle of land now largely used for parking; it is a prominent location in a part of Paris classified as a historic district and as privately owned green space. The site is bounded by the U.S. Ambassador’s residence and its gardens on two sides, by private offices and apartments on a third and an avenue on the fourth.

Design solution: The building will hide existing unattractive and chaotic construction along one of the site boundaries; a reflective glass façade facing the park will visually extend the adjacent gardens. To minimize bulk, part of the building has been placed below grade, with the entrance plaza and exterior circulation lowered by one level; the building steps up and back from the avenue and the gardens, giving each department within the building its own roof terrace. Five separate entrances, each reached from the public entrance terrace, were dictated by the need for direct access by visitors and the requirements of security. Circulation along the garden side of the building is internal, with a bridge linking the building with the garden.

Construction and materials: Structure will be poured in place concrete columns and main girders with precast concrete floor planks. Floors and roof terraces will be supported by a structural grid separate from the metal and glass external skin. The structural module is 2.75 m by 2.75 m and determines the size of interior partitions, lighting grid and modulation of the exterior glass wall and skylights. Exterior glazing is reflective glass, except for the circular stair towers, which are glazed with clear glass. Other exterior walls and roof terraces are to be dark gray granite. Interiors will include panelized plaster and clear partitions, suspended acoustical tile ceiling and exposed concrete columns.

Jury comments

LeMessurier: I think it’s going to be a nice building inside to walk around. It’s an office building but it has been made into a pleasant place inside. A quiet background with the park.

Stull: I like the scale of it, I like the open loft space. It’s with an extremely human scale. It’s extremely refined.

Hardy: When you consider what it might have been, I think it’s very remarkable. I think in most cases it wouldn’t be.

Johansen: It’s diplomatic architecture. For diplomacy we should give this one a ribbon.

LeMessurier: I like the building very much and it’s interesting on close examination. I seriously question the dinky bay they have. Also, there is no stairway that you can take to go down to the ground to get out.

Johansen: But there is no need for them to be that practical; they can build an embassy office building as a prestige thing. They don’t need to get all the maximum space out of it.

Okamoto: It has terraces and it provides public places to look out over the park.

Hardy: For an American in Paris, it’s a pretty good thing.
Citation

Rhone & Iredale

Credits
Architects: Randle Iredale, partner in charge; Peter Cardew, project architect.
Structural engineers: Canadian Environmental Sciences.
Client: Ontario Housing Corp.
Prototype for an innovative plan in Kitchener, Ontario, uses prefabricated units and unites the advantages of land ownership and privacy for medium density, multiple family housing

Program: To develop a housing prototype for use by the Ontario Housing Corp. Each house to have a private yard and individual covered parking adjacent to the house. Houses to have three, four and five bedrooms. Density to be 20 houses per acre.

Site: Choice of site should be based on the positive advantages of high density housing as opposed to the minimal use of land.

Design solution: Each house consists of two 12-ft-wide factory-built units. The ground level unit contains the living areas; the sleeping areas are in the unit above (units vary from 3 to 5 bedrooms). The two units are stacked at right angles to one another, forming an enclosed yard with private entrance and adjacent private parking under the sleeping unit.

The units are supported on a ground system of concrete walls, which is built first. This includes the support system and screen walls for the manufactured units and responds to the natural variations of the site. By varying this ground system, the density of the units can be altered. The manufactured units are transported from the factory to the site and installed on the ground system. The design emphasizes the contrast between heavy, site-built supporting ground system and light, manufactured box units. The manufactured nature of the units is stressed, not disguised.

Construction materials: The ground system is poured in place concrete. The external finish of the manufactured units is cedar-faced plywood.

Jury comments

Johansen: This is an innovative housing project. It may be repetitive—but it is the only factory-delivered project we’ve considered, and it is an ingenious arrangement of factory-produced units.

Okamoto: It’s the only one we’ve seen that’s concerned with the leftover space.

Hardy: It eats up a lot of problems, but don’t do it too often. However, it is a generous solution.

Stull: It works well with the street system and for other circulation, but I would not encourage its use everywhere.
one entry may begin to suggest jury feelings that awarding the highest honor to only one project may not be quite fair. The question of program—call it process, direction, concept or intent, with all that those terms imply—hits home stronger each year. Awards in 1971 and 1972 went to some submissions bearing little resemblance to traditional "design," focusing instead on social implications. It is not that the aesthetically well done submission lost out, but that new yardsticks simply gained importance. In their deliberations, jurors this year looked closely at a project's ability to solve problems of program, as always, but with added demands.

**Hardy:** John [Johansen], the thing that you were saying from time to time, that design really doesn't make any difference, if followed out, would lead one to say that this shouldn't be set up as a design awards program. Perhaps what we're saying is that there are other things we wish we could judge, but by the nature of what the program is, we're judging design. The further we get into change, mutations and process, the less emphasis we'll find on that picture, that plan and that option. The word "design" certainly prejudices both the people who submit projects and the projects they submit.

**Johansen:** Well, conventionally, design included everything from concept to organization, with programming and the whole thing. Now we're simply separating it into stages, it's what Archigram calls an organizing idea or ordering device which, once it's satisfied, makes it unimportant what the form looks like. Still, others would be much more concerned with form and less with organization now. That distinction, I think, has to be made.

**Stull:** But it was difficult for us to do without a clear mandate that that, in fact, was an option.

Other discussions were generated by a lack of tall building submissions. The jury gave close attention to the few that were reviewed, since they pose difficult design problems. Although no awards went to that building type, jurors made it clear that their objections were about the quality of submissions, not to the high rise per se. Another category, "Nostalgia," was created for reused old buildings, and several projects drew very favorable commentary. When measured against other finalists, however, many did not have enough merit (outside of visual appeal) to outweigh the winners. In all phases of the deliberations, the pattern of searching for program motivation prevailed.

**Stull:** At some point, I think that we are going to have to talk not only about buildings that adequately respond to programs in our view, but also the programmatic concern about whether the building should happen at all. Should enormous parking structures take up an entire city block, or should we award a nuclear reactor? We know that it pumps out waste and that no facility is yet developed that adequately handles that waste. I doubt very much if we would agree to cite a factory that manufactures antipersonnel weapons. Is that a moral judgment?

**Ericksen:** Are we making moral judgments here? That's the problem, because we could take that further and say that we don't believe in conservation, or social aspects of health care. I don't think it's our privilege to make such a comment.

**Okamoto:** It's a question of whether you make it explicitly or implicitly. We're making a lot of them anyway; take the houses, for example.

**Johansen:** What about the sewage plant? That does involve people in the cycle—their own cycle in fact—because it involves a public information area. Whether that involves a moral judgment or not, it comes close when you say that you make people part of the picture.

**Stull:** These process submissions were sent to P/A by architects to be judged by architects. Why do they exist? Because existing procedures, processes and institutions have not satisfied real, given problems that have to do with what architecture is. I think the architects that sent them had legitimate reasons for doing them, and therefore we have to consider them. We've talked a lot about the deficits that exist between needs and responses, and how much architects should respond, relate to and fill that deficit. Some schemes we saw were in that category, forming a bridge. My personal view is that that's very important. Architects should pick and choose their way so that their work has those kinds of responses.

**Hardy:** Yes, because architects have thought of their role in relationship to the client as passive, and all of their aggression goes into the shapes. If they would forget about the shapes, maybe they could consider their responsibilities to the program.

