



BUILDING TYPES STUDY 510:

THE CASE FOR DESIGN QUALITY IN TODAY'S MARKETPLACE

FOUR STUDIES OF COLLABORATION BETWEEN ARCHITECTS AND DEVELOPERS THAT EXPLORE THE ARITHMETIC OF EXCELLENCE

FULL CONTENTS ON PAGES 10 and 11

SEMI-ANNUAL INDEX ON PAGES 173-176

ARCHITECTURAL RECORD

DECEMBER 1977

12

A MCGRAW-HILL PUBLICATION FIVE DOLLARS PER COPY

Structural steel "system" cuts cost of Boston area schools.



Simple and repetitious structures hold down design and engineering time, ease problem solving, and save money.

Boston's Public Facilities Department has sponsored the development of a pre-designed, pre-engineered structural steel system that has been adopted for more than \$180,000,000 of new school construction in the Boston area. Known as the BOSTCO system (see box), it establishes guidelines in advance for structural framing, snow loads, fire proofing, and many other structural details. Developers were the Engineers Design Group, Inc. of Cambridge.

The BOSTCO system has been successfully used by a number of schools in the Boston area. Two schools are illustrated here, one in the city and one in an outlying area.

Bethlehem's Sales Engineering Division offers numerous technical and advisory services. For example, our preliminary frame analysis program is designed to help you determine the most economical steel frame for your



depend
on
Bethlehem



building. We also have a full library of engineering and design aids, product catalogs, slide presentations, and building case history studies geared to help you design more efficiently in steel.

For more information, get in touch with a Bethlehem Sales Engineer through the Bethlehem sales office nearest you. Bethlehem Steel Corporation, Bethlehem, PA 18016.

SALES OFFICES

Atlanta (404) 522-4918
Baltimore (301) 685-5700
Boston (617) 267-2111
Buffalo (716) 856-2400
Chicago (312) 664-5422
Cincinnati (513) 381-6440
Cleveland (216) 696-1881
Detroit (313) 336-5500
Houston (713) 659-8060
Los Angeles (213) 726-0611
Milwaukee (414) 272-0835
New York (212) 688-5522
Philadelphia (215) 561-1100
Pittsburgh (412) 281-5900
St. Louis (314) 726-4500
San Francisco (415) 981-2121
Seattle (206) 285-2200

IT'S ABOUT TIME ENGINEERS, ARCHITECTS AND ACCOUNTANTS AGREED ON SOMETHING.



WITH UNCANNY EFFICIENCY, GOOD LOOKS, AND COMPETITIVE PRICE, WIDE-LITE'S NEW SPECTRA® IX IS IT.

The engineer wants to specify an HID downlight for the parking lot that's capable of smooth illumination without vision-robbing hot spots and shadows.

The architect wants to be sure it's as attractive in the daylight as it is at night.

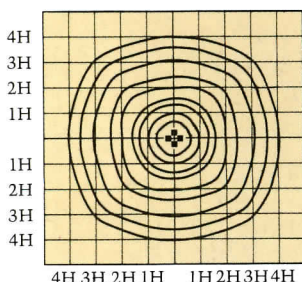
The accountant just cares about the bottom line. He wants a fixture that's competitively priced and inexpensive to maintain.

Any good downlight can satisfy one or two, but only Spectra® IX from Wide-Lite has what it takes to keep all three happy.

THE "SQUIRCL", A NEW HIGH IN EFFICIENCY.

Spectra® IX combines energy-saving metal halide lamps with Wide-Lite's high-purity specular aluminum reflector, polished and anodized for 85% reflectance. The result is a highly efficient new distribution pattern that combines the best of both square and circle, as shown in the diagram.

TYPICAL DISTRIBUTION



We call it the "Squircl" pattern, and when there's a specified minimum light level to meet, it can actually mean fewer required fixtures and poles than with competitive lighting. It's available with our drop acrylic lens for maximum spacing to mounting heights, or with our flat, tempered glass lens for exceptional glare control. Both the flat and drop lens version meet the IES definition of cutoff distribution.

BEAUTY AT ITS BEST, AND LONGEST.

As you can see, the Spectra® IX was designed with an eye for styling. And its crisp, clean good looks will stay that way for years to come thanks to the best known protection available:

our own dark bronze UltraClad coating. A polyester powder finish electrostatically applied and fused to the fixture housing under high temperature, it's more colorfast and abrasion-resistant than any anodic finish available.

SAVE NOW, SAVE LATER.

Spectra® IX comes with an initial price as low as, if not below, our competitors.

Thanks to superb efficiency, sealed and rugged construction, high quality encapsulated ballast, and easy relamping, Spectra® IX will keep on saving you money year after year.

But that's nothing new for Wide-Lite. Our popular Spectra® VIII downlight and all the rest of our fine lighting fixtures are famous for just that kind of quality. Our published three-year limited warranty is standard equipment on each and every one.

Write for our free brochure. Whether you're an engineer, architect, or accountant, you'll like what it has to say.

WideLite

P. O. Box 606, San Marcos, Texas 78666
Wide-Lite® products also manufactured in Australia, Belgium (for Europe), Canada, Mexico, Great Britain, Venezuela and South Africa.

For more data, circle 3 on inquiry card

Letters to the editor

Thank you for the generous review of my book, *Form Follows Fiasco (Why Modern Architecture Hasn't Worked)*, by my friend Jonathan Barnett.

I won't try to respond to every one of Jon's points, because I don't think I should pre-empt another two pages of your excellent magazine; but I would like to make *one* point: it is quite true that the arguments made in my book have long been familiar to those of us who have read the writings of Jane Jacobs, Robert Venturi, and others.

But these insights are not universally shared. All over the world—especially in developing and underdeveloped countries—the diagrams first proposed by modern pioneers in the 1920s are actually being built, every single day of every single week. When you look at the skylines of such cities as Zagreb, Nairobi, New Delhi, Brasilia—or, for that matter, the skyline of Houston, Texas (another developing country)—you suddenly realize that everyone still takes those diagrams very seriously indeed.

In fact, the very issue of ARCHITECTURAL RECORD which contained Jon Barnett's review also contained, on almost every page, a photograph or rendering of a project in which neither Jon nor I would wish to be caught dead—or, for that matter, alive.

*Peter Blake, FAIA
Boston Architectural Center
Boston, Mass.*

P.S. I am sorry that Jon Barnett hasn't learned how to laugh while grinding his teeth. I'd be happy to recommend an orthodontist if the disability persists.

—P.B.

Although his is hardly a neglected art, the architectural photographer often seems lost in the welter of credits when a major building is published.

May I, then, rescue Nick Wheeler from the minuscule type size assigned to him in your September issue, and clamorously applaud his two-page full-color photograph of the new Johns-Manville Building. In its almost staggering beauty, this is, quite simply, one of the most remarkable architectural photographs I have ever seen.

*Rob Cuscaden
Geneva, Ill.*

Read with interest but not surprise the editorial in September RECORD regarding the number of people attending the architect's panel in Fairfield County, Connecticut.

This lack of interest in architecture

is all around us. What can we as architects do about it?

One thought for the cause—begin teaching architectural "awareness" in the youngest school years—i.e., right from kindergarten.

I can speak to this concept with first-hand knowledge, having devoted many hours as a volunteer and as a paid instructor under grant in all the grades from K to 12.

At this time I am still very involved as architect-in-residence for the White Plains, New York, school system.

While devoting some 10 or 12 hours a week making "Architectural Awareness" a reality to young minds, I realized that I am making myself more "aware." What I am doing has enhanced my "being" as a professional and the spin-off of so many new contacts has increased my volume of work. I have been given much free publicity and am truly enjoying what I am doing. To work with students while their minds are still open and elastic; and to work directly with them on "hands on" projects of our own choosing, to develop a method of creative thinking, design and implementation wherein the student, teacher and architect work as a team, is without any doubt a sure way of preserving architecture for all of us.

At first the teachers were skeptical and hesitant about the whole idea. Now I find that I am in demand and have been asked to give workshops to the interested teachers in order to further spread the good things that are happening.

Working with kids has only shown me the great future that is out there for all architects who can think "young."

We are planning architectural projects in the 21st century. Believe me—it's great!

I would be happy to present my experiences to any architect interested in furthering the profession through education.

*Frank W. Santillo, AIA
White Plains, N.Y.*

My partner and I would like to thank you for your fine presentation of our Turtle Bay Towers project in the September issue.

The model apartment shown in the upper photograph on page 114 was decorated by Loreli Kaplan and credit was inadvertently not given in our submission. We would appreciate it if ARCHITECTURAL RECORD could correct our oversight in the next issue.

*Peter Thomson, AIA
Bernard Rothzeit & Partners, PC
New York, N.Y.*

Calendar

DECEMBER

12-14 Seminar, "Solar Energy," sponsored by New York University's School of Continuing Education; New York City. Contact: Heidi E. Kaplan, Information Services Manager, New York Conference Management Center, 360 Lexington Ave., New York, N.Y. 10017.

21-23 Exhibition of empathic sculptures and drawings by Charles Pollock, sponsored by Thonet Industries, Inc., Thonet Showroom at 305 E. 63rd St., New York City. Contact: Phyllis McCullough, Thonet Industries, Inc., 491 E. Princess St., York, Pa. 17405.

JANUARY

2-6 The 1978 Mid-Winter Meeting of Building Officials and Code Administrators (BOCA) International, Inc., "Spotlight on Energy," Ft. Lauderdale Hilton, Florida. Contact: BOCA International, Joan Parker, 1313 E. 60th St., Chicago, Ill. 60637.

22-26 The 1978 International Concrete & Aggregates Show, sponsored by the National Sand and Gravel Association, the National Ready Mixed Concrete Association, and the National Crushed Stone Association; Las Vegas Convention Center. Contact: Vincent P. Ahearn, Jr., Exhibit Manager, 1978 International Concrete & Aggregates Show, 900 Spring St., Silver Spring, Md. 20910.

30-February 1 The Southeastern Air-Conditioning, Heating, Refrigerating Exposition, World Congress Center in Atlanta, Georgia. During the same period, ASHRAE's national meeting is being held at the Atlanta Hilton Hotel. Contact: Exposition Management, International Exposition Company, 200 Park Ave., New York, N.Y. 10017.

FEBRUARY

16-18 The Second National Passive Solar Heating and Cooling Conference and Workshop, sponsored by the Mid-Atlantic Solar Energy Association; University of Pennsylvania, Philadelphia. Contact: Linda Knapp, Coordinator, Mid-Atlantic Solar Energy Association, Department of Architecture, Graduate School of Fine Arts, University of Pennsylvania, Philadelphia, Pa. 19104.

APRIL

9-13 "Design Atlanta" contract residential market, sponsored by Designer Products Ltd., Atlanta, Georgia. Contact: Tom Drum, Chairman, Designer Products Ltd., ADAC Space 49, 351 Peachtree Hills Ave., N.E., Atlanta, Ga. 30305.

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

December 1977, Vol. 162, No. 8. Title® reg. in U.S. Patent Office, copyright © 1977 by McGraw-Hill, Inc. All rights reserved. Copyright not claimed on front cover and editorial four-color separations. Indexed in Reader's Guide to Periodical Literature, Art Index, Applied Science and Technology Index, Engineering Index, and The Architectural Index. Published monthly except May, August, and October when semi-monthly, by McGraw-Hill, Inc.

Quotations on reprints of articles available. Every possible effort will be made to return material submitted for possible publication (if accompanied by stamped, addressed envelope), but the editors and the corporation will not be responsible for loss or damage.

EXECUTIVE, EDITORIAL, CIRCULATION AND ADVERTISING OFFICES: 1221 Avenue of the Americas, New York, N.Y. 10020. Other Editorial Offices: 425 Battery Street, San Francisco, Cal. 94111.

PUBLICATION OFFICE: 1221 Avenue of the Americas, New York, New York 10020. Second-class postage paid at New York, New York 10001 and at additional mailing offices.

OFFICERS OF MCGRAW-HILL PUBLICATIONS COMPANY: Gordon L. Jones, president; Paul F. McPherson, executive vice president; Gene W. Simpson, group vice president; senior vice presidents: James E. Boddorf, planning and development; David G. Jensen, manufacturing; Ralph R. Schulz, editorial; vice-presidents: James E. Hackett, controller; Robert L. Leyburn, circulation; Edward E. Schirmer, sales.

CORPORATION OFFICERS: Harold W. McGraw, president, chief executive officer and chairman of the board; Robert N. Landes, senior vice president and secretary; Ralph J. Webb, treasurer.

SUBSCRIPTIONS: Subscriptions solicited only from architects and engineers. Position, firm connection, and type of firm must be indicated on subscription orders. Please allow 4-12 weeks for shipment.

CHANGE OF ADDRESS or subscription service letters should be forwarded to Fulfillment Manager, ARCHITECTURAL RECORD, P.O. Box 430, Hightstown, N.J. 08520. Provide old and new addresses, zip code or postal zone number. If possible, attach issue address label. Annual subscription prices: U.S., U.S. possessions: \$17.00 for architects, engineers and other individuals in the fields served; others \$26.00. Canada: \$19.00 for architects, engineers and other individuals in the fields served; others \$28.00. Australia, Brazil, and Japan: \$40.00 to architects, engineers; others, \$45.00. Other countries: \$35.00 to architects, engineers; others, \$45.00. Single copies: \$5.00.

QUARANTEE: Publisher agrees to refund that part of subscription price applying to unfulfilled part of subscription if service is unsatisfactory.

ASSOCIATED SERVICES/McGraw-Hill Information Systems Co.: Sweet's Catalog Files (General Building, Engineering, Industrial Construction and Renovation, Light Residential Construction, Interiors), Dodge Building Cost Services, Dodge Reports and Bulletins, Dodge/SCAN Microfilm Systems, Dodge Management Control Service, Dodge Construction Statistics, Dodge regional construction newspapers (Chicago, Denver, Los Angeles, San Francisco).

THIS ISSUE is published in national and separate editions. Additional pages of separate editions numbered or allowed for as follows: Western Section 32-1 through 32-2. POSTMASTER: PLEASE SEND FORM 3579 to Fulfillment Manager, ARCHITECTURAL RECORD, P.O. Box 430, Hightstown, N.J. 08520



E CUBE 75

THE COMPUTER PROGRAM THAT NOW DOES MORE TO SAVE ENERGY AND MONEY.

The new, improved E CUBE 75 produces an accurate, three-part Life Cycle Energy Analysis at low cost. With many new features it computes the hour-by-hour energy requirements of your building or planned building for an entire year—taking into account all weather, design, operation, and occupancy factors.

Air Side Systems Simulations.

E CUBE 75 can now handle Variable Air Volume (VAV) systems directly. It also offers expanded treatment of Multizone, Dual-Duct, and Reheat air distribution systems. The energy consumption of various air side systems can be predicted—you can compare their performances and costs, and pick the one that's best. Other improvements make E CUBE 75 more complete and easier to use.

Energy Systems Simulations.

E CUBE 75 can simulate many different energy systems—from central stations to rooftops. It projects all costs, so you can choose the system or combination of sys-

tems that will work most efficiently and most economically for you.

E CUBE 75 is Inexpensive. For example, a life cycle energy analysis of a large building with 8 zones, 2 air side simulations, 4 system simulations and 4 economic comparisons costs less than \$160.

E CUBE 75 is Accurate. That's what it says in HUD Report "Study of Computer Utility Analysis." E CUBE is the most advanced program in this field with thousands of runs made by people in private practice, industry, American Gas Association member companies, and the U.S. government.

E CUBE 75 is Private. You give your information directly to the computer. Your project data and the results are never seen by any third party. Of course, we stand ready to provide assistance at your request.

E CUBE has been a big help to thousands. And the New Improved E CUBE 75 can help you even more to make the right decision. Right financially, and right for conserving America's energy.

For more information, or details of Seminars for new and advanced E CUBE 75 users, rmail in the coupon or call Stephen A. Lewis (703) 524-2000.

Stephen A. Lewis, Manager
Energy Systems Analysis
American Gas Association
1515 Wilson Boulevard
Arlington, Va. 22209.



- Send more information on E CUBE.
 Send information on Seminars.

Name _____

Address _____

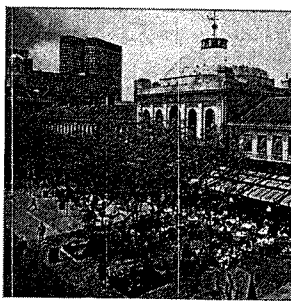
City _____

State _____ Zip _____

**ENERGY CONSERVATION
UTILIZING BETTER ENGINEERING**

 American Gas Association 

For more data, circle 5 on inquiry card



Cover: Faneuil Hall Marketplace
Boston, Massachusetts
Architects: Benjamin Thompson and Associates
Photographer: © Steve Rosenthal

EDITOR

WALTER F. WAGNER, JR., AIA

MANAGING EDITOR

HERBERT L. SMITH, JR., AIA

SENIOR EDITORS

ROBERT E. FISCHER
MILDRED F. SCHMERTZ, FAIA

ASSOCIATE EDITORS

GERALD ALLEN
GRACE M. ANDERSON
BARCLAY F. GORDON
CHARLES E. HAMLIN
CHARLES K. HOYT, AIA
WILLIAM MARLIN

ASSISTANT EDITOR

JANET NAIRN

PRODUCTION EDITOR

ANNETTE K. NETBURN

DESIGN

ALEX H. STILLANO, Director
ALBERTO BUCCHIANERI, Associate
ANNA-MARIA EGGER, Assistant
MURIEL CUTTRELL, Illustration
J. DYCK FLEDDERUS, Illustration
JAN WHITE, Consultant

EDITORIAL CONSULTANTS

EDWARD LARRABEE BARNES, FAIA
JONATHAN BARNETT, AIA, Urban design
GEORGE A. CHRISTIE, JR., Economics
ERNEST MICKEL, Hon. AIA, Washington
PAUL RUDOLPH, FAIA
Foreign architecture:
L'Architecture d'Aujourd'hui, Paris

McGRAW-HILL WORLD NEWS

RALPH R. SCHULZ, Director
9 domestic and 10
international news bureaus:
Bonn, Brussels, Buenos Aires,
London, Milan, Moscow, Paris,
Singapore, Tokyo, Toronto.

SALES MANAGER

LOUIS F. KUTSCHER

CIRCULATION DIRECTOR

HUGH S. DONLAN

BUSINESS MANAGER

JOSEPH R. WUNK

ASSISTANT TO THE PUBLISHER

ELIZABETH HAYMAN

PUBLISHER

BLAKE HUGHES

THE RECORD REPORTS

13 Editorial

Some positive thinking from
the General Services Administration

4 Letters/calendar

33 News in brief

Short items of major
national interest

34 News reports

Plans for a National Museum of the
Building Arts assume solid form
in committee report. GSA will
emphasize the reuse of existing
buildings for government use. The
Gallery at market east, a keystone
in Philadelphia's redevelopment,
opens to downtown shoppers.

37 Human settlements: world news

39 Buildings in the news

St. Anthony Main, Minneapolis.
Canal Place, New Orleans.

NEXT MONTH IN RECORD

Building Types Study:

Record Interiors of 1978

Each of the 10 award-winning
designs demonstrates a clear understanding
of the precise requirements
of interior design. Each, in its own way,
also reflects the concern felt
throughout the profession that new ways
of defining space, using materials,
conserving energy are urgently in need
of continuing study.

ARCHITECTURAL BUSINESS

53 Legal perspectives

A new bill in Congress, if enacted, spells tax relief to firms subjected to liability exposures

Attorney Arthur T. Kornblut reports
on the Product Liability Insurance
Tax Equity Act which would permit
design professionals to set up
tax-exempt insurance trusts.

56 Business development

Talking the developer's language: the financial analysis

Good designers need not be excluded
from the speculative real estate
market. The first step toward selling
architectural services to developers
is understanding their basic financial
process and designing for it.

61 Building activity

The 1977 Housing and Community Development Act: inner-city revitalization takes

a big step forward

Nathaniel J. Parish and Csaba Teglas,
of the planning firm of Raymond,
Parish, Pine & Weiner, Inc., outline
some of the major new initiatives
of the recently signed Federal act
authorizing \$14 billion in
construction over the next three years.

63 New ANSI standards on barrier-free design expected in 1978

Washington correspondent William Hickman
summarizes the progress
of revised comprehensive standards
expected to impact all
public construction and a majority
of private building.

133 Product reports

135 Office literature

173 Semi-annual index

160 Classified advertising

178 Advertising index

181 Reader service inquiry card

BUILDING TYPES STUDY 510

THE CASE FOR DESIGN QUALITY IN TODAY'S MARKETPLACE

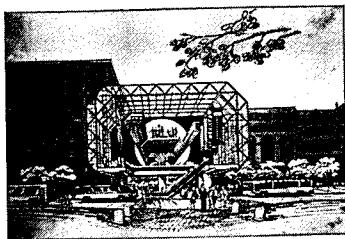
FOUR STUDIES OF COLLABORATION BETWEEN ARCHITECTS AND DEVELOPERS THAT EXPLORE THE ARITHMETIC OF EXCELLENCE

81 Introduction

One of the most frequent complaints of architects is that their design standards are too often compromised when they work for developers—that the “constraints of the marketplace” produce bargain-basement results. This issue suggests that there is an alternative—that good architects working with good developers, with community input where it is appropriate and needed, can result not just in a profitable venture for the developer, but a project that the architect can be proud of and that will be of real benefit to the community.

84 Brightening up some beaten paths

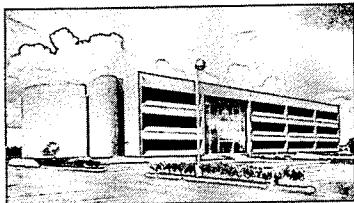
Washington architect Arthur Cotton Moore has designed strategies for implementing community development in such contrasting locations as Baltimore, Maryland, Petersburg, Virginia, Schenectady, New York, and Columbus, Georgia—design, in his case, being a process of identifying, and identifying with, the people who can make it happen.

**96 Four U.S. projects under development by Mondev International**

In Salem, Massachusetts, Colorado Springs, Colorado, Burlington, Vermont, and Seattle, Washington, Mondev, architects selected by Mondev, and the communities as represented by their redevelopment authorities are working together to revive their downtowns. These developer-architect-community teams are revitalizing these cities by creating concepts of mixed-use that come out of what the community is and wants to be, combining public and private functions and funding, complementing rather than competing with existing functions, linking new development with existing activity and stimulating related development beyond the project sites.

108 What's a high-style design firm like Gwathmey-Siegel doing designing speculative office buildings?

Gwathmey-Siegel—a firm with an office full of the highest design awards, best known for its elegant custom work—has in the last two years been working for two experienced office-building developers: The Interequities Group of Houston and The Evans Partnership in New Jersey. Working within the budget constraints and market insights of these two developers, Gwathmey-Siegel has designed some very high-quality buildings—buildings which meet the firm's design standards, the developers' budgets, and which have rented up in record time.

**116 Boston's historic Faneuil Hall Marketplace**

The success of the new Faneuil Hall Marketplace is the work of many people—architects, historians, preservationists, planners within the Boston Redevelopment Authority, HUD officials, developers and bankers—who have been concerned with the development of Boston's downtown waterfront area for more than 15 years. The three 19th-century market buildings and the streets between them have finally been restored and transformed by architect Benjamin Thompson and developer James W. Rouse into a highly successful downtown commercial center.

128 And so, we think, the point is made

While RECORD editors do not claim that these case histories are typical, we think they do demonstrate that the arithmetic of the marketplace and the arithmetic of excellence can be brought together—that good architects can work with good developers to create a new standard of quality in the marketplace. Quod erat demonstrandum.



When the architecture is this striking, the ceiling should be this elegant. Highspire Travertone™ from Armstrong.

With all the taste and talent that go into a first-class architectural design, there's one truly first-class way to top it off. And that's with the elegance of a Travertone Ceiling from Armstrong. Like all six of our Travertone designs, Highspire

is fire-retardant mineral-wool fiberboard with a distinctive surface pattern. In the case of Highspire, random abstract embossing creates a rich and rewarding overhead visual. You can use Highspire in either 12"x12" tiles or in 24"x24" tegular-edged

panels that extend slightly below the suspended grid. But whichever you choose, you'll find one thing for certain. Like good design, Highspire is in a class by itself. For Travertone booklet, write Armstrong, 4208 Rock St., Lancaster, Pa. 17604

For more data, circle 1 on inquiry card

FROM THE  INDOOR WORLD® OF
Armstrong

Some positive thinking from the General Services Administration

Aside from Dodge economist George Christie's Sweet's Construction Forecast, which predicts a healthy 15 per cent rise in non-residential building next year even in the long-troubled Northeast (see RECORD November, page 55), the best news delivered at last month's Building Products Executive Council was some pretty strong and enlightened commitments from the still-new GSA Administrator Jay Solomon.

What GSA is doing is of course important to everyone in the building industry since that agency continues, despite the drop-off in Federal building since the salad days, to be the largest "owner" in the country (with over 9,000 owned or leased buildings) and very probably the largest client for architectural and engineering services. A couple of those commitments from Administrator Solomon's speech:

The GSA is now disposing, sometimes as a gift to communities, of excess property: "Some of this excess property is offered for sale (by the Office of Real Property) to the private sector. Last year we received more than \$58 million from such sales. Other property is offered to communities for public uses such as schools, hospitals, parks and recreational facilities. Last year properties valued in excess of \$79 million were donated; and since January of this year, 133 properties containing more than 65,000 acres with an acquisition cost in excess of \$100 million have been given to public bodies. This includes 46 properties, containing almost 2500 acres which cost almost \$40 million, for health and education." All of which seems to me to be fine new positive thinking from Washington.

Item 2—which in some ways is a mixed blessing but nonetheless, in my view, a positive step—is the Fed's new emphasis on recycling of older buildings. (The "mixed" part is, of course, that for every commission for recycling an older building, there is not a commission for a new building.) At any rate, reports Administrator Solomon: "There is a change of emphasis from new construction to the restoration and rescue of old buildings . . . Our priorities are to look for buildings of historic value to restore, lease space second, and start new construction as a last alternative."

This new emphasis on restoration was, of course, recommended some years ago by a special task force of the National Endowment for the Arts, and has now been written into law. Administrator Solomon's reinforcement will be taken by most as a positive step. His reasons for the new policy are interesting:

"First, it takes less energy to remodel an old building than to build from the ground." (This, of course, is a mandatory statement for anyone at or near the Cabinet level in Washington these days. More importantly . . .) "Second, most of the buildings are located in the central city near mass transit, which will become more important in the future . . . Third, if we remodel and re-use old buildings we will be doing our part to save the central city . . . Fourth, utilizing space in the central city will make the government more accessible to minorities to whom we are committed to give equal employment opportunities . . ."

About the mixed-blessing part: Said Mr. Solomon: "I do not wish to leave you with the notion that we are abandoning all new construction"—and he pointed out that in this fiscal year, projects will be started with a construction cost of nearly \$890 million."

Finally (more positive thinking) Mr. Solomon spoke about "GSA's Design Action Center which, several months ago, requested from the design community and other Federal agencies suggestions to improve the quality of Federal design. Dominating the list of suggestions was the call for a Federal design policy. It was recommended that an appropriate policymaking body be designated to assume the responsibility for the delineation and the implementation of that policy."

Well, right on, Mr. Administrator. One might modestly suggest that since so many of the moves in the right direction so far came from the Arts + Architecture Program of the National Endowment for the Arts (notably, adaptive reuse, mixed-use, and art-in-architecture), the "appropriate body to assume the responsibility for delineation of a new Federal design policy" might be the National Endowment.

Indeed, as was suggested some time ago in several Endowment reports, the GSA could do a lot worse than simply dig out those old Guiding Principles for Federal Architecture—written by Daniel Patrick Moynihan and Arthur Goldberg back during the Kennedy Administration—and use that as design policy. The Endowment has, in written form, all the material for updating them—including those new emphases on adaptive re-use and mixed use.

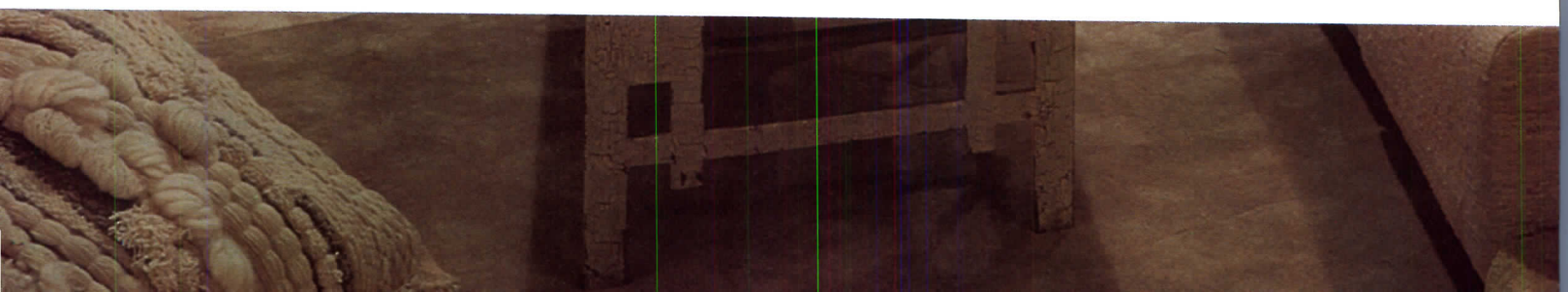
At any rate, for all of that positive thinking coming out of GSA these days, one gets some new hope about the quality of Federal buildings in the future. For which, if it happens, great thanks will be due Mr. Solomon.

—Walter F. Wagner, Jr.



**Walls that live up to your lofty ideas.
That's the beauty of Masonite.**

Brand



Construction costs rose an average 10.4 per cent across the nation in the 12-month period ending September 30, according to the Dodge Building Costs Services Department of the McGraw-Hill Information Systems Company. This compares with the 6.2 per cent increase registered a year earlier. The major increases were observed in lumber and plaster, followed by brick and cement. (The White House Inflation Council reported in October that the prices for softwood lumber and plywood had soared more than 50 per cent over the past two years, while wholesale prices of all lumber products had gone up more than 12 per cent in the previous three months alone.) The cost of labor, however, appeared to be increasing at a slower rate than last year.

A detailed report for the Congress puts flesh on a project for a National Museum of the Building Arts. The first priorities called for by the Committee are the establishment and funding of a National Building Arts Foundation and the acquisition of the Pension Building in Washington, D.C., as a home for the museum. Details on page 34.

GSA intends to emphasize the restoration and reuse of existing building in preference to new construction, said Administrator Jay Solomon in a recent speech. Details on page 35.

"Balanced strength" in all categories of construction characterized a 39 per cent rise in September contracts above the figures for September 1976, according to the F.W. Dodge Division of McGraw-Hill Information Systems Company. The month's total of \$13.7 billion in contracts reflects gains of 31 per cent in nonresidential building, 44 per cent in housing and 40 per cent in heavy construction. Moreover, commented Dodge chief economist George A. Christie, "The most recent quarter brought a decided improvement in contracting for commercial and industrial building—and this was capped by a September gain of 62 per cent." The construction of schools, hospitals and other nonresidential building, however, "barely held even with last year's level."

Accreditation has been granted to the Department of Architecture at New York Institute of Technology in Old Westbury, Long Island, by the National Architectural Accrediting Board, which has given its imprimatur to the school's five-year Bachelor of Architecture Program. The department received the approval of the New York State Board of Regents in 1973 and graduated its first class, 21 students, in 1975. At present, 626 students are enrolled in the department—100 studying for the B. Arch., the remainder completing requirements for the Bachelor of Science degree in Architecture Technology, a four-year program. The Department of Architecture is encompassed in New York Tech's Division of Architecture and the Arts, which is headed by Dean Olindo Grossi.

The opening of the Gallery at market east forges an essential link in Philadelphia's downtown redevelopment. Bower and Fradley are the architects. Details on page 35.

The American Institute of Architects has named Harold Fleming, Hon. AIA, its first "public" director. A long-time advisor to the AIA on urban growth and affirmative action, Mr. Fleming is the founder and current president of the Washington-based Potomac Institute, a nonprofit research and advisory group on urban social problems. The addition of a consumer representative to the board reflects a resolution passed at the last AIA convention.

Chicago will have two exhibits of work by women in architecture on view next month. "Chicago Women Architects: Contemporary Directions" will open January 4 at Artemisia Gallery, which is a combination exhibition gallery and fund formed by women artists in the Chicago area. "Women in American Architecture: A Historic and Contemporary Perspective," which will open January 10 at ArchiCenter, was organized by architect Susana Torre and the New York Architectural League and is presently on national tour.

The AGC have mounted a legal attack on the government's quota system for minority construction firms receiving contracts under the Public Works Employment Act of 1977. Details on page 35.

A new journal, American Preservation, made its first appearance with the issue of October-November 1977. Subtitled *The Magazine for Historic and Neighborhood Preservation*, its publisher and editor is Porter Briggs. Articles in the first issue, virtually all lavishly illustrated in four colors, included articles on architectural and neighborhood restoration and preservation in Helena, Annapolis, Galveston and Little Rock, a story on a small firm of contemporary craftsmen producing Victorian millwork, and a report on the displacement of low-income families by neighborhood restorations. The magazine is published bimonthly at the Bracy House, 620 East Sixth, Little Rock, Arkansas 72203.

The subject of the 1978 LeBrun Traveling Fellowship Competition is the creation of a "revitalized downtown" while retaining and recycling the bulk of an existing city with a population of 50,000 to 250,000. Nomination forms for the competition, which carries a prize of \$5,000 for six months travel and study outside the United States, are available from the LeBrun Traveling Fellowship Committee, New York Chapter, American Institute of Architects, 20 West 40th Street, New York, New York 10018.

Report on the National Museum of the Building Arts asks for Federal funds and a home in the Pension Building

Hopes for a national museum of building assume solid form in a comprehensive outline prepared by the Committee for a National Museum of the Building Arts.

The report, scheduled for publication early this month, will be presented to Congress in support of an appeal for the passage of a National Building Arts Foundation Act. The Foundation would sponsor the Museum and would acquire a home for it—the Pension Building, a Class I historic landmark in Washington, D.C.

The Committee also trusts that the Foundation "would signal the support of the Federal government and give credibility to the effort to secure private-sector support."

Following the establishment and funding of the Foundation, the first priority defined by the proposal is the acquisition of the Pension Building, now owned by the Federal government, leased by the District of Columbia and occupied by the municipal courts. By the end of June 1978, however, the building will be emptied as the courts move to a building of their own.

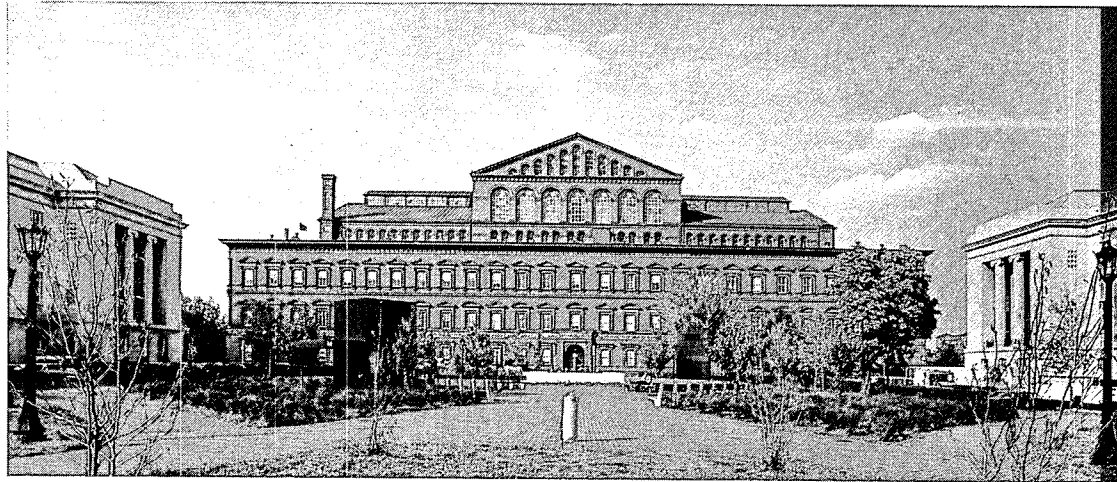
The Pension Building, designed by General Montgomery C. Meigs, an Army engineer, was completed in 1887. A notable building in many respects, its most remarkable feature is a 76-ft-high center courtyard lighted by a clerestory supported by eight giant Corinthian columns, and surrounded by four tiers of galleries. The splendid space has provided a hall for nine inaugural balls, including those for Grover Cleveland's first inauguration in 1885, before the building was completed, and for President Carter's celebrations earlier this year.

General Meigs's design prescience seems to have compassed the energy crisis as well as the late-20th-century vogue for atriums. Operable transoms in the clerestory and ventilation lanterns in the roof exhaust air without the assistance of fans. Meigs reported with satisfaction that the system effects a complete change of air within two minutes. Windows and clerestory were double-glazed, and solar heat gain can be controlled by tilting the roof glass.

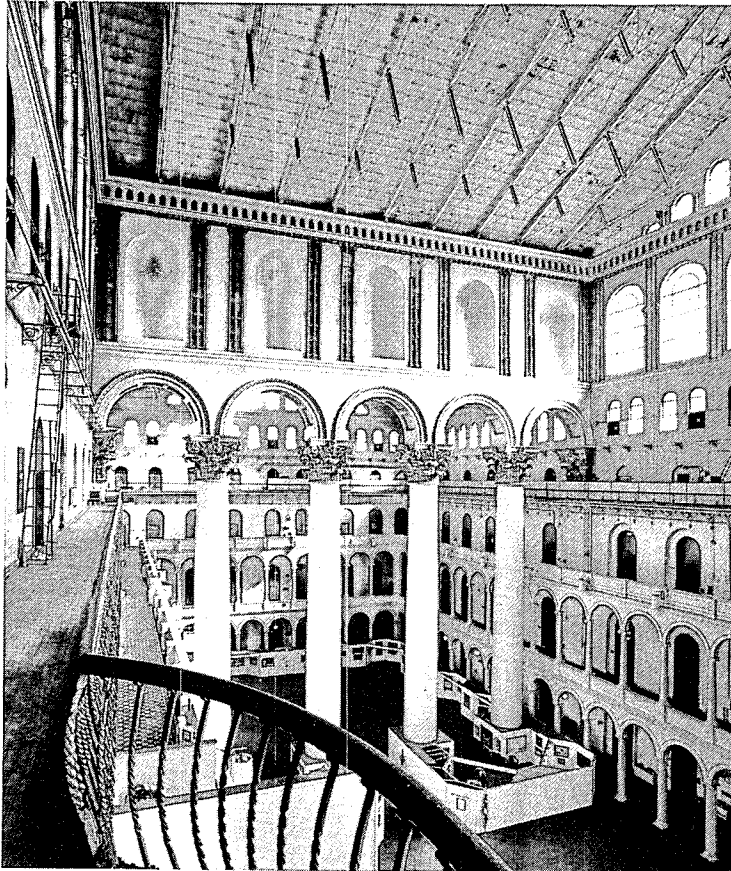
More to the point from the Committee's view, however, the building is highly adaptable as a museum. Permanent exhibitions, the proposal suggests, would be set around the perimeter of the court, leaving the center free as "official Washington's most elegant salon" for receptions and balls.

On the second floor, Meigs provided offices interconnected by archways that have since been closed in. By reopening these arches, the museum could convert the space to a series of galleries for special exhibits.

The Committee also suggests that office space might be leased to nonprofit groups or small Federal agencies with related interests, such as the



Lautman



National Institute for Building Sciences, the Advisory Council on Historic Preservation, or the Federal Architecture Project.

The Committee also produced a slew of ideas for exhibitions, both permanent and special, and for museum programs. The programs fall into two categories: "a building arts forum for public and professional inspiration, public environmental problem-solving, and international exchange," and "a building arts library, archives and national document inventory."

Both the forum and the library would figure in the Committee's plans for an information clearinghouse, "a one-step referral service to make better use of the research and material available." For the organization of technical documents, the proposal would revivify *Urbandoc*, a computerized inventory of articles and papers on urban planning designed earlier by

the City University of New York with funding from the Department of Housing and Urban Development.

The major permanent exhibit suggested by the Committee, "Building America," would be a survey of American building types ranging from the Iroquois long house to the contemporary skyscraper, and comprehending engineering and the techniques of construction as well as architectural history. This would be augmented by a smaller permanent exhibit, "People and Buildings," which the Committee imagines as including mechanized displays "that teach by experience," such as the manipulation of perceived space through changing light and color.

The Committee also envisions a Triennial Building Arts Exposition at which architects, engineers, builders, contractors and product manufacturers would "present the best innovations in building design and construc-

tion to the general public."

The Committee, which prepared this proposal under grants from the National Endowment for the Arts, HUD and private sources, estimates the total initial cost of the museum to be \$21.15 million—\$2 million for research and planning, \$11.65 million to renovate the Pension Building, and \$7.5 million for permanent exhibitions. Annual operating costs are estimated at \$3 million. In addition to the Federal funds needed to begin and operate the museum, the Committee hopes for financial support from the private sector, particularly the building industry and the design professions.

The Committee for a National Museum of the Building Arts drew its membership from a wide spectrum: from the ranks of architects and planners—Frederick Guthrie, Philip Hammer, Kevin Roche, Marietta Tree and David A. Wallace; from among scholars and historians—Albert Bush-Fitch, Carl W. Condit, James Marston Fitch, Bates Lowry, Martin Meyerson, Adolf K. Placzek and William L. C. Wheaton; Robert A. Georgine of AFL-CIO; Dan E. Morgenroth of Owens-Corning Fiberglas; developers Flaxie M. Pinkett and Bernard Weissbord; from engineering, Arthur M. Fox, editor of *Engineering-News Record* and former president of the American Society of Civil Engineers; from publishing—Blake Hughes, publisher of *ARCHITECTURAL RECORD*, William Marlin, *RECORD* associate editor, and Howard E. Paine, art director of *National Geographic*; James Biddle, president of the National Trust for Historic Preservation; R. Buckminster Fuller; Mrs. Eric Mendelsohn; and William Slayton, former executive vice president of the American Institute of Architects.

President of the Committee's Board of Directors is architectural historian Cynthia R. Field. Other directors are architect Chloethiel Woodard Smith, vice president; attorney Herbert M. Franklin, secretary/counsel; architect Beverly Willis; developer James W. Rouse; and architectural critic Wolf Von Eckhardt. Mr. Von Eckhardt, presently on leave from *The Washington Post*, serves the Committee as program director.

GSA stresses adaptive use instead of new construction

Restoration and reuse of existing buildings will be emphasized in the future by the General Services Administration, which will make a corresponding reduction in its level of new construction.

Administrator Jay Solomon suggests that this will set a trend for the private sector that could "have far-reaching implications." He detailed the agency's plans recently to the Building Products Executives Conference in Washington, D.C.

"The day when the Federal government demolishes an old building and only seeks the new is past," Mr. Solomon declared.

"Our priorities for satisfying space requirements are to look for buildings to restore for historic value first, to lease space second, and to start new construction as a last alternative."

For several years, GSA has had \$100 million annually in its repair and alterations budget. Mr. Solomon says the Fiscal 1979 budget proposal, which will be sent to Congress in January, will seek twice as much. And eventually, the agency chief sees the alteration budget exceeding that for new construction.

The government is not abandoning new construction, Mr. Solomon says, but he stresses that "there won't be as much of it in the future."

Philadelphia's new Gallery draws downtown shoppers



With the opening of The Gallery at Market East, a major component of Philadelphia's Market Street East development falls into place—a component that former City Planning Commissioner Edmund N. Bacon always considered crucial to the reanimation of downtown commerce and activity.

Designed by Bower and Fradley Architects, the four-level shopping mall, in addition to providing 200,000 sq ft of retail space, serves as a link for major public transit stations and other retail facilities, notably Strawbridge & Clothier and the new Gimbels.

One level below the street, the main mall provides a pedestrian way connecting the subway and a high-speed commuter line from New Jersey; a bridge at the fourth level leads to a new Parking Authority garage. The achievement of this nexus of rail,

One reason for the shift, he says, is that President Carter wants to balance the budget and hold down big capital expenditures. An additional incentive is the Public Buildings Cooperative Use Act of 1976, which requires GSA to look first at historic buildings that can be preserved and restored to satisfy Federal space needs.

The same law also permits the government to sublease space on the ground level of its buildings to non-Federal organizations for commercial purposes. Mr. Solomon believes that will make the structures more lively around the clock.

The agency chief also cites GSA's "Art-in-Architecture" program as an effort to bring more life to Federal structures. Under the program, GSA commissions artists for sculptures, paintings, tapestries, photographs, ceramics, woodworking, weaving and bas-reliefs for exhibition in Federal buildings.

For designers in his audience, Mr. Solomon gave a ringing endorsement of underfloor duct systems because "they reduce the cost of changing or relocating an outlet." Likewise he supports systems furniture, and GSA has pilot projects underway, using task-light furniture.—William Hickman, *World News, Washington*.

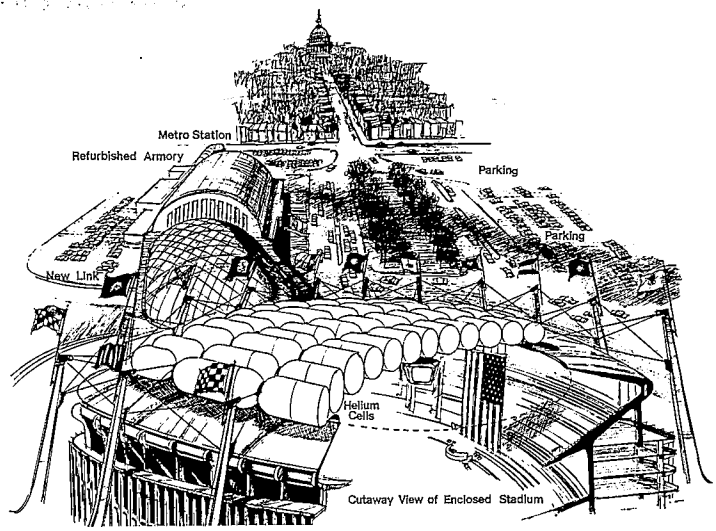
surface and pedestrian circulation in the central business district represents the climax (though not the finish) of 30 years' planning in Philadelphia's redevelopment efforts.

(That Philadelphians quickly found their way to the Gallery is evident in photographs. Architect John Bower complains, not without gratification, that photography of the space is impeded by throngs of shoppers.)

The Mall's four levels, which center on a large glass-enclosed court adjacent to Gimbels, is connected vertically by stairs, escalators and elevators, and horizontally by balconies and pedestrian walkways with continuous shop frontage.

A landscaped court gives access to the Gallery and Gimbels from 9th and Market Streets, and a smaller four-level interior court on the other side of 9th Street serves Strawbridge & Clothier. This smaller court is designed to extend up into the public spaces of a projected hotel.

Mall Center, of which the Gallery is the first phase, is being built by the City of Philadelphia in conjunction with the Rouse Company. Bower and Fradley are the coordinating architects for the entire Market Street East scheme, and were the architects of 1234 Market Street East, recently completed by the George M. Ewing Company at the western end of the project (see RECORD, April 1974, pages 146-150, and December 1974, pages 88-89.)



Helium-filled roof proposed for D.C. convention center

Washington architect Arthur Cotton Moore has suggested a \$25-million solution to the Federal city's need for a \$100-million convention center: cover the existing athletic stadium with helium-filled bags and link it to the existing armory to provide a huge exhibit hall convenient to rail transit and vehicular traffic.

Both Robert F. Kennedy Stadium and the District of Columbia Armory are underutilized, Mr. Moore notes, and the city government's plan for a new and separate \$100-million convention center near downtown is encountering Congressional reluctance.

Mr. Moore spelled out his plan recently in a guest article in *The Washington Post*. The city's other newspaper, *The Washington Star*, has editorially commented that "there is persuasive logic to the architect's idea and it deserves consideration."

The finished center envisioned by Mr. Moore would have 400,000 sq ft, one-third more than the city-proposed facility. He says he wants Washington to take its place in the avant-garde by using the lighter-than-air construction, which he says would become the world's first "floating roof."

"A network of helium-filled bags,

and restrained like other air structures, but using blimp technology, may be the way to avoid any disruption" of seats at Redskin football games. Moreover, a conventional suspension roof or air-supported covering might add as much as \$10 million to the project costs, the architect says.

The key to Mr. Moore's idea is a sausage-shaped linking structure. The stadium contains only 150,000 sq ft of flat surface, and the armory provides another 67,000. By linking them together with the 430-foot-long exhibit hall, the architects can achieve a total of 400,000 square feet.

Washington's newly opened railed Metro Blue Line is now operating to the stadium-armory complex with a transit time from downtown of 11 minutes. But parking is available for capacity crowds without transit operations.

Mr. Moore says, "As a planner, I've come reluctantly to the conclusion that, except for going to work, one is better off not trying to separate an American from his car for any trip involving a choice." He observes that the site suggested by city officials is not directly served by Metro and has virtually no public parking.—William Hickman, *World News, Washington*.

AGC attacks Federal quotas for minority contractors

The government's campaign to help minority-owned businesses get a foothold in the construction industry is under serious legal challenge. The challenge probably will not slow the \$4-billion local public works program that is its focal point, but opponents of Federal quotas for minorities on Federal programs are building a case to help them head off such programs in the future.

The opponents recently won a round. A Federal judge in Los Angeles declared unconstitutional a provision in the Public Works Employment Act of 1977 that says 10 per cent of the dollar value of all contracts awarded under the Act must go to minority business enterprises (MBE). To prevent disruptions, however, Judge A. Andrew Hauk

did not halt the present program.

Under Congressional mandate, the creaky machinery of the Commerce Department's Economic Development Administration is pumping out dollars as quickly as it can. Work on 8,500 projects is scheduled to start by January. The government has announced the allocations it has made to date and the city and county governments that will receive them, and a potpourri of small projects—ranging from fire stations to sewer lines—will soon be started.

The Associated General Contractors, who are orchestrating legal attacks on MBE rules all across the country, say their members are grateful for the extra business. But AGC

continued on page 37



**136,192
weathertight
reasons why
major builders
repeatedly
select our
curtainwalls.**

A curtainwall with 136,192 joints, like the one shown here, had better be tight. This one is. The frame sections for One United Nations Plaza are modular four-sided units. Which means our field fabrication team works with a nearly finished product—a system that virtually eliminates the possibility of a poorly constructed joint. The end result is a curtainwall that doesn't leak, and one that meets the builder's design, budget and scheduling targets. Of course, a weathertight curtainwall isn't all we offer. We're also

innovators. For example, many of our curtainwall installations employ unique anchoring and engineered systems that allow the wall to move in response to thermal changes without distorting. And as design consultants, we're frequently called in early to help translate architectural designs into workable solutions.

What we've done for major builders like Turner, Briscoe, Gilbane, Bechtel and Morse-Diesel, we can do for you. If you're planning a curtainwall, plan to let us visit you soon. Call us now, collect. (516) 759-1010.

FLOUR CITY
ARCHITECTURAL METALS
175 SEA CLIFF AVENUE, GLEN COVE, N.Y. 11542
A division of The Seagrave Corporation

For more data, circle 22 on inquiry

One United Nations Plaza, New York
Kevin Roche & John Dinkeloo, Architects
Turner Construction Company
Construction Manager

cites the Constitution in arguing that white companies are being unlawfully discriminated against.

The law says that 10 per cent of the public works projects must go to companies that are at least 50 per cent owned by blacks, Hispanics, Orientals, Indians, Eskimos and Aleuts, unless the Secretary of Commerce grants a waiver. Of 900 waiver requests, only three have been granted and they are for-work in eastern Idaho where there are no minority businesses.

Contractors, Mr. Ellis says, favor awards to the lowest responsive and responsible bidder, with little else counting. And contractors say companies that are unable to acquire surety bonding—and many minority firms cannot without a track record—should not be able to get a piece of the pie. Forcing established contractors to seek out minority firms and stake them to bonding is asking too much, the AGC contends.

Rep. Parren Mitchell (D-Md.), chairman of the Black Caucus and chief sponsor of the MBE rule, says that white contractors should try harder to accommodate minority business. "This country is not going to do very well until we get economic parity for minorities," the Congressman says.

Carter assembles ideas for Federal aid to ailing cities

Early next year, President Carter is expected to deliver on his pledge to help the "distressed cities" of the North and Northeast.

A massive sweep-up of ideas and recommendations was handed to the White House staff early in November.

Most of these ideas fall into a category of financing proposals that the press has labeled "Urbank" (for Urban Economic Development Bank)—ideas that have been simmering in Washington for years.

The new Federal Development Bank, whatever its name, would provide loans and loan guarantees to support local bond issues financing business development in specific neighborhoods—and perhaps hand out grants for the same purpose. Treasury has one scheme for a \$2-billion bank, the top officials at Housing and Urban Development another.

Other ideas mostly involve expansion of existing programs—another \$1 billion for the Commerce Department for example, for "soft public works" to upgrade neighborhoods and at the same time provide jobs for residents. Or giving the Labor Department additional billions to provide more public jobs with Federal money.

One set of recommendations would call for substantial boosts in spending—perhaps as much as \$10 billion.

Another set would opt mainly for re-packaging existing housing, manpower training, public works, and community development grant programs. This strategy could produce a multi-billion dollar package, under a new program name, without adding

Mr. Mitchell wants to go further. He thinks that 2 per cent of all government prime contracts and 5 per cent of all subcontracts should be set aside for minority businesses.

The AGC fears that Congress will buy this quota system, and it wants to nip the plan in the bud through the courts. Officials of the association say they are prepared to go to the Supreme Court to win their point. Their case will be weakened, however, if the Court upholds the principle of minority set-asides in the Bakke reverse-discrimination case, which attorneys for the contractors cite in their arguments.

To prove their willingness to put their resources on the line in the battle, the association has hired a Washington law firm to prepare a fill-in-the-blanks legal form to use in filing suits by affiliates around the country. So far, chapters in Pittsburgh, Philadelphia, Indianapolis, Wyoming, Montana, Palm Beach, Florida, and Cincinnati, in addition to Los Angeles, have filed suits.

Lawyers for AGC are now considering a frontal attack on the MBE rules through a suit of its own, in which it would seek an expedited hearing before the Supreme Court—*William Hickman, World News, Washington.*

much new spending.

Insiders insist—and Mr. Carter's own public statements indicate—that budget constraints will force him to choose options that minimize costs.

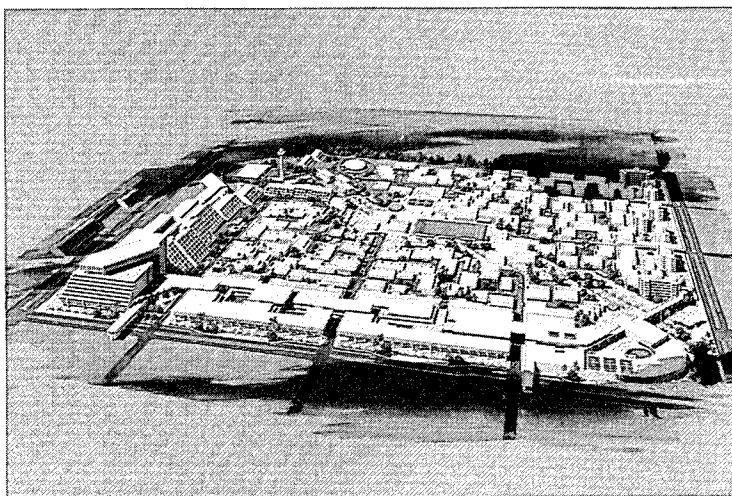
The major package of proposals came from the Urban and Regional Policy Group (URPG), a task force of half a dozen departments the Administration created early this year under Housing Secretary Patricia Harris.

The staff of URPG was headed by HUD Assistant Secretary Robert Embry, Jr., a vigorous advocate of "targeting" into distressed neighborhoods and distressed cities a much larger share of the grant money now broadly distributed by the Departments of Housing, Commerce, Labor and Transportation.

A key recommendation would create a new official at the White House or the Office of Management and Budget to make sure that grants from each of these Departments conform to city needs and policy.

President Carter is expected to outline his program in his State of the Union message in January, with a detailed message to Congress some weeks later. An urban development bank (if he should propose one) would take many months to get through Congress. So would any major shake-up in department organization or big increase in grants, or diversion of grants from present recipients to the more distressed cities.

But re-packaging existing programs and other administrative changes may be ordered by the President early on, to show immediate action—*Donald Loomis, World News, Washington.*



Town-in-Town will house 8,000 in suburban Riyadh

A new "Town-in-Town" will rise in Saudi Arabia to house 8,000 people and simultaneously to serve as a planning model and an economic model for future development.

The undertaking will be under the direction of the recently created Saudi Real Estate Company, in which the government and several private interests jointly hold stock. The arrangement represents the government's intention to provide well-constructed housing at reasonable cost and at the same time to encourage investors by allowing reasonable profits without contributing to the present rapid escalation of housing costs in the kingdom.

To be built in the Ulaya district of Riyadh, about five miles from the center of the city, the design for Town-in-Town was the subject of an international competition won by a professional consortium including two St. Louis firms—Sverdrup & Parcel and Associates, Inc., architects, planners and engineers, Eugene J. Mackey, III & Associates, Architects—and Abalkhail Consulting Engineers of Riyadh. The self-contained satellite community will occupy about 100 acres.

