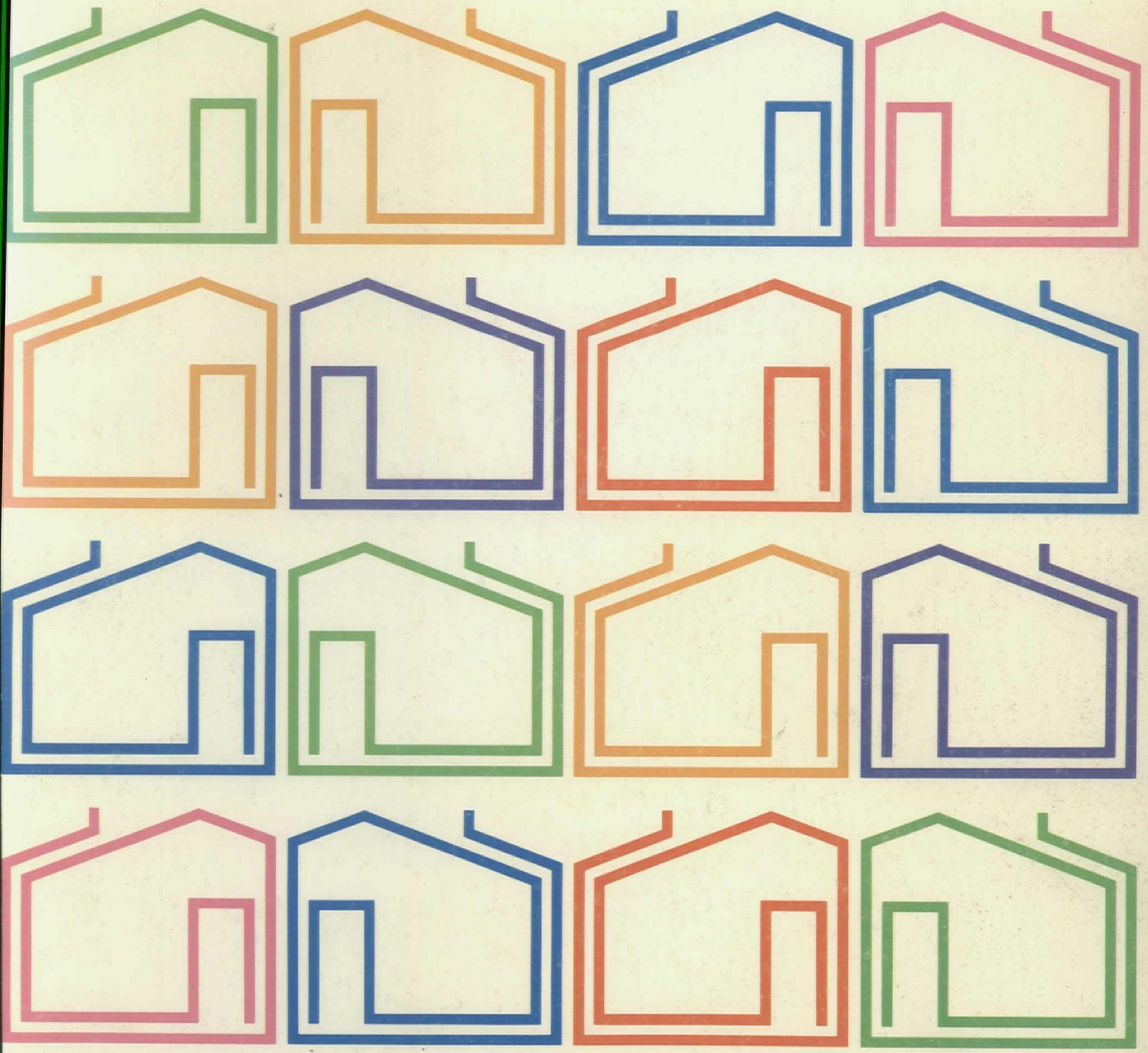
THE HOME TOWNS COME BACK



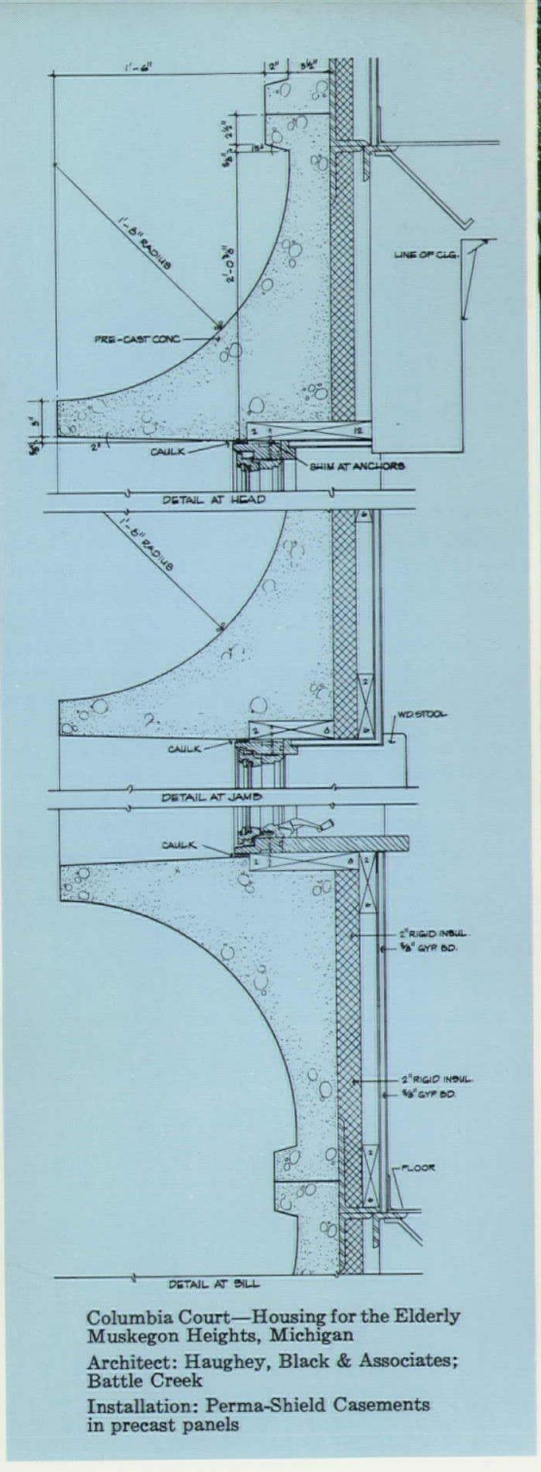
BUILDING TYPES STUDY 496: THE HOME TOWNS COME BACK

HOW ARCHITECTS ARE HELPING REBUILD A WAY OF LIVING IN OUR SMALLER CITIES AND TOWNS

FULL CONTENTS ON PAGES 10 AND 11/SEMI-ANNUAL INDEX ON PAGES 187-190

ARCHITECTURAL RECORD

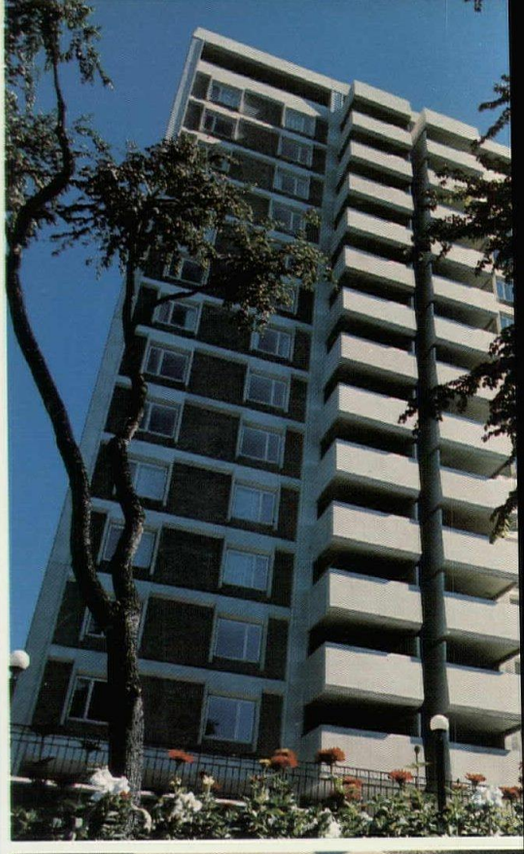
DECEMBER 1976 12 A McGRAW-HILL PUBLICATION FIVE DOLLARS PER COPY



Columbia Court—Housing for the Elderly
Muskegon Heights, Michigan

Architect: Haughey, Black & Associates; Battle Creek

Installation: Perma-Shield Casements in precast panels

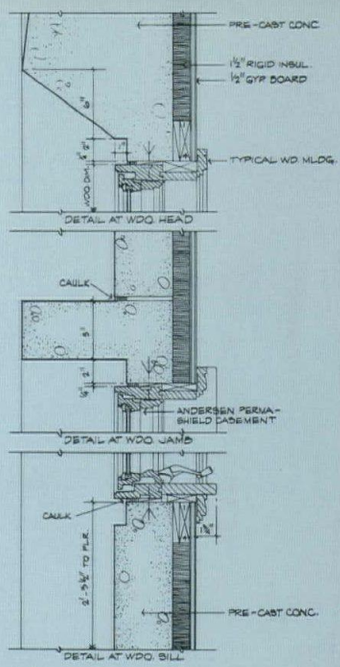


Concrete evidence

Structural harmony was only one of the beautiful reasons why these project architects chose Andersen® Perma-Shield® Windows.

They also knew Perma-Shield Windows have many of the same long-lasting qualities as their concrete surroundings. Because their tough, protective sheath of long-life, low-maintenance rigid vinyl is designed not to rust, pit or corrode. Not to chip, flake, peel or blister.

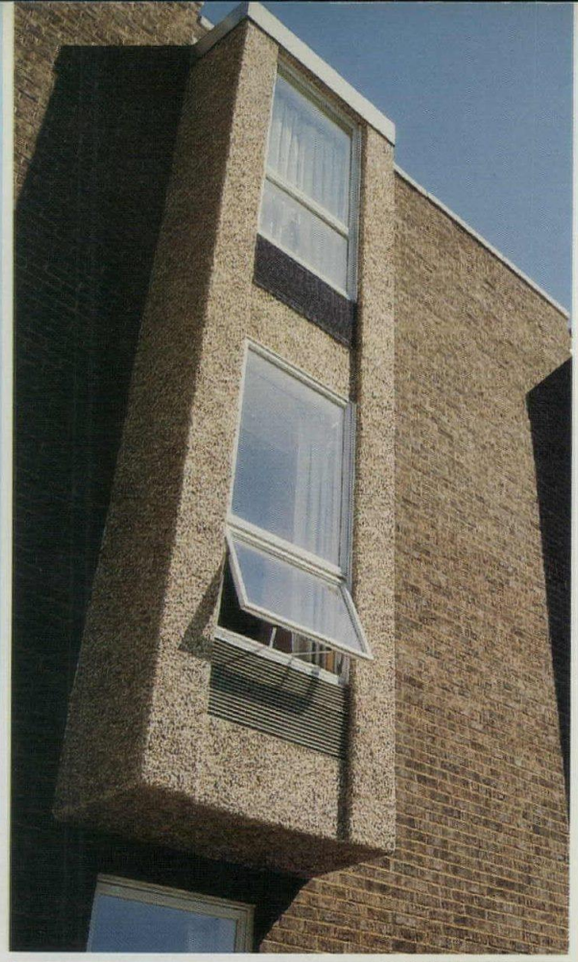
The architects also liked how easily Perma-Shield Windows install into concrete and masonry. And how they keep occupants comfortable while keeping fuel and maintenance costs down. That's because Andersen Perma-Shield Windows are made of treated wood—one of nature's best insulators—then built two times more weathertight than industry air-infiltration standards to help seal out dust and drafts. Help seal in comfort.

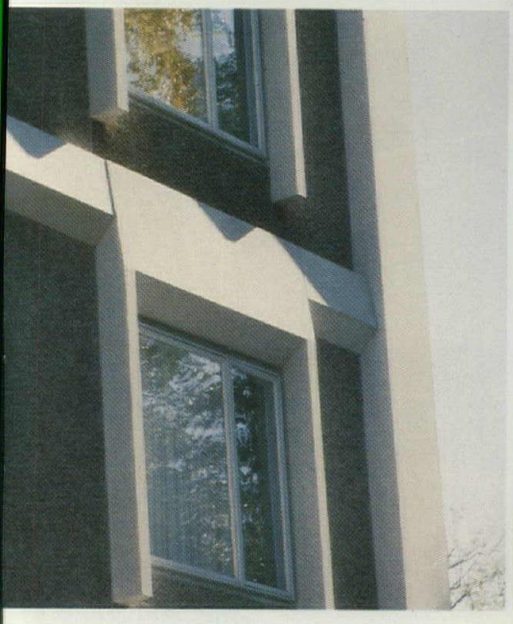


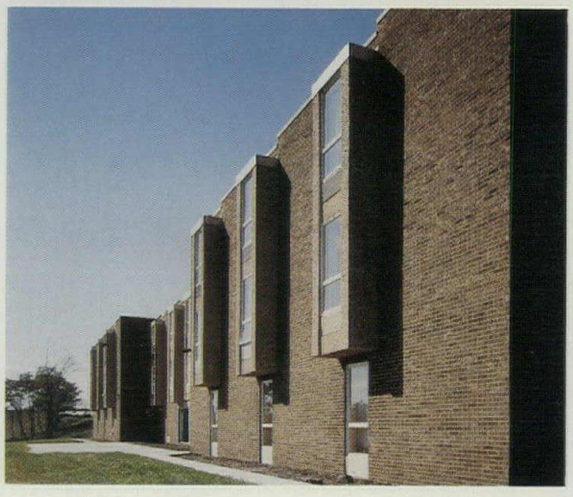
Cheesman Garden Apartments,
Denver, Colorado

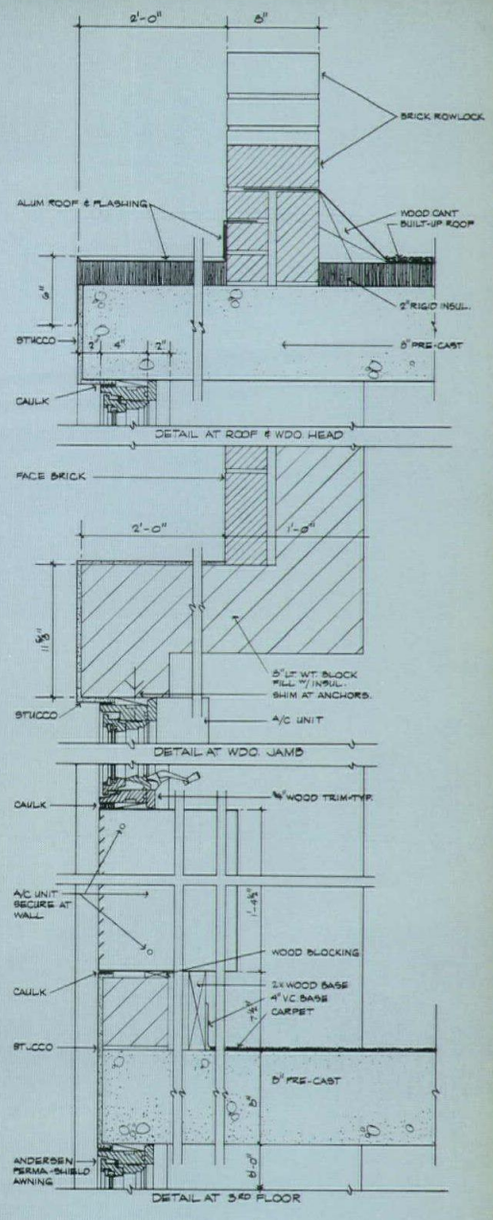
Architect: Slater, Small & Spenst; Denver

Installation: Perma-Shield Casement operating and fixed units in precast frames









Shenandoah College Residence Hall
Winchester, Virginia

Architect: Keith Williams & Associates; Winchester

Installation: Perma-Shield Awning Windows in masonry frame, with stucco facing.

# of Andersen beauty.

And with optional double-pane insulating glass, Perma-Shield Windows can reduce conducted heat loss through the glass area by up to 35% (compared to single-glazed units without storms).

Why not cast your next concrete or masonry design around any of the six Perma-Shield Window and Gliding Door styles? They're all strong evidence of Andersen beauty, comfort, low-maintenance and fuel-savings.

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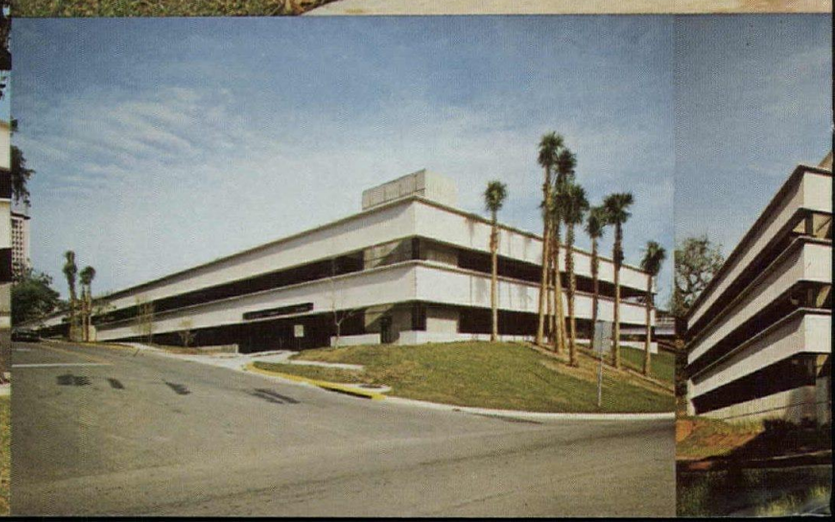

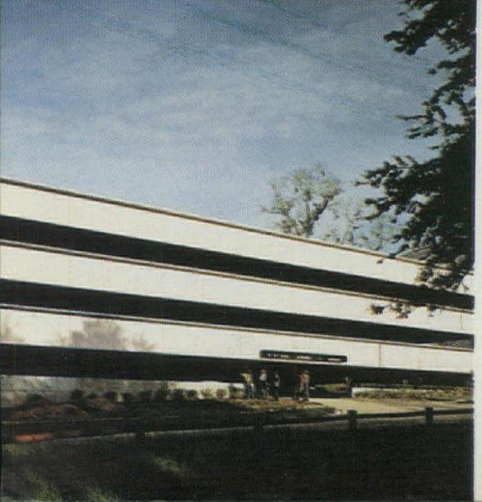

The steel-framed, long-span system: a natural choice for five new Florida parking garages.

Five new open-deck parking garages, accommodating up to 3,402 cars, are serving Florida's state employees in Capitol Center—a complex of government offices in Tallahassee.

The steel-framed, long-span concept was chosen over competitive systems for reasons combining economy, construction speed and aesthetics.

From the start, sites were selected and the respective structures designed with every intention of preserving visual harmony with the existing buildings and landscaping of Capitol Center. The happy result of this careful planning is that most of the trees are still there!

THE GREATEST ECONOMY

As many as eight different structural systems were used as models for evaluation. This in-depth study, which examined construction speed as well as material costs, showed that structural steel framing with composite cast-in-place concrete decks had the potential for the greatest economy.

The decision proved wise. Construction cost per car is figured at approximately $2,400—a unit cost substantially lower than comparable facilities in Florida.

NO FIRE PROTECTIVE MATERIALS NEEDED!

One of the decisive elements in establishing the low-cost estimate for the steel-framing system was the fact that the steel structures could be left exposed and unprotected—except for painting.

Changes in the regulations of a number of building codes (and fire insurance rates) have been effected through a research project carried out at Scranton, Pa., under the auspices of the American Iron and Steel Institute. The dramatic and fully documented Scranton Fire Test was an actual auto burnout in a normally occupied open-deck public parking garage. It confirmed the results of previous tests: *an automobile fire in these structures is a low-hazard fire.*

STANDARD MODULE

For all the five facilities (named Alpha, Beta, Gamma, Delta and Epsilon) the designers selected a standard bay module, which proved to be a major factor in cost-cutting.

Each bay measures 55-ft. wide with a 20-ft. distance between columns and a floor-to-floor height of 10-ft. These dimensions allow angle (58 degrees) parking for standard-size cars and perpendicular parking for compact cars.

Self-parking is, of course, made easier by this amount of long-span, column-free space.

3,446 tons of ASTM A36 steel went into the five facilities which, together, have a floor area of 1,074,909 sq. ft. Only two column sizes were used throughout: W10 x 49 and W10 x 72. All beams are W24's with the majority weighing 68 lbs. per linear foot. Design loads are 50 psf for roofs and floors.

United States Steel is ready to help you with your design of a long-span, open-deck garage. For a Structural Report on the Capitol Center Parking Garages, and for further information, write to U.S. Steel, P.O. Box 86 (C614), Pittsburgh, Pa. 15230. Or contact a USS Construction Representative through your nearest USS Sales office.

USS TRADEMARK **United States Steel**

Owner: Department of General Services, State of Florida.
Architects/Engineers:
Joint venture organization: Barrett, Daffin and Figg, Tallahassee, Fla.
De Leuw Cather, Associates, Chicago, Ill.
Schweizer Associates, Winter Park, Fla.

Steel Fabricators: Joint venture organization: Musselman Steel Fabricators, Inc., (Prime Coordinator), Tampa, Fla.
Aesco Steel, Montgomery, Alabama.
Florida Steel Corp., Jacksonville, Fla.
Steel Erector: North Florida Erection Co., Inc., Jacksonville, Fla.

For more data, circle 3 on inquiry card

Letters to the editor

Congratulations on the Engineering for Architecture 1976 (mid-August) issue of RECORD. Your case studies give a very specific and effective view of the leading edge of design practice. For me, these provide fresh insights on needs for new knowledge revealed as designers push the state of the art, and a challenge to put existing, verified knowledge into forms that will best assist best practices in becoming normal practices.

Margaret Gaskie's article on problem solvers gives valuable guidance on qualities of excellence in individuals. It's a challenge to other researchers to seek to influence practice, and to practitioners to put the best available knowledge to work in the service of their clients.

Your Round Table on the Technical Backup for Architecture and the companion editorial illuminate two principal themes: that the practices of designers can promote or inhibit industry's ability to provide good products for good buildings, and that the technical bases for the formulation and use of performance criteria are a vital element in the technical backup for architecture.

I appreciate your efforts to seek out the best in ongoing work and to present it objectively and effectively to your readers. I think it challenges us all to participate in the improvement of building practices.

Richard N. Wright, Director
Center for Building Technology
National Bureau of Standards,
Washington, D.C.

My attendance this year at EDRA 7 at Vancouver, British Columbia was my first experience at an EDRA (Environmental Design Research Association) conference.

My interest in EDRA was increased by the United Nations HABITAT Conference on Human Settlements, which was held about the same time in Vancouver. Encouragement also came from Don Conway, Director of Research Programs of AIA.

I found the experience to be very worthwhile. As previously suspected, I thought many of the papers presented were only good general education and not directly pertinent to architect/interior design use. However, the enthusiasm, interest, dedication and desire of these people to improve the human environment held me spellbound! I spoke at great length with many of the participants and greatly increased my knowledge of the field and how to make the process work in our architecture/interior design firm. Also, I was given the opportunity to participate by reviewing some research papers and involvement in some sessions. They seemed interested in me because of my interest as a practicing architect from a very old firm (established 1853). I now, more than ever, share their concern of getting designers of the environment to design for the human being. Good designers should be able to adapt research data into an environment of good design. These behavioral scientists do *not* want to neglect good design as many designers fear. It is my feeling that good research would add to esthetic design. Most architects would agree that generally a poorly planned building is usually lacking in esthetic design. Much of the fear that designers have is probably not only the methodology, which they don't understand, but even the basic terminology. It requires a new vocabulary that a lot of designers apparently feel keeps behavioral scientists as intellectual untouchables.

I left the EDRA Conference with an even greater enthusiasms for the field of man-environment relations. I also left having acquired some new, very good friends and am looking forward to EDRA 8.

John M. Gibson
Bohlen, Meyer, Gibson &
Associates, Inc.
Indianapolis, Indiana

I was pleased to see the drawings from NIAE in the October issue, especially the one I did for a recreational resort on page 109. It was disappointing though not to be identified while all other sketches and projects credited their authors.

Thomas Hickey
Harry Weese & Associates
Chicago, Illinois

The omission of your name in the credits for the recent NIAE feature was an oversight of the kind we try scrupulously to avoid. Thank you for calling it to our attention.

In a story on the New York State Association of Architects' competition for St. Joseph's Village for Senior Citizens (RECORD, November 1976, page 34), it was reported that third prize was awarded to architect Secundino Fernandez. In addition to Mr. Fernandez, other entrants for this design included architects Paul Benowitz, James McCullar and Masahide Susuki.

Calendar

DECEMBER

13-15 "Solar Energy For Domestic Heating and Air Conditioning," Miami; sponsored by New York University's School of Continuing Education. Contact: Ms. Heidi E. Kaplan, Information Services Manager, Dept. 14NR, New York Management Center, Inc., 360 Lexington Ave., New York, N.Y. 10017.

13-20 Fourth World Congress of Engineers and Architects in Israel, sponsored by Association of Engineers and Architects in Israel, Tel Aviv Hilton Hotel.

14-17 Structural Design Seminar, Steel and Concrete Design Sessions, Milwaukee; sponsored by the University of Wisconsin Extension. Contact: Department of Engineering, UW-Extension, 929 N. Sixth St., Milwaukee, Wisc. 53203.

JANUARY

5-8 American Concrete Institute, 1977 World of Concrete Exposition, Rivergate Exposition Center, New Orleans. Contact: American Concrete Institute, P.O. Box 19150, Detroit, Mich. 48219.

23-26 National Association of Home Builders 33rd annual Convention-Exposition, Convention Center, Dallas. Contact: Stanley Baitz, National Housing Center, 15th and M Streets, N.W., Washington, D.C. 20005.

FEBRUARY

2-6 30th annual meeting of the Society of Architectural Historians, Biltmore Hotel, Los Angeles. Contact: Mrs. Rosann S. Berry, 215/PE 5-0224.

3-5 The National Home Improvement Council Annual Convention, Fairmont Hotel, San Francisco. Contact: Philip Brown Sheehan, 212/867-0121.

14-17 The 1977 International Air-Conditioning, Heating, Refrigerating Exposition, held concurrently with ASHRAE's National Meeting, McCormick Place, Chicago. Contact: International Exposition Company, 200 Park Ave., New York, N.Y. 10017.

MARCH

5-7 The 1977 NHC Annual Meeting and Convention, sponsored by the National Housing Conference, Inc., Statler Hilton Hotel, Washington, D.C. Contact: NHC, 1126 Sixteenth St., N.W., Washington, D.C. 20036.

14-17 NOISEXPO '77, The National Noise and Vibration Control Conference and Exhibition, O'Hare/Kennedy Holiday Inn, Chicago. Contact: NOISEXPO '77, 2711 E. Oviatt Rd., Bay Village, Ohio 44140.

ARCHITECTURAL RECORD (Combined with AMERICAN ARCHITECT, ARCHITECTURE and WESTERN ARCHITECT AND ENGINEER)

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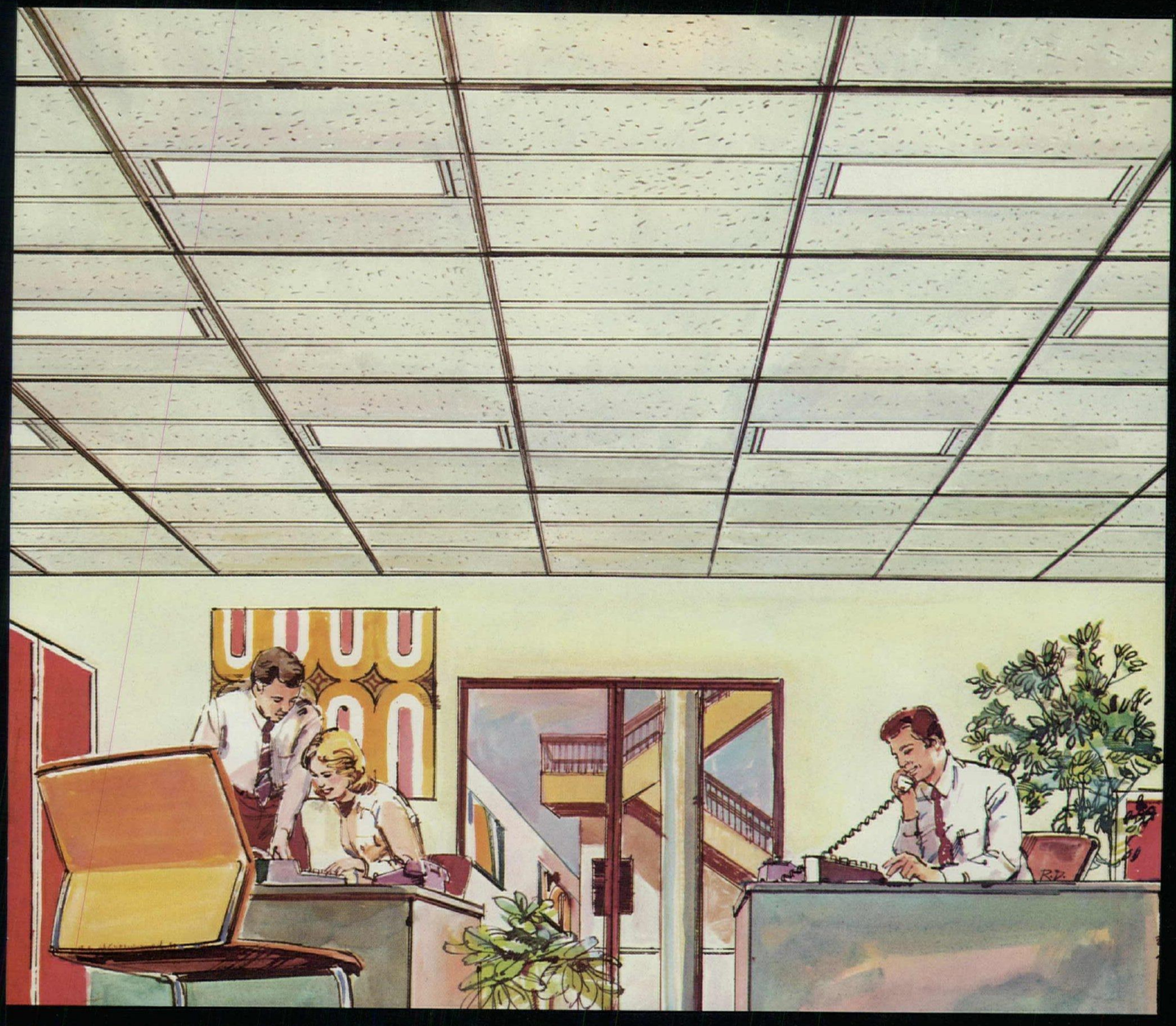

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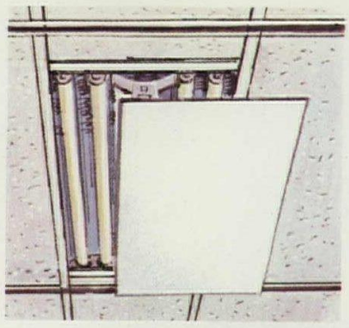

In many instances, the quality of light produced by these panels allows a reduction of at least one lamp in a conventional four-lamp fixture. This lowers the quantity of electric power required and eliminates much of the eye strain associated with nonpolarized lighting.

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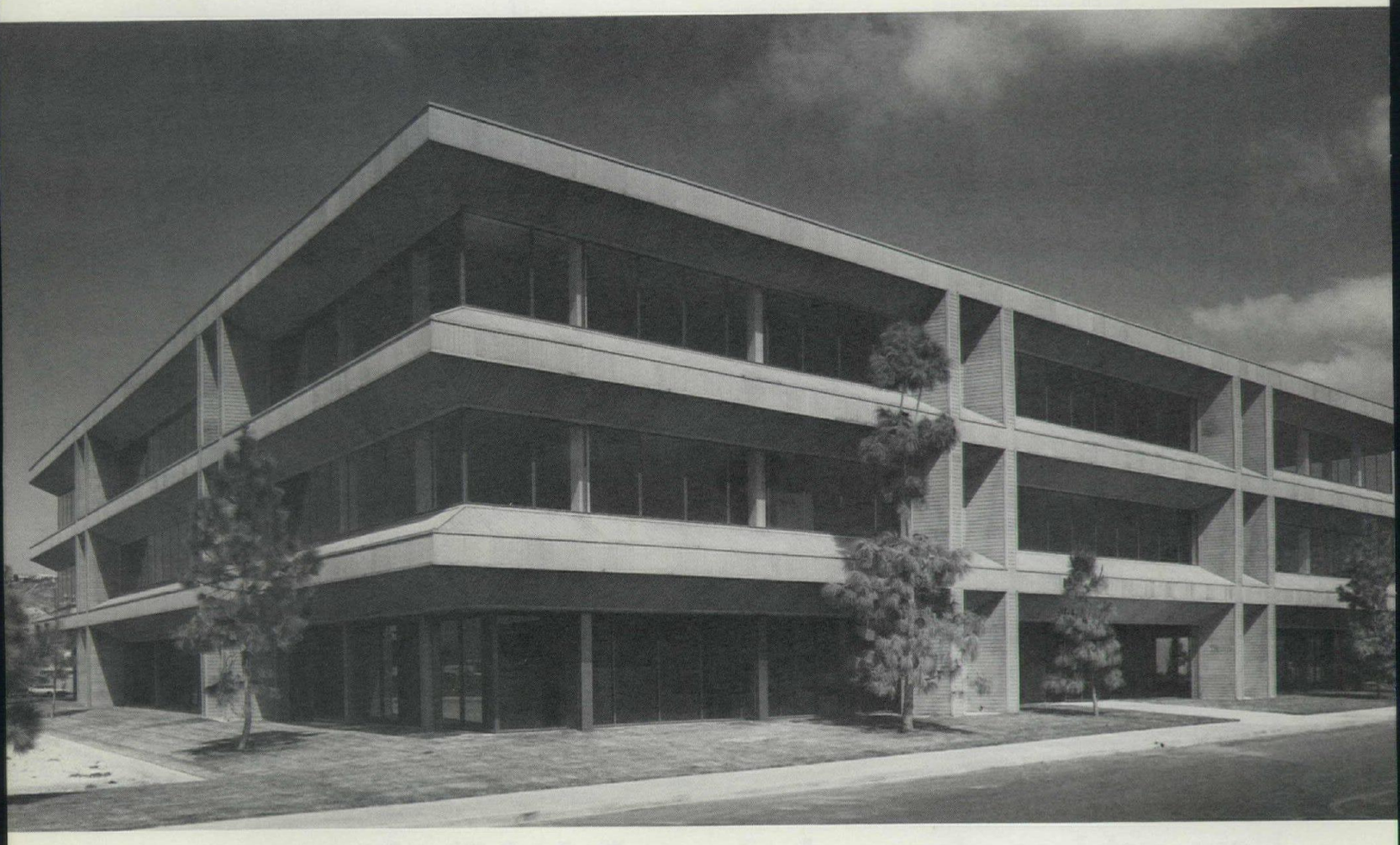

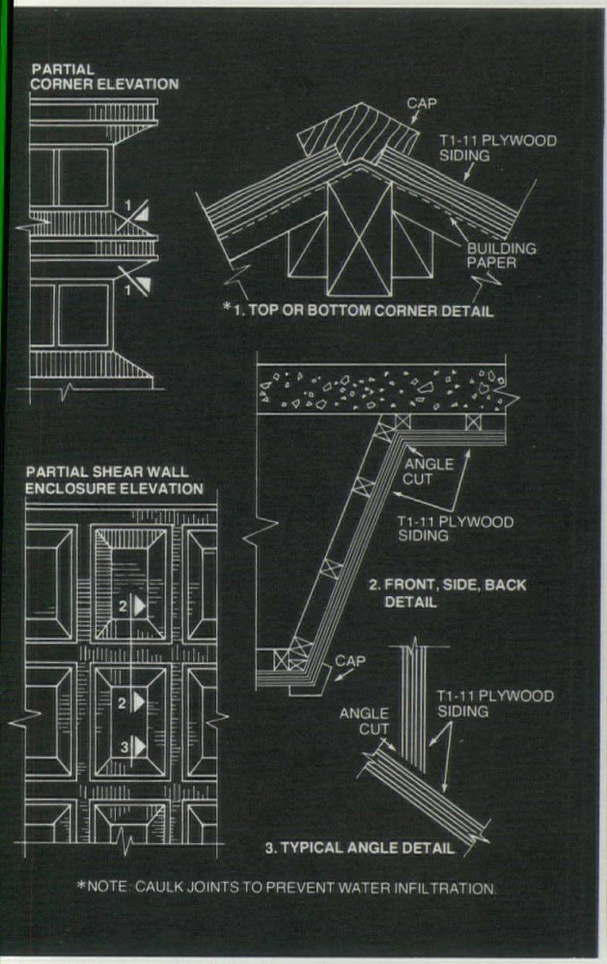

The end of the faceless office building.

Two things are responsible for the unique appearance of this large office building in San Diego, California.

Plywood, and the creative imagination of architect Brian Paul, AIA.

With plywood siding and sophisticated detailing, Mr. Paul integrated the building and its large inner courtyard into a refreshing environment for both tenants and their clients. The inherent warmth of plywood also helped form an empathetic tie with the adjacent residential neighborhood.

Plywood offered economic as well as aesthetic benefits. Shiplapped 5/8" T1-11 siding in a simple design needed only semi-skilled labor for installation. Spandrels were detailed to utilize ½- and ¼-sections of a standard plywood sheet. And as sheathing for the floors and roof, plywood extended its cost savings into the structural system as well.

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ENERGY MANAGEMENT VIEWS FROM THE NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION Vol. 1 No. 2

CONVERSION TO ELECTRIC HEAT PACING ENERGINEER'S* PLANS

In addition to taxes and death, several facts about our society seem fairly certain. About 76 percent of U.S. energy needs presently are supplied by oil and gas. U.S. production of these fossil fuels has peaked and world production probably will peak within 20 years. With the possible end of these fuels in sight, it seems logical that we should now be shifting our energy dependency to more abundant fuels such as coal and nuclear power. The best way of using these fuels, safety and environmental concerns considered, is through generation of electricity.

Since over 68 percent of electric production already is generated from coal, hydro and nuclear fuel, we can use less of our preciously depleted oil and gas reserves if we begin now to shift all applicable energy demands to electricity. Space heating, which draws about one-fourth of all energy use, is a good place to start. Allowing for the heat loss at the remote generator, the energy required for well designed electric space heating is essentially equivalent to direct combustion of oil and gas. Electric heat naturally and logically offers part of the solution to our energy management problems. In fact there are many areas where shortages of gas and uncertainties about oil have already made electric heat mandatory in all new construction.

To learn more about the national trend toward electric heat, NECA recently polled 108 of the 800 largest residential developers. The results are shown in Figure 1. Of 82 developers building single family detached units, 35 stated that all of their units were all electric. Another 12 stated at least half of their units were all electric. Another 13 reported using electric heat to a smaller extent. Of the 74 builders active in the townhouse market, 40 reported installing electric heat in all their units. An additional 6 stated that more than half of their townhouses were all electric. Of the 19 builders in the multi-family high-rise market, 18 reported all total electric dwellings. Concern for the availability and cost of fossil fuels was cited most frequently for specifying all electric (by 33 out of 75 responses).

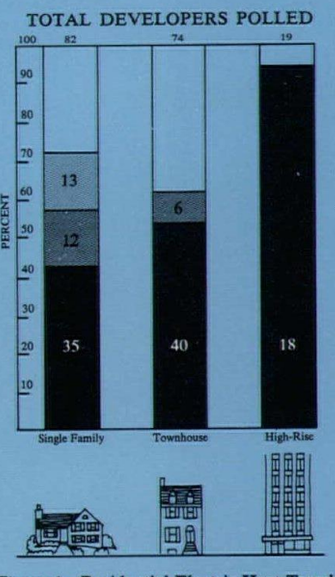

Figure 1—Residential Electric Heat Trends

Other typical reasons cited were low cost single source installations, individual tenant control, operational convenience, small amount of space needed, lower capital investment, customer preference, design adaptability, better utility service and lower operating costs. Competitively negotiated electrical installations were preferred by 81 to 27 over award to the lowest bidder. Contracting directly with specialty electrical contractors was preferred by 80 to 25 over the prime-sub single contract method. Most developers also believe these methods will be more prevalent in the future.

Energineers can select from a growing inventory of electric heating equipment. Either centralized or decentralized systems can be designed for maximum efficiency. Products available for decentralized applications include floor insert units, baseboard convectors, draft barriers, kickspace heaters, wall mounted units, valence or cove devices, ceiling mounts, through the wall packages, heating cable, pre-wired panels, and unit heaters. Centralized systems can employ ducted air heaters, electric furnaces, air to air (or water) heat pumps, and hydronic devices.

The ability to precisely control electric heat, especially in decentralized systems, means that temperatures required in occupied areas can be maintained without affecting adjacent space. A significant energy savings can be achieved by more selective use of heat where and when it is needed. Available control devices include thermostats, demand controllers, modulators, and automatic clock controlled setback devices. Clearly, electricity generated by coal, nuclear and hydro resources should be supplying more space heating energy for our growing residential needs.

Want to learn more? Consult with a local qualified electrical contractor.

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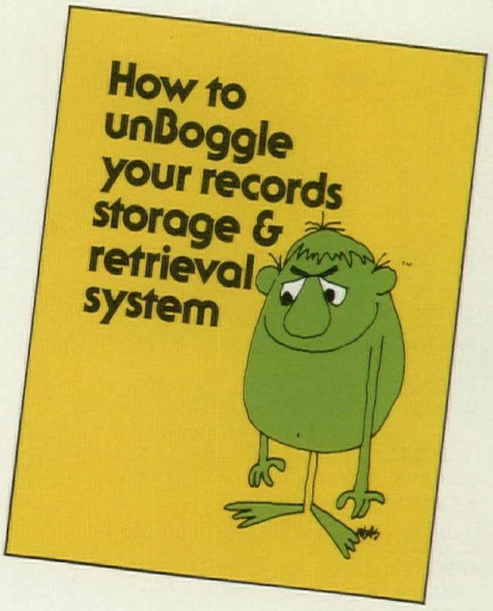

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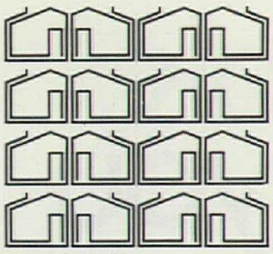


Cover design by
Alberto Bucchianeri

BUILDING TYPES STUDY 496: THE HOME TOWNS

79 HOW ARCHITECTS ARE HELPING REBUILD A WAY OF LIVING IN OUR SMALLER CITIES AND TOWNS

Small cities and towns across the land are being returned to and rehabilitated at a rapidly accelerating pace, and their popularity rests on a most pragmatic base: these renovations are politically visible assets for town executives who are successfully trying to keep industry from moving away to what seem like more viable environments. Architects are joining forces with mayors, bankers, business people, and concerned citizens to rescue their decaying home towns.

This issue consists of eight case studies of places where this is happening—plus an essay on where the money comes from.

82 AURORA

Centered on an island in the middle of a river—similar in potential to Paris's *Ile de la Cité*—this Illinois town had long ago turned its back on its riverfront assets, and had thus virtually forgotten itself. Today, a program of vigorous public reawakening —led by planner Ben-Ami Friedman— has created a wave of public interest that is being combined with the city's aggressive new financing techniques to make Aurora a special place once again.

88 GRANBURY

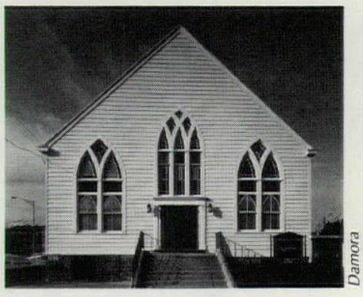
Community pride in this Texas hamlet has stimulated its facelifting and the renovation of many of its major structures, all with private money.

90 BRIDGEPORT

In this Connecticut town, a program of replanning, recycling of worthwhile buildings, and construction of new ones is gaining momentum. This program, initiated by architect Victor Christ-Janer, is being spearheaded by the architect and by the city's largest bank and one of its major manufacturers.

Phase one of the program has so far included rehabilitation of an industrial area into an office, recreation, and shopping center that attracts crowds into this once-rundown district. A smaller but significant aspect of phase one is the rehabilitation of a number of housing districts.

Phase two includes plans to recycle an abandoned railroad station, refurbish a rundown waterfront district, and develop a transportation, office building, and pedestrian mall complex in the "bombed-out" core.



Damora

100 SAVANNAH

This Georgia town is no stranger to historic preservation—but here is a new twist: on the fringes of a designated historic district, dilapidated Victorian houses are being remodeled, not only to sustain the architectural fabric of an area, but to maintain and create much-needed low-income housing.

COME BACK

102 CORNING

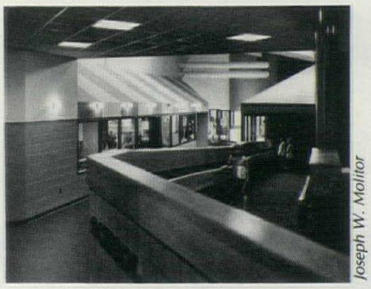
Skillfully coordinated dollars, planning, and design are turning this New York State factory town into a meat-and-potatoes mixture of fine new buildings, fixed-up old ones, fun public spaces, and dusted off heirloom streets.

110 GRAND HAVEN

How a "citizen architect" managed to raise the curtain on the Main Street of this small Michigan town —with the World's Largest Musical Fountain.

112 GANANDA

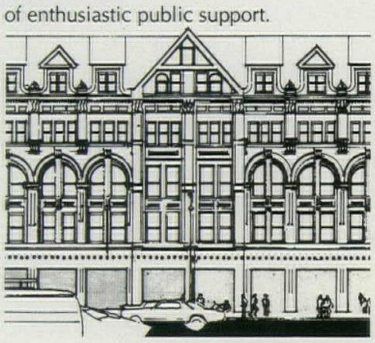
This New York State new town is on the move again after more than its share of troubles, and at the center of its first parts is a building that pays as much attention to asking the right architectural questions as answering them. Urban Design Associates discovered that planning a new neighborhood center can be a game, and they used the game technique to discover what people who would be affected most by the new town liked and disliked. The design for the new neighborhood center, organized along a pedestrian way, evolved directly from the large volume of material produced by the games.



Joseph W. Molitor

120 DAYTON

The Ohio architectural firm of Lorenz Williams Lively Likens and Partners began their work in Dayton with a series of commercial buildings built to standard concepts—but they applied to these buildings as well some more comprehensive goals which are now beginning to pay off in the form of a unified urban center—and in the form of enthusiastic public support.



124 THE EFFECT OF CURRENT METHODS OF FINANCING DOWNTOWN RENEWAL

Significant private investment in renewing the urban centers of our smaller cities and towns usually begins after skilled architects/planners have successfully played the game of "grantsmanship." An important part of the architect/planner's role today is finding funds for preliminary studies and the preparation of plans, as well as procuring construction money to renew the downtowns of U.S. cities. Today's best physical planners know how to put together development proposals that take advantage of monies made available by Federal, state and local programs.

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NEXT MONTH IN RECORD

Building Types Study: Record Interiors of 1977

In this annual feature, RECORD's editors present ten of the most compelling architect-designed interiors in a 28-page section that covers a wide range of building types.

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PPG: a Concern for the Future

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Housing in the city: What could happen if the incentives got shifted around?

Since World War II, most of the incentives offered by the Federal government have, of course, tended to benefit most the middle-and-up-income family who wished to follow The American Dream of a house in the suburbs or exurbs. If the days of low-low down payments and highly subsidized interest rates have now faded in the minds of all but us oldest residents, the ability to deduct mortgage interest payments from one's income tax is still a fine financial incentive for home ownership—especially for those on the upper end of the middle-and-upper-income brackets who tend to prefer the suburbs and exurbs to the city (mostly, in my opinion, though it is not socially acceptable to talk about it, because they are unwilling to send their children to city schools).

For some time now, the Federal government has had, as a matter of national policy, *two* housing goals: One is to encourage a high volume of residential construction, the other is to improve the shelter and environmental conditions of the poor.

While the first goal has met with mixed success (indeed, some pretty unmixed failure lately), it has been met far better than the second. I have not often agreed with HUD Secretary Hills, but she argues an interesting point in a recent letter to *The New York Times:* "Your major false assumption is that 'a high volume of production' will solve the housing problems of the lower- and middle-income families. Past overproduction created problems that we are now working off. Overproduction encouraged us to abandon slightly tarnished city housing for the shiny new, farther out. Overproduction too often turned sound urban housing into boarded and empty deteriorating blight."

The question is, now that the election is over, which way the incentives should be "tilted." Should they continue to favor new single-family housing, or should they be concentrated on encouraging rehabilitation of the urban housing stock—hopefully in some magic balance that will: 1) improve the living conditions of the poor and (even more difficult) . . . 2) improve the conditions in the city to the point that more middle-income, taxpaying, stability-building families will elect to remain in the city, or perhaps even return to it.

Congressman Thomas (Lud) Ashley, who will probably continue as chairman of the House Subcommittee on Housing and Community Development after his re-election last month, made these points to the Building Products Executive Conference in late October:

"I'm strongly of the view that we have relied too long, as a nation, on a single approach—new construction—to achieve both our *social* objective of housing for the poor and our *aggregate* economic objective of an equilibrium between housing supply and demand. As far as the latter is concerned, it may be that economic growth and cyclical stability are best achieved by expanding the supply of middle- and upper-income new housing, with Federal assistance if that's necessary, as has been Federal policy to date. But *social* objectives, it seems to me, are better served by direct subsidy of low-income housing consumption, particularly in a manner that encourages more efficient use of existing stock [that is, rehabilitation] and by coordination of shelter improvements with broader and more concentrated community development efforts. . . .

These strong views of an able, conscientious and powerful man sound like very good news to the poor and to our troubled cities—and are probably a strong signal of a Congressional tipping towards the social goals as opposed to the economic goals, a switch that will probably be speeded by the election of Mr. Carter.

If the incentives do tilt towards urban housing, how would they work?

Mr. Ashley points out accurately that there is "no discernible consensus emerging as to the most cost effective way to deliver decent shelter for those who can't afford it on the private market . . ." and that, specifically, "The Section 8 rental program to date has been a major disappointment."

What is the new thinking? Ashley told the BPEC that "HUD is now seriously examining a revenue-sharing system that would replace all or most of the current categorical programs in the Federal housing field. This system would be based on a national formula tied to statistical indices of need, such as population, extent of housing overcrowding, physical deterioration, and high rent-to-income ratios. It could also take into account prior local efforts in the housing field, such as active public housing agencies or large municipal rehabilitation loan programs, either in the formula or under a 'hold harmless' clause guaranteeing minimum funding for several years.

"It would be structured in a manner similar to HUD's two-year-old community development block grants program. It would provide set amounts on an annual or multi-year basis and distribute the bulk of the money to cities and counties across the country according to their qualifications under the formula. Communities would have broad, Congressionally defined limitations on how they could spend the grants, but nearly total freedom beyond that. The program would be linked closely to the Community Development Block Grant cycle in order to ensure coordinated housing and redevelopment efforts."

But would even a new push like this really help the cities? It would help, but . . .

There are a lot of questions that need to be asked and answered before such a switch, however socially desirable, is made.

Question 1. How much of a funding commitment are we as a nation prepared to make for this new effort? Congressman Ashley suggests that "the new program would be funded at levels equal to or in excess of the total annual subsidy assistance provided by HUD for the categorical programs that would be folded into the new system. This would mean $2.5 to $3 billion in annual outlay authority. . . ."

That sounds awfully heavy—*until* you put things in perspective and realize that in *each* of the years 1971, 1972, 1973, 1974, 1975 (tough year, right?) and 1976 we spent over $10 billion for roads and highways; or realize that the "new Navy" others in Washington are promoting is budgeted (before the inevitable "overruns") at some $155 billion.

But the question remains: Are we willing to make this kind of a commitment on behalf of the cities and on behalf of the poor?

Question 2: Should we spend this much money without any real assurance that it will solve the real problems of the cities? If we did spend the money it might provide, at long and way overdue last, that "decent housing" promised way back in the Housing and Urban Development Act of 1968. But it would not solve the cities' other very real problems—problems of not enough jobs, problems of too many illegal aliens, and the sad, but unavoidable, social problem that "the rich love the poor, but they hate to look at them." Building better housing for the poor is not going to bring back to the cities the middle-income taxpayer—and that is what the cities need most.

Myself, I think that the switch in housing incentives from suburban to urban is long overdue—I think it's about time we began to help the cities at the expense of the suburbs, about time we did something about housing those least able to help themselves.

But I wish I knew before we made such a massive commitment whether it would really help solve the city's basic ills—which are social as much as they are economic.

—Walter F. Wagner Jr.

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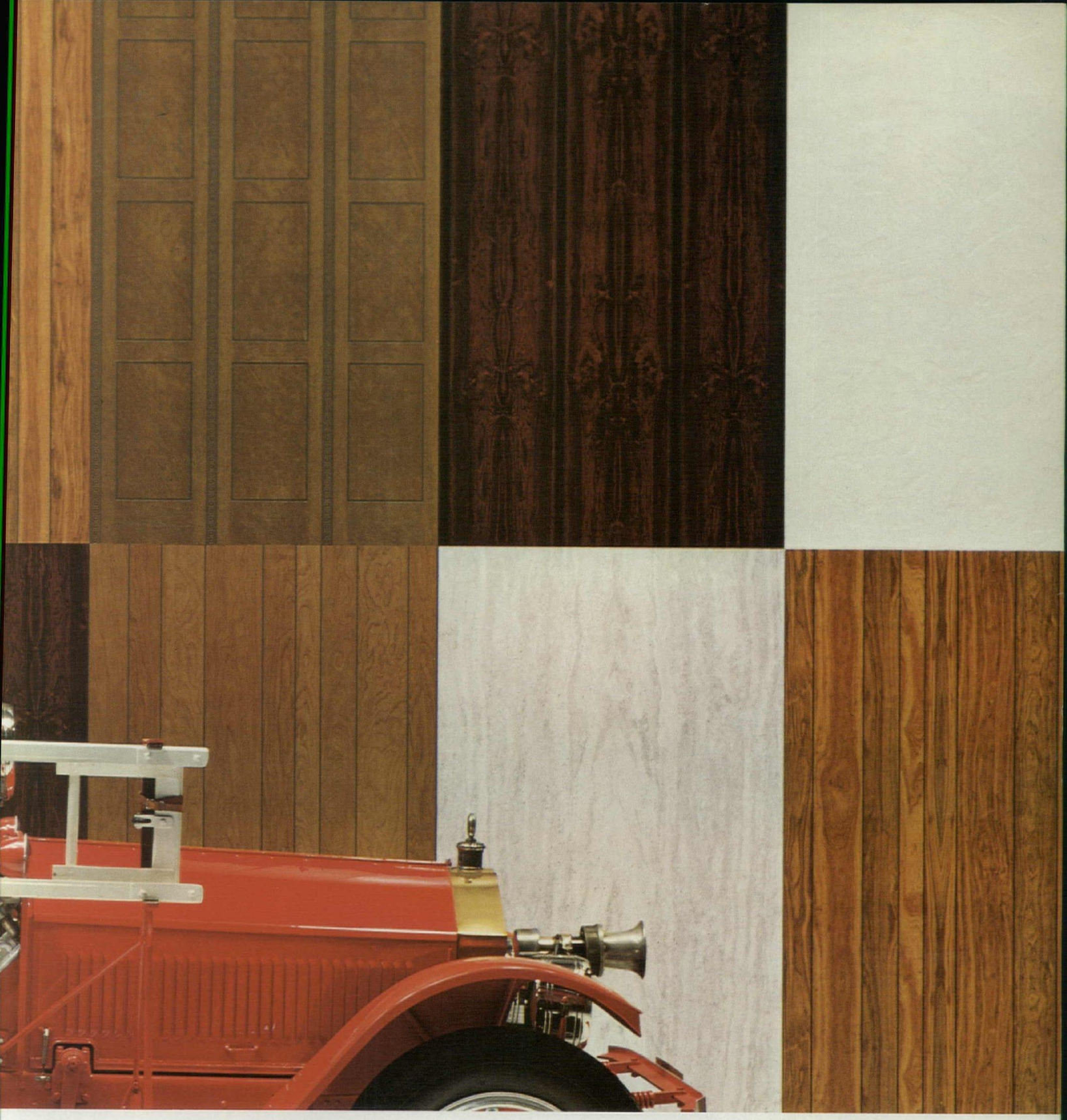
Brand Paneling



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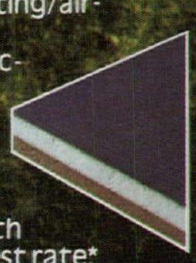

Fuel costs will also go down dramatically—with savings of $1,800 the first year and $50,514 over the 20-year life of the roof. This is based on an escalation of 10% in fuel costs for the next 5 years. Net savings will add up to $70,514 with a present worth value of $40,629 based on a 10% interest rate.*

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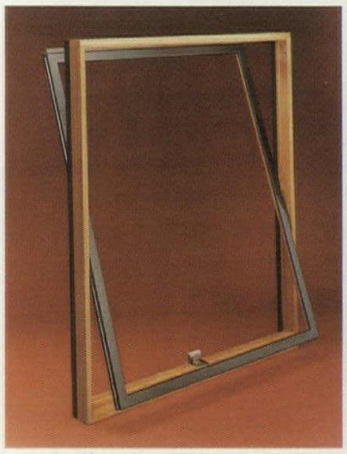
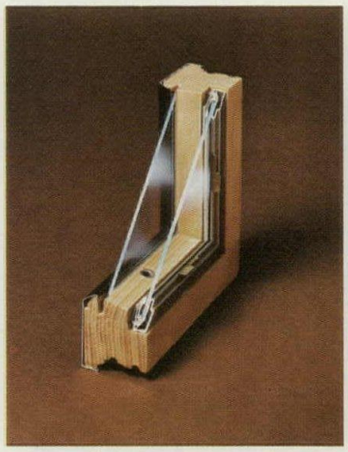
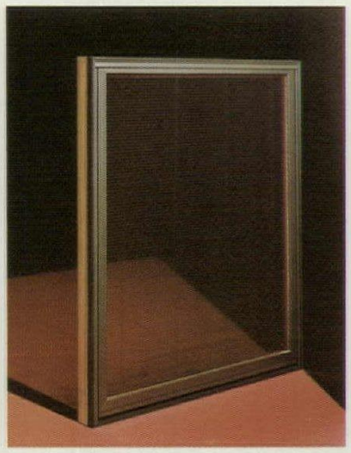
For complete specifications fill in and mail the coupon today.



Pivot sash brings outdoor glass surface inside for fast and economical maintenance. When pivoted, the sash is held in washing position by a catch.



Pella's *Energy-Tight* Double Glass Insulation System has 13/16" dead air space between panes—provides maximum insulation at lowest costs. Insulating glass also available.



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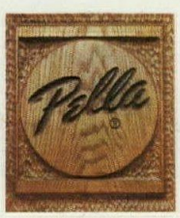

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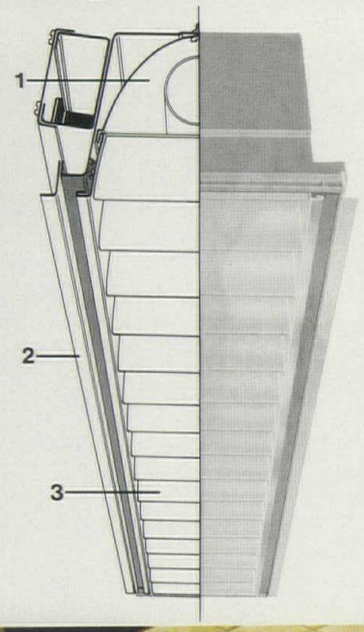
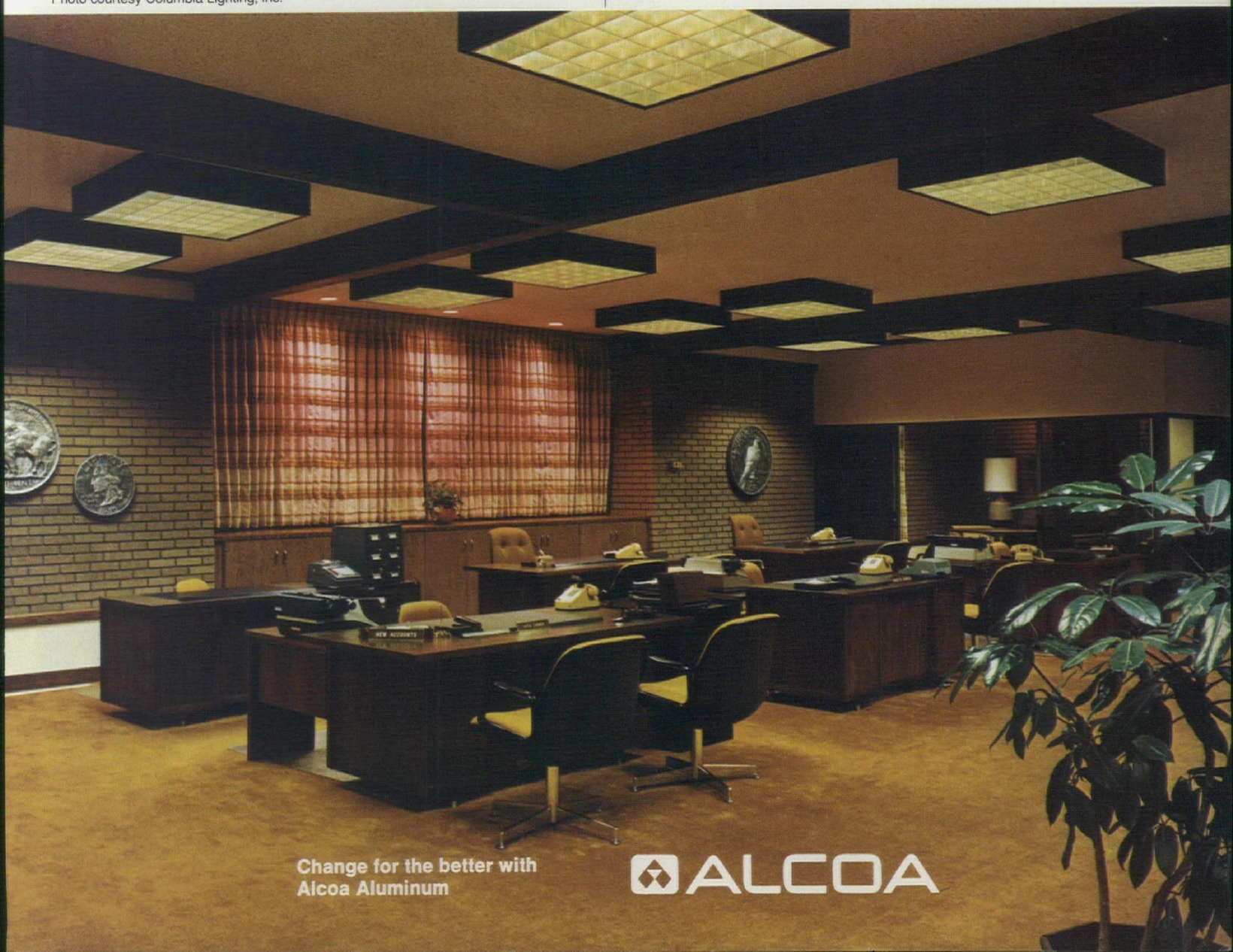


1. One-piece constructed Coilzak reflector with accurately controlled parabolic shape.
2. Extruded aluminum trim.
3. Coilzak parabolic baffle assembly.

Photo courtesy Columbia Lighting, Inc.



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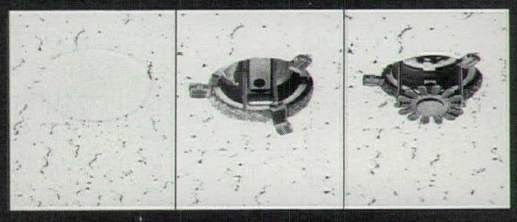

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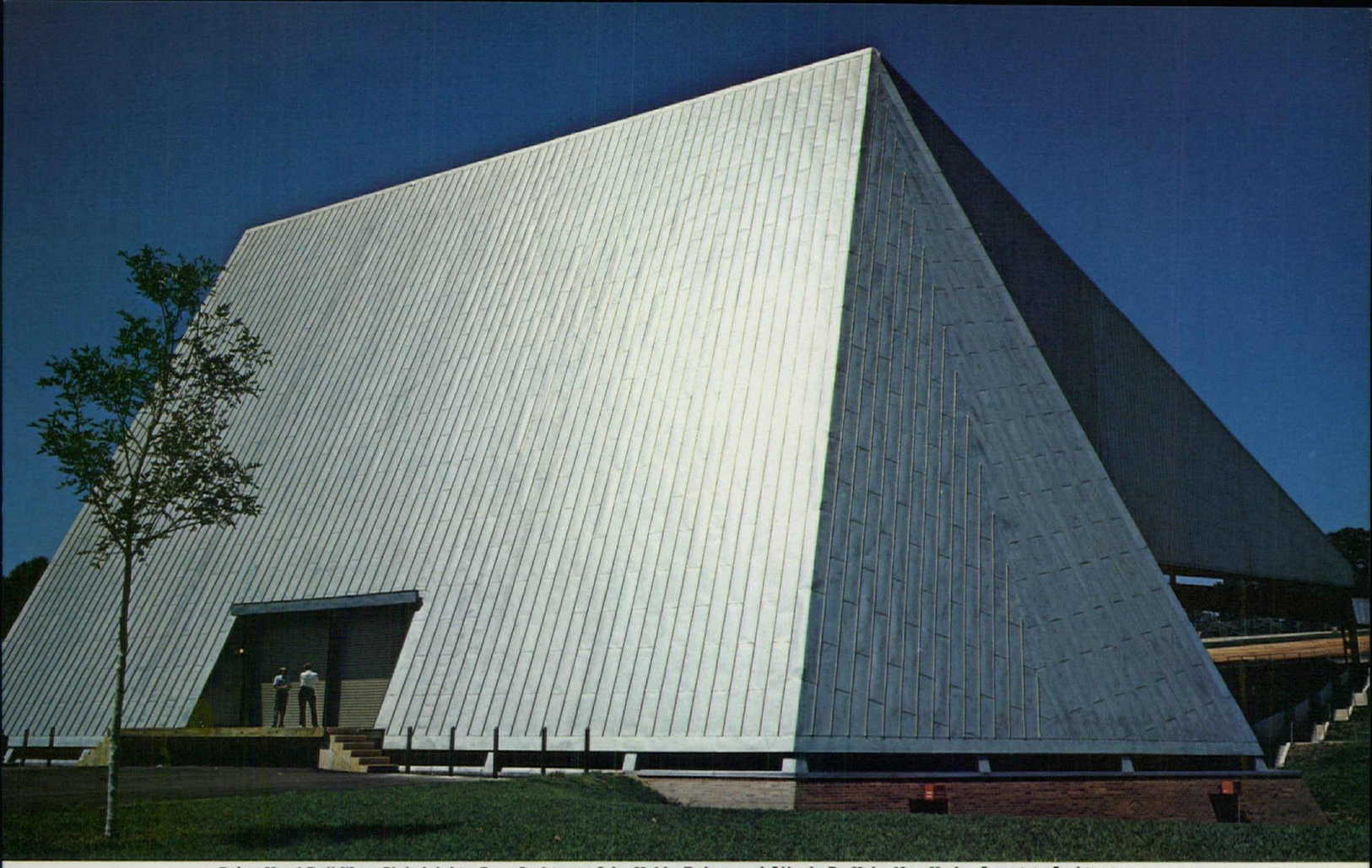

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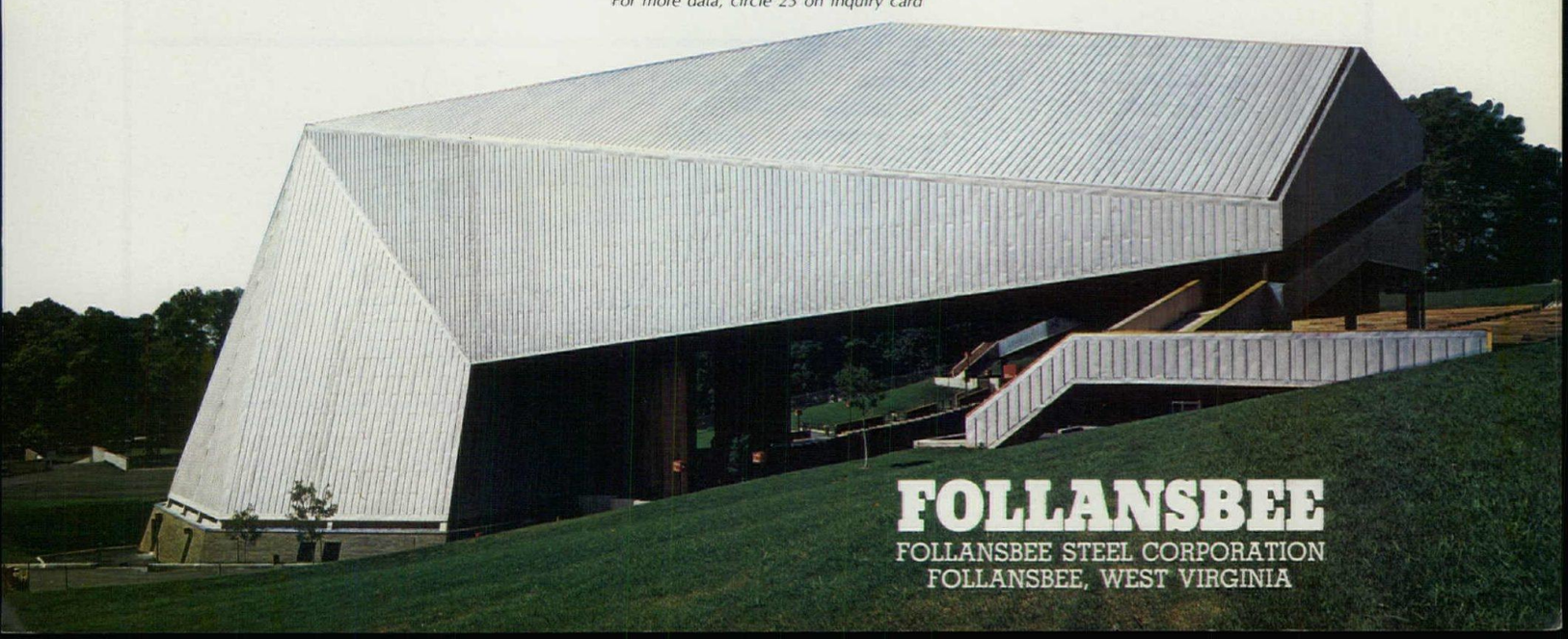

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Gains in building contracts pushed construction figures for September up seven per cent above September 1975, according to the F. W. Dodge Division of McGraw-Hill Information Systems Company. Nonresidential contracts for the month, totaling $2,875,323,000, rose 17 per cent above the figure for the same month last year, while residential work totaled $3,758,206,000, for a gain of 27 per cent. Increases in residential construction appeared in both single-family and apartment units. Nonbuilding construction fell 32 per cent from last September's figure for a total of $1,478,-241,000. The cumulative total for the first nine months of 1976 construction is $77.4 billion, a gain of six per cent over the same period in 1975.