**Johansen:** Well, I think we're all happy about our choices. **Hardy:** At least it isn't gloomy. It still seems to be a hopeful profession. People haven't given up. It may be silly and naive, but they're still out there trying—which is remarkable, really, considering where the society stands. The fact that we're building anything at all is a testament of faith.
Within the past 10 years the individual house has been both premiated and scorned by P/A juries. This year, discussion of houses expressed several jury concerns, ranging from relevance to economics. Although the four were selected to make a general point, each citation carries part of the message. The jury recognized that, in light of new professional concerns, most single family houses take on aspects of the ego-trip, involving indiscriminate land use that outweighs design skill. By citing the houses shown, the jury sought to applaud implicit, as well as explicit, comments on the state-of-the-house. Two of the four were read as incisive symbolism, a third as employing symbolism and technology and the fourth as an application of existing technology, forming a kit of parts. There was discussion among the jury about including other, admittedly skillful, house designs to recognize the more conventional "design" approach. It was felt, however, that this group of four made a stronger package, a vehicle for their views on the architects' irony and optimism.

Stull: We're essentially saying that a single family house is a trip which cannot be afforded, except that I don't think it can be said of the house in Vermont. That one can get out of the way; it's not a permanent disruption of land for a single use.

Hardy: They're all strong enough statements that I think it would be silly to pass up the opportunity we have. My only point is that I'm not sure that they should be cited as architecture, but as a direction.

Okamoto: To me, they're either the beginning or the end of something.

Stull: Maybe they're both. Maybe they're the end of a certain kind of ego trip and the beginning of a new noninvolvement with the single family thing.

Johanson: I'd say generally that the houses were very boring. The serious ones are all propped up; we've seen hundreds of them now, and speaking for myself, I'm weary of them. The only things that catch my eye are these things which indicate a new direction or a fresh approach.

Okamoto: The other thing is, if the house really is the last visual work of art, then these are the expression of that—more than the other's we've seen.

Erickson: I think that you sort of admit that the single family house is a rather exotic thing to begin with. What we're doing is premiating that in these selections.

Hardy: It's luxury taking up all the land to do this. If these things are a form of therapy, then they are fine.

Erickson: That's what all of these individual houses are, essentially, a form of therapy.

Erickson: If we could just say that—the ego trip with one phrase, the therapy of working out your frustrations by building them, and the funereal aspects of the automotive culture—it would be a positive statement for giving the citations.

Stull: We've resisted making similar kinds of intellectual statements on other categories.

Okamoto: Those were on social questions as opposed to aesthetic questions.

Johanson: I think it's a unified idea, as Don said, that an individual house is a trip. These are new trips. We left out a lot of competent, well-designed houses to make this statement.
Program: Design an inexpensive summer home incorporating the client’s beloved, but rusting, ‘57 Porsche.
Site: Wooded hill on Martha’s Vineyard, Massachusetts.
Design solution: To make a “little monument” for the Porsche, the shell of the car is to become an operable skylight over the large main room and sleeping loft. Upholstery on the roof and doors of the car will remain, as will window operating mechanisms. The rusting floor pan, seats and all running gear will be removed, and a glass clerestory will separate the Porsche from the house/monument base. A kitchen and adjoining bath open off the big room at the back.
Construction and materials: Standard wood construction with steel supports for the car, modular bathroom unit. Exterior trim calls for imitation marble.

Jury comments
Hardy: I think that this is a magnificent monument to the automotive culture—that’s where it’s at, right there! That’s just the end, the funereal aspects of that culture.
Erickson: The American Estate—that’s where it’s gotten! Okamoto: Actually, I don’t think he’s given up on the auto.
Hardy: Well, that’s how I read it.
Okamoto: This reminds me of the compulsion by Southern Californians to bury their little animals in very special graves.
Stull: Yes, and of guys making their racing cars into murals.
Hardy: Symbolically, I think it’s slightly different from the others by saying, “that’s how it ended,” and in that sense I think it’s quite serious.

Daniel V. Scully

Credits
Designer: Daniel V. Scully.
Rendering: Carol Scully.
Client: R.W. Williams.
Program: Design and build a weekend house for clients and two children that can serve as a media studio and reflect clients' interests in art and experimental design solutions.

Site: Mo-Jo Lake, 50 miles from Houston, Tex.

Design solution: With a ferro cement structural system, the house basically will be one large space. The ferro cement concept, adapted from boat construction, uses shored pipe contours, steel rods and layers of wire mesh, to which high early strength cement is applied. Besides its design flexibility, the strength and watertightness of ferro cement offers the resistance to hurricanes required by this location.

Construction and materials: High early strength portland cement applied to four layers of wire mesh on each side of 3/4 in. steel rods. These rods, spaced 6 in. apart are wired to pipe contours. The exterior will be a hard white finish, and the interior will be insulated with 4 in. of foam and upholstered in beige material, pleated along pipe contours. All interior components are being specially designed and built by the architects and other artists and craftsmen.

Jury comments

Erickson: In each of the houses, I think we're looking at the house as a private, personal preoccupation, and this is why it's no longer dealing with any public problem. It is exotic.

Stull: I think maybe we can go one step further and indicate what we view to be the underlying motives for these various trips.

Okamoto: Yes, certain of them can be more readily applied to the personal ego-trip approach than others.

Johansen: I would eliminate this house. You can design beautiful things in gunite—marvelous forms that could be quite livable, with a neoprimitive feeling of the material.

Hardy: But this is an act of total design, a true form of the handicraft, do-it-yourself, architect-as-artisan tradition. The entire house, down to plates and sinks, expresses that. It is admittedly a self-indulgence, a burlesque and a freaky thing to do, but it honestly admits that.

Richard Jost, Charles Lord, Doug Michels

Credits

Architects and builders: Richard Jost, Charles Lord, Jr., Doug Michels; Nationwide Builders.

Consultants: mechanical engineer, Pete Eichenlaub; fiberglass consultant, Doug Hurr; interior elements, Reptiles.

Model: Megan Williams.

Photography: Michael Shamberg.

Client: Marilyn and Alvin Lubetkin.
The People/Space Company Residence in Windham, Vt.

Program: Design a house for family living that is self-sustaining in terms of services, and with provisions for growing all family fruits and vegetables. Components of the house are to be built in the shop and assembled on the site.

Site: Steep hillside in Vermont; from an elevation of 1900 ft, it overlooks a two-acre pond to the east and mountains to the south.

Design solution: A series of spaces along a spine serve family living requirements. Food is to be grown in a centrally located greenhouse adjacent to the kitchen. Heat and hot water are to be supplied by a solar collector over the entry bridge, and electricity generated by windmills. All organic waste is to be recycled into methane gas for cooking and into composted fertilizer for the greenhouse.

Construction and materials: Basic structure is aluminum tube trusses and rectilinear aluminum frames, partly shop-built and assembled on the site. Standard greenhouse glazing and wood-framed room pods are attached to the frame. Panels with fiberglassed high stress cardboard or sheet aluminum bolted together with neoprene gaskets.

Jury comments

Stull: If we want to say that this concept of a single family house as a permanent thing shouldn’t be happening, then this house has to be taken seriously, because it’s not a permanent statement. You could unfold it, put it in your knapsack and go marching away down the mountainside. It’s not a permanent disruption.

Hardy: I’m not sure that it’s what you say, but it can be interpreted that way. It’s as much imagery as the others—see, there’s a space guy at the bottom of the ladder, and that’s so key: But I can’t see that it comes from a hardware store.

Stull: Well, I would argue to separate this from the imagery/eclecticism category. The moon image is really one of industrialization.

LeMessurier: It’s a program that my wife would want to accomplish—growing her own tomatoes, recycling everything, getting power from windmills. I think it’s really responsive to a real program that a lot of people have these days.

Hardy: I do think that it’s much more serious in its consideration of systems than any of the others.
Program: Design a house for the architect's own family, developing new ways of integrating and using existing pre-engineered systems. Each segment of the package is to remain essentially self-contained, with connecting links of standard wood construction.