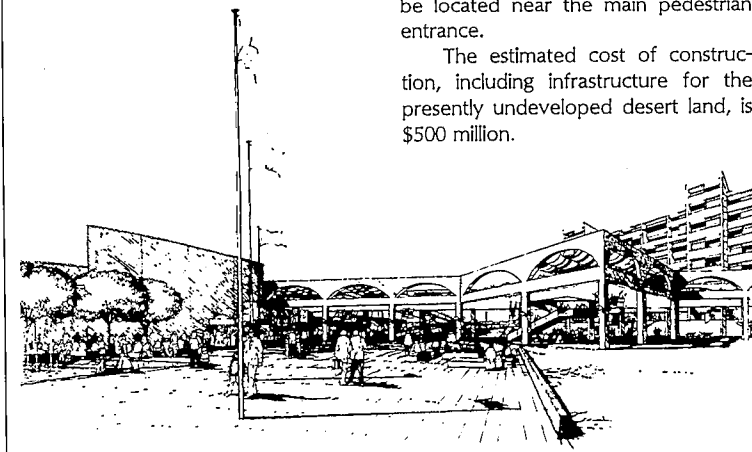
Housing in the pedestrian-oriented community is intended for middle- and upper-middle-income groups, both Saudi Arabians and expatriates working in Riyadh. The 2,000 units will comprise middle apartment blocks and individual villas, the latter clustered in compact groups around central courtyards "to respect the very private Saudi life-style," according to the designers.

In addition to *suaqs*, the traditional Arabian marketplaces, the new town will offer a building type that is largely unfamiliar in the country—540,000 sq ft of combined commercial, retail and office space, much like a contemporary Western shopping center. These structures will define the southern and western edges of the development.



A diagonal spine crossing the entire community will separate a zone of mixed residential and commercial buildings and a zone of smaller-scaled housing. The pedestrian entry to the site (see rendering below) and the adjacent civic center mark the southeastern end of the spine, which is terminated at the northwest by the mosque. At the center, a soccer field is surrounded by *suaq*, clinic, schools and playgrounds. A health and cultural center and a large swimming pool will be located near the main pedestrian entrance.

The estimated cost of construction, including infrastructure for the presently undeveloped desert land, is \$500 million.



Proven Performer[®] #712:

LOCATION:

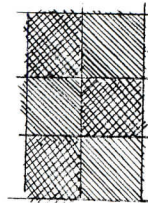
THE THIRD NATIONAL BANK OF SCRANTON, PENNSYLVANIA.



PROBLEM:

HIGH TRAFFIC

SOLUTION:



SPECIFY BIGELOW'S STATI-LOK MODULAR CARPET SYSTEM. LEVEL

LOOP ANTRON NYLON CARPET TILES THAT CAN BE INTERCHANGED AS THEY WEAR, THUS PROVIDING A REALISTIC ECONOMICAL APPROACH TO CARPETING AREAS WITH EXTREMELY HIGH LEVELS OF TRAFFIC.

RESULTS:

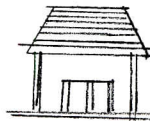
THE EFFECTS OF HEAVY TRAFFIC MINIMIZED WITHOUT BLOWING THE ENTIRE FURNISHINGS BUDGET.



A LOT OF MIGHTY HAPPY PEOPLE AT THE BANK.

PROVEN PERFORMERS

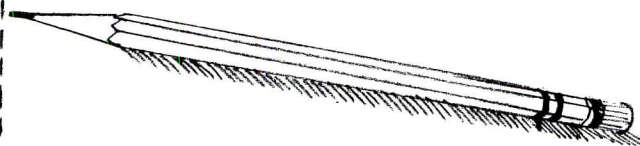
MORE BANKS AND OFFICES COME TO BIGELOW THAN ANYBODY ELSE IN THE CONTRACT CARPET BUSINESS.



FOR STRAIGHT TALK. PRACTICAL SUGGESTIONS AND PROVEN PERFORMERS LIKE THIS ONE CARPET THAT'S ALREADY PROVEN ITSELF IN YEARS OF ACTUAL ON-THE-JOB USE. CARPET THAT'S PROVEN IT CAN TAKE A REAL BEATING AND STILL STAND UP BEAUTIFULLY.

Bigelow-Sanford, Inc. Dept. A.
P.O. Box 3098, Greenville, S.C. 29602
I'd like to know more about your Proven Performers.
Please send me your contract catalog.

Name _____
Title _____
Address _____
City _____
State _____ Zip _____



After 150 years in the business, Bigelow has a wide selection of Proven Performers. And we use our experience and advanced technology to develop a product to meet your needs. Either way, when you come to Bigelow you get the benefit of years of experience.

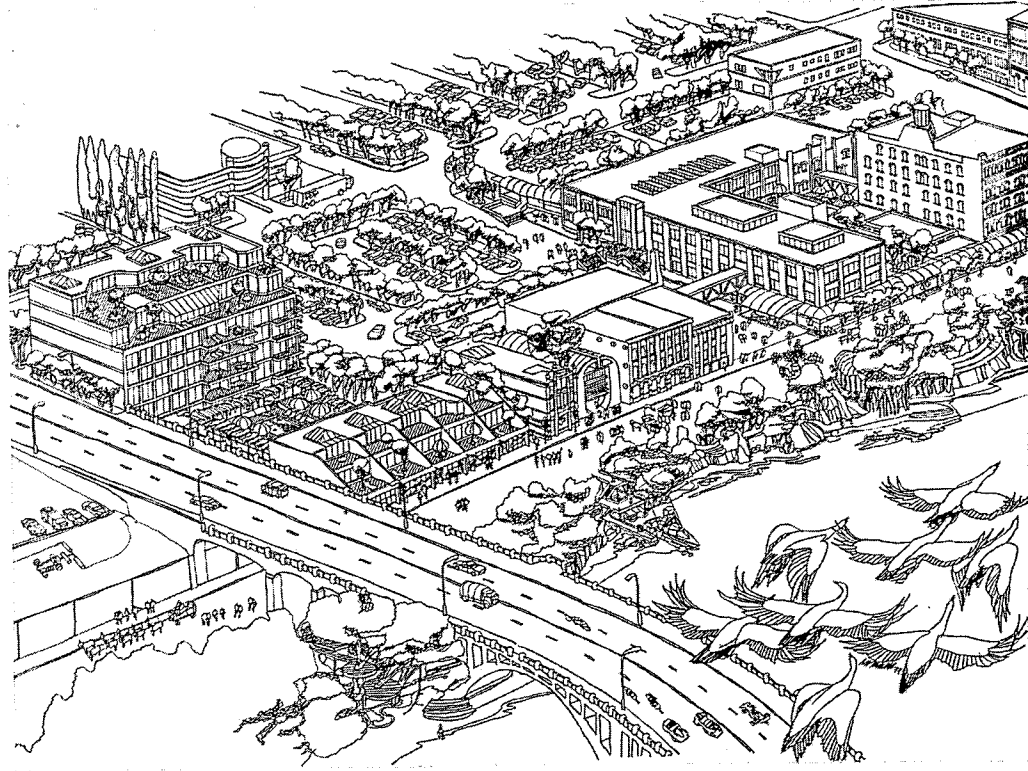
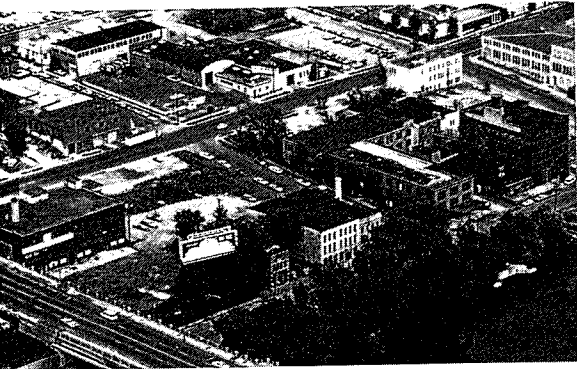
Bigelow[®]: 150 years of Proven Performance.

For more data, circle 23 on inquiry card

At the Mississippi headwaters, plans to revive the heart of old Minneapolis

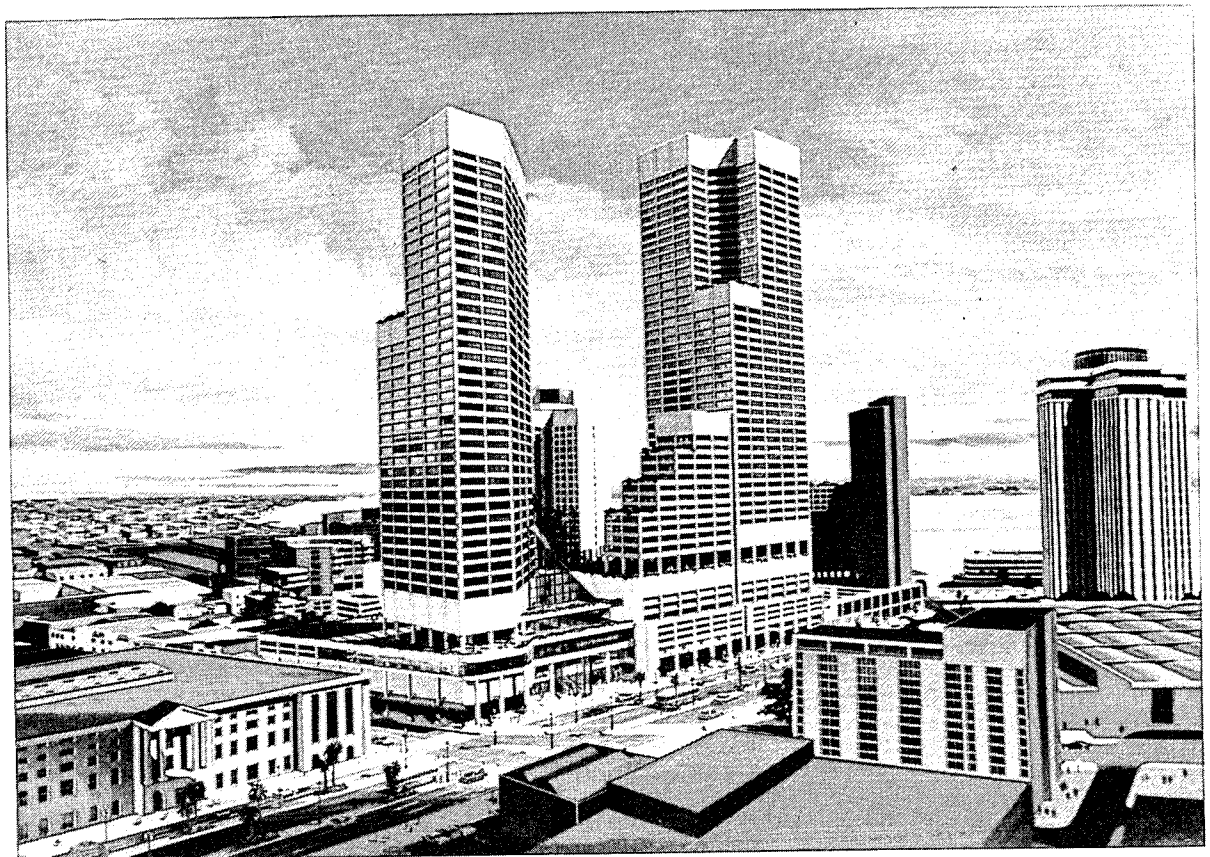
On the east bank of the Mississippi, adjacent to St. Anthony's Park and across the river from downtown Minneapolis, a collection of industrial buildings built as long ago as 1854 marks the site of St. Anthony, a village that antedated Minneapolis itself by a century. The Main Street district has been moribund since the 1950s, however, and now architect Benjamin Thompson has been commissioned to work the same sort of magic at St. Anthony. Main Street he worked at

Boston's Faneuil Hall (see pages 116-127). The first step is to renovate the Salisbury Mattress Co. building, a collection of three- and five-story structures in which three restaurants and shops will open shortly. Future phases call for the adaptive use of three landmarks listed on the National Register—the Upton Building, the Limestone Building and the United Iron Works—the recobbling of Main Street and the construction of townhouses and condominiums.



At the river's mouth, offices at Canal Place

On a 23-acre site in downtown New Orleans, bounded by the Mississippi River, Canal Street and the French Quarter, a multi-phase complex, Canal Place, went into its first phase with groundbreaking for a 32-story office tower (at left in rendering). The second phase two of the design, by architects August Perez and Associates, Inc., of New Orleans, and John Carl Warnecke Associates of New York, will get underway next year with the construction of a retail mall with atrium and promenades, a 500-room luxury hotel, parking and more office space—and future phases, to be completed within five years, call for a third office tower and 1,800 apartments. Developers of the \$500 million project are Joseph Canizaro, New Orleans, and Iran's Bank Omran in joint venture.



Architectural Record presents...

**fifteen
issues
a year
for
architects
& engineers** | **one
each
month...
and three
spotlight
issues**

The editors of Architectural Record regularly throughout the year present a wide variety of editorial content specifically geared to the known interests of architects and engineers.

In addition, responding to the need of architects and engineers for in-depth presentations of significant trends and developments in major areas of interest, the editors of Architectural Record each year publish three Spotlight issues. Each is an expansion of a continuing feature in the regular issues of the Record.



**RECORD HOUSES
AND APARTMENTS**

The annual mid-May issue devoted to the year's best architect-designed houses and apartments. More than 45,000 architect and engineer subscribers . . . plus distribution to 20,000 Sweet's-qualified builders and 4,000 Sweet's-qualified interior design offices.



**ENGINEERING
FOR ARCHITECTURE**

The annual mid-August issue, devoted to a comprehensive survey and analysis for architects and engineers of the most significant current developments in engineering for buildings. Bonus coverage of newly active building engineers.



PRODUCT REPORTS

The annual mid-October round-up of the most interesting new and improved building products. Organized by the Uniform Construction Index, this "product file on the drawing board" provides a quick up date of out-of-date catalogs and literature.



A new bill in Congress, if enacted, spells tax relief for firms subjected to liability exposures

Provisions in the Internal Revenue laws and regulations set forth ground rules for deducting the cost of purchasing liability insurance and paying business related claims not covered by insurance. For most architects, unless money is paid out for insurance premiums or actual claims, no tax deductions are permitted under current law. However, a new proposal known as the PLITE bill (H.R. 7711) has been introduced in Congress, and if enacted it could provide significant additional tax relief to businesses subjected to liability exposures.

by Arthur T. Kornblut, Esq.

In its most basic form, existing tax law permits a business expense deduction for the cost of premiums for professional liability insurance covering an architect's practice. No deductions are permitted for funds placed in self-insurance reserve accounts, even though the amount of money placed in reserve does not exceed the cost of commercially available insurance or even if commercial insurance is not available. Amounts paid to satisfy a legal judgment or settle a professional liability claim are deductible only to the extent that they are not covered by insurance.

The existing laws work hardships on architects in a number of ways. First, practically no architectural firm is large enough to justify the expense of self-insurance. Second, professional liability insurance policies available to architects are all written on a "claims made" basis with relatively high deductibles applied to most or all claims (depending on the insurance policy). Tax deductible reserves cannot be established to pay deductible amounts under an insurance policy for which the firm might become obligated in the future. Third, if the firm is organized as a corporation, the retention of earnings to cover potential claims or deductible payments could result in the imposition of an accumulated earnings tax.

The PLITE bill would enable firms to establish tax-exempt insurance trusts

In an attempt to ameliorate the limitations of current tax laws on businesses with either professional or product liability claim exposures, Congressman Charles W. Whalen, Jr. of Ohio introduced, on June 9, 1977, a proposed amendment to the Internal Revenue Code of 1954. This bill (H.R. 7111) is entitled the Product

Liability Insurance Tax Equity Act of 1977, or PLITE for short.

The PLITE bill, if enacted, would enable businesses to establish tax-exempt trusts for the payment of future liability claims and related expenses. Such trusts would be exempt from income tax, and deductions would be permitted for payments made to them. The bill would strictly limit the trusts to the payment of expenses resulting from liability claims. If funds are withdrawn for any other purpose, they would be included in gross income for the year in which withdrawn. One further limitation relates to the amount that could be paid into a trust in any tax year. A deduction for contributions to a trust would be allowed only to the extent that they did not exceed the reasonable cost of liability related insurance. "Reasonable cost" is not defined but probably would be determined on the basis of availability of commercial insurance and specific insurance costs for each type of business. This latter limitation on maximum contributions in a given year prevents a business from using the trust to shelter income in a highly profitable year and drawing from the trust in a poor year—which amounts to an unintended form of self-regulated income averaging.

Subsection (C) of the bill defines "product liability" for the purposes of the proposed amendment to the tax law as: "in the case of any person engaged in any trade or business of manufacturing, distributing, or selling any manufactured good, any liability arising from any defect in or use of such good; and in the case of any person engaged in any trade or business of providing any service, any liability arising from the providing of (or the failure to provide) such service."

From the standpoint of all professionals, it would be desirable for this subsection to be amended slightly so that product liability and professional liability are defined under separate headings. This change would recognize that product and professional liability are distinctly different legal concepts and that different standards are applied to determine each type of liability.

Support for enactment is growing; bill means relief from cost of claims

It is difficult to assess the PLITE bill's chances for enactment both in terms of timing and in a form substantially unchanged from that as drafted by the sponsor. The present Administration is contending with the development of various revisions to the tax laws, most of which seem to be in the area of adjusting tax rates for individual taxpayers and improving the corporate investment tax climate. It can safely be assumed that the IRS will be reluctant to support any measure that might seriously reduce revenues. However, when he introduced the bill, Congressman Whalen stated in the *Congressional Record* that he believed it would have a minimal effect on the Treasury. He said, "When the relevant laws were written, no one anticipated that self-insurance reserve funds would be necessary or desired, and they have developed only within the past two years or so. The tax revenues now derived from the additional tax obligations incurred by self-insuring companies were never anticipated in formulating the national budget. Consequently, they will not be missed if PLITE were enacted and the tax situation returns to where it was before the 1975 explosion in product liability insurance problems and the related growth in self-insurance reserve funds."

Support for PLITE is growing, with dozens of Congressmen from all parts of the country and of all political persuasions now listed as co-sponsors. Both the AIA and the National Society of Professional Engineers have gone on record in support of PLITE, as have numerous organizations representing manufacturers and producers of products.

For architects and other design professionals, the enactment of PLITE could mean the beginning of a program of relief from the cost of professional liability claims. The PLITE trusts would enable firms to gradually increase the deductibles on their commercially purchased liability insurance. In addition to the premium savings, the trust funds would alleviate concerns over multiple claims in a single year that could severely strain a firm's financial posture. Over a period of time in which an absence of claims enabled their trusts to grow, firms would be able to better structure their insurance programs. PLITE trusts, as a form of self-insurance, could cover much of their exposure, and commercially available insurance could provide for catastrophe.

Mr. Kornblut is a registered architect and practicing attorney in Washington, D.C.

"Legal Perspectives" is published with the understanding that the publisher is not rendering legal service. If legal advice is required, the services of a competent professional should be sought.

You waste
a lot of water
when you use flush tanks
instead of
Sloan Flush Valves.

Figure it out for yourself.

Number of
tank toilets in
your building

Number of gallons
a Sloan Flush Valve
saves compared
to a flush tank

Total number of
gallons wasted
by flush tanks
on every flush

Plus the number
of gallons wasted
by unnoticed leaks

x 0.64

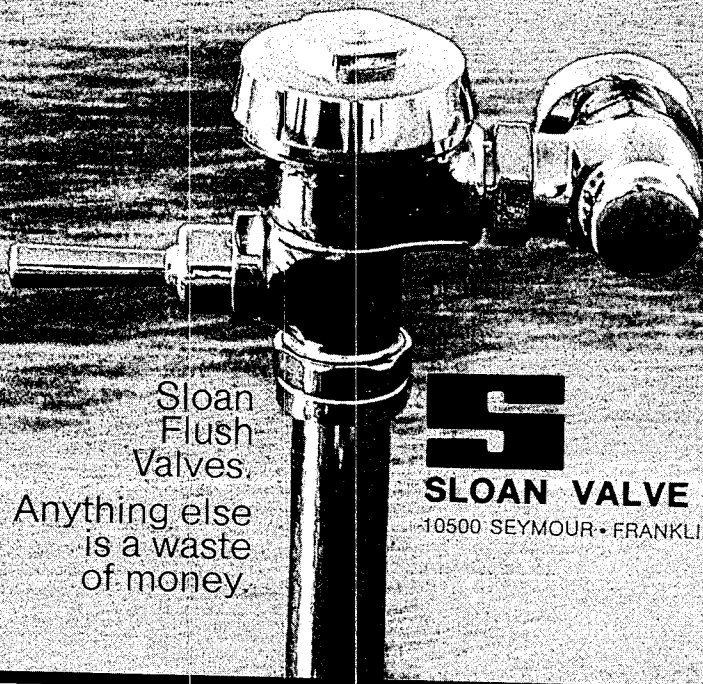
=

+

No matter what figure you got, remember it's only for a single flush. Think of how many times all the toilets in your building are flushed every day. Every month. And since every Sloan Flush Valve uses 0.64 gallon less than a flush tank, think of how much water you could be saving, instead of wasting. What's more, a Sloan Flush

Valve saves you money by using this same minimum water volume with every flush. No more, no less. That's because it completes its cycle, then shuts off automatically. Again, there's less water wasted and a lower water bill. Remember, it takes energy to pump water. The less water you have to pump, the less energy you

have to pay for. So stop wasting water and start saving money. To tell you how, we'd like you to have the test report from an independent laboratory that proves Sloan Flush Valves use 0.64 of a gallon less than tanks. For your free copy, just write to us.



Sloan
Flush
Valves.
Anything else
is a waste
of money.



SLOAN VALVE COMPANY

10500 SEYMOUR • FRANKLIN PARK, ILL. 60131

For more data, circle 36 on inquiry card



Introducing ScreenOne

From the inside out, ScreenOne™ has been designed for beauty and flexibility. With a thick and luxurious look and feel, it's elegant enough for the chairman of the board. Yet the removable cover material and free-standing design make it practical enough for the word processing center.

Your choice of striking graphic patterns, many sizes, colors and trim options, as well as the highest acoustical and fire ratings.

From the inside out, there's never been a screen like ScreenOne. Write Vogel-Peterson, Elmhurst, IL 60126, for more information.

VOGEL PETERSON

For more data, circle 37 on inquiry card

meaning that for each \$1.25 of gross income, \$1 is allotted to debt service, and 25¢ is the cash flow to the developer. In this example, therefore, the developer would divide the net income of \$277,500 by 1.25 to determine the debt service on this project (\$222,000 per year).

The next step is to determine the mortgage and equity amounts, remembering that the developer would probably want a minimum of 15 per cent return on his equity (Why would a developer suffer the risks of development for less? He could get a safe 9 per cent on a bond).

The mortgage amount is determined by the amount available for debt service. In this case, the \$222,000 will finance a mortgage amount of \$2,117,500 at 9½ per cent for 25 years. As to the equity, if the developer's anticipated cash flow (his return on investment)

this is a contingency. Typically, actual bricks and mortar account for 50 per cent of the total project, a portion that can be manipulated,

says, in working through the financial analysis, the building budget need not be the "fall guy" in the project.

FINANCIAL ANALYSIS

Typical 50,000 sq ft office building (2-story)
Parking on grade (5 cars/1,000 sq ft-250 cars)

Income	
50,000 sq ft @ \$9/sq ft	\$450,000
Less 5% vacancy	22,500
95% gross income	427,500
Operating expenses @ 33% of rent	150,000
Net income before interest & depreciation	277,500
Debt service @ 1.25:1 ratio	222,000
Before-tax cash flow	55,500

Equity: Based on 15% return before taxes	370,000
Mortgage: 9½%/25 years	2,117,500
Total project budget (Equity + Mortgage)	\$2,487,500

Costs	
Building: 50,000 sq ft @ \$30/sq ft	\$1,500,000
Land: 4 acres @ \$62,500/acre	250,000
Site work	100,000
Architectural and engineering fees @ 7%	129,000
Legal fees	10,000
Advertising	15,000
Initial operating deficit	150,000
Leasing commission (4%/10-yr lease)	100,000
Construction financing	150,000
Developer's overhead (2%)	50,000
Contingency	33,500
Total project cost	\$2,487,500

Talking the developer's language: the financial analysis

In the words of one experienced architect-developer, "development architecture is tough." It's tough because developers have traditionally looked upon architects as adversaries, and architects don't have a reputation for playing an effective role in the development process. But what is the role of an architect in real estate development and how is it carried out effectively? According to the architect,

When you are able to take difficult sites and difficult markets, he says, and demonstrate to a developer in his own terms that the project is feasible, you justify your

Shoppers to attract, traffic to flow, packages to carry. This is the place for Stanley automatic entrance



Retail stores and shops find it good business to ease the way for busy customers. Bulky packages, umbrellas, children in tow. These are the problems that Stanley automatic doors are designed to answer. They're also engineered to provide broad architectural flexibility and years of trouble-free use. Everything, in fact, you expect from the originator and world's foremost maker of quality automated doors. Stanley Door Operating Equipment, a Division of The Stanley Works, Farmington, CT 06032.

STANLEY

The 1977 Housing and Community Development Act: some new tools for central-city revitalization

Substantial new assistance is available to the nation's cities as a result of the Federal Housing and Community Development Act of 1977, the bill signed into law in mid-October that authorizes almost \$14 billion of housing and community development programs over the next three fiscal years. It includes the first initiatives of the Carter Administration in the areas of housing, urban rehabilitation and economic development programs for distressed cities. Although it is not funded at a level that will turn around our older cities or result in massive new city re-building, the Act does hold forth the promise of new initiatives and some significant progress. Perhaps early successes in program implementation will encourage the Carter Administration and Congress to expand program funding in order to bring about more ambitious, larger-scale re-building efforts.

by Nathaniel J. Parish and Csaba Teglas

The most dramatic new component of the 1977 Housing and Community Development Act is the Urban Development Action Grant (UDAG) program. Funded at a \$400 million per year level for each of three years, the program makes grants available for the implementation of local plans which combine private capital with UDAG and other public funds for projects that will provide long-term jobs. The emphasis is on helping meet the economic needs of low- and moderate-income people and also on bolstering the fiscal base of the community. It is intended that projects be discretely defined and carefully pre-planned (before a grant is approved) so that they can be carried out over a three- or four-year period. Screening criteria are intended to assure that only cities with severe economic and physical distress become eligible for possible funding.

It is anticipated that even with this initial screening process there will be far more interest than will be able to be accommodated at present funding levels. Congress has therefore set forth selection criteria for rating applications and HUD has further refined these through its recently issued proposed regulations. These would rank applicants on the basis of an evaluation of such factors as: previous performance in housing and community development programs; extent of financial participation by private sector and other government entities (particularly the state); leveraging effect of the UDAG funds; degree of benefit in relieving economic problems of low- and moderate-income families; potential program benefits in alleviating local physical and economic problems; and program feasibility and probability of achieving stated plans within budget and schedule.

Although the program appears to have many restrictions in terms of eligible applicants and project ranking, it is significant in that it is the first new step taken since the Housing Act of 1968 toward making Federal funds available for urban *non-residential* construction. It also takes a quantum leap from where the urban renewal program left off. The latter essentially made funds available for clearing and preparing sites and providing public infrastructure, but it did not allow funds to be used on either a loan or grant basis for non-public new development. UDAG on the other hand, may under certain circumstances actually be used to provide capital for new construction.

Northeast and Midwest cities will benefit from \$11 billion in new funds

While the Urban Development Action Program has undoubtedly received the most attention because it is new and dramatic, the now three-year-old Community Development Block Grant Program was re-authorized for an additional three fiscal years. Over this period some \$11 billion will be distributed to the nation's cities under various formulas.

The final version of the Act requires that the national distribution formula take into account age of housing, extent of poverty and growth lag—factors which will generally, but not always tend to favor Northeastern and Midwest cities. Generally lost in the mass media accounts of this controversy is that none of the cities of over 50,000 population will get less than under the basic formula that established their entitlement for the first three program years. Congress did, however, confirm a phase-out formula for those cities getting more money under "hold-harmless" provisions of the 1974 Act. The latter had taken into account what cities had received under folded in HUD categorical programs (urban renewal, model cities, etc.) and, when that exceeded what they were to get under the basic formula, they were

awarded the higher amount. This particularly affects small cities (those under 50,000 population) which will now have to compete for discretionary funds under the new Act if they want to replace funds lost as a result of the phasing out of their "hold-harmless" funds.

The new Act takes a major step toward encouraging comprehensiveness and continuity as it establishes the possibility of the funding of multi-year (not more than three) discretionary grant applications. Both the Act and the emerging HUD implementing regulations tend to encourage, and in some instances require, a more comprehensive and focused local community development plan.

HUD has established a 75 per cent figure as the minimum required proportion of funds which communities must allocate toward the improvement of low and moderate income areas. This formula approach has already spurred a lively debate between HUD, local elected officials, urban professionals, representatives of the poor, etc. Whatever the final decision, it is likely that this aspect of the law coupled with its requirements for more extensive citizen participation will generate far more local and Washington heat than the first three years of the program did. Clearly, HUD will now have a more substantive role in CD program review than it did under the 1974 version.

Perhaps 150,000 new apartment units may result from \$1.2 billion in subsidies

The housing section of the Act provides about \$1.2 billion in rent subsidy funds in fiscal year '78 for the public housing and Section 8 programs. These are to be distributed under statute formulas for some specific uses. Almost 20 per cent will go for projects to be financed by state housing agencies and some 10 per cent for non-profit senior citizen housing, or projects for the handicapped. Other set-asides are for the modernization of existing public housing and for projects to be developed by local public housing agencies. The \$1.2 billion in rent subsidy funds will spur a far greater amount of construction with the actual figure difficult to estimate since some of the funds will be used for subsidizing low income families in existing units. Some projections indicate that about 150,000 new units or substantial rehabilitation projects will be started under the Act which would indicate over \$5 billion of new construction volume.

Mr. Parish and Mr. Teglas are with the planning firm of Raymond, Parish, Pine & Weiner, Inc.



New ACOUSTONE[®] ceiling tile and panels ...now color clear through hides accidental damage!



Now, ACOUSTONE mineral fiber ceilings are twice new! They come in elegant earthtones and dramatic new fashion colors in a wide choice of distinctive textures. And they offer a unique care-free difference: color that goes all the way through. Accidental gouges and scratches blend in so well with the exterior finish, there's rarely any need for touch-up.

Select the pattern and color that best expresses the effect you're after. ACOUSTONE presents a professional selection . . . from craggy Boulder texture to the smooth, refined look of Finesse . . . in four earthtones . . . and a variety of custom tints in six color ranges. Other added-value ACOUSTONE advantages include: high fire resistance, a sound-soaking .75 NRC, availability in 2 x 2 ft. and 2 x 4 ft. modules plus optional foil-backing for extra energy savings.

■ See your U.S.G. representative. Or write to us at 101 S. Wacker Dr., Chicago, Ill. 60606. Dept. AR127.

UNITED STATES GYPSUM 
BUILDING AMERICA

For more data, circle 41 on inquiry card

New ANSI standards on barrier-free design expected in 1978

A new and highly comprehensive version of standards covering the design of buildings so that they are accessible to handicapped individuals is being prepared by the American National Standards Institute (ANSI) for adoption sometime in 1978. An earlier draft was revised after The American Institute of Architects and other organizations raised a number of technical and editorial objections. The new version will incorporate some of the changes suggested by AIA—probably enough, officials suspect, to win acceptance through ANSI's usual consensus process. The standards are important because they will become the basis for barrier-free design for virtually all public construction and it is likely the vast majority of private construction will follow suit.

Residential construction, for the first time, is covered in the soon-to-be-proposed standards. In many cases, public code and building authorities will just reference or reprint ANSI's standards as their own. Replacing an existing 16-year-old ANSI standard known as standard A117.1, the new version will be about ten times as long and more prescriptive.

Architects are generally uncomfortable with prescriptive standards, preferring performance standards. While this is a concern with architects, the new standards will probably permit designers to deviate from recommendations in many cases if they show the results will be the desired ones or better. Hence, there will be a performance element in the largely prescriptive standard.

According to Stanley McGaughan, a principal in McGaughan and Johnson Architects of Washington, D.C., the hope is that ANSI's new attempt at architectural barrier standards will be broadly accepted. If they are, he says, it should simplify architectural practice because architects will not be forced to design to overlapping standards that often differ from jurisdiction to jurisdiction.

McGaughan is AIA's representative to ANSI, and it was he who cast a vote against acceptance of the earlier draft on behalf of the Institute. He was not alone. Nearly one-third of the 45 members of ANSI's architectural barrier committee sent in negative votes. While a majority either accepted it or chose not to object, ANSI's secretariat staff agreed that a consensus had not been reached, and they decided to make another attempt at compromise. One of McGaughan's principal objections to the earlier draft was what he saw as vague language.

McGaughan is withholding judgment on whether he will accept the new draft until he has an opportunity to study it, but he is clearly optimistic. If he lifts his objections and the other 44 commenters do not institute serious ones, ANSI can begin the formal acceptance process—a step that will undoubtedly take several more months.

Federal actions on barrier-free environments have redoubled . . .

Technically, ANSI could adopt the standards over AIA objections, but as a practical matter, the organization will avoid a stalemate—particularly with objection coming from architects, the prime users of the standards.

Development of the standards is very timely because the Federal government is redoubling its effort to create a barrier-free environment for all handicapped people. The most dramatic move in this direction came in April when Joseph A. Califano, Secretary of Health, Education and Welfare, signed final regulations to implement Sec. 504 of the Rehabilitation Act of 1973.

Essentially, the regulation says no agency or institution receiving Federal funds may discriminate against a handicapped person solely on the basis of the handicap. Architectural barriers are viewed as discriminatory. Arthur F. Duncan, assistant director of the Codes and Regulations Center at AIA, says the regulation "will cause fundamental changes in building design," but architects have no objection to them.

So far as designers are concerned, the key words are "accessibility" and "non-discriminatory." Handicapped individuals must not be barred from going virtually anywhere able-bodied people can go. Institutions—such as schools, hospitals, and colleges—receiving HEW funding of any kind must make a "reasonable" attempt to ensure that barriers are removed. Everyone involved in the regulations expects court tests to determine just what is reasonable. This is a particularly sticky issue with existing buildings.

Despite the confusion and the anticipation of legal action to settle the reasonableness issue, Duncan reports that architects generally support the regulations. These regulations now reference the existing ANSI standards which were first prepared in 1961. When ANSI finishes with its new standards, the government plans to amend its regulations to adopt them—probably without modification.

. . . but Federal grants and subsidized loans will help foot the bill.

Meanwhile, HEW is pushing hard for the removal of architectural barriers. The agency's regulations say architectural barriers involving structural changes must be removed from existing facilities within three years. Moreover, it is saying that changes which can be made sooner must be.

The government is willing to help foot the bill for this work, however. Regulations published in the Federal Register August 12 spell out the ground rules for "financial assistance for construction, reconstruction, and renovation of higher education facilities." According to HEW's Thomas F. McAnallen, colleges and universities are eligible for grants or interest-subsidized loans for use in making structures more accessible to the handicapped.

The work undertaken in the program can cost between \$10,000 and \$5 million per campus per fiscal year. Even if a specific institution fails to get a grant and seeks a loan, it does so under very favorable conditions. In fact, the institution need only repay 75 per cent of the loan's face value.

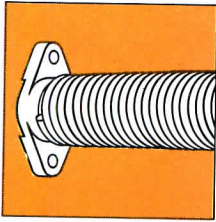
Not all the effort is at HEW. The Department of Housing and Urban Development is actively pursuing architectural barrier regulations for multi-family housing, and it, too, plans to make use of the new ANSI standards.

The General Services Administration, as the government's landlord, is continuing its effort to make Federally-owned or -leased buildings completely barrier-free. The agency has budgeted \$16 million to spend between now and fiscal year 1979 on barrier correction, according to William Campbell, Assistant GSA Commissioner for space utilization.

Local communities are getting in on the act too. Fairfax County, Va., for example, has developed an ordinance that requires a certain number of automobile parking places for handicapped individuals. If a building, apartment unit, or townhouse development has between 101 and 150 off-street parking places, it must provide five spaces for use by handicapped individuals.

According to the county's regulations, parking places for the handicapped must be at least 12 feet wide, 20 long and be identified as "Parking for the Handicapped Only." The building owners must also ensure that the parking lot be accessible to individuals in wheel chairs.—William Hickman, *McGraw-Hill World News, Washington*.

Raynor's reputation for dependability comes from doing things better ...like making our own springs!



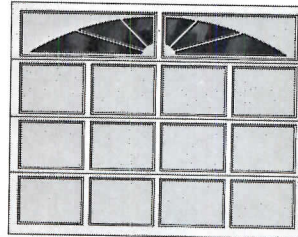
The heart of a dependable, long-lasting sectional overhead type door is the spring. That's why at Raynor we don't rely on anyone else's spring to open and close our doors. Instead, we custom engineer, specify and wind our own . . . for each and every door we build. And we do it all right in our own plant.

It's this extra concern for quality that's made Raynor the brand you can depend on for residential, commercial and industrial doors made of wood, aluminum, fiberglass or steel. Call us for more specifics. 815/288-1431. Or write Raynor Manufacturing Company, Dept. AR, Dixon, IL 61021, for the name of the Raynor factory-trained distributor/installer near you.

For more data, circle 42 on inquiry card



RAYNORTM
GARAGE DOORS



The case for design quality in today's marketplace: Four studies of collaboration between architects and developers that explore the arithmetic of excellence

"There are margins for maneuverability within the realities of the marketplace, which means margins for imagination, as the architect normally thinks of the freedom to create."

—Arthur Cotton Moore,
architect, Washington

Among architects, there is no single subject that generates more conversation, more agreement, and more frustration than "how my design was compromised by the demands of the client"—especially when those clients are investment builders, building for the marketplace and maybe even for speculation.

Such clients—the developers of shopping centers, downtown stores, office buildings, industrial parks, and the like—are indeed tough clients. They set budgets by a process which somehow seems backward to many of us—not by building up, step by step, what it will cost to do a decent, durable, delightful job; but by figuring what the marketplace will stand in the way of rentals and working backwards from there. Such budgets tend to be hard to meet, and yet they must be met by any architect who wants to play in this particular ball park.

Sometimes the criticism of such developers is justified. More than a few demand that the architect who chooses to work for them bow to their bargain-basement standards. Too many, not to mention the lenders whom they depend upon for backing, think of the architect as a kind of tasteful purchasing agent brought on to embellish with "architecture" a bottom line already arrived at. This has often left the architect who chooses to accept such commissions (and many do, perhaps reluctantly, on the premise that if they don't take the work, somebody else will) in the position of being more like a pharmacist than a physician—filling prescriptions written by others rather than, as architects should be, participating in the diagnosis. The results of this kind of collaboration between architects and developers mar streets, strips, and intersections across the country. The way to have less of this compliant packaging is for architects to compete it out of business.

The frustration over the standards demanded by developers has led some architects to believe that this competition must mean their *becoming* developers—and this is clearly an appealing option, given the heavy support for this approach at the 1977 AIA Convention, where a change in the Code of Ethics, permitting building by architects themselves, was only narrowly defeated.

"Ben Thompson is a merchant, and he understands, with us, the things that are essential to a marketplace."

**—James Rouse,
developer, Maryland**

But there is another form of competition within the marketplace—a different, maybe even more discerning, and as demanding a form of collaboration between architects and developers—and this is what this issue of RECORD is about.

The kind of collaboration depends upon the mutual respect of both the architect and developer from the start—the client working with the architect, and the architect working with the client, to establish the benchmarks, of both design and dollars, by which the success of the project is measured. And as we think that the case studies on the following pages show, very clearly and cogently, the results of this mutual respect can be a yield of which the architect, his client, and the community involved can be really proud. This yield can be design of high quality. This yield can be profitable performance for the developer. And this yield can be positive benefits for the public that will look at, work in, shop in, or live with the architecture.

Certainly the public benefits must, today more than ever before, be taken into account in such marketplace projects. Edmund Bacon, the great planner, has been arguing for years that the developer has a very important, creative role to play in the redevelopment and revitalization of our communities, and is not to be indicted out of hand for premeditated mediocrity; that the architect, to make the most of his role, must recognize the developer and his concerns, and must be eager to immerse himself in the total process by which those concerns are acted upon; and that the community involved must understand, or be persuaded to understand, its role to ensure that a quality collaboration between an architect and developer is made the most of, that the community's "fair return" includes the spur that conscientious architectural design can provide to social and cultural, as well as economic, regeneration. The community role is crucial: Through city development agencies, a community can stall endlessly; or, by temporary tax abatement, incentive zoning, or a mix of local, state, and Federal money, a community—as "design partner"—can help get what it wants and needs, where and when it wants it.

In the cases that follow, the architect's involvement has included a role

"When I engage an architect, I want what he's got to offer."

**—I. Rocke Ransen,
developer, Montreal**

"The architects turned out to be good to work with, exciting to work with, and met the budgets right on the button."

—Michael Shure,
developer, New Jersey

in the mediation process between developers and the communities—and that kind of involvement goes beyond considerations of new tactics and techniques into a demonstration that architecture is, after all, a *part* of human purpose, not just a matter of esthetics but one of the more telling, tangible, and certainly lasting expressions of our social, cultural, and economic values. These examples show that architects can create—in the broadest sense of creating—design opportunities out of actual community conditions, needs, and priorities; creating investment or—in responding to marketing decisions already made—acting as a catalyst for a level of design quality that will attract people and therefore generate revenue.

For example, architect Arthur Cotton Moore, of Washington, has "designed" in this way (pages 84-95) and the results, in a number of cities, big and small, range from thoughtful community plans, to strategies for implementation, to creative financing recommendations that can only be called "works of art."

Mondev, the Montreal-based developer, is representative of an increasing number of organizations involved in downtown revitalization that understand how tangibly important excellent design is (pages 96-107).

Gwathmey-Siegel, of New York, a firm that is not routinely thought of when it comes to meat-and-potatoes considerations, has gone to work for two office-building developers (pages 108-115). The results are impeccable, inexpensive, and renting up in record time.

Benjamin Thompson, of Cambridge, Massachusetts, working with developer James Rouse, has retrieved Boston's historic Faneuil Hall Marketplace as both a lively venue for urban activities—and as a good-looking, good-natured appraisal of marketplace considerations which are yielding both an economic and cultural renaissance (pages 116-127).

We do not argue that these four cases are typical. They aren't. But they do show that good design can pay off for good developers, creating lessons in how the arithmetic of the marketplace can add up for the good of our communities.

That is one of the things that architecture is about.

Washington architect Arthur Cotton Moore shows that designing strategies to reach a community's development objectives also means organizing a pragmatic alliance of the economic, political, and civic resources that can make it happen

A lot of architects, protective of their theoretical position, cultural bearings, or artistic integrity, tend to cast baleful side-long glances at those who have reason to suggest that architecture is, more than a fusion of science and art, of functional facts and human feelings, an *economic act*.

Some people have even had the temerity to suggest that it is chiefly an economic act, and that if more architects were to approach this reality as a creative challenge, to be worked with rather than around (somehow), decent architectural and urban design could more naturally characterize our physical surroundings—not just be that ineffable “something” that is fortuitously reflected by rare gems in an otherwise cost-conscious rough.

Architect Arthur Cotton Moore, of Washington, D.C., likes it in the rough. And without pulling any punches, Moore, who must be counted as one of the most thoughtful designers around these days, insists that the time is past when architects can get away with such condescending rationalizations as: “So-and-so wouldn't hire me, and that other so-and-so thought of firing me, because I wouldn't lower my standards of design.”

It is not that one cannot validly inveigh against the cost- and quality-cutting that has so routinely gone on in the client corner. It is a corner, after all, that is filled with other, louder shouts for attention, and the architect's familiar concern for design is easily drowned out by the din. It is a question, and an awesomely serious one, of what the architect can do to *get* attention—and get it where it counts, during the front-end phase, when the basic programmatic and financial dimensions of a project are being decided or, to put it in another way, “designed.”

Arthur Cotton Moore has deliberately gotten into the business of “designing” such decisions, and, with considerable *esprit de core*, his firm, these past several years, has been raising sights, projecting possibilities, and setting standards for the revitalization of many downtown areas, in both big cities and small cities. Such implementation planning, a critical factor in having established his firm's increasing accessibility to actual architectural commissions, has been done for a variety of developers. Which brings up a most interesting point:

In actuality, the nature of the so-called

developer is changing as fast as the profession's assumptions about what the process of design is, and about when that process occurs. The developers that Moore has worked with range from a city redevelopment agency, as in Baltimore (opposite, and pages 88-89); to a combination of citizens and tourism officials, as in Petersburg, Virginia (pages 90-91); to a group of merchants, as in Schenectady, New York (pages 92-93); and to yet another citizen association, one that was initially preoccupied with historic preservation, as in Columbus, Georgia (pages 94-95).

In all cases, Moore has worked with a combination of existing and *created* interests. Which is to say, a strategic part of this implementation planning has been for him to plot the do-ability of his redevelopment recommendations—and often to “design” that coalition of interests in such a way as to either attract a developer or developers, as in Baltimore, or to *be* the developer, as in Schenectady.

There are not many architects who are as explicit or insistent as Moore is about this aspect of “services.” Who, for the love of all those generations who talked about firmness, commodity, and delight, ever heard of an architect “designing” a developer? Wasn't, or isn't, “design” what an architect did, or does, after “all that other stuff” is decided? Moore's response to this narrow definition of design is not printable.

His response to his own definition is, though, and as we are going to discover in the following pages, that definition derives from his conviction that plotting the do-ability of redevelopment is as respectable a creative challenge as delineating what the various individual buildings are going to “look like.” Call it the esthetics of *decision*.

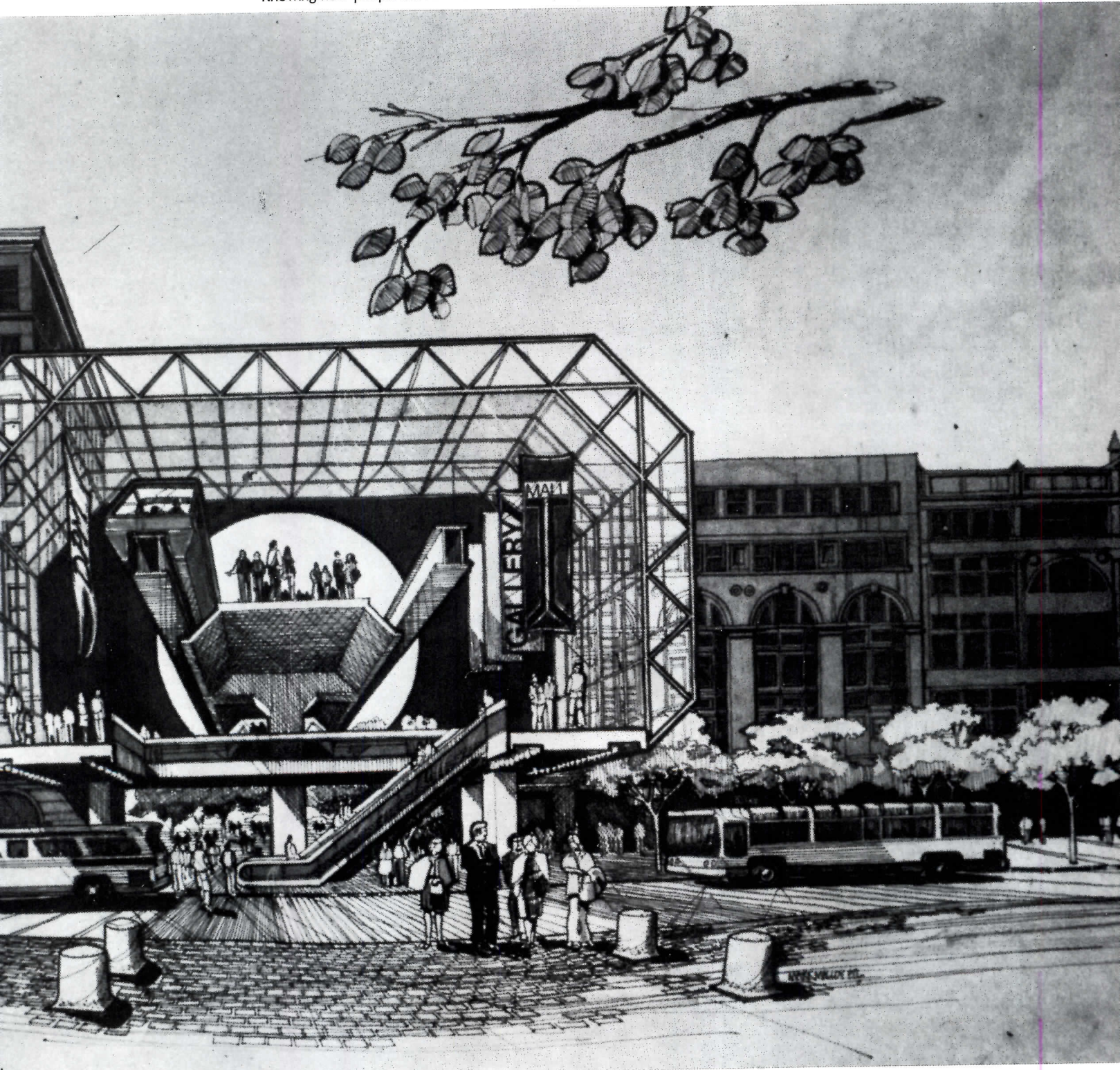
“All of our clients, some knowing what they want, others only suspecting what they want, have had, if at varied scales, the same objective of wanting to enhance the economic and environmental health of their cities or towns. And so each of our implementation plans has naturally required economic, political, and even public relations strategies, as well as a range of physical solutions. Each has also answered the same questions. What should be done? Why should it be done? And how can it best be done?”

“This means dealing with the forces that

Arthur Cotton Moore/Associates photos and drawings



Knowing how people move and what moves people is the essence of architect Arthur Cotton Moore's Baltimore Gardens.



determine what gets built, or doesn't get built, in any community," Moore continues. "It means sizing up the local real estate and leasing market, the interest of developers and lenders, local regulatory and review parties, the political framework, the physical and financial equity of the community. Each of these forces has its language, its rules, its habits, its attitudes and assumptions, its procedures, and the standards by which 'success' is measured.

"Compounding this is the fact that such dynamics have an aggressive interdependence—they are alive, often volatile, always in flux, and at times in seeming conflict, competing with each other, depending on each other, compromising each other. Those are the realities, the cumulative character of our overlapping values as people and as communities, that must be understood. There are definitely margins for maneuverability within these realities, which means margins for imagination as the thoughtful designer normally thinks of creative freedom."

Seeking a rapport with the whole *civitas* "schtick," Moore, who is as meat-and-potatoes as the next guy when it comes to wanting to get jobs, has thus worked out a rather interesting, and generally effective, method of going about getting them. Projecting physical possibilities for redevelopment in the tangible context of money, land, and of the wherewithal or plain willingness of the people who control both, his implementation plans have been having the effect of getting his firm a number of specific jobs—putting bricks and mortar together, for pay—and, as importantly, the effect of establishing a reputation among thoughtful observers in the political, civic, investment, and developmental sectors for understanding not only how "real life" works but also how all of the factors and forces of redevelopment can be woven together to redeem a swatch of city.

"It is fine and well," Moore says, "to be called in to design an individual building and be given a free hand. All of us architects crave being called in. But it's the free hand that is a problem. A municipal government may ask for a city hall, say. A corporation or a retailer may ask for a spiffy container for itself. A cultural institution or an educational institution may ask for the most memorable, inspiring structure ever conceived. A housing developer may be

bent upon your creating the 20th-century equivalent of Bath. And yet, I really have to ask myself whether designing any one, or all, of those things is really as creative a process as having the opportunity to design any one, or all, of those things as *part of*, as the *result of*, as a reinforcing *factor* in the comeback of a community as a whole—a comeback that has been informed and maybe even inspired by the architect, a comeback that has meant the creative coordination of money and land and civic faith, a comeback that may even be resulting in jobs for *other* architects.

"So I have to wonder about the free hand and the freedom to design. What, really, is fulfillment for the architect? You have only to look at the average community to see that a lot of buildings, done in the free-hand frame-of-mind, *look* that way, and this average community also looks as though there are a lot of right hands that couldn't care less what the left hands are doing. I would have to say then that my advice on matters of implementation here and there, and our corollary efforts to literally dream up what our recommendations might look like, as built (hopefully sooner than later, of course), are a process of continually training ourselves to keep in mind, to really act upon, the physical scale and community character of the cities and towns we are involved with—wherever we *do* get a job to 'design' something, whether it's big or small.

"Whether the ideas and designs that we dreamed up for Baltimore or Petersburg or Schenectady or Columbus, or for Nashville or Fort Wayne or Norfolk, are ever fully built, or built exactly as we first drew them up, is no more important a goal to be cherished than the hope that what things do finally get built in any of these places convincingly enclose and convey a larger sense of community conviction. If an architect can be called in to help design *that*, an architect, and others beside him, may just have a fighting chance to control the quality of the physical results of such front-end formulations, and to control them *beautifully*."

Control, then, is a function of when the architect is called in or, passing through, says and notices the kinds of things that, in some strange psychological chemistry, gets local leaders thinking about problems they might not have otherwise considered solving. In this respect, Arthur Cotton Moore/Associates has

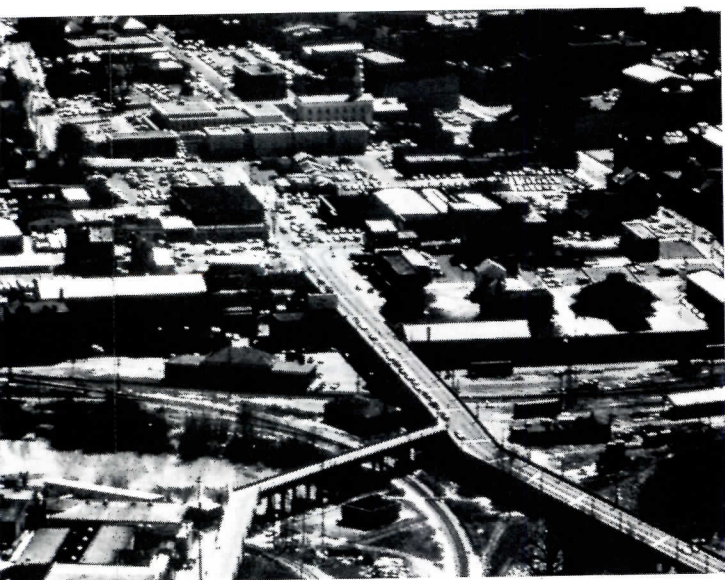
gradually turned into a well-coordinated troupe of itinerant urban preachers who, in the time-honored tradition of such types, know where the collection box is and how to get even "the-devil-made-me-do-it" types to toss in.

The process of conversion has now reached the point in Baltimore, Petersburg, Schenectady, and Columbus that some of the firm's implementation planning is taking, or sure to take, physical form. The collection box in Baltimore, a city of 906,000, is a 40-block study area for which Moore has made a number of specific, imaginative design recommendations for the dormant department store district that edges a new subway line. The collection box in Petersburg, a city of 45,000, is an old market area, with a number of convertible structures, that is adjacent to a big train yard and a beautiful river, the Appomatox. The collection box in Schenectady, a city of 78,000, is a two-block bite-size chunk of land, a composite of dwindling retail activity and vacant lots, and the "developer" is a corporation of 13 merchants who sell everything from diamond rings to flashy ties to soup. The collection box in Columbus, a city of 154,000 which is only 20 miles from *the* collection box—meaning Plains, Georgia—is a 20-block study area, the revival of which has been pegged upon the current conversion of an old hotel block into a new hotel block, and of an old Confederate gunboat factory into a trade center—this work being seen to in association with the talented local firm of Pound, Flowers, and Detwilder. What the faithful are tossing in, from place to place, varies considerably, and yet all of them have this in common—preacher Moore had an important hand in showing them something of the economic and social salvation that might be forthcoming were they to do so.

Baltimore's Department of Housing and Community Development called in Moore a few years ago, when a master plan it had contracted for the city's central business district, done with an eye on the construction of a new subway, projected redevelopment costs at some cosmic figure, like \$220 million, and projected, too, a lot of new office buildings for an area that couldn't fill the ones it had. Adjacent to where the big subway hole was going to be dug were five department stores, selling essentially the same stuff—but to a five-and-dime marketplace, and as for five-and-



Baltimore (left, above) plans to link a superstore and a new subway, while Petersburg, Virginia (left, bottom) plans to drag the Appomatox River into a dismal downtown fringe in the form of a busy tourist inlet, with a recycled dog outlet and train depot carrying the freight of all the new commercial activity.



Schenectady, New York (left, above) is bringing back its blocks, turning its vacancies into a vibrant venue of retail, cultural, and leisure-time action, while Columbus, Georgia (left, bottom) is beginning to brighten its main drag district by sprucing up an old gunboat factory as a main trade center.



dime stores, there were six of those nearby as well. A typical example, all told, of a frustrated, forlorn northeastern downtown. So Moore, as he has been heard to say in more casual company, went looking for a catalyst on this hot tin roof of urban malaise.