Construction costs are still rising, but at a considerably slower rate than they rose last year. During the 12-month period ending September 1976, the cost of construction materials and labor rose an average 6.2 per cent, compared with last year's average 9.3 per cent, according to a report released by the Dodge Building Costs Service Department of the McGraw-Hill Information Systems Company. Regionally, increases were higher in the West than in the East, with the highest increase, 9.4 per cent, registered in the Pacific Coast and Rocky Mountain States, and the lowest, 4.4 per cent, in New England.

President-elect Carter's administration is expected to encourage construction activity, particularly housing, in its efforts to stimulate the economic recovery. Details on page 34.

Alaskans elected in November to move their capital city from Juneau to a new site in the Talkeetna Mountains near Anchorage. Details on page 35.

The notion that housing money should flow to the cities rather than the suburbs is getting more than lip service these days. The Federal National Mortgage Association (FNMA) has announced the formation of a task force in St. Louis to develop special expertise in urban lending, and it intends to buy as much as $10 to $12 million in residential mortgages in areas of the city "where the infusion of money for home improvements and home loans can make the difference between new vitality and continued deterioration." (For remarks on the same subject by HUD Secretary Carla M. Hills, Congressman Thomas Ashley and editor Walter F. Wagner, Jr., see Editorial, page 13.)

New officers of the National Institute of Building Sciences include David S. Miller as vice chairman and Robert A. Georgine as secretary-treasurer. Mr. Miller is president of David S. Miller and Associates, Inc., Cleveland, and Mr. Georgine is president of the Building and Construction Trades Department, AFL-CIO. O. M. Mader, group vice president of Consumer Products, Aluminum Company of America, serves by Presidential appointment as chairman of the newly chartered group.

The Seagram Company has asked New York City to designate its Mies-designed headquarters building a landmark. Such action would require amendment of the city's Landmark Preservation Law, which exempts buildings less than 30 years old from the property encumbrance implicit in the designation. The company's stated reason for requesting landmark status is "our resolve to preserve for New York City, in perpetuity, the building's architectural and esthetic integrity." Taxation may also have a role in the resolution: Seagram, which is taxed on the value of its prestigious architecture, may be taking advantage of recent Federal legislation favoring historical buildings.

An exhibit titled "Clarence S. Stein, America's Environmental Architect" will open December 1 at the Washington headquarters of the American Institute of Architects. Organized by the Clarence S. Stein Commemorative Committee of the Institute, it will remain on view through January 31 and will thereafter travel around the United States and to England and Scotland.

Sculptor Alexander Calder died in New York City on November 11 at the age of 78. Mr. Calder, who gained fame for his mobile sculptures and for his monumental stabiles, was in New York to mark the opening of a major retrospective exhibition of his work currently on view at the Whitney Museum. The American Institute of Architects awarded Mr. Calder its Fine Arts Medal for sculpture in 1961.

The Department of the Interior has allocated $16.5 million for historic preservation grants-in-aid to states, localities and the National Trust for Historic Preservation. Interior Secretary Thomas S. Kleppe says that the states will receive about $13.9 million for preservation surveys and plans, as well as for the acquisition and restoration of properties listed in the National Register of Historic Places. The National Trust will receive about $2.5 million.

The fifth national Federal Programs Conference for architects and engineers will be held February 24-25 in New Orleans. Representatives of 30 participating Federal agencies will brief design professionals on opportunities in the Federal marketplace. The conference is sponsored by the Committee on Federal Procurement of Architectural/Engineering Services (COFPAES).

Carter's campaign promise to stimulate the economy may have quick effect on construction, particularly housing

The election of Jimmy Carter as President of the United States will impact on the construction industry's pocketbook in at least two important ways:

- Carter will move rapidly to use the tax, monetary and subsidy powers of the Federal government to spur the sagging economic recovery. One of his aims will be to encourage more construction activity, particularly in the housing sector.
- Unionized construction labor is likely to become more militant in its wage and other demands under a Carter Administration. Though Carter claims to be beholden to no special interests, it is clear he owes much of his narrow victory to the efforts of organized labor, including the building trades.

At the top of Carter's list of priorities will be action to get the economy moving upward more rapidly, either through a quick tax cut, a tax rebate, increasing Federal spending, or some combination of these. At the same time, the new Administration will urge the Federal Reserve Board, an independent agency, to help keep interest rates down with a relatively "easy" money supply policy.

The new Congress convening next month will almost certainly go along with any economic stimulation package Carter seeks. The Congress is still solidly Democratic in political makeup, and the majority will bend every effort to cooperate with the new Democratic president.

Though Carter vows to push for faster economic growth and to cut unemployment to 4.5 per cent, he insists that this does not preclude achieving two other seemingly contradictory goals—holding inflation in check and moving toward a balanced Federal budget.

Speedier economic growth averaging 5.5 per cent over the next four years, will generate enough extra Federal revenues, Carter argues, to help him pay for his ambitious legislative program and balance the budget by the end of his first term. At the same time, he insists the rate of inflation can be pushed down to 4 per cent. To dampen the inflationary potential of a faster economic expansion, Carter will try to establish voluntary wage-price guidelines through a strengthened Council on Wage and Price Stability, seek pre-notification to the government of major price hikes, and pursue a vigorous policy of "jawboning," using government inquiries and statements to combat unjustified price hikes.

As another part of its effort to combat inflation, the incoming Administration will enlarge the Council of Economic Advisers to include a group of government specialists who will identify potential material shortages and plant-capacity bottlenecks before they impose inflationary problems.

Organized labor will try to cash in on the debt Carter owes it by pushing him to support at least two major pieces of labor-oriented legislation: legalizing common-situs picketing, and repealing Section 14 of the Taft-Hartley Act.

It is now illegal for a union having a dispute with one contractor on a multi-employer project to picket the entire construction site. Congress passed legislation to legalize such site-wide picketing earlier this year, but outgoing President Gerald R. Ford vetoed it, infuriating the building trades and other segments of organized labor.

Section 14 of the Taft-Hartley Act authorized state "right-to-work" laws, which prohibit compulsory unionism. Twenty states now have such laws. Since many of these states are in the South, Carter's native region, the new President will be caught between a rock and a hard place in trying to please both his Southern and labor supporters on the issue.—*Herbert Cheshire, World News, Washington.*

OCF bestows its annual energy conservation awards

In its fifth annual energy conservation awards program, the Owens-Corning Fiberglas Company honored six architectural firms—three with honor awards for energy-conserving design, the others with honorable mentions.

Winners in the program's governmental category were Kansas Architects and Planners Associated of Lawrence, for their design of the Federal Office Building in Topeka (at top right). (The firm is an architectural joint venture involving Eicholtz and Groth, AIA, Kivett and Myers, AIA, Platt Associates, AIA, Woods and Starr, AIA, and Peters, Williams and Kubota, P.A.) The building was commended for its use of available technology to achieve savings in energy consumption, which equals about a quarter that of pre-energy-crisis buildings. Judicious orientation and a well-insulated wall—the U-factor is reported as .051—allowed the building to be operated entirely by electricity, a decision taken after extensive engineering and economic analysis. Mechanical/electrical engineers were TEC, Inc., of Lawrence.

In the institutional category, Allen & Miller Architects of Santa Ana, California, took first prize for the Fremont Elementary School, Santa Ana (center right). The building is submerged in the earth and has a park-like playground on its roof. The berms (about a third of the exterior concrete wall is so protected) and the placement of unair-conditioned spaces at the periphery reduce heat transfer, delaying heat gain until late afternoon. Martin and Tranberger did the structural engineering, and F.T. Andrews, Inc., were the mechanical engineers.

Stephen B. Jacobs and Associates, New York City architects and planners, and Mountbatten Equities, a development firm, were named winners in the program's special category, for Printing House, an industrial loft building converted to a housing and commercial complex (bottom right). A 300-panel solar collector on the roof will use a 9,000-gallon water tank, previously used for the sprinkler system, for hot-water storage. Harold Rosen Associates were the mechanical engineers.

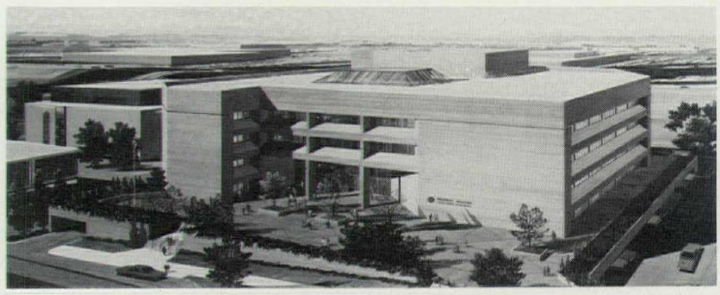
Honorable mentions were given to the following firms:

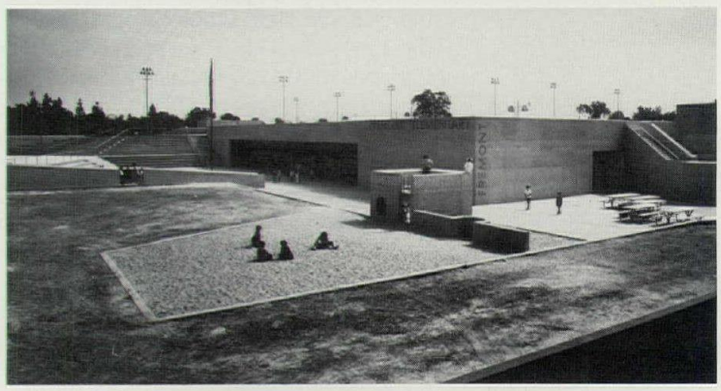
Unthank Seder Poticha, Architects, Eugene, Oregon, and Marquess Engineering Co., mechanical/electrical engineers, in the institutional category, for the Lane County Public Service Building, Eugene, which uses circulating warm water and an ornamental pond to insulate the roof. (Deciduous vines overhanging the window screen sun in summer, admit it in winter.) The building also uses a 200,000-gallon storage tank to offset peak cooling demands.

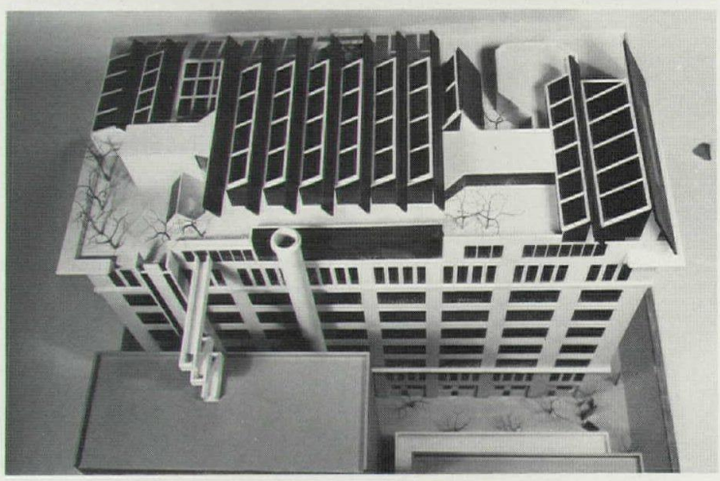
Taylor and Collum, Architects, Atlanta, in the commercial category, for the Shenandoah, Georgia, Solar Community Center, a multi-purpose recreational building that uses solar energy for domestic hot water, 95 per cent of its heating, two-thirds of its cooling, resurfacing the ice rink and heating the outdoor pool. Solar design was by Dr. J. Richard Williams of Georgia Institute of Technology, and Newcomb and Boyd did the solar system engineering.

Arthur Cotton Moore/Associates Architects, Washington, D.C., in the institutional category for the Madeira School, Greenway, Virginia, designed around a 4,600-sq-ft aluminum solar collector that uses oil as a heating medium, and that provides domestic hot water and space heating. Flack and Kurtz were mechanical/electrical engineers.

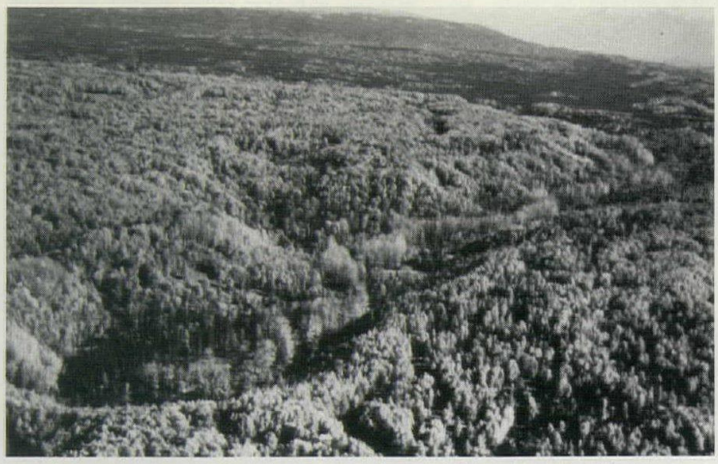
Members of the awards jury included Nathaniel Curtis, partner, Curtis & Davis, architects; Samuel Hack, director of facilities and construction management, Energy Research and Development Administration; William Louie, vice president, Smith Hinchman & Grylls; Charles Schaffner, senior vice president Syska & Hennessy, Inc., engineers; John Street, chief architect, John Portman Associates; and C. Herbert Wheeler, professor of architectural engineering, Pennsylvania State University.







Alaskans choose a site for a new state capital



Alaskans voting in the November elections issued a clear mandate for the removal of the state capital from Juneau to a site near the town of Willow, outside of Anchorage.

In one of the most controversial issues affecting the state in recent years (RECORD, February 1976, page 34), the largest number of voters in Alaskan history turned out. With 91 per cent of the precincts reporting, 51,239 persons voted for the Willow site for a showing of 52.9 per cent. For the other two sites under consideration on the ballot, 30,688 votes were cast for Larson Lake (31.6 per cent), and 14,881 votes for Mt. Yenlo (15.3 per cent).

The Willow site is situated in the southwestern foothills of the Talkeetna Mountains near the historic farming and homesteading area of the lush Matanuska Valley, approximately 30 miles (by air) from downtown Anchorage (a distance prescribed in the original initiative passed in 1974).

According to the initial cost studies, the Willow site will be the most inexpensive of the three to develop, no doubt an influential factor in swaying voters to this selection.

Legislators will start to plan in January, when the legislature convenes, for the development, its financing and the capital's new name. The financing will be by one of four methods: through general obligation bonds, from a permanent government fund (also approved by the voters in this election) to be composed of a minimum of 25 per cent of oil and gas royalty dollars, through the sale or lease of land, or from Federal sources. By law, the move to the new capital city must begin no later than October 1, 1980.

The architectural firm Crittenden, Cassetta, Cannon/Hellmuth, Obata, Kassabaum had been hired as the prime consultant to the Capital Site Selection Committee, to conduct studies and to recommend the three potential sites.—*Janet Nairn.*

Building economists predict continuing improvement

According to a number of economists performing their customary year-end forecasts, the housing industry will continue its growth through 1977.

Housing starts next year will be up 15 per cent to a level of 1.7 million, according to Michael Sumichrast, economist for the National Association of Home Builders. That compares with this year's expected 1.5 million.

Sumichrast projects (from data produced by the NAHB econometric forecasting model) that the increase will come largely from multifamily units. These are forecast to rise 35 per cent to 472,000 units—compared to 348,000 for the current year. Single-family housing starts are pegged at 1.3 million next year, up from this year's 1.1-1.2 million.

William Smolkin, New Orleans-based housing consultant, says that he is "more optimistic than the figures give me the right to be." He put next year's starts at 1.9 million—1.5 million single-family units, and 400,000 multifamily units.

The housing recovery—mostly visible in single-family starts—took on a broader economic significance when September's census figures showed a big leap in multifamily starts and another solid advance for the already high-riding single-family part of the industry.

The annual rate of 1.8 million in September was 18 per cent higher than the August figure, and 39 per cent higher than September of last year. Single-family starts, seasonally adjusted, hit 1.3 million in September, the second highest September on record.

The big increase over August starts, Sumichrast says, confirms "a very solid recovery" in housing activity. Housing Secretary Carla Hills, who hoped some such breakout would come before Election Day, quickly pointed out that "even if we don't start construction of another new home this year, the total for 1976 will be . . . better than all of last year, than 1974, than 1970, 1969, 1968, 1967, or 1966." Single-family starts had hit a level of 1.3 million in January, and then declined slightly. But multifamily activity was in September about double what it was as the year began.

Mrs. Hills says the increase in multifamily starts—to a seasonally adjusted 519,000 units, the highest in several years—"reflects in part" activity finally turning up in the Section 8 subsidized housing program.

John C. Weicher, the top economist in the Department of Housing and Urban Development, says "a major factor" in the multifamily sector is that "interest rates have been heading down." Earlier Mrs. Hills had cut the maximum interest rate on government-insured mortgages from 8.5 per cent to 8 per cent. Conventional mortgages average around 9 per cent.

continued on page 37

Los Angeles council approves redevelopment project for 255-block business district

After a 10-month planning moratorium, Los Angeles' 255-block central business district redevelopment project got the go-ahead from the City Council.

The project, initially approved by the council last year, includes seven planning areas, encompassing housing, commercial-parking and industrial-parking districts, as well as public land for open-space recreation (see RECORD, September 1975, page 37). When opposition to the project grew in the city's San Fernando Valley and other suburbs, however, the council halted everything pending study by a citizen's advisory committee.

According to the committee report, "One single fact stands out about the central city. A viable consumer base is essential for both small and large retail outlets to survive. The outward migration creates a vacuum resulting in a depressed job market and an expanding Skid Row."

The report concludes that Los Angeles must support the concept of a downtown residential community—and it defines as a target the construction of at least 20,000 housing units, not only to replace low- and moderate-income housing that now exists in unsafe buildings, but also to provide market-rate housing attractive to single people, young couples, older couples with grown children, and people interested in living near work.

At present, there are some 18,000 permanent downtown residents, many of them senior citizens. Except for 1,200 upper-income units in high-rise apartments, no new housing has been built downtown for decades.

The council has allowed $346,000 for work during the first year, but it has also surrounded the project's financing with some tight controls.

No more than $750 million in tax-increment financing can be spent in the next 20 years, and no more than $75 million in any single year. (This funding technique applies tax revenues accruing from improved property values to defray the costs of further redevelopment.) The council has also indicated that the use of private capital should be encouraged ahead of tax-increment financing, and that development projects are to be aimed at the most blighted areas of the CBD.

In addition, the council must approve every substantial transaction, such as sales and leases, as well as each year's rebuilding schedule. Specific cost information must be made public.

And a new advisory commission will monitor the project.—*Barbara Lamb, World News, Los Angeles.*

Public works applications pour into Economic Development Administration

The Commerce Department's Economic Development Administration (EDA) is sifting through thousands of applications for Federal grants to finance new local public works projects in a massive effort to ameliorate the construction industry's long-running depression.

Before the program is finished early in the new year, more than $2 billion in Federal money will be doled out for 100 per cent grants to local governments for use in building city halls, libraries, museums, waterworks, and sanitary treatment facilities.

If the framers of the program are accurate, it will mean the creation of a quarter-million jobs in construction and related fields. But the program showed early that local governments have a massive backlog of unbuilt facilities. In just a little over a week, EDA found itself submerged in applications for 7,000 projects valued at $7.6 billion—about quadruple the dollars available.

Congress carefully crafted the law, authorizing the program to avoid bureaucratic delays. According to the statute, Commerce must process applications within 60 days or they will be declared approved automatically. EDA officials suspect that this fast timetable may force them to work on a first come-first serve basis.

That is not what Congress had in mind, however. According to the legislation, the agency is supposed to give priority, by a rather elaborate formula, to projects in high unemployment areas. Those projects where sites have been acquired and drawings completed are to get additional consideration.

Two questions remain. Will the projects create enough economic activity to keep the unemployed at work or will the job opportunities fade fairly fast? Some economists think the extra business activity created by the public works program will feed on itself and that other jobs will be spawned. The other question is whether the undoubted thirst for more public-works aid will cause the Federal government to expand the program as the Carter Administration tries to perk up the economy. If it does, legislative action would be necessary.—*William Hickman, World News, Washington.*

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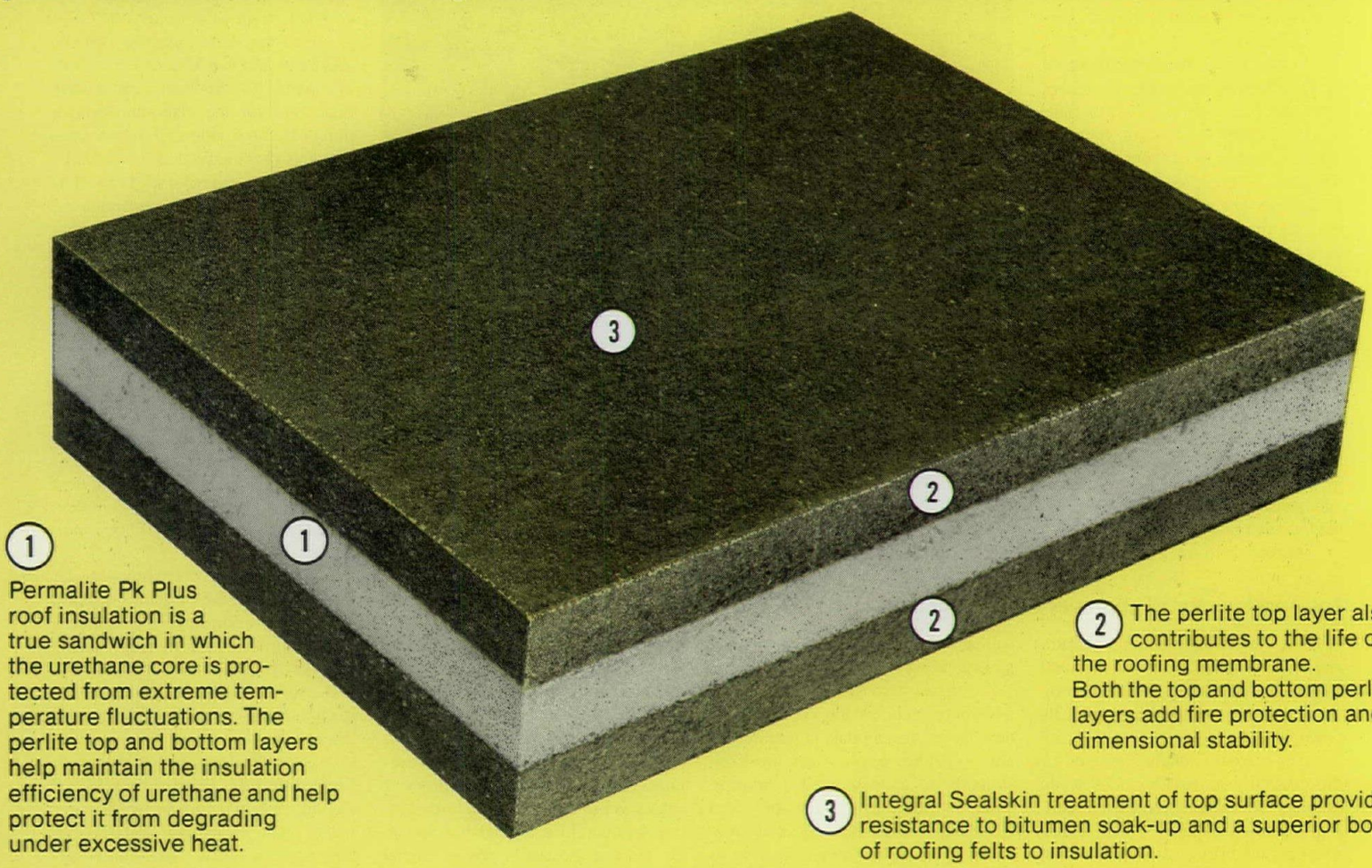

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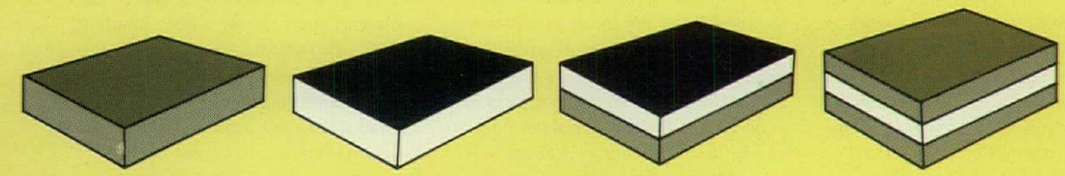

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Sales of new single-family homes, according to the Commerce Department, hit a seasonally adjusted annual rate of 656,000 in August. At the same time, the inventory of unsold new houses dropped in August to a 7.6-months' supply from the 8.2-months' level in July. The estimated number of new houses for sale at the end of August was 409,000, of which 136,000 were completed and 219,000 under construction.

(See also George A. Christie's "Dodge/Sweet's Outlook: 1977," in RECORD, November 1976, page 65 *ff.*)—*Donald Loomis, World News, Washington.*

ACEC charges government under-compensates A-Es

Architects and engineers working on Federal projects register low profits and high levels of frustration, a representative of the design professions recently told procurement policy officials. As a consequence, he said, "Many firms are turning away from such work or limiting the amount of it which they will undertake in order to preserve their viability as business enterprises."

This argument was offered by Richard H. Stanley, president of the American Consulting Engineers Council, before a hearing of the Office of Federal Procurement Policy (OFPP). He was speaking for his organization, for the American Institute of Architects and for three other societies of construction designers; all are members of the Committee on Federal Procurement of A-E Services (COFPAES).

The problem with Federal A-E work, according to Mr. Stanley, is that many overhead expenses are not allowed, though they are clearly costs of doing business. And Federal agencies, in calculating business profits, hold to low figures that do not take many factors into account.

Mr. Stanley cited figures showing that profits for architectural and engineering work for private, institutional and corporate clients vary, but generally yield 12 to 25 per cent. Similar Federal work yields far less—so much less that the government risks losing the best talent.

The problems could be solved, Mr. Stanley believes, if the government established a separate set of policies and regulations for procurement of A-E services that "recognize and support the unique characteristics associated" with the services.

He wants Federal agencies to adopt the Internal Revenue Service's criteria for determining allowable costs. The regulations should recognize that A-E firms have interest expenses, advertising costs, bad debts, contributions, insurance on principals' lives, and selected entertainment expenses "as legitimate costs of doing business."

Mr. Stanley was particularly critical of auditing costs on Federal projects. He noted that design firms keep books in a way that satisfies IRS, but procurement regulations require additional detail and refinement. And these regulations fail to recognize that A-Es incur higher than average overhead expenses on government projects.

In a special plea, Mr. Stanley asked the Federal procurement officials to realize that A-E firms have very heavy payrolls. Moreover, the work is cyclical in nature and services cannot be stockpiled. A-Es can seldom correctly identify the scope of services to be required.

Finally, Mr. Stanley told the hearing that designers have increasingly been subjected to third-party lawsuits and "the costs and risks attendant on defending and insuring against such suits are a major factor in A-E practice." But he said some designers were encountering reluctance by procurement officials to allow professional liability insurance premiums as an overhead charge. He asked the OFPP to make it clear that such costs should be allowed.—*William Hickman, World News, Washington.*

AIA and universities form consortium for research

The AIA Research Corporation, the Rice Center for Community Design and Research, and 13 schools of architecture have formed the Architectural Research Centers Consortium, Inc.

The consortium is a business venture designed to conduct large-scale research, particularly national projects that can call on the regional capabilities of its membership.

Announcing the formation of the consortium, John P. Eberhard, president of the AIA Research Corporation, said that the corporation "has been searching for ways to undertake large-scale research programs. We have also wanted to organize a working relationship with schools of architecture seriously interested in research. The establishment of the consortium will help to deal with both issues simultaneously."

Mr. Eberhard will serve as chairman of the new group. Other officers include: Jonathan King, the University of Michigan—president; Volker Hartkopf, Carnegie-Mellon University—vice president; W. Cecil Steward, University of Nebraska—secretary; and Thomas Southerland, Princeton University—treasurer.

The universities joining the consortium are Arizona State University, Tempe; University of California, Berkeley; Carnegie-Mellon University, Pittsburgh; Iowa State University, Ames; Louisiana State University, Baton Rouge; Massachusetts Institute of Technology, Cambridge; the University of Michigan, Ann Arbor; University of Nebraska, Lincoln; Pennsylvania State University, University Park; Princeton University, Princeton, New Jersey; Texas A&M University, College Station; Washington University, St. Louis; and University of Wisconsin, Milwaukee.

HUMAN SETTLEMENTS: WORLD NEWS

UNESCO reclassifies architecture from art to social science

In a recent UNESCO reorganization, architectural matters were transferred from the Department of Culture to the Division of Human Settlements and the Socio-Cultural Environment in the Department of Social Sciences. Michel Weill, secretary-general of the International Union of Architects, interviewed G. Fradier, director of the new division, to explore the reasons behind this decision and its possible implications for the future. Excerpts from the transcript, published in UIA's newsletter, are reprinted here.

Q: Why was this new division created, and why will it henceforth be part of the Department of Social Sciences?

A: Because human settlements are all inclusive. They require a global and integrated approach, and it appeared necessary to establish a division dealing with those problems at UNESCO according to its concerns, which are both social and cultural.

Architecture was previously a part of the Department of Culture. Justly, it was regarded as an art, and UNESCO's actions in this field were guided mostly by esthetic and historical considerations. However, when it was decided to create this new division, which was to include an important program of social science, it became obvious that such a program would be meaningless if it did not include all aspects of architecture and town planning. When we talk about town planning, we are well aware that it consists of a set of actions that are interconnected with all the preoccupations of society. The architect himself is caught in a network of obligations and sociological relationships.

Q: What is the organizational principle of this division and, besides UIA, what other NGOs [nongovernmental organizations] are directly concerned in its activities?

A: The principle is to achieve a true combination of all activities through a constant collaboration between architects, town planners, sociologists and economists.

As an example, we hope to be able to conduct surveys about new towns, new human settlements recently planned, to study how they work, not only in a social and cultural approach, but also from the point of view of construction itself. Obviously, those surveys will necessarily have to be conducted by both sociologists and architects.

As for the NGOs with which one must work, UIA should be placed at the top of the list. We also hope to establish very steady ties with town planning associations, with organizations such as the International Union of Local Authorities, and with any organization connected with the International Council of Social Sciences.

Q: Within the framework of this new organization of UNESCO, don't we run the risk of losing touch with the cultural aspects of architecture?

A: UNESCO's policy hasn't changed. In fact, our role has been enlarged. It is not only the esthetic aspects, but also the sociological and economic aspects which are taken into consideration in this Division.

Q: What could be the contribution of UIA to the work or studies planned?

A: UNESCO does not intend to do any town planning or to work in the field of physical planning. This role is basically entrusted to other institutions, such as the Center for Construction, Habitat and Planning of the Social Affairs Department in New York.

What UNESCO is interested in is education, the training of town planners and architects. It stands to reason that professional organizations such as UIA can and must promote an evaluation process among those in practice who are in a position to assess the education they received and the education they would consider adequate for those entering the profession.

Teaching establishments are often blamed for too slowly following the evolving status of the profession and of the economic, social and even political conditions connected with it. Therefore, this can be viewed as a good opportunity to bring together schooling and experience in carrying out projected studies.

Regarding the basic training of those responsible for decision-making in environmental questions, we often think less of planners, of those who make the final decisions about investments, than we do of those who take decisions from day to day—from the elected town councillors to officials of central ministries.

Q: Where do the town planner and the architect stand, and what is their role?

A: If we continue to carry out a series of retraining seminars with the assistance of UNEP, as in North Africa, Indonesia and Argentina, it will most likely be necessary to include some architects and town planners among those representing officials in charge of town management.

Furthermore, the theme for your next UIA Congress to be held in Mexico City in 1978, "National Development and Architecture," fits perfectly well within this context, and the architect should indeed be in a position to play a much more important role. In certain cases, we have the impression that the architect is in many ways ignorant of development problems, and that the role he plays is often considered too marginal. This occasion could provide an opportunity to better define his role and the responsibilities he has to assume.

Q: What are the activities UIA should focus on?

A: UIA should devote more attention to ties between architectural and environmental sciences. These are already important issues, but should become even more so in the future.

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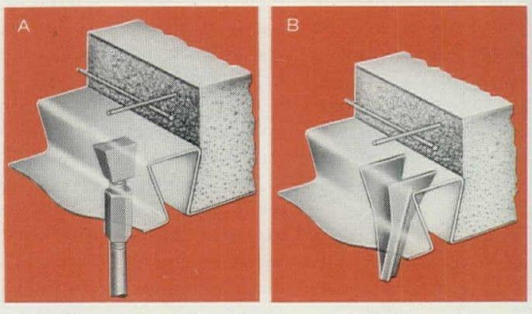
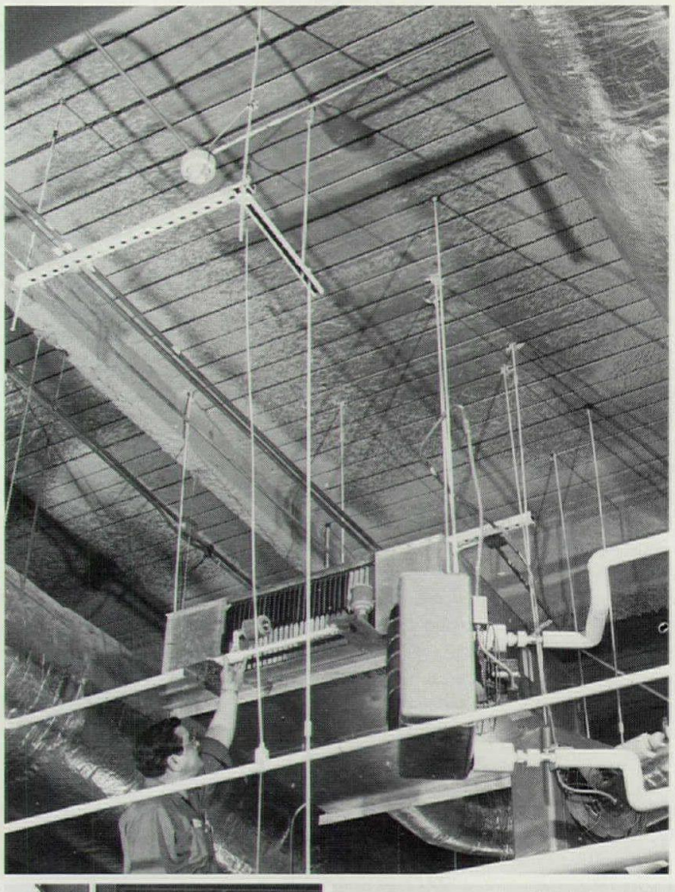


Central Medical Pavilion, Pittsburgh, Pennsylvania
Architect: Rea, Hayes, Large & Suckling
Contractor: Dick Corporation



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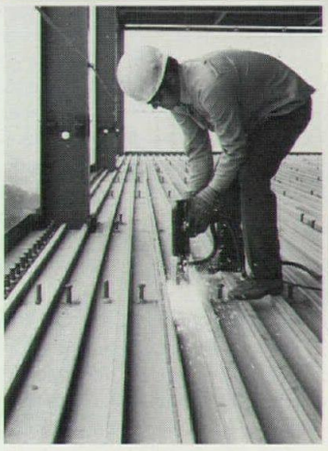
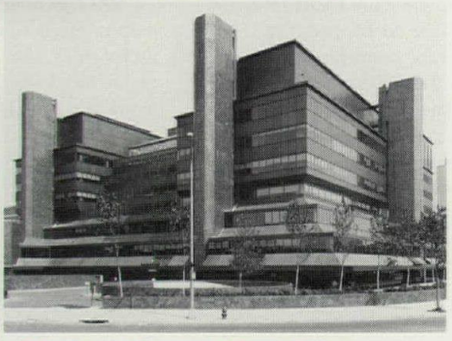


Private Hospital, Cincinnati, Ohio
Architect: Harry Hake & Partners
Structural Engineer: Donald Oakley
Construction Manager:
Charles V. Maescher & Co., Inc.



Children's Hospital of Philadelphia
Architect: Harbeson Hough Livingston & Larson
William A. Amenta
Associated Architects
Structural Engineer: A.W. Lookup Company
Contractor: Baltimore Contractors, Inc.

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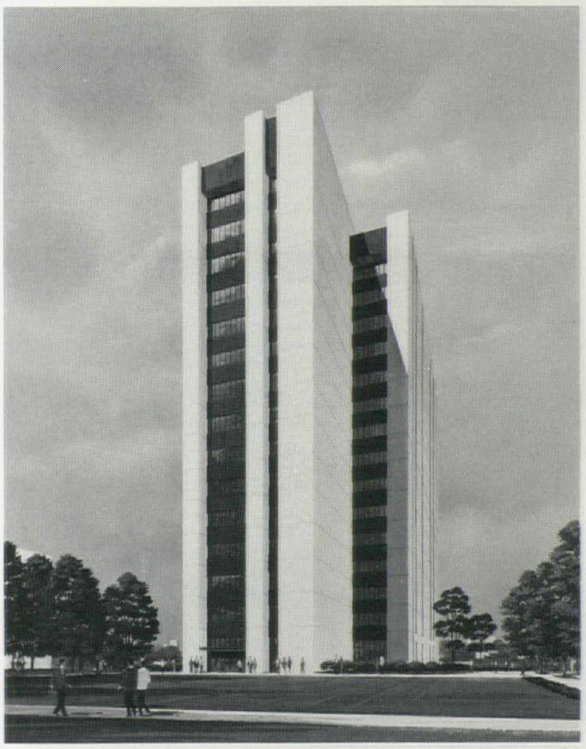
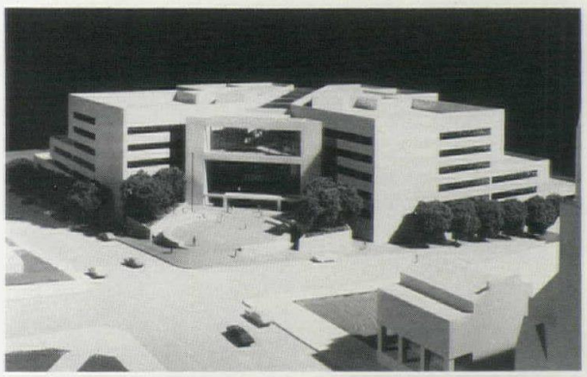


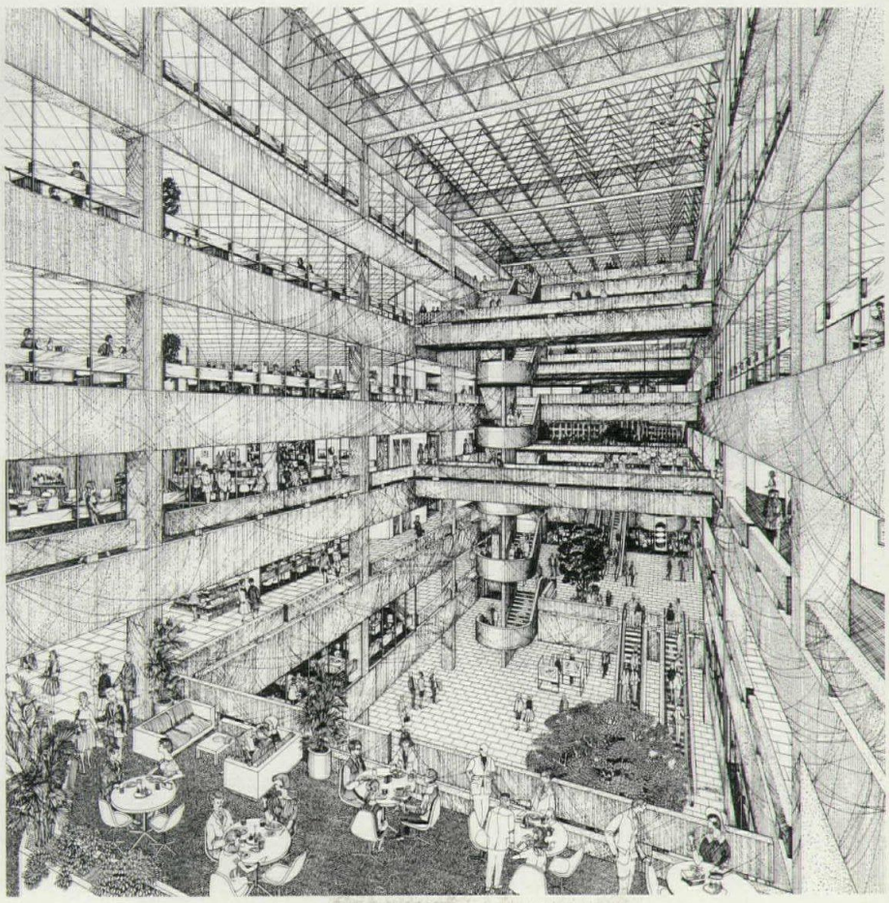
At either end of Raleigh: a new state office building and a new civic center

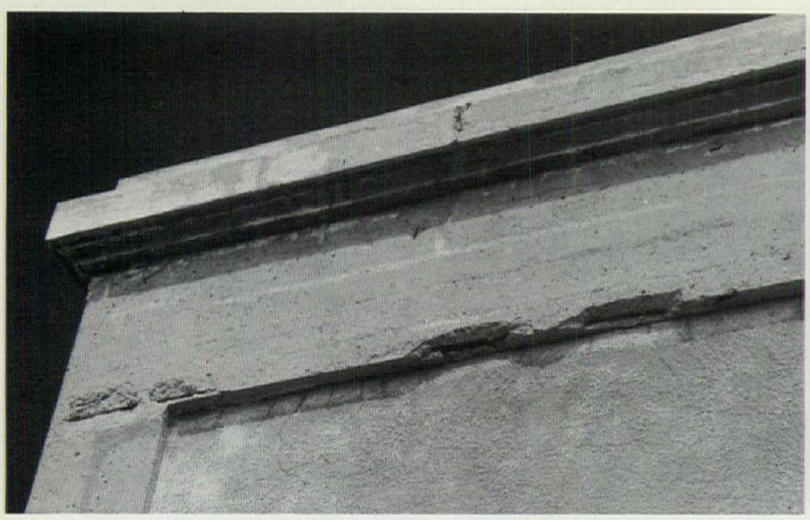
Raleigh, North Carolina, is undergoing a continuing process of renewal and revitalization, both in its downtown business district and in the adjacent state capital district, and Odell Associates Inc. have been intimately engaged at both ends of the 10-block stretch that connects the two areas. At the north end, the high-rise Archdale Building, which will house state offices, provides a major focus for the North Carolina State Government Master Plan, designed by Odell Associates in 1972. It is sited at the terminus of a 1,000-ft tree-lined mall, facing the recently built Legislative Building. At the other end of town, the Raleigh Civic Center, a new municipal convention and exhibition hall, will terminate the Fayetteville Street pedestrian mall and provide a focus for the Civic Center complex. The central arena will double as a covered pedestrian walkway when not in use for sports events and exhibitions.

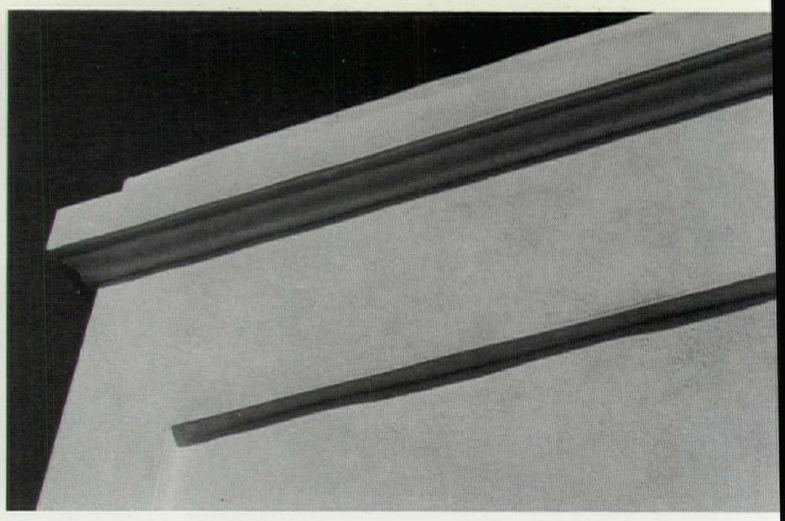


In state offices, the atrium comes to Jefferson City

The state offices of Missouri, many of which are now dispersed in leased space about Jefferson City, will be consolidated in the proposed Harry S. Truman State Office Building, designed by Patty Berkebile Nelson Duncan Monroe Lefebvre Architects Planners, a joint venture of three Kansas City firms. The building will house offices for 2,300 as well as the State Library, Archives and Records Center, conference and hearing rooms, cafeteria and parking. Despite its size—871,910 sq ft—the mass of the building was minimized so as not to interfere with the city's view of the Capitol dome, and out of respect for "the quiet merger of business and government in Jefferson City," according to project architect R. Bruce Patty. Height was restricted to eight levels, and the structure will be sited on the lower side of a slope that rises to the Capitol building. The building will be oriented on a diagonal to the neighboring Capitol building and bisected by a skylighted, 42-ft-wide atrium to provide pedestrian access—and a view—to the Capitol across a street intersection.







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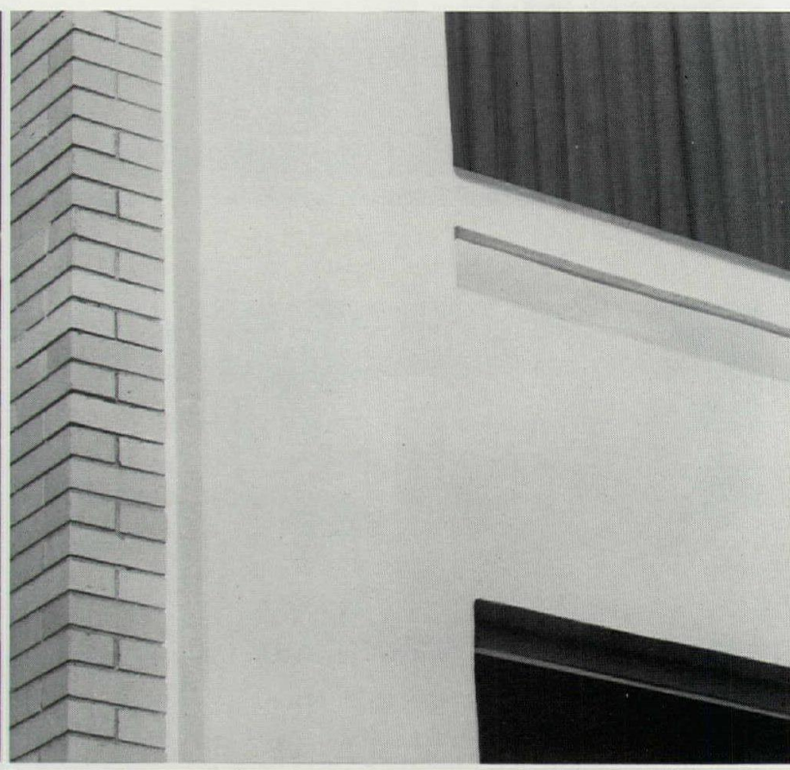
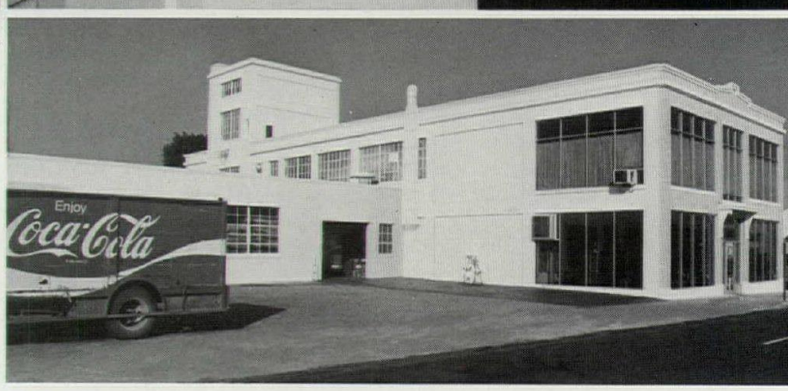


Coca-Cola Plant, Richmond, Indiana. Gen'l Contra.; V.H. Juerling & Sons, Inc. Applicator; Ralph Wisenhunt Co.



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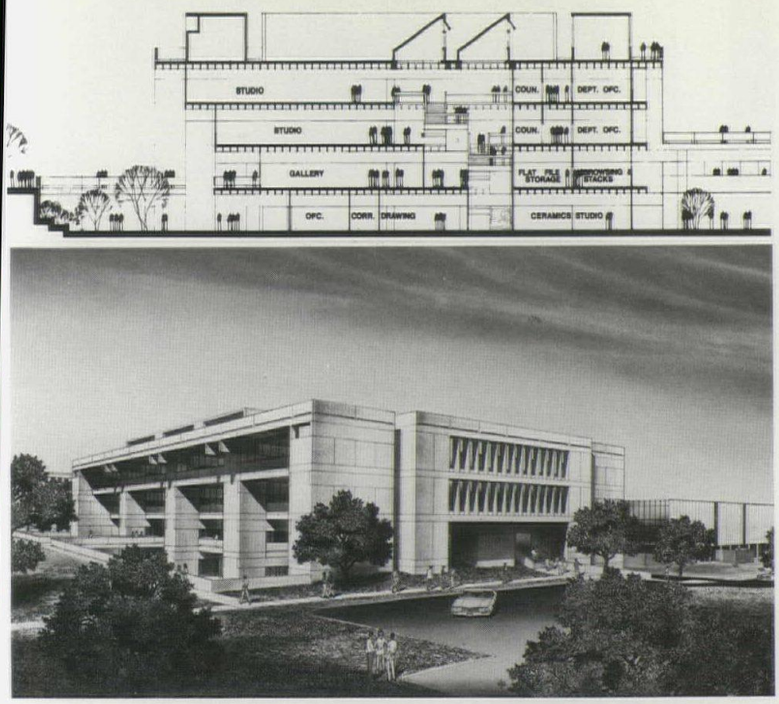


Texas A&M architecture students will occupy new Langford Center

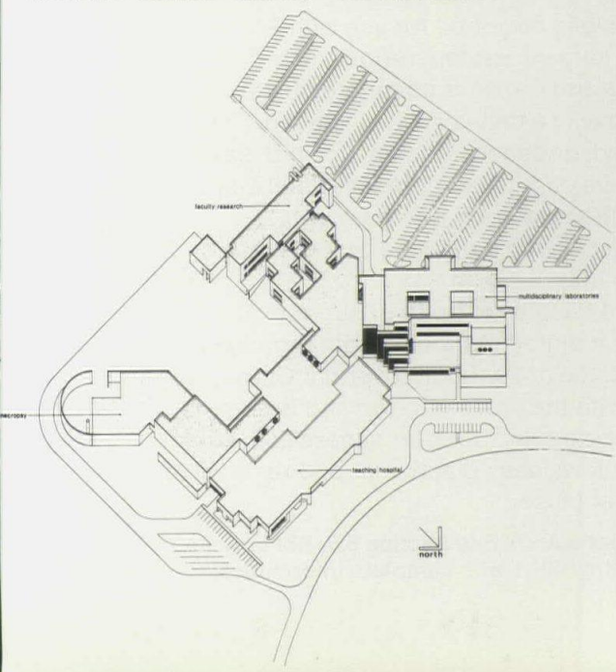
Architectural students at Texas A&M will next year occupy the Langford Architecture Center, now under construction at College Station. The new building will be named for Professor Emeritus Ernest Langford, former dean of the College of Architecture and Environmental Design. Designed by Harwood K. Smith & Partners, Inc., of Dallas, the 115,000-sq-ft building will be connected by pedestrian footbridge to two existing buildings used by the school. Estimated cost of the concrete building, with its full-height central atrium, is $8 million.

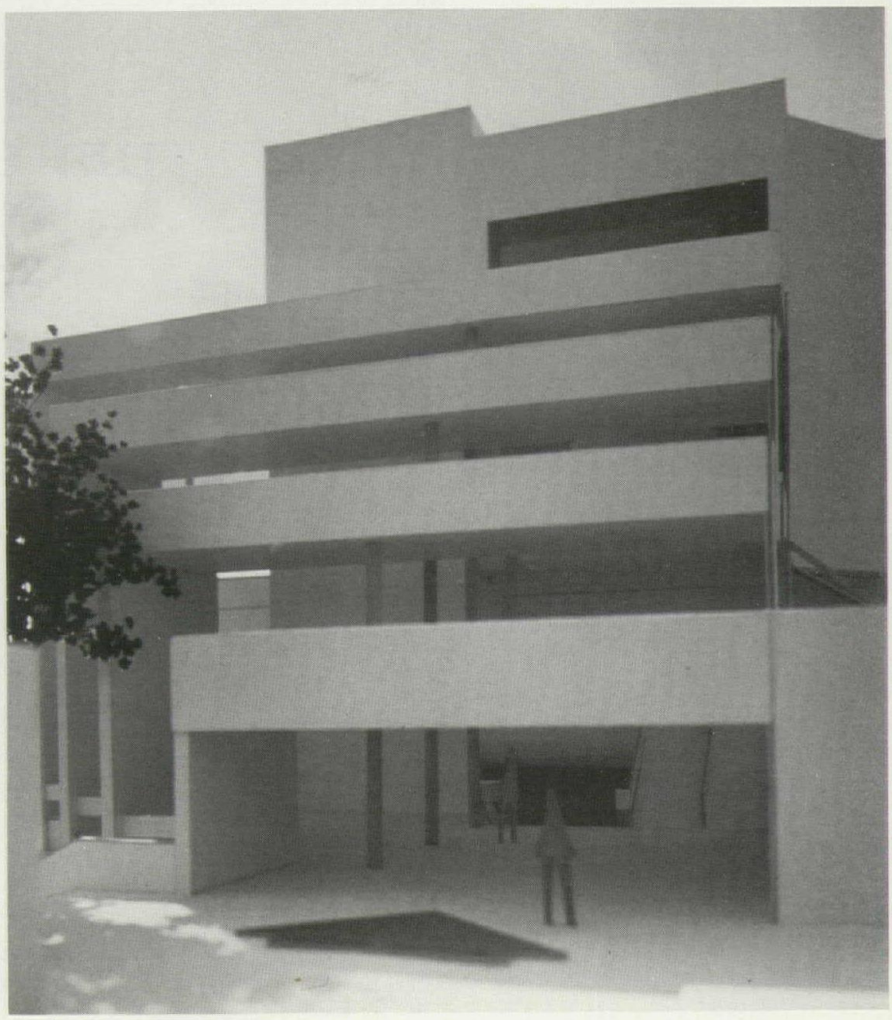
Bowling Green State alumni build headquarters

An extremely active alumni group at Ohio's Bowling Green State University found itself in need of space for seminar classrooms and meeting rooms to accommodate its continuing education program, as well as for offices to house the staff of the Alumni and Development Director. The two-story, 18,-000-sq-ft building, now under construction in Bowling Green, was designed by Thomas T. K. Zung Architects Inc. of Cleveland. The deep piers of the building's exterior wall are faced with charcoal-brown brick, and glazing is bronze-tinted. On the entrance plaza, Harry Bertoia will build a 13-ft bronze "sounding sculpture" commissioned by the architect. The center will cost an estimated $1 million.

Mississippi plans new veterinary school at Jackson

In 1974, the Mississippi legislature established a College of Veterinary Medicine for the state. The school's new building, to be constructed on a 130-acre site at the University of Mississippi in Jackson, was designed by Barlow & Plunkett, in association with Thomas S. Jones & Associates, Virden, Roberson & Harrison, Ltd., and Wakeman & Martin. The design encompasses three separately articulated facilities—teaching hospital, student laboratories and support areas, and faculty offices and research labs, all radiating from a central multi-level mall and entrance lobby. The building is massed against a hill, which will conceal a major parking area, and siting allows future horizontal expansion. As part of the energy conservation program, conditioned air will be recirculated from offices to animal holding areas. Estimated cost is $27 million.





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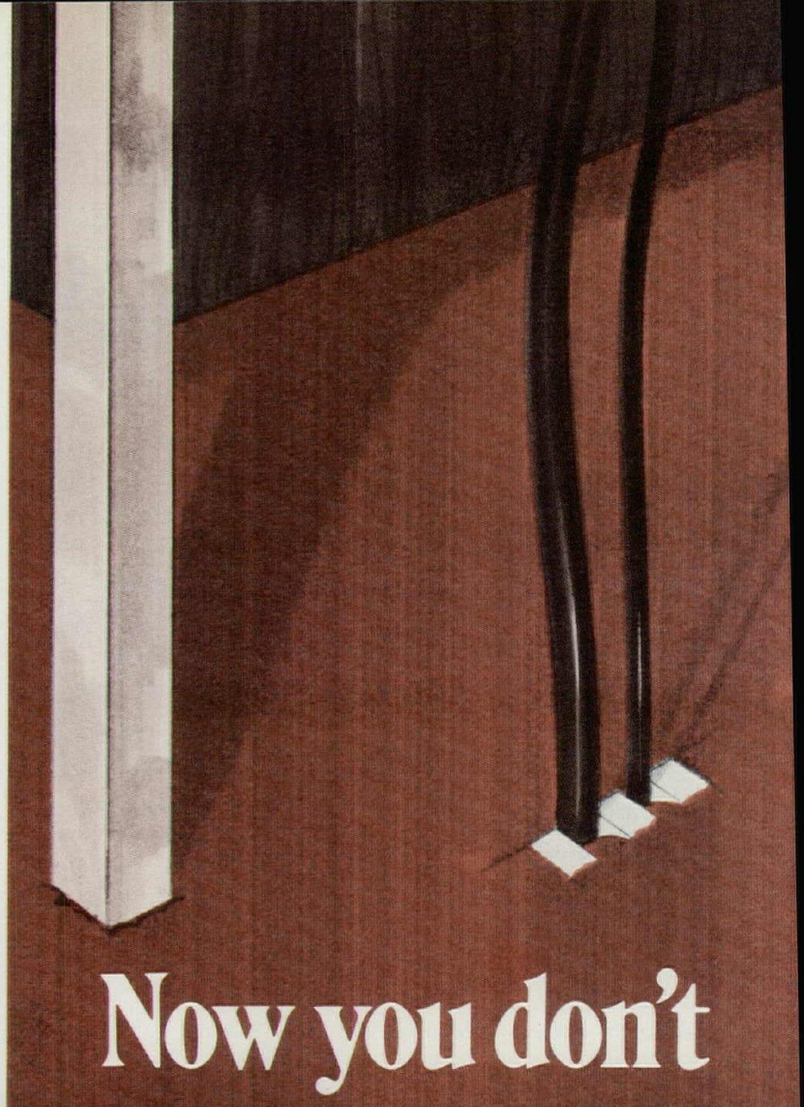

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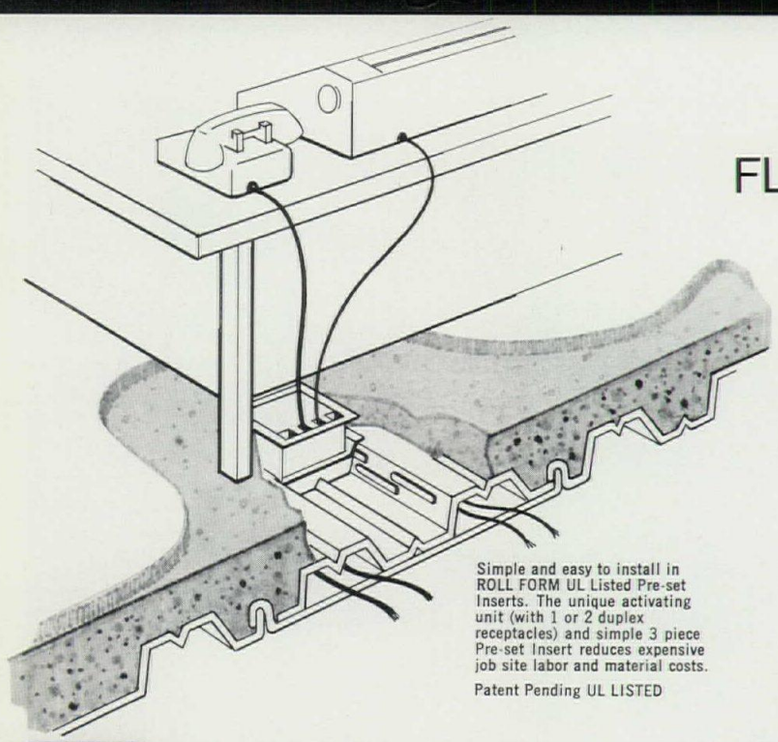

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Mumford revisited

ARCHITECTURE AS A HOME FOR MAN, *by Lewis Mumford; Architectural Record Books, New York, 1975, 214 pages, illustrations, $15.00.*

Reviewed by Edmund M. Bacon

The art of editorship is not one that is generally understood. Certainly it does not take me to say that Lewis Mumford is a great writer. Perhaps it does take me to point out the importance of the creative editorship of *Architecture as a Home for Man,* a publication of twenty-four essays written for ARCHITECTURAL RECORD by Lewis Mumford over a forty-year span from 1929 to 1968. The book was edited by Jeanne M. Davern, former managing editor of RECORD.

Of course all of us have read Lewis Mumford; few of us, I am afraid, have read all of Mumford. Each of us, at any moment, is subject to new flashes of insight on the range of vision of this remarkable man. Because of the confines of the subject matter and the constriction of space, these works contain a special kind of concentrated essence of the Mumford outlook at each particular moment in time. Linked as they are over four decades, cumulatively they give a perspective on a great period and a great mind that could be obtained by no other means. For the present-day student they provide an encapsulated introduction to Mumford of a length that probably fits his initial notion of time priority, but which will lead him to further exploration of Mumford's works. The opportunity to glide through four decades of crucial history with Lewis Mumford as a companion and mentor is a very special privilege, one which evokes rich reverberations caused by one's own recollections of one's own attitude and feelings during the course of the different eras.

Unfortunately, for this device to be fully effective one must be aware at each moment of reading, on each page, exactly the date when those particular words were stated, and this fact was not realized by the editors. In the entire volume there is no single listing by dates of each of the twenty-four articles in an adequate table of contents. The dates are not even indicated at the heads of each essay; they must laboriously be sought in the scattered places they are listed—the five pages heading the five "Books" into which all of the essays are arranged.

This is only a minor defect in a major and important work. As I see it the work contains three major themes.

- Lewis Mumford's aspirations for architecture and society.
- Lewis Mumford's search for people and things that embody these aspirations.
- Lewis Mumford's own ideas of how to achieve these aspirations.

It is important to keep the identity of these three themes in mind so that the force of the first doesn't become blunted in the course of pursuing theme two and theme three throughout the book.

Theme two is dealt with in the first section, Book One, three essays collectively titled "American Architecture Today," all written in 1928. Here Lewis Mumford avoids the then-fashionable attitude which equated resistance to stylish frivolity and historicism with adherence to cold, rigid, mechanical sterility. Mumford saw at that time the wrongness of either course. "But we are still human beings, not dynamos or Diesel engines; and there must be something more." Mumford's pursuit of just what the "something more" actually is is far less satisfying than his general description of what it ought to be. In 1930 in his intriguing essay "The Wavy Line versus the Cube," he sharpened the issue by identifying L'Art Nouveau and Cubism as the two forces vying for our allegiance, and, not surprisingly, concluded that ". . . a really comprehensive interpretation of modern life, must . . . get beyond the dogmas of both schools and yet retain the elements of truth that give each of them a career." In his 1928 search for work which embodies his aspirations for "something more," he was limited by the material then available and by the quality of the buildings the architects of the day supplied for his review. The buildings he seized upon, notably the Park Avenue Building by Buchanan & Kahn and the Columbia Presbyterian Medical Center by James Gamble Rogers seem through the passage of time to be somewhat dimmed as expressions of his lucid and bold aspirations. This in no way dims the brilliance of his statement of what ought to be.

The same question arises in connection with Mumford's search for a person or persons who share his insights and who are carrying his principles into practice.