Site: Rural, 65-acre planned area on a hilltop in Lyme, Conn.
Design solution: A geodesic dome (4 frequency, ⅔ icosahedron, 32 ft in diameter) will be the main living space, with connections to a 42-student school bus (eating), standard framed sleeping area, metal grain bin (working) and a concrete block silo (washing). Outbuilding for storage is a standard metal building and green house is a standard lean-to. The solution was influenced by the rural building vocabulary of the area, as well as the economy of off-the-shelf parts.

Jury comments
Johansen: I think that's got real grit, it's a real kick in the tail! I think it's better than the machine (house)—it's more of a house that deals with real parts. It's a serious direction.
Hardy: Yes, but I don't think he's come to any conclusion. You are not an ear of corn; this is made to store and move grain. You cannot translate yourself from an ear of corn into being able to live in there unless an amazing transformation takes place! It's a curiosity about a new vocabulary, which is certainly laudable, but if it's a house, doesn't it have to get lived in in some way? If we really think that people are corn, or that what goes on in a set of structures in no way affects them, that's a very peculiar architectural position to take.
Okamoto: But maybe that's the first step in forcing a wedge for the designer to show that the industrial process can mean something as a visual language.
Johansen: You see, he's got the sauna and water closets stacked with the mechanical, which is very logical. No waste of function and no need for windows at all. The living part is semi-transparent, with three levels. I'd rather live in the silo house than the others.
Urban design awards

The urban design jury

In contrast to last year's urban awards program which yielded neither awards nor citations, this year's jury—Edward Logue, Rai Okamoto and Archibald Rogers—gave three awards and five citations. Their concerns were much more pragmatic and their evaluation of projects less to do with relating program information with solution than last year's jurors. This year's concern was the attitude of the solutions toward the environment: are they appropriate, how do they fit, how do they change and what do they contribute?

Logue: I would first ask is it likely to be built? Second, is it appropriate that it should happen? Does it just prevent something terrible from happening or is it something that would make life more attractive? When dealing with urban design, another question that needs to be asked is will it be fun? Will it make passing through that urban setting more pleasurable than before? The last and equally important consideration is will it survive in its particular intended setting?

Rogers: On the assumption that something is likely to happen—and I rejected many because I don't think they are believable—the first test is how does it work internally? Then, how does it work externally in fitting the internal skeleton to the external? The next consideration would be the fit of what is designed to its setting—not implying equilibrium with nature, necessarily, but with what already exists. I do think the amendability of whatever is done is very important, and my final question would be, can it accept change?

Okamoto: I start from the assumption that this program is the only one where the purely innovative proposals have a forum for discussion and therefore I would split some hairs on whether or not it can be built. I would give preference to a project representing an alternative attitude that might not have a chance to be built, but might affect the on-going mainstream of thought. I would also give strong consideration to a concept which reflects an emerging trend—like conservation or ecology—even though the result might be nonarchitectural. Lastly, and in some sense contradictory, I would also give consideration to something really innovative and powerful—the very dramatic kind of formal proposal.

The final choices, after a day of reviewing all the planning entries, were consistent with their expressed concerns. All of the awards and many of the citations dealt with the preservation or conservation of existing resources, converted or interwoven with new use. Late in the day the jury discussed the overall nature of the submissions and directions or trends they felt were implicit in these submissions.

Logue: So few of the urban design submissions were attempting to be monumental, bold statements: most seemed deliberately to relate to not just the immediate environment, but a larger environment. There seems to be a willingness to weave new developments in among established development, to refurbish and rethink the function of old buildings and to make a new contribution.

Okamoto: There were few, if any, monumental tour de forces or exercises in urban design. At the other end of the scale, however, I regret that there were no really adequate submissions that were out of the mainstream of established processes, either political or developmental. I wonder to what degree this reflects a dampening of the active involvement of certain segments of the community in the on-going process of building cities. What it does reflect, on the other hand, is the emphasis on making as much of existing resources as possible. That neither extreme was represented suggests that there may be a coming together, a changing mood and this is a positive sign.

Rogers: There is an increasing consciousness at the community level expressed by both the client and architect of two emerging attitudes. The first is the importance of the natural environment and the way development can take place that will enhance it. Secondly, there is an emerging consciousness of "community"—in a physical sense—as an expression of society. I think the projects that were premiated illustrate these two attitudes well.

Edward Logue, President and Chief Executive Officer, New York State Urban Development Corporation, New York.

Archibald C. Rogers, Chairman, RTKL, Inc., Baltimore.
Custom House Urban Renewal

Site: Downtown Monterey, Calif.

Program: Land use and marketability study for a tourist-oriented nucleus in downtown Monterey, Calif. to include a conference center, 300-unit motor hotel and parking for 2000 cars. Major problems were integrating new structures into the existing small scale of the city and maintaining the residential scale of mud-brick buildings which are part of the city's delight and character.

Solution: The plan attempts to solve the problem of integration by providing visually controlled transitions such as set-backs from small to large scale and by use-controlled transitions allowing mixed-use infill among the surrounding residences, shops and waterfront activities and the new central facilities. The plan creates an active center with a "Main Street" commercial area and a "Path of History" through the area where Monterey's adobes dominate. Recognizing the character of the existing architecture, the plans state that the architectural character of new building will be compatible with, not imitation of, the historic areas.

Jury comments

Logue: This seems to be a very sensitive effort to connect and build with the things that happily were left, and the new things are intended to be in keeping with what's still there.

Rogers: I find this refreshing in terms of good human scale; in terms of transition between different kinds of uses between new and old; in terms of the reuse of the historic areas linked to the waterfront by a pedestrian walk.

Okamoto: The scale of life is small yet busy, and certain elements such as the pedestrian walk and historic area respond to that. I think it is reflective of a current trend of communities to maintain their past along with their growth.
Sectional drawings of new development illustrate suggested massing controls for integrating it into existing adobe-scaled architecture. A "main-street" will connect the commercial area with new activity center.
Award

Wallace, McHarg, Roberts and Todd
New Recreation Community

Site: 3000 acres of Amelia Island, 25 miles northeast of Jacksonville, Fla.

Program: To develop a planning method for a new recreational community which takes advantage of the opportunities for residential, resort and recreational uses while preserving and reinforcing the ecological processes.

Solution: The master plan summarizes the ecological inventory undertaken by the planners with a team of natural scientists, categorizes the various levels of demand for conservation and development, and illustrates how tradeoffs can be made on an objective basis. A total of 2900 dwellings of different types in varied site conditions were recommended; the latter part of the plan focuses on the initial phases of the project, illustrating the influence of ecological and site conditions. Guidelines for architectural solutions are shown for the benefit of the numerous architects who will participate in the implementation of the plan.

Jury comments

Rogers: It is a very serious investigation of all the ecological and economic issues and a synthesis of the two in the design plan. I think it is perhaps one of the most sophisticated ecological studies that has been made in terms of a base for development planning.

Logue: The entire coastline could benefit from the example of how a developer chose to be responsible; to propose development which is sensitive to ecological issues yet enable him to make an adequate return on his investment. To me, that is a rare and happy combination of circumstances.

Okamoto: What is important about this project is the fact that it is replicable. We have thousands of miles of coast-line and similar problems. The proposals are definitive enough for how to actually site buildings and yet open enough to allow much leeway to the actual architects.

Credits:
Partner in charge: William H. Roberts.
Project director: Jonathan Sutton.
Client: Sea Pines Plantation Company.
Recommended land use plan (right) was the result of an intensive ecological survey. Cross-section through island (bottom) indicates different types of ecological data collected, including wildlife, vegetation and soil conditions. Section through dune housing (left) suggests building on stilts to disrupt natural conditions as little as possible.
Award

Michael and Susan Southworth
Lowell Discovery Network

Site: City of Lowell, Mass.
Program: Develop a total environment for learning in Lowell, Mass.; provide an opportunity for economic rejuvenation; create an attraction for tourists; make learning settings which are an extension of and an alternative to traditional school learning; provide a neutral ground that allows self-renewal through planning, programming, research, implementation and evaluation. (P/A, Nov. 1972, p. 82)

Design solution: A continuous open space system centered on the historic canal system with bicycle and pedestrian paths. Numerous discovery centers at historic and industrial sites are designed to communicate through direct experience the organization of the city, its history, its industrial processes. The solution proposes no new building, only the reuse of the existing resources—the fabric of the canals, the old mill structures and gatehouses.