The coming subway line provided it, and in as creative a financial maneuver as has careened by in recent years, an approach that is called "value capture" was put into play as a method of capturing the heightened potential value of the property as a basis for latching onto the financing that would be necessary for its redevelopment. If the value thus captured by the subway, which should be operational in 1981, comes through, and negotiations with the Department of Transportation for about \$7 million in front-end money are encouraging, this will be the first time that this concept has been applied to a redevelopment process. David G. Nutter, of the Baltimore agency, has been one of the key figures in "designing" this arrangement, responding to Moore's dramatically drawn concept that the new subway, sympathetically related to, could move, more than passengers, the virtual revival of the district as a popular shopping and entertainment center. More than that, and the real test, it is an arrangement that, once into serious negotiation, has attracted a number of name developers.

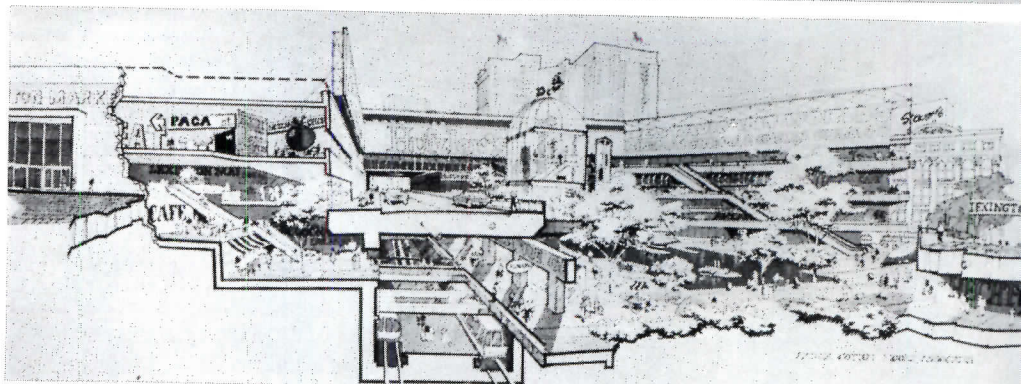
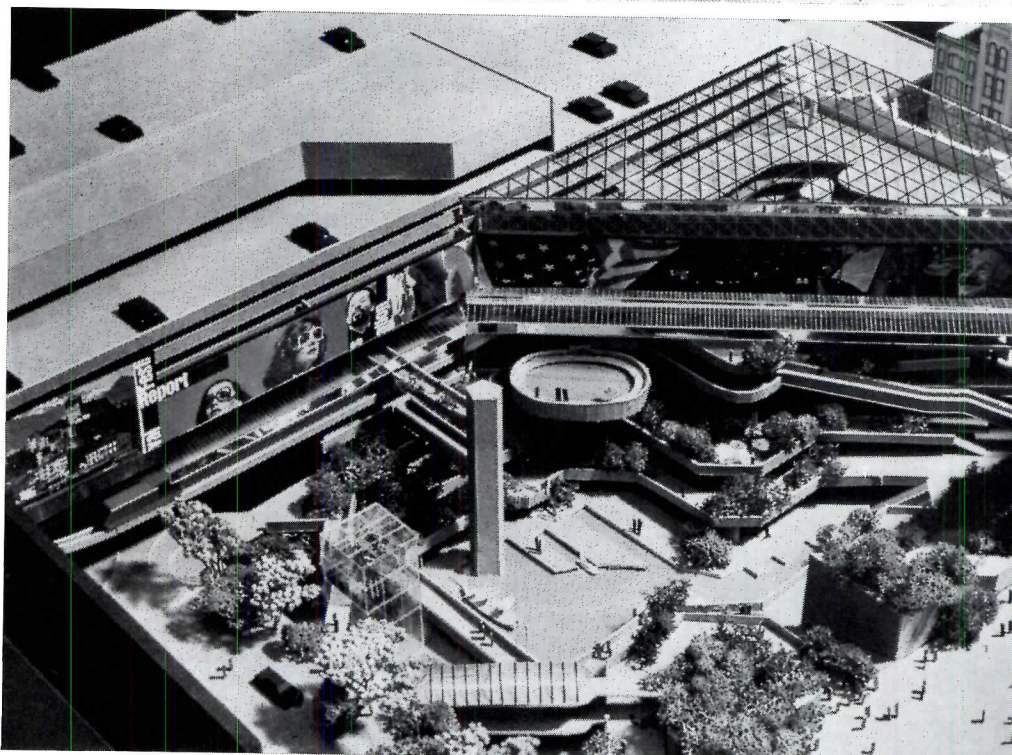
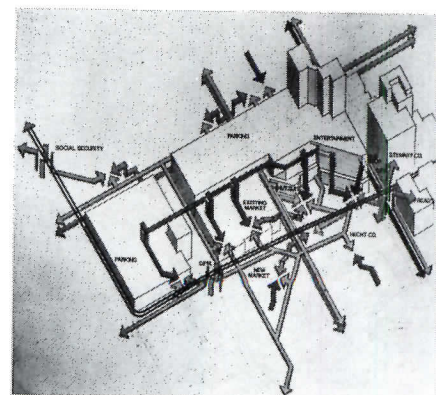
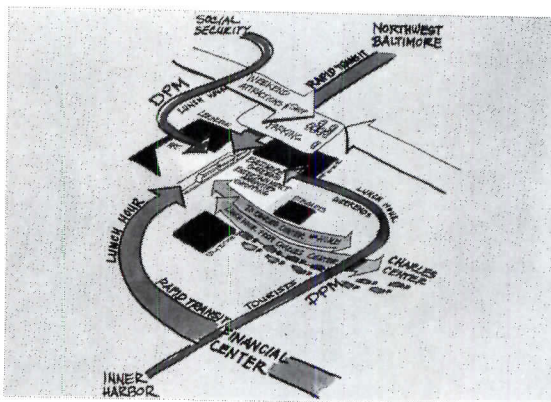
The mainstay of this redevelopment will be a series of stepped-down landscaped trays called Baltimore Gardens, which looks a little like a sunken park, a little like Disneyland, a little like an archeological dig, and a little like a science show. It will be all of these, in some respect, but wrapped together as a vibrant venue of varied retail and commercial action—right off and visible from the new subway. If this goes ahead, and it is fairly sure that DOT, the city, and one of the developers will be working out something, two of the adjacent department stores, Heck's and Stewart's, which had promised to pull out, have said they will definitely stay put.

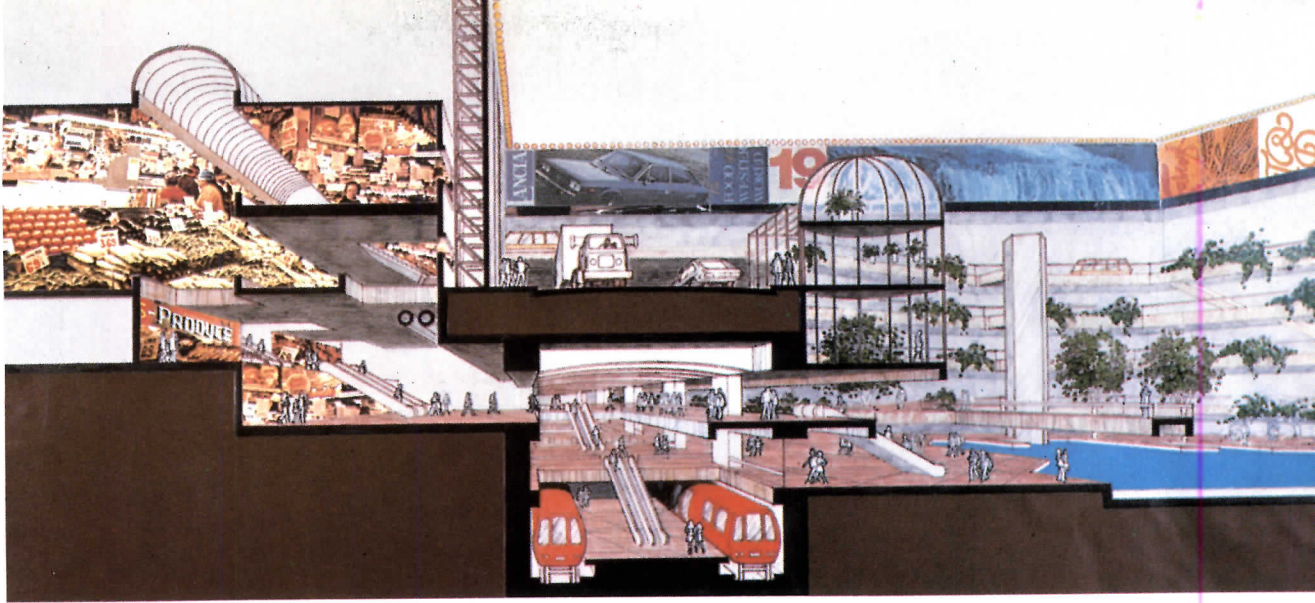
"Thinking of the linkage to the subway," Moore explains, "we linked ourselves to an inexorable, objective, determining process, even though a subway dig is not often thought about in such terms as a design opportunity, and, like a caboose, this part of downtown is going to get to market. Baltimore Gardens is an

Baltimore, Maryland's burghers and bureaucrats plan to reclaim downtown with an eden of stores and shops that will edge a new transit system

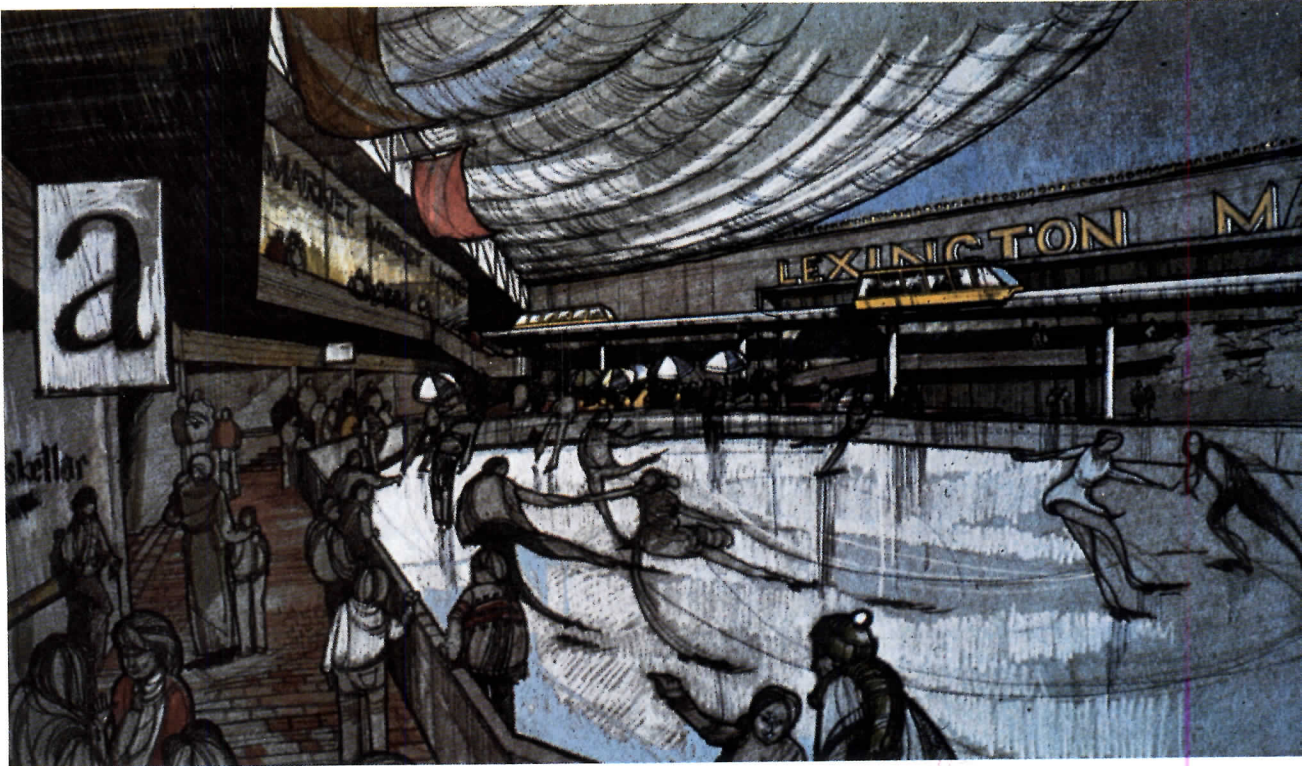
expression of what the market is. Bringing together both existing department stores and a slew of new retail, eating, and entertainment establishments, creating a kind of Superstore surrounding a cascade of space and water and plants and people, serving the noontime, afterhours, and weekend wants of office workers, Baltimore Gardens would also splice into other downtown improvements like the Charles Center area, with its offices and apartments, three blocks away, and to the nearby Lexington Market. Connections are also planned to the University of Maryland and the Social Security employment center. Finally, this proposal has spurred the city's determination to make code changes that will permit the conversion of old loft buildings in the area for new apartments—and this after a period that saw people leaving the city in the face of a seemingly futile hold-the-line housing policy.

Baltimore Gardens, even with all of its bright lights and economic bravura, is an important concept in another respect. Moore approached the actuality of the area—that existing stockpile of stores and streets, and the eventuality of the area—that projected subway line, as the raw material of design. And the design we see here, now being fine-tuned in light of imminent front-end financing, is not so much something that he has put into the situation but something, far more cogent, that he *found* in the situation. Found, too, and a natural extension of his "design approach," has been a financing approach made all the more appealing to otherwise wary developers because, from the first, the *specific physical implications* of redevelopment were right out front—not relegated to just volumes of statistical speculation. What is needed now is a good putter-togetherer, and that developer, the architect having helped "design" whatever confidence he brings to the job, will be given, essentially, "free land" by the city as a result of the "value capture" strategy. The "return," for Baltimore, will be sizeable appreciation on those front-end expenditures of money and faith because Baltimore Gardens, being design in the sense that it reflects the purposes, priorities, and hopes of the city, will have given everyday people something to appreciate. Projected for completion before 1981 if things go as they are presently expected, that new subway will have something worth arriving at.

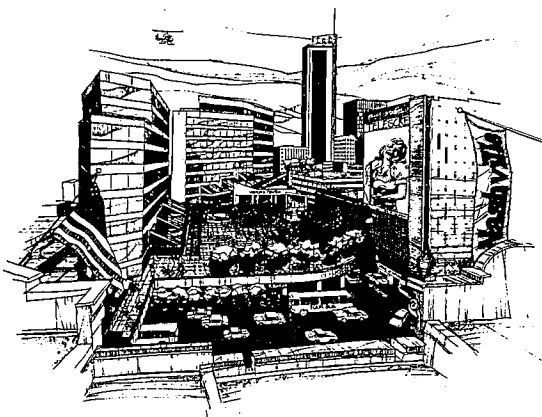




Baltimore Gardens is meant to tie in with that city's upcoming subway system—an example of architect Arthur Cotton Moore's strategy of deriving design strategies from within the nature of actual urban dynamics. Responding to the need for both open space and vibrant retail activity as the basis for resuscitating a presently dormant department store district, Moore has applied another dynamic, that of the suburban shopping center, while having evolved a formal framework, consisting of richly landscaped trays, that is directly expressive of the excavation-style atmosphere occasioned by the creation of the subway itself. Baltimore Gardens recognizes and dramatizes the few remaining physical assets of the area, weaving existing department store buildings in with a surfeit of new shops and services and entertainment facilities. It is a balanced, bright response to the variation of actual and potential markets around the clock. A similar sensibility to reusing and reweaving downtown resources appears in Moore's proposals for Nashville (see drawings overleaf) where a walkable, good-looking mix of rehabilitated buildings and new downtown construction would provide new apartments, lively retail activity, and, with the provision of a unifying central link, a highly visible expression of what Music City is all about.

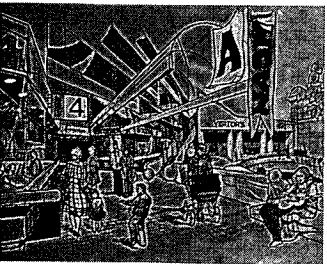
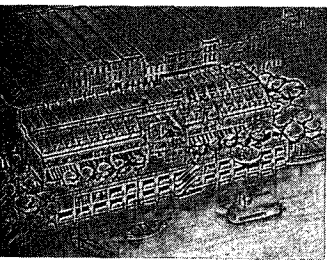


Petersburg, Virginia's proposed tourist port on the Appomatox River will blend natural attractions with a refurbished physical heritage



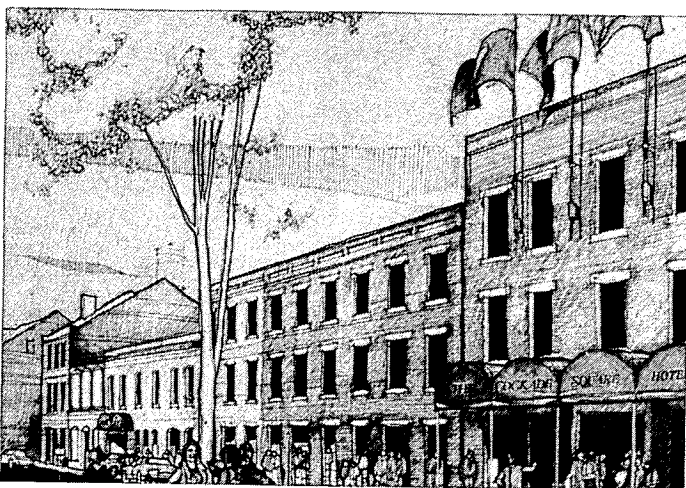
A different variety of passer-by was on the minds of the people in Petersburg, Virginia, an historic town on the Appomatox and tied into the tourist traffic of the popular James River region. Unfortunately, rather passive historical displays had not done much to divert tourists away from the major highways that pass through the edge of downtown, and so Petersburg found itself in a serious economic slump. Working with a grant from the National Endowment for the Arts, the city's tourism department, working with Moore, hit upon the idea of dragging the Appomatox right into downtown and creating, beside a new inlet for tourist and pleasure craft, a district full of salvaged, recycled, revenue-producing buildings.

The idea is to identify and dramatize and market attractive investment opportunities, pegged on the expected pull of the projected mini-port, which would be located where the freight runs of the Seaboard Coastline and the Norfolk & Western Railroad are now. Moore points out that the area at the foot of Sycamore Street had gone to the dogs, what with the old dog food outlets located there, and, to

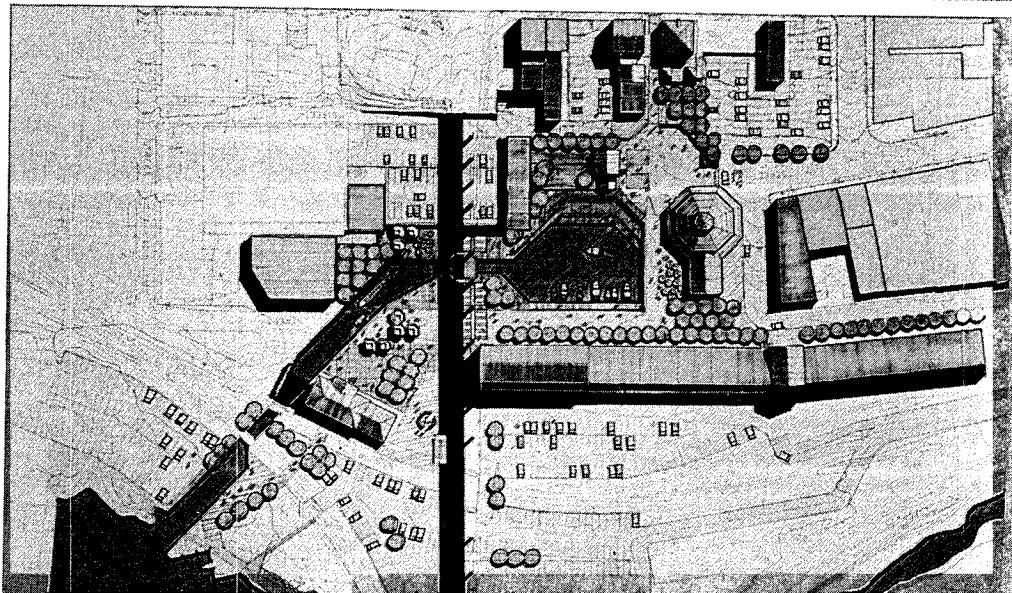


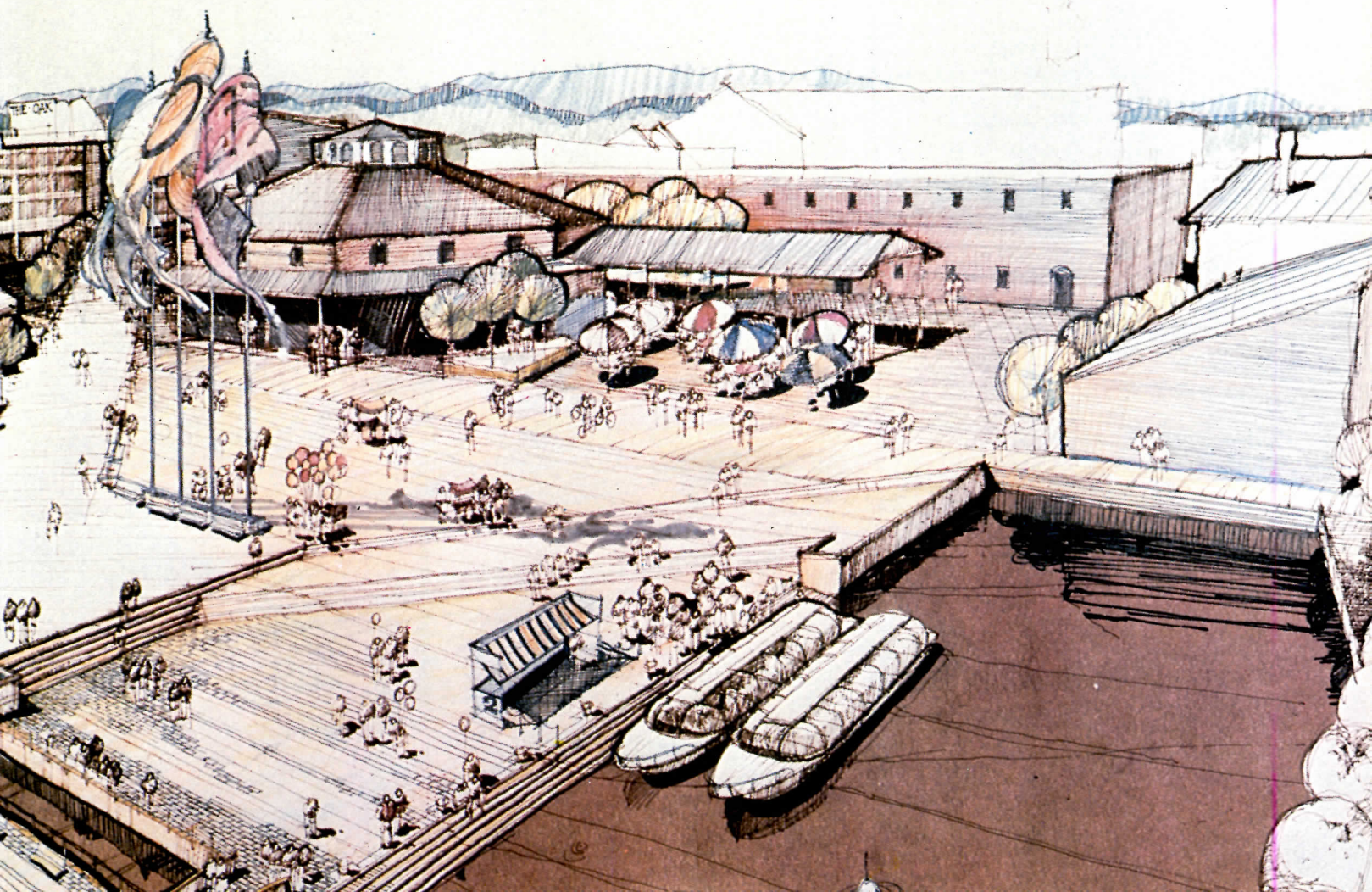
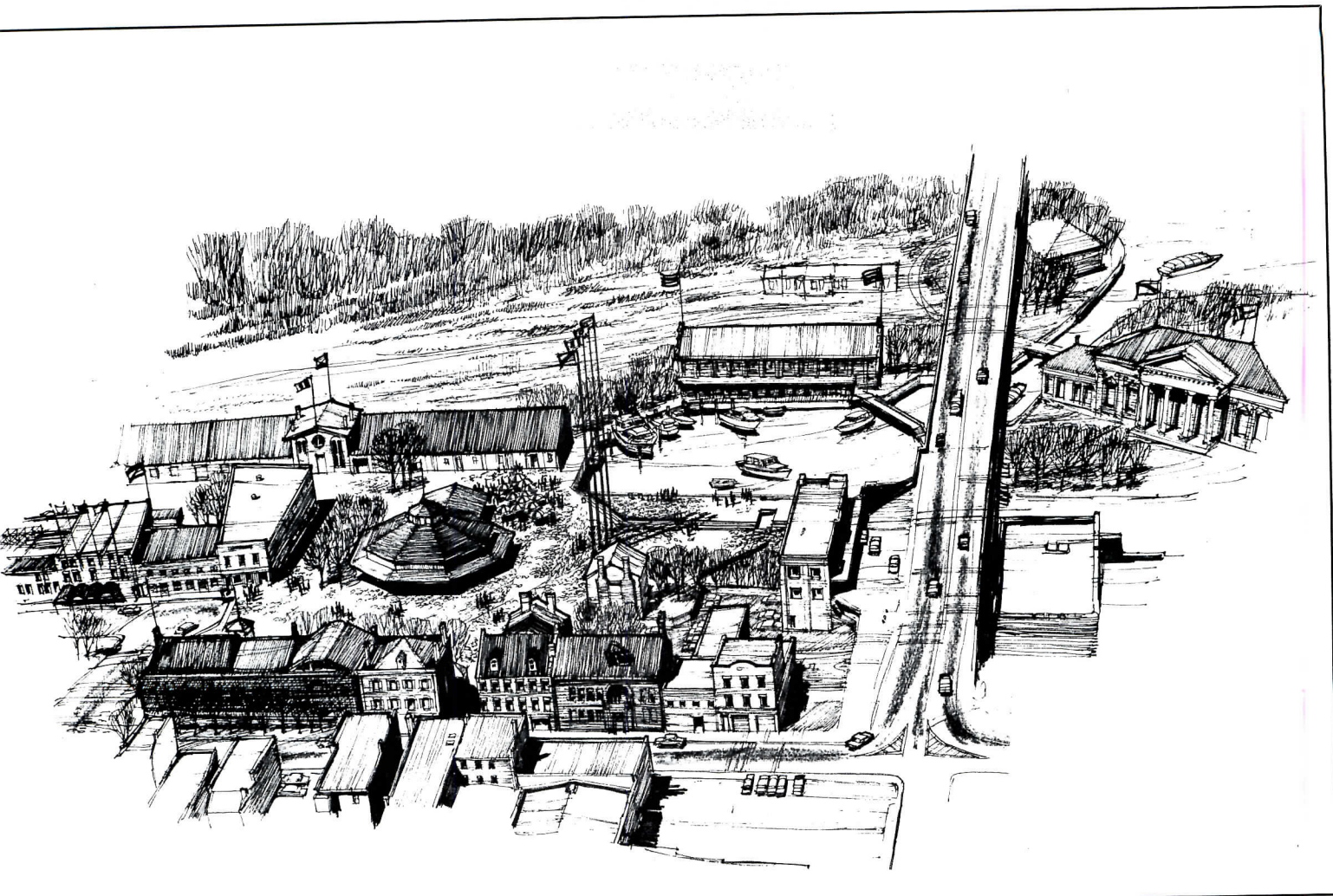
maintain something of that tradition, this implementation plan calls for turning one of the outlets into a hotel, which would, in turn, relate to retail and commercial life within the neighboring market and a recycled railroad depot. With the local bank lending moral support to this comeback, and with a number of small entrepreneurs interested, a second National Endowment grant has been applied for to finance fine-tuning of these proposals as negotiations with the railroads proceed and developers are secured. This cold-feet scheme—"if you're really worried, you can still do something," says Moore—has a good chance of breaking ground, and Petersburg may yet be more than a charming speedtrap along Interstate Highway 95.

Turning a city's apparent liabilities into



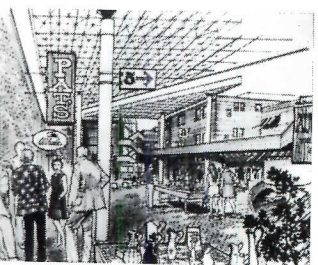
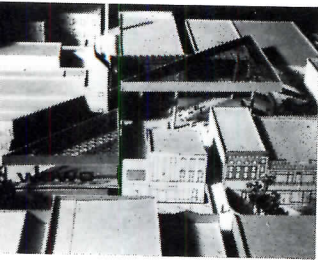
In Petersburg, Virginia, Arthur Cotton Moore, recognizing that an active rather than passive use of its historic surrounds by the Appomatox River would be necessary to leaven the city's sadly sagging tourist allure, has proposed dragging the river into the fringe of downtown, over a sea of train yards and freight facilities, and thus creating an inlet for pleasure and tourist boats that might better attract people who are traveling through the James River region nearby. Initial targets for redevelopment include an old dog food outlet, which would be turned into a mix of hotel and retail activities, the conversion of an old depot for additional commercial and cultural space, and the creation of a quay stepping down to the new inlet. Hoping to communicate this more pragmatic use of historic resources as solid investment opportunities, the local tourist department is arranging for additional study funds.





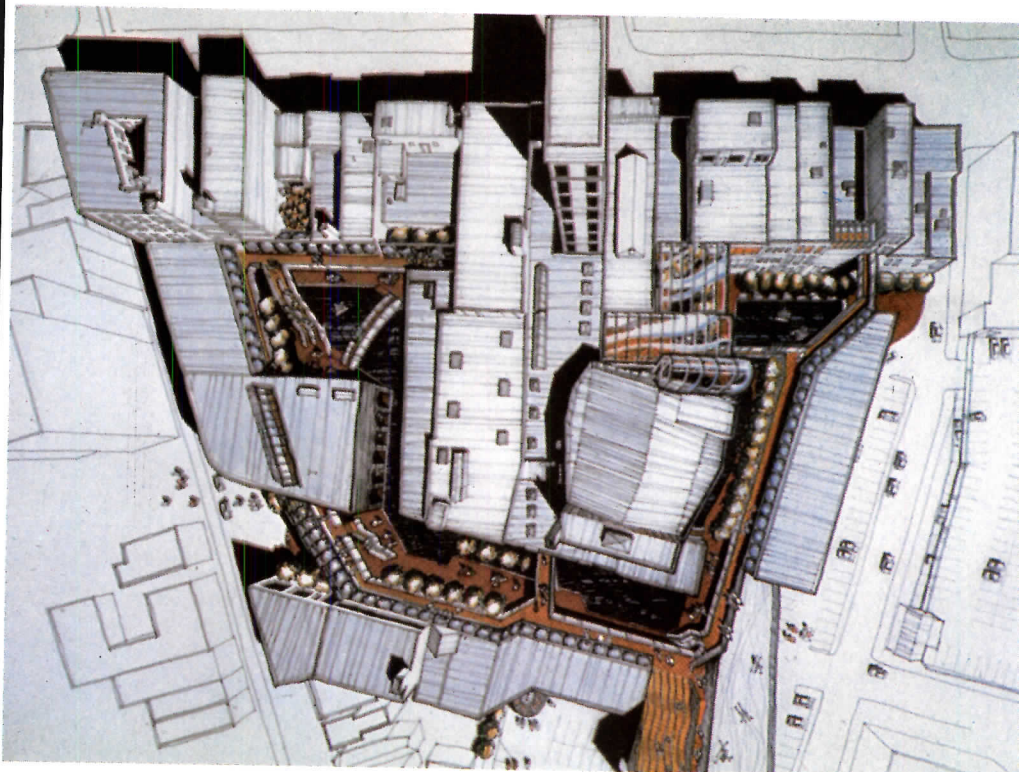
Schenectady, New York, is fixing some urban leftovers and serving up a bite-size blockful of retail and recreational action

economic and social assets has also been the design principle behind Moore's on-going involvement with the merchants of Schenectady. Here, until very recently, the public sector was completely lacking. But a garden variety of vendors, worried about their receipts, decided to grow some genuine renewal. Moore was called in to help turn themselves into a "developer." What has resulted is a layering of renewal projects—the surfacing of the old

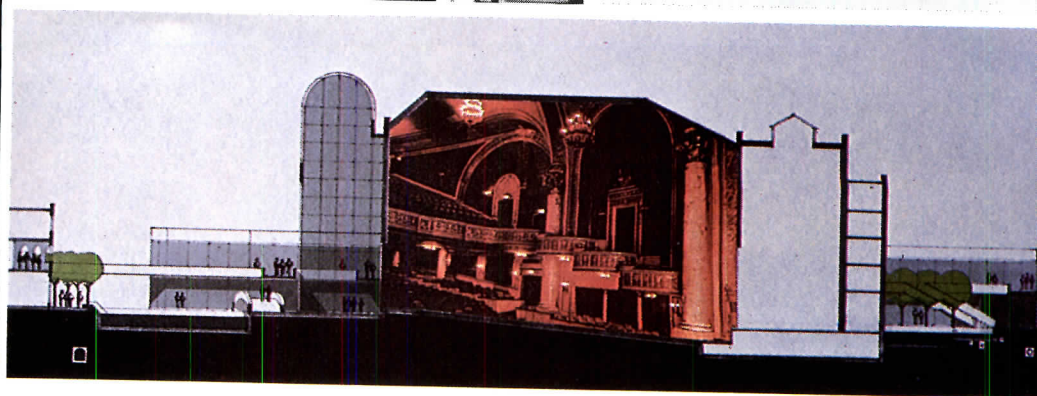


Cowhorn Creek and its transformation into a little Erie Canal; the conversion of the old Roxy Theater into a performing arts center; and the adaptation of the upper floors of the various existing buildings for such noncompetitive markets as specialty shops, home furnishings, and assorted forms of games and entertainment. Since a railroad and main traffic arteries divide Schenectady into quadrants and block-size chunks with-

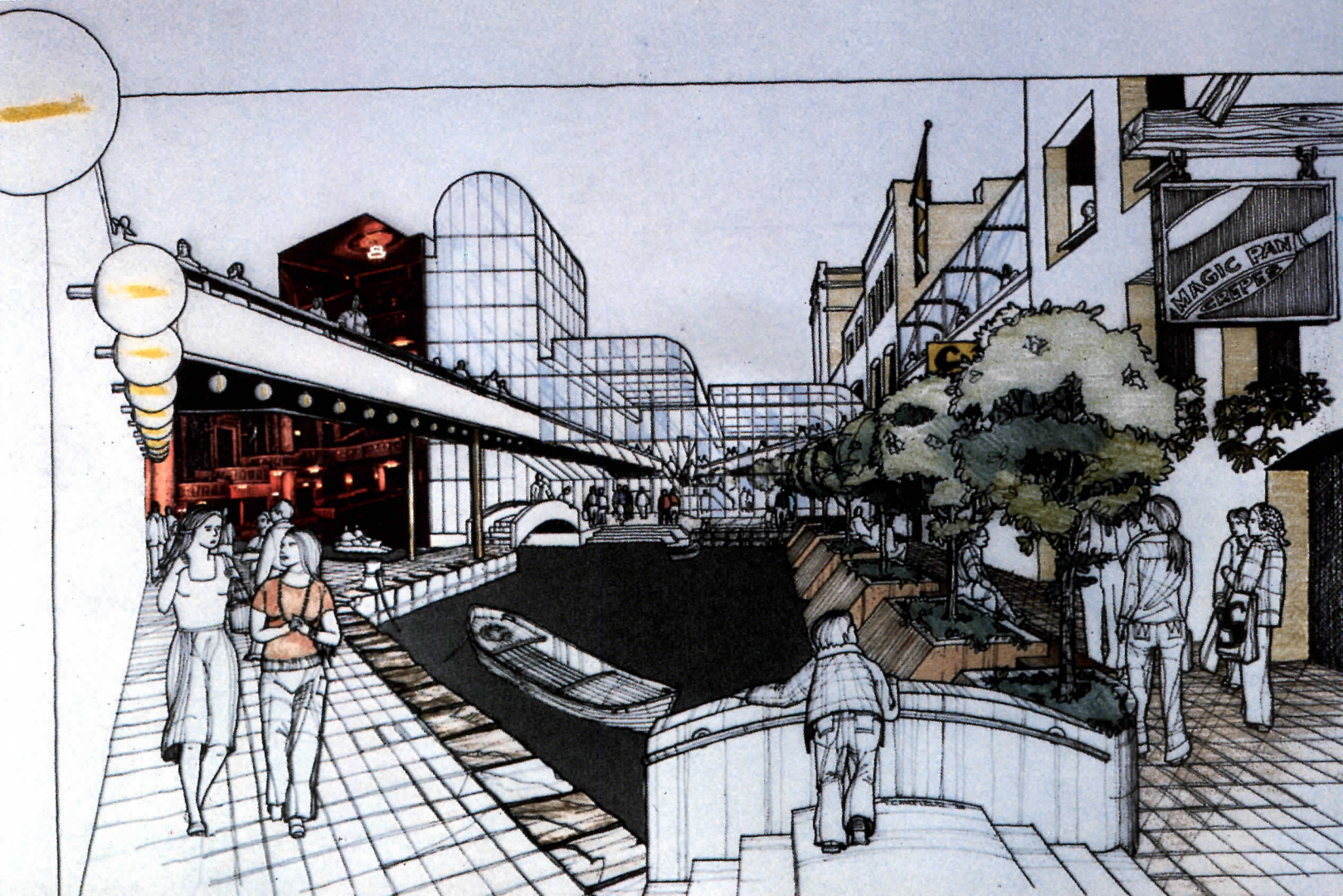
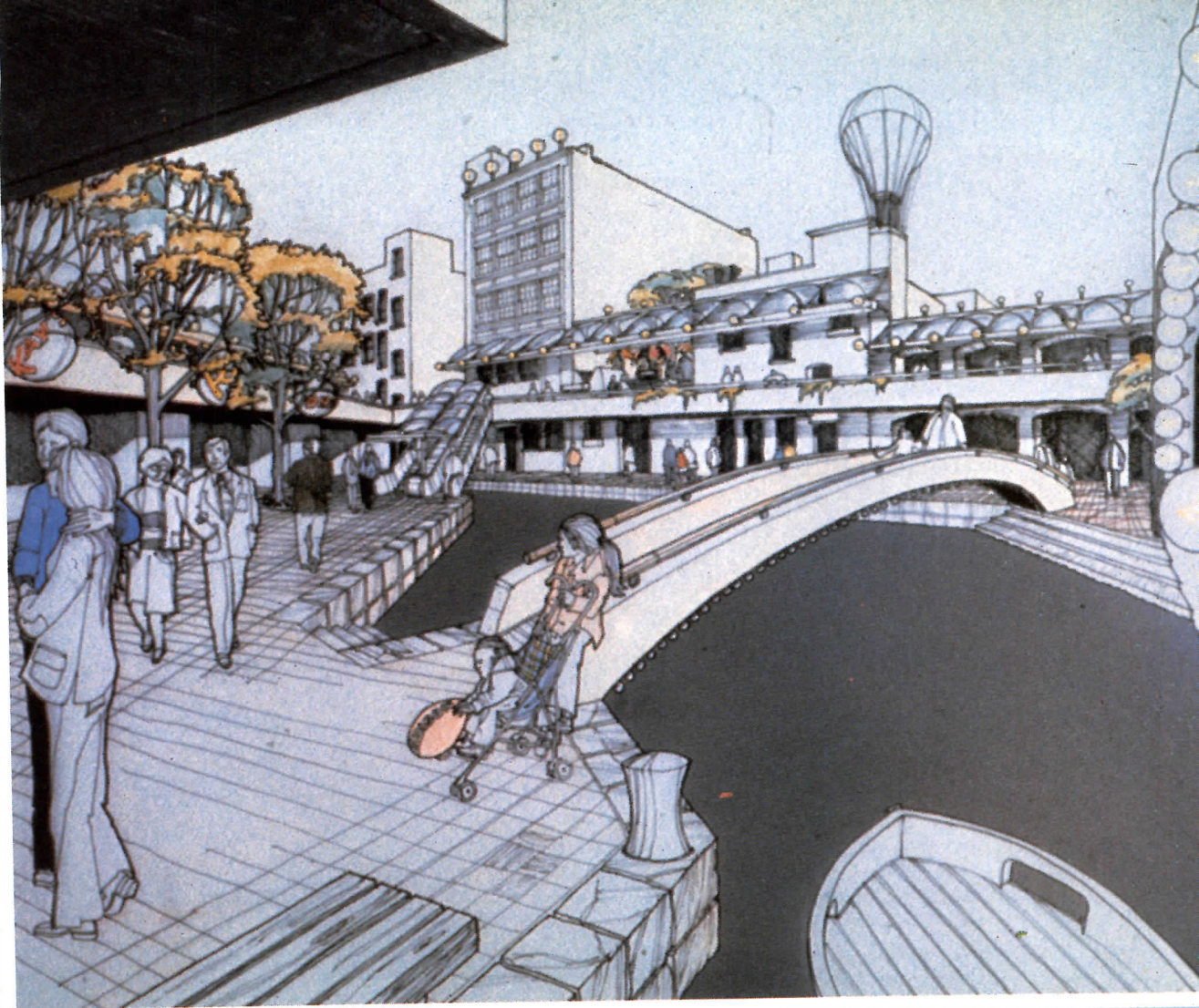
in them, Moore has kept the line of the surrounding streets and turned this chunk, full of proposed amenities, in upon itself, projecting a bit of economic dynamite that can act as a regenerative example for adjacent areas. Moore has encouraged the merchants' determination by deferring part of his fees, as a form of investment, and they will, when their development corporation takes its final form, be putting their buildings and lots into a single legal pot—which is a fairly convincing form of collateral in any lender's book. How this vacuum of vacancies is going to get from here to there depends on current negotiations with local sources of financing and with the Department of Housing and Urban Development, and in this last case, the Schenectadys of this country will do well, as these merchants are, to keep watch on an upcoming program called URDAG, which stands for Urban Development Action Grants—meant to provide seed-money to supplement privately raised funds that almost, but not quite, allow such projects as these to proceed. That extra increment will be crucial



In Schenectady, a block of merchant activity, like many blocks in many cities, is meant to turn vacant lots, alleys, and underused upper floors into a framework for community life and commercial renewal. In Fort Wayne, Indiana (far left), Moore projected a similar alley-cat-with-class approach to enhance an area closeby a civic center that is in the planning stage.



In Schenectady, the subsurface Cowhorn Creek would be resurfaced as a kind of Erie Canal. The old Roxy Theater is projected to become a performing arts center. And the vacant upper-level spaces in the buildings on these blocks are to be occupied with a noncompetitive mix of specialty shops, recreational activities, and other commercial functions. Recognizing the line and identity of the bordering streets, Moore has turned this new concentration of life inward, oasis-like.



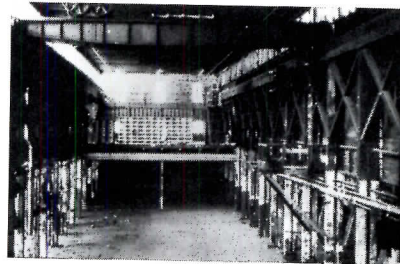
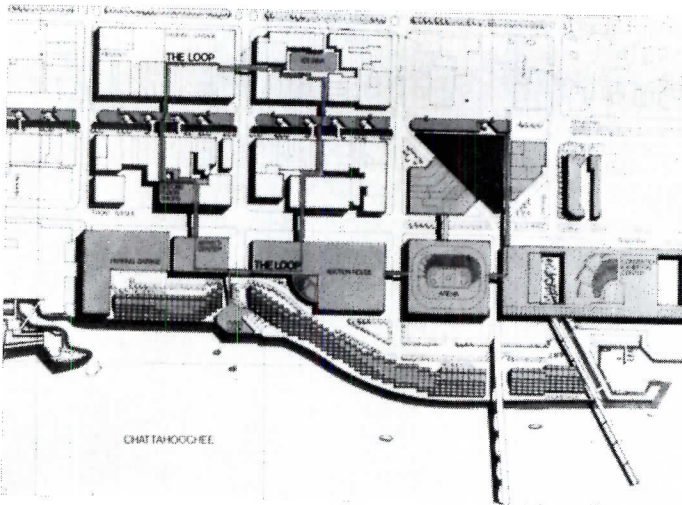
Columbus, Georgia is becoming immersed in sprucing up its old main drag as a people-pulling mix of merchandise and amenities

here, as it has proven to be in so many places. But Moore and the merchants, looking at a sink-or-swim situation, have designed a believable, beautiful bottom-line. It looks like they will be swimming after all, here on the block, and Moore has even given them a creek for it.

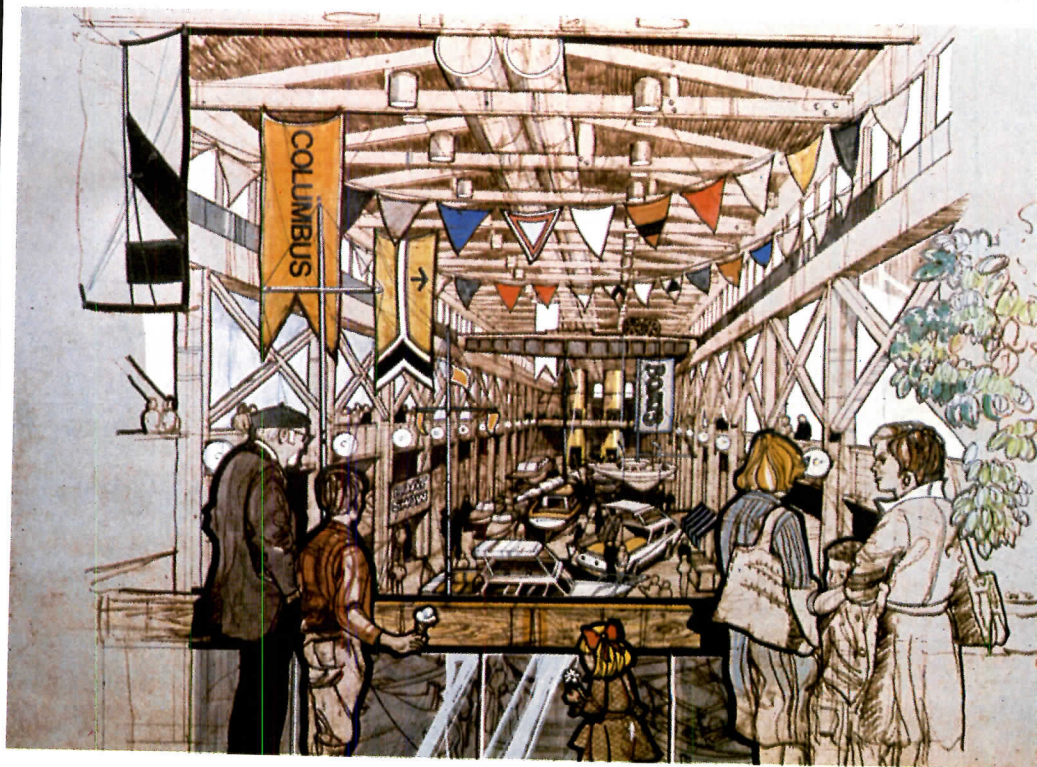
Down in Columbus, Georgia, by the Chattahoochee River, Moore, projecting a Southern Venice, suggested turning one lane of Broad Street, being very broad indeed, into a canal, while beefing up both sides and the median with a combination of revitalized and new buildings. The catalysts in Columbus are the old Rankin Hotel, and its neighboring street frontage, and the iron works from the gunboat days which is being turned into a trade center. A combination of beer taxes, Community Development Funds, and a grant from the Advisory Council on Historic Preservation has helped finance these improvements, and a key function of Moore's continuing role is to help discover a mix of public funds and private entrepreneurs so that the mystique of this old mill town can fully generate a new day for this downtown marketplace. In fact, Arthur Cotton Moore's "horseback empiricism" is having such a good effect all around, proving that money and imagination can work together, one hopes that the man from over Plains way is listening.

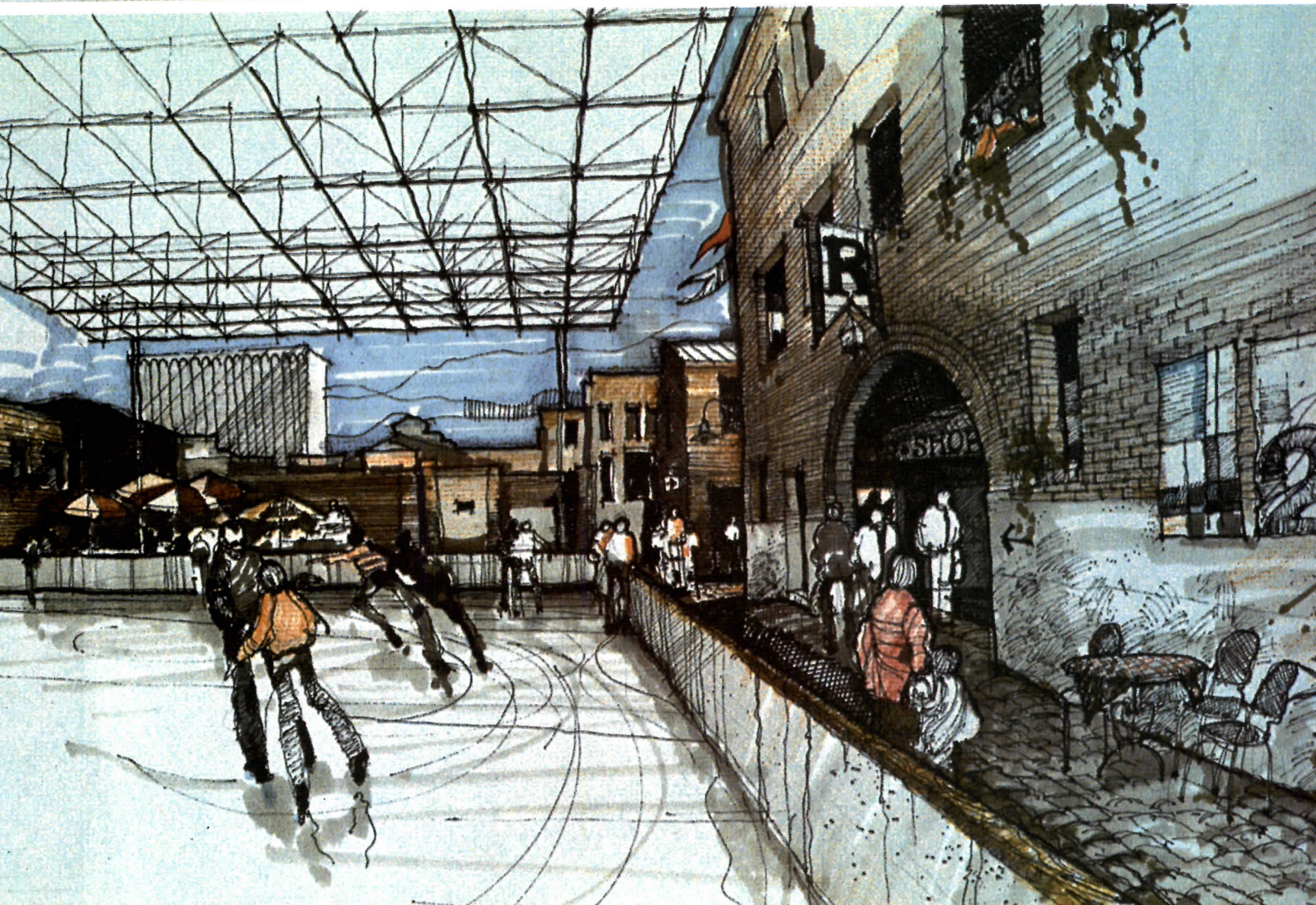
Making the most of what Moore calls the "prime existing resources" of such communities, this implementation planning approach of his has several levels of practical appeal. The private sector can relate to it because this approach, looking for ways to dust off and dovetail various bits and pieces of an area, doesn't demand the sweeping perfections of site assembly and locational preference that are routinely associated with so-called master planning. Finding ways to use, or to relate to, old buildings, underused land, blighted back streets or waterfronts can create leverage—the double economies of competitive (or often cheaper) construction costs, and of heightened leasing appeal. On an esthetic level, the design interpretation of such existing resources defies formulas, encouraging fresh solutions.

"It's settled, I think, that we're going to get our little downtowns and big downtowns rebuilt," Moore emphasizes. "How on earth to do it? Maybe by stirring up some soothing nostalgia through defining a practical potential for their past." — William Marlin



The South is rising again in Columbus, Georgia. With its mill town mystique, and the beautiful Chattahoochee River, Arthur Cotton Moore, working with downtown merchants bent upon bringing back its main drag, Broad Street, has proposed turning one lane of the long, wide stretch into a canal, while beefing up existing stores on the two sides of Broad and constructing new commercial and tourism attractions along the median. The catalysts for this proposal, now underway, are the conversion of an old Confederate iron works, once used for making gunboats, into a trade center—and the adaptation of the Rankin Hotel block for a mix of related, reinforcing retail, commercial, and hotel activity.





A new kind of development—an approach to mixed-use in which architecture supplies the vision that unites developer and community objectives—becomes the catalyst for downtown revitalization in four U.S. projects of Mondev International

by Jeanne M. Davern

In four U.S. projects of Mondev International, developer, architect and community work together to revive downtowns—or keep them alive—by creating concepts of mixed use that come out of what the community is and wants to be; combine public and private functions and funding; complement rather than compete with existing functions; link new development with existing activity; and stimulate related development beyond the project sites.

Mondev founder and president I. Locke Ransen is convinced that economically successful downtown development projects cannot effectively be conceived, to say nothing of designed and built, without the creative involvement of architects from the very beginning of the conceptual process. In his approach to development, quality is a first principle; and architectural quality is the visible expression of all the rest. But that may be the least of it, for the Mondev way of working makes the architect a continuing participant in a creative conceptual process that involves developer, architect and community in working together to enrich each other's perceptions, enlarge each other's horizons and elevate each other's contributions to a level none could achieve alone. The crux of the matter is not *who controls* but *how each contributes* to the concept which emerges.

A unique and significant context for that conceptual process is provided not only by Ransen's own deep commitment to making development an instrument for revitalizing cities, but by the creative alliance he has forged with the architect-planner whose philosophy and public career have illuminated the humane possibilities of "the city as an act of will." Edmund N. Bacon, for 21 years executive

director of the Philadelphia City Planning Commission until his retirement in May 1970, author of *Design of Cities* and proponent of the city as "a people's art, a shared experience," has been for more than six years Mondev's Philadelphia-based "vice president, design development." His perception of a community Mondev is considering is the foundation of the evaluation process; his perception of a community Mondev is working in is the continuing catalyst of the planning and design process.

Locke Ransen's convictions are founded on 20 years' experience in construction, development and operation first of single-family houses, retail complexes, apartment buildings and office buildings, then as a pioneer of mixed-use development projects. He began with a family construction company in Montreal, where Mondev was established in 1963, on his initiative, as a joint venture involving, in addition to his own interests, those of the Montreal Trust Company and subsequently of the Royal Bank of Canada and Fidelity Mutual Life Insurance Company of Philadelphia.

His first mixed-use development project and (after Rockefeller Center) one of the first in North America (1962-69) was the now world-famous, and immensely successful, office-retailing-apartment-parking complex, Westmount Square in Montreal, for which Ludwig Mies van der Rohe was the architect. Westmount Square's concourse level was linked to Montreal's Metro by a 400-foot-long arcade built by the developer at his own expense, since he had tried and failed to interest either municipal, provincial or Federal governments in building it. It was the first time residential had been connected to the Metro.

Since 1970, Ransen has been working in the U.S. as well as Canada. Architects of his U.S. work (all mixed-use downtown development) now completed, under construction or under contract, are Nelson Aldrich and Associates (for Salem, Massachusetts), Romaldo Giurgola of Mitchell/Giurgola Associates (Seattle and Boston), Richard Meier (Colorado Springs and Manchester, New Hampshire) and the Office of Mies van der Rohe (Burlington, Vermont and Binghamton, New York). Philip Johnson of Johnson/Burgee Associates is architect of the next phase of the Burlington project, which will include a Civic Center. (Robert Burley is associated architect.) Ransen also

commissioned Walter Gropius for a mixed-use project in Quebec City, Louis Kahn for one in Baltimore and I.M. Pei for one in Atlanta; the Kahn and Pei projects have not been built.

Three of the four projects shown on these pages are designed for urban renewal sites; but what Mondev is up to on those sites (as the photographs and drawings reveal) is not the standard urban renewal project, a few or several new buildings standing on their cleared site in visible (and actual) isolation from the rest of the community.

All four projects are in some way linked physically to their surroundings, knitted into the living fabric of the community. They are also designed for spin-off, to encourage new activities beyond their sites which can both contribute added vitality to the community and reinforce the vitality of the projects themselves. And they have been derived from a vision of "what the city ought to be" (as Bacon puts it in *Design of Cities*) which is the beginning of Mondev's concept planning process.

And all four projects are "mixed-use development" (MXD), a very particular kind of development which was last year established (complete with acronym) in a major study* by the Urban Land Institute, as an official development category. "Mixed-use development" is not to be confused with "multi-use projects" (also ULI vocabulary) or mixed-use buildings.