Book Three contains four essays written in 1954 entitled "The Life, the Teaching and the Architecture of Matthew Nowicki." Mumford so desperately wanted to find a younger person or persons who shared his insights and who were carrying his principles into practice and here, indeed, he presents a sensitive and perceptive teacher, designer, and thinker. It is tragic that the death of Matthew Nowicki just at the beginning of his career leaves unresolved whether he would fully have accomplished Mumford's aspirations for him. The only other person given major recognition is Albert Mayer. Included under the title "Trend is not Destiny" is a very favorable review of Mayer's book *The Urgent Future.*

It seems to me that Lewis Mumford hurts himself and his cause by too simple and total a division of people and periods into the "good" and "bad" category. I cannot agree that Gottmann's "Megalopolis" nor Doxiadis's world city systems are altogether worthless and destructive concepts. Mumford correctly says, ". . . twentieth century planning still lacks a fresh multi-dimensional image of the city." But his own efforts to provide one seem to peter out as the figure of four hundred thousand population is reached. Surely ways must be found to relate population in numbers far larger than this, and still retain the identity of the individual, the virtue of smallness, and the value of access to open land. It is Gottmann and Doxiadis who have led us into the realm of regional and inter-regional systems. While I do not believe they have all the answers, I do believe their work will form an essential link in the final achievement of that comprehensive image that Mumford so desires.

There is an interesting essay entitled "A New Regional Plan to Arrest Megalopolis," which is Mumford's appraisal of New York State's new (1965) development program; but even here, when Mumford moves into the prescriptive phase, he relies almost exclusively on Ebenezer Howard and the English New Towns as his model, which I feel is much too limited.

In further developing theme three, Lewis Mumford's own perception of the nature of emerging urban problems and his own solution to them, I am not intending to say Mumford is wrong and I am right, rather I am simply listing those places where I agree and disagree with him. I have already spoken with admiration of his consistent insistence on consideration of the individual and respect for human values. I was disturbed by his statement, made in 1959, "this is . . . the period of the Common Man," because I think that this is a very bad term, indirectly responsible for many of the demeaning programs of the New Deal and of today. I prefer Walt Whitman's vision of a nation of individuals.

In Book Two, "Mass Production and the Modern House," written in 1930, and Book Four, "The Future of the City," 1962-1963, Mumford by implication indicates the solution to the crowding and degradation of the city to

continued on page 46

Mr. Bacon was executive director of the Philadelphia City Planning Commission from 1949 until his retirement in 1970. In this role he began a continuous program of rebuilding for which Philadelphia has become famous. He is the author of The Design of Cities.

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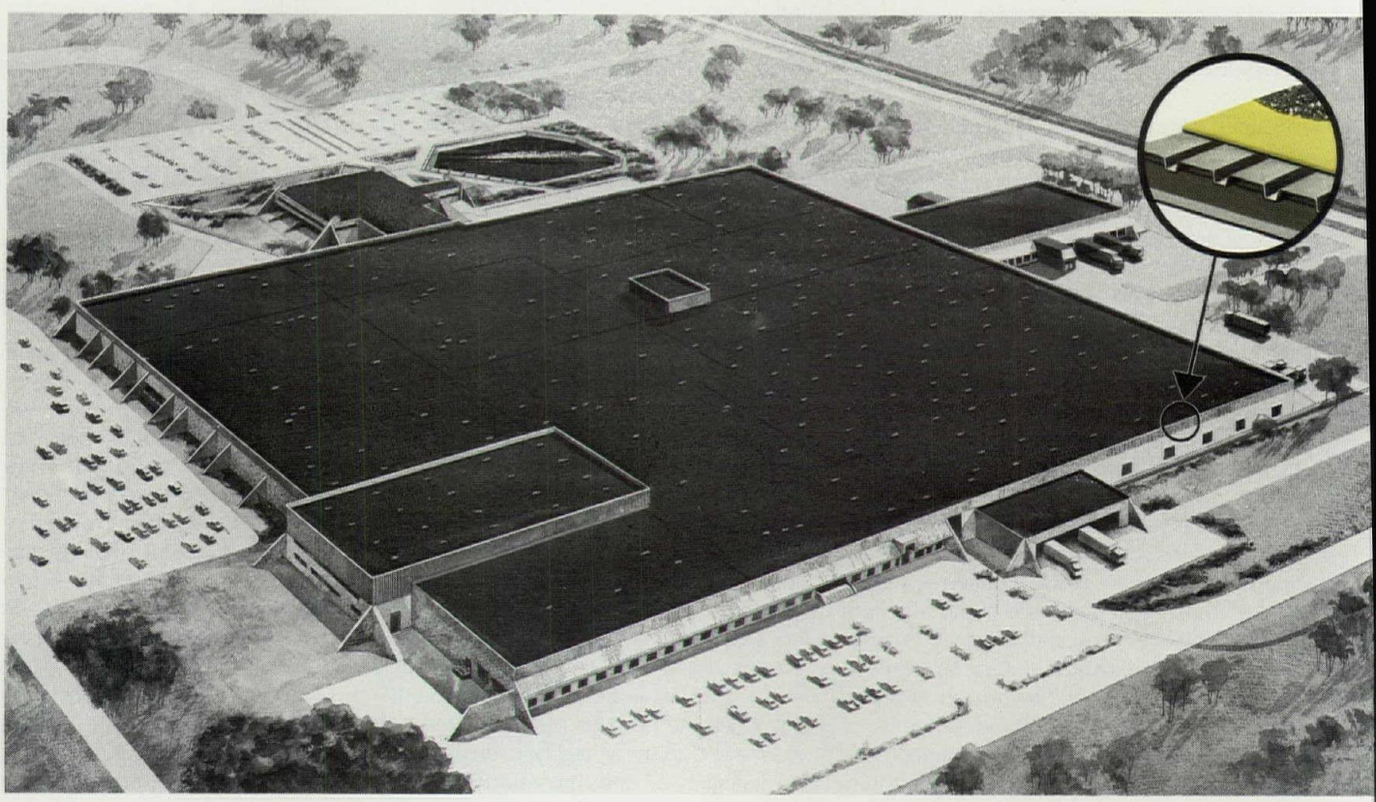

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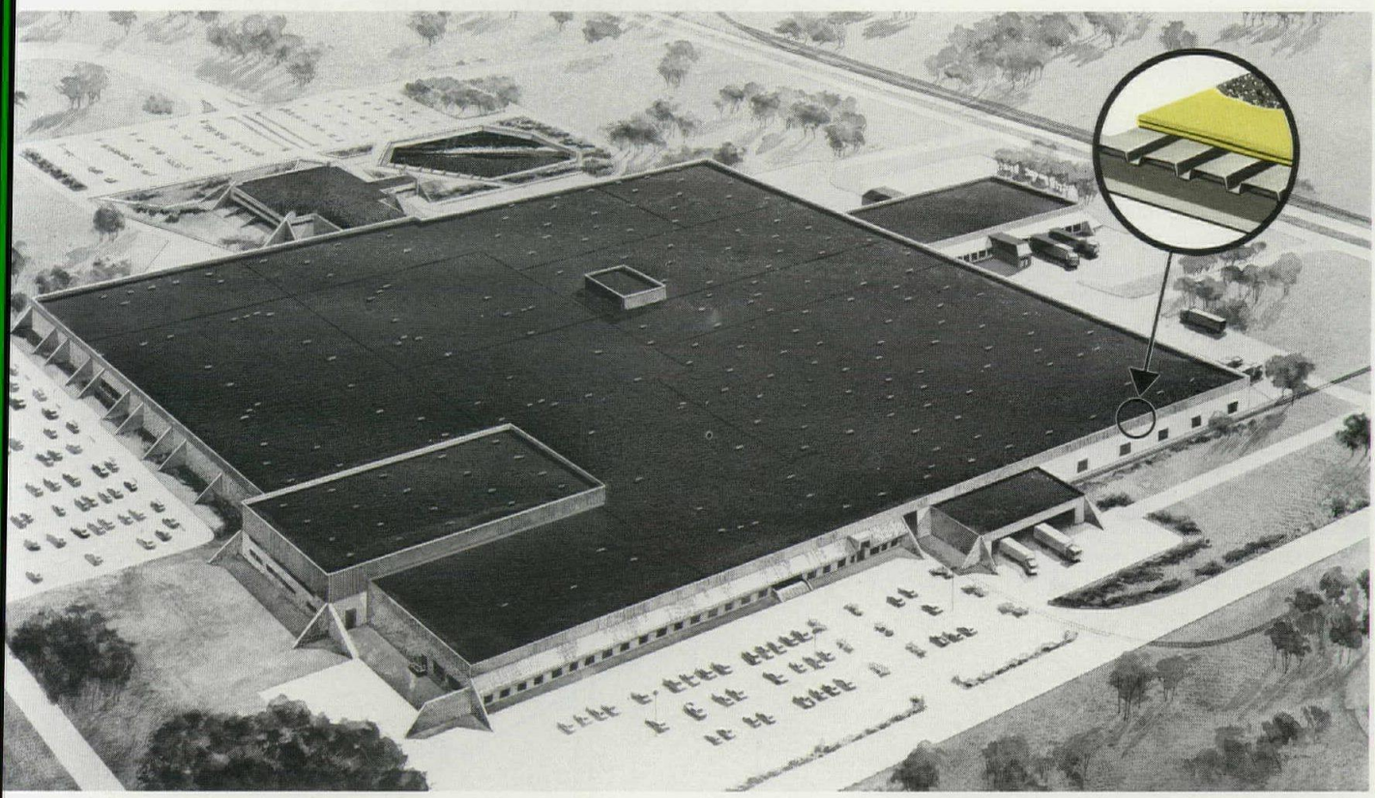

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be new construction on open land. It would appear that he did not see the richness of neighborhood life within the city, the variety and strength of its personal, familial, and institutional interconnections, the warmth of its ethnic and religious ties, and the need to solve these neighborhood problems *in situ,* where they exist and in their own terms. He did not seem to see the growing problems of abandonment, vacant lots, empty houses, and vandalized hulks of buildings proliferating to the point where the lowering of density itself became the menace, where the wastelands of the inner city reached catastrophic proportions. It was this lack of awareness of the existence and potential of city neighborhood life, aided and abetted by architects who saw in poverty a chance for a commission, that caused so many of the faults in the urban renewal programs that Mumford decries.

Yet all these are minor faults in the light of the overwhelming virtue of theme one, the clarity and breadth of Lewis Mumford's basic insights; woe be to he who allows theme two or theme three to bedim the first.

"We have been living in a fool's paradise, so far as we took for granted that mechanical progress would solve the problems of human existence. . . ." This set the tone for a very significant range of very acute observations on current patterns of thought, assumptions, ways of approaching problems, and fundamental beliefs, like the acceptance "without challenge of the belief that intensified mechanization and ever-accelerating locomotion will remain the one constant in an otherwise changing world." "They . . . assume that the very processes of change . . . are themselves unchanging;" "The future is never a mechanical extension of the past." If these concepts and many others contained within these essays were to be adopted in university circles there would be required nothing short of a revolution in the teaching of planning, urban design, and architecture. There would be required a complete reversal in the view of the nature of the student himself, of his relation to his work and to the people he will work with in his later life.

Perhaps the most frightening aspect of the current university is the tendency to regard the student, the future planner, technician, scientist, as some sort of *supra-human* being who can observe and evaluate mere mortals and their actions, but who himself will not become messed up in their sloppy, intuitive, and nontechnical activities, and thereby will retain the purity of his discipline, the virginity of his objectivity, and the perfection of his judgment.

So, for me, there was a great flash of warmth and joy at the way Lewis Mumford ended his work. "I have dared to be human and I have appealed to you primarily as simple men and women." So I hope this great clarion call will echo throughout the halls of academe, and that the students therein, as they read these pages, will not spend their energy on calculating why Lewis Mumford's specific prescriptions for solving the urban ills may not work, but rather will try to absorb within their being something of the spirit of this great and loving man.

Galvanized rebar protects the health and beauty of this health center

PHOTO BY LAWRENCE S. WILLIAMS, INC.

The Kling Partnership of Philadelphia prescribed galvanized rebar as "preventive medicine" against subsurface rust when they designed the University of Connecticut Health Center in Farmington, Conn.

The precast concrete panels which make up the beautiful, buff-colored, curvilinear facade all have hot dip galvanized reinforcing steel beneath their surface. In addition, The Kling Partnership specified galvanizing for tie wire, inserts and reglets that were required for the fabrication, transportation and erection of the panels.

By specifying galvanized steel, the architect has provided this building with the best proven protection against concrete cracking, spalling and staining caused by subsurface rust expansion. Proof of galvanizing's long-lasting protection is shown in the photo-micrograph of a rebar sample taken from the deck of the Longbird Bridge in Bermuda. After 22 years in this salty, moist environment, more than one-half of the zinc coating still remains to protect the steel against corrosion. **No other rebar protection has been time-proven like this.**

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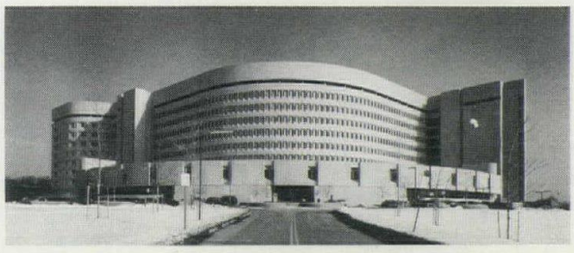

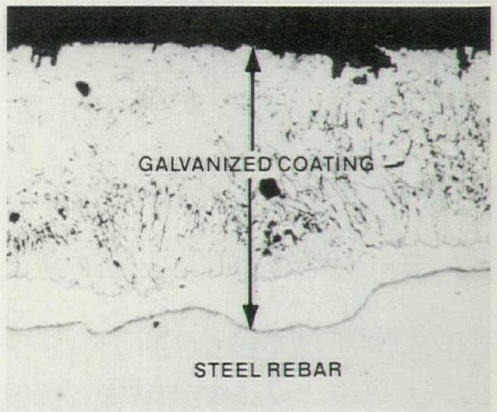

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Turning design ability into equity in your own development projects

It is in the smaller, more specialized situations where the architect has the most potential for participating as a developer or equity partner. Creativity is often essential in such projects both to identify a particular need and to create a solution that not only will take advantage of what may be an awkward site or building but will satisfy myriad regulatory authorities predisposed to say no. As professionalism becomes a greater prerequisite to satisfying local communities, the architect's training and sensitivity provides a lever to equity participation. Hours and intelligence can be traded for capital.

Partly because of that realization and partly because the fall off of architectural business has driven architects into trying to generate their own business, more architects are considering becoming developers themselves and "designing for equity." In addition, some see it as a way of maintaining the integrity of their plan or design. Others, trying to collect fees from developers or projects that have failed, are beginning to see the importance of learning what it is that makes a project feasible. There are few architects who have not done a considerable amount of up front design work only to have the project later cancelled. There are ways for the architect to minimize such losses, and indeed create a sound investment.

by William J. Poorvu

Just as the euphoria of the early 1970s overstated the fortunes to be made in the real estate industry, today's problems have produced exaggerated reports of a dying industry. The present problems of real estate development are basically twofold. First, supply has exceeded effective demand because of overbuilding fueled by an excessive influx of funds into the industry and a related rapid cost inflation. Second, the indirect consequences of the rapid growth plus a general rise in consumerism and environmentalism have led to a high degree of local controls that both hinder and raise the cost of future development.

If one begins to take a longer range view, it is obvious that the first problem, the current slowdown in growth, will be relieved by a gradual absorption of the oversupply, thus creating a whole new set of opportunities. The real estate industry has always been both cyclical and fragmented. Growth occurs unevenly. A short-term strategy should be to find those areas where opportunities still exist. There are advantages to investing when the market is soft rather than when prices are high.

The best opportunities today can be found primarily in smaller communities, suburbs of larger metropolitan areas and in selected neighborhoods within larger cities. Smaller projects often are needed to serve a particular niche in the market. It is important to remember that the aggregate statistics primarily reflect the vacancies in the large urban downtowns and the large residential projects that will take years to rent up. In the future, the riskiness of such projects will require the early participation of the prime user or a financial institution. Because of their importance to a project's success they can demand a low rental or a major equity interest for their participation. Such organizations, often with their own real estate departments, will dominate this type of development in the coming years.

The architect participating in development can minimize the risks

The pitfalls of development are not easy to avoid. The real estate industry itself is complex and integrative, requiring considerable skill both in analyzing and controlling risk. Moreover, the architect has a special set of problems that arise from a multiple set of perspectives which oftentimes become confused. First, the architect must decide whether a project warrants professional involvement from a design standpoint, whether the architect would accept the project on purely a fee basis. Second, would an equity participation make sense as an investment decision alone; and third, should the architect serve as the project developer or coordinator?

While there are many risks to development, there are several fundamental reasons that make it logical for an architect to consider becoming an investor:

1. By reducing a fee in return for an equity interest the architect can invest twice as much as would be the case in a straight cash investment (assuming that any additional fee income would be taxed at the maximum 50 per cent rate).

2. An equity interest can be taken in the name of the partners of the firm, in essence a way of withdrawing capital from the firm tax-free.

3. If the investment turns out well, the partners can receive an annuity that may help to balance income in the off-years of this cyclical industry.

4. During the early stages, projects often generate tax losses, which can currently be used against other income, although the new tax law stretches out the receipt of these benefits. (RECORD, October 1976, page 35.)

5. The architect's involvement is at an early stage of the project's life, and an investment at that time is oftentimes at a more favorable rate than after a project is underway.

6. The cash flow can be distributed to members of the development team in such a way that certain payments will qualify under Section 707a and c of the IRS Code as fee income, and thus be subject to a 50 per cent maximum tax rather than be treated as unearned income (which can be disadvantageous to high-income persons). To accomplish this, the payment must be predetermined and not tied directly to profits.

7. A good investment philosophy is to invest in what you know best.

On the other hand, there are a number of red flags that should be pointed out to a potential investor.

1. The corollary to investing in what you know best is not to fall in love with your own investment. For an architect, especially, it is easy to become attached to the product and the way it will look to others.

2. Although investing at the conceptual stage may have more potential for reward, the risk is also highest at this time.

3. The amount of equity required may be

Mr. Poorvu is a lecturer at Harvard University Graduate School of Business Administration and Graduate School of Design, teaching real property asset management and housing development. He is also managing partner in several real estate development projects and investment companies, and has been a consultant to private and public organizations in real estate development, housing policy and international property investment.

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The nicest thing about land as an investment is that when you shouldn't sell it, you can't.

understated at the start of a project, and a 10 per cent interest at the start may be watered down if more funds than were anticipated are needed, a situation that is more often the rule than the exception in real estate. The investor should pay close attention to the clause dealing with additional investment in the partnership agreement. Nevertheless, irrespective of what the partners initially agree, the order of payout may have to be revised to protect later investors if the development has problems. The first agreement may not necessarily be the final one, and your position likely may be that of a minority partner with minimal control over decision-making.

4. Moreover, real estate investments are relatively illiquid. As a wealthy landowner once put it, "The nicest thing about land as an investment is that when you shouldn't sell it, you can't." This may or may not meet your needs.

5. If the architect serves as a general partner, liability for loans, contracts and other payables may become personal obligations unless care is taken in the operation of the project.

6. Proposed tax legislation would prohibit losses from real estate against other professional income.

7. Although the architect may only be converting part of a fee into equity, there is a danger that the partnership may have a lever to delay the remaining payments if there is an overall cash flow problem. There can be a danger to wearing two hats.

The architect must decide whether the firm's capital needs are secure enough to warrant a long term, relatively illiquid commitment.

8. The architect should think very hard before assuming partial or full managerial responsibilities for the project. Not only can the time commitment escalate, affecting the architectural side of the business, but the skills, experience and temperment to manage a complicated development business are not traditionally found in an architect.

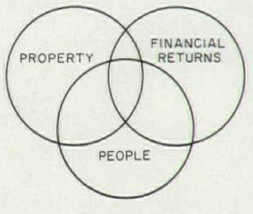
9. Lastly, even assuming that the architect is not going to have to assume managerial responsibility, the architect is now becoming an investor and should be satisfied that whoever assumes these functions is the person for the job. There are many overextended developers whose problems in their other projects may affect yours. Don't be afraid to investigate the financial strength and staying power of a potential partner.

As a general rule, one will find that pitfalls are more easily avoided in smaller scale projects. Moreover, although there are special advantages to long-term ownership, there can be additional safety in projects built for short-term sale. The architect must decide whether the firm's capital needs are secure enough to warrant a long term, relatively illiquid commitment.

Success or failure depends on the property, return and people

In any of the above cases, it is important to be able to analyze whether or not the development is apt to work out financially. We have created at Harvard a conceptual framework for assisting this analysis based on a series of questions. It is especially applicable to smaller scale projects. None of the questions themselves is unusual. However, together they form a pattern that forces consideration of the major elements in the process.

This is not an academic exercise. Only by asking all the questions can one discover what is crucial for the specific situation and what has not yet been properly considered. The questions are separated into three areas relating to *the property, the financial returns* and *the people*. There are risks indigenous to each of these, and as illustrated in the diagram, only when the three elements interface, should a project or transaction proceed. The integrative nature of the problem is the key. What also becomes obvious is why experienced developers look at such a large number of potential investments for every one selected. The potentialities interface in only a small portion of the possible cases.



As an illustration, a specific project may have gross rentals of $210,000 with operating expenses of $90,000, leaving a cash flow from operations of $120,000. This operating cash flow is affected by the physical condition of the property, changes in the locational and market environment, as well as existing and proposed legal restrictions. These conditions affect *the property* itself.

However, the *financial returns* are independently vulnerable to outside forces such as changes in capital market conditions, Federal monetary and fiscal policies and the specific owner's financial and tax position. In our example, the $120,000 operating cash flow might have financing costs of $80,000, which represent the principal and interest on a $750,000 mortgage. Not too many years ago, the money market conditions were such that the $80,000 payment could have carried a

Red cedar rounds out a restaurant.

When the architect designed the *Don the Beachcomber* restaurant in Dallas, his plans included red cedar shingles inside and outside. To quote his rationale: "The restaurant is a sheltering dome-like form with no demarcation between roof and walls.

"We selected red cedar shingles because they are a warm, natural material that weathers to a color which enhances the spirit of the building.

"Red cedar shingles are the ideal material to apply to the convex and concave shapes of the structure."

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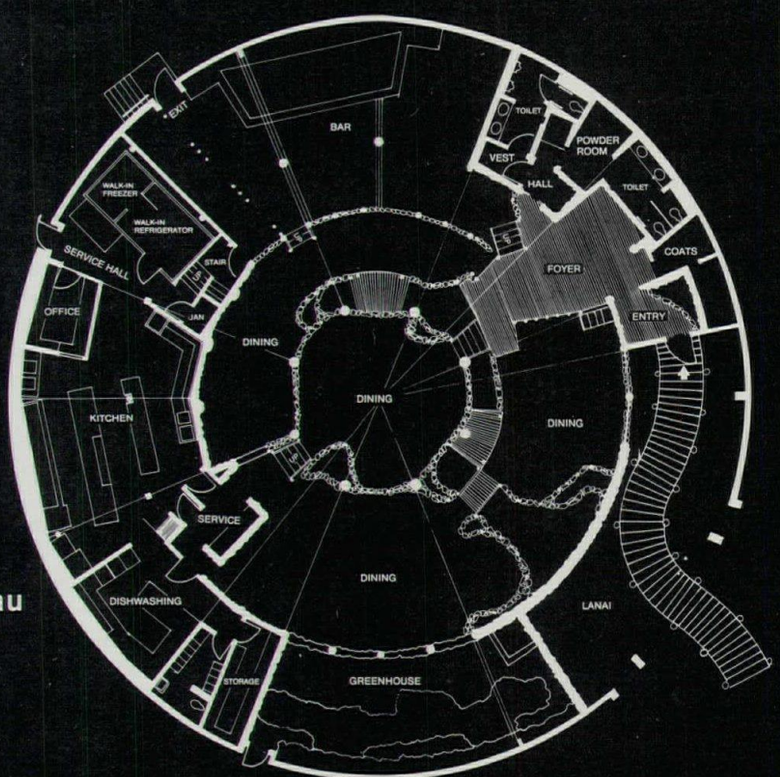

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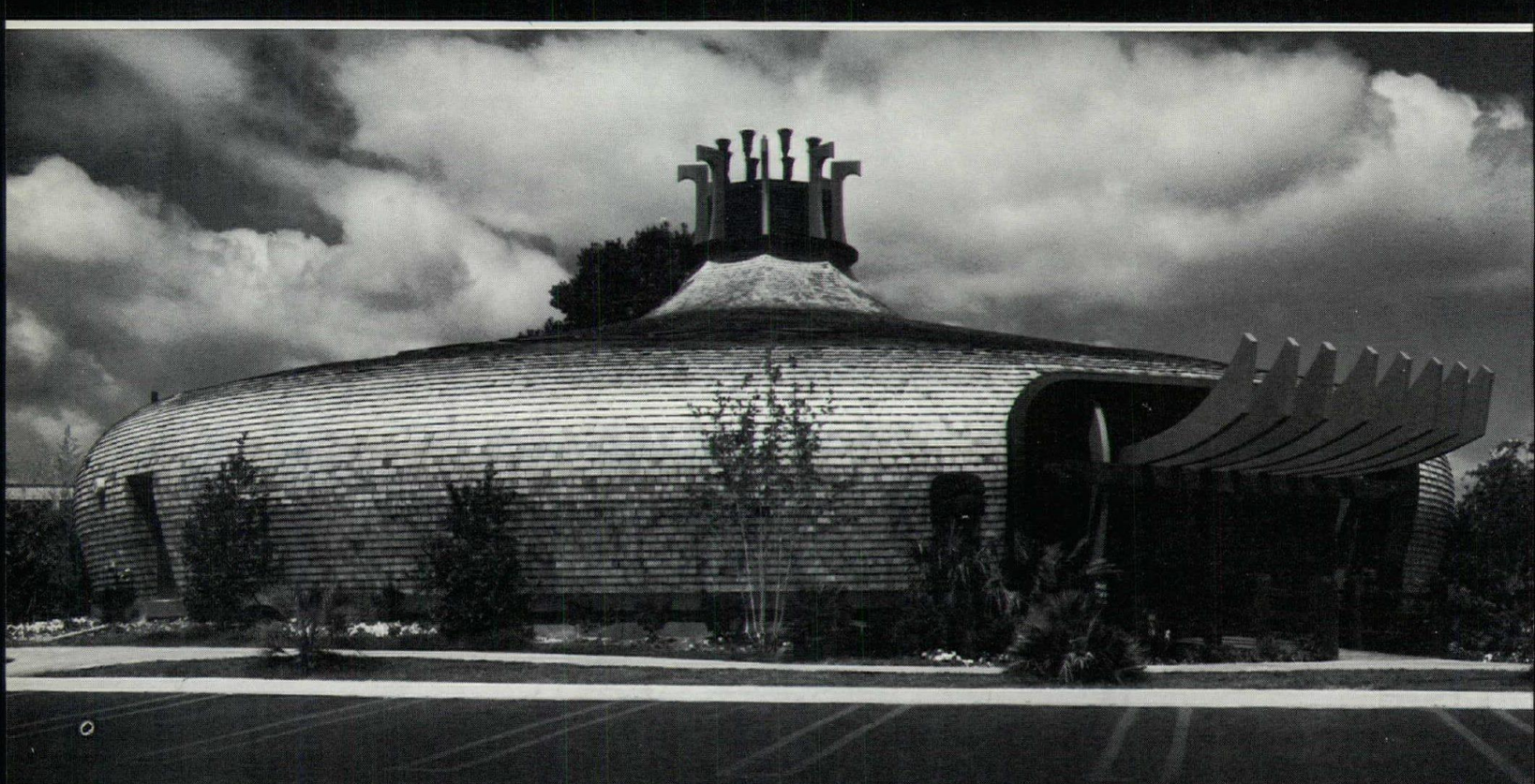


Don the Beachcomber Restaurant, Dallas, Texas. William Landworth and Associates, Architects.

These labels under the bandstick or on cartons of red cedar shingles, handsplit shakes and grooved shakes are your guarantee of Bureau-graded quality. Insist on them.

For more data, circle 37 on inquiry card

What may be good for one may be an unwarranted risk for another. The needs of the participants must be matched to the problems of the property and the nature of the financial returns.

$1 million mortgage. Moreover, at that time the depreciation rate allowable for income tax purposes was higher, thus increasing the after tax returns to the investor. For instance, the $40,000 cash flow after financing might rise to $60,000 after taxes if one assumes that depreciation charges result in a loss for income tax purposes, and if the owner is able to take advantage of such losses. To a large extent we can see that both the financing and tax variables are independent of the property itself.

There is a third element to any investment decision: the level of skills, resources and contacts brought by the specific *people* involved in or affected by the transaction. If in the building referred to above, the rentals came from 15 apartments with a high turnover rate in a city with rent control, the management requirements would be quite different from net leased commercial property. Likewise, the $20,000 increase in cash flow from tax benefits could be less or more valuable depending upon the bracket of the taxpayer. Remember that the marginal tax rate reaches 50 per cent only at a taxable income of $44,000. In other words, each decision-maker must proceed based upon that individual's personal perspective. What may be good for one may be an unwarranted risk for another. The needs of the participants must be matched to the problems of the property and the nature of the financial returns.

Changes in the environment can affect feasibility

Smaller scale projects in established areas are inherently less risky for the architect/investor/developer.

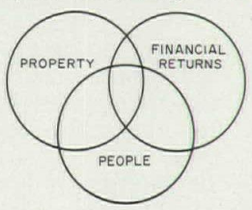
A key problem, though, is that in spite of the best decision-making, the fact that real estate development is a long-term process, ensures that many of the initial ground rules will not continue to be applicable. One has little control over many of the key variables. Moreover the larger and more complex a project, the more basic changes in the environment are apt to occur, another reason why smaller scale projects in established areas are inherently less risky for the architect/investor/developer.

There are risks relating to time, to change, to scale, to innovation, to experience. Most architects by temperament welcome projects that provide these challenges. Yet, given the unknowns of any real estate development one must ask how much risk is appropriate to assume.

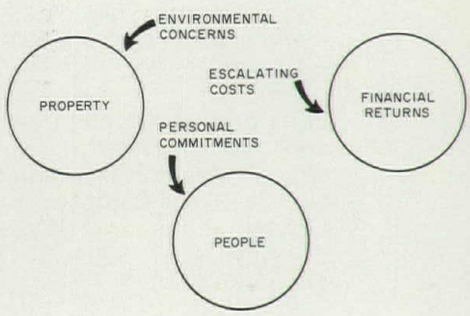
As an example of the types of unforeseen problems that can occur, a young developer of a small site in Virginia agreed as a result of the need to obtain approval from a new Planning Director to put parking for a new apartment house underground. The extra cost resulted in the developer not having the cash to proceed. The Planning Director may have set a reasonable standard, but the developer five years later is still sitting with an uneconomic parcel of land.

Also affecting the feasibility of a venture is the capitalization rate, given the project's income stream by the market. Capitalization is the act of estimating the present value of future periodical payments. It is simply computed by dividing the anticipated income by the market's expected rate of return. For example, a major project in New York City was logical in 1972 when the income of $450,000 was valued at an 8 per cent capitalization rate, or $5,625,000. But, by the time the necessary approvals were obtained, the market capitalized income from similar projects at 10 per cent. The projected $450,000 operating cash flow—even if obtained—was worth only $4,500,000 at the 10 per cent rate.

Further, the needs of the participants change. In Boston, a successful architect decided to invest some of the firm's profits in a long term waterfront development. Again, the project was delayed for years due to the need for myriad approvals and by the time the project got underway, the architect's practice had dwindled to the point where excess investment capital was scarce and the need for tax losses much less. In other words, it is important to remember that a situation that might have been described by our earlier diagram as:



might someday look like this:



Trends in the industry offer guidance

The real estate field is fragmented and project oriented. Each development is the start of a separate and new business. Over-all, just as population growth was over-estimated in the

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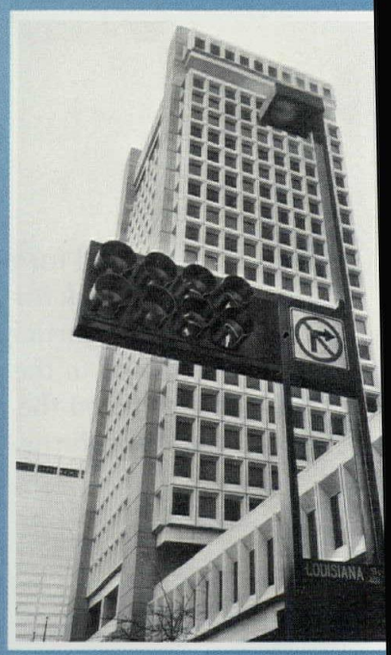

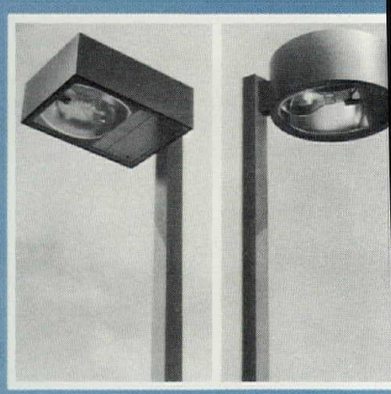

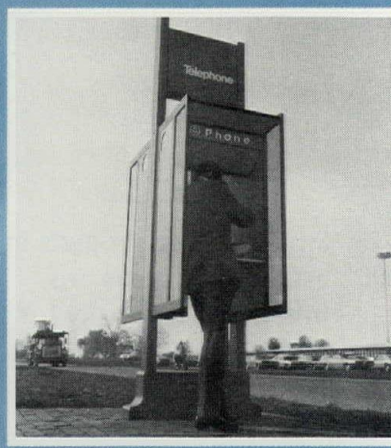

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Major market growth will continue to occur in the Sun Belt, or in middle-sized semi-urban areas.

1960s present estimates appear to be overcompensating in the opposite direction. Within each community there are opportunities. Yet, there are certain trends which, if taken into consideration, will increase one's chances of finding good opportunities. For example, major market growth will continue to occur in the Sun Belt, or in middle-sized semi-urban areas such as Raleigh-Durham, or Fairfax County, Virginia. These areas appeal to the large numbers of families who will be in their early- to mid-thirties in the next decade and who desire a pleasant and relatively less expensive living environment. Because of the recent growth in such areas, they now have many of the amenities of larger, older urban areas with comparatively few of the publicized disadvantages. A high degree of regulatory controls, though, will continue to be exerted at the local and state levels to preserve traditional values and existing scale.

Looking at the physical side, housing will continue to follow the trend in the automotive industry of producing smaller lighter cars with many extras, i.e., less structure and space, and more gadgets. Imaginative rehabilitation of existing structures will not only have a base cost advantage but will have an easier time in obtaining local approval. Operating costs will continue to rise partially because of rising real estate taxes and utilities and personnel costs, and partially because of consumer expectations. As a result, developers will continue to protect themselves against a decreasing profit margin by selling condominiums rather than renting apartments and by inserting full protection operating clauses in non-residential leases.

Imaginative rehabilitation of existing structures will not only have a base cost advantage but will have an easier time in obtaining local approval.

Financial returns will continue to be limited by high long term interest rates that require project capitalization rates of 9-11 per cent. In the next few years income tax reforms will eliminate the benefit of tax losses from construction and accelerated depreciation for all properties except subsidized housing.

Because of recent experience, most large development firms will find it difficult to obtain new financing for projects. Special groups will be formed with the contacts and expertise to handle specific opportunities. Architects will often be able to trade their expertise and willingness to reduce the developer's up-front investment for an equity interest.

Guidelines can help in the decision-making

Before proceeding, however, there are a number of guidelines that can help your decision-making.

1. Pick your spots. Is the project in a location where you have confidence that the market exists and can afford your product?

2. Make sure you are comfortable with the scale of the project. Smaller projects are generally less risky. The dollar requirements should meet your pocketbook not only at the initial stage of investment but later when more funds are needed.

3. Don't overleverage. Not only are projections suspect, but you may find that your co-developer or co-investors may not have the funds to do the job properly, and will begin to cut corners to avoid putting in more money, thus endangering both your design and the project's economic future.

4. Ask all the questions you want, irrespective of whether you think they are stupid or should fall under somebody else's expertise. All the questions in the conceptual framework are relevant and may be crucial. If an answer contradicts your common sense or is buried in a sea of numbers, slow down and ask again. Are cost estimates based upon facts or hopes? Make sure you have good information.

5. See how many risks can be eliminated through precommitments such as prior zoning, tenancy and financing approvals. A preliminary rule for judging the likelihood of approvals being obtained is to ask how you would react if you lived nearby. How innovative do you want the project to be? Remember that innovation is exciting but adds to the risk.

6. Does the compensation warrant the risk? You rarely get something for nothing. Is your design time the only initial outlay? If the project works out, how will you be paid and when?

7. If the project does not work out, how will you get out or limit your exposure? Again, who will pay the bills and when?

8. Consider whether your partners share your project development and financial goals. How long do you want to own this property? Have you budgeted adequate time to monitor the investment?

9. Lastly, real estate development has traditionally been a rewarding, yet a cyclical industry. Are you coming into the cycle at the high or low point? If everybody else is already doing it, beware. If not, now may be the time to act.

Nearly 22 per cent of architects responding to a recent RECORD *survey report having full or part ownership in projects designed in the last two years, primarily office buildings and multi-family housing. This figure compares with nearly 28 percent similarly involved in their projects in 1972.*—Ed.

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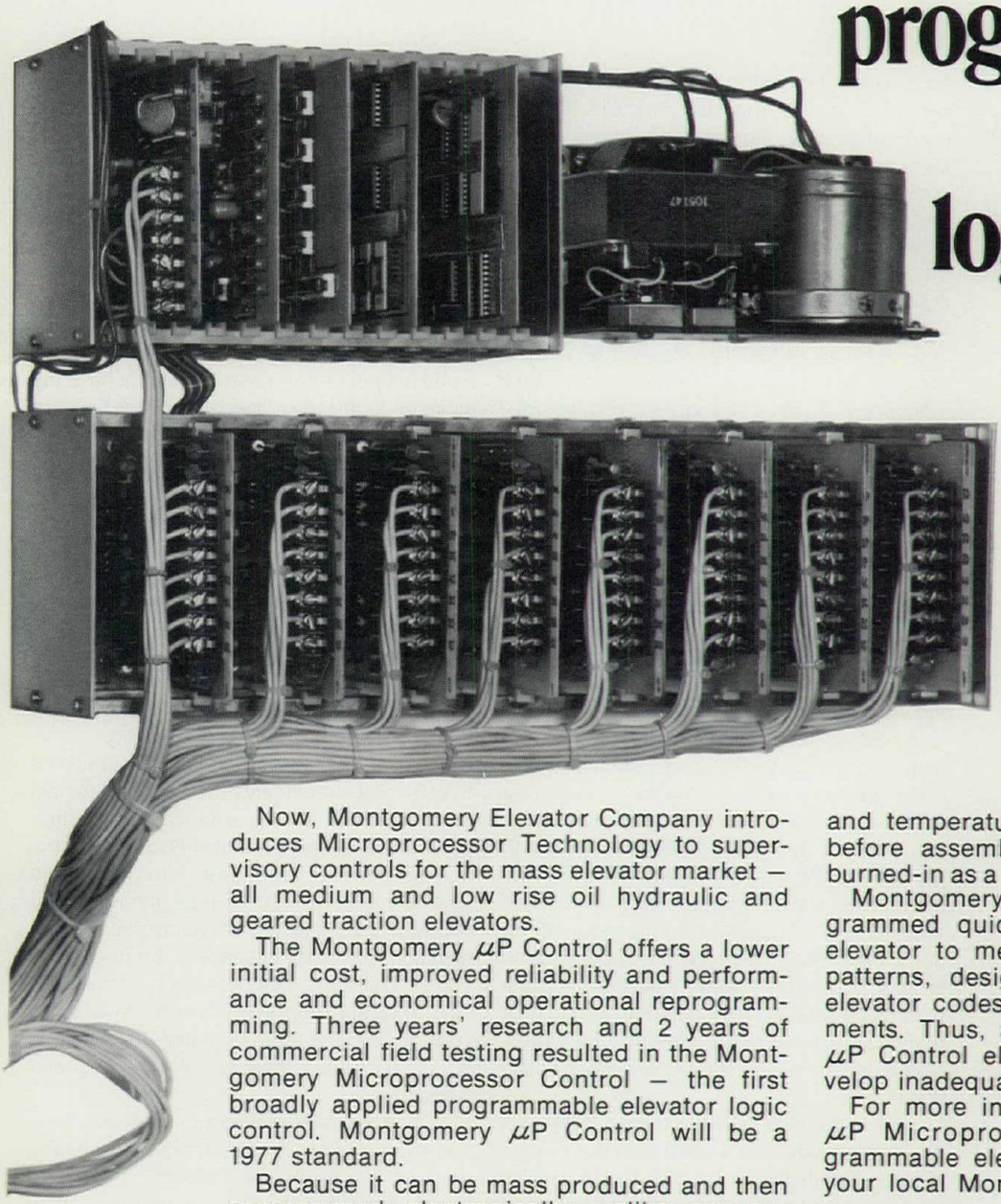

*μP is the electronic industries shorthand for microprocessor. μ is a Greek form of the letter m.

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Construction costs are up 6.2 per cent

The cost of construction materials and labor across the nation rose an average of 6.2 per cent during a twelve-month period, substantially below the 9.3 per cent increase registered a year earlier, it was reported recently by the Dodge Building Costs Services Department of McGraw-Hill Information Systems Company.

The information released by Dodge Building Cost Services, for the twelve-month period ended September 1976, is based on a semi-annual survey of building trades unions, contractors and materials suppliers in 183 cities in the continental United States. (The history of recent construction industry inflation is discussed on page 61.)

During the latest twelve-month period, cost hikes were generally highest in the region covering the Pacific Coast and Rocky Mountain States, up 9.4 per cent, followed by the Northeastern and North Central States area, up 6.1 per cent. The smallest increase, 4.4 per cent, occurred in the New England States.

The full report, titled "Dodge Building Cost Indexes for U.S. and Canadian Cities," may be purchased from Dodge Building Cost Services, Department 2051, McGraw-Hill Information Systems Company, 1221 Avenue of the Americas, New York, N.Y. 10021. The price is $3.00.

INDEXES: December 1976 — 1941=100.00 (except as noted)

Metropolitan area	Cost differential	Current Indexes: non-res.	residential	masonry	steel	% change last 12 months
U.S. Average	8.5	562.2	527.8	554.6	540.8	+08.3
Atlanta	7.5	665.1	627.0	655.0	641.8	+09.7
Baltimore	8.5	595.0	559.4	578.9	567.2	+00.7
Birmingham	7.3	559.1	520.0	549.3	537.8	+23.1
Boston	9.0	563.1	532.1	565.0	547.8	+06.5
Buffalo	9.1	594.4	558.1	585.0	568.3	+02.8
Chicago	8.3	644.2	606.2	635.6	619.5	+13.5
Cincinnati	8.8	617.8	581.3	603.2	590.2	+10.8
Cleveland	9.0	641.9	604.0	630.6	615.5	+19.3
Columbus, Ohio	8.2	565.2	530.8	562.5	545.7	+06.7
Dallas	7.9	543.4	526.2	539.9	525.5	+07.9
Denver	8.4	622.9	586.0	616.7	603.5	+11.3
Detroit	9.8	624.1	594.5	621.5	605.0	+03.3
Houston	7.4	521.8	490.0	510.4	501.4	+06.6
Indianapolis	7.8	523.0	491.1	514.8	504.0	+13.3
Kansas City	8.7	554.4	523.9	545.4	533.2	+07.6
Los Angeles	8.5	688.0	628.9	671.1	653.2	+13.4
Louisville	7.6	558.2	524.2	549.7	537.0	+11.1
Memphis	8.4	540.9	507.9	526.0	513.3	−00.6
Miami	7.9	599.7	571.3	595.9	583.0	+06.1
Milwaukee	8.7	684.8	643.0	680.4	657.4	+12.7
Minneapolis	8.9	570.4	536.6	565.4	549.6	+04.9
Newark	9.0	516.1	484.6	513.5	500.4	+04.3
New Orleans	7.5	541.8	511.4	532.3	523.3	+08.2
New York	10.0	594.2	552.5	581.0	520.9	+08.9
Philadelphia	9.1	585.6	557.9	578.7	566.7	+02.1
Phoenix (1947 = 100)	8.2	319.0	299.6	315.4	307.1	+05.8
Pittsburgh	8.9	532.1	500.6	522.1	511.1	+03.4
St. Louis	8.7	544.1	513.6	539.8	528.0	+01.6
San Antonio (1960 = 100)	7.6	221.6	208.1	216.7	212.6	+10.4
San Diego (1960 = 100)	8.7	255.5	239.9	252.3	246.0	+15.8
San Francisco	9.6	839.1	767.0	833.2	803.4	+09.0
Seattle	8.6	585.4	523.9	570.8	551.9	+10.8
Washington, D.C.	8.4	548.9	515.4	542.1	526.5	+04.8

Cost differentials compare current local costs, not indexes, on a scale of 10 based on New York

Tables compiled by Dodge Building Cost Services, McGraw-Hill Information Systems Company

HISTORICAL BUILDING COST INDEXES—AVERAGE OF ALL NON-RESIDENTIAL BUILDING TYPES, 21 CITIES — 1941 average for each city = 100.00

Metropolitan area	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975 (Quarterly) 1st	2nd	3rd	4th	1976 (Quarterly) 1st	2nd	3rd	4th
Atlanta	329.8	335.7	353.1	384.0	422.4	459.2	497.7	544.8	575.0	583.8	585.3	597.2	598.7	602.6	604.1	655.6	
Baltimore	280.9	295.8	308.7	322.8	348.8	381.7	420.4	475.5	534.3	538.7	540.2	579.6	581.1	609.7	611.2	583.5	
Birmingham	270.7	274.7	284.3	303.4	309.3	331.6	358.3	402.1	421.2	438.6	440.1	447.4	448.9	469.0	469.5	550.4	
Boston	262.0	265.7	277.1	295.0	328.6	362.0	394.4	437.8	462.5	484.1	485.6	511.7	513.2	535.7	537.2	554.4	
Chicago	320.4	328.4	339.5	356.1	386.1	418.8	444.3	508.6	529.6	539.2	540.7	558.6	560.1	560.3	561.8	633.7	
Cincinnati	278.3	288.2	302.6	325.8	348.5	386.1	410.7	462.4	500.1	518.0	519.5	549.1	550.6	602.9	604.4	608.3	
Cleveland	300.7	303.7	331.5	358.3	380.1	415.6	429.3	462.2	509.5	516.6	518.1	529.5	531.0	578.7	580.2	631.4	
Dallas	266.9	270.4	281.7	308.6	327.1	357.9	386.6	436.4	477.9	488.3	489.8	498.1	499.6	506.1	507.6	537.0	
Denver	297.5	305.1	312.5	339.0	368.1	392.9	415.4	461.0	510.0	530.4	531.9	552.1	553.6	580.3	581.8	614.5	
Detroit	296.9	301.2	316.4	352.9	377.4	409.7	433.1	501.0	538.7	554.4	555.9	596.0	597.5	615.1	616.6	615.7	
Kansas City	261.0	264.3	278.0	295.5	315.3	344.7	367.0	405.8	444.9	481.1	482.5	507.6	509.1	523.8	525.3	545.8	
Los Angeles	302.7	310.1	320.1	344.1	361.9	400.9	424.5	504.2	531.8	546.7	548.2	592.6	594.1	599.1	600.6	671.6	
Miami	284.0	286.1	305.3	392.3	353.2	384.7	406.4	447.2	485.5	499.5	501.0	557.4	558.9	588.1	589.6	591.0	
Minneapolis	289.4	300.2	309.4	331.2	361.1	417.1	412.9	456.1	488.6	513.9	515.4	536.5	538.0	548.3	549.8	562.6	
New Orleans	259.8	267.6	274.2	297.5	318.9	341.8	369.7	420.5	442.1	463.5	465.0	493.2	494.7	522.8	524.3	533.3	
New York	304.0	313.6	321.4	344.5	366.0	395.6	423.1	485.3	515.3	524.1	525.5	532.0	533.5	539.4	540.9	579.3	
Philadelphia	286.6	293.7	301.7	321.0	346.5	374.9	419.5	485.1	518.5	531.5	533.0	566.0	567.5	581.8	583.3	577.7	
Pittsburgh	271.1	275.0	293.8	311.0	327.2	362.1	380.3	424.4	465.6	475.2	476.7	508.0	509.5	508.5	510.0	524.8	
St. Louis	288.3	293.2	304.4	324.7	344.4	375.5	402.5	444.2	476.7	497.5	499.0	527.4	528.9	542.7	544.2	535.6	
San Francisco	386.0	390.8	402.9	441.1	465.1	512.3	561.0	632.3	672.5	716.0	717.5	751.8	753.3	790.1	791.6	819.3	
Seattle	275.0	283.5	292.2	317.8	341.8	358.4	371.5	424.4	450.2	472.5	474.0	513.6	515.1	525.9	527.4	569.0	

Costs in a given city for a certain period may be compared with costs in another period by dividing one index into the other; if the index for a city for one period (200.0) divided by the index for a second period (150.0) equals 133%, the costs in the one period are 33% higher than the costs in the other. Also, second period costs are 75% of those in the first period (150.0 ÷ 200.0 = 75%) or they are 25% lower in the second period.


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For the moment at least, inflation is down in the construction industry

Inflation relaxed its grip on construction in 1976. And in a year when there wasn't much else for architects to get excited about, this has to count as one of the few important things that happened.

Construction has always suffered a higher rate of inflation than most other sectors of the economy. Back in 1974, when the GNP cost index was rising by 10 per cent, construction costs—according to the most widely used composite measure—were surging ahead at 17 per cent. But now, in 1976, even construction costs have receded to a more tolerable range of 5 to 6 per cent. For the moment, at least.

Conventional wisdom has it that there are two important reasons why inflationary pressures have lessened over the past year or two. One is simply the recession. The other is government's austere monetary and budgetary programs. Together, these events are credited with restraining excessive demand, and—in cause-and-effect fashion—reducing inflation.

That's a fairly plausible explanation as long as you are willing to accept the simplistic notion that inflation is caused by "too much money chasing too few goods." It's an adequate concept as far as it goes, but it only goes as far as one type of inflation: demand-pull inflation. And when excess demand really is the inflationary source—as it was back in 1973 and early 1974—monetary and fiscal restraint are appropriate remedies. But there's also cost-push inflation, and cost-push inflation keeps on pushing prices up even when there's a deficiency of demand, even during recessions like 1974 and 1975.

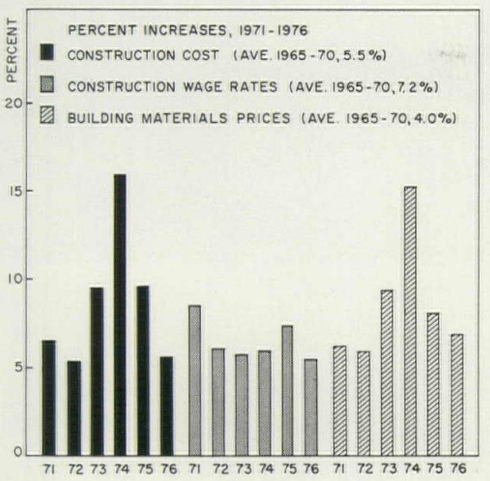
Of three types of recent inflation, two are inoperative

If the various sources of inflation could be neatly sorted out, they might be described as consisting of a base layer of cost-push inflation that is with us all the time (something that is built into the economy by way of its many rigidities and inflexibilities). On top of this irreducible minimum is stacked a layer of demand-pull inflation that comes and goes as the economy swings from prosperity to recession. And still on top of that is superimposed an additional layer that might be called "special-situation" inflation. During the mid-1970s we experienced all three to one degree or another.

Toward the end of 1973 and going into 1974, excess demand was by far the dominant source of inflationary pressure. The economy was at the peak of the business cycle, straining against the limits of its productive capacity. Shortages had cropped up in most industries, and that's where and when double digit inflation began.

In the two years that followed we were buffeted first by the oil crisis, and then by the worst recession in a generation. As the recession deepened, demand-pull inflation subsided. But that didn't help much, since it was replaced by a jolt of cost-push inflation of the special-situation type—the oil crisis. This turned out to be an even stronger source of inflation than the excess demand conditions that preceded it. It took nearly two full years for that one-shot surge of oil price hikes to work its way through and around the economy.

So now we've finally adjusted to a sharply higher level of energy cost. And for the time being, the post-recession economy has a deficiency rather than an excess of demand. The two most important causes of the recent inflationary binge are temporarily inoperative, and that's why we're back at 5 per cent.



Did it really happen that way in the construction industry? The accompanying chart shows that it did. During 1973 construction costs were reflecting the strongest demand conditions the construction industry has ever known. In that year contracting for nonresidential buildings rose by 15 per cent to the all-time peak of 1.4 billion square feet, and construction costs advanced by nearly 10 per cent, compared with the average yearly rise of 5½ per cent during the previous five years.

Materials, not labor, contributed to mid-1970s construction cost surge

By 1974, recession was already under way in construction (somewhat ahead of the rest of the economy), and nonresidential contracting dropped off about 10 per cent. Despite this weakening of demand, construction costs inflated 17 per cent in 1974! In the year that followed, a further decline of 25 per cent in the demand for nonresidential buildings was accompanied by another 10 per cent rise in cost. It was only in 1976 that inflation in construction finally settled back to its late-1960s early-1970s average rate of 5-6 per cent. The chart shows why it happened that way.

Construction wages are a substantial and usually volatile part of total building costs. However, the chart shows that wages in the building trades had little, if anything, to do with surge of construction cost during 1974 and 1975. In fact, during the mid-1970s, wage hikes in construction were both steady and low relative to what they averaged during the five years before. And that's reasonably consistent with the high rates of unemployment the building trades have known for the past few years. Only once since 1970 has this unemployment rate been below 10 per cent.

What this means is that most of the action had to be in building materials prices, and the chart shows that it was. As construction activity reached its peak in 1973-74, building products manufacturers were operating at full capacity. Unit costs rose sharply as shortages arose and bottlenecks developed. The slackening of demand late in 1974 and more especially in 1975, should have alleviated that strained situation, and probably would have relieved cost pressures in the building products industry except that this was when the oil crisis hit with full force.

To a greater degree than most industries, building materials manufacturing is highly dependent upon petroleum products—either as a source of energy (for cement, bricks, glass, and other "cooked" materials) or as a raw material (roofing, paving, and other bituminous products, plastics, and other petrochemical derivatives). And so the initial shock of skyrocketing oil prices was transmitted through building products to construction itself. The paradoxical result: a two-year period of some of the worst inflation the construction industry has ever known, at a time when the demand for construction was crumbling.

But now that inflation has receded and demand is strengthening, next year—1977—could be a particularly "constructive" year for the industry.

George A. Christie
Vice president and chief economist
McGraw-Hill Information Systems Company

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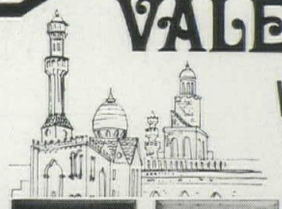

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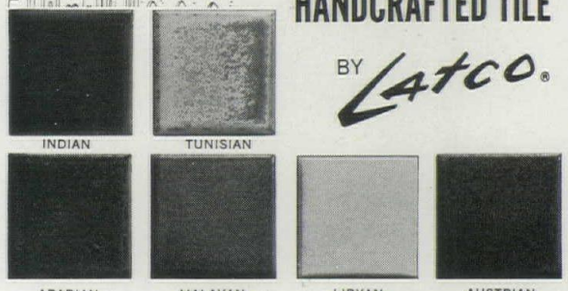

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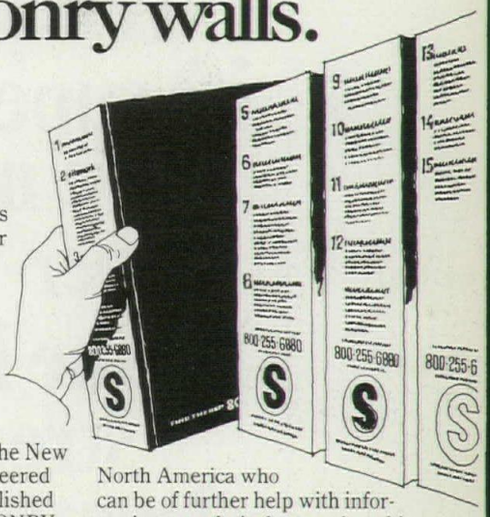

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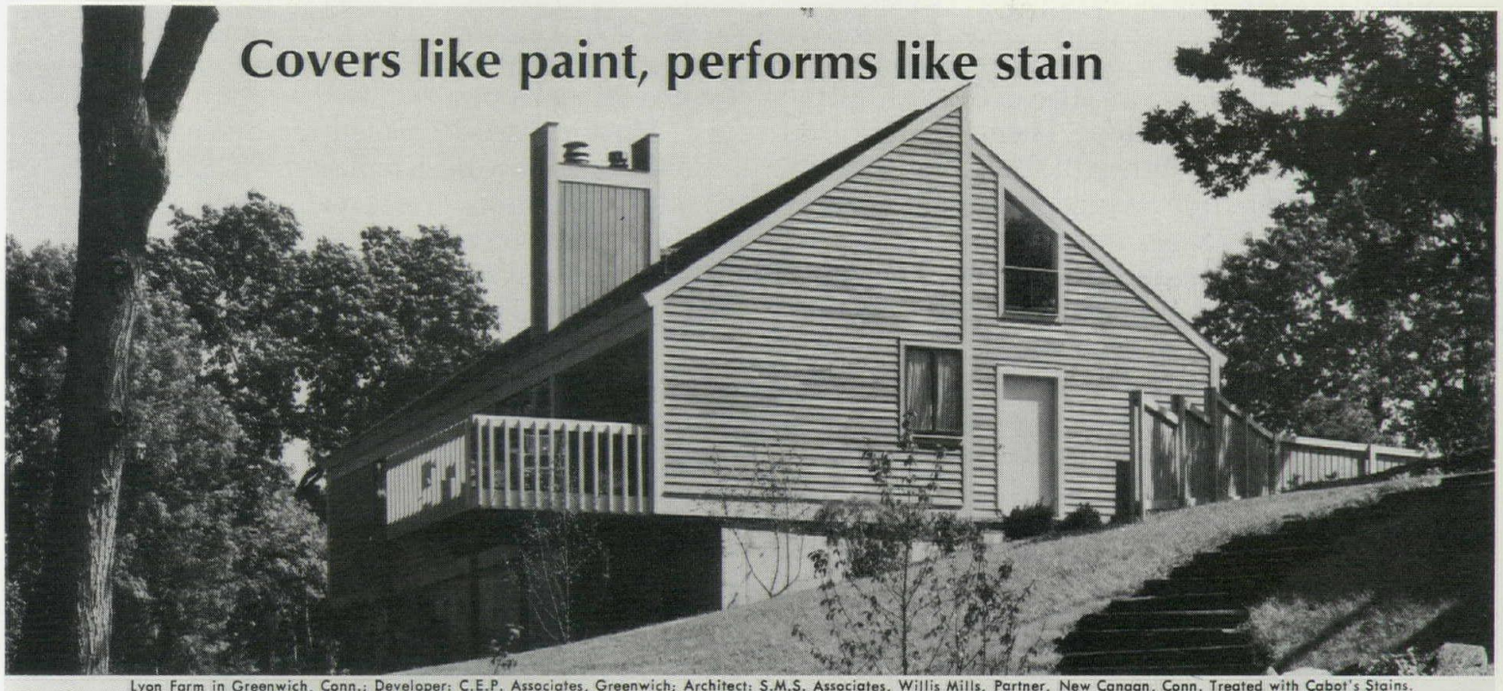

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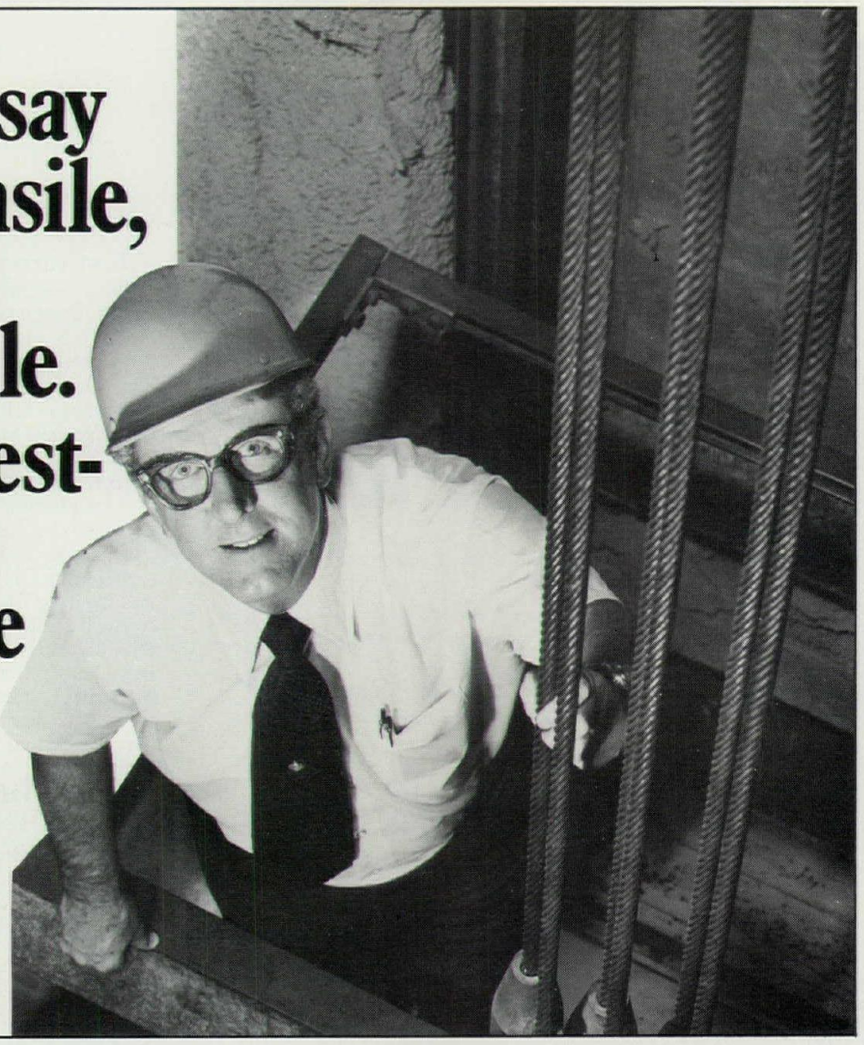

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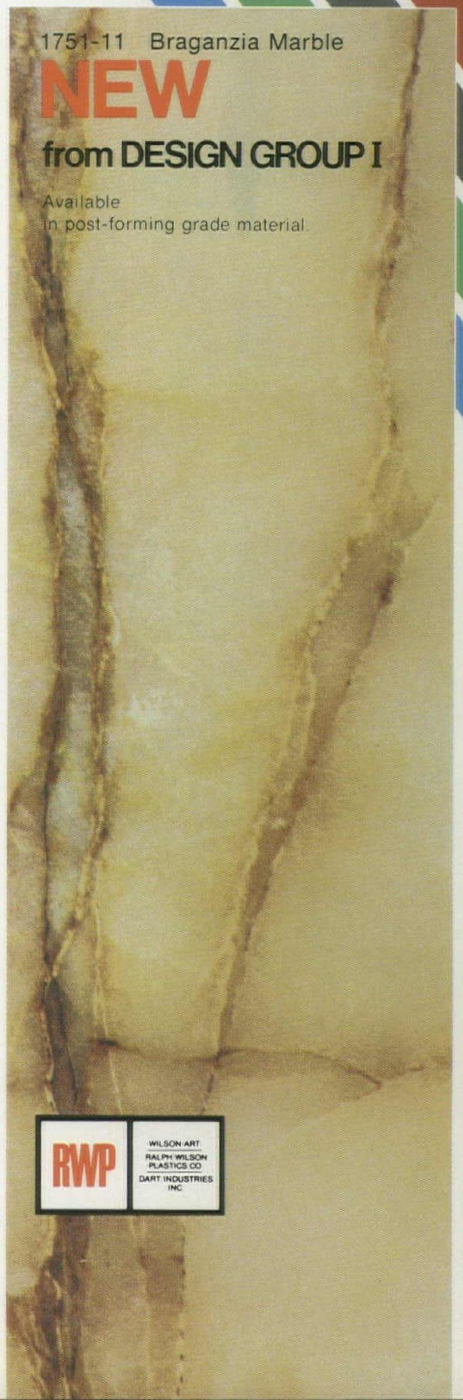

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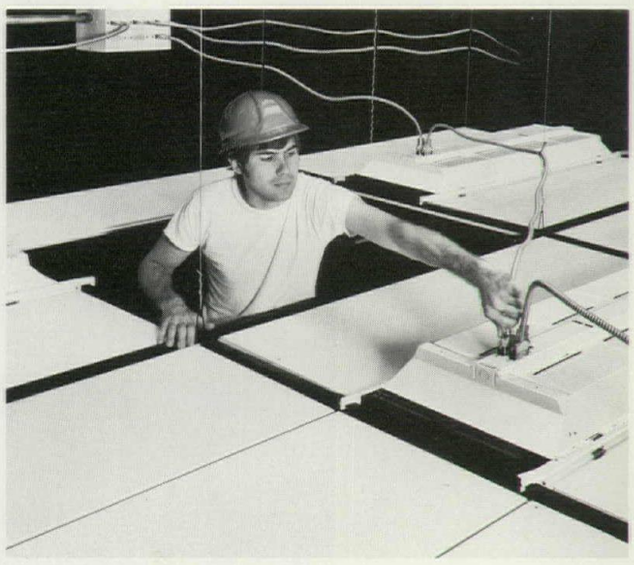

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Erector: Peterson Brothers Steel Erection Company, Houston
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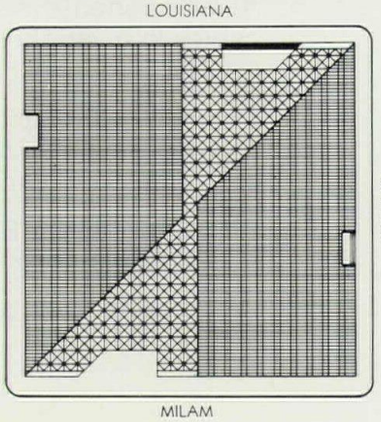

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The system adopted utilizes a welded rigid steel frame on the perimeter, and concrete shear walls in the core. Three additional welded bents, located near each 45-degree corner, minimize torsion.

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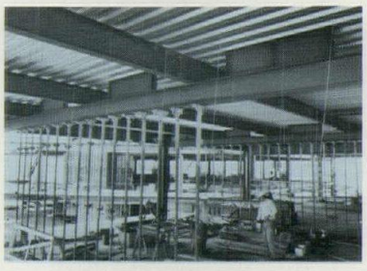

(1)

The stub-girder concept resembles a Vierendeel truss system. The composite concrete and steel floor deck system forms the top compression chord of the Vierendeel and a high-strength steel section forms the bottom tension chord. Stub pieces, shop-welded to the bottom tension chord and connected to the composite concrete and steel floor deck system by welded stub-type shear connectors, serve as the verticals of the Vierendeel.