Jury comments

Okamoto: There seems to be a need to make do with the resources that are inherited rather than make unnecessary commitments to new development. It would be easily executed, ensure the preservation of the historic features of the community and would be easily accessible and a delight to use for the people who are there.

Logue: This is a solution which doesn’t tear up the old city, but attempts to put it back together and make a contribution to an important part of our early industrial growth. The graphics are striking and I think they are capable of arousing popular understanding and support. As against the usual urban renewal solution, this has a great deal of promise.

Rogers: Each of our cities has its own kind of personality and what is recognized in this plan is the very particular personality which exists there. To pick out the essence of it and re-discover it as proposed here is a breakthrough in approach to urban design.

Credits

Partners: Michael Southworth, Susan Southworth.
Photography: John Gustavson.
Client: Model Cities Education Component of Lowell.
Site: Dunbar High School, Baltimore, Md.

Program: Develop an outdoor space created by two existing schools and a new high school as a focus for a black inner-city community. Other requirements were for a work which members of the community could use, look at and personally experience in some way regardless of their age, a work which would function year-round and could be maintained without undue expense.

Solution: A forum/fountain. The whole composition is intended to establish a strong focus for the outdoor space and to offer a practical means for promoting human interaction. The central element is simultaneously a pulpit, podium and plaything. Other peripheral forms allow for playing, sitting and observing. The whole experience of form and texture is altered and varied through the use of water.

Jury comments

Logue: It seems to me that in inner-city neighborhoods, moving water has a lot to offer as one of the best ways to create ambience. I think it can work and will make life in that area much pleasanter.

Okamoto: I like the idea of urban-scaled art, whether it be fountain or water or sculpture. Things like water, the play of light and shade, have an enormously humanizing effect on the surrounding environment. I can imagine the kids coming out and messing it up, but that's even part of what it's for.

Citation

Stafford Rolph/Cochran, Stephenson & Donkervoet Inc.
Forum/Fountain for Dunbar High School

Credits

Sculptor: Stafford Rolph.
Principal in charge: Richard C. Donkervoet.
Modelmaker: Stafford Rolph.
Photography: J. Alexander (model), Elsa Rosenthal (Rolph), Steve Camp (Donkervoet).
Rendering: Fred Schonback.
Client: Board of School Commissioners and the Department of Public Works, Baltimore, Md.
The Architects Collaborative/Durham Anderson Freed Co.  
Mercer Island Interstate 90

**Site:** Mercer Island, Wash.  
**Program:** Design a three-mile section of I-90, which links Boston to Seattle. Major concerns were that all alignments and profiles meet the highest standards of an interstate system, that provision be made for rail or bus stations as necessary, that the facility be designed to provide amenities to lessen the adverse effects of a highway and to make a positive contribution to the overall character of the island.  
**Solution:** A 10-lane highway—four lanes in each direction and two reversible—depressed 20 ft to reduce noise levels. Landscaped buffer space will be developed as a linear park related to the pedestrian bridges and existing open space. Bridge crossings will be wide to reinforce the continuity of the community rather than the automobile. Except for a parcel in the central business district acquired to allow for contiguous development, the new highway follows the route of the old U.S. 10, as this required the least disruption and land acquisition.

**Jury comments**  
**Okamoto:** This study is a very competent analysis with the appropriate proposals. I wish that the same methodology or approach with the same degree of obvious commitment could be applied as well in some of our inner cities.  
**Rogers:** The importance of this study is the design approach that is now being applied to what was heretofore conventional engineering studies based only on cost and efficiency.  
**Logue:** It is an abuse of priorities to give those affluent types five extra pennies to cover up a highway on an island which could survive well without the ambience or recreation added.

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R.W. Booker & Associates Historic St. Charles

**Site:** Eight blocks of Main Street, St. Charles, Mo.  
**Program:** The primary goal was the preservation and conservation of the historic district and the significant structures within it. Other objectives are the development of a central pedestrian mall, adequate circulation system, sufficient off-street parking areas, additional recreational sites, improvement of public utilities and an increased supply of housing.  
**Solution:** After a thorough investigation of the history of the area as well as architectural detail and construction methods, all the structures were classified as being historically significant, architecturally compatible, aesthetically compatible/noncompatible or substandard. In addition, each was rated on its structural soundness and conformance to minimal property standards. On the basis of this evaluation, an overall plan was developed to be carried out with the assistance of federal, state, city and private agencies.

**Jury comments**  
**Okamoto:** This is, again, the spirit of communities trying to recapture and instill life into their historic resources. It looks as though it fits into the overall downtown. It is carefully done, workmanlike and, above all, looks as though it can be done.  
**Logue:** There are a thousand streets like this in the U.S. which could benefit from this sensitive treatment, and only a few dozen have. This is one of the better examples and I hope it will encourage other such development.  
**Rogers:** The historic analysis and evaluation are very good and it is a prototype for practically all of our communities.
Plan shows the route of major 10-lane road, open space development along its edges and major arterial feeders. Sketches show road depressed 20 ft below existing grade, a device used to diminish noise.

Credits
Project architect: Barry W. Evens.
Project associates: Daniel K. Bockert, E. William Reichert, Ill.
Architectural historian: Gerhardt Kramer, FAIA.
Historian: Dr. Felix E. Snider.
Client: Redevelopment Authority, St. Charles, Mo.
Wallace, McHarg, Roberts & Todd
Inner Harbor I, Baltimore, Md.

Program: Conceptual design—a program of uses and strategies—for the redevelopment of the Inner Harbor and Municipal Center, 130 acres of obsolete commercial and waterfront sites. At the same time, the study defined the type and level of required functions and interrelationships of elements necessary to build a successful in-town community. From these criteria a physical design and urban renewal plan were prepared for the second phase of the subject.

Solution: Area adjacent to the water is to be developed for public, semi-public, commercial and recreational uses. Behind the water’s edge will be a new office/commercial development, a hotel, convention center, apartments and parking that will bring new life to the central business district.

Jury comments
Okamoto: This is an example of a renewed use that ties a waterfront area into the rest of the city. It shows a structural and physical connection to a successful piece of redevelopment.

Logue: It demonstrates that relatively large scale, design-oriented, federally aided, urban renewal still has a contribution to make to our larger cities. Equally encouraging and significant, it builds on and connects with an earlier renewal project in the downtown. It is a work of thoroughness and quality.

Rogers: It represents a very interesting reuse of an old and no longer economically viable asset. It is a fresh new look at ways of re-creating an exciting waterfront activity right in the heart of one of our major cities.

Lee Harris Pomeroy Associates
Mill River Run

Site: 323 acres in Lewisboro, N.Y.

Program: A residential community for 500 families in a rural section of Westchester County to include shopping and recreational facilities and planned so as not to interrupt the established character of the land.

Solution: Of the 323 acres, the buildings occupy only five percent of the available land. The U-shaped building is divided into five clusters, one to be built each year. Commercial facilities will be built during the first phase on the ground floor of the apartment units. The central open space will contain all of the planned recreational areas and the remaining land will have riding and nature trails as well as a wildlife sanctuary.

Jury comments
Logue: This north county site has proved itself to be a very difficult place to build even a substantial number of single-family houses. The treatment of the land and the enjoyment of the views of the lakes and streams is a demonstration of a particularly sophisticated kind of zoning. It seems well worth doing.

Rogers: I have reservations about the architecture, which has yet to be actually stated, but as a prototype for other developments in low density areas, I think it is an excellent concept.