As defined by ULI, a mixed-use development "means a relatively large-scale real estate project characterized by:

- three or more significant revenue-producing uses (such as retail, office, residential, hotel/motel and recreation—which in well-planned projects are mutually self-supporting);
- significant functional and physical integration of project components (and thus a highly intensive use of land), including uninterrupted pedestrian connections; and
- development in conformance with a coherent plan (which frequently stipulates the type and scale of uses, permitted densities and related items)."

In Mondev's philosophy, mixed-use development also not only implies but absolutely *requires* a public-private mix both of functions and funding. This is what makes the working relationship of the developer-architect-community triad so crucial in the planning process. The Mondev way of working is, in fact, a

continued on page 107

Jeanne M. Davern is a freelance architectural journalist and editorial consultant who is a former managing editor of ARCHITECTURAL RECORD.

*MIXED-USE DEVELOPMENTS: *New Ways of Land Use, Technical Bulletin 71*, Urban Land Institute, 1200 18th Street, N.W., Washington, D.C. 20036, 1976, 193 pages, illustrated, \$18 (\$13.50 to ULI members). The report of a ULI-commissioned study by Gladstone Associates, Economic Consultants, Washington, D.C., which was developed with the advice of a ULI review panel representing a wide range of MXD experience. Panel members included Ransen, who is second vice president of ULI and former chairman of its Urban Development Council, and Bacon, a council member.

Salem, Massachusetts

Population: 40,556

Site: 40-acre downtown renewal area, with separate project sites (cleared)

Project: Heritage Plaza

Estimated cost: \$50-million (total of public and private funds)

Mix: Public and private funds, public and private use. Functional types: parking garage, office building and retailing, pedestrian "greenways" and plazas. Under construction: retail mall. Future: residential

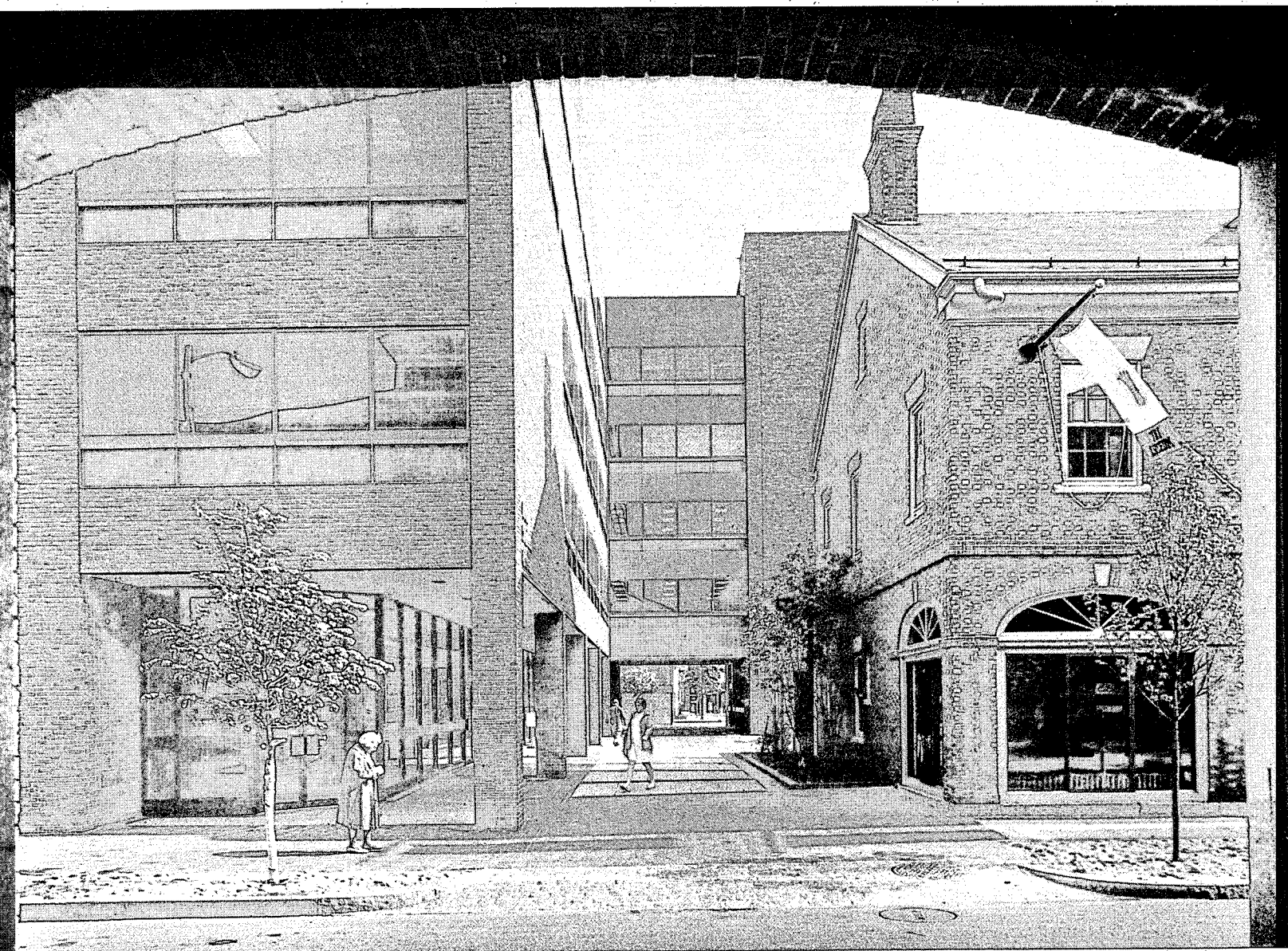
Links: Pedestrian "greenways" and plazas developed with public funds to connect the separate urban renewal sites with the existing retail areas and with the town's historic landmarks

Spin-off: Recycling and restoration, through a unique system of "facade easements," of 33 historic buildings, from the Town Hall and a hotel to a wide variety of stores, restaurants and other commercial establishments

Developer: Mondev International/The Salem Corporation.

Architects: Nelson W. Aldrich and Associates (now Aldrich Pounder and Associates)—Nelson W. Aldrich, partner-in-charge. One Salem Green (office building)—Samuel Wang, project architect; Chung Lee, project designer. Salem Parking Garage—Samuel Wang, project architect and designer. East India Square (retail mall)—Maxwell Pounder, project architect; Chung Lee, project designer.

Community: Salem Redevelopment Authority—Robert Bowman, chairman (since 1976); Christopher Olney, Project Administrator (since 9/1/77); John W. Barrett, executive director (1964-9/1/77), Consultants—The Collins Du Tot Partnership/The Delta group, civic design (John F. Collins, partner-in-charge; Tom Schraudenbach, project manager).



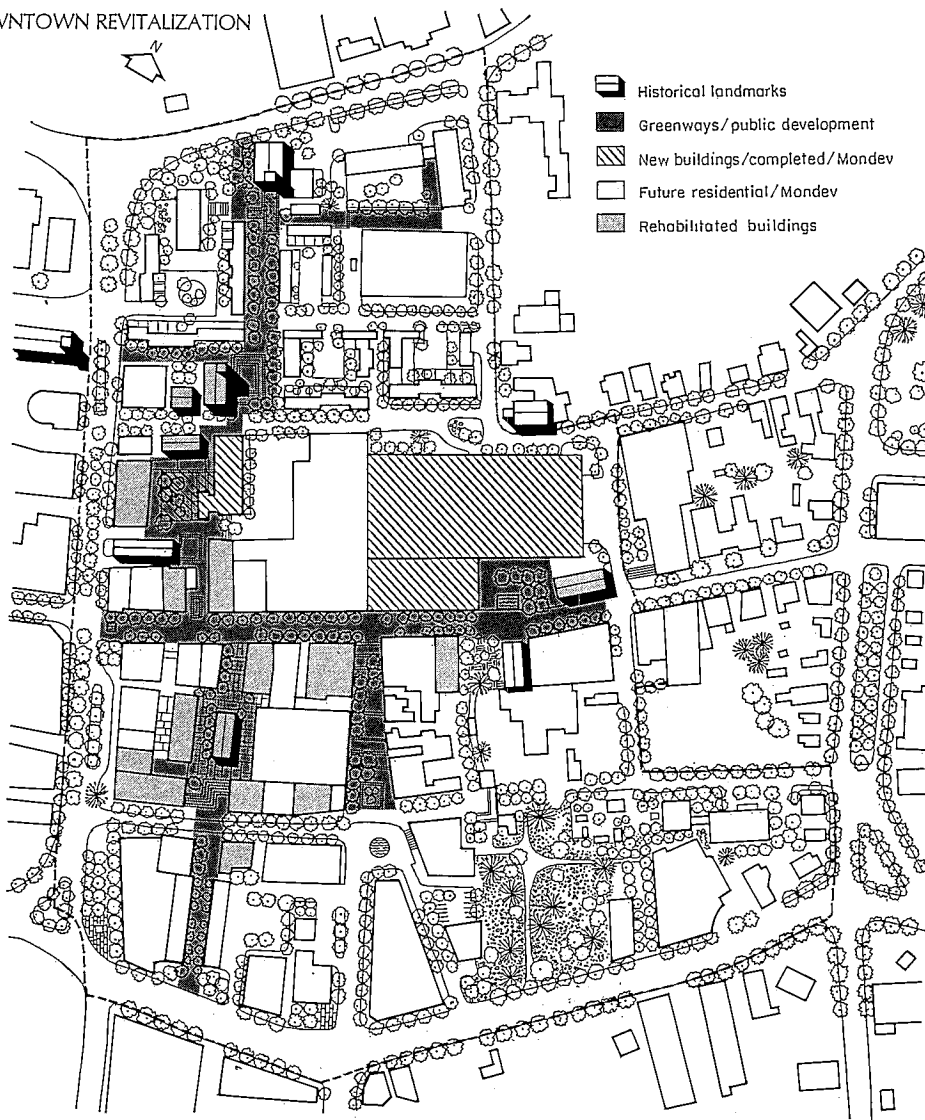
Norman McGrath

The partnership of public-private effort that has evolved from the Mondev way of working in the historic New England town of Salem is symbolized in the photograph above. It shows One Salem Green, the new office building which was the second building built in Salem by Mondev, and the old Lyceum, which was restored and recycled (as a delightful restaurant with terrace and garden) under a system of "facade easements"—administered by the Salem Redevelopment Authority—which has so

far resulted in restoration of no less than 33 buildings in downtown Salem. Like the first of Mondev's buildings in Salem, an enormous but very handsome parking garage (not shown), One Salem Green was designed by Nelson W. Aldrich as a new part of an old street. Its main entrance fronts on a pedestrian link between this street and the "greenway" on its other side, a reflection of the attention paid by the developer to linking new development with the existing community. A third Mondev

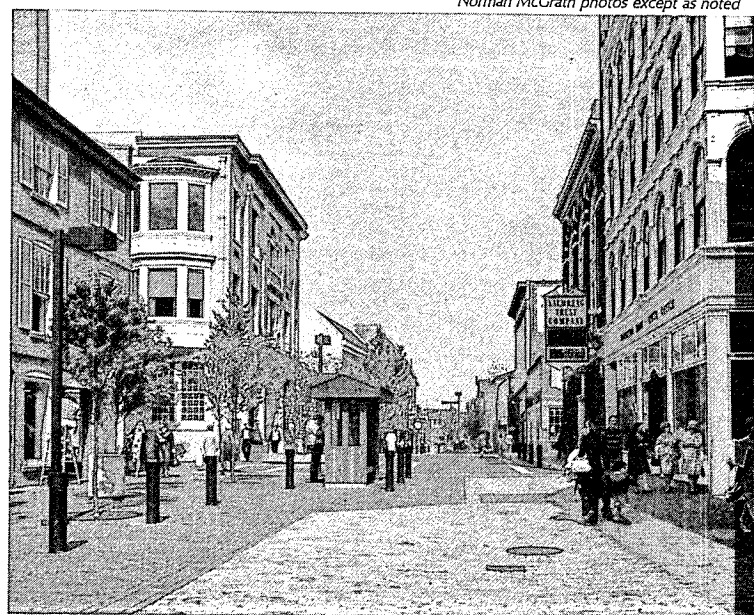
project, the retail mall East India Square, also designed by Aldrich, is under construction.

Nearly all the circumstances that are most effective in discouraging downtown development were present in Salem. Downtown had been eroding for years under the onslaught of regional and strip shopping centers along bypass Route 128. The community was deeply split over renewal (economic revival vs. historic preservation). The project was continually whiplashed in partisan political storms.



Community participation in the developer-architect-community planning process had an added dimension in Salem. Because of its "civic design" consultant John Collins—introduced to the Salem Redevelopment Authority by Mondevia Bacon, with whom he had worked in Philadelphia—SRA had a design impact that normally comes only from the architect (and Bacon). Photographs show the landscaped walkways, fountains and new Derby Square "farmers' market," all designed by Collins for SRA; and many of the restored buildings, rehabbed under a unique system of "facade easements" which encouraged participation by many different owners, developers and architects. SRA, with a design review board of which Collins became, and remains, a member, must approve facade treatment and in perpetuity retains the right to review any facade alterations. The "greenway" system and its focal points evolved in the kind of intensive interchange among developer, architect and community that characterizes the concept planning process in Mondevia's way of working.

Norman McGrath photos except as noted



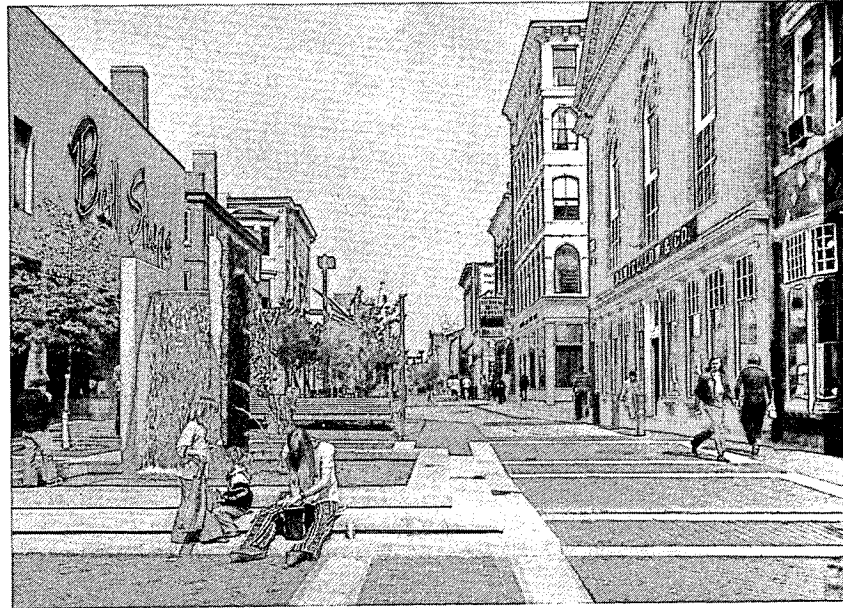
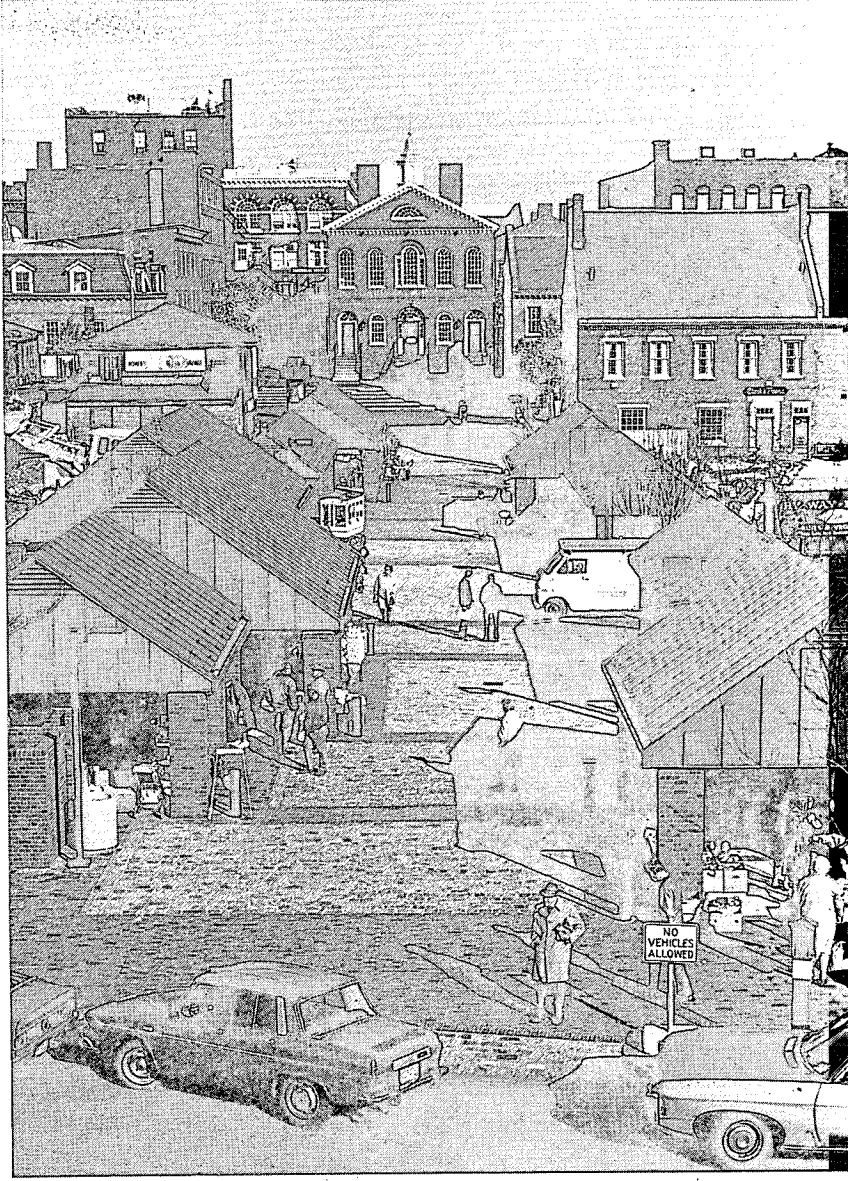
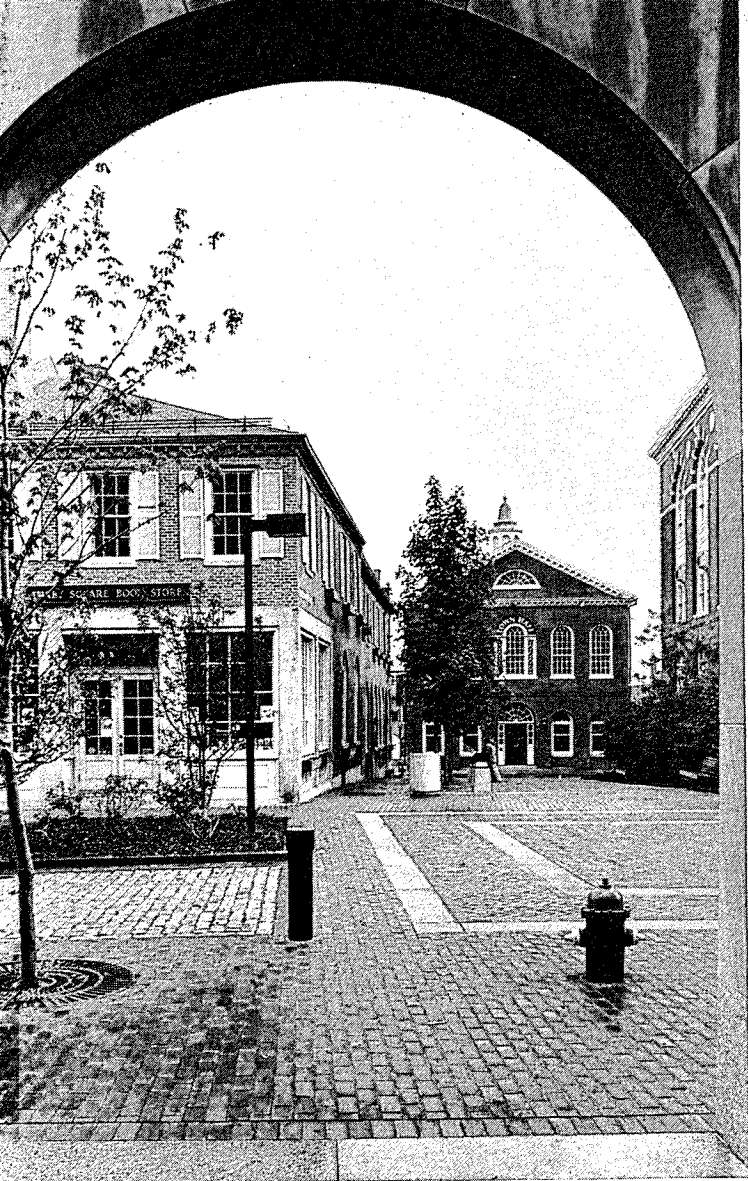
But Salem's dedicated band of preservation organizations eventually found effective allies who believed that economic revival and historic preservation could stimulate each other—Sam Zoll, Salem's mayor from 1970 to 1973; Timothy J. Noonan, SRA chairman 1970-73; and William J. Tinti, SRA chairman 1973-75. Then Nelson W. Aldrich found them; and in early 1972, Mondevia entered the picture and added its weight to the preservation thrust.

It now became the policy of SRA that no

building would be demolished unless efforts to save it through rehabilitation and/or recycling had been made and failed; and no building would be demolished until a new building was scheduled for construction on its site. At the same time, the "new" SRA also devised a program to encourage owner-occupants of as many old buildings as possible to stay in them. In return for "facade easements" which give SRA legal authority in perpetuity over the building's facade, SRA uses project funds to

rehab it—exterior restoration, structural stabilization and gutting of the interior—so that interior renovation becomes feasible for small developers on a building-by-building basis.

When Nelson W. Aldrich, who says he has been interested in Salem "since I was three years old," heard that the SRA was scrapping "the old plan, which everybody hated," and looking for new ideas and new developers, he decided to see what he could do to be involved. And he initiated the development



team which was selected over 22 others as "designated developer" under the name "Salem Corporation"—owned 50 percent by Mondev, 25 percent by R.M. Bradley & Co. (real estate consultants) and 25 per cent by his firm (then Campbell Aldrich & Nulty). In the course of the planning process, when additional investment funds were needed, the Salem Corporation became solely Mondev—R.M. Bradley dropped out, and Aldrich became the architect, without financial interest.

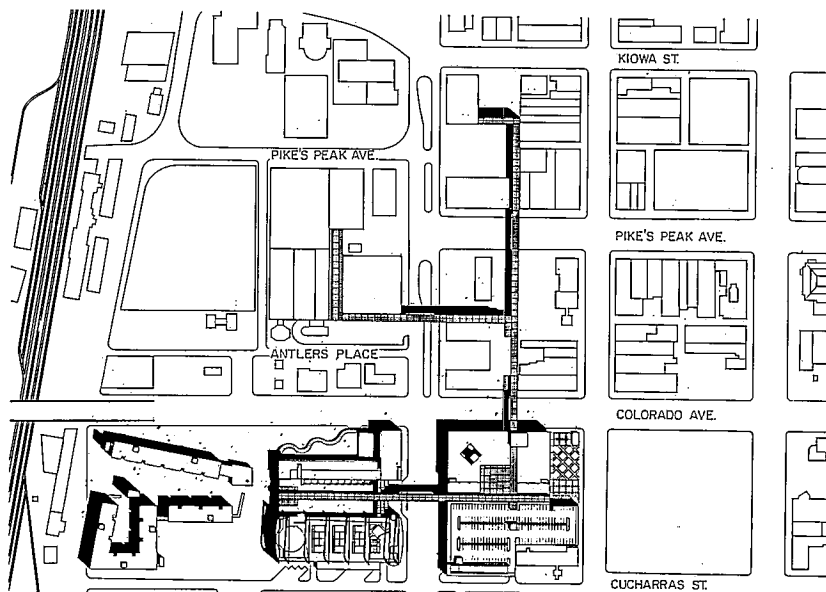
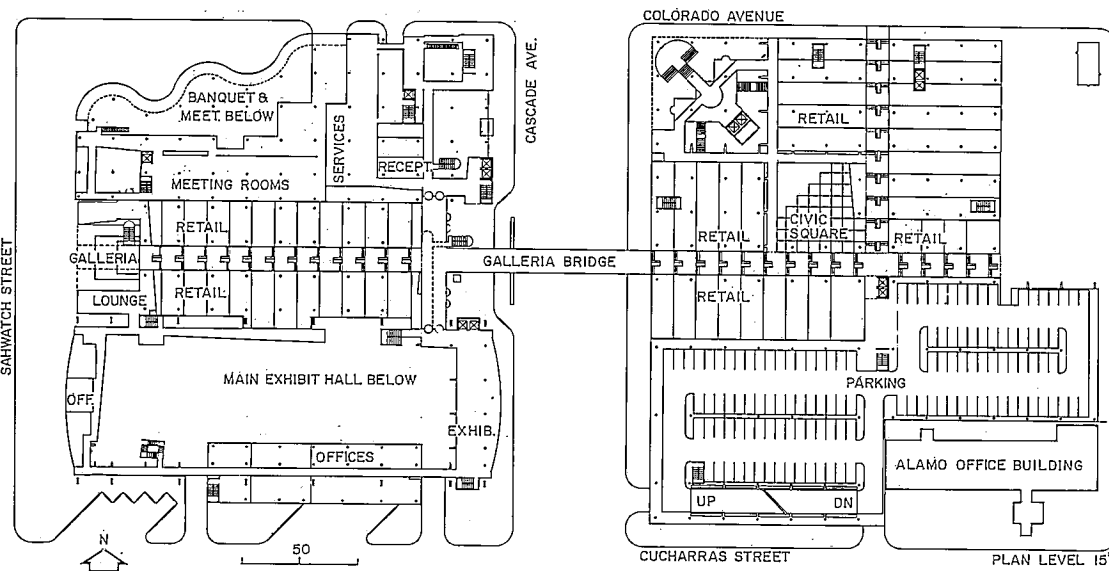
Aldrich had conceived downtown Salem as a place to live as well as work and shop, almost a town within a town, and rather like a small town with all the conveniences within walking distance. And he saw it as a pedestrian oasis. The Mondev development plan derived from these ideas and strengthened them in many ways. The Aldrich plan had some suggestions of greenways, but a traffic study commissioned by Mondev recommended, and persuaded SRA to adopt, a new traffic circulation

network that made even more extensive greenways feasible. (Warren Travers was the traffic consultant.)

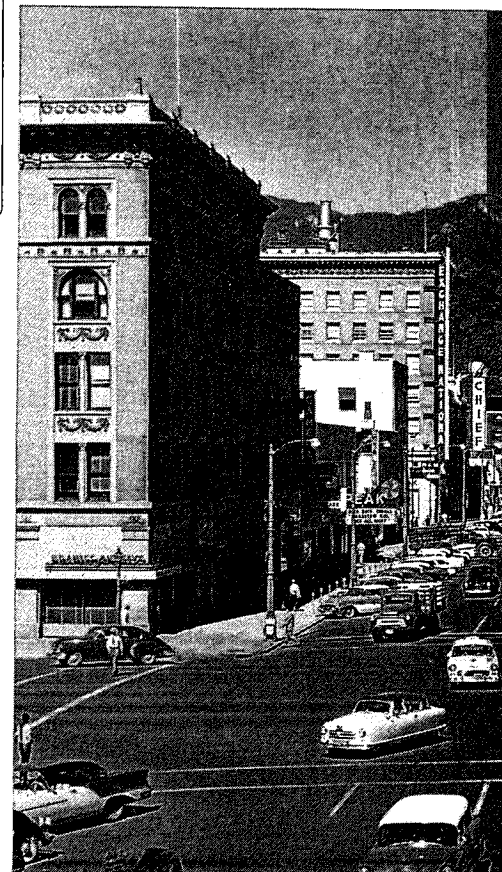
And Mondev support for the greenway concept as a major public contribution to this public-private development project helped both persuade SRA to adopt it and equip SRA to carry it out by introducing John Collins, the landscape architect who had worked with Mondev vice president Bacon on the greenways in Philadelphia, as SRA's consultant.

Colorado Springs, Colorado

- Population:** 135,000
- Site:** Two adjacent downtown city blocks (cleared)
- Project:** Alamo Plaza
- Estimated Cost:** \$25-million (total of public and private funds), including city hall and civic plaza
- Mix:** Public and private funds, public and private use. Functional types: convention center, hotel, retail mall, parking garage, recreational facilities, city hall and civic plaza.
- Links:** Elevated walkway system stemming from the center's 70-foot-high, 800-foot-long glazed galleria that steps up from grade to bridge a street that could not be closed, then steps down again into the new civic plaza. The walkway system connects the new center with the main existing areas of retailing and other commercial activity.
- Spin-off:** New city hall, which was to be built on another site, incorporated in Alamo Plaza. Location of projected new bank headquarters shifted to site in block adjacent so it can connect by walkway to new center.
- Developer:** Mondev International, Ltd.
- Architect:** Richard Meier and Associates
- Community:** Colorado Springs Urban Renewal Effort (CURE)—Diane Ingles, chairman; Charles D. Parrott, executive director; Bud Holscher and Associates, management consultant.



The renewal site was cleared 14 years ago. The Mondev proposal would revive a historic concept of the community as gateway to Pike's Peak, symbolized by the photograph looking up Pike's Peak Avenue when the old Antlers Hotel still saluted the peak, long a mecca for so many tourists. To encourage tourism or not is a question that now divides this community.



Richard Meier says: It was a primary consideration to determine how what we did here would positively affect the entire downtown area. We sought not only to reinforce particular characteristics of the original organization of Colorado Springs, but to reach out into the city and recreate the spirit of the Pike's Peak Avenue approach. As architect, my role was to help clarify an attitude about the particular characteristics of this context.

The proposal for the sites is to develop

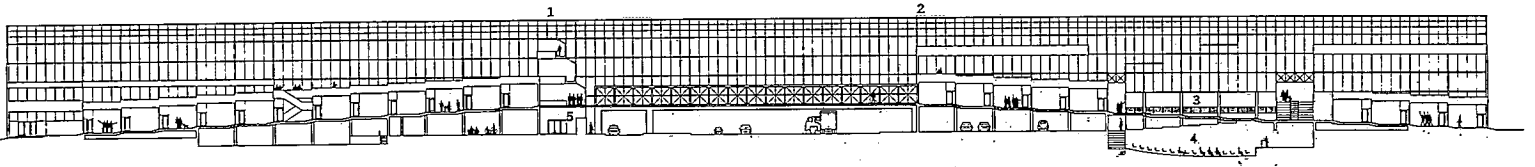
them in a way that will frame the view of Pike's Peak and that will also unify the separate elements of the convention center, the municipal parking garage, the hotel and what came later as the new city hall and the bank building, and extend that notion into an extension of the existing park area for a new park and residential space. The building complex is designed for two of the three vacant sites. It is grouped and massed in deference to the scale of, and connections into, the surrounding city. It is a

response to the gateway approach aspect of a new galleria.

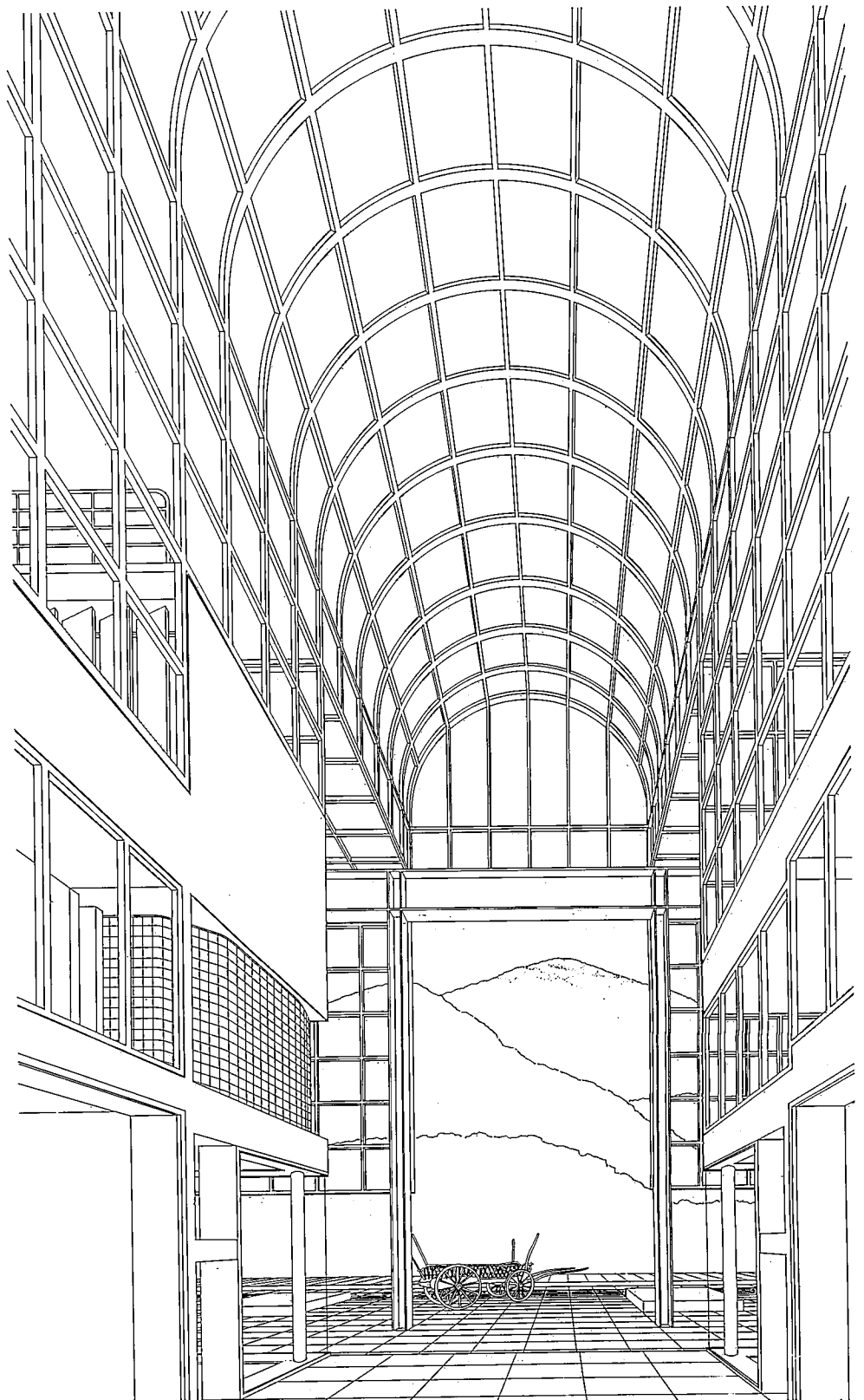
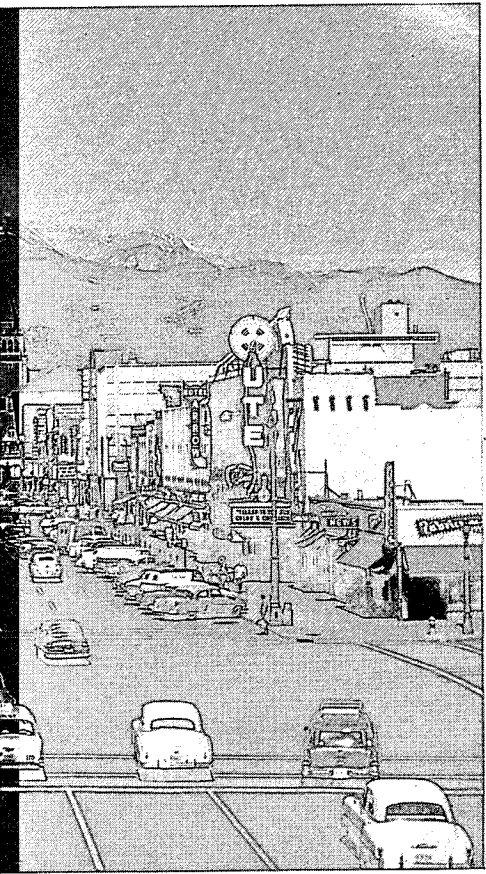
The building complex is in six parts—the first three (convention center, hotel and parking garage) were more or less given; the fourth and fifth (city hall and bank) were related needs the city had identified but didn't think to incorporate into this project; and the sixth was the connectors, the mortar that bound them all together.

The physical appearance of the complex is

- 1 Bridges to hotel, offices and meeting rooms
- 2 Municipal office building beyond
- 3 City square
- 4 City assembly
- 5 Lobby
- 6 Plaza



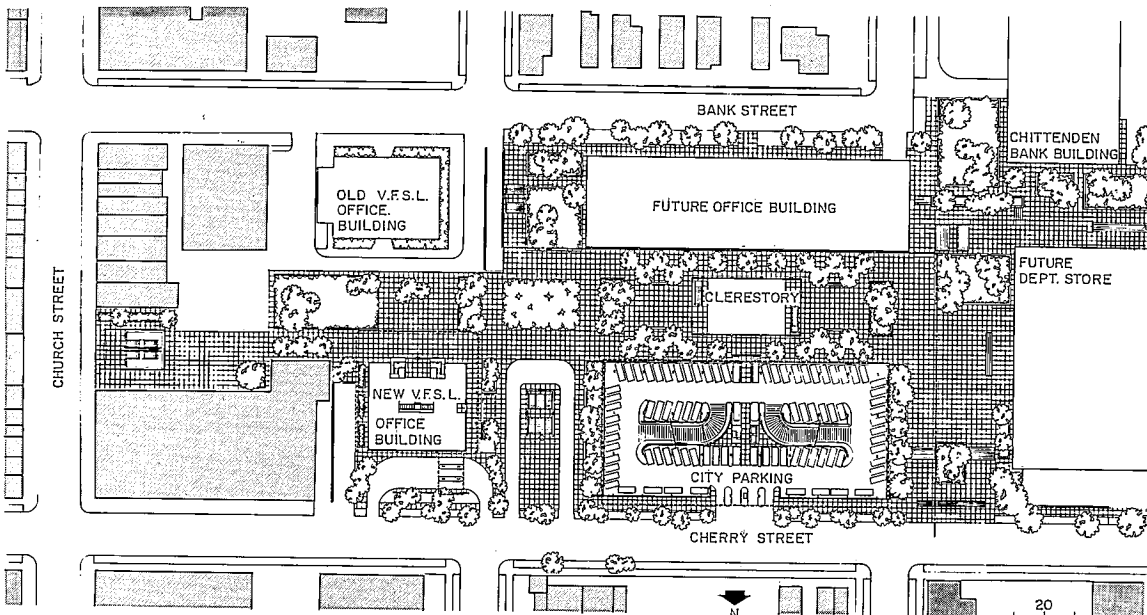
Since the Air Force Academy opened in 1965, it is increasingly a home for retired military less interested in the economy of the community than in keeping it a tranquil haven. And residents still resent the depredations of developers who violated the town's history and traditions. The Mondev proposal is designed to recall and renew the traditions.



determined by a series of architectural elements which reach out into the city—elevated walkways and the 70-foot-high, glazed-roof, stepped galleria, a climatized public space with shops on both sides, open through to views of Pike's Peak. This Rialto-Bridge-type concept was really Rocke Ransen's notion—what we did was give it form. It let us bridge a street that could not be closed and make a pedestrian link from garage to convention center and hotel.

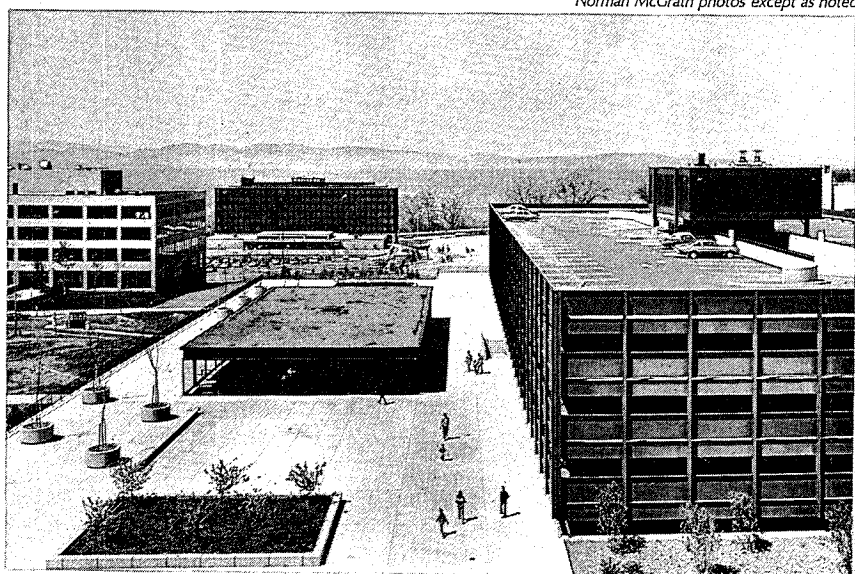
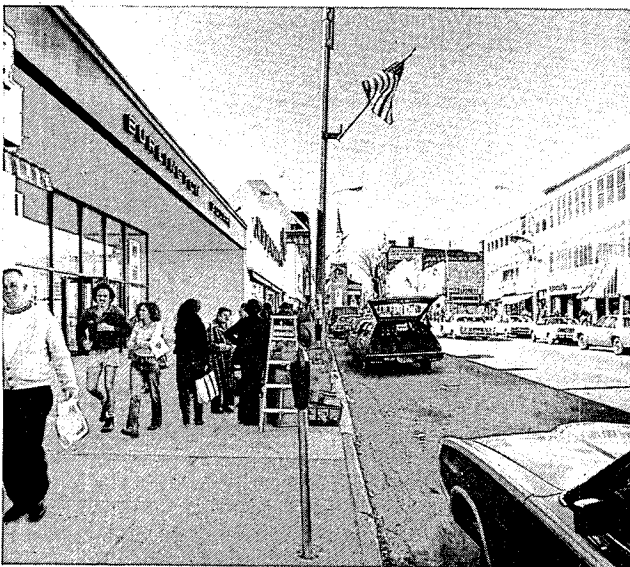
Burlington, Vermont

- Population:** 38,683
- Site:** 17 acres (cleared) in one site
- Project:** Burlington Square
- Estimated cost:** \$25-million (total of public and private funds)
- Mix:** Public and private funds, public and private use. Functional types: office buildings, parking garage, retail mall with restaurants, hotel. Future: civic center, residential, offices
- Links:** Developer land purchases for project connection to Church Street, the existing main retailing street, which also connects that main street with future civic center and waterfront development
- Spin-off:** Refurbishing of existing stores on Church Street and master planning by community for developing it as a covered mall linked to Burlington Square; master planning by community for redevelopment of waterfront as recreational and light commercial area linked to future civic center and to Burlington Square
- Developer:** Mondev International/Fidelity Mutual Life Insurance Company (development joint venture).
- Architects:** Office of Mies van der Rohe (now Fujikawa Conterato Lohan and Associates)—Joseph Fujikawa, partner-in-charge; Edwin Denson, project architect. Consultants—Murray Backler and Associates, structural engineering; I.A. Semenic and Associates, mechanical and electrical engineering; Office of Terrence J. Boyle, landscape architecture. Associated architects: Freeman French Freeman
- Community:** City Planning Commission—William Aswad, chairman. Arthur Hogan, (now executive director of the Chittenden County, Vermont, Regional Planning Commission), director of planning and redevelopment for the City of Burlington (1963-1970), consultant (1970-1977).



The 1800-foot-long site stretches from Church Street (photo below left) to the street next to the waterfront and to the site of the future civic center (left of Hotel Radisson in photo below), thanks to Mondev's \$1-million land purchase to make the connection at the Church Street end. The clerestory creates a great space (across-page) for community festivities at the core of the underground retail mall. Welcome amenities in frigid Burlington winters include underground connections to garage, hotel and office buildings. Chittenden Bank (far left in photo below) was built by Cousins Properties of Atlanta (Toombs, Amisano and Wells, Architects).

Norman McGrath photos except as noted



The opening of Burlington Square in the fall of 1976 was the culmination of an urban renewal process that began in March 1958, when the citizens of Burlington first voted that slums and blight existed in their city.

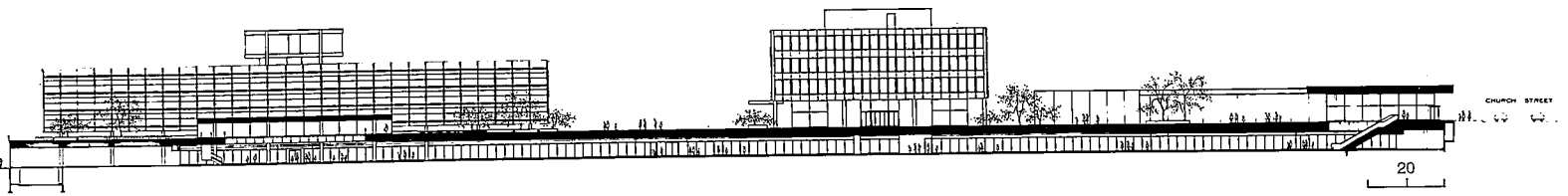
By spring of 1965, Burlington had its first developer under contract—a local conglomerate called Horizons, Inc.—and (on June 29, 1965) began the land acquisition process by buying the first of the 128 parcels that comprised the project site. Horizons built one

office building, then encountered problems in financing the apartment building it proposed to build next, and after a long series of extensions was declared in default of its contract.

Resisting some local pressures to sell parts of the site in smaller parcels, the city next contracted with a joint venture consisting of Fidelity Mutual Life Insurance Company of Philadelphia and Cousins Properties of Atlanta as lead developer. Now two more buildings were erected—an office building of some 30,000

square feet and the Home Office Building for the Chittenden Bank. This era was ended by a human and corporate tragedy, when a company plane carrying five of the Cousins executives crashed in Lake Champlain.

Mondev became Burlington's third developer when an agreement was approved by the city for Mondev to take over Cousins Properties' development interest. Arthur Hogan, director of planning and redevelopment for Burlington throughout the project, says Mon-



dev's arrival on the scene "spurred a whole new generation of development in downtown Burlington, and brought to the project some unique talents (Bacon, the Mies office) in terms of perception of this magnificent site and what you could do with it."

And Hogan points to civic consequences of the urban renewal process that reach beyond Burlington Square itself. That development, he notes, began its major thrust in 1972 and 1973, leading to agreements in 1974 that

led to completion of construction in 1976. It is really, he suggests, a public education process that is essential to public decision-making that occupies most time in the renewal process.

"Who knew about urban renewal in Burlington when they took the first steps—what the real potential of this was?" A kind of upgrading of architectural consciousness among ordinary citizens as well as public officials may be the most significant result of the process for Burlington, Hogan thinks—a new

respect for architecturally significant historic buildings being only one example. "The whole awareness of the city that the waterfront area was something precious and special to the city of Burlington happened through this whole thing. The city adopted waterfront ordinances to try and reclaim the waterfront as part of this process. That's an educational upgrading of not only the political spectrum but John Q. Citizen, because these projects don't work unless you've got the citizens involved."

Seattle, Washington

Population: 530,831

Site: Portions of two downtown city blocks (between 4th and 5th Avenues and Olive and Pine Streets) presently in active use (not cleared)

Project: Westlake Mall

Estimated cost: \$60-million (\$50-million private, \$10-million public)

Mix: Public and private funds, public and private use. Functional types: urban park, retail mall, hotel, monorail terminal, parking garage, multiple movie theaters, public plaza designed as sculpture garden. Future: residential development adjacent

Links: Relocated monorail terminus and terminal, elevated pedestrian plaza connecting to adjacent Times Square Building, and "retail bridges" connecting to three department stores on the other sides of the site.

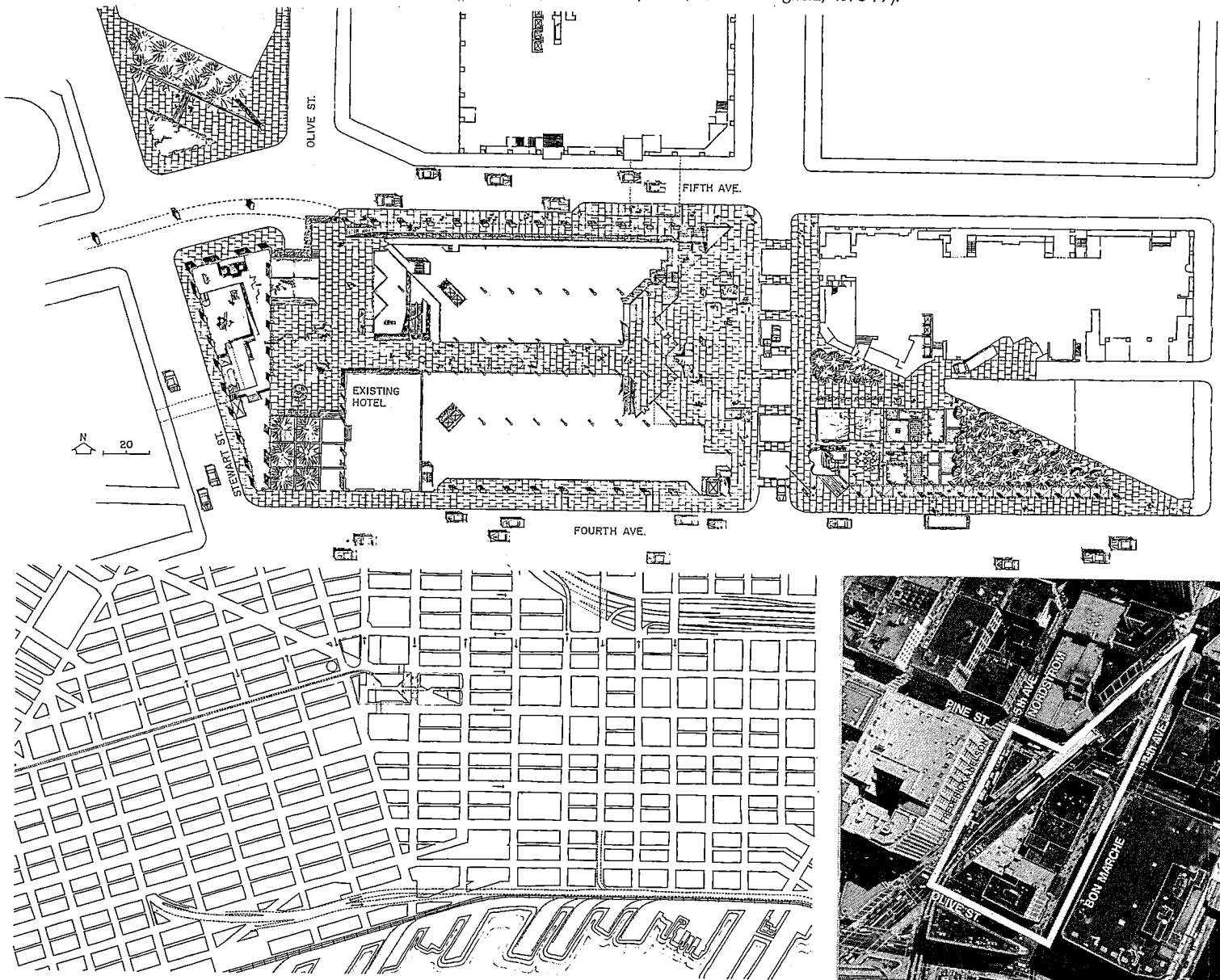
Spin-off: Possible recycling of adjacent Times Square Building as new extension of Seattle Art Museum, and possible residential development in the "Denny Regrade" area to the north of the Westlake project.

Developer: Mondev International, Ltd.

Architects: Mitchell/Giurgola Architects—team: Romaldo Giurgola, Jan Keane (project architect), George Yu, Sigrid Miller, Ted Chapin, Randy Leach. Consultants—Skilling Helle Christiansen and Robertson, structural engineering (Leslie Robertson, partner-in-charge); Joseph R. Loring Associates, mechanical engineering.

Associated architect: Joyce Copeland Vaughan and Nordfors Architects (Lee Copeland, partner-in-charge).

Community: Department of Community Development—James Hornell, Director (since May 1977; Paul E.S. Schell, 1975-77); William Stalzer, project manager (since May 1977; Barbara Dingfield, 1975-77).

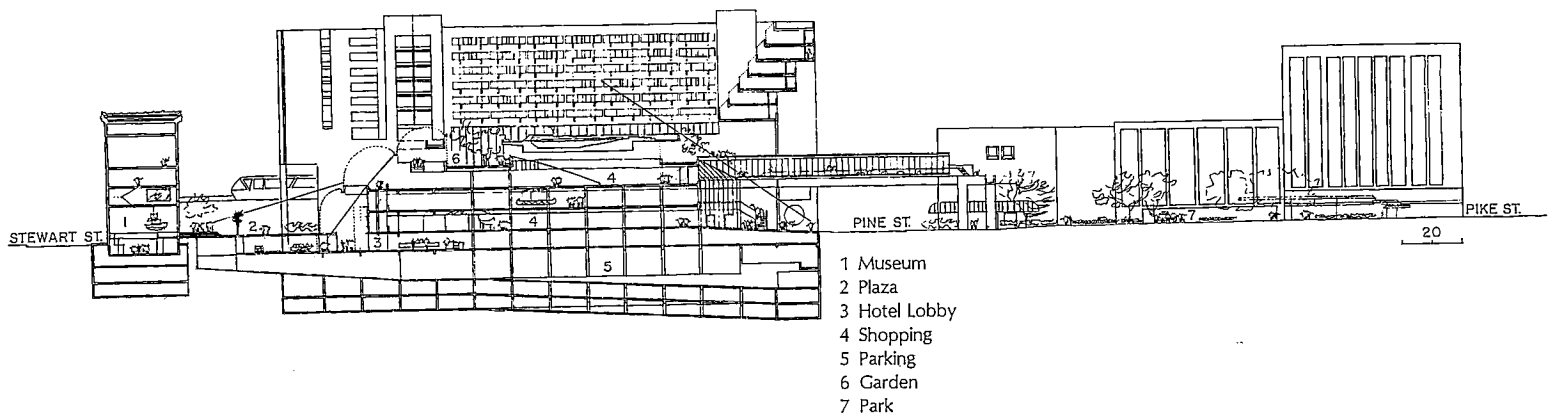


Romaldo Giurgola says: "Mondev came to our office with a program that was only in its formative stages, embryonic. It was an idea about the center of a city. And the problem here is quite a different one from Colorado Springs, for example. Here there are not open ground and abandoned parking areas, but a very vital section of the city—people, shops and three large department stores. So it was dealing with material that is already alive and in place, which means the whole process will be

quite different, because it will imply a constant relocation and provision for the people who are actually presently working on the site, so that the development will take place with full recognition that the life will go on exactly as it is now, and probably with some new potential developing within it."

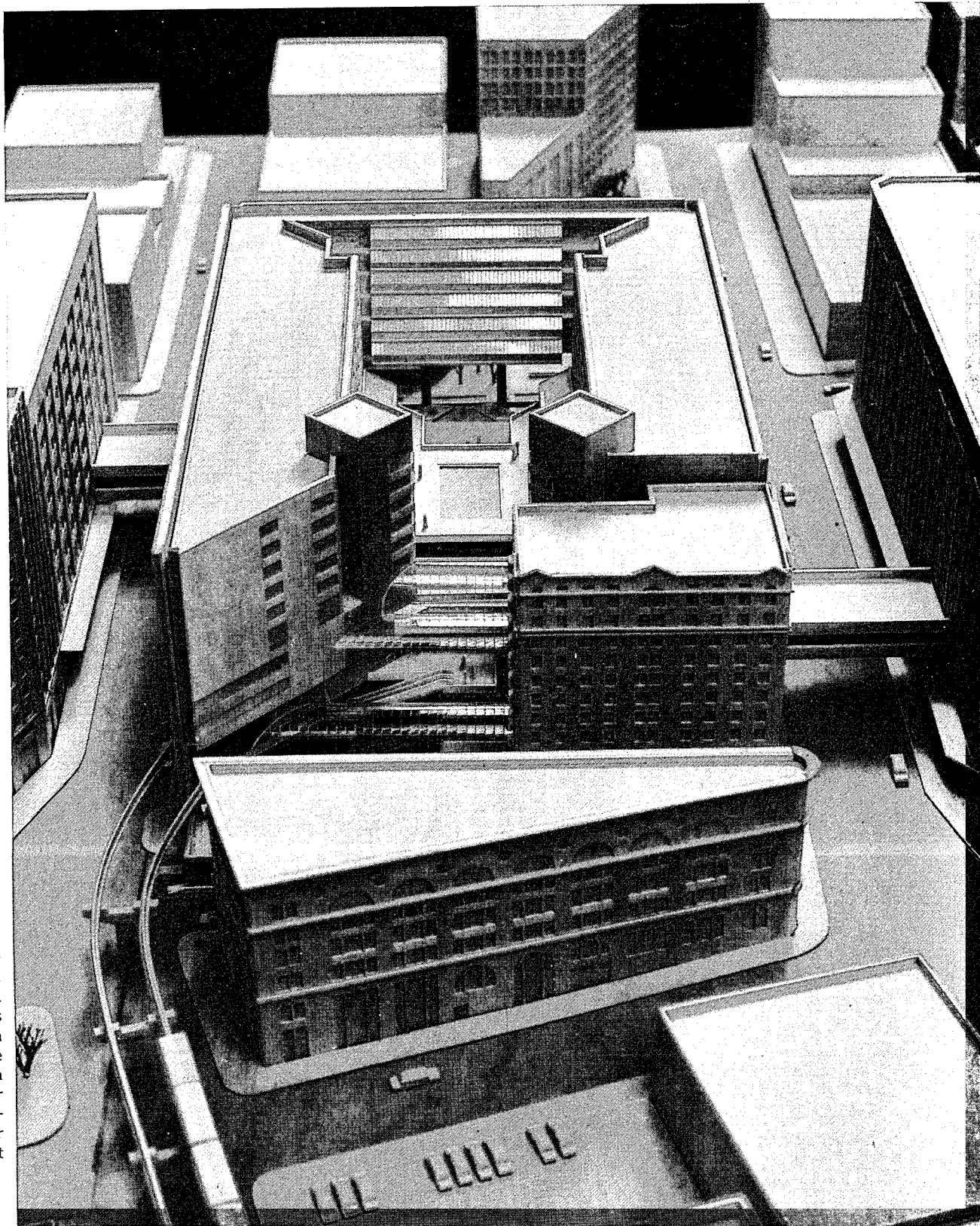
Seattle's project is not urban renewal, and the situation Giurgola describes is, in fact, the reverse of the familiar sequence in urban renewal—first acquisition and demolition, then

planning, then implementation, all as separate steps in what has tended to be a very long process indeed. Ransen and Bacon are convinced that this separation of planning from implementation in the renewal process has been a critical barrier to effective participation by developers in it. (Bacon says there is "an absolutely tragical lack of understanding of the positive role of the developer. The whole role of the developer has got to be re-thought and reconsidered.")