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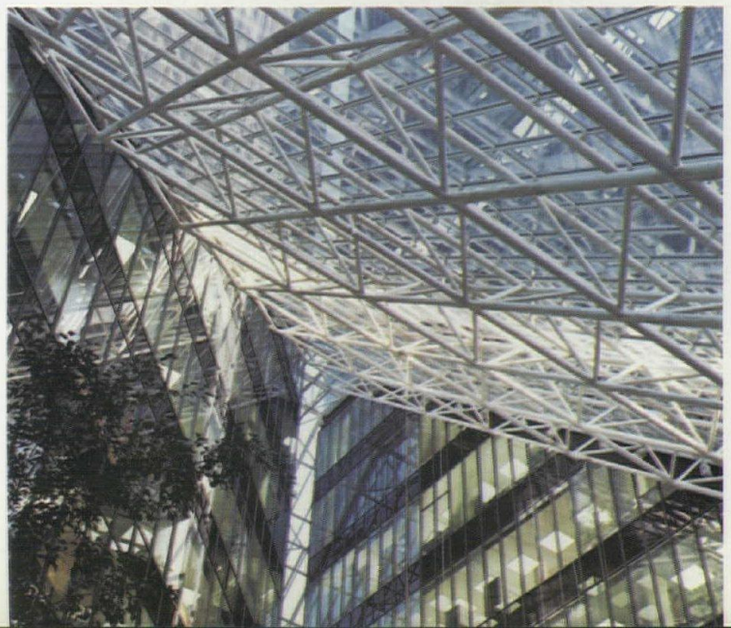

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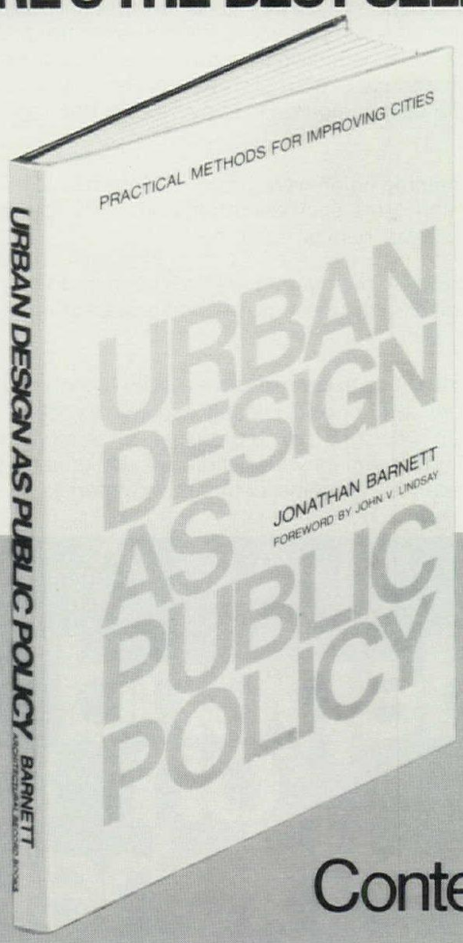

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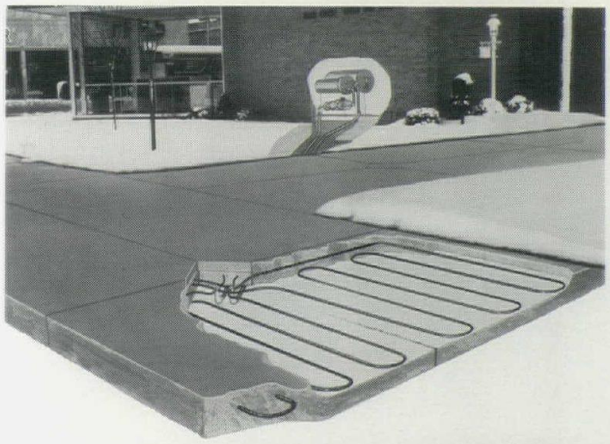

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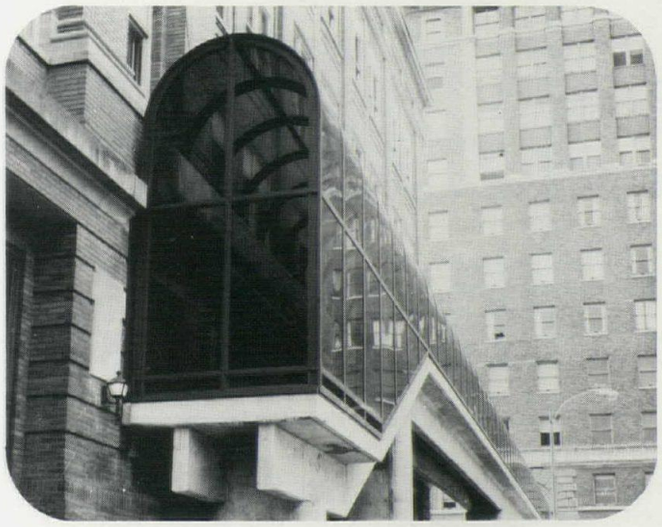

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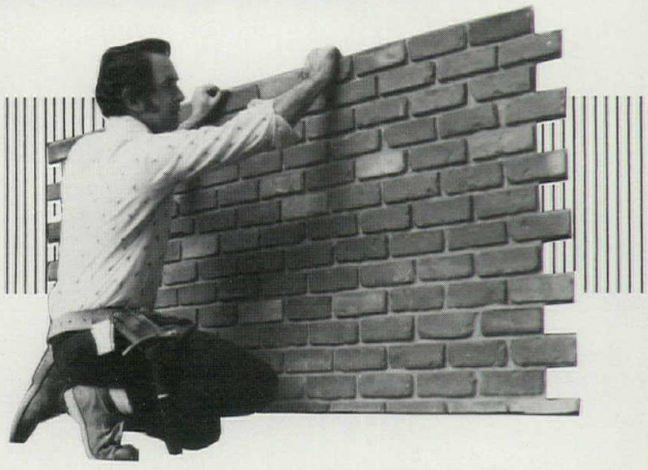

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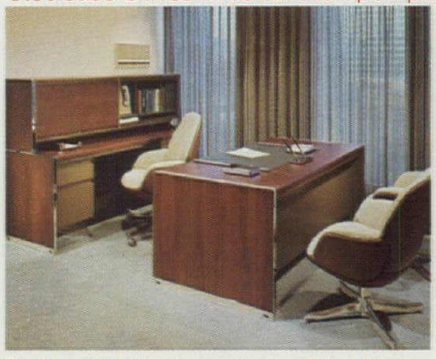

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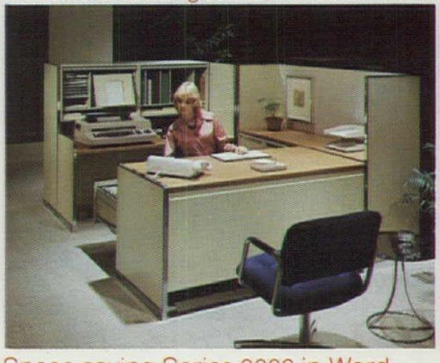

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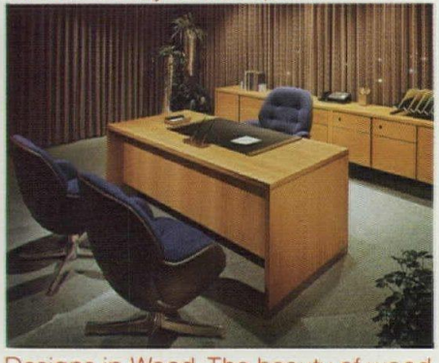

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THE HOME TOWNS COME BACK

How architects are helping rebuild a way of living in our smaller cities and towns

For much too long, now, many of our smaller cities and towns have been in serious trouble. Under competition from outlying shopping centers, central business districts have been falling into disuse. Housing near the core, which could bring twenty-four hour vitality, continues to be red-lined by many banks—leading to further decay. Once proud buildings—sometimes of landmark quality—are standing idle for lack of an effective new use. In many towns, urban renewal policies of the late 1950s and early 1960s cleared portions of the central districts, but did not produce the new building that was envisioned—and the result is a downtown parking lot. Present urban policies, and the concept of revenue sharing instead of categorical grants, place more and more responsibility on local authorities. More and more of our young people seem less anxious to leave their small-town backgrounds for The Big City—but nonetheless must continue to migrate, because those small towns so far have seemed to offer no jobs, little opportunity, and not much vitality.

■ It doesn't have to be that way—and in fact it *isn't* that way any more in a small but increasing number of towns across the country. They are being returned to; and they are being rehabilitated at a rapid pace. Their newly found vitality rests on several most pragmatic bases, the first of which is political: these renovations are invaluable assets for town executives who are successfully trying to keep industry from moving away to what seem like more viable environments. Thus mayors are joining forces with architects, bankers, business people, and concerned citizens to rescue not just their decaying towns, but a way of life which is becoming more and more to seem special and irreplacable and therefore urgently worth saving.

"In pioneering times, the civitas *came together in the cause of survival. Nothing less than a return to this survival spirit is needed today. There is not enough money in the world to save our towns and cities without this individual commitment."*—Victor Christ-Janer

This development signals a fairly radical turnaround in our attitudes. During the past half century, architects, city planners, sociologists, and psychologists have spent much—indeed almost all—of their time studying and describing the pleasures and the terrors of life in the large urban centers—almost as though it were a foregone conclusion that sooner or later most of the population would wind up living there. Thoughtful writers have praised the city for those very qualities that conventionally make it seem unappealing: its ugliness and therefore its vitality, its contradictions and therefore its variety, its fears and therefore its excitements. Some psychologists have even gone so far as to claim that it is *only* by facing the challenges, complexities, and inevitable defeats of city life that an individual (and from that a society) can ever pass from psychological adolescence to psychological true maturity.

What these writers on city life fail to notice, of course, is something which generations of Americans have known about for years without bothering to read the psychologists' works. For whereas the psychologists have learned to see the value of disorder and conflict, people in general have always understood the value of order. In the 1960s, for instance, a new generation of young people began to discover the pleasures of an altogether rural, completely un-urban life in places like Vermont, the deserts of New Mexico, and the North Coast of California. The relatively solitary, relatively un-social life in places like these provides an extreme alternative to big city life.

Another alternative still, which has been more and more sought after since the end of the Second World War, is life in the suburbs, and indeed whole cities—like Los Angeles and Houston—have grown up to bear more formal relationship to the suburb than to the traditional city. Life in the suburbs is characterized by many as calm and relatively serene, with minimal and sociable brushes with the neighbors (who, with any luck, are pretty much like yourself), and it is often characterized as well as being free from strident social involvements. Some, on the other hand, see suburban life, beneath a thin surface of orderliness, as being rife with boredoms, tensions, and hostilities.

In any case, these three contexts—urban, suburban, and rural—offer people three extremely different options for confirming and modifying their own identities by their choice of where and how they live. To these three options we now add a fourth, which has lately been overlooked but which is becoming more and more popular in America and which is represented by the newly burgeoning small towns across the land. We call this new option life in the Home Towns.

■ The term Home Towns has two specific meanings, both of them extremely obvious. Home Towns are Home Towns because they feel like towns, and because they feel like home. We think a community feels like a town when it feels like a thing unto itself, not just a satellite

of some other community, and when it does not feel so large, so various, so forbidding as to be a city. We think a community feels like home when, on the one hand, a person can have the opportunity and the sense of personal involvement in it, personal challenge, and personal achievement in a way that is usually rare in big cities, and when, on the other hand, there is the sense that there is in fact something of social worth to get involved in—a sense that is often lacking in rural life, and sometimes lacking in the suburbs.

Personal involvement and the possibility of personal achievement directly expressed are the keys: Home Towns are towns where effective town meetings are still possible. They are places where people are acquiring—some of them for the first time—the sense that their participation in the civic life matters.

■ This issue of ARCHITECTURAL RECORD contains eight case studies of places where these things are happening—plus an essay on where the money is coming from. The towns are:

Aurora, Illinois. Centered on an island in the middle of a river—not unlike Paris's famous *Ile de la Cité*—this medium-size town had long ago turned its back on its riverfront assets and had thus virtually forgotten itself. Today, a program of vigorous public reawakening—led by planner Ben-Ami Friedman—has created a wave of public interest that is being combined with the city's aggressive new financing techniques to make Aurora a special place once again.

Granbury, Texas. Community pride in this small hamlet has stimulated its facelifting and the renovation of its major structures—all with private money.

Bridgeport, Connecticut. In this venerable town, a program of replanning, recycling of worthwhile buildings, and construction of new ones is gaining momentum. This program, initiated by architect Victor Christ-Janer, is being spearheaded by the architect and by the city's largest bank and one of its major manufacturers. Phase one of the program has so far included the rehabilitation of an industrial area into an office, recreation, and shopping center that attracts crowds of people into this once-rundown district. A smaller but significant aspect of phase one is the rehabilitation of a number of housing districts. Phase two includes plans to recycle an abandoned railroad station, refurbish a rundown waterfront district, and develop a transportation, office-building, and pedestrian-mall complex in the run-down central core of the town.

Savannah, Georgia. This town is no stranger to the cause of historic preservation—saving itself by saving its older buildings. But here is a new twist: on the fringes of a designated historic district, dilapidated Victorian houses are being remodeled, not only to sustain the architectural fabric of an area, but to maintain and create much-needed low-income housing.

Corning, New York. Skillfully coordinated dollars, planning, and design are turning this New York State factory town into a meat-and-potatoes mixture of fine new buildings, fixed-up old ones, enjoyable public spaces, and dusted-off heirloom streets.

Grand Haven, Michigan. Here a "citizen architect" managed to raise the curtain on the Main Street of this small town—with The World's Largest Musical Fountain.

Gananda, New York. This New York State New Town is on the move again after more than its share of troubles, and at the center of its first part is a building that pays as much attention to asking the right architectural questions as answering them. Urban Design Associates discovered that planning a new neighborhood center can be a game, and they used the gaming technique to discover what people who would be affected most by the new town liked and disliked. The design for the new neighborhood center, organized along a pedestrian way, evolved directly from the large volume of material produced by the games.

Dayton, Ohio. The Ohio architectural firm of Lorenz Williams Lively Likens and Partners began their work in Dayton with a series of commercial buildings built to standard concepts—but they applied to these buildings as well some more comprehensive goals which are now beginning to pay off in the form of a unified urban center, and in the form of enthusiastic public support.

Then there is the broad question of:

The effect of current methods of financing renewal. Significant private investment in renewing the urban centers of our smaller cities and towns usually begins after skilled architects and planners have successfully played the game of "grantsmanship." An important part of the architect/planner's role today is finding funds for preliminary studies and the preparation of plans, as well as procuring construction money to renew the downtowns of America's Home Towns. Today's best physical planners know how to put together development proposals that take advantage of monies made available by Federal, state, and local programs.

As part of a program to encourage low- and middle-income owners to undertake renewal on their own, the South End Development Company—a joint venture of architect Victor Christ-Janer, People's Savings Bank, and Warnaco, a major employer in the area—bought, rehabbed, and resold this house in Bridgeport, Connecticut as a prototype. *Details on pages 90-99.*

Photography by Robert Damora

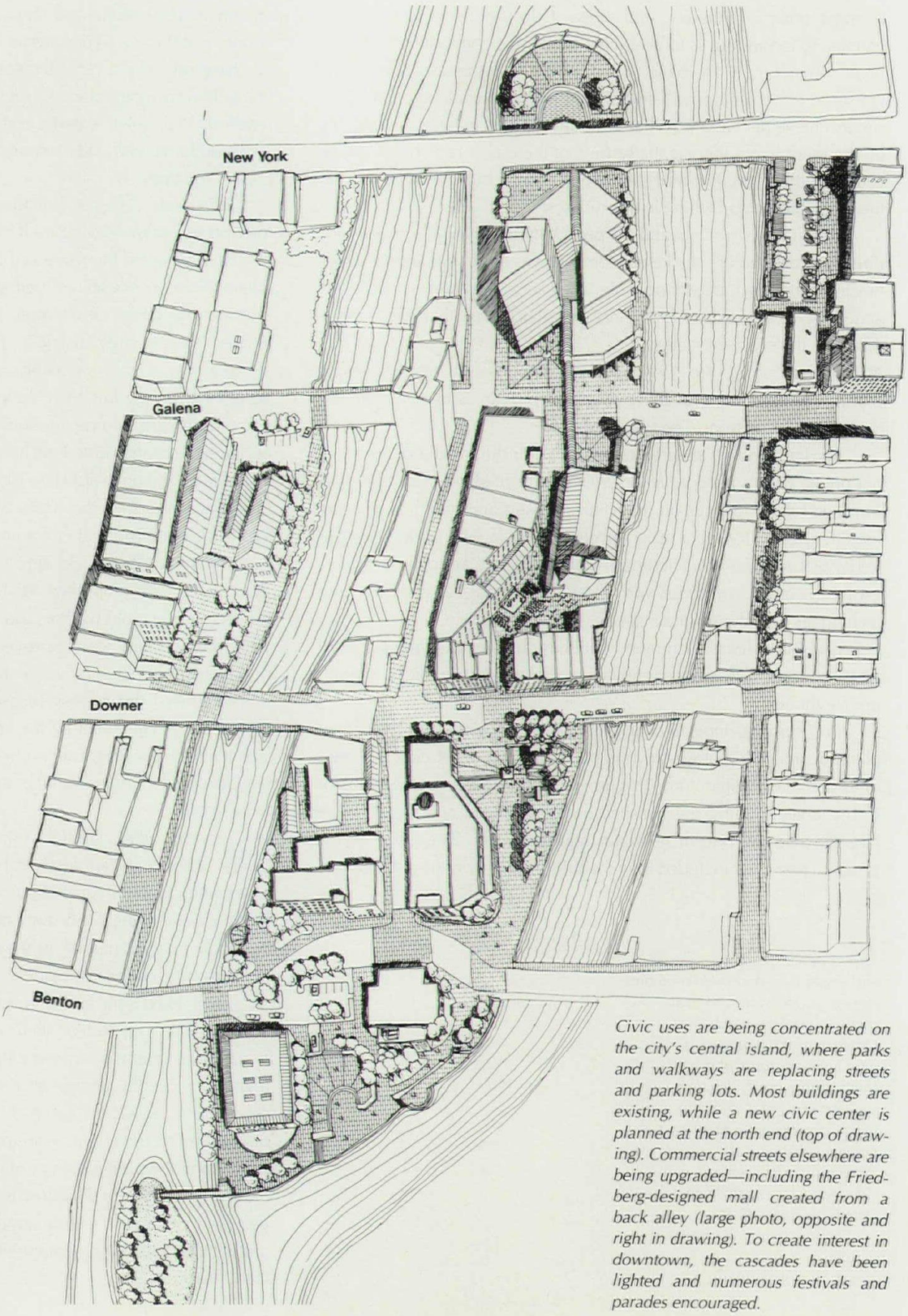
AURORA

Rediscovery of a forgotten asset—a central island—is creating a new spirit in this Illinois town

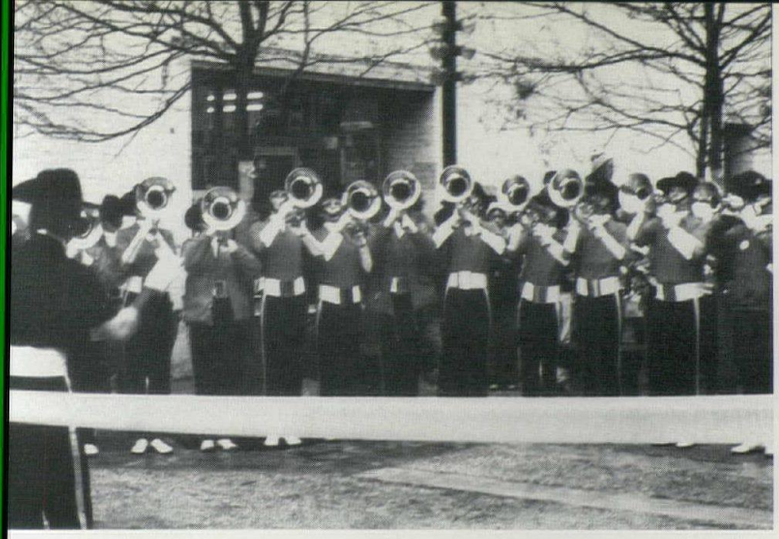
Located 40 miles west of Chicago, Aurora has had a long history as a prosperous city with an industrial economy. The current population is 80,000 people and that may well double in the next ten years. Given a strong financial basis, the city should be vital and healthy. Its physical assets include both colorful architectural reminders of its favored past, and a unique situation on the Fox River, in which an island similar to Paris's *Ile de la Cité* occupies the urban center. There are one and a half miles of frontage on the water and its cascades.

But—in an often repeated pattern—much of the metropolitan commercial activity has gone to the suburban shopping centers. In an effort to reverse the trend, gaping holes in the urban fabric have been made for parking lots, and once-dignified facades (including that of the 19th-century opera house) have been covered with attention-getting signs and metal screens. Property values fell 50 per cent in the ten years prior to 1974, the same year that 4,000 acres of adjacent farmland were annexed to raise the tax base and form a new urban center. At that time, "downtown" was clearly in trouble, and—at the "eleventh hour"—the city hired a planner, Ben-Ami Friedman. He formed a team of associates: Shirley Dugdale, Andrés Rojas, Carla Hall, Terry Wendt and William Donnell and numerous consultants in such diverse fields as economics and sociology.

Friedman's group quickly recognized that the central city's problems were inexorably tied to what was happening around it, and produced almost simultaneous studies for the business district *and* for the surrounding region. The purpose was to demonstrate that no rational decisions could be made in any one place without considering all of the affecting influences including ecol-



Civic uses are being concentrated on the city's central island, where parks and walkways are replacing streets and parking lots. Most buildings are existing, while a new civic center is planned at the north end (top of drawing). Commercial streets elsewhere are being upgraded—including the Friedberg-designed mall created from a back alley (large photo, opposite and right in drawing). To create interest in downtown, the cascades have been lighted and numerous festivals and parades encouraged.




ENTO BORINCANO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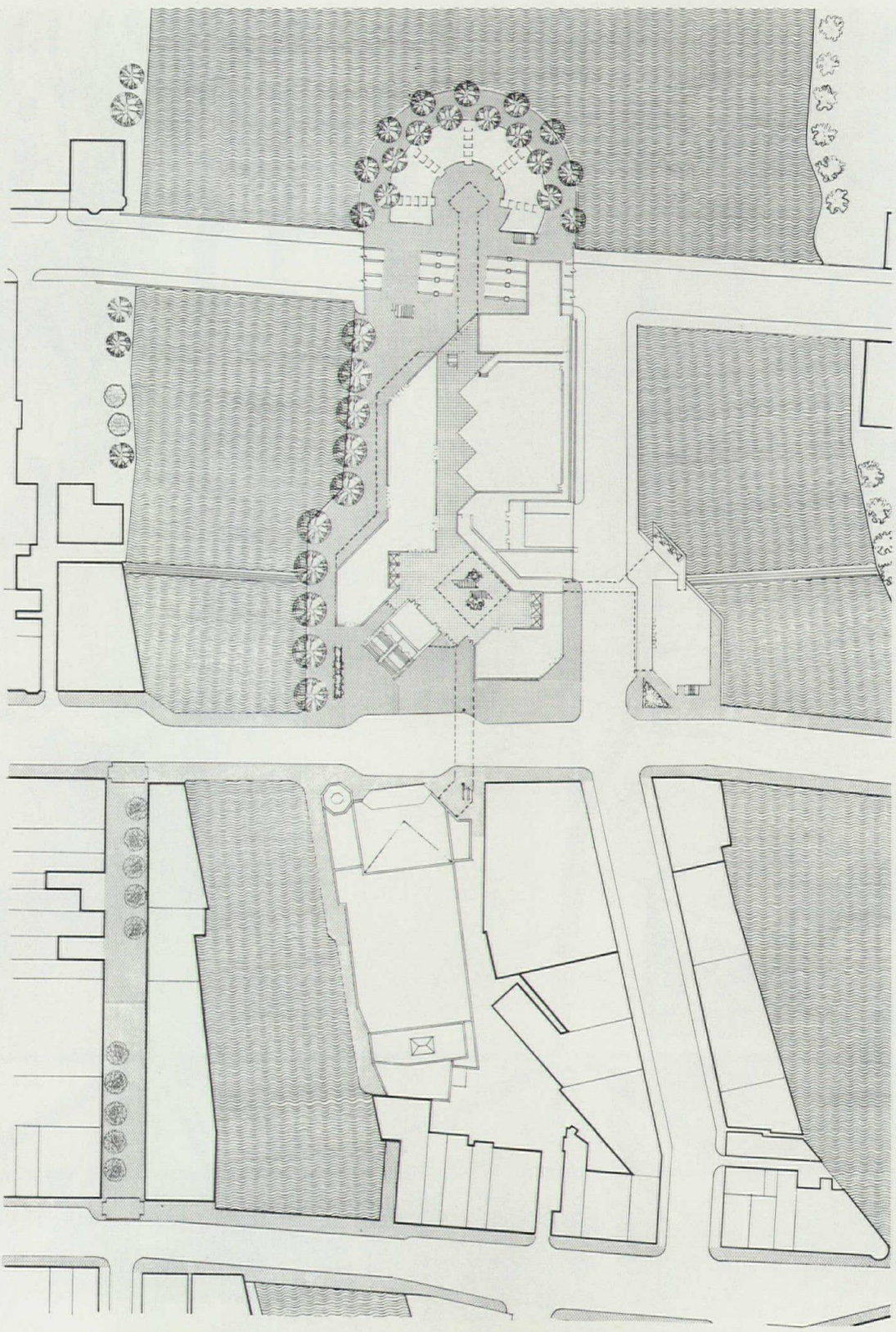
As viewed from the southeast side of the island (large photo, opposite), diverse existing structures are to be integrated by landscaping, new construction and restoration (such as that proposed for the row of commercial structures, photos bottom). Similar resurrection is proposed for commercial streets throughout the city. The north end of the island (plan, below and photo, right) is to be developed as a civic center according to designs by architects ELS and FOFQ on land that is now a parking lot. A pedestrian system is run the length of the island, and includes a mixed-use arcade between the existing loft-type buildings.

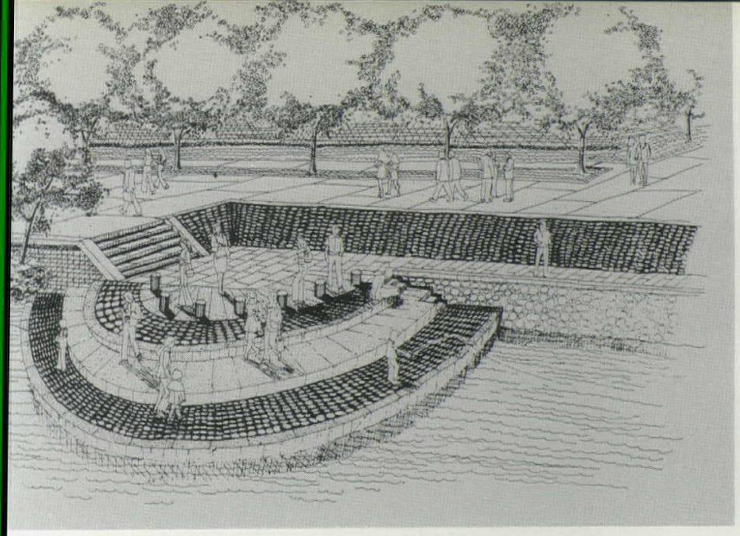
ogy and historic growth patterns. The studies were to produce the references for only a strategy of change. "Too many precise plans have lain unused on shelves. Few people really read reports, and fewer still relate to them—especially when they are projected too far into the future. The key to almost any current civic improvement is popular support, and the tools for the public's participation in decisions must be furnished even before finite objectives can be successfully established." And what was needed in Aurora first was a 180-degree turn around in public attitudes.

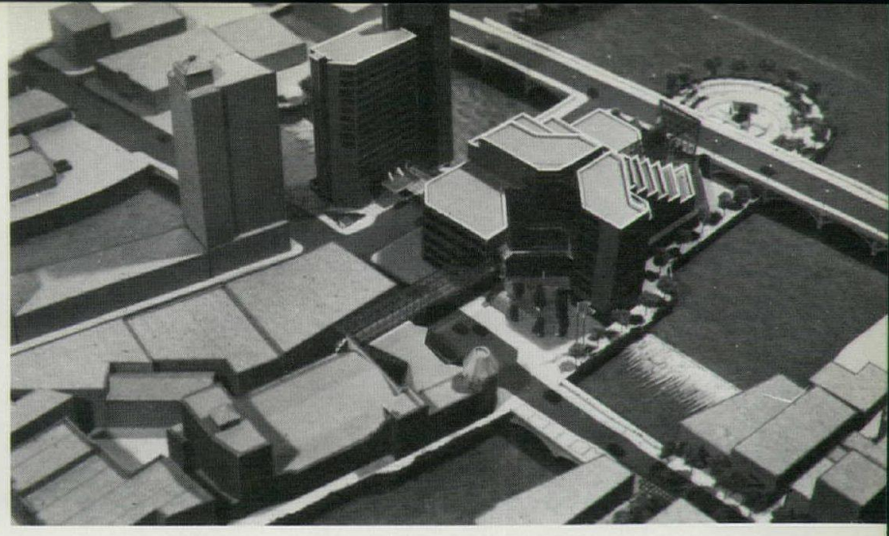
Accordingly, a public "workshop" was opened, and discussions to determine objectives begun. From these, three civic groups emerged that were to be responsible for, respectively, general improvements; a civic center complex; and an annual arts festival—the *Aurorafest*—to promote public interest in the city. An important benefit of the groups was credibility in the community for improvement programs, and hence the subsequent ability to commit city funds.

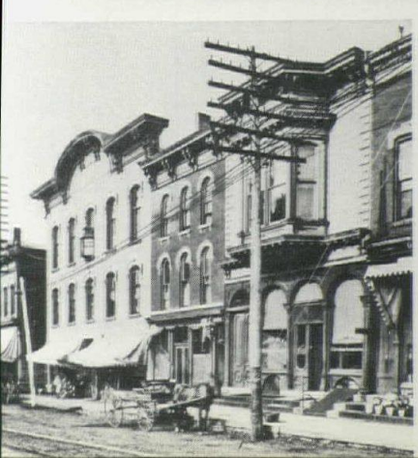
As ideas began to coalesce, a primary tool for further discussion was produced. It was called a decision chart, and it graphically presented options in the categories of the city's surrounding, physical form, housing, civic and commercial facilities and traffic. Each category was divided into listings of existing conditions, affecting issues, possible over-all policies, and possible specific action. The chart has recently won an award from HUD.

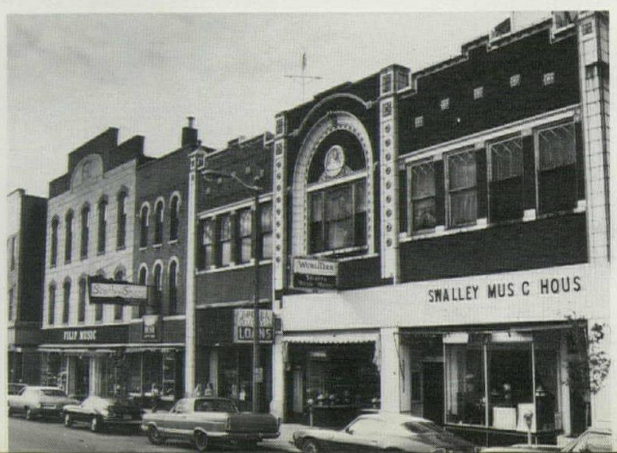
A list of recommended first priority projects was made, and these included a new civic center (hotel, government and private offices, and convention center); remodeling of an existing movie theater into a civic auditorium; upgrading of all storefronts, parking lots, and streets to provide a







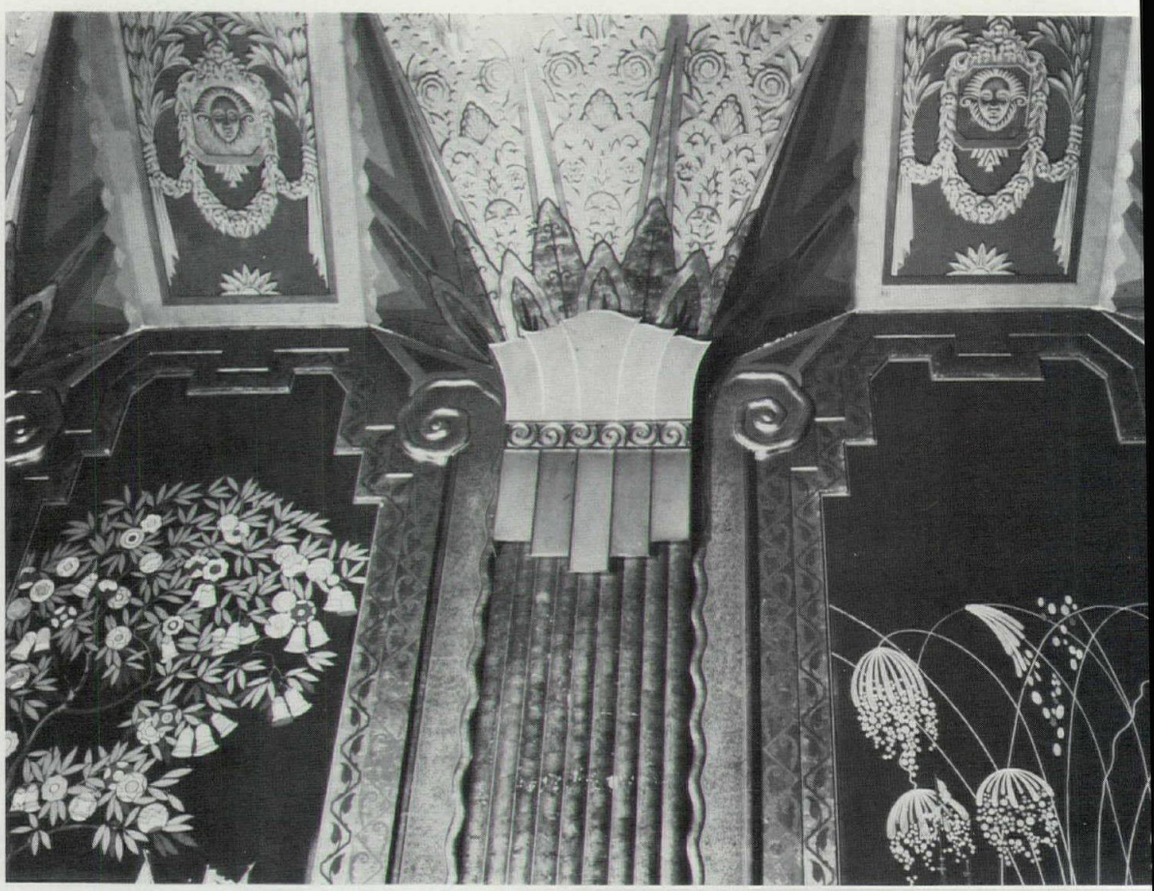


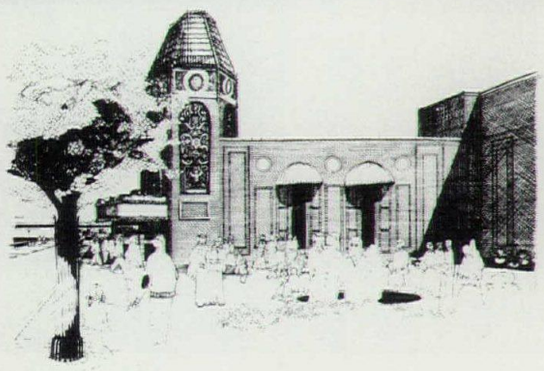

SWALLEY MUS C HOUS

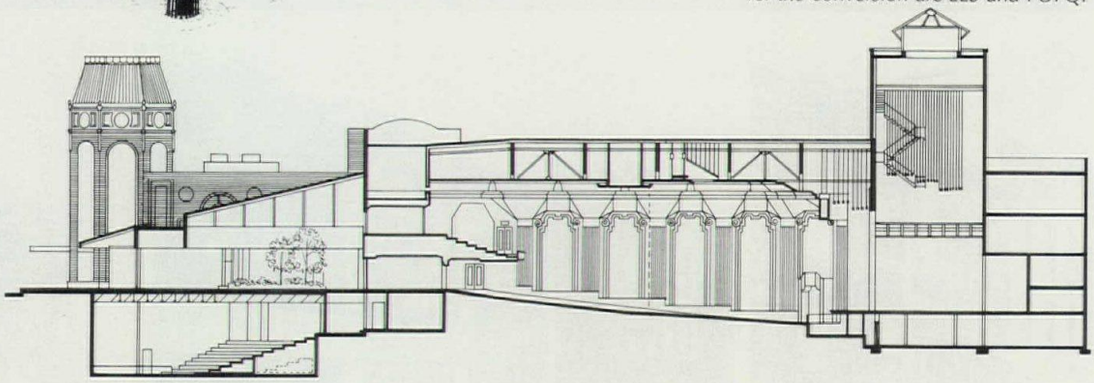

SWALLEY MUSIC HOUSE

primarily pedestrian oriented environment; rerouting of through traffic to avoid shopping streets; and preservation of existing structures. Associated architects The ELS Design Group (partner-in-charge: Geoffrey Freeman) and Frazier, Orr, Fairbank & Quam were retained along with their engineers Holabird & Root to design the civic center and auditorium (see captions). Landscape architect Paul Friedberg was commissioned to design the malls and parks.

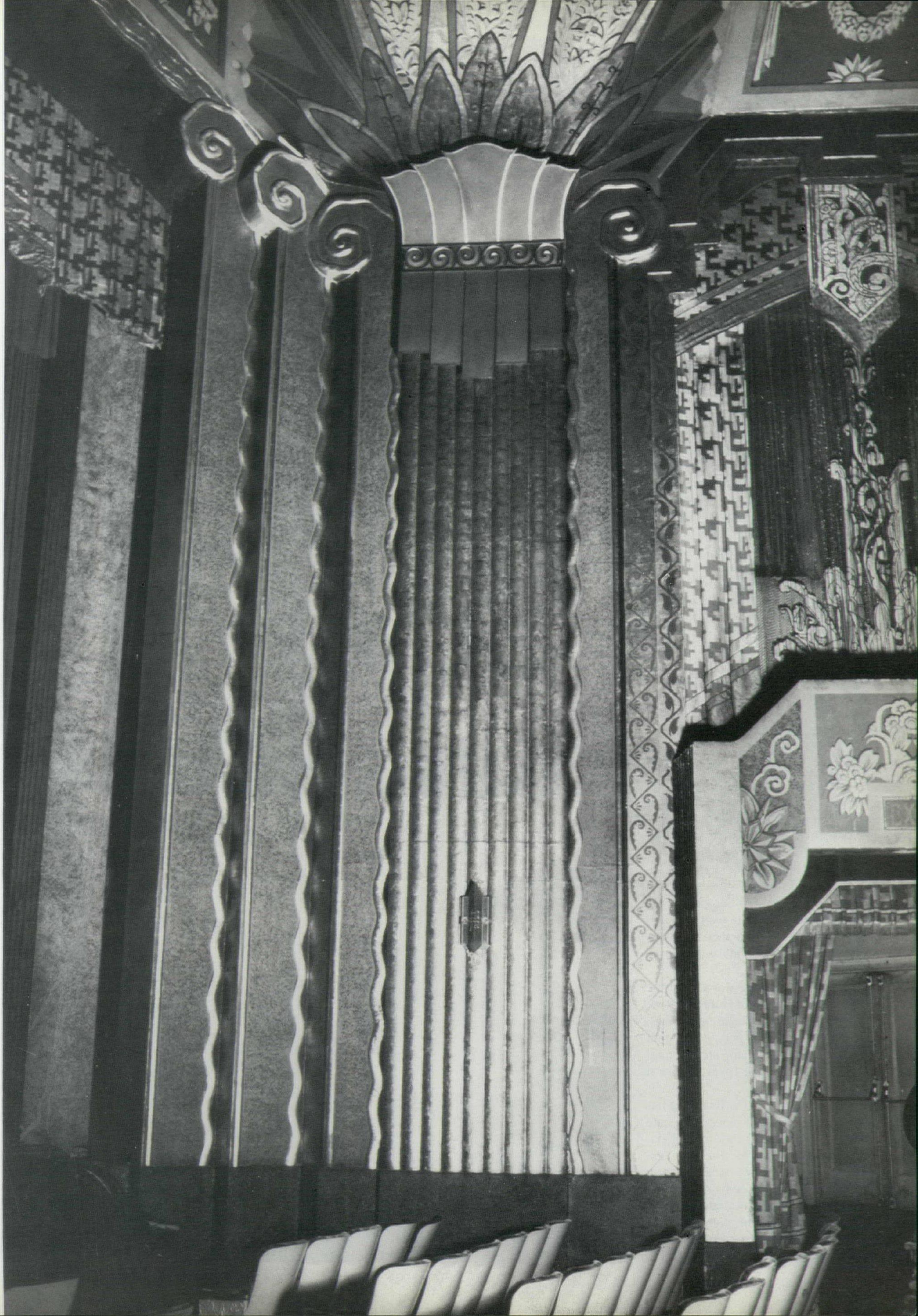
From the beginning, planner Friedman worked closely with the city to find funds for the public financed projects; and with potential developers to obtain their opinions of proposals that might be carried through by them. Planning funds were obtained from HUD, the National Endowment for the Arts, and both the Federal and State Departments of Transportation. Under NEA's program of City Options, monies were obtained to study better uses of the river banks and landmarks, and to establish *Aurorafest*. HUD provided the city's own staff to carry through the local government's responsibilities. In 1974, the City Council issued $12.8 million worth of general obligation bonds to finance the priority projects. At the urging of the design professionals, these monies were devoted to general amenity-raising improvements (such as landscaping and walkways—especially along the rivers), and not to the obvious highly visible civic center. The idea was to create first the climate for local pride and interest, and hence finance improvements insofar as possible by private development. Still, partially public monies for the civic center (approximately $10 million) are required and will come from state bonds. Altogether, Aurora demonstrates the results of abilities of design professionals that go beyond strictly those of "design."







As part of the eventual civic center, a lavishly-ornamented existing movie house built in 1930 (the octagonal tower is visible in the plan, model, and southeast view of island, overleaf back), is currently being restored and adapted to a municipal auditorium. It has 2000 seats in the main room, and will have a smaller 300-seat theater below a new glass enclosed lobby, to be built next to the projecting entrance tower (left in section). The architects for the conversion are ELS and FOFQ.



GRANBURY

An unpretentious fix-up of this small Texas town stems from an upswelling of community pride —and the citizens' own money

Community pride in this small town in Texas, 30 miles southwest of Ft. Worth, has stimulated the facelifting of the town's commercial structures, and is spreading outward to the residential neighborhoods. The Town Square has recently been classified as an Historic District, and all the 3000 citizens received the highest award for preservation efforts presented by the Texas Historical Foundation last month.

In 1970 a group of citizens set out to restore the Town Square. Nine buildings were refurbished by 1973, and 15 other structures have been or are in the process of being rehabilitated. Mrs. Mary Lou Watkins (a great-niece of one of the city's co-founders and one of the leaders in the rejuvenation) was one of the first active, by rehabilitating her ancestor's hotel into a restaurant.

The Hood County Courthouse, designed by architect W. C. Dodson in 1890, like most of the commercial structures, was constructed of limestone and has required only exterior sandblasting and interior modernization by remodeling. The Opera House, however, was literally falling down when Dallas architects Beran and Shelmire were retained to restore it. Restoration began in the fall of 1974, and it was opened in June, 1975.

Other professional advice came from Edward Hunt and Robert Reynolds, Dallas architects, and from Gary Hume, Steve Smith and Chip Kaufman, architectural advisors from the Texas Historical Commission.

Amazingly, the financing has come not from Federal or state grants or monies, but from donations by residents. The only exceptions were two donations from private foundations, specifically for use in the restoration of the Opera House. This pattern is continuing with those projects currently underway.

John Suhrstedt photos, Texas Highways Magazine

An alliance of enthusiastic citizens and architects has brought a stunning new vitality to the streets of this small Texas town. The photograph below shows the courthouse square with the newly renovated Opera House in the background; a few years ago it was on the verge of collapse, but now it is the scene of frequent performances. The Hood County Courthouse, Granbury's civic centerpiece, has also been cleaned on the exterior and remodelled inside. (Photo opposite, top; and below at right.) The bottom photo opposite shows some of the many renovated commercial buildings on Granbury's main square.

BRIDGEPORT

Where an architect and a bank—working as a private development team—have sparked a process leading far beyond urban renewal...to real civic renewal

Bridgeport, Connecticut is on Long Island Sound 58 miles east of New York City and 17 miles west of New Haven. In the 1860s, P. T. Barnum, a leading citizen of Bridgeport, retained Frederick Law Olmsted to master plan the city; and the hundreds of acres of parks he laid out, carefully maintained for years, gave justification to Bridgeport's proud claim as The Park City. The hundreds of manufacturing plants—most of them handsome red brick buildings in the New England mill vernacular—brought prosperity to the city. Workers' houses within walking distance of the plants were carpenter gothic, lovingly trimmed and crisply painted. After World War I, the veterans' housing built on curving and shaded streets (photo top left) was a model of its kind. The downtown center attracted shoppers from the affluent Fairfield County exurbs along the Sound, and boasted buildings by such distinguished architects as Cass Gilbert and James Renwick.

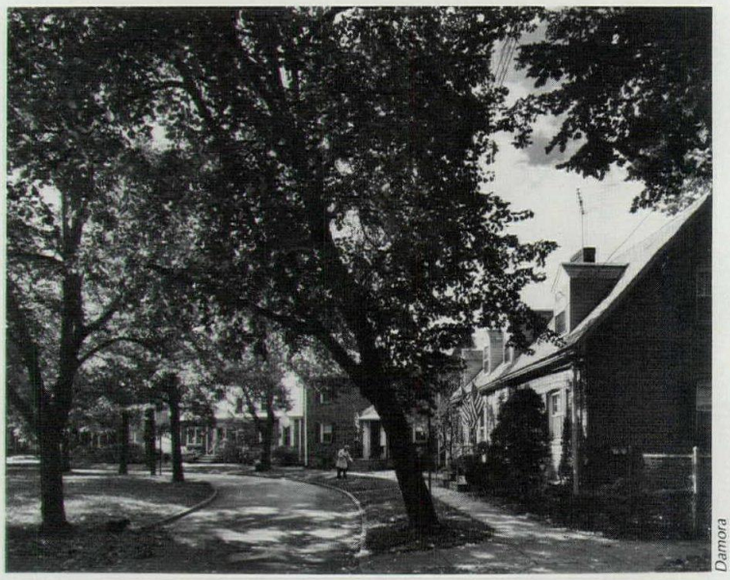
But then, as in so many cities—and perhaps especially New England cities—it all began to fade. Manufacturers moved to modern one-story plants—somewhere else. The vitality of downtown was lost to regional shopping centers. World War II veterans' housing created an almost instant slum close to downtown. The once-dominant railroad station lost its passengers, its paint, and its pride. And in the 1950s, the Interstate went through—four stories high and towering over most of the downtown buildings, it literally sliced the downtown into two pieces like a giant concrete cleaver.

Meanwhile, back in New Canaan and back in 1970 . . .

Architect Victor Christ-Janer, long one of that fashionable architectural enclave's most innovative and honored architects (e.g. his Lake Erie College in Painesville, Ohio won the Reynolds Award for the Lincoln Library, an AIA Honor Award for the Commons Building) was troubled, as so many architects were following the student unrest, with the question of "just what *should* I be doing?" "It was apparent," says Christ-Janer, "that the profession was undergoing radical change and that we would have to reach out into new areas of responsibility. Along with others searching for a role of greater responsibility and broader vocabulary, the central city seemed to offer the greatest potential. And to me, Bridgeport seemed particularly attractive. At that time, it had no planning department. It was uncharted territory. Since I knew the city well, I knew that its peculiar negativism was false. Its natural attributes were still there as they were in primal times: it is on the water, open to the prevailing breeze, with some of the best beaches on the coast. Its parks and worthwhile older buildings offered a handsome historic base for development. It is served by the railroad, the Connecticut Turnpike, a good airport—and of course the harbor opening to the Sound.

"Bridgeport seemed an open invitation," says Christ-Janer. "It is the next logical leap beyond Stamford for the expansion of the New York City region. Its attributes include a large stock of reasonable-cost housing and a labor force that still believes in the work ethic.

"As an architect casting for a new role, I believed that to affect any serious change in such an urban community, one would need a coalition of powerful allies from the community itself, the educational institutions [the 7300-student University of Bridgeport is located just off downtown], civic and cultural organizations, and most importantly a meeting of the minds between political leaders, the bankers, and the leading industrialists and businessmen."



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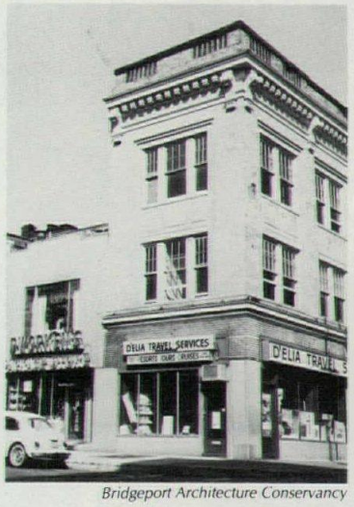


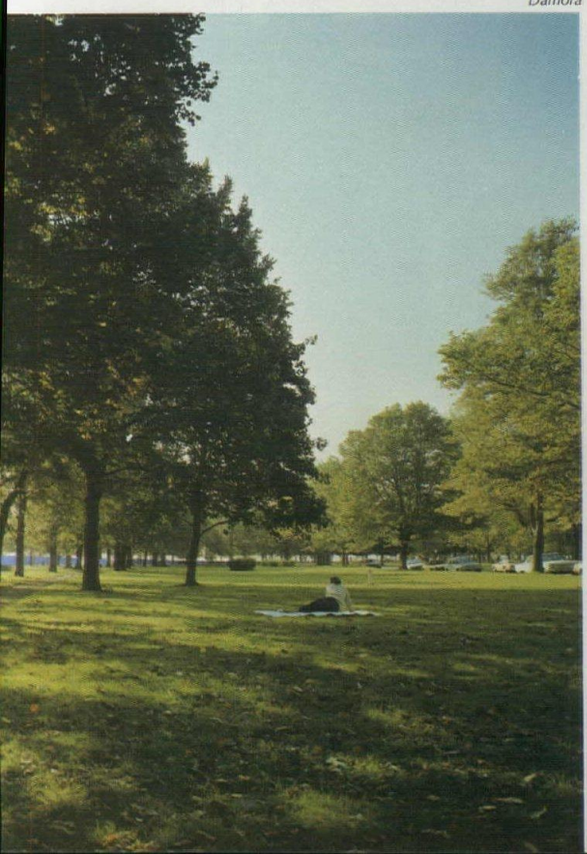
Bridgeport Architecture Conservancy

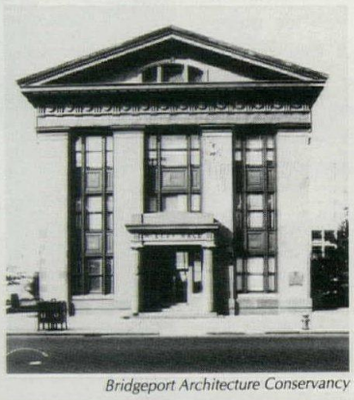
Bridgeport has some great assets—and some considerable problems. It has some fine downtown housing—like the World War I veterans' housing above. It has an incomparable park on Long Island Sound. It has some fine—indeed some historic—old buildings. But the city has lost character through all-too-typical "modernizations."

Bridgeport Architecture Conservancy

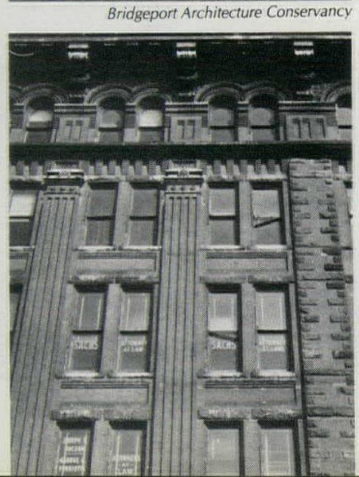
Damora

Damora





Bridgeport Architecture Conservancy



Wagner

photographs by Damora

On that basis, four years ago, Christ-Janer called first on Samuel Hawley, then-president of the Bridgeport People's Savings Bank, which is today the largest savings bank in the state. "I spoke to him about the changing role of our profession and my wish to deal in a more existential sense with the realities of urban problems. I told him that I did not want to function in the normal consultant sense only, but also to be in on the action and share the risk."

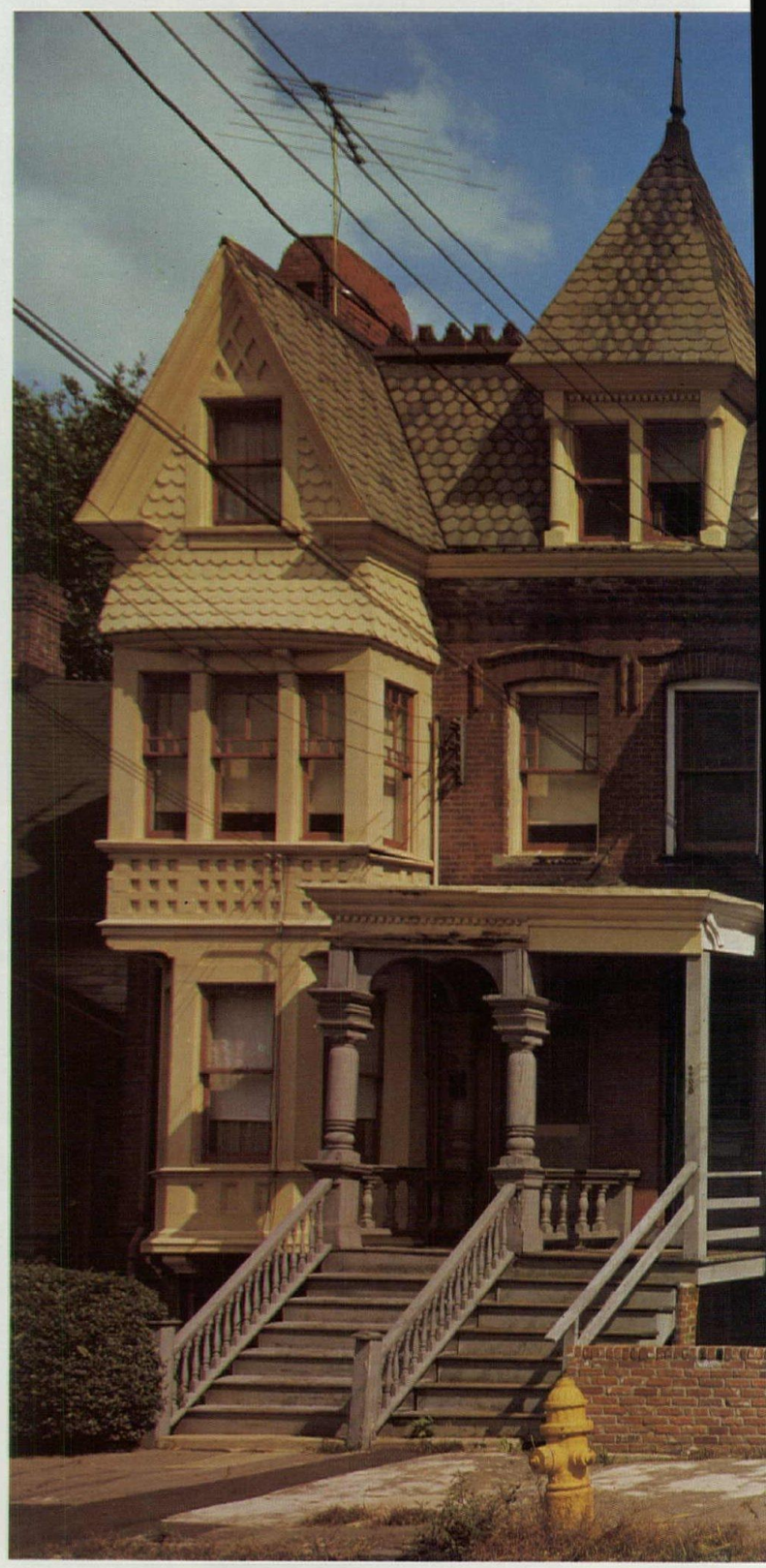
Banker Hawley invited Christ-Janer back a week later to outline his proposal and ideas to members of the bank's board of trustees, and they agreed in principle to a joint venture—having as a broad goal the step-by-step rehabilitation of sections of the city. The bank responded to the idea, Christ-Janer says, almost totally on the social imperatives involved in its home city; with the economics of the venture as a secondary (though critical) consideration.

"We began," Christ-Janer says, "quite literally by going to the roof of the bank and looking around." They chose to try and begin in the "South End," a 12-block, mostly run-down area just outside the downtown core. It was a relatively modest starting point—for the joint venture had decided that any redevelopment project had to be economically viable without any Federal subsidy (which they felt properly belonged to City-sponsored projects); and further that any immediate proposal for some kind of "superplan" would properly be greeted by skepticism. Finally, the area faced an immediate problem—a major employer in the area, Warnaco (a 102-year-old diversified apparel company), which maintained office space in its old factory buildings, was contemplating a move from the blighted area to a suburban site outside the city.

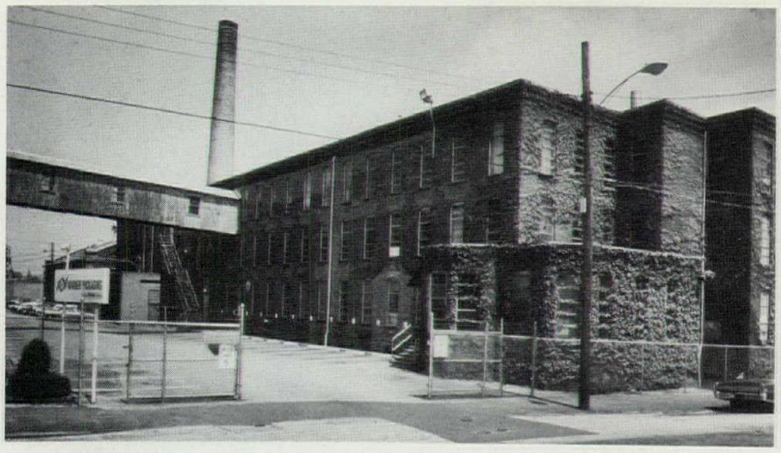
To begin this first venture, Christ-Janer incorporated himself (not his architectural firm) and formed a 50-50 joint venture with People's Savings Bank called the South End Development Company "to enter into the business of urban development."

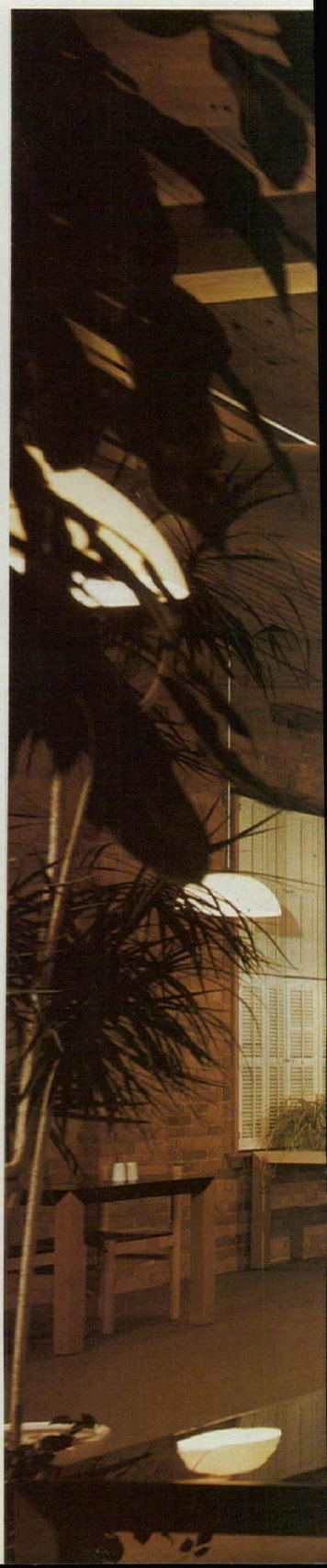
The South End Development Company agreed to buy architectural services from Christ-Janer's architectural firm. He agreed to pay 50 per cent of his standard architectural fees into South End; and the bank agreed to put in a matching amount. This arrangement, "since I must pay my staff and overhead," leaves Christ-Janer with no profit on this design work. "I make the profit in the development investments—in my share of the equity on projects now worth a considerable sum. The pay-out is long-term investment."

With the development company established, banker Hawley set up a committee which has met at least bi-weekly for three and a half years. Christ-Janer was given the authority to write the agenda, which was presented for action or dismissal to the committee members—five officers of the bank, a vice-president of the University, a real-estate consultant, and invited special guests whose interests were being discussed, often from the Mayor's office. "This organization and its disciplines," says Christ-Janer, "was critical to our future successes because the decision-makers were instantly accessible." The committee put Christ-Janer together with John W. Field, the chairman of Warnaco. The development scheme was outlined to Field; and he agreed to have Christ-Janer argue the case to Warnaco for staying in the inner city. Christ-Janer was able to show, after careful study, that he could rehab the old but sound factory buildings into comparable modern office space at about $22 per square foot; about half of the cost of a new-building proposal. Mr. Field agreed; and work began



Some of the housing rehabbed by South End: at far left, two tenements were purchased, cleaned and painted, remodeled into 27 apartment units. Center: As soon as an abandoned property is purchased, the windows are boarded and the house gets a coat of paint. "This seemingly minor commitment encourages the community, and halts further deterioration of the block." Near left and below: Three of this group of six houses in this 50 per cent white, 50 per cent black community were purchased by new owners and rehabbed with loans from People's Savings Bank. The owners returned home one lunch hour to pose for this "group" photo.





Some of the work at Warnaco's South End headquarters: Left, a typical factory building as it appeared "before;" right, as it looks transformed into University Square—an active street with a student bookstore, a popular restaurant, and other centers of vitality. Below, two views of the office space and the employee cafeteria designed by Christ-Janer for Warnaco. This work—and the commitment by Warnaco to stay in the city neighborhood—was the first big boost for the area in many years.

on the first of the South End's new "centers of vitality."

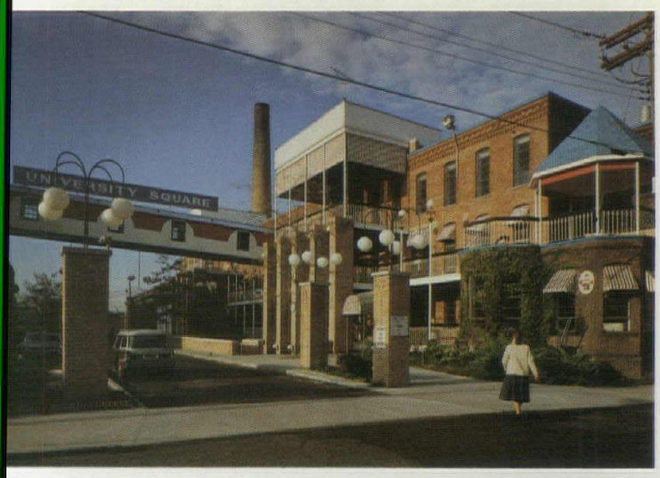
With that major commitment in hand, Christ-Janer and South End quickly became involved in a number of almost simultaneous projects:

First, of course, Warnaco's office space was built to the standard shown at right.

2. Christ-Janer got involved, through Mr. Field who was on the board, with the adjacent University of Bridgeport. The University had decided to spin off its book selling operation to Barnes & Noble, and South End Development Company persuaded that firm to put the university book store into the Warnaco complex.

3. South End obtained an empty factory building from Warnaco for $1 and a one-third partnership for Warnaco in the development company. Into this building, Christ-Janer placed the book store, which attracts, of course, crowds of students into the area from the adjacent University, plus (more vitality still!) the Warnaco employee cafeteria (large photo, right); Barnaby's, a restaurant popular with students and shoppers alike; an ice-cream parlor; several craft stores; and student game rooms. This busy place is called—inevitably, given its origins—The Corset Factory. The complex, rehabilitated with a $600,000 mortgage commitment from People's Savings Bank to South End, with the property obtained for $1 as equity, is now valued, including its improvements, at about $1.5 million.

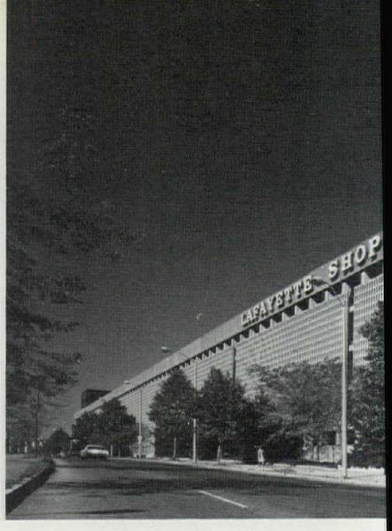
4. As a further commitment to the area, Warnaco purchased property across from its new offices for a factory outlet store, (photo, page 97) designed by Christ-Janer, selling first-line products from its chain of plants at half retail price. In a complementary move designed to attract still more shoppers into the area, South End committed to build Warren Ar-



photographs by Damora

photographs by Damora

The drawing below shows the South End area (at left) and the downtown core (at right) separated by the railroad and the Connecticut Turnpike. Some of the key elements in both sections are labeled. The top photos show (left and third from left) new shopping facilities built in the South End complex. In downtown, some renewal was begun with the Lafayette Shopping Plaza, the State National Bank, and a recycling (by Christ-Janer) of an older Bridgeport Hydraulic Company building for a new tenant, Burroughs. Below right, Bridgeport's new jai-alai fronton—just across the river from downtown and a major new source of energy and vitality for the city.



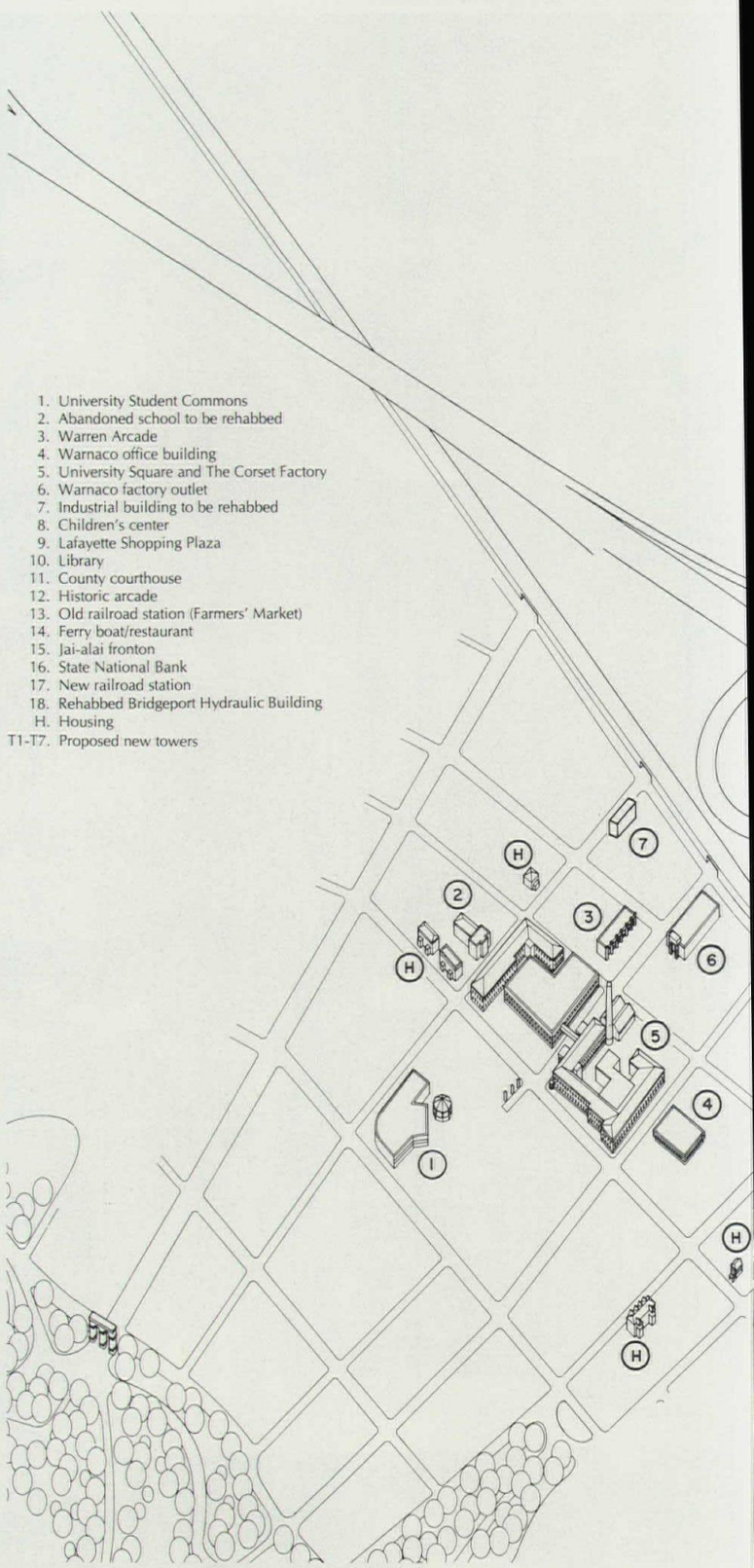
cade (above), which was carefully rented only to high-level stores or factory outlets for other quality manufacturers. Another Bridgeport bank, Connecticut National, put a branch into the complex. This project, like The Corset Factory, was financed by People's Savings Bank. This combined shopping area draws 35 per cent of its shoppers from wealthy suburbs up to 25 miles from Bridgeport, and is—for all of its shoestring start—a going and profitable property of the South End Development Company.