Okamoto: Its significance is realized in an attitude toward land rather than in an attitude toward the housing market.
Overall development plan for inner harbor and model photo show massing to take advantage of views and development of waterfront land for recreational uses.

Site plan clusters housing and uses remaining land for recreation and conservation. Section shows the mass of the housing as an extension of the hill.
Solid waste handling systems for residential complexes

William G. Knoll, Jr.

Solid waste handling and processing should be viewed as a utility like other required building services. It is as necessary to handle this material in a clean sanitary manner as it is to provide adequate heat.

The designer's goal should be to incorporate a waste handling and processing facility that residents will want to use. Ideally it should require only the opening of a door where the waste is to be placed. Then a system of internal transportation to a central point (or points) for possible processing, short term storage and removal from the site should be installed.

In the system planning stage, anticipated initial and future waste loads should be determined with hourly and seasonal peak loads accommodated. An existing local building with similar tenancy in terms of economic level and geographic location is usually a reliable source of this data. A one-week survey will cover daily variables. In very large complexes it may be necessary to determine loads during peak 15-minute periods. Regulations governing internal and external transportation, storage conditions and locations, and processing of waste must be reviewed, including those of local, state and federal agencies and appropriate societies and associations.

Systems and equipment for the internal collection and processing of waste often overlap in function. There are several basic approaches to choose from in both categories, as well as hundreds of individual components. Processing which may occur before or after internal transportation, should be as simple as possible and be consistent with good sanitary practice and efficient operation.

In some situations it will be desirable to reduce the amount or volume of waste prior to removal from individual apartments. Where codes permit, sink-mounted garbage disposal units can reduce the volume and weight of waste requiring transportation. Domestic compactors can also reduce the waste volume. In each case careful mechanical selection is needed to obtain quality units.

Often, simple compaction will prove to be the most practical solution. Compactors are available which are suitable for kitchen installation, chute base locations or for central point locations, with capacities from less than 200 lbs to 25,000 lbs daily. Suitable units can be arranged for direct chute and/or manual loading. Volume reduction of 4:1 should be anticipated. Containers range from modest size bags and boxes, to 1 to 2 cu yd roll-around containers, to 35-40 cu yd roll-off containers. Associated benefits include a cleaner environment, reduction in fire hazards, smaller storage space requirements, and lower removal costs.

Manual handling of waste by employees should be avoided because of the hazards involved. Similarly, compactor bags that require separating and cutting apart after being filled should be avoided, as should conditions that require heavy lifting or pushing of carts on steep inclines.

At their present level of development, pulping systems are not suitable for reducing and transporting general household waste. Local incineration is unpopular and in some areas forbidden. A careful watch should be maintained for future developments, particularly in the area of centralized and/or municipal incineration. Dry shredders are practical for residential waste particle size reduction prior to chute transport. They are not usually practical for volume reduction and are generally noisy. Mechanical conveyors usually present considerable cleaning problems and are practical only for short runs within a waste handling room.

The most basic transportation system is manual transportation by the resident to a suitable container or containers, such as enclosed, front or rear loader types with a self-closing charging door. Where rise is more than several levels, mechanical vertical transportation may be desirable. Gravity waste chutes should be considered for this application. When horizontal transportation is also required, carts may be practical for short distances and gravity-pneumatic chutes or fully pneumatic chutes for long distance transportation in larger complexes.

Transportation of oversized objects must also be planned. In most complexes manual transportation will be practical. In very large complexes utilizing pneumatic horizontal transport, strategically located shredders and special stations will allow many over-sized items to be reduced for pneumatic transport.

Consideration must be given to utilities and equipment for the thorough cleaning of all waste equipment, including cans, carts, chutes and stations and processing equipment. The areas in which they are installed and adjacent areas will also require thorough washing. Ventilation and perhaps cooling of storage areas is also needed under today's standards. Compaction areas in some localities require minimum heating to prevent freezing.

Instructions for proper use of the system for normal waste, and procedures for disposing of over-sized items, should be issued to new residents and reissued periodically to all.

In summary, final system evaluation and justification for its selection can be based only partially on economics. System selection must also be based on its ability to enhance the environment, including health and safety factors, and its ability to encourage the residents to use it properly.

Author: William G. Knoll, Jr. is Senior Engineer, Elevator and Materials Handling Department at Syska & Hennessy, Inc., Consulting Engineers, New York City.
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Both the architect and the manufacturer stand to gain from the use of architectural representatives despite growing manufacturers' claims to the contrary

Manufacturers of building products have historically furnished architects with a variety of technical information about their products. These data have been in the form of copious quantities of technical literature, advertising in architectural publications and architectural representatives who service architectural offices.

In recent years the availability of architectural representatives seems to have diminished. The most marked decline appears to be in the industry membership of CSI, another in the calls made by architectural representatives on the architect. While no survey has been made to determine this diminution, it seems to stem from: the economic climate which has resulted in a drop in CSI industry members; a reluctance on the part of architects to use out and out proprietary specifications; a failure on the part of architects to enforce their specifications, permitting substitution of materials; a feeling on the part of manufacturers that sales can best be generated at the buying source-contractors and subcontractors.

Some manufacturers complain, perhaps justifiably, that sales representatives can spend considerable time in an architect's office aiding in the preparation of details and specifications only to find that their investment in time and technical assistance has been vitiated by the inclusion of "or equal" products of competitors in the final specifications or by the fact that the contractor, for one reason or another, has sold the owner on a less costly product at the last moment.

Some manufacturers feel that their product has no equal and that it is unfair for the professional to use the manufacturer's representative to obtain all the required data only to find that the competition, which has made no investment, has run off with the order.

The realities of competition are a harsh fact of life. In many instances the products that an architect specifies are commodity items that can be purchased by the contractor at random from several sources: clear glass, ceramic tile, vinyl asbestos flooring, mineral fissured acoustic tile, portland cement for concrete and mortar, latex paints for interior surfaces and many others. Among these items, specific colors, textures or patterns may be the only reason for the design architect to single out and select specific products. Too often the sales manager looks only at the end result and complains that his investment in time and service has not paid off in a firm order.

On the other side of the coin, how many free hours have architects given to manufacturers making market surveys to determine whether to produce a specific product? How many free hours have they given when they take time to see manufacturers' exhibits at AIA and CSI conventions and at Producer Council exhibits? How many free hours have architects provided to criticize a manufacturer's product, pointing out deficiencies and thus giving free advice which aids in the improvement of the product? How many times do questionnaires come through the mails asking architects for their judgments on future trends in the construction industry?

The experience of the past suggests that the free interchange of information between the manufacturer and the professional has been productive for both sides. Producers have been furnished with ideas and recommendations which have been invaluable in improving products and in the development of new ones. Architects have been given access to materials and products that more completely solve some of the problems confronting them. It has been a two-way street—seeking and exchanging information on a quid pro quo basis.

It is recognized that the professional cannot single out every manufacturer from whom he receives information and specify him exclusively. The owner is entitled to competitive bidding where any commodity item will provide the required solution. Where only one specific product will perform the required task, that product will be specified. In addition, each producer who complains about giving free time and advice only to be sandwiched into the specifications in the company of his competitors, gets a free ride when his name in turn is specified where he has not made that investment.

Until such time as the industry can come up with a better solution to this free interchange of information, manufacturers should continue to use architectural representation. The representative is needed by the architect and in the councils of CSI. His participation in CSI affairs at the technical development level is essential in producing standards for materials and products. The manufacturer who participates through his architectural representative will reap the benefits in sales.

Author: Harold J. Rosen is Chief Specifications Writer of Skidmore, Owings & Merrill, New York City.
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Circle No. 329, on Reader Service Card
Low bidder for public projects

Bernard Tomson and Norman Coplan

Special legal problems can arise when it becomes necessary to determine if the lowest bidder on a public project is also the most responsible bidder.