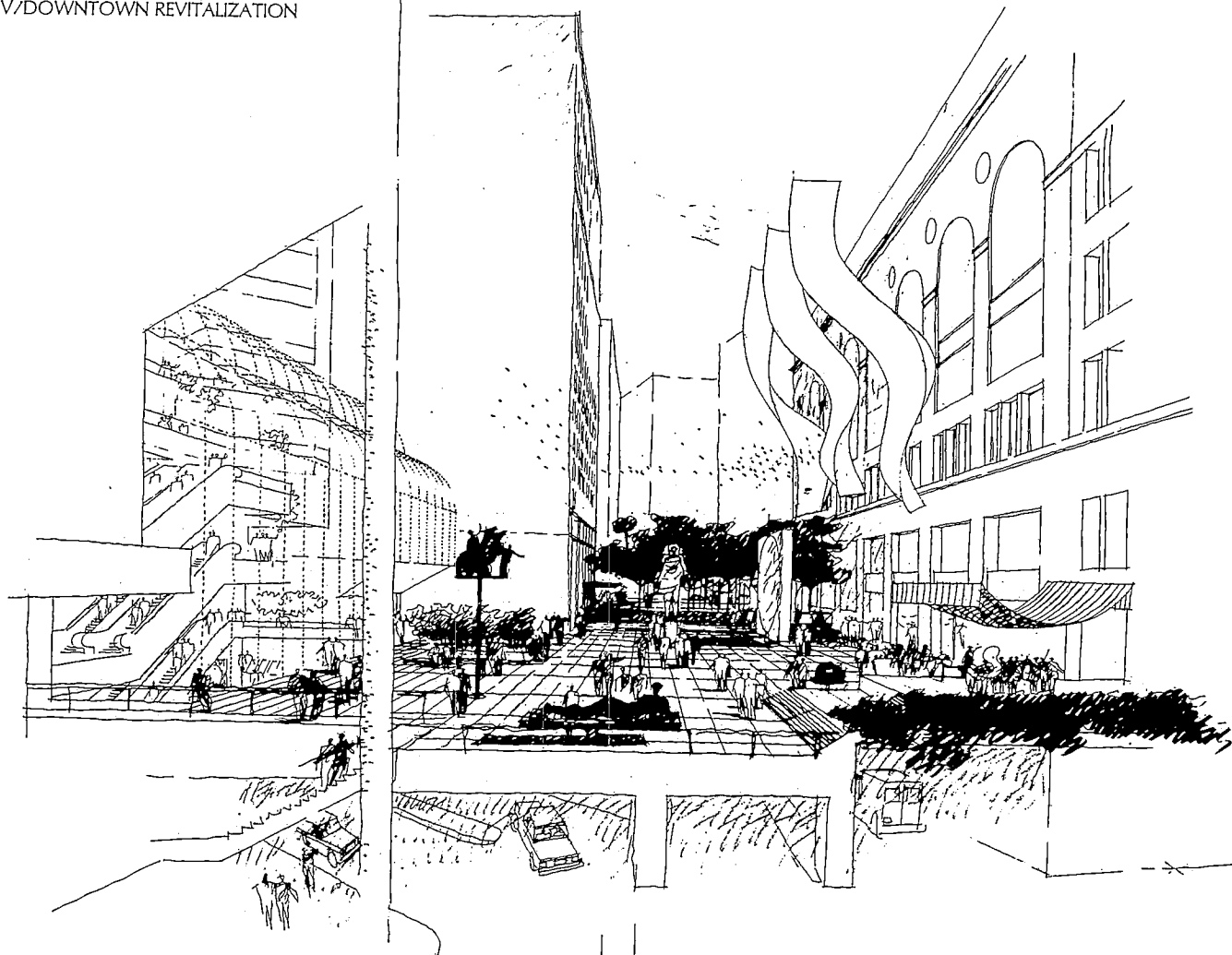


Rollin R. La France

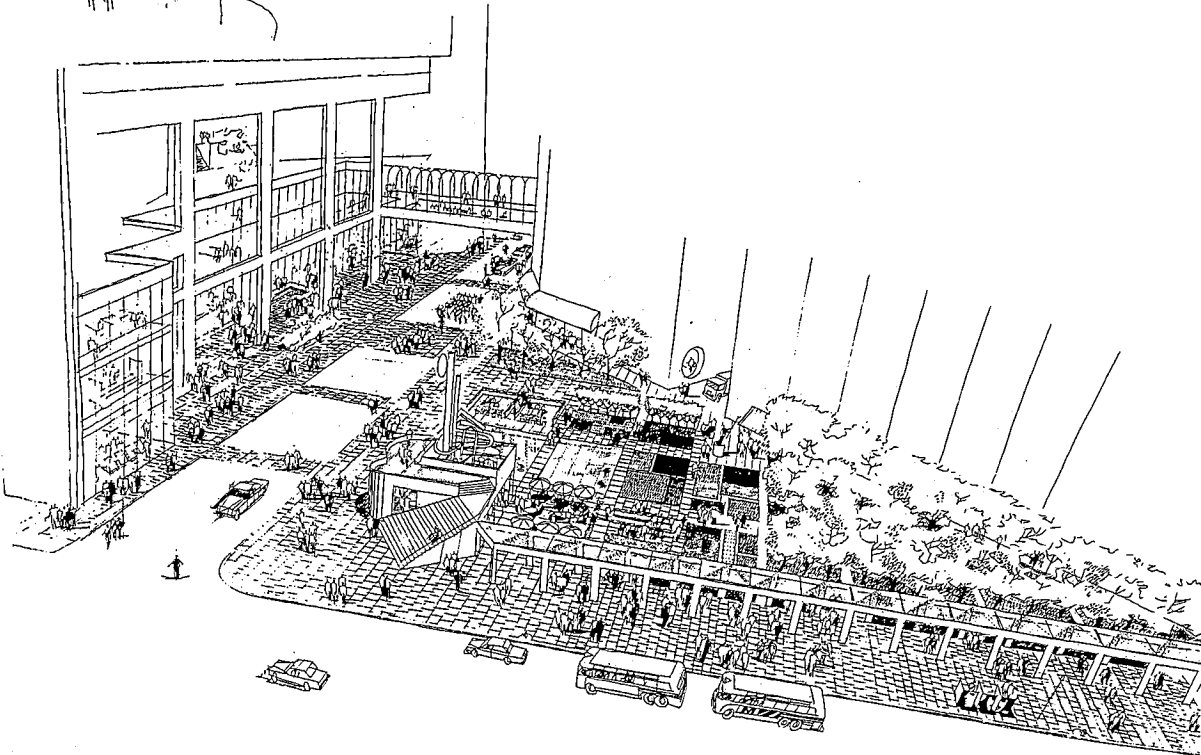
site is at the juncture of of Seattle's multiple grids, south of the old Times Square Building whose triangular shape marks the juncture. The change in grid and the city's development pattern have effectively divided the city into two for many years. West Seattle Mall will reunite it by linking the main business section to the city with the Times Square Building. If, as suggested, it becomes an extension of the Seattle Art Museum. The Monorail proposal would relocate the monorail terminus to one end of the site, parallel to Fifth Avenue, and close Olive Way (the street between the site and the Times Square Building) to create a pedestrian plaza connection between the Mall and the Times Square Building.



The proposed new building would share its site with the existing Mayflower Hotel (rectangular building at right in model photo), the only building on the site scheduled to be retained. The design concept puts an eight-story hotel above three levels of retailing and an underground parking garage. "Retail bridges" would make pedestrian connections to the department stores on three sides of the site, and an elevated pedestrian plaza would connect with the Times Square Building on the fourth side. The opposite end of the new building would open on a 25,000-square-foot triangular park. Hotel rooms would overlook a landscaped interior court, which would be open at both ends.



The idea of creating a park in the Westlake area goes back 15 years, and such a park has been funded since passage of a \$1-million bond issue in 1968. Now two "parks" are proposed in the Westlake Mall concept—one (right) a kind of public garden, "very urban and active in character," Giurgola says, and the other ("more intimate") a plaza which Giurgola saw as feasible if Olive Way were closed. The plaza, conceived by Giurgola as a sculpture garden, would make a pedestrian link between the Mall and the Times Square Building, giving the museum the prospect of being (as Bacon has observed) "the only art museum in the world from which you can go directly into three department stores under all-weather shopping malls"—and vice versa!



In Seattle, selection of the developer came first, not last; and funds that in many cities would have been paid to consultants for a "development plan" on which developers would later be invited to bid were therefore available to Mondev to hire its own consultant (i.e., Giurgola) and develop its own proposal out of the kind of intensive interchange among developer, architect and community described in the article on the concept planning process (pages 96 and 107).

In Seattle, a mayor strongly committed to the project had a strongly professional Community Planning Department to speak for the community in that developer-architect-community planning process.

So the "development plan" for Seattle's Westlake Mall had its implementation plan built into it through the participation in the planning process of a developer ready to commit \$50-million to the execution of that very \$60-million plan.

In what may be a unique procedure in a project of this scale, the city of Seattle is acquiring the site from its multiple owners by negotiation. And in another unusual effort, tenants now on the site will be temporarily relocated during demolition and construction phases of the project, then moved into quarters in the new building.

Giurgola says: "Mondev came into the office with a will to build, and that was the refreshing thing."

pioneering application to development in communities around the U.S. of Bacon's theory of "hypothesis formulation" involving the community and generated by his work in Philadelphia. Its potential significance to community development is suggested by Bacon's comment in *Design of Cities*: "One thing that emerges with greatest clarity from the experience in Philadelphia is that the reason the plans got built was that the ingredient of acceptance was built into the plans from the beginning, and that the planning process and the process of carrying out the plans were always seen as one."

It is a very different way of working than most architects are trained for or experienced in, rather like designing in an intensive and unending dialogue with the client that extends from feasibility analysis through programming, schematic design and design development, all going on more or less simultaneously, all testing and being tested by the client's responses and initiatives, and all testing and being tested by each other. It demands that the architect work creatively in the feasibility and programming processes, and it requires him to welcome the client into the design process. It is a system which directly involves the architect in concept formulations, and which gives him direct access to the decision-making process.

And it must be remembered that the architect's "client" in this process, while technically (legally) the developer, is functionally not only the developer but the community as well. As Peter Howlett, the Mondev vice president for operations, puts it, "The architect is severely tested by having to deal simultaneously with two very strong elements whose messages are at times consistent but at times divergent. It is a tribute to the process Mondev has evolved that most of the time the messages are consistent." Or, at any rate, *become* consistent.

It must also be understood that the "developer" member of the creative triad is not Ransen alone, nor Ransen and Bacon alone, but a multi-disciplined team of Mondev staff with MXD experience in leasing, consumer relations, promotion and financing as well as engineering, construction, construction management and architecture. (They are served by an in-house computer system for analysis of factors affecting development potential, scheduling of steps in the development process and buildings operation and management.) They act as resources for the architect and the community, supplying their knowledge of what will or won't work in this context or that, and generally monitoring the programmatic and budget aspects of the planning process; but they are absolutely forbidden by Ransen to suggest design solutions. Ransen says that he tells his architectural staff not even to *lead* architects toward design solutions: "When I engage an architect, I want what *he's* got to offer."

Marco Tonci Ottieri, Mondev's young architect-vice president in charge of a staff of six architects, is a particular resource for the project architects and an important link between developer, architect and community. He points out that the Mondev way of working has restructured the architectural contract,

because most of the time with the project architect is spent in conceptual planning. On a \$60-million project, the time-span may be six months (*none* of it spent in formal presentations to or formal reviews by Mondev); but when the concept plan has been made, the project can be priced by Mondev's estimators, and the plan becomes the basis for all leasing and financing arrangements. When those are in place, fast-track construction can begin, with little or no time for "design development" in between; the critical decisions have all been made during concept planning.

It should be emphasized that this sequence of architectural development is the *reverse* of the standard speculative developer practice of leasing first and planning later. Here, in the initial phase Mondev calls concept planning, there is a deliberate concentration of both architectural time and developer and community decision-making to support it, which produces an architectural result very nearly equivalent to the schematics plus design development phases in the conventional sequence of architectural development of a project.

For the architects of two of the four projects presented here, Romaldo Giurgola and Richard Meier, Mondev represented their first experience with a developer as a client. Both acknowledge that they began with some trepidation; but both are now convinced that the Mondev way of working expands rather than limits the creative role of the architect by involving him in designing the concept for the project as well as the project itself, and by requiring that the design derive from, and reach out to, the community beyond the project site.

It all begins with what Bacon calls "seeing the city as others don't"—looking at the community as a whole, seeing where it has been and where it is tending, and what it is missing, and imagining how the project can be structured to supply new energy for the life of the whole community. The program as initially given by the community, always regarded as tentative, is analyzed in this context; and the question becomes, what is missing that this project could supply (or help start)?

Meier says, "You visualize an over-all concept for Colorado Springs, then develop your proposal to fit in with it." In the evolution of the proposal, "everybody is contributing ideas about the kind of place it should be, about the hierarchy of importance of the elements, about the scale, about the way it should be influenced by the climate, about what ought and ought not to be enclosed—what is the nature of the place we're trying to make." In the process, the community discovers new possibilities for making the project serve a wider range of community objectives than it had initially recognized; and the project reaches out to generate or engage more and more aspects of community life.

Giurgola was "lukewarm" to the prospect of working with a developer when he began his work with Mondev, even though he thought it was natural for architects to work with developers because the circumstances surrounding a building are so important. He sees the emergence of a developer conscious

of his role in an urban situation as a new thing, compared with the developer we have known as "some kind of adventurer" on virgin land. But he points out that there is a new climate in our cities, created by the growth of public concern and involvement over the past 20 years, which calls for developers who "prepare more thoroughly and act more responsibly," as well as for architects who "are more interested in how people use things and less in 'ideal' solutions." He finds in Ransen none of the "fixity" of mind he had anticipated in a developer, and he calls him "a man who understands architecture."

Not every community is ready for full creative participation in the work of the triad, which can only function effectively when all three members are willing and able to play their parts as equals. Where there is continuity of first-rate professional staff in a community agency responsible for the project (as in Burlington and Seattle), the effectiveness of community participation is vastly enhanced.

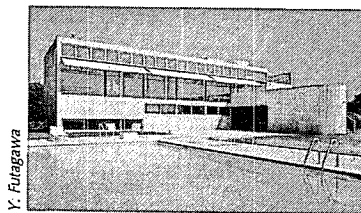
But of the many factors Ransen examines in assessing a community's readiness for downtown development, none is more critical in his view than the attitude of the community toward the project. He believes that revitalization must come from within; the developer is only the community's partner in helping to provide the means to express the will of the community. So above all, he looks for commitment to the idea of downtown revitalization, a deep community commitment that will transcend partisan politics and that will imply recognition on the part of the community that downtown development is a public-private partnership in which both partners must invest before either can profit.

Ransen says his experience has proved to him that creative architecture is the ultimate insurance that his projects will generate a "bottom line" that will appeal to lenders—even though architects are deliberately excluded from responsibility for budgets, cost estimating, scheduling and other such pragmatic considerations (in Ransen's view, a waste of creative architectural time). Mondev staff provides these services.

This is not to say that architects are not subject to cost analysis of their design proposals, or that the most rigorous cost control is not maintained at every stage of every project. In the concept planning process, the Mondev team working with the architect is monitoring the financial implications of every design approach along with all the programmatic aspects to see that the right blend of income is emerging, based on projected rentals and projected square footage, and that it is properly balanced in relation to projected construction costs. "And if you keep that monitoring principle to the end," says Ransen, "you're going to have a bottom line that's acceptable to lenders."

But the whole financing structure depends upon public commitments that will only be made if the public perception of the benefits to the community from all aspects of the project is strong enough. Ransen sees the creative vision of the architect as the most powerful force for creating that public perception.

What's a high-style design firm like Gwathmey-Siegel doing designing speculative office buildings along freeways and in office campuses?



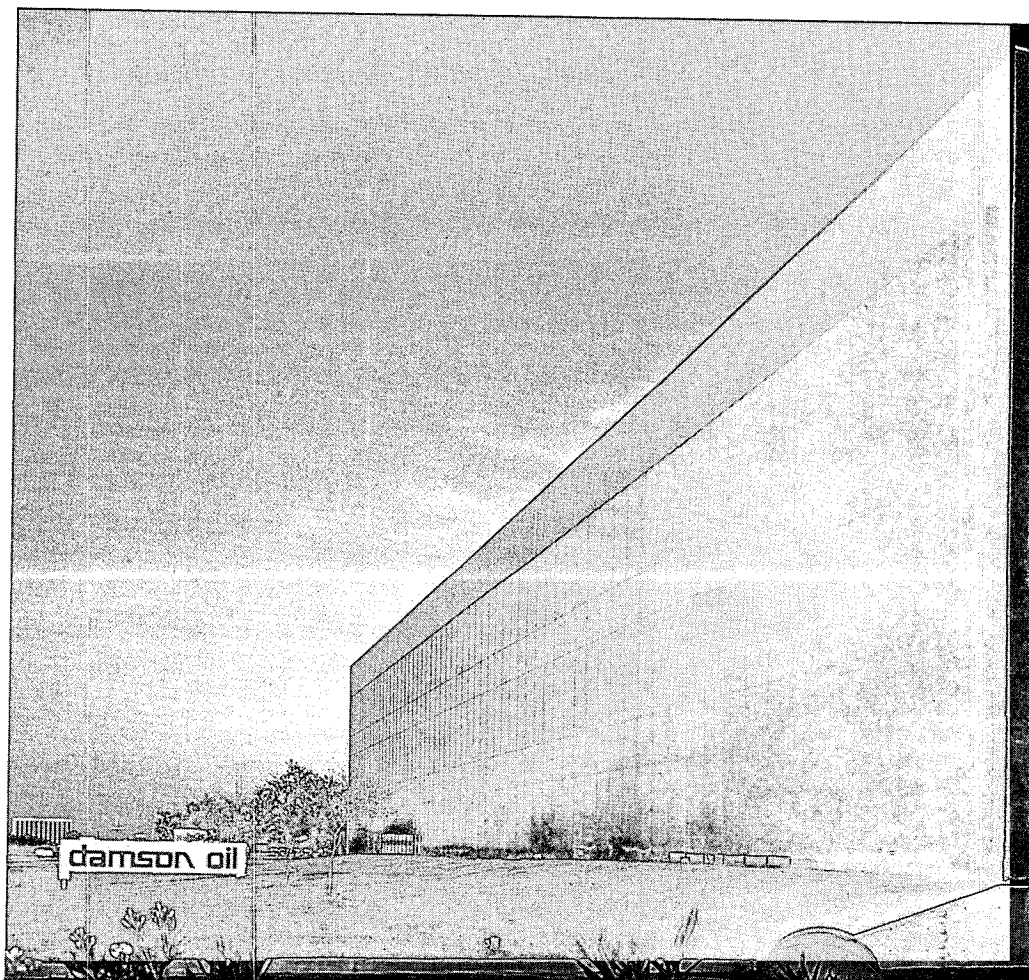
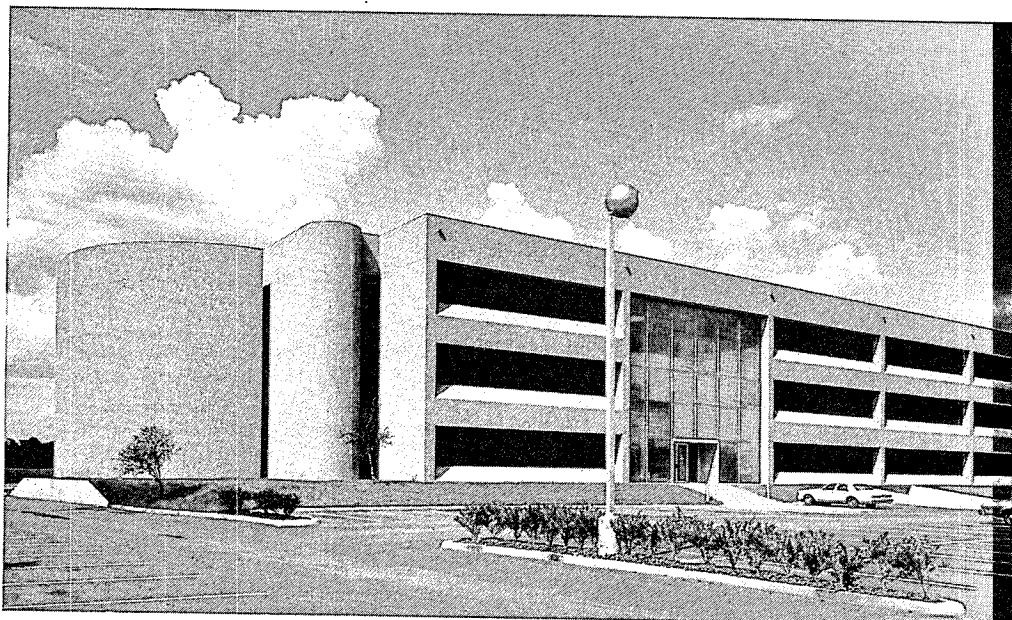
Gwathmey-Siegel's office wall is layered with design awards for spare and disciplined, beautifully detailed and very elegant work—including three National AIA Honor Awards: two in 1976 (for the renovation of Whig Hall at Princeton and for the dormitory/dining hall/student union at SUNY's Purchase campus) and another in 1968 for the Straus residence in Purchase. The firm has enjoyed a broad and varied practice, with perhaps the most experience in college buildings, high-density housing (mostly for New York's UDC), elegant interiors (Vidal Sassoon, General Motors, General Mills, Faye Dunaway); but is probably best known for those spare and elegant houses like the Cogan house (above) in East Hampton.

But no office buildings, and surely no speculative office buildings. Until lately.

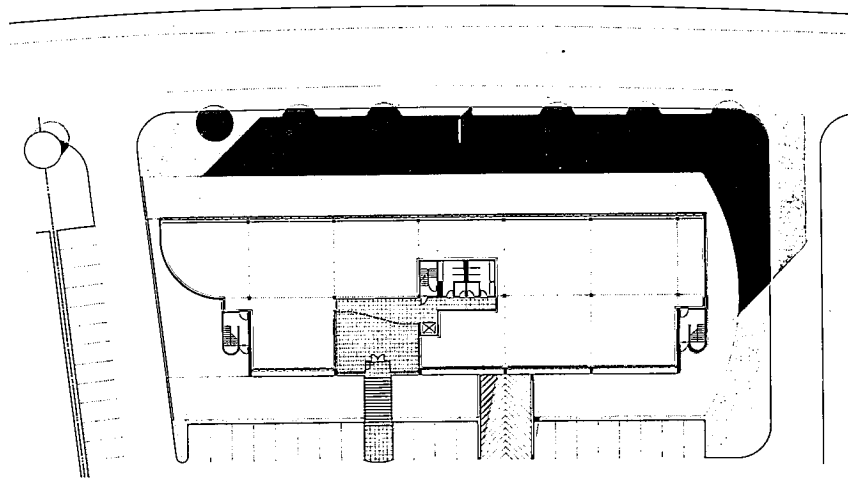
What Gwathmey-Siegel is doing (to answer the question raised in the headline) is demonstrating that the design standards of speculative office buildings—built under all those “constraints of the marketplace”—can be very high indeed. That the design of such buildings can be approached with the same kind of intellectual and design discipline as those elegant houses, and that the results can make a mark in the marketplace.

The two developers for whom Gwathmey-Siegel has worked have both retained the firm to do more buildings—for the simple reason that the first Gwathmey-Siegel buildings rented up at above-market rates in highly competitive markets—before they were completed. And that is the kind of performance developers like a lot. It all began with . . .

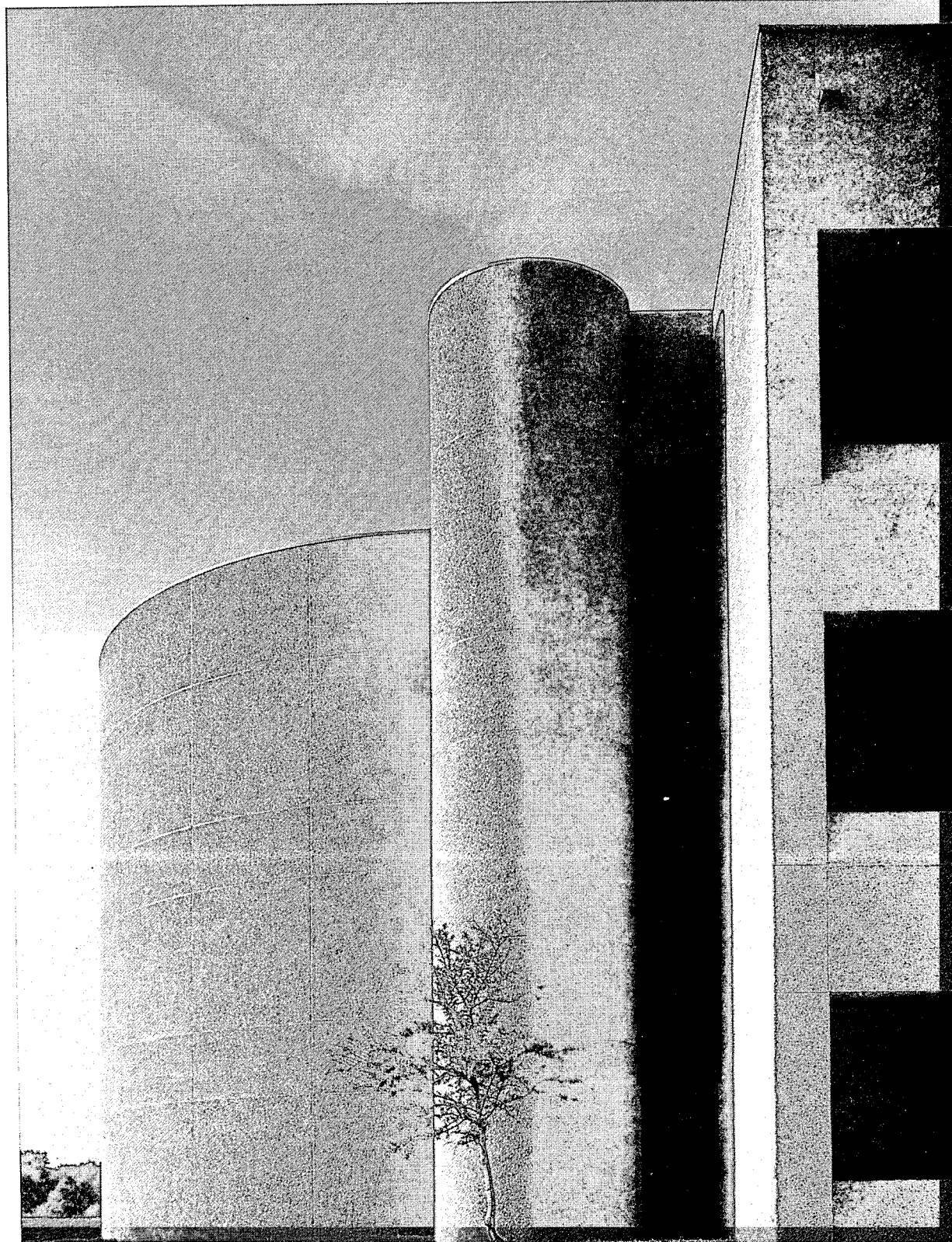
The Damson Oil, International Energy, and Northpoint Buildings: three buildings along Houston's North Belt Freeway for The Inter-equities Group of Houston. Damson Oil Corporation had contracted with partner-in-charge Ronald Bouchier to become the major tenant for a building provided they could agree on an architect. Damson recommended Gwathmey-Siegel, who had done some work in the company's New York office. Bouchier, who “knew Gwathmey's work by reputation and photographs,” met with the architects and talked some developer-type turkey. Explains Gwathmey: “We agreed, in that first two days, to accept some ideas that were critical to Bouchier [see caption].”

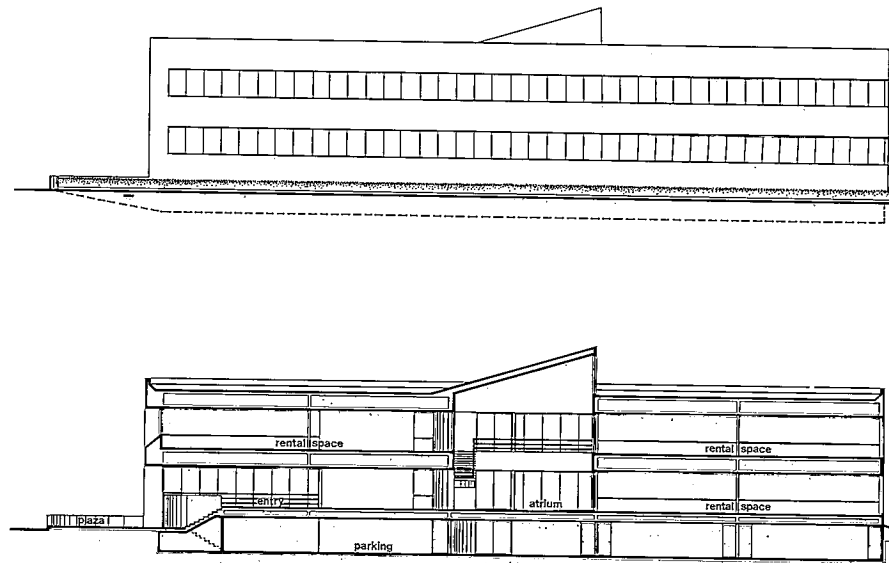
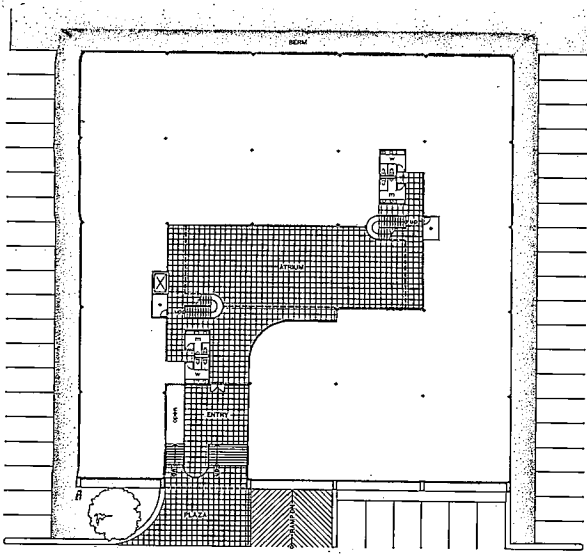


The **Damson Oil Building** was Gwathmey-Siegel's first job for Houston developer Ronald Bouchier. It was designed, explains Gwathmey, within some "tough constraints. Ron Bouchier insisted—for marketing reasons—on a big central atrium/lobby. There had to be parking underneath the building. A low-cost construction technique familiar to local contractors was prescribed: a four-foot grid, 32- to 36-foot bays, standard partitions, the outside wall to be steel studs with waterproof gypsum lath, cement stucco, and marble-chip aggregate sprayed on." Within these constraints, Gwathmey-Siegel designed a building that presents a strong, all-glass face to the freeway, but on the entry side is smaller scale with modest glass area well shaded. The building rented in record time.



Richard Payne photos





"We also agreed on budget and fees," says Gwathmey. "The budget for the building was preset by the available mortgage, the cost of the land, and the projected rental. We agreed to accept a budget of \$17 per square foot (exclusive of land and fees) for a building with finished public spaces but raw rental space (columns and open ceiling).

"And we agreed to a fee of 75 cents per square foot for design, contract documents and supervision—which is much less than the fee for comparable work in New York, but seemed to be the going rate in Texas. We figured we could make money if we hit it right the first time, and we did."

The Damson Oil Building was fully rented long before completion—and this success encouraged developer Bouchier to retain Gwathmey-Siegel (at \$1 per square foot fee) for the International Energy Building (above, left) and the Northpoint Building (above, right), adjacent to Damson along the freeway.

Of the three buildings, whose family resemblance is clear, Gwathmey says: "I found we could create designs that pleased us within all those constraints. I think we managed to take our design references and solutions from the basics—the site, the powerful force of the freeway, the orientation, energy conservation in that difficult climate, the need for a place of arrival . . . while at the same time meeting Ron Bouchier's 'market imperatives.'"

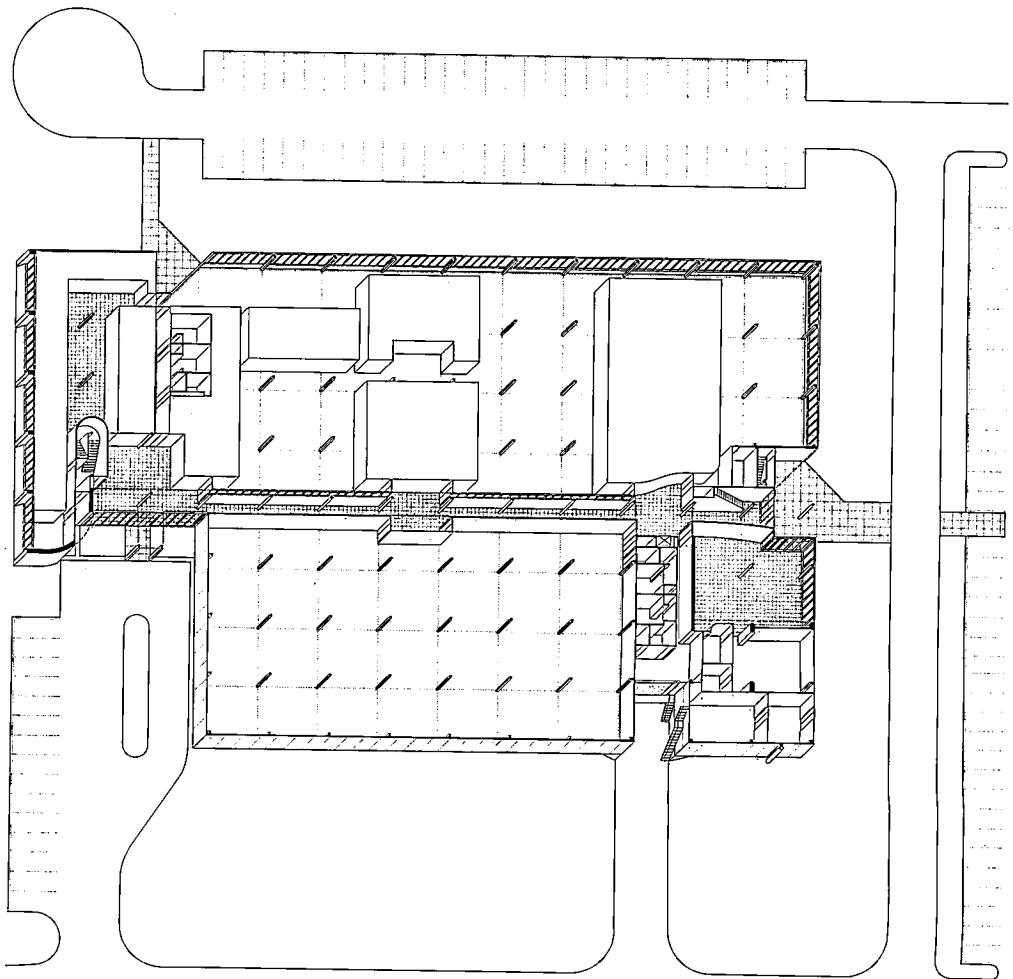
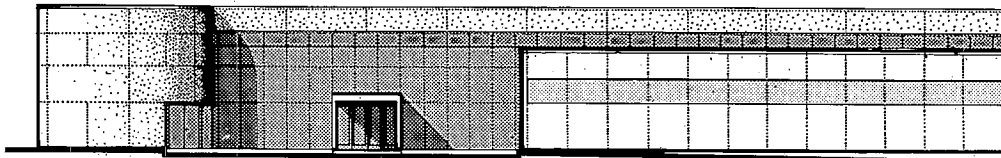
Says Bouchier, who has been an owner-developer seven years, and who builds two to three projects ranging from \$3 million (Damson) to nearly \$10 million: "Gwathmey-Siegel has created a product for us that is different, we think better, and in a quality range that is successful in the market.

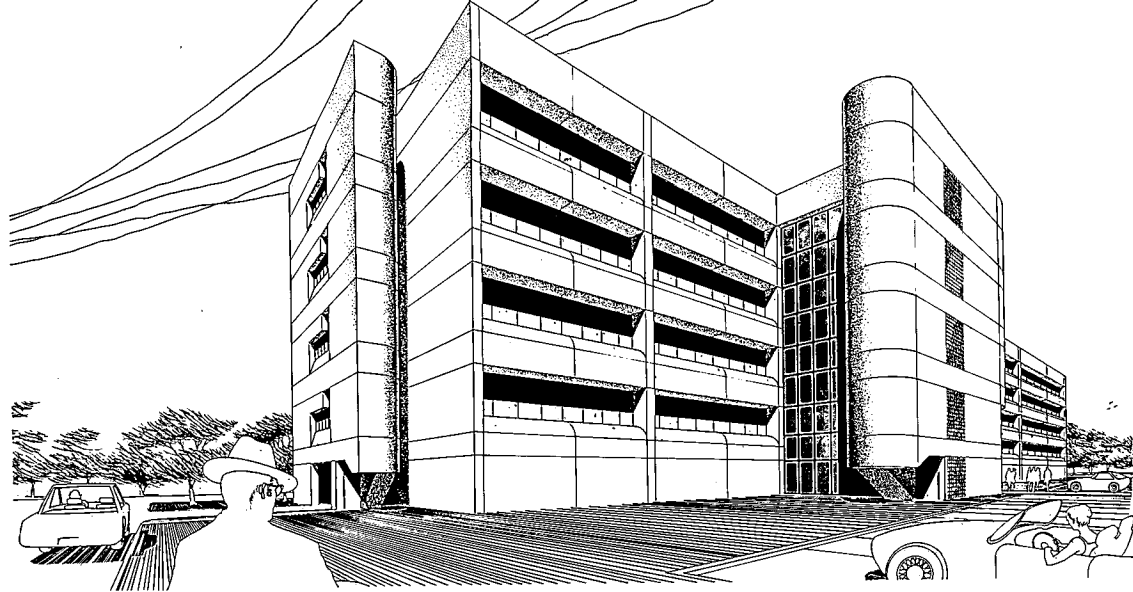
"Just as important a benefit to us is philosophical—we now have an input from a different part of the country, have seen different ways to use materials—and it's worked out well."

Bouchier reports: "We had no problems meeting budget—we priced out all the preliminary ideas and alternates until the budget did work out. Charlie did think we had some pretty bad preconceived ideas—but we worked that out. We argued some about the finish schedules—I was nervous about the use of all that glass block and some of those reflective finishes, like the mill-finish aluminum on the

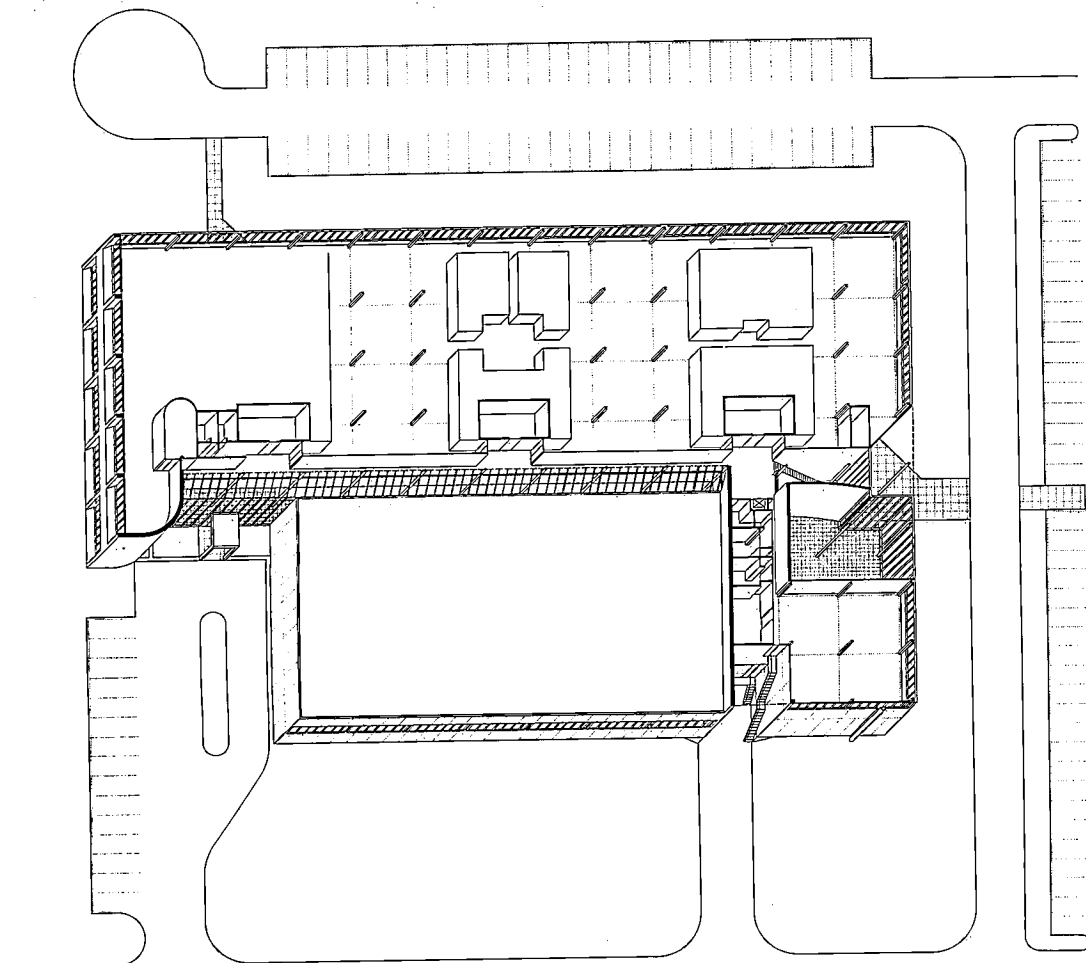
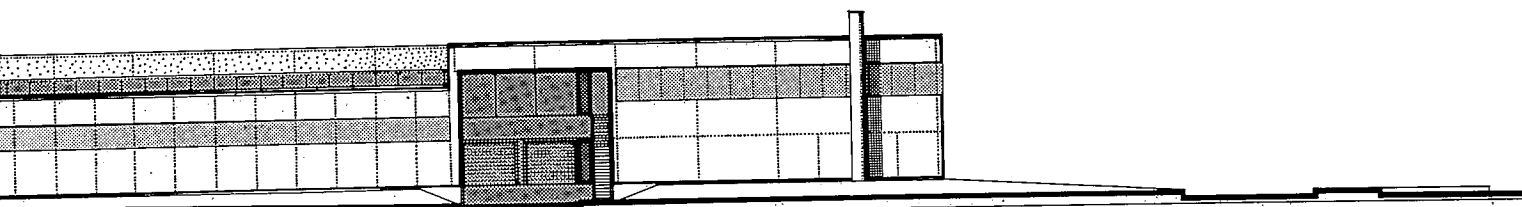
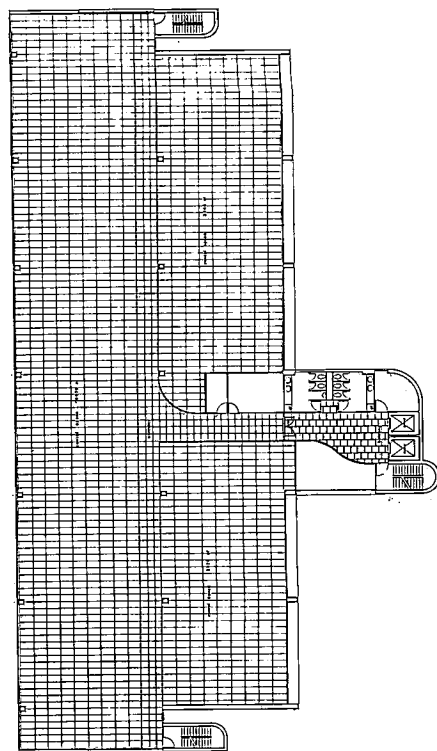
The International Energy Building was commissioned by developer Bouchier after the marketing success of the Damson job. Designed by Gwathmey-Siegel within similar constraints, it is two-story with a great central atrium "because the major tenant wanted it that way." This building is nearing completion, was rented up some

months ago. Because of the Houston climate, the developer requested special attention to energy conservation. He reports: "The Damson Building is using 30 per cent less energy than similar projects out of the ground a year earlier. It looks like the International Energy Building will save 40 per cent on energy. . . ."





The Northpoint Building is the third for developer Bouchier by Gwathmey-Siegel. In this case, the "mandatory" atrium lobby is outside the basic mass of the four-story building, providing design interest to what is essentially a loft building. These three buildings—all of a family—are adjacent along a thruway in Houston.



The Thomas & Betts building is a large (150,000 square feet) and complex headquarters for a New Jersey manufacturer of electrical components—now under construction. It is clearly articulated into three sections: management and general office space (two stories) and research laboratory (story and a half); separated by a sky-lit gallery running the length of the building and joining the lobby at one end and the dining area at the other. Says Gwathmey: "We approached the design very much as we do a house: find the clearest disposition of spaces, then use the circulation spaces as an organizer." Says Hal Ferguson, vice president of J.L. Williams & Company, which had guaranteed the price of this building under a design-build contract: "Gwathmey and Siegel proposed some obvious upgrading of our general package specifications—for example, the central vertical gallery extending into the public spaces; and some of the finishes—quarry tile in the public spaces, vinyl wall coverings, some elegant and expensive pipe railings. But the architects also persuaded the client to treat most of these as extras. Sometimes Charlie Gwathmey would make what I thought were pie-in-the-sky proposals; but Robert Siegel and I would 'modulate' them and make them work within the budget. . . ."

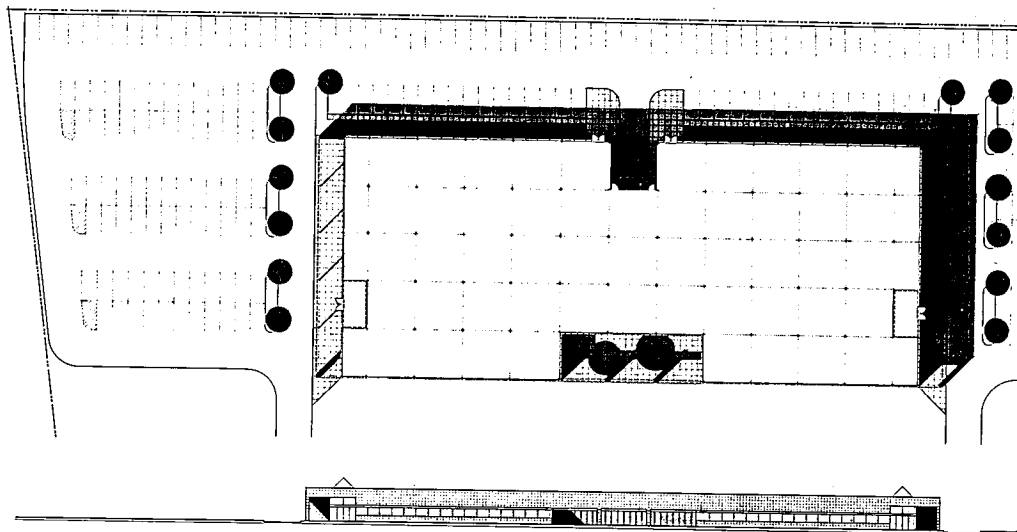
lobby ceiling. I thought sometimes Charlie was bringing us along a little too fast. But I'm glad we went . . ."

The Thomas and Betts building was not a speculative building, but some of the same developer constraints were involved. Gwathmey-Siegel was retained as architects *after* a lump-sum design-build contract had been signed between Thomas & Betts and J. L. Williams & Company of Dallas, a major investment builder.

The architects designed this large and complex building on a conventional negotiated percentage fee with the builder—"designing to suit" within the framework of preliminary work done for and by the developer to reach his guaranteed price. Says Hal Ferguson, J. L. Williams vice president: "Gwathmey-Siegel had some knowledge of the job [they had been part of another design-build team which made a proposal]. And after Thomas & Betts management suggested we work with Gwathmey-Siegel, we found no problems we weren't able to resolve quite easily—and except for agreed upon extras [see caption, previous page] the job came in on budget. . . ."

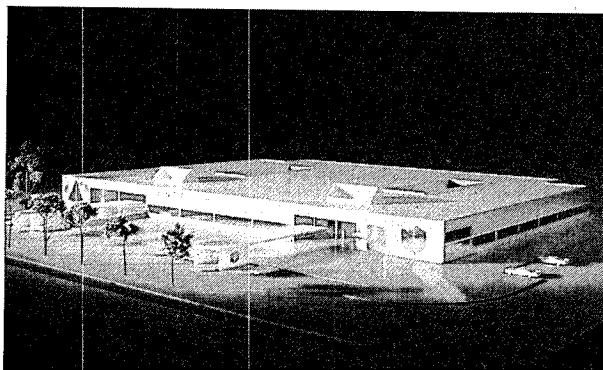
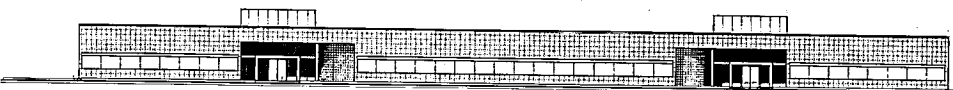
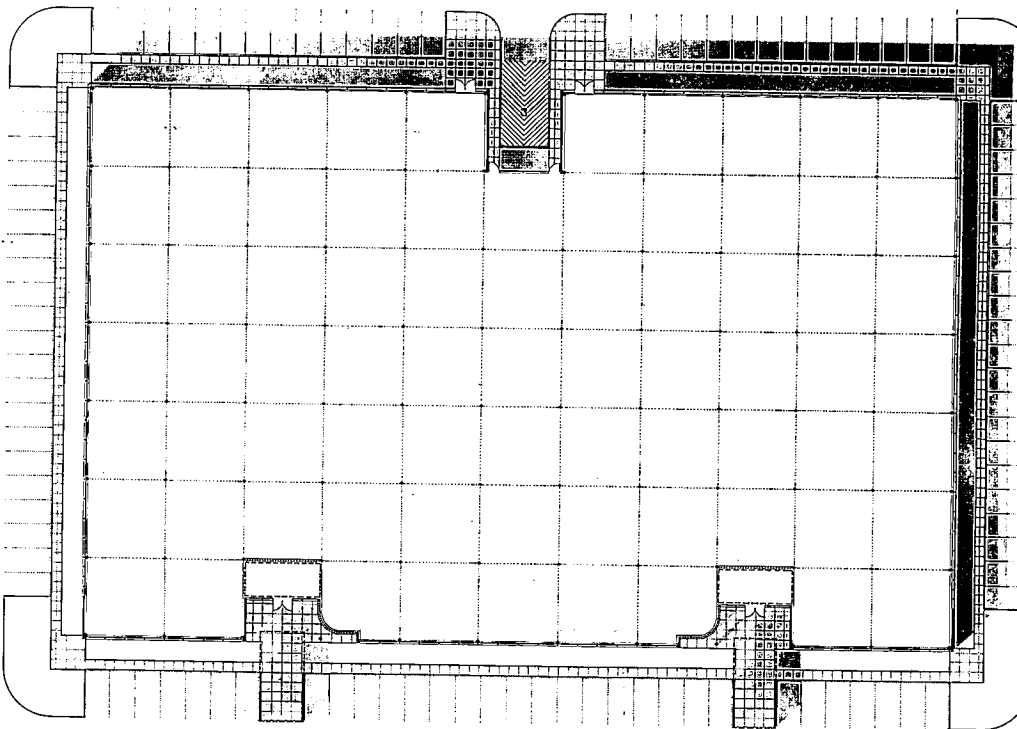
K 5-1, -2, -3 and K 6-1 are four buildings for The Evans Partnership—one of the largest investment builders in New Jersey, and probably the state's largest developer of office buildings. Its buildings—which range from 30,000 to more than 400,000 square feet—are built in "office campuses" on land Evans owns. Says partner Michael Shure: "I'd admired Gwathmey-Siegel's work when I saw it published, and met Charlie through a friend who owned a Gwathmey house. We showed him the buildings we'd been doing, and were very impressed by his criticism. And so we commissioned him to begin designs for Kingsbridge 5—one of our office campuses." Eventually the contract between Gwathmey-Siegel and Evans called for schematic design only—working drawings are done by a New Jersey firm familiar with local codes and agencies. The work is done on a negotiated hourly rate including principal time, staff time, overhead and profit.