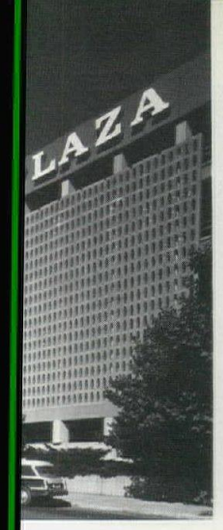
Housing in the area was another major consideration: Working with money provided by People's Savings Bank under a broad, expanding mortgage commitment, South End Development Company began buying up abandoned or absentee-owned slum housing and, as quickly as it could, restoring it to decent housing. The photos and caption on pages 92 and 93 describe some of this work. The frontispiece to this issue (page 80) shows another example—a single-family house on a block of mostly occupied similar houses was purchased, given a new kitchen and bath, cleaned up and painted, and in a purely symbolic gesture given a new picket fence and garden gate. The house was purchased for $13,000; sold for $23,000 (a "wash-out" after rehab costs). Significantly, owners of several other houses on the block have undertaken at least some noticeable fix-up in response. Perhaps the prize project is shown in the large photograph on page 93. As the caption explains, three of this group of houses were purchased and rehabbed by new owners and—in a moving testimony to the social as well as physical success of this small project—the owners, three white families and three black families, agreed to pose on the front stoop for Robert Damora's classic photograph.

Both South End and Warnaco now own additional housing units in the area, which they hope to rehab or put to new uses. Other commitments in the area: the city agreed to steam-clean the massive stone railroad viaduct and paint the railroad bridges facing the community. (Since the job captain on this project was a Yale student working for the summer in Christ-Janer's office, the bridges are—perhaps uniquely in all of America—Yale blue.) A new children's center sponsored by the Child Care of Greater Bridgeport, Inc. will soon be completed near the Warren Arcade—and form yet another gateway and center of vitality.

In addition to these physical results, says Christ-Janer, "There is now really a new awareness of the South End; an understanding of its potential by the business and banking community, by the Mayor, by the University, and most important of all, by the people who live there. The City has helped us with prompt processing of zoning and other applications. People's Savings Bank, as part of its commitment, has worked hard to arrange favorable financing—and in a few cases has taken some losses. The students and shoppers attracted to the area by the new businesses have created new vitality through the area; and the pioneering home owners are building a new stability. For all of us, this is more than physical urban renewal. It is real civic renewal."

With this work, experience, and success in hand, the next move was "downtown." The downtown core (right in drawing) is, of course a more complicated problem. A second committee—formed by the current president of People's Savings Bank, Norwick Goodspeed—undertook plans for downtown renewal and development. Several officers of South End Development Company serve

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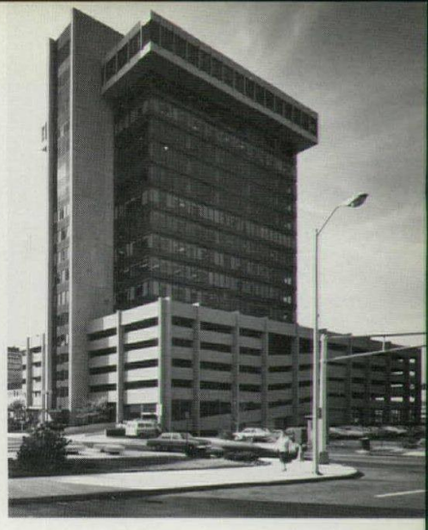

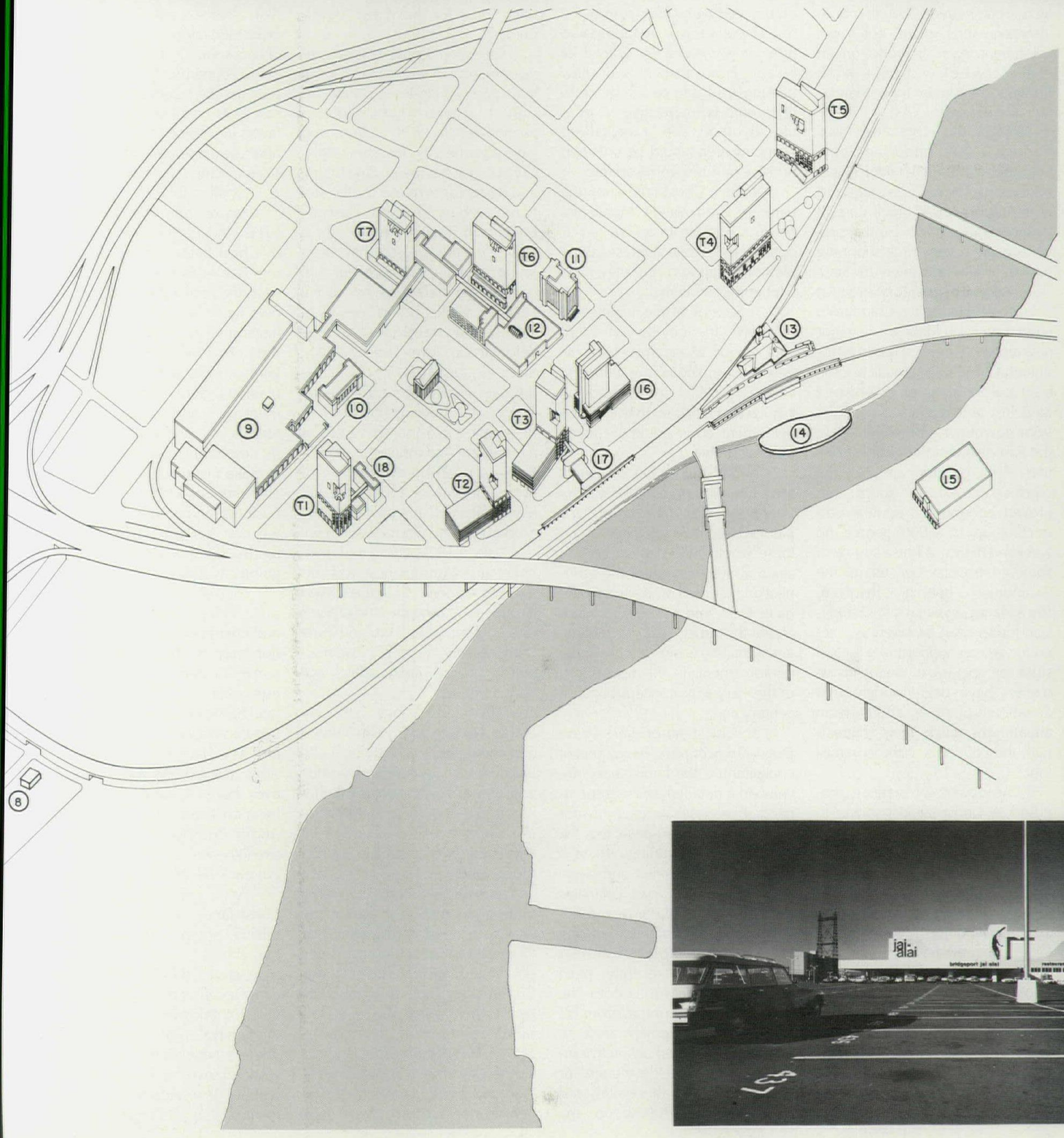
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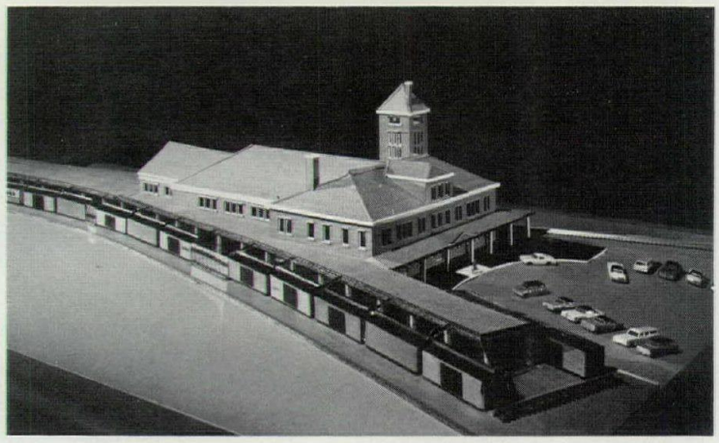
jai alai
bridgeport jai alai
restaurant



on this committee—though it is an idea-generating group, not a development team. It works on an almost weekly basis with Bridgeport's Mayor John Mandanici and his staff.

When this committee was formed, some important new building had already taken place, accounting for perhaps one-third of the four-by-eight-block core. It includes (see photos on the previous page) a very large shopping plaza, a major new tower for State National Bank, rehabilitation of Bridgeport Hydraulic Company's older office building for a major new tenant. and—perhaps most influential of all—a jai-alai fronton built on 24 acres of city-owned land just across the narrow river from downtown—but oriented to the Turnpike, not the business district. This exciting and (to the Northeast) exotic sport has proved enormously popular—attracting up to 9,000 people on weekend nights. While a source of some controversy because of the parimutuel betting involved, Christ-Janer says that "the Dionysian forces must be taken into account as an opportunity"—and since the opening of the facility its owners have been brought into downtown planning efforts in an attempt to match their interests with the concerns of the community.

The downtown scheme proposed by Christ-Janer is shown in the drawing on the previous page. Essentially, he proposes five towers (T1 through T5 on drawing) lining the water side of downtown. Following the line of the Turnpike and the railroad, these towers will all have parking beneath to raise the "living spaces" above the Turnpike and open them to the sun and view. Christ-Janer sees visitors arriving by car or by train (the new station built by Amtrack is marked on the drawing), proceeding into these "front" buildings and from there on proceeding by foot to all of the rest of downtown, including two other new towers (for a total of seven). From that line of new parking areas and buildings, nothing would be more than 10 minutes by foot; and a revitalized shopping area would be only two or three minutes from parking.

Neither Christ-Janer nor the bank or even Mayor Mandanici are in a position to assure development by private interests along the lines proposed. But they have a lot going for them:

1. Several of the towers are proposed for city-owned land, and Mayor Mandanici and his new planning board are willing to make favorable concessions on city-owned land, so that total development costs could be made most favorable.

2. Christ-Janer has designed, to a fully developed preliminary stage, the first five towers. As planned (see montage photo right) these would be reflective towers, again above the wall of the Turnpike and railroad, and each would have built into its side a major above-the-street park—a unique and attractive design feature and a reinforcement, in this new effort, of the Park City concept begun a century ago.

3. Christ-Janer and Leete Doty—an economic-development consultant to the bank—have developed a detailed and realistic financial proposal for each of four "first" sites. This proposal lists the costs of land, including (where it is required) acquisition and clearance; preliminary cost estimates for the proposed designs, and detailed time schedules for making the land available. Architect Christ-Janer has recently been made a paid consultant to the bank (a separate contract from his South End development work) to follow up as needed any active interest by outside developers or tenants for any of these sites, and to propose and follow up any other ideas for downtown development.

One such is now in active development: The railroad, having built a new high-level station fitting its modernization plans, abandoned its old station and gave it to the city. For some time, Christ-Janer has been developing and designing a re-use for the station as a busy and vital Farmer's Market. In just the last month, a client for this project has been found; and the entrepreneur will operate the station as not just a Farmer's Market but as a series of shops and boutiques on the below-track level (see photo). Since this facility is directly across the narrow river from the jai-alai fronton, the developer also plans to bring in a 275-foot ferry fitted as a restaurant and moor it at the station—a position where it will serve not only visitors to the jai-alai games and his new Farmers' Market, but the whole downtown.

Late in 1975, a Bridgeport Architecture Conservancy was organized by local architect David Austin to "protect Bridgeport's unique heritage of 19th and early 20th century factories, commercial buildings, public offices and bank buildings."

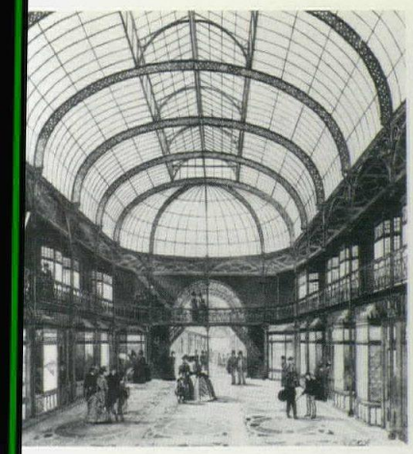
The Conservancy has generated considerable local interest and newspaper follow-up; and has developed a complete written and photo inventory of the buildings it feels should be saved for reuse. Christ-Janer's and Austin's interests are not, of course, hostile; though there is some impatience and concern on both sides. The bone of contention at present relates to a downtown area called "The Block," which contains two buildings of special interest to the Conservancy; but which also appear to be a prime site for a new hotel complex desired by the Mayor. Both Christ-Janer and the Conservancy have sketched alternate proposals; and in his impatient moments, Christ-Janer argues that "before any group delays civic redevelopment in the name of conservancy, it should come up with economically viable new uses for the buildings it wants to save." At any rate, neither group favors clearance of any site until a new use or re-use is found—and Mayor Mandanici agrees.

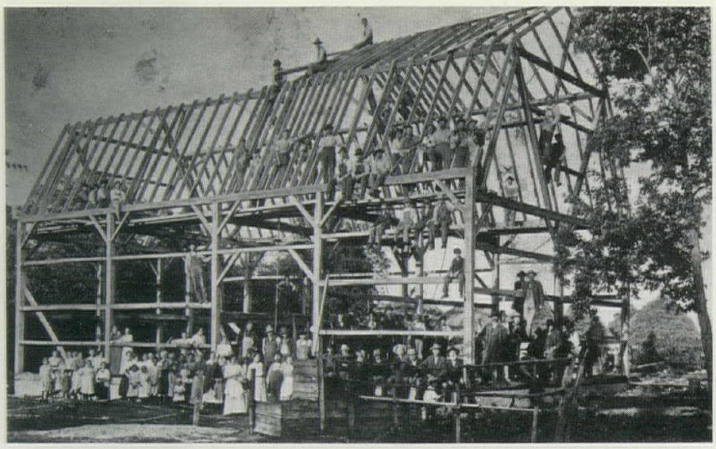
Of all of this work. . .

Mayor John Mandanici says: "The kind of commitment made by Christ-Janer and People's Savings Bank—as well as other business and banking interests and my own staff—is critical to the revitalization of any city. The City has just obtained—because of this kind of civic effort—a $250,000 planning grant from the Department of Economic Development for this year and another for next. By developing ideas, finding ways to make them work economically, and then making the necessary business and political decisions, we can get our cities moving again. I know Bridgeport is a going city today. . . ."

Banker Norwick Goodspeed says: "This kind of involvement and investment in civic revitalization may not be considered customary or traditional for a bank—especially, I suppose, a New England bank. But we feel good about our contribution to this civic effort. We have made some decisions that are less than conservative—because we feel a commitment on social and civic grounds. And if Bridgeport is, in the end, strengthened by all this; so will our bank be strengthened. . . ."

And, says architect Victor Christ-Janer—who has the "barn-raising" photo at the upper right in the entrance to his office: "In pioneering times, the 'civitas' came together in the cause of survival. Nothing less than a return to this survival spirit is needed today. There is not enough money in the world to save our cities and towns without this individual commitment. . . ." —*W.W.*





Bridgeport's old railroad station is being recycled into a Farmer's Market and a series of shops by Christ-Janer. The developer of this project also plans to bring in a ferry boat as a restaurant serving the jai-alai facility, the Market, and—for the future—the revitalized downtown core. The sketch is of an historic arcade—searching for a new use. The montage shows Christ-Janer's proposal for new buildings downtown—towers raised to the view of Long Island Sound with "parks" of trees and terraces set into their facades. The barn-raising photo is a Christ-Janer heirloom symbolizing the citizen involvement needed today.

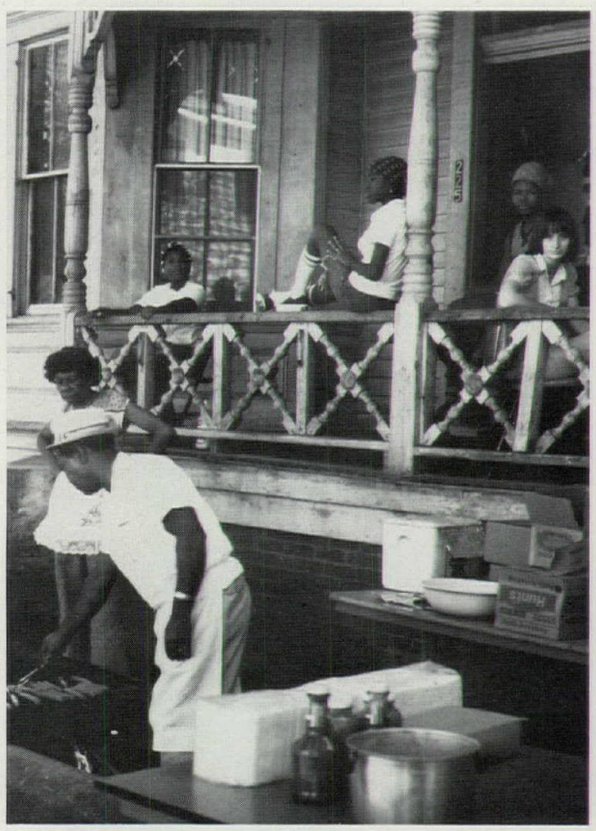
SAVANNAH

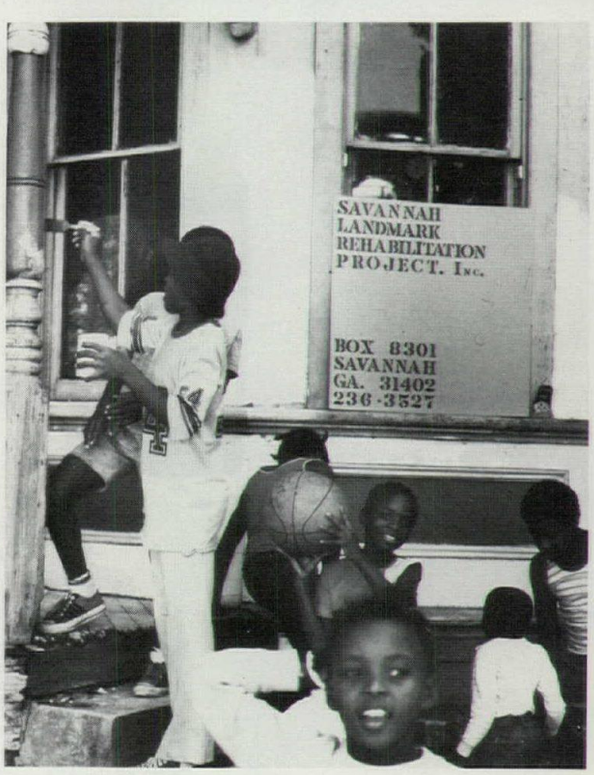
Rehabilitating houses is nothing new in Savannah. But rehabbing Victorian houses for low-income families is—and it's working

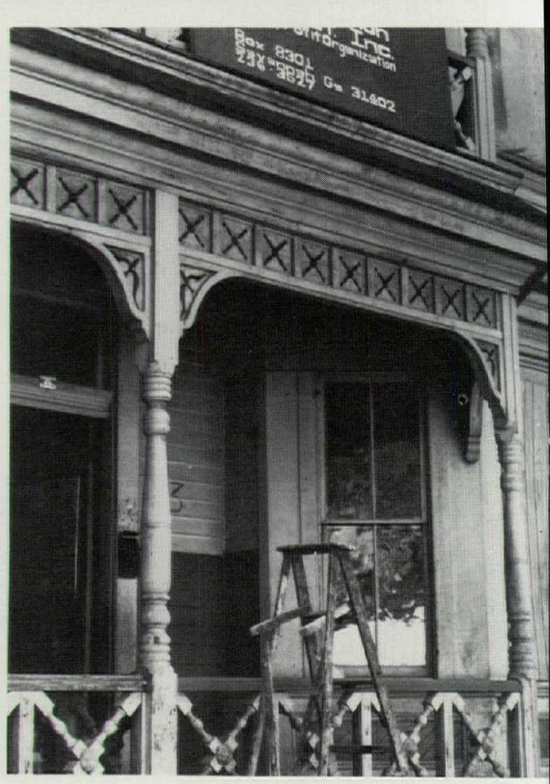
A program to rehabilitate dilapidated Victorian houses—specifically for low-income people, initially as rental units—has been undertaken by Savannah Landmark Rehabilitation Project, Inc. (SLRP). As a non-profit organization acting as a developer, it has purchased two parcels of land, each parcel with five houses. The houses, dating back to the late 1800s, are in a section called the Victorian District, an area listed on the National Register of Historic Places (south of downtown Savannah), once included in the Model Cities Program.

The work is not true restoration, but rather a practical, unglamorous rehabilitation of houses into apartment units that will be brought up to building codes. As a pilot project, work has begun on two houses, expected to be completed in the early spring of 1977.

Funding has been difficult because of the newness of the organization, but SLRP has received a grant from the National Endowment for the Arts for administrative costs, and a loan from a local bank has provided actual working capital for the rehabilitations. The original cost of the houses and the land was allocated at $2,000 to $4,000 per apartment unit, and rehabilitation is budgeted at $8,000 per unit. This necessitates a tight budget for architectural services, which mainly consist of inspection of all houses and drawing of floor plans, indicating building improvements. An unusual working relationship came about as Amanda Griffith, project coordinator and a recent architecture school graduate, while under salary from SLRP, worked in The Lominack Partnership's office (consulting architects) under their guidance. While just the beginning, for SLRP's goal is to upgrade the entire area and create 1200 units, it is one answer for deteriorating housing in the inner city.







CORNING

A New York State factory town hits the comeback trail with a line of handsome new buildings and dusted-off heirloom streets

Renaissances never start where most people think. Whoever would have thought, even ten years ago, that an old city like Corning, with some 17,000 people, would be turning into, as it most certainly has, a city whose time has come?

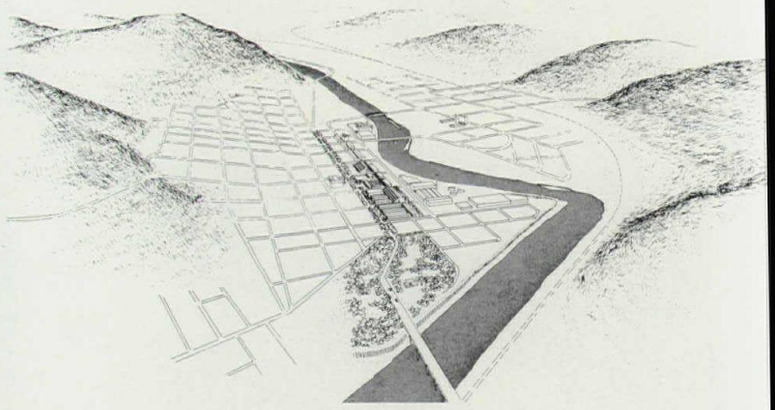
The home town of Corning Glass Works since 1868, and edging both banks of the Chemung River in one of the peaceful valleys of New York's forested Southern Tier, Corning is, to be sure, a classic "company town," one with a difference. A lot of bucolic bliss among its white-collar cadres, and a lot of lethargy among its many blue-collar workers, got washed away in the rampaging flood brought on by hurricane Agnes in 1972. With 60 per cent of the city under water, the whites and the blues immersed themselves in the hard job of fixing up these once-sleepy surrounds, stepping up plans for renewal and rehabilitation that were on the boards when Agnes hit. Before Agnes, there was the nagging question among local planners, "What if someone gave this renaissance, and nobody came?" Four years later, the whites and the blues not only exchange glances, but at noon, or after work, one can find many of them together, over at local architect Joseph Connell's Woodhouse bar (he is the *only* local architect and a very good one) having a beer.

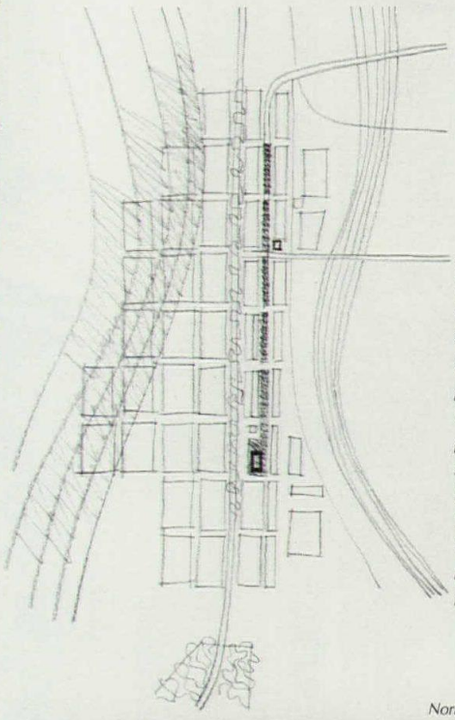
People had wondered what kind of "modern" bar he would come up with for the Woodhouse brothers. What he came up with, in its basic attitude at least, pretty well explains the come-hither, people-pulling quality of everything else that has been happening around here. Explains Connell, "I wanted to build a bar that would show that you can have a place that is both 'good modern design' and still very friendly. By 'good' I don't mean clever, because in that sense it could have been *so* 'good' that the guys wouldn't have felt comfortable hanging around and having fun."

All over Corning today are planning, building, and preservation accomplishments, some expedited by Agnes—but consciously developed to have the egalitarian, elbow-grabbing, "hi, guy" quality that the local architect captured in the Woodhouse. These accomplishments, though designed by comparatively "big time" architects from outside, and leavened by the brilliant rebirth of Old Market Street, the city's four-block-long main stretch, cast a whole new light on what the citizens are up to—or at least a whole new light on how urbane our outlying communities could end up being. Market Street, newly paved and planted, its old buildings from the 1890s being fixed up like new (or like *old*), threads right into the downtown renewal area, for which planning began back in 1970. And even here, with a familial cluster of new construction, the two-, three-, and four-story scale of Market Street called the shots.

The comprehensive planning and design guidelines for this Downtown Project No. 1, as it's called, were done by the architectural firm of Geddes Brecher Qualls Cunningham (GBQC), and the new cluster of buildings is ranged around and related to their landscaping, plaza, fountain, and vast outdoor covered skating rink. Its roof, a filigree of trusswork and plastic skylights supported on widely spaced, spare columns created the impression of a hovering, horizontal, and protective plane.

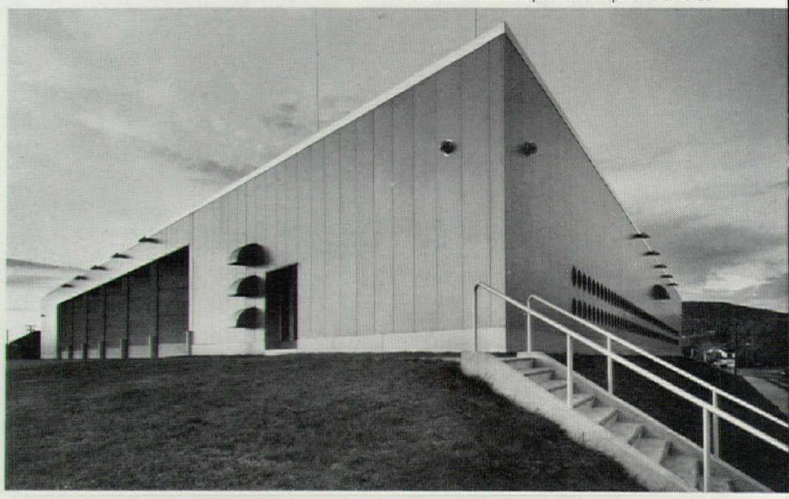
On one side of the rink is the new City Hall by RTKL Associates. On the opposite side is that firm's Public Library—both buildings of concrete, with generous sheets or ribbons of glass. RTKL skillfully sublimated these buildings into the over-all composition, creating





An old factory town set into a valley of the Chemung River, Corning, New York's comeback is a blend of skillful funding management, thoughtful planning, and adroit design. From the new civic center plaza (opposite above), to the spritely restoration of old Market Street (opposite bottom), to Gunnar Birkert's fire engine red fire station (below), Corning is making smallness count in a big, lesson-laden way.

Norman McGrath photos except where noted

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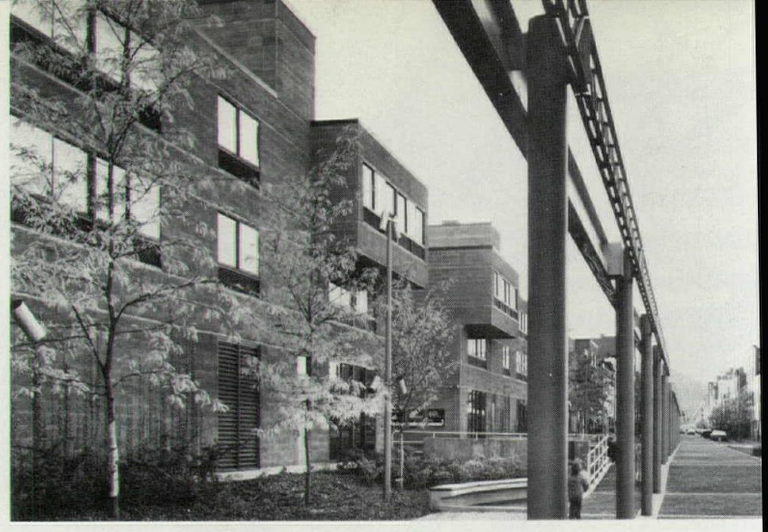
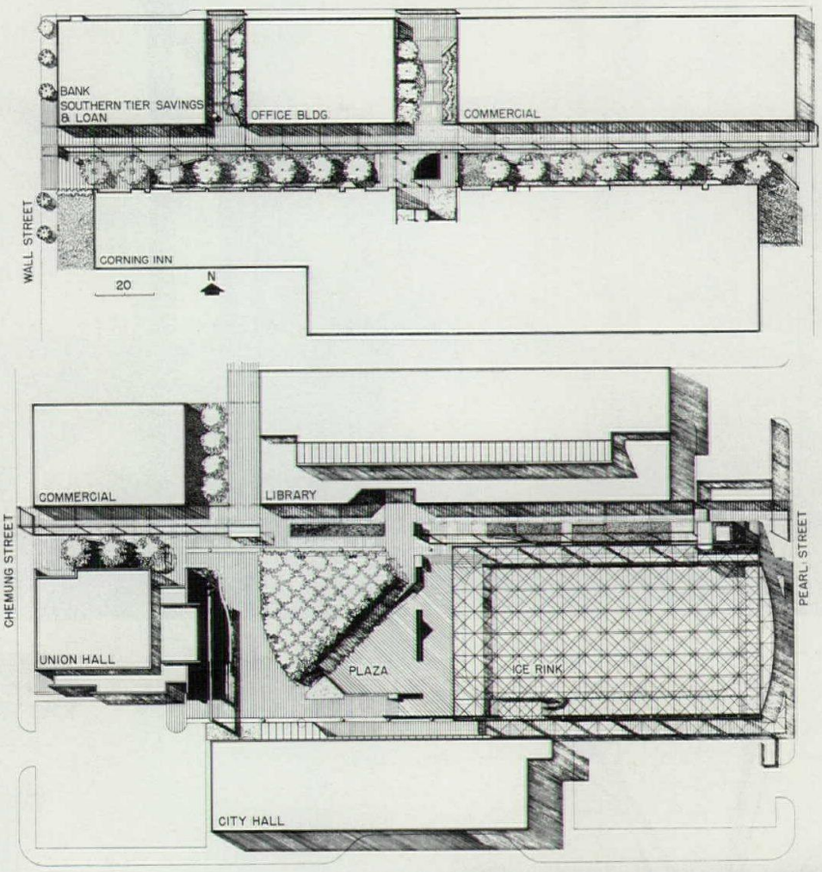


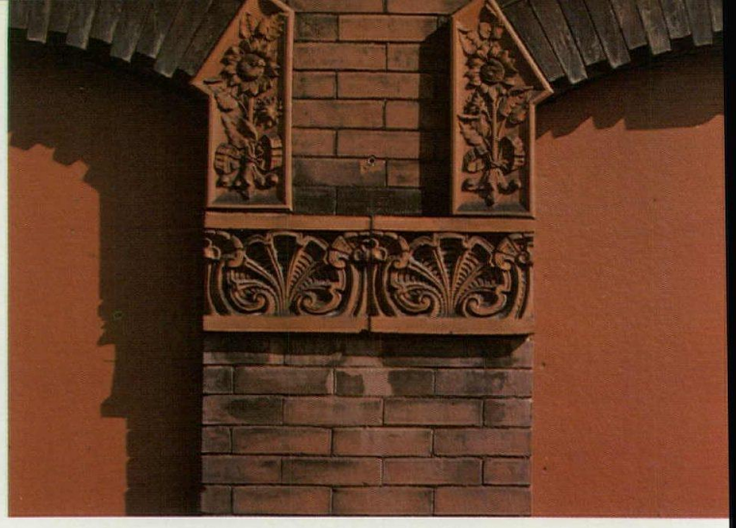
a definitive edge along both sides of the rink and its adjacent plaza. The City Hall's interior walls, facing outside and seen through the glass, are practically part of the exterior space, and these walls are embellished with a so-called People Wall, done by the eminent photographer Elliott Erwitt, using blow-ups of his pictures of townspeople, and turning an opportunity for amenity into an occasion for levity. Inside the Library, RTKL has splashed color and shape and fun all around, and although the librarians were initially opposed to having their new building in the civic center plaza area, they have nevertheless come up with a real "first." For one thing, there are very few places where people can skate up to a book depository.

On the west edge of the plaza, just beyond new trees and benches and the fountain, is Joe Connell's new hall for Local 1000 of the American Flint Glass Workers Union. And just west of this, ranging on to the beginning of the Market Street restoration area, is the 150-room Corning Hilton Inn, by Sasaki Associates, with a multi-level, tapestry-hung, lavishly planted lobby. It is at this crucial juncture between the eight-square-block renewal area and the Market Street district, that the design subtleties really show their stuff. For example, the darker color and striated texture of the exterior of the Inn allows a gentle transition near to the rich brick and detailing of the buildings down Market. Then, as one saunters along, eastward, toward the plaza and rink, the exterior color becomes lighter, the exterior texture more crisp and smooth. And ranging all the way through the civic center, past the Inn, to Market, GBQC has provided a strong linear esplanade that is cadenced, in turn, by a continuous column-supported beam. This beam, concealing lights, is also meant to carry colorful awnings

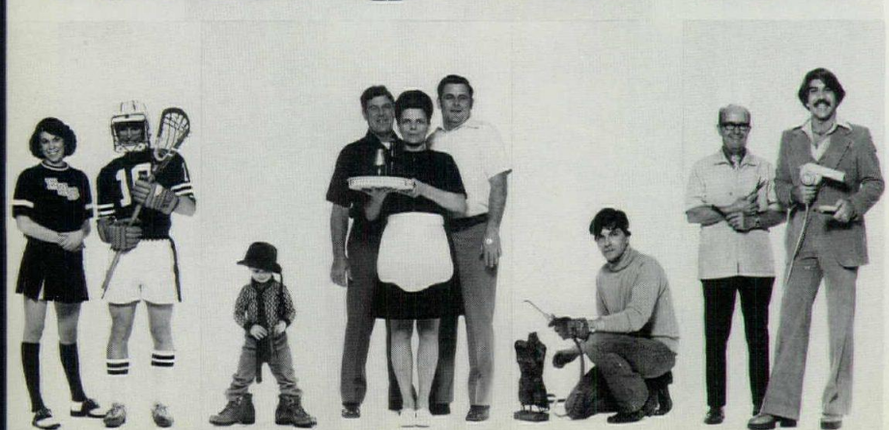


The Corning Hilton Inn (above, opposite top) by Sasaki Associates ranges 480 feet west from Market Street, picking up its scale with warm, textured hues. The ice rink and adjacent open-space amenities by Geddes Brecher Qualls Cunningham (below) is the focus for the new City Hall (opposite, middle) and Public Library (opposite, bottom) by RTKL Associates. There is recurrent give-and-take between indoors and outdoors, and the composition draws closely around the unifying, hovering trusswork of the rink's roof. No one building or feature is meant to be dynamite—but to deflect attention to the whole.

Joseph W. Molitor



Elliott Erwitt

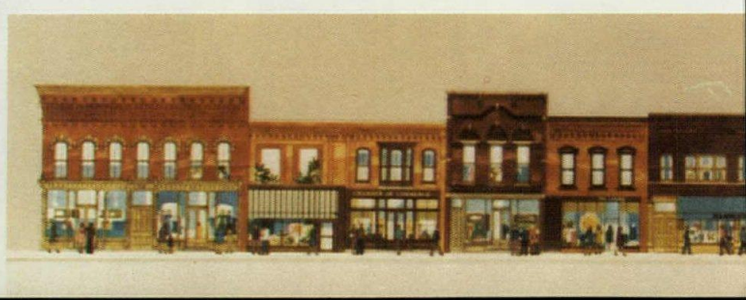


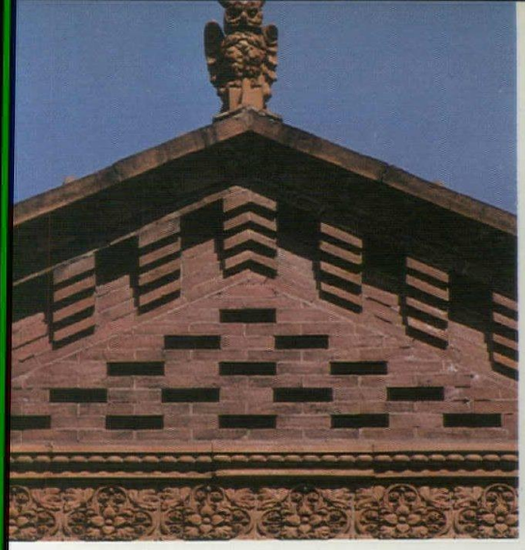
which, it is to be hoped, will hang out from the bordering buildings as, gradually, more of them—designated primarily for commercial purposes—are constructed west of the Library and across the esplanade from the Inn.

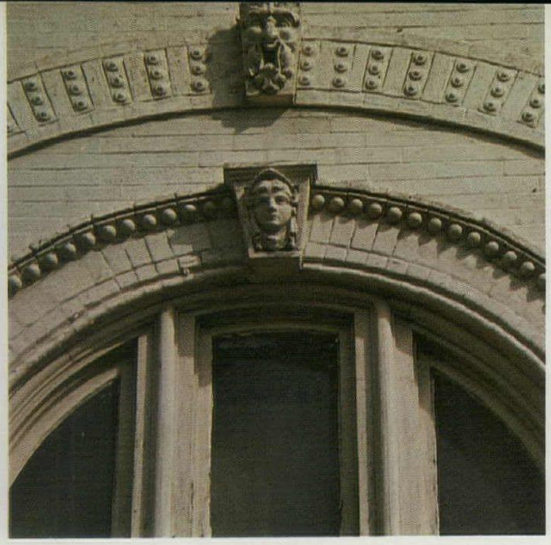
James Sheaffer, executive director of the Corning Urban Renewal Agency, who has masterfully coordinated the funding and planning of all this, explains, "Sure, the civic center could have been just another rectangular building, even a *good* one. But we felt that we were really involved with two things here—the activities indoors and the activities outdoors. We felt there should be a lot of play between them, a lot of give-and-take between views and activities and people and feelings, so that the business of government might actually become the *reason* for these things coming together instead of being unto itself and apart from everyday life."

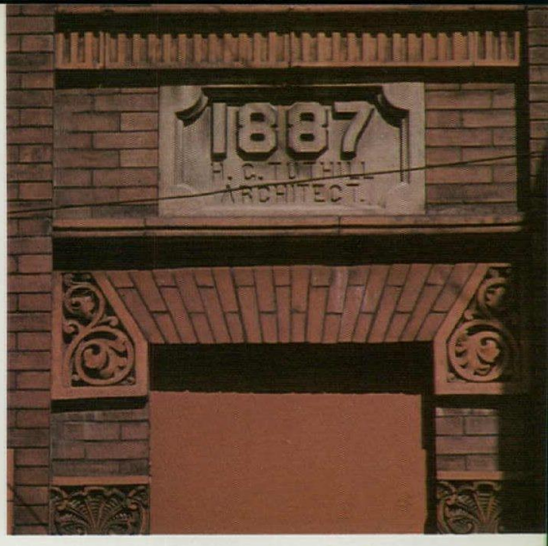
David Chiodo, an architect who is manager of product and business development for Corning Glass Works and intimately involved in shaping the design-review process here, reinforces Sheaffer's point: "How *do* you tell an architect who wants to work for you, who has put his heart and soul into a scheme, that it's no good? And what does 'no good' mean? Our design review committee set guidelines that made it pretty plain that 'no good' would mean coming up with some superstar scheme rather than with one that would reinforce the character and scale of the composition as a whole. Of course, amenity means more than having a lot of good-looking buildings and pleasant plazas. And a place, like we have created around the civic center, can't be said to have amenity unless it leaves room for people, in a natural way, to make of it what they will. We wanted to create room for that kind of natural responsiveness here, not just another collection of objects in space. So it was important, right away, to make it clear that the buildings would be expected to work together and that no *one* should be a dynamite job on the others. We still have a way to go in making the area what it should be," Chiodo adds, "so that the rink and plaza will end up as more than a receptacle for Sunday morning papers and pop cans. There's got to be more reasons thought up for people to scratch their heads and say, 'wonder what's going on downtown. Must be something going on.' Now that we've designed some good buildings and nice spaces, we've got to get busy and design some variety into the things people can do once they come down here."

Nearby Market Street, with its activist Restoration Agency headed by Norman Mintz, is already solving part of that problem. When the Agency was set up in 1974, the year that Market Street was designated a National Historic District, 35 per cent of the 125 stores were vacant, evincing the kind of blight that accumulates on so many main streets when merchants perpetuate "cover-ups" in aluminum cladding and garish signage—all in the name of "modernization." Well, thanks to Mintz's design skill, subtle diplomacy, and the economic self-interest of the merchants themselves, the cover-up is about over as the care, color, variety and

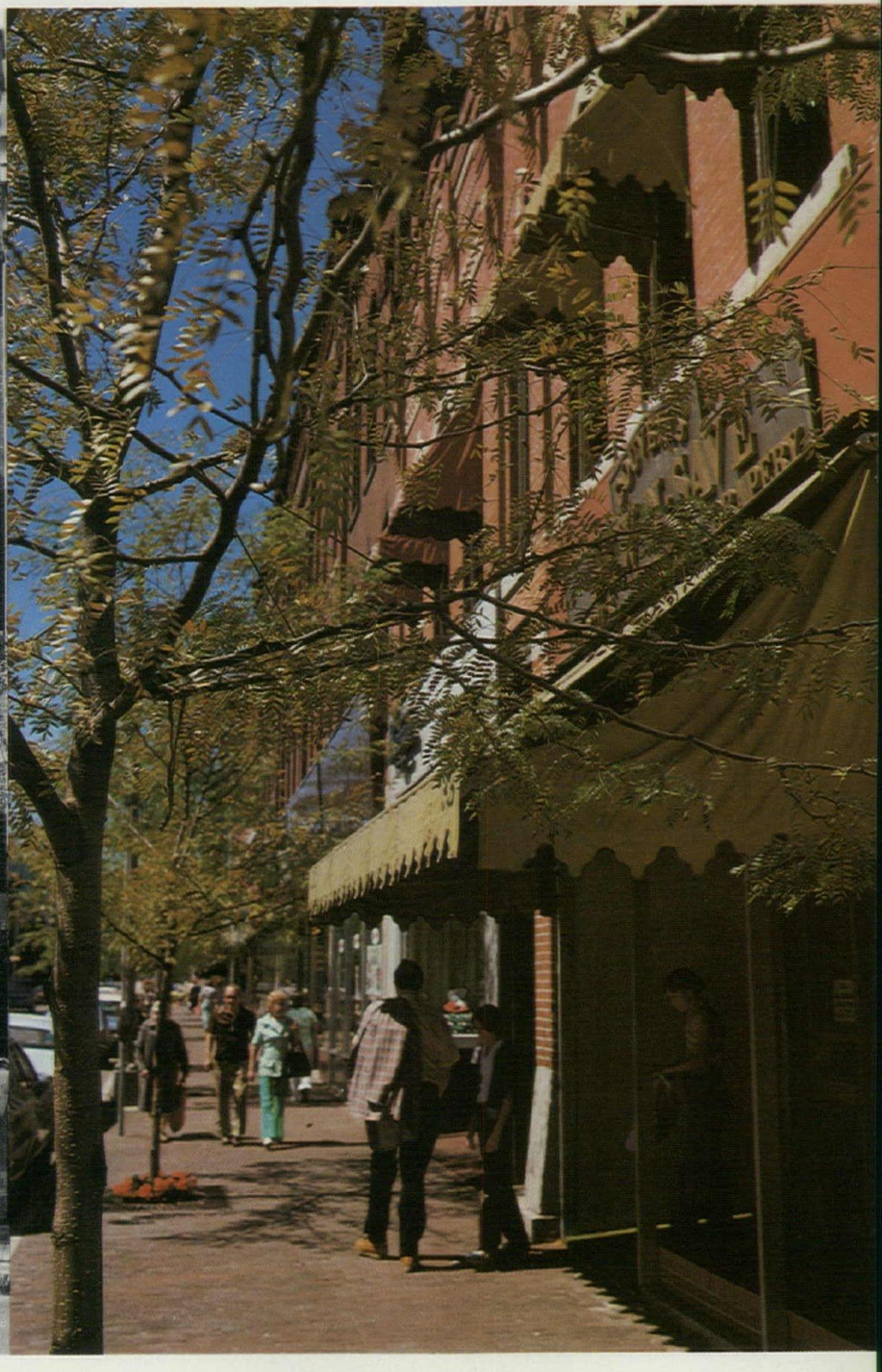


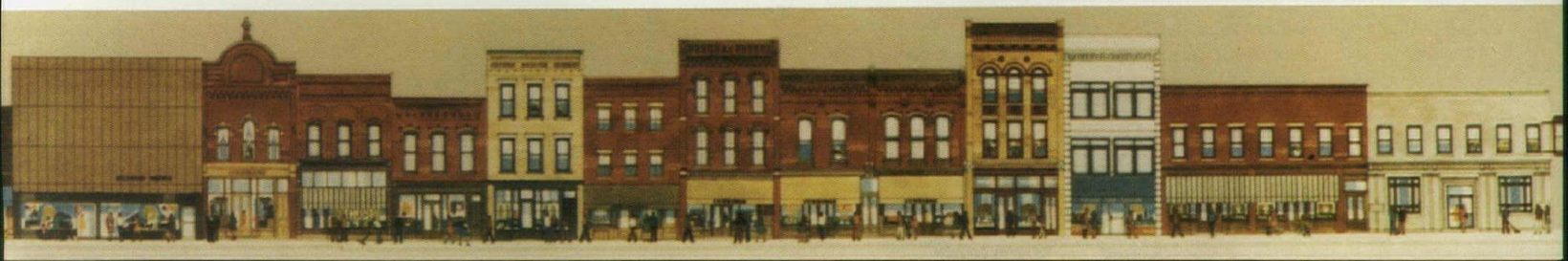





1887
H. C. TUTHILL
ARCHITECT


GOUVEIA'S
SEW·N·SAVE
FABRICS CRAFTS DRAPERY





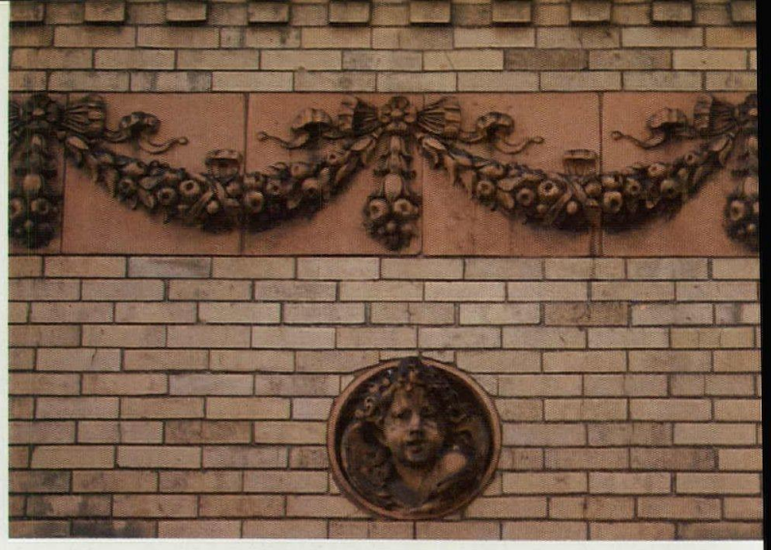
charm of old building craftsmanship is brought back into the light. Says Mintz, "If 750,000 people can visit the Corning Museum every year, we could imagine maybe half of them visiting Market *if* it were an interesting, fascinating, fun place to be and to shop. Well, that did it, really, and especially when we convinced the First Bank and Trust Company to restore its building rather than settle for some old new thing. We've been very careful not to impose prettified precepts on the merchants and to work with them in pointing out the simple things that can be done to bring out the basic qualities of their buildings, which, put another way, means to beef up the potential of their businesses." Mintz is right. Business *is* up—a 600 per cent increase in tax-rateable property. Amenity is now almost necessity, and to the *merchants*. The next step? Trying to get the upper floors ready for more retail and—try hard, boys—for the adventuresome souls who would like living right downtown above the shops.

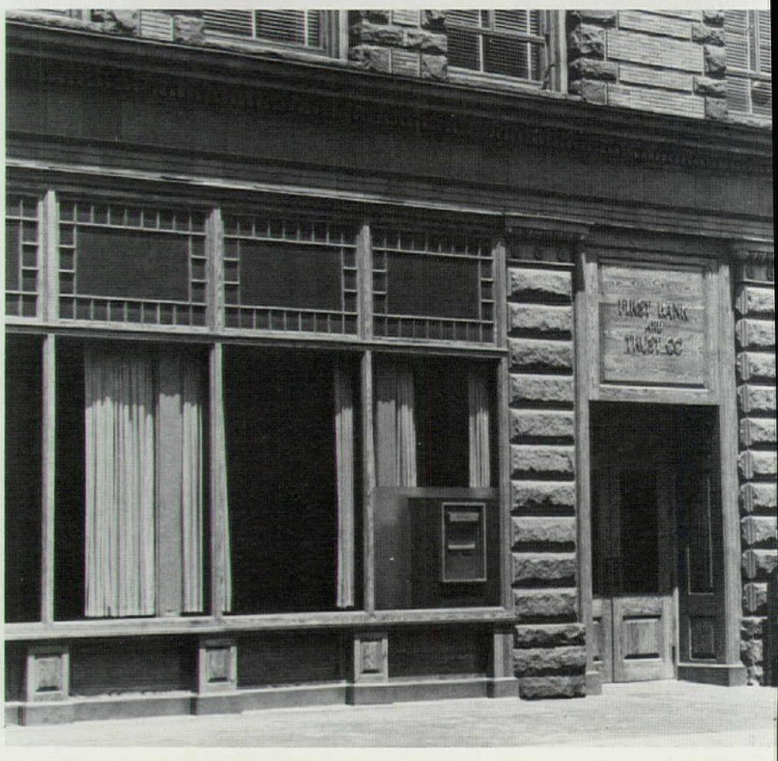
The funding for this reveling at the grassroots has been a remarkable mix. The Corning Glass Works Foundation has sown almost $2.9 million in seed money over the last five years—including $226,000 for Market Street, $128,000 for the initial planning of the renewal area, $1.6 million for the library's construction, $500,000 toward the ice rink and related amenities, $80,000 for the architectural fees for City Hall, and $25,000 for the People Wall inside ($10,000 more came from The National Endowment for the Arts). The $64,000 fee for the new red triangular fire station by Gunnar Birkerts was also discovered. Working with Chiodo and the design review committee, and in close counsel with Sheaffer, the Foundation has been able to assure quality design in the most mundane facilities needed by the redeveloping community.

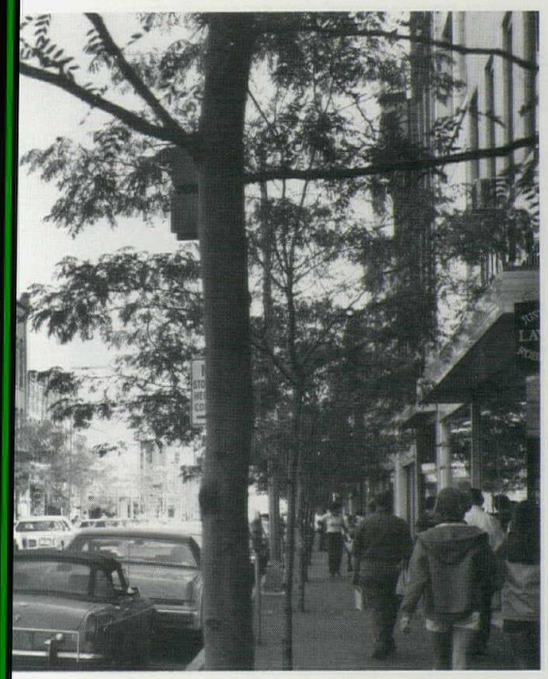
Of the non-private sources, $7 million went into the downtown renewal project, a fourth of that from state and local sources, the rest from HUD's urban renewal program. The downtown restoration effort was assisted with $251,000 from the New York State Department of Housing & Community Renewal, and a matching amount from HUD's Open Space Program, plus another $150,000 from the State's Office of Parks and Recreation. While a lot of cities have nickled and dimed their way to mediocrity, Jim Sheaffer, through careful definition of need and specification of priority, has done a lot with a little, causing one to reflect on whether or not the formula approach of the current Community Development block grant is inherently superior to the thoughtful use of the older categorical programs. Let Jimmy Carter come to Corning before rehauling HUD in his new administration.

There is not a much nicer compliment one can pay a man than to say that he's a "regular guy," which is why it's easy to compliment Corning, which is making the most of "regular buildings." A lot more is on the boards, including the multi-phase Agnes Project for the north side of the Chemung by the Ithaca, New York firm of Levatich, Miller, Hoffman, and meant to improve housing and recreational facilities, all left in ruins when Agnes broke the levy. Meanwhile, Birkert's fire station sits on a rise in the neighborhood, drawing crowds of children. "The men *want* to work double shifts here," quips fire chief Charlie Houper, who doubles as building inspector and who had just issued a permit for another facade rehabilitation.

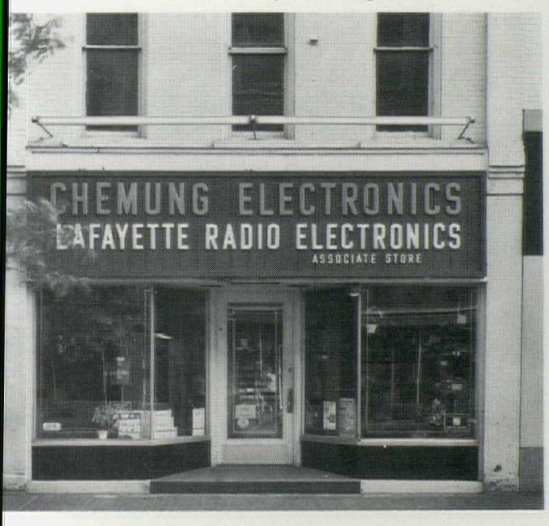
"We're devoted to smallness here," said the fire chief, modestly. The renaissance, so it seemed, was truly intact.

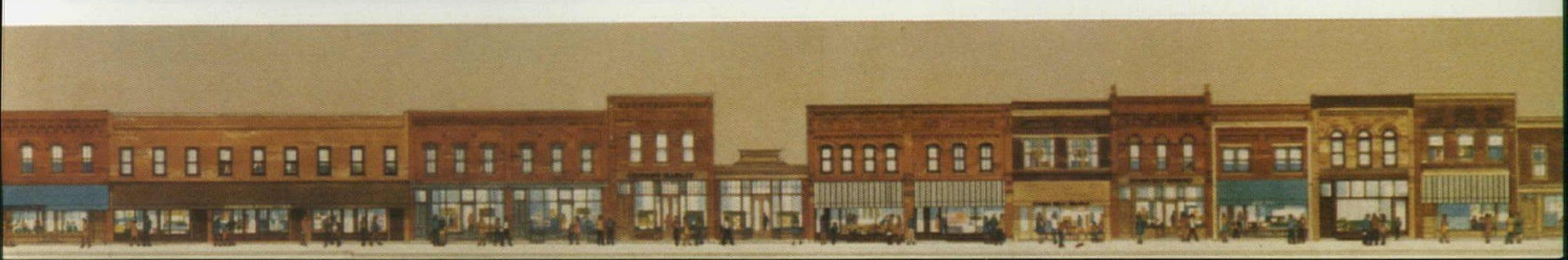






From all walks of life, blue collar and white, people are experiencing Corning and each other with a heightened feeling of unity. Market Street (above and opposite) is drawing them into the confidence of their own past, its scale and humanity informing the new.





GRAND HAVEN

How a "citizen architect" raised the curtain on the Main Street of this small Michigan town—with The World's Largest Musical Fountain

by Melinda Blauvelt and J. P. Chadwick Floyd

During the 1950s the Main Street of Grand Haven, Michigan (population 12,000), was suffering from a severe case of the downtown-itis. People didn't want to shop there any more, and storekeepers, disheartened by failing trade, let their stores deteriorate. By the early 1960s the urban decay seemed irreversible—until a local dentist, Dr. William Creason, proved it wasn't.

Armed with the memory of a musical fountain he had seen in a Berlin nightclub a decade earlier, Dr. Creason waged a grassroots campaign to build The World's Largest Musical Fountain right on the Grand River. Every time he filled a patient's tooth, Creason told his tale. With fifteen other believers, including a mechanical engineer, an electrical engineer, and a plumber, our citizen architect soon collected close to a quarter of a million dollars for the fountain.

Memorial Day, 1963, at eight in the evening, thousands of Grand Haven citizens gathered on Main Street and were thunderstruck as the unsightly downtown was transformed into an exciting and unique theater. Strains of the "Blue Danube Waltz" came out of the hill across the river and filled the street. A 250-foot row of water columns rose into the air and gamboled a hundred feet high. Dr. Creason—by then mayor—says "Some people clapped, others cried." The musical fountain had captured Grand Haven's imagination.

In response, the town appropriated tax dollars to build twenty rows of theater seats at the end of Main Street and a waterfront marina. Shopkeepers, recognizing that citizens and tourists visiting the new attraction promised to fill empty coffers, painted their storefronts and replaced signs.

Fourteen years later, The World's Largest Musical Fountain is still a rallying point for community pride. What makes it so astonishingly successful? Here are five considerations that Dr. Creason and his friends made when they built the fountain:

Image change
Dr. Creason was sensitive to the decay in the image as well as the fact of Grand Haven. He knew that a dramatic gesture was needed to put nowhere back on the map.

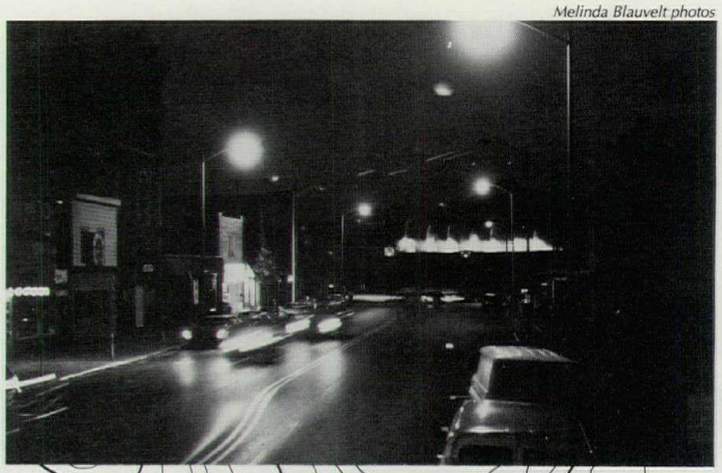
Visibility
Every good landmark stands out. Dr. Creason chose the hill across the river as the site for the fountain because it was centered at the end of Main Street

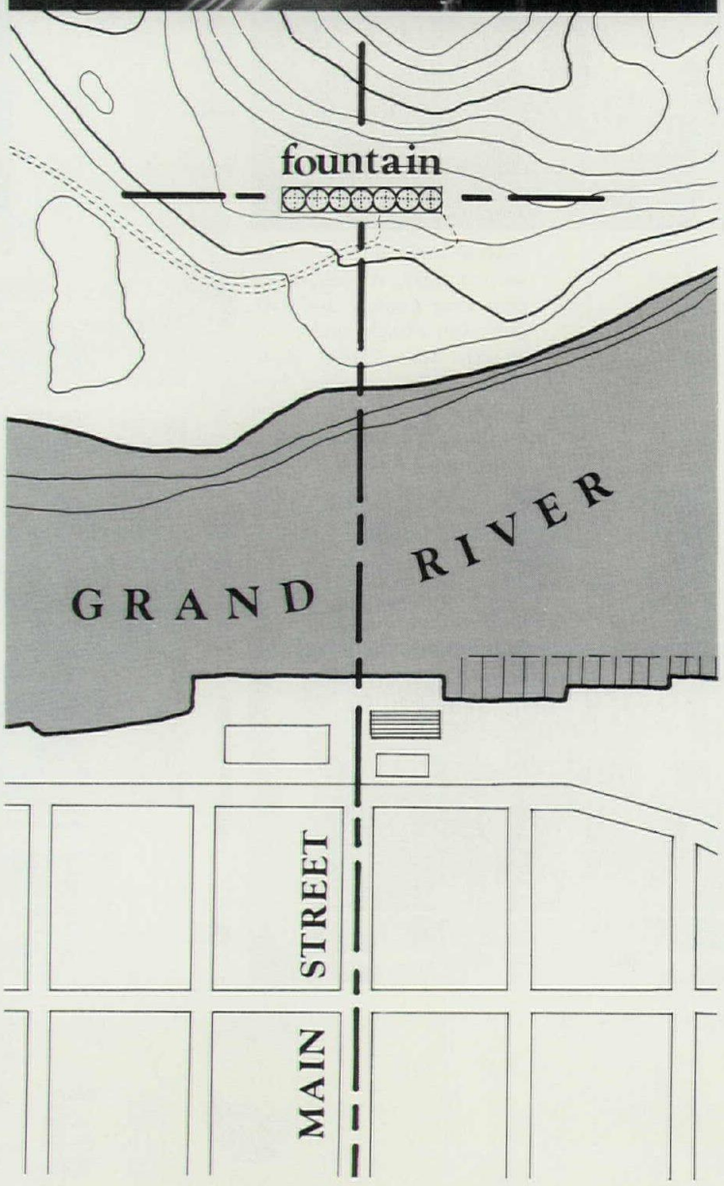
Elevation
Dr. Creason exploited another cardinal rule of good theater: an elevated stage heightens any drama. The musical fountain performs its routine 180 feet above the level of Main Street.

Personality
Nothing gets old faster than a showman with only one routine. Capable of 1,875,352,000,000 variations, the symmetrical water plumes are as protean as any dancer. The Grand Haven Chamber of Commerce reports that the most frequent reaction is, "Why it's almost human!"

Citizen involvement
Long after tax-implemented renewal programs are forgotten, the citizen-inspired and citizen-engineered fountain will continue to be a reminder that Grand Haven is people-controlled. As one citizen says, "We don't think of the fountain every day now. After all, it's been around for quite a while. But special times—Easter and Christmas—we go to see the show. And then two or three times a year, when friends come to visit, well, the first thing we think of to show them is the fountain. It's because of pride."

Melinda Blauvelt photos





The World's Largest Musical Fountain is sited on Dewey Hill across the river and on axis with Grand Haven's Main Street. Although watching the fountain is free, donations from tourists and residents pay the $10,000 yearly maintenance costs. Every night, spring through fall, the business district hosts the water spectacle. The fountain plays over forty different musical programs, ranging from rock to hymns. On special occasions, the fountain becomes a great proscenium theater for pageantry. At Christmastime, a giant crèche, topped with a 44-foot Star of Bethlehem, is placed on Dewey Hill, and the fountain is its backdrop.

GANANDA

An upstate New York new town (and a collegiate community surprisingly similar) demonstrate a game plan for pinpointing people's needs and wishes and dreams

The Pittsburgh firm of Urban Design Associates has gained a solid and growing reputation for their interest in identifying the particular and various forces that go into making an architectural program and, from that, a building. The built confluence of economic, political, social, and individual demands and urges is their special enthusiasm—at the expense, some of their critics argue, of glamorously photographable architectural images, but to the greater glory, the firm's partners David Lewis, James Goldman, and Raymond Gindroz would reply, of their real purpose: good buildings.

Two projects by Urban Design Associates are shown on these and the following pages as further evidence of how architects can help build a way of life in the Home Towns of America. One project is for a small college in Pennsylvania (not really a town at all, though certainly a community) and the other is for the still-nascent new town of Gananda (not quite yet a town, and a place currently riddled with controversy). Both projects are nonetheless straight to the point, because they aim to do something that is very close to the heart of the whole Home Town idea: they try to give people the sense, and indeed the reality, of having *their* needs and wishes help shape their environments directly.

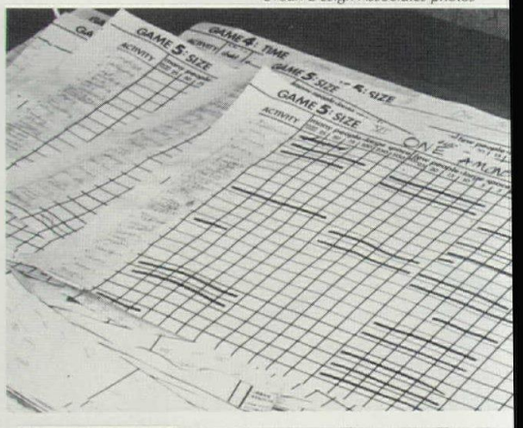
The town of Gananda, near Rochester in upstate New York, has in recent months come close to becoming the contentious centerpiece of the new towns debate—partly because of the extensive delays in getting much of anything very substantial built there. Word from Gananda is that housing construction is about to begin again—around Urban Design Associates' first neighborhood center, a building complex (and a complex building) that houses a school and all manner of neighborhood social facilities.

Joseph W. Molitor photos

On the outside (photo opposite) the first Gananda neighborhood center looks like a series of big barns, with its long and low red roofs and its triangular dormers. On the inside (photo above) it becomes a small city, with its many facilities opening onto a central pedestrian mall. The first center is designed to serve a neighborhood of 1,500 to 2,000 families; this is meant to combine with other neighborhoods like it to produce the final town of Gananda, intended to have a total population of about 80,000 people. When Urban Design Associates, the architects of the first neighborhood center, were commissioned, they brought in politicians, bankers, homemakers, farmers, university professors to participate in the design process.

GANANDA

Urban Design Associates photos



Gananda's original planners and developers envisaged a town which would grow, neighborhood by neighborhood, to 80,000 people; each neighborhood would have 1,500 to 2,000 families, and it would cluster around its own neighborhood center. In turn, the neighborhoods would be grouped around a city center, which would include large-scale facilities and amenities not found in the neighborhoods.