The application of legal requirements to public building projects often engenders questions or disputes which would not arise in private construction. One of the most common fields for litigation arises from the selection of the building contractor on a public project after competitive bidding. In most jurisdictions the law requires the municipality or other public body to select “the lowest responsible bidder.” The architect’s recommendation as to whether the lowest bidder qualifies as the lowest responsible bidder is often the determining factor in the selection of the contractor to whom the award is made. It is primarily in the evaluation of the concept of responsibility that disputes arise.

Where, in the opinion of a public body or agency, a bidder does not have adequate financial backing, or is lacking in the equipment or other resources to perform a project, the Courts have generally upheld the disqualification of such bidder provided the owner has acted in good faith in the exercise of his judgment. Relatively speaking, an evaluation involving the adequacy of finances or equipment or manpower can be objectively made. Where, however, the disqualification of a contractor is based upon his prior performances, the evaluation is more difficult and the possibility of litigation increases.

In a recent case involving the awarding of a contract to repair steam lines for the heating and air conditioning of a state building, the lowest bidder challenged the award of the contract to the second lowest bidder. The contract analyst for the state agency testified that the determination not to award the contract to the lowest bidder was based upon delays by the contractor on past contracts, the lack of cooperation by the lowest bidder with the state agency on past contracts, failure by the lowest bidder to include prior penalty assessments on the experience questionnaire, and the poor evaluation by the engineers of the agency of the low bidder’s prior work. The low bidder testified that most of the delays on past projects were not his fault.

The trial court found that the decision of the state agency not to award the contract to the low bidder was arbitrary, capricious and an abuse of discretion. Upon appeal, how-ever, this determination was found to be erroneous and reversed. The Appellate Court stated:

“Paragraph 6 of Section 8 of the Public Buildings Law provides, inter alia, that contracts for the construction of any State building ‘. . . must be offered for public bidding and may be awarded to the lowest responsible and reliable bidder, as will best promote the public interest.’ In determining the lowest responsible bidder, skill, judgment and integrity are to be considered and the awarding agency may investigate and consider the background of the bidders. . . . The record indicates that petitioner had been guilty of delays and lack of cooperation on prior contracts with the State and that it had performed poorly upon prior projects. Therefore, there was a rational basis for finding petitioner not to be the lowest responsible and reliable bidder.” (J.N. Futia Co. v. Office of General Services, 332 NYS 2nd 261)

The reluctance of the courts to interfere with a public agency in its relationship with contractors, providing it acts in good faith and with rationality, is further illustrated by a recent decision involving competitive bidders for a science building at a state university. (L. A. Wagner Construction Co. v. State University Construction Fund) The state in this case solicited separate competitive bids for the entire project and for laboratory furniture and equipment. The terms of the bidding were that if the low bid for laboratory furniture and equipment was selected, that contract would be assigned to the general construction contractor and such general contractor would become responsible for the complete project.

It was alleged by the state that the contractor who had been selected to furnish the laboratory furniture and equipment and whose contract had been assigned to the general contractor did not properly perform and the state sought relief from the general contractor. The general contractor defended on the ground that the state knew that the contractor it had selected, and whose contract had been assigned, had a past history of poor performance, but did not inform the general contractor of such fact. The Court in rejecting this defense stated:

“In situations such as this, is it the [state’s] obligation to reveal any and all prior performance irregularities of such contractors to the general contractors who assume responsibility for their performance on entering the general contract? And how would such information even be disseminated so that such prior irregularities could properly and fairly be evaluated? Should the [state] be expected to discredit its own selection of the lowest responsible bidders? We think not. . . .”

The underlying rationale of this case appears to be that the State will not be charged with the consequence of an error which it commits provided that it acted in good faith.

Authors: Bernard Tomson is a County Court Judge, Nassau County, N.Y., Hon. AIA. Norman Coplan, Attorney, is Counsel to the New York State Association of Architects, Inc. / AIA.
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Circle 103 on reader service card

Geometrics and others. A few from the collection of Vymura wallcoverings; 62 designs in 166 colorways are available including flocks and foils. Gravure-printed, the wallcovering is made with a layer of vinyl on paper backing. It is described as washable, scrubbable, dirt-, grease- and stain-resistant and will not shrink, stretch or tear. Vinyl layer is stripable from its paper backing. Shown: Manhattan, a design of small gray squares alternating in shiny and brushed-look lines. ICI America Inc.

Circle 104 on reader service card

Cluster of columns. Individual stainless steel cylinders, grouped in various ways as table bases or tables in themselves, have a massive, molded look with no visible joining on the surface. Plate glass or granite can be used for table tops; cylinders are also formed into planters, plant stands and end tables. Brueton Designs.

Circle 105 on reader service card

Rosewood door. Carved on both sides, doors and side panels are made of select solid kiln-dried rosewood, with dowel and groove construction. Shown is a geometric pattern called Regency, available in three standard sizes. Elegant Entries.

Circle 106 on reader service card

Furniture for the executive. Chair designed by Frank Mingis has a cantilevered polished chrome frame. Chariot chaise by Paul Tuttle for the Straessle Intercollection of Switzerland has a curved understructure of chrome plated tubular steel; caramel color suede is stretched across the framework of tubular steel finished in black epoxy. Thonet.

Circle 107 on reader service card

(continued on page 124)
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SpanJoist. An extension of the basic concept of nail-less plate and automated truss fabrication, this system uses common lumber and eliminates the need for high stress-grade lumber or steel joist systems. In spans of up to 60 ft, depths of 11½ to 25½ in., and in varied configurations, it is suggested for floors and roofs in residential, commercial and industrial buildings. According to its makers it offers economy, lightness and composite-section strength; labor-cost savings are the result of the opening between the webs, providing ample space for air conditioning ducts, plumbing and wiring. Sanford Industries.
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Communications center. Sound motion pictures (16 mm), slides (35 mm) and transparencies can be shown in normally lighted rooms with this audiovisual system. Available with nonglare screen from 36 in. square in single and dual image, it has a patented optical system which includes preset front surface mirror and projector positions. Self-contained cabinet comes in choice of finishes, can be recessed or used against a wall or in a shelf arrangement. Suggested applications include corporate conference rooms, educational and medical facilities. Jerome Menell Co., Inc.
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Acrylic coffer ceiling. A one-piece sculptured low-brightness ceiling is available in modules from 2'x2' to 5'x5'. Collars of gray-white acrylic, antique gold, and metallic gold and aluminum provide a shield to white matte acrylic diffusers above the ceiling plane. United Lighting and Ceiling Corp.
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Unibloc. Free form, all-in-one banquette includes a table and seating for four. Seats are of molded ABS plastic, lightweight and maintenance free, joined at a central point to the plastic laminate table. Suggested applications include restaurants, hotels, schools and hospitals. In black, white, red and yellow with tabletops in a range of colors. Harvey Probber.
Circle 113 on reader service card

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The Owens-Corning Energy Conservation Award: “Triangles,” a Steuben crystal sculpture. Presented to architects and engineers who show exceptional ingenuity in designing buildings and mechanical systems that conserve energy.
Minnesota, combines ideas which save 200 tons of cooling energy and 100 hp. of boiler heating energy. This adds up to 33 1/3 percent reduction in energy consumption for the building.

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3. **Enthalpy-type waste-heat recovery system.** Cuts boiler and chiller capacity requirements by 25 to 30 percent.
4. **Radiant heating/cooling ceiling panels.**

For an industrial building: The Smith Korach Hayet Haynie Partnership, Miami.

Energy Center, Mount Sinai Medical Center, Miami Beach, Florida, minimizes long-term owning and operating costs.