Says Gwathmey: "Our criticism—which Michael Shure and his partners understood at once—was that the office parks looked like architectural museums. Buildings of varying size



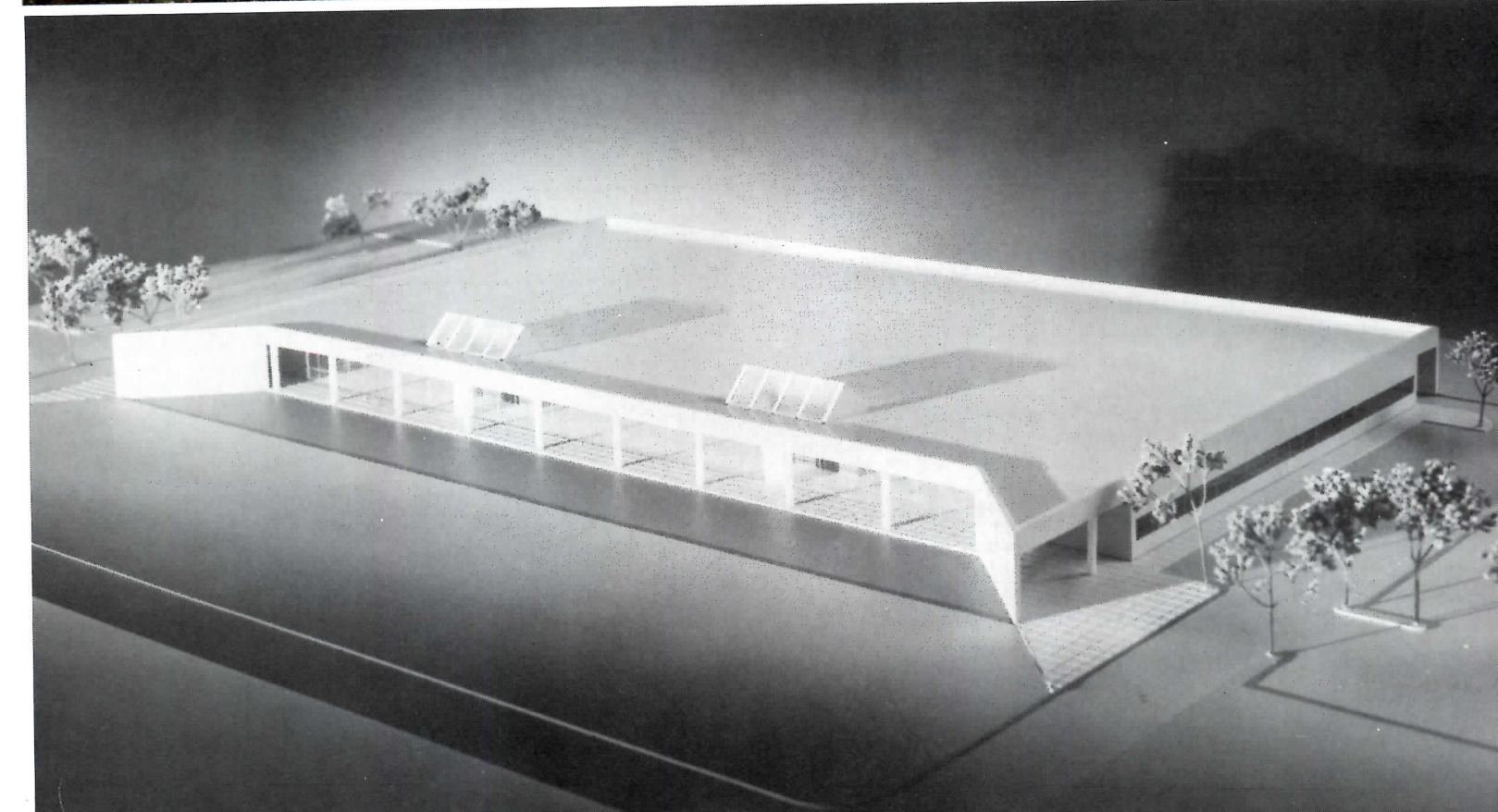
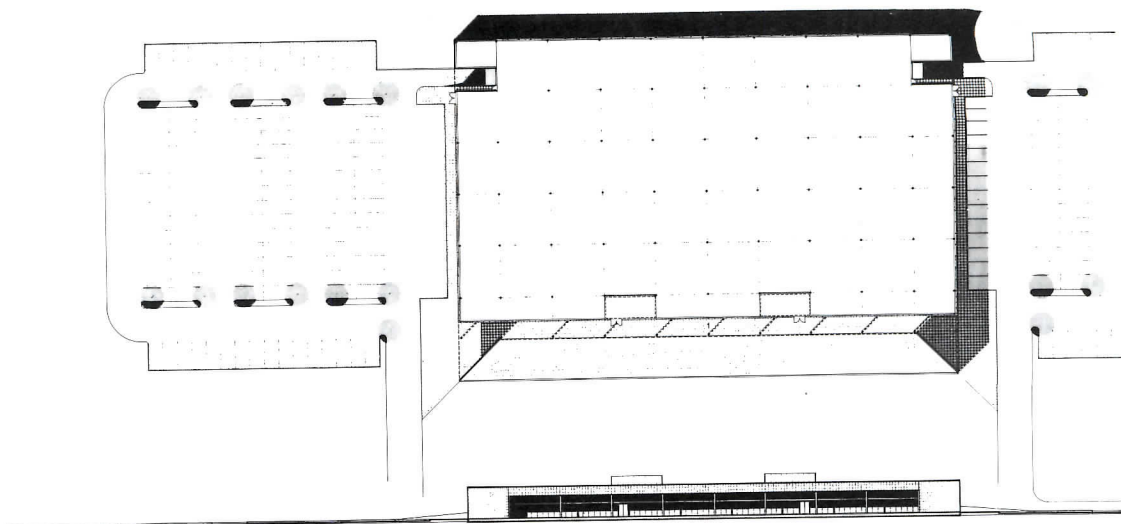
Building K 5-3 for Evans Partnership is the most recent Gwathmey-Siegel design, not yet under construction. Designed for two tenants, it has arcades at both ends, facing separate parking spaces, and the entry is articulated by a skylight in the arcade. The court, bottom in plan, makes a specific internal modulation which aids in plan-

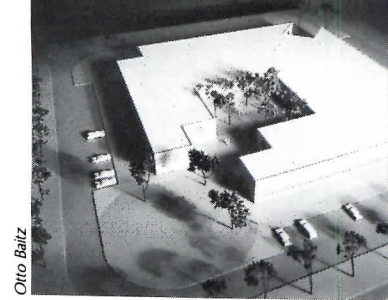
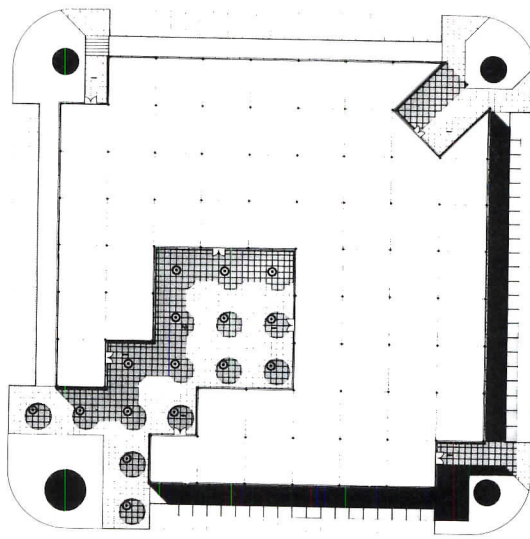
ning—it will probably be shared by both tenants. The service dock in the rear will also be shared. Like all of the designs that follow, the concept is very general except for the site, the circulation, and the orientation. And, in all buildings, glass is handled as a strip except at entries and courtyards—expressed by larger glass areas.



Building K 5-2 (the second building in Kingsbridge 5, a 102-acre office campus) is under construction, again assuming two tenants. Here, because of the road facade, the entries are the critical, specific, and strong component of the design—expressed as "extensions" (the canopies) and "erosions" (the cut-out lobby areas with skylights). The model shows two optional central courtyards cut in, if the tenants want them, even after construction.

Building K 6-1 (the first in a new 30-acre office campus) is complete but not landscaped. Here, the site restrictions required a major setback, no parking in front, and a linear design with parking at both ends. To meet these conditions, Gwathmey used an arcade across the front of the building connecting the parking spaces and overlooking a retention pond. The two entries are expressed by two skylights. Here the pattern of tall windows on the entry side (shaded by the arcade, which is the south elevation) and strip windows on the other sides is clearly seen. And this and the photos on the next pages show the extremely tight and precise detailing of the buildings.





Olto Baliz

Building K 5-1 was rented before completion, reports Michael Shure. Here, Gwathmey's "design opportunity" was the corner lot—and he opened a handsome courtyard (bottom photo) shared by two tenants to that corner. Below, the courtyard entry; at right, one of the off-street elevations tightly detailed in one plane of travertine and grey glass separated only by a fine white line. . . .

and form and materials competed anxiously with each other along the roads. We agreed at once that we needed a design concept for the entire campus.

"Setting such a framework was difficult because the program requirements are vague: design a one-story building ranging from 65,000 to 150,000 square feet of essentially loft space for an unknown number of unknown tenants.

"We began by suggesting a simple materials vocabulary. The client wanted to use travertine. . . ." Says Michael Shure: "We wanted a material that would help set our buildings apart, that we could use in a repetitive manner, that was rich and elegant, and that we would be able to buy for the next 10 years. Travertine was a natural. . . ."

From that, Gwathmey-Siegel developed the travertine/grey-glass infill system seen in the four buildings on these pages, and used white aluminum as the transition material. The detailing, best seen in the color pictures on this page, is tight, minimal, and beautiful.

"The next job," says Gwathmey, "was developing a design rationale for the individual buildings that would make each specific, yet part of the whole. How do you come up with a configuration with so vague a program? By going back to basics: Architecture has constraints of site, approach, parking, and entry—and we designed each of these first four buildings [pages 112-115] on those formal principles. Each building is different [see captions] because the site, the approach, the parking, and the entry requirements (depending on the assumed number of tenants) is different." As the photos and drawings on the previous spread show, so simple a return to architectural basics clearly works.

It also clearly works in the marketplace. Says Michael Shure: "The import of this change in design direction has been tremendous. We've never had more potential tenants visiting our office campuses and we've never rented faster. The architects turned out to be good to work with, exciting to work with—and hit the budgets on the button. Charlie got mad at us more than we got mad at him. At the risk of sounding corny: Working with Gwathmey and Siegel has added a new dimension to our lives. We're now more sophisticated about development and design—and we're proud of these buildings. There'll be more." —W. W.



Norman McGrath photos



**Boston's historic Faneuil Hall Marketplace:
restored and transformed by architect
Benjamin Thompson and developer James Rouse into
a triumphantly successful downtown center**



The photo above, taken from the window of the Mayor's office in City Hall is of Faneuil Hall Marketplace before the demolition of the roofs and certain facades of the North and South Market buildings began in December 1972. Faneuil Hall is in the foreground and directly behind is the Quincy Market building with its great dome and Classic Revival porches (right). The three rows of buildings were designed as an ensemble by Alexander Parris and built on landfill facing the harbor between 1824 and 1826.



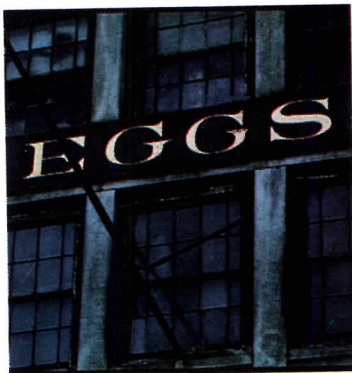
In 1971 the Quincy Market district had almost everything but life...



Parris worked in granite, setting it upright on its small dimension, similar to wood post-and-beam construction, allowing window and door openings to be large for their time.



Long before he got the chance to restore the market, Benjamin Thompson had lovingly recorded the fine old buildings with his camera.



Benjamin Thompson photos





BANKRUPT RECOVERY
THE HOUSE COMPANY
DEVELOPMENT
LEASING
MANAGEMENT
OFFICES
CONVEYOR
SOUTH MARKET
SOUTH MARKET

On re-opening day, August 26, 1976,
it became a magnet for people...



The great, elliptical, ribbed interior dome—long concealed by a hung ceiling—has been restored.



© Steve Rosenthal photos

The two streets, closed to traffic, have become great public plazas, paved with brick, cobblestone and granite and newly planted with trees. Glass canopies extend the retail space into



the plazas. In the market are meat, fish, cheese, produce and bakery goods as well as a variety of places to eat. The push carts are for small entrepreneurs who hope to graduate to shops.



...and a year later, with the opening of the South Market, the area continues to overflow with human vitality

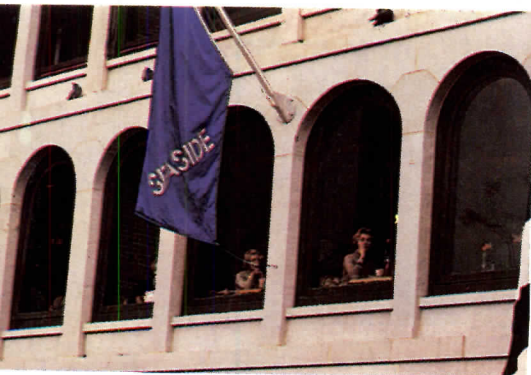
© Steve Rosenthal photos

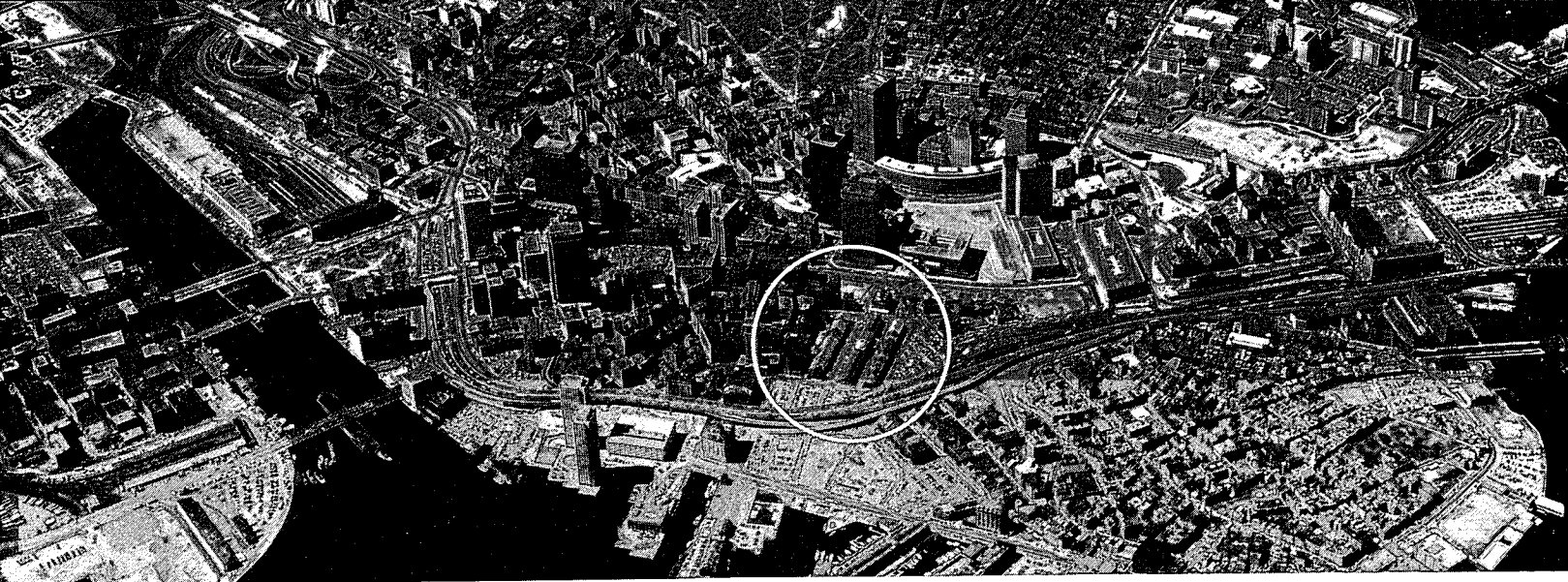


The people who for the past year have been thronging the food stalls in the Quincy Market are now beset by further temptations, which beckon from the South Market across the

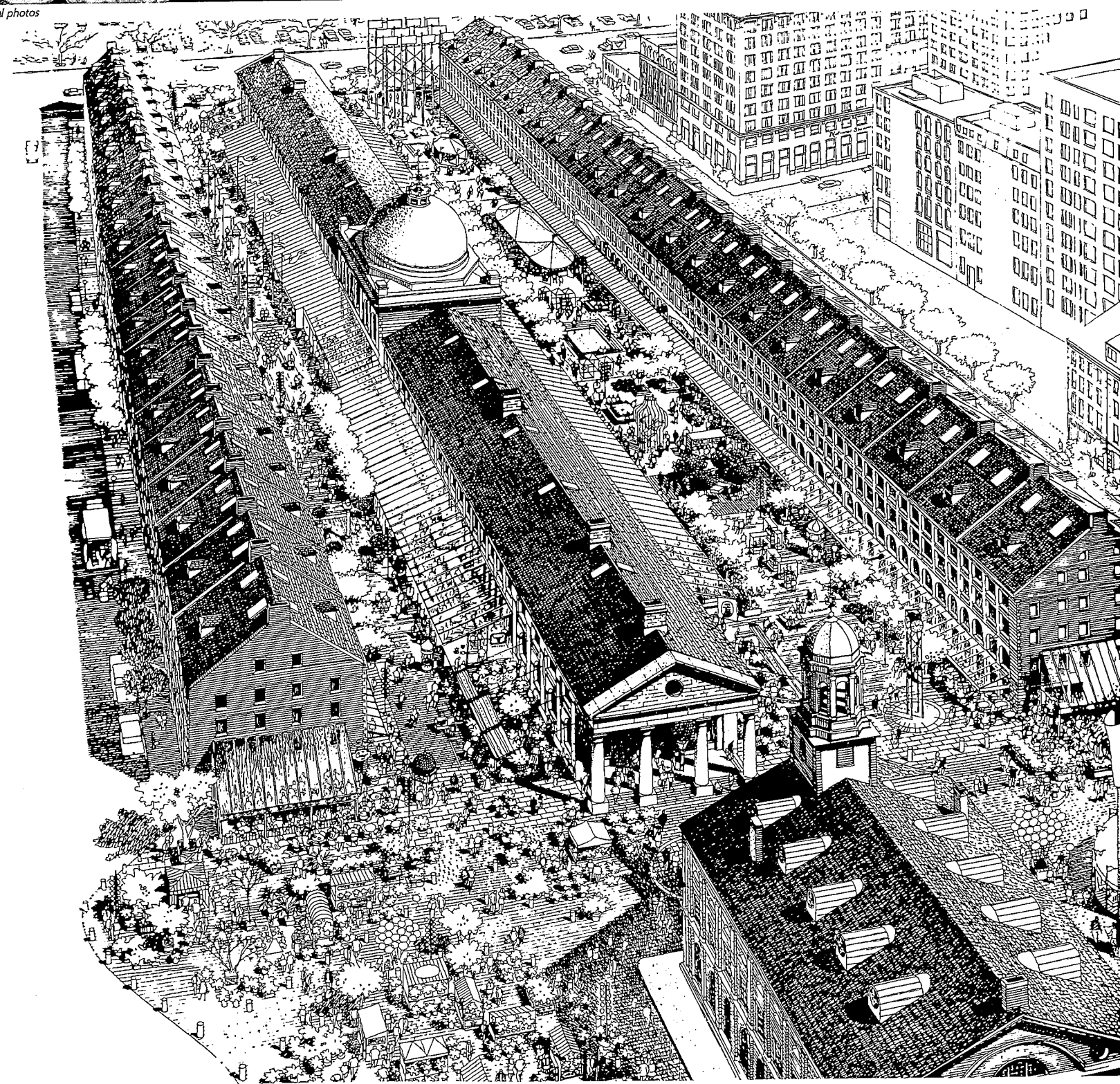
plaza. Here are to be found medium-priced to expensive women's and men's clothing, accessories, furniture, jewelry and gifts in 50 speciality shops. Office space is being leased on the

third, fourth and loft levels of the buildings and four restaurants have been added. The drawing opposite shows how the Marketplace will look when the North Market is finished.





l photos



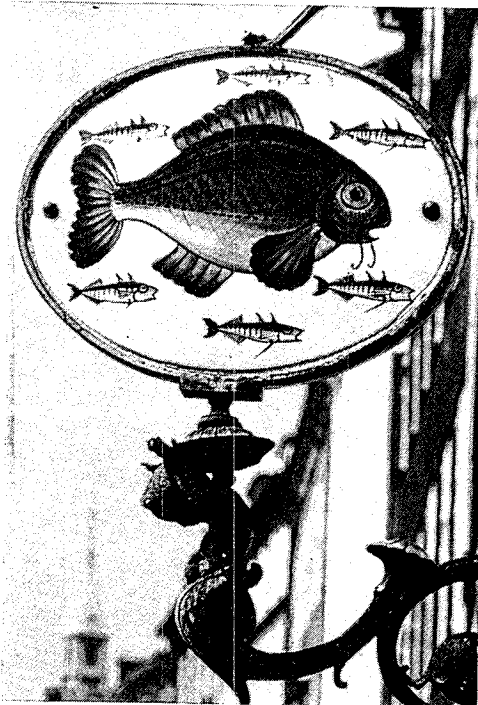
Two key figures who helped lay the groundwork for the Market's present success are architect Frederick A. Stahl and developer Roger Webb

The story of Faneuil Hall Marketplace goes back more than 150 years to 1823 and the decision by Mayor Josiah Quincy to build a new market hall adjacent to the original Faneuil Hall, which had been enlarged by Charles Bulfinch in 1805. In 1824, the splendid Greek Revival ensemble (opposite page top right), designed by Alexander Parris, was begun on new landfill facing the harbor. The north and south blocks were built by individual owners following Parris' design to harmonize with the city-constructed Quincy Market.

By 1959, after about 130 years of intensive use, the Marketplace was in danger of being declared obsolete and torn down. Steps were being taken to build a larger wholesale center away from the city to which the merchants were expected to move. In 1966, architect Frederick A. Stahl, a trustee of the Society for the Preservation of New England Antiquities, and Roger Webb, head of Architectural Heritage, Inc. (both non-profit organizations), went to the Boston Redevelopment Authority proposing that they do a complete preservation-modernization study for the Marketplace. Their comprehensive report, commissioned in 1968 by Edward J. Logue, head of the BRA, led to a HUD grant to Boston of \$2 million, to underwrite the cost of building restoration.

Stahl's architectural firm, Stahl/Bennett, Inc., was then hired by the BRA to begin the exterior restoration and renovation of the market buildings, creating the framework for construction to be done by the yet-to-be-selected developer.

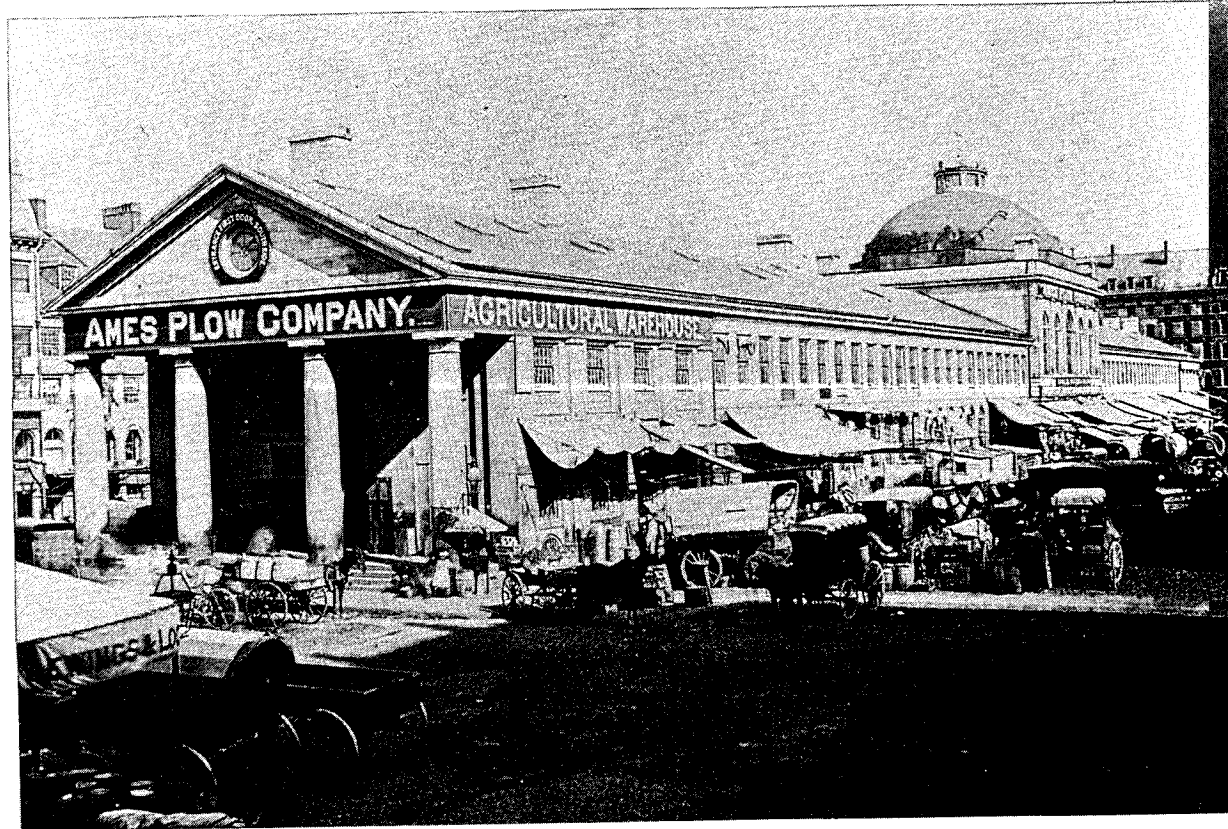
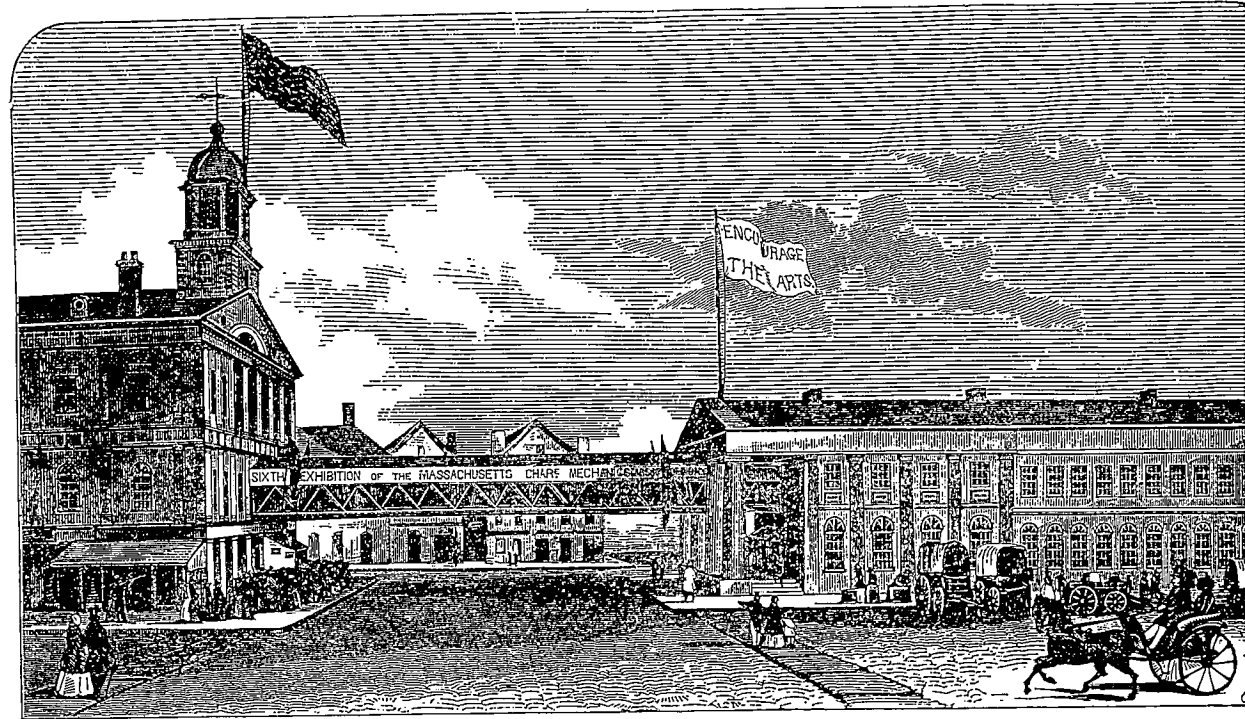
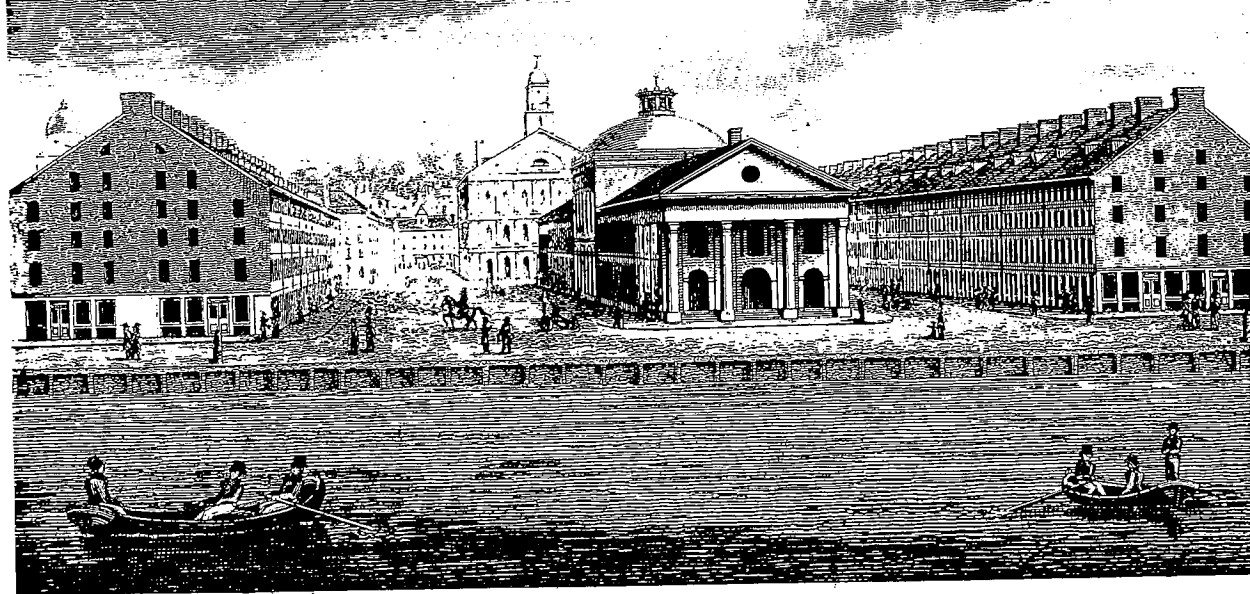
In October 1970, the BRA published its developers' kit for bids on the three market blocks: 6.5 acres of prime urban land and 370,000 square feet of space. In June 1971 the BRA named the winning proposal and development team: Benjamin Thompson & Associates (architect) and Van Arkle-Moss (developer). In January 1972 this team was "de-designated" for failure to get funding. In April of that year the BRA invited bids for the exterior renovation of the North-South Market Streets, using the \$2 million HUD grant and the Stahl/Bennett drawings and specifications, and in June selected a contractor. In May 1972 James W. Rouse, head of the Rouse Company, notified the BRA of his desire to become the developer with Benjamin Thompson as his architect. What happened after that is described on pages 126-127.



Thompson makes photographs of good signs from all over the world (above), which he uses to persuade Rouse Company tenants to improve their graphics. He also favors straightforward methods of display as in the Market's old days (below).

Photos courtesy Benjamin Thompson and Associates



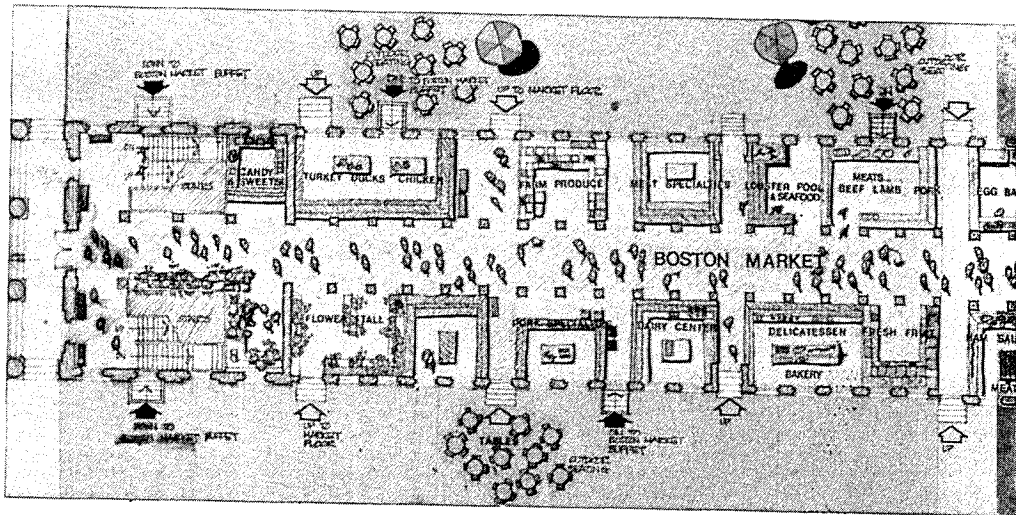


The 1968 feasibility study, by Architectural Heritage, Inc. and the Society for the Preservation of New England Antiquities, was carried out by Frederick A. Stahl, Roger Webb, William Endicott, vice president of the SPNEA and Walter Muir Whitehill, who was then director and librarian of the Boston Athenaeum and a member of the Massachusetts Historical Commission. They produced a five-volume report including an historical study, a combined urban design, architectural and engineering report, a volume of technical drawings, another devoted to specifications and cost estimates and a final volume devoted to real estate, marketing, development and disposition proposals. Of great interest is their documentation of the historic importance of the buildings. Their report shows that within the limitations of the Greek Revival style, new technological innovations were employed, such as the use of cast-iron columns, iron tension rods, laminated wood ribs for the copper-covered dome and the first large-scale use of granite and glass in an unusual post-and-beam technique. As time passed (top and middle) the buildings declined (bottom).

For six years, Ben and Jane Thompson made one study model and presentation sketch after another to communicate their thinking on preservation, rehabilitation, and new use to developers and the BRA

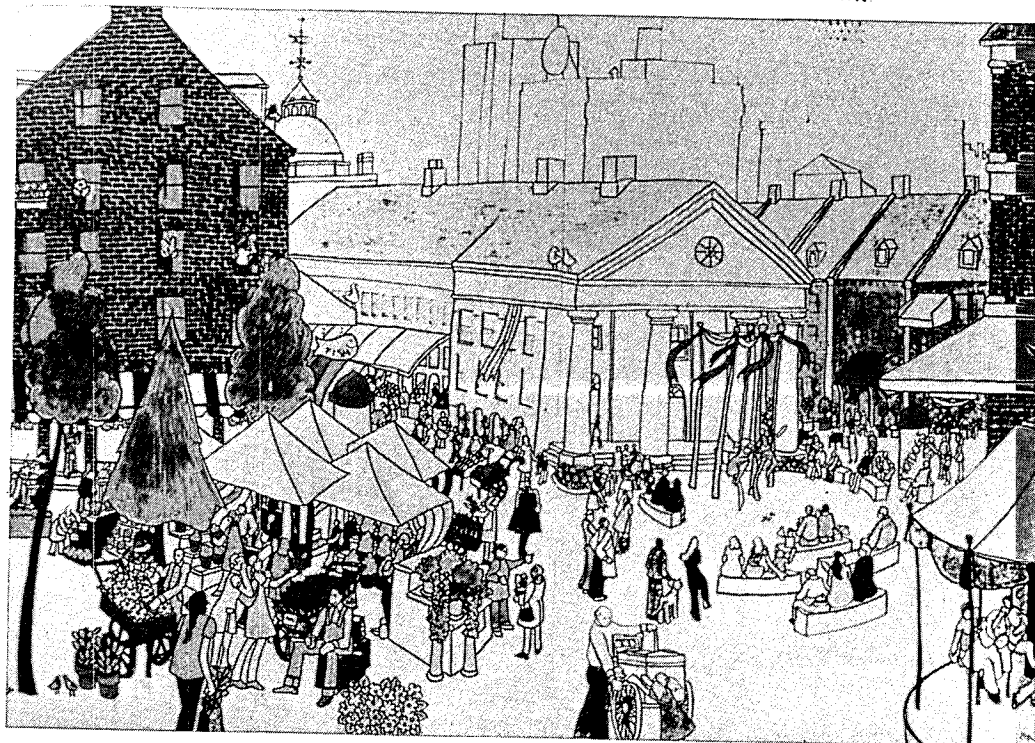
In their words: "Our goal is *genuineness*. This is a better word than authenticity, which is too often used to mean a good imitation of something genuine. Genuineness is the real thing. It is the real cobblestone street on which earlier generations walked and worked. It is solid wood, not plastic veneer, old wood genuinely aged, not new wood stained. It is stone that shows the marks of time, treads worn by generations of feet. It has meaning because it puts us in the presence of what was—the experience of history—not a later impression of what something 'looked like.' Without a clear relation to what is genuine, our sense of values and ability to judge real from fake is damaged—or worse, never developed.

"Two rules of restoration seem well accepted now after some recent years of confusion: First, do not improve on history; do not 'restore back' to a fixed cut-off date; history is richer in time than any one period or style. Second, when repair or replacement of building elements is required, new material should be subtly distinguished from the original. If such distinctions are not made, the genuineness of the original is confused, and the viewers' perception of time is confused. A third precept is longer in coming, but achieves more acceptance daily. This is the principle of *valid continuity*—the joining of successive styles in elegant and compatible ways. If the joining of what is old and what is contemporary (in whatever year) is clearly differentiated, the genuineness of each can be established and enhanced. Throughout Europe and America, buildings of successive periods have used differing materials, proportions and details. Cumulatively, these changes express the depth of a time line in the life of a building, which is one of architecture's most important perspectives on history. Buildings like people must be allowed to age, develop and change—and the changes must show. Buildings, like people, cannot be asked to stand still at a perfect 21, like a blushing beauty embalmed in a wax museum, or an aging movie star restored to youth by plastic surgery. We should not attempt to freeze history but rather strive to enhance its flow. The market should be neither 'historic' or 'modern' but simply the genuine continuation of a special place in city life growing tastefully out of genuine urban commerce and answering human needs."



The models and drawings produced by the office of Benjamin Thompson and Associates have a freshness and appearance of spontaneity which belies the dead earnestness behind them. The sketch above is part of a retail feasibility study for the Quincy Market building. Ben Thompson has been called a "real merchant" by Rouse, who should know. The feasibility study shows the kinds of foods to be sold in

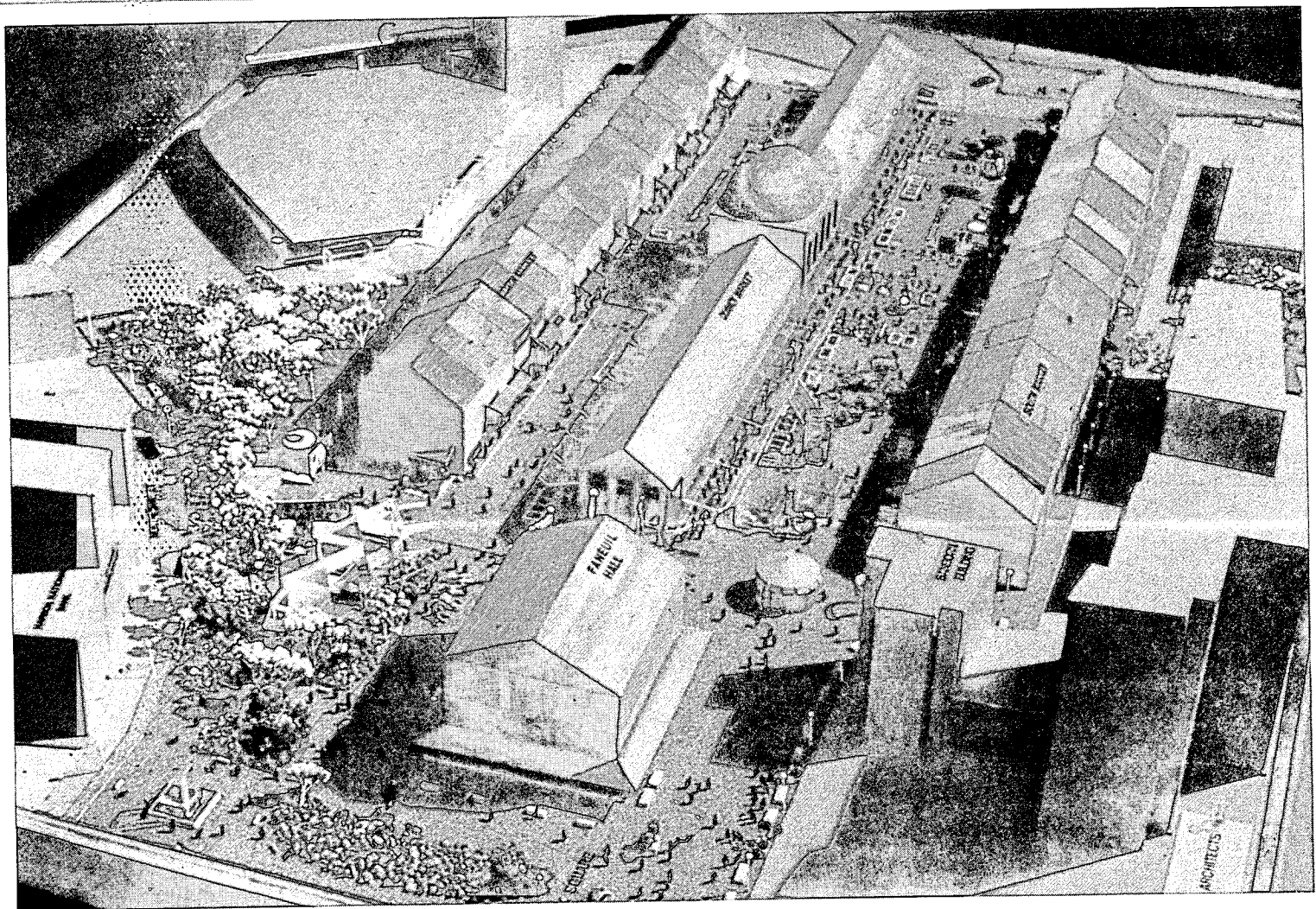
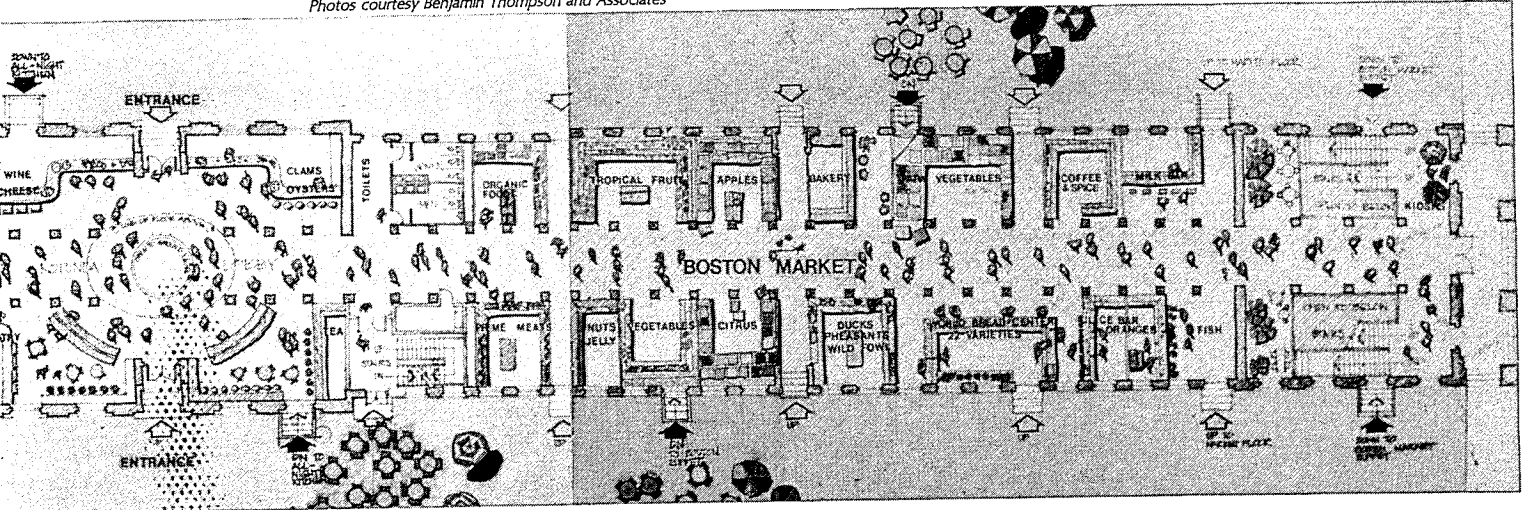
the market, in what sequence, and the number of square feet and linear feet of counter each tenant might require. The plan indicates seating areas where the shopper can rest and eat the snacks he has bought off the stands. The drawing below is one of many made for the Thompsons by Judy Maiewski to help convince non-believers that the Marketplace could be the lively place it has become.



Benjamin Thompson (left) and James Rouse (middle) show their models and drawings to Mayor Kevin H. White (right). The occasion was the designation by the BRA, under the recommendation of its then director Robert Kenny, of the Rouse Company as developer.



Photos courtesy Benjamin Thompson and Associates



Even after the Thompsons joined up with James Rouse, the BRA still had to be persuaded, and so did the bankers

Benjamin Thompson was first associated with the developer Van Arkle-Moss, who had been designated by the BRA to lease and transform the Faneuil Hall Marketplace into a viable commercial center. When this developer failed to get financing, their designation was rescinded. Architect Thompson, however, was determined not to lose the opportunity to help direct the development of the Marketplace according to design and merchandising principles which he believed would assure the success of the project. From January to April of 1972, he tried to induce one developer after another to associate with him, only to have the project rejected as unfeasible. Finally, at the suggestion of Robert Simon, the developer of the new town of Reston, he wrote a letter to James W. Rouse, the developer of the new town of Columbia. Rouse is chairman of the board of the Rouse Company, one of the nation's leading real estate development and mortgage banking firms. He has built 26 retail centers in the United States and Canada as he continues to develop Columbia for an eventual population of 100,000.

Rouse wanted to try his hand at a downtown development in the belief that the future holds great opportunities in the downtown centers of cities. Thompson and his wife and business partner Jane in her words: "presented him with the whole Faneuil Hall Marketplace package. We had the figures, the feasibility, the whole thing was ready-made. It came together in his head and he was ready to try it." Until the Thompsons' entrepreneurial effort to interest Rouse in the Marketplace, however, nothing had come along that could work.

"All the sites I had been offered," says Rouse, "were tiny little islands in the midst of jungles—their environments weren't big enough, reassuring enough." Rouse found the atmosphere surrounding the Boston site to be very encouraging. He was able to see that, in his words: "Boston is a city that is still strong in its heart. I was impressed with the development of the waterfront, the proposed new \$3.5 million park, the Mercantile Building, the financial district and the nearness of City Hall." Things had indeed come together at the right time to attract a developer of Rouse's intelligence to downtown Boston.

The Marketplace is located between two of the BRA's most ambitious undertakings of

the past twenty years: the \$230 million Government Center and the \$125 million Waterfront Redevelopment Project. Within the last ten years, public investment in the waterfront project has been more than \$40 million. All of this effort was beginning to show when Rouse made his first visit to the old Marketplace. Venerable wharf buildings on three of Boston's great old piers had been or were being rehabilitated into housing, shops and restaurants. The new Aquarium had recently been completed. The waterfront's Atlantic Avenue was being redone. Rouse observed as well that the Faneuil Hall neighborhood could become the vital heart of the larger improved area. This extends beyond the waterfront northwestward to Government Center—which in addition to City Hall and its great plaza is crammed with other high-density city, state and Federal office buildings—and southwestward to a cluster of high-rise privately constructed new office buildings, proposed, underway or completed. In his mind's eye, Rouse could see thousands of office workers on their lunch hour eating and shopping in the Marketplace, picking up goodies on their way home, and returning to the restaurants and theaters at night. Just as important to Rouse were the 20,000 people who live within walking distance of the Marketplace. In addition to the new housing that was being created, the old North End residential neighborhood was still alive and the whole area was becoming busy and prosperous enough to give a sense of security, even at night. But downtown needed a revitalized core to be as Jane Thompson puts it: "the final burst of energy to make everything really wake up."

Rouse also noted on this momentous first visit that the entire improved area is accessible by well located subway stops at Government Center and at the Aquarium, and that it is possible, furthermore, to take a subway from Logan Airport directly to these stops. Downtown Boston, moreover, is one of the best cities in the world to walk in. The Quincy Market streets were to become part of a pedestrian network that includes a lovely walk from Charles Bulfinch's golden-domed State House at the crown of Beacon Hill, past Boston Common, through the magnificent spaces within and surrounding City Hall, downward to Faneuil Market and on to the harbor with its 4.5-acre Waterfront Park. Rouse owes his

success to never forgetting that shopping and eating should be a pleasure as well as a necessity, and he could see that the Marketplace would be just the place for people out walking for fun to relax, eat, browse and buy. And for those arriving by car the Market is adjacent to thruway exits, a large parking garage at Government Center, and other convenient parking facilities.

As important as the strength and vitality of the Marketplace's surroundings were the old buildings themselves. "They didn't require a lot of twisting, turning and remaking," says Rouse. "I could see that handling them just as they were we could produce a logical, workable marketplace." Rouse, however, did not and does not venerate the buildings as the architectural historians do. "I don't think we saved something beautiful because I don't think the Market was beautiful, not even long ago. I think that together with Ben Thompson we have created something beautiful out of the opportunity that was there. This is a lot more than restoration. Of course what we have done would not have the feeling that it does if the buildings hadn't been old and rather marvelous to begin with. Those big granite openings and that wonderful rotunda and dome!"

Convinced by his first visit to the Market, by the Thompsons' arguments and supported by subsequent feasibility studies made by his staff, Rouse with the Thompsons began the effort to persuade the City of Boston and the BRA to designate the Rouse Company as developer and to arrange the financing—two inter-related and highly complex tasks. Thompson, now Rouse's architect, set about to help his new client by sharing the results of at least twenty years of thinking about ways to revitalize the downtowns of cities. He also had to offer his particular type of urban retailing experience—bringing together all kinds of goods in a marketplace setting—learned through founding and (for some years) owning and managing Design Research.

"Ben is a merchant," says Rouse. "He understands with us the things that are essential to a marketplace—how to stimulate certain kinds of traffic so that one type of purchase leads to another. Shops must be easy to find and enjoyable to be in. Shopping can be entertaining. Ben understands this." And Thompson offered Rouse firm counsel on just how far to

The Marketplace, although a great success, is not usually *this* crowded. The occasion: August 26, 1976, the 150th anniversary of the Market and its rededication and opening in honor of the Bicentennial. Mayor White, James Rouse, the Thompsons and BRA director Robert Kenny were there along with thousands of Bostonians eager to discover their reborn downtown.



© Steve Rosenthal photos

acknowledge standards of historical exactitude in the restoration of buildings, which are at the same time being adapted to today's marketing requirements. Thompson, for example, substituted large single panes of glass for the old ten-over-ten multi-paned windows of the early nineteenth century—against the opposition of preservationists advising the BRA.

It took six months of intensive effort for Rouse and the Thompsons to get the City of Boston to designate the Rouse Company as developer. Finally, in May 1974, the lease was signed and in July of that year Rouse got a commitment of \$21 million from Teachers Insurance and Annuity for the permanent financing. Two weeks later Rouse got a commitment from Chase Manhattan for \$10.5 million—one-half of the construction financing, on the condition that he get the remainder from Boston banks. Another six months went by until ten Boston financial institutions finally came up with the other half and only then after Rouse had broken the project up into three phases, the first, Quincy Market, to cost \$7.5 million. The GBH Macomber Company finally began construction of Phase One in 1975.

The reluctance of the financial community to lend money to the Rouse Company indicates that at that time the banks saw substantial risks in the project. There was fear and uncertainty about the concept of retailing in an urban area, based upon the record of failures in the downtowns of many U.S. cities. Further, the costs of remodeling old buildings is difficult to estimate accurately because of unforeseen problems leading to a fear that construction costs would get out of hand. Adding to the uncertainty was the fact that Rouse was embarking upon an unconventional retailing scheme in which there was to be no major retail tenant.

Their idea was that each tenant should lease a small selling area designed to maximize his sales per square foot allowing him to pay a higher rent per square foot. There would be more tenants per square foot than in a major shopping center and the likelihood of more turnover. Such tenants were expected by the banks to have lower credit ratings than typical major tenants.

In a typical shopping center there are two major tenants. For example, in the Chestnut Hill shopping center, the latest to be constructed in the Boston area, there are branches of Bloom-

ingdale's and Filene's. The bankers took a risk on financing the rest of the space to be constructed because the draw of magnets like Bloomingdale's and Filene's would bring customers and additional tenants to the center.

At Faneuil Hall Market, however, there was no certainty as to who the tenants would be and therefore what the attraction would be. The bankers knew, because Thompson and Rouse had told them in every way they knew how, that the way the tenants were located in the space in its entirety would be the magnet—and this is how it has turned out. But it took imagination, and lenders are not celebrated for risking that kind of imagination. Finally, in order to get his loan, Rouse did have to agree to lease 10,000 square feet on the second floor of Quincy Market to the Magic Pan, the only large tenant in the Marketplace.

At the point at which Boston's lenders began to relent, the city, state and Federal investment was close to \$10 million. The project cost to the Rouse Company was to be \$30 million; which included in addition to construction costs, design, legal work and the costs of getting the tenants in place. Thus the public subsidy was approximately one-third. The usual ratio is about ten per cent.

The cost of rehabilitating the space came to between \$65 to \$75 per rentable square foot. Some of the retail space cost as much as \$100 per square foot to renovate. Without this level of public subsidy, the rents would have been out of sight. No developer could have done the job.

According to Jane Thompson, the cost to Rouse of the reconstruction of the market buildings and getting the space ready for the tenants was about 10 per cent higher than in a large shopping center. The shopping center developer is used to building shells. Rebuilding the Faneuil Hall Marketplace was more expensive and complicated, but the Rouse Company, which charges its tenants a rent based upon a certain percentage of their sales, is getting its investment back at the rate of 200 per cent of what they normally get for retail space in a typical suburban shopping center. The Market is such a success that some shops are doing business at the rate of \$400 of sales per square foot per month. Rouse believes his gamble was well worth it.

According to Stuart Forbes, who has been

the Boston Redevelopment Authority's representative in working out the financial feasibility of the project with Roy Williams, the Rouse Company's director of the Marketplace operation, Rouse's most important strength was his ability to put together enough tenants of the right type so that when the Marketplace opened, its character was immediately evident. After filling the Quincy Market building with various kinds of merchants of food and drawing great crowds thereby, it was then easier to attract the fashionable clothing, accessory, jewelry and gift shops which have opened a year later in the South Market.

Rouse is particularly proud of his pushcarts: "We wanted to create as many independent tenants as we could so we decided to give small merchants a chance with pushcarts. We hired a bright young woman who went out all over New England identifying artists and craftsmen and small entrepreneurs with narrow specialties. She worked on 900 prospects for those 43 pushcarts, evaluating and recruiting them. We designed the carts and provided boxes and baskets to hang on them. Our standard lease with a tenant is 44 pages long and requires the merchant to have a lawyer, accountant, contractor and architect. So we created a one-page lease so that somebody could bring in his silk-screened whatever and in a week or so he could tell if they would sell." Rouse believes that the carts have been a great drawing card for the Marketplace. At least one pushcart operator has graduated to a small shop in the South Market.

The Rouse Company now pays taxes that are between 20 and 25 per cent of the gross income generated—which is consistent with other tax agreements in Boston. There was tax abatement during construction in return for contributions the Rouse Company made to the city, notably the installation and funding of Boston's Bicentennial exhibit in the Quincy Building. Rouse also assumed the risks inherent in the structural repairs contract, and did some other construction work which was previously to have been done by the city. The land and buildings are owned by the City of Boston and the Rouse Company has a 99-year lease. According to Stuart Forbes, the Faneuil Hall Marketplace will, within five years, be generating in excess of \$1 million in real estate taxes per year. —Mildred F. Schertz

And so, we think, the point is made....

The four case histories in this issue demonstrate, we think, that the right kind of architect-developer collaboration, with the right kind of input from the community, can result in very a high standard of design and marketplace performance. They certainly demonstrate that there is no truth in the commonly held notion that quality in architecture and profit-making in the marketplace are incompatible goals.

We do not suggest that these four case histories—Arthur Cotton Moore's work for a variety of clients, developer Rocke Ransen's work with a variety of architects, Gwathmey-Siegel's work with speculative office builders and a major contractor-developer, and, especially, Ben and Jane Thompson's work with James Rouse in rebuilding and revitalizing Boston's beloved Faneuil Hall Marketplace—are in any way typical.

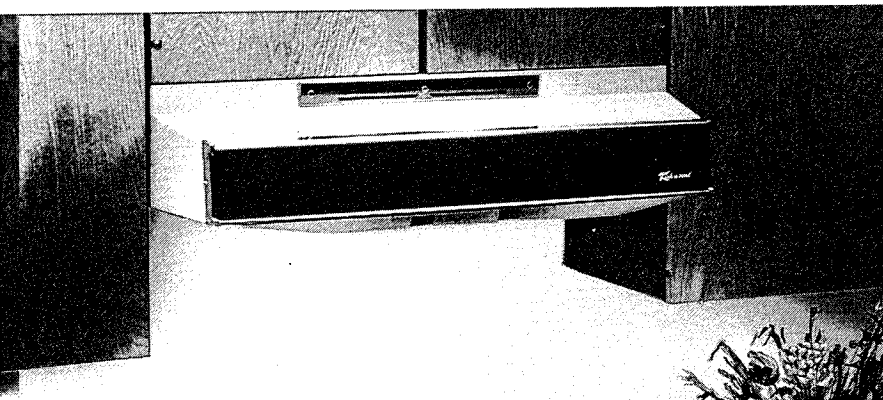
None of the architects involved are typical—rather, they are the kind of design super-stars that most observers would consider *least likely* to function happily and effectively amidst the constraints of the budget- and profit-conscious developer. The point is that they were able to organize themselves for another kind of commission and, as usual, do it very well indeed—meeting their own standards and at the same time giving something quite special to developer and public alike.

None of the developers involved are typical—rather, they are very sophisticated developers who have made a mark for themselves by being very successful in a very tough business, and who are now making a new kind of mark for themselves by stretching still further for quality.

Only the work is, in a sense, "typical"—downtown redevelopment, replanning and "recycling," office buildings along freeways and in office parks. To be sure, there is only one Faneuil Hall—but most cities have a special place which, in the hands of a sensitive and involved architect and developer, can be made into a new downtown magnet—and perhaps prove as successful in its way as the work in Boston has been.

We think that, as the title of this issue suggests, the case can be made for design quality in today's marketplace—that thoughtful collaboration between architects and developers can result not just in arithmetic that adds up in the marketplace, but "arithmetic of excellence."