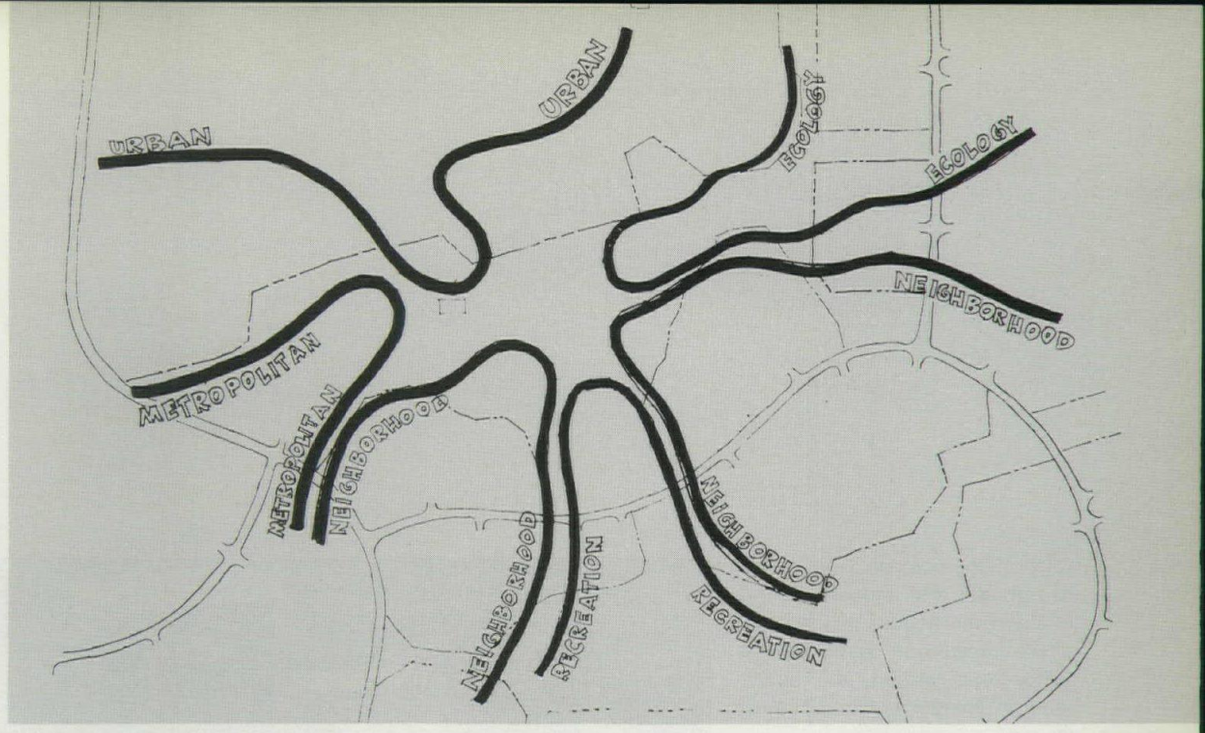
When Urban Design Associates were put in charge of developing the center for Gananda's first neighborhood, the developers did not envisage a design process that would involve citizens—since at that point the site was no more than open country.

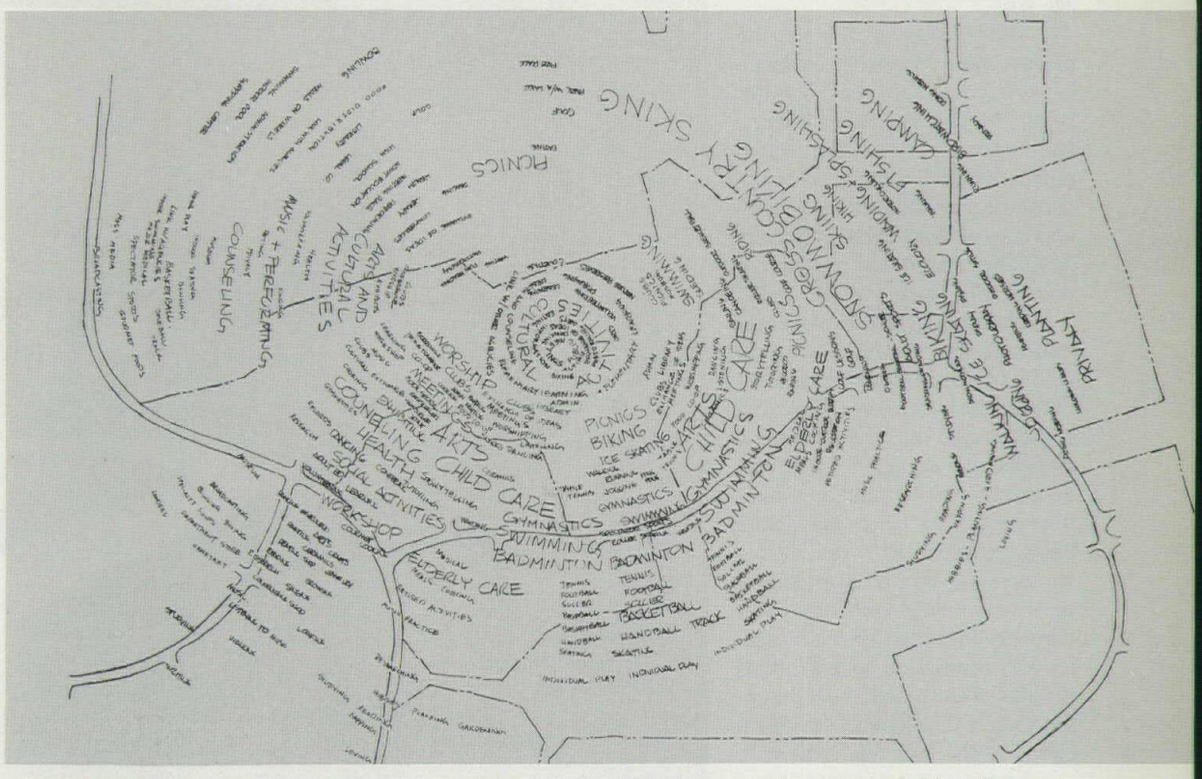
Or so it seemed. Urban Design Associates pointed out that, far from a community not existing, participants for a useful process were readily available, and that it was important to use them. Thus over two hundred people were invited to participate in designing the center—and these included elected officials from the region; administrators of local, county, and state agencies; rural people (whose lives would be affected by the new town); and a sample of the "market," including businessmen, professionals, home builders, and families. The process was like a town meeting.

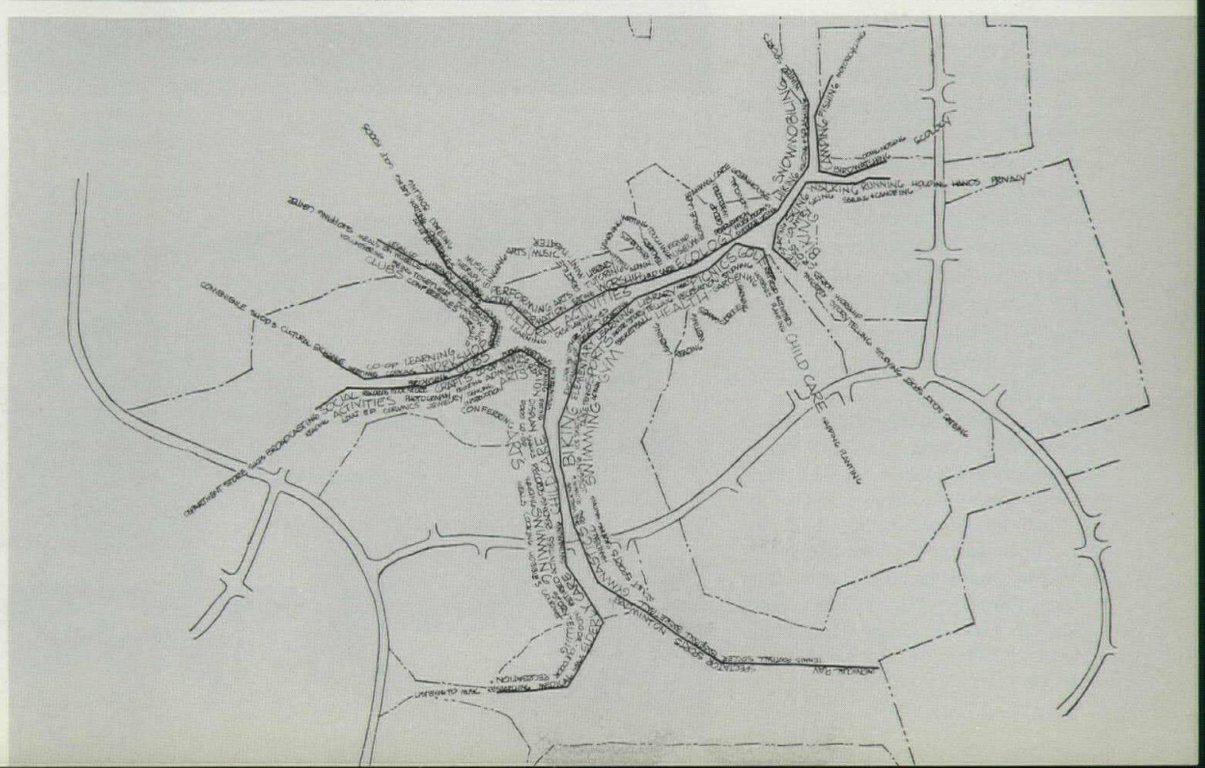
Urban Design Associates call these participatory sessions "games"—an unusual use of the word, since here the games involve groups of people not exercising their skills in competition with each other but in concert against a single enemy, the professional indifference, which so often refuses to give them the kind of environment they know they want.

The Gananda games were financed by the Educational Facilities Laboratories, and in essence they were almost deceptively simple. Urban Design Associates

The design of the first neighborhood center in Gananda evolved within the context of a series of games played by people from the Gananda region (photos left). Participants were asked which public activities they thought central to a neighborhood, and the answers to this question were computed and then elaborated in a series of subsequent games. Thus a program for the neighborhood center began to emerge.







The top diagram on the right shows the site for the first neighborhood center and the relationship of its various edges to different types of contiguous activities—activities which would influence that part of the center to some greater or lesser extent. The middle diagram shows some of the results of the games, with activities written larger or smaller according to the numbers of people who suggested them. The bottom diagram shows the activities arranged according to their logical contiguities and according to the pattern of existing bike paths.

asked the participants which public activities they thought central to a neighborhood. On the basis of the responses, a number of games were played, the object being to identify numbers, times, age-groups, and clusters.

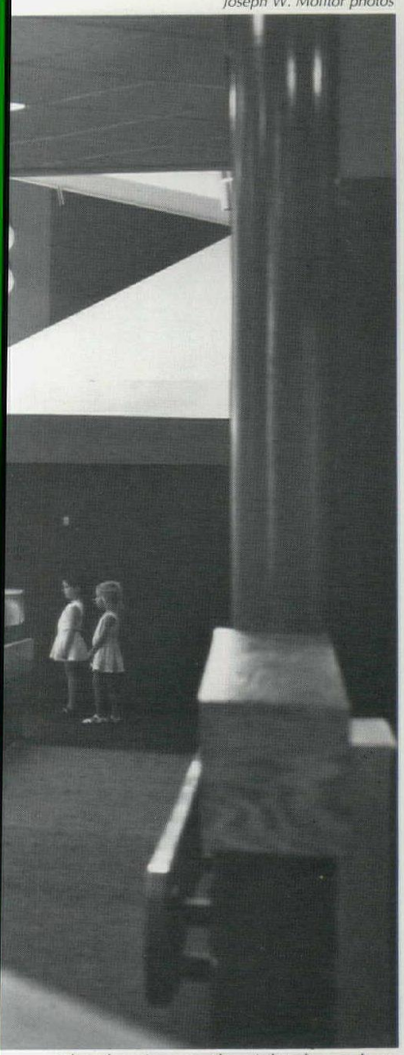
When the results of the games were collated, a program for the neighborhood center began to emerge. It included a learning center for children and adults, a public library, a health center, indoor and outdoor recreation, an ecology center, a theater for drama and music and an indoor-outdoor cafe.

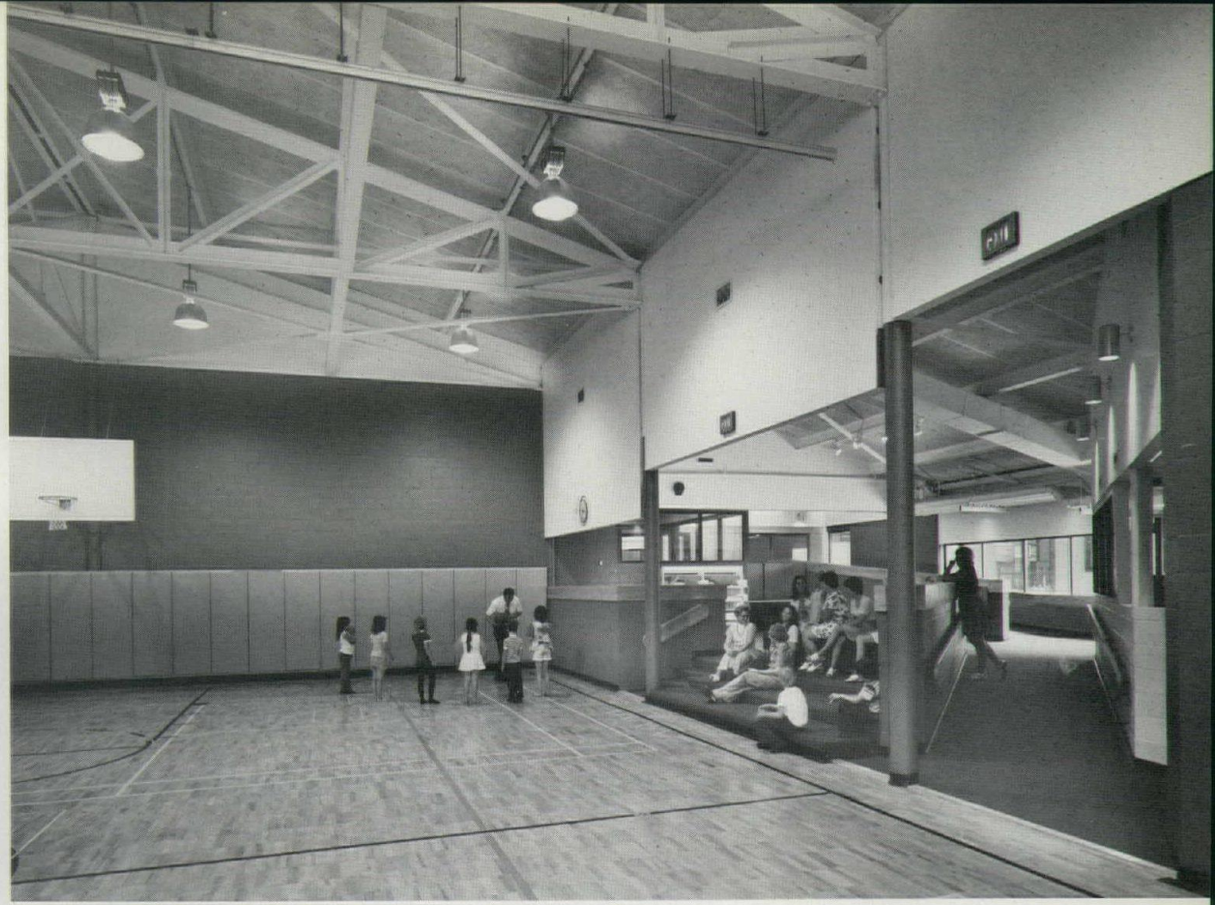
The design of the neighborhood center evolved directly within the context of the games—but the games, Urban Design Associates point out, were only one stream in the confluence that produced the finished building. During the period when they were being played, other task forces were working on other problems of programming and administration and finance. Thus the design moved forward on several fronts simultaneously, and the consensus of the developers, the agencies, and the user was built in.

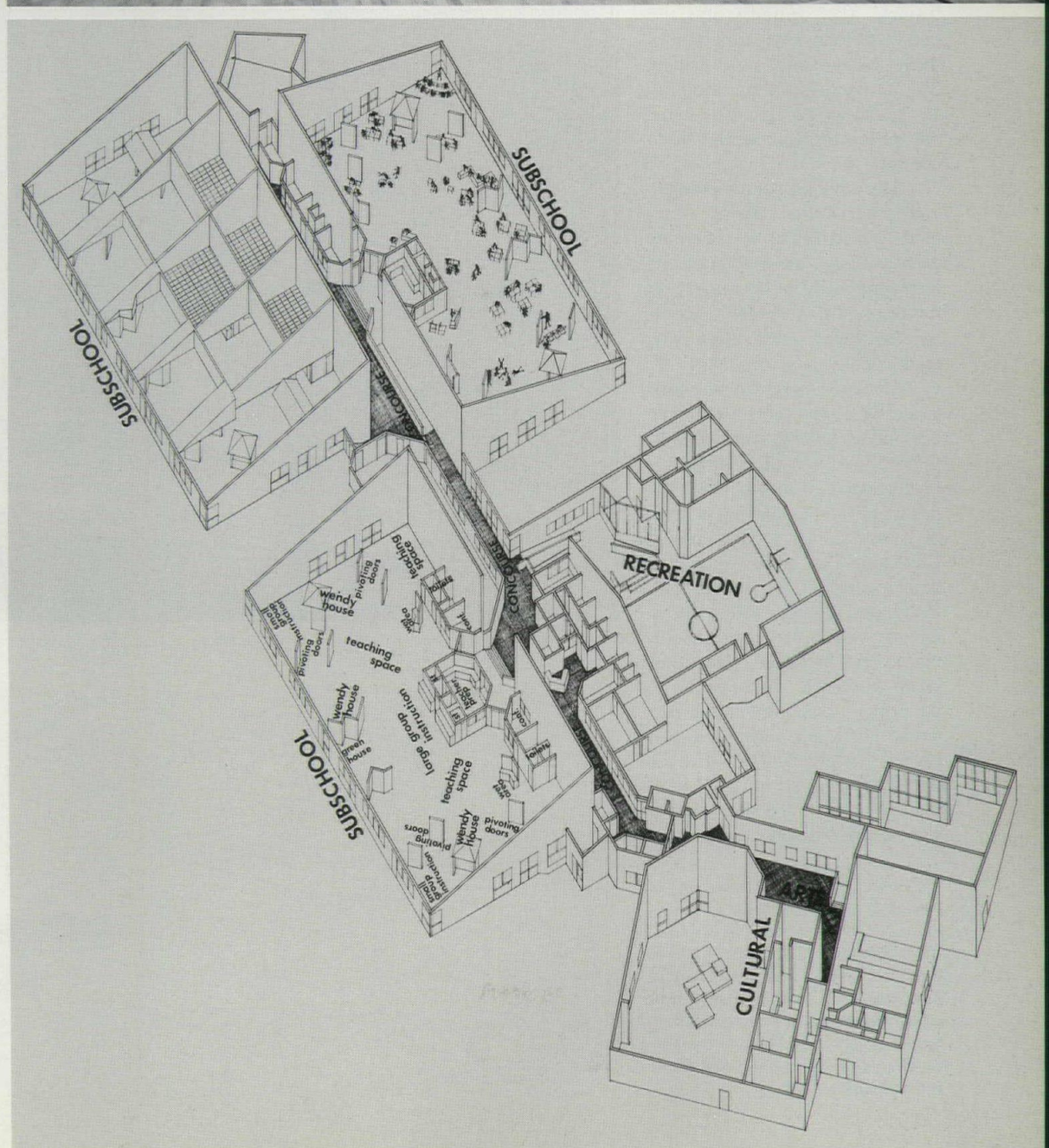
Each task force had a strong impact on the form of the built building. The task force on design, for instance, was concerned that the rural traditions of upper New York State be respected. Consequently the center, with its long and low red roofs and its triangular dormers, looks like a series of big barns from the outside. Inside, it becomes a small city, with its many facilities opening onto a central pedestrian mall.

FIRST GANANDA NEIGHBORHOOD CENTER, Gananda, New York. Architects: *Urban Design Associates.* Engineers: *Gustav Steuber & A. F. Garrone* (structural); *Straw, Custer & Duray, Inc.* (mechanical); *O'Brien & Gere Engineers, Inc.* (site). Consultants: *Land Design/Research, Inc.* (planners/landscape); *Thomas Green* (education). General contractor: *Iroquois Structural Builders, Inc.*

Joseph W. Molitor photos







The drawing on the right shows how the final building for the first neighborhood center emerged from the organization of the word priorities of the games along a central pedestrian spine. The photograph above shows the spine, and the one above right shows the gymnasium connected to it. The photograph on the left shows one of the teaching spaces in the school.

JOHNSTOWN

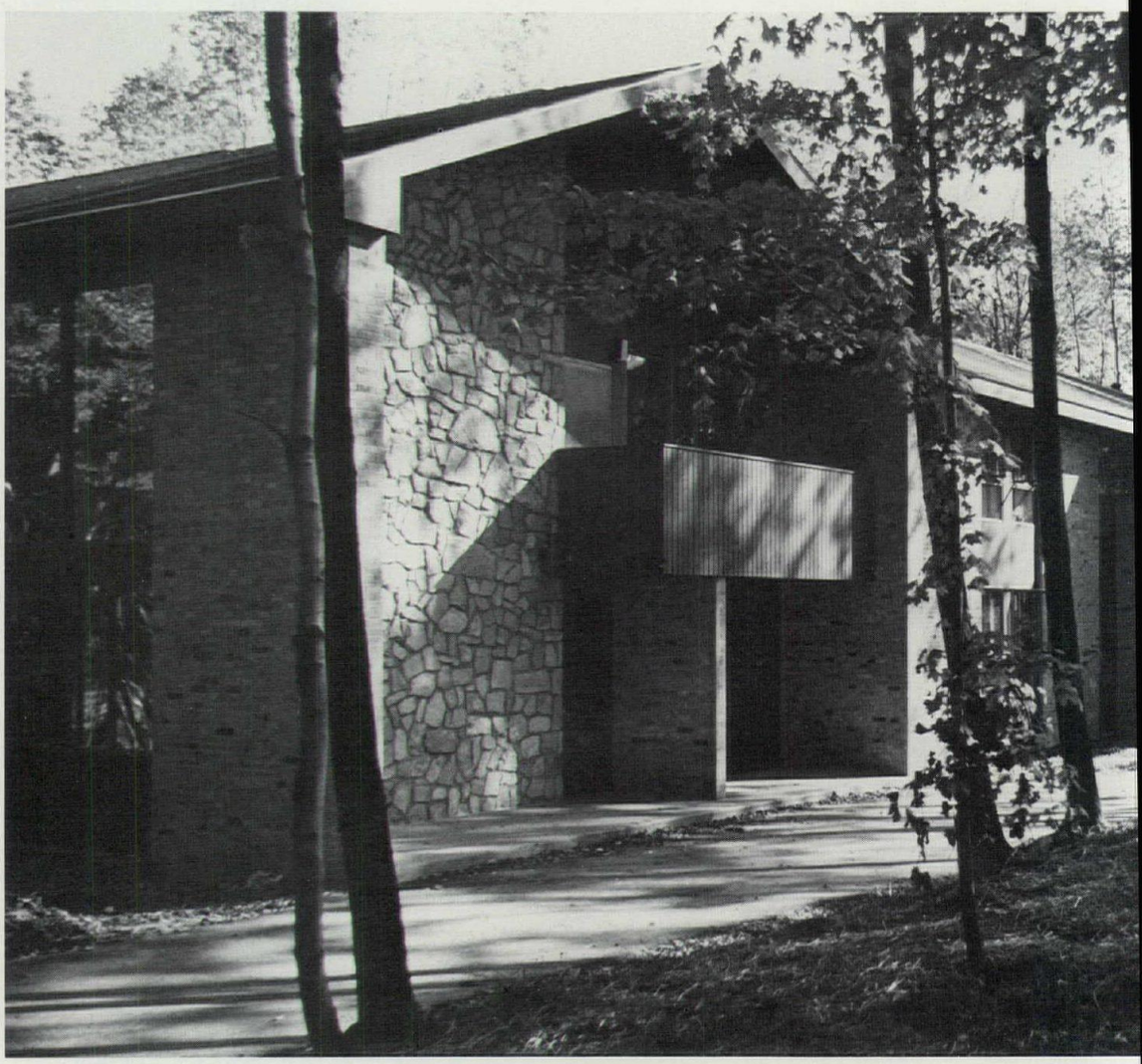
Playing the games (very quickly) for a college community

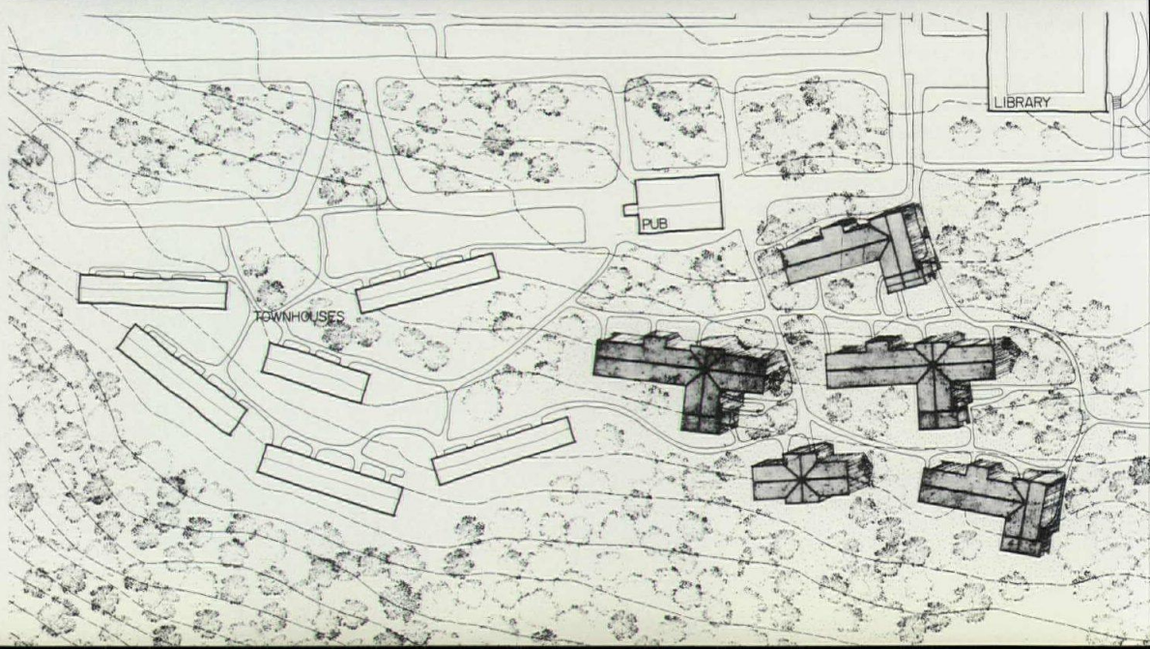
On a ridge of the Alleghenies above Johnstown, the Johnstown campus of the University of Pittsburgh slopes east with magnificent views through the tall trees. The first buildings, constructed in the early and mid-1960s, set the campus theme in an idiom of local stone, sloping roofs, barn-red eaves, and bronze window frames. The students and the people of Johnstown are proud of their college, and, in designing 256 units of student housing, Urban Design Associates saw that part of the problem would be to continue the idiom.

The other part of the problem was time. Urban Design Associates were asked on last February 20th to design the buildings, and they were ready for occupancy for the beginning of this fall's semester. The only way to do this was by teamwork, with few mistakes.

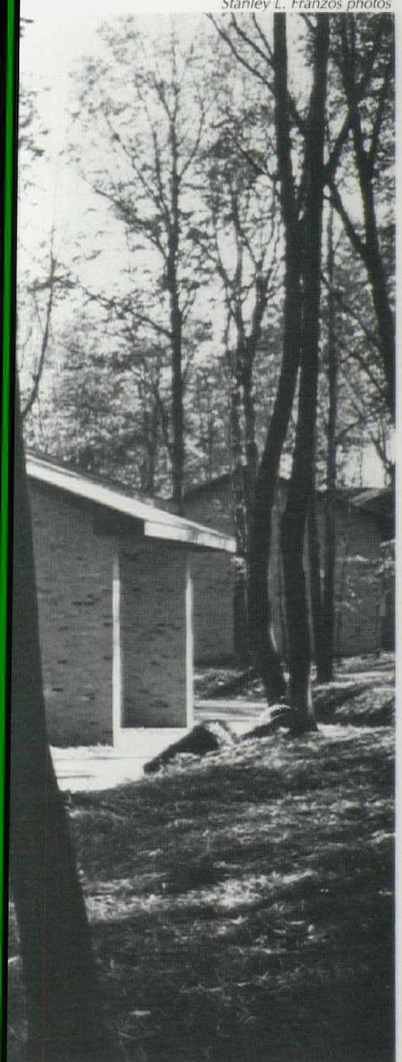
Urban Design Associates asked for a representative sample of students, faculty, staff, administration, and board members—eighty people in all—to join in the design process by playing a series of games similar to the ones at Gananda. The games provided, among other things, strong reinforcement to the existing architectural vernacular, and, according to the architects, they provided as well a "conscience" to the project, assuring that the particular needs and wishes that had been clearly articulated by the participants would not get lost in the frantic push and shove of designing these facilities.

STUDENT HOUSING, University of Pittsburgh at Johnstown, Pennsylvania. Architects: *Urban Design Associates—Raymond L. Gindroz, James P. Goldman, David Lewis; project architect: Stephen Casey.* Engineers: *Tallarico, Hoeffel & Partners, Inc.* (structural); *H. F. Lenz Co.* (mechanical/electrical). General contractor: *Wilson Construction Co.*





Stanley L. Franzos photos



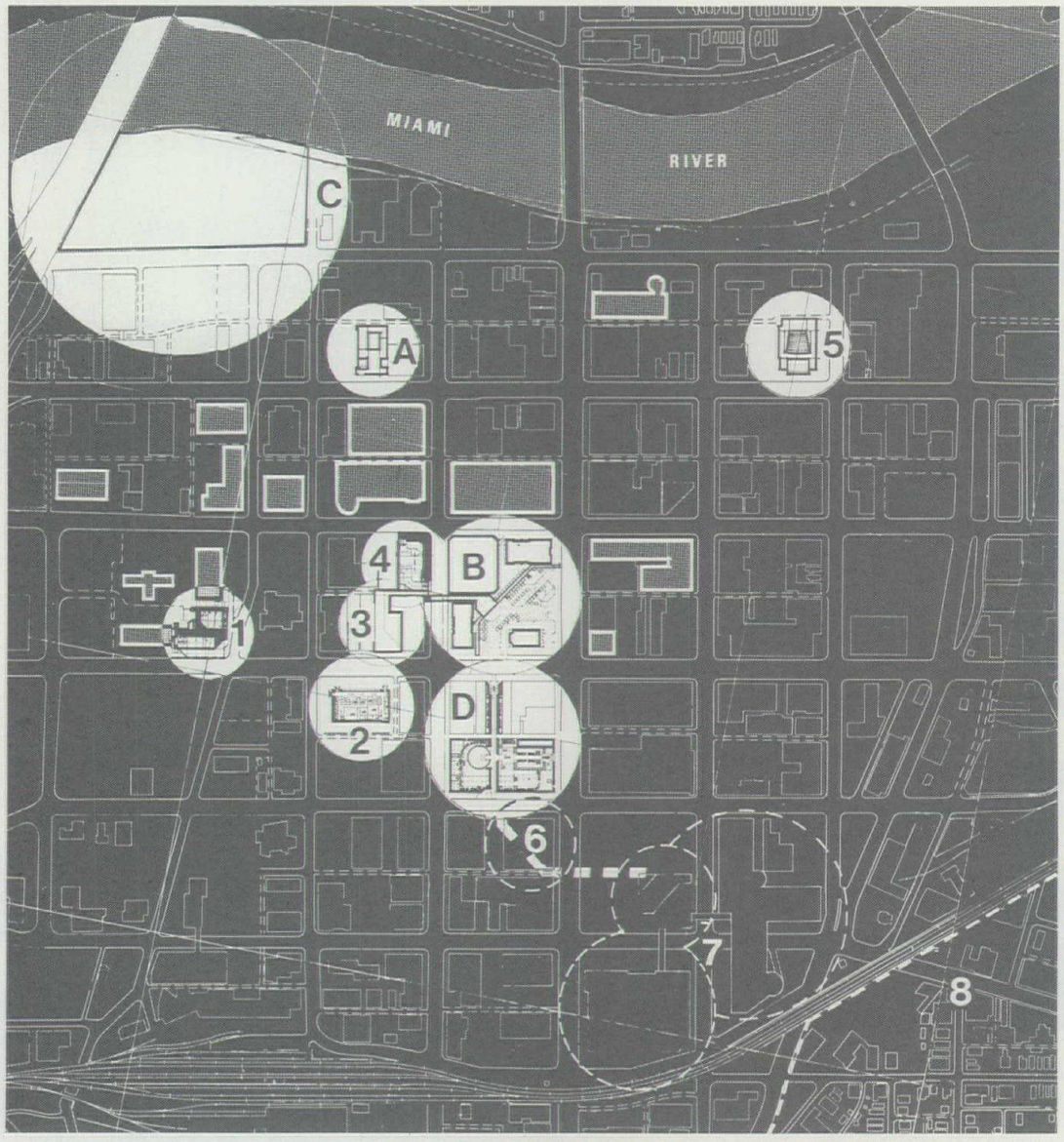
In designing new student housing for the University of Pittsburgh at Johnstown, Urban Design Associates breasted a wave of architectural taste and made new buildings that are reminiscent of the existing buildings on campus; thus the new buildings are, in effect, 1950s eclectic. The site plan below shows how the condominium-style housing is slipped in among the trees near existing student housing.

DAYTON

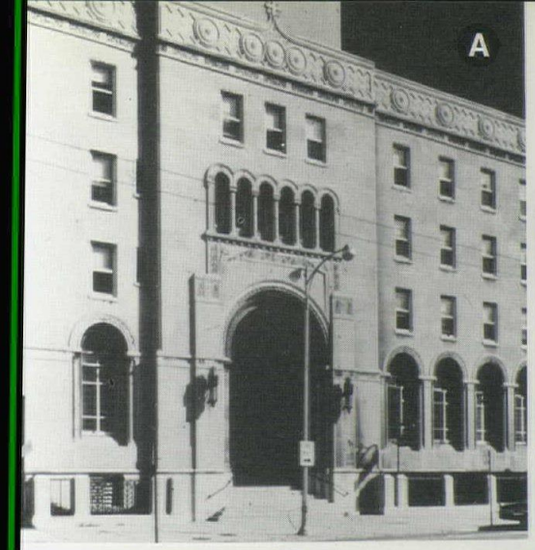
Where needed individual projects were linked in a way that makes the city more than the sum of its parts

With a population of 250,000 persons, downtown Dayton is generating far more new construction than most cities of its size. Until recently encumbered with more than its share of parking lots, the central business district is being knit together as a cohesive urban center of older structures and of new ones. According to local architects Lorenz Williams Lively Likens and Partners (designers of most of the projects discussed here) one of the big accomplishments is the ongoing raising of public consciousness of what is required to meet both the aims of a true urban center and individual interests. As the two aims are often viewed as contradictory, the recognition of a need for resolution is a major accomplishment in itself. Hence, LWLL & P is conducting its major current design projects with active public participation in the spirit of its own participation in Leadership Dayton—a program sponsored by the area Chamber of Commerce to develop potential in early-identified local leaders.

Progress on both the fronts of physical change and of public education has been gradual and steady. Because—like many similar cities—Dayton has traditionally followed a pattern of natural healthy development on a river's bank (here the Greater Miami), there has been little need for major reorganization. Instead, the effort has been to infill what is there within the concepts of making it workable as a whole. Beginning some years back, LWLL & P has performed traditional architectural commissions for a variety of commercial establishments (dotted areas on plan, right), even while the gaping holes of parking lots were still being made in the city's fabric. New commissions were performed within the firm's own conviction of what the city could be like. More recently, projects have begun to involve inno-



At Courthouse Square (Figure B in photos and plan), the large industrial structures, seen in the older photo at right, occupied the historical business center, and have been demolished. An extension of the plaza (around the 1820s Courthouse) is in construction as indicated in the plan and as designed by architects Lorenz Williams Lively Likens. The project has generated the completion of two tall corporate headquarters (as indicated on site plan and designed by architects Harrison & Abramovitz) and the current construction of a major department store in between. Two parking structures and a major bank (Figures 3 and 4 on the plan) have been designed by LWLL & P to infill predominantly low-rise older structures and are connected to the Square by an elevated walkway. The first phases of Riverdesign (see text and Figure C) are bringing a new intimate relationship to downtown. Loretto (A), a former hotel for single women, is being converted to offices, and the old post office (2) is to be re-used as the University Law School. New city and county court buildings (4) have established a new block-wide government center between the commercial center and the river to the west. The municipal auditorium (5) is being refurbished.


A


B

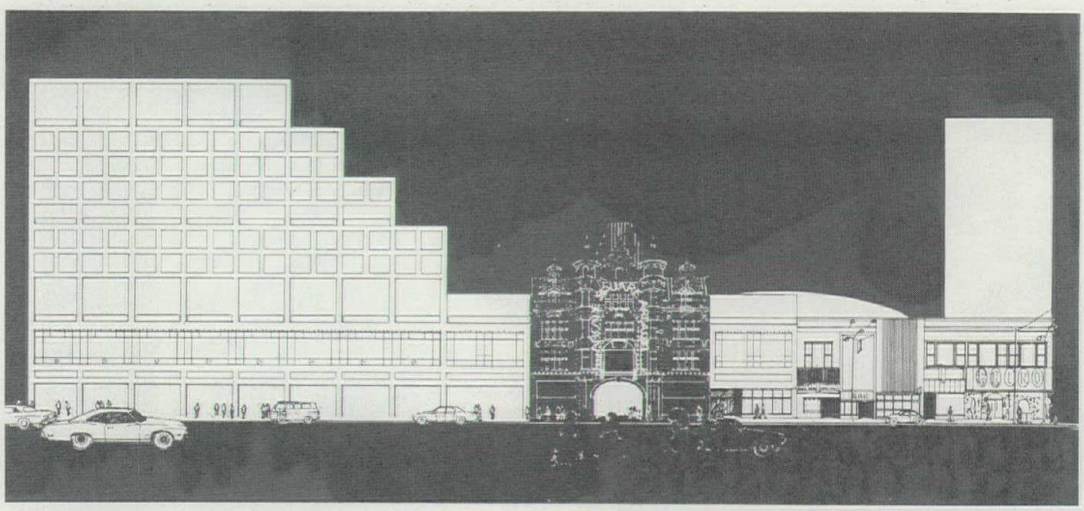

C

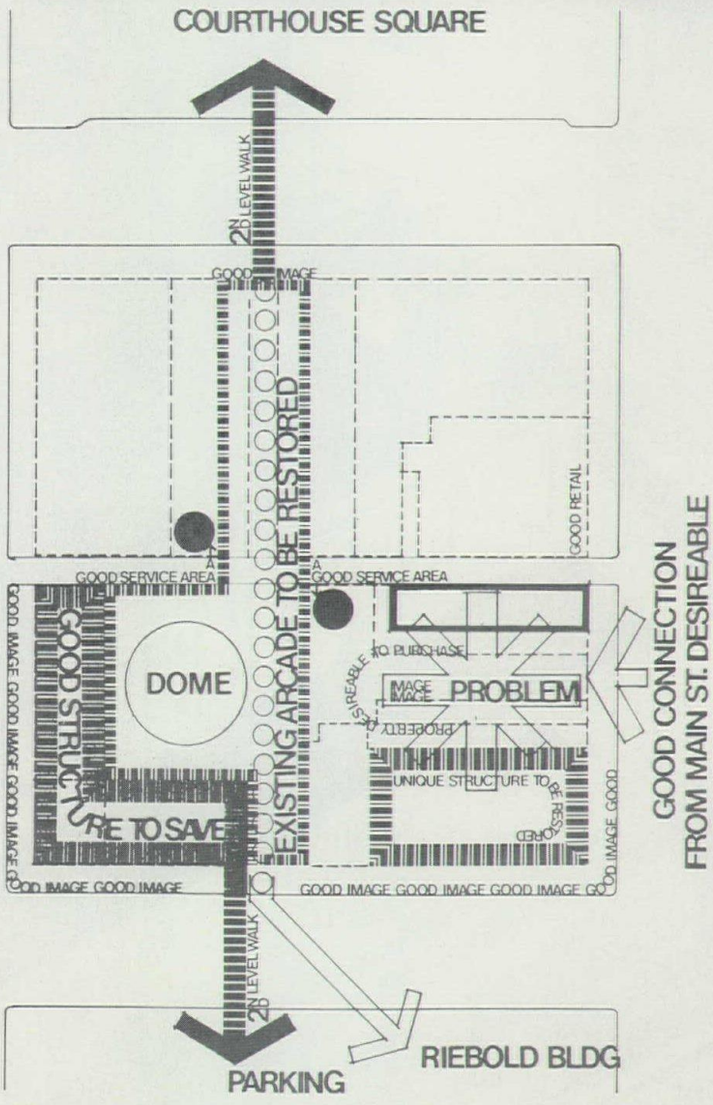

B

vative financing, public participation and the re-use of existing structures that have given back to Dayton a sense of roots.

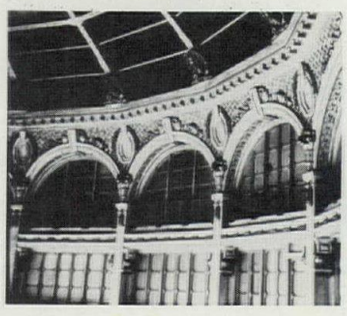
Among such projects (captions, page 120 and right) are Courthouse Square and Riverdesign Dayton. Both are financed by the city to stimulate new construction and hence repayment in the form of increased tax assessments. In each case, private developers are given the choice of a 20-year tax abatement for constructing publicly owned improvements, or construction by the city of the improvements. Arcade Square (caption, this page) is financed by private developers through a consortium of local banks. Here, the city will make improvements to the public areas and maintain title to them. Because of the government's involvement in all of these projects, it has been possible for the public to take an active role in the planning—especially in the case of Riverdesign, affecting a four-mile stretch of the Miami's levees (constructed after a disastrous flood in 1913). Here concepts to reunite the city and its river have received full public input via television "design-ins" and field offices for the airing of anyone's views. The planning and the architectural designs of allied housing and recreational facilities are being carried out jointly by architects Moore Grover Harper and LWLL & P. At Arcade Square, the latter architects were leaders in establishing the initial concept, and they publicly presented plans that were really diagrams (right) of the site's potential and needed changes.

Today, Dayton is clearly enjoying the fruits of progressive and imaginative leadership in both the private and public sectors. Courthouse Square and the already completed riverfront walkways are crowded with lively activity, and expanding businesses attest to the health of the downtown core.





In Dayton, Arcade Square (shown on these pages and figure D previous page) best exemplifies the way in which new concepts can lead to major urban revival. With architects LWLL as early promoters, a block of buildings has been analyzed for the best possible combination of existing and new uses. The planning importance of the block is as a link between the central business district and an area of new commercial construction (7)—and beyond that to an historic residential district (8). An older structure (6) is being remodeled into city offices. The Arcade (the facade faces Courthouse Square in the photo opposite) was built in 1904 to house separate retail concessions. With time, its glazed roofs (photo below) were covered over, and the quality of operations deteriorated. But recognizing its retail potential on a major pedestrian axis, plans now call for major refurbishing—including the uncovering of the glass roofs and the provision of new glass-walled elevator cabs. Linked new construction (elevation, above) is to infill the block around the Arcade and other sound older buildings.




D
ARCADE
AND
FOOD MARKET
DON'T WALK
deli & gifts

WHERE THE MONEY IS

Because both public and private funds for redevelopment are scarce, innovative use of all available resources is essential to successful redevelopment efforts

In the past four decades, the process of renewing the inner-city business and residential neighborhoods of U.S. cities and towns has gradually become more complex, yet more flexible. Influencing the trend toward greater sophistication in the renewal process has been the need of cities to find and make creative use of all available financing sources for community development projects. Paradoxically, while funds available from public and private sources have been shrinking in recent years, there has been a widening of the sources of funding and a broadening of the purposes for which funds are given.

Although the process has been made more complicated by continually changing Federal programs, many architects and planners working as consultants to, or members of, local planning agencies are becoming ever more adept at tapping the meager Federal, state and local funding sources, encouraging hesitant private investment, and wooing philanthropic capital.

Today's game of urban redevelopment is essentially a new one because the U.S. Congress has changed the rules

In passing the Housing and Community Development Act of 1974, Congress gave local governments greater flexibility, latitude and autonomy in the use of Federal funds. The Act fundamentally changes the Federal approaches to housing and urban renewal and attempts to simplify Federal-local relationships.

From 1949 to 1974, the major source of financial aid for community development other than housing was the Urban Renewal Program, which provided Federal and state financial assistance up to ⅞ths of the total acquisition, relocation, public improvement and administration costs for a specific project within a specific area. Urban renewal funds were granted on the basis of an application by the municipality and approval by HUD for each project was necessary. Until the 1974 Act, local governments had to conform to separate Federal regulations that applied to each of many categorical, separately funded and administered programs. These included urban renewal and neighborhood development programs; rehabilitation loan and grant programs (Sections 312 and 115); neighborhood facilities; open space, urban beautification and historic preservation activities; the Model Cities programs; water and sewer facilities and public facility loans.

Because Congress in 1974 assumed that local governments could devise more effective plans if they were not forced to work within these allegedly inflexible categorical programs and conform to all of their separate regulations, all of these programs were amalgamated into the Community Development Block Grant Program (CDBG).* The 1974 Act makes it possible for the localities to know in advance how much Community Development funding they will receive each year so that they may be able to plan for its best use. The Act makes it no longer necessary for the localities to come up with matching contributions as required in the earlier urban redevelopment programs. Although it continues the now standard urban renewal requirement for maximum feasible citizen participation in the planning process, the emphasis is on the word "feasible." The Act makes explicit what has always been implicit: the ultimate decision-making responsibility and implementation rests with the local governing body.

The size of the CDBG that a given locality can receive is predetermined by the Department of Housing and Urban Development based upon a complex formula pertaining to population, the extent of overcrowding and the extent of poverty, as well as the past level of Federal funding in the community for certain programs now consolidated in the Act. The legislation provides $8.1 billion through fiscal year 1977, to be allocated among cities, urban counties, other units of local government, and states. Eligible on the formula basis are central cities in the standard metropolitan statistical area, cities of more than 50,000 persons, and urban counties of more than 200,000 persons.

Other municipalities that received funds under urban renewal type programs are receiving, for the first three years at least, funds to maintain their previous levels of expenditure. Communities not eligible for funds under these criteria may make special applications for "discretionary funds." Community Development funds are not tied to a specific location within a city, but must be used primarily for the benefit of low- and moderate-income families and to alleviate blighted conditions. Such funds may be used for many different purposes. Like the urban grants, however, CD funds also cannot be used, except in special instances, for the construction of buildings that would be occupied by private enterprise.

The 1974 Act explicitly recognizes that community development be accomplished within a broad mix of interrelated purposes including physical renewal and social regeneration. It permits the locality to allocate significant portions of their block grants for such purposes. Unfortunately the CDBG program does not provide sufficient funds for the broad range of physical and social needs. Cities are still required to squeeze additional dollars from other Federal programs as well as from state and local sources. Private initiative and investment must be substantial from the outset. The entire funding process has thus become intriguingly complex.

The art of city planning can more and more be discerned in the

*Although technically absorbed into the CDBG or replaced, several programs have been continued by Congress for a limited time. Because both programs meet an acute need, Section 312 (which authorizes Federal three per cent loans to be made to residential property owners to rehabilitate their property) has been continued, as well as Section 202 loans for housing the elderly and the handicapped. The funds for Section 235, established by the Housing and Urban Development Act of 1968 to subsidize home ownership by reducing mortgage interest rates, were unexpended as a result of the 1973 moratorium on all Federal housing subsidy programs. These funds have been released under court order and are available for a limited time. With a few exceptions which are possibly temporary, the 1974 Act replaces all previous housing programs with the Section 8, Housing Assistance Payments Program. This program is designed to assist lower-income families to live in new, rehabilitated, or existing rental housing by making up the difference between 15 per cent and 25 per cent of the family income (depending on family size and other circumstances) and the operating cost of a standard unit suitable to its needs. "Lower income" is a new term that includes a much broader income range than public housing, reaching up to 80 per cent of the median income through the region. The capital cost of new construction and substantial rehabilitation must be financed with no Federal assistance since the subsidy program is directed at the consumer rather than the producer of housing.

skill with which financing and physical development are packaged together. The planning firm of Raymond, Parish, Pine & Weiner, Inc. is one of several across the nation who have become widely experienced in combining physical and social planning, community development, environmental studies, traffic and transportation studies and economic and market analyses. The firm has achieved notable success in its work for smaller towns such as Beacon, Mount Kisco and Elmira in New York State and the larger city of Springfield, Massachusetts.

In its experience the planning firm has learned that in many urban renewal and Community Development projects, the provision of vacant land and public improvements is not sufficient to create the economic climate for the private redevelopment of an area. In many cases, private development becomes profitable only if additional financial benefits are obtained by the developers. For this reason, the innovative use of available financial resources is often essential to ensure the success of a redevelopment effort.

Financial planning is seen to be a threefold effort

First, during the initial planning period, the Raymond, Parish, Pine & Weiner team investigates all available sources of special financing, from both government and private sources. Second, during the implementation period, the team looks for those financial sources which reduce the cost of development. These include grants, tax incentives, and reduced interest rates. Third, the planners devise innovative ways to use the available grants to allow the realization of projects which otherwise could not be accomplished. Where direct grants cannot be provided, some means of indirect assistance is sought.

Where a redevelopment project is economically marginal, the physical planning and urban design has to be sufficiently flexible to permit the application of innovative financial methods. The usual functional, economic and esthetic goals of redevelopment have to be adapted to this fundamental consideration.

No single development program in a given city can be used as a model for another city if it has been as well-tailored as it should be for a particular shape of circumstances. Nonetheless much can be learned from a detailed examination of the means by which certain cities are successfully renewing themselves. Two projects upon which the firm of Raymond, Parish, Pine & Weiner have been working are notable for the imagination, ingenuity and persistence with which public programs and private incentives have been set in motion for the ultimate benefit of the communities involved. Presented for study are two cities from the Northeast: Elmira, New York (population 40,000) and Springfield, Massachusetts (population 175,000).

Rebuilding Elmira, New York, after a devastating flood

The impetus for the major effort in Elmira was the recovery effort, set in motion by the Elmira Urban Renewal Agency, following the devastation from tropical storm Agnes in June 1972. (The same storm that caused such havoc in Corning, see pages 102-109.) Flood waters covered over 2,000 acres in the center of the city and caused extensive damage to homes, businesses and public facilities and utilities. The preparation of the initial recovery plans and the application for Federal urban renewal disaster funds were financed by the New York State Urban Development Corporation. As a result, some $55 million in urban renewal funds was made available by the Federal and state governments to begin the work.

This funding provided the basic resource for property acquisition, relocation of families and businesses, demolition of buildings and construction of new streets and utilities to provide sites for new development. Beyond this initial funding, however, a wide variety of sources has been tapped and combined to supplement the urban renewal funds or to undertake activities not allowed under urban renewal.

Providing open space and new housing

Since a number of parks and open space areas were to be created under the plan, it was decided that in place of urban renewal funds, available funds under the Federal open space program should be used to acquire and develop these areas. A major immediate need was new housing to replace the homes that had been severely damaged by the flood. Three separate Federal housing assistance programs are being used—a subdivision of moderately-priced, single-family houses has been constructed under the Section 235 program, 102 units of rental housing for low- and moderate-income families were built by UDC under the Section 236 program, and 208 apartments for the elderly are being completed under the conventional public housing programs.

Combining parking garages with a shoppong mall

As part of the rebuilding program for the central business district, it was determined that two well placed garages could serve virtually the entire CBD and release for development some land now used for surface parking. The planners, including Daniel Shuster, vice-president of Raymond, Parish, Pine & Weiner, and Joseph R. Pacitto, executive director of the Elmira Urban Renewal Agency, decided that the capital cost of the construction of these garages could be drawn from the State of New York's matching contribution to the urban renewal program. To compete with suburban shopping centers, free parking for shoppers (up to three hours) was proposed. To finance the operating cost of each garage, a special assessment district is being created providing that property owners be taxed in accordance with their distance from the garage and the parking need generated by their property.

Many small businesses that are being displaced need to relocate in well located space at reasonable rents. To this end most of the ground level of each garage will become a shopping mall. The malls are considered public space and will be paid for from urban renewal funds. Spaces to be occuped by displaced businesses will be furnished under the urban renewal relocation provisions. The remaining retail space will be developed by the city and released to a realtor under a master lease. Funds for this latter construction are being sought

under the new Public Works Capital Investment Program. Where one garage abuts a row of existing buildings, urban renewal funds are being used to create new rear entrances directly into the shopping mall thus increasing its accessibility.

Transforming an old movie house into a multi-purpose performing arts center

The Elmira Theater, a 50-year-old movie palace with the largest seating capacity in the city, stands in the path of a major arterial street to be built by the New York State Department of Transportation. Reluctant to lose this facility, the planning consultants and the development agency explored means to save it without impeding the much needed street. It was determined that the removal of the front 25 feet of the structure would provide sufficient room for the street without substantially affecting the theater. A non-profit group was formed to own and operate the facility and to make necessary improvements. The urban renewal agency acquired the building and will pay for the necessary demolition of the front section. The building will be sold to the non-profit corporation for a nominal price. The corporation has already undertaken a fund-raising drive, which produced over $600,000 from local foundations and private contributions. These funds will go toward the construction of a new entrance lobby and interior restoration including conversion to flexible use.

Converting a former school into a social service center

A long-standing need for a central location for the many public and quasi-public social service organizations was brought to a head by the acquisition for demolition of a building that has housed many of these agencies. The building is to come down to make way for the arterial street just mentioned. A new center is being created, through the conversion of a former school, with $940,000 provided by three separate sources—$500,000 from a HUD Neighborhood Facility grant, $252,000 from the Appalachian Regional Commission and $188,000 from HUD under the Community Development program.

A major effort has been the rehabilitation of existing buildings

Four methods have been used to recycle portions of the older housing stock. Immediately following the flood, the Small Business Administration made available loans at one per cent interest with the first $5000 forgiven. Additional loans were made available through HUD via its Section 312 rehabilitation loan program at three per cent. Grants to homeowners of lower income were provided from urban renewal funds. Finally, funds from the Community Development Program were used to subsidize interest rates on loans from private lending institutions in areas outside the urban renewal area. Thus rehabilitation has been funded by a combination of Community Development Block Grants, Section 312 (an older program which has been continued by Congress for a limited time to meet an acute need) and other Federal sources.

And money has been found for public art works

Several large-scale sculptures to be placed in public plazas adjacent to the retail center are being funded by combined grants from a private foundation, the National Endowment for the Arts and the Urban Renewal Agency.

Ten years of financing the revitalization of Springfield, Massachusetts

The Springfield Redevelopment Authority headed by Allan R. Andrews, and its long-time consultants Raymond, Parish, Pine & Weiner, have assembled an impressive and effective variety of public and private financing sources and mechanisms over the past decade in a major effort to revitalize the central business district in Springfield. More of the same is in sight as the central city starts the second round of its rebuilding program.

On the public side, Federal and state urban renewal funds and financing from the still new Federal Community Development Block Grant (CDBG) Program have provided incentives to developers to take full advantage of the state law authorizing the creation of private urban development corporations and partnerships well suited to build and own large commercial and housing complexes. The private sector has responded further by organizing its own financing of downtown projects and has even come up with outright corporate gifts needed to assure the construction of two parks in commemoration of the nation's Bicentennial.

The process of central business district renewal in Springfield, as explained by Csaba Teglas, senior design associate of Raymond, Parish, Pine & Weiner, began in the mid-sixties when downtown business men banded together to meet the competition of suburban shopping centers already on the drawing boards and to reverse the same kind of downward economic spiral that was afflicting many American cities. Noting that the real estate tax base in downtown Springfield had eroded from 20 per cent of the city total to less than 10 per cent over the prior 20 years, the businessmen created an organization called Springfield Central Business District, Inc., and set out to seek solutions to their problems.

After reviewing reports of privately sponsored planning and economic studies, the organization decided to concentrate on the development of a large mixed-use complex in the heart of the shopping district next to the city's two department stores. While this private group pooled their own financial resources to assemble the four acres of built-up land needed for the project, the city government decided to build a civic center and to sponsor its own renewal project to be carried out in concert with the private effort.

The public commitment produced the Federally-assisted Court Square Urban Renewal Project, being administered by the Springfield Redevelopment Authority. This project, covering about 41 acres, was designed to provide a site for the civic center, other sites for additional private investment in commercial and residential developments, and much needed improvement in downtown traffic patterns. While urban

renewal funds were provided only for the improvement of the Court Square project, the physical planning extended over the 200-acre downtown area.

An advantageous state tax law encourages the development of a $50 million complex

The Springfield Central Business District, Inc. proceeded to assemble the land for its project and then passed the actual development job on to Massachusetts Mutual Life Insurance Company, whose home office is in Springfield. Massachusetts Mutual created a development corporation under the provisions of Chapter 121A of the Massachusetts General Laws, which permits so-called 121A developers to pay an excise tax in lieu of real estate taxes, based on a percentage of gross rental income, rather than face the uncertainties of the annual setting of local real estate tax rates. (This is the statute first used to permit the construction of the Prudential Center in Boston.) In exchange for the special tax arrangement, the law required the return on investment to be limited to six per cent.

With this arrangement in hand, Massachusetts Mutual developed the $50 million complex known as Baystate West, which opened four years ago and consists of 600,000 square feet of office and retail space, a 300-room hotel (now being operated by Marriott), a 1200-car garage, and two second-level retail selling areas constructed on air rights across two streets to link the development's retail mall with the nearby department stores. The Valley Bank and Trust Company is the major tenant in the 20-story office tower.

A consortium of local banks provide favorable financing for a parking garage beneath the new civic center

While Baystate West was under construction, the Springfield Redevelopment Authority, under the early land acquisition provisions of the old urban renewal law, assembled sites for the civic center and a parking garage to serve both the center and future downtown development. The Springfield Institution for Savings, the largest savings bank in western Massachusetts, took the leadership in the creation of a consortium of local banks to provide favorable financing for the privately built civic center parking garage, a 1200-car facility that had to be assured before the city council would approve a $10.3 million general obligation bond issue needed for the construction of the civic center. The garage and civic center then were built, as the city used other bond funds to make street and sidewalk improvements, and made arrangements for Federal TOPICS* and Urban Systems funds to be used for new traffic control signals and the construction of the important arterial extension near the civic center. The demolition of old buildings also proceeded on the basis of the downtown plan.

Once the public improvements were completed and had provided land for additional development, the job was to attract additional new development to the urban renewal area. The rehabilitation and construction of a few smaller projects was economically feasible. It required, however, additional special financing to ensure the feasibility of major developments. Three developers were interested in the two available housing sites and an effort was begun to select the one whose scheme offered the most exciting possibilities for bringing people back downtown to live.

Financing mixed-income housing near the civic center

The housing development, known as Chestnut Park, is a $20 million, 490-unit apartment complex, consisting of a 34-story tower and three other buildings. Opened in late 1975, the development is nearly 100 per cent rented and houses some 1,100 persons of low, moderate and high incomes. Chestnut Park was financed through the Massachusetts Housing Finance Agency (MHFA), which provided a below market rate construction loan and permanent mortgage arrangements that made the development possible. Also used was the Federal Section 236 housing program, which provides interest reduction payments in connection with the low and moderate income units in the project.

The developer, MB Associates of Boston, created a limited partnership and entered into a Chapter 121A tax agreement with the city in the same manner as Baystate West. Meanwhile, the Springfield Institution for Savings made another major investment in downtown through a subsidiary by purchasing the land from the developer and leasing it back for an 80-year period. The bank's involvement in this venture was made possible through the passage of a new state law permitting savings banks to engage in real estate development activity.

Finding the money for an urban park

The downtown plan sought to provide an opportunity to physically and visually connect the downtown business district to the city's museum and library complex situated at a higher grade just east of the Chestnut Park housing site. The urban renewal plan prohibited the housing developer from constructing buildings on a 50-foot-wide strip of land 100 feet deep, between two of its structures. The restriction was written into the plan assuming that other financing could be found to construct an urban park, which would include steps to provide the long sought after connection with the museum and library. The Bicentennial year provided the opportunity.

The Springfield Bicentennial Committee successfully solicited corporate gifts to finance half the cost of the $750,000 park, while the city is making up the difference with Federal Community Development Block Grant funds. Nearly completed now, the park contains a reflecting pool, waterfall, a clock tower, the aforementioned broad steps, and a hydraulic lift for pedestrians who either can't or don't want to negotiate the stairway. The new park, known as Pynchon Plaza in honor of Springfield's founder William Pynchon, also contains a major piece of sculpture paid for on a 50/50 basis by corporate donations and a grant from the National Endowment for the Arts.

Another $750,000 downtown park, on the bank of the Connecticut River, is being financed through a combination of funds from cor-

*Traffic Operations Program to Increase Capacity and Safety—a grants program of the Department of Transportation.

porate gifts, a U.S. Bicentennial Commission grant, a Federal manpower program, and the city's Federal Community Development Block Grant allocation.

Restoring Springfield's first historic district

Mattoon Street is the only street in Springfield where 19th century townhouses line both sides. Its restoration is being carried out through a combination of public and private financing mechanisms. The local property owners have formed an historical preservation society and are supporting the rehabilitation of the street. They have agreed to be assessed for part of the cost of new brick sidewalks built by the city. In addition, they paid for the installation of period street lamps and are bearing part of the cost of constructing a small park at the end of the street in front of a historic church designed by H. H. Richardson. Federal Open Space Land Program funds also helped to build the park, and city bond funds were used to make sewer, drain and street improvements.

Meanwhile the Springfield Redevelopment Authority undertook a state-aided urban renewal project to save five of the historic townhouses whose owners had no interest in the preservation effort. Using funds provided by the city in anticipation of 50 per cent reimbursement from the state over a 20-year period, the Authority acquired the townhouses, cleaned out and stabilized three that were damaged by fire, and selected a developer to restore them in accordance with plans approved by the Springfield Historical Commission. It is intended that these five buildings be marketed to owner occupants, who should find it easier than usual to secure financing because each building will contain an additional apartment that will generate rental income for the owner.

Future plans include another major mixed-use development for downtown Springfield

At present, the city government, the Springfield Redevelopment Authority and a recently reorganized Springfield Central Business District Association are working hard to arrange for the construction of another mixed-use development—this one on a three-and-one-half acre site assembled through the urban renewal project across from Baystate West. Mondev International, Ltd. of Montreal has been selected as the developer of the site, and the complex financing mechanisms necessary are beginning to fall into place.

To provide parking for the proposed development, Springfield secured the passage of a special act of the state legislature authorizing it to acquire the civic center parking garage from its present private owner and lease it to Mondev. The city will lease the garage to the developer for an amount not less than the annual principal and interest on the general obligation bonds to be issued to finance the city's purchase of the facility. Because the bonds will be tax exempt instruments, the annual cost to the developer for providing parking will be less than the cost would be had the parking been provided by him through conventional financing.

Another aspect of the proposed Mondev development would have the city invest $1.25 million in CDBG funds for constructing the plazas, malls and pedestrian bridges that are an essential part of the downtown plan.

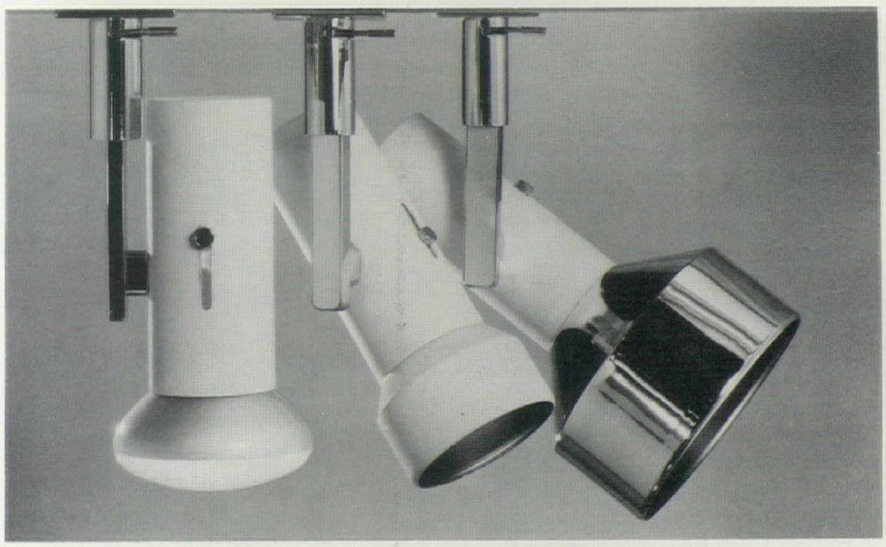
While the developer will purchase the urban renewal site from the Springfield Redevelopment Authority, it is expected that the land will be reconveyed to the Springfield Institution for Savings, or a subsidiary, and leased back to the developer on a long-term basis. The savings bank, which occupies a building at the corner of the urban renewal site, will provide its land to the developer to enhance the development potential of the renewal site and will become the major tenant in a new office tower in the development—all as part of its participation in the project. As a result of the parking garage arrangement, the use of CDBG funds, urban renewal land price write-down and the arrangements made with the savings bank, the $25 million first phase of the project is expected to begin early next year.

The last major downtown urban renewal site is a one-acre parcel next to the city hall. While no plans have been solidified as yet, it is expected that the same kind of combinations of public and private financing will have to be worked out.

The planning achievements in Elmira and Springfield are being duplicated elsewhere in the United States

The case studies in the rest of this issue reinforce the theme of this article—architects and planners are integrating physical and financial planning in ever more complex ways. The total array of funding possibilities including those at a Federal level and monies provided by states, regions and municipalities would fill several large volumes. The Federal level alone funds programs in neighborhood conservation through the departments of Agriculture, Commerce, Defense, Health, Education and Welfare, Housing and Urban Development, Interior, Justice, Labor, Transportation and Treasury. Independent agencies which sponsor programs include the American Revolution Bicentennial Administration, the Appalachian Regional Commission, the General Services Administration and most importantly the National Endowment of the Arts with its Architecture + Environmental Arts Program, which makes planning grants in the fields of architecture and urban design. Other sources include the National Endowment for the Humanities, the Regional Development Commission, the Small Business Administration, the Smithsonian Institution, the Tennessee Valley Authority (most notably with its Operation Townlift) and the Veterans Administration. None of these funds are simply there for the asking of course, and it takes considerable energy, persistence and zeal, combined with realistic and useful proposals to pry them loose. Most of those who shape the proposals and go after the funds are the architects and planners in the local redevelopment agencies, aided by their consultants. It is only through the imaginative use of these funds, in combination with private capital that progress in the redevelopment of our cities and towns can be made. The architects and planners who integrate this work with the physical design process are in the vanguard of urban design.—*Mildred F. Schmertz*

For more information, circle item numbers on Reader Service Inquiry Card, pages 195-196



Low-cost track lighting is recommended for residential and commercial use

"Basic Lytespan" components feature finishes in teakwood grain and polished chrome, as well as in matte white and matte black; the shallow track may be trimmed in either teakwood grain or black vinyl. Spotlights include spheres, squares, step cylinders, basic cylinders and universals, as well as wall washers and downlights. Installation is said to be simple. Snap-in wiring eliminates splicing and where longer runs are needed, the track plugs together with no visible seam. ▪ Lightolier, Inc., Jersey City, N.J.

Circle 300 on inquiry card

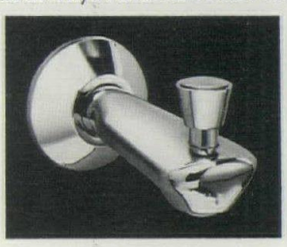
Large diameter chrome legs distinguish tables

The #92028 "Oswego" series of tables featues cylindrical polished chrome legs 3 in. in diameter. The tops are available in various diameters from 42 to 60 in., finished in eight glossy or low-glare lacquer colors. All tops feature a 1½-in. bullnose edge. Table heights are 16 in. and 29 in. ▪ Intrex Inc., New York City.