1. **Life-cycle costing.** The initial cost of cooling and heating equipment was considered secondary in importance to costs over the long term,
2. **Separate plant concept.** More efficient than having smaller capacity equipment in individual buildings. Releases valuable working space.

3. **Insulation.** Piping and mechanical equipment were insulated to ASTM standards.

**Additional awards.**

Honorable mentions go to Harbeson Hough Livingston and Larson/William A. Amenta, Philadelphia. (Their design for the Children’s Hospital of Philadelphia includes an energy reclaim system for heating and cooling.) And to Walter Krause Architects, Phoenix. (Their design for Drain Properties, Phoenix, uses water-cooled lighting and an ice bank system to cut energy consumption by 23 percent.)

**How the winners were selected.**

Entries were judged principally on the extent and creativity of the energy-conserving ideas used, as well as on how much energy is actually saved.

Winners were selected by a distinguished awards jury: MacDonald Becket, Welton Becket Associates, Los Angeles; Harold S. Lewis of Jaros, Baum and Bolles, New York; Leander Economides of Economides and Goldberg, New York; Professor Charles E. Sepsy, Ohio State University; Herbert H. Swinburne, F.A.I.A. of the Nolan-Swinburne Partnership, Philadelphia.

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Schindler: vulnerable and powerful

Reviewed by Charles W. Moore, FAIA, professor of architecture at Yale University, who also practices in Essex, Conn.

David Gebhard's book about Rudolph Schindler was, for me, the most moving story of an architect that I have read since I was astonished at an early age by Frank Lloyd Wright's Autobiography. Being moved, of course, can include a lot more than transport on the wings of the dove; and it is this book's special quality that the bittersweet victories (or were they defeats?) of a fine flawed career are brought so close and made so tense that for paragraphs at a time I imagined I was Schindler or he I.

The method of the book contributes to this power. David Gebhard has brought to it art historical scholarship, a fine feeling for Southern California and especially the perceptions of Esther McCoy, (P/A's "Architecture west" editor) who worked for and knew Schindler. He has used all these to tell the story of the young man born in Vienna and trained there, who continued his training after 1914 in Chicago and then with Frank Lloyd Wright, on whose business he went to Los Angeles in 1920. From then until he died in 1953, Schindler's story was part of the exotic development of Southern California, bizarre then but later the model for most of the rest of the world. It is this part of the story that Gebhard tells with special insight, from which he extracts the full poignancy of the recent past in a sunny place now engulfed as surely as the lost Atlantis, buried under itself, submerged in people and their wholesale constructions and their noxious fumes.

Schindler's renown in Southern California was engulfed, even as he practiced, by the far more slickly packaged reputation of his Viennese contemporary Richard Neutra, and by his failure ever to get any really substantial commissions. It is one of the sympathetic wonders of Gebhard's work that he perceives Schindler's ideas, even the little ideas, even when they were aborted, and makes clear how these saved Schindler from the despair that so small a set of opportunities might have induced.

The format of the book is a delight. There are many photographs and drawings of Schindler's own work, also a good many of contemporary works by others, illustrative of Schindler's enthusiasms and the author's. The plates are interspersed with the text, and their numbers are in the margin, so that it is easy to leaf backward and ahead with a minimum of frustration.

A possible role for the reviewer is to consider the basic question: Why in the world read a book about Rudolph Schindler? There are, happily, an impressive number of books around today about architects too soon forgotten, especially the contemporaries of Richardson and Wright. It turns out that many of them did large, handsome and inspiring buildings. Why then Schindler, whose oeuvre was small and inexpensive and (to my eyes) wildly erratic in quality? The answer, for me, was voiced in a radio interview I lately heard, in which a famous actor was praising a young actress with whom he had worked, and whom he much admired. He searched for a word to [continued on page 136]
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describe her, and came up with vulnerable, that is to say, open to all kinds of things (nobody is open to everything) in the world around. Rudolph Schindler, at least in Gebhard’s book, comes off vulnerable, too, and I like to think I am. His vulnerability caused him pain, and lost him work, and created some terrible looking buildings as well as some of lasting power. But it makes this book about him fascinating reading, in which he stands not only for himself, but for a great many other vulnerable architects, most of them summarily dismissed by historians as derivative.

Bona fide vulnerability, as I see it, involves caring about the specific things you find and find out about so much that you will change your position to accommodate them: invulnerable architects see and learn things too, but they have a position, or a sense of mission, early arrived at, to which the learned and seen things contribute, without the power to change it. Vulnerable and invulnerable is not good and bad. Moshe Safdie’s Beyond Habitat is the proud story of an invulnerable who has seen and known and felt a great deal, to the greater glory of his steady vision. Maybe there could be a historical game: I like to think that Bernini was invulnerable, and that Borromini was vulnerable. Some architects perhaps are vulnerable to a point, and then fix their positions. I’m willing to believe that Lou Kahn’s AFL–CIO Medical Center in Philadelphia was the work of a vulnerable, his Exeter Library of an invulnerable. (This excuses me for preferring the former.) Walter Gropius was the thoughtful arch-invulnerable; the International Style the temple of invulnerability.

I prefer distinctions, like this, that have good and bad on both hands. The one David Gebhard uses, to some of the same ends, is between high art and low art, and he sees Schindler’s translations from the one to the other, either way, as contributing to his strength. I don’t really dispute the existence of the chasm between high art and low, or the tense drama of the leap over it, but I do think the distinction is more useful to the gallery world of painting and sculpture where some things deemed to be high art acquire very special attributes and price tags, than to architecture, where buildings submitted for our periodic ritual premiation generally have much in common with and only some distinction from the “folk” work of our rich contractor friends. Schindler’s work is common but very special in ways which make reading about it, as I’ve said, tense and bittersweet, and more than a little unnerving.

Reading the book, I kept being reminded of my first trip to Japan, when I was aspiring to be a Bay Region architect. I had been to Europe, and had been transported by the presence of Chartres and the Parthenon and the Alhambra and Batalha; but I wasn’t threatened by them. They were made of beautiful alien stuff. Now here in Japan where people who had taken boards—just what I used, though theirs appeared to be of better quality—and had made with them things more wonderful than I had ever dreamed of. That was threatening. And, of course, it was moving too.

Rudolph Schindler, as he comes alive in David Gebhard’s book did things I try to do, and did some of them thrillingly well, and was never a success really, but kept responding all the while. I’m moved by that.


The content of this book comprises papers presented at a conference organized (continued on page 138)
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Books continued from page 136

by the Philadelphia Chapter of the AIA. It is also, perhaps more significantly, one of the first conferences in this country that sought to bring an understanding of environmental research to practicing architects, building users and students.

Participating in the program designed to bridge the gap separating research and practice, were Donald Conway, director of research, AIA, Washington, D.C., Wolfgang Preiser, a member of the research committee, AIA, and John Archea, reporting on a recent survey of the field of environmental psychology.

The papers include: "Architecture for Human Behavior: The Nature of the Problem" by Jon Lang; "Environmental Psychology and the Design Professions" by Harold M. Proshansky; "Fundamental Values in Planning with the Non-Paying Client" by John Zeisel; "The Human Being and the Institutional Building" by Powell Lawton; "Evaluating Buildings on a Performance Basis" by Michael Brill; "Environmental Programming for Offices Based on Behavioral Considerations" by Walter Moleski; "Evaluation of Environments: Behavioral Observations in an Undersea Habitat" by Robert Helmrleich; and "The Mental Image of Architecture" by Charles Burnette.

Despite the esoteric nature of some of the papers, the conference was mainly concerned with a better fit between "the design of buildings and the behavior they house"—the impact of buildings on the lives of people and the value shift that has led many young people to explore the living conditions of the less privileged. Here the focus was on discovery of the difference in needs and lifestyles at first hand, factors long ignored in the design of public housing and institutional buildings.