For more information, circle item numbers on Reader Service Inquiry Card, pages 181-182

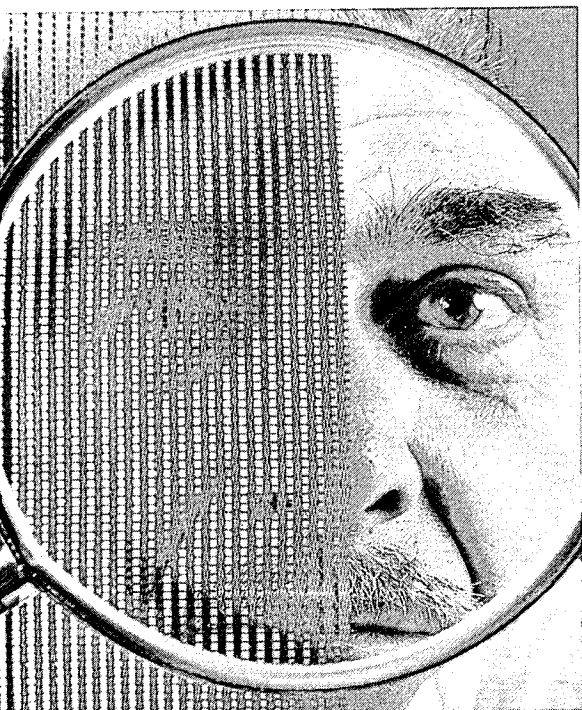


Three venting options offered in one range hood

The "2100 Series" kitchen range hood has a versatile venting structure that allows a standard hood to be converted at the time of installation into any of three duct versions: 7-in. round; 3 1/4 by 10-in., or ductless. The UL-listed unit has a

two-speed motor, enclosed 60-watt light, and 121-sq-in. aluminum grease filter. "2100 Series" hoods have chrome and black glass trim inserts, and are available in standard colors. ■ Home Metal Products, Co., Plano, Texas.

circle 300 on inquiry card



Glass fiber screening blocks both heat and cold

Strands of fiber glass filaments are vinyl coated, then woven into a mesh forming a summer insect screen said to have excellent solar energy blocking properties as well. When installed under tension 1/2-in. or more from the outside surface of a window, the screen works by

absorbing, then quickly dissipating, most of the sun's heat before it reaches the glass. Screens made from this fiber glass mesh also help save winter heating fuel by reflecting radiant heat back inside the house. ■ PPG Industries, Inc., Pittsburgh, Pa.

circle 301 on inquiry card

Swiveling desk chair adjusts vertically

Fully cushioned for support and seating comfort, the swiveling desk chair shown is part of the manufacturer's "900" office group. The fivelegged base is chrome steel, available with glides or with twin wheel casters. The chair is vertically adjustable. Simulated leather upholstery is available in red, blue, green, light brown, dark brown and black. Fabric upholstery is also offered, in these colors plus yellow, orange, and light green. ■ Facit-Addo, Inc., Greenwich, Conn.

circle 302 on inquiry card

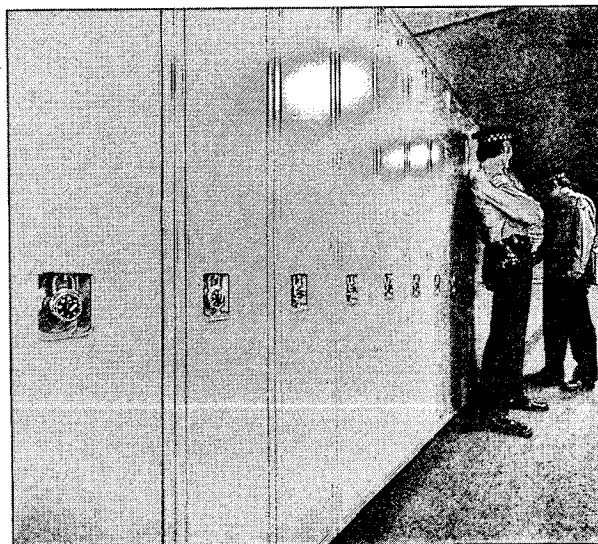
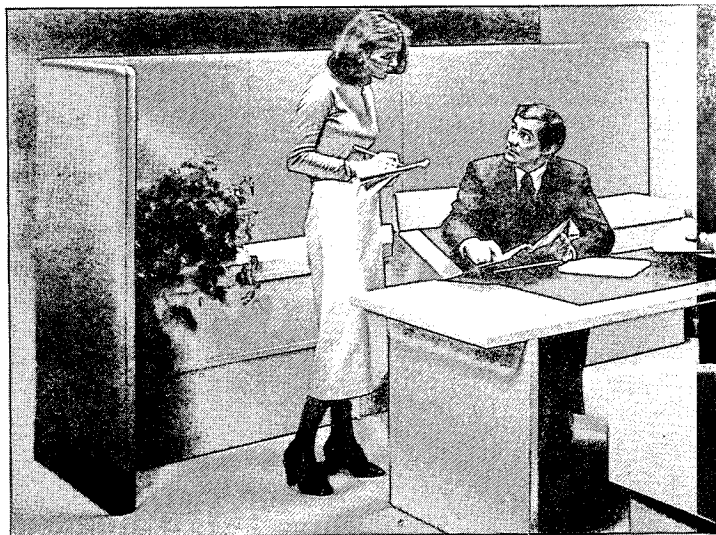


Flexible office partition absorbs sound

Intended for use in open offices, *Sound Screen II* partitions interlock for a secure connection between panels. Each panel base has a cavity to accept electrical and communications wiring. The screen itself

consists of 1 1/2-in.-thick layers of acoustical insulation which sandwich a sound-blocking aluminum septum, framed by welded aluminum sections. ■ Owens-Corning Fiberglas Corp., Toledo, Ohio.

circle 303 on inquiry card



Foam-backed lockers reduce noise and clutter

The backs of these specially-modified steel lockers are insulated with 3/4-in.-thick sheets of foam for improved acoustical control. Visual clutter is reduced by the flanged, recessed pocket set into the locker fronts, which serves as a door pull and provides a hasp for out-of-the-

way combination locks. Ventilating louvers are located on the sloped tops of the lockers, adding to the clean, uniform appearance of corridors. ■ Penco Products Inc., Oaks, Pa.

circle 304 on inquiry card
more products on page 137



Now... architectural dimming that performs better than theatrical dimming

Easy to Operate . . . Versatile

VERSAPLEX™ the new architectural dimming control from LUTRON, dims fluorescent, incandescent *and* mercury vapor lighting. It can even dim all three simultaneously. These handsome control units provide advantages previously available only in expensive theatrical dimming . . . yet are priced to be used in conference rooms, board rooms, multi-purpose halls or audio-visual rooms. And, they're so simple, anyone can operate them.

VERSAPLEX provides full multi-location control (including mastering and grand mastering). You can take command of the system from any station. Audio-visual presentations can be interfaced with VERSAPLEX to pre-program a variety of aesthetic dimming effects. VERSAPLEX features energy saving, solid state square law dimming and cost-cutting low voltage Class II wiring. Beautiful brushed aluminum or bronze adds elegance to function, enhancing the entire interior.

Three basic configurations are available: (1) Slide (Up to

5 sliders on one faceplate), (2) Touch-button presets with fade and (3) both Slide and Touch-button combined in one control.

VERSAPLEX is the finest and most reliable system of its kind available. Installations include Citibank, FMC, Air Products, Energy Research and Development Administration (ERDA). U.L. Listed.

CUSTOMER SERVICE "HOT LINE" —
For further technical information or field service
call our "HOT LINE" (800) 523-9466.
Ask for an Applications Engineer.

LUTRON®

COOPERSBURG PA 18036

For more information, circle item numbers on Reader Service Inquiry Card, pages 181-182

LAMINAR FLOW HEATER / An illustrated four-page brochure explains the unique laminar flow air delivery of the "LF" series horizontal unit heaters. Air is drawn across, rather than forced violently against, the heating elements, eliminating high air turbulence and high operating noise. Complete electrical data for heaters of from 2 to 50 kW capacities are shown on a selection chart. ■ Erncraft Mfg. Co., Inc., Michigan City, Ind.

circle 400 on inquiry card

WOODGRAIN LAMINATES / Five new plastic woodgrain patterns are shown in a color brochure, which also illustrates the 20 other designs in the most recent "Design Group I Woodgrain" line. ■ Wilson Art, Temple, Texas.

circle 401 on inquiry card

CONCRETE RETARDERS / Reprints of an article first appearing in *Modern Concrete*—"The How and Why of Chemical Retarders for Producing Exposed Aggregate Concrete Products"—are available to interested professionals. What retarders will and won't do is discussed; specific steps involved in producing different precast effects are explained. ■ Preco, Plainview, N.Y.

circle 402 on inquiry card

SOIL COMPACTION / A 22-page booklet outlines the reasons soil compaction is needed, and discusses soil types, properties and moisture content. Additionally, the guide explains compaction methods and machine characteristics to consider for various applications, and discusses the most widely used compaction tests. ■ Davis Mfg. Div., J. I. Case, Wichita, Kan.

circle 403 on inquiry card

SECURITY REVOLVING DOOR / A product data sheet presents the *Tubelite* electronic security revolving door, capable of handling more than 2,000 people an hour in one direction only. An invisible light curtain completely covers the "wrong way" route; the door locks instantly if this light beam is interrupted. This security door has FAA approval for use in commercial air terminals. ■ Consolidated Aluminum Corp., Architectural Div., St. Louis, Mo.

circle 404 on inquiry card

SPECIAL DOORS / A 14-page door selection guide uses a series of questionnaires to present product data on special doors for any of these severe services: fire; sound or noise; detention/security; water, air or gas resistance; pressure/blasts missiles/bullets; seismic, or radiation. Summary questionnaire covers hinges, locking mechanisms and code requirements. ■ Overly Mfg. Co., Greensburg, Pa.

circle 405 on inquiry card

INDUSTRIAL CLADDING MATERIALS / An illustrated folder demonstrates how *Galbestos* cladding and *Stypolight* translucent panels reduced the life-cycle costs of coal preparation plant buildings at the Emerald Mines Corp. in Waynesburg, Pa. The material's resistance to severe acid attack and constant vibration is explained. ■ H. H. Robertson Co., U.S. Building Products Div., Pittsburgh, Pa.

circle 406 on inquiry card

SOFFIT VENT SYSTEM / A fact sheet describes a continuous aluminum soffit vent system, used with soffit panels to provide additional ventilation of under-eave areas. ■ Cheney Flashing Co., Trenton, N.J.

circle 407 on inquiry card

HARDBOARD SIDING / Color photographs of product applications in all types of residential construction illustrate the variety of styles and finishes available in this hardboard siding line. Included are horizontal and vertical treatments, smooth and textured surfaces, and contemporary and traditional patterns available primed, unprimed or prefinished. All applicable guarantees are explained. ■ Masonite Corp., Chicago, Ill.

circle 408 on inquiry card

INTERIOR PAINTS / Sixty deep colors specifically formulated to supplement the manufacturer's *Design-a-Color* paints and provide complete coverage with two coats are shown in an accordion-type, pocket-size brochure. The color deck also includes safety colors meeting OSHA standards. ■ PPG Industries, Inc., Pittsburgh, Pa.

circle 409 on inquiry card

SECURITY SYSTEMS / A short-form catalog introduces the *Red Alert* control panels and security accessories for industrial, commercial and residential protection. Four basic control panels are explained: key operated; comprehensive key-operated panel with dual convenience zones; full function digital controls; and combination fire and burglary, full function residential control panels. ■ Redco, Inc., Pennsauken, N.J.

circle 410 on inquiry card

LIGHTING FIXTURES / Luminaires for commercial, industrial and institutional applications are shown in a fully illustrated condensed catalog. More than 40 fixtures are included, covering wraparound, surface and suspended, fluorescent, floodlight, industrial HID and roadway lighting types. Complete product information is given for each luminaire; prices are listed. ■ Westinghouse Electric Corp., Pittsburgh, Pa.

circle 411 on inquiry card

ALUMINUM LIGHT POLES / All-aluminum tapered poles for floodlighting and area lighting are described in a product brochure. Instructions are given on how to coordinate the total effective projected area of fixtures and brackets with the wind velocity and mounting height when ordering either an entire shaft assembly or individual parts. ■ Pfaff & Kendall, Newark, N.J.

circle 412 on inquiry card

OFFICE EQUIPMENT / A four-page catalog illustrates a complete line of office machine stands, work stations, and bookcases. Product descriptions include dimensions, colors, and a list of accessories. ■ Tiffany Stand and Furniture, Maryland Heights, Mo.

circle 413 on inquiry card

PRINTED MURALS / "Architectural Tapestries" are computer printer murals which can be reproduced in large format from any artwork or photos. Four- or 6-ft wide and up to 15-ft in length, they can be hung vertically or horizontally with their own hook and loop fastening system. ■ 3M Co., St. Paul, Minn.

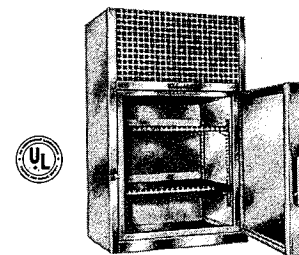
circle 414 on inquiry card

METAL BUILDINGS / Photographs of buildings all over the world are used in a brochure illustrating the varied architectural treatments available with this metal building system. Structures shown include manufacturing plants, offices and showrooms, theaters and recreational facilities. The economic, maintenance and durability advantages of the *Stran* system are discussed. ■ Steel Products Co., Houston, Texas.

circle 415 on inquiry card

WE FIT IN

STAINLESS STEEL WALL MOUNTED REFRIGERATORS, FREEZERS



WM-CW* series eye-level, wall mounted refrigerators are offered in 4 sizes featuring cold wall cooling systems with push-button defrost and automatic reset. Two removable, adjustable stainless steel shelves are provided. Front mounted grille removes easily for servicing.

WM-1-CW Capacity—1.5 cu. ft. (45 ltr.)

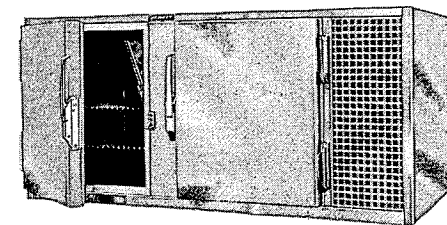
WM-2-CW Capacity—2.3 cu. ft. (65 ltr.)

WM-3-CW Capacity—3.2 cu. ft. (95 ltr.)

WM-4-CW Capacity—4.3 cu. ft. (125 ltr.)

WM-3-F-CW freezer is available only in a 3 cu. ft. (85 ltr.) capacity and has a manual hot gas defrost.

Capacity—3.0 cu. ft. (85 ltr.)



WM-BC series space saving, double-door, wall-mounted refrigerators are available in 2 sizes. Furnished with 4 stainless steel shelves, they have a blower-coil cooling system with automatic off-cycle defrost and a condensate evaporator. Condensing unit is easily serviced by removing front mounted clip-on grille.

WM-7-BC Capacity—6.6 cu. ft. (190 ltr.)

WM-10-BC Capacity—9.6 cu. ft. (275 ltr.)

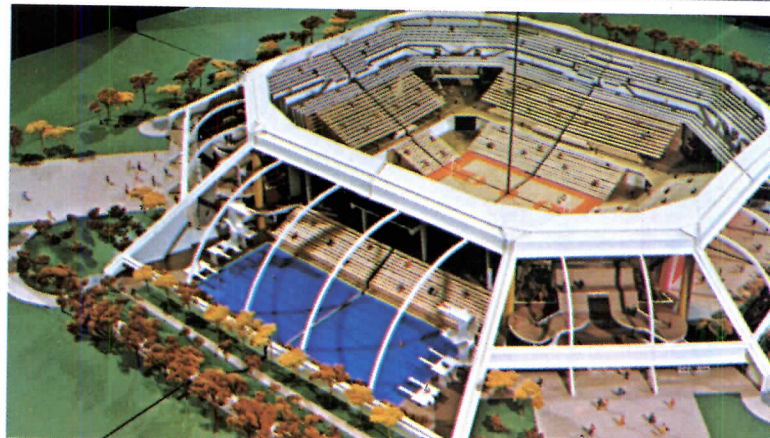
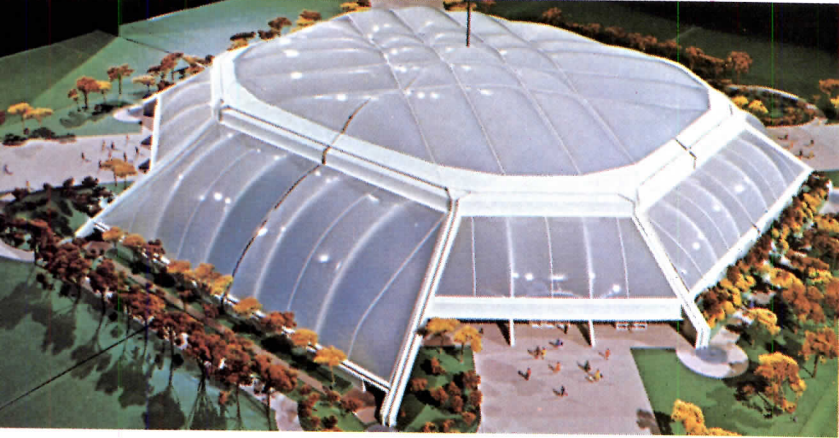
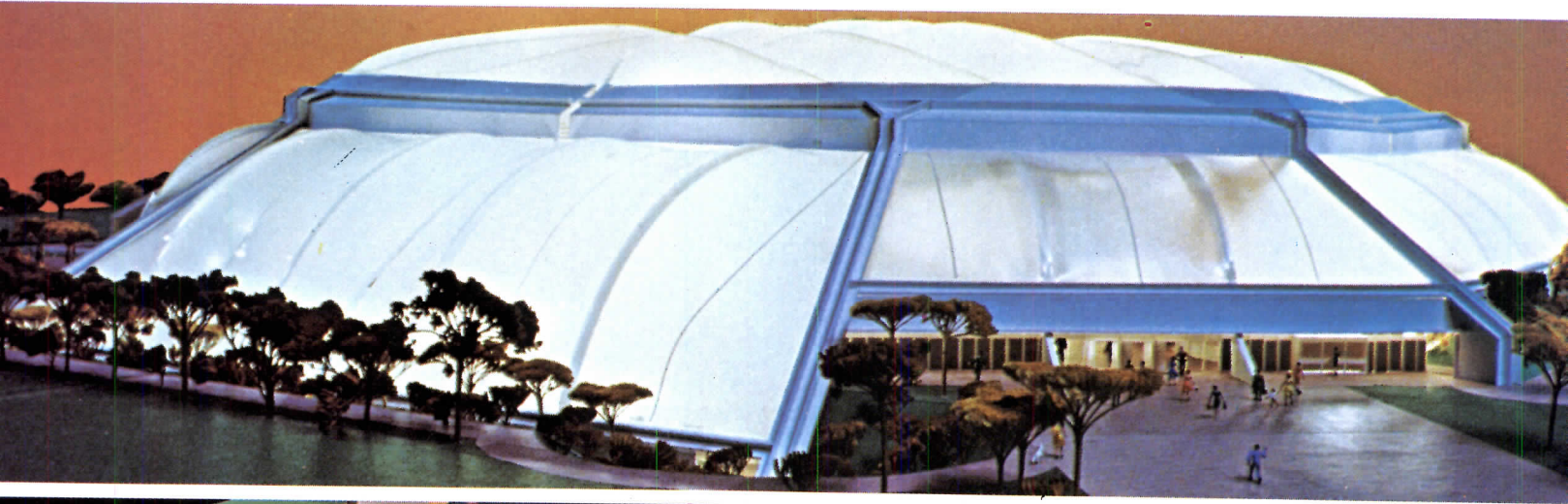
*With explosion proof interior.

Jewett also manufactures a complete line of blood bank, biological, and pharmaceutical refrigerators and freezers as well as morgue refrigerators and autopsy equipment for world wide distribution through its sales and service organization in over 100 countries.



For more data, circle 59 on inquiry card

Now...innovative, versatile fabric structures that last. TEFLON makes it possible.



Model of proposed student activities center, University of Florida, Gainesville, Florida. Architects: Caudill Rowlett Scott, Houston, Texas; Moore, May & Harrington, Gainesville, Florida. Engineers: Geiger-Berger Associates, P.C., New York City.

Permanent fabric exterior removed from model to illustrate column-free interior.

The University of Florida at Gainesville needed a new student activities building. They wanted a basketball court, olympic-size swimming pool, high diving area, indoor track, court sports and gymnastic area, locker rooms and administrative offices. They wanted an attractive permanent building...not a temporary structure. And, they had the inevitable limitations of a budget.

The architectural firms of Caudill Rowlett Scott and Moore, May & Harrington met their needs by proposing a permanent building of architectural fabric coated with TEFLON® fluorocarbon resin. Pound for pound stronger than steel, the glass-fiber fabric can be supported by light air pressure or high strength cables providing large, clear spans without bulky, expensive supporting columns. Enclosed space is free and uncluttered. And the translucence of architectural

fabric coated with TEFLON adds to the feeling of openness. It admits enough natural light to grow plants and carry on sports activities even on cloudy days. The new facility is designed to resist Florida hurricane forces.

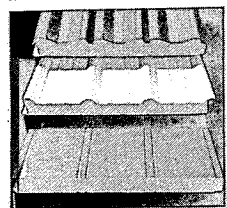
TEFLON makes it possible. Architectural fabric coated with TEFLON resists sunlight, industrial smogs, aging and weather. It washes clean in rain. Its excellent flame resistance has permitted it to be accepted under all code requirements for permanent buildings for which it was submitted.

To learn more about permanent buildings with architectural fabric coated with TEFLON, send for our free 16-page, full-color brochure. Write: Du Pont Company, Room 35743J, Wilmington, DE 19898. In Europe: Du Pont de Nemours International, S.A. P.O. Box CH-1211, Geneva 24, Switzerland



REG. U.S. PAT. & TM. OFF.

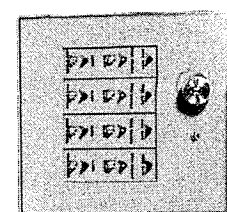
INSULATED ROOF/WALL PANELS / StarTherm



panels, designed for use with the manufacturer's metal building systems, are a composite of painted metal skins bonded to a rigid foam insulation core, with a non-metallic member interlocking the interior and exterior skins for structural integrity and weathertightness. Factory-applied sidelap vapor/air seals allow the system's interior surfaces to function as a complete vapor barrier and prevent air infiltration. StarTherm wall and roof panels have U-factors of .040 and .043, respectively; FM-tests based on ASTM E-84 for panels with 3 in. of insulation are said to show excellent flame spread, fuel contributed and smoke developed ratings. Panels up to 22 ft in length are available in the three rib configurations shown. The paint finish on both wall and roof panels comes with a five-year standard guarantee. ■ Star Mfg. Co., Oklahoma City, Okla.

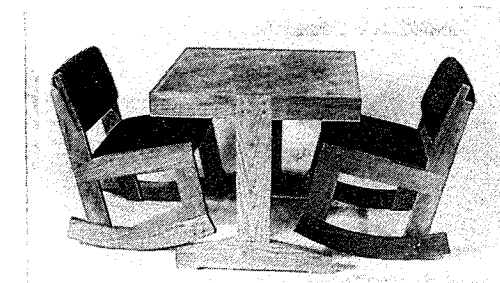
circle 305 on inquiry card

FENCE SECURITY / Operating on a modular zone



concept, this perimeter security system accepts inputs from Piezo-electric vibration detectors, gate switches and/or tamper switches. Tested in over eight years of use in all weather conditions, the system is shielded from moisture and stray electrical interference. The zone control panel (shown in photo) has four primary circuits for each zone: zone safe indicator; zone disable indicator; alarm indicator; and alarm silence pushbutton. ■ Electronic Surveillance Fence Security, Inc., Long Lake, Minn.

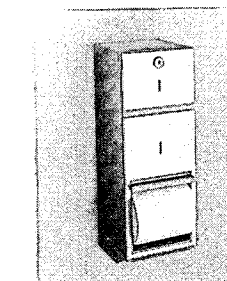
circle 306 on inquiry card



OCCASIONAL SEATING / The "Bridgehampton Rocker," shown with a coordinated game table, is said to balance perfectly for sitting upright at a dining table, as well as providing rocking chair capability. The oak dining/side chair is available with natural white, rust red, or dark brown cotton duck-covered foam cushions, and retails for \$144.00. ■ Warren Padula Furniture, Bridgehampton, N.Y.

circle 307 on inquiry card

TISSUE DISPENSER / Now available in a three-roll



capacity, the Reserv-A-Roll toilet tissue dispenser has a simple, durable working mechanism. The new roll drops and locks into place only when the roll in use is empty. Rollers and tissue cannot be removed unless the cabinet is unlocked with a key. ■ RAR Enterprises, Houston, Texas.

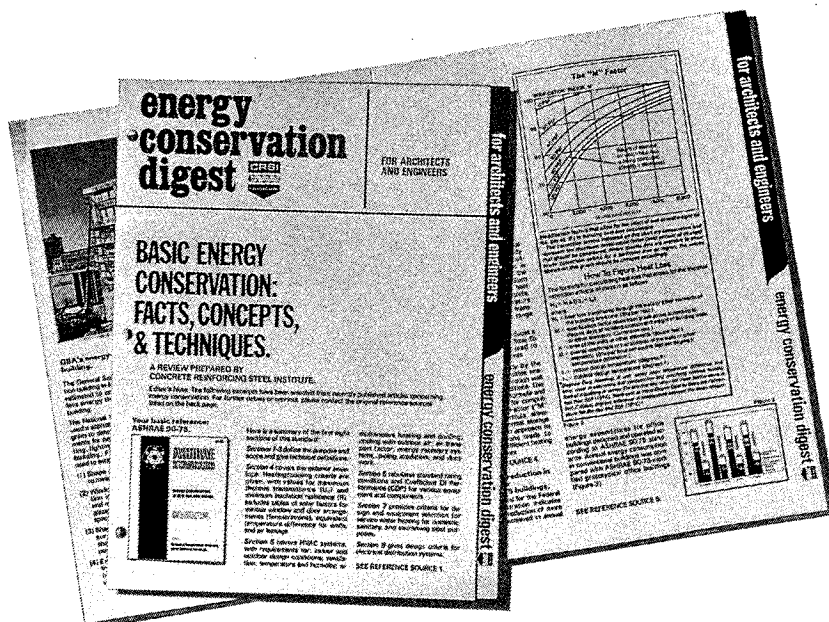
circle 308 on inquiry card
more products on page 139

URGENT QUESTION:

How can we reduce energy consumption in today's buildings?

TIMELY ANSWER:

New "Energy Conservation Digest" shows ways to conserve energy in your new building. And save money, too.



Here's a free publication you'll find indispensable. The "Energy Conservation Digest," prepared by Concrete Reinforcing Steel Institute, reviews and summarizes current literature for proven ways to save energy.

In "ECD," you'll read about the General Service Administration's energy-conserving building. Discover five practical ways to reduce energy consumption. Find out how

to calculate heat loss. Learn how the natural insulating value of reinforced concrete reduces energy costs. There's also a full list of invaluable references and additional reading.

You need answers to the energy crunch—*now*. Find them in reinforced concrete and in your copy of the "Energy Conservation Digest." Write to CRSI at the address below. Ask for Bulletin 7604.

CONCRETE REINFORCING STEEL INSTITUTE **CRSI**
180 North LaSalle Street, Room 2108
Chicago, Illinois 60601

THE ANSWER'S IN REINFORCED CONCRETE

For information on Professional Membership Program, write to Director of Marketing.

For more data, circle 61 on inquiry card

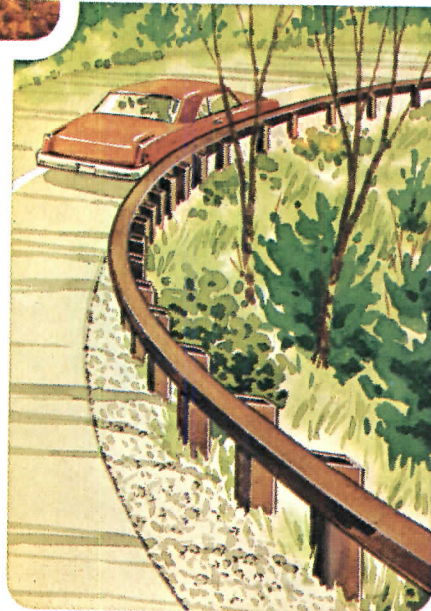
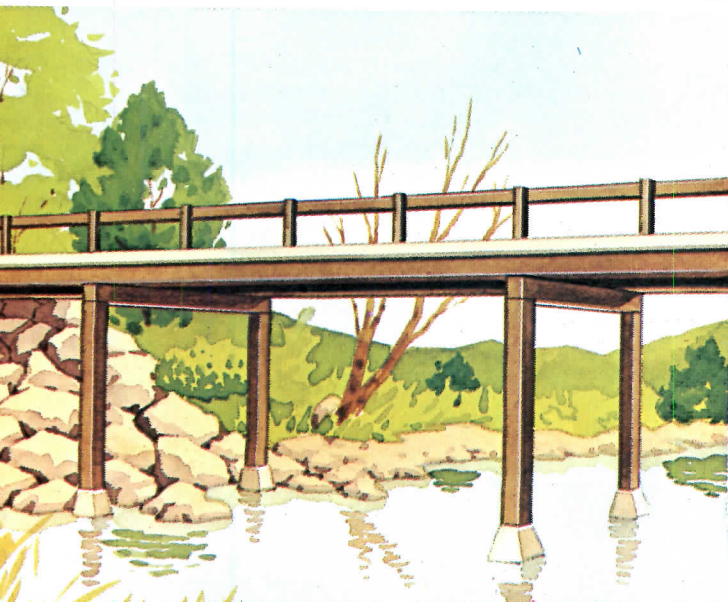
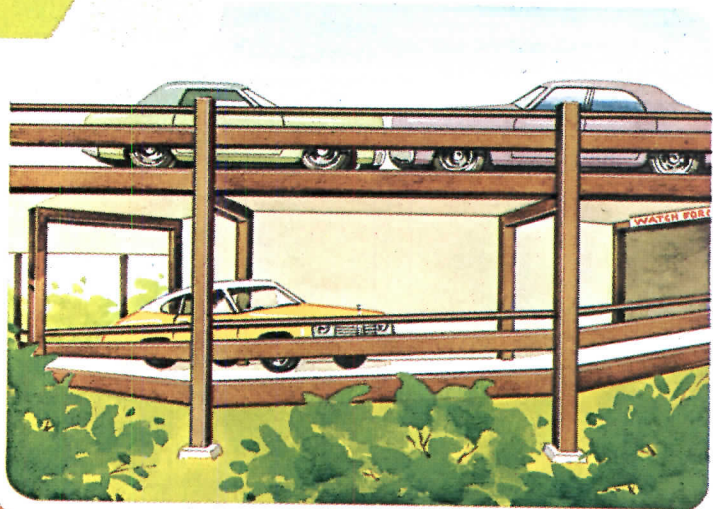
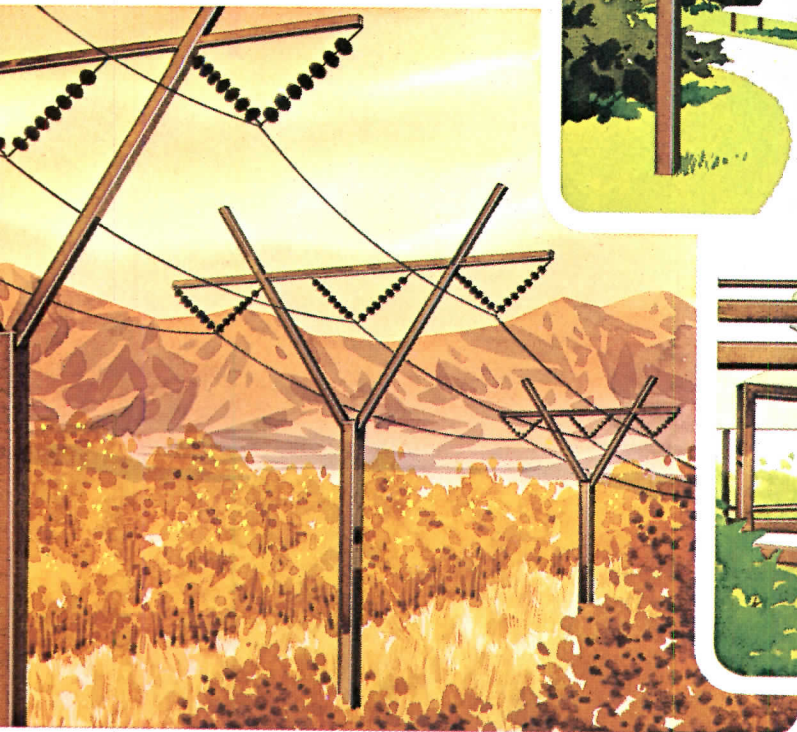
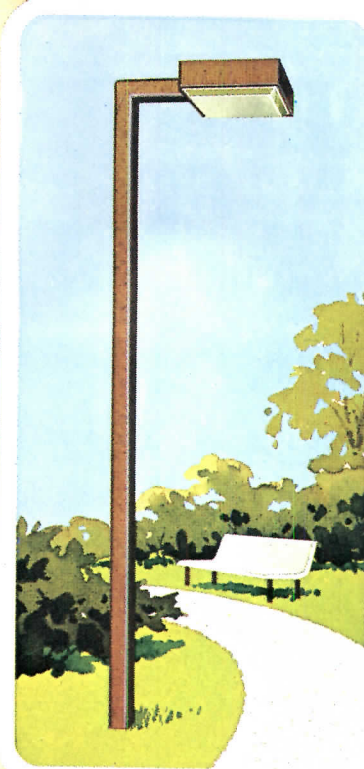
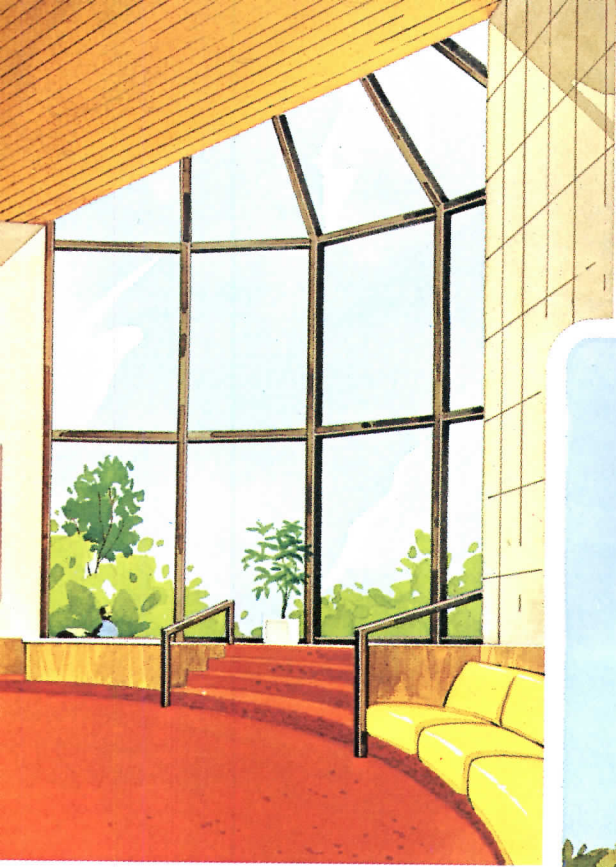
New Regal earth tube

Now Regal offers you structural steel tubing with a beautiful yet tough weathering surface. The warm earth tones of its durable surface mature with age and blend naturally into any environment. Painting is never required. Available in square and rectangular shapes, dozens of perimeters and wall thicknesses for scores of uses. Earth tube. We think you'll agree its well named.

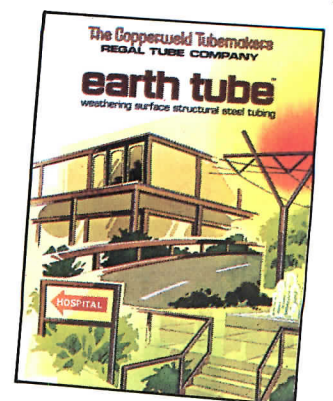
The Copperweld Tubemakers
REGAL TUBE COMPANY

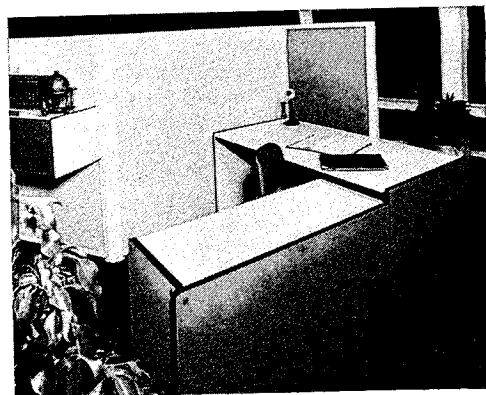
7401 South Linder Avenue
Chicago, Illinois 60638 • 312/458-4820

For more data, circle 62 on inquiry card



We invite you to send for
our earth tube catalog.

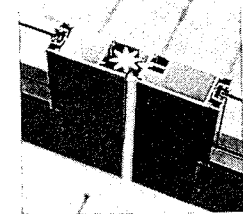




OPEN-OFFICE FURNITURE / "The Time Line" series of open-office components includes furniture, accessories, and functional acoustical panels. Integral to the line is a unique top connector said to reduce both initial and secondary installation time by well over 30 per cent. ■ Pleion Corp., Santa Ana, Calif.

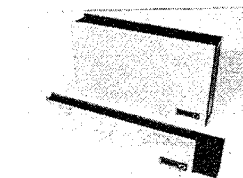
circle 309 on inquiry card

TRIP-PROOF PANIC DOOR / A free-wheeling start-toothed rotor engages an adjustable metal fin in a true mesh configuration, making the closed *Nightwatch* concealed astragal panic door completely untrippable. The *Nightwatch* door fits flush against any wall, is available for narrow and medium-stile doors, and will accommodate any manufacturer's panic device. Frame, rotor and fin are constructed of extruded aluminum; poly-pile weatherproofing strips are provided on both sides of the entrance. ■ Howmet Aluminum Corp., Greenwich, Conn.

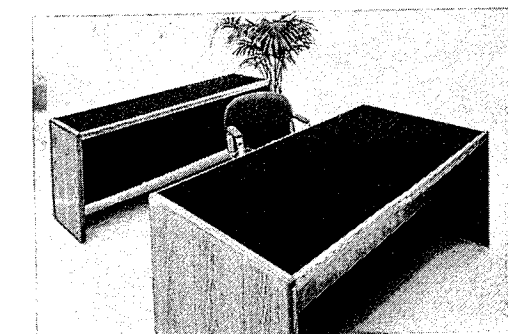


circle 310 on inquiry card

FIN TUBE HEATERS / Completely adjustable wall-to-wall on the job without cutting, four electric fin tube heaters have been added to this manufacturer's line of perimeter units. Included are sill line, pedestal, draft barrier, and architectural draft barrier heaters. ■ TPI Corp., Johnson City, Tenn.



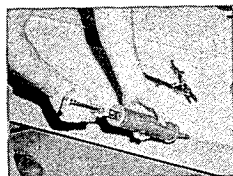
circle 311 on inquiry card



OFFICE FURNITURE / This manufacturer's recently introduced lower-priced furniture line, "The Rondo Series," offers solid 3/4-in. oak construction with oak veneer bottoms and contrasting laminates. The desks, credenzas and accessory tables in the "Rondo" group have smooth lines with soft, rounded edges; all furniture pieces are available in a variety of door and drawer combinations. ■ Domore Office Furniture, Elkhart, Ind.

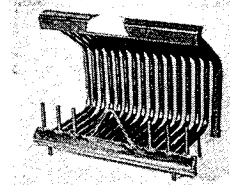
circle 312 on inquiry card

DUCTWORK SEALER / A rubber-base sealer for use on medium- and high-pressure heating and air conditioning ductwork, "Duct Sealer 900" has been reformulated for easier brush application. The flexible compound will adhere to aluminum, steel and galvanized steel, and will not sag on vertical or overhead surfaces. Fully cured after 48 hrs, the sealer has an average tensile shear strength of about 40 psi, and will withstand pressures in excess of 10 psig. "Duct Sealer 900" can be applied by hand, brush, pressure caulking equipment, trowel or spatula. ■ Adhesives, Coatings and Sealers Div., 3M Co., St. Paul, Minn.



circle 313 on inquiry card

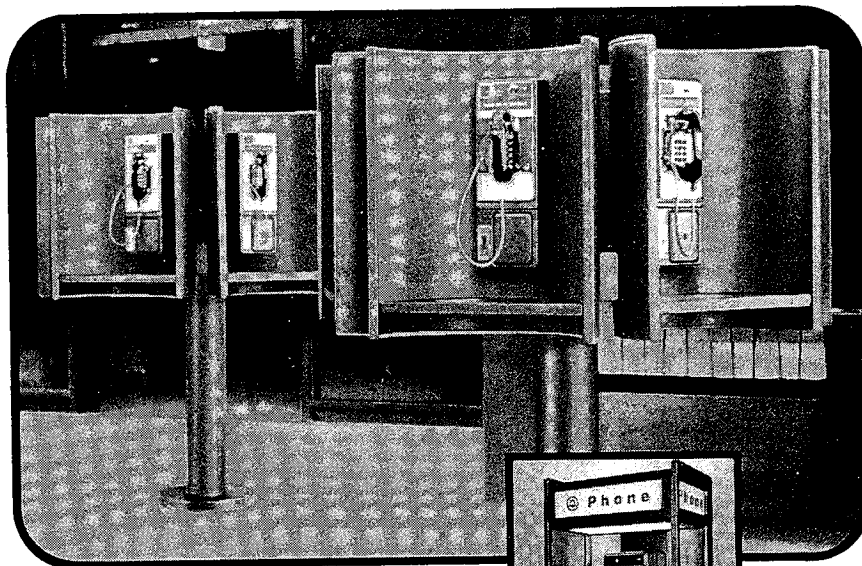
FABRICATED FIREPLACE / The *Hydroplace* is a double-walled, water-circulating fireplace said to function efficiently enough to heat an entire home, generating up to 50,000 Btus. The entire unit, including walls, floor and grate, constitutes a closed-loop hot water system, which operates through standard residential hydronic systems, heating the hot water directly, or by means of a heat exchanger in the cold air return duct for forced air systems. The *Hydrohearth* (shown) closed-loop grate is designed for retrofit installation with existing fireplaces. Units are warranted against burnout for 25 years. ■ Ridgway Steel Fabricators, Inc., Ridgway, Pa.



circle 314 on inquiry card
more products on page 141

Clean Compact Quiet

The ADCO 90-S Acousti-Call® Booth. The ultimate in contemporary appearance with quiet noise-absorbing interior walls. Unlimited mounting options. Unlimited color combinations.



The ADCO 115 Courier™ Outdoor/Indoor Booth. Blends handsomely with any decor. Interior fluorescent lighting. Four-way lighted signing. Stay-clean shelf. Accommodates most standard pay phones.



World's Largest Manufacturer of Telephone Booths

ACOUSTICS DEVELOPMENT CORPORATION
and its BURGESS-DAY DIVISION

P.O. Box 397-1850 Holste Road
Northbrook, Ill. 60062, 312/272-8880



New York
Denver
Atlanta
Provo, Utah
Birmingham
Los Angeles
St. Joseph, Mo.
Toronto
Dallas

For more data, circle 63 on inquiry card



Hopkins Road Elementary School (one of three identical schools), Chesterfield County, Virginia
Associated Architects and Planners: C. Page Highfill, AIA and William Ward Moseley, AIA
Structural Engineer: Alvin W. Dunbar
General Contractors: J. W. Enochs, Inc., Walthall Construction Corp., Frank B. McAllister, Inc.

Time-to-first-maintenance is a major criterion. Specify Galbestos.

Soaring maintenance costs make the choice of materials for use on any school difficult. Particularly since a profiled roof is a severe test of a finish. Galbestos® roofing was chosen for the 3 Chesterfield schools because it has proven a winner against both time and the elements. Extensive independent tests* of Color Change and Fade Resistance, Pollution Resistance, and Humidity Resistance



Intensive testing (EMMAQUA) conducted by Desert Sunshine Exposure Tests, Inc. in the Arizona desert has established the excellent resistance of Galbestos to color change and fade.

all prove its ability to outperform other finishes — in the important time-to-first-maintenance consideration that can mean thousands of dollars. Write H. H. Robertson, 400 Holiday Drive, Pittsburgh, PA 15220 for product data and copies of the independent test reports.

*These standard ASTM, Kesternich and EMMAQUA tests were conducted by the Pittsburgh Testing Laboratory, Carnegie-Mellon University and Desert Sunshine Exposure Tests, Inc.

Robertson

LIGHT POLE BASE / Designed for parking lot area lights, gas station use, etc., the tapering pole base shown is filled with concrete at the job site. This anchors both the base itself and the light pole bolts. The base is 24-in. high and 18-in. long at the base of the taper; the design has been approved by fast food chains and oil companies. ■ Morgan Metal Fabricators, Beaver Falls, Pa.

circle 315 on inquiry card

THROUGH-WALL HEAT PUMPS / Said to provide individual room heating and cooling at reduced costs for all types of multi-family structures, *Zoneline III* extended range heat pumps come in cooling capacities of 9,000-, 11,800-, and 14,000-Btu/hr. The units operate as reverse cycle heat pumps with defrost down to 35 F, or lower, depending on outdoor humidity conditions. During the heating mode, *Zoneline III* units operate with a coefficient of performance of 2.2 or better at standard rating (ARI test) conditions. The through-wall unit has two fan motors, one each for indoor and outdoor fans; the heat pump chassis is designed so that it may be used to replace any previous *Zoneline* unit installed since 1960. ■ General Electric Co., Louisville, Ky.

circle 316 on inquiry card

CONTROLLED FLOODLIGHTING / *Infranor* flood lights are now made of a marine-grade cast aluminum that is corrosion resistant to saltwater atmospheres. The octagonal shape shown is available in 1,000 or 1,500 Watts, providing a high coefficient of beam utilization in a choice of 16 standard precision rectangular beam patterns, suitable for sports lighting, building illumination or area lighting. A segmented reflector system enables light to be laid in by zones, minimizing spill and eliminating hotspots. The manufacturer claims this system provides efficient and economical solutions to complex lighting tasks, reducing both energy and pole requirements. ■ Sterner Lighting Systems, Inc., Winsted, Minn.

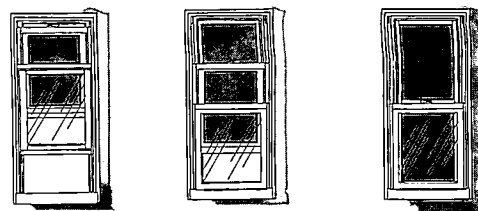
circle 317 on inquiry card

UNDERFLOOR OUTLET BOX / This 3-gang size floor box accommodates both high- and low-voltage devices, eliminating the need for above-floor service fittings. A dual-service split-cover polycarbonate plastic floor plate, available separately, has cut-outs for service wires and cords, and serves as a carpet plate. "663" *Steelcity* underfloor boxes are made of 14-gauge steel; knockouts for 3/4-in. and 1 1/4-in. conduits are located on sides and ends of the 2 1/2-in.-deep box. ■ Midland Ross, Electrical Products Div., Pittsburgh, Pa.

circle 318 on inquiry card

THEATRICAL LIGHTING CONTROL SYSTEM / Said to provide low-cost memory control of theatrical lighting in schools, traveling shows and small professional auditoriums, the basic "Encore-100" system is a solid-state unit with 32-channels and 100 lighting cues. The portable (65 lbs) control remembers 97 more cues than a three-scene preset system. When not energized, the pre-set program is retained in the "Encore" memory by battery power for up to seven days, enough for travelling or for short-term storage. Depending on options, the "Encore-100" lighting control system ranges in price from \$5,000 to \$10,000. ■ Hub Electric Co., Inc., Elmhurst, Ill.

circle 319 on inquiry card

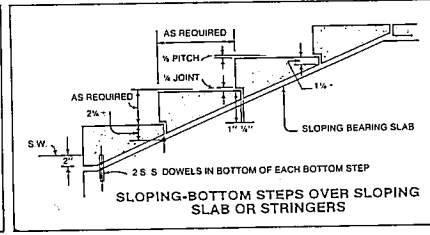
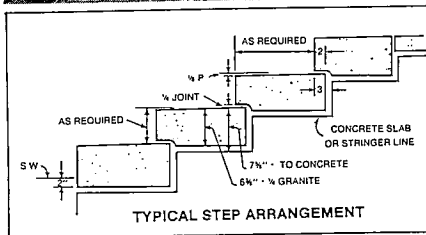


PROTECTIVE WINDOW PANELS / Designed to protect replacement windows from vandalism, break-ins and violent storms, "Guardian" panels are constructed with a steel face laminated to an insulating core. Each double-hung window has two panels: one fixed in the upper position in place of glass, the other, movable over the entire length of the window, placed in back of the lower light of insulating glass. The window tilts out for easy cleaning. ■ Graham Architectural Products Corp., York, Pa.

*circle 320 on inquiry card
more products on page 143*

Granite.

Tough enough to take the thunder of 10 billion feet.

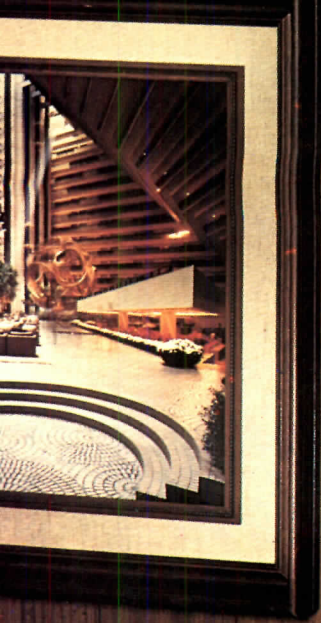


What else but granite can take 38 years of wear and weather without fading, staining, or showing measurable wear? That's what made Cold Spring granite the ideal choice for the Banker's Life Insurance Building when it was built in Des Moines, Iowa, in 1939. And that same unique combination of beauty and unsurpassed durability make it ideal for today's floors, facades, core walls, steps, malls and walkways — wherever you need maximum durability that's virtually maintenance-free.

For more information, plus a free copy of our 16-page, full color catalog showing all 18 Cold Spring colors available, call toll free **800-328-7038**. In Minnesota, call (612) 685-3621. Or write to the address below.

Cold Spring Granite Company, Dept. AR-12 202 South 3rd Avenue, Cold Spring, MN 56320

For more data, circle 65 on inquiry card



***This
full-recessed
drinking fountain***

Goes on Giving!

A drink of water now, when the building is new, and for years to come. Haws incorporates this unparalleled product reliability within a smoothly molded receptor of Polymarble. Suit your decorating fancy with Tan, or give some thought to Satin Gray, Yellow Mist, Cerulean Blue, Pistachio Green or White. With any Polymarble fountain you choose, there's luster that lasts, to resist bumps, abrasion, chalking; plus the cleanly swept appearance of recessed bubbler and flush-mounted push-button valve.



Model 2510

Polymarble drinking fountains, part of the Haws experience in reliability since 1909. For full product information and Polymarble Color Selector, contact your nearest Haws Representative or Haws Drinking Faucet Co., 1441 Fourth Street, Berkeley, CA 94710.



DRINKING FOUNTAINS

For more data, circle 66 on inquiry card

AZTEC



Almost 1,000 Aztec low temperature electric radiant ceiling panels were specified to provide perimeter heat along cold walls to supplement the heat generated by equipment, lights and people in an energy saving system especially designed for the AT&T Long Lines building at White Plains, N.Y.

Hellmer & Medved,
Consulting Engineers.
Kansas City, Missouri

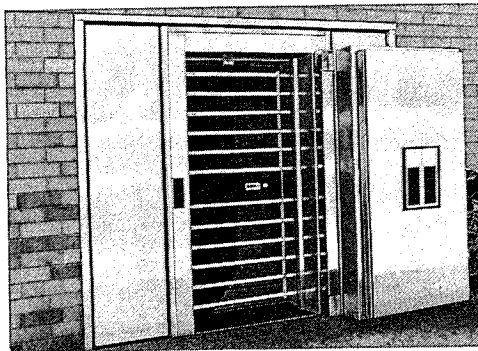
cfm Distributors, Inc.,
1104 Union Street,
Kansas City, Missouri 64101
816-842-5400
Aztec Engineering Representative

Aztec panels have a patented crystalline surface. A superior graphite element insures uniform heat across the panel. No moving parts. No maintenance. 10 year limited warranty.

For more information on Aztec electric radiant heating panels or for the Aztec engineering representative nearest you, call or write to:

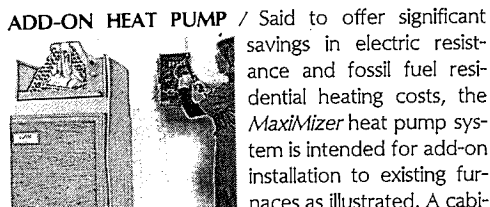
Aztech International Ltd.
3434 Girard N.E.
Albuquerque, N.M. 87107
505-345-5631
TOLL FREE 800-545-8306

For more data, circle 67 on inquiry card



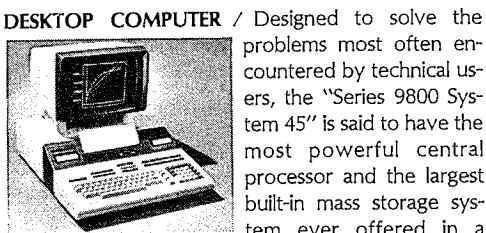
VAULT DOOR / The "Guardian" door is now available in a 7-in.-thick model, constructed of stainless steel, including the jambs, vestibule and door hinges. Security features include the *Rapidial*, which operates two keychanging four-tumbler combination locks; a 120-hr time lock to monitor door opening and closing; and relock devices to protect against attack with torches, explosives and drills. The door provides a clear opening 36-in. wide and 78-in. high ■ Diebold, Inc., Canton, Ohio.

circle 321 on inquiry card



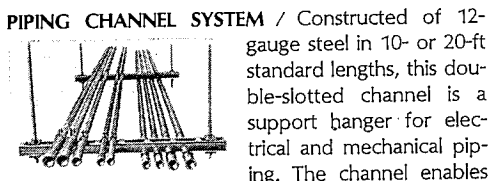
ADD-ON HEAT PUMP / Said to offer significant savings in electric resistance and fossil fuel residential heating costs, the *MaxiMizer* heat pump system is intended for add-on installation to existing furnaces as illustrated. A cabinet is placed outside the house, and a coil is installed on the furnace. A wall-mounted pre-programmed control module ties the furnace and heat pump together, to provide an energy efficient blend of heating. ■ York Div., Borg-Warner, York, Pa.

circle 322 on inquiry card



DESKTOP COMPUTER / Designed to solve the problems most often encountered by technical users, the "Series 9800 System 45" is said to have the most powerful central processor and the largest built-in mass storage system ever offered in a desktop computer. The unit features a 12-in. CRT display, uses ANSI-conforming BASIC language, and has an optional graphics package with high-speed hard-copy printing and applications software. The graphics mode provides a 560 x 455 dot matrix with high visual resolution and no perceptible flicker. The compact "Series 9800 System 45" weighs 75 lbs. The basic system, with built-in keyboard, 16 kbytes of read/write memory, CRT and one tape transport, costs about \$12,000. System may also be leased. ■ Hewlett-Packard Co., Palo Alto, Calif.

circle 323 on inquiry card



PIPING CHANNEL SYSTEM / Constructed of 12-gauge steel in 10- or 20-ft standard lengths, this double-slotted channel is a support hanger for electrical and mechanical piping. The channel enables pipe, conduit, and fittings to be fastened to both sides of a section, and is especially suitable for trapeze-type and similar installations. Hanging system is available with electrodeposited "Perma Green" enamel in galvanized or plain finishes. ■ Unistrut Corp. Wayne, Mich.

circle 324 on inquiry card

"Have you heard about that new Intelligent Floor Fact Folder?"



"I've read it! Tells how to reduce energy consumption by using Ludlow Carpet Cushion to improve floor insulation!"



"Now that's what my clients want to hear! How do I get a copy?"



"I got mine by calling Ludlow toll-free at 800-225-8302."



"Hm. Ludlow Corporation's listed on the New York Stock Exchange, isn't it?"



"And it has paid consecutive dividend payments since 1872. Real solid!"



Carpet Cushion by **Ludlow**

P.O. Box 101
Needham Heights, MA 02194

For more data, circle 68 on inquiry card

INTRODUCING They can cut



They're the stingiest fluorescents of them all.

Use them to replace every-other 40-watt fluorescent in 2- or 4-lamp rapid-start series systems...

And cut power consumption 33% or 50% (depending on whether you use Thrift/Mate 33 or Thrift/Mate 50 lamps).

Light levels are proportionately reduced, too. But the important point is that while you're saving energy, you get evenly distributed light, instead of gaps in your lighting pattern (which is

ARCHITECTURAL RECORD. Published by McGraw-Hill, Inc., 1221 Avenue of the Americas, New York, New York 10020. © 1977. All rights reserved.

Readers using the index will find buildings entered in three ways: by architect's name, by building's or owner's name, and by building type (banks, hospitals, schools, etc.). Other categories cover subjects in the engineering section (concrete, lighting, prefabrication, etc.). ABBREVIATIONS: AB—Architectural Business; AE—Architectural Engineering; BA—Building Activity; BTS—Building Types Study; LP—Legal Perspectives.

A

Academic Facility of Rush University, Presbyterian-St. Luke's Medical Center, Chicago, Ill.; Metz Train Olson & Youngren, archts.—July 1977, pp. 89-93.

Aid Association for Lutherans Headquarters, Appleton, Wis.; John Carl Warnecke & Assocs., archts.—mid-Aug. 1977, BTS, pp. 78-83

Airports. South Terminal, Logan International Airport, Boston, Mass.; John Carl Warnecke & Assocs. and Desmond & Lord, Inc., archts.—Sept. 1977, pp. 105-110.

Aldrich, Nelson W. & Assocs., archts.; Mondev International/The Salem Corp., Salem, Mass.—Dec. 1977, BTS, pp. 96-107.

American Express Southern Region Operations Center, Fort Lauderdale, Fla.; Ferendino/Grafton/Spillis/Candela, archts.—Nov. 1977, pp. 93-96.