Circle 301 on inquiry card

Spring-loaded diverter spout always returns water flow to tub position

This spring-loaded diverter spout does not depend on gravity for the diverter to return to the original tub position. The tight bypass mechanism also permits no water to leak from the spout while the shower is in use. The spout itself has a flow-straightening feature. A metal star built inside the spout "bundles" the water, forming the flow into a "pillar" shape that minimizes splashing noise caused by water hitting the bathtub. The product is solid cast brass. ▪ Grohe Div., Flygt Corp., Elk Grove Village, Ill.



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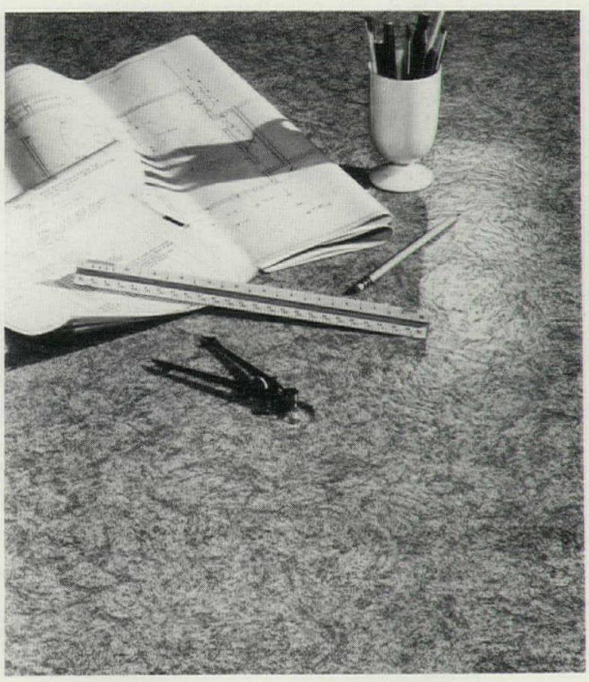
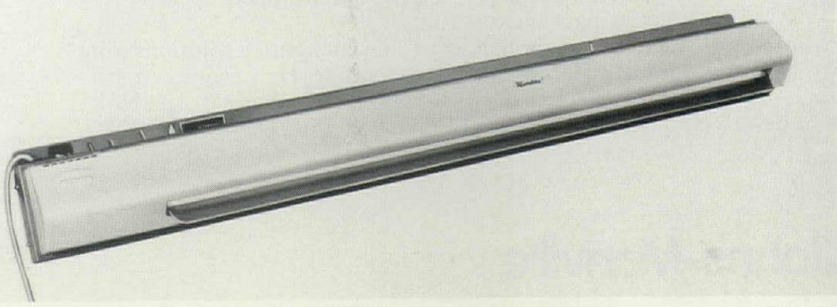


Proof printer makes dry copies in seconds, mounts on the wall

The "Proofprinter" is a fast, compact dry-printer unit designed to process Du Pont's "Dylux" instant image-proof paper. The unit is offered in two model sizes, one that can process negatives up to 42 in. (107 cm) wide by any length, and another with an 18-in. (46 cm) wide by any length capability. The unit can turn out 8½- by 11-in. proofs in 11 seconds on the "Dylux" paper. The unit can operate on a table top or be wall-mounted. It meets OSHA requirements. ▪ Teledyne Rotolite, Stirling, N.J.

Circle 303 on inquiry card



Contract sheet vinyl meets Federal specifications

"Flor-Ever" commercial vinyl flooring has a 25-mil wear layer and meets all Federal Specifications for L-F 001641, Class 1 products, according to the company. In addition, it meets government flame-spread and smoke-density requirements for commercial use. "Flor-Ever" resilient flooring has a random, over-all design in eight colorways, and is available in both 6- and 12-ft widths. The stain-resistant product is recommended for health care facilities, office buildings, hotels, banks and restaurants. To aid in specifying this product, the company offers an "Architect's Sample Booklet" with 5- by 7-in. samples and technical data. ▪ Congoleum Corp., Kearny, N.J.

Circle 304 on inquiry card

more products on page 136

For more data, circle 55 on inquiry card

Holophane lenses.

We make over 30 so you'll have the right one for any lighting situation.

There are no pat answers when it comes to lighting. Each project has its own set of requirements. That's why Holophane® offers you more than 30 different lenses.

We offer the right lens for classroom lighting, store lighting, low glare lighting, wall lighting and dozens of other specific applications.

Every injection-molded clear acrylic Holophane lens delivers tailored light distribution and high efficiency for energy-conscious installations. All wrapped up in a very attractive package.

Learn more about energy-efficient lighting solutions from your local Holophane representative. He's trained to meet your needs. Or, write to Johns-Manville Sales Corp., Holophane Div., Dept. AR–12, P.O. Box 5108, Denver, CO 80217.

JM Johns-Manville

For more data, circle 56 on inquiry card

For more information, circle item numbers on Reader Service Inquiry card, pages 195-196.

REPLACEMENT WINDOWS / A fact sheet describes the "Model 655" custom-built replacement window, specifically designed for oversized openings. This *NuPrime* unit has high-tensile-strength, hollow extruded aluminum alloy frame and sash members; double weatherstripping to prevent metal-to-metal contact; and a range of glazing options, including acrylic panels, insulating glass, wire-reinforced security glazing, and fiber glass screens. ▪ Season-all Industries, Inc., Indiana, Pa.

Circle 400 on inquiry card

FIRE ALARM SYSTEMS / Three complete life safety systems are outlined in an eight-page booklet. The *SET/7000* is a basic modular solid-state alarm system; *SET/7500* monitors up to 250 zones with an automated multiplex system; and the *SET/7000 EVAC* two-channel system permits direct voice communication to any area of a building. ▪ Johnson Controls, Inc., Milwaukee, Wis.

Circle 401 on inquiry card

AIR CONDITIONERS / Ratings and specifications on 10 models of 26-in. through-wall air conditioners for multi-room structures are described in a four-page product brochure. Four of these units combine cooling with electric heat. ▪ General Electric Co., Appliance Park, Louisville, Ky.

Circle 402 on inquiry card

OFFICE FURNITURE / Publications and color swatch cards are available on the "C-3766" (Traditional) and "C-7000" (Contemporary) series of upholstered furniture for executive office use, and the *Series Shell* line of contract seating pieces. ▪ Interroyal Corp., New York City.

Circle 403 on inquiry card

SOLAR ENERGY COLLECTORS / A technical booklet gives performance characteristics for aluminum and copper flat plate solar collectors. Guidelines show optimum operating efficiencies for sun exposures and air temperatures in various locations. Also included are positioning, installing and plumbing recommendations; residential, commercial and industrial applications are suggested. ▪ PPG Industries, Pittsburgh, Pa.

Circle 404 on inquiry card

ESCALATORS/MOVING WALKS / Planning information to assist architects in the design of escalator and moving walk installations is summarized in a four-page publication. Plan and section drawings of escalators, and moving walks (for use at angles up to 12 degrees), show pertinent details and dimensions. ▪ Otis Elevator Co., New York City.

Circle 405 on inquiry card

WATER TREATMENT EQUIPMENT / A 12-page buyers guide outlines the manufacturer's water and wastewater treatment systems and equipment. Processes described include aeration, clarification, deaeration, filtration, flotation, ion exchange, membrane systems and water softening. Waste treatment methods include liquid solid separation, metal finishing treatment, sludge concentration and dewatering equipment. All water treatment equipment can be produced to Nuclear Code Specifications. ▪ The Permutit Company, Inc., Paramus, N.J.

Circle 406 on inquiry card

WASHROOM ACCESSORIES / A range of soap dispensing equipment and washroom accessories is described in a 48-page catalog. Introduced is a line of "multi-color" recessed accessories: "Econo" towel dispenser and waste receptacle combinations; and vandal-resistant models of ash urns, sanitary napkin vendors, tissue dispensers, and hand/hair dryers. ▪ American Dispenser Co., Inc., Carlstadt, N.J.

Circle 407 on inquiry card

PATIENT ROOM LIGHTING / Two illustrated brochures present different *MedicaLine* patient overbed fluorescent fixtures. The "Sunbeam K-4/K-3" are cantilevered wall fixtures; "K-5" is designed for even, indirect illumination to provide wall-wash lighting without glare. The literature provides dimensions and photometry information for all versions of these patient room fixtures. ▪ Keene Lighting/MedicaLine, Union, N.J.

Circle 408 on inquiry card

BUILDING AUTOMATION / A two-page bulletin briefly describes the operation and application of the "System 570 Series 300" computer-based building automation center. Energy management, life safety, asset protection, optimization, preventive maintenance, and mechanical and electrical systems can all be controlled by this modular computer system. ▪ Powers Regulator Co., Skokie, Ill.

Circle 409 on inquiry card

HIGH-PRESSURE SODIUM LUMINAIRES / A 24-page brochure discusses a variety of applications for high-pressure sodium luminaires: indoor and outdoor lighting for plants, stores, recreation facilities, walkway and roadway lighting, etc. Data is included on luminaire performance, features and benefits, spacing arrangements and ballast electrical characteristics. ▪ Johns-Manville Service Center, Holophane, Denver, Colo.

Circle 410 on inquiry card

AIR CONDITIONING/HEATING / Built-in 32-in. room air conditioners, some with electric heat, are described in a six-page product bulletin. These units, for commercial and residential installation, come in 230-volt models of up to 12,300 Btuh capacity. ▪ Hotpoint, Appliance Park, Louisville, Ky.

Circle 411 on inquiry card

STORE LIGHTING / High-intensity discharge lamps can achieve both energy cost savings and improved merchandise appearance, according to a booklet on store lighting. The effect of various types of HID lamps on both merchandise and people is discussed, and specific merchandising applications are suggested. ▪ Westinghouse Lamp Div., Bloomfield, N.J.

Circle 412 on inquiry card

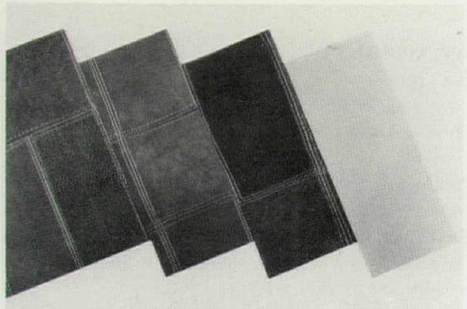
INDUSTRIAL FANS / Industrial materials of several types, as well as dust, fumes and chemical mists, can be handled by this line of industrial exhausters. A new catalog gives full specifications on all sizes available: fan capacities range from 210- to 59,000 cfm. A feature of the *Airlines* unit is a convertible fan: rotation and discharge can be changed in the field. ▪ Aerodyne Development Corp., Cleveland, Ohio.

Circle 413 on inquiry card

WOOD WINDOWS / New sections on trapezoid and triangle windows are featured in a 36-page catalog. Patio doors, bow and bay window styles, and extra-wide *Casemaster* units are also shown. The book provides detailed information on wood window sizes, openings, priming and prefinishing, grids and divided lights, and other options. ▪ Marvin Windows, Warroad, Minn.

Circle 414 on inquiry card

more literature on page 147

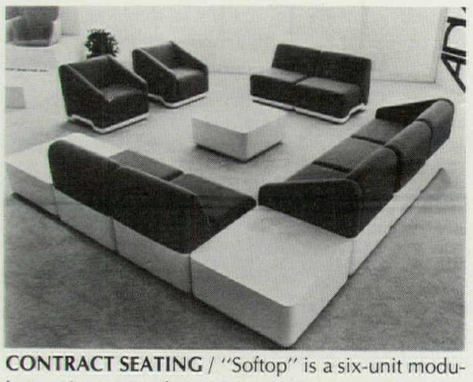


UPHOLSTERY FABRIC / *Skai* "Maroc" is a vinyl/foam/textile combination said to have the look and feel of leather. Developed expressly for interior design and furniture manufacturing applications, "Maroc" comes in a full range of colors. The material is tear- and wear-resistant, dirt repellant, and is said to be easy to clean. ▪ Emak Coated Fabrics Corp., New York City.

Circle 305 on inquiry card

OFFICE FURNITURE / The "Merit" series of desks and credenzas is said to provide quality features at a moderate price. Desk pedestals are insulated with sound deadening material, and are constructed with both an inner and an outer steel shell for extra rigidity. File cabinets and credenzas are fitted with a variety of drawers, files, and open or covered shelves. The "Merit" series is offered in 29 finish colors and 10 plastic laminate top materials, in both solid colors and wood grains. Leg uprights are either chrome or acrylic enamel finish. ▪ Steelcase, Inc., Grand Rapids, Mich.

Circle 306 on inquiry card



CONTRACT SEATING / "Softop" is a six-unit modular seating series that can be used singly, combined into sofas, or joined to form continuous seating arrangements. Each piece is freestanding; a common *Cycolac* plastic shell contains and supports the arms, seats, back and table surface. "Softop" furniture is available in the customer's own fabric selection, with a choice of white or dark brown *Cycolac* bases. ▪ Harvey Probber, Inc., Fall River, Mass.

Circle 307 on inquiry card

more products on page 139

When you expose our new silicone foam to 2,000 F for 3 hours, something incredible happens. Nothing.

Only new Dow Corning® RTV silicone foam firestop can make that statement. And back it up.

Factory Mutual Research tested it.

In full-scale functional tests (ASTM-E119-73) conducted by Factory Mutual Research in October and December 1975, Dow Corning silicone foam withstood temperatures of over 2,000 F during a 3-hour test in both wall and floor configurations. The foam showed slight charring, but it did not melt, burn, pass fire or emit smoke.

No toxic fumes.

A major problem with traditional firestop sealants is that even if they don't burn in a fire, they release quantities of toxic fumes. Stable Dow Corning RTV silicone foam greatly reduces this toxicity, and reduces the total amount of smoke combustion products released.

Fast, easy installation.

To seal cable gaps, simply inject the easy-to-mix liquid components into the dammed penetration. The material expands to three or four times the volume of its liquid constituents and sets up in 3 to 4 minutes. Excess can be trimmed off with a knife. That's all there is to creating an airtight fire penetration seal.

The safety factor.

Many cases of fire spreading through cable penetrations have resulted in loss of life and millions of dollars of equipment, property, and revenue.

Dow Corning RTV silicone foam is an effective, economical firestop. And if you're not sure how important that is, ask your insurance man. He'll tell you how you can save in case of an actual fire.

Dow Corning RTV silicone foam. More than 2,000 F for over 3 hours. Incredible.

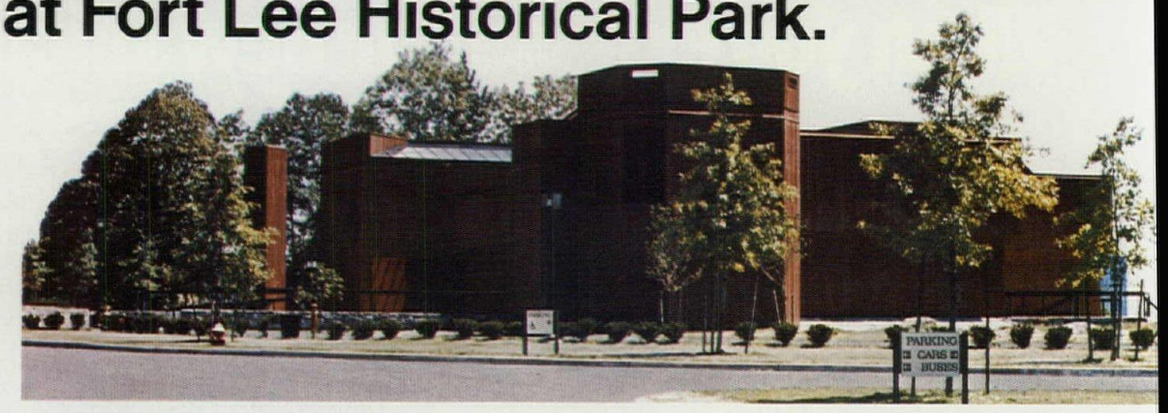
For more information and specifications, write Dow Corning Corporation, Dept. A-6403, Midland, Michigan 48640.

DOW CORNING

DOW CORNING

For more data, circle 58 on inquiry card

Matthews signage moves people through the past at Fort Lee Historical Park.



As its contribution to the American Bicentennial, the Palisades Interstate Park Commission spent $3.3 million to reconstruct Fort Lee as an historic park on the Palisades. The park rests in the shadow of the George Washington Bridge and commands a beautiful view of the Hudson River and New York City.

Visitors to Fort Lee now walk on the ground where the Colonists fought the British, and with the help of Matthews signage, know exactly what took place when and where.

The 30-acre park features a three-story fort-like museum, hiking and bicycle trails and picnic areas; as well as highly realistic cannon and mortar emplacements, infantry bunkers and lookout posts. And, everything's easy to find and understand thanks to over 40 Matthews' exterior signs fabricated of damage-resistant NOMAR® fiber reinforced polyester. Many of the signs are of the "you are here" type, while others contain interesting historical information. The park also has a sprinkling of Matthews' symbol signs.

The architects and planners of Fort Lee were fully aware of the present, and of the need for an efficient signage system to move people through the past, so they specified an integrated signage program in their initial plans for the park.

Matthews can supply you with total signage systems, from interior to exterior; monoliths, plaques, cast metal letters or pressure sensitive letters. All tastefully coordinated. A representative of the architectural firm stated, "Fort Lee becomes real with the help of Matthews' signage. It adds to the dramatic impact of the park without being obtrusive. An outstanding job."

If you'd like to know the when and where of things, please give us a call and ask us about our total signage responsibility.

Talk to us for total signage systems.

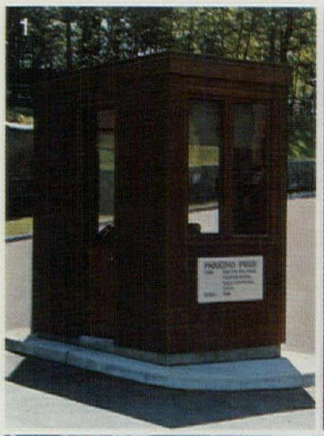
800-245-6574

Pennsylvania calls: 412-561-3456

Engineers/Architects/Planners:
Vollmer Associates
New York, NY

Sign text researched and written by:
Dr. Peter Henderson
Haworth, NJ

JHM MATTHEWS
Architectural Division



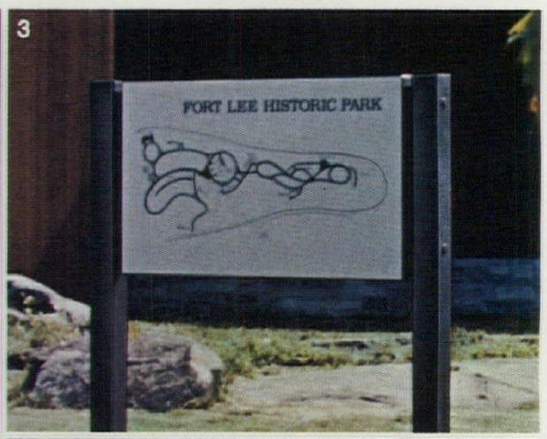
1. Wall mounted NOMAR® box panel

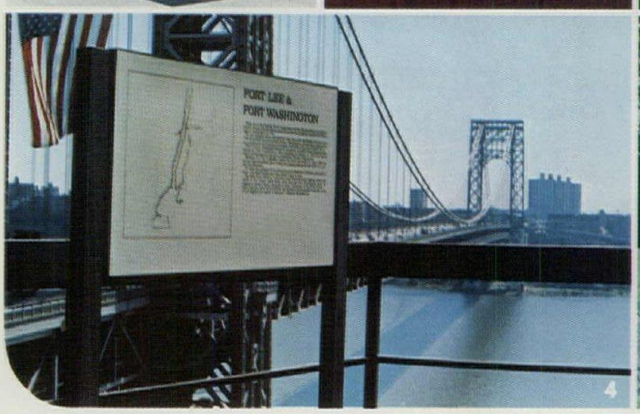
2. RSP interior signs

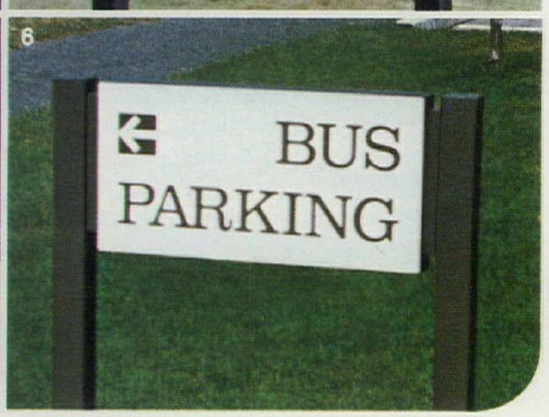
3. Informational orientation map post & panel assembly

4. Informational post & panel assembly

5. & **6.** Directional post & panel assembly

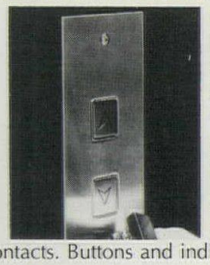






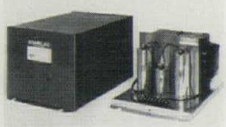
For more data, circle 59 on inquiry card

ELEVATOR INDICATORS / These stainless steel pushbuttons and indicators are said to resist all attempts to shatter, pry loose, burn or jam them. The assemblies are designed so that all shock loads on the pushbuttons are absorbed by the body of the unit and not by the contacts. Buttons and indicators are available in either illuminated or non-illuminated versions. ▪ C. J. Anderson & Co., Chicago, Ill.



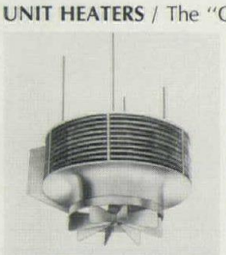
Circle 308 on inquiry card

VOLTAGE STABILIZER / *Stabilac* stable AC source is a transformer-like device without moving parts or electronic components for voltage stabilization. Features of the regulator are its ability to stabilize output voltage during simultaneous line voltage and load current variations. Sensitive loads can be isolated from incoming voltage spikes; three-phase units with voltage stabilization capabilities of up to 150 KVA are included in the *Stabilac* line. ▪ Frequency Technology, Inc., TDC Div., Littleton, Mass.



Circle 309 on inquiry card

UNIT HEATERS / The "Goldline" downflow heater is manufactured in capacities up to 450,000 Btuh (132 Kw), for a wide range of warehouse, gym, industrial or large commercial space heating needs. All heaters feature a built-in recirculation control, which operates "fan only" when ceiling air temperatures are high. This warm stratified air is recirculated back to floor level. The control compartment is readily accessible, located away from heat producing elements ▪ Erincraft Mfg. Co., Inc., Michigan City, Ind.



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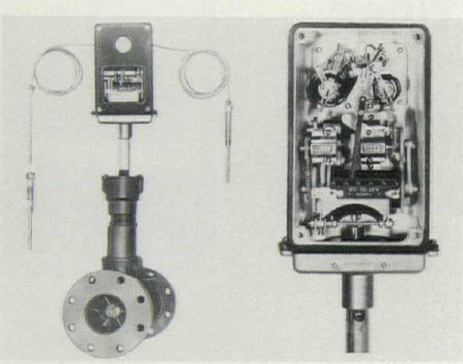
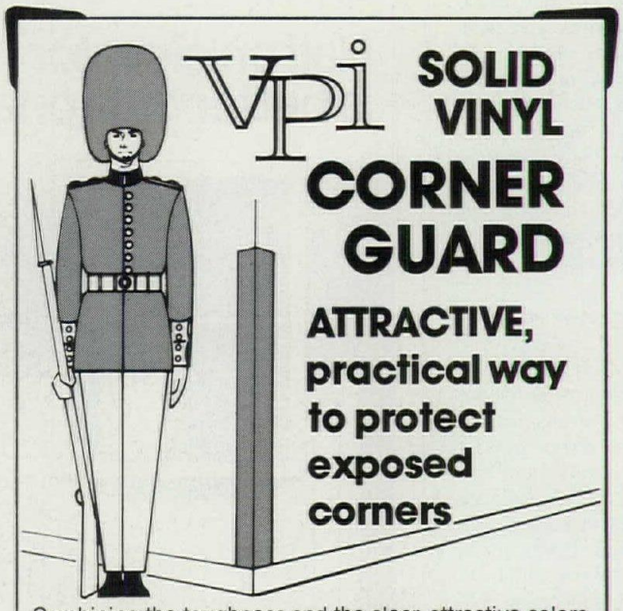


ENERGY MEASURING EQUIPMENT / Hard data on the amount of energy used by a given industrial or commercial establishment can be provided by the *American BTU Meters*. These devices measure the amount of either cooling supplied by a chilled-water refrigeration plant or AC unit, or the heat supplied by a hot-water system. The *American BTU Meter* is essentially a water meter with two thermal elements, automtically recording energy consumed as a function of the temperature difference between supply and return water. Such metering is said to encourage conservation by permitting a building owner to charge tenants on actual energy consumed, instead of on square feet of space occupied. ▪ The Singer Co., Philadelphia, Pa.

Circle 311 on inquiry card

more products on page 146

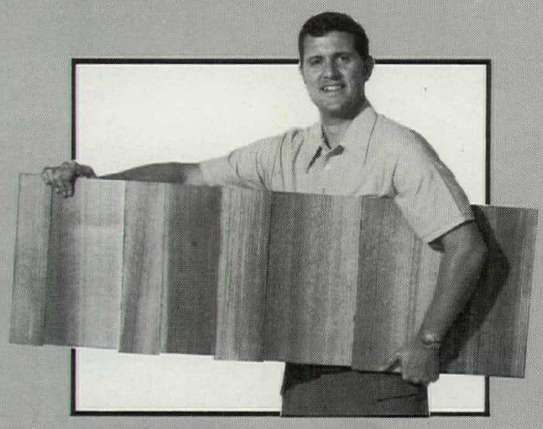


Combining the toughness and the clear, attractive colors of solid vinyl, VPI Corner Guard protects exposed corners in hospitals, nursing homes, hotels, motels, apartments, commercial buildings and factories. Available in five contemporary colors — pearl gray, olive, taupe, jet and safety yellow. Each carton contains six 4′ pieces of one color and 1 pt. of VPI Adhesive, furnished to ensure complete job satisfaction and one-source responsibility. For further information contact... 51-273

VPi VINYL PLASTICS INC
3123 SOUTH 9th STREET • PHONE 414-458-4664
SHEBOYGAN, WISCONSIN 53081
MANUFACTURERS OF QUALITY PRODUCTS SINCE 1946

For more data, circle 62 on inquiry card

What's the newest way to install cedar shakes and shingles?



4' Easy Panel

Put up Western Red Cedar shakes and shingles four feet at a time with new Easy Panels. They're ideal for new construction or remodeling. See just how much time they can save. Write for complete product information.

Shakertown Panels
Dept. AR, P.O. Box 400, Winlock, WA 98596

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YOU NOTICE NEENAH CASTINGS AROUND THE WORLD

Architects, designers and planners know Neenah castings are found in Pakistan, Kuwait, Turkey, South Africa, Argentina, Bahamas . . . and from Paris to Pittsburgh.

They know Neenah makes the finest quality castings: from gray iron manhole covers . . . to ductile iron airport drainage grates . . . to decorative tree grates . . . and a complete line of building castings.

But did you know Neenah has thousands of design variations to choose from? Over 100 years of experience? Three modern plants?

Write or call for the most complete construction castings catalog, Neenah's Catalog "R", 6th edition.

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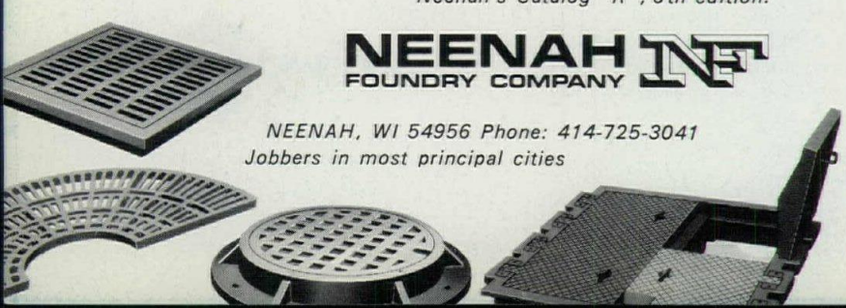


For more data, circle 63 on inquiry card

The only window covering that combines light control, privacy, beauty, and the *Guardian Tilter.®

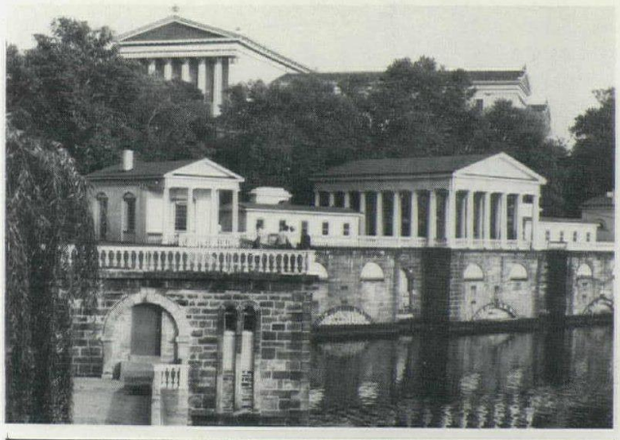
Levolor Riviera Blinds.

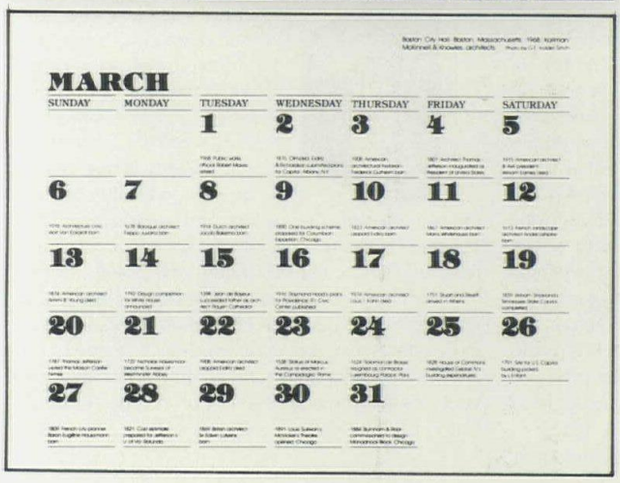
We've added a safety clutch to our Magic Wand tilter...to protect your blinds from damage caused by "overturning." This is just one of many reasons why your window treatment specs should read: Levolor Riviera. Send for our complete manual. Levolor Lorentzen, Inc., 720 Monroe St., Hoboken, N.J. 07030.

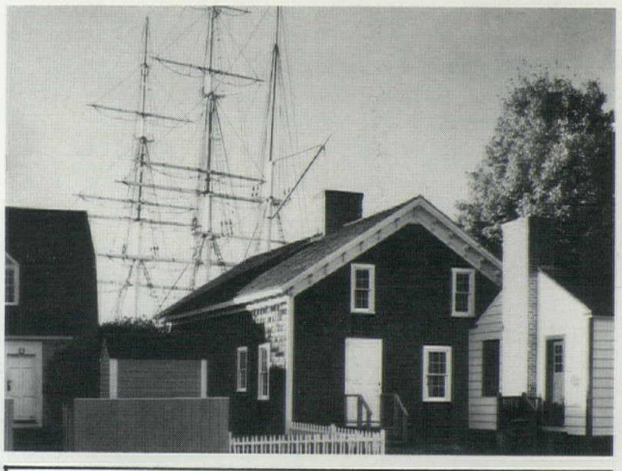
*Guardian Tilter is a trademark of Levolor Lorentzen, Inc.

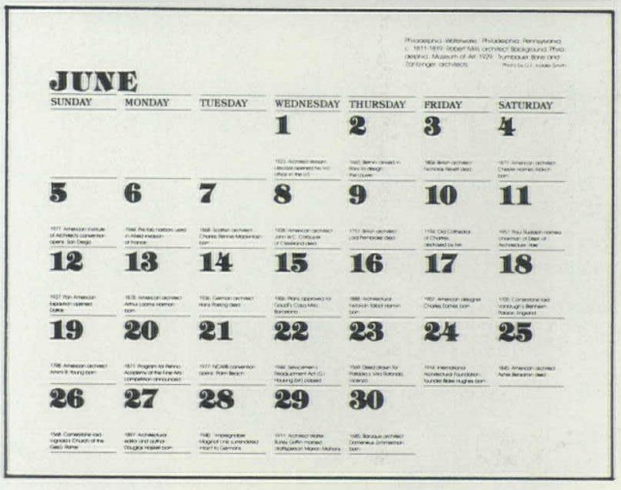
For more data, circle 65 on inquiry card

For more data, circle 66 on inquiry card









The Calendar of Historic Architectural Events

The 1977 Architectural Calendar is better than ever! It is all new—365 more historic events in architectural history and 13 more stunning architectural photographs by award-winning architect-photographer G. E. Kidder Smith, FAIA. And, for the first time, this year's calendar is designed to be used as a write-in desk calendar as well as a wall calendar! They said it couldn't be done, but the 1977 Architectural Calendar continues its daily commemoration of memorable architectural events . . . famous firsts in architecture and engineering . . . births and deaths of the world's greatest architects and engineers . . . significant, amusing and little-known facts that inform and surprise even the most knowledgeable . . .

- The day Palladio was fined for absenteeism from the construction site
- The day the Parthenon was "rediscovered" during the Renaissance
- The day that Latrobe complained that architecture wasn't a "fit profession for a gentleman"
- The day Michelangelo began painting the Sistine Chapel
- The day Thomas Jefferson insured Monticello—for $6300
- The day Inigo Jones loaned his client (and King) £500
- The day the Congressional Medal of Honor was awarded to a famous American architect
- The day Disneyland opened

. . . these and hundreds of other bits of history make the 1977 Architectural Calendar a valuable source of architectural knowledge and a true collector's item.

Illustrated with 13 beautiful, full-color photographs illustrating the architectural heritage of the United States, this calendar will make a handsome and decorative addition to your home or office, and would make a much-appreciated (and inexpensive) gift. This strikingly designed calendar is printed on luxurious enamel stock in an oversized, 9x12″ format. Only a limited number of calendars are being printed this year, so in order to avoid disappointment, order today! Send your payment for $5.00 to Architectural Record Books, 1221 Avenue of the Americas, 41st Floor, New York, N.Y. 10020, or use the handy order blank below.

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Please send me _____ copies of **The 1977 Architectural Calendar** @ $5.00 each.

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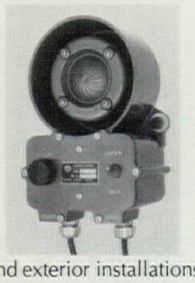
INTERCOM SYSTEMS / New models in this line of specialized industrial intercoms are designed to provide efficient communications under temperature conditions ranging from −50 to 150 F. The sub-zero capability permits applications in industrial research test rooms, food processing plants, and exterior installations in geographic areas subject to the most severe weather conditions. Each intercom is self-contained, both receiving and transmitting, and amplifying in the process. Installation is said to require only plug-in power and connection by two-wire cable; both AC and DC-powered models are available. Frequency response is shaped to provide clear communication despite high ambient noise levels. ▪ Atkinson Dynamics, South San Francisco, Calif.



Circle 312 on inquiry card

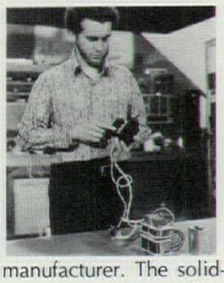
COMMERCIAL CARPET / A bright floral tile pattern, "Designer's Choice" all-nylon pile is easily maintained and resists mildew, moisture and insects. The commercial-grade carpet has a high-density foam rubber backing, and is intended for restaurants and other institutional applications. "Designer's Choice" is available in colorations of red, coffee, gold or orange; and in 6- and 12-ft widths. ▪ Needle-Craft Industries, Dalton, Ga.

Circle 313 on inquiry card

STAINLESS STEEL SINKS / Features of the "Florentine Group" of stainless steel kitchen sinks include fluorescent light, solid maple cutting board, dish drainer and chrome swing faucet. A built-in blender unit is an optional accessory. The 18-8-gauge steel sinks come in triple-, double- and single-bowl models, all with sound-deadening insulation. The sink's Grip Rim design is said to simplify installation. ▪ Just Mfg. Co., Franklin Park, Ill.

Circle 314 on inquiry card

HID LIGHTING BALLAST / The use of solid-state, transistorized components is said to produce a HID ballast significantly smaller and lighter in weight than core and coil devices. Noise and stroboscopic effect are eliminated, and a crest factor of 1.4 improves lumen maintenance, according to the manufacturer. The solid-state ballast master power controller eliminates the need for auxiliary switching equipment or wiring in emergency lighting applications: by "floating" a battery source across the power-supply output line, line-voltage failure results in automatic reversion to batteries for lamp power. The solid-state ballasts are said not to impair lamp efficiencies. ▪ Wide-Lite Corp., Houston, Texas.



Circle 315 on inquiry card

CARPET FIBER / Photo shows a use test conducted in New York City's Grand Central Station on newly-introduced *Ultron* continuous filament nylon carpet fiber. Results of this and other tests conducted for the manufacturer show excellent wear, soil hiding and pile restoration characteristics. A carbon conductive filament incorporated in the polymer fiber itself provides static control for the life of the carpet. Commercial carpet made of *Ultron* fiber carries a five-year wear guarantee. ▪ Monsanto Textiles Co., Decatur, Ala.

Circle 316 on inquiry card

ENERGY CONTROL / The *PowerRation* system is designed to reduce both power demand and consumption costs for department stores, supermarkets, theaters: any building with varying occupancy rates. Occupancy is determined by electronically counting people entering the facility and subtracting those leaving, obtaining a net count displayed on a digital readout. This actual user figure and preset comfort levels are coordinated to provide needed heating or cooling as load demands change. *PowerRation* control system may be connected with existing fire alarm systems for automatic control of dampers and vent fans in an emergency. ▪ Conservation Controls Corp., Boston, Mass.

Circle 317 on inquiry card

SILICONE SEALANTS / A brochure provides three case studies on the use of low-modulus silicone rubber building sealant. Joint movements of up to 50 per cent can be accommodated by *790* sealant, according to the literature. ▪ Dow Corning Corp., Midland, Mich.

Circle 415 on inquiry card

GAME COURT LAYOUTS / Full details on court layouts for a variety of games are given in a reference booklet. Included are official diagrams for such sports as handball, squash, indoor baseball, badminton, basketball, volleyball, tennis, and shuffleboard courts. ▪ Maple Flooring Manufacturers Assn., Inc., Oshkosh, Wis.

Circle 416 on inquiry card

ELEVATOR DOORS / Doors for freight elevators, conveyor, and dumbwaiter applications are included in an eight-page catalog. Space requirement drawings and weight schedules are given, as well as a section on *Magne-Grip* power operators. ▪ Security Fire Door Div., Courion Industries, St. Louis, Mo.

Circle 417 on inquiry card

CONTRACT FURNISHINGS / A 200-page catalog covers a line of commercial and institutional seating and other furnishings. New with this edition is a section on dual purpose furniture: sofas, sleepers, and mattresses for hotels and hospitals. ▪ Shelby Williams Industries, Inc., Chicago, Ill.

Circle 418 on inquiry card

WALL TABLES / Proper installation, operation and maintenance procedures for this line of wall-mounted, fold-out tables and seating is given in an illustrated brochure. ▪ Hamilton Industries, Two Rivers, Wis.

Circle 419 on inquiry card

INTEGRATED CEILING/WALL / A brochure details the advantages of the *Geminaire* ceiling, air delivery and wall system, especially in the renovation of older office buildings. The *Geminaire* ceiling grid combines exposed runners with concealed elements to provide linear air diffusers and a plenum space of 9.5-in. Available in modules of up to 5- by 5-ft, the ceiling can accommodate nearly any acoustical tile manufactured, and can be used with coffered, monolithic and other ceiling designs. Wall components adjust to any ceiling height or freestanding panel wall. ▪ Roper Eastern Building Systems, Columbia, Md.

Circle 420 on inquiry card

ELECTRONIC ALARM SYSTEMS / The *Moduplex 4000* risk management system is designed to react to and control fire safety, security, light and hvac functions, etc., from one central console. The system uses both point-to-point and multiplex connections; all components can easily be tailored to fit an installation's particular requirements. *Moduplex 4000* can operate at full efficiency with or without computerization, according to the brochure. ▪ The Mosler Safe Co., Hamilton, Ohio.

Circle 421 on inquiry card

CONTRACT CARPETING / An attractive full-color booklet presents complete specifications, including flame test data, on this manufacturer's lines of contract and custom carpets. Photos reproduce texture and style details, as well as the full color range of each carpet. ▪ Philadelphia Carpet Co., Cartersville, Ga.

Circle 422 on inquiry card

COMMERCIAL PANELING / Actual 5- by 7-in. samples of architectural grade prefinished panels are included in a "Selection Guide" for design professionals. Finishes include cherry, walnut, antique birch, pecan, elm, oak and birch. ▪ Georgia-Pacific Corp., Portland, Ore.

Circle 423 on inquiry card

COLD STORAGE DOORS / A 12-page catalog describes the *Enviro* line of insulated, steel-reinforced fiber glass doors designed for the cold storage industry. Applications ranging from loading docks to coolers and freezers are covered; there is a section on power operators and self-support systems. ▪ Arthur Smith Industries, Inc., Milwaukee, Wis.

Circle 424 on inquiry card

STEEL/FIBER GLASS DOORS / New brochures present two lines of sectional upward-acting doors for metal farm and industrial buildings. *Steelmaster* doors have each section roll-formed from a single sheet of steel. Aluminum-framed sectional fiber glass doors provide light transmission, and are easy to handle and maintain. All doors have a vinyl bottom door seal that conforms to floor irregularities and keeps out weather and dirt. ▪ Jim Walter Doors, Tampa, Fla.

Circle 425 on inquiry card

Sylvania lights the world's biggest playroom.

It's the Louisiana Superdome.

680 feet end to end. 273 feet top to bottom. 125,000,000 cubic feet.

32 escalators. 52 meeting rooms. Restaurants, cafeterias, snack stands. Miles and miles of corridors. Parking for 5,000 cars, 250 buses.

All lighted by lamps from GTE Sylvania.

Sylvania decor lamps for corridors, restaurants, escalators. Fluorescents for meeting rooms and service areas. Flood and Metalarc lamps for parking areas and service ramps.

And in the colossal dome, 1674 Sylvania Metalarc, mercury and tungsten-halogen lamps flood the arena with up to 150 footcandles for any activity from conventions to lectures to baseball.

All told, we have over 27,000 lamps in the Superdome—38 types and sizes lighting the largest covered sports facility ever made.

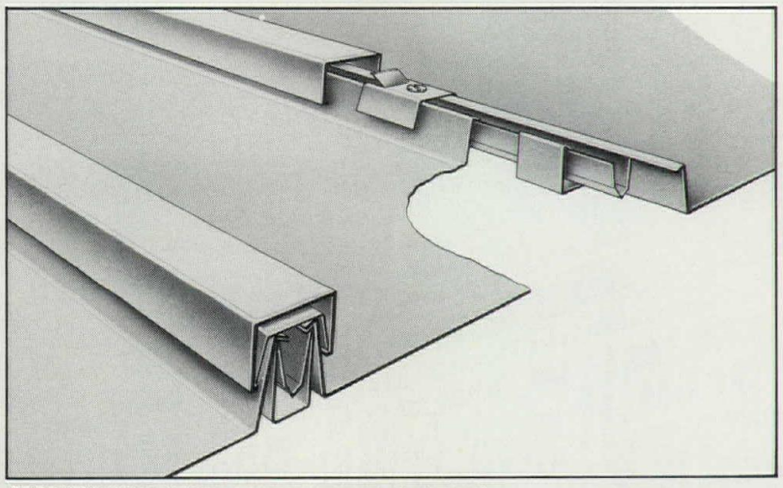
With light like that, who needs daylight?

If you'd like to know more about lamps for any project at all, see your Independent Electrical Distributor. Or write Sylvania Lighting Center, Danvers, Massachusetts 01923.

GTE SYLVANIA

For more data, circle 68 on inquiry card

Strong & Silent.



SPECIFY MM BATTEN-TITE ROOFING SYSTEMS
write for a FREE brochure or refer to SWEET'S 7.2/MM

Batten-Tite Roofing System

HIGH STRENGTH.

You specify the thickness. Our strong alloy aluminum has greater tensile strength than steel of the same weight. Wind load analysis is provided to meet local code requirements. Select and specify from a number of patterns and finishes, including a 20-year warranted finish.

NO WIND NOISE.

No clattering in the wind with Batten-Tite Roofing Systems. It goes down easily. And it quietly stays there. With built-in expansion/contraction capability and watertight concealed fastening, Batten-Tite Roofing has no equal. And the cost is surprisingly low to your client.

MM SYSTEMS CORPORATION

"The materials make it; the system shows it."

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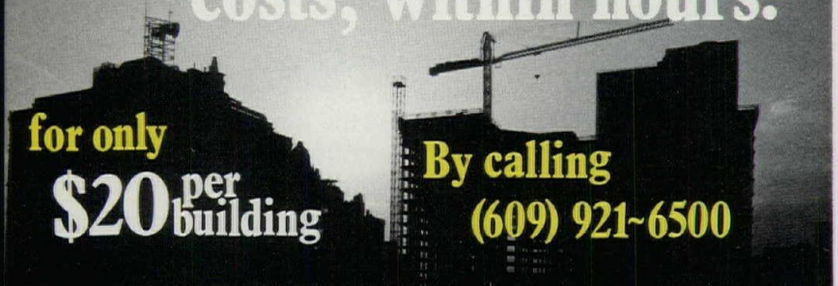
Construction Budget Analysis

it provides budgetary building construction costs, within hours.



for only $20 per building

By calling (609) 921-6500

WOOD & TOWER

The Construction Cost Center

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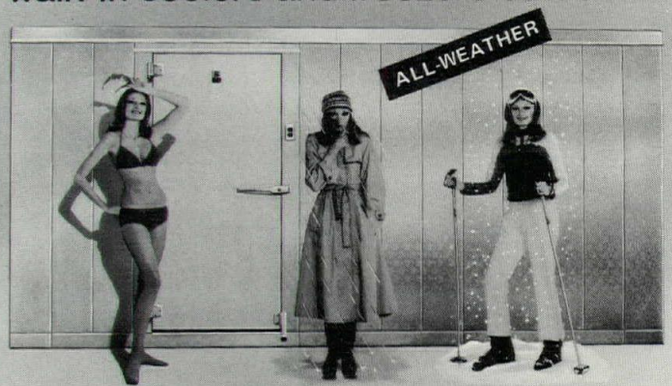
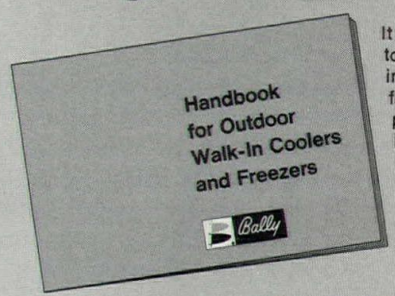
Our 25th Year of Construction Cost Management and Information Services.

New from Bally

A comprehensive guide for erecting walk-In coolers and freezers outdoors.





It contains everything you need to know about erecting walk-ins outdoors, including critical facts that many refrigeration people don't even know. It has 16 pages of drawings, and specifications covering concrete slabs, weatherproof roofs, electrical and refrigeration characteristics, and other needed information.

FREE FOR YOUR REFERENCE LIBRARY

Bally ©1976

Bally Case & Cooler, Inc.
Bally, Pennsylvania 19503

Call 215-845-2311 or write Dept. AR 12

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For more data, circle 71 on inquiry card

The One Piece Bathing Suite.

One module installs in one step by one trade.

Walls, tub and top are molded in a single unit of colorfast acrylic sheet. Nail the module to your rough framing, hook up supply and drain lines and that's it. No drop ceilings to build, no dry wall to install, no painting to do.

The One Piece Bathing Suite has no seams or tight corners to clean, no tile joints, cracks or crevices to collect dirt or allow leaks. Its surface is three to six times thicker than sprayed-on coatings.

The same contemporary styling and ease of maintenance that make the One Piece Bathing Suite ideal for homes make it great for hotels and motels, too. Choose from seven decorator colors (gold, beige, blue, white, bayberry, regency blue and bone) and three sizes (60" tub-shower combination, 48" shower and 36" shower.)

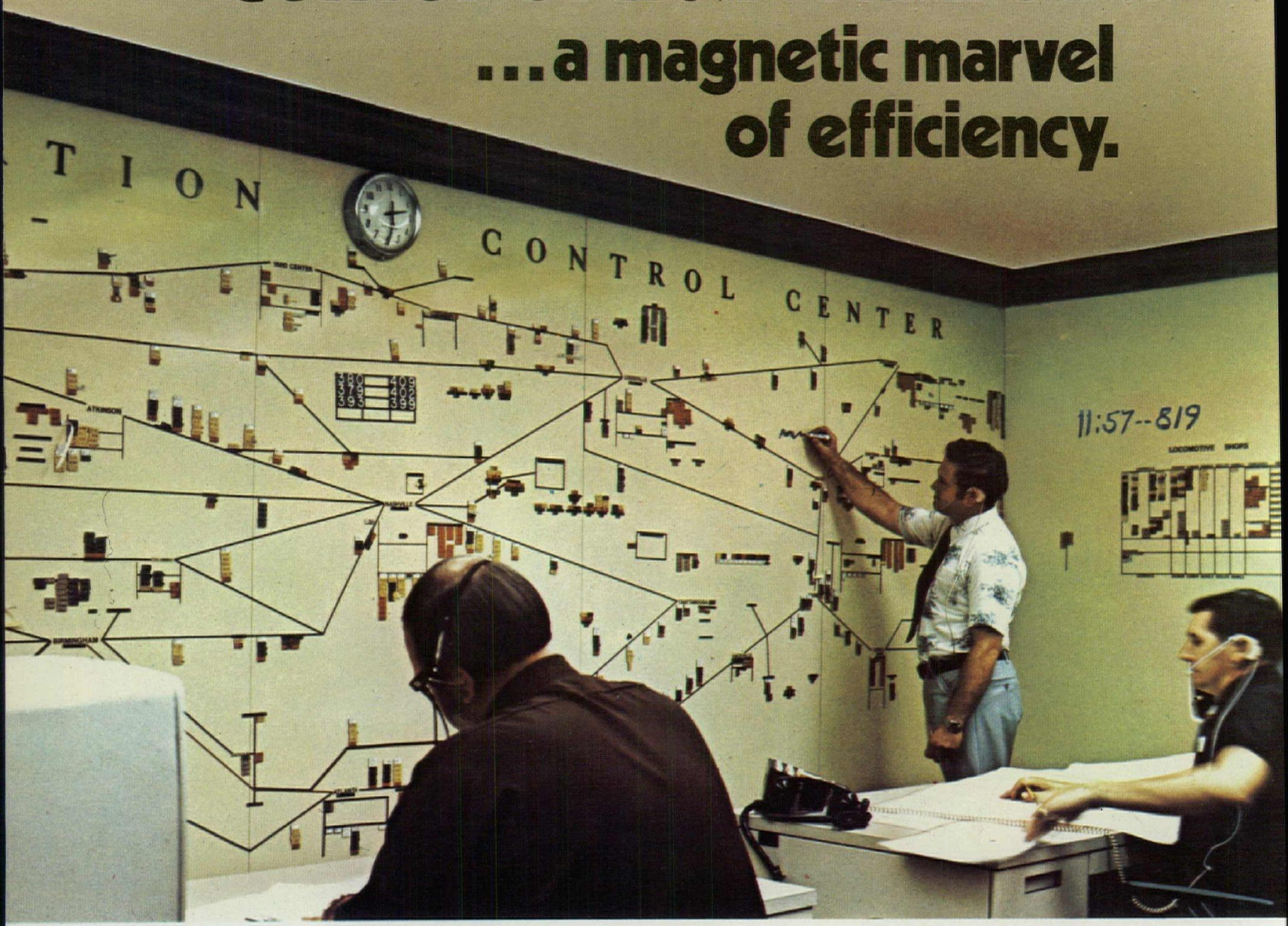
Hydroguard 406 (left) provides the finishing touch. This pressure-equalizing valve automatically controls volume, temperature and flow direction (shower or tub). No more hot blasts, no more icy jolts. The pushbutton diverter automatically reverts to tub-fill after it's turned off. So the bather never gets a surprise dousing from the shower when he thinks he's filling the tub.

Contact your Powers-Fiat representative, or write Powers-Fiat, 3400 Oakton Street, Skokie, Ill. 60676.

POWERS-FIAT
DIVISION OF POWERS REGULATOR COMPANY
SKOKIE, ILLINOIS 6007

For more data, circle 73 on inquiry card

Transportation Control Center of L&N Railroad ...a magnetic marvel of efficiency.



Combines AllianceWall porcelain-on-steel WhyteBoard*, magnetic symbols and dust-free writing system.

How do you keep tabs on thousands of different railroad cars? The Louisville & Nashville Control Center does it with AllianceWall porcelain-on-steel WhyteBoard walls and an ingenious system of magnetic symbols used to plot the movements of trains.

These same porcelain-on-steel WhyteBoard walls, combined with special dry-wipe Rite-On, Wipe-Off markers, form a dust-free writing system. Markers write clear and clean. Erase clean with swipe of dry cloth. WhyteBoard walls double as projection screen. The writing surface, virtually indestructible, is guaranteed for 50 years.

AllianceWall WhyteBoard is an ideal wall system for all types of business offices, sales and conference rooms, schools... anywhere people meet to communicate.

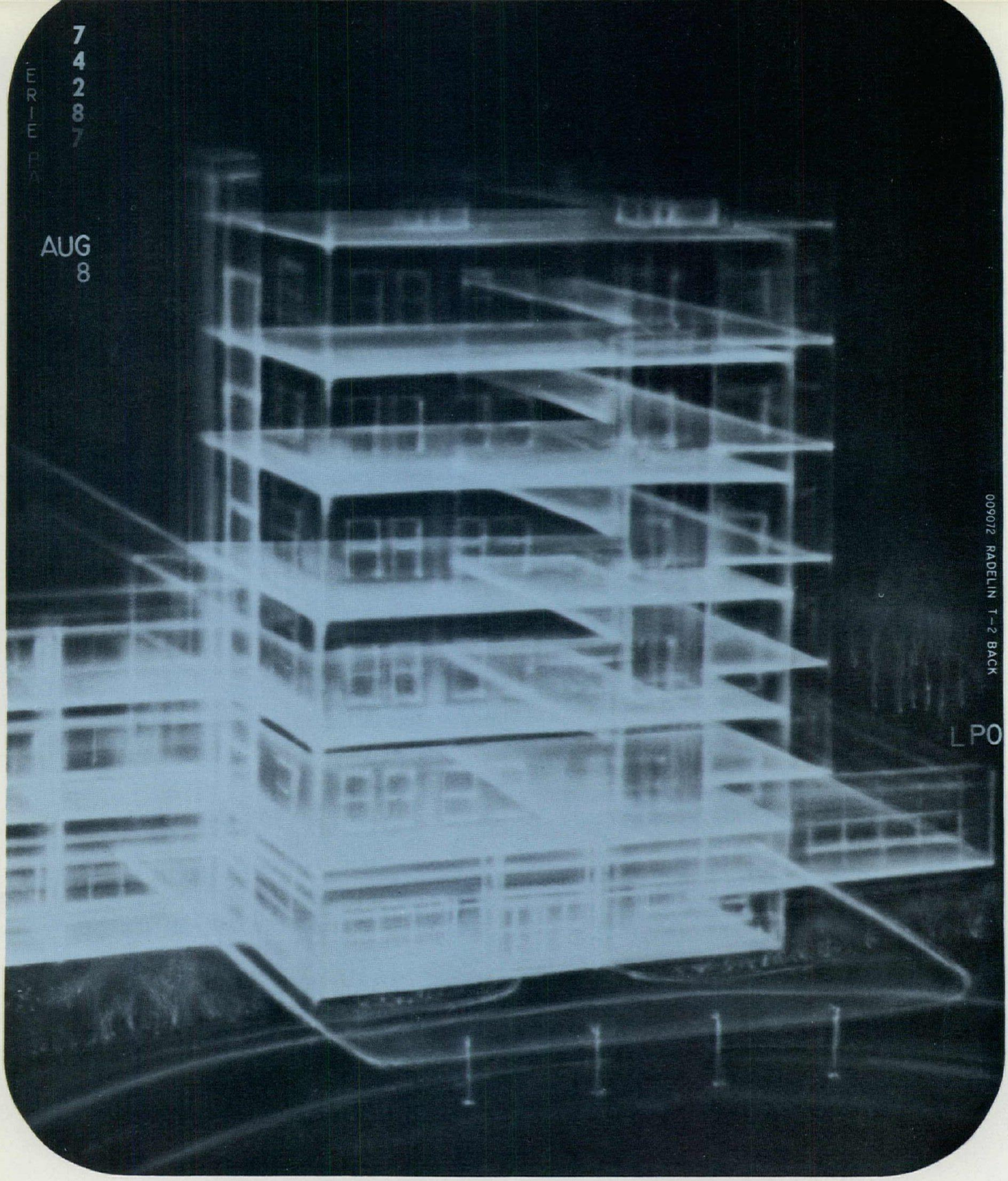
Write AllianceWall Corporation, Box 247, Alliance, Ohio 44601.

AllianceWall® Corporation

Manufacturing plants in Alliance, Ohio; Okmulgee, Oklahoma; Genk, Belgium and Odense, Denmark.

*formerly known as Rite-On, Wipe-Off panels.

For more data, circle 74 on inquiry card



Our patient, the hospital.

So how do you diagnose remodeling in a hospital?

Get the team together: administrators, consultants, architects and AMSCO Systems Company.

AMSCO has a lot to offer you—especially in the early stages. You see, most of our patients are hospitals.

Our diagnosis capability begins with a facilities and procedure evaluation. We tailor to your needs the widest range of material handling and processing systems available.

We work within your framework of time, space and money.

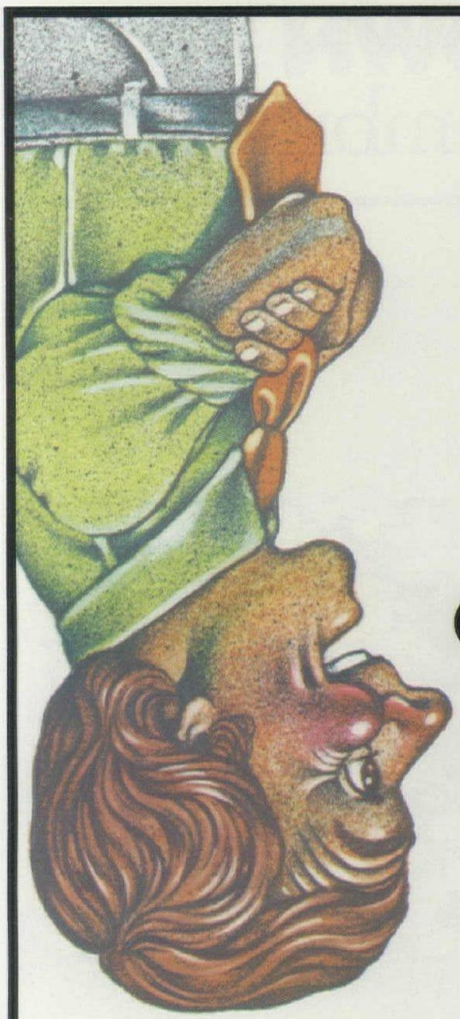
We provide single-source responsibility for a thorough program of support services.

AMSCO Systems Company. Experienced in hospital remodeling as well as new construction.

For more data, circle 75 on inquiry card

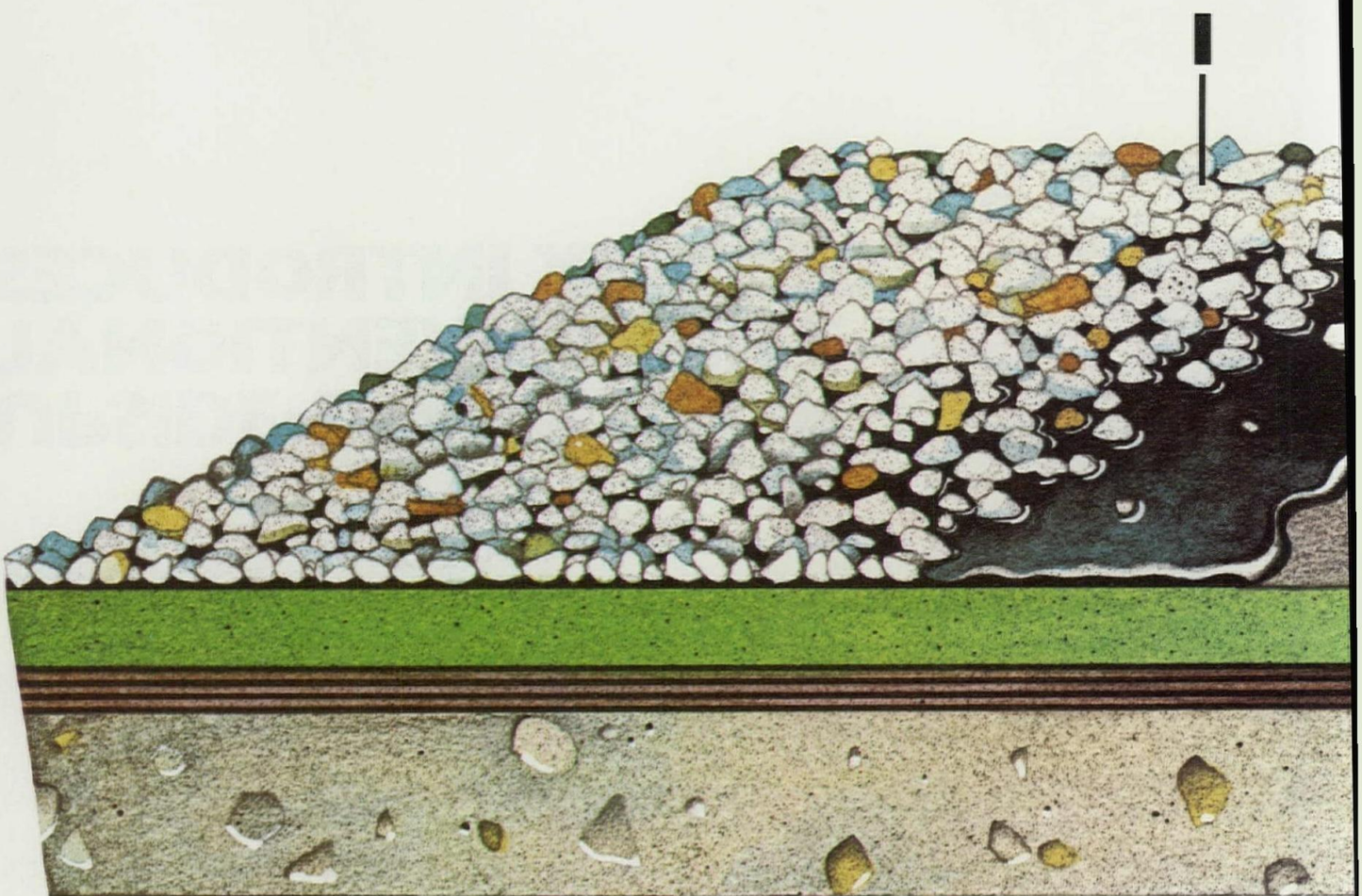
AMSCO
American Sterilizer Company

ERIE, PENNSYLVANIA · 16512



CELOTEX INTRODUCES THE CONVENTIONAL UPSIDE-DOWN ROOF.

THE CELOTEX UPSIDE-DOWN ROOF
It protects the roof membrane like

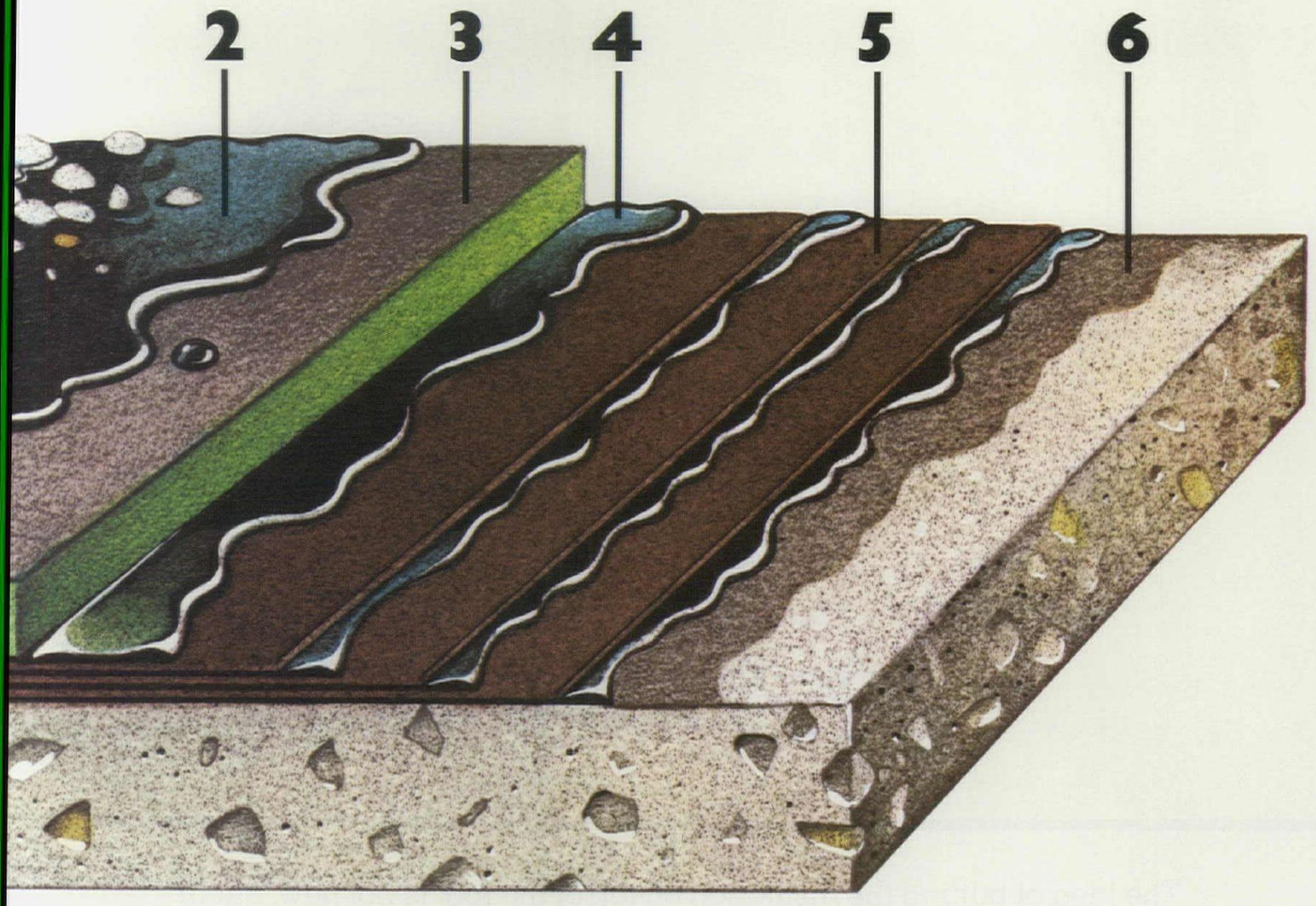


1 A conventional application of 300 lbs. of slag or 400 lbs. of gravel per 100 sq. ft. protects roof from flaming brands, harmful rays of the sun, and impact damage caused by hail and roof traffic.

2 Top pouring of hot asphalt keeps gravel in place and provides first line of protection against moisture.

3 New Tempchek® Roof Insulation is what makes the Celotex Inverted Roof Assembly work so well. Other conventional, time-tested Celotex roofing materials are simply combined with it more efficiently. Tempchek Roof Insulation provides thermal protection, dimensional stability and resistance to moisture. It is a closed-cell urethane foam, reinforced with glass fibers and faced with asphalt-saturated roofing felt.