Design professionals have not necessarily been made aware of the growing knowledge that has emanated from the field of environmental psychology. These papers were presented in an effort to "relate the knowledge gained in research and study to the processes of design and use and to make the knowledge that architects have to human behavior in physical settings explicit." Our judgment is that in most cases they succeeded.

Escents continue to page 140.

Documents [The documents listed below are available from the associations and agencies cited. Request for such documents should be directed accordingly.]

Systems Building Techniques by Alan M. Baas. The ERIC Clearinghouse on Educational management, University of Oregon, Eugene, Ore. 97403. 15 pp. On request.

The 15th in a series of papers devoted to the analysis of current research findings on topics in educational management, this document surveys the growth of the systems concept in school design and construction and reports on the conclusions of architects and educators. Current literature on the subject of systems is reviewed. Systems building techniques are viewed as providing a tailor-made school facility that is sensitive to both budgetary and educational needs.


The complex relationship between the use of energy, economic growth and the quality of the environment is explored in this conference volume based on contributions to an RFF forum held in 1971. Eight participants from widely different professions...
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sional vantage points consider two objectives: providing energy to meet tomorrow’s needs and protecting the quality of our natural environment.

Among the contributors are Walter Heller, Regents’ Professor of Economics at the University of Minnesota; Barry Commoner, Director of the Center for the Biology and Natural Systems at Washington University in St. Louis; Gordon J. MacDonald, a member of the Council on Environmental Quality; Edward S. Mason, Professor Emeritus of Harvard University; and Glenn T. Seaborg, former Chairman of the Atomic Energy Commission.


Essentially a paperbound volume of photographs of stone houses in Bucks County, Pa., this also is a survey of stone masonry construction during the 18th and 19th Centuries in Bucks County, Pa. Farmhouses, barns, meetinghouses, factories and other structures made of stone are shown. Nice viewing.


Over $250 million is appropriated each year for the programs listed in this publication; this is a guide on how to get some. Federal and State art programs are given, all listed with their directors and programs. Taken from research done by the Library of Congress for the U.S. Senate, the study was originally printed for Senate members.

Industrialized Housing by Karl G. Pearson. Industrial Development Division, the University of Michigan, 2200 North Campus Blvd., Ann Arbor, Mich. 48105. 94 pp. $3.

This monograph is the result of data collected from interviews with key people in the field of industrialized housing as well as from observations drawn from visiting varied plants. The study focuses on several key aspects of industrialized housing: men, materials and assembly; transportation and erection; building codes; financing and marketing. There is a separate chapter on mobile homes and an appendix which lists and summarizes the operations of 66 modular housing producers.
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**Progressive Architecture**

**Notices**

**Appointments**

Randall H. Baldwin has been named an associate of Emerson Fehr Newton, Architects and Planners, Austin, Tex.

Leslie I. Brown has been made an associate of Childs Bertman Tseckares Associates, Inc., Architects, Planners and Landscape Architects, Boston, Mass.

Raymond J. Green, Robert D. Hunter and William D. Palmer have been appointed associates of O'Donnell Wicklund Pigozzi Architects, Inc., Evanston, Ill.

Sheldon Fox, AIA, has joined John Carl Warnecke & Associates, New York City, as vice president.

James D. Reiter has been appointed associate vice president of Daniel, Mann, Johnson, & Mendenhall, Los Angeles. Ted K. Matsuo and Mitsugi Nishikawa have joined the Honolulu office.

Elaine Carberry has been named head of the planning department of the Los Angeles office of Gruen Associates.

Paul Silver, AIA, has been appointed partner of Gruzen & Partners, New York City.

Edward C. Wundram, AIA, has been named director of the health systems planning group of Heery & Heery, Atlanta, Ga.

Charles B. McReynolds has been elected to the board of directors of Welton Becket & Associates, Architects, Los Angeles.

Geddes Brecher Qualls Cunningham, Philadelphia and Princeton, N.J., have announced the following appointments: Alan L. Fishman, AIA, associate; Peter Piven, AIA, associate and general manager; E. Fred Brecher, PE, head, structural engineering department.

Rossetti Associates, Inc., Detroit, has appointed the following vice presidents: Frederick A. Bertram, W. James Pfandtner, and Gary S. Van Neck.

Edward R. Lampp has been named consulting associate in engineering to William A. Gould & Associates, Cleveland, Ohio.

Paul M. Johnson has been elected vice president and general manager of the Los Angeles, Calif., office of Charles Luckman Associates.

Holden Yang Raemsch & Corser, New York, is now Holden Yang Raemsch Terjesen with the retirement of John B. Corser, Jr., and the admission of Allen B. Terjesen as partner.

[continued on page 146]
The low-down on glue-down!

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New firms
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Elmore J. Boles, Jr., PE, John F. Collins, ASLA, David M. DuTot, ASLA, and Joe J. Jordan, FAIA, have formed The Delta Group, Philadelphia.
Martin C. Goward, AIA, and Jack A. Schults, AIA, have formed Goward/Schults Architects, National Bank Bldg., Fort Worth.
Raymond Ketzel, Richard Achey and Jerry Goodman have formed Ketzel, Achey & Goodman, 4050 Calle Real, Suite 11, Santa Barbara, Calif. 93110.
Chase Architectural Associates, 201 South Main St., North Syracuse, N.Y., headed by David Erik Chase, AIA.
James Goldberg, AIA, 1427 St. John's Ave., Highland Park, Ill. 60035.
Interior Architects, Inc., 625 N. Michigan Ave., Chicago, Ill. 60611, with Arnold Blair Kominsky as president.
The Burke Associates, Architects & Planners, 622 S. Washington St., Seattle, Wash. 98104, headed by Edward M. Burke, AIA.
Hazim Niami, Janek Kaliczak and Andrew Campbell have formed International Geodesic Corporation, 111 East Broadway, Glendale, Calif. 91205.

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<td>Brewer Associates, Inc.</td>
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<tr>
<td>Stanley Works-Hardware Div.</td>
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<td>Steelcraft Manufacturing Co.</td>
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<td>Teledyne Monarch Rubber/</td>
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<td>Sterling Alderfer Div.</td>
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<td>Northlich, Stolley of Akron, Inc.</td>
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<td>Townsend Paneling, Inc.</td>
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<td>Turner Ltd.</td>
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<td>United States Gypsum Co.</td>
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<td>Needham, Harper &amp; Steers, Inc.</td>
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<td>U.S. Plywood Div. of Champion International</td>
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<td>U.S. Steel Corp.</td>
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<td>Uvalde Rock Asphalt Co.</td>
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<td>Glenn Advertising Inc.</td>
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<td>Viking Sauna Co.</td>
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<td>Meltzer, Aron &amp; Lemen, Inc.</td>
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<td>Vogel-Peterson Co.</td>
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<td>Ross Llewellyn, Inc.</td>
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<td>Walker/Parkersburg</td>
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<td>Fahlgren &amp; Associates, Inc.</td>
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<td>Western Wood Products Association</td>
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<td>McCann-Erickson, Inc.</td>
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<td>Wilson, Ralph, Plastics Co.</td>
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<td>Still searching for the</td>
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<td>Impossible?</td>
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<td>ACME PLASTICS produces precision quality letters</td>
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<td>to satisfy the ULTIMATE demands of</td>
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<td>architects, designers and sign</td>
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<td>specialists.</td>
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<td>We incorporate our diverse line in a DREAM of a</td>
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<td>catalog which is yours for the asking.</td>
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<tr>
<td>Or contact your nearest Acme distributor.</td>
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<tr>
<td>ACME PLASTICS</td>
<td></td>
</tr>
<tr>
<td>P.O. BOX 23666 / 4021 N.E. 5th TERR</td>
<td></td>
</tr>
<tr>
<td>FT. LAUDERDALE, FLA. 33307</td>
<td></td>
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<tr>
<td>TEL: (305) 563-1146</td>
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