AIA. "Some random thoughts on the San Diego convention," Editorial by Walter F. Wagner, Jr.—July 1977, p. 13. "Two messages from AIA President McGinty," Editorial by Walter F. Wagner, Jr.—Nov. 1977, p. 13.

Anderson Notter Assocs., Inc., archts.; The Tannery, Peabody, Mass.—Sept. 1977, BTS, pp. 124-126.

Arboleda, Rodrigo & Laureano Forero, archts.; Capilla de la Asuncion, Medellin, Colombia—July 1977, BTS, p. 107.

Architects Collaborative (The), archts.; Bernardin Tourism Resort, Piran, Yugoslavia—Oct. 1977, BTS, pp. 118-121.

Johns-Manville World Headquarters, Jefferson County, Colo.—Sept. 1977, pp. 89-100

Architects International, archts.; Office Building for Tempel-Callison Co., Jefferson City, Mo.—mid-Aug. 1977, BTS, pp. 90-91.

Architectural Business. "The case for design quality in today's marketplace," Building Types Study 510—Dec. 1977, pp. 81-128. "Consultant profile: the medical equipment planner"—Aug. 1977, pp. 59-61. "Continuing education as a requirement for recertification takes hold in California"—Oct. 1977, p. 57. "New ANSI standards on barrier-free design expected in 1978"—Dec. 1977, p. 63. "The news release as marketing tool," by Stephen A. Kliment—July 1977, p. 55. "The 1977 Housing and Community Development Act: central-inner-city revitalization takes a big step forward," by Nathaniel J. Parish & Csaba Teglas—Dec. 1977, p. 61. "Range estimating: a way to predict the accuracy of cost estimates"—Sept. 1977, pp. 62-63. "REITs begin the gradual process of regaining some of their former status in funding development"—Oct. 1977, p. 61. "Responsibility for product innovation: how to be progressive, yet reduce your risk," by Harold J. Rosen—mid-Oct. 1977, p. 14. "Some news in the right direction from Washington," Editorial by Walter F. Wagner, Jr.—Oct. 1977, p. 13. "Southern newsletter delivers 12 new project leads per week"—Sept. 1977, p. 59. "Specifications writing: a new CSI program provides a 'one-stop' approach to locating references"—mid-Aug. 1977, p. 47. "Stable money markets will benefit most construction this year, but a squeeze on housing funds could develop," by George A. Christie—July 1977, p. 51.

"Talking the developer's language: the financial analysis," by Jonathan Morse—Dec. 1977, pp. 56-57.

Architectural Education. "Architecture, engineering, and education: The newest idea is going back to some old ideas," Editorial by Walter F. Wagner, Jr.—mid-Aug. 1977, p. 7. "Continuing education as a requirement for recertification takes hold in California"—Oct. 1977, AB, p. 57.

"NCARB: tough talk on recertification, ethics and the testing of young architects," Editorial by Walter F. Wagner, Jr.—Aug. 1977, p. 13.

Architectural Engineering. "Engineering for architecture," Building Types Study 506—mid-Aug. 1977, pp. 61-124.

"Architecture, engineering, and education: The newest idea is going back to some old ideas," Editorial by Walter F. Wagner, Jr.—mid-Aug. 1977, p. 7. "Automated stackers used by construction equipment dealer to speed parts retrieval"—July 1977, p. 120. "Computer graphics for architecture: techniques in search of problems"—mid-Aug. 1977, BTS, pp. 98-105. "Designing brick masonry walls to avoid structural problems," by Clayford T. Grimm—Oct. 1977, pp. 125-128. "Elevator space requirements in high-rise buildings," by Jeffrey K. Ochsner, Nat W. Krahl & Anderson Todd—July 1977, pp. 117-118.

"Flexible wiring systems: a catalog of current technology"—mid-Aug. 1977, BTS, pp. 114-120. "The National Institute of Building Sciences (NIBS): ready to get down to work"—report—Nov. 1977, pp. 125-128. "Notes from the field: how architects, and their consultants, approach solar design," by Margaret F. Gaskie—mid-Aug. 1977, BTS, pp. 108-113. "Plastic-composite design cuts steel tonnage in Johns-Manville's new headquarters building," by William J. LeMessurier—Sept. 1977, pp. 127-128. "Possibilities in architecture," by Robert Geddes—Nov. 1977, pp. 103-108. Reviews of *18 years with Architect Louis I. Kahn* by August E. Komendant and *The Existential Pleasures of Engineering* by Samuel C. Florman by Horst Berger and Abba Tor—mid-Aug. 1977, BTS, pp. 106-107. "Round Table: On cost-effective strategies for saving energy in buildings"—mid-Aug. 1977, BTS, pp. 92-97. "Sprinkler system installer invents a bar joist that is part sprinkler pipe"—July 1977, p. 119. "A vacuum sewage system helped take this project off the shelf"—mid-Oct. 1977, p. 11. "Zoned Halon extinguishing system overcomes first cost hurdle"—mid-Oct. 1977, pp. 12-13.

Art Galleries. Madison Civic Center, Madison, Wis.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 86-87.

Auraria Learning Resources Center, Denver, Colo.; C. F. Murphy Assocs., archts.—Nov. 1977, BTS, pp. 118-119.

Australia. Torin Corporation Building; Marcel Breuer & Herbert Beckhard, archts.—Aug. 1977, pp. 108-109.

B

Baltimore Gardens, Baltimore, Md.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95.

Barber & McMurry Architects, archts.; Rokeby Condominium Apartments, Nashville, Tenn.—Sept. 1977, BTS, pp. 120-121.

Beckhard, Herbert & Marcel Breuer, archts.; Torin Corporation Building, Australia—Aug. 1977, pp. 108-109.

Berger, Horst reviews two books: *18 years with Architect Louis I. Kahn* by August E. Komendant and *The Existential Pleasures of Engineering* by Samuel C. Florman—mid-Aug. 1977, BTS, pp. 106-107.

Bernardin Tourism Resort, Piran, Yugoslavia; The Architects Collaborative, archts.—Oct. 1977, BTS, pp. 118-121.

Blitch, J. Buchanan & Assocs., archts.; St. Patrick's Catholic Church, Robertsedale, Ala.—July 1977, BTS, p. 108.

Book Reviews. Reviews of *18 years with Architect Louis I. Kahn* by August E. Komendant and *The Existential Pleasures of Engineering* by Samuel C. Florman by Horst Berger and Abba Tor—mid-Aug. 1977, BTS, pp. 106-107.

Bouchier, Ronald, developer, Damson Oil Building, International Energy Building, Northpoint Building, Houston, Tex.; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115.

Brazil. Mexican Embassy in Brasilia; Teodoro Gonzalez de Leon and Abraham Zabludovsky, archts.—Oct. 1977, pp. 81-85.

Breuer, Marcel & Herbert Beckhard, archts.; Torin Corporation Building, Australia—Aug. 1977, pp. 108-109.

Breuer, Marcel & Mario Jossa, archts.; Saier house, near Deauville, France—Aug. 1977, pp. 105-107.

Breuer, Marcel & Hamilton Smith, archts.; Traffic Service Position Systems Building, Torrington, Conn.—Aug. 1977, pp. 110-112.

Buchsbaum, Alan & Stephen Tilly, archts.; Loft for Alan Buchsbaum, New York, N.Y.—July 1977, pp. 97-100.

Building Activity. "Dodge/Sweet's construction outlook for 1978"—Nov. 1977, pp. 55-61. "The 1977 Dodge/Sweet's Construction Outlook: Second Update—More gains in

architectural work are expected"—Aug. 1977, pp. 55-57.

Building Design Partnership, archts.; Learning Road Baptist Church, Blackburn, England—July 1977, BTS, p. 110.

Burlington, Vt., Mondev International/Mondev Burlington, Inc.; Office of Mies van der Rohe, archts.—Dec. 1977, BTS, pp. 96-107.

C

Canada. Government of Canada Building, Toronto, Canada; DuBois-Strong-Bindhardt & Shore Tilbe Henschel Irwin, Archts.—mid-Aug. 1977, BTS, pp. 62-65. Metropolitan Toronto Library, Toronto; Raymond Moriyama, architects and planners, archts.—mid-Aug. 1977, BTS, pp. 70-73.

Capilla de la Asuncion, Medellin, Colombia; Laureano Forero & Rodrigo Arboleda, archts.—July 1977, BTS, p. 107.

Carmel Presbyterian Church, Charlotte, N.C.; Wheatley/Whisnant Assocs., archts.—July 1977, BTS, pp. 102-103.

Cavaglieri, Giorgio, archt.; Chapel of the Good Shepherd, Roosevelt Island, New York, N.Y.—July 1977, BTS, p. 109.

Chapel of the Good Shepherd, Roosevelt Island, New York, N.Y.; Giorgio Cavaglieri, archts.—July 1977, BTS, p. 109.

Christ the King Catholic Church, Little Rock, Ark.; Wittenberg, Delony & Davidson, Inc., archts.—July 1977, BTS, p. 105.

Ciardullo/Ehmann Architects, archts.; Lancaster General Hospital Parking Garage, Lancaster, Pa.—mid-Aug. 1977, BTS, pp. 88-89.

Cincinnati Union Terminal, Cincinnati, O.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 84-85.

The College Center and The Graduate School of Business, The University of Chicago, Chicago, Ill.; Metz Train Olson & Youngren (with Samuel A. Lichtmann), archts.—July 1977, pp. 94-96.

College Center, Vassar College, Poughkeepsie, N.Y.; Shepley Bulfinch Richardson & Abbott, archts.—July 1977, pp. 73-78.

Collegio de Mexico, Mexico City, Mexico; Teodoro Gonzalez de Leon and Abraham Zabludovsky, archts.—Oct. 1977, pp. 86-88.

Colombia. Capilla de la Asuncion, Medellin; Laureano Forero & Rodrigo Arboleda, archts.—July 1977, BTS, p. 107.

Colorado Springs, Colo., Mondev International; Richard Meier & Assocs., archts.—Dec. 1977, BTS, pp. 96-107.

Columbus, Ga.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95.

Community Centers. Miami Beach Youth Center, Miami Beach, Fla.; Ferendino/Grafton/Spillis/Candela, archts.—July 1977, pp. 79-84. Police Athletic League-Patrolman Andrew F. Giannone-Webster Community Center, Bronx, N.Y.; Smotrich & Platt Architects, archts.—Oct. 1977, pp. 95-98.

Condon Hall, School of Law/Law Library, Seattle, Wash.; Mitchell/Giurgola Archts., archts.—Aug. 1977, pp. 96-98.

Cooper-Hewitt Museum, the Smithsonian Institution's National Museum of Design, New York, N.Y.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 81-83.

D

Damson Oil Building, Houston, Tex., Ronald Bouchier, developer; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115.

Daniel, Mann, Johnson & Mendenhall, archts.; Holyoke Community College, Holyoke, Mass.—Nov. 1977, BTS, pp. 112-115. St. Vincent Medical Center, Los Angeles, Cal.—Aug. 1977, BTS, pp. 126-128.

de Leon, Teodoro Gonzalez and Abraham Zabludovsky, archts.; Collegio de Mexico, Mexico City, Mexico—Oct. 1977, pp. 86-88. Mexican Embassy in Brasilia, Brazil—Oct. 1977, pp. 81-85.

Denys Lasdun & Partners, archts.; The National Theater, London, England—Sept. 1977, pp. 81-88.

Desmond & Lord, Inc. and John Carl Warnecke & Assocs., archts.; South Terminal, Logan International Airport, Boston, Mass.—Sept. 1977, pp. 105-110.

DuBois-Strong-Bindhardt & Shore Tilbe Henschel Irwin, archts.; Government of Canada Building, Toronto, Canada—mid-Aug. 1977, BTS, pp. 62-65.

Dune house, Atlantic Beach, Fla.; William Morgan, archt.—mid-Aug. 1977, BTS, pp. 74-75.

E

Editorials. "Architecture, engineering, and education: The newest idea is going back to some old ideas," by Walter F. Wagner, Jr.—mid-Aug. 1977, p. 7. "Introduction to Product Reports"—mid-Oct. 1977, p. 15. "NCARB: tough talk on recertification, ethics and the testing of young architects," by Walter F. Wagner, Jr.—Aug. 1977, p. 13. "On getting the public involved and interested in architecture," by Walter F. Wagner, Jr.—Sept. 1977, p. 13. "Some news in the right direction from Washington," by Walter F. Wagner, Jr.—Oct. 1977, p. 13. "Some positive thinking from the General Services Administration," by Walter F. Wagner, Jr.—Dec. 1977, p. 13. "Some random thoughts on the San Diego convention," by Walter F. Wagner, Jr.—July 1977, p. 13. "Two messages from AIA President McGinty," by Walter F. Wagner, Jr.—Nov. 1977, p. 13. Energy Conservation. "Engineering for architecture," Building Types Study 506—mid-Aug. 1977, pp. 61-124. "Round Table: On cost-effective strategies for saving energy in buildings"—mid-Aug. 1977, BTS, pp. 92-97. Evans Partnership, N.J., K 5-1, -2, -3 and K 6-1 "office campuses," N.J.; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115.

F

Faneuil Hall, Boston, Mass., Rouse Company; Benjamin Thompson & Assocs., archts.—Dec. 1977, BTS, pp. 116-127. Federal Home Loan Bank Board Building, Washington, D.C.; Max O. Urbahn Assocs., Inc., archts.—mid-Aug. 1977, BTS, pp. 66-69. Ferendino/Grafton/Spills/Candela, archts.; American Express Southern Region Operations Center, Fort Lauderdale, Fla.—Nov. 1977, pp. 93-96. Miami Beach Youth Center, Miami Beach, Fla.—July 1977, pp. 79-84. Fine Arts Center, Muhlenberg College, Allentown, Pa.; Johnson/Burgee Architects and Wallace & Watson Assocs., archts.—Nov. 1977, BTS, pp. 110-111. Foreign Architecture. See individual country. Forero, Laureano & Rodrigo Arboleda, archts.; Capilla de la Asuncion, Medellin, Colombia—July 1977, BTS, p. 107. France. Saier house, near Deauville; Marcel Breuer & Mario Jossa, archts.—Aug. 1977, pp. 105-107. Freedman/Clements/Rumpel, archts.; St. Mary's Episcopal Church, Jacksonville, Fla.—July 1977, BTS, p. 111.

G

Galveston Grand Opera House and Hotel, Galveston, Tex.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, p. 89. Gateview at Albany Hill, Albany, Cal.; Hallenbeck, Chamorro & Assocs., archts.—Sept. 1977, BTS, pp. 116-119. Geren Assocs., archts.; Tarrant County Junior College, Northwest Campus, Fort Worth, Tex.—Nov. 1977, BTS, pp. 120-121. Government of Canada Building, Toronto, Canada; DuBois-Strong-Bindhardt & Shore Tilbe Henschel Irwin, archts.—mid-Aug. 1977, BTS, pp. 62-65. Graphics. "Computer graphics for architecture: techniques in search of problems"—mid-Aug. 1977, BTS, pp. 98-105. Great Britain. Learnington Road Baptist Church, Blackburn; Building Design Partnership, archts.—July 1977, BTS, p. 110. The National Theater, London; Denys Lasdun & Partners, archts.—Sept. 1977, pp. 81-88. Growald Architects, archts.; Tandy Center, Fort Worth, Tex.—mid-Aug. 1977, BTS, pp. 86-87. Gund, Graham Assocs., Inc., archts.; Hyatt Regency Cambridge, Cambridge, Mass.—Oct. 1977, BTS, pp. 109-113. Gwathmey-Siegel, archts.; Damson Oil Building, International Energy Building, Northpoint Building, Houston, Tex., Ronald Bouchier, developer; Thomas and Betts Building, Dallas, Tex., J. L. Williams & Co., developer; K 5-1, -2, -3 and K 6-1 "office campuses", N.J., Evans Partnership—Dec. 1977, BTS, pp. 108-115.

H

Hallenbeck, Chamorro & Assocs., archts.; Gateview at Albany Hill, Albany, Cal.—Sept. 1977, BTS, pp. 116-119. Hardy Holzman Pfeiffer Assocs., archts.; Five remodeling and restoration projects: Cooper-Hewitt Museum, the Smithsonian Institution's National Museum of Design, New York, N.Y.—Aug. 1977, pp. 81-83; Cincinnati Union Terminal,

Cincinnati, O.—Aug. 1977, pp. 84-85; Madison Civic Center, Madison, Wis.—Aug. 1977, pp. 86-87; St. Louis Art Museum, Cass Gilbert Renovation, St. Louis, Mo.—Aug. 1977, p. 88; Galveston Grand Opera House and Hotel, Galveston, Tex.—Aug. 1977, p. 89.

Hardy, Hugh with Malcolm Holzman and Norman Pfeiffer, "Recycling architectural masterpieces—and other buildings not so great"—Aug. 1977, pp. 81-92.

Hennepin County Medical Center, Minneapolis, Minn.; Medical Facilities Assocs.-General, a joint venture of Smiley Glotter Assocs. & Thorsen & Thorshov Assocs., archts.—Aug. 1977, BTS, pp. 114-121.

Hinckley, Albert P. Jr., archt.; Mississippi Queen Steamboat—Oct. 1977, BTS, pp. 114-117.

Hixson, Inc., archts.; "Automated stackers used by construction equipment dealer to speed parts retrieval"—July 1977, AE, p. 120.

Holyoke Community College, Holyoke, Mass.; Daniel, Mann, Johnson & Mendenhall, archts.—Nov. 1977, BTS, pp. 112-115.

Homsey, Victorine & Samuel, archts.; St. Barnabas Episcopal Church, Marshallton, Del.—July 1977, BTS, p. 106.

Hospitals. "Hospitals. How are they?," Building Types Study 505—Aug. 1977, pp. 113-128. "Consultant profile: the medical equipment planner"—Aug. 1977, AB, pp. 59-61.

Hennepin County Medical Center, Minneapolis, Minn.; Medical Facilities Associates-General, a joint venture of Smiley Glotter Assocs. & Thorsen & Thorshov Assocs., archts.—Aug. 1977, BTS, pp. 114-121. Penobscot Bay Medical Center, Acute Care Hospital, Rockport, Me.; Shepley Bulfinch Richardson & Abbott, archts.—Aug. 1977, BTS, pp. 122-125. St. Vincent Medical Center, Los Angeles, Cal.; Daniel, Mann, Johnson, & Mendenhall, archts.—Aug. 1977, BTS, pp. 126-128. See also Medical Facilities.

Hotels. "Design for Leisure: Two urban hotels, a riverboat and a recreational village," Building Types Study 508—Oct. 1977, pp. 109-124. Bernardini Tourism Resort, Piran, Yugoslavia; The Architects Collaborative, archts.—Oct. 1977, BTS, pp. 118-121. Hyatt Regency Cambridge, Cambridge, Mass.; Graham Gund Assocs., Inc., archts.—Oct. 1977, BTS, pp. 109-113. Jerusalem Hilton, Jerusalem, Israel; Y. Rechter, M. Zarhy, archts.—Oct. 1977, BTS, pp. 122-124.

Mississippi Queen Steamboat; Albert P. Hinckley, Jr., archt.—Oct. 1977, BTS, pp. 114-117. "Shinjuku," by Peter Gluck—Sept. 1977, pp. 101-104.

Houses. Addition and renovation, Mill Valley, Cal.; Daniel Solomon, archt.—Nov. 1977, pp. 90-92. Dune house, Atlantic Beach, Fla.; William Morgan, archt.—mid-Aug. 1977, BTS, pp. 74-75. Residential addition, Conn.; Mayers & Schiff, archts.—Nov. 1977, pp. 82-83. Saier house, near Deauville, France; Marcel Breuer & Mario Jossa, archts.—Aug. 1977, pp. 105-107. Simmons residence and office, Washington, D.C.; Thomas R. Simmons, archt.—Nov. 1977, pp. 86-89. Tigerman houses, Barrington, Ill., Oakbrook, Ill.; Stanley Tigerman & Assocs., archts.—Oct. 1977, pp. 89-94.

Housing & Apartments. "High-density Housing," Building Types Study 507—Sept. 1977, pp. 111-126. Gateview at Albany Hill, Albany, Cal.; Hallenbeck, Chamorro & Assocs., archts.—Sept. 1977, BTS, pp. 116-119. Loft for Alan Buchsbaum, New York, N.Y.; Alan Buchsbaum & Stephen Tilly, archts.—July 1977, pp. 97-100. "The 1977 Housing and Community Development Act: central-inner-city revitalization takes a big step forward," by Nathaniel J. Parish & Csaba Teglas—Dec. 1977, AB, p. 61. Rokeby Condominium Apartments, Nashville, Tenn.; Barber & McMurry Architects, archts.—Sept. 1977, BTS, pp. 120-121. Rooftop apartment, New York, N.Y.; C.C.Pei, archt.—Nov. 1977, pp. 84-85. The Tannery, Peabody, Mass.; Anderson Notter Assocs., Inc., archts.—Sept. 1977, BTS, pp. 124-126. Turtle Bay Towers, New York, N.Y.; Bernard Rothzeld & Partners, archts.—Sept. 1977, BTS, pp. 112-115. 240 East 26th Street Apartments, New York, N.Y.; Marvin H. Meltzer Architects, archts.—Sept. 1977, BTS, pp. 122-123.

Hyatt Regency Cambridge, Cambridge, Mass.; Graham Gund Assocs., Inc., archts.—Oct. 1977, BTS, pp. 109-113.

IBM Santa Teresa Laboratory, San Jose, Cal.; McCue Boone

Tomsick (now MBT Assocs.), archts.—Aug. 1977, pp. 99-104.

International Energy Building, Houston, Tex., Ronald Bouchier, developer; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115.

ISD Incorporated, New York, N.Y.; "Consultant profile: the medical equipment planner"—Aug. 1977, AB, pp. 59-61.

Israel. Jerusalem Hilton, Jerusalem; Y. Rechter, M. Zarhy, archts.—Oct. 1977, BTS, pp. 122-124.

Ives, Philip Assocs., archts.; Ann Mason Building, Lorton, Va.—Oct. 1977, pp. 105-108. Memorial United Methodist Church, Avon, Conn.—July 1977, BTS, p. 104.

J

Japan. "Shinjuku," by Peter Gluck—Sept. 1977, pp. 101-104.

Jerusalem Hilton, Jerusalem, Israel; Y. Rechter, M. Zarhy, archts.—Oct. 1977, BTS, pp. 122-124.

Johns-Manville World Headquarters, Jefferson County, Colo.; The Architects Collaborative, archts.—Sept. 1977, pp. 89-100. Johns-Manville World Headquarters, Jefferson County, Colo.; The Architects Collaborative, archts.—Sept. 1977, pp. 89-100. "Plastic-composite design cuts steel tonnage in Johns-Manville's new headquarters building," by William J. LeMessurier—Sept. 1977, AE, pp. 127-128. "Plastic-composite design cuts steel tonnage in Johns-Manville's new headquarters building," by William J. LeMessurier—Sept. 1977, AE, pp. 127-128.

Johnson/Burgee Architects and Wallace & Watson Assocs., archts.; Fine Arts Center, Muhlenberg College, Allentown, Pa.—Nov. 1977, BTS, pp. 110-111.

Jossa, Mario & Marcel Breuer, archts.; Saier house, near Deauville, France—Aug. 1977, pp. 105-107.

K

K 5-1, -2, -3 and K 6-1 "office campuses," Evans Partnership, N.J.; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115.

Kappe, Raymond, archt.; Southern California Institute of Architecture, Santa Monica, Cal.—Nov. 1977, BTS, pp. 122-124.

Kerr, Clark Learning Resources Hall, The University of California, Santa Barbara, Cal.; Marquis & Stoller, archts.—July 1977, pp. 85-88.

L

Lancaster General Hospital Parking Garage, Lancaster, Pa.; Ciardullo/Ehmann Architects, archts.—mid-Aug. 1977, BTS, pp. 88-89.

Learnington Road Baptist Church, Blackburn, England; Building Design Partnership, archts.—July 1977, BTS, p. 110.

Legal Perspectives. "The debate over consolidation of arbitration proceedings is enlivened by a recent New York case," by Gerald Aksen—Oct. 1977, p. 59. "Minimizing defects in plans and specifications," by McNeill Stokes—July 1977, p. 49. "A new bill in Congress, if enacted, spells tax relief for firms subjected to liability exposures," by Arthur T. Kornblut, Esq.—Dec. 1977, p. 53. "OSHA and the architect: a recent case lessens designer liability," by Arthur T. Kornblut, Esq.—Nov. 1977, p. 63. "Supreme Court rulings during the 1976-77 term: some good news, some bad news (and some maybe's)," by Arthur T. Kornblut, Esq.—Aug. 1977, p. 63.

Libraries. Condon Hall, School of Law/Law Library, Seattle, Wash.; Mitchell/Giurgola Archts., archts.—Aug. 1977, pp. 96-98. Library of the Mercer School of Theology, Garden City, N.Y.; Ronald Woodward, archt.—July 1977, BTS, pp. 114-116. Metropolitan Toronto Library, Toronto, Canada; Raymond Moriyma, architects and planners, archts.—mid-Aug. 1977, BTS, pp. 70-73. Pusey, Nathan Marsh Library, Harvard University, Cambridge, Mass.; Hugh Stubbins & Assocs., Inc., archts.—mid-Oct. 1977, AE, pp. 12-13. Tredyffrin Public Library, Stratford, Pa.; Mitchell/Giurgola Archts., archts.—Aug. 1977, pp. 94-95.

Lichtmann, Samuel A. & Metz Train Olson & Youngren, archts.; The Graduate School of Business, The University of Chicago, Chicago, Ill.—July 1977, pp. 94-96.

Loft for Alan Buchsbaum, New York, N.Y.; Alan Buchsbaum & Stephen Tilly, archts.—July 1977, pp. 97-100.

Logan International Airport, South Terminal, Boston, Mass.; John Carl Warnecke & Assocs. and Desmond & Lord, Inc., archts.—Sept. 1977, pp. 105-110.

Lorenz & Williams, Inc., archts.; NCR Corporate Headquarters, Dayton, O.—Nov. 1977, pp. 97-102.

M

Madison Civic Center, Madison, Wis.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 86-87.

Marquis & Stoller, archts.; Clark Kerr Learning Resources Hall, The University of California, Santa Barbara, Cal.—July 1977, pp. 85-88.

Malls at Water Tower Place, Chicago, Ill.; Warren Platner Assocs., archts.—Oct. 1977, pp. 99-104.

Marvel, Thomas S. of Torres • Beauchamp • Marvel archt.; Municipal Baseball Stadium, Bayamon, Puerto Rico—mid-Aug. 1977, BTS, pp. 84-85.

Mason, Ann Building, Lorton, Va.; Philip Ives Assocs., archts.—Oct. 1977, pp. 105-108.

Mayers & Schiff, archts.; Residential addition, Conn.—Nov. 1977, pp. 82-83.

McCue Boone Tomsick (now MBT Assocs.), archts.; IBM Santa Teresa Laboratory, San Jose, Cal.—Aug. 1977, pp. 99-104.

McMurray Architects + Planners, archts.; Monastery at Belmont Abbey, Belmont, N.C.—July 1977, BTS, pp. 112-113.

Medical Facilities. "Consultant profile: the medical equipment planner"—Aug. 1977, AB, pp. 59-61. See also Hospitals.

Medical Facilities Assocs.,—General, a joint venture of Smiley Glotter Assocs. & Thorsen & Thorshov Assocs., archts.—Aug. 1977, BTS, pp. 114-121.

Meier, Richard & Assocs., archts.; Mondev International, Colorado Springs, Colo.—Dec. 1977, BTS, pp. 96-107.

Meltzer, Marvin H. Architects, archts.; 240 East 26th Street Apartments, New York, N.Y.—Sept. 1977, BTS, pp. 122-123.

Memorial United Methodist Church; Avon, Conn.; Philip Ives Assocs., archts.—July 1977, BTS, p. 104.

Metropolitan Toronto Library, Toronto, Canada; Raymond Moriyama, architects and planners, archts.—mid-Aug. 1977, BTS, pp. 70-73.

Metz Train Olson & Youngren, archts.; "2 Learning Places," by Nory Miller: Academic Facility of Rush University, Presbyterian-St. Luke's Medical Center, Chicago, Ill.—July 1977, pp. 89-93; The College Center and The Graduate School of Business, The University of Chicago, Chicago, Ill. (with Samuel A. Lichtmann, archt.)—July 1977, pp. 94-96.

Mexican Embassy in Brasilia, Brazil; Teodoro Gonzalez de Leon and Abraham Zabludovsky, archts.—Oct. 1977, pp. 81-85.

Mexico. Colegio de Mexico, Mexico City, Mexico; Teodoro Gonzalez de Leon and Abraham Zabludovsky, archts.—Oct. 1977, pp. 86-88.

Miami Beach Youth Center, Miami Beach, Fla.; Ferendino/Grafton/Spillis/Candela, archts.—July 1977, pp. 79-84.

Mississippi Queen Steamboat; Albert P. Hinckley, Jr., archt.—Oct. 1977, BTS, pp. 114-117.

Mitchell/Giurgola Archts., archts.; Condon Hall, School of Law/Law Library, Seattle, Wash.—Aug. 1977, pp. 96-98.

Mondev International, Seattle, Wash.—Dec. 1977, BTS, pp. 96-107. Tredyffrin Public Library, Stratford, Pa.—Aug. 1977, pp. 94-95.

Monastery at Belmont Abbey, Belmont, N.C.; McMurray Architects + Planners, archts.—July 1977, BTS, pp. 112-113.

Mondev International, Colorado Springs, Colo.; Richard Meier & Assocs., archts.—Dec. 1977, BTS, pp. 96-107.

Mondev International/Mondev-Burlington, Inc., Burlington Vt.; Office of Mies van der Rohe, archt.—Dec. 1977, BTS, pp. 96-107. Mondev International/The Salem Corp., Salem, Mass.; Nelson W. Aldrich & Assocs., archts.—Dec. 1977, BTS, pp. 96-107. Mondev International, Seattle, Wash.; Mitchell/Giurgola Archts., archts.—Dec. 1977, BTS, pp. 96-107.

Moore, Arthur Cotton Assocs., archts.; Four projects: Baltimore, Md., Petersburg, Va., Schenectady, N.Y., Columbus, Ga.—Dec. 1977, BTS, pp. 84-95.

Morgan, William, archt.; Dune house, Atlantic Beach, Fla.—mid-Aug. 1977, BTS, pp. 74-75.

Moriyama, Raymond, architects and planners, archts.; Metropolitan Toronto Library, Toronto, Canada—mid-Aug. 1977, BTS, pp. 70-73.

Mt. Holyoke College, Willits-Hallowell Center, South Hadley, Mass.; Hugh Stubbins & Assocs., Inc., archts.—Nov. 1977, BTS, pp. 116-117.

Muhlenberg College, Fine Arts Center, Allentown, Pa.; Johnson/Burgee Architects and Wallace & Watson Assocs., archts.—Nov. 1977, BTS, pp. 110-111.

Municipal Baseball Stadium, Bayamon, Puerto Rico; Thomas S. Marvel of Torres • Beauchamp • Marvel, archt.—mid-

Aug. 1977, BTS, pp. 84-85.

Murphy, C. F. Assocs., archts.; Auraria Learning Resources Center, Denver, Colo.—Nov. 1977, BTS, pp. 118-119.

Museums. Cooper-Hewitt Museum, the Smithsonian Institution's National Museum of Design, New York, N.Y.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 81-83. St. Louis Art Museum, Cass Gilbert Renovation, St. Louis, Mo.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, p. 88.

N

NCR Corporate Headquarters, Dayton, O.; Lorenz & Williams, Inc., archts.—Nov. 1977, pp. 97-102.

National Theater (The), London, England; Denys Lasdun & Partners, archts.—Sept. 1977, pp. 81-88.

Northpoint Building, Houston, Tex., Ronald Bouchier, developer; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115.

O

Office of Mies van der Rohe, archts.; Mondev International/Mondev-Burlington, Inc., Burlington, Vt.—Dec. 1977, BTS, pp. 96-107.

Office Buildings. Aid Association for Lutherans Headquarters, Appleton, Wis.; John Carl Warnecke & Assocs., archts.—mid-Aug. 1977, BTS, pp. 78-83. American Express Southern Region Operations Center, Fort Lauderdale, Fla.; Ferendino/Grafton/Spillis/Candela, archts.—Nov. 1977, pp. 93-96. "Elevator space requirements in high-rise buildings," by Jeffrey K. Ochsner, Nat W. Krahl & Anderson Todd—July 1977, AE, pp. 117-118. Federal Home Loan Bank Board Building, Washington, D.C.; Max O. Urbahn Assocs., Inc., archts.—mid-Aug. 1977, BTS, pp. 66-69. Government of Canada Building, Toronto, Canada; DuBois-Strong-Bindhardt & Shore Tilbe Henschel Irwin, archts.—mid-Aug. 1977, BTS, pp. 62-65. Gwathmey-Siegel, archts.; Danson Oil Building, International Energy Building, Northpoint Building, Houston, Tex., Ronald Bouchier, developer; Thomas and Betts Building, Dallas, Tex., J. L. Williams & Co., developer; K 5-1, -2, -3 and K 6-1 "office campuses", N.J., Evans Partnership—Dec. 1977, BTS, pp. 108-115. IBM Santa Teresa Laboratory, San Jose, Cal.; McCue Boone Tomsick (now MBT Assocs.), archts.—Aug. 1977, pp. 99-104. Johns-Manville World Headquarters, Jefferson County, Colo.; The Architects Collaborative, archts.—Sept. 1977, pp. 89-100. "Plastic-composite design cuts steel tonnage in Johns-Manville's new headquarters building," by William J. LeMessurier—Sept. 1977, AE, pp. 127-128.

NCR Corporate Headquarters, Dayton, O.; Lorenz & Williams, Inc., archts.—Nov. 1977, pp. 97-102. Office Building for Tempel-Callison Co., Jefferson City, Mo.; Architects International, archts.—mid-Aug. 1977, BTS, pp. 90-91. Offices for Fluor Engineers & Constructors, Southern California Div., Irvine, Cal.; Welton Becket Assocs., archts.—mid-Aug. 1977, BTS, pp. 76-77. Sears Tower, Chicago, Ill.; Skidmore, Owings & Merrill, archts.: "OSHA and the architect: a recent case lessens designer liability," by Arthur T. Kornblut, Esq.—Nov. 1977, LP, p. 63. Tandy Center, Fort Worth, Tex.; Growald Architects, archts.—mid-Aug. 1977, BTS, pp. 86-87.

Offices. Offices for Fluor Engineers & Constructors, Southern California Div., Irvine, Cal.; Welton Becket Assocs., archts.—mid-Aug. 1977, BTS, pp. 76-77. Simmons residence and office, Washington, D.C.; Thomas R. Simmons, archt.—Nov. 1977, pp. 86-89.

P

Parking. Lancaster General Hospital Parking Garage, Lancaster, Pa.; Ciardullo/Ehmann Architects, archts.—mid-Aug. 1977, BTS, pp. 88-89.

Pei, C.C., archt.; Rooftop apartment, New York, N.Y.—Nov. 1977, pp. 84-85.

Penobscot Bay Medical Center, Acute Care Hospital, Rockport, Me.; Shepley Bulfinch Richardson & Abbott, archts.—Aug. 1977, BTS, pp. 122-125.

Petersburg, Va.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95.

Performing Arts Buildings. Galveston Grand Opera House and Hotel, Galveston, Tex.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, p. 89. Madison Civic Center, Madison, Wis.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 86-87. The National Theater, London, England; Denys Lasdun & Partners, archts.—Sept. 1977, pp. 81-88.

Planning. "The case for design quality in today's market-

place," Building Types Study 510—Dec. 1977, pp. 81-128. Baltimore Gardens, Baltimore, Md.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Burlington, Vt., Mondev International/Mondev Burlington, Inc.; Office of Mies van der Rohe, archts.—Dec. 1977, BTS, pp. 96-107. Colorado Springs, Colo., Mondev International; Richard Meier & Assocs., archts.—Dec. 1977, BTS, pp. 96-107. Columbus, Ga.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Faneuil Hall, Boston, Mass., Rouse Company; Benjamin Thompson & Assocs., archts.—Dec. 1977, BTS, pp. 116-127. "The 1977 Housing and Community Development Act: central-inner-city revitalization takes a big step forward," by Nathaniel J. Parish & Csaba Teglas—Dec. 1977, AB, p. 61. Petersburg, Va.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Salem, Mass., Mondev International/The Salem Corp.; Nelson W. Aldrich & Assocs., archts.—Dec. 1977, BTS, pp. 96-107. Schenectady, N.Y.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Seattle, Wash., Mondev International; Mitchell/Giurgola Archts., archts.—Dec. 1977, BTS, pp. 96-107.

Platner, Warren Assocs., archts.; The Malls at Water Tower Place, Chicago, Ill.—Oct. 1977, pp. 99-104.

Police Athletic League-Patrolman Andrew F. Giannone-Webster Community Center, Bronx, N.Y.; Smotrich & Platt Architects, archts.—Oct. 1977, pp. 95-98.

Product Reports. "Introduction to Product Reports," Editorial—mid-Oct. 1977, p. 15. "Manufacturers' casebook: design solutions through product application"—mid-Oct. pp. 5-10. Product Reports 78—mid-Oct. 1977, pp. 17-177. "Responsibility for product innovation: how to be progressive, yet reduce your risk," by Harold J. Rosen—mid-Oct. 1977, AB, p. 14.

Public Buildings. Government of Canada Building, Toronto, Canada; DuBois-Strong-Bindhardt & Shore Tilbe Henschel Irwin, archts.—mid-Aug. 1977, BTS, pp. 62-65. Madison Civic Center, Madison, Wis.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 86-87. Mason, Ann Building, Lorton, Va.; Philip Ives Assocs., archts.—Oct. 1977, pp. 105-108. Mexican Embassy in Brasilia, Brazil; Teodoro Gonzalez de Leon and Abraham Zabludovsky, archts.—Oct. 1977, pp. 81-85.

Puerto Rico. Municipal Baseball Stadium, Bayamon; Thomas S. Marvel of Torres • Beauchamp • Marvel, archt.—mid-Aug. 1977, BTS, pp. 84-85.

Pusey, Nathan Marsh Library, Harvard University, Cambridge, Mass.; Hugh Stubbins & Assocs., Inc., archts.—mid-Oct. 1977, AE, pp. 12-13.

R

RTKL Assocs., Inc., archts.; White Flint Mall, Montgomery County, Md.—mid-Oct. 1977, AE, p. 11.

Recreational Facilities. Miami Beach Youth Center, Miami Beach, Fla.; Ferendino/Grafton/Spillis/Candela, archts.—July 1977, pp. 79-84. Municipal Baseball Stadium, Bayamon, Puerto Rico; Thomas S. Marvel of Torres • Beauchamp • Marvel, archt.—mid-Aug. 1977, BTS, pp. 84-85. "Shinjuku," by Peter Gluck—Sept. 1977, pp. 101-104.

Rechter, Y., M. Zarhy, archts.; Jerusalem Hilton, Jerusalem, Israel—Oct. 1977, BTS, pp. 122-124.

Religious Buildings. "Religious Buildings," Building Types Study 504—July 1977, pp. 101-116. Capilla de la Asuncion, Medellin, Colombia; Laureano Forero & Rodrigo Arboleda, archts.—July 1977, BTS, p. 107. Carmel Presbyterian Church, Charlotte, N.C.; Wheatley/Whisnant Assocs., archts.—July 1977, BTS, pp. 102-103. Chapel of the Good Shepherd, Roosevelt Island, New York, N.Y.; Giorgio Cavaglieri, archt.—July 1977, BTS, p. 109. Christ the King Catholic Church, Little Rock, Ark.; Wittenberg, Delony & Davidson, Inc., archts.—July 1977, BTS, p. 105. Learnington Road Baptist Church, Blackburn, England; Building Design Partnership, archts.—July 1977, BTS, p. 110. Library of the Mercer School of Theology, Garden City, N.Y.; Ronald Woodward, archt.—July 1977, BTS, pp. 114-116. Memorial United Methodist Church, Avon, Conn.; Philip Ives Assocs., archts.—July 1977, BTS, p. 104. Monastery at Belmont Abbey, Belmont, N.C.; McMurray Architects + Planners, archts.—July 1977, BTS, pp. 112-113. St. Barnabas Episcopal Church, Marshallton, Del.; Victorine & Samuel Homsey, archts.—July 1977, BTS, p. 106. St. Mary's Episcopal Church, Jacksonville, Fla.; Freedman/Clemmens/Rumpel, archts.—July 1977, BTS, p. 111. St. Patrick's Catholic Church, Robertsedale, Ala.; J. Buchanan Blitch & Assocs., archts.—July 1977, BTS, p. 108.

Renovations & Restorations. "The case for design quality in today's marketplace," Building Types Study 510—Dec. 1977, pp. 81-128. Addition and renovation, Mill Valley,

- Cal.; Daniel Solomon, archt.—Nov. 1977, pp. 90-92. Baltimore Gardens, Baltimore, Md.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Burlington, Vt., Mondev International/Mondev Burlington, Inc.; Office of Mies van der Rohe, archts.—Dec. 1977, BTS, pp. 96-107. Chapel of the Good Shepherd, Roosevelt Island, New York, N.Y.; Giorgio Cavaglieri, archt.—July 1977, BTS, p. 109. Cincinnati Union Terminal, Cincinnati, O.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 84-85. The College Center and the Graduate School of Business, The University of Chicago, Chicago, Ill.; Metz Train Olson & Youngren (with Samuel A. Lichtmann), archts.—July 1977, pp. 94-96. College Center, Vassar College, Poughkeepsie, N.Y.; Shepley Bulfinch Richardson & Abbott, archts.—July 1977, pp. 73-78. Colorado Springs, Colo., Mondev International; Richard Meier & Assocs., archts.—Dec. 1977, BTS, pp. 96-107. Columbus, Ga.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Cooper-Hewitt Museum, the Smithsonian Institution's National Museum of Design, New York, N.Y.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 81-83. Faneuil Hall, Boston, Mass., Rouse Company; Benjamin Thompson & Assocs., archts.—Dec. 1977, BTS, pp. 116-127. Galveston Grand Opera House and Hotel, Galveston, Tex.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, p. 89. Leamington Road Baptist Church, Blackburn, England; Building Design Partnership, archts.—July 1977, BTS, p. 110. Library of the Mercer School of Theology, Garden City, N.Y.; Ronald Woodward, archt.—July 1977, BTS, pp. 114-116. Madison Civic Center, Madison, Wis.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, pp. 86-87. Monastery at Belmont Abbey, Belmont, N.C.; McMurray Architects + Planners, archts.—July 1977, BTS, pp. 112-113. Petersburg, Va.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Residential addition, Conn.; Mayers & Schiff, archts.—Nov. 1977, pp. 82-83. Rooftop apartment, New York, N.Y.; C.C. Pei, archt.—Nov. 1977, pp. 84-85. St. Louis Art Museum, Cass Gilbert Renovation, St. Louis, Mo.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, p. 88. St. Mary's Episcopal Church, Jacksonville, Fla.; Freedman/Clements/Rumpel, archts.—July 1977, BTS, p. 111. Salem, Mass., Mondev International/The Salem Corp.; Nelson W. Aldrich & Assocs., archts.—Dec. 1977, BTS, pp. 96-107. Schenectady, N.Y.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Seattle, Wash., Mondev International; Mitchell/Giurgola Architects, archts.—Dec. 1977, BTS, pp. 96-107. Simmons residence and office, Washington, D. C.; Thomas R. Simmons, archt.—Nov. 1977, pp. 86-89. The Tannery, Peabody, Mass.; Anderson Notter Assocs., Inc., archts.—Sept. 1977, BTS, pp. 124-126. Turtle Bay Towers, New York, N.Y.; Bernard Rothzeid & Partners, archts.—Sept. 1977, BTS, pp. 112-115. 240 East 26th Street Apartments, New York, N.Y.; Marvin H. Meltzer Architects, archts.—Sept. 1977, BTS, pp. 122-123. Rokeby Condominium Apartments, Nashville, Tenn.; Barber & McMurry Architects, archts.—Sept. 1977, BTS, pp. 120-121. Rothzeid, Bernard & Partners, archts.; Turtle Bay Towers, New York, N.Y.—Sept. 1977, BTS, pp. 112-115. Rouse Company, Faneuil Hall, Boston, Mass.; Benjamin Thompson & Assocs., archts.—Dec. 1977, BTS, pp. 116-127. Rush University Academic Facility, Presbyterian St. Luke's Medical Center, Chicago, Ill.; Metz Train Olson & Youngren, archts.—July 1977, pp. 89-93.
- S**
- Saier house, near Deauville, France; Marcel Breuer & Mario Jossa, archts.—Aug. 1977, pp. 105-107. St. Barnabas Episcopal Church, Marshallton, Del.; Victorine & Samuel Homsey, archts.—July 1977, BTS, p. 106. St. Louis Art Museum, Cass Gilbert Renovation, St. Louis, Mo.; Hardy Holzman Pfeiffer Assocs., archts.—Aug. 1977, p. 88. St. Mary's Episcopal Church, Jacksonville, Fla.; Freedman/Clements/Rumpel, archts.—July 1977, BTS, p. 111. St. Patrick's Catholic Church, Robertsdale, Ala.; J. Buchanan Blitch & Assocs., archts.—July 1977, BTS, p. 108. St. Vincent Medical Center, Los Angeles, Cal.; Daniel, Mann, Johnson, & Mendenhall, archts.—Aug. 1977, BTS, pp. 126-128. Schenectady, N.Y.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Sears Tower, Chicago, Ill.; Skidmore, Owings & Merrill, archts.: "OSHA and the architect: a recent case lessens designer liability," by Arthur T. Kornblut, Esq.—Nov. 1977, LP, p. 63. Shepley Bulfinch Richardson & Abbott, archts.; College Center, Vassar College, Poughkeepsie, N.Y.—July 1977, pp. 73-78. Penobscot Bay Medical Center, Acute Care Hospital, Rockport, Me.—Aug. 1977, BTS, pp. 122-125. "Shinjuku," by Peter Gluck—Sept. 1977, pp. 101-104. Shopping Centers. Malls at Water Tower Place, Chicago, Ill.; Warren Platner Assocs., archts.—Oct. 1977, pp. 99-104. "Shinjuku," by Peter Gluck—Sept. 1977, pp. 101-104. White Flint Mall, Montgomery County, Md.; RTKL Assocs., Inc., archts.—mid-Oct. 1977, AE, p. 11. Shore Tilbe Henschel Irwin & DuBois-Strong-Bindhardt, archts.; Government of Canada Building, Toronto, Canada—mid-Aug. 1977, BTS, pp. 62-65. Simmons, Thomas R., archt.; Simmons residence and office, Washington, D.C.—Nov. 1977, pp. 86-89. Skidmore, Owings & Merrill, archts.; Sears Tower, Chicago, Ill.: "OSHA and the architect: a recent case lessens designer liability," by Arthur T. Kornblut, Esq.—Nov. 1977, LP, p. 63. Smith, Hamilton & Marcel Breuer, archts.; Traffic Service Position Systems Building, Torrington, Conn.—Aug. 1977, pp. 110-112. Smotrich & Platt Architects, archts.; Police Athletic League-Patrolman Andrew F. Giannone-Webster Community Center, Bronx, N.Y.—Oct. 1977, pp. 95-98. Solomon, Daniel, archt.; Addition and renovation, Mill Valley, Cal.—Nov. 1977, pp. 90-92. South Terminal, Logan International Airport, Boston, Mass.; John Carl Warnecke & Assocs. and Desmond & Lord, Inc., archts.—Sept. 1977, pp. 105-110. Southern California Institute of Architecture, Santa Monica, Cal.; Raymond Kappe, archt.—Nov. 1977, BTS, pp. 122-124. Stores & Shops. Baltimore Gardens, Baltimore, Md.; Arthur Cotton Moore Assocs., archts.—Dec. 1977, BTS, pp. 84-95. Faneuil Hall, Boston, Mass., Rouse Company; Benjamin Thompson & Assocs., archts.—Dec. 1977, BTS, pp. 116-127. "Shinjuku," by Peter Gluck—Sept. 1977, pp. 101-104. Tandy Center, Fort Worth, Tex.; Growald Architects, archts.—mid-Aug. 1977, BTS, pp. 86-87. Stubbins, Hugh & Assocs., Inc., archts.; Nathan Marsh Pusey Library, Harvard University, Cambridge, Mass.—mid-Oct. 1977, AE, pp. 12-13. Willits-Hallowell Center, Mt. Holyoke College, South Hadley, Mass.—Nov. 1977, BTS, pp. 116-117.
- T**
- Tandy Center, Fort Worth, Tex.; Growald Architects, archts.—mid-Aug. 1977, BTS, pp. 86-87. Tannery (The), Peabody, Mass.; Anderson Notter Assocs., Inc., archts.—Sept. 1977, BTS, pp. 124-126. Tarrant County Junior College, Northwest Campus, Fort Worth, Tex.; Geren Assocs., archts.—Nov. 1977, BTS, pp. 120-121. Thomas and Betts Building, Dallas, Tex.; J.L. Williams & Co.; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115. Thompson, Benjamin & Assocs., archts.; Faneuil Hall, Boston, Mass. Rouse Company—Dec. 1977, BTS, pp. 116-127. Tigerman, Stanley & Assocs., archts.; Two houses: House in Barrington, Ill.; House in Oakbrook, Ill.—Oct. 1977, pp. 89-94. Tilly, Stephen & Alan Buchsbaum, archts.; Loft for Alan Buchsbaum, New York, N.Y.—July 1977, pp. 97-100. Tor, Abba reviews two books: *18 years with Architect Louis I. Kahn* by August E. Komendant and *The Existential Pleasures of Engineering* by Samuel C. Florman—mid-Aug. 1977, BTS, pp. 106-107. Torin Corporation Building, Australia; Marcel Breuer & Herbert Beckhard, archts.—Aug. 1977, pp. 108-109. Traffic Service Position Systems Building, Torrington, Conn.; Marcel Breuer & Hamilton Smith, archts.—Aug. 1977, pp. 110-112. Tredyffrin Public Library, Stratford, Pa.; Mitchell/Giurgola Architects, archts.—Aug. 1977, pp. 94-95. Turtle Bay Towers, New York, N.Y.; Bernard Rothzeid & Partners, archts.—Sept. 1977, BTS, pp. 112-115. 240 East 26th Street Apartments, New York, N.Y.; Marvin H. Meltzer Architects, archts.—Sept. 1977, BTS, pp. 122-123.
- U**
- University & College Buildings. "College buildings," Building Types Study 509—Nov. 1977, pp. 109-124. Academic Facility of Rush University, Presbyterian-St. Luke's Medical Center, Chicago, Ill.; Metz Train Olson & Youngren, archts.—July 1977, pp. 89-93. Auraria Learning Resources Center, Denver, Colo.; C.F. Murphy Assocs., archts.—Nov. 1977 BTS, pp. 118-119. The College Center and The Graduate School of Business, The University of Chicago, Chicago, Ill.; Metz Train Olson & Youngren (with Samuel A. Lichtmann), archts.—July 1977, pp. 94-96. College Center, Vassar College, Poughkeepsie, N.Y.; Shepley Bulfinch Richardson & Abbott, archts.—July 1977, pp. 73-78. Collegio de Mexico, Mexico City, Mexico; Teodoro Gonzalez de Leon and Abraham Zabudovsky, archts.—Oct. 1977, pp. 86-88. Fine Arts Center, Muhlenberg College, Allentown, Pa.; Johnson/Burgee Architects and Wallace & Watson Assocs., archts.—Nov. 1977, BTS, pp. 110-111. Holyoke Community College, Holyoke, Mass.; Daniel, Mann, Johnson & Mendenhall, archts.—Nov. 1977, BTS, pp. 112-115. Kerr, Clark Learning Resources Hall, The University of California, Santa Barbara, Cal.; Marquis & Stoller, archts.—July 1977, pp. 85-88. Pusey, Nathan Marsh Library, Harvard University, Cambridge, Mass.; Hugh Stubbins & Assocs., archts.—mid-Oct. 1977, AE, pp. 12-13. Southern California Institute of Architecture, Santa Monica, Cal.; Raymond Kappe, archt.—Nov. 1977, BTS, pp. 122-124. Tarrant County Junior College, Northwest Campus, Fort Worth, Tex.; Geren Assocs., archts.—Nov. 1977, BTS, pp. 120-121. University of Washington, Condon Hall, School of Law/Law Library, Seattle, Wash.; Mitchell/Giurgola Architects, archts.—Aug. 1977, pp. 96-98. Willits-Hallowell Center, Mt. Holyoke College, South Hadley, Mass.; Hugh Stubbins & Assocs., Inc., archts.—Nov. 1977, BTS, pp. 116-117. Urbahn, Max O. Assocs., Inc., archts.; Federal Home Loan Bank Board Building, Washington, D.C.—mid-Aug. 1977, BTS, pp. 66-69.
- V**
- Vassar College Center, Poughkeepsie, N.Y.; Shepley Bulfinch Richardson & Abbott, archts.—July 1977, pp. 73-78.
- W**
- Wallace & Watson Assocs. and Johnson/Burgee Architects, archts.; Fine Arts Center, Muhlenberg College, Allentown, Pa.—Nov. 1977, BTS, pp. 110-111. Warnecke, John Carl & Assocs., archts.; Aid Association for Lutherans Headquarters, Appleton, Wis.—mid-Aug. 1977, BTS, pp. 78-83. Warnecke, John Carl & Assocs. and Desmond & Lord, Inc., archts.; South Terminal, Logan International Airport, Boston, Mass.—Sept. 1977, pp. 105-110. Webster Community Center, Bronx, N.Y.; Smotrich & Platt Architects, archts.—Oct. 1977, pp. 95-98. Welton Becket Assocs., archts.; Offices for Fluor Engineers & Constructors, Southern California Div., Irvine, Cal.—mid-Aug. 1977, BTS, pp. 76-77. Wheatley/Whisnant Assocs., archts.; Carmel Presbyterian Church, Charlotte, N.C.—July 1977, BTS, pp. 102-103. White Flint Mall, Montgomery County, Md.; RTKL Assocs., Inc., archts.—mid-Oct. 1977, AE, p. 11. Williams, J.L. & Co., Thomas and Betts Building, Dallas, Tex.; Gwathmey-Siegel, archts.—Dec. 1977, BTS, pp. 108-115. Wiring. "Flexible wiring systems: a catalog of current technology"—mid-Aug. 1977, BTS, pp. 114-120. Willits-Hallowell Center, Mt. Holyoke College, South Hadley, Mass.; Hugh Stubbins & Assocs., Inc., archts.—Nov. 1977, BTS, pp. 116-117. Wittenberg, Delony & Davidson, Inc., archts.; Christ the King Catholic Church, Little Rock, Ark.—July 1977, BTS, p. 105. Woodward, Ronald, archt.; Library of the Mercer School of Theology, Garden City, N.Y.—July 1977, BTS, pp. 114-116.
- Y**
- Yugoslavia. Bernardin Tourism Resort, Piran; The Architects Collaborative, archts.—Oct. 1977, BTS, pp. 118-121.
- Z**
- Zabudovsky, Abraham and Teodoro Gonzalez de Leon, archts.; Collegio de Mexico, Mexico City, Mexico—Oct. 1977, pp. 86-88. Mexican Embassy in Brasilia, Brazil—Oct. 1977, pp. 81-85. Zarhy, M., Y. Rechter, archts.; Jerusalem Hilton, Jerusalem, Israel—Oct. 1977, BTS, pp. 122-124.

The UniGroup™ Edge In Open Office Filing.

UniFile™ panel-mounted edge filing is as efficient as open plan itself. Because it

lets you use more vertical space, not more floor space. Because everything is accessible at once, up close, edge filed for fast finds. Twice as fast, in fact, as drawer-type filing. Yet, efficiency is only part of the UniFile edge. Uncluttered component styling, panel mounting and closeable doors in nature-based colors make UniFile a beautifully integrated part of the UniGroup whole. So you can use it with other components in the UniGroup system wherever it's needed. To match spaces to people



and provide a flexible, pleasing environment. The UniGroup, UniFile edge. Ask your Haworth representative for literature or write Haworth, Inc., Holland, Michigan 49423.

HAWORTH™

For more data, circle 97 on inquiry card

PLEXIGLAS® DR

where extra toughness counts!

A quality lighting lens material with superior breakage resistance.

Lighting that is under constant risk of attack by vandals performs best when protected by lenses extruded or injection molded from Plexiglas DR acrylic plastic pellets.

That's because Plexiglas DR makes the toughest acrylic lenses you can buy. Lenses molded or extruded from Plexiglas DR have 10 times more resistance to impact than conventional cast or extruded sheet. This toughness enables Plexiglas DR lenses to shrug off attacks by vandals, indoors or out.

Any place lighting lenses are exposed to attacks by vandals, make sure you have lenses that will last. Look to lenses of vandal-resistant Plexiglas DR acrylic for toughness that virtually ends breakage worries.

Write today for technical data and design assistance, and for names of extruders and molders using Plexiglas DR.

Plexiglas acrylic plastic is a combustible thermoplastic. Observe fire precautions appropriate for comparable forms of wood. For building uses, check code approvals. Impact resistance a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives.

**ROHM
AND
HAAS** 
PHILADELPHIA, PA. 19105

For more data, circle 98 on inquiry card