PUTS THE INSULATION ON TOP.
no right side up roof ever could.



4 Flood coat of hot asphalt keeps Tempchek insulation in place, and provides the second line of protection against moisture. The asphalt is beneath the insulation, and will not alligator.

5 Built-up roofing membrane provides the third and most important line of protection against moisture. Serves as a vapor barrier as well. Roof membrane is protected from thermal shock, punctures and blistering by the Tempchek insulation above.

6 Roof deck provides structural support for roofing system. The Celotex Inverted Roof Assembly systems are readily applied to conventional nailable and non-nailable decks. Shown above is a concrete deck, with asphalt primer.

TESTED AND PROVEN IN FLORIDA'S STEAMING SUMMERS

The idea of putting the insulation on top of the roof is not new. But in practice, it requires a remarkably versatile insulation product. One able to withstand the rigors of weathering and traffic.

New Tempchek Roof Insulation is such a product.

The dimensional stability of Tempchek insulation cannot be matched by other foamed plastic insulations on the market today. Tempchek is stabilized by glass fibers much like concrete is by reinforcing rods.

Tempchek roof insulation is not damaged by hot asphalt applied at normal job temperatures. This relieves roofing mechanics of the responsibility for determining just the right time to bond the insulation without melting it.

There is no need to apply 1,200 lbs. of gravel per 100 sq. ft. on top of the insulation. Tempchek insulation, anchored by hot asphalt, provides uplift resistance of 90 lbs./sq. ft.

Being a closed-cell foam insulation, Tempchek will not absorb water. Insulating efficiency of the Celotex Inverted Roof Assembly is assured. Under

ACROSS THE COUNTRY, AND MICHIGAN'S ICY WINTERS.

normal use, Tempchek Roof Insulation will retain an average 80% of its thermal resistance (R-factor) value.

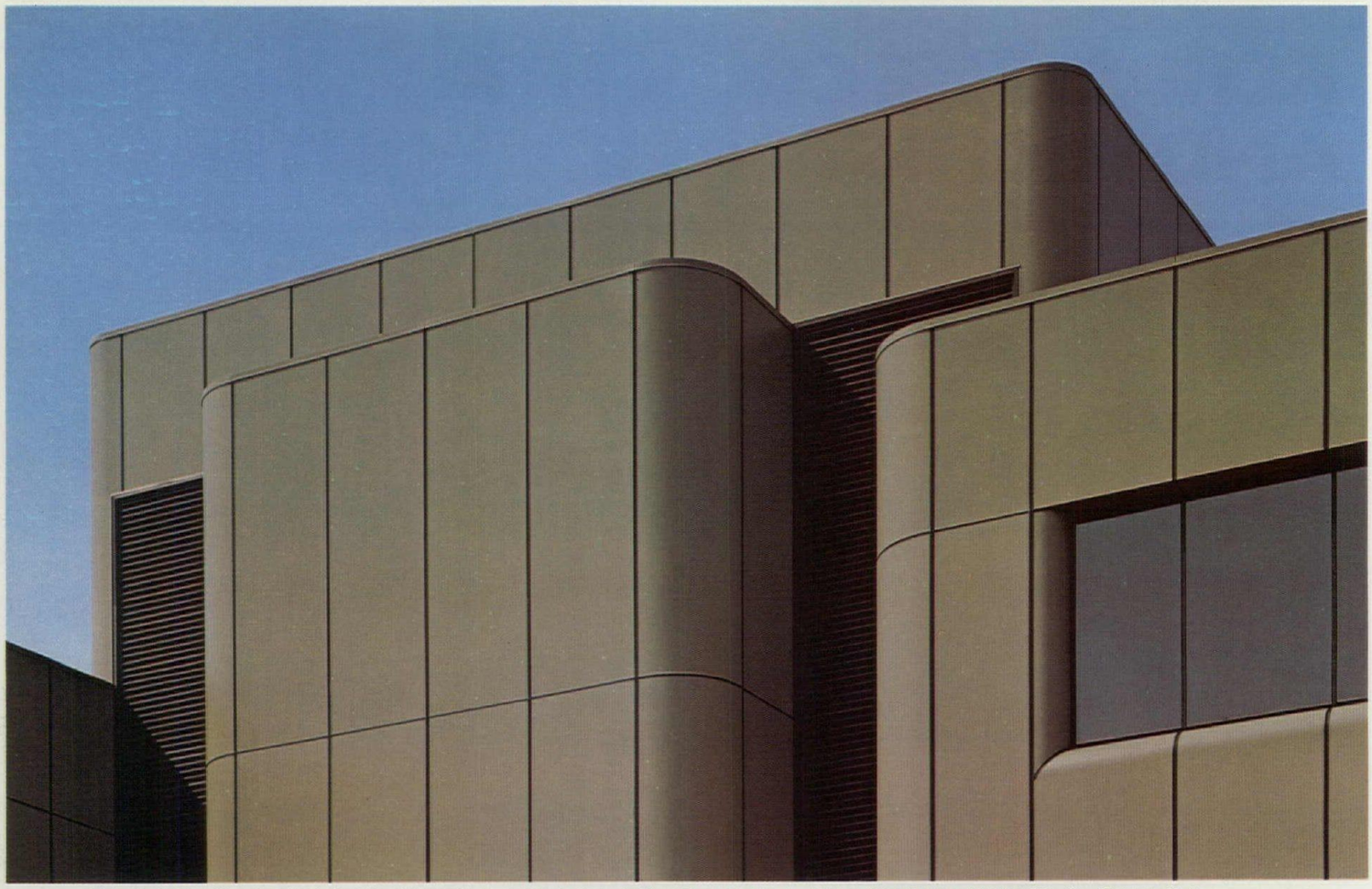
Before putting the upside-down roof on the market, Celotex tested it. And re-tested it... on jobs located across the U.S. From L'Anse, Michigan, to Houston, Texas. From St. Petersburg, Florida, to Dubuque, Iowa. Ask us about them.

Celotex offers a 10-year Inverted Roof Assembly guarantee, a specimen of which will be provided at the place of purchase or upon written request addressed to The Celotex Corporation, 1500 North Dale Mabry Highway, Tampa, Florida 33607.

Your Celotex representative has complete details about the new Inverted Roof Assembly. Or contact John Hasselbach, Commercial Roofing Department, at the above address. A 20-page catalog covering the new system is available now, and will also appear in the 1977 Sweet's Files.

Celotex®
BUILDING PRODUCTS
The Celotex Corporation, Tampa, Florida
a Jim Walter company

For more data, circle 80 on inquiry card



Project: Keen College Academic Building, Union, N. J. Architect: Robert Hillier, Princeton, N. J. Curtain Wall Erector: Whelan Mfg. Co., Trenton, N. J.

Alcoa Alply Insulated Panels offer you custom design flexibility.

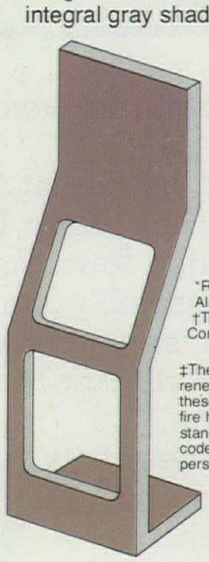
Why settle for less?

If aesthetic freedom and energy conservation are important to you and your client, then we suggest you contact us for your nearest Alcoa Alply* panel regional distributor, who offers you single-source responsibility — everything from engineering to the completed wall system, in place, with integral fenestration, interior and exterior finish and thermal insulation.

No other insulated modular wall offers all these choices for low- to middle-rise buildings:

Exterior and interior skins: aluminum, stainless steel, hardboard, plywood, cement-asbestos — you name it.

Finishes: four standard finishes and 18 colors, including Super Alumalure* baked-on, factory-applied fluoropolymer enamels . . . Alumalure baked-on synthetic resin enamels . . . Alumilite† electrolytic coatings in natural aluminum . . . Duranodic† hard-coat finishes in three integral bronze shades and three new integral gray shades.



*Registered Trademark of Aluminum Company of America
†Trade Name of Aluminum Company of America

‡The use of polyurethane, polystyrene and isocyanurate cores in these applications may present a fire hazard under certain circumstances. Consultation with building code officials and insurance company personnel is recommended.

Panel cores: polystyrene, polyurethane, isocyanurate‡ or other materials, depending upon project requirements.

Wide range of panel sizes: up to 5 feet wide, 18 feet long.

Variety of shapes: panels can be shop-formed to almost any three-dimensional shape desired.

Choice of joining systems: Alcoa's patented Snug Seam* caulking, splines, battens or frames.

Variety of cutouts possible: to accommodate windows, doors, sloping grade lines, walkways, difficult contours, parapets.

Whatever you're designing, let our regional Alcoa Alply panel distributors help. They know a great deal about wall systems, finishes, industrial roofing and siding and other low- and middle-rise construction problems. For further information, write: The Stolle Corporation, Aluminum Company of America, 1025–M Alcoa Building, Pittsburgh, PA 15219.

The Stolle Corporation **A Subsidiary of Aluminum Company of America**

For more data, circle 20 on inquiry card

For more data, circle 81 on inquiry card

Why steel is the material others are compared to!

When toilet partition materials are talked about, comparisons are inevitably made to steel . . . comparisons in performance, availability, design, colors *and* price.

Why? Because steel partitions have proven their value over decades of use . . . in all types of structures with a wide range of problems. Problems that include design criteria for traffic, resistance to vandals, fire, humidity, stains, scratches and effects of intensive rest room cleaning procedures. Bridgecore insulation in panels, pilasters and doors provide low sound transmission.

STEEL IS STRONG! Steel pilasters, panels and doors provide support strength and rigidity unmatched by other materials. Steel will not warp or burn . . . steel "Stands Up".

STEEL IS VERSATILE . . . in design and colors, and — it's available in finishes to meet your specific needs; baked acrylic finish that resists cigarette burns, stains, common acids and caustics, while meeting rigid budget requirements. Porcelain on steel for ultimate corrosion resistance . . . glass hard surface fused to steel and stainless steel trim, add up to ultimate resistance to acids, scratches, stains and effects of heavy use. 302 Stainless Steel . . . jewel-like in appearance with lifetimes of strength and beauty. And for the "luxury look", vinyl bonded to steel to provide texture and color.

STYLES? Only steel can offer *all* styles: Wall supported partitions to provide easy cleaning and greater design flexibility. Head-rail and floor supported "Academy" for new or old buildings, ceiling-hung "Century" for clear floor areas and "Normandie" floor supported units.

VERY IMPORTANT! Consider the construction and hardware. Sanymetal hinges are smooth, flush, integral to the pilasters and doors . . . no exposed bolts or screws — easy cleaning, strong and proven through *millions* of swings. Concealed latches are recessed, pilaster bases are extra strong with one piece stainless steel shoes, corners are welded for strength and smoothness.

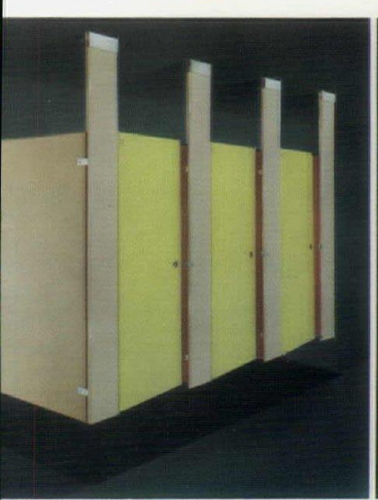
These are just some of the reasons steel is a "standard" for comparison . . . it's the "standard" too, for *value* . . . in-place cost versus in-place performance.

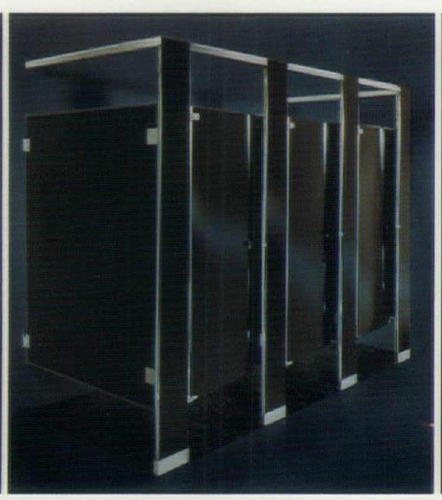
For functional and design disciplines that do not require all the attributes of steel . . . consider Sanyplastic (high-pressure laminate) or Sanymetal Mela-Mate — the new, fast-cycle melamine surface in wood grains and contemporary colors.

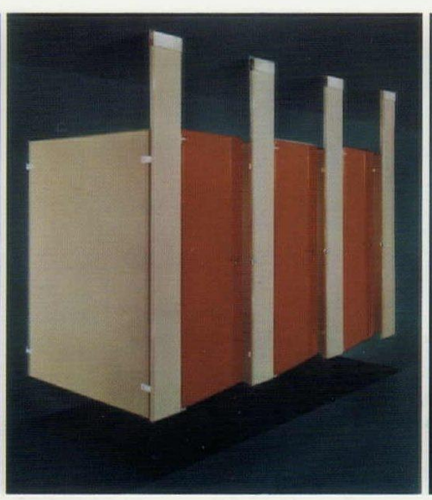
Sanymetals

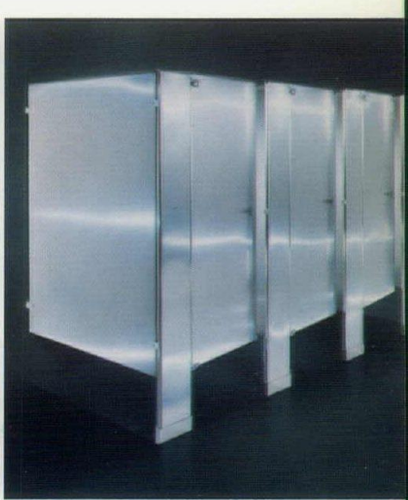
THE *Sanymetal* PRODUCTS COMPANY, INC

1701 URBANA ROAD, CLEVELAND, OHIO 44112

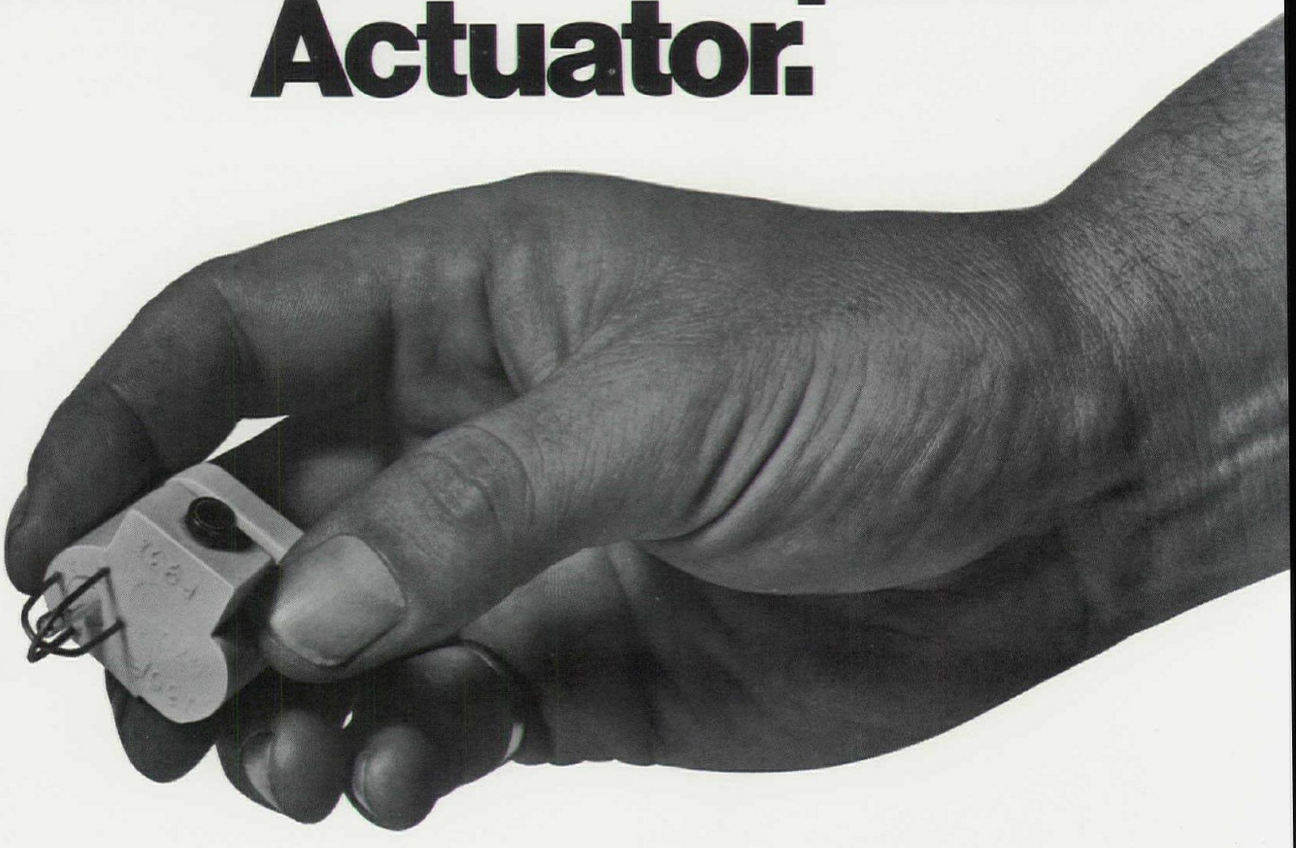








Announcing Grinnell's new Quick Response Actuator.



It speeds sprinkler reaction time up to 75%.

Our new Quick Response Actuator, in combination with our Duraspeed Sprinkler, controls and puts out fires faster.

There's less chance of fatalities, less chance of injuries, less property loss.

The Quick Response Actuator offers excellent life-safety benefits in nursing homes, hospitals, hotels, condominiums, apartments and similar buildings where it may be difficult to evacuate occupants.

It also offers superior protection for high-value equipment and inventories wherever flammable materials present the potential for flash fires.

Under typical approval test conditions, a sprinkler with the new Quick Response Actuator activated in just 30 seconds compared to 115 seconds for a standard sprinkler without it.

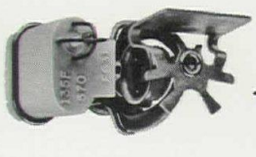
The UL-listed actuator installs easily onto our new Horizontal Sidewall Extended Coverage Sprinkler (which gives you twice as much coverage as a standard sprinkler) and our Pendent and Sidewall Sprinklers.

You can order the unit as original equipment or it can be retrofitted into existing Duraspeed installations.

For information contact your nearest Grinnell representative listed in the Yellow Pages. Or write: Grinnell Fire Protection Systems Company, Inc., 10 Dorrance Street, Providence, Rhode Island 02903.

New Quick Response Actuator installs on these Grinnell Duraspeed models:

Pendent Sprinkler



Sidewall Extended Coverage Sprinkler

Standard Horizontal Sidewall Sprinkler

GRINNELL

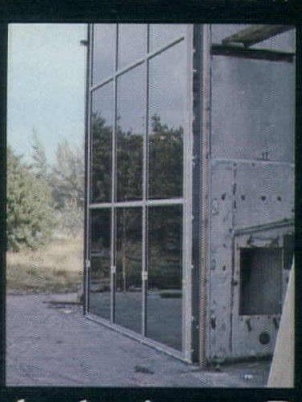
Grinnell Fire Protection Systems Company, Inc.
Protecting Life and Property Since 1850.

For more data, circle 82 on inquiry card

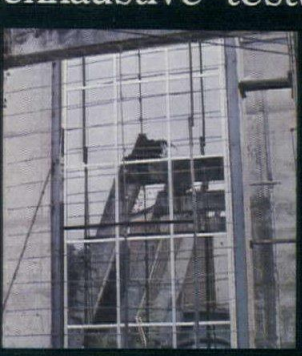
The Best Place To Test A New Curtain Wall System Is On Our Building. Not Yours.

That's why, at Amarlite Anaconda, we erected and tested our new CWT-550 Curtain Wall System, before we even thought about trying to sell it to you.

We knew this new thermally-improved system looked good on paper, because the Amarlite Anaconda Curtain Wall Team that designed it is made up of some of the most talented, experienced people in the business. But the true test of any structural system is how it actually performs.



So we put CWT-550 through exhaustive tests. We flooded it with water and blasted it with high pressure air currents. It didn't leak.

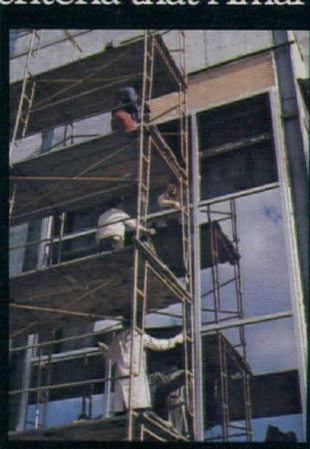


We checked the thermal characteristics of the CWT-550. And found that the system proved equal to 1" insulated glass.

We tried out the CWT-550's unique installation procedures, like interior glazing and improved anchoring and splicing, and found it easier, faster and more economical to install.

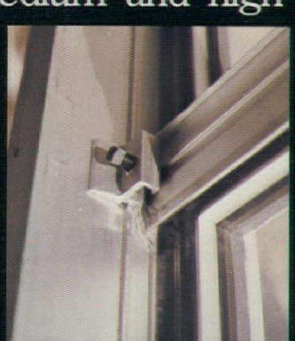
And we knew we had a winner.

This unique curtain wall system meets or excels every criteria that Amarlite Anaconda set for the product. It's a reverse type pressure wall system that eliminates metal to metal contact between exterior and interior. Its low profile reveal is designed for today's environmental glass. In fact, it meets all the requirements established for glazing environmental insulated glass.



So the tests are finished. And the same Amarlite Anaconda Curtain Wall Team who has designed and checked out the CWT-550 System is ready to put that system to work for you.

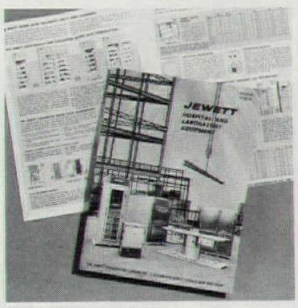
Just call or write for more information on this unique system that's specially designed for today's medium and high-rise buildings.



AMARLITE

ANACONDA Aluminum Division

P.O. Box 1719
Atlanta, Georgia 30301
404/691-5750



New Hospital and Laboratory Equipm Catalog illustrates Jewett's full line stainless steel refrigerators and freezers, well as morgue and autopsy equipme Featuring the newest rectangular mod of the "blood bank refrigerator with brain," the 8-page brochure also inclu counter-top, wall-mounted, and und counter models. English and metric specifications accommod Jewett's international markets.

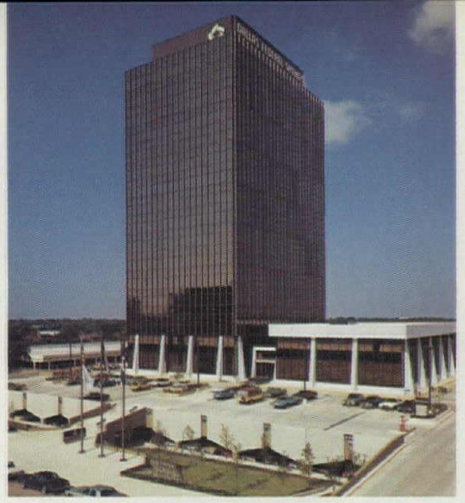
The Jewett Refrigerator Co. Inc., 2 Letchworth St., Buffalo, N 14213.

For more data, circle 85 on inquiry card

RECORD IMPRESSIONS CATALOG

SEND FOR A COMPLETE, DETAIL CATALOG of "Record Impressions." convenient service offering reprints Building Type Studies, Interiors and Sp cial Reports. Offered are more than items including back issues of Rec Houses; Product Reports and the practi reference guide, "Air Conditioning: New Interpretation." Address your quest to: Record Impressions, Architectural Record, P.O. Box 5 Princeton Road, Hightstown, New Jersey 08520.

Modular service walls by Halsey Taylor.



Functional accents of stainless steel for Dallas Federal Savings.

This 12-module Halsey Taylor service wall creates a focal point for the south wall, first floor, of the Dallas Federal Savings & Loan Association Tower.

The Dallas Federal corporate offices, which occupy the concourse and first two floors, contain six Halsey Taylor service wall units. All of the units are stainless steel. Two incorporate 12 modules each and four are composed of nine modules each. Functional modules consist of drinking fountain and cooler, a fire hose cabinet and a clock panel. Remaining panels are decorative.

"Our Halsey Taylor units are beautiful as well as functional," states Mr. Earnest Brownlee, Property Manager and Vice President, "and the stainless steel complements the chrome trim used throughout the building interior."

The Halsey Taylor Service Wall System conserves space, reduces the number of isolated wall cutouts normally required, and makes the location of critical building facilities easy to remember.

The wide selection of functional and decorative panels permits broad design flexibility. In addition to stainless steel and PATINA bronze-tone stainless, eight Polychrome colors are available. Functional modules include drinking fountains, clocks, directory boards, fire hose and extinguisher cabinets, fire alarm pulls, telephones, ash trays, waste receptacles, and loudspeaker grilles. All modules are standardized and any number may be included in a single station—depending on the amount of wall space at your disposal.

For complete details, specifications and a modular wall system design kit, write to Halsey Taylor Division, King-Seeley Thermos Company, Freeport, IL 61032.

Dallas Federal Savings & Loan Association Tower:

Architect: Mark E. Miller, Dallas, Texas
Interior Architect: Steven O. Nall, Dallas
Mechanical Engineer: Herman Blum Consulting Engineers, Dallas
Mechanical Contractor: Allied Mechanical Contractors, Dallas

Halsey Taylor®
KING-SEELEY KST THERMOS CO.

The Prudential Insurance Company
55 N. Livingston Ave., Roseland, N.J.
Architect: The Grad Partnership, Newark, N.J.

Integrated Ceiling Systems from Johns-Manville.

Now you can create ceilings that work as beautifully as they look.

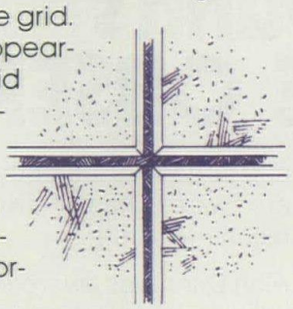
Appearance and performance. That's what you'll have when you specify an integrated ceiling system from Johns-Manville.

Our wide choice of attractive ceiling configurations allows you the kind of design freedom you want. And we've combined these with lighting, sound control and air handling options—all from one manufacturer—for a truly integrated ceiling system.

Attractive modular grid intersection.

Until now, modular ceiling grids have rarely been the object of aesthetic praise. We're introducing one that will be, with mitered flanges and a thru-regress at all intersections.

And, it's versatile. Air boots go anywhere on any runner. Telephone and electrical wiring is easily dropped through the grid.

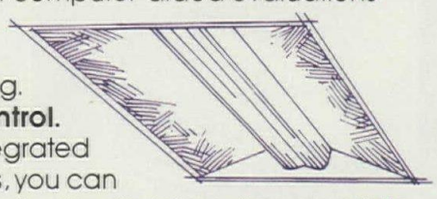


Besides outstanding appearance and versatility, the grid shape offers superior structural properties. It's roll-formed from 25-gauge steel and locks together in three planes to accommodate vertical, lateral and torsional loads.

Efficient distribution of light.

J-M Integrated Ceiling Systems feature Holophane luminaires, backed by 75 years of experience and technical leadership in providing energy-efficient lighting solutions. Our luminaires provide visually comfortable illumination, too. Even the new energy-saving HID lamps may be used without creating brightness problems.

We also offer computer-aided evaluations of lighting layouts for your project planning.

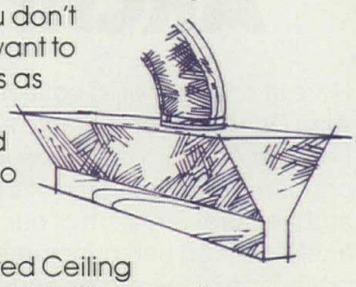


True sound control.

With J-M Integrated Ceiling Systems, you can select the acoustical material most appropriate for your requirements. Whatever the criteria—NRC, STC, durability, appearance or fire endurance—you have a choice of J-M acoustical products.

Quiet, dependable ventilation.

J-M air handling systems are known for reliability and flexibility. They maintain excellent distribution patterns even at low volume outputs and go virtually unnoticed in the ceiling. You don't see them and you don't hear them. And, if you want to move an air terminal, it's as simple as lifting it from the current position and inserting it at the new. No tools are required.



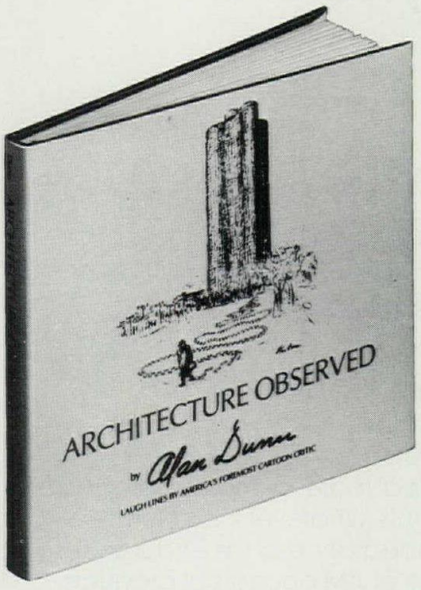
Learn more about Johns-Manville Integrated Ceiling Systems. Call your local J-M office or write: Johns-Manville Sales Corp., Holophane Division, Greenwood Plaza, Denver, Colorado 80217.

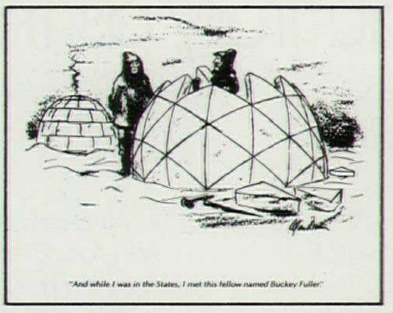
Johns-Manville

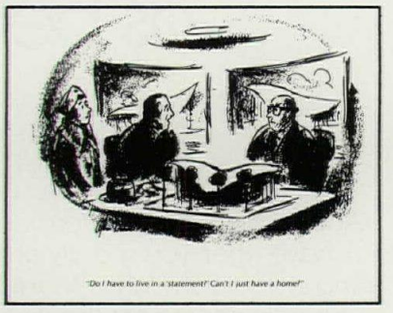
For more data, circle 90 on inquiry card

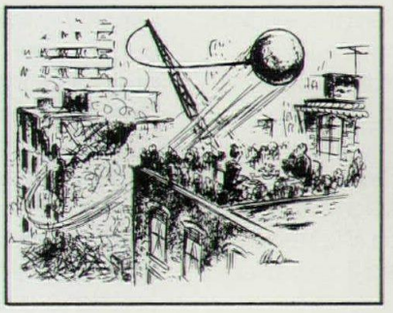
An architectural laugh-in

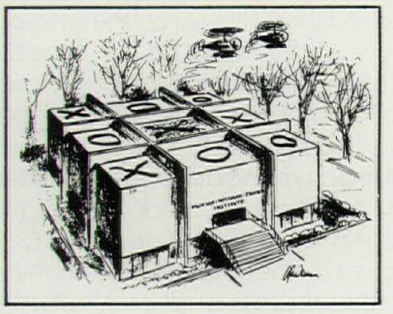
...by the cartoonist who Mumford called "a better architect than the architects"




"And while I was in the States, I met this fellow named Buckey Fuller."


"Do I have to live in a 'statement?' Can't I just have a home?"





Alan Dunn's ARCHITECTURE OBSERVED

Here in one sparkling collection are the best of Alan Dunn's incomparable architectural cartoons. For over 40 years the drawings of this award-winning cartoonist formed some of the most telling architectural criticism of our times. Dunn's finely-pointed pen punctures the balloons of pretention of the profession—leading Lewis Mumford to observe "he is obviously a better architect than the architects . . . he exposes."

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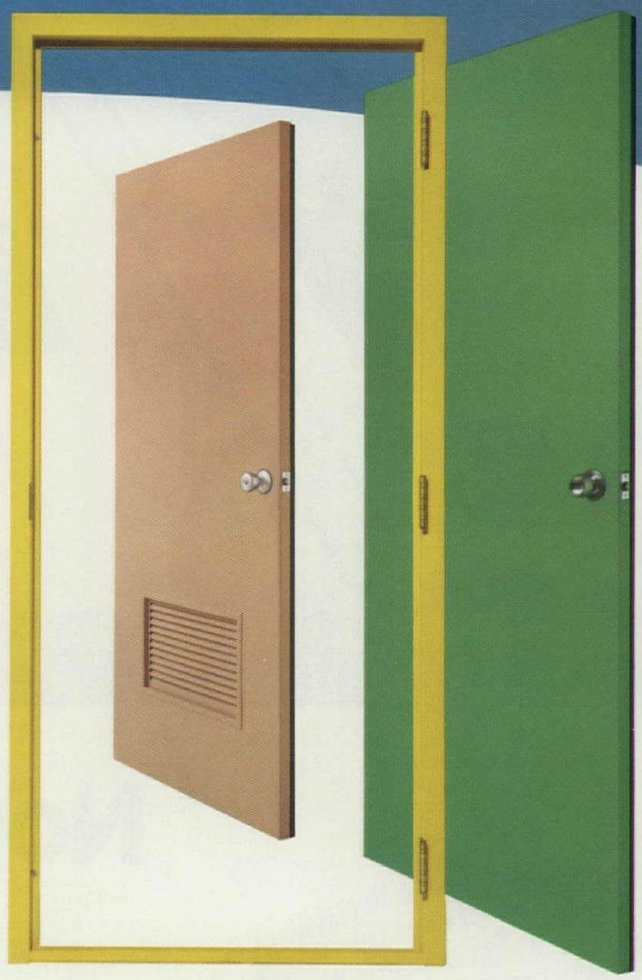

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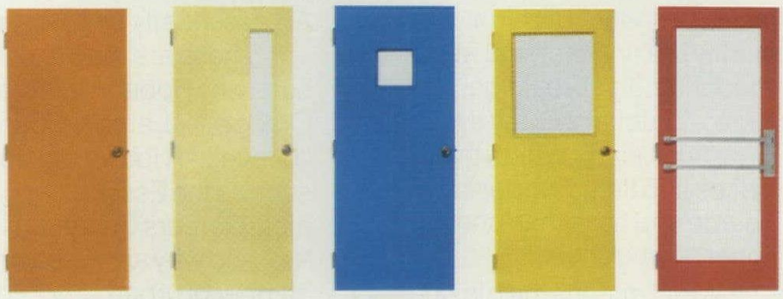

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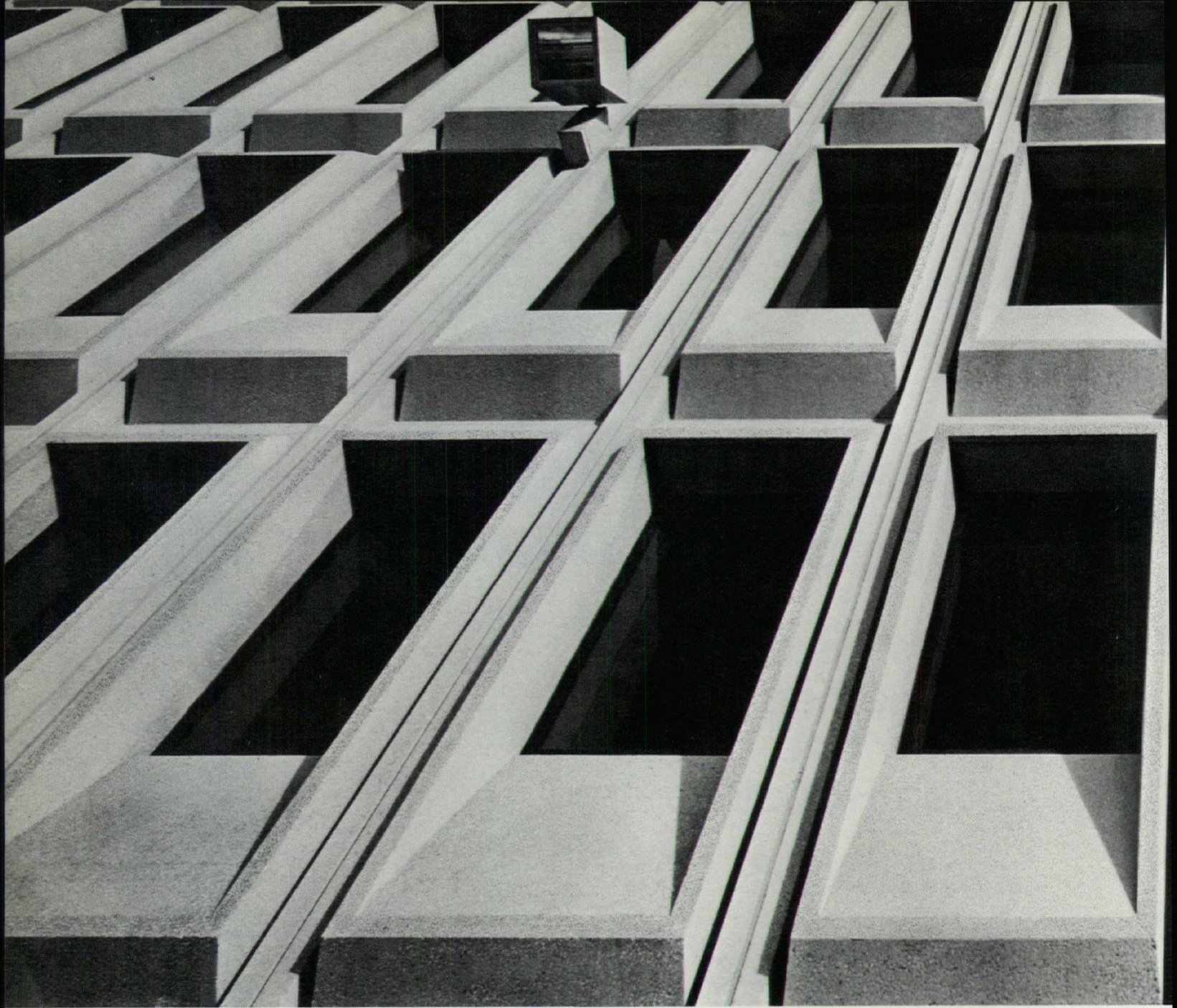

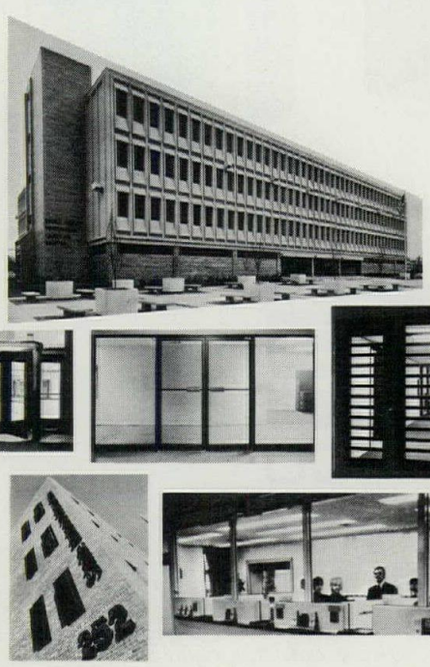

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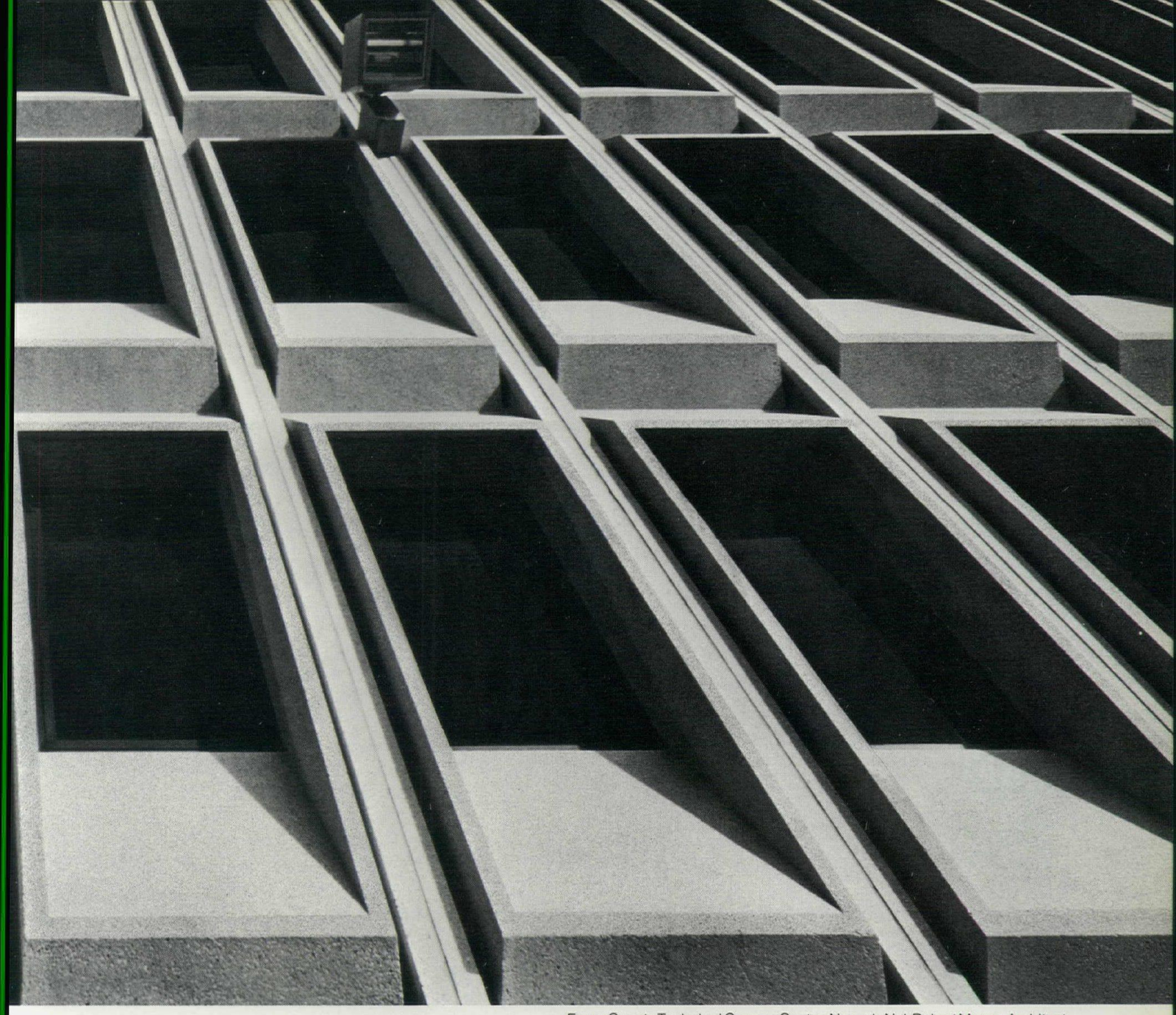

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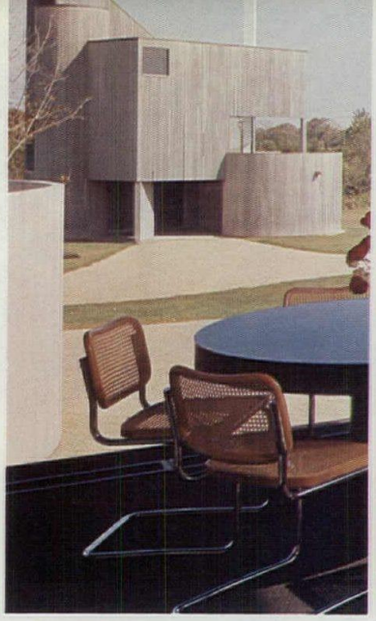

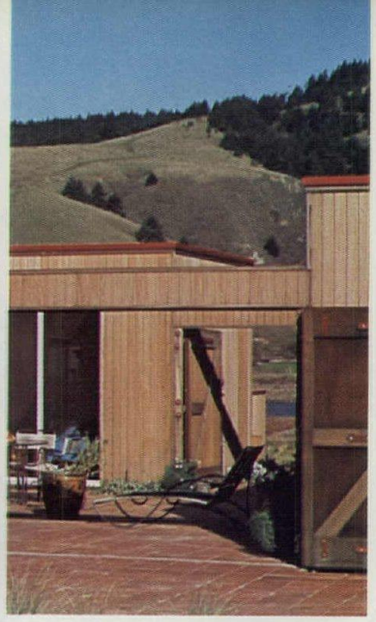

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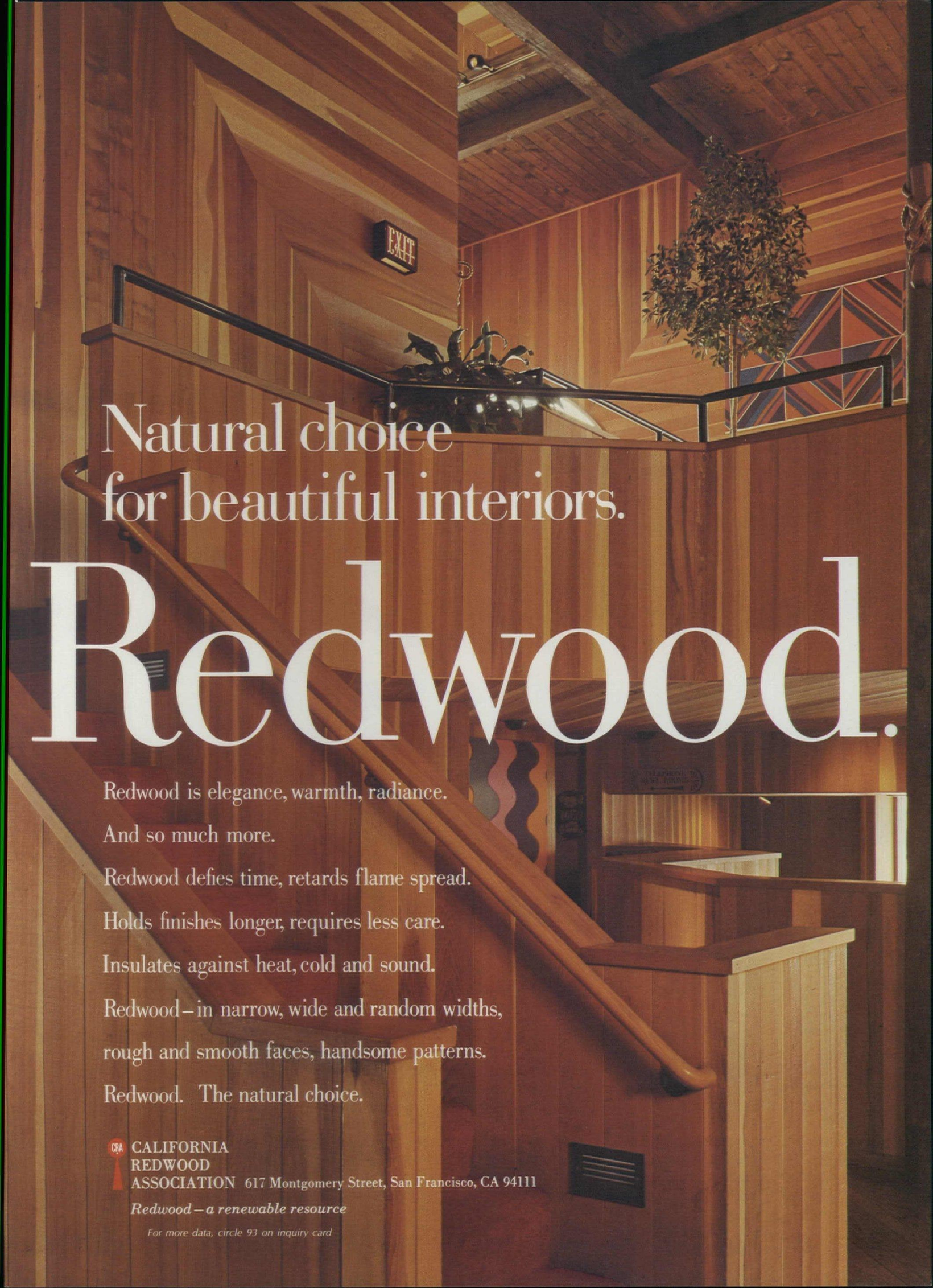

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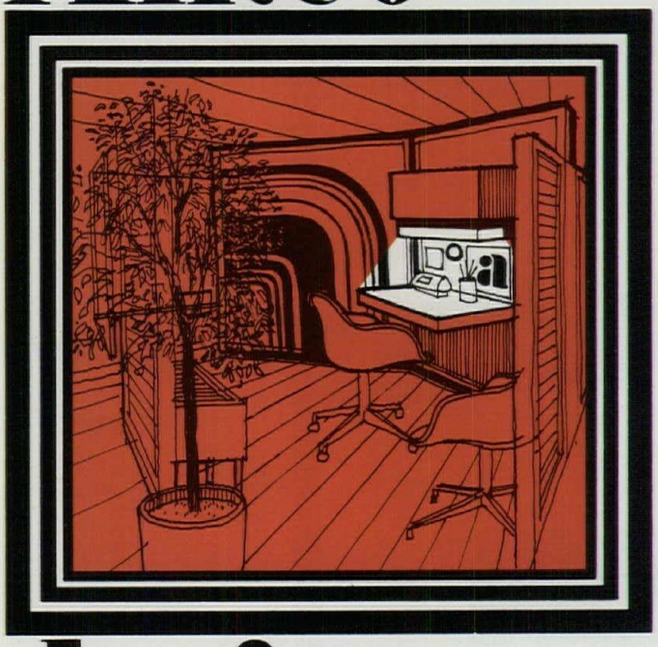

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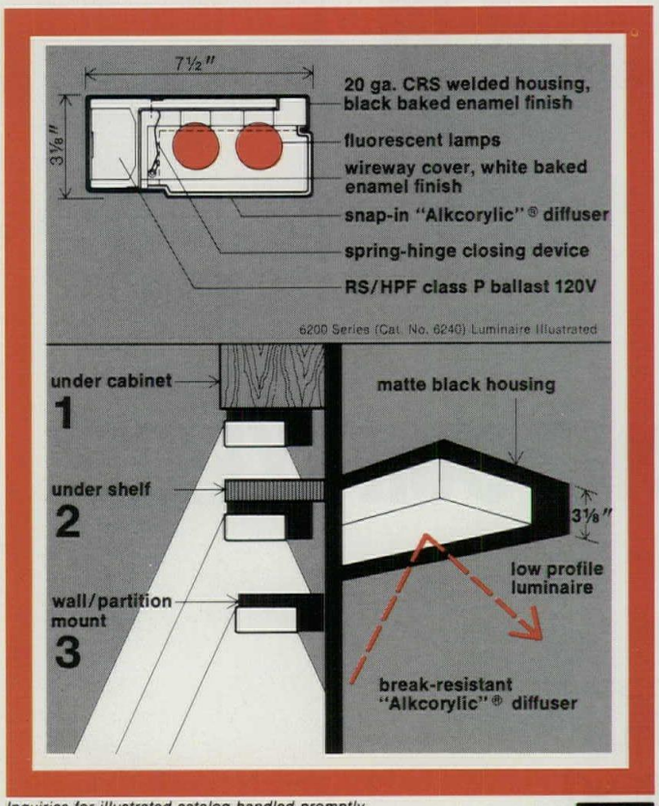

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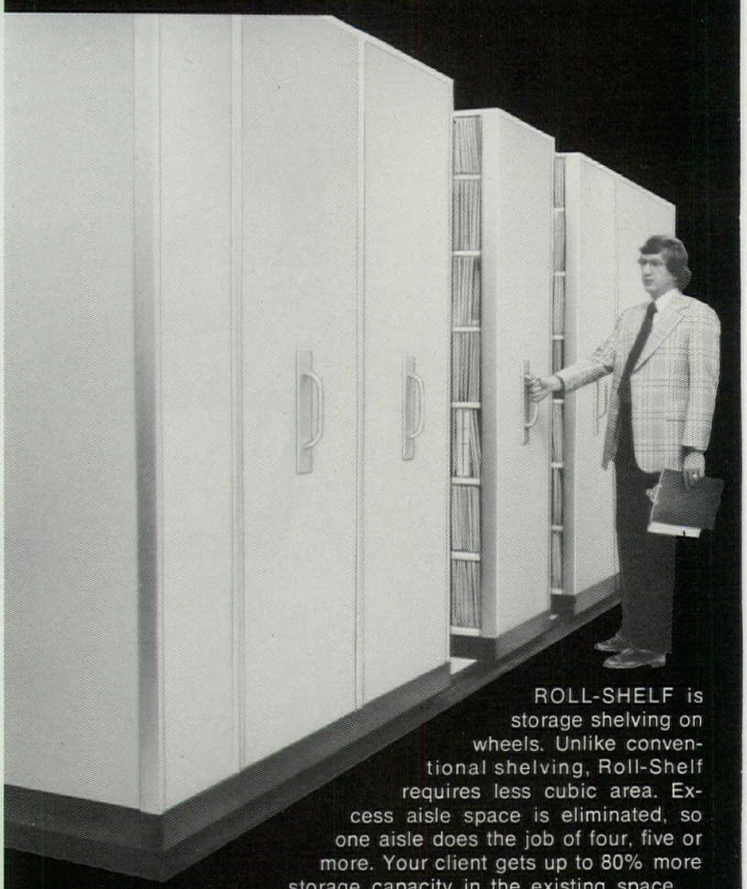

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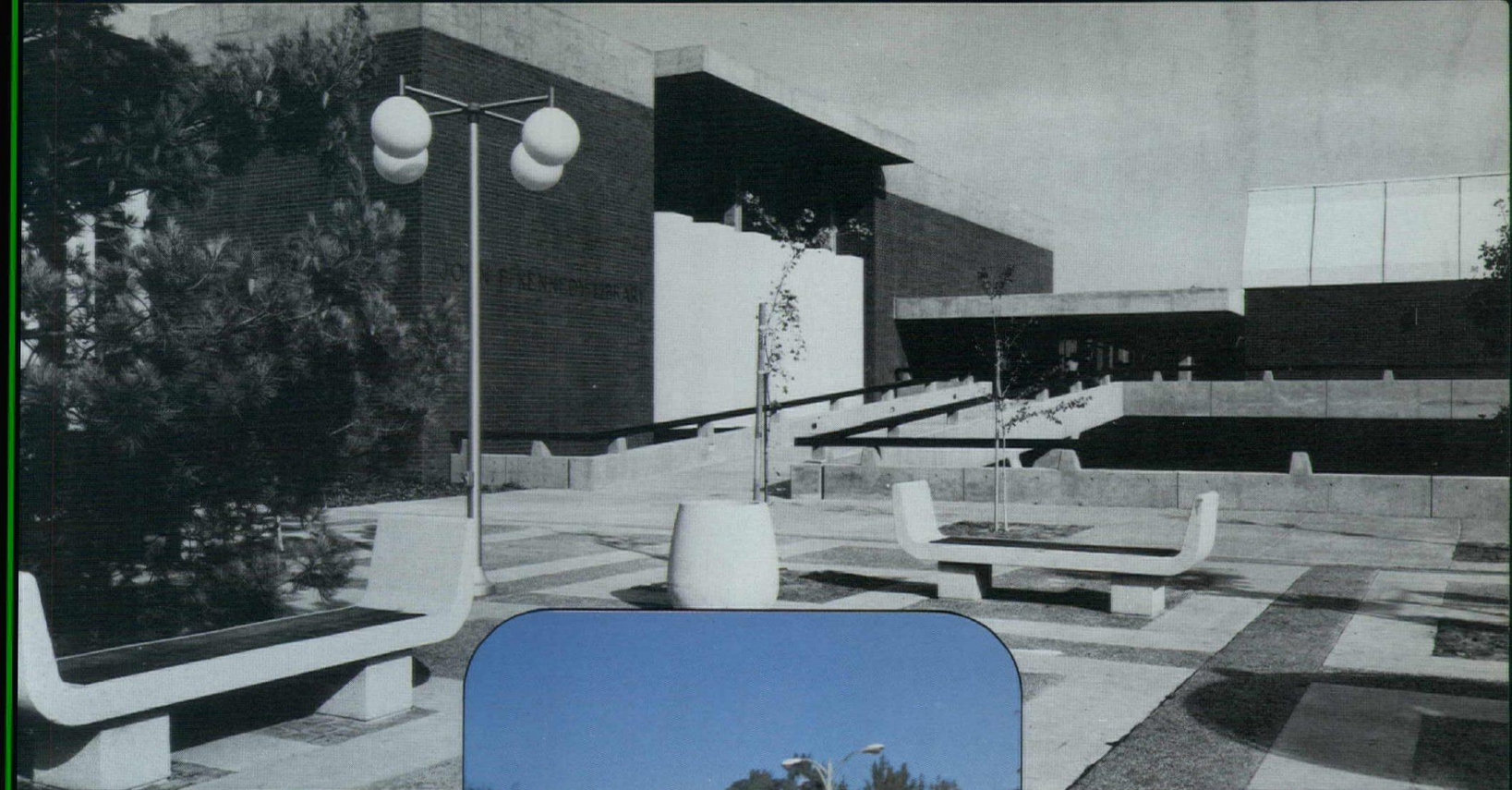

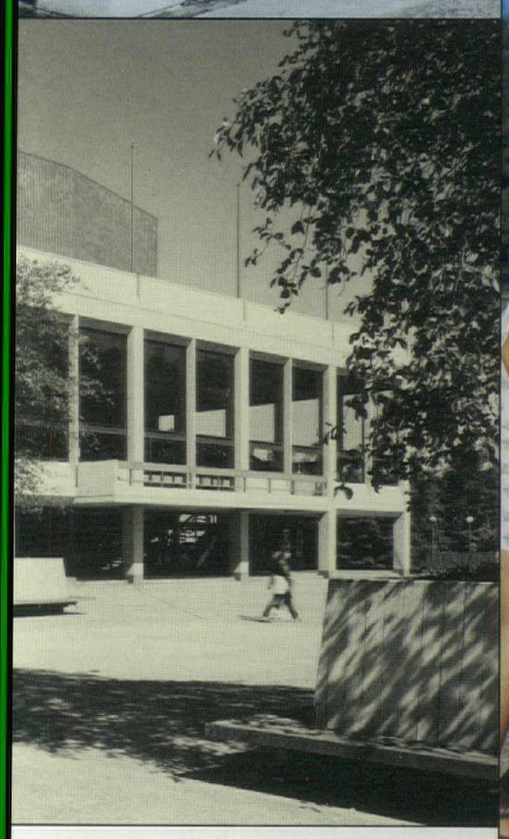

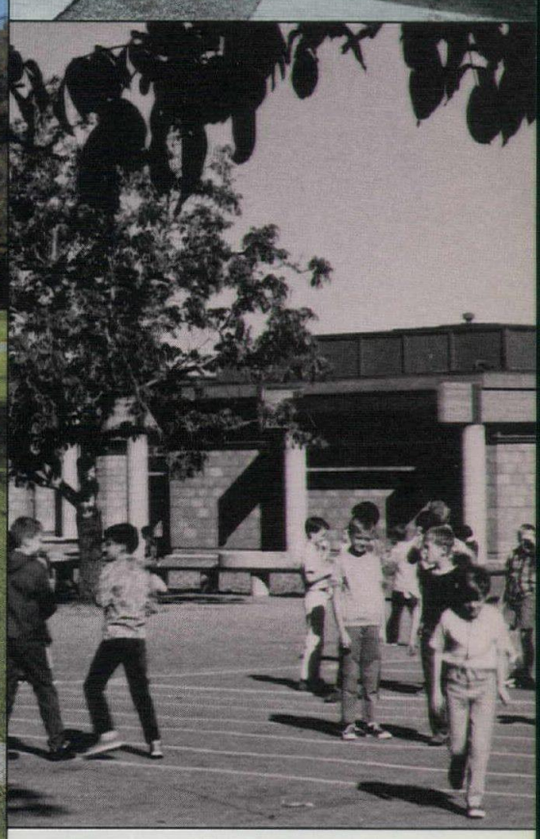

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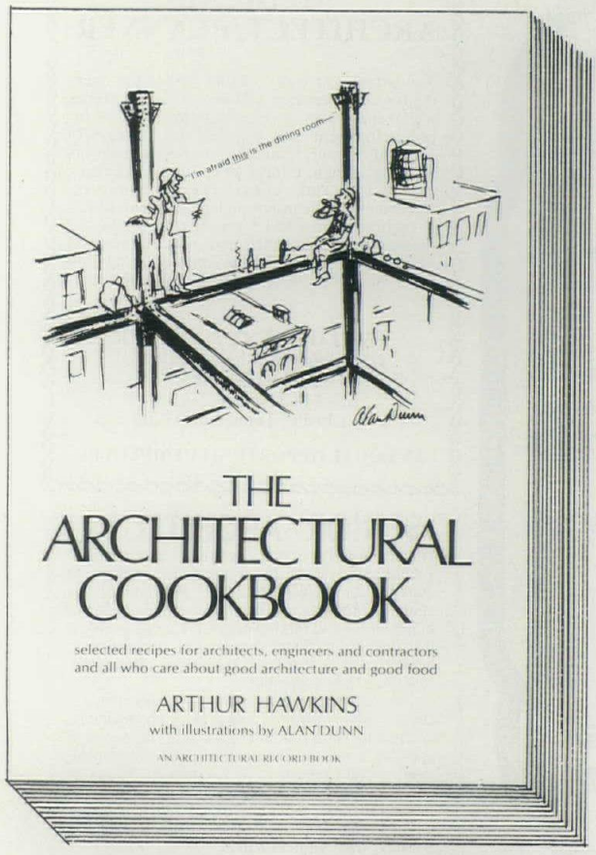

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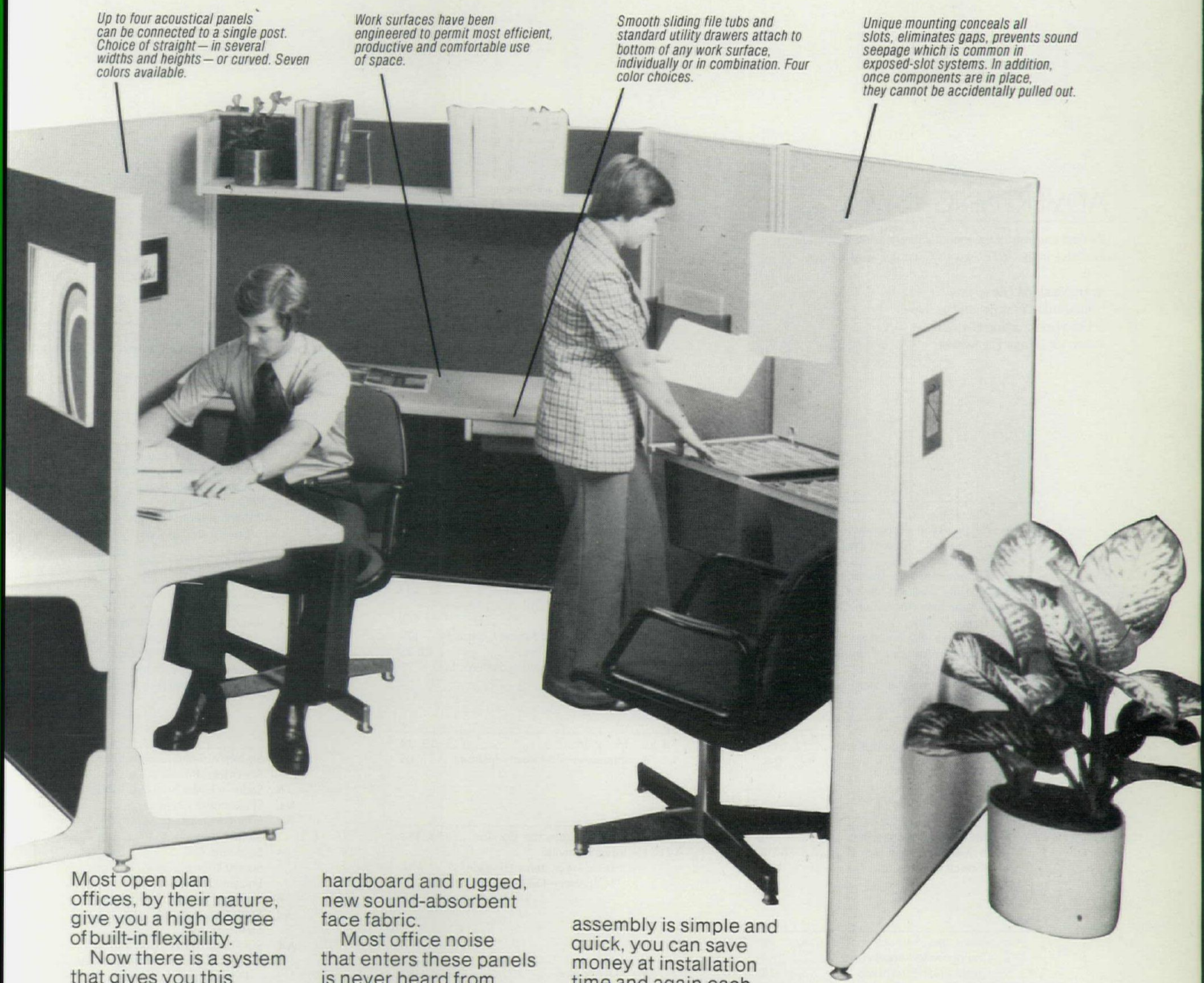

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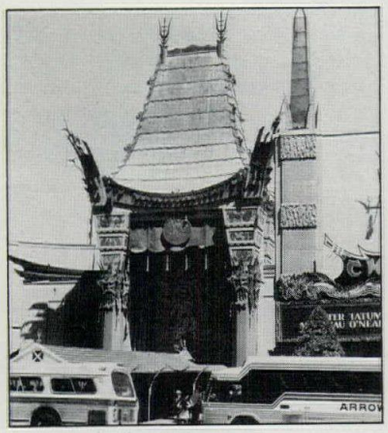

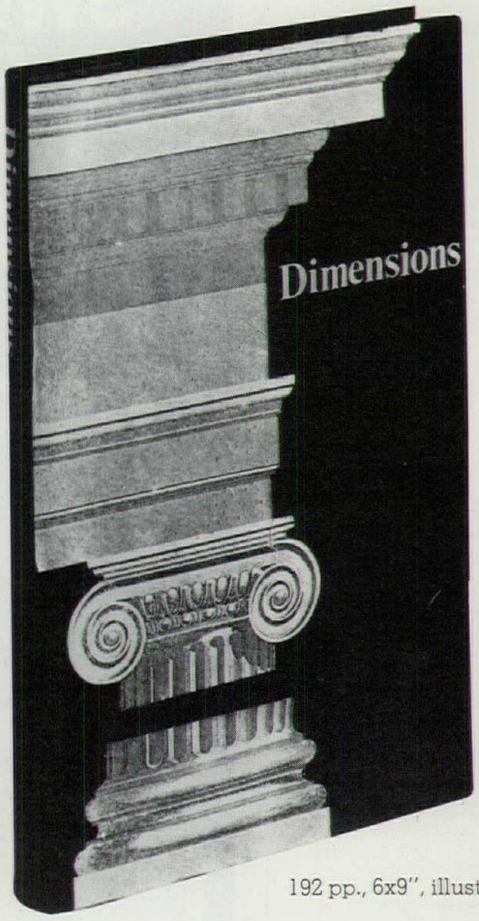

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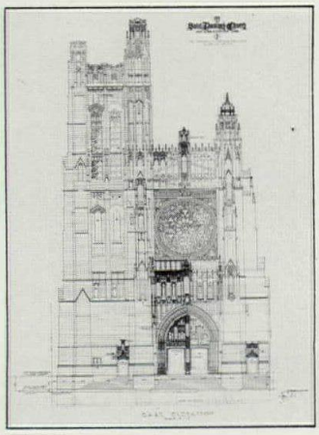

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